# Shakespeare®

# QUALITY, PERFORMANCE AND DURABILITY

## MAXIMUM PERFORMANCE WITH MAXIMUM QUALITY

Shakespeare® is an antenna brand with a reputation for superior quality, performance and durability. Our passion comes from our ability to produce products that are designed to endure the harsh environment and can be counted on to connect boaters on the water.

We have a rich tradition serving maritime customers, and we offer our customers high quality products that have been perfected through a strong collaboration with professionals, Navies and Coast Guards since 1952.

Whether you are looking to boost your cellular, radio, HDTV or WiFi signal, Shakepseare® has a full line of antennas and accessories to fit your specific need.

PHASE III™     GALAXY®     Classic     ((•)) ANYWHERE by Shakespeare     SeaWatch®

newell
BRANDS

6111 Shakespeare Road
Columbia, SC 29223
1-800-845-7750
www.shakespeare-marine.com

**ELECTRONICS**

**Coral**
- Perimeter lighted black face
- Blue & white graphics
- Black aluminum raised bezels
- Contoured white pointer
- Flat glass lens

**Euro**
- Perimeter lighted black face
- Bold white graphics
- Contoured white pointer
- Flat glass lens

**Euro White**
- Perimeter lighted white dial
- Bold black graphics
- Black aluminum bezel
- Contoured black pointer
- Flat glass lens

**Chesapeake Black Stainless Steel**
- Perimeter lighted black dial
- Blue & white graphics
- Polished stainless steel bezel
- Contoured white pointer
- Domed glass lens

| TYPE OF GAUGE | CORAL | EURO | EURO WHITE | CHESAPEAKE S/S BLACK |
|---|---|---|---|---|
| **TACHOMETERS 4"** | | | | |
| 6000 RPM Gas in-boards and I/Os | FAR 33004 | FAR 32804 | FAR 32904 | FAR 33710 |
| 7000 RPM Universal outboards | FAR 33005 | FAR 32805 | FAR 32905 | FAR 33718 |
| 7000 RPM Universal outboard with LCD hour meter | ~ | FAR 32840 | ~ | ~ |
| 4000 RPM Mech diesel take-off & var-ratio alt | ~ | FAR 32842 | FAR 32942 | ~ |
| **SYCHRONIZERS 4"** | | | | |
| Twin gas in-boards, I/Os and most diesels (*See note 1) | FAR 33007** | ~ | ~ | ~ |
| **SPEEDOMETERS 4"** | | | | |
| 55 MPH (*See note 4) | FAR 33009 | FAR 32810 | FAR 32909 | ~ |
| 60 MPH (*See note 4) | ~ | ~ | ~ | FAR 33704 |
| 80 MPH (*See note 4) | ~ | FAR 32812 | FAR 32910** | FAR 33730 |
| **FUEL LEVEL GAUGE 2"** | | | | |
| Empty - 1/2 - Full | FAR 13001 | FAR 12801 | FAR 12901 | FAR 13701 |
| **OIL PRESSURE GAUGES 2"** | | | | |
| 80 PSI | FAR 13002 | FAR 12803 | FAR 12902 | FAR 13702 |
| 100 PSI | ~ | FAR 12845 | ~ | ~ |
| Metric 10 Bar (*See note 2) | ~ | ~ | FAR 12926** | ~ |
| **WATER TEMPERATURE GAUGES 2"** | | | | |
| 100º - 250ºF | FAR 13004 | FAR 12812 | FAR 12904 | FAR 13704 |
| 40º - 120ºC (*See note 2) | ~ | ~ | FAR 12929** | ~ |
| **VOLT METERS 2"** | | | | |
| 10 - 16 Volts D.C. (12 volt system) | FAR 13010 | FAR 12821 | FAR 12911 | FAR 13705 |
| 20 - 32 Volts D.C. (24 volt system) | ~ | FAR 12860 | ~ | ~ |
| **AMMETER 2"** | | | | |
| 60 - 0 - 60 Amps | FAR 13011** | FAR 12822 | ~ | ~ |
| **HOURMETER 2"** | | | | |
| 10,000 hours. Elapsed time in hours & tenths of hours. (*See note 6) | FAR 13013 | FAR 12835 | FAR 12913 | FAR 13715 |
| **CLOCK 2"** | | | | |
| Quartz analog clock | ~ | FAR 12825 | ~ | ~ |
| **CYLINDER HEAD TEMPERATURE GAUGE KIT 2"** | | | | |
| 60º - 220ºF. For water cooled outboards. Comes with sending unit. | ~ | FAR 12819 | FAR 12910 | FAR 13706** |
| **BATTERY CONDITION INDICATOR 2"** | | | | |
| Displays energy remaining for 12V batteries | FAR 13012 | ~ | FAR 12933** | ~ |
| **TRIM GAUGES 2"** | | | | |
| Mercury & Mariner O/Bs & Mercruiser stern drives | FAR 13017 | FAR 12828 | FAR 12916 | FAR 13707 |
| OMC O/Bs Johnson / Evinrude & Suzuki | FAR 13016 | FAR 12827 | FAR 12915 | FAR 13709 |
| OMC Sea drives & stern drives (except Cobra) | FAR 13015** | ~ | ~ | ~ |
| **WATER PRESSURE GAUGE KITS 2"** | | | | |
| 30 PSI For water cooled O/Bs (*See note 3) | ~ | FAR 12810 | FAR 12903 | FAR 13712 |
| 2 bar metric for water cooled O/Bs (*See note 2) | ~ | ~ | FAR 12922* | ~ |
| **TANK LEVEL 2"** | | | | |
| Empty - Full. Potable water (*See note 5) | ~ | FAR 12830 | ~ | ~ |
| **RUDDER ANGLE INDICATOR 2"** | | | | |
| Requires sender | ~ | FAR 12833 | ~ | ~ |

**\*\* Limited Quantities**

Faria marine instruments are manufactured and assembled entirely in the U.S.A. Faria offers the industry's only transferable limited LIFETIME WARRANTY. Speedometers, synchronizers and tachometers are 4" and require a 3-3/8" hole.
All other Faria gauges have a 2-1/2" bezel and require a 2-1/16" hole.

| TYPE OF GAUGE | CHESAPEAKE S/S WHITE | DRESS WHITE | PROFESSIONAL RED | SPUN SILVER |
|---|---|---|---|---|
| **TACHOMETERS 4"** | | | | |
| 6000 RPM Gas in-boards and I/Os | FAR 33807 | FAR 33103 | FAR 34607 | FAR 36004 |
| 7000 RPM Universal outboards | FAR 33817 | FAR 33104 | FAR 34617 | FAR 36005 |
| 6000 RPM Gas in-boards with LCD hour meter | FAR 33832 | ~ | ~ | FAR 36032 |
| 4000 RPM Mech diesel take-off & var-ratio alt | ~ | ~ | FAR 34642** | ~ |
| 4000 RPM Mech diesel take-off & var-ratio alt w/LCD hour meter | FAR 33834 | ~ | ~ | ~ |
| **SYCHRONIZERS 4"** | | | | |
| Twin gas in-boards, I/Os and most diesels (*See note 1) | FAR 33801 | ~ | ~ | ~ |
| **SPEEDOMETERS 4"** | | | | |
| 55 MPH (*See note 4) | ~ | FAR 33112 | ~ | ~ |
| 60 MPH (*See note 4) | FAR 33811 | ~ | ~ | ~ |
| 80 MPH (*See note 4) | FAR 33829 | FAR 33113 | ~ | ~ |
| **FUEL LEVEL GAUGE 2"** | | | | |
| Empty - 1/2 - Full | FAR 13801 | FAR 13101 | FAR 14601 | FAR 16001 |
| **OIL PRESSURE GAUGES 2"** | | | | |
| 80 PSI | FAR 13802 | FAR 13102 | FAR 14602 | ~ |
| **WATER TEMPERATURE GAUGES 2"** | | | | |
| 100º - 250ºF | FAR 13804 | FAR 13110 | FAR 14604 | FAR 16004 |
| **VOLT METERS 2"** | | | | |
| 10 - 16 Volts D.C. (12 volt system) | FAR 13805 | FAR 13120 | FAR 14605 | FAR 16023 |
| **AMMETER 2"** | | | | |
| 60 - 0 - 60 Amps | ~ | FAR 13149** | ~ | ~ |
| **HOURMETER 2"** | | | | |
| 10,000 hours. Elapsed time in hours & tenths of hours. (*See note 6) | FAR 13815 | FAR 13130 | FAR 14613 | FAR 16020 |
| **CYLINDER HEAD TEMPERATURE GAUGE KIT 2"** | | | | |
| 60º - 220ºF. For water cooled outboards. Comes with sending unit. | FAR 13806 | ~ | ~ | ~ |
| **BATTERY CONDITION INDICATOR 2"** | | | | |
| Displays energy remaining for 12V batteries | ~ | ~ | FAR 14623** | ~ |
| **TRIM GAUGES 2"** | | | | |
| Mercury & Mariner O/Bs & Mercruiser stern drives | FAR 13807 | FAR 13122 | FAR 14607 | FAR 16016 |
| OMC O/Bs Johnson / Evinrude & Suzuki | FAR 13809 | ~ | FAR 14609** | FAR 16017** |
| OMC Sea drives & stern drives (except Cobra) | ~ | ~ | FAR 14630** | ~ |
| OMC Cobra & Volvo SX stern drives | FAR 13808 | ~ | ~ | ~ |
| **WATER PRESSURE GAUGE KITS 2"** | | | | |
| 30 PSI For water cooled O/Bs (*See note 3) | FAR 13812 | ~ | FAR 14612 | ~ |

**** Limited Quantities**

Note 1: Not for flywheel sensors
Note 2: Use with European/International sending units
Note 3: With installation kit
Note 4: Requires pitot tube on boat
Note 5: Use with standard marine sending unit
Note 6: Non-illuminated gauge



**Chesapeake White Stainless Steel**
• Perimeter lighted white dial
• Blue & white graphics
• Polished stainless steel bezel
• Contoured black pointer
• Domed glass lens



**Dress White**
• Perimeter lighted white dial
• Black graphics
• White aluminum bezel
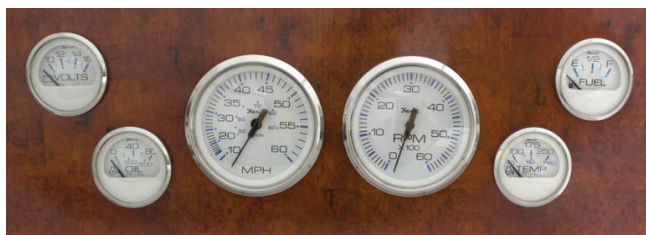• Contoured black pointer
• Flat glass lens



**Professional Red**
• Perimeter lighted black dial
• Red and white graphics
• Black aluminum bezel
• Tear drop white pointer
• Flat glass lens



**Spun Silver**
• Perimeter lighted black dial
• Black graphics
• Polished stainless bezel
• Contoured black pointer
• Domed glass lens

ELECTRONICS

## Faria Boxed Sets



KTF001



KTF003

### Chesapeake Series - 6

▪ Complete set of fog free stainless steel gauges
▪ Inboards (6 piece)
▪ Speedometer w/pitot, Tachometer, Fuel, Volt, Temperature, Oil pressure

| FAR KTF001 | White |
| --- | --- |
| FAR KTF003 | Black |

### Chesapeake Series - 4

▪ Outboards (4 piece)
▪ Speedometer w/pitot, Tachometer, Fuel, Volt



| FAR KTF002 | White |
| --- | --- |
| FAR KTF004 | Black |

KTF002



KTF024

### Koronos Series - 6 (Bayliner replacement)

▪ Complete set of fog free stainless steel gauges
▪ Inboards (6 piece)
▪ Speedometer w/pitot, Tachometer, Fuel, Volt, Temperature, Oil pressure

| FAR KTF024 | Kit |
| --- | --- |

### Individual Gauges

| FAR 19005 | 2" Trim |
| --- | --- |
| FAR 19003 | 2" Water temperature100-250°F |
| FAR 19002 | 2" Oil pressure 0-80 psi |
| FAR 19020 | 2" Hourmeter |
| FAR 19001 | 2" Fuel level |
| FAR 19004 | 2" Voltmeter |
| FAR 19007 | 2" Water pressure |
| FAR 39004 | 4" Tach 6000 rpm, gas |
| FAR 39009 | 4" Speedometer |

## Faria Boxed Sets
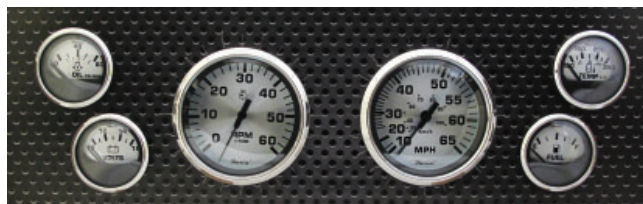


### Spun Silver Series - 6

▪ Complete set of fog free stainless steel gauges
▪ Inboards (6 piece)
▪ Speedometer w/pitot, Tachometer, Fuel, Volt, Temperature, Oil pressure

**FAR KTF0184**

## Faria Chesapeake S/S Speedometer w/GPS

▪ 4" diameter
▪ 0 - 60 MPH
▪ Premium LED back-lit dials
▪ No external GPS antenna required
▪ Ultra fast satellite acquisition time (TTFF) 1 second from hot start
▪ Speed accuracy of +/- 1 MPH
▪ Digital stepper motor driven pointers
▪ Ideal replacement for speed sensing devices (pitot tube and paddle wheel) that typically fail over time
▪ Perfect for slow moving vessels where pitot tubes typically don't work
▪ Deutsch connectors



33749

| FAR 33749 | Black |
| --- | --- |
| FAR 33839 | White |

▪ 0 - 60 MPH
▪ LCD displays compass rose heading and actual heading (COG)
▪ Heading accuracy of +/- 1 degree



33826

| FAR 33726 | Black |
| --- | --- |
| FAR 33826 | White |

▪ 0 - 80 MPH
▪ LCD displays compass rose heading and actual heading (COG)
▪ Heading accuracy of +/- 1 degree



| FAR 33730 | Black |
| --- | --- |
| FAR 33829 | White |

33730

## Faria 4-In-One Combo Gauge

▪ 4" diameter
▪ Includes fuel, volts, oil pressure and engine temperature analog readings
▪ White face with a chrome bezel
▪ Chesapeake, S/S White



**FAR 33851**
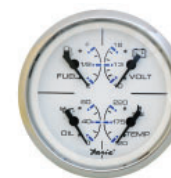
## Faria Euro Tachometer w/System Check

▪ 4" Diameter
▪ 7000 RPM
▪ 4 system check indicators: no oil, low oil, temperature, engine check



| FAR 32850 | Black |
| --- | --- |
| FAR 32950 | White |

## Faria Accessories

### Rudder Angle Indicator Senders

▪ Standard or floating ground

**FAR 90530**    Single station

---

### Replacement Bulbs

**SPE 161**    Fits all 2" gauges, black/grey dials except water pressure, vacuum boost, vacuum & 2" operator warning system.

**SPE 658**    Fits all 2" gauges, white dials except water pressure, vacuum boost, vacuum & 2" operator warning system.

**SPE 194**    Fits all tachometers & Speedometers except competition series.

---

### Miscellaneous Items

**FAR 12861**    2" Gauge blank
**FAR 32861**    4" Gauge blank

---

## Moeller Dash Mount Electronic Fuel Gauge

▪ All electrical senders are calibrated to 33 to 240 OHMs
▪ S/S bezel, white print with a backlit black face
▪ 12VDC
▪ 2-1/16" cutout

**MOE 035727-10**
Parts:
**SPE 161**    Replacement 12V bulb

---

## Moeller Conversion Capsules

▪ Direct site mechanical read capsule
**MOE 035759-10**

▪ Conversion capsule from mechanical to electrical dash mounted gauge
**MOE 035760-10**

---

▶ **Also See**    Fuel Senders   pg 675

## Sierra
### Tach/Hourmeter

▪ For any gasoline motor up to 2 cylinder, monitors 2 or 4 strokes
▪ Displays RPM up to 9000
▪ Displays RPM when running total hours when off
▪ No power or ground required
▪ Water and shock proof
▪ Displays up to 9999 hours
▪ 10 year internal battery lifetime
▪ Includes 2-sided mounting tape and screws

**STR 56969P**

---

## Sierra
### Magnetic Proximity Sender

**STR 1507678P**

---

## Faria Water Temperature Senders

▪ Single station or dual station for use with most marine water temperature gauges

**FAR 90401**    1/8" NPT, water temp sender
**FAR 90402**    1/4" NPT, temperature sender
**FAR 90403**    3/8" NPT, water/oil/temp sender
**FAR 90404**    1/2" NPT, temperature sender
**FAR 90406**    1/8" NPT, dual sender
**FAR 90412**    1/8" NPT Euro. single standard ground

90401

### Faria Cylinder Head Temperature Sender

▪ Works with all models

**FAR 90405**    Sender

---

## Sierra Temperature Senders

**SIE 18-5896**    1/8", 240°F
**SIE 18-5897**    3/8", 240°F
**SIE 18-5898**    1/2", 240°F, dual station

18-5896

---

## Sierra Water Temperature Senders

▪ Water temperature sender operates Faria, Stewart-Warner and Teleflex gauges

**Single Station**
**SIE TS26611**    1/4" NPT 240°F
**SIE TS26621**    3/8" NPT 240°F
**SIE TS26631**    1/2" NPT 240°F

**Dual Station**
**SIE TS26641**    1/8" NPT 240°F
**SIE TS26651**    1/4" NPT 240°F

TS26611

---

## Sierra Temperature Switch

▪ Used with light
▪ Set at 210°F. 3/8" NPT

**SIE TS25101**

## Sierra Oil Pressure Sender

- Single station
- 1/8"-27 thread size
- 10-32 stud terminal
- 0-80 PSI

**SIE 18-5899**

## Sierra Oil Pressure Switch

- Used for electric fuel pump shut off
- Set at 6 PSI
- Used by Mercury Marine and Volvo. (1/8" NPT)
- Normally closed

**SIE OP22900**

## Sierra
## Oil Pressure Safety Shutoff Switch

- 1/8"-27 thread size

**SIE OP72533**

## Sierra
## Oil Pressure Light Switch

**NEW**

- 1/8"-27 thread size

**SIE 18-5894**

## Sierra Oil Pressure Senders

- Faria, Stewart-Warner and Teleflex gauges
- Range: 0-80 PSI (1/8" NPT)

**SIE OP24891**      Dual station

Range: 0-100 PSI (1/8" NPT)

OP24891

**SIE OP24301**      Single station

## Faria Oil Pressure Senders

90512

**American (0-80 P.S.I.)**

**FAR 90512**     1/8" NPTF, Single station, standard ground
**FAR 90511**     1/8" NPTF, Dual station, standard ground

**European**

**FAR 90515****     1/8" NPTF 5 BAR single standard ground
**FAR 90526**     1/8" NPTF 10 BAR/150 PSI single standard ground
** Limited Quantity

## Shields Speedo Tubing

- Black vinyl tubing for pitot hook-up.
- Dimensions: 1/8" I.D. x 1/4" O.D

**SHI 151-0185**      1/8" x 25'
**SHI 151-1/8"**      Per foot

## Sea-Dog Pitot Tube Shield

- 304 stainless steel
- 1-1/4" x 3/4"

**SED 331310-1**

## Faria Pitot Tube Assembly Kits

- Transom mount speedometer pick-up with escutcheon plate and mounting hardware (less tubing)
- For all marine speedometers through 80 MPH

**FAR 91109**

91109

- Same as 91109 but includes 20' of tubing

**FAR 91106**

**Cover Plate**

- Black finish cover plate for pitot tubing or cable entry.

**FAR 91105**

91106

## Faria Depth Sounders

Digital depth sounders can be bought with options of an in hull transducer or transom mount transducer.

- Depth range to 199' (61m)
- Reads depth in meters, fathoms and feet
- Keel offset, shallow/deep water audio and visual alarms
- Shallow and deep water alarms
- Automatic gain control
- Backlighting for maximum night vision
- Alarms are audio & visual
- Cutout: 2-1/16"
- Available with transom (25' cable), thru-hull (26') or in-hull (20') transducers

**FAR 12850**     Euro Black, transom mount transducer
**FAR 12851**     Euro Black, in-hull transducer
**FAR 12951****   Euro White, in-hull transducer
**FAR 13750**     Chesapeake Black, transom mount transducer
**FAR 13751**     Chesapeake Black S/S, in-hull transducer
**FAR 13795**     Chesapeake Black S/S, thru-hull transducer
**FAR 13850**     Chesapeake White S/S, transom mount transducer
**FAR 13851**     Chesapeake White S/S, in-hull transducer
** Limited Quantity

## Dual Temperature Depth Sounder

All the same features as the depth sounder above with the addition of the following:

Read the ambient air temp or the water temp right on your depth sounder. The dual display can show depth and either air or water temperature. Choose which temperature you wish to see, change the view even while the vessel is moving

- Complete with air & water temperature sensors
- Transom mounted transducer included

**FAR 13752**     Chesapeake Black, S/S
**FAR 13852**     Chesapeake White, S/S

## Hawkeye DepthTrax 2B
## Boat Mount Depth Finder

- Automatic Range and Sensitivity delivers uninterrupted depth readings from 2.5' to 600' at speeds up to 60 mph
- Auto targets and intensifies bottom echoes for error free readings
- Warning system with both audible and visual alarms
- Automatically adjusts depth readings for vessel draft
- Polarized, LED backlit, LCD screen allows for glare-free viewing in any light condition
- Waterproof plug and play transducer connector w/ 30' cable
- Water temperature sensor
- Mounts in a standard 2-1/8" gauge hole
- Display window size: 1.65" x .87"
- 2 year warranty

**NRC DT2B-TM\*\***    With dual mount transducer - transom/in-hull
**\*\* Limited Quantity**

## Hawkeye Portable Depth Finder

- Instant depth readings, from 2.5 to 199 feet, in 1/10th increments
- LCD display is backlit for nighttime viewing
- Waterproof construction
- Includes a wrist strap
- Requires 1 '9V' battery (not included)

**NRC DT1H\*\***
**\*\* Limited Quantity**

## Hawkeye
## FishTrax Handheld Fish Finders

- Unit dimensions:         6" x 3" x 2"
- Power requirement:      4 x 'AAA' alkaline batteries
- Battery life:            30 hours continuous use
- Units of measure:       Feet & meters
- Depth range:            1.5' - 240'
- Readout increments:     1/10 Foot/meter
- Sonar sensor type:      Portable, shoot-through, & boat mountable
- Sonar sensor cable:     15'
- Warranty:               2 years

**FishTrax 1**
**with ICON Display**

- Glare-Free ICON LCD with LED backlight offers excellent readability

**NRC FT1P\*\***

**FishTrax 1X**
**with VirtuView Dot Matrix Screen**

- Features a VirtuView Dot Matrix LCD

**NRC FT1PX\*\***
**\*\* Limited Quantity**

## Hawkeye
## Transom Mount Transducer

- 200W 200 kHz dual purpose transom or glue-in-hull transducer
- 2 year Factory Warranty

**NRC XDR-AMR-P23-9150\*\***
**\*\* Limited Quantity**

## Hawkeye Mounting Bracket

MB01 allows the surface mount of any in dash depth sounder.

**NRC NRC ACC-DF-1000\*\***
**\*\* Limited Quantity**

## Hawkeye Accessories

**Display Mounting Disk**

An adhesive pad disc that allows you to stick this to any surface and attach the adjustable mounting bracket with suction cup (ACC-FF-1550) to it. No tools required.

**NRC ACC-FF-1550\*\***    Each

**Adjustable Mounting Bracket with Suction Cup**

- Adjustable mounting bracket with suction cup allows you to easily mount your fish finder to any flat surface on your kayak, small boat or canoe

**NRC ACC-FF-1567\*\***

**Transom Mount Transducer Bracket Kit**

- You should only order this item if you have broken or misplaced the original bracket kit supplied with your transducer

**NRC ACC-FF-1659\*\***

**Camera Mount Adapter**

- Allows the FishTrax to be mounted to any post mount

**NRC ACC-FF-1505\*\***

**Iceshack Pack**

- Protects your fishtrax during winter ice fishing, travel and storage
- Handy shack design doubles as a case and an adjustable ice fishing platform

**NRC ACC-FF-1529\*\***

**Hard Carrying Case**

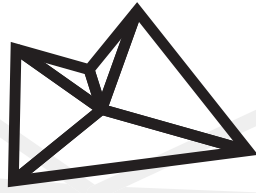- Protects your fishtrax.
- Includes lanyard

**NRC ACC-FF-1536\*\***

**Weighted Mounting Pad**

- Keeps your fish finder securely in place. The heavyweight base has a non-slip, anti-skid surface, so there's no movement
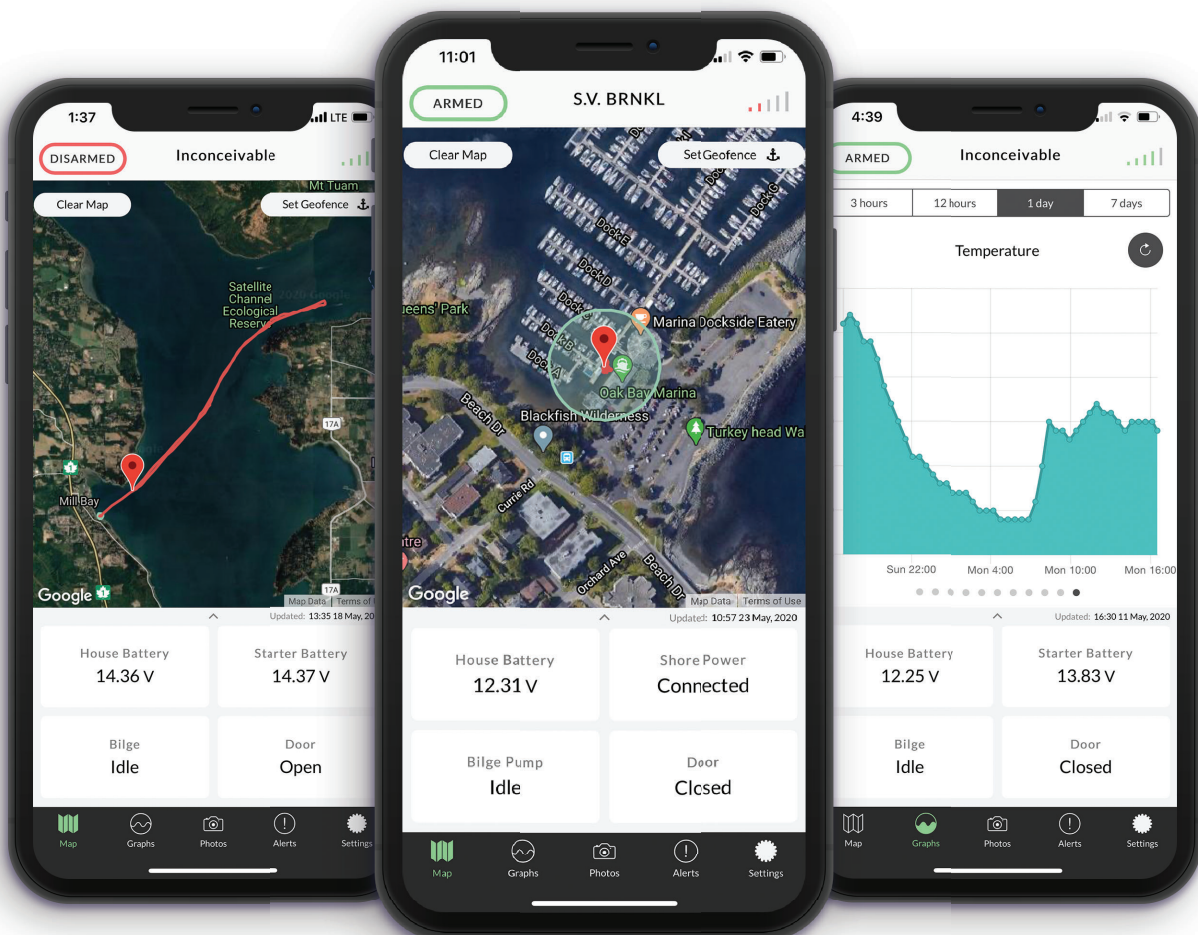
**NRC ACC-FF-1543\*\***
**\*\* Limited Quantity**

**ELECTRONICS**

# BRNKL




BRNKL

## BRNKL
## Boat Security and Monitoring System

BRNKL is an award-winning 'home security system' for your boat, built by people that know security. Check on your boat and receive an alert if something is wrong, whether you're at the dock, at home, or halfway around the world.


BRNKL_EXT19

- Capture camera images from your boat - on demand, or automatically when a door opens, motion is detected, or other triggers
- Monitor up to 4 battery banks, shore power, bilge activity, and external sensors.
- Additional built-in sensors include temperature, humidity, barometric pressure, pitch, heel, and impact
- BRNKL has a built-in SIM card that allows the device to communicate over a global cellular network
- Generally installed behind circuit breaker panel, or at the helm of your boat where existing battery monitoring, bilge switches, and shore power connections are located. BRNKL connects to those existing connections in order to monitor the health of those systems
- Annual Service Plan charges apply
- Dimensions: L: 5" x W: 3-1/2" x D: 1-15/16"
- 9-32V

**BRN BRNKL**           System only
**BRN BRNKL_EXT19**     System with external camera


BRNKL App shown



## BRNKL MATE
## Connection Expander

Merge the smart home with the smart boat. BRNKL Mate works with the leading smart home brands to enable you to use the home devices on your boat

- Go wireless by adding compatible wireless sensors
- Connect to your boat's NMEA 2000 network to monitor engine RPM's, tank levels, etc
- Connect a compatible Iridium satellite device to receive alerts from anywhere in the world
- Will allow an additional camera
- Dimensions: L: 6-5/8" x W: 4-3/4" x D: 2-3/8"
- 9-32V

**BRN BRNKL_MATE**

## BRNKL Accessories

### Camera



- Add an additional camera to your system
- Indoor/outdoor cameras are rated for extreme environments and are the size of an egg
- Requires BRNKL Mate (only 2 cameras can be added currently)

**BRN WIRED_ACC_CAM**

### AC Device Expander



- Relay allows you to control devices like heaters, AC lights, and even your coffee maker

**BRN WIRED_ACC_ACRLY**

### DC Device Expander



- Used to monitor additional 12V switching inputs and convert them to switching ground inputs.
- Primarily used to monitor addtional bilge pumps on board your boat
- Add up to four (4) DC Device Controllers

**BRN WIRED_ACC_DCRLY**

### Door / Window Sensor



- Magnet switches are specifically designed to alert you when doors, windows, hatches, drawers, or other apertures open

**BRN WIRED_ACC_DOOR**

### Plug-In Shore Power Sensor



- Plug-in shore power sensor allows your BRNKL to monitor your boat's shore power connection from a simple wall outlet inside your vessel.
- If your shore power becomes disconnected, the plug will lose power and BRNKL will send you an alert

**BRN WIRED_ACC_SHORE**

### Hard Wired Shore Power Sensor



- Hard-wired shore power sensor allows your BRNKL to connect directly to your AC panel to monitor shore power
- Supports 80 - 264 VAC & 50 - 60 Hz

**BRN WIRED_ACC_TRANS**

**ELECTRONICS**

# The Power of VHF and AIS Combined

Cortex is the world's fiirst VHF with high speed SOTDMA AIS transponder technology, making your boat visible to others. A built-in heading sensor tells other vessels your direction, helping them more accurately predict potential collisions. See critical information about vessels, AIS Aids to Navigation and man overboard devices on your MFD, mobile or Cortex handset.

## Vesper CORTEX Hub M1 & V1

Cortex M1 Hub is a Full Class B SOTDMA smartAIS with out-of-the-box monitoring. Cortex V1 combines Cortex M1 with Cortex H1 Tethered Handset to provide full VHF functionality. Optionally add H1P Portable Handsets for even greater freedom on board.

Cortex is the world's first VHF with high speed SOTDMA AIS transponder technology making your boat visible to others. A built-in heading sensor tells other vessels your direction, helping them more accurately predict potential collisions.

Configure and monitor the Cortex system and receive alerts to a connected smartphone on the Cortex Onboard App or receive alerts and control devices on the boat remotely using the Cortex Monitor App.
- Collision Avoidance & One-touch DSC
- Anchor Watch on board and ashore
- 9-33V. 12V: 6A max, 500mA nom
- 1.7 lbs

**VES CORTEX-M1**    AIS/Monitor
**VES CORTEX-V1**    AIS/Monitor/VHF

> **Included with the M1**
> M1 Hub, GPS Antenna, Power Cable, NMEA 2000 Drop Cable, NMEA 2000 Tee, Audio Cable, External Sensors Cable, External WiFi Antenna.
>
> **All the above included with the V1, PLUS**
> a H1 Tethered Handset
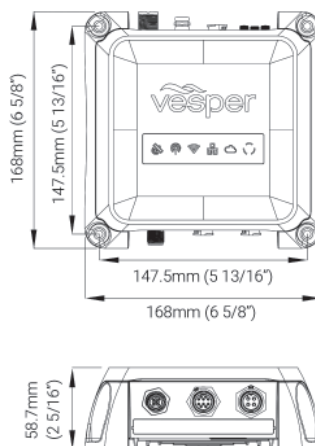


### FEATURES
- Add additional H1 Tethered & H1P Portable Handsets
- Software Feature Updates via the Cortex Onboard App for FREE
- Portable handset for VHF capability
- Built-in Class B SOTDMA
- Built-in antennas for WiFi and cloud connectivity for monitoring on board and ashore
- Transmit AIS and VHF simultaneously
- Universal compatibility
- Low power consumption
- Galvanically isolated ports Monitor up to 5 external sensors connected directly
- Network to NMEA 2000 to monitor sensors remotely or supported 3rd Party Apps
- Integrated no-loss AIS / VHF splitter
- IPx7 full plastic housing
- 10Hz GPS and external antenna port
- GNSS: GPS, GLONASS, Bei Dou, Galilleo
- Anti jamming feature

## Vesper Tethered & Portable Handsets

Connect up to 10 Cortex Handsets, 5 directly to the Hub and 5 through an existing network on the boat for increased range.

A revolution in marine technology that will change your VHF experience forever. An intuitive touchscreen that is engineered for durability to withstand the rigours of the harsh marine environment. Audio that's as loud as a train but clear as a bell.
- LCD TFT Si, 640 x 800, 24 bit Colour
- Capacitive, optically bonded, LCD, glove and salt water operable
- Waterproof (IPx8)

**VES CORTEX-H1**    Tethered, 285g
**VES CORTEX-H1P**    Portable, 235g
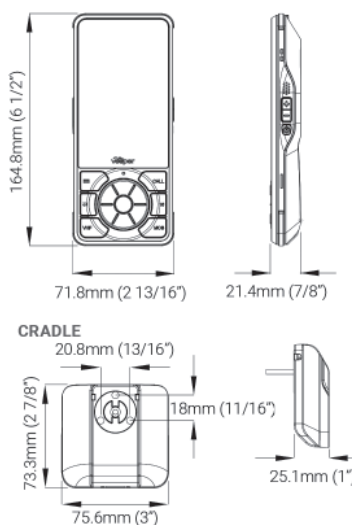


**CRADLE**



### FEATURES
- Intuitive functionality
- Secure mounting and charging cradle
- One-touch DSC
- Single-handed operation with rotary click-wheel
- Wireless freedom on board
- Up to 85 dBA audio
- Wide angle & sunlight viewable
- Pinch-to-zoom
- Critical data always in view
- Durability in wet and rough conditions
- Gorilla Glass, wet-use touchscreen

# smartAIS

**INNOVATIVE MARINE AIS TECHNOLOGY**

## WHAT IS smartAIS?

Reinventing the future of AIS.

Unlike an ordinary AIS which only sends and receives data, smartAIS from Vesper Marine is a stand-alone active AIS system with smart alarm logic that proactively alerts you when you have potential collision situations. It plots your anchor position and alerts you if your anchor drags. It continuously watches for a man overboard and triggers an alarm for quick action.

### Safety Underway  Collision Avoidance

Proactively alerts you when you have potential collision situations. It combines GPS data such as position, course and speed along with AIS data and smart alert logic to continually determine safety implications and alert you. It computes the closest point of approach and time until the closest point of approach and triggers alarms to warn you of vessels posing a threat.

### Safety at Anchor  Anchor Watch

Every boater knows that being at anchor is no guarantee of total safety. In particular, anchors can drag without those on board being aware. Thanks to Anchor Watch, however, you can be safer and sleep well at night. That's because Anchor Watch sounds the alarm if you drift outside a zone defined around your anchor position. Activate the anchor watch when you drop the anchor using either a wired switch or your smartphone or smartwatch remotely from the windlass or anywhere on-board.

### Safety for your Crew: Man Overboard (MOB) alarm

WatchMate Visions Man Overboard (MOB) alarm  sounds the alarm the instant somebody goes over the side and activates his AIS MOB device. The Alarm clearly identifies the MOB on the display and gives you the location, bearing and range of the person for quick retrieval. It also provides continuous updates of position, bearing and range.

### Complete Class B AIS Transponder

Class B AIS transponder with a two channel parallel receiver and transmitter. It transmits your vessel position and details and receives the same kind of information from other vessels with AIS transponders. The AIS data is sent every few seconds and includes information such as course, speed, latitude, longitude, and heading. Static information about the vessel is sent every few minutes and includes the name, type of vessel, length, beam, draft, etc.

### smartAIS features

Unlike normal AIS which send and receive, smartAIS which is an active system with smart alarm logic that alerts you rapidly to potential dangers.

### Direct Selective Calling (DSC)

You can initiate an individual DSC call to any vessel displayed on your screen. This feature makes it easy to message nearby boats, requesting them to switch to a specific channel for a VHF call, without having to enter the other vessel's MMSI number manually into your VHF radio.

### WiFi connectivity anywhere on board

Built-in Wi-Fi. You can securely connect up to 5 other devices simultaneously. You can have a wireless connection to your laptop, smartphone and tablet.

### Certified NMEA 2000 Gateway

Translates NMEA 2000 instrument data (heading, wind, depth, speed, log, temperature) and routes it to mobile devices, computers and plotters.

### High resolution GPS

Fast 5Hz 50 channel GPS. This provides greater detail and higher resolution plotting. Displays GPS satellite status and navigation data such as your position, course and speed when viewed from the My Vessel screen.

### WatchMate App

Monitor your smartAIS features on a tablet or smartphone using the free Vesper Marine WatchMate App. Monitor AIS-equipped vessels can be viewed on an easy to use radar plotting screen, view and update your vessel information, view navigation information and GPS status from anywhere on board. Be alerted of potential risk situations to take decisive action. You can also remotely control alerts, alarms and transponder settings.

## Vesper WatchMate XB8000 smartAIS Transponder

The world's only black box transponder with built-in smartAIS alarms. While the WatchMate XB-8000 is often mounted behind an instrument panel, its powerful external alarm and switch can be mounted anywhere on board at a convenient location where you can access it.

The external alarm and switch is primarily used to sound an alarm when smartAIS detects a collision situation, if your anchor drags or if there is a man overboard activation. The alarm sounds even if the MFD, plotter or mobile device is turned off. The alarm can be silenced by pressing the external switch.

Besides being used to mute smartAIS alarms, the switch is also used to activate Silent Mode or reset Anchor Watch, depending on its setting.

- Complete Class B AIS Transponder
- NMEA 2000 Gateway
- smartAIS features
- Safety Underway-Collision Avoidance
- Safety at Anchor-Anchor Watch
- WiFi connectivity anywhere on board
- High resolution GPS
- WatchMate App
- Galvanic isolated USB ports
- Upgradable AIS platform
- Fully Waterproof IPx7
- 10-32VDC, 2A, 6W
- 3.15 lbs
- W: 7-7/8" x H: 5-1/8" x D: 2-3/8"

**VES XB8000**

## Vesper WatchMate XB6000 Class B AIS Transponder

Mounting the XB-6000 is made easy with innovative cable connection points that create low profile installations. As well as being waterproof the XB-6000 also has multiple connection options: NMEA 2000 / 0183 and USB connectivity.

- Complete Class B AIS Transponder
- NMEA 2000 Gateway
- 10-32VDC, 2A, 6W
- 3.15 lbs
- W: 7-7/8" x H: 5-1/8" x D: 2-3/8"

**VES XB6000**

## Vesper AIS Splitter

Many AIS splitters introduce significant signal loss, some say no loss but this splitter is the only one that provides signal gain - improving AIS reception and increasing range. This is because the splitter has a built-in low noise amplifier.

- Designed to work with all Vesper Marine AIS transponders
- Has a unique on-screen VHF-in-use indicator when used with the WatchMate 850 and WatchMate Vision AIS transponders
- Increases the performance of other manufacturer's AIS receivers and transponders
- Simplify installation by sharing an existing VHF antenna
- Designed for use with AIS receivers and transponders
- 10-32VDC, .06A, 0.8W
- 1.01 lbs
- W: 5-5/16" x H: 4-13/64" x D: 2-13/64"

**VES SP160**

▶ *Note*    *If using a splitter with Vesper AIS you must use a Vesper splitter*

## Vesper WatchMate Vision2 Touchscreen smartAIS Transponder

The WatchMate Vision2 with a highly responsive, easy to use 5.7" capacitive touchscreen, bright colour display and increased WiFi connectivity.

Get proactive alerts when you have potential collision situations, if your anchor drags or if there's a man overboard situation.

With its intuitive and easy to use touchscreen, scroll through the menu, zoom in and out, see vessel details and navigation data, change alarm settings and more with the most gentle of touches. Remote control your transponder from anywhere on board with your smartphone, tablet or smartwatch using high speed WiFi. The Vision2 enables up to eight devices connected simultaneously for greater flexibility.

- Complete Class B AIS Transponder
- smartAIS features
- Safety Underway-Collision Avoidance
- Safety at Anchor-Anchor Watch
- Safety for your Crew: Man Overboard (MOB) alarm
- WiFi connectivity anywhere on board
- Certified NMEA 2000 Gateway
- High resolution GPS
- WatchMate App
- 10-32VDC, 2A, 6W
- 2.69 lbs
- W: 6-7/8" x H: 5-1/8" x D: 2-3/8"

**VES XB9010**

High Speed WiFi

## Vesper External Weatherproof Speaker

**NEW**

- IP66 ingress protection, suitable for mounting almost anywhere on board
- Compact in size, the speaker features a durable and UV stable polymer housing
- Rated at 70W max power output, with a 4 Ohm frequency response of 120 Hz - 20,000 Hz to deliver full, clear sound
- Compatible with Cortex
- Surface mount through using a 2-15/16" diameter hole, requiring a minimum mounting depth of 2-1/4"
- Pre-wired with 6.5' of cable
- Mounted OD: 3-3/4"

**VES 111210**

## Vesper Accessories

| | |
|---|---|
| **VES 141005** | External alarm for WatchMate 850 and Vision2 |
| **VES 211002** | VHF splitter patch cable, 6' |
| **VES 233050** | Nonpowered handset cradle, H1/H1P |
| **VES 233366** | Charging handset cradle, H1P |
| **VES 311011** | Cortex H1 bulkhead connector |
| **VES 39307** | 5m waterproof lockingUSB cable |
| **VES 39309** | Power/data cable 6' |
| **VES 39310** | AM/FM cable for SP160 |
| **VES 39425** | 2m PL259 patch cable for SP160 |
| **VES 39914** | 10m external GPS antenna extension cable kit |
| **VES GPA901** | External GPS antenna for WatchMate Vision2, Vision, XB-8000 and XB-6000 |

![NAVIONICS A Garmin Brand]

**NEW**

## Navionics Electronic Charts

Navionics +

| | |
|---|---|
| **NAV MSD/NAV+CA** | Navionics+ Canada & Alaska |
| **NAV MSD/NAV+NI** | Navionics+ US & Canada |

Platinum +

| | |
|---|---|
| **NAV MSD/900P+** | West Great Lakes |
| **NAV MSD/901P+** | East Great Lakes |
| **NAV MSD/902P-2** | Nova Scotia - St Lawrence River |
| **NAV MSD/903P-2** | Nova Scotia - Newfoundland |
| **NAV MSD/913P+** | BC South Coast |
| **NAV MSD/914P-2** | North BC - Baranof Island |

Hotmaps Platinum

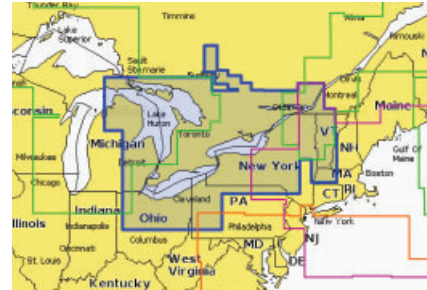| | |
|---|---|
| **NAV MSD/HMPT-C6** | Hotmaps Platinum Canada Lakes |

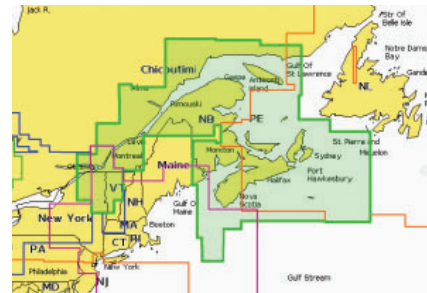Navionics Update

| | |
|---|---|
| **NAV MSD/NAVU-NI/WM** | Navionics Update US & Canada WM |

MSD/900P+
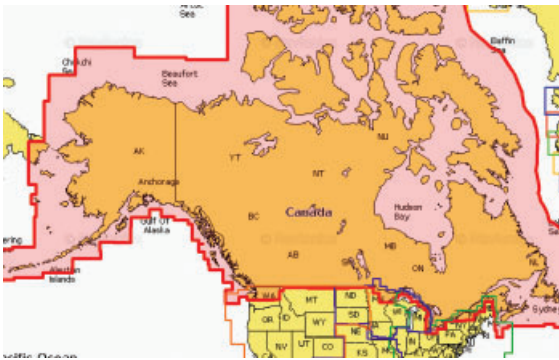
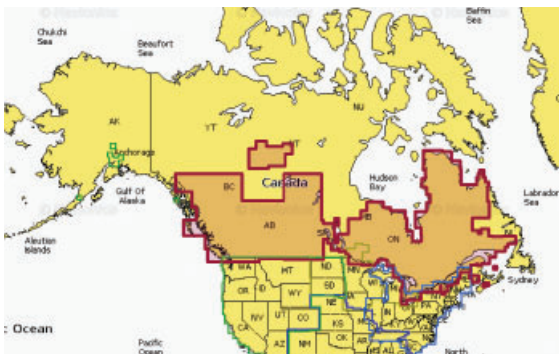MSD/901P+

MSD/NAV+CA

MSD/902P-2
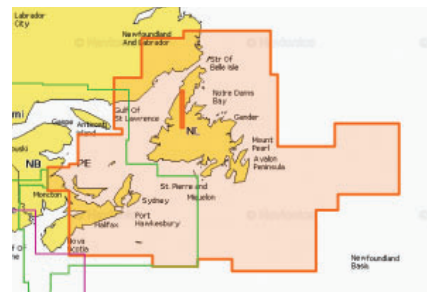
MSD/NAV+NI

MSD/903P-2
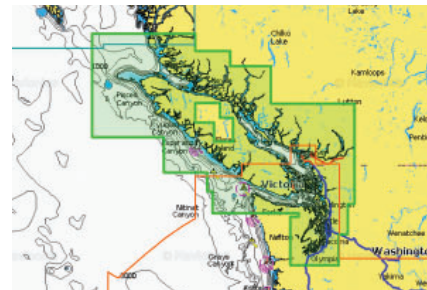
MSD/HMPT-C6

MSD/913P+

MSD/914P+

# C-MAP MAX

**C-MAP 4D MAX+** is the latest evolution of electronic charting technology, combining award-winning vector chart data with exclusive Dynamic Raster Charts and the ability to view charts in 2D or amazing 3D presentation with high-resolution satellite imagery. Packed with innovative features designed to enhance every cruising, fishing or sailing experience
• Local and Wide coverage available worldwide, and at a budget that suits your boating needs
• Ability to add future Value Added Data segments and features

### Compatible with:
• Raymarine aSeries, cSeries, eSeries
• Raymarine eS Series & gS Series
• Raymarine Dragonfly (4D MAX ONLY)
• Furuno 1670F & 1870F
• Standard Horizon CPN 700 & CPN1010
• Humminbird ION & ONIX

| | |
|---|---|
| CMA NA-D021-SD | 4D Canda North & East |
| CMA NA-D025-SD | 4D Canada West |
| CMA NA-D026-SD | 4D Great Lakes East Coast |
| CMA NA-D048-SD | 4D Canada Lakes |
| CMA NA-D934-SD | 4D Local Lake Ontario |
| CMA NA-D935-SD | 4D Local St Lawrence River |
| CMA NA-D956-SD | 4D Local Victoria to Cape Scott |
| CMA NA-D957-SD | 4D Local San Juan to Nigei Island |
| CMA NA-D958-SD | 4D Local Queen Charlottes |

**C-MAP MAX** electronic charts have been a worldwide standard for years, providing cruisers, sailors and fishermen with the accurate, up-to-date chart data they need to enjoy each day on the water. Still a leading choice of navigators and chartplotter manufacturers around the globe.
• Updated twice annually to provide all the latest detail and information
• Extensive coverage of coastal waters, lakes and rivers
• Local, Wide and MegaWide coverage for all charting needs and budgets

### Compatible with:
• Furuno• Standard Horizon
• Si-Tex
• Rose Point Coastal Explorer Software
• MaxSea Software
• Expedition Software

| | |
|---|---|
| CMA NA-M025-SD | Canada West (W48) |
| CMA NA-M025-C | Canada West (W48) |
| CMA NA-M021-SD* | North & East (W72) |
| CMA NA-M028-SD* | Alaska (W49) |
| CMA NA-M024-SD* | US Westcoast & Hawaii (W47) |

**\* Request Items**

**Max C-Card**

**Micro SD Format**

**SD Format**

**NT+ C-Card**

**NT+ F-Card**

**New C-MAP MAX-N** C-MAP MAX-N opens up a new world of performance for cruisers, sailors and fishermen, providing the detail, advanced features and coverage to fuel every boating adventure.
• Rich chart detail
• Harbor & approach details

**MAX-N Wide & Local** provides additional C-MAP features such as harbor and approach chart detail, detailed marina charts and coverage of inland rivers and lakes. Whether you have just purchased MAX-N BDS or are an existing owner of a compatible Lowrance, Simrad or B&G chartplotter, MAX-N Wides & Local provide expansive coverage based on Jeppesen's popular C-MAP MAX Wide charts.

### Compatible with:
• Lowrance HDS Gen1 & Elite series
• Simrad NSS, NSO & NSE
• B&G Zeus

**C-MAP MAX-N+** With huge coverage areas, up-to-date data and state-of-the-art features, no adventure is out of reach.
• Dynamic raster charts
• High-res satellite imagery
• High-res bathy fishing charts and sport fishing data
• Custom shaded depths and aerial photos
• Detailed marina charts
• Dynamic tides and currents

### Compatible with:
• Lowrance HDS Gen 3, HDS Gen2 & Gen2 Touch
• Simrad NSS/NSO EVO2 & Go7
• B&G Zeus 2 & Vulcan

**Jeppesen MapMedia 3D (MM3D)** charts bring trusted C-MAP chart data and features to popular Furuno NavNet systems and other PC-based navigation solutions.
• Updated at least twice per year with the latest chart detail and information
• Bahamas coverage includes popular private charts from Lewis Offshore Limited and Wavey Line Publishing
• Comprehensive coverage of the Great Lakes, Western Rivers and key inland waterways
• Detailed Harbor Charts & Marina Diagrams
• Raster Charts for the Bahamas

### Compatible with:
• Furuno Navnet 3D & TZ Touch & TZ Touch 2
• Nobeltec Timezero

# C-MAP NT+

**C-MAP NT+** For fishermen, sailors and cruisers who continue to depend on C-MAP NT+, we provide updates twice annually to ensure that navigators benefit from all the latest Coast Guard Notice to Mariner (NTM) changes and other important chart data updates.
• Rich chart detail and available data
• Easy on-screen queries of chart objects
• Local and Wide coverage areas available

### Compatible with:
• Furuno Navnet1
• Raymarine

**ELECTRONICS**

# Raymarine

The Element S series of navigation displays gives you the freedom to enjoy the open waters—Select your destination and let Element's fast and accurate 10Hz GPS/GNSS lead the way. Engineered for simplicity and affordable performance, Element S will quickly become your trusted cruising companion. A quad-core processor offers responsive performance and Element's all-weather, sunlight viewable displays deliver chart and navigation data in beautiful colour. Element's simple and straightforward LightHouse Sport operating system lets you navigate with confidence. Once underway, Element S will keep you on course with a smart list of user-friendly features, such as AIS target overlays, autopilot integration, and sailing instruments displays.

## Raymarine Element S Navigation Displays

- Single channel High CHIRP Sonar with 9 pin connector
- Supports CPT-S transom and thru-hull transducers
- 1 x NMEA2000 port (DeviceNet microC)
- IPx6 and IPx7
- WiFi - 802.11 b / g / n
- 12VDC (8V to 16VDC)

| Part # | Model | Display | Chart | Dimensions | Power (W) |
|---|---|---|---|---|---|
| RAY E70531-00-NAG | 7S | 7" 800 x 480 WVGA | US & Canada Chart | 9.5" x 5.3" x 2.4" | 15 |
| RAY E70533-00-NAG | 9S | 9" 800 x 480 WVGA | US & Canada Chart | 11.3" x 6.3" x 2.4" | 20 |
| RAY E70535-00-NAG | 12S | 12" 1280 x 800 WVGA | US & Canada Chart | 14.1" x 8.5" x 2.4" | 25 |

Note: Charts are Navionics

## Raymarine Element S Transducers

| | |
|---|---|
| **RAY E70342** | CPT-S Transom |
| **RAY E70339** | CPT-S Plastic ThruHull 0° Angled Element |
| **RAY A80448** | CPT-S Plastic ThruHull 12° Angled Element |
| **RAY A80447** | CPT-S Plastic ThruHull 20° Angled Element |
| **RAY A80446** | CPT-S Bronze ThruHull 0° Angled Element |
| **RAY E70340** | CPT-S Bronze ThruHull 12° Angled Element |
| **RAY E70341** | CPT-S Bronze ThruHull 20° Angled Element |
| **RAY A80273** | Transducer Extension for CPT-S, CPT100, CPT110 & CPT120 (4m Cable) |

Knowledge is power and the Element™ CHIRP sonar/GPS series from Raymarine gives you the upper hand when hunting for fish and their habitat. Delivering the sharpest view of the underwater world, Element's HyperVision™ 1.2 megahertz sonar technology, turns up the resolution of DownVision, SideVision, and RealVision 3D to a new level of precision imaging and fish identification, letting you see structures, vegetation, and fish with amazing life-like clarity.

## Raymarine Element Hypervision Navigation Displays

- Built-in CHIRP Sonar, DownVision (Standard and Hyper), SideVision (Standard and Hyper), RealVision™ 3D (Standard and Hyper)
- 1 x NMEA2000 port (DeviceNet microC)
- IPx6 and IPx7
- WiFi - 802.11 b / g / n
- 12VDC (8V to 16VDC)

HV-100

| Part # | Model | Display | Chart | Dimensions | Power (W) |
|---|---|---|---|---|---|
| RAY E70532-05-NAG | 7S | 7", 800 x 480 WVGA | US & Canada Chart | 9.5" x 5.3" x 2.4" | 15 |
| RAY E70534-05-NAG | 9S | 9", 800 x 480 WVGA | US & Canada Chart | 11.3" x 6.3" x 2.4" | 20 |
| RAY E70536-05-NAG | 12S | 12", 1280 x 800 WVGA | US & Canada Chart | 14.1" x 8.5" x 2.4" | 25 |

Note: Charts are Navionics

**ELECTRONICS**

# Raymarine

The performance-tuned Axiom Plus is a new generation of award-winning Raymarine multifunction displays. Optimized for speed, Axiom+ is equipped with a powerful quad-core processor for industry-leading responsiveness and speed; giving you the power to seamlessly redraw charts, navigate with augmented reality, and experience RealVision 3D sonar. New higher resolution IPS displays deliver 25% more brightness, and new day/night color palettes offer enhanced visibility in any lighting condition. Axiom+ features the renowned LightHouse 3 OS, the most powerful and easy-to-use Raymarine MFD operating system to date.

Axiom includes surface, flush, and trunnion mounting kits, mounting hardware, power/data cable, and installation instructions.

## Raymarine Axiom+ Touch Screen Multifunction Navigation Displays

**NEW**

- 1 x NMEA2000 port (DeviceNet microC)
- IPx6 and IPx7
- 12VDC (8V to 16VDC)

| Part # | Model | Display | Chart | Dimensions | Power (W) |
|---|---|---|---|---|---|
| RAY E70634-00-NAG | 7 | 1024 x 600 WVGA Multitouch | US & Canada Chart | 7.92" x 5.24" x 3.00" | 7.34 |
| RAY E70636-00-NAG | 9 | 1280 x 720 WXGA Multitouch | US & Canada Chart | 9.65" x 6.22" x 3.00 | 8.95 |
| RAY E70638-00-NAG | 12 | 1280 x 800 WXGA (HD) IPS | US & Canada Chart | 12.36" x 8.54" x 3.00 | 15.48 |

Note: Charts are Navionics

## Raymarine Axiom+ Touch Screen Multifunction Navigation Displays W/ RealVision 3D

**NEW**

- Same features as above with built-in sonar

| Part # | Model | | Display | Chart | Dimensions | Power (W) |
|---|---|---|---|---|---|---|
| RAY E70635-00-NAG | 7 | Integrated RealVision 3D, 600W Sonar | 1024 x 600 WVGA Multitouch | US & Canada Chart | 7.92" x 5.24" x 3.00" | 9.84 |
| RAY E70635-03-NAG | | Integrated RealVision 3D, 600W Sonar, RV-100 transducer | | US & Canada Chart | | |
| RAY E70637-00-NAG | 9 | Integrated RealVision 3D, 600W Sonar | 1280 x 720 WXGA Multitouch | US & Canada Chart | 9.65" x 6.22" x 3.00 | 11.98 |
| RAY E70637-03-NAG | | Integrated RealVision 3D, 600W Sonar, RV-100 transducer | | | | |
| RAY E70639 | 12 | Integrated RealVision 3D, 600W Sonar | 1280 x 800 WXGA (HD) IPS | - | 12.36" x 8.54" x 3.00" | 19.96 |
| RAY E70639-00-NAG | | | | US & Canada Chart | | |
| RAY E70639-03-NAG | | Integrated RealVision 3D, 600W Sonar, RV-100 transducer | | | | |

Note: Charts are Navionics

## Raymarine Axiom Accessories

Non Chirp 50/200 Khz Transducer For Axiom DV (A80485 Required), Axiom RV (A80489 Required) & Axiom Pro-RVX Or RVX1000 (A80496 Required). All models 600W, except for A102112/A102113, 1000W.

| | |
|---|---|
| RAY A80485 | Adaptor Cable (9 pin to 8 pin) Airmar transducer to AXIOM DV |
| RAY A80489 | Adaptor Cable (25 pin to 8 pin) Airmar transducer to AXIOM RV |
| RAY A80496 | Adaptor Cable (11 pin to 8 pin) Airmar transducer to AXIOM Pro-RVX |
| RAY E66008 | Urethane P79 D Adjustable Angle In-Hull Transducer |
| RAY E66013 | Urethane P319 D Low Profile Through Hull Transducer |
| RAY E66014 | Bronze B117 D Low Profile Through Hull Transducer |
| RAY E66077 | Urethane P319 D Low Profile Thru-Hull Transducer |
| RAY E66086 | Bronze B60 D/T Through Hull 12º Tilted Element Transducer |
| RAY E66085 | Bronze B60 D/T Through Hull 20º Tilted Element Transducer |
| RAY E66054 | Urethane P66 D/S/T Transom Mount Transducer |
| RAY A66091 | Bronze B744V D/S/T Through Hull Retractable Transducer |
| RAY A102112 | Bronze B164-12 D/T 12º Tilted Element Low Profile Transducer |
| RAY A102113 | Bronze B164-20 D/T 20º Tilted Element Low Profile Transducer |

## Raymarine Axiom Parts

| | |
|---|---|
| RAY A80498 | Front Mounting Kit AXIOM 7 |
| RAY A80500 | Front Mounting Kit AXIOM 9 |
| RAY A80502 | Front Mounting Kit AXIOM 12 |
| RAY R70528 | Rear Mounting Kit AXIOM 7 |
| RAY R70531 | Rear Mounting Kit AXIOM 9 |
| RAY R70534 | Rear Mounting Kit AXIOM 12) |
| RAY A80524 | Adaptor Plate E7/E7D to AXIOM 7 |
| RAY A80526 | Adaptor Plate A9X to AXIOM 9 |
| RAY A80525 | Adaptor Plate C70 to AXIOM 9 |
| RAY A80564 | Adaptor Plate C80/E80 to AXIOM 9 |
| RAY A80528 | Adaptor Plate C12X/E12X to AXIOM 12 |
| RAY A80527 | Adaptor Plate A12X to AXIOM 12 |
| RAY A80529 | Adaptor Plate C120/E120 to AXIOM 12 |
| RAY A80530 | Adaptor Plate E90W to AXIOM Pro 12 |
| RAY A80565 | Adaptor Plate E120 to AXIOM Pro 12 |
| RAY A80531 | Adaptor Plate E120W to AXIOM Pro 12 |
| RAY A80533 | Adaptor Plate E140W/E165 to AXIOM Pro 16 |

ELECTRONICS

**Raymarine**

Axiom Pro is engineered for captains that want it all.
Available with RealVision 3D, 1kW CHIRP sonar, and Raymarine HybridTouch control, Axiom Pro is the new standard for "all-in-one" display. And with a blazing fast quad core processor, a super bright IPS display, and the smart LightHouse OS, Axiom Pro delivers a fluid and intuitive navigation experience. Axiom Pro is easy to expand into an advanced navigation network that includes multiple Axiom displays, CHIRP radar, Evolution autopilot, FLIR thermal night vision technology, and more.

