



XB-6000 AIS Transponder

High Performance Class B AIS Transponder

AIS INNOVATION LEADER

Unlike Any Other AIS

The world's first Class B AIS with built-in NMEA 2000 gateway, the XB-6000 integrates AIS, GPS and NMEA information so that you can see your safety and navigation on any AIS-capable chart plotter or MFD. Or use your PC and Mac for easy computer navigation. Easily integrate AIS to your existing marine electronics and convert NMEA 2000 & 0183 instrument data to USB, facilitating 3rd party navigation software.

- NMEA 2000 / 0183 and waterproof USB
- Compatible with all NMEA 2000 certified chart plotters and MFD's
- The only AIS transponder that can be used as a GPS source for NMEA 2000
- Fast 5Hz GPS update rate provides greater detail and higher resolution plotting
- Can be put in Silent Mode (receive-only)
- Includes 50 channel GPS with WAAS/EGNOS and powerful external GPS antenna
- Built-in internal GPS antenna allows for easy installation when the XB-6000 has a view of the sky. Perfect for small vessels
- Galvanic isolated USB and NMEA ports protects the transponder and your other equipment against damage and installation problems

Easy Integration



The only AIS transponder with fast 5Hz GPS navigation rate. Use the XB-6000 as your primary GPS source for your NMEA 2000 and NMEA 0183 equipment.

NMEA 2000 GATEWAY

The XB-6000 translates NMEA 2000 instrument data such as heading, wind, depth, speed, log, and temperature. This allows you to view this data, along with GPS and AIS information, simultaneously on all AIS-capable chart plotters, multi-function displays and computer software.

Works seamlessly with Garmin, Raymarine, Simrad, B&G, Lowrance and others.

The built-in internal GPS antenna means there is no need for multiple external GPS antennas in many installations. You can even use the XB-6000 as your primary GPS source for all chart plotters and multi-function displays.

ROBUST AND RELIABLE

- Fully waterproof, rated IPx7 (submersible to 1m for 30 minutes)
- Wide operating temperature range
- Galvanic isolated NMEA and USB connections prevent ground loops and damage to connected devices
- Self diagnosis status lights to indicate functioning AIS, GPS and antenna
- World-wide two year warranty

TECHNICAL DATA

Size	200mm wide x 130mm high x 60mm depth 7 7/8" x 5 1/8" x 2 3/8"
Power supply	10-32 VDC 2A max, 2.5W nominal
Environmental	Watertight (IPx7)
Operating temperature	-25°C to +55°C (-13°F to 131°F)
Storage temperature	-25°C to +80°C (-13°F to 176°F)
Number of receivers	2 AIS, 1 DSC (timeshared)
Number of transmitters	1 AIS
Receive frequency range	156.025 – 162.025 MHz
Transmit frequency range	161.500 – 162.025 MHz
AIS sensitivity	-113 dBm < 20% PER
Power output	33 dBm (2W)
GPS sensitivity	-159dBm tracking & navigation -142dBm acquisition
GPS differential support	SBAS: WAAS, EGNOS, MSAS, GAGAN
GPS navigation rate	Selectable 1Hz or 5Hz with magnetic variation included in output
Serial data	1 USB port (isolated), 1 NMEA input (isolated RS422), 1 NMEA output (RS422)
NMEA 2000 gateway	Converts selected instrument PGN's to 0183 and USB
USB connector	Mini USB (USB 2.0)
NMEA 2000 connector	NMEA 2000 Micro-C male. Requires female drop cable (not included)
Power/data connector	10 pin circular. Includes 2m cable with molded waterproof locking plug
VHF antenna required	50 ohm, max 2:1 VSWR @ 162 MHz. PL-259 connector

FAST AND EASY INSTALLATION

- Compact low profile unit can be placed in any orientation
- All cable connection points are contained within the footprint of the unit
- External GPS antenna is included with small cable connector facilitating easy routing through holes and conduits
- Standard VHF antenna connection does not require special cables or connectors
- Fully NMEA 2000 certified for compatibility
- Interface with any devices over NMEA 0183, NMEA 2000 and USB
- Convenient configuration and troubleshooting via free PC and MAC software
- Solve common antenna issues using built-in VSWR meter

Com Port: COM10 | IP Address: | Port: | Disconnect

Model: XB6000 | Version: 5.06
Serial Number: KW74131 | Revision: 4993

Configure Vessel Data | NMEA2000 | Status | GPS | Firmware Update | Serial Data

MMSI: [] info...
Name: []
Call Sign: []
Type: Pleasure craft (primary propulsion is engine)

GPS ANTENNA

A: [] | B: [] | C: []

Units: [] Metres [] Feet*

Save Data

* Data is always stored in whole metres. Therefore not all dimensions in feet can be represented



Incorporates Vesper Marine patented AIS technology.



