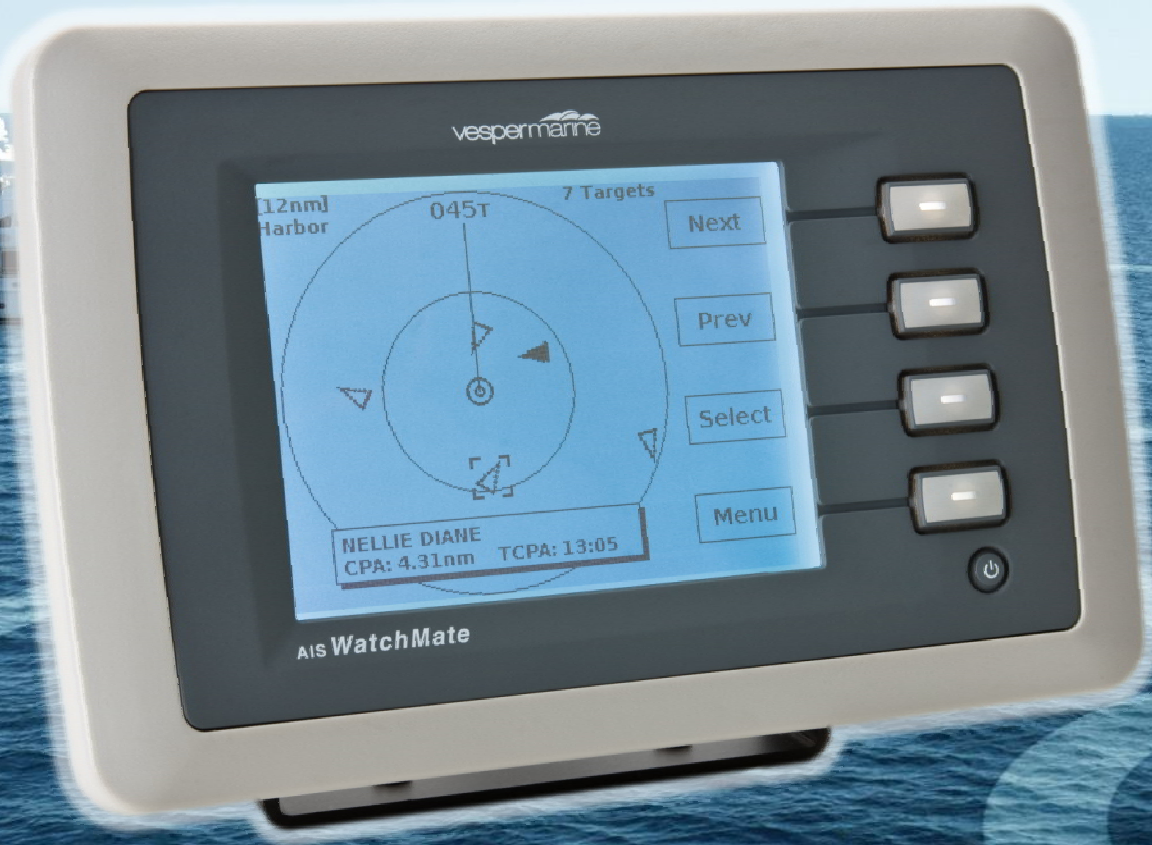
vespermarine

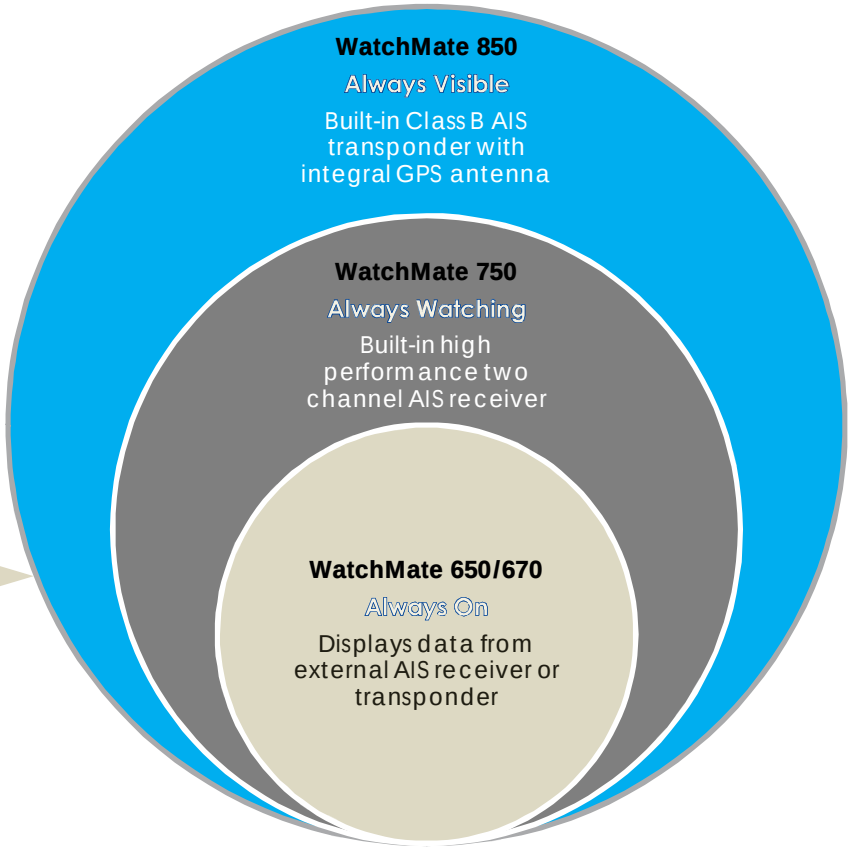


Click anywhere on the screen to move to the next slide

AIS WatchMate - Introduction

The WatchMate Product Set