**INTUITIVE CONTROL**
With Raymarine HybridTouch you can enjoy simple touch screen interaction or take control of Axiom Pro from its keypad and multi-function rotary control. The choice is yours.

### Raymarine Axiom Pro
### High Performance Multifunction Navigation Displays

- Multitouch
- 1 x NMEA2000 port (DeviceNet microC)
- IPx6 and IPx7
- 12VDC (8V to 16VDC)
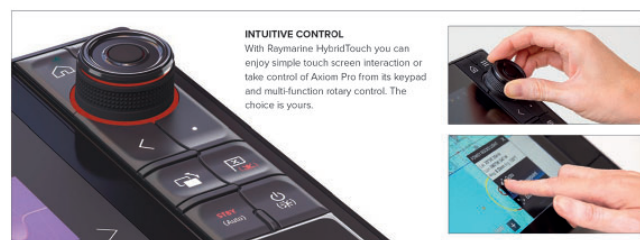
| Part # | Model | | Display | Chart | Dimensions | Power (W) |
|---|---|---|---|---|---|---|
| **RAY E70481** | 9 | High CHIRP Conical Sonar for CPT-S | 1280 x 720 WXGA 9" IPS Optically Bonded LCD | - | 11.9" x 6.85" x 2.56" | 20 |
| **RAY E70481-00-NAG** | | | | US & Canada Chart | | |
| **RAY E70482** | 12 | High CHIRP Conical Sonar for CPT-S | 1280 x 800 WXGA 12.1" IPS Optically Bonded LCD | - | 14.1" x 9.17" x 2.56" | 35 |
| **RAY E70482-00-NAG** | | | | US & Canada Chart | | |

Note: Charts are Navionics

### Raymarine Axiom Pro-RVX High Performance Multifunction Navigation Displays

- 1 x NMEA2000 port (DeviceNet microC)
- IPx6 and IPx7
- 12VDC (8V to 16VDC)

| Part # | Model | | Display | Chart | Dimensions | Power (W) |
|---|---|---|---|---|---|---|
| **RAY E70371** | 9 | 1KW Sonar DV, SV, RV 3D | 1280 x 720 WXGA 9" IPS Optically Bonded LCD | - | 11.9" x 6.85" x 2.56" | 20 |
| **RAY E70371-00-NAG** | | | | US & Canada Chart | | |
| **RAY E70372** | 12 | 1KW Sonar DV, SV, RV 3D | 1280 x 800 WXGA 12.1" IPS Optically Bonded LCD | - | 14.1" x 9.17" x 2.56" | 35 |
| **RAY E70372-00-NAG** | | | | US & Canada Chart | | |

Note: Charts are Navionics

### Raymarine
### Axiom, Axiom Pro and RVX1000 Transducers

Conical High Chirp Direct Connect To Axiom Dv Adaptor Cable A80490 Required For Axiom Rv And All Axiom Pros
Axiom Rv, Axiom Pro-Rvx And Rvx1000 Realvision 3d Transducers
RealVision 3D thru hull transducer
- Includes: 8m transducer extension cable, split transducer Y-cable and port and starboard thru hull transducers

| | |
|---|---|
| **RAY T70318** | RV-212, Bronze transducers, 12°, pair |
| **RAY T70319** | RV-220, Bronze transducers, 20°, pair |
| **RAY T70320** | RV-312, Plastic transducers, 12°, pair |
| **RAY T70321** | RV-320, Plastic transducers, 20°, pair |

RealVision 3D transom transducer
- Includes: 8m transducer extension cable and split transducer Y-cable

| | |
|---|---|
| **RAY A80464** | RV-100, RealVision 3D transom mount transducer |
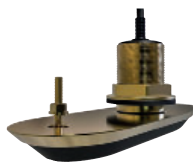
### Raymarine System Remote Control

The new Raymarine RMK-10 Remote Keypad is an ultra-compact wired keypad accessory that provides full control of aSeries, cSeries, eSeries, eS Series, gS Series and AXIOM Range Multifunction Displays (MFDs) from any mounting location.

| | |
|---|---|
| **RAY T70293** | RMK-10 |

### Raymarine Radar
### Quantum, Pulse Compressed Chirp Radar

**Raymarine**®

- Superior Radar Imaging: FLIR's exclusive ATX™ advanced target separation technology displays targets like boats, landmarks, rocks, buoys, and weather cells with unsurpassed resolution and separation quality
- CHIRP Pulse Compression: Excellent short-range detection and enhanced target detail with 18' (6m) minimum range
- CHIRP Pulse compression ensures more energy reaches each target, resulting in superior imaging on long ranges
- Small Target Detection: Quantum's CHIRP Pulse Compression technology identifies small, weak targets, even when positioned close to strong returns.
- Immediate Awareness: Quantum solid-state technology is ready to use in seconds, without any lengthy warm up period.
- Simplified Installation: Simple Wi-Fi connection between Quantum and any Raymarine LightHouse II powered MFD
- Quantum's small diameter power cable is easy to route through tight spaces
- Easy to upgrade - Quantum uses the same bolt pattern as previous generation radars. Optional Quantum adapter cable eliminate the need to run new radar cables
- Energy Efficient and Lightweight Design: Weighs 50% less than traditional magnetron radars
- Safe Emissions thanks to Quantum's low power solid state radar transmitter
- Very low power consumption (17 Watts transmit and 7 watts standby)
- Extended vessel battery life when under sail
- Supply voltage: Either 12 VDC or 24 VDC nominal (Minimum: 10.8 VDC | Maximum: 31.2 VDC)
- Weight: 5.6 kg (12.3 lb)
- Transmit Frequency: 9354 to 9446 MHz
- Peak Power Output: 20W
- 21.3" x 8.25"

| **RAY E70344** | Quantum 18" Q24W (WiFi Model) w/ 10m Power Cable |
| **RAY T70243** | Quantum Q24C 18" Radar with 10m Power and 10m Data Cable |

### Raymarine Radar

### Quantum 2 Chirp Radar With Doppler Collision Avoidance Technology

- Doppler moving target display allows for superior situational awareness at-a-glance
- Fully automatic MARPA target tracking, along with manual MARPA mode
- Adjustable TrueTrails target history shows the motion history of moving contacts
- CHIRP Pulse Compression detects contacts as close as 18-feet for zero-visibility navigation
- 24-mile range for early detection of traffic, navigation aids, landfall and weather
- Immediate awareness - Quantum starts up and is ready to go in seconds
- Superior interference rejection eliminates noise from other radars
- Simplified installation with Wi-Fi or thin wire network connectivity
- Easy upgrade - Quantum 2 fits the same bolt pattern as other Raymarine scanners
- Lightweight and easy to install - Quantum weighs up to 50% less than comparable magnetron radars
- Safe emissions - mount Quantum anywhere onboard
- Low power consumption for extended battery life under sail
- Diameter: 54.1 cm x  Height: 20.9 cm
- Weight: 5.6 kg
- Supply voltage: Either 12 VDC or 24 VDC nominal (Minimum: 10.8 VDC | Maximum: 31.2 VDC)
- Range Performance: 24NM
- Peak Power Output: 20W
- 21.3" x 8.25"

| **RAY T70416** | Quantum 2 Q24D Doppler 18" Radar with 10m Power and Data Cable |
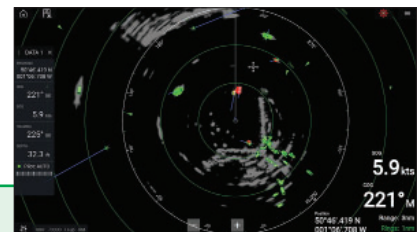
### HOW DOPPLER RADAR WORKS

Microwave energy waves are bounced off of a distant target, just like conventional radar.
Moving targets send back echoes whose frequencies shift upward or downward from what was originally transmitted.
For inbound targets, the frequency increases as the leading edge of the returning echoes are received more frequently as the target's range decreases.
For outbound targets, the frequency drops as the returning echoes spread out as its range increases.
Doppler radars are engineered to detect these small shifts in wave frequency, and use them to classify moving radar targets.

### DOPPLER TARGET PROCESSING

Doppler radar is tuned specifically to detect the radar echo frequency shift returned by moving vs. stationary targets.
Quantum 2 then uniquely colour codes moving targets to indicate whether they are getting closer, or moving away.
- Inbound targets are coloured red.
- Outbound targets are coloured green.
Colour coded targets make it simple to pick out moving traffic from other stationary targets like land, navigation aids or stopped/anchored vessels.

**ELECTRONICS**

### Raymarine CP370 Sounder Module

Spend less time looking for fish and more time fishing

- Smarter target intensity controls reveal bait and game fish with exceptional clarity
- Enhanced digital filtering reveals fish targets through the entire water column
- Spend less time looking for fish, and more time fishing. CP370 takes the guesswork out of interpreting the sonar display.
- Power: 600W / 1000W Depending on transducer
- 11.79" x 7.9" x 3.3"

**RAY E70297**

### Raymarine SiriusXM Weather Receiver

SiriusXM Marine is graphical weather and fishing information for boaters. Essential information like weather radar, NEXRAD storm cell tracking, tropical storm tracks and localized forecasts are all easily viewable inside the LightHouse 3 chart application. Fisherman can enjoy expanded information including high-resolution coastal and offshore sea surface temperature overlays, also displayed right on the live navigation chart.

- Compatible Displays: Axiom, Axiom Pro, Axiom XL (Requires LightHouse 3.9 or newer software)
- Includes: Shakespeare SRA-50 SiriusXM Antenna and SR200 InfoLINK to RayNet Interface cable

**RAY E70499**

### Raymarine GA150 External GPS Antenna

- Improves reception of your Multifunction Display's built-in GNSS (GPS/GLONASS) receiver
- Optional external GPS patch antenna for use on all a9, a12, eS9, and eS12 model MFDs (MFDs Internal GPS antenna must be ON)
- Flush or pole mount capabilities
- Ideal for situations where the display is mounted below decks or under a hard top
- 10m cable included

**RAY A80288**        50 channel

### Raymarine Raystar RS150 External GPS Antenna

**NEW**

A high performance, 72-channel, remotely mounted GPS sensor for Raymarine navigation systems. The RS150 offerss fast 10Hz position updates and enhanced accuracy. It is also a GNSS receiver and supports the GLONASS global navigation satellite system.

- Satellite differential GPS-compatible. Space-Based Augmentation System (SBAS) enabled with WASS, EGNOS, MSAS, and GAGAN support
- Low power consumption: 30mA
- SeaTalking and NMEA2000 compatible (using a device net adapter cable)
- Designed for low profile surface mounting or optional pole mounting

**RAY E70310**        72 channel

### Raymarine AIS700

The AIS700 from Raymarine is a Class B Automatic Identification System (AIS) transceiver designed for use with Raymarine multifunction navigation display systems. As a Class B AIS transceiver, the AIS700 not only receives broadcasts from other vessels, it also transmits your own boat's information too helping you to be seen on other vessels' systems.

- Full transmit and receive AIS for enhanced situational awareness and safety
- Latest SO-TDMA networking for longer range and faster performance
- Built-in antenna splitter simplifies installation with existing VHF radio antenna*
- NMEA2000, NMEA0183, PC (setup & diagnostics) and SeaTalkng compatible.
- Software or hardware switchable Silent Mode for enhanced security when needed
- W: 6.76" x D: 5.22

**RAY E70476**

### Raymarine AIS350

Raymarine's AIS350 is a receive-only AIS device that allows you to receive and display the AIS data transmissions from nearby vessels.

- Dual-channel receive-only
- For small vessels wanting increased situational awareness, but without the need to transmit
- Low cost alternative brings AIS safety advantages to a wider range of vessels
- W: 6.57" x H: 2.12"

**RAY E32157**

### Raymarine Tiller Pilots

- Removeable Cockpit Autopilots for Tiller Steered Yachts
- AutoTack lets you handle the sheets while the pilot tacks the boat and AutoSeastate intelligently keeps the boat on course while conserving power.
- Whether used as a stand-alone pilot or with SeaTalk/ NMEA GPS, the clear backlit LCD and 6 button keypad make these pilots safe and easy to use.
- Nominal voltage: 12V DC

**RAY A12004**        ST1000+ Tiller 3,000kg (6,600lbs)
**RAY A12005**        ST2000+ Tiller 4,500kg (10,000lbs)

## Raymarine Autopilot
## Evolution System Packs With Drives


T70157

- Automagic™ - No lengthy calibration procedures to perform. No compass calibration required. Plug and play connections
- Easy to install - Freedom from the restrictions of conventional heading sensors. EV sensor core can be installed above or below deck. Install upside-down or off the vessel's centre line.
- Aerospace technology - 9-axis precision monitoring of pitch, roll, yaw and heading
- Fuel efficient - Evolution autopilots steer so accurately they will save fuel and get you to your destination faster

### The EV Sensor Core

At the centre of every Evolution system is the intelligent EV sensor core, a 9-axis sensor that monitors vessel motion in all three dimensions. The innovative EV sensor core combines advanced solid-state sensors with the Evolution autopilot processor into a single easy-to-install housing.

Mount the EV sensor core above or below decks, the rugged enclosure is fully sealed and built to IPX6 and IPX7 waterproofing and submersion standards.


T70158


T70154


T70152


T70330

### EV-1 Cockpit and Inboard Autopilots

EV-1 autopilots consist of a Control Head, EV-1 Sensor, Autopilot Control Unit (ACU) and drive unit. The drive unit (inboard mechanical/hydraulic or cockpit mounted) and correct ACU for your vessel is dependent on the steering system and displacement of the vessel itself.

**RAY T70154**     EV-100 Power Pilot with p70Rs control head, ACU-100, EV1 Sensor Core, EV1 Cabling kit & 0.5l hydraulic pump
**RAY T70152**     EV-100 Wheel Pilot with p70s control head, ACU-100, EV1 Sensor Core, EV1 Cabling kit & Wheel Drive
**RAY T70330**     EV-150 Power Pilot with p70Rs control head, ACU-150, EV1 Sensor Core, EV1 Cabling kit & 1.0L hydraulic pump
**RAY T70157**     EV-200 Hydraulic Autopilot with p70Rs control head and rudder indicator, ACU-200, EV1 Sensor Core, EV1 Cabling kit & Type 1 Hydraulic pump
**RAY T70158**     EV-200 Linear Autopilot with p70s control head, ACU-200, EV1 Sensor Core, EV1 Cabling kit & Type 1 Mechanical Linear drive

### Raymarine Autopilot Control Units



Complete your Evolution autopilot system with an autopilot control. The new p70s and p70Rs control heads feature vibrant colour displays and are powered by Raymarine's intuitive LightHouse user interface. LightHouse organises all options into simple menu structures and with Evolution's quick setup process you will be up and running in minutes.
Designed for sailing yachts, the p70s offers simple 1 and 10 degree direct course change push buttons. The p70Rs features a rotary dial control for power boaters. Use the rotary dial for menu and course changes or activate power steer mode and steer manually right from the p70Rs.
- 3.5" super bright oversized LCD for maximum visibility
- All weather, low power, optically bonded display technology delivers brighter colours, sharper contrast, and a wide viewing angle
- Button or rotary control options for sail and power applications
- Supported autopilot modes: Auto; Standby; Pattern; Track; Wind Vane; Power Steer and Jog Steer
- Display the pilot information in different formats with automatic 3-step setup for leisure, cruising and performance
- Simple system and group dimming / illumination
- Easy to use Lighthouse user interface with sculpted rubber keypad for precise operation in all conditions
- SeaTalkng networking for seamless connectivity to Raymarine systems and NMEA2000* networks
- New glass bridge industrial design compliments Raymarine eS and gS Series multifunction displays
- Supplied with both black (eS Series style) & (e Series style) gunmetal bezels and protective suncover
- Nominal voltage: 12VDC
- Display: Sunlight readable optically bonded LCD
- Resolution: 320 x 240 QVGA
- Waterproofing: IPX6

**RAY E70328**     p70s Autopilot Control Head (Sail)
**RAY E70329**     p70Rs Autopilot Control Head (Power)
**RAY E15024**     S100 Wireless Autopilot Remote Complete with Base Station

## Raymarine i50 & i60 Instruments

The i50 instruments are designed to complement Raymarine's latest generation multifunction displays. These stylish, dedicated-function instruments are the perfect solution for smaller power boats, yachts and RIBs. The i50 range consists of 3 digital displays: speed and depth displays with extra-large digits and a multi-line tridata unit.

Excellent viewing angles for both day and night conditions and simple, push-button controls make i50 instruments extremely easy to see and use. They are also simple to install thanks to the front-mount design.

- Large numerals and digits
- Red back lighting for enhanced night time visibility
- SeaTalk and SeaTalkng interfaces
- NMEA 2000 (compatible) interface
- Built-in transducer interface
- Low power consumption
- Multiple data source support eliminates potential data conflicts
- Front mounted design for simple installation
- 12VDC, < 1W (display only) / 2.4W max w/transducer connected
- 4.33" x 4.52"

**RAY E70153**     i50 & i60 Wind, Speed, Depth - 3 x Instrument  & 3 x Transducer Pack

## Raymarine i70 Instruments

The i70s multifunction gives you the flexibility to display instrument and navigation data that is most important to you. Equipped with a bold and bright 4.1" display the i70s is easy-to-customize with digital, analog and graphical displays of depth, speed, wind and more. Add the i70s to your existing Raymarine instrument system or create a network of i70s displays and sensors, the choice is yours.

- Large numerals and digits
- Red back lighting for enhanced night time visibility
- SeaTalk and SeaTalkng interfaces
- NMEA 2000 (compatible) interface
- Built-in transducer interface
- Low power consumption
- Multiple data source support eliminates potential data conflicts
- Front mounted design for simple installation
- 12VDC, 1.6W
- 4.33" x 4.52"

**RAY E70327**     i70s Multifunction Colour Display

**RAY T70226**     i70s System Pack (Colour instrument & Wind, DST transducers), iTC-5, 9M backbone, power, 1 backbone & 1 inline terminator

**RAY T70216**     i70s System Pack (i70s Colour instrument & Wind, DST transducers, iTC-5, 3M backbone, 5 Way Connector, STng power cable & 2 backbone terminators)

**RAY M78713-PZ**     P319 Low Profile Through Hull Plastic Depth Transducer 14m Cable
**RAY E26031**     ST800/P120 Speed/Temperature Low Profile Retractable Through Hull Transducer - 13.7m Cable
**RAY E22078**     Short Arm Vane Transducer supplied with 30m (97.5') Cable
**RAY R28170**     Short Arm Wind Vane Transducer

## Raymarine iTC-5 Instrument Transducer Converter

The Raymarine iTC-5 converts analogue transducer signals used in i70, ST70+ and ST70 instrument systems to SeaTalkng.

Transducers for Speed/Temperature, Depth, Wind, Rudder Angle and Fluxgate Compass can be connected to the one iTC-5 unit, eliminating the need for multiple ST70 pods
- W: 5.9" x H: 3.7"

**RAY E70010**

**ELECTRONICS**

### Raymarine CAM210 IP Marine Camera

Ruggedised, High Definition, Day and Night network bullet video camera suitable for all above deck applications. Integrated sun-cover for maximum visibility and small frame size for easy installation anywhere on the boat.

- Plug and play integration with Raymarine MFD's running Lighthouse II
- Power over Ethernet (PoE) or direct 12v DC power supply
- High bright IR LEDs for operation in total darkness
- Digital Defog processing improves the captured image in poor weather conditions (such as smog, fog or smoke)
- Intelligent IR technology for clear video images at night in all conditions
- H: 7.87" x Mount Dia: 3.5"

**RAY E70346**      CAM210 Bullet CCTV Day and Night Video Camera (IP Connected)

---

### Raymarine CAM220 IP Marine Camera

Ruggedised, High Definition, Day and Night network dome video camera suitable for above or below deck applications. Dome design provides all round selected viability whilst the small frame size allows for rapid installation. Stylised to blend in with your boat's aesthetic design. Ruggedised, High Definition, Day and Night network dome video camera suitable for above or below deck applications. Dome design provides all round selected viability whilst the small frame size allows for rapid installation. Stylised to blend in with your boat's aesthetic design.

- Plug and play integration with Raymarine MFDs running Lighthouse II
- Power over Ethernet (PoE) or direct 12v DC power supply
- Simple mechanical frame allows the camera to be locked, rock steady, into position
- High bright IR LEDs for operation in total darkness
- Mount Dia: 3.9"

**RAY E70347**      CAM220 Eyeball CCTV Day and Night Video Camera (IP Connected)

**Raymarine Depth - 600W Transducers**

| | |
|---|---|
| RAY E66008 | P79 Adjustable In-Hull Angle |
| RAY E66013 | P319 Low Profile Through Hull |
| RAY E66014 | Bronze B117 Low Profile Through Hull |

**Raymarine Depth/Temperature - 600W Transducers**

| | |
|---|---|
| RAY E66085 | Bronze B60 D/T Through Hull with 20º Tilted Element Transducer |
| RAY E66086 | Bronze B60 D/T Through Hull with 12º Tilted Element Transducer |
| RAY E66077 | P319 Urethane Low Profile Thru-Hull Transducer 600W |

**Raymarine Transducer Accessories**

| | |
|---|---|
| RAY A80490 | Axiom RV/Pro RVX CPT-S/DV & Axiom PRO to CPT-S 25-pin to 9-pin Adaptor - 0.3m |
| RAY A80562 | HyperVision Thru-hull Transducer Extension Cable - 4m |
| RAY E66010 | 5m Transducer Extension Cable with Removable Back-Shell |
| RAY E66066 | Transducer Adaptor Cable for DSM/CP transducer to MFD |
| RAY R70615 | RealVision 25-pin Locking Collar Kit |

**Raymarine Network Accessories**

| | |
|---|---|
| RAY E22158 | ST1 to STNG Adaptor Kit (1x R52131, 2x A06031, 2x A06032, 1x A22164, 1x A06049, 1x A06039) |
| RAY T70134 | STNG Starter Kit (1xA06064, 2xA06031, 1xA06040, 1xA06049) |
| RAY A25062 | STNG Backbone Kit (2 x A06031, 1 x A06037, 2 x A06036, 4 x A06028, 1 x A06049) |
| RAY A06028 | STNG T-Piece Connector |
| RAY A06064 | 5 Way Connector |
| RAY A06049 | STNG Power Cable |
| RAY A06031 | STNG Backbone Terminator |
| RAY A06074 | In-Line STNG Terminator |
| RAY A06033 | Backbone Cable 400mm |
| RAY A06034 | Backbone Cable 1m |
| RAY A06035 | Backbone Cable 3m |
| RAY A06036 | Backbone Cable 5m |
| RAY A06068 | STNG Backbone Cable 9m |
| RAY A06037 | Backbone Cable 20m |
| RAY A06038 | Spur Cable 400mm |
| RAY A06039 | Spur Cable 1m |
| RAY A06040 | Spur Cable 3m |
| RAY A06041 | Spur Cable 5m |
| RAY A06045 | DeviceNet Female Adaptor Cable, 15.7" |
| RAY A06082 | STng (Male) to Devicenet (Female) Adaptor |
| RAY A06083 | Devicenet (Male) to STng (Female) Adaptor |
| RAY A80007 | HS-5 Network Switch (RayNet) |
| RAY A62360 | RayNet (F) to RJ45 (M) cable - 1m |
| RAY A80151 | RayNet (F) to RJ45 (M) cable - 3m |
| RAY A80159 | RayNet (F) to RJ45 (M) cable - 10m |
| RAY 308-0251-30-00 | RayNet (Female) to RJ45 (Male) Cable, 30M |
| RAY A62361 | RayNet (F) to RayNet (F) cable - 2m |
| RAY A80005 | RayNet (F) to RayNet (F) cable - 5m |
| RAY A62362 | RayNet (F) to RayNet (F) cable - 10m |
| RAY A80006 | RayNet (F) to RayNet (F) cable - 20m |
| RAY A80162 | RayNet (M) to RayNet (M) cable - 100mm |
| RAY E55060 | SeaTalkHS Crossover Coupler |
| RAY 4115028 | Connector, RF45 Waterproof Enclosure |

**ELECTRONICS**

WANT TO HAVE IT ALL?

JOIN THE CLUB

GARMIN

# Differences between the Garmin Marine Series Families

| STRIKER VIVID SERIES FISHFINDERS | ECHOMAP UHD & ECHOMAP ULTRA SERIES COMBOS | GPSMAP SERIES CHARTPLOTTER/COMBO |
|---|---|---|
| • Entry level Fishfinder<br>• Has sonar built-in<br>• Packaged with Transducer<br>• GPS built-in for waypoints, track logs & routes<br>• NO charts are pre-loaded or can be added<br>• (NO SD card slot)<br>• Can do QuickDraw Contours to create 1' contour chart data direct to & saved to unit internal memory.<br>  (over 2 Million acres)<br>Sizes Available :<br>4", 5", 7", 9" | • Chartplotter/Sonar Combo<br>• NO Radar compatibility<br>• Packaged with a Transducer<br>• Charts can come pre-loaded & can also be added via a Pre-Programmed SD Card<br>• Echomap UHD have- 1-microSD Cardslot<br>• Echomap Ultra have- 2-microSD Cardslot<br>• Can do QuickDraw Contours to create 1' contour chart data direct to unit saved to an SD Card.<br>• Can share data with up to 2 units from either Echomap or Striker series with data sharing cable (to share waypoints, sonar)<br>• Can network 2 units or more from either Echomap or Ultra series with network cables & if needed the additional GMS 10 Network Port Expander (7" or larger to share waypoints, sonar)<br>Sizes Available : 6", 7", 9", 10", 12" | • Available as Chartplotter only or with Sonar built-in<br>• Radar Compatible<br>• Fully Networkable within the GPSMAP Series (all sizes)<br>• NO Transducer packaged with (Available separately)<br>• Can do QuickDraw Contours to create 1' contour chart data direct to unit saved to SD Card.<br>• Units can come with Charts pre-loaded & can also be added via SD Card slot<br>Sizes Available :<br>7", 9", 10", 12", 16", 17", 22", 24" |

**GARMIN.**

**GARMIN.**


**NEW**

STRIKER Vivid 4sv      STRIKER Vivid 5cv      STRIKER Vivid 9sv

### Garmin STRIKER Vivid Fishfinders

▪ 7 NEW, vivid, high contrast colour palettes enable anglers to distinguish fish and structure ever more clearly
▪ Designed to not only see fish and structure below the boat, but also to mark your favorite fishing spot and easily navigate back to them
▪ Bright sunlight readable display
▪ Built-in Garmin CHIRP ClearVü™ (cv models) scanning sonar for nearly photographic images of what passes below your boat
▪ Built-in GPS lets you mark waypoints, create routes and view boat's speed
▪ Quickdraw Contours: Easy-to-use built-in map generation software lets you instantly create personalized HD fishing maps with 1' contours,with storage up to 2 million acres
▪ Brighter Display: Bright, sunlight-readable display and intuitive user interface
▪ Built-In Wi-Fi (on the Striker Vivid 7cv/7sv/9sv only): Use the built-in Wi-Fi to access the ActiveCaptain mobile app for smart notifications, access to the Garmin Quickdraw Community and more

| Part # | Model | Display | Description | Max Depth (Freshwater / Saltwater / ClearVu) | Transducer Included |
|---|---|---|---|---|---|
| GAR 010-02550-01 | STRIKER Vivid 4cv | 4.3" | Fishfinder/GPS | 1,750' / 830' / 250' ClearVu | GT20-TM (CHIRP/ClearVu) |
| GAR 010-02551-01 | STRIKER Vivid 5cv | 5" | Fishfinder/GPS | 2,300' / 1100' / 250' ClearVu | GT20-TM (CHIRP/ClearVu) |
| GAR 010-02552-01 | STRIKER Vivid 7cv | 7" | Fishfinder/GPS | 2,300' / 1100' / 250' ClearVu | GT20-TM (CHIRP/ClearVu) |
| GAR 010-02553-01 | STRIKER Vivid 7sv | 7" | Fishfinder/GPS | 800' / 250' ClearVu / 500' SideVu | GT52HW-TM (CHIRP/ClearVu/SideVu) |
| GAR 010-02554-01 | STRIKER Vivid 9sv | 9" | Fishfinder/GPS | 800' / 250' ClearVu / 500' SideVu | GT52HW-TM (CHIRP/ClearVu/SideVu) |

STRIKER Plus 4sv

## Garmin STRIKER Plus Fishfinders

▪ Designed to not only see fish and structure below the boat, but also to mark your favorite fishing spot and easily navigate back to them
▪ Bright sunlight readable display
▪ Built-in Garmin CHIRP ClearVü™ (cv models) scanning sonar for nearly photographic images of what passes below your boat
▪ Built-in GPS lets you mark waypoints, create routes and view boat's speed

▪ Quickdraw Contours: Easy-to-use built-in map generation software lets you instantly create
   personalized HD fishing maps with 1' contours,with storage up to 2 million acres
▪ Brighter Display: Bright, sunlight-readable display and intuitive user interface

| Part # | Model | Display | Description | Max Depth (Freshwater / Saltwater / ClearVu) | Transducer Included |
|---|---|---|---|---|---|
| **GAR 010-01871-01**\*\* | STRIKER Plus 4cv | 4.3" | Fishfinder/GPS | 1,750' / 830' / 250' ClearVu | GT20-TM (CHIRP/ClearVu) |

\*\* Limited Quantity



ECHOMAP Plus 45sv



ECHOMAP Plus 77cv
ECHOMAP Plus 77sv
ECHOMAP Plus 97sv

## Garmin ECHOMAP Plus Chartplotter Combos

▪ Easy-to-use, easy-to-setup chartplotter/sonar combos
▪ Following the success of the ECHOMAP CHIRP combo series, Garmin is proud to announce the new ECHOMAP Plus
▪ Comes with either U.S. Coastal BlueChart or Canada LakeVü HD chart
▪ QUICKDRAW Contours: Easy-to-use built-in map generation software lets you instantly create personalized HD fishing maps with
   1' contours,with storage up to 2 million acres
▪ Internal 5 Hz GPS updates position and heading 5 times per second
▪ (1) microSD card for optional mapping, user data storage and ActiveCaptain mobile app
▪ NMEA 0183 (4" models); NMEA 0183 & NMEA 2000 compatible (7" & 9" models)
▪ Supports a wide range of compatibleGarmin transducers, including 50/200 kHz, 77/200 kHz, CHIRP Traditional and Garmin
   CHIRP ClearVü and more
▪ Transmit power: 500 W (RMS), 4,000 W (peak-to-peak)

▪ Built-In Wi-Fi (on the 7' & 9" models): Use the built-in Wi-Fi to access the ActiveCaptain mobile app for smart notifications, access
   to the Garmin Quickdraw Community and more
▪ Keyed-Assisted Touchscreen (on the 7" & 9" models): Easy-to-use interface with quick access to features you use most

### *Inland Models:*

| Part # | Model | Display | Description | Pre-Loaded Chart | Transducer Included |
|---|---|---|---|---|---|
| **GAR 010-01887-05** | ECHOMAP Plus 45sv | 4.3" | Chartplotter/Fishfinder | Canada LakeVu G3 | GT20 (CHIRP/Clear Vu) |

### *Coastal Models:*

| Part # | Model | Display | Description | Pre-Loaded Chart | Transducer Included |
|---|---|---|---|---|---|
| **GAR 010-01895-01** | ECHOMAP Plus 77cv | 7" | Chartplotter/Fishfinder | Canada Bluechart G3 | GT23M-TM (CHIRP/ClearVu) |
| **GAR 010-01899-01** | ECHOMAP Plus 77sv | 7" | Chartplotter/Fishfinder | Canada Bluechart G3 | GT51M-TM (CHIRP/Clear Vu/Side Vu) |
| **GAR 010-01903-01** | ECHOMAP Plus 97sv | 9" | Chartplotter/Fishfinder | Canada Bluechart G3 | GT51M-TM (CHIRP/Clear Vu/Side Vu) |

▪ Optional BlueCharts available -

ECHOMAP UHD 65CV



ECHOMAP UHD 75CV

## Garmin ECHOMAP UHD Touchscreen Chartplotter Combos

- Ultra High-Definiton ClearVu and Traditional CHIRP
- Share data with other devices on your network (7" and 9" models only)
- Create your own maps on the fly and tailor them to fit your needs
- Manage your marine experience from nearly anywhere
- Connect to autopilots, digital switching, weather, FUSION-Link audio system, media, VHF, AIS and more from one screen
- Transducers for Ultra High-Definition ClearVu scanning sonar, which shows you a crystal-clear image below your boat. Plus, you get Garmin high wide CHIRP traditional sonar for remarkable target separation.
- IPX7
- 400 x 800 pixels
- WVGA display

| Part # | Model | Display | Pre-Loaded Chart | Transducer Included |
|---|---|---|---|---|
| GAR 010-02332-00 | UHD 65CV | 6" | Canada LakeVu G3 | GT24UHD TNS |
| GAR 010-02336-00 | UHD 75CV | 7" | Canada LakeVu G3 | GT24UHD-TM |

## Garmin GPSMAP 743/943/1243 With Vivid Sonar Chartplotters & Combos (Touchscreen)

- NEW higher-resolution touchscreen displays compared to previous. GPSMAP 743 offers 60% more pixels, and the GPSMAP 943 offers 50% more
- GPSMAP 743 and 943 offer nearly twice the processing power of previous generation devices
- GPSMAP 943 and 1243 offer IPS displays with touchscreen for wider viewing angles and superior clarity
- Supports Garmin Marine Network; allows sharing of sonar, maps, user data, radar, IP cameras and Panoptix™ sonar among multiple units
- Touchscreen displays offer sunlight readability, even with polarized sunglasses and edge-to edge screens
- Built-in high-sensitivity 10Hz GPS/GLONASS receiver
- Built-in Wi-Fi networking to pair with the free ActiveCaptain app for access to OneChart, smart notifications, software updates, and more
- J1939 and NMEA 2000 engine connectivity, and Garmin's exclusive OneHelm feature for connecting to compatible third -party devices, such as EmpirBus digital switching
- Integrated ANT® support for use with quatix® 3 and quatix 5 marine watch, Garmin Nautix™ in-view display, gWind™ Wireless 2 transducer, GNX™ Wind marine instrument and wireless remote controls
- SailAssist
- All models support Panoptix and Panoptix LiveScope sonar devices



NEW



010-02366-01

| Part # | Model | Display | Description | Pre-Loaded Charts |
|---|---|---|---|---|
| GAR 010-02365-01 | GPSMAP 743 | 7" | Chartplotter | US+Canada+Bahamas g3, LakeVu g3 |
| GAR 010-02366-01 | GPSMAP 943 | 9" | Chartplotter | US+Canada+Bahamas g3, LakeVu g3 |
| GAR 010-02367-01 | GPSMAP 1243 | 12" | Chartplotter | US+Canada+Bahamas g3, LakeVu g3 |

### *XSV Series Sonar Features:*

- Built-in Ultra High-Definition SideVu and ClearVu scanning sonars with high-contrast vivid color palettes to help distinguish fish from structure as well as 1kW CHIRP traditional sonar and more



010-02366-03

| Part # | Model | Display | Description | Pre-Loaded Charts | Transducer |
|---|---|---|---|---|---|
| GAR 010-02365-03 | GPSMAP 743xsv | 7" | Chartplotter/Fishfinder | US+Canada+Bahamas g3, LakeVu g3 | sold separately |
| GAR 010-02366-03 | GPSMAP 943xsv | 9" | Chartplotter/Fishfinder | US+Canada+Bahamas g3, LakeVu g3 | sold separately |
| GAR 010-02367-03 | GPSMAP 1243xsv | 12" | Chartplotter/Fishfinder | US+Canada+Bahamas g3, LakeVu g3 | sold separately |

ELECTRONICS

## Garmin GPSMAP 8600 Series Chartplotters & Combos (Touchscreen)

- NEW updated graphics and user interface
- Beautiful widescreen multi-touch fully networked displays
- Built in high-sensitivity 10Hz GPS/GLONASS receiver
- Includes Quickdraw Contours map drawing software
- Supports Garmin Marine Network; allows sharing of sonar, radar, maps, user data,
  NMEA 2000 and NMEA 0183 support for network connectivity, including autopilots,
  digital switching, weather, media, VHF, AIS and other sensors
- Built-in wireless capabilities for ActiveCaptain app and VIRB® action camera integration
- Use Garmin OneHelm to connect many third-party devices
- Integrated ANT® support for use with quatix® 3 andquatix 5 marine watch, Garmin Nautix™ in-view display,
  gWind™ Wireless 2 transducer, GNX Wind marine instrument and wireless remote controls
- SmartMode™ control quickly changes all screens at a helm in sync
- J1939 support for engines and generators
- SailAssist
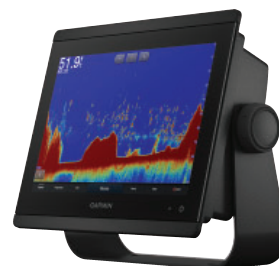
| Part # | Model | Display | Description | Pre-Loaded Charts |
|---|---|---|---|---|
| GAR 010-02091-01 | GPSMAP 8610 | 10" | Chartplotter | BlueChart g3 & LakeVu g3 |
| GAR 010-02092-01 | GPSMAP 8612 | 12" | Chartplotter | BlueChart g3 & LakeVu g3 |
| GAR 010-02093-01 | GPSMAP 8616 | 16" | Chartplotter | BlueChart g3 & LakeVu g3 |

### XSV Series Sonar Features:

- Built-in Garmin HD-ID™ sonar, true dual-channel CHIRP sonar and both ClearVü and SideVü scanning sonar with CHIRP
  technology (transducers sold separately)
- Supports a wide range of compatible Garmin transducers, including 40 - 250 kHz CHIRP, 260/455/800/1200 kHz CHIRP scanning
  (ClearVü and SideVü) (transducers page 238)
- Supports Panoptix LiveScope All-Seeing sonar
- Supports premium GSD 26 sonar module
- Transmit power: 1 kW RMS (8000W peak-to-peak); CHIRP: 1 kW RMS (8000W peak-to-peak)
- Graphic logging of water temperature and sonar recording
- All-in-one transducer options

| Part # | Model | Display | Description | Pre-Loaded Charts | Transducer |
|---|---|---|---|---|---|
| GAR 010-02091-03 | GPSMAP 8610XSV | 10" | Chartplotter | BlueChart g3 & LakeVu g3 | sold separately |
| GAR 010-02092-03 | GPSMAP 8612XSV | 12" | Chartplotter | BlueChart g3 & LakeVu g3 | sold separately |
| GAR 010-02093-03 | GPSMAP 8616XSV | 16" | Chartplotter | BlueChart g3 & LakeVu g3 | sold separately |

## Garmin GPSMAP 1042/1242 Chartplotters Combos

- Experience advanced all-in-one solutions with these keyed combos
- Large, bright 10" or 12" screens coupled with quick and easy-to-use
  keypad interface with user-progammable keys and a multi-function control knob.
- Built-in high-sensitivity 10Hz GPS/GLONASS receiver
- Includes Quickdraw Contours map drawing software
- Supports Garmin Marine Network; allows sharing of sonar, radar, maps, user data, NMEA 2000 and NMEA 0183 support for network
  connectivity, including autopilots, digital switching, weather, media, VHF, AIS and other sensors
- Built-in wireless capabilities for ActiveCaptain app and VIRB® action camera integration
- Includes Quickdraw Contours map drawing software
- Integrated ANT® support for use with quatix® 3 and quatix 5 marine watch, Garmin Nautix™ in-view display, gWind™ Wireless 2
  transducer, GNX Wind marine instrument and wireless remote controls
- SailAssist

### XSV Series Sonar Features:

- Garmin single channel CHIRP sonar, CHIRP ClearVü and CHIRP SideVü scanning sonar (transducers page 238)
- Supports Panoptix™ all-seeing sonar and premium Garmin sonar modules

| Part # | Model | Display | Description | Pre-Loaded Charts | Transducer |
|---|---|---|---|---|---|
| GAR 010-01740-03 | GPSMAP 1042XSV | 10" | Chartplotter/Fishfinder | BlueChart g2 HD (US & Canada West Coast) & US LakeVu HD | sold separately |
| GAR 010-01741-03 | GPSMAP 1242XSV | 12" | Chartplotter/Fishfinder | BlueChart g2 HD (US & Western Canada) & US LakeVu HD | sold separately |

### Pre-loaded in ECHOMAP Plus 45sv



**GAR 010-C1113-00**   Canada LakeVü G3

### Pre-loaded in ECHOMAP Plus 77cv, 77sv & 97sv



US Coastal Bluechart G3

### Pre-loaded in GPSMAP Units



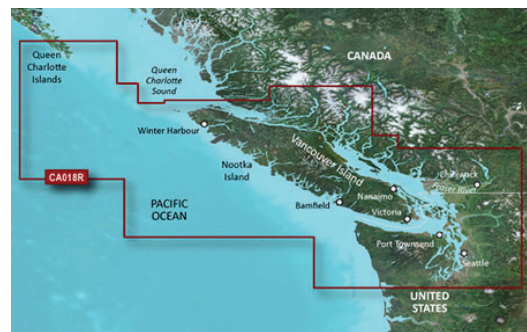**GAR 010-C1018-20**   US & Canada West Coast Bluechart G3

### Optional Canada Coastal Chart for: 45sv, 77cv, 77sv & 97sv



**GAR 010-C1019-20**   Canada Coastal Bluechart G3
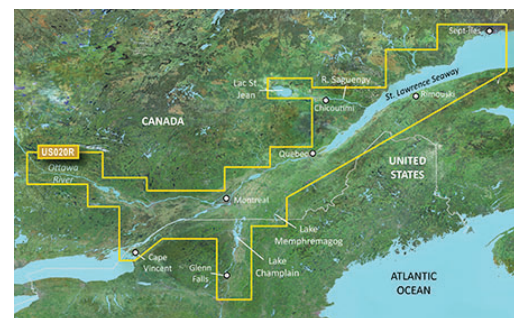
### Optional Canadian Charts



**GAR 010-C1105-00**   Inside-Outside Passage Bluechart G3 Vision



**GAR 010-C0701-00**   Puget Sound Dixon Bluechart G3 Vision



**GAR 010-C0721-00**   St. Lawrence Seaway Bluechart G3 Vision

## Garmin Fantom 18 Radar

**NEW**

▪ 18" 40-watt solid-state radar has a range from 20' to 48 nm, even in fog or rain
▪ Rotation speeds of 24 RPM for reduced power consumption, and 48 RPM for fast screen updates
▪ 5.2-degree horizontal beamwidth provides a high-resolution image and high antenna gain, and 8-bit true colour
▪ MotionScope uses the Doppler effect to detect moving targets and highlight them in different colours so you can navigate around other boats or severe weather, or toward fishing spots where birds feed at the surface
▪ Comes with 15m cables
▪ Dia: 20" x H: 9.8"
▪ 13.6 lbs

**GAR 010-01706-00**          18"

## Garmin GMR 18HD+ Radar

▪ 18" 40-watt
▪ 4 kW of transmit power and clear echo definition at all ranges
▪ Dynamic Auto Gain automatically adjusts to your surroundings for optimal performance in all conditions
▪ Dynamic Sea Filter automatically adjusts gain to changing sea conditions
▪ Overlays radar image on the chartplotter map page (autopilot or heading sensor recommended for best results)
▪ Comes with 15m cables
▪ Range: 20m to 36nm
▪ Dia: 20" x H: 9.8"
▪ 17 lbs

**GAR 010-01719-00**          18"

GT23M-TM
GT51M-TM
CV51M-TM

GT15M-IH

GT23M-TH

GT52HW-TM
GT24UHD-TM

GT34UHD-TM

GT36UHD-TM

## Garmin Transducers

▪ For a complete selection of transducers, please ask for the Garmin Transducer catalogue or visit www.garmin.com

| Part # | Model | Type | Description | Features |
|---|---|---|---|---|
| GAR 010-01966-00 | GT51M-TM | Transom Mount | CHIRP ClearVü/SideVü (260/455 kHz ), 500W mid-band CHIRP sonar (80-160 kHz ), 600W, 12-pin | Depth / Temp 30' cable |
| GAR 010-12402-00 | GT15M-IH | Hull | Mid-band CHIRP traditional sonar (85-165 kHz), 600W, 8-pin | Depth 20' cable |
| GAR 010-12404-10 | GT23M-TH | Hull | Mid-band CHIRP traditional sonar (80-160 kHz) 600W CHIRP ClearVü (260/455 kHz), 500W, 8-pin | Depth / Temp 30' cable |
| GAR 010-12404-00 | GT23M-TM | Transom Mount | Mid-band CHIRP traditional sonar (80-160 kHz), 600W CHIRP ClearVü (260/455 kHz) 500W, 8-pin | Depth / Temp 30' cable |
| GAR 010-12405-00 | GT52HW-TM | Transom Mount | High wide band CHIRP traditional sonar (150-240 kHz), 250W CHIRP ClearVü/SideVü (2.0°x50° @ 455 kHz and 1.0°x30° @ 800kHz)  350W, 12-pin | Depth / Temp 20' cable |
| GAR 010-12776-00 | GT34UHD-TM | Transom Mount | ClearVü/SideVü (800/1200 kHz), 500W, 12-pin | Depth / Temp 20' cable |
| GAR 010-12908-00 | GT24UHD-TM | Transom Mount / Motor Mount | High wide band CHIRP traditional sonar (150-240kHz), 350W CHIRP ClearVü (760-880 kHz), 350W, 8-pin | Depth / Temp 20' cable |
| GAR 010-13072-00 | GT36UHD-TM | Transom Mount / Motor Mount | ClearVü/SideVü (455/800/1000 kHz), 500W, 12-pin | Depth / Temp 25' cable |
| | | | **Panoptix Transducers** | |
| GAR 010-01284-00* | PS30 | Transom Mount | LiveVü Down, RealVü 3-D Down and RealVü 3-D Historical, 144W, Ethernet | Depth 30' ethernet |
| GAR 010-01284-01* | PS31 | Transom Mount / Motor Mount | LiveVü Forward and RealVü 3-D Forward, 144W, Ethernet | Depth 30' ethernet |
| GAR 010-01406-00* | PS60 | Hull | LiveVü Down, RealVü 3-D Down and RealVü 3-D Historical, 144W, Ethernet | Depth 30' ethernet |
| GAR 010-01753-00* | PS51-TH | Hull | Premium FrontVü Forward-looking Sonar LiveVü Forward sonar, 96W, Ethernet | Depth / Temp 6' ethernet |
| GAR 010-01945-00* | PS22-TR | Motor Mount | LiveVü Forward sonar, LiveVü Down sonar, 48W, Ethernet | Depth / Temp 13' ethernet |

*\* Request Items*

PS30

PS31
PS22-TR

PS60

PS51-TH

PS22-TR

## Garmin Transducer Adapters & Cables

**GAR 010-11615-00**      6-pin transducer to 4-pin sounder adapter cable
**GAR 010-11617-10**      4-pin transducer extension cable
**GAR 010-11617-32**      10' extension cable for 12-pin Garmin scanning transducers
**GAR 010-11617-42**      30' extension cable for 12-pin Garmin scanning transducers
**GAR 010-11617-50**      8-pin, 10' transducer extension cable
**GAR 010-11617-52**      8-pin, 30' transducer extension cable
**GAR 010-12262-00**      8-pin right angle adapter
**GAR 010-12262-10**      12-pin right angle adapter
**GAR 010-12719-00**      8-pin transducer to 4-pin sounder adapter cable

## Garmin Remote

Remote input device provides full control of your compatible chartplotter. Rotary knob and joystick controls provide navigation through menus and screens and allows you to seamlessly navigate between monitors at a station - all while controlling single or multiple compatible monitors and multifunctional displays (MFDs) with 1 device. GRID can be integrated into a captain's chair for a low-profile controlling solution.
▪ Power source input: 10-35VDC
▪ H: 3-1/16" x W: 6-7/8" x D: 2-3/8"
▪ Weight: 9.1 oz

**GAR 010-01024-00**    GRID

## Garmin Reactor Autopilot Remote

**NEW**

Water-resistant remote places autopilot control in the palm of your hand.
▪ Gesture control for heading hold and course corrections lets you simply point the remote where you want to go
▪ Bright, sunlight-readable colour display and an ergonomic design for comfort
▪ Programmable preset buttons allow quick access to your favorite functions
▪ Floats
▪ For use with GHC 20 and compatible chartplotters
▪ Power: 2 x AA batteries (not included)
▪ H: 2.0" x W: 6.0" x D: 1.3"

**GAR 010-12833-10**

## Garmin Premium Sonar Module

▪ Designed for the serious sportfisherman, the GSD 25 premium sonar module is a remote network solution that provides outstanding fishfinding and bottom tracking capabilities for boats with networked GPSMAP 8000 or GPSMAP 7600 Series chartplotters
▪ Offers true dual-channel 1kW CHIRP, plus ClearVü and SideVü scanning sonar with CHIRP technology for the clearest scanning images on the water
▪ Transducer sold separately
▪ H: 2.6" x W: 9.9" x D: 7.6"

**GAR 010-01159-00**    GSD 25

## Garmin SteadyCast Heading Sensor

▪ Ensures bow orientation on your chartplotter matches your heading
▪ Heading accuracy of plus or minus 3 degrees
▪ Easy NMEA 2000 plug-and-play interface
▪ Simple 2-step calibration process
▪ 9-axis MEMS technology allows installation in any orientation located away from magnetic interference
▪ H: 1.3" x W: 2.1" x D: 3.4"
▪ IPX7

**GAR 010-11417-10**

## Garmin 9-Axis Heading Sensor

▪ Provides exceptional heading accuracy, even at lower speeds or when bow is pitching, rolling or heeling over
▪ Heading accuracy of plus or minus 2 degrees
▪ Heading and rate-of-turn output at 10 Hz; trim and heel output at 1 Hz
▪ Simple 2-step calibration process
▪ 9-axis MEMS technology allows installation in any orientation located away from magnetic interference
▪ H: 2.0" x W: 6.7" x D: 3.5"

**GAR 010-11417-20**

**Garmin**
**Reactor 40 Mechanical/Retrofit/Solenoid Corepack**

Ideal for sailboats and powerboats with direct or cable-actuated steering systems.
- Solid-state 9-axis Attitude Heading Reference System (AHRS)
- Minimizes heading error, course deviation, rudder movement and power consumption while providing a comfortable ride
- Minimal commissioning and calibration
- Supports heading hold, wind hold, step turns and tack/jibe modes

**GAR 010-00705-49**

**Garmin**
**Reactor 40 Hydraulic Autopilot**

- Solid-state 9-axis Attitude Heading Reference System (AHRS)
- Minimizes heading error, course deviation, rudder movement and power consumption while providing a comfortable ride
- Minimal commissioning and calibration
- Patented Shadow Drive technology keeps you in control, even when autopilot is engaged

**GAR 010-00705-19***
* Request Item

**Garmin**
**Reactor 40 Pump Kit**

Use the 1.2 litre per minute pump kit with your Reactor 40 system to pump hydraulic fluid to the steering cylinders and steer the boat. New and improved with ORB hydraulic ports and threaded cable collars for increased durability.
- W: 4.3" x H: 4.4" x D: 1.9"

**GAR 010-00705-64**

**Garmin**
**Shadow Drive**

Gives boaters the security of knowing they maintain control even when relying upon the autopilot. Use this Shadow Drive attachment to automatically disengage the autopilot if the helm is turned, allowing the helmsman to maneuver the boat.

**GAR 010-11054-00**

**Garmin**
**Marine Autopilot Control Unit**

- Compatible with legacy Garmin autopilots as well as newer Garmin autopilots; can be controlled with quatix® marine watch
- Large, bright 4-inch color glass-bonded display with anti-glare finish
- Easy to read from a distance and 170 degree viewing angle
- Enhanced night time readability with backlight dimmer and full color or new red/black or green/black color schemes
- Enhanced daylight readability
- Size: 4.33" x 4.44" x 1.9"
- 320 x 240 pixels, QVGA display
- Rated: IPX7

**GAR 010-01141-00**

**Garmin**
**GRF 10 - Rudder Feedback**

The GRF 10 uses a magnetic sensor to relay position information, eliminating friction that causes other types of sensors to wear out. The arm of the GRF 10 is connected to the rudder of the boat and relays position information through the sensor to the mariner so they know where the rudder is – giving them an added peace of mind when starting from a stopped position, docking, launching or moving at slow speeds.

**GAR 010-11829-00**
  Accessories:
**GAR 010-11829-01**   Extension cable, 16.4'
**GAR 010-11829-02**   Extension cable, 49.2'

## Garmin GHP SmartPump

SmartPump works for most boats and applications. Plus, you get complete control in a smaller size with better thermal performance, higher reliability and lower power consumption. It also includes color-coded connectors to make it very easy to install.
Our SmartPump is engineered from corrosion-resistant components including black dye on aluminum parts and nickel-plating on all steel parts.
- Power input: 11.5-30VDC
- H: 7-3/4" x W: 7-1/2" x D: 9-5/8"
- Weight: 16.5 lbs

**GAR 010-00705-62***

    * Request Item

## Garmin
## GMI 20 Marine Instrument

- Marine instrument display clearly shows depth, speed, wind and 100+ marine and vessel parameters
- Bright 4" colour glass-bonded lens display with anti-glare finish
- Easy to read from a distance and 170 degree viewing angle
- Enhanced night time readability with backlight dimmer and full colour or new red/black or green/black colour schemes
- Enhanced daylight readability
- Size: 4.33" x 4.53" x 1.18"
- 320 x 240 pixels, QVGA display
- Rated: IPX7

**GAR 010-01140-00**

## Garmin Fuel Sensor

Add fuel tracking capabilities to your Garmin chartplotter and optimize your boat's fuel economy. The GFS 10 tracks fuel flow use and sends the data to your chartplotter via the Garmin CANet or NMEA 2000.
Unlike other fuel flow sensors, the GFS 10 will include fuel level sensing capability when connected to an existing analog fuel gauge or resistive fuel tank sensor. Maximum fuel flow rate for the GFS 10 is 50 gal/hr, and the minimum flow rate is 2 gal/hr.

**GAR 010-00671-00**    GFS-10

## Garmin GPS Antenna

The highly accurate GPS 19x NMEA 2000 position receiver/antenna
provides 10 Hz update rates for position, velocity and time data. It offers high-sensitivity reception and enhanced position acquisition to the Garmin family of marine multifunctional displays (MFD), instrument display and autopilots.
- Power source input: 9-16 DC, unregulated
- H: 1-15/16" x D: 3-19/32"
- Weight: 7.1 oz

**GAR 010-01010-10**    GPS 19X NMEA 2000

## Garmin
## GMS 10 Network Port Expander

The GMS 10 network port expander allows you to connect multiple chartplotters and sensors over the Garmin Marine Network. With this robust 100 MB switch, you can connect multiple multi-functional displays (MFDs) and sensors to the marine network and gain the benefit of Ethernet-like data transfer speeds up to 10 times faster than some competitive systems.
- Completely plug-and-play
- All connections are totally water resistant
- Size: W: 3.5" x H: 2.3" x D: 11.8"
- Weight: 1.2 lbs

**GAR 010-00351-00**

## Garmin Network Cables & Connectors

| | |
|---|---|
| **GAR 010-10550-00** | 6 ft, complete harness |
| **GAR 010-10551-00** | 20 ft, complete harness |
| **GAR 010-10552-00** | 40 ft, complete harness |
| | |
| **GAR 010-10580-10** | PoE isolation coupler |
| **GAR 010-10647-01** | 500 ft, bulk |
| **GAR 010-10580-00** | Marine network cable coupler |
| **GAR 010-10603-00** | Marine network cable connectors (2/pkg) |
| **GAR 010-11170-00** | Split connector (18mm) |
| **GAR 010-11533-00** | Actuator power cable |
| **GAR 010-11580-00** | NMEA 2000 power isolator |
| **GAR 010-12234-06** | User data sharing cable |
| **GAR 010-12531-00** | Cable coupler (small) |

## Garmin Handheld GPS

For boaters and watersports enthusiasts who want to run with the best, the rugged GPSMAP 78s features a 3-axis compass, barometric altimeter, crisp colour mapping, high-sensitivity receiver, new molded rubber side grips, plus a microSD card slot for loading additional maps. And it floats!
- Comes with built-in worldwide basemap (additional charts can be purchased)
- Transflective, 65-K colour TFT (160 x 240)
- Interface: High-speed USB and NMEA 0183 compatible
- IPX7
- 7.7 oz
- W: 2.6" x H: 6.0" x D: 1.2"
- 2 x 'AA' batteries (not included)

**GAR 010-00864-01**    GPSMAP 78s

Go on a power trip with

**FURUNO**

# GET LOST.

Because wherever you choose to explore, we have the power to get you there & back.

**NEW for 2021!
9" Hybrid Touch**

TZT9F 9" Hybrid Touch IPS Display
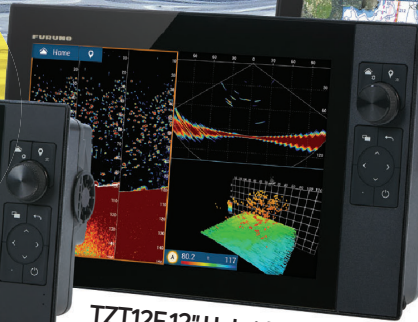
TZT12F 12" Hybrid Touch IPS Display

TZT16F 16" Multi Touch IPS Display

TZT19F 19" Multi Touch IPS Display

## Challenge your horizons with confidence & the power of Furuno, guiding you each step of the way.

| Lightning fast Multi Touch MFDs | NXT Radar Target Analyzer™ Alerts You To Hazardous Targets | Free Worldwide Weather Forecasts | Preloaded US Coastal Raster/Vector Charts | Auto Acquire 100* AIS Targets |

*Requires external sensor

**NAVnet**
**TZ touch 3**

*Get the whole story at NavNet.com*

## Furuno NavNet TZtouch3 Chart Plotter/Fish Finders

- More powerful quad-core processor for lightning-fast response
- Built-in Dual Channel 1kW TruEcho CHIRPTM & CW Fish Finder
- Chart Type: Vector or Raster or Satellite Photo or 3D Data or C-Map or CMOR
- Large 19" and 16" multi-touch IPS display for maximum brightness
- Hybrid 12" display with RotoKeyTM and buttons for added accessibility
- Pin Code Lock - require a password to access your TZtouch3 upon startup
- Frequency: CW 50-200kHz or CHIRP 40kHz to 225kHz
- Power Usage: 12-24 VDC
- Power Output: 300 W or 600 W or 1 kW
- Receiver Type: GPS: 72 channels, SBAS: 1 channel (C/A mode, WAAS)
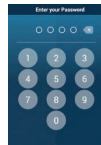
### Furuno
### 12" Hybrid Control IPS Display



Captains who have smaller boats know that when you are crashing through the waves, it can be difficult to get an accurate tap on the screen. That's why we made our TZtouch3 12" MFD with a Hybrid Touch. You get the best of both worlds with a full multi-touch display and a handy, built-in keyboard that features a Rotokey™, cursor pad and dedicated buttons!

