

# NavNet TZtouch3 FAQ Rev 3/4/2020 v16

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# 1. NavNet TZtouch3 System Overview

## Q1.SYS What models are in the NavNet TZtouch3 product range?

NavNet TZtouch3 MFDs are available in three models, TZT12F (Hybrid), TZT16F and the TZT19F. All models utilize a widescreen format.

## Q2.SYS How many NavNet TZtouch3 MFDs are allowed in one network?

Any combination of up to six (6) TZtouch3 and/or TZtouch2 MFDs are allowed in one network. Or four (4) MFDs and one TZT2BB. If a Nobeltec PC is included, it is counted as one MFD in the network.

## Q3.SYS Does one NavNet TZtouch3 MFD need to be set as a Master?

Just like TZtouch and TZtouch2, TZtouch3 is a "Master-less" system in regard to network and settings configuration, making the system fully redundant. However, one TZtouch3 MFD must be set as the "Chart Master" so the MFD can share its System ID over the network.

## Q4.SYS Which charts are pre-loaded on the 256GB Micro SD-Card in TZtouch3?

The 256GB Micro SD-Card included with each TZtouch3 MFD contains every NOAA Raster, NOAA Vector, C-MAP Vector, and Navionics Vector chart in the entire Mapmedia Library for all of North, Central and South America. In other words, the entire Western Hemisphere is fully covered! This includes the C-MAP and Navionics Bahamas Vector Charts, as well as the Bahamas Satellite Photos and the C-MAP "Explorer" Raster Bahamas Charts, Four CMOR chart areas, along with Satellite Photos for several select areas in the USA. Only customers wishing to access additional satellite photo areas or charts on the other side of the world will need to add more charts to their system. Locked chart areas such as C-MAP, Navionics and CMOR will need to be purchased from an Authorized Furuno Dealer. Once chart areas are purchased, they can automatically be unlocked by connecting the TZtouch3 MFD to the Internet. Alternatively, the charts can be manually unlocked by entering the chart unlock codes.

## Q5.SYS Which NMEA2000 PGNs are supported by TZtouch3?

### Input

**065280, 126992/993, 127237/245/251/257/488/489/505, 128259/267, 129025/026/029/030/038/039/040/041/291/538/540/793/794/798/801/802/808/809/810, 130306/310/311/312/313/314/316/577/578/817/818/820/822/823/826/827/828/880**

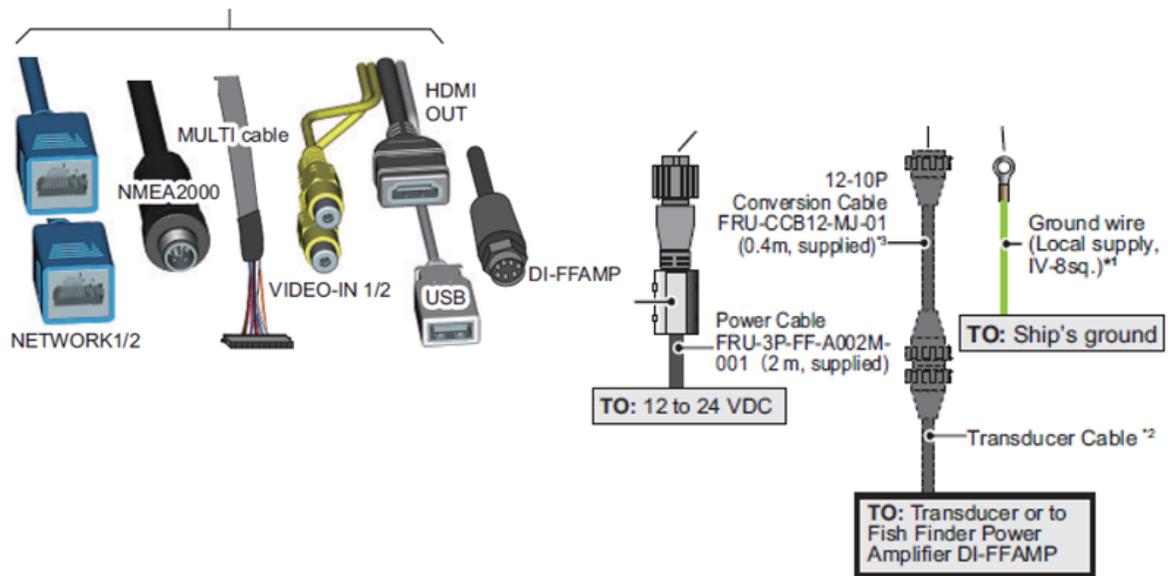
### Output

**126992/993/996, 127250/251/257/258/259, 128259/267/275, 129025/026/029/033/283/284/285, 130306/310/311/312/313/314/316**