Three products that encapsulate the best in AIS collision avoidance systems



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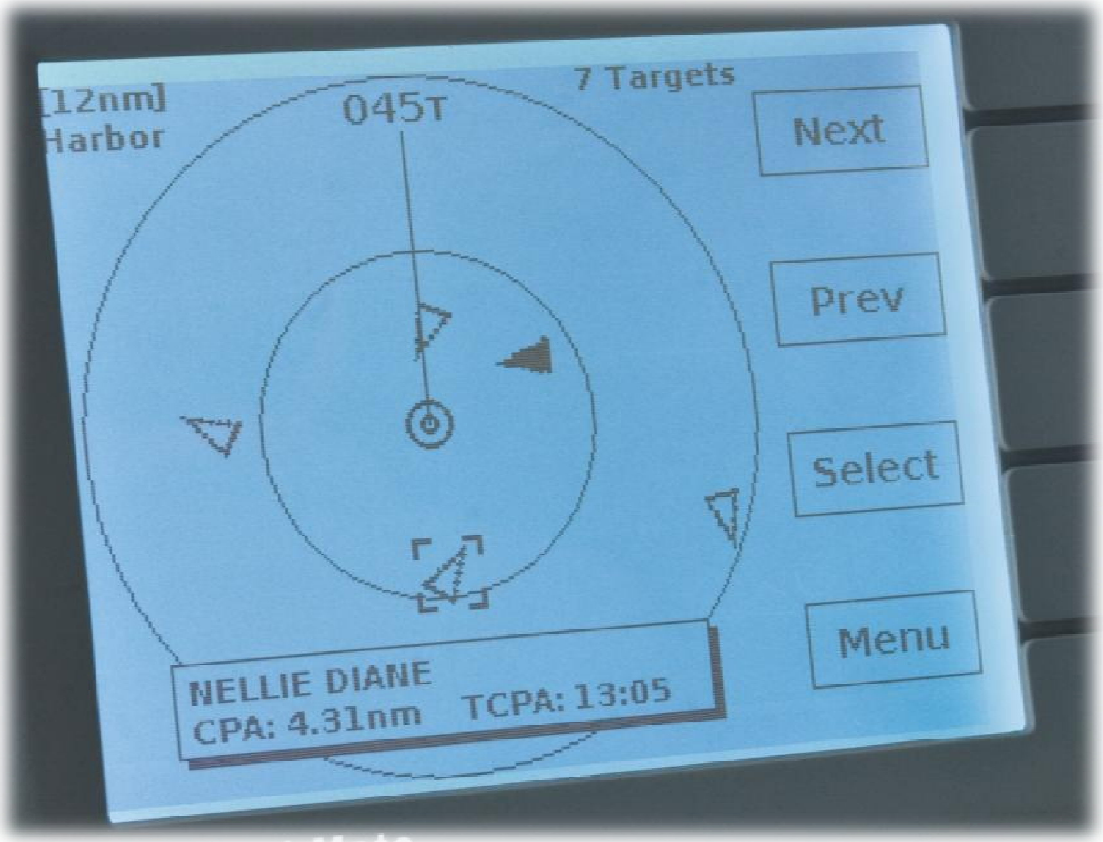
Why The Need for AIS WatchMate?