- Display size: 12.1", Resolution: WXGA 1280 x 800

**FUR TZT12F\***

### Furuno
### 16" & 19" Multi Touch IPS Displays

These lightning-fast Multi Function Displays features a sleek edge-to-edge glass display that delivers ultra-clear images from any angle. This MFD will not only make your helm functional but will also add style and ergonomics.

- Display size: 15.6", Resolution: FHD 1920 x 1080

**FUR TZT16F\***

- Display size: 18.5", Resolution: FHD 1920 x 1080

**FUR TZT19F\***

  * Request Items

## Furuno NavNet TZtouch2 Multi-Touch MFD

Sleek all-glass front, refined graphical user interface, built-in RezBoost Fish Finder, and internal GPS antenna. Accessing different displays is achieved by tapping on the Home icon, or utilizing the new "Edge Swipe" motion. Swiping from the left edge reveals the NavData panel, where you can customize content to simplify navigation and chart usage. From here, you can set the autopilot, check tide information and much more. Swiping up from the bottom of the screen unveils the new Layers menu, a practical way of changing settings on the fly without having to venture into deeper menu systems. Since the screen remains visible at all times, changing settings is now simpler than ever. There are similar, contextual functions when available by swiping from the top or right side of the screen.

- NavNet TZtouch2 is a component-based system

### Key Features

- GPS/WAAS: 56 Channel GPS receiver built in
- Fish Finder: 50/200kHz, 600W or 1kW
- Memory: 30,000 User Points, 30,000 Track Points, 200 Planned Routes with 500 Points/Route
- Interface: 1 Port, CanBUS/NMEA2000
- LAN: 1 Port, Ethernet 100 BASE-TX
- Wireless LAN: IEEE802.11B, 2.4GHz band
- USB: 1 Port, USB 2.0
- Video Out: 1 Port, HDMI
- Video In: 2 Ports, NTSC/PAL
- Waterproofing: IP56

### FUR TZTL12F\*
- Display size: 12.1", Resolution: WXGA 1280 x 800
- Power: 12-24VDC, 3.0-1.5 A

### FUR TZTL15F\*
- Display size: 15.6", Resolution: FWXGA 1366 x 768
- Power: 12-24VDC, 3.6-1.8 A

  * Request Items

### Rotary Knob w/Joystick Remote Control

- This new remote controller offers the expandability of a hardware key operation in addition to the multi touch operation for NavNet TZtouch/NavNet TZtouch2
- 77 x 175mm

**FUR MCU004**

### Joystick Remote Control

- 59 x 115mm

**FUR MCU002\***

### SD Card Unit

- Micro SD, SDHC and SDXC compatable

**FUR SDU001\***

  * Request Items

## Furuno Black Box

- Compatible with your choice of Multi Touch Display
- Screen Resolution: FHD 1920 x 1080 recommended, XGA 1024 x 768/SXGA 1280 x 1024 available
- Signal Interface: Picture: HDMI, Extended, HDCP, Touch panel: USB2.0, Windows 7 multi-touch
- Cartography: MapMedia mm3d chart (C-MAP/Navionics/NOAA)
- Memory Capacity: 30,000 user points, 30,000 points for ship's tracks, 200 planned routes (500 points per route)
- Alarms: Anchor Watch, XTE, Proximity, Depth, Temperature, Speed, etc. 12 or 24VDC
- Transmit Frequency: 50/200 kHz
- Transmission Power: 600 W or 1 kW
- Modes: RezBoost, ACCU-FISH, Bottom Discrimination, A-Scope, Auto (Fishing/Cruising/Manual), Bottom Zoom, Bottom Lock
- LAN: 3 Ports (100 BASE-TX)
- USB: 5 Ports (USB2.0): Type A 4 Ports, microB 1 Port
- HDMI I/O: 1 port
- AUX I/O: 1 Port (External Event/MOB Input/Power Switch/Alarm Output)
- Waterproofing: Processor Unit: IP22, Switch Box: IP56 (front), IPX2 (chassis)
- 15.1" x 11.8" x 5.1"
- 12 or 24VDC

| | |
|---|---|
| **FUR TZT2BB*** | Black Box |
| **FUR MCU005** | Control Unit, 11.5" x 3.9" |

\* Request Item
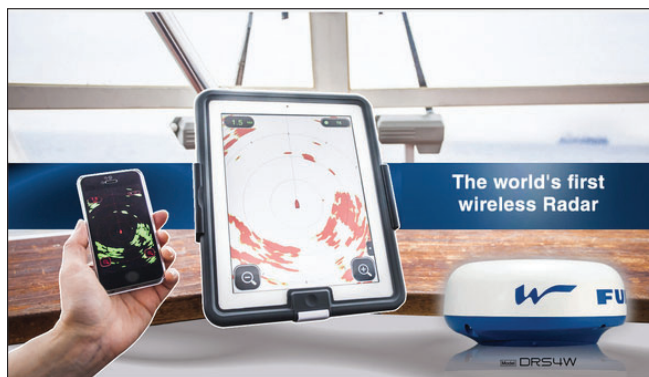


## Furuno
## 1st Watch Wireless Radar

Radar that you can access directly from your iOS devices. You can bring the Radar display whenever you go, even put it on the iPhone in your pocket. Since the display is untethered, you are free to roam the vessel while maintaining full situational awareness of your surroundings.

Plug in the Radar, set up the free app from App Store and you're good to go. With familiar gestures it's a breeze to use; you can even use two iOS devices simultaneously.

- 4kW Radar antenna, powerful yet compact in size (19")
- Extremely economical power consumption (24W)
- Wireless LAN, first Radar in the world accessible from your iOS devices
- Exceptionally simple setup and intuitive operation with user-friendly & free iOS app
- Fast and easy installation process w/only a single power cable
- Simple touch interface with familiar gestures
- Vivid, multi-colour Radar target presentation
- User selectable range scale from 0.125 to 24 nm
- Two iOS devices – simultaneous operation

**FUR DRS4W**

## Furuno
### Radome For NavNet TZtouch and TZtouch2

The DRS4DL+ is a , 19" dome Radar Sensor for NavNet TZtouch and NavNet TZtouch2. This 4kW Radar is presented in a compact, rugged 19" dome with a 5.2 degree horizontal beamwidth antenna. Furuno's automatic, real-time digital signal processing presents navigators with some of the clearest targets they'll ever find from a Radar of this compact size. The DRS4DL+ utilizes a wired connection with NavNet TZtouch and TZtouch2. In combination with the TZTL12F/15F, this single-wire solution results in a very simple installation.

The DRS4DL+ spins at a fixed 24RPM, and has range scales from 1/8 nm to 36 nm. The DRS4DL+ is designed to work with NavNet TZtouch and TZtouch2 systems. It is not compatible with NavNet 3D

Fast Target Tracking (TT) / ARPA on the DRS4DL+ manually or automatically acquires and tracks 10 targets. After selecting a target, it only takes a few seconds for a speed and course vector to be displayed. With accurate tracking information, estimation of other vessel's course and speed is made simple.
- 4kW, 36 n.m., 19" UHD
- Band : X-Band

**FUR DRS4DLPLUS\***

* Request Item

## Furuno
### Solid State Doppler Radar

The DRS4D-NXT is the first radar in the world to use the new FURUNO exclusive Target Analyzer function.

Targets that are approaching your vessel automatically change colour to help you identify when they are hazardous. Green echoes are targets that stay stationary, or are moving away from you, while red echoes are hazardous targets that are moving towards your vessel.

Echoes dynamically change colours as targets approach, or get farther away from your vessel. Target Analyzer improves situational awareness and can increase safety by showing you which targets to look out for.
- NXT, Solid-State pulse compression Doppler Radar
- Revolutionary Target Analyzer function instantly identies hazardous targets
- Fast Target Tracking, up to 100 targets
- RezBoost beam sharpening, equivalent to 2 degree beam width open array
- Compact 24" radome with 25W output power
- Bird Mode, track birds to find the best shiner grounds
- Simple installation, no need to open the radome, external PSU is not required
- New smart-connector cable for retro tting existing DRS cable installations
- No warm-up time

**FUR DRS4DNXT\***

* Request Item

## Furuno
### 6" LCD Radar (Stand Alone)

| | |
|---|---|
| Display Size: | 6" |
| Display Type: | Mono LCD |
| Antenna Size: | 15" |
| Antenna Type: | Radome |
| Range: | 16 NM |
| Power Output: | 2.2 kW |

- 2.2kW 16NM, 15" radome included
- Waterproof, Silver Bright LCD
- Display resolution of 240(H) X 320(V) dots
- Targets displayed in up to 4 levels of grey tones
- New Tri-speed 15" radome antenna, increases RPM at short ranges for better target accuracy
- 3 Transmitter pulse lengths and repetition rates
- Linear receiver with 10 dB noise figure
- Automatic receiver tuning
- Automatic or manual sea-clutter (STC) adjustment
- Automatic or manual receiver gain adjustment
- Sector blanking
- Rain clutter (FTC) control
- Echo stretch and interference rejection modes
- Watchman mode to control the radar system for vessel safety
- Reverse video display (white targets and marks on a black background)
- Full screen navigation data display in the standby mode
- Omni pad control for rapid cursor and menu operation
- Electronic bearing line and variable range marker
- Target or echo trails with selectable time intervals
- Waypoint lollipop on-screen to aid in vessel navigation
- Adjustable duplex (in or out) radar guard zone alarm
- TLL (Target Lat/Lon) output for use with plotter
- Ability to connect BBWGPS GPS/WAAS receiver
- Wind indication with appropriate sensor input
- 10 Meter signal cable assembly

**FUR 1623**

## Furuno 8.4" Colour
### LCD Radar (Stand Alone)

| | |
|---|---|
| Display Size: | 8.4" (IPx6 rating) |
| Display Type: | Colour LCD |
| Antenna Size: | 19" |
| Antenna Type: | Radome |
| Range: | 36 NM |
| Power Output: | 4 kW |
| Band: | X-Band |

- Fast Target Tracking provides instant heading and speed info for up to 10 targets
- True Trail and True View modes (heading sensor required)
- AIS display for up to 100 targets (AIS receiver required)
- Advanced auto-adjust settings for Gain/Sea Clutter/Rain Clutter
- Digital Signal Processing for improved auto Gain/Sea/Rain controls
- Swivel mount bracket to adjust the angle of the display unit
- 12-24VDC input and low power consumption (Up to 38 W during transmit)
- 5.2-degree horizontal and 25-degree vertical beam width
- External pigtail cable eliminates need to open the dome to install the Radar cable
- (3) NMEA0183 inputs for GPS, heading, and AIS (Port 3 for heading only)
- (2) NMEA0183 outputs for TTM, TLL and RSD (with required nav sensor inputs)

**FUR 1815**

## Furuno
## Multi-Touch GPS/WAAS Chart Plotters

Display Type: Color Multi Touch LCD
Chart Type: C-Map by Jeppesen
Power Usage: 12-24VDC
Range: 1500'
Frequency: Variable
Power Output: 300 W or 600 W or 1 kW

### Multi Touch Interface

The all-glass, multi touch display gives you access to every feature via convenient and intuitive slide-out menus. Slide your finger down from the top of the display to select Quick Pages, including your favorite custom display modes, with a single tap. Slide out from the left to view customized Data Boxes. Slide up from the bottom to quickly adjust your layer settings. Finally, slide your finger out from the right side to instantly access the menu functions you use the most. Tap or double tab the display with two fingers to capture a screen shot or perform other customized functions. Everything in the menu is intuitive and contextual, so the content relates to the current display mode.

### Powerful Chart Plotter with Internal GPS Antenna

The Chart Plotter utilizes full-featured C-Map 4D charts. C-Map 4D empowers you with plenty of useful data that you can overlay onto a rich vector chart, such as relief vectors, tidal streams and marine plans, significantly boosting situational awareness. Creating routes and waypoints is as simple as touch-and-go. When connected to an AIS receiver, you can see valuable AIS data on the display. C-Weather, which provides downloadable wind, wave, weather, humidity and temperature information to add to your planning, is another standard feature.(Charts sold separately)

### Built-In CHIRP and Conventional Fish Finders

The unit includes a built-in TruEcho CHIRP, as well as a conventional Fish Finder, transmitting at 300W, 600W or 1kW. Simply tell the unit what transducer you are using and it will select the type of Fish Finder to use. The TruEcho CHIRP transmits across a spectrum of frequencies, delivering an incredible amount of detail and clearly marking individual game fish and bait fish. The conventional Fish Finder includes RezBoost data processing for an ultra-crisp, high-resolution picture. Other features include ACCU-FISH fish size assessment, and the highly useful Bottom Discrimination function to help you find the most productive fishing grounds.

### Wireless Radar Connectivity

Radar can be overlayed onto the Chart Plotter display via wireless connection to the Furuno DRS4W 1st Watch Wireless Radar. The DRS4W's wireless configuration makes it a breeze to add the compact 19" Radar dome to any vessel. The DRS4W can also display the Radar presentation on a connected smart phone or tablet, offering a major upgrade in safety and versatility.

### Autopilot Control

Via the CAN bus network interface, The NAVpilot 300 and NAVpilot 711C can be connected to the GP1871F and GP1971F and controlled directly from the Chart Plotter.

**FUR GP1871F**      7" display size
**FUR GP1971F**      9" display size

## Furuno
## Colour LCD Fish Finders

Display Size:   5.7"/8.4"
Frequency:      50 & 200 kHz
Range:          2-1200m
Power Use:      12VDC or 24VDC

- Improved clarity and resolution that was previously impossible with conventional narrowband transducers has been made possible thanks to the new RezBoost™ technology
- Improves the ACCU-FISH function
- Bottom Discrimination Analyzes bottom structure. Provides an at-a-glance recognition of bottom composition with four types of graphical displays - Rocks/Sand/Gravel/Mud - when connected to a supported thru-hull or transom mount transducer
- ACCU-FISH - A unique fish size analyzer based on the latest digital technology
- White Line feature - Discriminate fish lying near the bottom
- The top edge of the sea floor is displayed in white to clearly show structures
- This feature helps to discriminate weeds and bottom fish distinctly
- Configurable Alarm function (depth, fish echoes, etc.)
- Post-processing Gain Control applied to all echoes displayed on the screen
- Share and display information on a chart plotter*
- Furuno's TLL (Target Lat/Lon) output allows you to interface the FCV-628 with your chart plotter so that you can mark fishing spots with various information (L/L, Depth, Water Temp, Fish size, Bottom).
- Fast transmission rate of 3,000 PRR (Pulse Repetition Rate) per minute (at 5m depth range)
- Bright 800 cd/m2 LCD gives excellent readability, even in bright sunlight
- The LCD and the AR glass are bonded together to ensure no fogging issues
- Clear visibility even when wearing polarized sunglasses
- Transducer sold separately

Swivel mounting bracket to adjust
the angle of the display
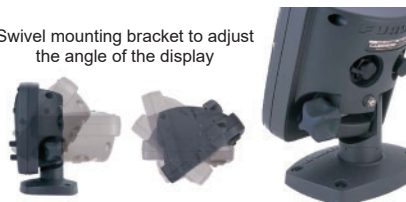
**FUR FCV628**      5.7" LCD, 640 x 480 pixels (VGA)
**FUR FCV588**      8.4" LCD, 640 x 480 pixels (VGA)

## Furuno
## GPS Receiver

The FURUNO GP39 GPS Navigator provides accurate and reliable position fixing, thanks to a 12-channel GPS receiver combined with integrated SBAS (WAAS/EGNOS/MSAS) technology.
The GP39 has various display modes, including Plotter, Highway, Steering, NAV data, and Satellite monitor, as well as 2 user-customizable display modes, allowing you to select which data you want displayed on its 4.2" colour LCD. Up to 3,000 points of ship track, 10,000 waypoints and 100 routes (each with up to 30 waypoints) can be stored. The waypoint and route data can be exported/imported via a USB flash drive or signal converter.
The GP39 can be networked with a fish finder, sonar, radar or other navigation equipment for feeding highly accurate navigation data.
The GP39 receives the TLL (Target Latitude/Longitude) sentence from networked fish finders or sonars and can display the received information, allowing you to easily mark fish school locations.

- Newly designed GPS core delivers enhanced position fixing accuracy
- Bright 4.2" high-resolution colour LCD (700cd)
- SBAS capable for better positioning calculations
- NMEA0180 input port receives data from Fish Finder, Radar, etc.
- 7 display modes available, including 2 user-customizable modes
- Displays position data in Loran TD's
- USB port for importing/exporting waypoints and routes; Upload/download data in GPX format for easy transfer to TZtouch/TZtouch2
- "Click-In" hanger for easy mounting/dismounting and uses no knobs - also perfect for overhead mounts
- Multi-language ready

**FUR GP39**

## Furuno
## GPS/WAAS Navigator

- 4.3" "Sunlight Viewable" colour LCD (Brightness: 700 cd)
- Enhanced data legibility thanks to large characters and high resolution visual aid
- Stores up to 10,000 marks/waypoints, 100 routes and 3,000 track points
- 7 display modes available, including 2 user-customized modes
- Supports both NMEA0183 and NMEA 2000 compatible CAN bus interface
- Contact closure capability available on the 10P connector
- SBAS capable for better measurement

**FUR GP33**

## Furuno
## GPS/WAAS Sensor NMEA2000

The GP-330B is a high performance GPS receiver designed for any type of vessel. This compact and cost-effective receiver offers extremely accurate position fixes, within 3 meters with the WAAS mode activated.
The GP330B is capable of data output in NMEA2000 format, making it an ideal GPS sensor for use with NavNet 3D systems. The sensor comes with all of the hardware required for deck, deck/flush or mast-mounting solutions. A 6-meter cable with NMEA2000 connector is supplied as standard

- Dia: 3.9"

**FUR GP330B**

## Furuno GPS Antenna

- Furuno external GPS Antenna for GP1670F and 1870F. Also the replacement antenna for the 1650/1850 Series, 7000 Series, GP31, GP32 and GP33
- Includes 10 meter cable

**FUR GPA017**

## Furuno Heading Sensor NMEA 2000

- Angular velocity sensor and magnetic bearing sensor incorporated
- Automatic determination of installation site suitability
- L-shaped mounting base for mounting on bulkhead
- Output of magnetic bearing data to FURUNO CAN bus device
- Includes 6' NMEA2000 cable

**FUR PG700**

## Furuno Heading Sensor

- Required for radar overlay on any Navnet system
- Automatic correction for local magnetic variation with an appropriate GPS navigator or manual correction with an optional remote display RD-30
- High stability by a solid-state rate gyroscope
- Two IEC/NMEA ports, one AD-10 port
- High speed heading data output in IEC 61162-2 format

**FUR PG500R***
<mark>* Request Item</mark>

## Furuno
## Compact Dome Satellite Compass

**Antenna Type:** Radome
**Data Type:** NMEA2000
**Power Usage:** 12-24VDC
**Receiver Type:** GPS or GLONASS or Galileo or QZSS or SBAS

The SC33 Satellite Compass provides highly accurate attitude information for navigation equipment such as Radar, Plotter, Autopilot, Fish Finder and Sonar. With its compact GNSS antenna and built-in processor, it can be used for a wide variety of applications on any type of vessel. This all-in-one system delivers incredibly accurate heading and roll & pitch information as well as heaving information, GPS position, SOG (Speed Over Ground), COG (Course Over Ground) and ROT (Rate Of Turn) data.

Employing a two-antenna system with a 3-axis gyro and acceleration sensors, the SC33 enables high-speed response capability. Advanced digital signal processing techniques compute accurate heading based on sensor data. NMEA2000 interface is standard for simple installation, while the optional interface unit IF-NMEASC is available for conventional NMEA0183, AD10 and contact closure.

A new GNSS antenna and advanced parallel signal processing allows the SC33 to achieve more precise Pitch, Roll and Heading measurement than conventional models, providing enhanced performance for all of your connected equipment. Its Micro-C pigtail NMEA2000 cable provides flexibility to run cables in challenging areas.
W: 27" x W: 10.4" x H: 5.5

**FUR SC33***
<mark>* Request Item</mark>

**Furuno**
## Compact Dome Satellite Compass

**Antenna Type:** Radome
**Data Type:** NMEA2000
**Power Usage:** 12-24VDC
**Receiver Type:** GPS or GLONASS or Galileo or QZSS or SBAS

**Revolutionary Baseline Architecture**
The unprecedented quad-antenna design of the SCX20 and SCX21 makes them capable of calculating extremely accurate heading, pitch, roll, and heave information. They are the perfect heading solution for complex vessel installations where the view of satellites may sometimes be obstructed.

**Experience superior accuracy**
Enhance the performance of on-board equipment such as Radar, Fish Finders, Sonar, and Autopilots. Accurate heading information empowers your NAVpilot to keep a better course, saving time, fuel, and money on every voyage; meanwhile, precise pitch, roll, and heave information stabilizes the display for many Furuno Fish Finders and Sonars, allowing for an accurate presentation even in the roughest of seas.
W: 9.8" x W: 7.64" x H: 3"

**FUR SCX20**

**Furuno**
## NavNet 3D & TZT Network Hub

NavNet 3D is built on an Ethernet network, allowing you to add as few or as many components as you desire along with up to ten displays to create your perfect navigational suite. The HUB101 is the centre of your navigational network, connecting all of your displays and components together. Power on/off synchronization amongst all of the NavNet 3D display units can be achieved with the use of the dedicated Ethernet HUB101.

**FUR HUB101**

**Furuno**
## Black Box Fish Finder Module

A network fish finder for NavNet 3D, NavNet TZtouch and NavNet TZtouch2 that features an all new bottom discrimination function, as well as the FDF (Furuno Digital Filter) capability of the DFF1.

**FUR BBDS1**        600w/1kW Dual

---

**Furuno**
## Class B AIS Transponder

- Includes GPS antenna GPA-017S
- Fully satisfies the technical standards for Class-B AIS, IEC 62287-1
- Receives both Class-A and Class-B AIS information
- Outputs data to NavNet and PC through Ethernet
- Flexible integration with various AIS compatible radar and chart plotters
- Waterproofing: Transponder Unit: IP20, Antenna Unit: IPx6
- TX/RX Frequency: 156.025 MHz to 162.025 MHz
- W: 10" x L: 8.6" x H: 3.5"

**FUR FA50**

---

## Furuno Black Box AIS Receiver

- Enhances safe navigation by receiving critical navigation information from local AIS-equipped vessels
- Vastly improves situational awareness in any weather conditions
- Dual parallel channel, "full duplex" receiver design receives AIS contact messages up to 100% more often than dual channel "multiplexing" receivers
- High sensitivity, synthesized receiver automatically switches between international and local AIS channels
- Optional amplified VHF splitter allows the use of a single antenna for VHF radio and AIS receiver
- Network output to NavNet 3D and PCs for added redundancy
- Serial output for integration with radar and chart plotter systems
- AIS viewer software included for on-board PC or land based installations
- Bulkhead mounting and low power, flexible DC input voltage design for simplified installations

**FUR FA30***
* Request Item

---

## Furuno NavNet 3D & TZT Network Multi-Beam Sonar

Revolutionary 3D multi-beam sonar for deep and wide water columns: depths of over 980 feet, with Side Scanning over 650 feet

Instantly understand fish distribution at a glance: cross section displays the real-time sea column echo in 120 degrees port and starboard

Intuitive 3D Sounder History: useful in a variety of situations, such as selecting a fishing hot spot and assessing the seabed condition.

Better understand the depth of fish targets: a single (directly under boat) or triple direction (middle, left and right) fish finder image are displayed simultaneously.
- Frequency: 165 kHz
- Output Power: 800 W
- Range: 300 m down - 200 m sidebar Cross section
- Power Usage: 12-24VDC
- 15" x 12.4" x 4.7"

**FUR DFF3D***
* Request Item

## Furuno
## Remote Digital Display

- 4.3" "Sunlight Viewable" colour LCD (Brightness: 700 cd)
- Enhanced data legibility thanks to large characters and high resolution display
- Customizable display format from full-screen to a 6-way split screen presentation
- Supports CAN bus, NMEA2000 and NMEA0183 interfaces
- Two independent CAN bus input and output ports incorporated for daisy chain networking
- Internal NMEA0183/CAN bus conversion capability available
- Simultaneous alarm monitoring capabilities for Water Temp, Depth, Speed, Arrival, Anchor, XTE, Trip, Odometer, Timer and Countdown Timer, Roll & Pitch, Wind Speed, Wind Direction, and Battery

**FUR RD33**

Screenshots of Available Presentaion Styles
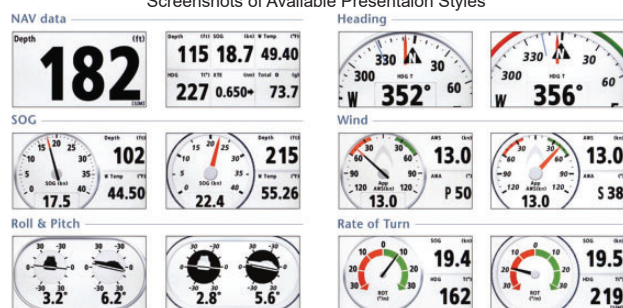
## Furuno NMEA2000 Backbone Box

The FI5002 is an NMEA2000 Junction Box for use with NavNet 3D, TZT and the FI50 series of intrument displays, as well as the FI5001 Wind Sensor. The FI5002 features 2 NMEA2000 backbone ports, as well as 6 NMEA2000 ports. Its power requirements are less than 2A on a 12VDC system.

**FUR FI-5002***
* Request Item

## Furuno Parts & Accessories

| | |
|---|---|
| **FUR IF-NMEA2K2** | IF converter, NMEA200 - NMEA0183 |
| **FUR PSU012*** | Power supply unit DRS4A/6A w/MFD8 |
| **FUR 000-010-511** | 30m cable for FI 5001 sensor |
| **FUR 000-154-054** | 5m NMEA 6 pin cable |
| **FUR 000-154-028** | 5m NMEA 7 pin cable |
| **FUR 000-156-405** | Power cable assembly (NMEA0183) |
| **FUR 001-167-890-10** | 5M LAN cable assembly RJ45XXRJ45 4P |
| **FUR 001-167-900-10** | 10m LAN cable assembly RJ45XX RJ45 4P |

* Request Item

## Furuno Transducers

### Bronze Thru-Hull Multi-Sensor

- 600W; 50/200 kHz
- 40/10 degree beam angles
- Depth, speed and temperature
- 30' cable with 10-pin connector
- High-speed fairing block included
- Bottom discrimination functionality

**FUR 525STID-MSD**

### Bronze Thru-Hull Multi-Sensor

- 600W; 50/200 kHz
- 45/12 degree beam angles
- Depth, speed and temperature
- 30' cable with 10-pin connector
- High-speed fairing block included
- Bottom discrimination functionality

**FUR 525STID-MSD7**

### Bronze Thru-Hull

- 600W; 50/200 kHz
- 46/10 degree beam angles
- 8 meter cable with 10-pin connector
- Bottom discrimination functionality

**FUR 520-5MSD**

### Plastic Transom Mount Multi-Sensor

- 600W; 50/200 kHz
- 45/11 degree beam angles
- Temperature and removable speed assembly
- 30' cable with 10-pin connector
- Bottom discrimination functionality

**FUR 525STID-PWD**

### Plastic Transom Mount

- 600W; 50/200 kHz
- 46/10 degree beam angles
- 8 meter cable with 10-pin connector
- Bottom discrimination functionality

**FUR 525-5PWD**

### Plastic Thru-Hull Low Profile

- 600W; 50/200 kHz
- 45/15 degree beam angles
- 30' cable with 10-pin connector
- Bottom discrimination functionality

**FUR 520-PLD**

### Plastic Thru-Hull

- 600W; 50/200 kHz
- 46/10 degree beam angles
- 8 meter cable with 10-pin connector
- Bottom discrimination functionality

**FUR 520-5PSD**

ELECTRONICS

## Furuno Transducers
### Bronze Thru-Hull Multi-Sensor

- 200W; 235 kHz
- Depth, speed and temperature
- 10 meter cable with 7-pin connector
- Can be flush mounted with up to a 22 degree dead rise

**FUR 235DST-MSE***
* Request Item

---

### Plastic Thru-Hull Multi-Sensor

- 200W; 235 kHz
- Depth, speed and temperature
- 10 meter cable with 7-pin connector

**FUR 235DST-PSE**

---

### Plastic Shoot-Through-Hull

- 600W; 50/200 kHz
- 45/15 degree beam angles
- 30' cable with 10-pin connector

**FUR 520-IHD**

---

## Furuno
## NMEA2000 Smart Sensors

The DST-800PSF is a NMEA2000 device. The wide fore-aft, fan shaped beam is able to find bottom even when installed on high dead rise hulls or on sailboats.
- 235 kHz
- Depth, speed and temperature (+/ - 1 degree )
- 2-Meter cable with 5-Pin NMEA2K Connector
- Airmar's patent pending speed signal processing for stable and high accuracy speed readings from 160 MPH near-flush housing minimizes drag with only 5 mm (3/16") extending outside of the hull
- Depth, speed, and temperature insert is easily removed for quick service or storage
- Self-jacking cap makes it easier to remove insert

**FUR DST-800PSF***     Depth/speed/temp
**FUR DT-800PSF***      Depth/temp sensor
* Request Items

---

### Furuno Transducer Accessories

**FUR AIR-033-203***     Transducer extension cable, 4m
**FUR AIR-033-270***     Transducer Y cable
**FUR AIR-033-333***     Transducer pigtail, 2m
* Request Items

## Furuno Multi-Beam
## Bronze Thru-Hull Transducer

The 165T-B54 is a multi-beam transducer for the DFF3D that affords a 120 degree port-starboard view of the underwater world. A built-in motion sensor stabilizes the display to give clear and stable images.
- Bronze thru hull with high speed fairing block. Can be flush mounted in keel without using fairing block
- DFF3D operating frequency: 165 kHz
- 2 x 10M cables:
  - Bare ended cable for DFF3D sonar
  - 7 pin connector for the motion sensor
- Built-in motion sensor
- Built in temp sensor

**FUR 165T-B54**

---

### Airmar All-in-One Smart Sensor
### Bronze Thru-Hull Transducer

- View depth, speed and temp on any instrument, chart plotter, or radar display that accepts NMEA 2000 data
- 235 kHz frequency prevents mutual interference with other echosounders on the vessel
- Fast-response temperature sensor provides ±0.2°C accuracy
- Featuring Airmar's patented Smart Sensor technology
- 51 mm (2") fitting, overall length: 6-1/2"
- 6m (20') cable

**AIR DST800L-235-N2**

---

AIR-033-409          AIR-033-476

## Furuno
## High Speed Fairing Blocks

**FUR AIR-033-409**     L: 14" x W: 3" x L: 3"
**FUR AIR-033-476**     L: 14" x W: 3" x L: 3"

### Furuno NavPilot

A revolutionary autopilot with a sunlight viewable display designed for a variety of vessels. It utilizes a self-learning and adaptive software algorithm, and plays the ultimate role in course-keeping capability. NavPilot dynamically adjusts essential parameters during navigation, such as vessel speed, trim, draught, tide and wind effects, dead band, weather and more. These parameters are stored in system memory and continuously optimized to make the NavPilot more versatile.

#### Self-Learning and Adaptive Software

From the first dock-side setup through the last voyage you made, NavPilot continues to learn your vessel's steering characteristics, allowing for real-time, dynamic adjustments to make the boat's steering more accurate.

#### SAFE HELM and POWER ASSIST

The optional SAFE HELM and POWER ASSIST features provide a unique interface to the vessel's hydraulic hand steering system, providing unrivaled comfort and control of steering directly from any manual helm on the vessel. These two modes greatly reduce steering effort and enhance the safety of your autopilot.

#### FishHunter Mode

FishHunter mode is a unique feature of FURUNO's NavPilot series. Find a fish target with your FURUNO sonar/sounder or bird target with your FURUNO radar and feed it to the NavPilot The NavPilot will activate the FishHunter mode to perform square, zigzag, circle, orbit, spiral or figure-eight maneuvers around the specified target at a user selected distance. This feature can also be used for Man Overboard (MOB).

| | |
|---|---|
| **FUR NAVPILOT700*** | 4.6" display, double-din |
| **FUR NAVPILOT711C*** | 4.1" colour display, single-din |
| Accessories: | |
| **FUR FAP7011C-A** | 2nd control unit for 711C |
| **FUR PUMPHRP11-12*** | Hydraulic pump 1.1 CI/SEC 12V |
| **FUR PUMPHRP17-12*** | Hydraulic pump 1.7 CI/SEC 12V |

* Request Item

### Furuno FI70 - 4.1" Colour LCD Instrument/Data Organizer

The FI70 is a brand new instrument/data oOrganizer featuring a vibrant 4.1" Colour LCD screen. The screen is bonded for fog-free performance and is perfectly visible even in bright daylight. A variety of external sensors can be connected via the CAN bus network for simple and reliable operation. Display modes include: Heading, Wind, Engine, AIS, Graph, Timer, Highway, Nav Data, Rudder, Roll & Pitch, and more.

The FI70 boasts an amazing user interface - almost anything can be customized. Conveniently choose the way you want information to be displayed, in a way that is most relevant to you.

- Perfect cosmetic match for NavNet TZtouch/TZtouch2 and NavPilot 711C
- Beautiful, vibrant 4.1" colour LCD
- Use existing sensors with new analog IF-NMEAFI converter
- Low power consumption (0.15 A max)
- Simple AIS display through connected CAN bus devices

**FUR FI70***

* Request Item

### Maretron
### 4.1" High Bright Colour Display

Maretron's DSM410 is a 4.1" high-resolution sunlight viewable colour display that interprets and displays NMEA 2000 instrument, navigation, and vessel monitoring data. The DSM410 is a user friendly dedicated marine display with custom screen configurations and an easy-to-use five-key illuminated keypad.

In addition to the monitoring and display capabilities, the DSM410 features an alert/alarm package and electrical switching capability. Unlike traditional single-display units, DSM410 users can choose numeric, gauge, bar or graph formats in single or multiple displays, with cycling options possible for a wide range of favorite data. These multiple display options conserve mounting space and reduce overall system cost.

The DSM410 will directly connect with any NMEA 2000 network and with the exception of AIS data will display any or all information captured throughout the vessel. Various audio and visual alarms are also programmable.

The DSM410 displays a multitude of information including AC power, anchor status, battery, depth, electrical distribution, engine, environment, fuel management, GPS, heading, navigation, pressure/vacuum, rudder, speed, status indicators, tanks, temperature, time, transmission, water makers, weather, wind and more.

The DSM410 is capable of sharing alert information with other DSM410 units as well as any DSM150, DSM250 and N2KView installations on the network.

- High alert
- Low alert
- Data unavailable alert
- On alert
- Off alert
- Circuit breaker tripped alert
- Course alert
- GPS quality alert
- Outside radius alert
- Inside radius alert
- Direction alert
- Timer alert

**MRE DSM410-01**

# Maretron®
## Vessel Monitoring & Control

## Your ONE Source for Creating the Intelligent Boat

Cables & Connectors

MBB300C Vessel Monitoring & Control Black Box

SMS100 Short Message Service (TEXT) Module

MPower® Digital Switching Platform

DSM Series High Resolution Color Displays

TLM100 Tank Level Monitor

VDR100 Vessel Data Recorder

N2KView® Vessel Monitoring & Control Software

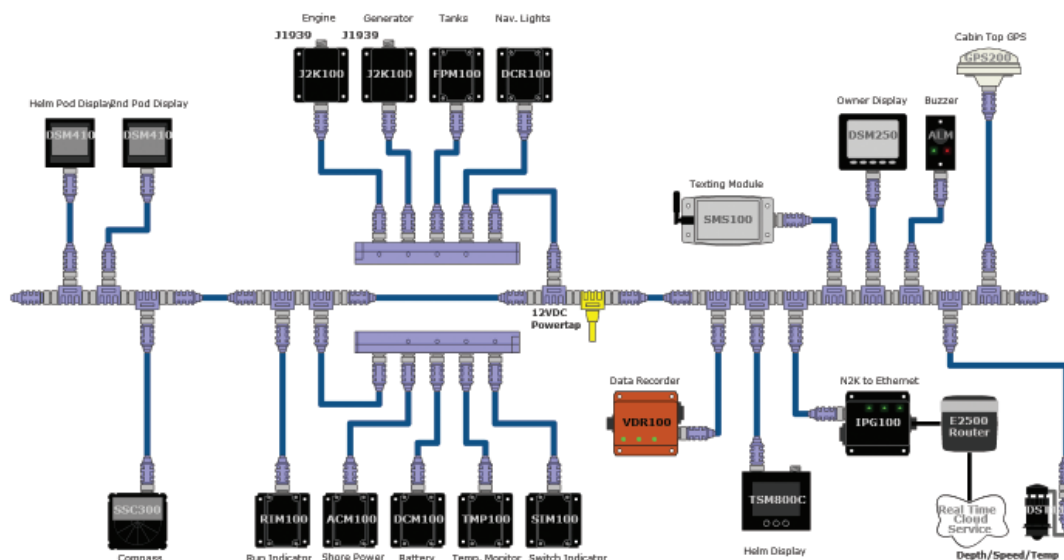| VESSEL MONITORING AND CONTROL | NMEA 2000® GATEWAYS AND BRIDGES | TANK & ENGINE MONITORING | NAVIGATION INSTRUMENTS | USER INTERFACE SOFTWARE AND HARDWARE | CABLES AND CONNECTORS |
|---|---|---|---|---|---|

NMEA 2000 is a registered trademark of the National Marine Electronics Association

## Sailboat Comprehensive System



## Maretron Internet Protocol Gateway

The Internet Protocol Gateway (IPG100) lets you connect Maretron black boxes (MBB100's), Maretron touch screens (DSM800's), PC's, Mac's, tablets, or smartphones to an NMEA 2000 network so you can monitor and control your vessel using Maretron's N2KView software. The conventional way of viewing NMEA 2000 information is with a display on the vessel that is directly connected to an NMEA 2000 network, but with the IPG100, you are not limited to direct connected displays. With the IPG100, you can use any device running N2KView software to monitor and control your vessel from onboard or ashore.
 ▪ Works together with N2KVIEW software

**MRE IPG100-01**

## Maretron USB Gateway

A gateway for bridging USB equipment using NMEA 0183 sentences - such as an on-board computer running navigational software - with an NMEA 2000 network. The gateway automatically converts incoming NMEA 2000 messages to NMEA 0183 sentences so you can continue benefiting from navigational and charting software that you already own while enjoying the many benefits of networked NMEA 2000 instruments.

**MRE USB100-01**

## Maretron Short Message Text Module

A mobile or cellular modem that automatically sends text message alerts from your vessel to your phone. Works together with Maretron's dedicated displays & N2KView software (with the optional N2KView-Alerts module) to detect programmable alert conditions from sensors interconnected on an NMEA 2000 network. You can also send a text message to your vessel.

**MRE SMS100-01***
 * Request Item

## Maretron Fuel Flow Monitor

The FFM100 uses state-of-the-art, positive displacement metering technology for unprecedented accuracy. Additional benefits of the positive displacement metering technology are the elimination of flow conditioning components such as straighteners and pulsation dampers. Other flow meter technologies require flow conditioning components that increase system and installation cost. The FFM100 also uses true temperature compensation with embedded temperature sensors within the meters. The returning fuel is generally hotter than the supply fuel and if not properly compensated, inaccuracies as much as 5% can occur in computing the engine's fuel consumption. The FFM100 also detects momentary reverse flow in the fuel lines due to fluctuating pressure caused by the injection pump. Less accurate systems count the reverse fuel flow as part of the consumed fuel where the FFM100 properly accounts for momentary reverse flow.

Lastly, the FFM100 can be used for fluid types other than fuel (e.g., water, oil, etc.) by ordering the appropriate flow sender.

The FPM100 is NMEA 2000 certified so you can view any and all information anywhere on the vessel using a compatible NMEA 2000® display. The FFM100 is a key component of Maretron's N2KView® vessel monitoring and control system.

**MRE FFM100-01**

### Fuel Flow Sensors

Connect the a fuel flow sensor to the NMEA 2000 network via a FFM100 fuel flow monitor. The fuel flow sensors are compatible with fuel, lubricating oil, hydraulic fluid, or other clean petroleum based products and should not be used with any other fluid types.

| | |
|---|---|
| **MRE M1AR** | Flow range : 0.53 to 26.4 GPH, 2 to 100 LPH |
| **MRE M2AR** | Flow range : 6.6 to 132 GPH, 25 to 500 LPH |
| **MRE M1RSP-2R-E8*** | Flow range : 0.53 to 26.4 GPH, 2 to 100 LPH |

** Limited Quantity
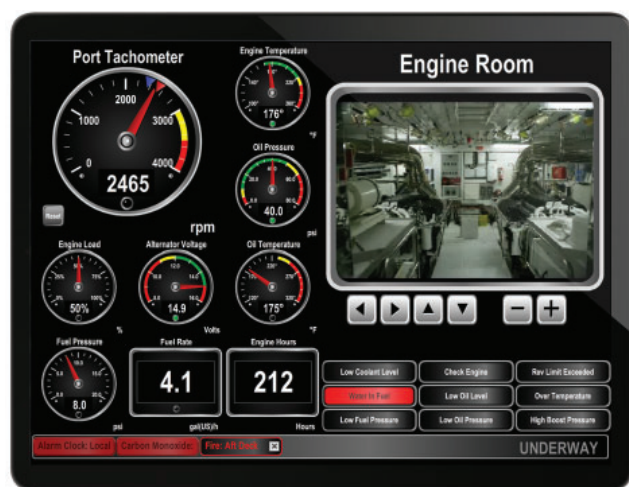
## Maretron N2KVIEW Monitoring Software

N2KView is a comprehensive vessel monitoring and control software that goes beyond simple monitoring. With N2KView® you get additional functionality including alerts, video, control, and fuel management. The alerts functionality allows you to setup as many warnings and alarms as you need so you can be forewarned of potential problems. With alerts, you can relax knowing that the system is watching for smoke, CO, high bilge water, or anything else you deem important. N2KView video capability allows you to add cameras as part of the monitoring system - for example a camera in the engine room - or the cameras can be used as part of the security system. The control functionality gives you the ability to manage your electrical system; for example, you can turn lights or pumps on or off directly from N2KView and even tell if the lights or pumps are burned out and not working. Lastly, the fuel management function uses information from the fuel flow monitor, tank monitors, and GPS to provide advanced information like distance and time to empty as well as fuel rate and fuel economy.

### Hardware

N2KView software can run on your vessel's computer or on standalone products like one of Maretron's TSM800C, TSM1330C displays or the Maretron Black Box (MBB200C) vessel monitoring computer.

*If you want to run N2KView software on your vessel's computer, you will need either a Maretron USB100 or an IPG100, which are necessary to get sensor information from the NMEA 2000 network to the computer.*

There is also a mobile version of N2KView which runs on iPhone or iPad, or an Android device

### About N2KView

N2KView is completely user-configurable and you are free to design different screens to your exact needs while easily switching from screen to screen for monitoring all your systems. Digital displays, analog gauges, graphic displays, warning lights, bar graphs, all can be configured exactly how you want them to be. You can even set the operating limits and colour bands for analog gauges so you know when things are within limits and when they are not.

**MRE N2KVIEW**      Monitoring software

## Maretron Solid State Compass

Solid state, rate gyro electronic compass that provides better than 0.7° heading accuracy through ±45° of roll and pitch angle, and better than 1° roll and pitch accuracy in static conditions. It delivers precise, reliable heading information ten times per second, plus vessel attitude including pitch and roll readings once per second.
- Compatible with the NMEA 0183 digital interface standard

**MRE SSC300-01**

## Maretron NMEA 2000 GPS Antenna/Receiver

32 channel GPS antenna and receiver capable of providing five position fixes per second, accurate boat speed four times per second, and precision time once per second. An additional benefit of the GPS200 is that it broadcasts precision magnetic variation information using the current position and world magnetic model. The GPS200 automatically decodes GPS correction signals from Satellite Based Augmentation Systems including WAAS, EGNOS, or MSAS to provide better than 2.5m accuracy.
- Dia: 4 x H: 1.65"

- Latitude
- Longitude
- Time
- Date
- Course over ground
- Speed over ground
- Magnetic variation
- Satellite status

**MRE GPS200-01**

## Maretron Triducer

Maretron's DST110 Smart retractable Depth/Speed/Temperature Triducer, delivers precise digital depth, accurate speed and exact water temperature even at speeds above 40 knots - all with no programming or calibration necessary. Its patented Smart sensor technology, retractable and removable sensor, and NMEA 2000 network connectivity make the DST110 easy to interpret, easy to install and connect with other navigation equipment, and easy to maintain
- NMEA 2000 network connectivity
- Water depth from 0.4m to 100m
- Water temperature from -10°C to +40°C at ±1.0°C accuracy
- accurate speed from 1 to 50 knots
- At 235kHz it can be used with a fishfinder
- Plastic housing is recommended for fibreglass/metal hulls only

**MRE DST110-01**      .6 to 100m depth

## Maretron Engine Gateway

Maretron's J2K100 attaches directly into J1939 networks of compatible engines, transmissions, and gensets and converts the J1939 data to the new marine digital interface (NMEA 2000). Critical engine, transmission, and genset data is then distributed throughout the vessel over a single cable where it can be monitored by any NMEA 2000 compatible display. The J2K100 can also be used as part of a complete fuel computer. Simply connect the J2K100 together with Maretron universal displays (DSM200/ DSM250/N2KView) and GPS antenna/receiver (GPS100).

**MRE J2K100-01**

The J2K100 converts the following information:
- AC generator current
- AC generator frequency
- AC generator voltage
- Tachometer
- Engine hours
- Coolant pressure
- Coolant water temperature
- Engine oil pressure
- Engine oil temperature
- Boost pressure
- Fuel rate monitoring
- Charging voltage
- Percent engine load
- Percent engine torque
- Rated engine speed
- Vin
- Software id
- Transmission gear
- Transmission oil pressure
- Transmission oil temperature

Gateway The J2K100 is compatible with any engine, transmission, or genset equipped with a J1939 interface, including products from the following manufacturers:
- Caterpillar
- Cummins
- Detroit Diesel
- John Deere
- Kohler
- Northern Lights
- Onan
- Perkins
- Steyr
- Volvo Penta
- Yanmar

## Maretron Alarm Module

Maretron's Alarm Module generates visual and audible alerts for any monitored condition. The Alarm Module can be triggered by alarms generated by Maretron's N2KView Vessel Monitoring System, or by Maretron's DSM250.
- NMEA 2000 network interface
- Super loud 105db audible alarm
- Bright red led visual alarm
- Green led status indicator
- Multiple selectable alarm patterns
- Waterproof - can be mounted indoors or outdoors

**MRE ALM100-01**

## Maretron Smoke/Heat Detector

This self-diagnostic four-wire smoke detector continually monitors its own level of sensitivity and its operational status, showing a visual trouble indicator if it encounters conditions out of its sensitivity range or fails internal diagnostics. The heat detector has a fixed temp point of 135°C. These smoke/heat detectors do not receive their power from the NMEA 2000 network.
- Dia: 6-1/8" x H: 2-1/2"

**MRE SH-002**

## Maretron Tank Level Adapter

The TLA100 is used to adapt commercially available resistive tank senders to the NMEA 2000 network. This allows you to observe tank levels anywhere on the vessel where there are NMEA 2000 compatible
- Adapts American standard (240-30 ohm) resistive senders
- Adapts European standard (10-180 ohm) resistive senders
- Calibrated for any resistance range from 0 to 300 ohms
- Accommodates irregularly shaped tanks
- 16 Programmable tank types including fuel, fresh water, waste water, live well
- Programmable tank number (s) up to 16 per tank type
- Programmable tank capacity
- Works alongside of analog gauges

**MRE TLA100-01**

## Maretron Rudder Angle Adapter

The RAA100 is used to adapt commercially available resistive rudder angle senders to the NMEA 2000 network. Compatible with both the American standard (240-33 ohm) and the European standard (10-180 ohm) resistive senders. Can be calibrated for any resistance between 0 and 300 ohms. You can also use the RAA100 with existing analog gauges.

- Rudder angle
- Rudder order

**MRE RAA100-01**

## Maretron Direct Current Relay Module

Contains 6 Direct Current (DC) relays, each capable of switching up to 10amps. The DCR100 connects directly to an NMEA 2000 network, so you can turn on and off the relays from any device onboard or remotely running Maretron's N2KView software. The DCR100 easily handles resistive DC loads like lights, or inductive DC loads like pumps and motors. The DCR100 can also be used to switch AC circuits using external relays. An added benefit of the DCR100 is that it reports the current through each of the six channels. This allows you to determine if loads are drawing too little electrical current such as burnt out bulbs, or if the loads are starting to draw too much electrical current.
- Six relays for on/off control over NMEA 2000 network
- Each relay capable of carrying up to 10 amps
- Individual relay electrical current monitoring
- Automatic relay over current shutdown (shuts down at ≈ 12 amps)
- Automatic relay thermal shutdown (over temperature protection)

**MRE DCR100-01**

## Maretron Engine / Vessel Monitoring

Maretron brings you plug-and-play engine and vessel monitoring electronics for distributing critical data throughout the vessel. Whether you're down in the engine room or up at the fly bridge, all the information you need is available everywhere you need it. Gone are the days of disparate systems that fail to communicate with each other. With Maretron's networked electronic components like engine and tank monitors, vessel data is combined for advanced features like fuel economy (MPG or GPM) or distance and time to empty (calculated from engine fuel rate, vessel speed from GPS, and fuel remaining from tank monitor). Finally, true vessel monitoring on a single network combining information for display anywhere and everywhere you need it.

### Alternating Current (AC) Monitor

Maretron's ACM100 is a device which monitors AC power sources and outputs information about these sources onto the industry standard NMEA 2000® marine data network.

**MRE ACM100-01**
Accessories:

| | |
|---|---|
| **MRE M000630** | 100 amp transducer w/cable |
| **MRE M000612*** | 400 amp transducer w/cable |

*Request Item*

### Direct Current (DC) Battery Monitor

An advanced electronic monitoring device used to measure the voltage and current of any direct current (DC) power source or load.
- Battery Voltage & Current
- Ripple Voltage
- Battery Case Temperature
- State of Charge
- Time Remaining
- Charge Efficiency Factor

**MRE DCM100-01**
Accessories:

| | |
|---|---|
| **MRE LEMHTA400-S*** | 400 amp transducer w/cable |
| **MRE LEMHTA600-S*** | 600 amp transducer w/cable |

*Request Items*

### Run Indicator Monitor

- Monitors and reports the running status of connected devices
- Works with both AC and DC loads
- Works with both automatically and manually switched loads
- Can indicate the status of a wide variety of loads: Bilge pumps, Winches, Running lights, Transfer pumps, Exhaust/intake fans
- Monitors fuel and detects presence of water in fuel

**MRE RIM100-01**

### Switch Indicator Monitor

Monitors switch closure devices.

- Heat & Smoke detectors
- Carbon monoxide detectors
- Gas detectors
- Bilge water detectors
- Magnetic switches
- Glass break detectors
- Clogged fuel filter detection (excessive vacuum)
- Door, hatch, and porthole magnetic switches

**MRE SIM100-01**
Accessories:

**MRE SH-449CSTE****  Smoke/Heat Detector

** *Limited Quantity*

### Temperature Monitor

- Measures the temperature for up to 6 temperature probes
- Four channels for thermistor probes and 2 channels for high temperature thermocouple probes
- Wide variety of applications supported with optional temperature probes (see below)

**MRE TMP100-01**
Accessory Probes:

| | |
|---|---|
| **MRE TP-AAP-1** | Ambient air temperature probe |
| **MRE TP-EGT-1** | Exhaust gas temperature probe |
| **MRE TP-IP-1** | Immersion temp probe |
| **MRE TR3K** | Ring/under bolt temperature probe |

### Fluid Pressure Monitor

- Adapts up to six pressure transducers to the NMEA 2000 network
- Each channel independently programmed to match pressure transducer characteristics
- Each channel independently programmed in pressure/vacuum mode or tank level mode
* Pressure transducers up to 5000 PSI available as a special order

**MRE FPM100-01**
Pressure Transducers:

| | |
|---|---|
| **MRE PT-0-3PSI-01** | 0 TO 3 PSI |
| **MRE PT-0-5PSI-01** | 0 TO 5 PSI |
| **MRE PT-0-500PSI-01** | 0 to 500 PSI |

### Tank Level Monitors

Ultrasonic, or sound waves, are transmitted via the TLM100 mounted at the top of the tank and the flight times of the sound waves to and from the fluid are measured much like a depth sensor.

The TLM100 is capable of sensing fluid levels in tanks up to 40" (1.02m) in depth. It can be used for diesel, fresh water, waste water, black water, and oil tanks (use TLM150 for gasoline tanks). Unlike most tank senders that only work with rectangular tanks, the TLM100 can be calibrated for irregular tank shapes so you can know the true fluid level in your tanks.

- Diesel tanks
- Fresh water tanks
- Live well tanks
- Waste water tanks
- Black water tanks

| | |
|---|---|
| **MRE TLM100-01** | Tank level monitor (40"depth) |
| **MRE TLM150-01** | Gasoline tank level monitor |
| Accessories: | |
| **MRE TA-5H-1.5NPT*** | Tank adapter |
| **MRE TFT-5H** | SAE non-disp. hull focus tube |

*Request Item*

## About NMEA 2000® Cables and Connectors

The NMEA 2000® standard goes beyond defining message content and includes requirements for the cabling used to interconnect electronic components (referred to as the physical interface). The following catalog pages contain the NMEA 2000® approved network interconnect components used to build an operational network.

About Micro, Mid and Mini Cable Systems There are three types of NMEA 2000® cabling systems, Micro, Mid and Mini. The Micro/Mid cable system is generally used for smaller networks requiring less power (i.e., less than 4 amps per network leg) while the Mini cable system is used for larger networks (i.e., more than 4 amps but less than 8 amps per leg).

