











## **TECHNICAL NOTE**

# The Furuno NavNet TZtouch multi-function display provides full, integrated control of the FLIR M-Series thermal camera.

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TZtouch simplifies navigation by centralizing all of your key controls onto one Ethernet-connected device. Thermal images, 2D and 3D charts, AIS, Radar, Fish Finder, and Sonar can all be displayed in various full or splitscreen configurations, as needed. And with the TZtouch's interactive MFD, you can scroll, pan, and zoom in and out using intuitive finger gestures.

The TZtouch is available with a nine or 14.1-inch display, as well as a "black box" version designed to be connected to larger, external MFDs.

#### **Automatic tracking**

What makes the TZtouch even more revolutionary is the automated tracking capability it adds to the M-Series — a feature normally reserved for more expensive infrared camera systems.

Tap an object on a chart — such as an AIS target or buoy — and a menu will appear allowing you to tell the M-Series to lock on to it. A red cone will appear on the chart like a search light emanating from your vessel. This represents the camera's field of view over the water. The M-Series will use

GPS positioning to track both stationary targets, like buoys, and moving targets, such as AlS-enabled vessels.

You can also use your chart plotter or radar to set active waypoints that the M-Series will automatically seek out and track during your voyage.

## Pan/Tilt capabilities

The M-Series features up to a 640 x 480, military-grade thermal imager and full 360° panning and +/- 90° tilt capabilities. It's available with an additional lowlight video camera payload, as well. Once the M-Series locks onto a target, it will automatically pan and tilt as necessary, regardless of the position of the boat. While not a gyrostabilized system, the M-Series emulates one with this feature.







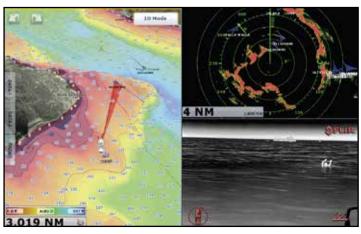












Pan/Tilt the camera manually or lock on an ARPA Target by tapping a chart or the M-Series camera's live thermal video feed on the TZtouch screen.



The NavNet TZtouch displays custom settings for the camera, including zoom distance, camera altitude, and automatic locking on an active waypoint or Man Over Board (MOB).





#### NavNet TZtouch

The NavNet TZtouch provides intuitive, automatic control of the FLIR M-Series thermal night vision camera.

- Sunlight Viewable 9" or 14.1" WVGA multi touch display
- Automatic control of M-Series camera using touch screen finger gestures
- Custom apps to wirelessly view and control TZtouch from any iPhone, iPad, or iPod Touch
- WiFi Hotspot Connectivity
- Add Radar, Network Fish Finder, AIS, and a variety of other sensors
- View multiple video inputs via Ethernet network

## Easy set-up

Setting up the M-Series and the TZtouch is easy and straightforward. Input a few camera settings, such as zoom distance and altitude, and the M-Series is ready for action. If you choose to use the M-Series joystick, you can easily switch back to the TZtouch seamlessly.

#### WI-FI equipped

The TZtouch also has Wi-Fi capability so that you can control it remotely using an iPhone or iPad anywhere on your vessel with Wi-Fi connectivity (Android and Windows-based mobile devices are not supported). The mobile device will mirror exactly what the TZTouch screen shows, including thermal images. So in case you need to check out a problem — or simply relax on deck — you can monitor your thermal video feed and control the TZtouch remotely.

## **FLIR M-Series**

The FLIR M-Series thermal imaging camera is available with a variety of sensors and resolutions to meet a wide range of maritime needs.

- Thermal imaging camera with an uncooled VOx micro bolometer, thermal images up to 640 x 480 pixels
- Lowlight CCD camera
- Rugged and waterproof
- 360° pan and +/- 90° tilt
- Detects 2.3 m x 2.3 m objects at a distance of more than 3 km in total darkness

## Versatility unleashed

The NavNet TZtouch and FLIR M-Series are a perfect match. The TZtouch's powerful software enhances the M-Series camera's accuracy, responsiveness, and tracking capabilities. And given the M-Series' wide appeal, the NavNet TZtouch is the ideal solution for operators looking to transition to the kind of intuitive control only a multifunction display can provide.

More information about thermal imaging cameras can be obtained from:

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The images displayed may not be representative of the actual resolution of the camera shown. Images for illustrative purposes only.