An independent and dedicated safety instrument



A dedicated device that has the sole job of monitoring and displaying AIS information

- Being independent of other equipment WatchMates are very practical, fast and easy to use – IT HAS TO BE
- WatchMate is also a very low powered device that conserves valuable battery energy.

"Exceptional customer feedback supports the WatchMate's ease of use ... confirming our design and safety goals, and validating our efforts."

Jeff Robbins, CEO

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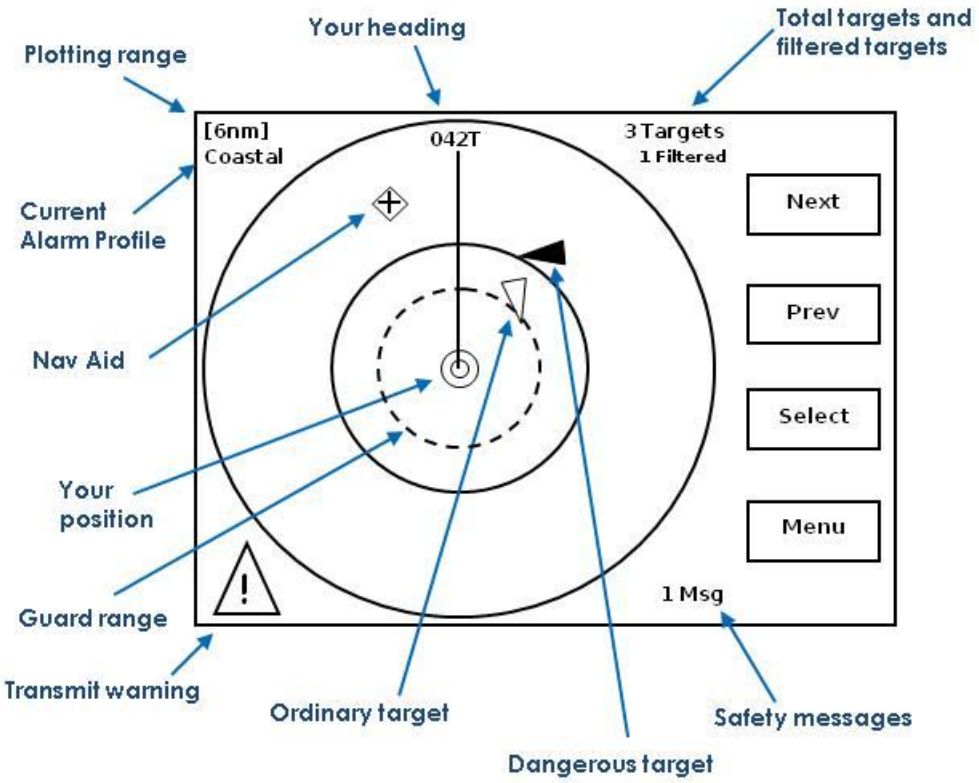
The Home Screen

Situation Display

The home screen displays targets using a graphical situation display similar to a radar.

The display is oriented either Heading-Up or North-Up depending on profile and settings.



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Introducing WatchMate 670 Display and 750 RX

Always On, Always Watching

AIS***WatchMate*** 670 & 750

Dedicated display with the WatchMate 670 or use a WatchMate 750 to have a display and an AIS Receiver

Customers love the award winning features that have been designed to make AIS WatchMate the easiest device to use on their boat.

These features include:

- Alarm configuration and Filtering,
- Listing of vessels by target priority,
- Multiple profiles based on location,
- Plot future crossing positions,
- Low power consumption,
- Displays lat/long GPS position,
- Friends list
- and of course WatchMate is a dedicated AIS safety instrument independent of all other equipment.

WatchMate has been designed to simplify the display of other ships AIS location and course information. As required WatchMate filters out non priority targets and only displays the vessels that may be on a collision course, removing the uncertainty and stress related to navigating in highly congested and isolated waterways. The WatchMate installation is designed to be easy with multiple mounting options and IPx7 rated water proofing.