ALWAYS
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XB-8000 AIS Transponder

Built in WiFi Router & NMEA 2000 Gateway

AIS on Your Mobile Device

Unlike Any Other AIS

The world's first Class B AIS with built-in WiFi and NMEA 2000 gateway, the XB-8000 integrates AIS, GPS and NMEA information so that you can see your safety and navigation data anywhere on your boat via tablet, mobile or PC. Easily integrate AIS to your existing marine electronics and convert NMEA 2000 & 0183 instrument data to USB and WiFi, opening up a world of third party applications.

- NMEA 2000 / 0183, WiFi and waterproof USB
- Compatible with all NMEA 2000 certified chart plotters and MFD's
- The only AIS transponder that can be used as a GPS source for NMEA 2000
- Fast 5Hz GPS update rate provides greater detail and higher resolution plotting
- Can be put in Silent Mode (receive-only)
- Includes 50 channel GPS with WAAS/EGNOS and powerful external GPS antenna
- Free WatchMate app for iPhone / iPad / Android providing interactive remote control
- Wide variety of compatible 3rd party apps for Windows, Mac, iPhone, iPad and Android.



Three Products in One



The only AIS transponder with fast 5Hz GPS update rate, WiFi router for all mobile devices and a NMEA 2000 gateway bringing navigation instrument data to a wide range of mobile apps. All in a compact and robust package.

CONNECT - AS EASY AS IT GETS



NMEA AND WIFI GATEWAY

The XB-8000 translates NMEA 2000 instrument data such as heading, wind, depth, speed, log, and temperature. This allows you to view this data, along with GPS and AIS information, simultaneously on up to five WiFi devices (tablets, smart phones, computers) as well as computers via USB or plotters using NMEA 0183. For more than five mobile devices or to combine with on-board internet the XB-8000 can wirelessly connect to other WiFi routers.

ROBUST AND RELIABLE

- Fully waterproof, rated IPx7 (submersible to 1m for 30 minutes)
- Wide operating temperature range
- Galvanic isolated NMEA and USB connections prevent ground loops and damage to connected devices
- Self diagnosis status lights to indicate functioning AIS, GPS and antenna
- World-wide two year warranty

TECHNICAL DATA

Size	200mm wide x 130mm high x 60mm depth 7 7/8" x 5 1/8" x 2 3/8"
Power supply	10-32 VDC 2A max, 3W nominal
Environmental	Watertight (IPx7)
Operating temperature	-25°C to +55°C (-13°F to 131°F)
Storage temperature	-25°C to +80°C (-13°F to 176°F)
Number of receivers	2 AIS, 1 DSC (timeshared)
Number of transmitters	1 AIS
Receive frequency range	156.025 – 162.025 MHz
Transmit frequency range	161.500 – 162.025 MHz
AIS sensitivity	-113 dBm < 20% PER
Power output	33 dBm (2W)
GPS sensitivity	-159dBm tracking & navigation -142dBm acquisition
GPS differential support	SBAS: WAAS, EGNOS, MSAS, GAGAN
GPS navigation rate	Selectable 1Hz or 5Hz with magnetic variation included in output
Serial data	1 USB port (isolated), 1 NMEA input (isolated RS422), 1 NMEA output (RS422)
NMEA 200 gateway	Converts selected instrument PGN's to 0183, WiFi and USB
USB connector	Mini USB (USB 2.0)
NMEA 2000 connector	NMEA 2000 Micro-C male. Requires female drop cable (not included)
Wireless	802.11 b/g in Access Point or Client Mode
Access point security	WPA2 Personal
Client mode security	None, WPA & WPA2 Personal

EASY INSTALLATION

- Compact low profile unit can be placed in any orientation
- All cable connection points are contained within the footprint of the unit
- External GPS antenna is included with small cable connector facilitating easy routing through holes and conduits
- Standard VHF antenna connection does not require special cables or connectors
- Fully NMEA 2000 certified for compatibility
- Interface with any devices over NMEA 0183, NMEA 2000, WiFi and USB
- Convenient remote configuration and troubleshooting via smart phone/tablet using WiFi



Incorporates Vesper Marine patented AIS technology.