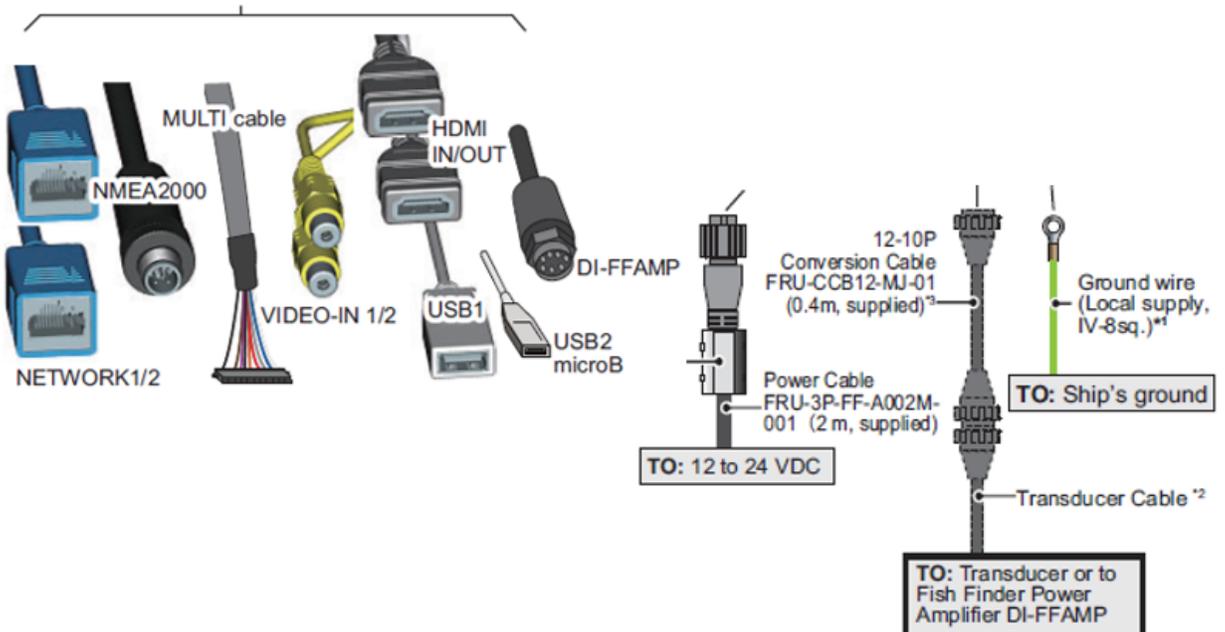
## Q6.SYS Does TZtouch3 have a built-in Operator's Manual?

Yes. TZtouch3 has a built-in operator's guide called "eGuide." The "eGuide" can be accessed from the home screen and is fully indexed.

**TZT12F**



**TZT16F and TZT19F**



The difference between the TZT12F and the TZT16F/19F is the addition of an HDMI input port along with a USB Passthrough port.

## **Q8.SYS What type of connections are available on the Multi-cable port?**

The Multi-cable has connections for an optional power switch, NMEA0183 output, external buzzer and event switch. It has 11 color coded wires. A removable pigtail cable/connector is provided for ease of installation.

| Wire color | Function   | Pin No. | Remark (Port No.)            |
|------------|------------|---------|------------------------------|
| White      | NMEA-TD-A  | 1       | NMEA0183 Output              |
| Blue       | NMEA-TD-B  | 2       |                              |
| Gray       | EXT_BUZZER | 3       | External buzzer ON/OFF       |
| Red        | +12 V      | 4       | External buzzer power (12 V) |
| Orange     | EVENT_SW   | 5       | Event switch (MOB, etc.)     |
| Black      | GND        | 6       | Grounding                    |
| Purple     | POWER_SW   | 7       | Power switch                 |
| Brown      | DC_N       | 8       |                              |
| Black      | DRAIN      | 11      | Grounding                    |

## **Q9.SYS Does NavNet TZtouch3 come with built-in GPS?**

TZT12F and TZT16F come with built-in GPS, the TZT19F does not.

## **Q10.SYS Does NavNet TZtouch3 have built in NMEA0183 functionality?**

Yes. TZtouch3 has a single NMEA0183 output port. TZtouch3 does not have an NMEA0183 input port. The NMEA0183 Sentences and baud rate are selectable in the "Settings > Initial Setup > NMEA0183 Output" Menu.

TZtouch3 can output the following NMEA0183 sentences.