PATENT PENDING

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Introducing WatchMate 850 Class B AIS Transponder

Always On, Always Watching..... and now Always Visible

As Easy as AIS Gets
Dedicated display with transponder & GPS

The new AIS***WatchMate*** 850:

- Fully certified Class B AIS transponder
- Highest sensitivity AIS receivers (-113dBm) and even better with Vesper Marine splitter (-119dBm)
- Compact with very low power consumption (2-3W)
- Easy installation, fully self contained
- Standalone but can easily connect to computers & plotters
- All functions controlled by the display; No need to use a computer to configure
- Send AIS mayday safety message
- Allow transponder to be put in Silent Mode

- No need for external GPS antenna (typical)
- 50 channel fast TTFF GPS with WAAS/EGNOS
- Own vessel position, course, speed, etc.
- Satellite signal quality display
- 12/24 VDC
- Waterproof USB can provide power for use as an AIS receiver, GPS, configuration and learning at home
- NMEA multiplexor
- Unique VHF "in use" indicator
  (when used with Vesper Marine's antenna splitter)
- Antenna quality monitor
- Indicates if any problem occurs and why! Not just an error LED
- Drives external alarms, buzzers, etc.

PATENT PENDING

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Why a WatchMate

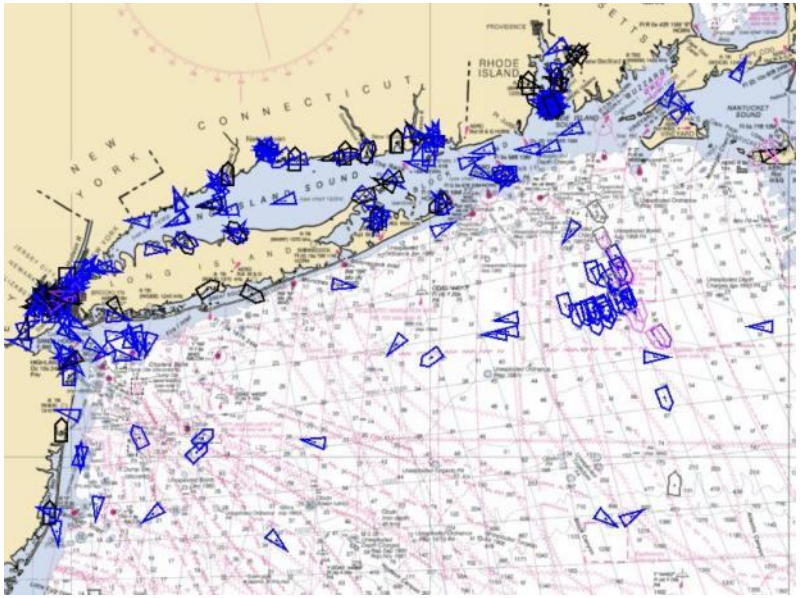
Why not just buy a “black box” AIS transponder and wire it into a chart plotter?

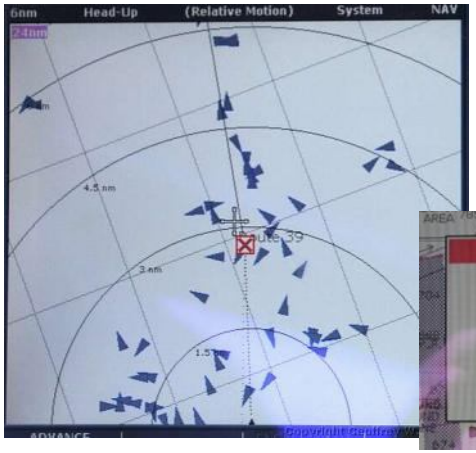
Answer….

- Clutter in high traffic areas makes a plotter with AIS unreadable.
- The scale for a chart versus useful AIS viewing is often different.
- WatchMate provides all AIS data at a glance.
- Focus is on the most important targets.
- Installation is simple, no interfacing and often no need for a separate GPS antenna.
- Others don’t have WatchMate’s sophisticated Alarms, Filtering, or Multiple Profiles.