ALWAYS
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WatchMate 850

AIS transponder with integrated screen and GPS antenna

The Easiest AIS to Install

Easy to Install, Easy to Use

Engineered for ease of install and use, yet packed with comprehensive functionality, the AIS WatchMate® is perfect when you want AIS that is robust, reliable and intuitive.

The built-in GPS antenna eliminates the need for another GPS antenna in most installations allowing you to just connect power, plug in a VHF antenna and your complete AIS system is installed. Alternately, share an existing connection to an antenna using our unique AIS splitter with 'gain not loss', or connect via NMEA 0183 or USB to show AIS data on your existing chart plotter or computer.

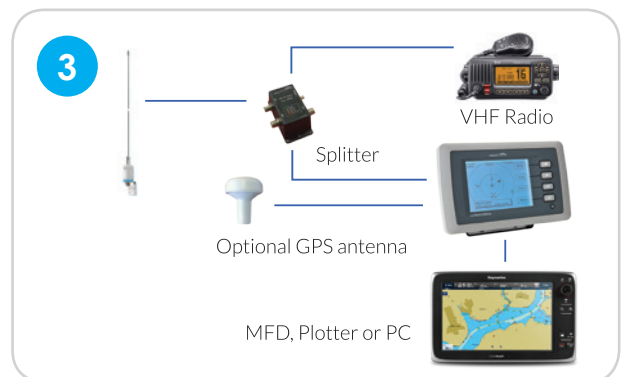
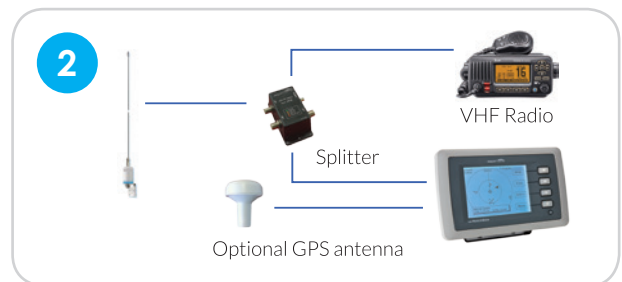
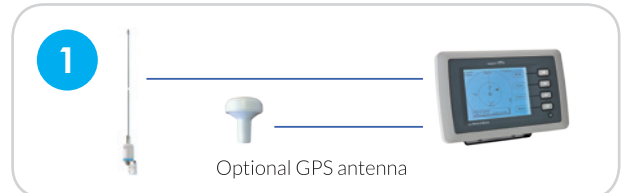
The unique target filtering function reduces clutter in busy locations by taking advantage of a collision avoidance display option which shows only those vessels on a collision course along with a graphical view of their crossing situation.

Sophisticated alarm management eliminates false collision warning alarms that plague chart plotters and other AIS displays.

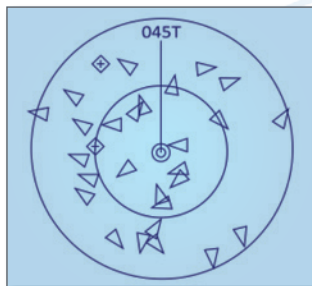
Super-low power consumption allows you to leave the WatchMate 850 switched on at all times.

The high resolution backlit LCD screen is so intuitive that most users can operate "out of the box" without reading the manual. Large, backlit buttons make operation easy and fast.

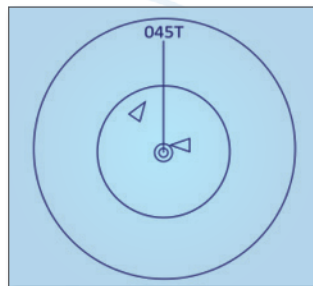
Standalone or Integrate



ADJUSTABLE FILTERS



Show icons for every vessel



Filtered to only show collision risks

Intelligent filtering enables you to de-clutter your display. The WatchMate 850 automatically calculates the closest point of approach (CPA) and time until CPA (TCPA). You can filter target vessels by range, speed, CPA or TCPA.