### Micro/Mid NMEA 2000® Network Example
(Up to 4 amps per leg)

- Micro/Mid Tee
- Field-Attachable Connectors
- Micro/Mid Powertap Tee
- Micro Double-ended Cordsets
- Micro Double-ended Cordsets
- Micro/Mid Tee
- Micro Termination Resistor
- Micro Bulk Cable
- 4 amps
- 4 amps
- To Power Source
- Micro Drop-line to NMEA 2000® Component
- N2KMeter NMEA 2000® Diagnostic Tool
- BULKHEAD
- Micro Bulkhead Feed-Thru
- Multi-Port Box
- Micro Termination Resistor
- Micro Drop-line to NMEA 2000® Component

## Maretron NMEA 2000® Cable Features

- ▪ Simple trunk and drop line topology interconnects all NMEA 2000® equipment
- ▪ Drop line topology allows powered component removal or re-connection while rest of network remains operational
- ▪ Cable includes power and ground for powering equipment drawing less than 1 amp/device
- ▪ Connectors include keys and keyways for simple error free connections
- ▪ Screw thread connectors reduce chances of accidental disconnects of essential equipment
- ▪ Waterproof connection system prevents corroded intermittent connections and continues to operate even while submerged in the bilge
- ▪ Three independent cable shields (power pair, signal pair, and overall cable) protects system from external noise sources such as high power radio transmitters and radar units
- ▪ Nickel plated brass connector ends ideally suited to harsh marine environment
- ▪ Phosphor bronze contact base material with gold over nickel plate for reliable connections
- ▪ Overmolded cable connector ends provide strain relief
- ▪ Simple easy to use diagnostic components enable trained and untrained personnel to diagnose and troubleshoot network installations

### Mini NMEA 2000® Network Example
(Up to 8 amps per leg)

- Mini Tee
- Field-Attachable Connectors
- Mini Powertap Tee
- Mini Double-ended Cordsets
- Mini Double-ended Cordsets
- Mini/Micro Tee
- Mini Termination Resistor
- Mini Termination Resistor
- Mini Bulk Cable
- 8 amps
- 8 amps
- To Power Source
- Mini Drop-line to NMEA 2000® Component
- N2KMeter NMEA 2000® Diagnostic Tool
- BULKHEAD
- Mini Bulkhead Feed Thru
- Multi-Port Box
- Micro Drop-line to NMEA 2000® Component

## Maretron Micro Cables

| | |
|---|---|
| MRE CM-CG1-CF00.5 | Micro double end cordset .5m grey |
| MRE CM-CG1-CF01.0 | Micro double end cordset 1m grey |
| MRE CM-CG1-CF-02 | Micro double end cordset 2m grey |
| MRE CM-CG1-CF-03 | Micro double end cordset 3m grey |
| MRE CM-CG1-CF-04 | Micro double end cordset 4m grey |
| MRE CM-CG1-CF-05 | Micro double end cordset 5m grey |
| MRE CM-CG1-CF-06 | Micro double end cordset 6m grey |
| MRE CM-CG1-CF-10 | Micro double end cordset 10m grey |
| MRE CG1 | Micro cable grey (sold per foot) |

## Maretron Mid Cables

| | |
|---|---|
| MRE DM-DB1-DF-00.5 | Mid cable double end cord 0.5m blue |
| MRE DM-DB1-DF-01 | Mid cable double end cord 1m blue |
| MRE DM-DB1-DF-02 | Mid cable double end cord 2m blue |
| MRE DM-DB1-DF-03 | Mid cable double end cord 3m blue |
| MRE DM-DB1-DF-04 | Mid cable double end cord 4m blue |
| MRE DM-DB1-DF-06 | Mid cable double end cord 6m blue |
| MRE DM-DB1-DF-08 | Mid cable double end cord 8m blue |
| MRE DF-DB1-25.0* | Mid single ended cordset 25m blue |
| MRE DB1 | Mid cable blue (sold per foot) |

## Maretron Micro/Mid Connectors

| | |
|---|---|
| MRE CF-SPWR05-CF | Micro/Mid powertap tee 5m |
| MRE CM-CF-4 | Micro/mid 4 way multi-port box |
| MRE QCM-CG1-QCF01 | Nylon to metal cable connector |
| MRE FA-CF-ST | Micro/mid field att.connector, female |
| MRE FA-CM-ST | Micro/mid field att.connector male |
| MRE FA-CF-90 | Micro/Mid 90 field attach, female |
| MRE FA-CM-90 | Micro/Mid 90 field attach, male |
| MRE IT-CM-CF | Micro/Mid in-line termination resistor |
| MRE CM-CF-CF | Micro/Mid tee |
| MRE TR-CF | Micro/Mid termination resistor, female |
| MRE TR-CM | Micro/Mid termination resistor, male |
| MRE M000101 | Micro/Mid cap for female connector |
| MRE M000102 | Micro/Mid cap for male connector |
| MRE BHF-CM-CF | Micro/Mid bulkhead feed-thru |

## Maretron Mini Cables

| | |
|---|---|
| MRE NM-NB1-NF-00.5* | Mini double end cord 0.5m blue |
| MRE NM-NB1-NF-01.0* | Mini double end cord 1m blue |
| MRE NM-NB1-NF-02.0* | Mini double end cord 2m blue |
| MRE NM-NB1-NF-03.0* | Mini double end cord 3m blue |
| MRE NM-NB1-NF-04.0* | Mini double end cord 4m blue |
| MRE NM-NB1-NF-05.0* | Mini double end cord 5m blue |
| MRE NM-NB1-NF-06.0* | Mini double end cord 6m blue |
| MRE NM-NB1-NF-08.0* | Mini double end cord 8m blue |
| MRE NM-NB1-NF-10.0* | Mini double end cord 10m blue |
| MRE NG1 | Mini cable grey (sold per foot) |

## Maretron Mini Connectors

| | |
|---|---|
| MRE FA-NF-ST | Mini field att.connector female |
| MRE FA-NM-ST | Mini field att.connector male |
| MRE NF-NM4P-NF | Mini powertap |
| MRE NM-CF-NF | Mini/micro tee |
| MRE TR-NM | Mini/micro termination resistor male |
| MRE TR-NF | Mini/micro termination resistor female |
| MRE TRL-NF | Mini/micro termination resistor female LED |
| MRE BHF-NM-NF | Mini bulkhead feed |
| MRE NM4P-05 | Mini power cordset 5m |

* Request Items

## Maretron Micro Cable
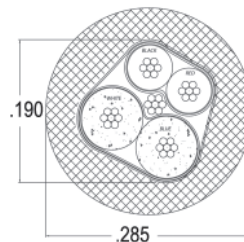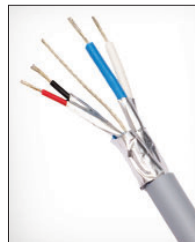


**OVERALL**
| | |
|---|---|
| Outer Jacket Mat/Colour: | PVC/Grey |
| Insulation Material: | PE (data wires), SRPVC (power wires) |
| Construction: | 4x22 (0.65mm) AWG, 22 (0.65mm) AWG Drain |
| Shielding (3 Levels): | FOIL (overall), FOIL (power pair), FOIL (data pair) |

**POWER PAIR**
| | |
|---|---|
| Wire: | 2X22 (0.65mm) AWG |
| Resistance/Conductor: | 18.1 Ohms/1000ft |
| Max Amperage: | 6 Amps |
| Colour Code: | Red/Black |

**DATA PAIR**
| | |
|---|---|
| Wire: | 2X22 (0.65mm) (AWG) |
| Characteristic Impedance: | 120 Ohms ± 10% |
| Capacitance: | 11.33pF/IT ± 10% |
| Colour Code: | White/Blue |

## Maretron Mid Cable
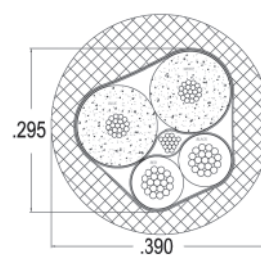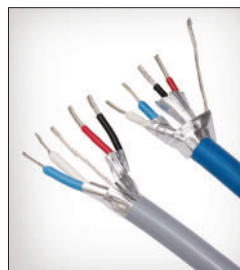


**OVERALL**
| | |
|---|---|
| Outer Jacket Mat/Colour: | PVC/Grey – DG1 PVC/Blue – DB1 |
| Insulation Material: | PE (data wires), PVC (power wires) |
| Construction: | 2x16 (1.29mm) AWG, 2x20 (0.81mm) AWG, 20 (0.81mm) AWG Drain Wire |
| Shielding (3 levels): | Foil (overall), Foil (power pair), Foil (data pair) |

**POWER PAIR**
| | |
|---|---|
| Wire: | 2x16 (1.29mm) AWG |
| Resistance/Conductor: | 4.1 Ohms/1000 ft max |
| Max Amperage: | 14 Amps |
| Colour Code: | Red/Black |

**DATA PAIR**
| | |
|---|---|
| Wire: | 2x20 (0.81mm) (AWG) |
| Characteristic Impedance: | 120 Ohms ± 10% |
| Capacitance: | 10.75 pF/ft |
| Colour Code: | White/Blue |

## Maretron Mini Cable
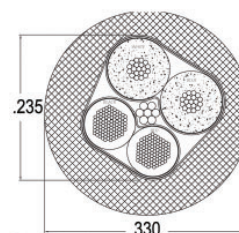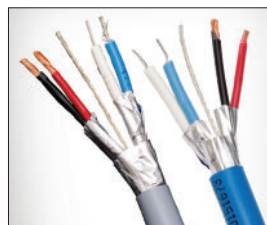


**OVERALL**
| | |
|---|---|
| Outer Jacket Mat/Colour: | PVC/Blue – NB1PVC/Grey – NG1 |
| Insulation Material: | PE (data), PVC (power) |
| Construction: | 2x15 (1.45mm) AWG, 2x18 (1.02mm) AWG, 18 (1.02mm) AWG Drain Wire |
| Shielding (3 Levels): | Foil (overall), Foil (power pair), Foil (data pair) |

**POWER PAIR**
| | |
|---|---|
| Wire: | 2x15 (1.45mm) AWG |
| Resistance/Conductor: | 3.44 Ohms/1000 ft max |
| Max Amperage: | 16 Amps – NB1 14 Amps – NG1 |
| Colour Code: | Red/Black |

**DATA PAIR**
| | |
|---|---|
| Wire: | 2x18 (1.02mm) AWG |
| Characteristic Impedance: | 120 Ohms ± 10% |
| Capacitance: | 12 pF/1000 ft Max |
| Colour Code: | White/Blue |

## Maretron
## NMEA 2000 Starter Kit

Maretron's Cable-Starter-Kit provides
all the necessary cables and connectors
necessary to connect two products together on an NMEA 2000
network. This includes a powertap for powering the products, one
10 meter trunk or backbone cable, two tees and two 2 meter cables
for crating branch or stub connections to the individual products,
and two terminators for proper termination of the NMEA 2000
network. The network is easily expanded by adding a tee and
branch cable for each additional product that is added to an NMEA
2000 network.
Kit Includes:
- 1 x CF-SPWR05-CF Micro/Mid 5m power tap tee
- 2 x CM-CF-CF Micro tee
- 2 x CM-CG1-CF-02.0 Micro double ended cordset - M to F - 2.0m grey
- 1 x CM-CG1-CF-10.0 Micro double ended cordset - M to F - 10.0m grey
- 2 x TR-CM Micro termination resistor Male

**MRE CABLE STARTER KIT**

## Garmin
## NMEA 2000 Network Updater

NMEA 2000 network updater provides the convenience of
updating Garmin products and NMEA 2000 accessories that do
not have a SD card slot. Simply download a software update to
an SD card and insert the card into the network updater. Using a
simple "plug and play" installation, the network updater easily and
temporarily[1] connects to your NMEA 2000 network.

**GAR 010-11480-00**

## Maretron
## NMEA 2000 Diagnostic Tool

The N2KMeter is a diagnostic tool for
NMEA 2000 networks that allows users to
validate NMEA 2000 network compatibility
and operations during installation of a
device or complete system, and diagnose
possible network flaws or failures that occur
on an operational network. N2KMeter
provides the detailed technical information
an NMEA 2000 troubleshooting expert needs, yet it simplifies and
summarizes, allowing an NMEA 2000 novice to effectively identify
and diagnose network problems. N2KMeter uses a patented
integrated intelligence technique to summarize multiple NMEA
2000 network operational variables into a single health index.

**MRE N2KMETER-01**

**MPower Digital 12V Switches by Maretron**

Available to NMEA Certified Dealers

Contact Western Marine to learn how to
become an MPower Dealer

## Garmin
## NMEA 2000 Starter Kit

Starter kit has everything you need to build a basic NMEA 2000
network on your boat. The kit includes an NMEA 2000 drop cable
(6.5'), backbone cable (19'), power cable (6.5'), 2 T-connectors, and
male and female terminator connectors.

**GAR 010-11442-00**

## Garmin
## NMEA 2000 Network Cables

| | |
|---|---|
| **GAR 010-10817-01** | N2K weather cap |
| **GAR 010-11076-03** | N2K Backbone/Drop Cable 1' |
| **GAR 010-11076-00** | N2K Backbone/Drop Cable 6' |
| **GAR 010-11076-04** | N2K Backbone/Drop Cable 13' |
| **GAR 010-11076-01** | N2K Backbone/Drop Cable 19' |
| **GAR 010-11076-02** | N2K Backbone/Drop Cable 32' |
| **GAR 010-11171-01** | N2K Backbone/Drop Cable 98' |
| **GAR 010-11078-00** | N2K T-connector |
| **GAR 010-11079-00** | N2K Power cable |
| **GAR 010-11080-00** | N2K Terminator, male |
| **GAR 010-11081-00** | N2K Terminator, female |
| **GAR 010-11089-00** | N2K Backbone/Drop Cables (Right Angle) |
| **GAR 010-11094-00** | N2K Field-installable Connector, male |
| **GAR 010-11095-00** | N2K Field-installable Connector, female |
| **GAR 010-11096-00** | N2K Inline Terminator |

**ELECTRONICS**

**ELECTRONICS**

Ancor NMEA 2000 approved cables and connectors simplify creating or expanding an NMEA 2000 network. Couplers are colour coded to make identifying the power cable or connector easy once installed as part of an NMEA 2000 network. The colour coded couplers connect to the corresponding Ancor cables and connectors creating an easy to identify network.
NMEA 2000 Approved, 100% universal and compatible with other manufacturers' products
NMEA micro-size connectors

## Ancor NMEA 2000
## Single Device Starter Kit

Kit include all components needed to create a single device NMEA 2000 network.
▪ 1 meter power cable with tee,  #270000
▪ One male terminator, #270106 and one female terminator, #270105
▪ One single tee connector, #270101
▪ One 2 meter drop cable, #270302

**ANC 270201**

## Ancor NMEA 2000
## Dual Device Starter Kit

Kit include all components needed to create a dual device NMEA 2000 network.
▪ 1 meter power cable with tee, #270000
▪ One male terminator, #270106 and one female terminator, part #270105
▪ One dual tee connector, #270103
▪ Two 2 meter drop cables, #270302

**ANC 270202**

## Ancor NMEA 2000
## Power Cable With Tee

For power connection to an NMEA 2000 network. The tee is colour coded red to make identifying the power cable easy once installed as part of an NMEA 2000 network. The yellow couplers connect to the corresponding Ancor backbone cables and tees creating a simplified, colour coded network installation.
▪ 1 meter power cable includes a tee for direct connection to backbone cables
▪ 18 AWG power conductors to reduce voltage drop, provide better reliability and meet the requirements of ABYC and the USCG for minimum size power conductors

**ANC 270000**          1 metre

## Ancor NMEA 2000
## Single Device Backbone Starter Kit

Basic starter kit for adding a new NMEA 2000 network to your boat.
▪ One power cable with Tee, 3.3 ft (1m), #270000
▪ One male terminator, #270106
▪ One female terminator, #270105
▪ One single tee connector, #270101
▪ One drop cable, 1.64 ft (.5m), #270300
▪ One backbone cable, 16.4 ft (5m), #270005

**ANC 270203**

## Ancor NMEA 2000
## Backbone Cables

For connection to an NMEA 2000 tee connector. The yellow couplers connect to the corresponding Ancor tees creating a simplified, colour coded network installation.
▪ 18 AWG power conductors to reduce voltage drop and provide better reliability for critical backbone cables

| | |
|---|---|
| **ANC 270001** | 0.5 meter |
| **ANC 270002** | 2 meter |
| **ANC 270005** | 5 meter |
| **ANC 270010** | 10 meter |

## Ancor NMEA 2000
## Drop Cables

For connection between an NMEA 2000 device and tee connector. The black couplers connect to the corresponding Ancor tees creating a simplified, colour coded network installation. The drop cables are smaller in diameter and more flexible than backbone cables for easy connection to NMEA 2000 devices
▪ 22 AWG power conductors

| | |
|---|---|
| **ANC 270300** | 0.5 meter |
| **ANC 270301** | 1 meter |
| **ANC 270302** | 2 meter |
| **ANC 270305** | 5 meter |

### Ancor NMEA 2000 Through Bulkhead Adaptor

Use for transitions through bulk heads or panels. Simplifies installation when routing through a waterproof bulkhead or panel. Creates a connection point for removable equipment such as a computer interface.

**ANC 270107**

### Ancor NMEA 2000 Field Serviceable Connectors

For termination of bare NMEA cable. Securely terminate bulk cable or replace a broken end.

| **ANC 270109** | Female |
| **ANC 270110** | Male |

### Ancor NMEA 2000 Blanking Caps

Covers unused couplers. Protects unused tee connectors from dust and water.

| **ANC 270111** | Female |
| **ANC 270112** | Male |

### Ancor NMEA 2000 Inline Terminator

For proper termination of a network in a single piece, space saving design. The inline terminator connects between a backbone cable and a drop cable, while still maintaining proper termination for the end of the network.

**ANC 270114**

### Ancor NMEA 2000 Power Isolator

Ancor's NMEA 2000 Power Isolator can be used for isolating power between 2 independent NMEA 2000 networks. Reduce battery current draw by powering one bus off while the other remains operational, or can be used to assist with voltage drop issues on long networks. The yellow couplers connect to the corresponding Ancor backbone cables and tees creating a simplified, colour coded network installation.
 ▪ Colour coded for easy installation and component identification
 ▪ Compatable with all NMEA 2000 micro devices

**ANC 270113**

### Ancor NMEA 2000 Tee Connectors

For connection between NMEA 2000 drop cables and backbone cables. The yellow couplers connect to the corresponding Ancor tees and backbone cables, creating a simplified, colour coded network installation. The connectors are offered in four configurations for maximum installation flexibility. The two way and four way tee connectors allow for multiple drop cables to be connected without additional backbone cable.

| **ANC 270101** | Single |
| **ANC 270103** | Two way |
| **ANC 270104** | Four way |

### Ancor NMEA 2000 Terminators

270105     270106

For proper termination of an NMEA 2000 network. The yellow couplers connect to the corresponding Ancor tees, creating a simplified, colour coded network installation.

| **ANC 270105** | Female |
| **ANC 270106** | Male |

### Ancor NMEA 2000 90° Elbow Connector

Makes cable routing easier. The connector is installed between two cables to reduce stress on the cables and create a compact installation

**ANC 270108**

# OCTOPUS AUTOPILOT DRIVE UNITS

- A range of professional hydraulic steering solutions for power and sailboats
- Designed and built to the highest standards
- Proven reliability and performance, with thousands of installations worldwide
- Patented piston pump offers pinpoint accuracy, high power and low consumption
- Multiple configurations ideal for installations with limited below deck space
- Compatible with all major brand autopilot systems

## Octopus Hydraulic Linear Drives

Octopus linear drives are available with a huge range of stroke and pump sizes. Standard drives are available with the pump either mounted on the ram or separately. The LAU custom solutions offer 8 different configurations to suit virtually all installations.

OCTAF1012LAM7

OCTAF1212LARM12

**LAM Remote Style**

| | |
|---|---|
| **OCT OCTAF1012LAM7*** | 38mm x 7" stroke, 12V |
| **OCT OCTAF1212LAM12*** | 38mm x 12" stroke, 12V |

**LAR Mounted Style**

| | |
|---|---|
| **OCT OCTAF1012LAR7*** | 38mm x 7" stroke, 12V |
| **OCT OCTAF1212LAR12*** | 38mm x 12" stroke, 12V |

\* Request Items

## Octopus Hydraulic Reversing Pumps

Featuring a patented piston pump design which offers twice the power of competitor's models, but with half the consumption, Octopus reversing pumps are suitable for steering rams sizes from 150cc to 500cc, with pinpoint accuracy and adjustable flow rates.

OCTAF2012

OCTAFG1012

**Piston Pumps**

| | |
|---|---|
| **OCT OCTAF1212** | 1.2L, 150-300 CC, 12V |
| **OCT OCTAF2012** | 2.0L, 245-500 CC, 12V |

**Gear Pumps**

| | |
|---|---|
| **OCT OCTAFG0612** | 0.6L, 98-131 CC, 12V |
| **OCT OCTAFG1012** | 1L, 164-230 CC, 12V |
| **OCT OCTAFG1612** | 1.6L, 262-394 CC, 12V |

| Pump Model | Steering Rams Displacement (cubic Inches) | | | | | | | | | | | | | Adjustable Flow | Control of H.O. to H.O. Speed | H.O. to H.O. in seconds | Peak Current (amps) | Normal Steer Current (amps) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 98 CC | 131 CC | 164 CC | 197 CC | 230 CC | 262 CC | 295 CC | 328 CC | 361 CC | 394 CC | 426 CC | 459 CC | 492 CC | | | | | |
| **AFG 0612-9C1** | ■ | ■ | | | | | | | | | | | | No | No | 9-15 | - | - |
| **AFG 1012-15C1** | | | ■ | ■ | ■ | | | | | | | | | No | No | 9-15 | - | - |
| **AFG 1612-24C1** | | | | | | ■ | ■ | ■ | ■ | ■ | | | | No | No | 9-15 | - | - |
| **AFG 1012-15C1** | ■ | ■ | ■ | ■ | ■ | ■ | | | | | | | | Yes | Yes | 15 | 19 | 4-6 |
| **AFG 1212-18C1** | | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | | | | Yes | Yes | 15 | 19 | 4-6 |
| **AFG 2012-31C1** | | | | | | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | Yes | Yes | 15 | 22 | 6-8 |

**OCTOPUS**
AUTOPILOT DRIVE SYSTEMS

## Octopus
## Type S Dashboard Drive

The Straight shaft drive unit replaces the manual drive used on cable steered boats and is mounted directly behind the dash. the drive is directly compatible with the Morse 290 steering helm but comes with its own bezel kit and can be retrofitted in most installations using the cable and steering.

**OCT OCTAFMDMSW**

## Octopus
## Type R Mechanical Remote Drive

The heart of this pilot drive system is the remote drive unit which is connected to the boat steering by a cable and connection kit.
▪ Low cost solution - no need to change to hydraulic steering
▪ Easy to fit - simple to install kits
▪ Time saving - rudder feedback option mounts directly on drives
▪ Safe - manual override without disengaging the autopilot
▪ Compatible with all major autopilot brand electronics

**SINGLE ENGINE SYSTEM A**

Remote Drive Unit
Drive Cable
Installation Kit

The remote drive system is ideal for the following types of engine applications:
▪ Stern drives also known as I/O drives or Z drives
▪ Inboard engines requiring traditional rudder steering

**OCT OCTAFMDRESYSA***     Sterndrives - Mercruiser from 1994, North American Volvo from 1997
* Request Item
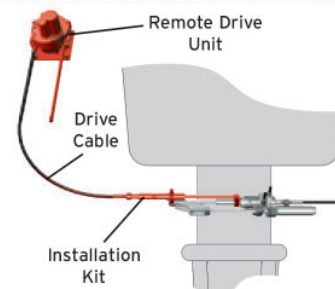
## Octopus
## Type RS Sailboat Drives

The Type RS Sailboat Drive makes it easy and economical to install an autopilot on light displacement sailboats with mechanical steering. The drive is very responsive and has little feedback resistance when in 'Standby' Pilot mode
The connection kit can be fitted into very small spaces, ideal for small to midsized modern sailboats which have limited space under the cockpit to fit drive units.
▪ Easy To Buy - Everything you need supplied in one box - drive, 6' steering cable and universal connection kit
▪ Easy To Fit - The simple to mount installation kit and optional integrated rudder feedback make for easy fitting
▪ Compact - The remote drive unit has a tiny $0.25^2$ footprint and can be mounted in the most convenient location on your boat, horizontally or vertically
▪ Reliable & Safe - Proven, tested design. The drive unit features a manual override without having to disengage the autopilot first
▪ Compatible With Your Pilot - The Type R Remote Drive System is compatible with all major brand inboard autopilot systems

**OCT OCTAFMDRSSYS8**      Short 9", boats up to 32' or 13,200 lbs
**OCT OCTAFMDRSSYS12***   Long 12", boats up to 38' or 15,400 lbs
* Request Item
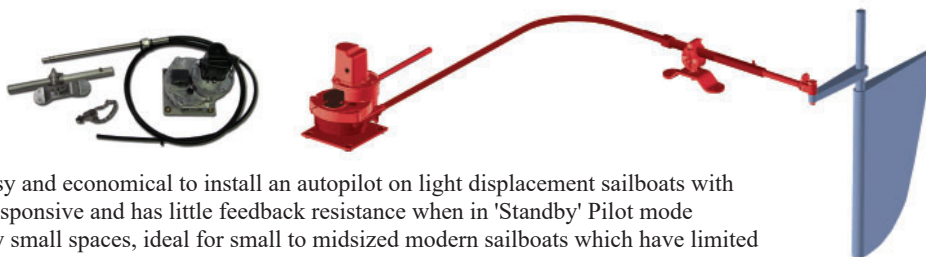
## Octopus
## Optional Rudder Feedback Units

One of the most complex and time-consuming aspects of autopilot installation is fitting the rudder feedback unit, ensuring that the geometry matches the full range of rudder movement. The Octopus rudder feedback unit solves these problems as it mounts directly to the drive unit itself.

**OCT OC15SUK27B**   For Raymarine Autopilots
**OCT OC15SUK27E**   For Garmin, Furuno, Navman & TMQ Autopilots

► Also See    Octopus Hydraulic Steering Fluid  pg 646

## Octopus
## Hose Fitting Kit

Makes autopilot installation a breeze. Essential option for any Pilot installation, includes ORB fittings to work with 2014 or newer Seastar helms.
▪ Includes: 3 x 30" hoses and ORB and NPT helm fittings kits

**OCT OC17SUK42**

## Octopus
## Steering Cable Adapter Kit for Type S & R Drives

Used with the Type S Dashboard or Type R Mechanical Systems to accept SeaStar TFX SSC62 or Uflex M66 steering cables.

**OCT OC15SUK08**

# HATTELAND DISPLAY

- Multitouch
- Type approved
- IP22 rear / IP66 front
- Superior bonding technology
- Module based, tailor-made systems made easy
- Sunlight readable
- Glass display control (GDC), solid state menu system
- Designed to work with Furuno TZT14 and BB systems

Sunlight Readable / High Bright Series X Generation 2 (G2) Display Panels offer the ultimate in performance, convenience, state of the art design and enduring quality for system integrators and boat builders.

Series X Generation 2 (G2) display range is a flexible monitor solution designed and type approved for the professional maritime segment, where reliability and long life time are key pre-requisites for the industry. The product range combines stunning design and technology with innovative features and options, making it all that the integrator needs for top class type-approved marine systems.

The multi-input MMD models provide a wide choice of display size and format for a multitude of shipboard applications, where combining data and video inputs to a single unit provides maximum flexibility. Be it for ship navigation, automation or security, this range with all it's possible options provides a robust and multipurpose platform from which to display and manage data and multiple camera or sensor videos.

Series X Generation 2 (G2) displays feature Glass Display Control™, LED Backlight, TFT Active-matrix Technology, full dimming and multipower as standard, and can also accomodate and combine a number of options such as touch screen, optical bonding, sunlight readability (High Bright) and ECDIS calibration.
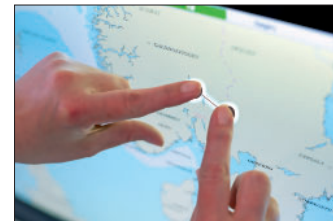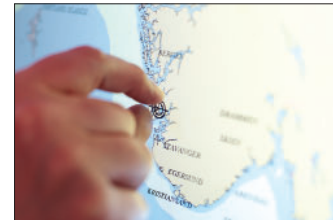
| Part # | Screen | Aspect Ratio | Size | Weight |
|---|---|---|---|---|
| **HAT HD 17T21-MMD-MA1-FOGP*** | 17" 1280 x 1024 SXGA | 5:4 | W: 15.35" x H: 13.82" x D: 3.09" | 6.2kg / 13.6lbs |
| **HAT HD 19T21-MMD-MA1-FOGP**** | 19" 1280 x 1024 SXGA | 5:4 | W: 16.89" x H: 15.04" x D: 2.93' | 9.7kg / 21.3lbs |
| **HAT HD-19T22-MMD-MA1-FOGP*** | 19" 1280 x 1024 SXGA | 5:4 | W: 16.89" x H: 15.04" x D: 2.93' | 9.7kg / 21.3lbs |
| **HAT HD-24T22-MMD-MA1-FOGP*** | 19" 1920 x 1080 FHD | 16:9 | W: 23.35" x H: 15.12" x D: 2.44" | 9.1kg / 20lbs |

* Request Items
** Limited Quantity

Supported Video Signals: Interlaced HDTV, NTSC, PAL and SECAM video, Composite Video

Multi-power 115/230VAC - 50/60Hz + 24VDC

Product Features: Dimmable 0-100%, Multi-power AC & DC, PBP (Picture By Picture), PIP (Picture In Picture)

**Connectors**
- DVI IN: 2 x DVI-D 24P (female)
- RGB IN: 2 x HD D-SUB 15P (female)
- Composite Video IN: 3 x BNC (female)
- SCOM RS-422/485: 1 x 5-pin Term. Block 3.81, non-isolated+Buzzer
- RGB OUT: 1 x HD D-SUB 15P (female)
- If Touchscreen: 1 x USB Type A (female)
- Ethernet: 1 x RJ45 (female) for Remote Control
- SCOM RS-232: 1 x D-SUB 9P (female) non-isolated
- Potmeter: 1 x D-SUB 9P (male), - (Potentiometer IN, +5VDC OUT, BRT +/- IN)
- AC Power IN: 1 x Std. IEC inlet
- DC Power IN: 1 x 2-pin Terminal Block 5.08

**Approved vs Certified**
NMEA Components—cables and connectors must pass NMEA approval to guarantee that they are manufactured to standards which allow them to be universally used with any manufacturers approved components and certified devices.
NMEA Devices—must be certified to run the universal NMEA 2000 communications protocols to be used universally between different manufacturers devices.

T H E   S U M   O F   A U D I O   I N N O V A T I O N

# 770 SERIES

## MARINE ENTERTAINMENT SYSTEM

The Apollo RA770 harnesses the power of Fusion DSP, letting you optimize each audio zone on your vessel with your Fusion speakers, for premium listening in any environment.

Enjoy the clarity and premium quality of Wi-Fi audio streaming in a world-first for marine stereos, including the convenience of Apple AirPlay and UPnP. Designed with Wi-Fi on board, the Apollo RA770 and SRX400 can also be connected without running any wires - reducing installation time, cost and complexity.

The power of PartyBus enables other PartyBus products on the network to connect to the Apollo RA770 in Party Mode and play the same perfectly synced audio source throughout the entire vessel. Opt into Personal Mode on any PartyBus enabled product and listen to available audio sources from your stereo in the area of your choice without disrupting Party Mode in the other areas of the vessel.

## FEATURES

- Custom audio profiles for each zone in your vessel
- Fusion-PartyBus is the new way to enjoy music on your boat
- Over-the-air software updates from your compatible device
- Wi-Fi audio streaming via Apple AirPlay and UPnP
- 4.3" touchscreen with play, pause and skip functions
- Control your tunes from a compatible Multi-Function Display, compatible device or Garmin watch
- Multi-Zone Technology control in four separate audio zones
- IPX7 Ingress Protection rating
- Class-D amplifier design for higher efficiency and output
- 280 W peak power output
- Ohm stereo stable for wiring up to 2 x 4 Ohm speakers per channel
- Weight: 26.5 oz

Face plate:   19.2 x 8.2 cm
Cutout:       16.4 x 5.0 cm
Install depth: 9.9 cm

### Fusion Apollo MS-RA770 Stereo

AM / FM / Bluetooth / Apple AirPlay / Wi-Fi audio streaming / PartyBus /digital optical input / USB audio / AUX x 2 / UPnP / MTP / SiriusXM-Ready

**FUE 010-01905-00**     MS-RA770

Accessories:
**FUE 010-12817-00**     Flush mount kit
**FUE 010-12829-01**     Retrofit kit

# 400 SERIES

## MARINE ENTERTAINMENT SYSTEM

The Apollo SRX400 combines the latest design, engineering and powerful feature set of the Apollo Series in a compact, versatile form factor. With Apple AirPlay 2, built-in Wi-Fi streaming, Fusion's Digital Signal Processing, PartyBus connectivity and over-the-air software updates, the Apollo SRX400 is the perfect combination of intelligent design and superior sound in a compact zone stereo.

## FEATURES

- Custom audio profiles for each zone in your vessel
- Fusion-PartyBus is the new way to enjoy music on your boat
- Over-the-air software updates from your compatible device
- Wi-Fi audio streaming via Apple AirPlay and UPnP
- 2.7" colour display
- Control your tunes from a compatible Multi-Function Display, compatible device or Garmin watch
- Multi-Zone Technology control in four separate audio zones
- IPX7 Ingress Protection rating
- Class-D amplifier design for higher efficiency and output
- 140 W peak power output
- Ohm stereo stable for wiring up to 2 x 4 Ohm speakers per channel
- Weight: 12 oz

Face plate:   11.0 x 7.0 cm
Cutout:       8.3 x 5.0 cm
Install depth: 10.0 cm

### Fusion Apollo MS-SRX400 Stereo

AM / FM / Bluetooth / Apple AirPlay / Wi-Fi audio streaming / UPnP

**FUE 010-01983-00**     MS-SRX400
Accessories:
**FUE 010-12830-00**     Flat mount kit

# 670 SERIES

## MARINE ENTERTAINMENT SYSTEM

The brand new Apollo RA670 inherits key audio innovations and technological brilliance from the award-winning Apollo RA770, re-embodied in a more compact form factor. Featuring a brilliant, optically bonded, full-colour LCD display, Fusion's DSP technology for a technically superior listening experience and system protection, Fusion-LinkTM integration and control from compatible MFDs, smart devices and Garmin watches, Multi-ZoneTM control in up to three audio zones and PartyBusTM capabilities when connected to a Wi-Fi or Apollo network.



3 YEAR WARRANTY

Face plate:    15.7 x 6.8 cm
Cutout:        13.0 x 4.9 cm
Install depth:   10.2 cm

## FEATURES

- Custom audio profiles for each zone in your vessel
- Fusion-PartyBus is the new way to enjoy music on your boat
- Over-the-air software updates from your compatible device
- Wi-Fi audio streaming via Apple AirPlay and UPnP
- 2.7" colour display
- Control your tunes from a compatible Multi-Function Display, compatible device or Garmin watch
- Multi-Zone Technology control in four separate audio zones
- IPX6 & IPX7 Ingress Protection rating
- Class-D amplifier design for higher efficiency and output
- 280 W peak power output
- Ohm stereo stable for wiring up to 2 x 4 Ohm speakers per channel
- Weight: 26.5 oz

### Fusion Apollo MS-RA670 Stereo

Sources: AM / FM / Bluetooth / Apple AirPlay 2 / Optical Audio In / USB / AUX / MTP / UPnP* / DAB+ Ready (Requires MS-DAB100A) / SiriusXM-Ready (Requires SiriusXM Connect Vehicle Tuner)

**FUE 010-02138-00**     MS-RA670
  Accessories:
**FUE 010-12817-02**     Flush mount kit
**FUE 010-12829-03**     Adapter plate

---

# MS-WB670

## MARINE ENTERTAINMENT HIDEAWAY SYSTEM

The new Apollo WB670 inherits key audio innovations and technological brilliance from the Apollo RA670, re-engineered in a compact, space saving form factor designed to simplify dash space at the helm. Connect to an Apollo ERX400 wired remote via Ethernet for the full Apollo user experience, or alternatively, for a more streamlined system you can control the WB670 using only a Garmin MFD via NMEA 2000 or Ethernet. From the kick drum to your eardrum, Apollo has made it inherently simple to customize your audio entertainment for superior sound quality in any area of your boat.



NEW

## FEATURES

- Digital Signal Processing (DSP) - a technically superior listening experience made simple, Fusion's DSP produces superior sound quality in every environment. Precisely calculated loudness curves, full range audio at every volume level, and feed-forward limiter
- Intuitive user experience with full control of the PartyBus-Network functionalities including Stereo Grouping, Volume Control, Power Options, and Home Zone
- WiFi audio streaming with Apple AirPlay 2 has the added functionality of being able to stream one audio source from your compatible Apple device to multiple Apollo Series stereos connected to the same network, with individual and global control of the head units
- Compact design, to save space at the helm, the unit can be mounted in out-of-the-way places such as storage lockers, inside helm consoles, and other concealed compartments
- Same 2.7" brilliant, full-color LCD from the Apollo RA670 and SRX400
- Over-the-Air software updates
- Up to six independent audio zones available by connecting two Apollo WB670's via Ethernet or router to Ethernet switch. Both units can be controlled from a single ERX400 wired remote

- IPX2 rated when correctly installed
- 280 W peak power output
- Connections: one Ethernet port, one USB 2.0 port, one SiriusXM port, one Motorola antenna port
- 4x speaker channels, 1 pair per zone
- W: 5-1/8" x H: 5-1/8" x D: 2-3/16"

### Fusion Apollo Hideaway System

AM / FM / Bluetooth / Apple AirPlay 2* / Optical Audio In / USB / AUX / MTP / UPnP* / DAB+ Ready (Requires MS-DAB100A) / SiriusXM-Ready (Requires SiriusXM Connect Vehicle Tuner)

**FUE 010-02346-00**     MS-WB670

\* Available when the Apollo WB670 is connected via an Ethernet cable to a wireless network router or Apollo Series stereo network enabled with WiFi technology.

**ELECTRONICS**

# MS-ERX400

## APOLLO WIRED REMOTE WITH ETHERNET

Sleek, compact, and easy to install, the new Apollo ERX400 wired remote control allows you to add intuitive and integrated audio control to any zone on board your boat.

Featuring premium design aesthetics including a 2.7" optically bonded color LCD and a black front face with multiple mounting options - controlling your on board audio entertainment has never looked this good.

Connect via a single proprietary Ethernet cable to an Apollo Series stero network, or individual stereo.

## FEATURES

- Intuitive user experience with full control of the PartyBus-Network functionalities including Stereo Grouping, Volume Control, Power Options, and Home Zone
- Ultra-shallow mounting depth of just 1-15/16" allows the ERX400 to be mounted in a variety of areas, particularly where mounting depth is limited. You have the option of mounting with a flush finish, or integrating it into the helm with a premium flat finish
- Same 2.7" brilliant, full-color LCD from the Apollo RA670 and SRX400
- Over-the-Air software updates
- IPX6 and IPX7 rated
- Faceplate: 4-5/16" x 2-3/4" x 1-7/8"

### Fusion Marine Stereo Remote

**FUE 010-02244-00**    MS-ERX400
   Accessories:
**FUE 010-12922-00**    8m network power cable
**FUE 010-12922-02**    Surface mount kit

---

# 210 SERIES

## MARINE ENTERTAINMENT SYSTEM

The new MS-RA210, a compact marine stereo designed to deliver a quality audio entertainment experience out on the water. The MS-RA210 features Fusion's new-look design aesthetics and revolutionary Digital Signal Processing technology for optimized listening in any environment. The sleek design with the option of either mounting the stereo with a conventional flush finish or integrating it flat

## FEATURES

- Brilliant 2.7" optically bonded, full-colour LCD
- Digital Signal Processing (DSP)
- PX6 and IPX7 ingress protection
- Fusion-Link
- Multi-Zone Technology
- Class-D Amplifier
- 200 W peak power output
- One USB 2.0 port (for phone charging / media playback)
- Speaker Channels: 2 x channels, 1 pair per zone (2 zone amplified)

Face plate:    15.7 x 6.8 cm
Cutout:       13.0 x 4.9 cm
Install depth:   10.5 cm

### Fusion Apollo MS-RA210 Stereo

Sources: AM / FM / Bluetooth / USB / AUX / iPhone / iPod / MTP / DAB+ Ready (Requires MS-DAB100A) / SiriusXM-Ready (Requires SiriusXM Connect Vehicle Tuner)

**FUE 010-02250-00**    MS-RA210
   Accessories:
**FUE 010-12817-02**    Flush mount kit
**FUE 010-12829-03**    Adapter plate

## Fusion PS-A302B
## Panel All-In-One Audio Entertainment Solution

**1 YEAR** WARRANTRY

The Panel-Stereo combines two 3" speakers with a large-surface bass radiator inside a perfectly tuned enclosure. This, matched with Fusion's Digital Signal Processing (DSP), results in a smooth frequency
response, high efficiency and Hi-Fi audio reproduction.

### FEATURES

- Sources: AM / FM / USB / AUXx2 / iPhone / iPod / Android AOA / Bluetooth
- Digital signal processing
- Fusion-link control via bluetooth
- Fusion-Link enables control of your entertainment directly from your compatible Apple or Android devices and Garmin watches
- Tuned sealed enclosure with a Passive radiator
- IP65 water resistant
- A2DP bluetooth audio streaming
- Am/fm tuner with preset support
- 1 USB type A port for USB flash drive or media player connection and provides 1A charging
- 140 watt peak power speaker system (2 x 70 W)
- Class-D amplifier
- Quick and simple installation, flat, flush or surface mounting
- Speakers: 2 x 3" speakers with 1 x passive radiator
- Bluetooth audio streaming and control within 33 ft range (via devices compatible with A2DP/AVRCP 1.3 / SSP Bluetooth profiles). Bluetooth version 4.1
- ANT Technology: Yes - up to 10 ft range (Download the free Fusion-Link Lite app to enable wireless control via ANT Technology from your compatible Garmin watch.)
- L: 13-9/16" x H: 6-1/8" x D: 2"
- Weight: 2.54 lbs

**FUE 010-02005-00**   PS-A302B
**\*\* Limited Quantity**

## Fusion RV-FS402B
## Sound Panel All-In-One Speaker

**1 YEAR** WARRANTRY

Fusion's Sound-Panel combines two 4" speaker drivers, two soft-dome tweeters, and a large-surface passive radiator inside a perfectly tuned enclosure, achieving professional sound quality in a shallow-mount form factor.

### FEATURES

- Quick and simple installation
- Shallow mount design
- Tuned sealed enclosure with a passive radiator
- IP65 weatherproof
- Tweeter type: soft dome tweeter
- Stainless hardware
- Max. Power (watts): 100W (per speaker connection)
- Rms power (watts): 25W (per speaker connection)
- Efficiency (1w/1m): 87db
- Min mounting depth (clearance): 1-5/8"
- Mounting dimension (clearance): 17" x 6-3/4"
- Impedance: 4 ohms
- Frequency response: 67hz - 20khz
- 18-1/16" x 8-5/16" x mounting depth: 1-5/8"

**FUE 010-01791-00**    RV-FS402B

## Fusion ARX70B
## ANT Wireless Stereo Remote

**1 YEAR** WARRANTRY

Enjoy the freedom to control your audio entertainment from wherever you are, whether you are on the boat or in the water, depending on where you install your ARX70 wireless remote control.
The ARX70 utlizes ANT technology for wireless remote control of your Fusion ANT-enabled marine stereo. Wireless audio control has never been so easy.
This remote can also be used across a variety of Fusion ANT enabled products including the 70 Series, 755 Series, StereoActive, Apollo RA770, Panel-Stereo, MS-BB100 and RV-IN1501.

### FEATURES

- Rated IPX6 and IPX7 water resistant
- The ARX70 can act as a media controller for a single zone
- Powered by a CR2032 battery, with a typical 1-year battery life
- Compact, low profile design
- Rubberised tactile buttons and a light-bar
- A semi-permanent adhesive, VHB tape, is used to mount the ARX70 on to a variety of surfaces
- Frequency: 2.4 GHz
- Dia: 2.56" x D: .42"

**FUE 010-02167-00**    Black
**FUE 010-02167-01**    White

**FUSION**®

# 755 SERIES

## MARINE ENTERTAINMENT SYSTEMS

Engineered from the ground up to withstand the harshest marine environments, the FUSION 755 Series embodies the very definition of our True-Marine design philosophy.

The intuitive user interface is loaded with the latest technologies and futureproofed by regular free software updates available to all customers.

Protected by an industry leading 3-Year consumer warranty; FUSION continues to define the marine entertainment standard.

**3 YEAR** WARRANTRY

## FEATURES

- 16:9 WQVGA colour widescreen optically bonded LCD
- Multi-Zone technology - 4 independent audio zones
- Fusion-link wired - NMEA 2000 or ethernet
- Fusion-link ethernet
- Fusion-link wireless - Wi -Fi or Bluetooth
- A2DP Bluetooth audio streaming with AVRCP
- Works with Pandora radio
- Internal Uni-Dock - MS-UD755
- DVD playback with HDMI connectivity and ARC - MS-AV755
- 360° IPx5 water resistant
- Class-D amplified stereo with a side-fin Aluminum heat sink - 280 watts max
- Intuitive Apple and MTP audio control and playback
- Dab+ ready - MS-DAB100A required
- Garmin watch control via ANT technology

Face plate:   21.7 x 5.8 cm
Cutout:        18 x 5.2 cm
Install depth: 17.7 cm

### Fusion Internal UNI-Dock Stereo

**MS-UD755**: AM/FM/DAB*/Bluetooth/Pandora/USBx2/AUXx2/iPod/iPhone/MTP/Sirius-XM Ready**
Enjoy music from the latest smartphones and media players while your device is kept charged and protected from the marine environment inside the UNI-Dock.

**FUE 010-01882-00**    MS-UD755

**LARGE ENOUGH TO DOCK THE iPhone 7 & SAMSUNG GALAXY S7**

### Fusion DVD With Arc Stereo

**MS-AV755**: AM/FM/DAB*/CD/DVD/ARC/Bluetooth/Pandora/USB/AUX x2/iPod/iPhone/MTP/Sirius-XM Ready**

Enjoy your favorite family video or listen to your high school mix CD with FUSION's superior sound quality. A standard definition HDMI connector is incorporated for universal integration with most major television manufacturers.

FUSION's exlcusive ARC source allows audio from any supported device to be decoded by the 755 series for all zone playback.

**FUE 010-01881-00**    MS-AV755

*DAB source requires the connection of the FUSION MS-DAB100A accessory - Available in EU, Norway, Switzerland and Australia - software update may be required.
**SiriusXM is only available in the United States and requires a subscription and additional tuner module.

# 650 SERIES

## MARINE ENTERTAINMENT SYSTEMS

3 YEAR WARRANTY

The FUSION 650 Entertainment Series is available in two models: MS-UD650 Internal UNI-Dock and MS-AV650 DVD/CD System. Offering superior playback of your favorite USB, Apple iOS and MTP Android/Windows media devices. MS-UD650 WITH UNIDOCK MS-AV650 WITH DVD The 650 includes FUSION-Link Wired NMEA 2000 control, FUSION-Link Wireless Bluetooth control and A2DP audio streaming capabilities for a true symphony of audio technologies.

Face plate:    21.7 x 5.8 cm
Cutout:         18 x 5.2 cm
Install depth:   17.7 cm

## FEATURES

- Optically bonded monochrome LCD
- Multi-zone technology - 3 zones
- Fusion-Link wired control - NMEA 2000
- Fusion-link wireless control - Bluetooth
- A2DP Bluetooth audio streaming with AVRCP
- Works with Pandora radio
- Internal Uni -Dock - MS-UD650 only
- Dvd playback with component and composite video connections - MS-AV650 only
- 360° IPx5 water resistant
- Class-D amplified stereo with a side-fin Aluminum heat sink - 280 watts max
- Intuitive Apple & MTP audio control & playback
- DAB+ ready - MS-DAB100A required
- 3 X line out & sub out

### Fusion Internal UNI-Dock Stereo

AM / FM / DAB* / Bluetooth / USBx2 / AUXx2 / iPod /iPhone / MTP / Pandora / Sirius-XM eady**

**FUE 010-01357-00**     MS-UD650

### Fusion DVD Stereo

AM / FM / DAB* / CD / DVD /Bluetooth / USB / AUXx2 / iPod / iPhone / MTP / Pandora / Sirius-XM Ready**

**FUE 010-01355-00**     MS-AV650

*DAB source requires the connection of the FUSION MS-DAB100A accessory - Available in EU & Australia
**SiriusXM is only available in the United States and requires a subscription and additional tuner module.
Note: Zone 3 requires additional amplification

---

# 70 SERIES

## MARINE ENTERTAINMENT SYSTEM

1 YEAR WARRANTY

Introducing the 70 series, FUSIONs sleekest value-packed marine stereo, designed to deliver a quality on-water entertainment experience by incorporating some of the latest marine technologies. Engineered to seamlessly replace any standard DIN sized non-marinized stereo without the need to reconfigure dash space.

Face plate:    18.8 x 6.08 cm
Cutout:         16.1 x 5.0 cm
Install depth:   10.0 cm

## FEATURES

- A2DP Bluetooth audio streaming
- Fusion-Link wireless control - Bluetooth
- Fusion-Link wired control
- Multi-zone technology - 2 zones
- DIN size form factor
- IPx7 waterproof front panel
- Dash & flush mounting options
- Apple IAP2 audio playback
- Android AOA audio playback
- DAB+ ready - support coming soon
- Mp3 audio playback via USB
- Monochrome LCD screen

- FUSION-Link NMEA 2000 Ready for connection and control from any supported Multi-Function Display (MS-RA70NSX ONLY)

### Fusion 70I Series Stereo

Sources: - AM / FM / USB / AUX / iPhone / iPod / Android AOA / Bluetooth / DAB+ Ready (Requires MS-DAB100A)

**FUE 010-01516-01**     MS-RA70I

### Fusion 70NSX Series Stereo

Sources: AM / FM / Bluetooth / USB / AUX / iPhone / iPod / Android AOA / SiriusXM-Ready (Requires SiriusXM Connect Vehicle Tuner)
- FUSION-Link NMEA 2000 ready for connection and control from any supported Multi-Function Display

**FUE 010-01516-30**     MS-RA70NSX

Accessories:
**FUE 010-12466-00**     DIN mount kit

**ELECTRONICS**

# MS-BB100

## MARINE BLACK BOX ENTERTAINMENT SYSTEM WITH INCLUDED WIRED REMOTE

Introducing FUSION's compact full featured Black Box entertainment system the MS-BB100. Featuring a quick touch multi-mount wired remote control with embedded Bluetooth for easy pairing and enhanced reliability on the open sea.

**1 YEAR WARRANTY**

### Fusion Black Box Stereo

AM / FM / USB / AUX / iPhone / iPod / Android AOA / Bluetooth / DAB+ Ready (Requires MS-DAB100A)

**FUE 010-01517-01** MS-BB100

## FEATURES

### BLACK BOX
- A2DP bluetooth audio streaming
- Fusion-link wireless control - Bluetooth
- Fusion-Link wired control - NMEA 2000
- Multi-zone technology - 2 zones
- Apple IAP2 audio playback
- Android AOA audio playback
- DAB+ ready - support coming soon
- Mp3 audio playback via USB

### WIRED REMOTE
- Embedded Bluetooth receiver
- IPx7 waterproof
- Multi-mount (dash or flush installation)
- MS-NRX300i connectivity - NMEA 2000

### FUSION-LINK CONTROL

As support for the FUSION-Link protocol continues to grow, so does FUSION's commitment to advancing and perfecting the interface for all boaties to enjoy.

The MS-BB100 includes both W ired and Wireless support for FUSION-Link via NMEA 2000 and Bluetooth. When connected to an existing NMEA 2000 network additional FUSION wired remote solutions can be added for Multi-Zone audio control.

### FUSION WIRED REMOTE CONTROL

Included with the FUSION MS-BB100 is a quick touch IPx7 waterproof remote for easy audio adjustments. Control includes volume adjustment, track skipping, source selecting, power on/off and Bluetooth pairing mode. The Bluetooth receiver is embedded in the remote for optimum reception, this ensures an enhanced listening experience.
The FUSION-Link Bluetooth app, a FUSION NMEA 2000 remote or compatible Multi-Function Display (MFD) is required for full control of the MS-BB100.

### DIGITAL RADIO

The MS-BB100 is engineered to support the latest DAB and DAB+ broadcasts when the new MS-DAB100A module and antenna package is incorporated into the system.

*DIRECT BLUETOOTH PAIRING FROM THE INCLUDED WIRED REMOTE*

# MS-NRX300

## NMEA 2000 WIRED REMOTE

Control your entertainment experience directly from any audio zone throughout your vessel with the MS-NRX300.
The remote features a certified NMEA 2000 connector for quick connection to existing networks, dramatically reducing the installation time and cost. Most stereo functions and control of the volume, balance and subwoofer level are available.

**3 YEAR WARRANTY**

### Fusion Marine Stereo Remote

Compatible with the MS-AV755, MS-UD755, MS-RA70N, MS-BB100, MS-IP700i, MS-AV700i, MS-AV650, MS-UD650, MS-BB300 & MS-RA205.
Note: MS-BB100 & MS-RA70N require a powered NMEA 2000 network to power the MS-NRX300 remote.

**FUE 010-01628-00** MS-NRX300

## FEATURES

- NMEA 2000 certified
- IPX7 water resistant
- Fusion-link NMEA 2000 ready
- NMEA 2000 data repeater
- Large 2.6" monochrome daylight viewable lcd screen
- Key and LCD adjustable backlighting
- Compact size for ease of installation
- Flat & flush mounting options
- Cutout: 1-5/8" diameter, with 3" rear clearance
- Faceplate: 4-3/8" x 2-3/4" x 4-1/64"

Multiple MS-NRX300 wired remotes on a NMEA 2000 Network
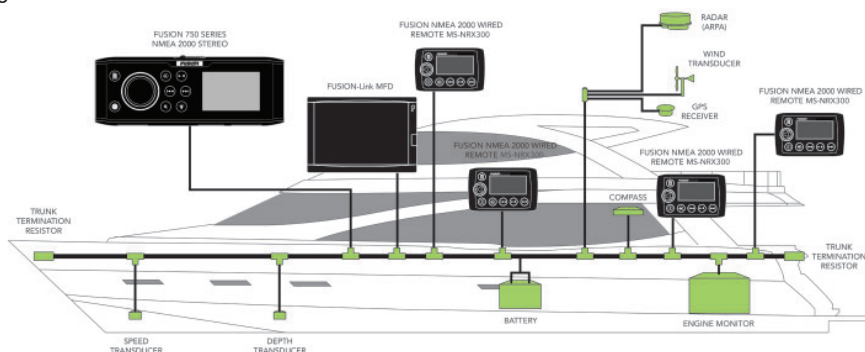
# MS-UNIDOCK

## SMART MEDIA DOCKING SOLUTION

The UNI-Dock is designed to offer water resistant protection of your smartphone or media device in the marine environment. Engineered to securely house the world's most popular smart devices, it keeps them charged and ready while playing your favorite soundtracks.
For supported Apple and MTP devices visit: www.fusionentertainment.com

## *FEATURES*

Maximum Device Size
L: 141mm (5-9/16")
W: 71mm (2-3/4")
H: 13mm (1/2")

**Fusion**
**Universal Media Device Dock**

Compatibility depends on the Fusion Stereo connected to the UNI-Dock.

**FUE MS-UNIDOCK**

- 2m (6 5') installation cable included
- Easy charge connections
- 150mm cables included, Apple 30 Pin, Lightning and Micro-USB
- IPx5 Water Resistant on the front of the dock
- Faceplate: 6-3/16" x 2-11/16"
- Mounting depth: 6-1/8"

---

### Fusion Bluetooth Adapter

▪ Enables Bluetooth audio streaming from a compatible Bluetooth enabled device
▪ The MS-BT100 supports direct paired unit control
▪ Play, Stop and skip tracks and with an effective range of 33'
▪ Compatible with MS-IP600, MS-AV600, MS-CD600, MS-RA200, MS-RA50, MS-AV700, MS-IP700 and MS-RA205

**FUE MS-BT100**

---

### Fusion Bluetooth Adapter

The MS-BT200 supports both direct stereo and paired unit control. Play, Stop and skip tracks with song info displayed on screen.
▪ Effective range of 33'
▪ Compatible with MS-AV700, MS-IP700, and MS-RA205*

* Software upgrade may be required, visit www.fusionelectronics.com for details. If Sirius connector is currently in use purchase the MS-BT100

**FUE MS-BT200**

---

### Fusion Panel Mount Connector

▪ Features a 2 meter (6.5 FT) USB and 3.5mm auxiliary extension cable
▪ Connect any support Apple, Android, Windows or USB flash device to the USB connector, while any traditional MP3 or standard media player is connected to the 3.5mm auxiliary socket

**FUE 010-12381-00**

---

### Fusion Hi-Lo Converter

Use connected from the speaker outputs of a car audio system to the line level inputs of an amplifier. Voltage is stepped down to reduce the high output level of the car audio to match the more sensitive line input of the amplifier
▪ Input impedance: 50O
▪ Frequency range: 20Hz - 30 Hz
▪ Output impedance: 10kO
▪ Dimensions: W: 50 x H: 28 x D: 25mm

**FUE HL-02**

---

### Fusion Accessories

| | |
|---|---|
| **FUE 010-12621-00** | 1 female to 2 male RCA splitter (MS-RCAYM) |
| **FUE 010-12622-00** | 1 male to 2 female RCA splitter (MS-RCAYF) |
| **FUE MS-RA200MP** | MS-RA200 DIN mounting plate |
| **FUE MS-NRX200AP** | Adapter plate, 600 to 200 remote |

---

### Fusion Accessory Cables

| | |
|---|---|
| **FUE 010-12396-00** | 30 pin legacy cable |
| **FUE 010-12397-00** | Apple lightning cable |
| **FUE 010-12398-00** | Micro USB cable |
| **FUE 010-12381-00** | USB 3.5 panel mount aux cable |
| **FUE 010-12613-00** | 3' twisted RCA cable (MS-RCA3) |
| **FUE 010-12615-00** | 12' twisted RCA cable (MS-RCA12) |
| **FUE 010-12616-00** | 25' twisted RCA cable (MS-RCA25) |
| **FUE 010-12898-00** | 25' 12 AWG speaker cable |
| **FUE 010-12898-10** | 50' 12 AWG speaker cable |
| **FUE CAB000863** | Drop cable for N2K install RA205 |
| **FUE MS-CBUSBFM1** | USB cable |

## Fusion Full Range 2-Way Speakers

Incorporating the latest German 'CURV' technology that incorporates a woven fibre composite which is heat pressed to form a lighter and stronger cone. This creates greater sound definition, higher output and greater resistance to the marine environment.
FUSION has added a Bucking Magnet at the rear of the speaker motor assembly, which reduces interference that can occur with compasses or compass-based electronics*.

### FEATURES

- ASTM Standards for UV Stability (ASTM-D4329) and Salt/Fog Resistance (ASTM-B117)
- Complies with IP65 Waterproof and Dust Standards
- Features a fully sealed cross-over, magnet and tweeter housing with waterproof cone and surrounds
- Tweeter Type: titanium dome
- Efficiency (1W/1M): 87dB
- Frequency Response: 90Hz-22kHz
- Impedance: 4 Ohm

*As with the installation of any device with a magnetic field on a vessel, compass accuracy should be checked after installation.

▪ Includes Ice White speaker covers

**FUE MS-FR4021**    4", 120 watts max

▪ Includes three speaker grille options

**FUE 010-01848-00**    6", 200 watts max MS-FR6022
**FUE 010-01849-00**    7", 260 watts max MS-FR7022

## Fusion Shallow Mount Speakers

Designed with flush profile tweeters and a compact basket depth for simple shallow mount installation.

### FEATURES

- Peak Power: 150 Watts
- IP65 weatherproof rating
- 6.5" polypropylene cone
- Efficiency: 84dB
- Frequency Response: 100Hz - 15kHz
- Impedance: 4 Ohm
- Mounting depth: 1-11/16"

**FUE 010-02080-00**    EL-F651W, White
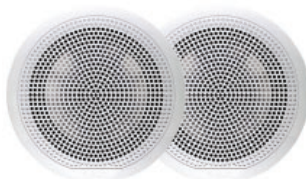
## Fusion 2-Way Box Speakers

Outdoor box speakers are carefully designed and manufactured specifically for marine/outdoor use.

### FEATURES

- Box Type: Sealed
- Cone: Polypropylene/NBR Surround
- Efficiency (1W/1M): 86dB W/M
- Frequency Response: 80Hz - 20Hz
- Impedance: 4 Ohm
- Peak Power: 100 Watts
- RMS Power: 25 Watts
- Woofer Size: 4"
- H: 7-7/8" x W: 5-3/8" x D: 5-7/16"

**FUE MS-OS420**

## Fusion Subwoofer

Designed to produce unparalleled bass in the marine environment. Added to our audio system, marine subwoofers increase the bass level of your music or improve the overall sound quality.
*To operate your subwoofer correctly you must also install a 2 or 4 channel amplifier.

### FEATURES

- Frequency response: 30Hz-200Hz
- Impedance: 4 Ohms
- Magnet Structure: 60 Oz
- Peak Power: 400 Watts
- Voice Coil: 2" Til
- Woofer Size: 10"

**FUE MS-SW10**

## Fusion FM Series
### 6.5" Flush Mount Speakers

**NEW**

Designed to be flush mounted with a mounting profile no thicker than 3/32" for a premium, visually-appealing, near-flat finish.

**FEATURES**

- Optimized full range speaker
- Non-Intrusive mounting system; no need to create any screw holes in your vessel
- IP65 rated, and designed to comply with ISO12216
- Peak Power: 120 Watts
- Polypropylene with rubber surround
- Efficiency: 87 dB
- Frequency Response: 100 Hz - 18 kHz
- Impedance: 4 Ohm
- Mounting depth clearance: 2-3/4"

**FUE 010-02299-00**    FM-F65RW, White
**FUE 010-02299-01**    FM-F65RB, Black

3 YEAR WARRANTRY

## Fusion FM Series
### 7.7" Flush Mount Speakers

**NEW**

Designed to be flush mounted with a mounting profile no thicker than 3/32" for a premium, visually-appealing, near-flat finish.

**FEATURES**

- Optimized full range speaker
- Non-Intrusive mounting system; no need to create any screw holes in your vessel
- IP65 rated, and designed to comply with ISO12216
- Peak Power: 200 Watts
- 6.5" polypropylene with cloth surround
- Efficiency: 91 dB
- Frequency Response: 80 Hz - 18 kHz
- Impedance: 4 Ohm
- Mounting depth clearance: 3-1/4"

**FUE 010-02300-00**    FM-F77RW, White

3 YEAR WARRANTY

## Fusion FM Series
### 7.7" Flush Mount Box Speakers

**NEW**

Designed to be flush mounted with a mounting profile no thicker than 3/32" for a premium, visually-appealing, near-flat finish.

**FEATURES**

- Optimized full range speaker
- Non-Intrusive mounting system; no need to create any screw holes in your vessel
- IP65 rated, and designed to comply with ISO12216
- Peak Power: 200 Watts
- Polypropylene with cloth surround
- Efficiency: 91 dB
- Frequency Response: 80 Hz - 18 kHz
- Impedance: 4 Ohm
- Mounting depth clearance: 3-1/4"
- Dimensions: L: 7-1/8" x H: 7-1/8" x D: 3-3/16"

**FUE 010-02300-01**    FM-F77SB, Black

3 YEAR WARRANTY

---

3 YEAR WARRANTY

## Fusion XS Series Sport Speakers

Set the tone, complement your music or get the party started on board with LED illumination in a wide range of colours available. The innovative translucent cone on the Sports style speakers produce bright, even LED illumination in any colour you choose, which can be controlled with the MS-RGBRC wireless remote (sold separately).

**FEATURES**

- Optimized Full Range Speaker: The XS Series speakers are acoustically optimized for performance in the marine environment, by combining optimized speaker drivers and tweeters to produce quality sound at all volumes.
- Innovative RGB Illuminated Cone: Enhance your on-water audio entertainment experience with LED illumination in a range of colours. The innovative translucent cone disperses a bright, even illumination to set the tone on board.
- True-Marine Designed and Engineered: Extensively tested to perform in the harsh marine environment, the XS Series carry an IP65 weatherproof rating along with True-Marine accreditation.
- Two Grille Options Supplied: Enjoy the freedom to choose the finish to suit your vessel, with both Sports Grey and Sports White grilles supplied in the box.
- Water and Dust Resistance (IPX rating): IP65

### XS 6.5" Series Sport Speakers

- Watts: 200
- Frequency Response: 80 Hz - 18 kHz
- Nominal Impedance: 4 ohms
- RMS Power Rating: 50 Watts
- Efficiency (1W/1M): 91dB
- Mounting diameter: 5-5/16" x D: 2-5/8"

**FUE 010-02196-20**    XS-FL65SPGW

### XS 7.7" Series Sport Speakers

- Watts: 240
- Frequency Response: 70 Hz - 18 kHz
- Nominal Impedance: 4 ohms
- RMS Power Rating: 60 Watts
- Efficiency (1W/1M): 92dB
- Mounting diameter: 6-3/8" x D: 3"

**FUE 010-02197-20**    XS-FL77SPGW

---

### XS 10" Sports Subwoofers

- Watts: 600
- Frequency Response: 30 Hz - 2 kHz
- Nominal Impedance: 4 ohms
- RMS Power Rating: 40 - 300 Watts/channel
- Mounting diameter: 8-3/4" x D: 4-7/16"

### Full Colour LED

- LED illumination
- Sports Grey & White grills supplied

**FUE 010-02198-20**    XS-SL10SPGW

### Classic

- Classic Black & White grills supplied

**FUE 010-02198-00**    XS-S10CWB

# SIGNATURE SERIES

**3 YEAR WARRANTRY**

## SIGNATURE SERIES 3 CLASSIC SPEAKERS

Pushing the boundaries of what is possible on the water, FUSION's Signature Series 3 marine speakers deliver unparalleled performance even when exposed to the harshest marine conditions. Incorporating the finest materials and latest acoustic technologies, Fusion has combined 'CURV' cone composite technology with a silk dome tweeter and fully sealed crossover components to create a speaker system with a stunning signature sound.