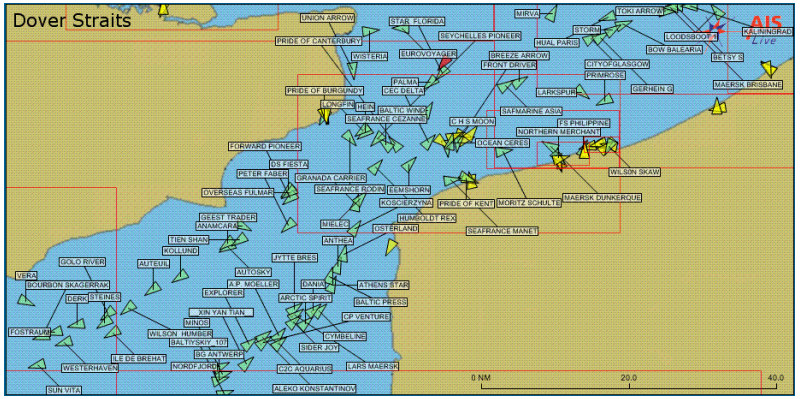
…. most chart plotters, and all laptops, will use way more power than a WatchMate.

Clutter on PC charting software





How can you make quick and accurate decisions when all you are told is “Dangerous Target”?



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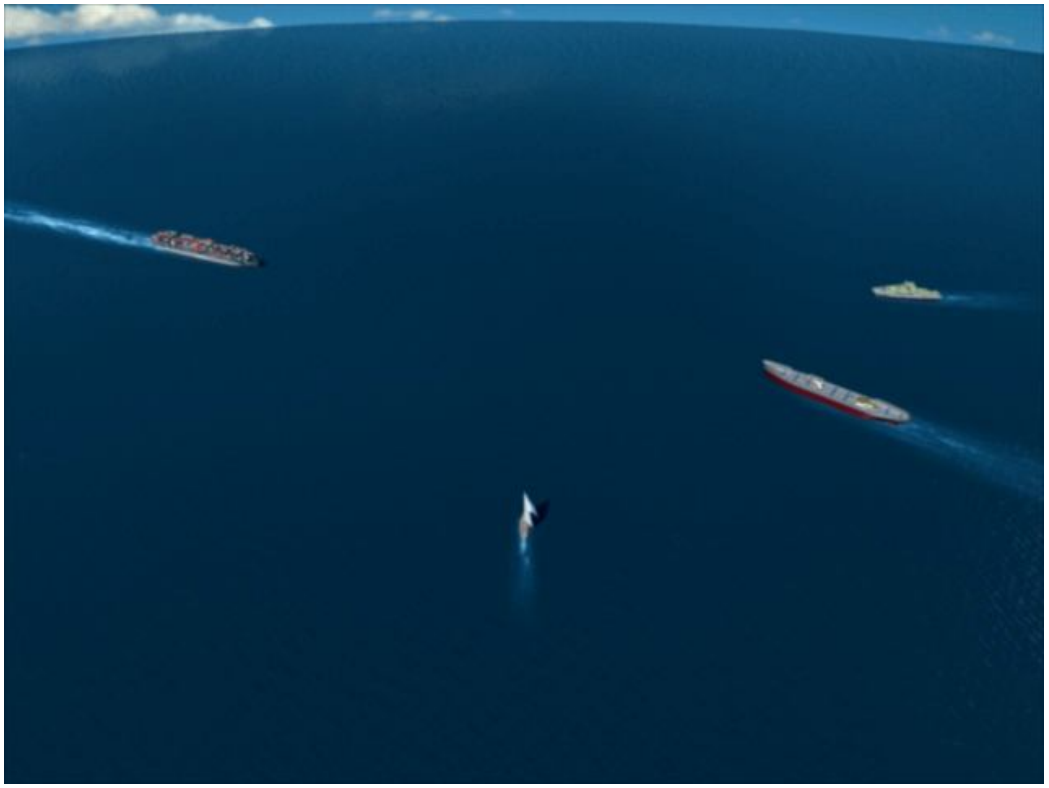
The Advantage of a Dedicated WatchMate Display

Filters reduce clutter

By using the WatchMate Filters...

...the clutter of irrelevant ships...

...is removed from the display...



...and the display continues to provide a reminder of the 81 filtered ships.