You can customize these settings for different situations – Harbor, Coastal, Offshore and Anchor, making it easy to alter your display and alarms with one button.

Vessels and alarms are presented in priority order, making it easy to identify critical hazards.

EASY INSTALLATION

- Built-in GPS antenna does not require an external GPS antenna for most installations
- Optional external GPS antenna when a view of the sky is not available
- Connect to chart plotters with NMEA 0183 and computers with USB
- Standard VHF antenna connection which does not require special cables or connectors
- Very low power consumption

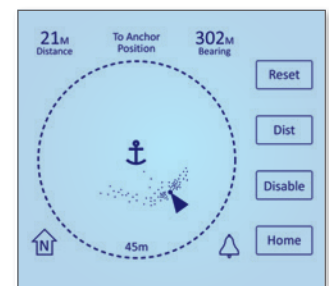
ROBUST AND RELIABLE

- Fully waterproof, rated IPx7 (submersible to 1m for 30 minutes)
- Rugged construction and easy to use buttons made for the marine environment
- Galvanic isolated NMEA and USB connections prevent ground loops and damage to connected devices
- Self diagnosis ensures AIS, GPS and antenna system are functioning properly
- World-wide two year warranty

ANCHOR WATCH

Press a button when you drop the anchor. The WatchMate 850 continuously shows the range and bearing to your anchor. Your position relative to the anchor is displayed over time so you can visualize your swing.

The alarm sounds if your position moves outside the selected range. Corrects for errors caused by the GPS antenna position on-board your vessel.



TECHNICAL DATA

Size	208mm wide x 135mm high x 76mm depth 8 3/16" x 5 5/16" x 3"
LCD panel	125mm (5") FSTN 320x240 LED backlit
Power supply	10-32 VDC 2A max, 3W nominal
Environmental	Watertight (IPx7)
Operating temperature	-25°C to +55°C (-13°F to 131°F)
Storage temperature	-25°C to +80°C (-13°F to 176°F)
Number of receivers	2 AIS, 1 DSC (timeshared)
Number of transmitters	1 AIS
Receive frequency range	156.025 – 162.025 MHz
Transmit frequency range	161.500 – 162.025 MHz
AIS sensitivity	-113 dBm < 20% PER
Power output	33 dBm (2W)
GPS sensitivity	-159dBm tracking & navigation -142dBm acquisition
GPS differential support	SBAS: WAAS, EGNOS, MSAS, GAGAN
Serial data	1 USB port (isolated), 1 NMEA input (isolated RS422), 1 NMEA output (RS422)
Baud rate	4800 or 38400. AIS output requires 38400 baud
USB connector	Mini USB (USB 2.0)
GPS antenna connector	TNC
VHF antenna required	50 ohm, max 2:1 VSWR @ 162MHz, PL-259 connector
External alarm maximum	150mA @ VDC
AIS Messages	Displays all class A and class B position reports, voyage data, static data, aids to navigation, SAR aircraft, SART, MOB, meteorological/hydrographic and safety messages



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WatchMate Vision

Touchscreen AIS transponder and WiFi network hub

The Ultimate AIS Transponder

Enhanced Safety at Your Fingertips

WatchMate Vision® is the ultimate dedicated AIS safety instrument. A unique touchscreen Class B AIS Transponder, WiFi Router and NMEA Gateway, Vision allows you to see safety and navigation data on your tablet, mobile or PC. Use with a variety of third party apps or our free iOS and Android WatchMate app for interactive remote control.

Install standalone or easily integrate to your existing network. WatchMate Vision is compatible with all NMEA 2000 certified chart plotters and MFD's and is the only AIS transponder that can be used as a GPS source for NMEA 2000.

Unique target filtering reduces clutter in busy locations showing only those vessels on a collision course and displaying a graphical view of crossing situations.

Sophisticated alarm management eliminates false collision warning alarms that plague chart plotters and other AIS displays.