**AAM, APB, BOD, DBT, DPT, GGA, GLL, GNS, GSA, GSV, RMB, RMC, RTE, TTM, VDM, VTG, WPL, XTE, ZDA.**

Selectable between NMEA0183 versions 1.5, 2.0, and 3.0

## **Q11.SYS Does TZtouch3 have a Demo Mode?**

Yes. TZtouch3 has both a tutorial video as well as built in demo files. The start-up screen has three selections. Play a demo file [Demo Mode Start], a tutorial [Start Tour], or Navigate [Lets Navigate]. The demo file is a live recording of a radar, sounder, DFF3D Sonar, GPS chart plotter, and camera. The tutorial provides guidance on how to use the MFD. Navigate sets the MFD into a normal operating mode.

## **Q12.SYS Can I use polarized glasses with TZtouch3?**

Yes.

## **Q13.SYS Is TZtouch3 compatible with hotspot sites that require web login or authentication?**

TZtouch3 MFDs can open a web browser to allow web login. However, we cannot guarantee that all of the authentication contents can be shown on the TZtouch3 browser. TZtouch3 is compatible with password protected and open Wi-Fi Hotspots.

## **Q14.SYS Is TZtouch3 compatible with the Active Captain POI database?**

No. Active Captain is not available with TZtouch3. There are no plans to offer this compatibility with TZtouch3.

## 2. NavNet TZtouch3 Connection Overview

### Q1.CONN Can Engine, Tank and Fuel data be displayed on the TZtouch3 MFDs?

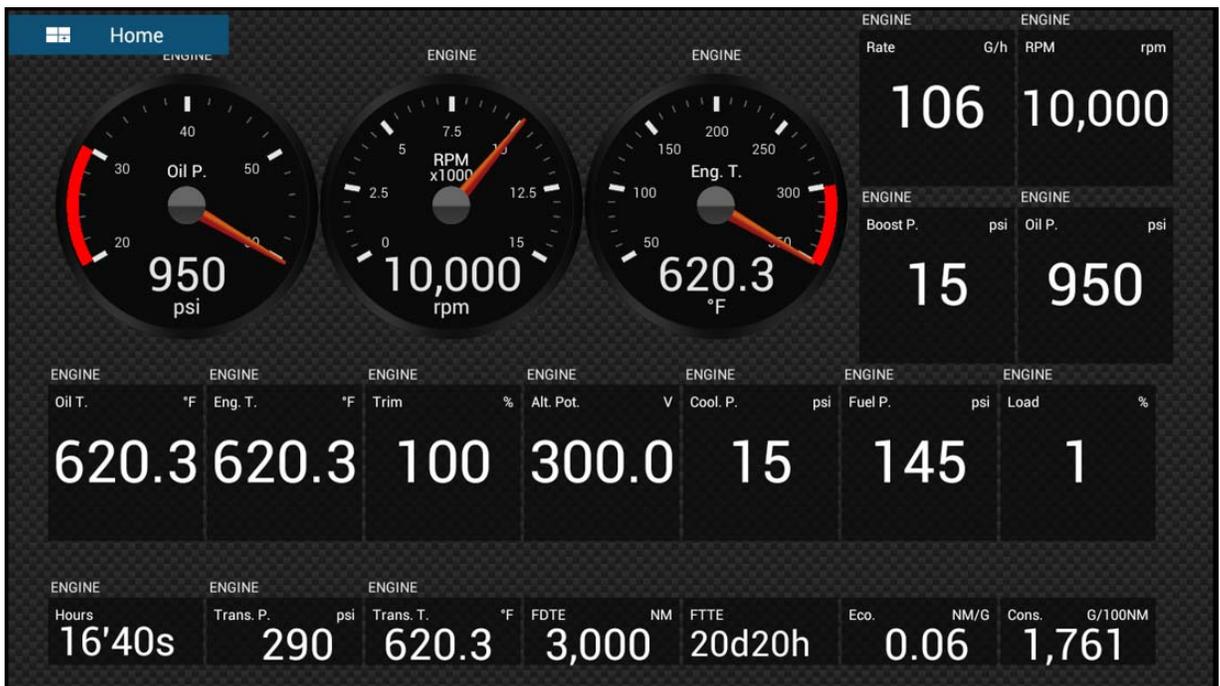
Yes. TZtouch3 MFDs have extensive and fully customizable Engine and Data Monitoring pages. Certain engine, tank and fuel data (up to 4) in NMEA2000 format may be displayed on any MFD in the Network. The following data PGNs are supported:

### Displayable Engine Information

| Indicator               | PGN    | Indicator                     | PGN              |
|-------------------------|--------|-------------------------------|------------------|
| Engine Speed            | 127488 | Transmission Oil Pressure     | 127493           |
| Engine Boost Pressure   | 127488 | Transmission Oil Temperature  | 127493           |
| Engine Trim Tilt        | 127488 | Tank Level                    | 127505 or Manual |
| Engine Oil Pressure     | 127489 | Available Fuel                | 127505 or Manual |
| Engine Oil Temp         | 127489 | Fuel Rate                     | 127489           |
| Engine Temp             | 127489 | Fuel Economy                  | 127489           |
| Alternator Potential    | 127489 | Fuel Consumption              | 127489           |
| Total Engine Hour       | 127489 | FTTE (Fuel Time to Empty)     | 127505 & 127489  |
| Engine Coolant Pressure | 127489 | FDTE (Fuel Distance to Empty) | 127505 & 127489  |
| Fuel Pressure           | 127489 | Battery Voltage               | 127508           |
| Engine Load             | 127489 | Battery Current               | 127508           |

**Note:** The instance number is used to “map” the engine, tank and fuel flow data. Instance 0, 1, 2 and 3 must be used (instance 0 corresponds to engine number 1).

### Example of Engine data



## **Q2.CONN Is a special Ethernet Hub required for use with TZtouch3 networks?**

TZtouch3 does not require a special Ethernet Hub. While we recommend the Furuno HUB101\*, any standard 100Mbps or Gigabit Ethernet Hub/Switch is compatible with the network. HUB101 must have a -55 PCB for use with TZtouch3. Additionally, each TZtouch3 MFD has two (2) Ethernet ports.

## **Q3.CONN Can standard touch PC monitors be used with TZtouch3 MFDs for remote displays?**

Yes. TZtouch3 can use standard widescreen touch PC monitors that are HDMI compatible. Non touch screen monitors are also compatible. An MCU002, MCU004, MCU005 remote or a mouse could be added for control. While standard monitors can be used, it is recommended that the monitor be tested with the TZtouch3 MFD before it is mounted to see if it is compatible. TZtouch3 does not support proprietary drivers, such as 10-point touch features. TZtouch3 supports dual point touch only. Any touch monitor that requires a driver be loaded into the TZtouch3 will not work. The TZtouch3 can use widescreen PC monitors that are either HDMI or DVI compatible (with an adapter plug). Non-marine monitors are not recommended for outside installations or in areas of high brightness. Also consider night-time viewing for installations using non-marine grade monitors.

TZT12F HDMI output resolution is fixed at 1280 x 720, TZT16F is and TZT19F is fixed at 1920 x 1080. **Note:** Connected touch monitors must have the same native resolution as the TZtouch3 MFD they are connected to (16 x 9 aspect ratio) as well as have the HPD (Hot Plug Detection) functionality.

## **3. NavNet TZtouch3 Compatibility**

### **Q1.COMP Can I mix TZtouch2 and TZtouch3 MFDs in a single network?**

Yes, TZtouch3 MFDs may be mixed with TZtouch2\* MFDs in a single network. There is a six MFD limit in the network.

\*TZtouch2 requires version 7 software. (available spring of 2020)

\*Each TZT2BB counts as two MFDs.

### **Q2.COMP Is NavNet 3D or TZtouch compatible with NavNet TZtouch3?**

No. TZtouch3 is not compatible with NavNet 3D or TZtouch. NavNet 3D or TZtouch and TZtouch3 MFDs cannot exist together on the same network.

### **Q3.COMP Can Furuno commercial Radars be connected to NavNet TZtouch3?**

Yes. TZtouch3 can be connected to an FAR2XX7, FAR2XX8, FR15X8, and FR15X3, depending on radar software versions. Please contact Furuno Tech support for additional information.

### **Q4.COMP Can an FCV1150 Sounder be connected to NavNet TZtouch3?**

While this is possible, it is not officially supported.

### **Q5.COMP Can I control a SiriusXM Satellite Radio (audio channels) using NavNet TZtouch3?**

Yes. TZtouch3 is compatible with SiriusXM audio and SiriusXM Weather via the BBWX3 or BBWX4 SiriusXM weather receivers.

## **Q6.COMP Is TZtouch3 compatible with Nobeltec TZ software?**

TZ Professional and TZ Navigator can be connected to a TZtouch3 network.

Also, with a TZT16F or TZT19F you can utilize the HDMI IN port along with the USB passthrough port to view and control a PC running TZ software.

Please contact [Nobeltec \(TimeZero\)](#) for additional information concerning compatible TZ software versions.