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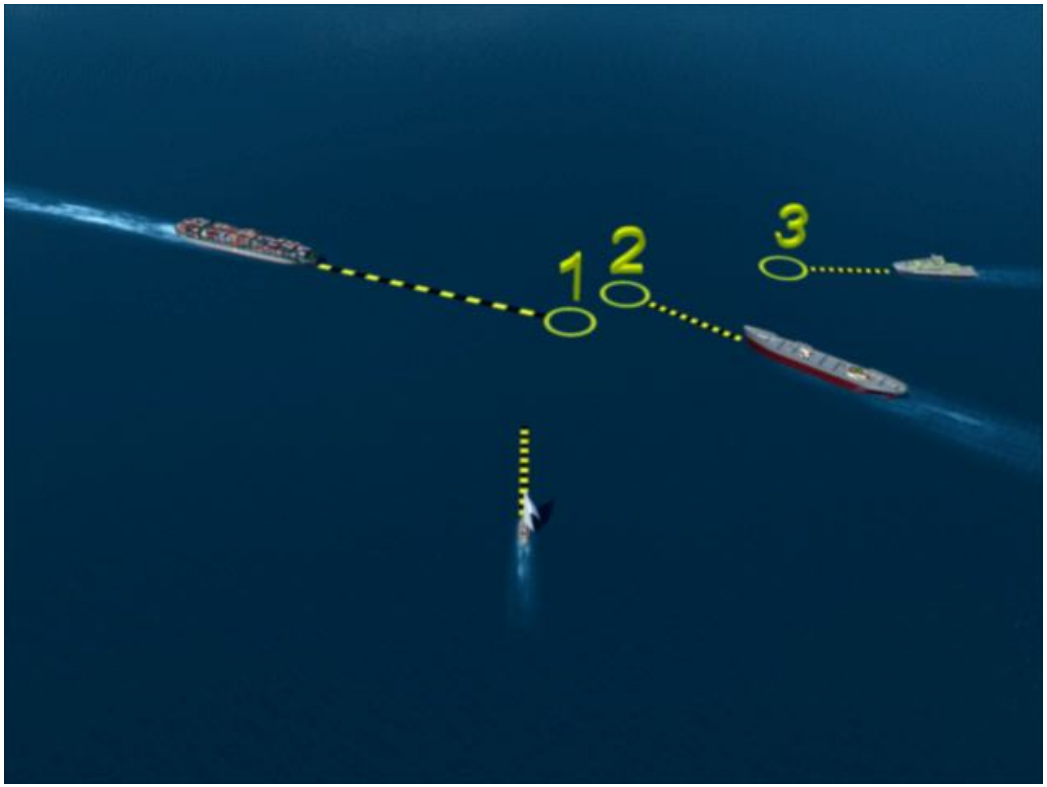
Focus on the Most Important Targets

Identify Priority Traffic

The ship that creates the highest risk of collision is prioritized…

…and shown on the display in list order of priority



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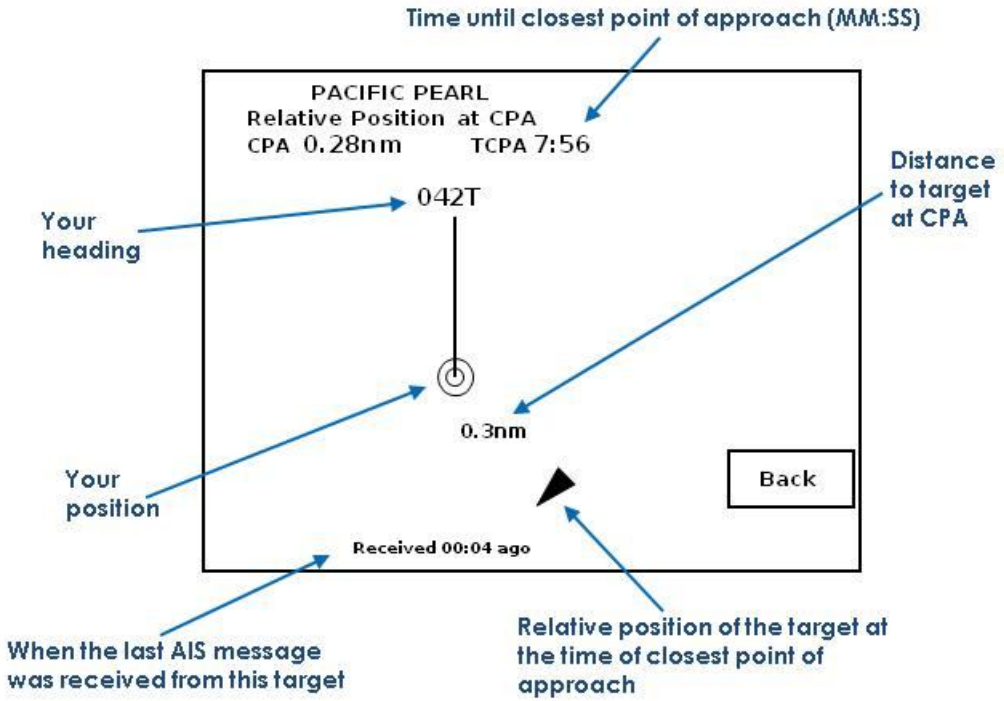
The unique Course Crossing feature