### FEATURES

- CURV cone technology
- Silk dome tweeter
- Perforated metal grille
- Fully sealed crossover components
- True-Marine design and protection
- IP65 water resistant design

**NEW**



### Fusion 6.5" Signature Speakers

- 230 watt, 90dB
- 70 Hz - 22 kHz

**FUE 010-02432-00**   SG-F652W, White

### Fusion 7.7" Signature Speakers

- Large diameter voice coil
- 280 watt, 91 dB
- 60 Hz - 22 kHz

**FUE 010-02433-00**   SG-F772W, White

## SIGNATURE SERIES 3 SPORT SPEAKERS

Pushing the boundaries of what is possible on the water, FUSION's Signature Series marine speakers are designed to offer unparalleled performance even when exposed to the harshest marine conditions. Incorporating the finest materials and latest acoustic technologies, Fusion has combined 'CURV' cone composite technology with a silk dome tweeter and fully sealed crossover components to create a speaker system with a stunning signature sound.
The sports-style Signature Series 3 speakers feature industry-first CRGBW LED lighting to illuminate your vessel with an unprecedented spectrum of colours.

### FEATURES

- Premium CRGBW LED lighting
- CURV cone technology
- Silk dome tweeter
- Fully sealed crossover components
- Sports styled grille
- True-Marine design and protection
- IP65 water resistant design

**NEW**



### Fusion 6.5" Signature Speakers

- 230 watt, 90 dB
- 70 Hz - 22 kHz

**FUE 010-02432-10**   SG-FL652SPW, White
**FUE 010-02432-11**   SG-FL652SPC, Chrome

### Fusion 7.7" Signature Speakers

- Large diameter voice coil
- 280 watt, 91 dB
- 60 Hz - 22 kHz

**FUE 010-02433-10**   SG-FL772SPW, White
**FUE 010-02433-11**   SG-FL772SPC, Chrome

### Fusion 8.8" Signature Speakers

- Large diameter voice coil
- 330 watt, 91 dB
- 50 Hz - 20 kHz

**FUE 010-02434-11**   SG-FL882SPC, Chrome

## SIGNATURE SERIES 3 SUBWOOFER

A carefully balanced blend of exceptional mechanical design and brilliant acoustic engineering, the new revamped subwoofers deliver premium low frequency bass.
The sports-style Signature Series 3 subwoofers feature industry-first CRGBW LED lighting to illuminate your vessel with an unprecedented spectrum of colours. .

### FEATURES

- Premium CRGBW LED lighting
- Upgraded 600 Watts peak power
- Polypropylene cone technology
- Sports styled grille
- Large diameter voice coil
- True-marine design and protection
- IP65 water resistant design

**NEW**



### Fusion 10" Signature Subwoofer

- 600 watt, 86 dB

**FUE 010-02435-10**   SG-SL102SPW, White

# SIGNATURE SERIES

**NEW**

## SERIES 3 WAKE TOWER SPORTS SPEAKERS

For those serious about their sounds while enjoying high speeds on the water, the Signature Series Wake Tower speakers deliver it all. Acoustically optimized and engineered for quality audio at any volume level, even at full speed.
Precisely calculated for exceptional sound reproduction, the enclosure is designed with the exact air volume required for premium audio.

### FEATURES

- Precisely calculated enclosure
- CURV cone technology
- Fully sealed crossover components
- Silk dome tweeter
- Large diameter voice coil
- Water and Dust Resistance (IPX rating): IP65
- White and Blue LED colour options
- Premium sports aesthetic

### Fusion 8.8" Coaxial Wake Tower Speakers

- Watts: 130
- Frequency Response: 55 Hz - 25 kHz
- Nominal Impedance: 4 ohms
- RMS Power Rating: 130 Watts
- Efficiency (1W/1M): 91 dB
- Height including mounting clamp*: 9-1/2"

**FUE 010-02082-00**　　SG-FT88SPC, Chrome
**FUE 010-02082-10**　　SG-FT88SPWC, White
　　　　　　　　　　　　　* Sold separately.

### Fusion Voltage Regulator

▪ Provides a constant voltage supply to the connected Signature speaker or subwoofer installation, ensuring stable LED illumination for up to 10 speakers/subwoofers.
▪ Protection against output short circuits and input over voltage.
▪ Control options include: Power On/Off for illumination, colour switching between Blue or White and a dimmer function.

**FUE 010-12276-00**

## Fusion
### RGB Lighting Control Module w/Remote

Enhance your on-board audio entertainment experience with not only brilliant audio, but LED illumination options to match! The MS-RGBRC wireless remote lets you take control of your on-water experience to adjust the lighting of your Fusion RGB speakers.

This portable wireless remote will function up to 10m from the speaker lighting control module, giving you the freedom to adjust the illumination from anywhere on your boat. Both static and dynamic colour options are available, with the colour easily selectable on the intuitive colour select wheel.

### FEATURES

- Static and Dynamic Colour Options: A range of colours are available in both static and dynamic modes with the RGB speakers to complement your music and enhance your on-board audio entertainment experience. Simply select any colour on the remote's colour wheel or change modes to cycle automatically through predefined lighting patterns.
- Intuitive Touch Controls: Adjusting the lighting of your Fusion RGB speakers is made easy with touch controls including an intuitive colour-select wheel.
- Speakers Controlled: Up to 4 pairs of Fusion RGB speakers
- Radio Frequency Range: 2.4GHz

**FUE 010-12850-00**　　MS-RGBRC

**NEW**

## Fusion CRGBW
### Lighting Control Module w/Wireless Remote

Enhance your on-board audio entertainment experience with premium CRGBW lighting. The MS-CRGBWRC wireless remote allows you to enjoy full control of the LED illumination options of your Fusion CRGBW speakers and subwoofers.

This portable wireless remote will function up to 10m from the speaker lighting control module, giving you the freedom to adjust the illumination from anywhere on your boat. Experience an unprecedented spectrum of colours with the ability to combine RGB with Cool White or Warm White with the press of a button, and quickly adjust the colour using the intuitive colour select wheel.

### FEATURES

- Full control of the illumination of your Fusion CRGBW speakers and subwoofers. Select colour, adjust brightness, mode (static or dynamic with 25 preconfigured lighting patterns), and speed with the touch of a button
- Industry-first ability to combine RGB with Cool White or Warm White to produce an unprecedented spectrum of colours with Cool White RGBs, Warm White RGBs, and standard RGB
- Adjusting the colour and lighting is made easy with touch controls and intuitive colour select wheel
- Speakers Controlled: Up to 5 pairs of Fusion CRGBW speakers or 5 CRGBW subwoofers
- Radio Frequency Range: 2.4GHz

**FUE 010-13060-00**　　MS-CRGBWRC

ELECTRONICS

# SIGNATURE SERIES

## SIGNATURE AMPLIFIER

### Fusion Amplifiers

**3 YEAR WARRANTRY**

Introducing our most efficient, stunning and powerful marine amplifier series. Engineered with a stainless steel front panel to resist corrosion and featues Class-D amplifier technology; the key benefit of a Class-D amplifier is low battery drain with a high output, making this the perfect amplifier for the marine environment.

### FEATURES

- Class-D amplifier technology
- True-Marine design
- Rigid aluminum heat sink
- Stainless mirror finish
- Conformal coated PCB's

#### SG-DA41400, 4-Channel, 1400 Watts

Configurable for a minimum of 2 Ohms impedance per channel, this 4 channel amplifier will power up to four Signature Series speakers, or two Signature Series speakers and a subwoofer.
- 150 Watts RMS x 4 @ 4 Ohms
- 220 Watts RMS x 4 @ 2 Ohms
- 440 Watts RMS Bridged channel x 2 @ 4 Ohms
- L: 11-13/16" x W: 8-1/4" x H: 2"

**FUE 010-01969-00**

#### SG-DA51600, 5-Channel, 1600 Watts

Configurable for a minimum of 2 Ohms impedance per channel, this 5 channel amplifier can power four Signature Series speakers and a subwoofer with ease. Other channel and bridging options are also available.
- 80 Watts RMS x 4 @ 4 Ohms
- 130 Watts RMS x 4 @ 2 Ohms
- 250 Watts RMS Bridged channel x 2 @ 4 Ohms
- L: 11-13/16" x W: 8-1/4" x H: 2"

**FUE 010-01968-00**

#### SG-DA61500, 6-Channel, 1500 Watts

Configurable for a minimum of 2 Ohms per channel, this 6 channel amplifier has multiple channel and bridging options available, and can power two 4-ohm speakers in parallel per channel.
- 100 Watts RMS x 6 @ 4 Ohms
- 125 Watts RMS x 4 @ 2 Ohms
- 250 Watts RMS Bridged channel x 3 @ 4 Ohms
- L: 16-9/16" x W: 8-1/4" x H: 2-1/4"

**FUE 010-02161-00**    SG-DA61500

#### SG-DA82000, 8-Channel, 2000 Watts

Configurable for a minimum of 2 Ohms per channel, this 8 channel amplifier has multiple channel and bridging options available, and can power two 4-ohm speakers in parallel per channel.
- 100 Watts RMS x 8 @ 4 Ohms
- 125 Watts RMS x 4 @ 2 Ohms
- 250 Watts RMS Bridged channel x 4 @ 4 Ohms
- L: 16-9/16" x W: 8-1/4" x H: 2-1/4"

**FUE 010-02162-00**    SG-DA82000

# SIGNATURE SERIES

**3 YEAR WARRANTRY**

## SIGNATURE SUBWOOFER

Defined low frequency bass can be the difference between a good audio system and a truly memorable entertainment experience. The Signature Series marine subwoofers deliver a carefully balanced blend of engineering brilliance and performance to bring your favorite music to life.

### FEATURES

- 10" fibreglass-paper composite cone
- Large diameter voice coil
- Dual-colour diffused led lighting (excluding classic)
- True-marine design and protection
- IP65 water resistant design
- High grade engineered
- Basket construction

### DUAL-COLOUR DIFFUSED LED LIGHTING OPTIONS

The Signature Subwoofers feature Dual-Colour diffused LED Lighting options that illuminate Striking Blue or Sparkling White to set the mood or start the party.
Note: Colour determined by wiring polarity at installation.

STRIKING BLUE          SPARKLING WHITE

### Fusion 10" Signature Subwoofer

▪ 450 watt, 88 dB

**FUE 010-01428-23**    Chrome with LED's SG-SL101SPC

# SIGNATURE SERIES

**3 YEAR WARRANTRY**

## SIGNATURE SUB-WOOFER AMPLIFIER

### Fusion SG-DA12250, Monoblock, 2250 Watts

Introducing our most efficient, stunning and powerful marine amplifier series. Engineered with a stainless steel front panel to resist corrosion and featues Class-D amplifier technology; the key benefit of a Class-D amplifier is low battery drain with a high output, making this the perfect amplifier for the marine environment.

Configurable for 1 Ohm impedance per channel, this monoblock amplifier will power either one subwoofer or two subwoofers wired in parallel.

### FEATURES

- Class-D amplifier technology
- True-Marine design
- Rigid aluminum heat sink
- Stainless mirror finish
- Conformal coated PCB's
- 500 Watts RMS x 1 @ 4 Ohms
- 850 Watts RMS x 1 @ 2 Ohms
- 1100 Watts RMS Bridged channel x 1 @ 4 Ohms
- L: 11-13/16" x W: 8-1/4" x H: 2"

**FUE 010-01970-00**    SG-DA12250

## Fusion Amplifiers

- Incorporating heat-tempered and conformal coated PCB's for maximum product life and gold plated connectors for improved signal flow
- FUTRANZ Heat Sink Technology, which transfers heat more efficiently and offers more thermal stability and maximum component reliability.
- F.R.A.T FUSION Regulated Amplifier Technology, which outputs enormous power output at the lowest voltage
- F.I.S.T FUSION Intercooled Semi-Conductor Technology, which clams down internal power switching - rapidly removing heat from all associated semi-conductors
- 1 year warranty

**FEATURES**

### 2 Channel Marine Amplifier

The 2 Channel 400 Watt (Peak) MS-AM402 will drive up to two subwoofers, an extra pair of speakers or even 4 speakers (2 speakers in parallel each channel at 2 Ohms).
- Frequency Response: 5Hz - 38kHz +/- 3dB
- Peak Power: 400 Watts
- Rated Power: 14.4 Volt Power Output Specification 65 Watts RMS x 2 @ 4 Ohm 1% THD+N 100 Watts RMS x 2 @ 2 Ohm 1% THD+N 200 Watts RMS x 1 @ 4 Ohm Bridged
- W: 11-2/3" x H: 9" x D: 2-1/6"
- 12V

**FUE 010-01499-00**     MS-AM402

**FEATURES**

### 4 Channel Marine Amplifier

The 4 Channel 500 Watt (Peak) MS-AM504 will drive a pair of FUSION speakers plus a 10" subwoofer, or up to four pairs of FUSION speakers (2 speakers in parallel each channel at 2 Ohms), to help spread the sound arround your vessel
- Frequency Response: 5Hz - 38kHz +/- 3dB
- Peak Power: 500 Watts
- Rated Power: 14.4 Volt power output specification 65 Watts RMS x 4 @ 4Ω 1% THD+N 100 Watts RMS x 4 @ 2Ω 1% THD+N 200 Watts RMS x 2 @ 4Ω Bridged 1% THD+N
- W: 14-7/16" x H: 9" x D: 2-1/6"
- 12V

**FUE 010-01500-00**     MS-AM504

**FEATURES**

### 6 Channel Marine Amplifier

The 6 Channel 1600 Watt (Peak) will drive 3 pairs of speakers (6 speakers) or 6 pairs of speakers (12 speakers) wired in parallel at 2 Ohms (2 x 4 Ohm speakers per channel) or 1 subwoofer (bridged) and 2 pairs of speakers (4 speakers) or 2 subwoofers (4 bridged channels) and a pair of speakers (2 speakers)
- Frequency Response: 5Hz - 38kHz +/- 3dB
- Peak Power: 1600 Watts
- Rated Power: 28.8 Volt power output specification 80 Watts RMS x 6 @ 4Ω 1% THD+N 130 Watts RMS x 6 @ 2Ω 1% THD+N 275 Watts RMS x 3 @ 4Ω Bridged 1% THD+N
- W: 15-3/8" x H: 9" x D: 2-1/6"
- 24V

**FUE 010-01703-00\*\***     MS-AM806
\*\* Limited Quantity

## Marine Digital Receivers

**MVH-MS310BT:**
- Designed for marine use - conformal coating protects the PCB against corrosion*
- High-visibility outdoor LCD display, with 10-level brightness control
- Smartphone integration
- Compatible with the Marine Remote CD-ME300 (sold separately)
- Time alignment, 13-band graphic equalizer (31 band with Pioneer Smart Sync app), and low-pass/high-pass filters
- Detachable face with 2-line display
- USB Auto Switch - when phone is connected via USB, you have the option to choose whether the receiver uses the phone as a source, or just charge the device
- Inputs: front USB port, front auxiliary input
- RAC preouts: 2 pair, 2V (front/rear)
- Built-in amplifier
- Built-in crossover network - HPF front/rear; LPF subwoofer
- Maximum output 50W x 4 channels
- Dimensions: W: 7" x H: 2" x D: 3-7/8"

    * Do not install the unit in a location exposed to direct sunlight, contact with water/liquids, or excessive heat, humidity, or dust


MVH-MS310BT

### Pioneer Marine Audio Stereo

AM / FM / Bluetooth / iPhone compatible / Pandora / Spotify / Pioneer Smart Sync / MIXTRAX / FLAC

**PIO MVH-MS310BT**

**MVH-MS512BS:**
- As above, plus:
- Colour customization, 210,000 colours, dual-zone text/button
- SiriusXM ready
- RCA preouts: 3 pair, 4V (front/rear/subwoofer)
- Built in crossover network - HPF front/rear; LPF subwoofer / 3-way audio network mode


MVH-MS512BS

### Pioneer Marine Audio Stereo

AM / FM / Bluetooth / iPhone compatible / Pandora / Spotify / Pioneer Smart Sync / MIXTRAX / FLAC / Sirius XM ready

**PIO MVH-MS512BS**


MXT-MS316BT

### Pioneer Marine Audio System

MVH-MS310BT receiver with pair of TS-MR600 speakers

**PIO MXT-MS316BT**

MXT-MS316BT audio sytem package includes the Pioneer MVH-MS310BT marine-rated digital media receiver and a pair of weather-resistant TS-MR600 6-1/2" marine speakers.

## Wired Remote Control

**CD-ME300:**
- IPX7 rating
- Compatible with MS310 and MS512
- Includes 25' cable extension
- Large, illuminated keypad with textured, convex-shaped buttons
- Mounts in bulk-head, dash, or other flat surface of your boat or vessel
- Faceplate dimensions: Dia: 2-1/2" x Depth: 5/8"
- Cutout dimensions: Dia: 1-7/8" x Depth: 1-3/8"



### Pioneer Remote Control

**PIO CD-ME300**

ELECTRONICS

# Pioneer

## Marine Amplifiers

### GM-ME400X4:
▪ Max power output at 4 Ohms 150W x4 or 400W x2 bridged
▪ Aluminum top plate
▪ Matched power ratings for exlusive use with Pioneer marine speakers and subwoofers
▪ Conformal coating protects the PCB against corrosion*
▪ Rubber covers protect side panel controls, RCA terminals, and fuses
▪ Avg current consumption at 4 Ohms: 2.6 amp, or 3.8 amp bridged
▪ Fuse rating 30A x2
▪ Dimensions: W: 9-7/8" x H: 2-3/8" x D: 8-1/2"

GM-ME400X4

GM-ME500X1

### GM-ME500X1:
▪ Max power output at 4 Ohms 600W
▪ Aluminum top plate
▪ Matched power ratings for exlusive use with Pioneer marine speakers and subwoofers
▪ Conformal coating protects the PCB against corrosion*
▪ Rubber covers protect side panel controls, RCA terminals, and fuses
▪ Avg current consumption at 4 Ohms: 2.4 amps
▪ Fuse rating 40A x2
▪ Dimensions: W: 10-3/4" x H: 2-7/16" x D: 8-7/16"

### Pioneer Marine Amplifiers
**PIO GM-ME400X4**   4-channel RCA inputs
**PIO GM-ME500X1**   Mono

\* Do not install the unit in a location exposed to direct sunlight, contact with water/liquids, or excessive heat, humidity, or dust

### Pioneer 6-1/2" 2-Way Marine Speakers
▪ IPX7 rating
▪ Mica-reinforced IMPP monocoque cone
▪ Lightweight PI tweeter diaphragm
▪ Shallow grille design
▪ Optimized symmetrical motor design provides linearity and clear, low distortion sound reproduction
▪ Peak Power: 250 Watts
▪ Sensitivity: 88 dB
▪ Frequency Range: 34 Hz to 23 kHz
▪ Impedance: 4 Ohm
▪ Mounting Depth: 2-3/8"

TS-ME650FC

TS-ME650FS

**PIO TS-ME650FC**   Classic grille, White
**PIO TS-ME650FS**   Sports grille x2, Black, White

### Pioneer Nautica Series 6-1/2" Marine Speakers
▪ Dual-cone speakers
▪ Water-resistant elastomer surround
▪ White water-resistant IMPP composite cone woofer
▪ Peak Power: 100 W (25 W nominal)
▪ Sensitivity: 90 dB
▪ Frequency Range: 30 Hz - 20 kHz
▪ Impedance 4 Ohm
▪ Mounting Depth: 2-1/4"
▪ Cut-out Dimensions: 5"

TS-MR1600

**PIO TS-MR1600**   White

▪ 2-Way speakers
▪ 1-1/8" Poly-ether imide dome tweeter
▪ White water-resistant IMPP composite cone woofer
▪ Peak Power: 160 W (30W nominal)
▪ Sensitivity: 91 dB
▪ Frequency Range: 30 Hz - 30 kHz
▪ Impedence: 4 Ohm
▪ Mounting Depth: 2-1/4"
▪ Cut-out Dimensions: 5"

TS-MR1640

**PIO TS-MR1640**   White

### Pioneer 10" Marine Subwoofers
▪ IPX7 rated
▪ Rated ASTM D4329 for UV exposure
▪ Mica reinforced IMPP monocoque cone
▪ Shallow grille design
▪ Optimized symmetrical motor design provides linearity and clear, low distortion sound reproduction
▪ Rubber surround with heat resistant resin basket
▪ Peak Power: 900 W
▪ Sensitivity: 84 dB
▪ Frequency Range: 20 Hz - 3.5 kHz
▪ Impedance 4 Ohm
▪ Mounting Depth: 5"
▪ Cut-out Dimensions: 8-7/8"

TS-ME100WC

TS-ME100WS

**PIO TS-ME100WC**   Classic grille, White
**PIO TS-ME100WS**   Sports grilles x2, Black and White

ELECTRONICS

### SiriusXM Receiver

▪ For use with SiriusXM ready marine stereos
▪ Single interface cable connection
▪ Requires external antenna
▪ Subscription required (XM compatable only)

**SXM SXV300V1C**

### Polk
### Marine Wired Remote Control

The waterproof (IPX6) remote is compatible with the Polk PA450UM marine source unit.
▪ 2" diameter mounting hole
▪ Blue backlight illumination

**PMA PRC100BC\*\***
    \*\* Limited Quantity

### Polk
### Wired Remote

▪ Dot matrix positive LCD display
▪ Surface mount or rear flush mount
▪ Mounting hole: 1.63"
▪ Dimensions: L: 4.27" x H: 2.49"

**PMA PRC200BC\*\***
    \*\* Limited Quantity

### Jensen 2-Channel Bluetooth Amplifier

▪ 80 watt max power (40 watt RMS)
▪ Bluetooth audio (A2DP)
▪ Waterproof (IPX6)
▪ 4 Ohm ~ 8 Ohm stable
▪ Operating voltage: 10 - 18VDC
▪ Frequency response: 20 Hz - 20KHz
▪ Flush mount lighted chrome switch
▪ Epoxy potted enclosure
▪ 10 Amp fuse in waterproof holder
▪ 4-1/2" x 3" x 1-3/4"

**JEN JAHD240BT\*\***
    \*\* Limited Quantity

### Kanto TV Mount

Specially designed for RVs and boats, this full motion mount features an easy-lock mechanism and adjustable rubber bumpers to prevent your TV from moving during transit. Galvanized and stainless steel parts inhibit rust, while a powder coated finish protects against wear and tear. Along with a detachable arm assembly, the RV250G includes a secondary wall plate, giving you the freedom to easily transfer your TV between your home and vehicle. Velcro cable management straps and screw-on wall plate covers are also included to ensure a clean and organized setup.
▪ TV Size: 26" - 42"
▪ Max Weight: 40 lb (18 kg)

**KAN RV250G**

### Newmar Intercom

For larger vessels where multiple station calling capability is desired. Communication can take place between up to 10 different stations. Any station can be individually selected and called by any other station. The phone base features 10 numbered call-buttons and a label is provided for identifying the different stations.
▪ Sold individually so that the system can be sized to requirements
▪ 12 volt power source required

**NEW PI-10-WHITE**

### Newmar Intercom Sets

A two station, 12 volt intercom system makes for simple communication between the bridge, galley, engine room or staterooms. The system comes complete with 2 intercoms, 40' of hook-up wire and all the necessary hardware.

**NEW PI-2-SET-BLK**    Black, 2 station set
**NEW PI-2-SET-WHT**    White, 2 station set
**NEW PI-2-BLACK**    Black, phone only

### Interconnect Wire

For PI-2 2 station systems, use 5 conductor wire. (Included in PI-2 set.) For Multi-station systems, use 15 conductor wire. Minimum recommended wire: 22 AWG.
▪ Sold per foot

**NEW 22-15**    15 conductor (22-15)

### Cobra HH150 FLT VHF Radio

- Floating design and orange core make retrieving radio easier if dropped overboard
- 3 watt output
- 5 "AAA" rechargeable batteries included with 12V charger
- Works with Cobra's optional lapel mic (CM 330-001)
- 1 year warranty

**COB MR HH150 FLT\*\***
** Limited Quantity

### Cobra MR HH350 FLT Floating VHF Radios

- Floats
- Meets JIS7 (IPX7) standards
- Select between 1, 3 or 6 watts
- Noise canceling microphone
- NOAA Weather Channels and Emergency Alert
- BURP feature removes water from speaker
- H: 4.75" x W: 2.66" x D: 2.09"
- Includes lithium-ion battery, AC cradle charger & 12V DC charger
- 3 year warranty

**COB MR HH350 FLT\*\***          Black
** Limited Quantity

### Cobra MR HH500 FLT BT with Rewind-Say-Again VHF Radio

- Floating design
- Cobra exclusive rewind-say-again* feature
- Features Bluetooth to make and receive phone calls
- All 10 NOAA/weather channels
- Weather alert with S.A.M.E.
- Keystroke tone signal (selectable on/off)
- Illuminated function keys
- JIS7/IPX7 rated submersible and BURP
- 1, 3 or 6 watt
- Speaker microphone jack
- Lithium-ion battery
- USA, Canada and international channels
- Includes lithium-ion battery, AC cradle charger & 12V DC charger
- 4.75" x 2.88" x 2.08" (Not including antenna)
- 3 year warranty

**COB MR HH500 FLT BT\*\***
** Limited Quantity

*Not quite sure if the call was for you? Push the REWIND key to replay up to the last 20 seconds of audio. Other bonus recording features included.

### Cobra MR HH600 GPS FLT BT VHF Radio

VHF radio with GPS & DSC shows your GPS coordinates and automatically transmits them with DSC calls to notify the Coast Guard or other vessels of your exact position in case of emergency.
- Bluetooth cellular calling, keep your cell phone safe and dry by pairing it to the radio
- Floating design
- Rewind Say Again
- Select between 1, 3 and 6 watts
- Built-in flashlight & strobe
- Includes 12 & 120VDC chargers
- 3 year warranty

**COB MR HH600 FLT GPS BT\*\***          Black
** Limited Quantity

### Cobra Lapel Speaker/Mic Accessory

- Fits Cobra VHF handheld radios
- Screw in audio connector
- Rotating spring loaded clip
- Earpiece output jack
- Includes adapter for Cobra GMRS and PMR radios

**COB CM 330-001\*\***
** Limited Quantity

### Cobra Handset to 12VDC Socket Adapter

This handy accessory will let you plug the MR F300 into a cigarette socket. Now you can easily transfer your Bluetooth handset from boat to boat, or even use it in a vehicle!

**COB CM 140-002\*\***
** Limited Quantity

**ELECTRONICS**

## Uniden
### MHS-335BT VHF Radio

- Largest screen in class
- Full Class D industry standard DSC
- Integrated GPS receiver: WAAS, SBAS, QZSS
- Bluetooth Wireless: Use smartphone app to set up the radio and to text message other VHF text message capable radios
- Auto Plot to Distress Call: Built-in compass screen
- Water Activated MOB: Automatically activates Distress feature when in water
- Water activated emergency strobe light
- Flashlight
- 6 watt transmit power
- Floating radio: Rated IPX8
- NOAA Weather Channels: Weather Alert and S.A.M.E. local location alerts
- Noise Cancel: For both received and transmitted audio
- Waypoint Navigation: Navigate to your stored locations using the compass screen
- Smartphone App (Android and iOS)
- Included Accessories: AC & DC charging cable, charge cradle, hand strap, belt clip, antenna
- 3 year warranty

**UNI MHS335BT**

## Uniden
### Atlantis-275 VHF Radio

- Floating Handheld VHF
- Largest LCD in Class
- 1/2.5/6 Watt Transmit Power
- NOAA Weather Alerts
- IPX8 Submersible Rated
- Height: 5-3/8"
- Weight: 8.5 oz
- 3 year warranty

**UNI ATLANTIS-275**

## Uniden
### Atlantis-155 VHF Radio

- Floating Handheld VHF
- Largest LCD in Class
- 1/3 Watt Transmit Power
- NOAA Weather Alerts
- IPX8 Submersible Rated
- Height: 5-3/8"
- Weight: 8.9 oz
- 3 year warranty

**UNI ATLANTIS-155**

## Uniden
### MHS-75 VHF Radio

- Compact design
- JIS8 submersible
- Dual/triple/quad watch
- Memory channel scan
- Weather alert
- Variable power (1, 2.5, 3 watt)
- DC clip-on charger
- Runs 11 hours on lithium ion battery (included)
- W: 2.5" x H: 9.25" x D: 1.75"
- 3 year warranty

**UNI MHS-75**
  Accessories:

| | |
|---|---|
| **UNI MHS75DC** | DC adaptor |
| **UNI BBTG0927-001** | Battery pack |

## Uniden Accessories

| | |
|---|---|
| **UNI BADG1194-001** | AC adaptor, Atlantis 200 |
| **UNI BADG1237-001** | AC adaptor, Atlantis 270 |
| **UNI BATG0478-001** | Antenna, Voyager |
| **UNI BATY0467-001** | Antenna, MHS350 / Atlantis250 |
| **UNI BBTG0920-001** | Battery pack, Atlantis 270 |
| **UNI BBTG0936-001** | Battery pack, Atlantis 290 |
| **UNI BBTY0571-001** | Battery pack, Atlantis 250 |
| **UNI BP-VOY** | Battery pack, Voyager |
| **UNI BZAG0147-001** | Speaker microphone |
| **UNI FMB320** | Flush mount kit, Solara |
| **UNI FMB321** | Flush mount kit, Oceanus / Polaris / UM |
| **UNI FMB322B** | Flush mount kit, Oceanus / Solara DSC, Black |
| **UNI FMB322W** | Flush mount kit, Oceanus / Solara DSC, White |
| **UNI GBCT4B5405Z** | Microphone clip for Solara DSC |
| **UNI GBCT4E3473Z** | Belt clip for MHS050, ALT200/250 |
| **UNI RSC126** | Charging cradle for MHS126 |

## Sea-Dog Microphone Clip

- Stamped 304 stainless steel
- 1-7/8" x 1"

**SED 329990-1**

## Uniden
### UM-385 VHF Radios

- Updated design
- 25 watt
- JIS4/CFR56 waterproof level
- Memory channel scan
- Hi/Lo power switch
- S.A.M.E. Weather Alert - Specific area message encoding
- Backlit keypad and display
- Channel names
- DSC (Digital Selective Calling)
- DSC Position Send and Request
- Compatible with Uniden MRN-GPSK GPS reciever
- 3 year warranty

**UNI UM-385**        White
**UNI UM-385BK**      Black

## Uniden
### UM-435 VHF Radios

- Updated ultra compact, sleek design
- Class-D DSC
- Quik Command One-Touch channel 16/9 key
- All USA, Canadian and international marine channels
- S.A.M.E. emergency/weather alert
- Memory San & Weather scan/alert
- 1/25 watt transmit power
- DSC Position Send and Request
- Channel names
- Triple Watch Plus
- Easy-to-use intuitive menus in full dot matrix display
- Large backlit display for enhanced night vision (dimmable)
- Submersible - meets the JIS8 standards
- 3 year warranty

**UNI UM-435**        White
**UNI UM-435BK**      Black

## Uniden
### PRO 510-XL CB Radio

- Compact professional CB radio
- LED channel display
- Automatic noise limiter
- 4 Segment LED S/RF meter
- Adjustable squelch & volume
- W: 12" x H: 6" x D: 4"

**UNI PRO-510XL**

**NEW**

## Garmin
### VHF 115 Marine Radio

- Fixed-mount radio with plug and play via the NMEA 2000 network
- Standard Class D Digital Selective Calling (DSC) functionality (distress calling and direct calling with user programmed MMSI)
- 25W of transmit power with built-in GPS
- Frequency bands: all U.S., Canadian and international marine channels; 10 NOAA weather channels
- NMEA 2000: Yes
- NMEA 0183: Yes
- H: 3.4" x W: 6.7" x D: 5.8"
- Weight: 43.8 oz
- Water rating: IPX7
- 2 year warranty

**GAR 010-02096-00**

## Garmin
### VHF 215 AIS Marine Radio

- Displays Automatic Identification System (AIS) on the chartplotter (210 ONLY)
- Standard Class D Digital Selective Calling (DSC) functionality (distress calling and direct calling with user programmed MMSI)
- 25W of transmit power
- Frequency bands: all U.S., Canadian and international marine channels; 10 NOAA weather channels
- NMEA 2000: Yes
- NMEA 0183: Yes
- H: 3.9" x W: 7.8" x D: 5.8"
- Weight: 42.8 oz
- Water rating: IPX7
- 2 year warranty

**GAR 010-02097-00**

**ELECTRONICS**

ELECTRONICS

## Icom IC-M25
## Handheld VHF Radio

- Float'n Flash: Floats and lets you know where it is with the flashing red LED light and LCD/key backlight
- 5/1W output power
- 1500mAh lithium-ion battery allows 11 hours (approx.) of operation
- USB charging (Micro-B USB type)
- AquaQuake draining function
- Slim body and lightweight
- Large LCD, simple user interface
- Waterproof rating: IPX7
- 4-step battery life indicator
- Weather channel with weather alert
- Dual/Tri-watch functions
- Instant access to Channel 16 or programmable call channel
- Favorite channel function
- Monitor function opens noise squelch
- Dimensions: 2.2" x 5.3" x 1.2"
- Weight: 7.8 oz
- 3 year warranty

**ICO IC-M25 #61**          Metallic grey

## Icom IC-M37
## Handheld VHF Radio

- 6 W RF output power
- 700 mW audio output
- Voice boost and mute functions
- Low battery alert
- Dual/Tri-watch
- Float'n'Flash - The radio floats and helps you retrieving with the flashing LED light
- Instant access to channel and call channel
- Favorite channel
- Weather channels with weather alert
- Large keys and Easy-to-Grip design
- 2.4" × 5.5" × 1.5"
- Weight: 10.3 oz
- 3 year warranty

**ICO IC-M37 #21**

▶ *Also See*          Railblaza VHF Holders  pg 1165

## Icom IC-M73
## Handheld VHF Radio

- Last Call Voice recording
- Active Noise Cancelling technology
- Bass Boost function
- 700mW loud audio
- 6/3/1W output power
- 2000mAh Li-ion battery
- Waterproof rating: IPX8
- Slim, hourglass body
- Wide viewing angle LCD
- AquaQuake mic draining function
- Dual/Tri-Watch function for monitoring Channel 16 and/or call channel
- 4 level battery indicator
- Auto power save function
- Dimensions: 2.07" x 4.92" x 1.18"
- Weight: 11.3 oz
- 3 year warranty

**ICO IC-M73 #41**

## Icom IC-M85
## Handheld VHF Radio

- Covering VHF marine channels and 136–174 MHz Land Mobile frequency
- 700 mW powerful audio
- 5/3/1W output power
- 2010mAh Li-ion battery, up to 14 hours
- Private conversation
- Automated Emergency Alarm
- Instant operation with multi-function button
- IP67 and MIL-STD rugged construction
- AquaQuake mic draining function
- Internal VOX capability for hands-free operation
- 14 hours of long battery life
- Weather channel receiving
- Monitor function & Priority scan function
- Dual/Tri-watch function for monitoring CH16 and/or call channel
- Favorite channel function for quick access to often used channels
- 2.2" × 3.6" × 1.1"
- Weight: 8.7 oz
- 3 year warranty

**ICO IC-M85 #11***

*** Request Item**

## Icom IC-M93D
## Handheld VHF Radio

- Built-in Class D DSC with a CH70 receiver
- 5/1W output power
- 1570mAh Li-on battery, up to 9 hours
- Waterproof rating: IPX7
- AquaQuake mic draining function
- Large LCD
- Integrated GNSS receiver
- Active Noise Canceling
- Float'n Flash: Floats and lets you know where it is with the flashing red LED light
- Dimensions: 2.24" x 5.69" x 1.52"
- Weight: 10.58 oz
- 3 year warranty

**ICO IC-M93D #01**

## Icom IC-M330
### Fixed VHF Radio

- Built-in GPS (M330G only)
- Built-in class D DSC with a CH70 dedicated receiver
- Easy-to-read full dot-matrix display
- Waterproof rating: IPX7
- Ultra compact body
- Easy installation in limited space
- New speaker delivers dynamic, clear audio
- Intuitive operation with icom marine user interface
- Class leading receiver performance
- Dimensions: 6.2" x 2.6" x 4.3"
- Weight: 1.6 lbs
- 3 year warranty

**ICO IC-M330 #11**
**ICO IC-M330G #31**     GPS
    Accessories:
**ICO AC-MBF5**     Flush mount kit

## Icom IC-M424
### Fixed VHF Radio

- Built-in GPS receiver
- Active noise cancelling
- New Icom marine family user interface
- 10W Loud Audio, Public Address and Foghorn
- Built-in Class D DSC
- New Optional COMMAND MIC IV HM-195B/SW
- Common GPS/NAV Interface
- MarineCommander compatible
- AquaQuake mic draining function
- Waterproof rating: IPX7
- Dimensions: 7.09" x 3.23" x 4.72"
- Weight: 2.65 lbs
- 3 year warranty

**ICO IC-M424G #41**

## Icom IC-M506
### Fixed VHF/AIS Radio

- Integrated AIS Receiver
- 25W two-way hailer
- Active Noise Cancelling
- Intuitive menu driven user interface
- Last Call Voice Recording
- Automatic foghorn function
- NMEA 2000, NMEA 0183 connectivity
- Class D DSC
- AquaQuake mic draining function
- Waterproof rating: IPX8
- Dimensions: 6.18" x 4.48" x 4.09
- Weight: 3.09 lbs
- 3 year warranty

**ICO IC-M506 #21**

**Rear Microphone Version**

Same features as above but the microphone connector is drawn from the rear panel and a 6.1m (20ft) microphone extension cable is supplied to allow you clean and neat panel installation.

**ICO IC-M506 #41**

## Icom IC-M605
### Fixed VHF Radio

This unit allows the user to set up the radio with up to three stations

- Output power: 25w
- NMEA 2000, NMEA 0183 connectivity
- Hailer: 30W listen back hailer
- Horn/Foghorn
- Built-in GPS: GNSS antenna included
- Waterproof rating: IPX8
- AIS receiver
- Configuration flexibility
- Large 4.3" colour display with night mode
- AquaQuake mic draining function
- Dimensions: 9.8" x 4.5" x 3.7
- Weight: 3.3 lbs
- 3 year warranty

**ICO IC-M605 #21**

## Icom
### COMMAND MIC IV

The optional white backlit COMMANDMIC, HM-195G makes it convenient to create a separate station in a separate cabin or tower. All radio functions can be controlled from the COMMANDMIC.

- IPX7 Submersible rating
- Superior audio performance
- Control all communications & Class D DSC functions
- AquaQuake draining function
- Compatable with: IC-M424G, IC-M506 & IC-M605
- 2.66" × 5.69" × 1.46"

**ICO HM-195GB**

## ICOM IC-M Accessories

| | |
|---|---|
| **ICO MB-75** | Flush mount bracket - IC-M605 |
| **ICO MB-132** | Flush mount bracket - IC-M424G, IC-M506 |
| **ICO OPC-999** | Ext Cable, Command Mic II, 20' |
| **ICO OPC-1000** | Standard cable II Command Mic |

# Raymarine

### Raymarine Ray53 VHF Radio

▪ Compact Class D marine VHF with Digital Selective Calling
▪ Built-in GPS/GNSS receiver with a connection point for an optional external antenna
▪ NMEA2000 and NMEA0183 networking for integration with onboard systems
▪ Audio output connection for optional passive remote speaker (A80542)
▪ Surface and trunnion mount kits included
▪ Styled to compliment the Axiom family of multifunction displays
▪ Low power setting 1 W | High power setting  25 W
▪ Water Proofing: IPx6 & IPx7
▪ Mounted: W: 7.7" x H: 4.5"
▪ Faceplate: W: 6.1" x H: 3.5"
▪ Install Depth: 5.3"

**RAY E70524**

### Raymarine Ray63 VHF Radio

▪ Full-sized Class D marine VHF with Digital Selective Calling
▪ Wired or wireless expansion with optional RayMic handset stations
▪ Built-in GPS/GNSS receiver with connection point for optional external antenna
▪ NMEA2000 and NMEA0183 networking for integration with onboard systems
▪ Audio output connection for optional passive remote speaker (A80542)
▪ Surface and trunnion mount kits included
▪ Styled to compliment the Axiom family of multifunction displays
▪ Low power setting 1 W | High power setting  25 W
▪ Water Proofing: IPx6 & IPx7
▪ Mounted: W: 8.8" x H: 5.2"
▪ Faceplate: W: 7.8" x H: 3.9"
▪ Install Depth: 6.7"

**RAY E70516**

### Raymarine Ray73 VHF Radio

Ray73 is Raymarine's deluxe traditional VHF radio packed with all of the powerful features of the Ray53 and 63, plus a built-in Automatic Identification System (AIS) receiver along with a loudhailer output. Add an optional hailing horn for fog signals and voice communication with on-deck crew.

▪ Built-in AIS receiver provides target data for chartplotter, radar, and instruments
▪ Fog signaling and public address functions with optional hailing horn (M95435)
▪ Wired or wireless expansion with optional RayMic handset stations
▪ Mounted: W: 8.8" x H: 5.2"
▪ Faceplate: W: 7.8" x H: 3.9"
▪ Install Depth: 6.7"

**RAY E70517**

### Raymarine Ray90 VHF Radio

Raymarine's fixed mount Ray90 modular VHF radio brings multi-station communications to a whole new level of power, performance, and flexibility. The Ray90 is a black-box design with a transceiver that hides out of sight while the ergonomic RayMic handset and remote speaker provide full control of the radio with crystal clear audio.

▪ Black box, multi-station capable VHF radio
▪ Wired handset and passive speaker included
▪ Expandable to 2 handsets
▪ Position tracking feature to keep tabs on up to 5 nearby DSC equipped vessels, automatically shared with your Raymarine MFD
▪ Cast in solid aluminum for shock and vibration resistance and maximum heat dissipation
▪ Built-in loudhailer and fog signal generator
▪ Optional external GPS
▪ Simple NMEA2000 and NMEA0183 Networking
▪ Base: W: 9.3" x H: 5.9" x D: 2.4"
▪ Speakers: W: 4.7" x H: 4.4" x D: 1.8"
▪ Handset: W: 2.8" x H: 6.6" x D: 1.8"

**RAY E70492**

### Shakespeare External Speaker

- Mylar cone in a 2-1/4" white housing
- 4-ohm. input up to 5 watts (RMS)
- Comes with a ratchet action mounting bracket, hardware mounting kit and six feet of cable with "mini phone" plug installed

**SHA ES-2**

### Shakespeare Deluxe External Speaker

- A four-inch, 4-ohm, speaker with Mylar cone and white plastic cabinet
- Maximum input power is 8 watts (RMS)
- Comes with a swivel mounting bracket, hardware mounting kit and six feet of cable with "mini-phone" plug installed

**SHA ES-4**

### Shakespeare Hailer Speaker

- 5" external hailer speaker
- White plastic horn speaker rated at 4 ohms
- 15 watts (RMS) input

**SHA HS-5**

### Shakespeare Hailer Speaker

- 7" external hailer speaker
- White plastic horn speaker rated at 8 ohms
- 40 watts (RMS) input
- W: 11" x H: 7" x D: 13"

**SHA HS-40**

### Wesmar Hailer Speaker

- Weatherproof design
- ABS plastic construction, stainless steel hardware
- 8 Ohm, 30W Rms, 40W peak
- Vertical adjustable
- W: 8" x H: 4-3/4" x D: 9-1/2"

**WES WP20(SPC15RP)**

### Wesmar Hailer Speaker

- Weatherproof design
- ABS plastic construction (off white), stainless steel hardware
- 8 Ohm, 40W Rms, 40W peak
- Vertical and horizontal adjustment
- Can be flush mounted
- W: 6.5" x H: 11" x D: 8-1/2"

**WES SPC40RP**

### Davis Instruments Solar Charger and Speaker

- Solar charger, high output speakers, rugged carrying case - all in one
- Use the 3-watt stereo speakers to listen to music, enhance games, or make a hands-free call
- Output rate is 300-500 mA, and you can use your phone or device while it is charging
- When the charge runs low, you can recharge the SoliCharger-SP's 2000 mAh internal battery using the sun or by plugging into your PC or any type of USB port
- Included Cordura case provides protective storage for a wide range of electronic gadgets
- Includes adapters for 32 pin Apple, USB, USB Mini, USB Micro and USB Female (for iPhone 5 and beyond)
- 300-500 milliamp output
- H: 3-3/4" x W: 7-1/4" x D: 1-3/4 (closed)

**DIN 3480\*\***

\*\* Limited Quantity

## Shakespeare
## QuickConnect VHF Antennas

To make it easy and convenient to install/replace your antenna, we designed our QuickConnect antenna system with cable attached to the mount instead of the antenna itself. Simply screw on/off the antenna, and enjoy this hassle-free and cost-effective alternative to the traditional antenna installation. The QuickConnect products have a 2 year warranty and have the same mounting hole pattern as our standard antenna mounts. Note: When selecting a QuickConnect antenna, you must pair it with a QuickConnect mount.

**Features:**
- High quality connection
- Hanging dust protection cap
- Water protection cap
- Centerpin PL-259-CP-G connector
- Standard mount design

**Benefits:**
- Unscrew or screw antenna to disconnect or connect
- No noise generated due to vibrations
- Protect the connector on the mount when antenna is disconnected
- Cap stays fastened to mount to prevent it from getting lost
- Easy Solderless Centerpin Connector

QC-3

QC-4 & 8

Shown with QCM-S mount

| Part # | Length | Type | DB Gain | Max Input | VSWR | Bandwith |
|---|---|---|---|---|---|---|
| **SHA QC-3** | 3' | SS Whip / White Plastic Body | 3 | 50 | Less than 1.3:1 @ 156.8 MHz | 5 MHz within 2.0:1 VSWR |
| **SHA QC-4** | 4' | White Fibreglass Chrome-Plated Brass Ferrule | 3 | 50 | Less than 1.3:1 @ 156.8 MHz | 5 MHz within 2.0:1 VSWR |
| **SHA QC-8** | 8 | White Fibreglass Chrome-Plated Brass Ferrule | 6 | 50 | Less than 1.3:1 @ 156.8 MHz | 5 MHz within 2.0:1 VSWR |

## Shakespeare
## QuickConnect Antenna Mount

- 4-way ratchet design with locking handle
- Deck or side mount
- 1"-#14 thread, 9/32" hole for cable feed
- HD version developed to accommodate the Galaxy series antennas
- 20' of RG-58 attached

**SHA QCM-S**          Stainless steel

## Shakespeare
## QuickConnect Antenna Mount

- Ratchet action for quick and easy installation on to 7/8"-1" railing
- For antennas up to 8' in length
- Standard 1"-14 thread
- 9/32'" hole for cable feed
- With 20' of RG-58 attached

**SHA QCM-SR**          Stainless steel

## Shakespeare
## QuickConnect Antenna Mount

- 4-way ratchet design with handle
- For deck or bulkhead mounting
- Standard 1"-14 thread male threads
- For use with small antennas
- With 15' of RG-58 attached

**SHA QCM-N**          Nylon

## Shakespeare
## QuickConnect Antenna Mount

- Ratchet action for quick and easy installation on to 7/8"-1" railing
- Accept any antenna 1"-14 thread
- With 15' of RG-58 attached

**SHA QCM-NR**          Nylon

Low-loss ethafoam spacer

Low-loss polyethylene dielectric

Tinned copper inner conductor

Brass outer element

Brass choking sleeve

Stainless steel ferrule
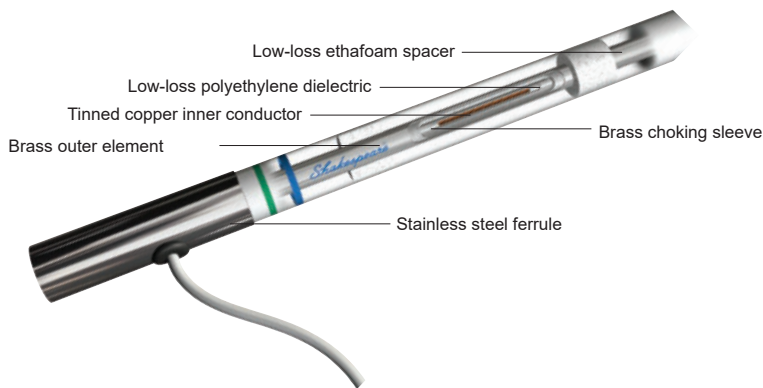
Shakespeare Galaxy Antennas have long been revered as the industry standard for both beauty and performance, with top notch materials and master craftsmanship as the basis for every antenna. Our master craftsmen hand solder, hand assemble and hand finish each antenna, following a 20-plus-year tradition. Relied upon for high performance and chosen for their extra durable construction, they are also universally admired for their beautiful, distinctive Galaxy finish. With mirror-polished, stainless steel ferrules, the antennas' pristine white radomes are protected by a proprietary, high-gloss polyurethane that won't fuzz or turn yellow in the sun.

## Shakespeare Galaxy VHF Antennas

Extra strong – sturdy enough to be self-supporting, even in high winds and high speeds.
- Frequency Range: 156-164 MHz
- Brass and copper elements
- Stainless steel ferrule with standard 1"-14 thread
- 20' RG-8/X low-loss cable plus a PL-259 connector

*Shakespeare*
**5 YEAR** WARRANTY

| Part # | | Length | DB Gain | Max Input | VSWR | Bandwith |
|---|---|---|---|---|---|---|
| **SHA 5400-XT** | White | 4' | 3 | 50 | Less than 1.5:1 @ 156.8 MHz | 5 MHz within 2.0:1 VSWR |
| **SHA 5225-XT** | White | 8' | 6 | 100 | Nominally 1.5:1 @ 156.8 MHz | 6 MHz within 2.0:1 VSWR |
| **SHA 5226-XT** | Black | | | | | |
| **SHA 5399** | White | 9'6" | 6 | 100 | Nominally 1.5:1 @ 156.8 MHz | 3 MHz within 2.0:1 VSWR |
| **SHA 5230** | White | 14' | 8 | 200 | Nominally 1.5:1 @ 156.8 MHz | 3 MHz within 2.0:1 VSWR |
| **SHA 5018** | White | 17'6" | 9 | 150 | Nominally 1.5:1 @ 156.8 MHz | 3 MHz within 2.0:1 VSWR |

5230

5018

PHASE III
**8 YEAR** WARRANTY

## PHASE III VHF & AIS Antenna

Mounting sleeve for standard 1"-14 thread or mast mount. High-strength fibreglass radome, foam filled high-gloss, high-performance, non-yellowing polyurethane finish.
- Silver-plated outer conductor, copper inner conductor
- Stainless steel mounting sleeve
- Type "N" connector inside mounting sleeve for easy mounting and dismounting for stowage
- Colinear-phased 5/8 wave elements
- 6 dB gain

Max. Power Input: .........150 watts
VSWR:..........................Less than 1.5:1 @ 156.8 MHz
Bandwidth:....................3 MHz within 2.0:1 VSWR

**SHA 6225-R**          8'

PHASE III
**8 YEAR** WARRANTY

## PHASE III AM/FM Antenna

AM/FM reception couldn't get any better, and the four-foot 6420 coordinates with the looks of other 4-foot Phase III antennas. Great for hardtops, T-Tops and radar arches.
- 20ft RG-62, Motorola type plug, installed
- Versatile mounting sleeve for standard 1"-14 thread or mast mount
- High-strength fiberglass radome, foam filled
- High-gloss, high-performance, non-yellowing polyurethane finish

**SHA 6420-R**          4'

## Shakespeare 8' Galaxy 6dB AIS Antenna

Specifically designed to meet the broader bandwidth requirements of all popular AIS transceivers, this antenna features a commercial-grade fiberglass construction to ensure performance and durability. These benefits combined with the great look of our Galaxy high-gloss finish signifies a standard of quality to be admired.
- Brass and copper elements
- High-gloss, non-yellowing polyurethane finish
- Stainless steel ferrule with 1" – 14 thread
- Includes 20' RG-8/X low-loss cable plus a PL-259 connector

**SHA 5225-XT-AIS**

## Shakespeare 4' Galaxy 'Little Giant' 3dB AIS Antenna

Specially designed to meet the broader bandwidth requirements of all popular AIS transceivers. Commercial-grade fibreglass construction.
- Center-fed 1/2 wave coaxial sleeve
- Brass and copper elements to maximize range
- Stainless steel ferrule w/standard 1"-14 thread
- Includes 20' RG-8/X cable and a PL-259 connector
- One Section

Max. Power Input: .........50 watts
SWR: .............................nominally 1.5:1 at 158 MHz
Bandwidth:.....................5 MHz within 2.0:1 VSWR

**SHA 5396-AIS**

## Shakespeare 4' Galaxy Little Giant AM/FM

Sturdy construction and outstanding performance make this an excellent choice for T-tops, hard-tops and other elevated mounting positions. Extra rigid, extra tough.
- Copper elements to maximize range
- Stainless steel ferrule with standard 1"-14 thread
- Includes 12' RG-62 cable with Motorola type plug installed
- One section

**SHA 5420-XT**

## Shakespeare 8' Classic AM/FM Antenna
- Chrome-plated brass ferrule with 1"-14 thread
- Includes Motorola connector & 15' cable

**SHA 5120**

## Shakespeare 2' Classic 3dB VHF Antenna

Designed especially for rigid inflatables and other applications requiring a short overall length, the black stainless steel whip has a helical design to avoid excessive whipping. A unique solderless connector at the base provides for easy installation and removal.
- Frequency Range: 156-164 MHz
- Durable all black finish
- "L" bracket mount supplied
- 20' black RG-58 coax cable and a PL-259 connector

| Part # | Length | DB Gain | Max Input | VSWR | Bandwith |
|---|---|---|---|---|---|
| **SHA 5415** | 2' | 3 | 50 | Less than 1.5:1 @ 156.8 MHz | 6 MHz within 2.0:1 VSWR |

## Shakespeare Classic VHF Antennas

Brass element and a smooth, high gloss, polyurethane finish that won't turn yellow in the sun.
- Brass and copper elements
- Chrome-plated brass ferrule with 1"-14 thread
- Includes 15' RG-58 cable and a PL-259 connector
- One section

| Part # | Length | DB Gain | Max Input | DC Ground | VSWR | Bandwith |
|---|---|---|---|---|---|---|
| **SHA 5101** | 8' | 6 | 50 | Yes | Nominally 1.5:1 @ 156 8 MHz | 5 MHz within 2.0:1 SWR |
| **SHA 5102** | 8' | 6 | 50 | Yes | Nominally 1.5:1 @ 156.8 MHz | 5 MHz within 2.0:1 SWR |
| **SHA 5104** | 4 | 3 | 50 | Yes | Nominally 1.5:1 @ 156. 8 MHz | 5 MHz within 2.0:1 SWR |

5104

5101

## Shakespeare VHF Antennas

- Brass and copper elements
- Includes 15' RG58 cable and a PL-259 connect
- Integral deck mount
- One section

| Part # | Length | DB Gain | Max Input | VSWR | Bandwith |
|--------|--------|---------|-----------|------|----------|
| SHA 420† | 5' | 3 | 50 | Nominally 1.5:1 @ 156.8 MHz | 5 MHz within 2.0:1 SWR |
| SHA 396-1 | 5' | 3 | 50 | Nominally 1.5:1 @ 156.8 MHz | 5 MHz within 2.0:1 SWR |
| SHA 5206N | 8' | 6 | 50 | Nominally 1.3:1 @ 156.8 MHz | 5 MHz within 2.0:1 SWR |

*† Integral polycarbonate Lift-n-Lay mount for deck mounting*
*Comes with a levelling plate and installation hardware*

420

396-1

## Shakespeare Classic SSB Antenna

- Conductors run the full length and are permanently sealed
- Chrome-plated brass ferrules
- Side feed termination band
- Two sections

| Part # | Length | Type | Frequency Range | Max Input | Bandwith |
|--------|--------|------|-----------------|-----------|----------|
| SHA 390 | 23' | Full length conductors (No loading coil) | 2-30 MHz w/tuner | 1kw | Resonant Frequency: 10.8 MHz within 2.0:1 SWR |

## Shakespeare 3' Little Giant CB Antenna

- Coil is permanently sealed
- Continuous-load, end-fed 1/2-wave
- 27MHz Citizens Band
- DB Gain: Utility
- DC grounded
- 1 section

| Part # | Length | Type | Max Input | VSWR | Mounting |
|--------|--------|------|-----------|------|----------|
| SHA 4051 | 3' | Little Giant | 25 | 2.0:1 or less at Channel 19 | Nylon ferrule, 1"-14 thread Includes 7' cable and a PL-259 connector |

4051

### FYI

Here is a formula for calculating the range of an antenna:
Square Root of Height (in feet) above water x 1.42 = Range in miles

Remember to perform the calculation for BOTH vessels, then add the results to get the range between two vessels.

### Shakespeare Galaxy Inflatable Emergency & Special Purpose VHF Antenna

▪ A full 3dB inflatable antenna that can be rapidly deployed via a CO2 cartridge or a manual tube and inflates to 5' (1.6 m)
▪ Provides a range of up to three times greater than any existing helical emergency antenna
▪ Can be deflated and stowed away safely in its easy-to-spot storage bag
▪ Mounted with hook and loop straps for a quick installation on almost any vertical structure
▪ Grommets on the top and bottom to facilitate hanging even in case the inflatable bladder becomes damaged
▪ Includes a pre-soldered PL-259 connector which allows connection to a fixed VHF directly or a handheld via the included SMA Adaptor
▪ Also includes a solder-free female UHF connector that allows the antenna to be spliced into existing coax cables
▪ Max. Input Power: 50 Watts
▪ SWR: nominally 1.5:1 at 156.8 MHz
▪ Bandwidth: 156-162 MHz within 2.0:1 VSWR

**SHA INFL8-5**

### Shakespeare 10" Stowaway Emergency VHF Flex Antenna 1/4 Wave Whip

Comes packed in a 12" weather-resistant, plastic tube which can "stow away" for instant emergency capability. Complete with 12' cable, connector, and rubber suction cup for fast, easy mounting to any smooth horizontal surface.
▪ Flexible vinyl outer covering
▪ 10" overall length
▪ Velcro strips for storage included

**SHA 5911**

### Shakespeare 15" Sailboat Racers VHF Antenna

▪ Super light-weight black stainless steel antenna
▪ Gold-plated connector
▪ End-fed, center-loaded design
▪ Black L-bracket included for mast mounting
▪ One 15" section

**SHA 5216**

### Shakespeare 7" Flexible VHF Antenna

Designed especially for small boat applications needing only short range communications, the Style 5912 is a small, space-saving antenna that attaches and detaches with ease, once the included gold plated Flush Mounting Kit has been installed. The connectors are gold plated for low-loss performance. It's compact, light weight, and easily stored.
▪ 7" (18cm) VHF Marine Band Flexible Antenna
▪ 25 watt max.
▪ Impedance: 50 Ohms
▪ No DC Ground - The antenna will read open on continuity test

**SHA 5912**

### Shakespeare 36" Squatty Body End-Fed 1/2 Wave VHF Antennas

A favourite with sailboat owners, this light weight, low profile, stainless steel antenna was specially designed for masthead mounting.
▪ Hermetically sealed, tin-plated copper wire coil
▪ Stainless steel body and whip
▪ SO-239 connector
▪ Mount: Stainless steel "L" bracket (supplied)

**SHA 5215**

Same features as the 5215 but comes complete with 60' of low-loss RG-8/X cable and a PL259 connector

**SHA 5215C-X**
   Accessories:

**SHA 5215L/BRKT**     "L" Bracket for 5215 series

### Shakespeare 36" Squatty Body End-Fed 1/2 Wave AIS Antenna

A favourite with sailboat owners, this light weight, low profile, stainless steel antenna was specially designed for masthead mounting and built with extra bandwidth for all popular AIS transceivers.
▪ Hermetically sealed, tin-plated copper wire coil
▪ VHF marine band 3dB
▪ Stainless steel body and whip
▪ SO-239 connector
▪ Mount: Stainless steel "L" bracket (supplied)

**SHA 5215AIS**

### Shakespeare 36" Low Profile End-Fed 1/2 Wave VHF Antenna

▪ The perfect choice where compact size is most important
▪ Comes with a standard-duty stainless steel whip
▪ Chrome plated brass canister minimizes de-tuning
▪ Sealed, tin-plated copper wirecoil
▪ Requires mount with centre hole for passage of the supplied 15' RG-58 cable.  PL-259 connector included
▪ Stainless steel whip

**SHA 5241-R**     Heavy duty whip

## Shakespeare 36" Stainless Steel Skinny Mini VHF Antenna

- This compact, lightweight antenna is ideal for vessels where space is limited
- Chrome plated brass canister minimizes de-tuning
- Cable and PL-259 connector included
- VHF marine band 3dB
- 3 foot stainless steel whip
- Sealed, tin-plated copper wire coil
- Requires mount with centre hole for passage of the supplied 15' RG-58 cable

**SHA 5250**

## Shakespeare 36" Skinny Mini AIS Antenna

Designed to meet the broader bandwidth requirements of all popular AIS transceivers.
- Chrome plated brass canister minimizes de-tuning
- VHF marine band 3dB
- 3 foot stainless steel whip
- Sealed, tin-plated copper wire coil
- Requires mount with centre hole for passage of the supplied 15' RG-58 cable
- One section
- Built for AIS transceivers

**SHA 5250-AIS**

## Shakespeare 8' Navigator Loran Antenna

- Fibreglass whip with chromed brass fitting
- 3/8" - 24 male threads
- Recommended by virtually all Loran manufacturers

**SHA 4208\*\***

\*\* Limited Quantity

## Shakespeare 36" AM/FM Antenna

This combination antenna features a distributive load for super signal pulling power. The coil is permanently sealed in Shakespeare's white fibreglass.
- Includes 10' RG-62 coax with Motorola plug
- Integrated Lift-n-Lay mount w/hardware
- One section, 39" overall length
1"-14 thread for standard mount.