The touchscreen operation is so intuitive that users can operate "out of the box" and includes worldwide coastal outlines.

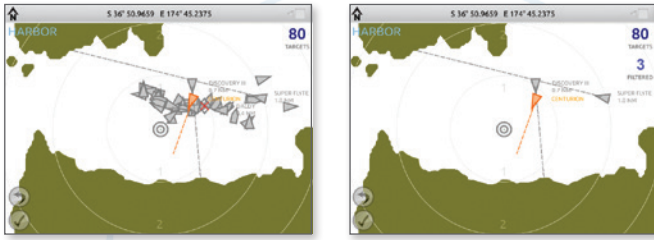
The unique WatchMate Wheel™ controls all menu functions.



Standalone or Integrated



ADJUSTABLE FILTERS



Show icons for every vessel

Filtered to only show collision risks

Intelligent filtering enables you to de-clutter your display. The WatchMate Vision automatically calculates the closest point of approach (CPA) and time until CPA (TCPA). You can filter target vessels by range, speed, CPA or TCPA.

You can customize these settings for different profiles – Harbor, Coastal, Offshore and Anchor, making it easy to alter your display and alarms according to your situation.

Vessels and alarms are presented in priority order, making it easy to identify critical hazards.

THREE PRODUCTS IN ONE



AIS transponder with fast 5Hz GPS update rate, WiFi router for all mobile devices and a NMEA 2000 gateway bringing navigation instrument data to a wide range of mobile apps. The WatchMate Vision is an innovative dedicated AIS display with capabilities beyond any chart plotter or MFD.

TECHNICAL DATA

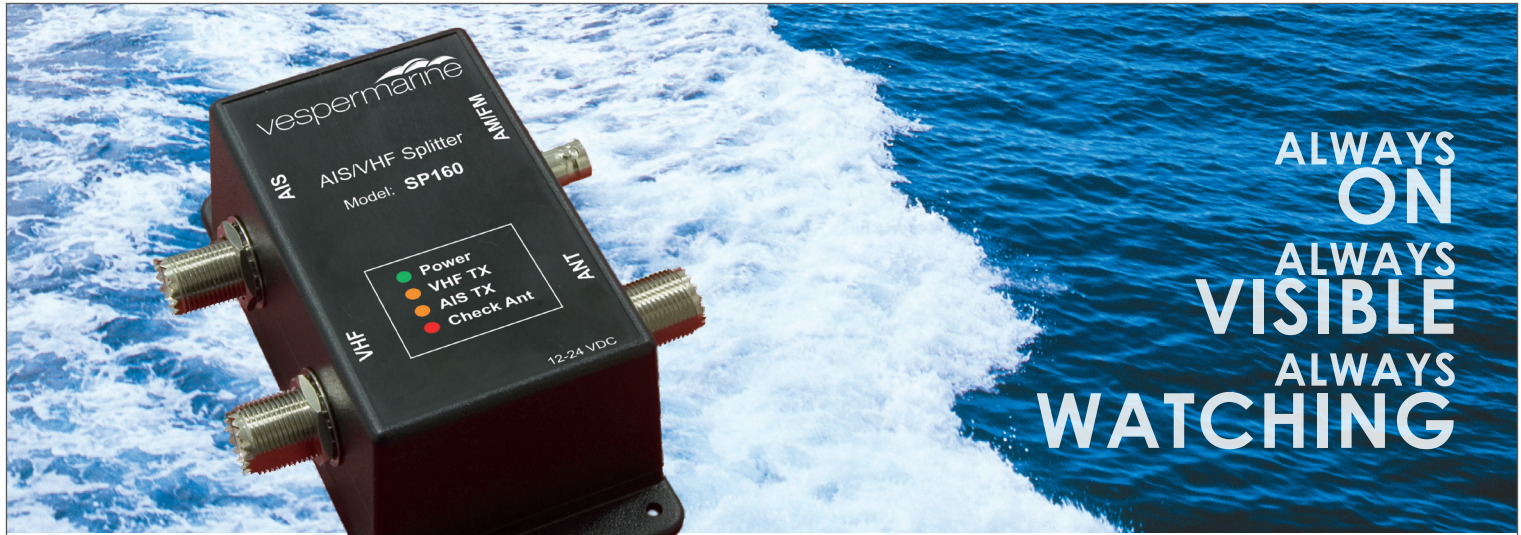
Size	172mm wide x 130mm high x 60mm depth (6 7/8" x 5 1/8" x 2 3/8")
LCD touch panel	145mm (5 11/16") VGA color TFT resistive touch
Power supply	10-32 VDC 2A max, 6W nominal
Environmental	Watertight (IPx7)
Operating temperature	-25°C to +55°C (-13°F to 131°F)
Storage temperature	-25°C to +80°C (-13°F to 176°F)
Number of receivers	2 AIS, 1 DSC (timeshared)
Number of transmitters	1 AIS
Receive frequency range	156.025 – 162.025 MHz
Transmit frequency range	161.500 – 162.025 MHz
AIS sensitivity	-113 dBm < 20% PER
Power output	33 dBm (2W)
GPS sensitivity	-159dBm tracking & navigation -142dBm acquisition
GPS differential support	SBAS: WAAS, EGNOS, MSAS, GAGAN
GPS navigation rate	Selectable 1Hz or 5Hz with magnetic variation included in output
Serial data	1 USB port (isolated), 1 NMEA input (isolated RS422), 1 NMEA output (RS422)
NMEA 200 gateway	Converts selected instrument PGN's to 0183, WiFi and USB
USB connector	Mini USB (USB 2.0)
NMEA 2000 connector	NMEA 2000 Micro-C male. Requires female drop cable (not included)
Wireless	802.11 b/g in Access Point or Client Mode
Access point security	WPA2 Personal
Client mode security	None, WPA & WPA2 Personal