Closest Point of Approach - Rolling time forward using Course Crossing

When a target is converging the Closest Point of Approach (CPA) button can be used to show the crossing situation that will occur and when it will occur in the future.

This display is represented in the diagram to the right.

This is a unique feature of the WatchMate series of products. It has been designed to make it very easy for users to quickly see what the situation will be and enable them to judge the risk ahead of time, removing the stress from a potentially hazardous situation.



This example tells us that in 7 minutes and 56 seconds Pacific Pearl will pass behind us with 0.3nm clearance.

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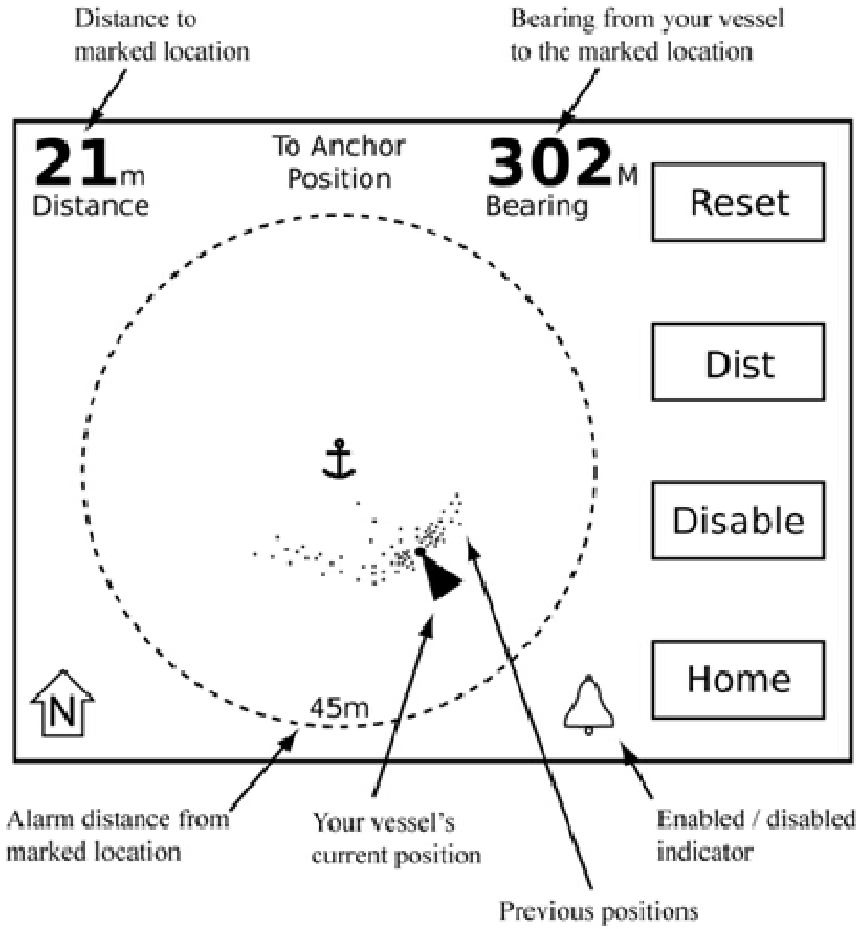
The Anchor Watch Feature

For the WatchMate 850, 750 and 670

Anchor Watch is used to mark where an anchor is dropped. If the vessel moves outside the preset circle, an alarm will sound indicating that the boat has begun to drift outside the set radius.

The unique Anchor Watch screen displays;

- The bearing from your vessel to the marked anchor location
- The distance between your vessel and the marked anchor location.
- The periodic position of your vessel shown as dots indicating how your vessel has been moving while anchored.



Anchor Watch is available on all WatchMate 850 Transponders and new WatchMate 670 or 750's. A firmware upgrade is available for existing WatchMate 750 or 670 from our website Support page www.vespermarine.com/firmware-upgrades.