**SHA 4351**

## Shakespeare 36" AM/FM Antenna

Shakespeare's master craftsmanship enables the creation of AM/FM antennas to accommodate any size vessel. The compact size and light weight of the Classic 4356 Skinny Mini, complete with a sealed, tin-plated copper wire coil, is ideal for marine vessels with limited space, such as bass boats and center console fishing vessels.
- Stainless steel whip (36″)
- Sealed, tin-plated copper wire coil
- Chrome plated brass canister minimizes de-tuning
- Requires mount with center hole for passage of the supplied cable
- 15′ coax cable and Motorola connector included

**SHA 4356**

## Shakespeare AM/FM Antenna

This innovative design lets you put an AM/FM antenna on your boat where it won't get in the way. It is a clear tape with embedded antenna elements. Its permanent adhesive strip lets you attach it quickly and easily onto your boat's windshield or any smooth, nonmetallic surface. It comes with a 6' cable and attached "Motorola type" plug.

**SHA 4353**

## Shakespeare Galaxy SRA-50 Satellite Radio Antenna

Using the latest Satellite Radio technology, this SiriusXM approved antenna meets the most recent specifications set forth by SiriusXM. This antenna is compatible with all radios and docks that work on the Sirius and XM networks with push on style, single input SMB connector. This antenna can be mounted on almost every possible surface with 4 different mounting options:
▪ 4-way mounting system: flush, surface, pedestal or 1" 14 thread mount
▪ Sleek ultra low-profile design
▪ White UV-stabilized housing
▪ SiriusXM approved accessory
▪ Two year limited warranty

**SHA SRA50**

## Shakespeare Satellite Radio Cable Kits

| | |
|---|---|
| **SHA SRC-50** | 50', RG58 cable w/SNB connector and TNC male connector. |
| **SHA SRC-90** | 90', RG58-X cable w/male TNC connector both ends and a 6" cable w/SNB connector and female TNC connector. |

## Shakespeare SeaWatch Marine TV Antennas

The SeaWatch series of TV antennas are omni-directional over-the-air digital HDTV solutions that bring sleek lines and 360 degrees high-performance coverage to your watercraft. Designed to accept common 1"-14 threaded mounts, the antennas are well suited to fit virtually any application. Everything needed to connect the antenna to your converter or television is in the box. When paired with an optional 2-way band separator between the antenna and the amplifier, these antennas can also receive AM/FM radio signals.
▪ Frequency Range: VHF:47-230MHz;UHF: 470-862MHz
▪ Receiving Range: FM/VHF/UHF
▪ Gain: 30dB
▪ Noise Figure: 3db
▪ Max. output lever: 110dBuV
▪ Impedance: 75ohms
▪ Connector: F-connectors
▪ Power Supply: DC 12V, AC 110V

Package Includes:
▪ Panel TV antenna
▪ 20' RG-59 coax cable/F-connectors
▪ USB/AC/DC power cords

### 15" Antenna
▪ For up to 65 km (40 miles) from broadcast towers
**SHA 3015**

### 19" Antenna
▪ For up to 120 km (75 miles) from broadcast towers
**SHA 3019**

## Shakespeare Flat HDTV/FM Antenna

This razor-thin, multi-directional amplified antenna is the most advanced dual band (VHF/UHF) antenna on the market. Designed with Clear Circuit Technology, the embedded amplifier is able to amplify 100% of the signal at the element to maximize channel reception and minimize pixelation and dropouts for the best viewing experience possible
▪ Low noise amplifier
▪ Multi-directional
▪ Recieves ALL local HD broadcast signals
▪ AC, DC and USB power adapter
▪ Best suited for areas up to 15 miles from broadcast towers
▪ Frequency range: 47-230MHz, 470-862MHz
▪ Receiving Range: FM/VHF/UHF
▪ Gain: 28dB
▪ Noise figure: ≤3dB
▪ Max output level: 100dBuV
▪ Impedance: 75ohms
▪ Power supply: AC/DC adapter (DC 12V/50mA)
▪ Power supply: DTV set-top box (DC 5V/40mA)
▪ Dimensions: 12" x 13"

**SHA 2061\*\***
   \*\* Limited Quantity

## Shakespeare
## Wireless Cellular Booster Kits

Wireless Cellular Booster Kits enable you optimize cellular coverage on your boat or in your home where reception is weak due to distance from cellular towers, topography or building interference or obstruction. These kits enhance 2G and 3G voice and data for all carriers. Its compartmentalized design and sturdy, marinized metal casing ensures enhanced call clarity that will last for years. Features adjustable dials for pinpoint enhancement and features and indoor panel antenna to direct coverage to where it is needed most.
Kit includes: 65db amplifier, 5412 P antenna, indoor panel antenna and co-axial cables.
- Covers up to 5,000 square feet
- 5-10 simultaneous users
- 2-year manufacturer's warranty

### Aura Booster Kit

- 2G and 3G compatible

**SHA CA-VAT\*\***
    ** Limited Quantity

---

### SuperHalo Booster Kit

Kit includes: 50db amplifier, Galaxy 5239 outside antenna, indoor panel antenna and co-axial cables.
- 5-Band amplifier works with 2G, 3G, & 4G networks
- Stealth technology so the uplink becomes dormant while not in use to save power
- Automatic gain control (AGC) and does not overpower or interfere the cell sites
- Automatic shutdown so it is energy efficient and does not interfere with the cell sites
- Supports 10+ users simultaneously
- Manually adjustable gain for flexibility in antenna placement and fine-tuning the system

**SHA CA-VAT-10-R**

---

### Shakespeare World Band Cellular Antenna

This World-band antenna provides coverage for 2G/3G/4G and WLAN systems for Cellular, PCS, AWS and LTE frequencies, as well as 802.11n Wi-Fi. This compact, feature rich antenna is at home on virtually any watercraft, and is fitted with a stainless steel ferrule and N-connector that are compatible with nearly all Shakespeare 1″ -14 threaded mounts.
- Full Band (698 – 2700 MHz) Broadband
- 2G/3G/4G and WLAN systems
- Wi-Fi 802.11n compatible
- Designed for marine use
- Omni-directional antenna 3-4 dB Gain
- 9.25" H x 2.625" D

**SHA 5239**

### Wave WiFi Rogue Pro & Pro DB

The Rogue Pro is an ultra-small, compact Wireless Bridge and Ethernet Converter with output power of an incredible 800mW. All the features and elements of the larger EC-Series like the user friendly, proprietary web-based interface are available in this easy to set-up kit. The Rogue comes with an 8.5dB omni-directional outdoor antenna and is powered by Power over Ethernet (PoE). This means there is a single cable between the computer or router and the Rogue. The Rogue can also be used with variety of remote mount, 2.4 GHz omni-directional antennas. The Rogue Pro is an Ethernet Converter (EC) so a direct connection can be made to any Ethernet enabled device, router or switch. This means that, when connected to a wireless router, the Rogue Pro provides Internet connectivity for numerous wireless devices aboard the boat. There is no software to install and no power robbing USB connections. The ultra-small size of the Rogue Pro makes it the ideal 'personal' Ethernet Converter/Wireless Bridge for delivery captains and crew.

- Output power to 29dBm (800mW)
- Up to 7-mile range
- Sealed, polished stainless steel case withan integral 1″-14 ready base for numerous standard marine antenna mounts
- Easy to use proprietary web-based Wave WiFi Interface
- Compact, ultra-small design
- 120/220 VAC & 12VDC PoE injector
- 25' Ethernet cable
- Instructional CD, Quick Start Guide.
- One year limited warranty

**WAV ROGUE PRO**     802.11 b/g/n (2.4 GHz)
**WAV ROGUE PRO DB**  802.11 a/n 5Ghz + 802.11 b/g/n 2.4Ghz

### Wave WiFi Yacht AP DB

This AP integrates nicely with all Wave WiFi products and with most networking equipment. This AP can simultaneously broadcast on 2.4GHz and 5GHz Wi-fi spectrums. Use this AP for faster local connections and to broaden the wi-fi range on your boat.
- Dual Band
- Ethernet – Gigabit Port
- Wi-Fi 802.11 b/g/n/ac
- Power 24v PoE provided
- Speeds 300 Mbps to 867Mbps
- Diameter 6"

**WAV YACHT AP DB**

### Wave WiFi Yacht AP Mini

This AP integrates nicely with all Wave WiFi products and with most networking equipment. This AP broadcasts on the 2.4GHz network only. Use this AP to cover "wi-fi dead zones" on your boat.
- 2.4GHz Only
- Ethernet 10/100 Mbps Port
- Wi-Fi 802.11 b/g/n
- Power 12v PoE provided
- Speeds 54Mbps to 100Mbps
- Diameter 4.25"

**WAV YACHT AP MINI**

### Wave WiFi EC-HP

Wave WiFi's EC-HP produces the highest allowable output power of 1 Watt providing long-range connections to good quality HotSpots. The EC-HP supplies maximum receive sensitivity (-97dBm @ 1-11mbs G). The EC-HP supports WEP, WPA and WPA2 encryption and has a unique, built-in 'help' system, online firmware upgrades and free, online global weather forecasting from iMap Weather.
The EC-HP is a Ethernet Converter (EC) so a direct connection can be made to any Ethernet enabled device resulting in flawless performance as a standalone system or integrated into the boat's network. Also there is no software to install, no USB restrictions and no power-robbing USB connections. This means better performance for plug-and-play computer accessories like VoIP phones and webcams.
The EC-HP features a built-in MIMO access point allowing you to create your own HotSpot aboard your boat. Multiple laptop computers or devices aboard the boat can connect to the access point wirelessly.
- CPU: 600Mhz
- Output power - 30dBm (1W)
- Supports 802.11 a/n 5Ghz + 802.11 b/g/n 2.4Ghz
- Weather resistant enclosure
- User friendly proprietary web-based Wave WiFi Interface
- Exceptional receive sensitivity
- 2 x 7" 2.4 GHz 'Rubber-Duck' Antennas for MIMO Local Access Point
- 2 x 2.4 GHz 8dBi 40" Omni-Directional Antennas
- 2 x 25' LMR 400 antenna cables, N-Male connectors
- Ethernet port and 25' cable (to any Ethernet enabled device)
- DC Power, 12 volts - cable included
- Control box dimensions: H: 11" x W: 9"
- Instructional CD disk, Quick Start Guide
- One year limited warranty

**WAV EC-HP-DB-AC**

## Shakespeare Antenna Radio Tester

The ART-3 tests receiver function as well as output power and VSWR (antenna efficiency). It is powered by an internal battery or can be connected to ships 12VDC with the supplied power cable.
- Frequency Range: 155-158 MHz
- RF Power Scale: 0 to 30 watts
- Impedance: 50 Ohm
- Connectors: SO-239
- Tone: 1000 Hz
- RF Level: -115 dBM (approx.)

**SHA ART-3**

## Shakespeare Automatic Switch

- Allows you to have two radios on one antenna
- When keying the microphone on one radio the AS-2 switches the antenna to it automatically

**SHA AS-2**
Parts:
**SHA 4079**      1m RG-58 cable w/connectors

## Shakespeare
## AM/FM Marine Band Separator

- Eliminate the need for separate AM/FM and VHF antennas
- Operate your AM/FM and VHF radio at the same time
- Includes 10' of RG-62 coaxial cable and 3' of RG-58 VHF cable
- For base loaded antennas such as the 5215, 5240-R, 5241-R

**SHA 4357-S**

## Ancor Marine Grade Coaxial Cable

- 100% tinned copper braid and centre conductor
- UV inhibiting white jacket

| Part # | Type | Size | O.D. | Use |
|---|---|---|---|---|
| ANC 150510 | RG58CU | 100' | 3/16" | Interconnect |
| ANC 150525FT | RG58CU | Cut | 3/16" | Electronics |
| ANC 151025 | RG59U | 250' | 1/4" | TV's & SAT NAV's |
| ANC 151050FT | RG59U | Cut | 1/4" | TV's & SAT NAV's |
| ANC 151510 | RG8X | 100' | 1/4" | VHF Runs < 50 ft. |
| ANC 151525 | RG8X | 250' | 1/4" | VHF Runs < 50 ft. |
| ANC 151550FT | RG8X | Cut | 1/4" | VHF Runs < 50 ft. |
| ANC 151710 | RG213 | 100' | 13/32" | VHF Runs > 50 ft. |
| ANC 151725FT | RG213 | Cut | 13/32" | VHF Runs > 50 ft. |

## Sea-Dog Coaxial Cable Assemblies

- Chrome plated brass cable assembly
- Pre-assembled PL-259 on both ends

**SED 329800-1**      2'
**SED 329802-1**      5'
**SED 329804-1**      10'
**SED 329806-1**      20'

## Shakespeare Gold Plated Coaxial Connectors

**Adapters**

**SHA PL258-G**      Barrel connector PL-259

**Connectors**

PL259-G      RA-259-239-G

**SHA PL259-G**      For RG-8/AU & RG213 coax. Standard solder type connector
**SHA PL259-8XG**      PL-259 connector with UG176 adapter & DooDad for RG-8X cable
**SHA PL259-58G**      PL-259 connector with UG175 adapter & DooDad for RG-58 cable
**SHA RA-259-239-G**      Right-angle PL-259 to SO-239 adapter
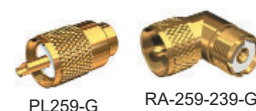
## Shakespeare
## Gold Plated Centerpin Coaxial Connectors

PL258CP-G      PL259CP-G

The solution for installing a PL-259 connector or splicing a RG-58 A/U or RG-8/X coax cables. These connectors are solderless, fretless, gold plated and botchless. No measuring, no critical stripping, no fussing with coax. braid and no tinning.

**SHA PL258CP-G**      For splicing RG-58 A/U and RG-8/X
**SHA PL259CP-G**      For RG-58 A/U and RG-8/X

## Ancor Coaxial Cable Fittings

A variety of coaxial connectors to help keep you plugged in.

200259      202176
202175      200258

| Part # | Description | Wire OD |
|---|---|---|
| ANC 200259 | Solder On UHF Male Plug (PL 259) | 8U 13/16" |
| ANC 202176 | Twist-On Solder less UHF Male Plug | 8X 1/4" |
| ANC 202175 | Twist-On Solder less UHF Male Plug | 58 3/16" |
| ANC 200258 | Double Female (PL 258) | N/A |

## Sea-Dog UHF Cap and Chain

- For when connectors are not in use
- Chrome plated brass

**SED 329970-1**

## Sea-Dog UHF/BNC Hand Held Radio Adapter

Chrome plated brass. Enables your hand held VHF to use a larger VHF antenna.

**SED 329910-1**

## Sea-Dog BNC Male Connector-RG58/U Cable

BNC male fittings are miniature quick connect/disconnect radio frequency connectors used for RG58/U coaxial cable
▪ Nickel plated brass construction

**SED 329913-1**

## Sea-Dog Double Female UHF Connector

Use when connecting two PL-259 connectors. Not recommended for through bulkhead applications.

**SED 329950-1**

## Sea-Dog Double Female Bulkhead Connector

Use when connecting two PL-259 male connectors through a bulkhead.

**SED 329951-1**

## Sea-Dog Double Male Adapter

Use to connect two female connectors.

**SED 329953-1**

## Sea-Dog UHF Right Angle Connector

Elbow turns connecting wire at the back of set allowing radio to sit closer to the wall.
▪ Chrome plated brass

**SED 329955-1**

## Sea-Dog UHF T- Adapter

Allows connection of two male PL-259 and one female SO-239 connectors.
▪ Chrome plated brass

**SED 329957-1**

## Sea-Dog Coaxial Connectors

329900

329905

329906

329901 / 329902

Male UHF Connector PL-259; For U/C cable, adaptor type.

**SED 329900-1**

Combination 329900 and 329905 for RG/58U cable.

**SED 329901-1**

Combination 329900 and 329906 for RG-59/U cable.

**SED 329902-1**

Reducer UG175U for RG-58/U Cable; Use with 329900.

**SED 329905-1**

Reducer UG176U for RG-59/U Cable; Use with 329900.

**SED 329906-1**

## Shakespeare Heavy Duty Extension Masts

Constructed of white fibreglass and finished to match the Galaxy series of antennas. These extensions can be used to increase the height of the antenna, thus improving effective range and boost placement of an antenna above on-board obstructions. Stainless steel upper and lower ferrules with standard 1" thread.

| | |
|---|---|
| **SHA 5228** | 8 ft. long - 1-1/2" dia |
| **SHA 5228-1** | 1 ft. long - 1" dia |
| **SHA 5228-2** | 2 ft long - 1" dia |
| **SHA 5228-4** | 4 ft. long - 1-1/2" dia |

## Shakespeare Extension Accessories

**Mast Extensions - White Polycarbonate**

▪ 8' heavy duty 1-1/2" dia
▪ Use with a 410 mounting kit
▪ Chrome plated brass ferrules
▪ 1"-14 thread, upper male, lower female
▪ Actual length 91"

**SHA 4008**

▪ Same as 4008 but shorter
▪ Actual length 50"

**SHA 4008-4**

**Mast Extensions - Stainless Steel**

▪ 4-1/2"
▪ Standard duty
▪ Standard 1"-14 female thread both ends

**SHA 4006**

▪ Heavy duty
▪ 1"-14 thread male and female fittings

| | |
|---|---|
| **SHA 4700** | 6" Extension |
| **SHA 4700-1** | 1' Extension |
| **SHA 4700-2** | 2' Extension |

4008-4 / 4008

4700-2      4006

## Sea-Dog Antenna Mount Extension

- Investment cast 316 stainless steel
- Standard 1"-#14 thread

| Part # | Length | Diameter | Tube Wall |
|---|---|---|---|
| SED 329532-1 | 12" | 1-1/16" | 13/16" |
| SED 329536-1 | 24" | 1-1/16" | 13/16" |

## Shakespeare Tube Mounted Antenna Base

Slip on to a 1" diameter pipe for a 1"-14 thread male fitting. Can be used with any 1" O.D. stainless tubing. Attaches easily with set screws.

**SHA 4705**

## Sea-Dog Tube Mounted Antenna Base

Investment cast 316 stainless steel. can be used with any 1" O.D. stainless tubing allowing for custom mount.

**SED 329520-1**

## Sea-Dog Antenna Hook

- 304 stainless steel
- Keeps your antenna in the lay down position

**SED 329790-1**

## Shakespeare Stand-Off Bracket

- Heavy duty, chrome plated brass
- Adjustable length 3 to 8"
- Use to clear overhang or other obstacles

**SHA 4191**

## Sea-Dog Antenna Standoff Bracket

This bracket holds antennas in place when running and also provides additional support. Made from nylon and comes complete with stainless steel mounting hardware.

**SED 329780-1**

## Shakespeare Stand-Off Bracket

- White moulded plastic
- Use on antennas of 1", 1-1/8" and 1-1/2" dia.
- Includes mounting hardware

**SHA 408-R**

## Shakespeare Mounting Kits

Combines a versatile heavy duty swivel mount base with a 408 standoff bracket.
- For antennas of 1", 1-1/8" and 1-1/2" dia.
- Chrome plated
- Includes mounting hardware

**SHA 409-R**

Combines a deck/side swivel mount base with a moulded upper bracket.
- For antennas of 1", 1-1/8" and 1-1/2" dia.
- Includes mounting hardware

**SHA 410-R**

## Shakespeare Lift-N-Lay Mount

- Positive snap action
- Comes with levelling plate
- 1"-14 thread with a 3/8"-24 thread brass insert
- Antennas to 8'
- Polycarbonate

**SHA 495-B**

## Sea-Dog Antenna Mount

- Injection molded nylon with dual swivelling mounts
- Open base design allows the antenna wire to be fed directly through the base
- Accept any antenna 1"-14 thread
- Use 1/4" F.H. screw
- W: 2-1/2" x L: 3-5/8" x H: 5-5/8"

**SED 329100-1**

## Sea-Dog Antenna Mount

- Injection molded nylon ratchet
- Accept any antenna 1"-14 thread
- Use 1/4" F.H. screw
- W: 2-9/16" x L: 3-5/8" x H: 4-3/4"
- Colour - White

**SED 329130-1**

## Shakespeare Antenna Mount

- Solid nylon base (non-yellowing)
- 4-way ratchet design with handle
- For deck or bulkhead mounting
- Standard 1"-14 thread male threads
- For use with small antennas

NOTE The 4186 is not for use with antennas longer than 8' in self-supporting mode.

**SHA 4186U**

## Shakespeare 4 Way Antenna Mount

4-way action antenna mount that fits almost any mounting location and permits antenna lay down in desired direction. For deck or side mounting when used with a standoff bracket.

- Accept any antenna 1"-14 thread

**SHA 407**

    ** Limited Quantity

## Shakespeare Antenna Ratchet Mount

- Stainless steel antenna base
- 4-way ratchet design with locking handle
- Deck or side mount
- 1"-#14 thread, 9/32" hole for cable feed
- HD version developed to accommodate the Galaxy series antennas

**SHA 4187**
**SHA 4187HD**        Extra strength & rigidity

## Shakespeare Antenna Ratchet Mount

- Stainless steel
- Designer look, 4-way ratchet mount
- Its simple lines come from a nutless design
- 5° teeth for finer adjustments than standard mounts (no shims required)
- Standard 1"-14 threads and a special cable slot that eliminates removal of most factory installed connectors
- Bolt holes: 5/16" dia, 3" x 1-1/2" on centre

**SHA 5187**

## Shakespeare Antenna Mount

- For deck or side mounting when used with a SHA 408-R upper support bracket (sold separately)
- Base is dual jointed, free-pivoting, and allows easy lowering of antenna for clearing overhead obstructions
- Standard 1"-14 thread

**SHA 81-S**

## Sea-Dog Adjustable Antenna Mount

- Die cast chrome plated zinc for fresh water environments
- Designed with an integral feed system for Loran cable
- Accept any antenna 1"-14 thread
- Use 1/4" F.H. screw
- W: 2-1/8" x L: 3-5/8" x H: 4-3/4"

**SED 329300-1**

## Sea-Dog Adjustable Antenna Mount

- 316 investment cast stainless
- Dual swivelling mounts
- Integral feed system for Loran cable
- Accept any antenna 1"-14 thread
- Use 1/4" F.H. screw
- W: 2-1/2" x L: 2-15/16" x H: 4-1/2"

**SED 329230-1**

## Sea-Dog HD Adjustable Antenna Mount

- 316 investment cast stainless
- Dual swivelling mounts
- Integral feed system for Loran cable
- Additional height and weight compared to the 329230
- Accept any antenna 1"-14 thread
- Use #14" F.H. screw
- W: 2-1/4" x L: 3" x H: 5-15/16"

**SED 329235-1**

## Sea-Dog Adjustable Antenna Mount

- 316 investment cast stainless
- Attaches to 7/8" and 1" vertical and horizontal rails
- Lever action laydown handle
- W: 4-5/8" x H: 3-7/16"

**SED 327145-1**
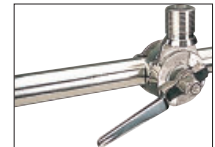
## Shakespeare Rail Mount Antenna Base

- Stainless steel
- Ratchet action for quick and easy installation onto 7/8"-1" railing
- For antennas up to 8' in length
- Standard 1"-14 thread
- 9/32" hole for cable feed

**SHA 4190**

## Shakespeare Rail Mount Antenna Base

- Stainless steel
- Ratchet action for quick and easy installation on to 7/8"-1" (4188S) or 1" to 1-1/2" (4188SL) railing
- For antennas up to 8' in length
- Standard 1"-14 thread
- 9/32"' hole for cable feed

**SHA 4188SL**

### Scanstrut
### Antenna Mount

- Stainless steel
- Watertight seal
- Attaches to 1" vertical and horizontal rails
- Allows for internal cable routing to ensure a neat installation

**SCA RA-01**

### Shakespeare
### Nylon Rail Mount

Plastic mount attaches to 7/8" and 1" horizontal rails and has a side slot in the 1"-14 thread section for antennas with coax exiting the bottom centre of their ferrule.
- Accommodates cable
- Accept any antenna 1"-14 thread

**SHA 4722**

### Shakespeare Economy Nylon
### Ratchet Rail Mount

- Ratchet action for quick and easy installation on to 7/8"-1" railing
- Accept any antenna 1"-14 thread

**SHA 4721**

### Sea-Dog
### Rail Mount Antenna Bracket

- Injection molded nylon
- Fits rails 7/8" - 1", 3-5/8" high
- Accept any antenna 1"-14 thread
- Complete with stainless steel screws

**SED 327148-1**

### Shakespeare Antenna Rail Mount

- Economy stainless steel rail mount
- Comes with adaptors to fit 7/8", 1 & 1-1/4" vertical or horizontal rails
- Use with standard 1"-14 thread antennas
- Can be mounted on flat surfaces

**SHA 4720**

### Sea-Dog Antenna Adapter

Allows the mounting of a 3/8"-24 thread Loran whip onto standard 1" base.

**SED 329550-1**

▶ *Also See*    Shakespeare QuickConnect Mounts   pg 290

### Sea-Dog Straight Antenna Bases

- Flange mount fixed antenna bracket
- Formed 304 stainless steel construction
- Designed to allow wire to feed directly through the base eliminating the need for a separate cable grommet
- Standard 1"- #14 threads
- Installs with three 1/4" RH fasteners (not included)

**SED 329515-1**      4-1/2"
**SED 329517-1**      1-1/2"

### Sea-Dog Fixed Antenna Base

- Accept any antenna 1"-14 thread
- Base diameter: 2-13/16"
- Use 1/4" RH fasteners

**SED 329500-1**

### Shakespeare Antenna Bases

- Low profile, 1" high mount
- Accept any antenna 1"-14 thread
- For GPS, marine TV and shorter antennas

**SHA 4710**      Stainless steel
**SHA 4711**      Nylon
  Accessories:
**SHA 418**      Shim kit (2-pc rubber)

### Shakespeare Straight Antenna Base

- All stainless steel construction
- Accept any antenna 1"-14 thread
- 4" high
- Perfect for radar arches
- Can be used with a 4364 extension mast
- Use 1/4" fasteners

**SHA 4365**

### Sea-Dog Straight Antenna Base

- All stainless steel construction
- Wire will feed through base
- Accept any antenna 1"-14 thread
- 4" high 2-7/8" base
- Use 1/4" fasteners

**SED 329510-1**

### Shakespeare Mounting Shims

Shim kit for ratchet mounts consists of 4 shims, two each with front/back and side/side slope. Each shim adds a half-notch (5°) tilt. Stack them for extra height or for compound angles.

**SHA 414**

# Radar and Satdome Modular Mount System

▪ 3 simple steps to build your modular mount
▪ Steps 1 and 2 required to build your mount, Step 3 is optional

**SEAVIEW//**

## STEP 1: SELECT MOUNT TYPE

▪ Made from cast aluminum adding incredible strength while providing an attractive addition to any vessel
▪ Elevating your radar with the Seaview mounts maximizes performance, longevity & safety

PMA-57-M1, ADA-R1, LTB-R, SP1-MOD and LTBP-1697

AM12-M1 and ADA-S1

PMA-1810-M2, ADA-S2, LTB-S and LTBP-1697

| Item # | Description |
|---|---|
| **Closed Dome Radars, Small Satdomes (16" Diameter or smaller), Light & Cameras** | |
| SVW PMF-57-M1 | 5" Modular Mount / FWD raked / 7" x 7" base plate / Light bar compatible / Top plate required |
| SVW PMF-107-M1 | 10" Modular Mount / FWD raked / 7" x 7" base plate / Light bar compatible / Top plate required |
| SVW PMA-57-M1 | 5" Modular Mount / AFT raked / 7" x 7" base plate / Light bar compatible / Top plate required |
| SVW PMA-107-M1 | 10" Modular Mount / AFT raked / 7" x 7" base plate / Light bar compatible / Top plate required |
| SVW PMA-167-M1 | 16" Modular Mount / AFT raked / 7" x 7" base plate / Light bar compatible / Top plate required |
| SVW PMA-247-M1 | 24" Modular Mount / AFT raked / 7" x 7" base plate / Light bar compatible / Top plate required |
| SVW AM5-M1 | 5" Modular Mount / Vetical / 8" Rnd base plate / Light bar compatible / Top plate required |
| SVW AM12-M1* | 12" Modular Mount / Vetical / 8" Rnd base plate / Light bar compatible / Top plate required |
| SVW AM18-M1* | 18" Modular Mount / Vertical / 8" Rnd base plate / Light bar compatible / Top plate required |
| **Large Satdomes (18" - 24") / Open Array Radars (up to 4.5')** | |
| SVW PMA-57-M1 | 5" Modular Mount / AFT raked / 7" x 7" base plate / Light bar compatible / Top plate required |
| SVW PMA-1210-M2 | 12" Modular Mount / AFT raked / 10" x 10" base plate / Light bar compatible / Top plate required |
| SVW PMA-1810-M2 | 18" Modular Mount / AFT raked / 10" x 10" base plate / Light bar compatible / Top plate required |
| **Dual Mounts** | |
| SVW PMA-DM1-M2 | 13.25" Dual Mount pre-drilled for most closed dome radars.  Top plate required for satdomes |
| SVW PMA-DM2-M2 | 23.75" Dual Mount pre-drilled for up to 4.5' Open Array Radar.  Top plate required for satdomes |
| SVW PMA-DM3-M1* | 28" Dual Mount pre-drilled for up to 4.5' Open Array Radar. Top for Satellite domes / Top plate required |
| SVW PMA-DM4-M1* | 19" Dual Mount pre-drilled for most closed dome radars. Top for FLIR, Searchlight or Satellite domes / Top plate |

## STEP 2 CHOOSE TOP PLATE

▪ UV stable white ABS with internal anodized aluminum plate pre-drilled to match your electronics
▪ This new plate means you only have 4 visible mounting bolts...no more unwated and unused holes

PMA-DM1-M2, ADA-S1, SP2-MOD, LTB-SF and LTBP-1697

PMA-57-M1, ADA-R1, LTB-OA and LTBP-1197

| Item # | Description |
|---|---|
| **Radar (Closed Dome & Open Array 4' - 6'), Searchlights & Thermal Cameras** | |
| SVW ADA-R1 | Modular plate for Closed Dome and Open Array Radars, for mounts ending (M1) |
| SVW ADAR1DMLTB* | Modular plate for Closed Dome and Open Array Radars, for mounts ending (M2) |
| SVW ADA-F1 | Modular plate for mounts ending in M1 or M2 to fit FLIR M-Series or Raymarine T-Series thermal cameras |
| SVW ADA-F2* | For FLIR M100 or M200 thermal cameras |
| SVW ADA-F3* | For mounts ending in M1 or M2 to fit FLIR M300 series thermal cameras |
| SVW ADA-BLANK* | For Searchlights on Seaview mounts ending M1 or M2 |
| SVW ADA-HALO3* | Modular plate for Simrad open array radar adapter plate. MUST BE USED WITH ADA-R1 |
| **Satdome** | |
| SVW ADA-S1 | Modular plate for mounts ending in M1 to fit KVH M1/M2/M3/TV1/TV3 , Intellian i1/i2/i3, Raymarine 33/37STV / For mounts ending in M2 to fit KVH M2/M3/TV3, Intellian i3, Raymarine 37STV |
| SVW ADA-S2 | Modular plate for mounts ending in M1 or M2 to fit KVH M5/M7/TV5/TV6, Intellian i4/i6/d6, Raymarine 45/60STV |
| SVW ADA-S3 | Modular plate for mounts ending in M2 to fit KVH M1/TV1, Intellian i1/i2, Raymarine 33STV |

*Request Items

PMA-57-M1
w/ADA-R1

ADA-R1

ADA-S1

# STEP 3 CHOOSE OPTIONAL ACCESSORIES

▪ Heavy duty 1-1/4" light bars for easy cable pass
▪ LTB TOPs required with light bar orders
▪ Some light bars fold over 90° as needed
▪ Spreader kits (all inclusive)

LTB-R        LTB-S        LTB-OA

| Item # | Description |
|---|---|
| **Light / GPS Bars (Must pick a Light Bar Top)** ||
| **SVW LTB-R** | 1-1/4" Light bar for closed dome radar (folds over 90°) |
| **SVW LTB-OA** | 1-1/4" Light bar for open array radar up to 4.5 ft. |
| **SVW LTB-S** | 1-1/4" Light bar for 18" or smaller satdomes (folds over 90°) |
| **Light Bar Tops** ||
| **SVW LTB-U1A** | (LTB TOP) Universal Light Bar Top for mounting your own light and or GPS |
| **SVW LTBU1A1697*** | (LTB TOP) LTB-U1A w/12.75" post and Perko 1697 LED light |
| **SVW LTBU1A1197*** | (LTB TOP) LTB-U1A w/12.75" post and Perko 1197 incandescent light |
| **SVW LTBP-1197** | (LTB TOP) Perko 1197 light with 7' of wire / USCG approved for boats up to 20m (65.6') |
| **Spreader Kits** ||
| **SVW SP1-MOD** | Complete spreader kit for radar or satdome applications, no additional accessories required / *For mounts ending in "M1"* |
| **SVW SP2-MOD*** | Complete spreader kit for radar or satdome applications, no additional accessories required / *For m ounts ending in "M2"* |
| **Threaded Insert for Spreader Kits** ||
| **SVW SP7-SS** | Stainless steel 1-14 threaded insert - replaces standard plastic insert |
| **Base Wedge** ||
| **SVW PM-W2-7*** | 2° wedge for 7" x 7" radar mount base plate |
| **SVW PM-W4-7** | 4° wedge for 7" x 7" radar mount base plate |
| **SVW PM-W6-7*** | 6° wedge for 7" x 7" radar mount base plate |
| **Hinge Adapters For Base Plate** ||
| **SVW PM-H7** | Hinge adapter for 7" x 7" base plate / fits most 5-16" tall radar mounts |

LTBP-1197        LTBU1A1697

Complete spreader kit

PM-H7

PM-W4-7

ELECTRONICS

RW4-2

### Seaview Direct Mount Radar Wedges (4°)

| | |
|---|---|
| **SVW RW4-1*** | 4 degree direct mount wedge for Furuno DRS4DL (15"-20" radar), 18" Koden & 18" Sitex |
| **SVW RW4-2** | 4° direct mount radar wedge for Raymarine, Garmin & 3G/4G closed dome radars |
| **SVW RW4-3*** | 4° direct mount radar wedge for Furuno, Garmin, Koden & Simrad open array radars |
| **SVW RW4-4*** | 4° direct mount radar wedge for Raymarine open array radars |
| **SVW RW4-7*** | 4° direct mount radar wedge for Simrad Halo open array radars |

PMA-5-7LSS, LTBRSS, LTBP-1197

### Seaview Stainless Steel Mounts

| | |
|---|---|
| **SVW PMA-5-7LSS*** | Stainless steel 5" Mount / AFT rake / 7 x 7 base / For any closed dome radar |
| **Stainless Steel Light Bar** ||
| **SVW LTBRSS*** | 1-1/4" Light bar for closed dome radar / 316 Stainless Steel / Must pick a Seaview LTB TOP above |

* Request Items

SM-18-R and SM-G18-U

## Seaview Mast Mounts

| SVW SM-18-R | Mast mount for 18" Raymarine, Garmin & 3G/4G radars / fits masts 2-5/8" or larger |
|---|---|
| SVW SM-18-U | Mast mount for 18" Furuno, Sitex, Lowrance, Simrad & Koden radars / fits masts 2-5/8" or larger |
| SVW SM-24-U | Mast mount for 24" Furuno, Geonav, JRC, Lowrance & Simrad radars / fits masts 3-5/8" or larger |
| SVW SM-24-R | Mast mount for 24" Raymarine and Garmin radars / fits masts 3-5/8" or larger |
| **Stainless Steel Guards** | |
| SVW SMG18U* | Stainless steel guard for 12-20" closed dome radars |
| SVW SM-G24-U* | Stainless steel guard for 24" closed dome radars |

PM5-FMT-8

## Seaview Camera & Search Light Mounts

| SVW PM5-FM-38* | 5.75" Thermal Camera Mount (FLIR M300 series) / Vertical / 8 in. round base plate |
|---|---|
| SVW PM5-FMT-8 | 5" thermal camera mount for FLIR M-Series and Raymarine T-Series / Vertical / 8" round base |
| SVW PM5-FMD-8* | 5" thermal camera mount for FLIR MD-Series and Raymarine T200-Series / Vertical / 8" round base |
| SVW FTDR-3* | 1.5" Thermal Camera Top Down Riser for FLIR MD324, MD625 / Vertical or upside down |
| SVW FTDR-2* | 2" Thermal Camera Top Down Riser for FLIR M324S, M324L, M324CS, M324XP, M625S, M625L, M625CS, M625XP, M612L, M617CS, M618CS / Mount vertical or upside down |
| SVW PM5-FMH-8* | 5.75" Thermal Camera Mount (FLIR M100/M200 series) / Vertical / 8 in. round base plate |

FTDR-2

## Seaview Low Profile Satdome Mounts

| SVW AMA-GXF* | 3" tall for KVH M1/M1DX/TV1, Intellian i1/i2, Raymarine 33STV |
|---|---|
| SVW AMA-16* | 2-3/4" tall for KVH M2/M3/M3DX/M3ST/V3/TV3, Intellian i3, Raymarine 37STV / 8" round base |
| SVW AMA-18 | 2-3/4" tall for KVH M5/TV5/, Intellian i4/i4P/k4/d4, Raymarine 45STV / 8" round base |
| SVW AMA-18IP* | 2-3/4" tall for KVH V7IP, V3IP / 8-1/4" round base |
| SVW AMA-24 | 2-3/4" tall for KVH M7/M7SK/V7/G6/HD7, Intellian i6/i6P/d6/k6/s60, Raymarine 60STV / 8-1/4" round base |
| **Low Profile Satdome Mount Accessories** | |
| SVW AMA-W | Adjustable wedge (0-12°) / for low profile satdome mounts listed above |

AMA-16

*Request Items

SP5S

## Seaview Sail Boat Pods (SPODS)

Seaview SPODS fit the majority of steering gear including Jefa, Whitlock and Edson.  The SPODS fit standard (12" / 9-1/2") and non standard guard rails.  These units can be tailored to fit other non standard systems.  Two stainless steel brackets suitable for 1", 1-1/8", and 1-1/4" rails are supplied.  The cables are hidden within the mounting bracket.

SP2S

| | |
|---|---|
| **SVW SP1S*** | SPOD Sail Pod uncut single instrument pod / Usable face 4.63" x 4.63" / 1 stainless steel clamp |
| **SVW SP1S2*** | SPOD Sail Pod uncut single Instrument Pod for TRITON2 / 5" x 5" usable face/ 1ea S.S. clamp |
| **SVW SP2S*** | SPOD Sail Pod uncut small pod / Usable face 11.75" x 7" / 2 stainless steel clamp |
| **SVW SP3S*** | SPOD Sail Pod uncut medium pod / Usable face 13.75" x 9" / 2 stainless steel clamp |
| **SVW SP4S*** | SPOD Sail Pod uncut large pod / Usable face 16.9" x 12.25" / 2 stainless steel clamp |
| **SVW SP5S*** | SPOD Sail Pod uncut for 3 instruments / Usable face 14.75" x 5" / 2 stainless steel clamp |

SP2P

## Seaview Power Boat Pods (DPODS)

Seaview DPOD quick release rotating base makes it easy to quickly rotate the screen to your direction. The UV resistant ABS plastic housing is held together with tamper resistant screws. A water tight gasket prevents water from getting inside the pod. The DPOD is mounted onto a anodized aluminum base.

| | |
|---|---|
| **SVW SP2P*** | DPOD Deck Pod uncut small pod / Usable face 11.75" x 7" |
| **SVW SP3P*** | DPOD Deck Pod uncut medium pod / Usable face 13.75" x 9" |
| **SVW SP5P*** | DPOD Deck Pod uncut for 3 instruments / Usable face 14.75" x 5" |

SP2S1 / SP1S1

## Seaview Rail Pods

Seaview Rail Pods fit the majority of steering gear including Jefa, Whitlock and Edson.  A single stainless steel clamp suitable for 1", 1⅛", and 1¼" rails are supplied.  The cables are hidden within the mounting bracket.

| | |
|---|---|
| **SVW SP1S*** | Uncut single instrument pod / 1 S.S. clamp / 4.63" x 4.63" usable face |
| **SVW SP1S2*** | SPOD Sail Pod uncut single Instrument Pod for TRITON2 / 5" x 5" usable face/ 1ea S.S. clamp |
| **SVW SP2S1*** | Uncut small pod / 1 stainless steel clamp / 11.75" x 7" usable face |
| **SVW SP3S1*** | Uncut medium pod / 1 stainless steel clamp / 13.75" x 9" usable face |
| **SVW SP5S1*** | Uncut three instrument pod / 1 stainless steel clamp / 14.75" x 5" usable face |

SP2P and one SP1BOX accessory

## Seaview SPOD, DPOD & Rail Pod Accessory

A optional add on instrument pod that mounts on the side of either a SPOD or DPOD.

| | |
|---|---|
| **SVW SP1BOX*** | Uncut single Instrument Pod / 4.63" x 4.63" usable face/ hardware to instal on pod box |
| **SVW SP1BOX2*** | Uncut single Instrument Pod for TRITON2 / 5" x 5" usable face/ hardware to instal on pod box |

SP2S and two SP1BOX accessory

**\* Request Items**

DPOD Base Dimension
1.813"
4"
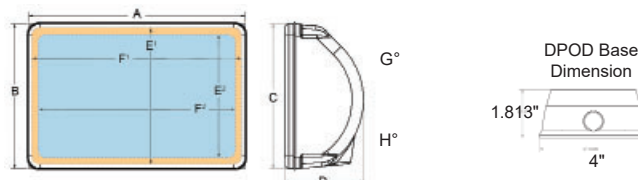
| | SP1S/SP1S2 | SP2S / SP2P / SP2S1 | SP3S / SP3P / SP3S1 | SP4S | SP5S / SP5P / SP5S1 | SP1BOX/SP1BOX2 |
|---|---|---|---|---|---|---|
| | **Overall Dimensions** | | | | | |
| **A** | 5.038" / 127.97mm | 12.305" / 312.55mm | 14.25" / 361.95mm | 17.5" / 444.50mm | 15.25" / 387.35mm | 5.038" / 127.97mm |
| **B** | 5.163" / 131.14mm | 7.555" / 191.89mm | 9.5" / 241.30mm | 12.75" / 323.85mm | 5.5" / 139.70mm | 5.163" / 131.14mm |
| **C** | 5.163" / 131.14mm | 7.555" / 191.89mm | 9.5" / 241.30mm | 12.75" / 323.85mm | 5.5" / 139.70mm | 5.163" / 131.14mm |
| **D** | 3.125" / 79.375mm | 5.08" / 129.03mm | 5.147" / 130.73mm | 5.7" / 130.73mm | 3.185" / 80.899mm | 3.125" / 79.75mm |
| | **Max Usable Face** | | | | | |
| **F1** | 4.625" / 117.47mm | 11.75" / 298.45mm | 13.75" / 349.25mm | 16.938" / 430.23mm | 14.75" / 374.65mm | 4.625" / 117.47mm |
| **E1** | 4.625" / 117.47mm | 7" / 177.80mm | 9" / 228.60mm | 12.25" / 311.15mm | 5" / 127mm | 4.625" / 117.47mm |
| | **Max Cut Out Area** | | | | | |
| **F2** | 4.125" / 104.77mm | 11" / 279.40mm | 12.938" / 328.63mm | 16" / 406.40mm | 13.875" / 352.42mm | 4.125" / 104.77mm |
| **E2** | 4.125" / 104.77mm | 6.125" / 155.57mm | 8.125" / 206.37mm | 11.25" / 285.75mm | 4.125" / 104.77mm | 4.125" / 104.77mm |
| **G** | NA | 26° | 32° | 10° | 6° | NA |
| **H** | NA | 12° | 30° | 7° | 6° | NA |

## Scanstrut
### Aluminum PowerTower

For Radomes, Open Array, and Small Satcom/TV Antennae
Choice of heights
- Available in aft or forward leaning designs with a 25° rake
- Pre-drilled mounting holes; fastens to top plate using its own mounting bolts
- Marine sealant not required
- Internally mounted Scanstrut DS30 cable seal
- Constructed from marine-grade aluminum with powder coating
- Fits Garmin, Raymarine, Simrad, Lowrance Radar

| | |
|---|---|
| **SCA APT-150-01** | Aft, 25°, 6" high, white |
| **SCA APT-150-01-BLK** | Aft, 25°, 6" high, black |
| **SCA APT-250-01** | Aft, 25°, 10" high, white |
| **SCA APT-250-01-BLK** | Aft, 25°, 10" high, black |

## Scanstrut
### Antenna Bar

Central GPS / VHF Antenna Bar
Fits single antenna
- No drilling required, fits PowerTower using pre-drilled, tapped internally mounted 316 stainless backing plates
- Powder coated aluminum
- For use with APT-150-01 and APT-250-01 only
- Overall height: 12.5"
- Tube Diameter: 1.26"
- Thread: 1" x 14 TPI

| | |
|---|---|
| **SCA APT-GPS-01** | White |

## Scanstrut
### Central Lightbar

- Fit single or multiple antennas
- No drilling required, uses the Easy-Fit Mount System
- Powder coated aluminum
- 100% watertight installation, all cables are internally routed and hidden
- For use with APT-150-01 and APT-250-01 only
- Compatible with: Hella NaviLED Pro & 2984 Series / Aquasignal Series 25 & 40 / Perko 0200, 0406, and 0455 / Lopolight
- Overall height: 25.4"
- Tube Diameter: 1.26"

| | |
|---|---|
| **SCA APT-LB-01** | White |
| **SCA APT-LB-01-BLK** | Black |

## Scanstrut
### Central Bar and Wing Plate

Mount for 2x Antenna and 1x Navlight
- No drilling required, uses the Easy-Fit Mount System
- Powder coated aluminum
- For use with APT-150-01 and APT-250-01 only
- Overall height: 19.76"
- Tube Diameter: 1.26"
- Thread 1" x 14 TPI

**SCA APT-LB-GPS2-01**

## Scanstrut
### Mast Radar Mounts

New, larger mounting foot is stronger, stiffer, and now even easier to fit
- Attached to mast with four swivel feet, matching a variety of mast profiles
- 12 point fixing using high quality monel rivets
- Antenna extends only minimum distance from the front of the mast
- Safety wire kit independently attaches scanner to mast
- Powder coated aluminum
- M92722  - L: 19.1" x W 10.4"
- SC20 - L: 15.6" x W: 10.4"

| | |
|---|---|
| **SCA M92722** | Allows addition of radar guard |
| **SCA SC20** | |

SC20

M92722
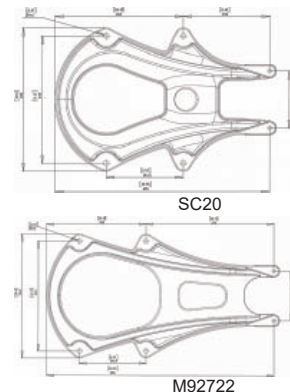
## Scanstrut
### Base Wedge

- 4° base wedge
- Fits composite or aluminum PowerTowers, excluding SPT1004 and SPT1005
- Fits below all PowerTower bases
- Includes watertight base seal
- Marine grade polymer
- W: 8.07" x L: 8.07"

**SCA PT3010**

## Blue Sea Systems
## DC Analog Ammeters

- Can be surface or flush mounted
- Simple 2-wire connection from shunt
- Meter senses and powers from shunt connection
- Packaged with shunt (except 8005 with internal shunt)
- Face can be backlit
- W: 2.625" x H: 2.375"

8005

**BSS 8005**     0-25 amp DC
**BSS 8022**     0-50 amp DC
**BSS 8017**     0-100 amp DC
**BSS 8018**     0-150 amp DC

## Blue Sea Systems
## Analog DC Voltmeters

- Displays to .2 volt
- Draws only 1 milliamperes
- Accurate to 3% of scale range
- Face can be backlit
- W: 2.625" x H: 2.375"

8003

**BSS 8003**     8-16 Volts DC
**BSS 8240**     18-32 Volts DC

## Blue Sea Systems AC Voltmeter

- 150 Volt dial marked in $5^0$ increments
- Simple 2-wire connection
- Face can be backlit
- W: 2.625" x H: 2.375"

**BSS 9353**

## Blue Sea Systems AC Ammeter

- 50 Amp dial marked in 2 amp increments
- Meter senses and powers from coil slipped over wire to be measured
- Includes current transformer
- Simple 2-wire connection
- Face can be backlit
- W: 2.625" x H: 2.375"

**BSS 9630**

## Blue Sea Systems
## 3-Bank Voltage Monitor

- Standard 8-16 voltmeter
- 3.75 "H x 5.25" W panel
- Rotary switch to switch between 3 different battery banks

**BSS 8015**

## Blue Sea Systems
## 3-Bank Digital DC Voltmeter

- Reads from 7-60VDC
- Easy to read red LED display w/dimmer
- Meter senses and powers from same location
- Draws as little as 13 milliamperes
- Simple 3-wire installation
- Face can be backlit
- Dimensions: 3.75" H x 5.25" W

**BSS 8051**

## Blue Sea Systems
## Meter Mounting Panel

Slate grey aluminum panels for mounting all analog or digital meters. Exact colour and size match to Blue Sea electrical panels.

**BSS 8013**     Single 3-3/4"H x 5-1/4"W

▶ *Also See*          Mounting Panels   pg 105

ELECTRONICS

## Blue Sea Systems
## Digital Meters



- Spin-on mounting system
- Panel mounts in any full size Blue Sea Systems' electrical panel meter cut-out

All digital series meters share the following features:

8235

- 3 display brightness levels + off (sleep mode)
- Splash proof case
- Display character size: 9/16"
- Power consumption min. 0.60 Watt
- Power consumption max. 1.00 Watt
- Standby consumption: 0.15 Watt
- W: 2.625" x H: 2.431" x Mounting D: 2.75" x Cutout dia: 2"

### DC Digital Voltmeter

- Displays voltage from 7 to 60 volts
- 3 Display brightness levels & off

**BSS 8235**

### DC Digital Ammeter

- Displays amperage from -500 to +500 amps
- Standard meter operates in negative side of circuit only
- Input voltage 7-60VDC
- Includes 500 amp shunt

**BSS 8236**

### DC Digital Multimeter With Alarm

- Displays amperage from -500 to +500 amps
- Displays voltage from 7 to 60 volts in 0.01 volt increments
- User defined high and low voltage, audio and visual alarms
- Standard meter operates in negative side of circuit only
- Includes 500 amp shunt

**BSS 8248**

### DC Digital Voltmeter With Alarm

- Displays voltage from 7 to 60 volts
- User defined high and low voltage audio and visual alarms
- Input voltage 7-60VDC

**BSS 8251**

### AC Digital Voltmeter

- Displays voltage from 80 to 249 volts
- Input voltage range 80 to 249 VAC*
- For 120 & 240VAC single phase systems

**BSS 8237**

### AC Digital Ammeter

- Displays amps from 0 to 150 amps
- Includes current transformer
- For 120 & 240VAC single phase systems

**BSS 8238**

### AC Digital Frequency

Displays frequency from 40 to 90 Hz

**BSS 8239**

## Blue Sea Systems
## AC Digital Multimeter With Alarm



- Displays amperage from 0 to 150 amps
- Displays voltage from 80 to 249 volts
- Displays power from 0-35 kilowatts
- Displays frequency from 40 to 90 hertz
- For 120 & 240VAC single phase systems
- User defined high amperage audio and visual alarm
- Includes current transformer (#8256)

**BSS 8247**

## Newmar Digital Monitors

These instruments provide accurate information on all important aspects of electrical system status - voltage, current, power consumed, power available, and AC frequency accuracy is +/- 1%. Programmable visual and audio alarms alert of abnormal system conditions: Low/High Voltage and Low/High Frequency.
All read-out modes and alarm programming of multiple functions are controlled via touch-pads on the instrument face. LCD displays are easily read in bright sunlight and feature five level adjustable back-lighting for conservation of night vision.
The meter/touch-pad and surrounding bezel are fully waterproof are suitable for installation in exposed above deck areas (provided there is no water ingress to the rear of the mounting surface).

- NMEA 0183 compatible
- All models are designed for through-bulkhead mounting
- 2-1/4" diameter cutout

### DC Energy Monitor



- Displays volts, amps, energy used and remaining for 12/24V systems up to 500 amps and up to 3,000 amp-hour capacity
- Monitor voltage on up to three separate banks
- House bank may be programmed for:
    1. Monitor charge/discharge amperage
    2. Total energy monitor can be set for amp-hours or percent-of-charge
    3. High/low voltage alarm, plus alarm set-point for low amp-hours remaining
- 500 amp shunt included
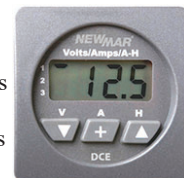
**NEW DCE**

### DC Voltmeter



- For three battery banks, 12/24 volt systems
- Reads to the nearest 1/10 volt
- Programmable high/low voltage alarm circuit for each bank

**NEW DCV**

## Blue Sea Systems M2 OLED Monitors

The M2 Organic LED Digital Monitor measures essential electrical system parameters with adjustable alarms and an auto-dimming display. The M2 Monitors include a MOSFET External Circuit Relay (ECR) which can be used to control external circuits based on any value measured by the M2.

- Auto-dimming, bright Organic LED display is easy to read
- 80dB alarm on all models
- Isolated 500mA MOSFET relay
- Includes external DC Shunt or AC Current Transformer when required
- Display Size: 55mm x 28mm
- Input Voltage: 7-70V DC
- Range (Power Consumption): 0.3W–1.0W

### AC Meters

#### M2 AC Ammeter

Monitors AC Amperage on large, bright display. Supports programmable current transformer ratios. Accurately measure and alarm the amperage of your AC system. (measures 2 independent circuits)

**BSS 1836**

#### M2 AC Voltmeter

Monitors AC Voltage on large, bright display. Accurately measure and monitors the voltage of your AC system. (measures 2 independent circuits or 1 double phase circuit)

**BSS 1837**

#### M2 AC Multimeter

Monitors AC Amps, Volts, Hzs on large, bright display. Supports programmable current transformer ratios. Accurately measure and monitor AC amperage, voltage and Hz. (measures 2 voltages and 2 circuits)

**BSS 1838**

### DC Meters

#### M2 DC SoC Monitor

Accurately measure and monitor the state-of-charge of your batteries. Supports programmable shunt ratios.

- Accurately measures and monitors State-of-Charge of 1 bank
- Measures 3 voltages and 1 current
- Supports programmable shunt ratios
- External relay activation

**BSS 1830**

#### M2 DC Ammeter

Monitors DC Amperage with large, bright display. Accurately measure and monitor the amperage of your DC system. (measures 2 circuits) Supports programmable shunt ratios.

**BSS 1832**

#### M2 DC Voltmeter

Monitors DC Voltage on large, bright display. Accurately measures and monitors the voltage of up to four battery banks.

**BSS 1833**

## M2 Vessel Systems Monitor (M2 VSM)

Performs comprehensive monitoring of four critical systems in one compact organic LED digital monitor

### DC System Monitoring (up to two batteries)

One input monitors the DC voltage, state-of-charge, current for one battery bank and another input monitors the voltage of an additional battery bank. Alarms include high and low voltage, high current, and low battery.

### AC System Monitoring

The VSM monitors a single AC voltage, current, and frequency. Alarms include high and low voltage, high current, and high and low frequency.

### Bilge & Tank Monitoring

The VSM has two inputs that can be configured as a bilge or tank monitor. When configured as a bilge input, monitoring functions include pump active, cycle count in the last 24-hours, average cycles in a typical 24-hour period, and total cycles. High alarms can be set for both the minutes of run time in the last hour as well as the number or cycle counts in the last 24-hours. When configured as a tank input, tank status can be represented in both capacity (gallons or liters) or as a percentage of capacity. Custom tank shapes can be auto-calibrated or programmed. Both high and low level alarms can be set for all tanks.

### DC Specifications

| | |
|---|---|
| Nominal System Voltage: | 12V, 24V, 36V, 48V |
| Operating Voltage: | 7–70V |
| Minimum Current Draw: | 15mA @ 12V, display off |
| | 8mA @ 24V, display off |
| Voltage Accuracy: | +/- 1% |
| Current Range: | -500A to 500A |
| Current Accuracy: | +/- 1% |

### AC Specifications

| | |
|---|---|
| Nominal System Voltage: | 120V @ 60Hz, North America |
| | 230V @ 50Hz, Typical of Europe |
| Operating Voltage: | 40–300V |
| Voltage Accuracy (RMS): | +/- 1% |
| Current Range: | 0–150A |
| Current Accuracy (RMS): | +/- 2% |
| Frequency: | 40–90Hz |

### Tank Senders Supported:

10–180 Ω VDO
240–33 Ω Teleflex
Blue Sea Systems ultrasonic tank senders (sold separately)
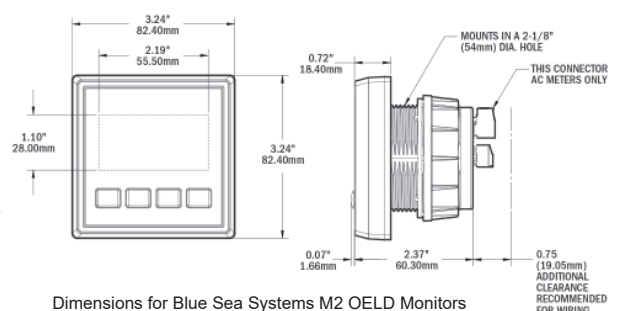- For diesel, water, or waste 1810 (32" tank depth)
- For gasoline 1811 (24" tank depth)

### Retail Packaging Includes:

Head unit, display cover, surface mount bezel, surface mount gasket, DC Current Shunt 8255, AC Current Transformer 8256, connectors, mounting screws and screw driver.