EASY INSTALLATION

- Waterproof, rated IPx7 (submersible to 1m for 30 minutes)
- Built-in GPS antenna does not require an external GPS antenna for most installations
- Optional external GPS antenna when a view of the sky is not available
- Fully NMEA 2000 certified for compatibility
- Interface with any devices over NMEA 0183, NMEA 2000, WiFi and USB
- World-wide two year warranty



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AIS VHF Splitter

High performance splitter for AIS, VHF and AM/FM

Making AIS Easy to Install

A Splitter with Gain, Not Loss

A built-in low noise amplifier makes the Vesper Marine antenna splitter uniquely able to improve AIS reception and range by providing signal gain.

Unlike other splitters, there is now no need to compromise on performance when utilizing the convenience of an existing antenna and cabling to install an AIS receiver or transponder.

Ideal for use with low power AIS man overboard devices.

Ensuring Optimal Performance

- Provides amplification to the AIS signal resulting in much higher AIS sensitivity, improving AIS receive range
- 4 convenient status LED's (power, VHF transmit, AIS transmit, antenna quality)
- VHF Fail-safe. VHF radio always has priority and can always transmit even if the power to the splitter fails
- The unique antenna quality LED indicates a problem with the antenna, cable or installation
- Waterproof high quality rugged construction made specifically for marine use.
- VHF-in-use indicator appears on the screen of the WatchMate 850 and WatchMate Vision whenever the VHF radio is being used. This indicates when AIS traffic is delayed due to antenna use by the VHF radio
- Provides AM/FM radio connection. An optional cable with a standard "Motorola plug" is available to make installation easy. Plugs directly into almost all car or marine stereos
- No adapters or special patch cords needed for VHF and AIS. Uses standard PL-259 patch cables (1 x 2m (6.5ft) cable included)
- 12/24 volts with very low power consumption

TECHNICAL DATA

RF Performance	Frequency Range 156MHz to 163MHz
Operating temperature	-25°C to +55°C (-13°F to 131°F)
Overall Size (incl connectors)	135mm Long x 107 Wide x 56 Deep (5 5/16" x 4 13/64" x 2 13/64")
VHF / AIS Connectors	SO239 (requires PL259 plug)
AM / FM Connectors	BNC, optional cable available BNC to Motorola plug
Power Supply	10 - 32 VDC, <0.8W nominal
AIS Receive Gain	12dB
Insertion Loss	VHF RX 1.5dB / VHF TX 1dB / AIS TX 1dB
AIS Sensitivity, with Vesper Marine Transponders	-119 dBm, 6dB improvement