Sorry this feature is not available for the older WatchMate 650 product.

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See WatchMate in action

Click video clips - WatchMate going through its key functions

The problems WatchMate solves for customer – An overview

WatchMate Dedicated Marine Collision Warning

www.youtube.com/watch?v=LdmF0BaBz2U

WatchMate - Identify Priority Traffic

www.youtube.com/watch?v=ckalPExyn4I&feature=channel

How WatchMate software functions – A more detailed view

WatchMate Introduction

User Interface Software introduction / Describing the Closets Point of Approach

www.youtube.com/watch?v=zYlZfnMjN2M&playnext=1&videos=ymhj2dkLsvQ&feature=rec-LGOUT-exp_rn-1r-7-HM

WatchMate video 2

Target Lists / Filtering & decluttering unwanted targets / Alarms

www.youtube.com/watch?v=T4i2oyN1Xm4&playnext=1&videos=qwdQiMkLiHI&feature=rec-LGOUT-exp_rn-1r-4-HM

WatchMate video 3

Selecting vessels / Displaying CPA / Using Fleet List

www.youtube.com/watch?v=fSidXPjxY_Y&feature=related

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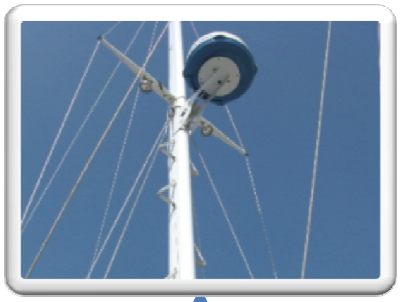
Easy to Use as Well as Easy to Install

WatchMate 670 Display and WatchMate 750 RX

Step 1. Flush or bracket mount WatchMate



Step 3. Connect a to separate VHF Antenna

Step 2. Connect to Power

Installation Complete!

Or optional VHF Splitter to connect into an existing VHF Antenna

Step 4: Connect External GPS Sensor & Antenna

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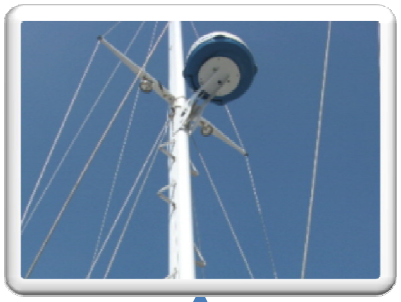
Easy to Use as Well as Easy to Install

WatchMate 850 Transponder

Step 1. Flush or bracket mount WatchMate



Step 3. Connect a separate VHF Antenna

Step 2. Connect to Power

Installation Complete!

Or optional VHF Splitter to connect into an existing VHF Antenna

Optional external GPS Antenna

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AIS VHF Splitter

Technical Details

An AIS VHF Splitter to compliment WatchMate or any AIS Receiver / Transponder

AIS VHF Splitter Specification

RF Performance	Frequency Range 156MHz to 163MHz
Operating Temperature	-15C to +55C
Overall Size (incl connectors)	135mm Long (5.3”), 107 Wide (4.2”), 56mm Deep (2.2”)
VHF / AIS Connectors	SO-239 (uhf)
AM / FM Connectors	BNC, optional cable available BNC to Motorola plug
Power Supply	12VDC – 24VDC, <0.8W (nominal)
AIS Receive Gain	12dB
Insertion Loss	VHF RX 1.5dB / VHF TX 1dB / AIS TX 1dB
AIS Sensitivity, with WMX850 Transponder	-119 dBm, 6dB improvement

- Designed to work with any AIS transponders with unique integration features for the WatchMate 850.
- VHF-in-use indicator appears on the screen of the WatchMate 850 whenever the VHF radio is being used.
- No adapters or special patch cords needed for VHF/AIS. Uses standard PL259 patch cables.
- Very compact and easy to install with built-in mounting flanges.
- 4 status LED's (power, VHF transmit, AIS transmit, antenna quality).
- Provides AM/FM radio connection.
- Fail-safe - VHF can always transmit even if the power to the splitter fails.
- The unique antenna quality LED will indicate a problem with the antenna, cable or installation.
- Low power consumption.
- Works with both 12/24 volts.
- Allows VHF radio to have priority.
- Waterproof, IPx7 rated. Quality construction made specifically for marine use.

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Thanks for taking the time to review this introduction to the WatchMate range

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End

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