**BSS 1850\***

\* Request Item

Dimensions for Blue Sea Systems M2 OELD Monitors

**ELECTRONICS**

### Blue Sea Systems Shunt Shifter

- Shunt adapter for DC digital ammeter positive side shunt applications, such as alternator measurement
- Designed for use with BSS 8255
- Advanced technology shifts the shunt's positive reference to negative as required by digital meters
- Installs directly onto shunt using existing sense screws
- Ideal for use with 12-36 volt DC systems

**BSS 8242**

### Blue Sea Systems DC Shunts

- Power all Blue Sea Systems external shunt ammeters
- W: 1.75" x L: 3.25" x H: 1.75"

**BSS 8255**     500 amp
**BSS 9230**     100 amp

### Blue Sea Systems AC Current Transformer

- 300A AC/50mA AC
- Inside Diameter: 1.25in (31.75 mm)
- Outside Diameter: 2.68in (68.07 mm)

**BSS 1829**

### Blue Sea Systems AC Current Transformer Coil

- For use with AC Ammeters
- 150A AC/50mA AC
- Inside Diameter: 0.60" (15.24 mm)
- Outside Diameter: 1.38" (35.05 mm)

**BSS 8256**

### Blue Sea Systems Ultrasonic Tank Sender

- Accurate - used with the Vessel Systems Monitor VSM 422 PN 1800 above - can be precisely calibrated for each tank
- Reliable - SSI Technologies, Inc. Fluid-Trac is non-contacting eliminating any mechanical moving parts that can wear and cause intermittent or complete signal loss
- Digital filtering - Eliminates errors due to liquids sloshing in mobile tanks

**BSS 1811**     Gasoline only, max tank depth 24"
**BSS 1810**     Diesel, water or waste, max tank depth 32"

### Mastervolt
### BattMan Pro Digital Monitor

An affordable battery monitor that does exactly that: providing critical information about the status of your battery bank under all circumstances. Moreover it will warn you when your battery bank is empty. Also displays the remaining time until your battery needs to be charged and stores special battery status events.

- 12/24VDC with large, splash proof display (IP65) and power bar
- Number of battery outlets: 2; service (fully), starter (voltage)
- Display/read-out: voltage, current, amp-hours, time remaining, battery capacity in %, special battery status events
- Bezel: 2.5" x cutout: 2" x depth: 2.8"

**MSV 70405070**

### Xantrex
### LinkLITE & LinkPRO Battery Monitors

**Common Features**
- Read your battery bank like a fuel gauge
- Provides critical information about the status of your battery bank
- Displays voltage, current, consumed amphours and remaining battery capacity
- Secondary battery bank voltage monitoring
- Auto sensing battery voltage inputs
- Large backlit LCD Display
- Quick nut mounting construction
- Programmable alarm relay
- Shunt selection capability enables flexible system integration
- Splash proof frontpanel
- 500 Amp shunt included
- CE and e-mark certified
- Cutout: 2.54" x Depth: 3.11"

**XAN 84-2030-00**     LinkLITE
Accessories:
**XAN 854-2021-01**     Connection kit, 50'

**LinkPRO Additional Features**
- Displays time remaining
- Communication/expansion port
- Stores a wide range of history events in internal memory
- Advanced programmable alarm relay
- Battery temperature sensor input

**XAN 84-2031-00**     LinkPRO
Accessories:
**XAN 854-2021-01**     Connection kit, 50'

**Blue Sea Systems**
**Mini OLED DC Volt Meter**

▪ Input voltage range 8-36V DC
▪ Voltage accuracy ± 1.0%
▪ Daylight readable OLED screen
▪ IP66 waterproof
▪ Reverse polarity protected
▪ Mounts in a common 1-1/8" hole

**BSS 1733**

**Blue Sea Systems**
**Mini OLED Ammeter**

▪ Daylight readable OLED screen
▪ Monitors DC amperage from -100A to 100A
▪ Includes #9230 analog meter shunt
▪ 12/24VDC
▪ Mounts in a common 1-1/8" hole

**BSS 1732**

**Blue Sea Systems**
**Mini OLED Temperature Meter**

▪ Monitors external temperature from -40° to 125° C
▪ 12/24VDC
▪ Mounts in a common 1-1/8" hole

**BSS 1741**

**Sea-Dog**
**Digital Volt Meter**

▪ Volts: 4-30
▪ Injection molded nylon
▪ Compact size allows for installation in a variety of locations
▪ For interior or fully protected locations only
▪ Face diameter: 1-7/16" x Depth: 3/4" x Cutout: 1-1/8"

**SED 421615-1**

**Sea-Dog**
**Digital Volt/Amp Meter**

▪ Volts: 4-30
▪ Amps: 10
▪ Injection molded nylon
▪ Compact size allows for installation in a variety of locations
▪ For interior or fully protected locations only
▪ DC shunt not required
▪ Face diameter: 1-7/16" x Depth: 1-3/8" x Cutout: 1-1/8"

**SED 421625-1**

**Sea-Dog** LED
**Digital Volt Meter**

▪ Injection molded nylon
▪ Digital dual voltmeter displays voltage for main and auxiliary batteries simultaneously
▪ The same compact size as a standard 1-1/8" socket allows this voltmeter to be installed in a wide variety of locations
▪ Red LED display
▪ Cutout: 1-1/8" x Depth: 1-3/8"
▪ Input 10V-48V
▪ IP65 rating

**SED 421616-1**

**Sea-Dog**
**Digital Volt Meter**

▪ Injection molded nylon
▪ The rainbow dial digital voltmeter gives the user quick visual colour-coded voltage information
▪ Red/yellow means the voltage is too low, Green means voltage is normal
▪ Fits a standard 1-1/8" socket
▪ For use with 12V systems
▪ IP65 rating

**SED 421617-1**

**Sea-Dog** LED
**Digital Volt Meter**

▪ Injection molded nylon
▪ Rocker switch style dual voltmeter monitors and displays the voltage for main and auxiliary batteries simultaneously
▪ Fits into any 13/16" x 1-7/16" rocker switch hole
▪ Digital red LED display
▪ Input 10-48VDC
▪ IP65 rating

**SED 421636-1**

**Sea-Dog** LED
**Digital Volt Meter / Double USB**

▪ Injection molded nylon
▪ Double USB rocker switch style voltmeter fits into any standard 13/16" x 1-7/16" hole
▪ Allows two devices to be charged simultaneously while also displaying the batteries output
▪ Total output 4.2A load is split 2.1A per side
▪ Input 12-24VDC
▪ Red LED display
▪ IP65 rating

**SED 426527-1**

**Sea-Dog** LED
**Digital Volt Meter / Double USB**

▪ Two devices to be charged simultaneously while also displaying the batteries output
▪ Total output 4.2A load is split 2.1A per side as needed
▪ 12-24VDC
▪ Output DC 5V/4.2A
▪ Red LED display
▪ IP65 rating
▪ Dia: 1-7/16" x D: 1-1/2" x Cutout: 1-1/16"

**SED 426517-1**

**Sea-Dog**
**Digital Volt/Amp Meter / Double USB**

▪ Stamped stainless steel/injection molded nylon
▪ LED screen displays charging status in amps, battery voltage, and low voltage audio alarm
▪ USB power socket output is 4.8A, 2.4A per side
▪ Fits any standard 12VDC receptacle

**SED 426513-1**

## Balmar XT-Series Alternator Packages

XT-VT-170-IR

XT-SF-170-IR

The XT-Series Alternator produces up to 110A at idle speed - ample power to service all electrical loads with power left over to top-off house batteries

- 170A in a small case package
- Ideal for high electrical load vessels
- Custom high speed bearings for long life
- Dual fan cooling, high airflow frame
- USCG title 33, ISO 8846 and SAE J1171 certified
- XT-Series mounting styles are drop-in compatible for WakeBoat and other GM gasoline engine applications.

| **BAL XT-SF-170-IR** | 1-2" Single Foot (11Si Typical) |
| **BAL XT-VT-170-IR** | Vortec  (9Si Typical) |

## Balmar 6-Series YP Alternator Packages

Balmar's Smart Ready internally regulated 6-Series 12-volt alternator, when paired with the smart, multi-stage regulator (premium MC- 612), delivers faster and safer charging, along with the added assurance of a built-in back up regulator.

- All kits include alternator, voltage regulator alternator temperature sensor, battery temperature sensor, and wiring harness. YP Packages fit most Yanmars, Mercruisers and other engines using a 3.15" saddle mount

| **BAL 60-YP-MC-100-SV** | 100 amp, 12 volt, single pully |
| **BAL 60-YP-MC-120-DV** | 120 amp, 12 volt, dual pully |

## Balmar 6-Series VUP Packages

VUP Packages fit most engines requiring 1" Motorola or 2" Delco style mounts, including Volvo, Universal, or GM blocks

| **BAL 621-VUP-MC-120-DV** | 120 amp, 12 volt, dual pully |
| **BAL 621-VUP-MC-100-SV** | 100 amp, 12 volt, single pully |

## Balmar 95-Series Medium Duty Alternators

- Extra heavy duty stator winding with large gauge wire for added output at low RPM
- Extra large sealed bearings, a .875" pulley shaft
- Bi-directional cooling fan
- 6,500 RPM maximum rotation speed
- Requires external regulation

| **BAL 9504-24-140-IG** | 140 amp, 24 volt |
| **BAL 9504-12-210-IG** | 210 amp, 12 volt |

## Balmar 94-Series Medium Duty Alternator

- Delco-style 2" single foot alternators
- Oversized bearings and extra high amperage diode
- Custom wound stators, integrating extra large gauge copper wire deliver outstanding lowend output and high performance across the powerband
- Rated to 6,500 RPM
- Bi-directional cooling fan

| **BAL 94-140-24-IG** | 140 amp, 24 volt |

## Balmar 6-Series Light Duty Alternators

Built into the small case 6-Series alternator is a patented single stage Smart Ready internal regulator that's always ready as a primary regulator, or as a back up in the unlikely event that your external regulator fails.

- 12,000 max RPM
- Case dia: 5.75"

| **BAL 60-100-SV** | 3.15" saddle, 100 amp, 12 volt |
| **BAL 621-100-SV** | 1 or 2" saddle, 100 amp, 12 volt |

## Balmar Battery Monitor

**Learns & Displays Critical Battery Parameters**
- State of Charge (SoC%)
- State of Health (SoH%)
- Charge/Discharge Current Flow
- Time Remaining
- History, Faults & Alerts

**Support for All Common Battery Chemistries & Voltages**
- Including Lead Acid, Lithium (LifePO4), Standard AGM, TPPL AGM, Carbon Foam AGM, and GEL Batteries
- Supports 12V-48V Battery Banks

**Intelligent, Self-Calibrating Accuracy**
- Typically 97 % Accurate within 2 Cycles
- Auto-Calibrating

**Large, Bright Colour Display**
- Sunlight Readable, Configurable & Dimmable
- 60 Degree Viewing Angle
- Fits in Standard 2-1/16" Gauge Socket

**Expandable Architecture**
- Support Multiple Displays (Optional)
- Supports Multiple Battery Banks (Optional)
- Standard Support for 2 Start Batteries (Voltage Only)
- Simple, easy-to-install Point-to-Point Network

**Optional Smartphone/Bluetooth Gateway**
- Free iOS and Android Apps (Requires Bluetooth Gateway PN SG2-0300)
- View All Parameters on your Phone
- Download Product Updates
- Kit includes: Colour display, SmartShunt and SmartLink Com cable

| **BAL SG200** | 12-48V |
| **BAL SG210** | 12-48V, includes SG2-0300 |

## Balmar Bluetooth Gateway

- Optional bluetooth gateway for smartphone monitoring
- Connect to any open port on the SmartLink network
- 1 meter (39") tether

**BAL SG2-0300**

## Balmar Smart Gauge

- Balmar's Smartgauge™ battery monitoring system provides accurate, dependable information about battery condition, without the need for shunts and complicated programming.
- Simply select the battery program that most closely matches your battery technology.
- Features voltage and stage of charge displays, as can be used to provide alarms for low battery voltage and capacity.
- As with all electrical components, take time to read and follow the instructions provided. Failure to do so could result in damage to the Smartgauge and/or your electrical system.
- Cutout: 3.75" x 2.55" x 1"
- House (Primary) Battery Voltage
- House (Primary) Battery State of Charge
- Engine (Secondary) Battery Voltage
- High/Low Battery Voltage alarms for each battery
- High/Low State of Charge alarm for auxiliary battery
- Bright LED daylight readable display
- Volt free alarm contact for firing external alarms, relays etc

**BAL 44-SG-12/24**

## Balmar Regular Conversion Kit

Now Yanmar owners can add Balmar Smart Regulation without disposing of the Valeo 120A/12V alternator. A simple retro?t of the Valeo alternator converts the Valeo to accept Balmar's multi-stage external regulators.

- Reduce the cost of adding Balmar multi-stage regulation by half
- Balmar's patented Smart Ready Design
- The Internal regulator provides "Come-Home" capability if the external regulator fails (12V versions only)
- Temperature Sensing provides protection for your battery and alternator to prevent damage from overheating
- Kits come with all required conversion parts
- Conversion can be Ccompleted in 30 minutes

**BAL ARS-5-VL-01**

## Balmar Multi-Stage Regulators

- Bright, easy-to-read 3-digit LED display
- Selectable presets for gel, AGM, Optima, deep-cycle and standard flooded
- Up to 12 defined stages of charging
- Can control dual alternators on a single engine with optional Centerfielder BAL CF-12/24-II
- Advanced programming control
- Single P-type alternator control only

**BAL MC-614-H**
**BAL MC-624-H**

## Balmar Multi-Stage Regulator

- Bright, easy-to-read 3-digit LED display
- Selectable presets for gel, AGM, Optima, deep-cycle and standard flooded
- Up to 12 defined stages of charging
- Can control dual alternators on a single engine
- Option for temperature sensing at two alternators and a single battery, or dual batteries and a single alternator

**BAL MC-612 DUAL-H**

## Balmar ARS Multi-Stage Regulator

- Bright, easy-to-read 3-digit LED display
- Selectable presets for gel, AGM, Optima, deep-cycle and standard flooded
- Belt Load Manager eliminates belt wear worries
- Single P-type alternator control only

**BAL ARS-5-H**

## Balmar Digital Duo Charge

- Delivers current and voltage controlled charging from the house battery to the starting battery, eliminating the need for an isolator or battery switches
- Preset programs for gel, AGM, standard and deep cycle flooded batteries allow mixing of house and start battery technologies

**BAL DDC-12/24**

## Balmar Centrefielder II Charge Balancer

The Centerfielder II balances twin engine charging systems by monitoring port and starboard voltage regulators. When both alternators and voltage regulators are working, the Centerfielder allows the dominant regulator to control both alternators, making it possible to charge a single house battery bank with the combined output from both alternators.

- Works in both 12-volt and 24-volt applications
- Use only with MC-612 or MC-624 voltage regulators
- Not for systems utilizing internally regulated alternators
- Not required for single-engine, dual-alternator applications

**BAL CFII-12/24**

## Balmar Spike Protectors

Spike protectors build in an additional level of system safety by ensuring an exit corridor to ground should an AC or DC spike invade the vessel's charging system. The TSP's fused sacrificial diodes are designed to fail before alternator diodes can be damaged.

| | |
|---|---|
| **BAL TSP-12** | 12 volt |
| **BAL TSP-24** | 24 volt |

## Balmar Adjustment Arm

10" powder coated 1/4" stock aluminum adjustable mounting arm

**BAL UAA**

## Balmar Temperature Sensors

| | |
|---|---|
| **BAL MC-TS-A** | 54", alternator |
| **BAL MC-TS-B** | 20', battery |

## Balmar Hardware Kit 60/70 Series Yanmar

Installation hardware kits take much of the guesswork out of 6-Series and 7-Series installations on various Yanmar engine installations (GM, JH, Other than CX, LP).

**BAL 6-0020**

# We can keep you here longer......*very quietly*.

## Charge Your Batteries Silently While Anchored - Even on Cloudy Days!

# EFOY
## ENERGY FOR YOU



| | EFOY 80 BT | EFOY 150 BT |
|---|---|---|
| Max. charging power per day | 960 Wh/day 80 Ah/day | 1728 Wh/day 144 Ah/day |
| Max. nominal power | 40 W | 75 W |
| Nominal voltage | 12/24V Lead/AGM 12.8V LiFePO4 | 12/24V Lead/AGM 25.6V LiFePO4 |
| Max. nominal charging current @ 10.5 V | 3.8 A | 7.1 A |
| Recommended battery capacity lead batteries @ 12 V | 40-800 Ah | 60-800 Ah |
| Recommended battery capacity LiFePO4 batteries @ 12 V | 20-600 Ah | 30-600 Ah |
| Weight | 14.3 lbs | 15.2 lbs |
| Nominal consumption / kWh | 0.24 US gal (0.9 litre) | |
| Noise level @ 1m distance | < 44 dB(A) | < 47 dB(A) |
| Operating temperature | -4°F to +104°F (-20 °C to +40 °C) | |
| Dimensions | L: 17.64" x W: 7.8" x H: 10.83" | |

## How it works

The EFOY unit charges the on-board battery automatically. The integrated charge controller permanently monitors the charge level of the 12 or 24V battery. If necessary, the EFOY starts automatically and switches off again once the battery is charged. The EFOY produces electricity using the fuel in the fuel cartridge, adding oxygen from the air. In addition to the electricity, it only produces waste heat and water vapour containing an insignificant amount of carbon dioxide.



### Included Standard Accessory Set

- BT Bluetooth adaptor
- Mounting bracket
- Charge line for battery connection
- Fuel cartridge holder with belt
- Off heat duct Set EFOY
- Isolated exhaust hose
- User manual
- Service fluid

## EFOY New Generation Fuel Cell Battery Chargers

Control your EFOY with a smartphone or tablet via the EFOY app (comes with Bluetooth), or the optional EFOY Control Panel OP3.

**EFY 158 000 002**     80 BT
**EFY 158 000 022**     150 BT

   Parts & Accessories:

**EFY 158 906 001**     Connecting line to fuel cell
**EFY 158 906 018**     CL5 charge line
**EFY 158 908 007**     MP3 mounting plate set

## EFOY Control Panel OP3

Control your EFOY via the control panel, which can be connected directly to the fuel cell via a cable.

**EFY 158 077 003**

# EFOY
## ENERGY FOR YOU

## How it works

The EFOY COMFORT charges the on-board battery automatically. The integrated charge controller permanently monitors the charge level of the 12 V battery. If necessary, the EFOY COMFORT starts automatically and switches off again once the battery is charged. The EFOY COMFORT produces electricity using the fuel in the fuel cartridge, adding oxygen from the air. In addition to the electricity, it only produces waste heat and water vapour containing an insignificant amount of carbon dioxide.

Fuel cartridge + EFOY COMFORT — Battery — optional inverter for 110 V — Consumer
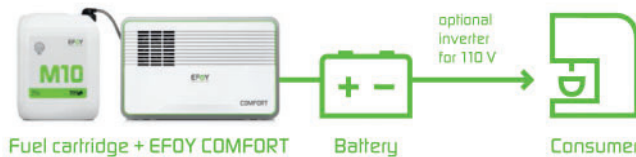
### EFOY Comfort Fuel Cell Battery Chargers

| | |
|---|---|
| EFY 151 000 210 | 80I kit |
| EFY 151 000 211 | 140I kit |
| EFY 151 000 212 | 210I kit |

Parts & Accessories:

| | |
|---|---|
| EFY 151 906 005 | Senseline extension cable 8M/26' |
| EFY 151 906 006 | Powerline extension cable 8M/26' |
| EFY 151 906 034 | Charge line CL4 |
| EFY 151 075 037 | Mastervolt-EFOY cable |
| EFY 151 077 053 | Remote operating panel w/cable, White |
| EFY 151 077 045* | Remote panel bezel, White |
| EFY 151 077 051 | Remote panel bezel, Black |
| EFY 150 903 001 | Service fluid replacement bottle |
| EFY 151 905 021 | Fuel cartridge holder |
| EFY 151 908 003 | Belt for fuel cartridge |
| EFY 151 908 022 | Mounting belt EFOY |
| EFY 151 908 020 | Mounting plate EFOY, White |
| EFY 151 077 054 | Surface mount plate EFOY, White |
| EFY 151 077 055 | Surface mount plate EFOY, Black |

\* Request Item

#### Included Standard Accessory Set

- Operating panel (white) with cable
- Mounting plate with belt
- Charge line for battery connection
- Fuel cartridge holder with belt
- Off heat duct Set EFOY COMFORT
- Isolated exhaust hose
- User manual
- Service fluid

### EFOY M10 Fuel Cartridge

Volume: 2.64 US gallons / 10 litres
Weight: 18.5 lbs / 8.4 kg
Nominal capacity: 11.1 kWh
Dimensions: L: 9.1" x W: 7.6" x D: 12.5"
- Lasts about 30 days of "average" boating

EFY 150 905 099

## Can be used all year round

With the EFOY COMFORT, you have a reliable electricity supply when you are on the road or at sea. Whether you are under a shady tree or in a lonely cove. Irrespective of the weather and all year round - even at sub-zero temperatures!

## Extremely quiet

When the EFOY COMFORT is installed as recommended, you will not hear it at all. SFC's newly developed insulation and the sound damping system ensure quiet operation. Enjoy the peace and silence!

## Fully automatic and maintenance-free

Your EFOY COMFORT supplies electricity as soon as all connections are properly made. All you have to do is to make sure that fuel is always supplied. You do not even need to clean or maintain the EFOY COMFORT. It does not get any more convenient than this!

## Eco-friendly

The EFOY COMFORT is economical in use and does not produce emissions that harm the environment. It is extremely eco-friendly!

## Provides more power than a solar solution

Over the period of one year, EFOY COMFORT provides 3 to 10 times as much electricity as a solar system with the same power rating. To produce the same amount of electricity as an EFOY COMFORT 80 (40 W) with solar power, depending on the country and time of year, you would need a solar system with an output of between 120 and 400 Wp.

### EFOY Bluetooth Adapter

The EFOY adapter communicates with the EFOY app via Bluetooth once connected to your EFOY COMFORT and sends you all important data, directly onto your mobile device.

EFY 151 000 193    Comfort 80, 140, 210

**To control your EFOY COMFORT with the free EFOY app, you will require the latest version of the app, the most recent firmware for your fuel cell and the EFOY Bluetooth adapter.

Turn your smart phone or tablet into a remote control for your EFOY COMFORT with the EFOY app myEFOY function. Choose the operating mode with the press of a button and see all important data regarding your fuel cell, fuel cartridge and battery all on one screen.
Interesting statistics such as daily consumption or the average daily operating hours of the fuel cell are displayed clearly in the app.

| | COMFORT 80 | COMFORT 140 | COMFORT 210 |
|---|---|---|---|
| Max. charging power per day | 960 Wh/day 80 Ah/day | 1728 Wh/day 144 Ah/day | 2520 Wh/day 210 Ah/day |
| Max. nominal power | 40 W | 72 W | 105 W |
| Nominal voltage | 12 V | 12 V | 12 V |
| Max. nominal charging current @ 12V | 3.3 A | 6.0 A | 8.75 A |
| Recommended battery capacity @ 12V | 40-160 Ah | 60-250 Ah | 80-350 Ah |
| Weight | 15.4 lbs | 16.5 lbs | 18 lbs |
| Nominal consumption / kWh | 0.24 US gal (0.9 litre) | | |
| Noise level @ 7m distance | 25 dB(A) | | |
| Operating temperature | -4°F to +104°F (-20 to + 40 °C) | | |
| Dimensions | L: 17.44" x W: 7.95" x H: 11.34" | | |

ELECTRONICS

## Xantrex
### TRUECharge2 12V & 24V Battery Chargers

- Now with PARALLEL STACKING FEATURE*
- This NEW feature allows two chargers to work together to combine the output current, achieving up to 120A for large battery banks.
- Microprocessor-controlled, multistage charging algorithms
- Settings for two and three-stage charging
- Charges flooded, gel, AGM or lead-calcium batteries
- Battery-equalization feature
- Auto-ranging universal input voltage (90-265 Vac, 47-63 Hz) is also compatible with a generator or other low-quality power sources
- Temperature-compensated charging
- Power factor corrected for efficient charging
- Mounting is possible in a variety of orientations and in areas where space is limited
- Ability to charge healthy batteries drained to low voltage
- Easy access to AC and DC wiring from one side
- Reverse battery polarity protection
- Drip-proof design
- Over and under-temperature protection
- DC over-voltage protection
- Battery overcharging protection
- Tested to conform to ingress protection rating IP32 and meets UL1564, UL1236 including marine supplement and ABYC standards
- Optional battery temperature sensor (Part #808-0232-01)
- Optional remote panel (#808-8040-01) required for parallel stacking
- Two year warranty

| Part # | Volts | Amps | L x W x H | Weight |
|---|---|---|---|---|
| XAN 804-1220-02 | 12 | 20 | 9.8" x 6.7" x 2.8" | 4.8 lbs |
| XAN 804-1240-02 | 12 | 40 | 9.8" x 6.7" x 2.8" | 4.8 lbs |
| XAN 804-1260-02 | 12 | 60 | 13.4" x 6.7" x 3.5" | 9.9 lbs |
| XAN 804-2410 | 24 | 10 | 9.8" x 6.7" x 2.8" | 4.8 lbs |
| XAN 804-2420 | 24 | 20 | 9.8" x 6.7" x 2.8" | 4.8 lbs |
| XAN 804-2430 | 24 | 30 | 13.4" x 6.7" x 3.5" | 9.9 lbs |

## Xantrex
### TRUECharge2 Remote Battery Sensor

The BTS mounts on a terminal post of a battery in a bank or on the side of a battery and measures its temperature. It sends precise information to the charger or charge controller

**XAN 808-0232-01**

## Xantrex
### TRUECharge2 Remote Panel

- Gives the user flexibility to set maximum charger output current
- Can be used to operate two chargers in parallel to increase output capacity
- Allows the charger to be powered on or placed into standby while AC power is connected
- Programs the charger for battery type and temperature
- Displays faults and warnings, basic battery level and settings
- Displays the current status of each battery or each battery bank
- Simple push buttons to set charger mode
- Allows for activation and termination of equalization
- FCC Class B compliant
- Two 7.6 m (25') communication cable
- Mounting template and 1 1/2" NPT locknut for mounting
- 4-9/16" x 1-3/4" x 3-8/16"

**XAN 808-8040-01**

## Xantrex
### Digital Echo Battery Charger

- 15 A maximum charge current
- Automatically adjusts for 12 or 24 volt battery banks (both battery banks must be the same DC voltage and battery type)
- Automatically switches on/off without affecting the in-house battery bank or over-charging
- Utilizes excess current from the primary charging source
- Built-in thermal and over-current circuits
- Reverse polarity protection
- 5.5" x 4.5" x 1.25"

**XAN 82-0123-01**

## ProMariner
## ProNauticP Series Battery Chargers

**ProMar Digital Charging Performance – 12**

**Selectable Profiles**
- Up to 12 performance & precision 4-stage charging profiles: Charge, Condition, Maintain and Re-condition
- Automatic dockside power mode for 12 Volt DC lighting and appliances
- Factory set for Flooded (Lead Acid) batteries. AGM, GEL and others are selectable

**Power Factor Correction – Global AC Input**
- Auto-ranging (100-260VAC/50-60Hz) global AC input with reduced harmonic distortion allowing all models to operate off a household power outlet connection
- ProNauticP consumes less power so more AC power is available on board

**Distributed On Demand Technology**
- Automatically senses and distributes 100% of available charging amps to any one bank or combination of all banks

**Digital Self-Calculating Absorption and Battery Health**

**Re-Conditioning Mode**
- Automatically programs conditioning time based on discharge state of batteries
- Automatically recharges batteries after 21 days of inactivity in the maintain mode, improving reserve power performance and extending battery life by reducing battery sulfation

**Conservation Energy Saver Mode**
- After fully charging and conditioning batteries, ProNauticP's Energy Saver Mode will monitor and Auto Maintain batteries only when needed, maintaining a full state of charge
- This significantly reduces AC power consumption while lowering operating costs and maximizing reserve power performance

**Service and Fault Mode LED Indicators**
- Real time indication of wiring faults or adverse conditions that may impact the operation of a boat's charging system

**Automatic Fan Speed Control**
- Quiet operation. Innovative front exhaust prevents restriction of air flow and cooling

**Automatic Temperature Compensation and Built-in Safety**
- Remote temp. probe included - Ignition protected and current limiting
- Constructed to: Marine ULc 1236, CE, CTick and FCC Class B.

| Part # | Volts | Amps | Banks | Amps@ 100/240 VAC | Size H x 8.5" x 3.5" | Lbs |
|---|---|---|---|---|---|---|
| PRO 63110 | 12 | 10 | 2 | < 3.0 / < 1.5 | 10.25" | 5 |
| PRO 63115 | 12 | 15 | 3 | < 4.0 / < 2.0 | 10.25" | 5 |
| PRO 63120 | 12 | 20 | 3 | < 5.0 / < 2.5 | 10.25" | 5 |
| PRO 63130 | 12 | 30 | 3 | < 6.0 / < 3.0 | 10.25" | 5 |
| PRO 63140 | 12 | 40 | 3 | < 7.0 / < 3.5 | 10.25" | 5 |
| PRO 63150 | 12 | 50 | 3 | < 10.0 / < 5.0 | 12.25" | 7 |
| PRO 63160 | 12 | 60 | 3 | < 11.0 / < 5.5 | 12.25" | 7 |
| PRO 63170 | 24 | 20 | 3 | < 7.0 / < 3.5 | 10.25" | 5 |
| PRO 63180* | 24 | 30 | 3 | < 11.0 / < 5.5 | 12.25" | 7 |

*Request Item*

### Optional Remote Display

When installed, it will display the current status of the charger along with the voltage and amperage.
- L: 4-1/4" x W: 2-3/4" x D: 7/16"

**PRO 63100**

## ProMariner
## ProTournament Elite Series Battery Chargers

52026

52038

**Tournament Winning Technology**
100% charge upon completion of multi-stage charging process. 100% charging output with AC power as low as 90 VAC. 50% lighter and 2 to 3 times faster than traditional chargers.

**Forced Induction Cooling (model 52038 only)**
Concealed waterproof fan provides forced induction air cooling through side exhaust ports for cooler operation and fastest charge times.

**Digital LED Display with Dual Mode Battery Status Monitor**
Intuitive LED display with charge mode indicators and real time charge level status with an on-the-water push-to-test feature for percent of battery power remaining.

**3 Selectable Performance Matched Charge Profiles**
Profiles include: Standard Flooded/AGM batteries, HP AGM1 for pure lead AGM batteries like OPTIMA Blue Top Marine Batteries, HP AGM 2 for pure lead AGM Batteries like Odyssey Marine Batteries.
Waterproof Connector Port for Optional Status Remote
Optional tri-colour LED charge mode status remote can be placed up to 12' away from the charger.

**Digital 5-Stage Charging with Temperature Compensation**
Analyzes connections and the ability for a battery to accept a charge, advance high fill rate charging, conditioning, auto maintain (energy saving mode) and automatic once a month storage recondition mode automatically monitors ambient temperatures and adjusts its charging output.

**System OK & Individual Battery Trouble Status Indicators**
Advanced technology eliminates time consuming trouble shooting by clearly indicating system and battery connections are OK or if a fault is present on a specific battery bank.

**Built-in Safety & Pre-Wired for Easy Installation**
Shock resistant, space saving extruded aluminum design, dual in-line DC safety fuses for trolling motor and house batteries, over-voltage, overload, over-temperature, reverse polarity and ignition protection.

| Part # | Volts | Amps | Banks | L x W x H | Lbs |
|---|---|---|---|---|---|
| PRO 52026 | 12-36 | 24 | 3 | 13"x 7.25" x 2.75" | 8 |
| PRO 52036 | 12-36 | 36 | 3 | 13.5" x 9.375" x 4" | 13.5 |
| PRO 52038* | 12-48 | 36 | 4 | 13.5" x 9.375" x 4" | 14.5 |

*Request Item*

### ProMariner Charge Status Remote

- Optional tri-colour LED chargemode status remote can be placed up to 12' away from the charger
- Shows Ready (Green), Conditioning (Orange) and Charging (Red) modes

**PRO 52060**

**ELECTRONICS**

## ProMariner
## ProSport GEN4 HD Series Battery Chargers

- Promariner digital technology
- Distributed-on-demand technology
- Heavy duty tri-surface extruded heat sink design
- Expanded LED display with completion status gauge
- Lightweight design
- 3 selectable charge profiles
- Auto-maintain energy saver mode
- Fully automatic 5-stage digital performance charging
- Built-in quality and safety
- Easy installation and operation
- IP67
- AC in: 120VAC±5 50/60Hz
- Three year warranty

| Part # | Volts | Amps | Banks | L x W x H | Weight |
|---|---|---|---|---|---|
| PRO 44006 | 12 | 6 | 1 | 7.9" x 7.7" x 2.9" | 3.8 lbs |
| PRO 44008 | 12/24 | 8 | 2 | 7.9" x 8.9" x 2.9" | 5.2 lbs |
| PRO 44012 | 12/24 | 12 | 2 | 7.9" x 10.5" x 2.9" | 6.0 lbs |
| PRO 44020 | 12/24 | 20 | 2 | 7.9" x 12.8" x 2.9" | 7.2 lbs |
| PRO 44021 | 12/24/36 | 20 | 3 | 7.9" x 12.8" x 2.9" | 7.8 lbs |

### ProSport GEN4 HD Series-Global Battery Chargers

All the same features as above but with:
- Universal IEC c14 power cord
- AC in: 100-240VAC 50/60Hz



Universal IEC c14 power cord

| Part # | Volts | Amps | Banks | L x W x H | Weight |
|---|---|---|---|---|---|
| PRO 44023 | 12 | 6 | 1 | 7.9" x 7.7" x 2.9" | 3.8 lbs |
| PRO 44028 | 12/24 | 20 | 2 | 7.9" x 13.6" x 2.9" | 5.2 lbs |



## ProMariner
## Battery Chargers

- Fully automatic 4-stage charging
- Dual mode charge status indicator
- Battery & wiring fault detection
- Rugged shockproof construction
- Auto maintain/energy saver mode extends battery life
- Safe for long and short term storage
- Pre-wired with waterproof inline DC fuses and nickel plated copper ring terminals
- Quiet EMI design meets US FCC Emissions requirements
- 3 year warranty

| Part # | Volts | Amps | Banks | L x W x H | Weight |
|---|---|---|---|---|---|
| PRO 31510 | 12/24 | 10 | 2 | 9.2" x 5.7" x 2.4" | 7 lbs |
| PRO 31515 | 12/24/36 | 15 | 3 | 10.5" x 6.5" x 3.0" | 11 lbs |

## Professional Mariner
## ProSport Maintainer



- Concealed mounting holes & die cut foam resting pad for portable use
- Expanded LED display for Power, Charging and Auto Maintain status
- Maintain 12 volt lead acid (sealed & vented) batteries up to 150 amp hours
- Quick connect DC clamp & ring terminal assemblies
- Weatherproof and water resistant to IP65
- Built-in safety with reverse polarity, short circuit, temperature and ignition protection
- Single bank, 1.5 amp output
- Size 5.0" x 5.75" x 1.97"
- 6' cable
- Weight 2.3 lbs

**PRO 44001**

## ProMariner
## DC Cable Extenders



- Colour coded for a quick installation
- Rated to 30 amps
- Dual integrated in-line fuses
- 3/8" ring connectors

**PRO 51805**     5'
**PRO 51815**     15'

ELECTRONICS

## Blue Sea Systems
## P12 Series Battery Chargers

- Four stage, three output, dry mount design
- Rugged, finned aluminum case
- PreFloat stage prevents over charging
- Power factor corrected for efficient use of AC
- Intuitive diagnostic screens
- User defined charge profiles and customizable settings
- Charging for up to three battery banks
- Large, bright display
- Multi-language: English, French, German, Italian, Spanish
- Charge Coordination with Automatic Charging Relays (ACR) controls ACR state ensuring proper float stage for each battery
- Battery Temperature Compensation - adjusts charge voltage based on battery temperature
- AC over and under voltage shut down and automatic restart
- Over and under battery temperature protection
- DC over voltage and reverse polarity protection
- Surge and short circuit protection
- 5 year warranty

**BSS 7531**
**BSS 7532**

|  | **7531** | **7532** |
|---|---|---|
| **Input AC Current:** | 4.5A @ 100V AC 2.25A @ 200V AC | 7.5A @ 100V AC 3.75A @ 200V AC |
| **Total Output Current** | 25A | 40A |
| **Recommended Battery Bank Sizes** | 60Ah Minimum 330Ah Maximum | 60Ah Minimum 440Ah Maximum |
| **Nominal Voltage** | 12V DC | |
| **Ignition Protected** | Yes | |
| **Number of Outputs** | 1 negative, 3 positive | |
| **Universal AC Input Voltage** | 90-265V AC | |
| **AC Input Frequency** | 45-65Hz | |
| **Typical Float Voltage** | 13.5V DC | |
| **Battery Types** | AGM, Flooded Lead Acid, Gel, TPPL | |
| **Size** | H: 13.03 x W: 8.46" x D: 3.66" | |
| **Weight** | 13 lbs | |

## Blue Sea Systems
## Battery Charger LED Remote

### LED Indicators

- Charging LED - Quick check for green light confirms charging
- Charge Stage - Displays charging stage
- Equalize LED - Indicates the charger is currently in equalization mode
- Charge Output - Displays the percentage of output current for each battery. Will also indicate maximum output setting when maximum output is adjusted to accommodate for AC source limitations.
- Alert - Icon LEDs provide warning and alert status for quick diagnostics

### Four Control Buttons

- Fan- User adjustable settings
- Dim/ Alarm - Provides adjustment to brightness of LEDs on display as well as Silence function for alarms.
- Output - User adjustable charger output when AC source limitations exist that require lowering the AC current draw.
- Power - Places P12 Battery Charger into standby mode
- H: 3.01" x W: 4.15" x D: .95"

**BSS 7520**

## Blue Sea Systems
## BatteryLink Chargers

### AC charging at the dock:

- Use AC shore power to charge two isolated battery banks with the 3 Stage battery charging
- Universal AC input: 90-265V AC, 50-60 Hz

### DC charging away from the dock:

- Share the DC power from the alternator with both the Start and the Auxiliary battery through the integrated 65A ACR
- Battery temperature compensation prolongs battery life
- Start isolation protects sensitive electronics
- Snap-on insulating cover
- One-piece stainless flange nuts ensure safe and secure connections
- Includes LED remote indicator for charge status at the helm
- IP 67 waterproof
- 5 year warranty

**BSS 7605**       NA model, NEMA 5-15P plug
**BSS 7606**       International model, bare wire plug
**BSS 7608**       NA Model, NEMA 5-15P plug

|  | **7605** | **7606** | **7608** |
|---|---|---|---|
| **Total Output Current** | 10A | 20A | 20A |
| **Recommended Battery Bank Sizes** | 120Ah Maximum 60Ah Minimum | 170Ah Maximum 60Ah Minimum | 170Ah Maximum 60Ah Minimum |
| **Continuous Rating** | 65A | 170A | 170A |
| **Voltage** | 12 | | |
| **Number of Outputs** | 1 Negative / 2 Positive | | |
| **Battery Types** | AGM, Flooded, TPPL | | |
| **Maximum Battery CCA** | 850 | | |
| **Size** | H: 4.36" x W: 6.66" x D: 2.13" | | |

## Blue Sea Systems
## Mini Add-A-Battery Plus Kit

A complete small boat battery management system. Charge two batteries at or away from the dock.

- For alternators up to 65A
- Includes a Dual Circuit Plus battery switch, a 3 Stage 10 amp charger with an integrated 65A automatic charging relay, and a LED charger remote

### e mSeries Dual Circuit Plus Battery Switch

- Switches two battery banks simultaneously while maintaining battery bank isolation
- Can combine two battery banks
- IP66 - protected against powerful water jets

### BatteryLink Charger

- Total Output Current: 10A
- Recommended battery bank sizes: 120Ah Maximum, 60Ah Minimum
- Continuous Rating: 65A
- Number of Outputs: 1 Negative, 2 Positive
- Battery Types: AGM, Flooded, TPPL
- Maximum Battery CCA: 850
- 12VDC
- Size: H: 4.36" x W: 6.66" x D: 2.13"
- 5 year warranty

**BSS 7655**

## Guest
## Battery Chargers

- All high frequency, digital charging technology
- Fully automatic 5-stage performance charging
- Dedicated battery charging, sensing and control per bank
- Expanded LED charge status monitor
- Wiring and battery fault detection
- Auto-maintain energy saver mode
- 100 percent waterproof (IP67) and shock resistant for all fresh and saltwater applications
- For all 12 volt flooded and AGM lead acid batteries
- Built-in safety: reverse polarity, over-current, over-voltage, over-temperature and ignition protection. In-line fuses for maximum DC wire protection
- 2 year warranty

2720A

2740A

| Part # | Volts | Amps | Banks | L x W x H | Weight lbs |
|--------|-------|------|-------|-----------|------------|
| GUE 2707A | 12/24 | 4/4 | 2 | 7.5" x 2.4" x 9.0" | 4.5 |
| GUE 2708A | 12 | 5 | 1 | 7.5" x 2.4" x 7.2" | 3.2 |
| GUE 2710A | 12 | 10 | 1 | 7.5" x 2.4" x 9.0" | 4.2 |
| GUE 2711A | 12/24 | 5/5 | 2 | 7.5" x 2.4" x 9.0" | 4.7 |
| GUE 2713A | 12/24/36 | 5/5/5 | 3 | 7.5" x 2.4" x 12.9" | 6.7 |
| GUE 2720A | 12/24 | 10/10 | 2 | 7.5" x 2.4" x 12.9" | 6.6 |
| GUE 2731A | 12/24/36 | 10/10/10 | 3 | 9.0" x 4.1" x 8.7" | 8.0 |
| GUE 2740A | 12/24/36/48 | 10/10/10/10 | 4 | 9.0" x 4.1" x 8.7" | 8.5 |

## Guest
## Portable Battery Chargers

- Portable battery charger 6A/12V, 1 bank, 120v input
- One output, six amps per out
- 12V battery system
- Input voltage: 100-130VAC/60hz
- Input connection: 6 ft AC cord with standard plug
- Output voltage: 12VDC per output
- Output connection: 4 ft DC cables with battery clips

**GUE 2606A-B**          6 amp

## Marinco
## Charge Pro PLUS Series Charger

The Charge Pro PLUS system combines a Guest charger with an alternator power module (VSR) to continuously charge the trolling motor or house battery while the engine is running. This system allows energy which is normally wasted on a fully charged cranking (or starting) battery bank to be re-directed to the trolling motor or house battery bank ensuring that all batteries are fully charged.

- Total Amps: 20
- Outputs: 2
- Amps per Out: 10/10
- Battery Systems: 12V
- Dimensions: 8" x 8.9" x 3"
- 2 - year limited warranty
- 9.5 lbs

**MAR 36202-12\*\***
<mark>\*\* Limited Quantity</mark>

## Mastervolt ChargeMaster Battery Chargers

- High frequency switch mode technology makes them extremely efficient, compact and lightweight
- Designed for worldwide marine applications, they offer auto-ranging universal input (90-265Vac, 50/60Hz)
- Use with lead acid, gel, AGM or spiral batteries and will charge up to 3 battery banks simultaneously
- Providing full charging current even with low quality power
- Includes an auxiliary power supply to provide DC voltage even if the batteries are not connected, they can revive a "dead battery" and their built-in memory functions prevent overcharging
- Variable speed fans to adjust to ambient temperatures
- Over-temperature and ignition protected, over current, surge and short circuit protected
- Includes battery temperature sensor with 20' cable
- Two year warranty

| Part # | Total Charge Current | Output Voltage | Battery Capacity | Dimensions H x W x D | Weight lbs |
|--------|---------------------|----------------|------------------|----------------------|------------|
| MSV 44010250 | 25A @13.25V | 12V | 50-250 Ah | 9.2" x 5.2" x 2.4" | 4 |
| MSV 44010350* | 35A @14.4V | 12V | 70-350 Ah | 11.5" x 8.3" x 5.2" | 9 |
| MSV 44010500 | 50A @14.4V | 12V | 100-500 Ah | 11.5" x 8.3" x 5.2" | 9 |
| MSV 44020300 | 30A@28.8V | 24V | 60-300 Ah | 11.5" x 8.3" x 5.2" | 9 |
| MSV 44021000** | 100A @28.8V | 24V | 200-1000 Ah | 17" x 11" x 5.9" | 18 |

<mark>\* Request Item</mark>
<mark>\*\* Limited Quantity</mark>

CE Certified, meet ABYC and UL 1236, ignition protected, EMC FCC Class B

Compatible with Mastervolt's Masterbus CANbus network system where information can be displayed, monitored and controlled from desired locations onboard and remotely from anywhere via SMS technology

## Mastervolt ChargeMaster Plus Battery Chargers

ChargeMaster Plus is the next generation battery chargers that integrates multiple functions into one single device. Replacing auxiliary chargers, battery isolators and VSR, ChargeMaster Plus reduces system complexity and cost. Designed for versatility, it charges virtually any combination of three batteries at high speed and works anywhere in the world.

Features:
- Revival mode automatically revives even fully depleted batteries
- Priority chage redirects available power to the lowest battery, for faster charging
- Multicharger with two outputs, one in/output, DC-DC converter, current limiter and VSR
- Charges Lithium Ion, Gel, and AGM batteries, the 24V models also charge and large or small 12/24V battery banks on a single charger
- Combine Lithium Ion, Gel, or AGM, and large or small battery
- Charges multiple batteries while being underway
- Extended specifications: offers 20% more output at 14.4V and 80% charging power at 60°C
- Safe Charge: quickly recognize the State of Charge for extended battery life
- Very wide operating range of 80-275V AC, 35-70 Hz
- Compact, easy to connect and quick to install

ChargeMaster Plus is CE, E-mark, ABYC, UL, SAE, CEC and RCM/C-Tick compliant

In modern applications, all components work together. CAN-based MasterBus enables the charger to communicate with displays, shunts and power systems including communication standards like CZone, NMEA and CANopen.

| Part # | Total Charge Current | Output Voltage | Battery Capacity | Dimensions H x W x D | Weight lbs |
|---|---|---|---|---|---|
| MSV 44310755 | 75 A @ 14.4 V | 12V | 320-800 Ah | 15.1" x 9.8" x 5" | 13 |
| MSV 44311005 | 100 A @ 14.4 V | 12V | 400-1000 Ah | 15.1" x 9.8" x 5" | 13 |
| MSV 44320405 | 40 A @ 28.8 V | 24V | 160-400 Ah | 15.1" x 9.8" x 5" | 13 |
| MSV 44320605 | 60 A @ 28.8 V | 24V | 200-500 Ah | 15.1" x 9.8" x 5" | 13 |
| MSV 44321105 | 110 A @ 28.8 V | 24V | 400-1000 Ah | 15.1" x 9.8" x 5" | 13.9 |

## Newmar Battery Chargers

- "Smart" circuitry provides three stage charging - bulk, absorption, float
- Gel-Cell/Flooded Lead-acid/AGM battery type switch selects optimum charge/float voltages
- Multiple isolated output banks; ammeter indicates total output current. (Except PT-7)
- Optional sensor adjusts output voltage based on battery temperature. (Except PT-7)
- Current limiting-prevents damage from overloading
- Clean well regulated output can be used as a power supply; can power loads directly without a battery in line
- Built to last - rugged stainless steel case with a durable white powder coat finish with an optional drip shield and marinized internal circuitry
- Protection: Current Limiting, Thermal Protection, Forced Air Cooling, Drip Shield
- ABS type approval for battery charging and power supplies
- Two year parts and labor warranty

| Ref | Height x Width x Depth (mm) |
|---|---|
| A-1 | 10.5"(26.7) x 5.0"(12.7) x 2.8"(7.1) |
| A-2 | 12.5"(31.8) x 7.7"(19.6) x 4.3"(10.9) |
| A-3 | 14.1"(39.4) x 9.5"(24.1) x 4.0"(12.7) |
| A-4 | 15.5"(39.4 x 9.7"(24.6) x 5.0"(12.7) |
| A-5 | 16.7"(42.4) x 9.8"(24.9) x 6.7"(17.0) |

| Part # | Volts | Input VAC | Input Amps @115V | Max. Output Amps @115V | Output Banks | Battery Capacity (amp hours) | Case Size | Weight lbs |
|---|---|---|---|---|---|---|---|---|
| NEW PT-7 | 12 | 88-132 or 76-264 | 2 | 7 | 2 | 14-70 | A-1 | 3.2 |
| NEW PT-14W | 12 | 85-264 | 2.8 | 14 | 3 | 28-140 | A-2 | 8 |
| NEW PT-25W | 12 | 90-132 / 80-254 | 6.5 | 25 | 3 | 50-250 | A-2 | 8.2 |
| NEW PT-40U | 12 | 85-132 / 90-264 | 8.5 | 40 | 3 | 80-400 | A-3 | 12 |
| NEW PT-80 | 12 | 90-264 | 12 | 80 | 3 | 160-800 | A-4 | 15.2 |
| NEW PT-24-8W | 24 | 85-264 | 2.8 | 8 | 3 | 16-80 | A-1 | 8 |
| NEW PT-24-13W | 24 | 90-132 / 180-264 | 6.5 | 13 | 3 | 26-130 | A-1 | 8.2 |
| NEW PT-24-20U | 24 | 85-135 / 170-270 | 8.5 | 20 | 3 | 40-200 | A-2 | 12 |
| NEW PT-24-45U | 24 | 90-264 | 12 | 45 | 3 | 90-450 | A-4 | 12.2 |
| NEW PT-24-95U* | 24 | 90-264 | 26 | 95 | 3 | 180-950 | A-5 | 24.5 |

* Request Item

## Newmar Remote Indicator Panel

- LED's indicate charger output stage
- Button allows manual re-initialization of three stage charge cycle
- Supplied with 25' cable and plug-in connector. (All models except PT-7)

**NEW RP**          3" H x 4.75" W

## Newmar Temperature Sensor

- 5 mV per cell per °C. Sensor supplied with 25' cable and plug-in connector.

**NEW TCS-12/24-25**

ELECTRONICS

709-3024-01

708-0150

781-0110

## Xantrex
## Solar Semi-Flex Panel

Semi-flexible solar panel with 5 busbars and PERC (Passivated Emitter and Rear Contact) mono-crystalline cells, a special cell technology that increases module efficiency significantly over standard solar cells. Designed with a highly protective top-layer called ETFE (Ethylene-Tetra-Fluoro-Ethylene), this allows for better light transmittance, corrosion resistance, stain-resistance, weather resistance, and overall superior durability over a wide temperature range, compared to non-ETFE semi-flexible panels.
- 110W solar panel
- Cable clamps and tie wraps are included
- 39.2" x 26.4" x .12"

**XAN 781-0110**

### Cable and Battery Harness Install Kit

- Weather resistant and certified cables to connect the solar panel to the charge controller and from the charge controller to the battery. The PV cables and battery cables, with a built-in fuse and ring terminals, built-in ferrule terminations for quick connections to the charge controller

**XAN 708-0150**

### Solar Charge Controller 30

- 30A Pulse-Width Modulation (PWM) flush-mounted charge controller is provided to charge and protect your batteries. Featuring an LCD screen, multi-stage battery charging, charging protections, two USB ports and real-time system indicators
- 7.3" x 4" x 2.4"

**XAN 709-3024-01***
  * Request Item

## Xantrex
## Expansion Kit

Includes 110W solar panel, mounting hardware and a pair of male and female branch connectors to connect solar panels in parallel.

**XAN 781-0100-02****     Expansion Kit for 781-0100-01
  * Limited Quantity

---



## Samlex
## Portable Solar Solar Panel

Just unfold, plug in and start charging: no complicated installations, brackets or electrical diagrams.
- Solar panel is pre-wired with battery clamps for a quick and easy connection, 16' cable
- Turn a few times per day and increase charging by 30%
- Adjustable legs allow for maximum sun exposure
- Folding panels in anodized aluminum frames, won't rust
- Built-in 10 Amp Charge Controller manages the charge to the battery and prevents overcharging
- Automatically detects 12 or 24V battery(s), for use with all battery types
- Open: 36.2" x 26.4" x 1.4"
- Folded: 18.1" x 26.4" x 2.8"
Kit Includes:
3 x 30W Solar Modules
10 Amp Charge Controller
Protective carrying case

**SMX MSK-90**

---



## Samlex
## Battery Maintainer

- Prevents back flow of current from the battery to the panel
- Direct charging - no need for additional Charge Controller
- Semi-flexible panel construction
- Rugged, weather-proof design
- 10ft cable
- 1ft cable with 12V power plug
- 1ft cable with ring terminals for battery
- 12" x 15" x .53"

**SMX SC-10**

**Best Customer Service in the Industry**

- Fast delivery backed by extensive inventory in multiple strategically located warehouses
- Pre-sales application specific product selection assistance
- Post sales installation and troubleshooting guidance
- Fully context aware of industry applications in our markets
- Technically competent customer service staff
- ISO9000 Certified
- Minimum 2 year warranty

## Samlex
## PST Series Pure Sine Inverters

- Silent Operation - temperature controlled fan reduces energy consumption
- Extremely low interference with other devices
- GFCI protected outlets
- 1500 and 2000W models can be hard-wired
- Input: 12 or 24VDC, Output: 120 VAC
- Low idle power draw
- Commercial grade design suitable for heavy duty loads, long periods of continuous operation & for emergency back up
- Wide operating DC input range compatible with new high voltage alternators
- Universal Protection Circuit: low voltage, over voltage, over temperature, over load and short circuit
- Optional remote controls available for select models

| Part # | Watts | Dimensions (WxDxH) | Weight |
|---|---|---|---|
| SMX PST-300-12 | 300 | 9.69" x 6.1" x 2.58" | 3.46 lbs |
| SMX PST-600-12 | 600 | 10.87" x 9.37" x 3.23" | 5.9 lbs |
| SMX PST-1000-12 | 1000 | 15.63" x 9.37" x 3.23" | 8.8 lbs |
| SMX PST-1000-24 | 1000 | 15.63" x 9.37" x 3.23" | 8.8 lbs |
| SMX PST-1500-12 | 1500 | 18.43" x 10.35" x 4.16" | 15.6 lbs |
| SMX PST-2000-12 | 2000 | 18.43" x 10.35" x 4.16" | 15.6 lbs |

## Samlex
## PST Series Remote

- For use with PST-600 & PST-1000
- Remote push button on/off
- LED indicators for overload, over temperature and power 15' of cable
- 3.5" x 2.52" x 1.1"

**SMX RC-15A**

## Samlex PST Remote

- LCD panel remote control for use with PST-1500-12/24/48, PST-2000-12/24, PST-3000-12/24 and PST-300S-12E/24E inverters
- LCD displays AC Volts, AC Amps, frequency, power (watts), and power factor
- Indicators for overload, over temperature and power
- Includes 25' cable
- 4.33" x 2.56" x 0.97"

**SMX RC-300**

## Samlex SSW Series Pure Sine Inverters

- High surge, 2x continuous operating power
- Soft start technology - the unit ramps up gradually, putting less strain on the inverter and the load
- Compact and lightweight
- Universal circuit protection: thermal, battery, overload, short circuit, earth fault
- 350W and 600W units have a USB charging port
- 1000W, 1500W, and 2000W models include an LCD ON/OFF remote control

SSW-1500-12A

| Part # | Watts | Dimensions | Weight |
|---|---|---|---|
| SMX SSW-350-12A | 350 | 7.87" x 6.1" x 2.24" | 1.5 lbs |
| SMX SSW-600-12A | 600 | 9.06" x 6.1" x 2.24" | 2.0 lbs |
| SMX SSW-1000-12A | 1000 | 10.43" x 8.74" x 3.46" | 5.7 lbs |
| SMX SSW-1500-12A | 1500 | 12.2" x 8.74" x 3.46" | 7.1 lbs |
| SMX SSW-2000-12A | 2000 | 12.2" x 8.74" x 3.46" | 8.4 lbs |

## Samlex PSE Series Modified Sine Inverter

- Switching mode design
- High efficiency
- Modified sine wave output voltage
- 12VDC input and 120 VAC output
- Overload protection
- High output current surge
- Low battery alarm / shut down
- Front-end LED display indicates battery voltage and output power levels
- Low idle power draw of less than 0.05 Amps
- Compact and light weight
- One output receptacle
- Configuration also enables hardwiring to multi-outlets

| Part # | Watts | Dimensions | Weight |
|---|---|---|---|
| SMX PSE-1227-5A | 2750 | 8.07" x 19.49" x 6.3 | 16.2 lbs |

## Samlex
## PSE Series On/Off Remote

- Power ON/OFF
- 2" x 2.5" x 1"

**SMX RC-15**

## Samlex
## Modified Sine Inverter

- 100 watt modified sine wave Inverter
- Low interference, high efficiency modified sine wave DC-AC inverter
- Convert 12VDC to 115 VAC at an output frequency of 60 Hz
- Connect through any 12V lighter socket in your car, boat, truck or RV
- Protection: low battery, over temperature, over voltage, overload, short circuit, earth fault
- Includes one three prong outlet and a USB charging port (5VDC, 500 mA)
- LED indicator for power status
- ETL Safety Listed

**SMX SAM-100-12**

## Samlex
### SAM Series Modified Sine Inverters

- Models 250W to 800W include a USB charging port (5VDC, 500 mA)
- Compact design
- Cigar lighter plug and battery clamps included (250W, 450W and 800W only)
- Load controlled cooling fan
- Low battery input alarm
- Universal protection circuit: thermal, battery, overload, short circuit, earth fault
- Soft start technology
- Cool surface technology
- Low interference technology

| Part # | Watts | Dimensions | Weight |
|--------|-------|------------|--------|
| **SMX SAM-250-12** | 250 | 5.9" x 4.5" x 1.8" | 0.9 |
| **SMX SAM-450-12** | 450 | 5.9" x 6.1" x 2.2" | 1.2 |
| **SMX SAM-800-12** | 800 | 8.6" x 7.1" x 2.3" | 2.9 |
| **SMX SAM-1000-12** | 1000 | 9.8" x 7.1" x 2.3" | 3.7 |
| **SMX SAM-1500-12** | 1500 | 11.1" x 8.0" x 3.3" | 7.0 |
| **SMX SAM-2000-12** | 2000 | 13.6" x 8.0" x 3.30" | 8.5 |
| **SMX SAM-3000-12** | 3000 | 16.5" x 8.0" x 3.30" | 12.1 |

## Samlex
### SAM Series Remote

- Power ON/OFF
- 10' cable with RJ45 connector
- Bar meter monitor for battery charge level and output power
- LED indicator lights for: over & under voltage protection, over temperature protection and overload protection
- 4.5" x 2.6"

**SMX SAM-RC**

## Samlex
### Inverter Installation Kits

Kit contains a pair of heavy duty gauge cables and a fuse assembly that is used to connect the inverter to the battery bank. The fuse protects your equipment in the event of a battery short-circuit and the cables provide a safe and easy plug and play connection.
- High strand count, annealed copper conductors

| Part # | Inverter | Cable | Fuse |
|--------|----------|-------|------|
| **SMX DC-1000-KIT** | 12V, 600-1000 W<br>24V, 600-2000 W | AWG #4 | 100 amp |
| **SMX DC-2000-KIT** | 12V, 1000-2000 W<br>24V, 2000-3000 W | AWG #2 | 200 amp |

## Xantrex
### Freedom X Inverters

- Extended Surge Rating: Surges to 2X continuous power for 2 seconds for motor loads
- True Sine Wave AC Power: For operation of sensitive and motor loads
- Ignition Control: Feature to turn inverter on/off via a 12 VDC signal and to minimize battery drain by switching the inverter off when the ignition key is turned off
- Wide 10-18 VDC Input Range: Ensures inverter operation on high voltage alternators found on many new vehicle chassis
- Built-in 30A AC Transfer Relay: Senses when outside AC Power is present and transfers the load from the inverter to the source of incoming power (shore or generator). The unit also automatically switches from invert mode to charge mode
- Quick Installation: Huge wiring bay for easy access and quick connect AC in/out terminals for fast & easy wiring
- Two year warranty

| Part # | Watts | Continuous Current | L x W x H | Weight lbs |
|--------|-------|--------------------|-----------|------------|
| **XAN 817-1000** | 1000 | 8.4 amps | 13.4" x 9.1" x 3.7" | 11.5 |
| **XAN 817-2000** | 2000 | 16.7 amps | 14.6" x 10.8" x 3.9" | 14.7 |
| **XAN 817-3000** | 3000 | 25 amps | 15.4" x 10.8" x 4.0" | 16.5 |

## Samlex
### Modified Sine Inverter/Charger

- Integrated 1500W modified sine wave inverter, 30A transfer switch, and 2 stage 12VDC, 15A battery charger
- High efficiency, lightweight, and compact for easy installation
- Separate ON/OFF control for inverter and battery charger for selectable operation as inverter, charger or UPS function
- 4 colour LED indicators to monitor operational status
- Load controlled fan for efficient cooling when required
- Allows use of higher capacity external 12V battery bank for longer backup time
- Neutral to ground bond switching relay for grounding compliance
- Electronic protections including GFCI when in inverter mode
- 7.95" x 13.58" x 3.30"
- 8.82 lb

**SMX SAM-1500C-12**

## Samlex EVO Pure Sine Inverter/Chargers

Pure sine wave inverter, adaptive battery charger and transfer relay
- Intelligently integrates a 4 stage battery charger and a transfer relay
- Operates at 165 million instructions per second with lightening fast load & response times, has 9 points of physical protection monitoring (being scanned up to 10,000 times per second) to detect fault conditions & protect itself in a vast range of adverse environments
- 12VDC input, 120 VAC output, 50/60 Hz
- 12.79" x 16.77" x 8.15"

*EVO-RC remote control sold separately

| Part # | Inverter Watts | Charger Amps | Relay amps | Weight |
|---|---|---|---|---|
| **SMX EVO-2212** | 2200 | 100 | 40 | 60 lbs |
| **SMX EVO-3012** | 3000 | 135 | 70 | 64 lbs |

## Samlex EVO Remote

Designed specifically for use with the EVO series of inverter/chargers.
View real-time activity on the 32 character LDC screen while the unit is operating: output voltage, frequency, amps, watts, volt amps, power factor, battery voltage, battery current, solar input current.
Use the remote to program inverter and battery charging parameters. Save a parameter set on a removable SD Card. Transfer saved parameters to other EVO inverter/chargers or insert the SD card into a computer and make parameter adjustments there.
Data log historic power consumption, inverter functionality, battery charging activity, faults and all of the conditions leading up to them. Analyze trends for more efficient use of off-grid resources.
- 5.6" x 4.5" x 1.4"

**SMX EVO-RC**

## Samlex EVO F Series Pure Sine Inverter/Chargers

- Pure sine wave inverters
- 6 programmable charging profiles – 2, 3 and 4 stages with equalization
- Use lead acid or Lithium batteries
- Adaptive battery charging option for lead acid batteries: Algorithm monitoring in the Bulk Stage assesses the battery's condition. The remaining charging stages are based on the battery's condition rather than a pre-set charging time.
- Synchronized transfer: Zero transfer time when switching from inverter to AC input source.
- High surge inverter
- Active power boost
- Input for solar charge controller
- Bullet proof intelligence
- Temperature controlled cooling
- Programmable power save mode (using optional EVO-RC-Plus)
- Inverter Watts: 1200
- Charger Amps: 60 ADC
- Relay Amps: 30
- Dimensions: W: 12.76" x D: 16.34" x H: 5.83"
- Weight: 38.8 lbs

**SMX EVO-1212F-HW**     12VDC
**SMX EVO-1224F-HW***     24VDC
<mark>* Request Item</mark>

## Samlex EVO F Series Remote

- Advanced features for programming various parameters and modes of operation
- 4 rows of 20 character alpha numeric LCD display for messaging
- Up to 16 GB SD card slot for data logging
- Comes with 10m / 33ft RJ-45 data cable
- 5.6" x 4.5" x 1.4"

**SMX EVO-RC-PLUS**

## Xantrex Freedom 12V XC Inverter/Chargers

**Inverter Features**
- Extended Surge Rating: Surges to 2X continuous power for 2 seconds for motor loads
- True Sine Wave AC Power: For operation of sensitive and motor loads
- Ignition Control: Feature to turn inverter on/off via a 12 VDC signal and to minimize battery drain by switching the inverter off when the ignition key is turned off
- Wide 10-18 VDC Input Range: Ensures inverter operation on high voltage alternators found on many new vehicle chassis
- Built-in 30A AC Transfer Relay: Senses when outside AC Power is present and transfers the load from the inverter to the source of incoming power (shore or generator). The unit also automatically switches from invert mode to charge mode
- Quick Installation: Huge wiring bay for easy access and quick connect AC in/out terminals for fast & easy wiring

**Charger Features**
- Power Factor Corrected Multi-Stage Charging: Utilizes less shorepower when charging batteries. This frees up more usable AC power for running electrical devices and appliances and reduces the likelihood of tripping shorepower breakers
- Programmable: Configurable 3 stage temperature compensated battery charge algorithm for optimal charging of almost any battery type up to 18V
- Battery Equalization: Maximizes flooded battery life
- Dead Battery Charging Down to 0 VDC
- Power Share: Prioritizes AC loads by reducing the charge current and maintaining the total input current to less than the breaker setting
- Two year warranty

| Part # | Inverter Output | Charger Output | L x W x H | Lbs |
|---|---|---|---|---|
| **XAN 817-1050** | 1000 W | 50 A | 14.2" x 10.6" x 3.7" | 13.4 |
| **XAN 817-2080** | 2000 W | 80 A | 15.4" x 10.8" x 4.0" | 16.3 |

Accessories:
**XAN 808-9817**     GFCI 20 A plug kit

## Xantrex X/XC Remote Panel

- The Xantrex remote panel for the Freedom X inverters and Freedom XC inverter/chargers features a LED screen, LED indicator lights and function buttons for easy operation
- Monitor AC IN/OUT voltage/current, battery voltage/current, percentage status bar for inverter AC output and fault & error codes
- Includes a 25-ft. 6-conductor com cable kit
- 5.5" x 2.7" x 1.5"

**XAN 808-0817-01**
**XAN 808-0817-02**     With Bluetooth output for FXC App

## Xantrex Freedom XC PRO
## 12V Inverter/Chargers

NEW

### Inverter Features

▪ Extended Surge Rating: Surges to 2X continuous power for 5 seconds for motor loads
▪ True Sine Wave AC Power: For operation of sensitive and motor loads
▪ Ignition Control: Feature to turn inverter on/off via a 12 VDC signal and to minimize battery drain by switching the inverter off when the ignition key is turned off
▪ Wide 10-18 VDC Input Range: Ensures inverter operation on high voltage alternators found on many new vehicle chassis
▪ Programmable AC Under-Voltage (85-110VAC) Shutdown: Ideal to operate under weak shore power or generator input
▪ Built-in 50A AC Transfer Relay: Senses when outside AC Power is present and transfers the load from the inverter to the source of incoming power
▪ Quick Installation: Huge wiring bay for easy access and quick connect AC in/out terminals for fast & easy wiring

### Charger Features

▪ Power Factor Corrected Multi-Stage: Utilizes less shorepower when charging batteries. This frees up more usable AC power for running electrical devices and appliances and reduces the likelihood of tripping shorepower breakers
▪ Programmable: Configurable 3 stage temperature compensated battery charge algorithm for optimal charging of almost any battery type up to 18V
▪ Battery Equalization: Maximizes flooded battery life
▪ Dead Battery Charging Down to 0 VDC
▪ Power Share: Prioritizes AC loads by reducing the charge current and maintaining the total input current to less than the breaker setting
▪ Lithium-Ion/Battery Support: BMS required
▪ Two year warranty

| Part # | Inverter Output | Charger Output | L x W x H | Lbs |
|---|---|---|---|---|
| XAN 818-2015* | 2000 W | 100A | 15.4" x 10.8" x 4.9" | 17.1 |
| XAN 818-3015* | 3000 W | 150A | 15.4" x 10.8" x 4.0" | 18.6 |

*Request Item*

## Xantrex
## Freedom SW Inverter/Chargers

▪ Pure sine wave output to operate sensitive electronics
▪ Advanced configuration options for customized applications*
▪ Parallel and series stacking capability
▪ Built-in transfer switch automatically transfers between inverter power and incoming AC power
▪ Power factor corrected, multi-stage charger
▪ Temperature compensated charging
▪ Ignition lockout feature helps prevent unnecessary battery drain when the alternator is not providing power*
▪ Operating temperature range: -4°F to 140°F (-20°C to 60°C)
▪ Conformal coated circuit boards for humid environments
▪ Dual input / Dual output AC interface for 3000 W model
▪ Ability to charge batteries drained to extremely low voltage
▪ Compatible with the Xantrex Automatic Generator Start** (Part# 809-0915)
▪ Battery over-voltage and under-voltage protection
▪ Over-temperature shutdown
▪ Automatic overload protection
▪ Short-circuit protection
▪ Integrated, resettable AC breakers
▪ 15.25" x 13.5" x 7.75"
▪ Two year warranty
* When used with the remote panel
** Sold separately

| Part # | Volts | Inverter Output | Charger Output | Weight lbs |
|---|---|---|---|---|
| XAN 815-2012 | 12 | 2000 W | 100 A | 60.5 |
| XAN 815-2024 | 24 | 2000 W | 50 A | 66.0 |
| XAN 815-3012 | 12 | 3000 W | 150 A | 77.0 |

## Xantrex System Control Panel

NEW

▪ Works with the Freedom SW 2012 and 3012
▪ Easy-to-use interface of a Xanbus-enabled power management system
▪ 6" x 4" x 1.5625"

**XAN 809-0921**

## Mastervolt CombiMaster Inverter/Chargers

With the CombiMaster, power dips and failures belong to the past. The automatic AC transfer system switches between generator or mains and inverter output, ensuring a constant power supply. Its Power Assist function prevents tripping of the mains fuse in case you're connected to a weak land line or small generator.

The CombiMaster comes with MasterBus, CZone and NMEA 2000 compatible communication, allowing for a broad range of monitoring and system integration options.

▪ Most compact and lightweight Combi in its class.
▪ Reliable, hum-free and longer operation from your batteries.
▪ Starts even the heaviest and most sensitive loads.
▪ Intelligent 3-step+ battery charger for faster and safer charging.
▪ Automatic switching between mains and inverter mode.
▪ Power Assist prevents blown mains fuses.
▪ Generator compatible.
▪ Integrated CZone*, MasterBus and NMEA 2000 communication.
▪ Quick installation with heavy duty connections.
▪ E-mark certified.
▪ Two year warranty

| Part # | AC Output Voltage | Continuous Power | Surge Capability | DC Charger Output | Weight lbs | H x W x D |
|---|---|---|---|---|---|---|
| MSV 35512000 | 120 | 2000W | 4000W | 12V / 17A | 20.5 | 17.6" x 11.2" x 6.1" |
| MSV 35513000 | 120 | 2600W | 6000W | 12V / 28A | 20.5 | 17.6" x 11.2" x 6.1" |
| MSV 35522000 | 120 | 2000W | 4000W | 24V / 21A | 20.5 | 17.6" x 11.2" x 6.1" |
| MSV 35523000 | 120 | 2600W | 6000W | 24V / 25A | 20.5 | 17.6" x 11.2" x 6.1" |

ELECTRONICS

## Magnum MS-PAE Series - *Renewable Energy* Pure Sine Wave Inverter/Chargers

The MS-PAE Series Inverter/Charger from Magnum Energy is a pure sinewave inverter designed specifically for the most demanding renewable energy applications. The unique design of the MS-PAE Series can provide 120 and 240 volts AC output in one unit, eliminating the need to stack two units together to get 240 volts. ETL listed to the stringent requirements of UL 1741 and CSA C22.2 No. 107.1-01 for renewable energy installations.

- Up to four MS-PAE Series inverters can be connected together in a parallel configuration, increasing overall inverter power and surge capacity
- Power Factor Corrected (PFC) Charger: – using 25-30% less AC current than standard chargers
- Comes with an on/off inverter mounted switch with an easy-to read LED indicator
- 13.75" H x 12.65" W x 8" D
- Weight: 55 lbs
- 3 year warranty

**Transfer relay capability:** 2 legs at 30A per leg transfer standard on all models
**Five stage charging capability:** Bulk, Absorb, Float, Equalize (requires remote), and Battery Saver
**Battery temperature compensation:** With available temp sensor
**Internal cooling:** 0 to 120 cfm variable speed drive using dual 92mm brushless DC fans
**Overcurrent protection:** Yes, with two overlapping circuits
**Overtemperature protection:** Yes on transformer, MOSFETS, and battery

| Part # | Charger Output | Inverter Battery Input | Inverter Output |
|---|---|---|---|
| **MAG MS4024PAE** | 105 amp | 18 - 34VDC | 4000 VA |
| **MAG MS4448PAE*** | 60 amp | 36 - 68VDC | 4400 VA |

**\* Request Item**

Accessories:
**MAG ME-ARC50**     Remote

► *Note*     **Not suitable for marine use except in certain situations**

## Magnum MM & MMS Series Inverter/Chargers

Units use a PFC (Power Factor Corrected) charger, which is 85% efficient and the same charger topology used in all Magnum models. ETL listed to the stringent requirements of UL/cUL 458, CSA C22.2 #107.1-01 and meets the KKK-A-822E standard. AC power to continue to pass-thru to power loads even if the inverter is off.

- Dead battery charging allows charging of batteries that are extremely low
- Automatic, 4-stage battery charger with power factor correction
- Inverter/charger has a 12 amp AC transfer relay
- The AC input and output are provided with pigtail wires to allow hard wiring to a main AC distribution panel or inverter sub-panel
- Neutral-to-ground switching
- Includes 15' battery temperature sensor
- Dimensions L: 16.6" x W: 8.4" x H: 4.7"
- Two year warranty

### MM Modified Sine Wave

**Inverter**
- Input battery voltage: 9-15.5VDC
- Rated input battery current 160 ADC

**Charger**
- Continuous output at 25° C 70 ADC

| Part # | Charger Output | Inverter Output | Weight |
|---|---|---|---|
| **MAG MM1212** | 70 ADC | 1200 VA | 20 lbs |

Accessories:
**MAG MM RC25**     Remote

### MMS Pure Sine Wave

**Inverter**
- Input battery voltage: 9-17VDC
- Rated input battery current 133 ADC

**Charger**
- Continuous output at 25° C 50 ADC

| Part # | Charger Output | Inverter Output | Weight |
|---|---|---|---|
| **MAG MMS1012** | 50 amp | 1000 VA | 23 lbs |

Accessories:
**MAG MM RC25**     Remote

## Magnum
### ME Series Inverter/Chargers

The power corrected charger efficiently charges your batteries even at low AC voltage, while the modified sine wave inverter keeps the cost down. Additionally, the battery temperature sensor works with the charger for optimum battery charging.

Power Factor Corrected (PFC) Charger: It uses less energy from a generator than a standard charger – using only 15 amps per 100 amps versus 23 amps used by standard chargers.

- ETL Listed to the requirements of UL/cUL 458
- Designed with Flash programming for memory upgrades
- Mount on a shelf, bulkhead, or even upside down
- Aluminum base and cover
- Multiple ports, including an RS485 communication port for network expansion, and a remote port
- Comes with an on/off inverter-mounted switch with an easy-to-read LED indicator
- Expanded transfer relay: 50 amp transfer service
- Extra large AC access cover with terminal screw block and 360° DC connection terminals with covers
- All boards can be replaced in the field
- Five stage charging including bulk, absorb, float, equalize, and battery saver
- Inverter Battery Input: 9 - 17VDC
- 13.75" H x 12.65" W x 8" D
- Three year warranty

**Transfer relay capability:** 2 legs at 30 A for 120 V/30 A or 240 V/60 A service
**Five stage charging capability:** Bulk, Absorb, Float, Equalize and Battery Saver™
**Battery temperature compensation:** With optional Temp Sensor
Internal cooling 0 to 120 cfm variable speed drive using dual 92mm brushless DC fans
**Overcurrent protection:** Yes, with two overlapping circuits
**Overtemperature protection:** Yes on transformer, MOSFETS, and battery

| Part # | Charger Output | Inverter Output | Weight |
|--------|---------------|-----------------|--------|
| MAG ME2012 | 100 amp | 2000 VA | 38 lbs |
| MAG ME2512 | 120 amp | 2500 VA | 42 lbs |
| MAG ME3112 | 160 amp | 3100 VA | 45 lbs |

Accessories:
**MAG ME-RC50**          Remote

## Magnum
### MS Series Pure Sine Wave Inverter/Chargers

The power factor corrected charger efficiently charges your batteries even at low AC voltage. The Pure Sine Wave inverter will power your T.V.s, stereos, plasma screens, and other sensitive electronics without worry. The pure sine wave inverter and power factor corrected charger provide clean, reliable inverter power with low total harmonic distortion (THD) of less than 5%.

- ETL Listed to the requirements of UL/cUL 458
- Designed with Flash programming for memory upgrades
- Mount on a shelf, bulkhead, or even upside down
- Aluminum base and cover
- Multiple ports, including an RS485 communication port for network expansion, and a remote port
- Comes with an on/off inverter-mounted switch with an easy-to-read LED indicator
- Extra large AC access cover with terminal screw block and 360° DC connection terminals with covers
- All boards can be replaced in the field
- 13.75" H x 12.65" W x 8" D
- Three year warranty

**Transfer relay capability:** 2 legs at 30 A for 120 V/30 A or 240 V/60 A service
**Five stage charging capability:** Bulk, Absorb, Float, Equalize (requires remote), and Battery Saver™
**Battery temperature compensation:** Yes, 15 ft Battery Temp Sensor standard
**Remote available (optional):** Yes, MM-RC or ME-RC
**Internal cooling:** 0 to 120 cfm variable speed drive using dual 92mm brushless DC fans
**Overcurrent protection:** Yes, with two overlapping circuits
**Overtemperature protection:** Yes on transformer, MOSFETS, and battery

| Part # | Charger Output | Inverter Battery Input | Inverter Output | Weight |
|--------|---------------|------------------------|-----------------|--------|
| MAG MS2012-L-U | 100 amp | 9 - 17VDC | 2000 VA | 42 lbs |
| MAG MS2024 | 60 amp | 18 - 34VDC | 2000 VA | 41 lbs |
| MAG MS2812-L-U | 125 amp | 9 - 17VDC | 2800 VA | 55 lbs |
| MAG MS4024-L-U | 105 amp | 18 - 34VDC | 4000 VA | 55 lbs |

Accessories:
This stacking interface is designed to allow two MS4024's to be connected together to run 120 and 240 VAC appliances with ease.

**MAG ME SSI**          Interface kit
**MAG ME-RC50**          Remote

## Magnum
## MSH Hybrid Series Pure Sine Inverter/Chargers

Why is the MSH-M Series a "Hybrid"? Most inverters only use one source of energy to power the inverter loads - either from the incoming AC power (i.e., shorepower or generator) or from the batteries. The MSH-M Series combines the energy from both the AC input and the batteries to power the inverter loads. This feature gives the inverter the ability to recharge the battery when there is surplus power, or to deliver more power to the loads if they require more than the AC input can supply by itself.

- 120 VAC / 60 Hz output
- 60 amp AC input and pass-thru capability
- Load Support parallels the inverter output with incoming AC sources allowing it to run larger loads from smaller generators
- Works with any Magnum accessory, including the AGS, remotes, and the Magnum router
- 13.75" H x 12.65" W x 8" D
- Weight: 55 lbs
- Three year warranty

**Transfer relay capability:** 60 AAC
**Five stage charging capability:** Bulk, Absorb, Float, Equalize (requires remote), and Battery Saver™
**Battery temperature compensation:** Yes, 15 ft Battery Temp Sensor standard
**Remote available (optional):** Yes, ME-ARC-50 or ME-RC (with latest revision)
**Internal cooling:** 0 to 120 cfm variable speed drive using dual 92mm brushless DC fans
**Overcurrent protection:** Yes, with two overlapping circuits
**Overtemperature protection:** Yes on transformer, MOSFETS, and battery

| Part # | Charger Output | Inverter Battery Input | Inverter Output |
|--------|----------------|------------------------|-----------------|
| **MAG MSH3012M-L** | 125 amps | 9 - 17VDC | 3000 VA |
| **MAG MSH4024M-L** | 110 amps | 18 - 34VDC | 4000 VA |

Accessories:
**MAG ME-ARC50**     Remote

## Magnum Charger Hood

Designed to prevent objects from falling inside the top vents of an inverter. Normally, inverters are mounted horizontally without any vents facing the top or bottom. However, in installations where these inverters are mounted on a vertical surface (DC side down) - such as on a MMP or MP enclosure - the MP-HOOD must be mounted above the inverter to meet UL regulatory requirements

- Steel, white powder-coated construction
- W: 14.45" x D: 8.06"

**MAG MP-HOOD**

## Magnum Backing Plate

A single-piece, backplate designed to accommodate the MMP enclosure, a Magnum inverter, and the inverter hood together; making the complete system appear more seamless. This backplate also provides the necessary requirement to provide a noncombustible mounting surface required when mounting the inverter on a wall. Designed with PEM (i.e. internally threaded) nuts, the backplate is shipped with ten 1/4"-20 x 3/4" hex head bolts for mounting the MMP enclosure, a Magnum inverter, and the inverter hood

Shown in use

- Steel, white powder-coated construction
- W: 16.75" x D: 34.185"

**MAG BP-MMP**

## Magnum
## Conduit Box

The ME-CB Conduit Box fits on the front side of the Magnum ME, MS, MS-PAE and RD Series inverters. This conduit box accommodates installations where the electrical code requires the AC and/or DC wiring to be enclosed and protected by conduit. This enclosure provides knockouts for use with 1/2", 3/4", 1" and 2" trade size conduit and adds just over 5" (13 cm) to the length of the inverter.

- Steel, white powder-coated construction
- H: 6" x W: 10-1/4" x D: 5-1/4"

**MAG ME CB**

## Magnum ME 300F & ME 400F Fuse Kits

The Magnum Energy fuse block is designed to provide code compliant over-current protection. It uses a fast acting, current limiting class-T fuse cartridge which provides instantaneous protection in the event of a short circuit but also employs a time delay to allow momentary current surges common in inverter applications. Rugged injection molded polycarbonate base and thermoformed ABS cover.

**MAG ME-300F**     300 amp
**MAG ME-400F**     400 amp

## Magnum Battery Temperature Sensor

- With 15' cable

**MAG ME-BTS-15**     Kit

## Magnum Remote

The MM-RC25 remote control is designed to be simple to install and use. It allows easy on/off control and provides a quick indication of the inverter and charger operation. This remote is for the MM and MMS Series that include the battery charger; such as the MM612AE, MM1212, MM1212AE and MMS1012 models. This remote can also be used with the ME, MS, MS-AE, MS-E, RD and RD-E Series inverter/chargers; provided they do not require any inverter or charger programming changes.

- Cut out: 1-1/2" x 2"
- Panel: 2" x 3"
- 25' cable included

Works with MM, MM-E, MM-AE, MMS, MMS-E Series

**MAG MM RC25**

## Magnum Remote

The ME-RTR is a combination of the ME-ARC advanced feature remote and a communication hub for MS-PE parallel units all in one easy-to-install and operate unit. The ME-RTR features full inverter/charger setup and control, four-line LCD display, four parallel stacking ports for the MS-PE Series inverter/charger, communication ports for ME-AGS-N or ME-BMK accessories, and a two wire voltage controlled auxiliary relay.

- Works with MS-PAE, MS, ME and RD-Series
- Panel: 6-/58" x 8-15/16"
- 6' cable included

**MAG ME RTR**

## Magnum Remote

Simple to use, yet allows full set-up features of the ME, MM, MS and RD Series inverters. The ME-RC also has the option of controlling the ME-AGS Automatic Gen Start using a network connection to the inverter.

- Non-volatile memory saves your settings even if the power is disconnected
- The large LCD screen and at-a-glance LEDs display the inverter/charger status
- Soft keys give access to menus and a rotary encoder knob quickly scrolls through menus and selects settings
- Multiple functions in one place, including: inverter on/off, charger on/off, shore power breaker settings, AGS control, meter button, setup, and technical menus
- *Optional ME BMK kit for full battery monitoring
- Cut out: 2-7/8" x 4-7/8"
- Panel: 3-3/4" x 5-3/4"

**MAG ME-RC50**    Panel w/50' cable
  Accessories:
**MAG ME-RC-BZ**    Bezel only

Works with ME, MM612 Inverter, MM, MM-E, MM-AE, MMS, MMS-E, MS, MSH-M, MSH-RE, MS-AEJ, MS-E Series, MS-PAE, MS-PE, RD, RD-E Series

## Magnum Advanced Remote Control

Simple to use, yet allows full set-up of all the standard and advanced features available in Magnum inverters. The ME-ARC also has the option of controlling the advanced features of the ME-AGS-N Automatic Gen Start and the ME-BMK Battery Monitor Kit using a network connection to the inverter. This remote has convenient finger-tip operation, including the new one-knob programming. 50' cable.

- Face plate: W: 5-7/8" x 3-7/8"
- Cutout: W: 4-7/8" x H: 2-7/8"

Works with ME, MM612 Inverter, MM, MMS, MMS-E, MM-AE, MS, MSH-M, MSH-RE, MS-AEJ, MS-E, MS-PAE, MS-PE, RD, RD-E Series

**MAG ME-ARC50**

## Magnum Battery Monitor Module

Gives you a "fuel gauge" type of meter for your battery bank. It monitors the battery bank and reports the percentage state of charge, real time amps, voltage, amp-hours in/out, and the minimum/maximum DC volts. The ME-BMK includes the sense module, sense and communication cables, and a 500 amp shunt.
* The ME-BMK-NS requires a Magnum inverter with a "Network" port and a ME-RC (revision 2.0 or higher) or ME-ARC remote control.

**MAG ME-BMK**



**ME-BMK Basic Configuration Diagram**
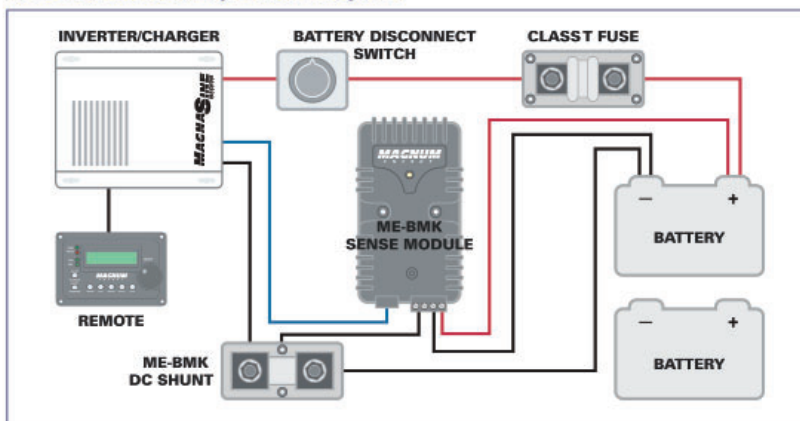
### Magnum Smart Battery Combiner

- An easy to use stand alone battery combiner and isolator
- Apply a single charging source to the main battery and the ME-SBC charges a second battery using a portion of the charge
- Adjustable voltage ranges, automatic on-off points
- Transfers up to 25 amps
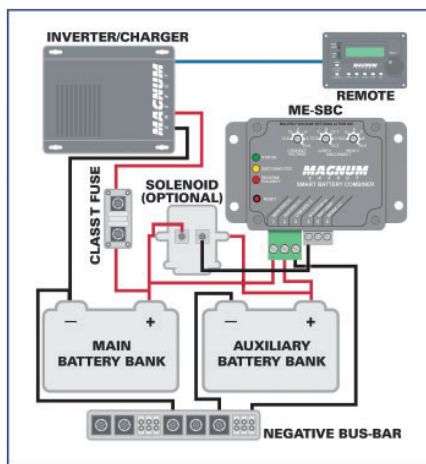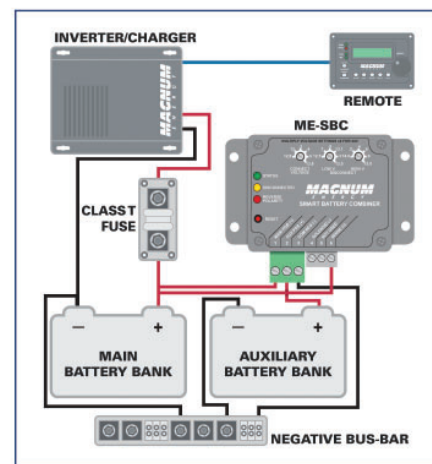- Bi-directional charging

**MAG ME-SBC**

**ME-SBC Basic Configuration Diagrams**
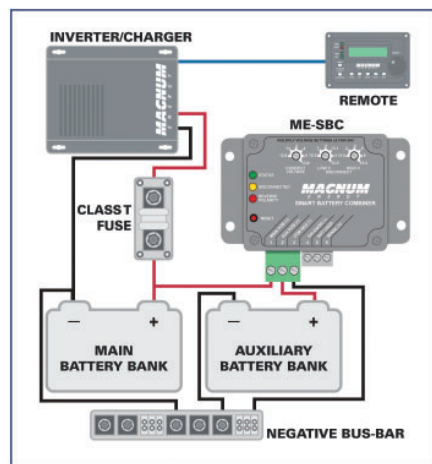


25 amp Combiner Mode

Solenoid Drive

Remote Voltage Sense

### Magnum Automatic Generator Start Module

The Magnum AGS is compatible with most major generators and is designed to automatically start your generator based on low battery condition or the inside temperature of the boat.

Adjust the AGS to meet your needs: With the AGS, you can set the battery start voltage from 10-12VDC or 20-22VDC, the start temperature from 65° - 85°F, the run time from .5 to 6 hours, and the quiet time.

Manual start and stop: Auto gen start settings do not interfere with the manual start/stop operation of the generator. Just use any existing start/stop switch in your boat.

- Selectable quiet time 5 choices: 9 pm - 7 am, 9 pm - 8 am, 9 pm - 9 am, 10 pm - 8 am, 11 pm - 8 am

The network version AGS allows operation of the AGS via the ME Series remote panel (ME-RC50) with Magnum ME & MS series charger/inverters.

- Panel: 5-3/8" x 3-5/8"

**MAG ME-AGS-N**

### Magnum Manual Generator Start Module

The is the 'stand-alone' version of Magnum Energy's Automatic Generator Start (AGS) controllers. This auto generator start controller can automatically start your generator based on battery voltage or high temperature. Adjustable settings include: run time, start volts DC, start temp, quiet time, and 24 hour clock.

- Includes: test switch, 25' communication cable & controllers

**MAG ME-AGS-S**

### Magnum Pigtail Adapter

The ME-PT2 (pigtail two-wire) adapter is designed to be connected to Magnum's Auto Generator Start (AGS) controller to allow a connected generator to be started by an external switching device. This is useful in applications where there is a requirement to conveniently and automatically turn the generator on/off externally through a manually controlled switch, or from an automatically controlled switching device. This adapter has two pigtail wires and when connected together they cause the AGS controller to start and run the connected generator
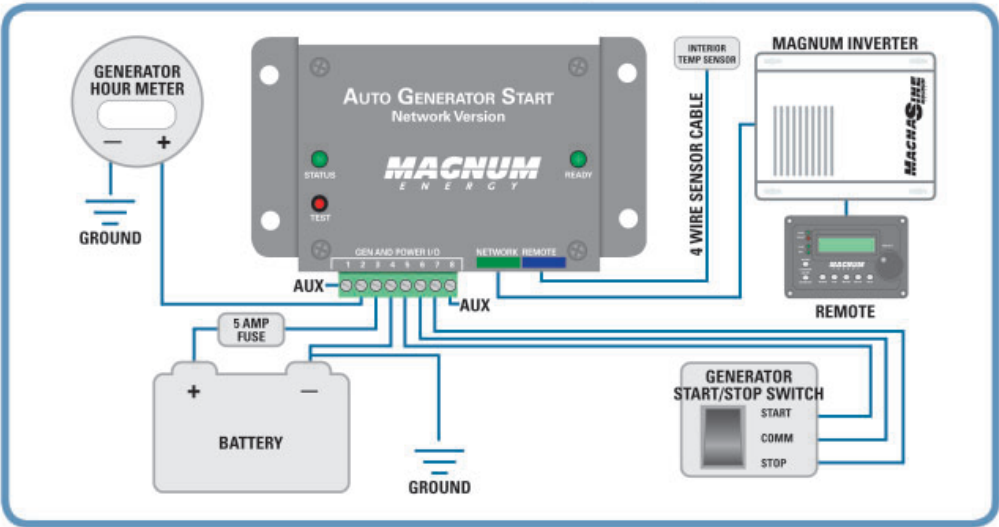
**MAG ME-PT2**

## AGS WIRING DIAGRAM FOR STAND ALONE SYSTEMS (ME-AGS-S)
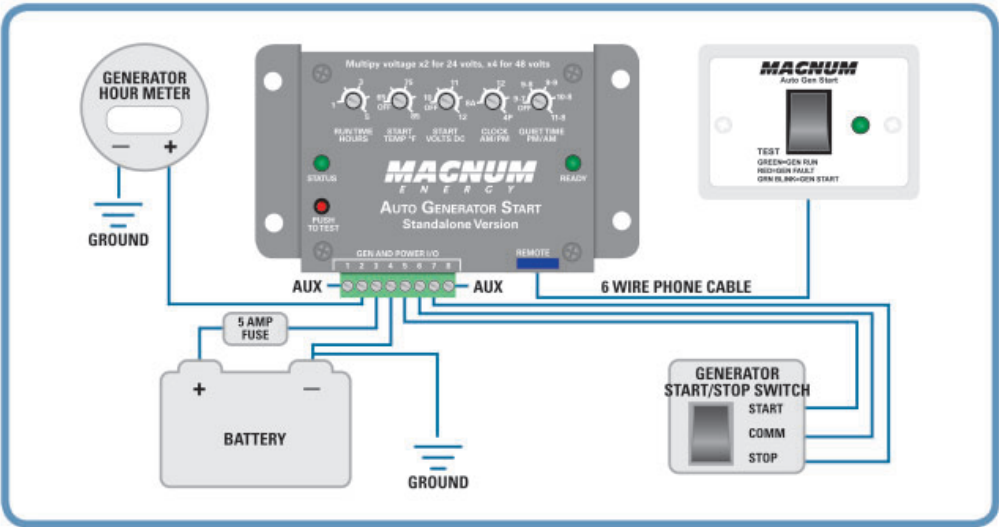


## AGS WIRING DIAGRAM FOR NETWORKED SYSTEMS (ME-AGS-N)



### ProMariner Battery Isolator
### ProIsocharge Series



ProIsoCharge delivers digitally controlled alternator output distribution while protecting the health of engine start batteries, isolating and charging up to 3 other independent battery banks off of a single alternator.

- Zero volt loss isolation and charging
- Intelligent software control provides priority charging to a battery bank that is under load
- Real time LED status indicators
- Distributed On Demand battery bank management will only activate with ignition power on
- 5 year warranty

| Part # | Volts | Amps | Banks | L x W x H" | Lbs |
|---|---|---|---|---|---|
| PRO 23121 | 12 | 120 | 2 | 5.35 x 5.875 x 3.125 | 2 |
| PRO 23125* | 12 | 180 | 3 | 7.55 x 5.875 x 3.125 | 5 |
| PRO 23126* | 12 | 250 | 3 | 8.875" x 5.875" x 3.125" | 6 |
| PRO 23127* | 12 | 130 | 4 | 12.05 x 5.875 x 3.125 | 7 |

*Request Items

### Newmar StartGuard



The abrupt DC system voltage drop that accompanies engine starting can cause microprocessor-driven communication and navigation electronics to "dump" programmed memory.

StartGuard solves this problem by providing supplemental voltage to sensitive electronics while the engine is cranked. It contains a sealed rechargeable battery which is switched on-line to electronics when the starter switch or solenoid is engaged. When the engine is running StartGuard automatically goes off-line and the internal battery is recharged by the alternator.

- Input Voltage: 13.8 - 14.8VDC nominal, 15.5VDC max.
- Relay Activation Input Voltage: 7-15VDC
- Output: 20 amps max.
- Battery: 12VDC, sealed rechargeable, 5 - 7 year life (typical), 5 amp-hour capacity
- Certified by DOT and IATA for shipment by air
- H: 8.25" x W: 4.9" x D: 3.5"
- 5.5 lbs

**NEW NS-12-20**

## Mastervolt Masterswitch

Masterswitch gives you the option to switch automatically between available power sources, connecting the output to the highest priority input, if available.

- Selectable time delay for generator stability
- Two inputs (120V): inverter, shore power or generator
- Single outlet to the 120V power group
- Fully automatic or manual switching
- Power transfer up to 7 kW
- Can be combined with circuit breakers
- 200 x 154 x 148 mm

**MSV 055106100**        For AC

## Mastervolt Masterview Easy Touch Remote

- Allows the monitoring and control of multiple MasterBus devices on one panel
- 3.5" touch screen
- Multi language operation
- Compatible with the Mastervolt MasterBus network plug-and-play
- Low power consumption
- Integrated buzzer
- No external power supply needed
- Night view backlight
- Alarm indication via backlight colour
- Key board lock function
- Flush front mounted and adhesive template
- Fits in Raymarine/Simrad size 110 x 110 x 20mm
- Includes 6 meter MasterBus cable

**MSV 77010305***

   Accessories:

**MSV 6502100150**        15 meter cable for remotes

   * Request Item

## Mastervolt Remote Panel

Small monitor panel for indicating at a glance the different stages of battery charging. Included is a current output dial to reduce consumption from the shore connection and a RS232 serial connection port for connection with a Mass battery charger. This panel gives the following information:

- Charger on indicator
- Charger/fault indicator
- Battery/bulk stage, 0-80% charged
- Battery/absorption stage, 80-100% charged
- Battery/float stage, battery fully charged
- W: 128 x H: 85 x D: 50mm

**MSV 070403040**

## Mastervolt EasyView 5

- Intuitive touch control
- Waterproof, IP67 (front), daylight readable colour display (480 x 272 pixels)
- Favourite pages can be customized
- Logbook to track warnings and alarms
- Buzzer and Home button
- Front mount, wall mount or retrofit
- Easy updating through MasterBus and USB
- MasterBus powered, or 12/24 V input
- 4.4" x 5.0" x 1.7"

**MSV 77010310**

## Mastervolt SmartRemote

- Full colour display for local device monitoring
- Displays four key parameters
- Control key device functions
- CZone* and MasterBus network compatible
- Universal, easy mounting
- Plug & Play - no configuration, no power supply needed
- Blue Sea Systems Custom 360 integration
- Display: 320 x 240 pixels
- 2.8" x 2.8" x 1.2"

**MSV 77010500**

## Mastervolt Masterlink MICC Panel

Remote control for a battery charger, inverter or charger/inverter combination (Combi). The information provided includes reading voltage, current, Ah, time remaining and remaining capacity in percentage terms of two independent batteries. The Masterlink MICC has LED indicators for remote monitoring of the battery level. LCD screen also displays direct online data or historical information. A back box, easy to install, is included as standard for protecting the electronic components against moisture and dust.

- With LCD readout and LED bar
- Included shunt for precise measuring
- W: 120 x H: 65 mm

**MSV 70403105**

## Mastervolt Remote Panel

For use with the Mass Sine Series inverters Model C4-RI, has an inverter on/off switch, an 'on' indicator and a 'fault' indicator. Possible faults include battery voltage too low, overload, or a short circuit in the AC circuitry.

- 60 x 65 mm x D: 60 mm

**MSV 070404110**

## Mastervolt Masterlink BTM-III Panel

- Monitoring for three independant batteries
- State of charge for house battery
- Automatic calculation of charge efficiency factor
- More historical data than ever before, including 'abuse counter' (excessive & very slow discharges)
- Includes protective housing
- NMEA 0183 connection
- One shunt (500A/50mV) included (precise measuring of one battery)
- 120 x 65 x 40mm

**MSV 70403163**

   Parts:

**MSV 6502001030**        6 m remote cable
**MSV 6502100150**        15 m remote cable

## Mastervolt Mass Combi AC Remote

- Add on to standard Mass Combi control panel.
- LED bars for read out of actual AC load, actual AC voltage and selected AC input limitation
- Status LED's for external AC source and failure
- W: 120 x H: 65 mm

**MSV 70405050**

## Mastervolt USB Interface

The MasterBus USB Interface enables you to read and configure the MasterBus network via your PC.
▪ 2.6" x 3.1" x 1.3"

**MSV 77030100**

## Mastervolt Combi Interface

This interface integrates a Mastervolt Mass Combi in a MasterBus network and allows it to be operated or monitored via a MasterView panel or PC.
▪ Includes 6 m MasterBus cable & MasterBus terminator
▪ 2.6" x 3.1" x 1.3"

**MSV 77030475**

## Mastervolt DC Distribution 500

▪ The smallest distribution model available
▪ Connects up to four DC devices to the DC groups, such as a battery charger, inverter, alternators and solar panels
▪ With the included plug & play cable it can be easily connected to the MasterBus network.
▪ Includes 6 meter MasterBus cable
▪ Comes with four ANL fuses: 80, 80, 125 and 160 amp, and a spare 125 amp fuse
▪ 12, 24 or 48VDC
▪ 5.9" x 8.5" x 2.6"

**MSV 77020200\***
**\* Request Item**

## Mastervolt Master Shunt

**NEW**

This integrated battery monitor shares information about the battery bank with other Mastervolt devices such as battery chargers, Combis, and displays. All information needed for monitoring your battery bank and control of your system, such as voltage, current, state of charge and time remaining. Programmable events and an integrated real time clock make it possible to fully automate your system.
▪ MasterBus, CZone and NMEA 2000 communication
▪ Fits in a CZone system including setup tools and configuration files
▪ Digital shunt providing the energy system with extensive information and historical data
▪ Very accurate and reliable determination of State of Charge (SOC)
▪ Service mode prevents memory loss during system maintenance
▪ Realistic and precise indication of the time remaining
▪ For higher current, multiple MasterShunt models may be installed in parallel
▪ MasterConnect system makes connecting to the DC Distribution product very easy
▪ Straightforward, easy to install
▪ Freedom of choice for fuse type, rating and location. Suitable for T-fuse and ANL-fuse (to be ordered separately)
▪ Robust housing with isolation of the DC connections
▪ 5.9" x 5.9" x 2.6"

**MSV 77020115**

## Mastervolt
## MAC 24/12 DC-DC Converter

▪ Reliable and very stable DC supply for 12 and 24 V battery systems
▪ Parallel switching of multiple units for capacities of 40, 60 or more amps
▪ Battery charger and dimmer function
▪ Adjustable output voltage
▪ Voltage stabilisation for a longer lifespan of halogen lights, etc
▪ Corrosion & shock-proof aluminium casing
▪ Temperature-powered fan for cooling
▪ Generates limited heat, so installable almost anywhere
▪ Fully MasterBus compatible with a MasterBus Serial Interface

| Part # | Max Amps | Input VDC | Output VDC | L x W x D Inches |
|---|---|---|---|---|
| **MSV 81200100** | 20 | 24 | 13.6 | 7.5 x 5.1 x 2.4 |

## Mastervolt
## DC Master 24/12 DC-DC Converter

The required voltage for DC current can vary. Some equipment requires 24V, while onboard equipment usually requires 12V. For custom DC current, Mastervolt offers a compact DC-DC converter for battery systems that offer stable power with the right current for any connected consumer.
▪ Easy to install using included mounting bracket, screws and fasteners
▪ Non-insulated
▪ Smart electronics mean no unnecessary heat generation
▪ Continuous output
▪ Two minutes of extra power for short power boosts

| Part # | Max Amps | Input VDC | Output VDC | Weight lbs | L x W x D Inches |
|---|---|---|---|---|---|
| **MSV 81400352** | 60 | 20-32 | 13.6 | 3.96 | 11.1 x 4.9 x 2.9 |

Often 12V power is available by tapping the battery stack at the junction of the lower and upper battery. Tapping the battery stack will result in unequal current draw from the lower and upper battery. Unequal current draw from the batteries will result in a state of charge unbalance.
The lower battery will be discharged more than the upper battery. Eventually this will lead to damage and reduced life from the batteries.
The battery equalizer provides an effective method for ensuring that the two batteries maintain voltage balance by providing all of the 12V current. The battery is only called upon to supply transient currents that exceed the output capability of the equalizer.

## Mastervolt
## Magic 12/24-10 Voltage Regulator

The Magic models can regulate the voltage both up and down to ensure an optimal voltage stabilisation, even when the battery voltage fluctuates due to heavy loads. The galvanic isolation between input and output prevents disruptions to, for instance, communication equipment.

- Converter and 3-step battery charger
- Parallel switchable
- Adjustable and programmable output voltage
- Voltage stabilisation for a longer lifespan of halogen lights, etc.
- Dimmer function for Mac & Magic models
- The isolated Magic models provide galvanic isolation between input and output circuits
- Interference suppression for sensitive equipment
- Dimensions: 8.9" x 6.1" x 3.2"
- Weight: 4 lbs

**MSV 81300300**        10 amp

## Samlex 24/12 DC-DC Converter

High efficiency switch-mode step-down DC-DC converter converts an input voltage of 24VDC nominal (range 20VDC to 35VDC) to a highly regulated output voltage of 12VDC nominal (13.8VDC) at 20 Amps. Non-isolated (no galvanic isolation between input and output) and meant for use in negative ground systems.

- Advanced switchmode design
- Mount in almost any location
- Compact and light weight
- Reverse polarity protection
- High efficiency
- Current limiting circuit
- Overvoltage crowbar circuit
- 7.8" x 4.8" x 2.4"
- 2.2 lbs

**SMX SDC-23**        20 amp

## Samlex AC/DC Converter

This high efficiency UL-60950-1 approved AC-DC power converter provides a highly regulated output DC voltage of 13.8 volts at 10 amps with an AC input of 120 volts, 60 Hz. This advanced switch-mode DC power supply was designed specifically for use with land mobile radio. The power supply produces clean reliable power and are highly filtered to suppress RFI. The unit comes with a detachable power supply cord with NEMA 5-15P plug. Features include over-current, short-circuit and over-voltage protection. The AC-DC power supply conforms to FCC Part 15(B), class B digital device.

- Advanced switch-mode technology
- Reliable power with minimum weight and size
- Circuit innovations minimize output voltage ripple and RFI
- Input voltage can be set at 120VAC or 240VAC (internal jumper)
- UL listed to both USA & Canadian safety standards
- 8.19" x 7.28" x 2.4"
- 3.4 lbs

**SMX SEC-1212**

## Sure Power
## 24-12 Volt Converter

In dual battery (24V systems) it is often desirable to have 12V power available. Converters provide fixed outputs to power 12V loads directly where a 12V battery is not available.

- Under and over voltage protection
- Reverse voltage protection
- Voltage transient protection
- Over load and short circuit protection
- Thermal overload shutdown
- Equalization status indicator
- Protected from the elements
- Rated @80 amps
- 11.9" x 8.46" x 3"
- Weight: 10.8 lbs

**SUR 21080C00**

## Sure Power Battery Equalizer

In dual battery (24V systems) it is often desirable to have 12V power available. Often this 12V power is available by tapping the battery stack at the junction of the lower and upper battery. Tapping the battery stack will result in unequal current draw from the lower and upper battery. Unequal current draw from the batteries will result in a state of charge unbalance.

The lower battery will be discharged more than the upper battery. Eventually this will lead to damage and reduced life from the batteries. The battery equalizer provides an effective method for ensuring that the two batteries maintain voltage balance by providing all of the 12V current. The battery is only called upon to supply transient currents that exceed the output capability of the equalizer. The equalizer thus maximizes the life of the batteries in dual battery systems. Converters provide fixed outputs to power 12V loads directly where a 12V battery is not available.

- Under and over voltage protection
- Reverse voltage protection
- Voltage transient protection
- Overload and short circuit protection
- Thermal overload shutdown
- Equalization status indicator
- Protected from the elements
- Rated @60 amps
- 11.9" x 8.46" x 3"
- Weight: 10.8 lbs

**SUR 21060E-00**

## Sure Power Battery Equalizer

Equalizers provide equalization for dual battery systems where high 12V loads are required, enhancing battery life and ensuring maximum performance for vehicle charging systems.

- Under and over voltage protection
- Reverse voltage protection
- Voltage transient protection
- Overload and short circuit protection
- Thermal overload shutdown
- Equalization status indicator
- Protected from the elements
- W: 8-1/2" x H: 3-1/4" x D: 7-1/4"
- Weight: 9 lbs

**SUR 52204**        40 amp

ELECTRONICS

## Mastervolt Battery Mate

Battery Mate's technology is electronic and includes mosfets (transistors). Its components compensate for the voltage drop and ensure that charging continues at the right voltage level, even with several battery banks. The Battery Mate is compatible with any type of alternator/battery charger, in both existing and new systems.

- LED display indicates whether the power input is active
- Completely corrosion-proof material with aluminium heat sinks, the electronic components are encased in synthetic material
- 8.1" x 5.5" x 3.1"
- 2.2 lbs
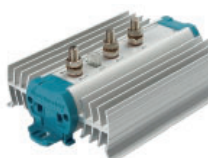
| Part # | Batteries | Output Charger | Output Alternator |
|---|---|---|---|
| **MSV 83116025** | 2 | 120 amps | 160 amps |
| **MSV 83116035** | 3 | 120 amps | 160 amps |

## Newmar Automatic Power Selector

A solid state device which enables installation of a seamless, redundant power system for critical electronic loads. It selects the higher voltage of two isolated DC power sources and routes power to the load. Should one source falter or fail, the other will automatically supply the load with no transfer delay, operation continues uninterrupted.

- 70A, 6-50V
- 6mm studs
- 3.25" x 4.5" x 3.1"
- 2 lbs

**NEW APS-70**

## Sure Power Battery Isolators

Solid state isolators provide automatic charge distribution and load isolation of batteries, eliminating the need for operator intervention. Designed for negative ground alternator systems and batteries of the same nominal voltage. Will operate at full rated load over the ambient temperature range of -40ºF to +250ºF.

- 6mm terminals
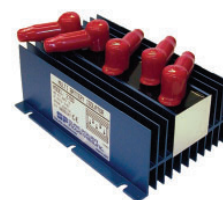
2703

| Part # | Charging Sources | Charging Amps | Banks | Dimensions (L" x W" x H") |
|---|---|---|---|---|
| **SUR 702D** | 1 | 70 | 2 | 4.5 x 3.25 x 3.25 |
| **SUR 703-D** | 1 | 70 | 3 | 4.5 x 3.25 x 3.25 |
| **SUR 1202** | 1 | 120 | 2 | 6.5 x 4.5 x 3.25 |
| **SUR 1203** | 1 | 120 | 3 | 6.5 x 4.5 x 3.25 |
| **SUR 1302** | 1 | 130 | 2 | 6.5 x 4.5 x 3.25 |
| **SUR 2002** | 1 | 200 | 2 | 9 x 4.5 x 3.25 |
| **SUR 2403** | 1 | 240 | 3 | 12 x 4.5 x 3.25 |
| **SUR 2702** | 2 | 70 | 2 | 6.5 x 4.5 x 3.25 |
| **SUR 2703** | 2 | 70 | 3 | 6.5 x 4.5 x 3.25 |
| **SUR 3202** | 2 | 120 | 2 | 12.5 x 4.25 x 3.25 |
| **SUR 3203** | 2 | 120 | 3 | 12.5 x 4.25 x 3.25 |

## Charles Industries Marine Isolation Transformers

When properly installed, Charles Marine Isolation Transformers will electrically isolate the AC shore power from the boat's AC power system. The boat's electrical system and the grounding conductor are not actually connected to the shore-side power. There is no direct electrical connection between earth-grounded shore AC power and the onboard electrical system. The shore ground is connected to a shield that is wound between the primary (shore) and the secondary (boat) transformer winding. The connection of this grounding wire only to the shield of the transformer isolates the boat's AC electrical system from shore.

Compliance with independent testing lab requirements maximize safety
- Marine UL listing ensures durability and safety
- Greatly reduced potential for in-water shock hazard
- Eliminates the need for polarity alarms and galvanic isolators

Superior technology guarantees top performance
- Fully-encapsulated components and transformer windings
- Full current carrying shield per ABYC E-11

Easy to install and use
- Occupies less space and easier to install than most units
- Terminal blocks for easy customer connections
- Corrosion-resistant housing and components
- Convection-cooled enclosure designed to meet NEMA 3R requirements.

| Part # | Type | Input Current | Input V Range | Output Current | Output V Range | Size | Weight |
|---|---|---|---|---|---|---|---|
| **CHA 93-IXFMR3/6T-A** | 3.6KVA w/terminals | 30A | 120V 60hz | 30A | 120V 60hz | 10.5" x 10.5" x 8" | 60 lbs |
| **CHA 93-IXFMR12I-A** | 12KVA Int'l./Universal | 50A | 120/240V 50/60Hz | 50A | 120/240V 104/208V 50/60Hz | 16" x 15" x 12" | 235 lbs |

**Strain Relief Kits**

**CHA 97-001120-A**     For 12KVA
**CHA 97-001127-A**     For 3.6KVA

97-001127-A

## Charles Industries
## Marine Isolation Transformer

The ISO-G2 provides reliable, affordable AC system protection and meets ABYC standards as a single-unit alternative to using a galvanic isolator/status monitor combination.
Function:
- Isolates onboard systems from potential shore-side power hazards
- Provides efficient, clean power for onboard systems

Features:
- 3.6 kVA, 30 Amps, 60 Hz, 120 VAC
- Terminal block included for easy connections
- Full current carrying shield
- Whisper-quiet operation
- Designed specifically for marine environments
- Meets ABYC and NMMA standards
- 9.65" x 10.5" x 9"
- Weight: 76 lbs
- Made in the U.S.A.

**CHA 93-ISOG2/6-A**

## FTZ Surge Suppressors

- For protecting sensitive on-board marine electronics
- Mitigates electrical surges and filters out electrical noise, the causes of both immediate and long-term damage to marine electronics
- Parallel wired to protect your entire electrical panel without draining boat's batteries
- 2,000 amp peak surge rating
- Voltage Responsive Circuitry protects the electrical system from impulse surges
- Frequency Responsive Circuitry filters out electrical noise which disrupts and damages sensitive electronics
- Small, compact size can be installed virtually anywhere on your boat's electrical system
- Encapsulated for a superior watertight seal and vibration resistance
- W: 2-3/4" x L: 3-1/2" x H: 1"

**FTZ FDMA-212HWA**    12V
**FTZ FDMA-224HWA**    24V

## Newmar Noise Filter

The interference or electronic "noise" generated by alternators, ignition systems, motors, etc., can render a vehicle or vessel's radio or other electronic equipment virtually useless. This interference takes the form of popping or static on radios or audio gear and garbled images or "hash" on video displays.

These specialized filters can be used singly or in combination to attenuate conducted line noise, either at the affected equipment or at the noise source.
- Audio – 200 MHz
- Heavy duty aluminum construction
- 6-48VDC systems
- Integral mounting flanges
- Brass stud connectors on alternator filters
- Colour coded wire leads

**NEW PC-10**

## Sure Power Battery Separators

- Connects to primary battery, auxiliary battery and ground
- No system modifications are necessary
- Works with any type of 12V negative ground charging system 100 amps or less
- Allows multiple batteries to be charged from one charging source
- Charges primary and auxiliary battery after 13.2V

**SUR 1314A-B**    Uni-Directional
**SUR 1315**    Bi-Directional

## Newmar Battery Integrators

- Enables charging of two separate banks without voltage drop, yet maintains 100% isolation at all other times
- For systems of three banks or more, an additional unit may be installed for each additional bank
- Easy three-wire hook up for two bank systems
- Terminal for optional wiring of remote light indicating when battery banks are integrated

**NEW BI-100**    12 volt, 100 amp
**NEW BI-200**    12 volt, 200 amp
**NEW BI-24-100**    24 volt, 100 amp

## Forespar Lightning Master

Lightning Master Static Dissipaters lower the exposure to a direct lightning strike by controlling the conditions which trigger direct strikes (i.e. they reduce the buildup of static ground charge and retard the formation of the ion "streamers" which complete the path for a lightning strike). The Dissipater employs the point-discharge principal to continually leak off the lightning causing ground potential in low amperage dissipation over a long period of time instead of the short duration.
- Length: 21"

**FRS 151100**

## Guest Dynaplate Hull Bonding and Grounding Plate

Reduces problems of RF interference, poor SSB or AM transmission / reception and poor reception of low frequency navigational bands such as Loran. Takes the ground away from your engine, providing a static-free line, eliminating interference and improving performance. Reduces the occurrence of electrolysis and galvanic corrosion due to differences between dissimilar metals. The bronze material serves as the next sacrificial metal on the galvanic scale after your zincs, providing another buffer against corrosion of stainless steel parts. Low drag, non-fouling shape scrapes clean with a wire brush. Each plate includes one gold plated mounting bolt and silver contact paste.

| Part # | Plate Size | Equals Copper Sheathing |
|---|---|---|
| GUE 4006 | 6" x 2" x 1/2" | 12 sq ft |
| GUE 4012 | 12" x 3" x 1/2" | 40 sq ft |

## Newmar Copper Ground Strap

- 10 mil thick x 2" wide copper ground strap
- 100' rolls

**NEW GS-2"X100'**

ELECTRONICS

## Maddox
## Shaft Straps

- Spring tension for easy installation and use
- Tinned copper braid strap for superior operation
- Back up bonding features for redundancy
- Tested over 4.500 hours of operation
- 11 positioning holes to suit most drive shafts
- 316 marine grade stainless steel pivot arm and mount
- Includes conductive lubricant for best efficiencies
- Spring loaded locking pins for easy adjustment
- MPS.SS07, recommended 1-4" shafts, 320mm braid length
- MPS.SS10, recommended 3-6" shafts, 430mm braid length
- 250mm long x 24mm wide stainless arm

**MAD MPS.SS07**     Shaft strap
**MAD MPS.SS10**     Commercial shaft strap

▶ *Also See*     Conductive Grease   pg 537

## Seaguard
## Digital Corrosion Test Meters

- Colour test results
- Quick response times
- Easy to use and customize
- Quick release lock connectors for both the reference cell and the alligator clip
- Measurement range: -2.5V~+2.5V
- Accuracy: 0.5%
- Display: 1.8" TFT, Resolution: 320 x 220
- Choose the STANDARD model for Zinc reference cell
- Choose the PROFESSIONAL model for Silver and Silver Chloride reference cell

**SEA SEACORB\***     Standard
**SEA SEACORP\***     Professional
   \* Request Items

## Newmar Galvanic Isolators

Installing a galvanic isolator between the AC safety ground and DC bonding system, blocks a majority of the low voltage currents, and corrosive action on the zincs is significantly reduced. This means a significant savings in boat haul-out fees and zinc replacement costs. For additional safety, the units feature a large capacitor, providing a secondary low impedance path for sending AC current to ground.

| Part # | Amps | lbs | Dimensions |
|---|---|---|---|
| **NEW GI-30** | 30 | 2.45 | 2.7" x 4.8" x 7.3" |
| **NEW GI-50** | 50 | 3.2 | 4.5" x 4.7" x 8.9" |

## ProMariner
## ProSafe FS Galvanic Isolator

ProSafe FS installs easily and does not require a dedicated monitor to verify the operational status of the galvanic isolator as required by non FailSafe Certified galvanic isolators.

- Built on a robust FlatPack semiconductor platform (in the event of a failure, the ground continuity on-board is not compromised when connected to AC Shore Power)
- ABYC A-28 July '08 Compliant and Fail Safe Certified
- Certified by Underwriters Laboratories (UL)
- Robust high power diodes
- Ignition Protected
- Meets ISO 8846, can be mounted in an engine room
- Shore cord inlet compatibility: Single 15, 16, 20 or 30
- Gold plated terminations
- Input: 120 VAC, 50/60Hz
- L: 6.75" x W: 7" x H: 2.5"
- 3 lbs

**PRO 22034**