## **Q7.COMP Can NavNet TZtouch3 be connected to a Fusion radio?**

Yes. TZtouch3 can be connected to a Fusion Radio via an Ethernet connection. NMEA2000 connectivity is not available. The following Fusion models via "Fusion Link" are compatible; MS700/750/755, MS-RA770, and MS-SRX400. Click here for [Fusion radio Link Guide](#).

## **Q8.COMP Is TZtouch3 compatible with CZone Digital Switching Systems?**

Yes. CZone functionality is available with TZtouch3. Please see the "Guides" section of any TZtouch3 MFD product page for more information. Click here for [CZone Guide](#).

## **Q9.COMP Which Remote Controllers are compatible with TZtouch3 Networks?**

The MCU002, MCU004 USB Remote controllers, and MCU005 Ethernet controller are compatible with both TZtouch2 and TZtouch3 MFDs. More than one MCU002/4/5 can be connected to a single TZtouch3 or in a system. Once connected to a TZtouch2 or TZtouch3 MFD any MCU004/5 can control any TZtouch MFD in the system. MCU002 remote controllers only control the TZtouch3 that they are physically connected to. Click here for [Remote Control Unit Guide](#).

## **Q10.COMP Can additional USB devices be connected using a generic USB Hub?**

Yes. TZtouch3 has a powered 5V USB port that can supply up to 0.5 Amps to any generic USB Hub. This will allow you to connect additional USB devices, such as the SDU001 Chart Card Reader, MCU002, MCU004 USB Remotes, USB Memory Stick, Mouse, keyboard, etc.

## **Q11.COMP Are standard Microsoft USB Mice, Pointing Devices, and Keyboards compatible with TZtouch3 MFDs?**

Yes, TZtouch3 is compatible with standard Microsoft USB mice or pointing devices, and keyboards as long as a special driver is not required. You cannot load any drivers into a TZtouch3 MFD. You can perform almost every function using a mouse trackball and wheel. The only function that is not supported is pan and tilt while the plotter is in 3D mode which is only supported by the two-finger touch operation.

## **4. NavNet DRS Radars**

### **Q1.DRS Will my NN3D DRS radar work with a TZtouch3 MFD?**

Yes. Original, NN3D DRS radars are compatible with TZtouch3 MFDs if the DRS software is version 1.16 or higher. A DRS power supply will need to be added to power the radar if it is currently powered by the NN3D MFD. The following NN3D DRS power supplies are available.

PSU017 for use with a DRS4D

PSU012 for use with a DRS4A, 6A, and 12A.

PSU013 for use with a DRS25A (was included with the DRS25A)

## 5. NavNet TZtouch3 Fish Finder

### Q1.FF **Can I use an external Black Box Fish Finder in a TZtouch3 network?**

While TZtouch3 MFDs provide a built-in 1kW CHIRP/CW Fish Finder, you may opt to also utilize a Furuno black box Fish Finder, such as the BBDS1, DFF3D, DFF1-UHD, DFF3D Sonar or add the DI-FFAMP 2/3kW high power CHIRP amp. Please note that older black box fish finders, the BBFF1 and BBFF3 are not compatible.

### Q2.FF **How many Black Box Fish Finders can I have in a TZtouch3 network?**

A maximum of two fish finder sources and one DFF-3D Sonar in one TZT2/3 network.

### Q3.FF **Does TZtouch3 support PBG?**

At this time, TZtouch3 does not support PBG. This feature is expected to be released Fall of 2020

### Q4.FF **Can I use my existing 10pin Furuno transducer with the Internal Sounder of TZtouch3?**

Yes. While the transducer connector of the TZtouch3 has a 12pin connector to support dual channel CHIRP transducers, the TZtouch3 is supplied with a 12pin to 10pin adapter for use with conventional transducers.

### Q5.FF **Which transducers support Bottom Discrimination and Accu-Fish with TZtouch3?**

Please see the TZtouch3 MFD product page for a complete list of available transducers and their specifications.

### Q6.FF **Does Furuno stock CHIRP transducers for the internal TZtouch3 CHIRP sounder?**

Furuno USA stocks dual and single frequency CHIRP transducers from 300w to 1kw, as well as low, medium, and high frequency bands. Please see the TZtouch3 MFD product page for a complete list of available transducers and their specifications. For 2 or 3kw transducers, the DI-FFAMP is required.

## 6. Cameras, Video Inputs/Outputs and External Monitors

### Q1.CAM **Can FLIR M-Series Cameras be controlled from NavNet TZtouch3?**

Yes. Configuration information can be found in a dedicated document on the TZtouch3 product pages at [www.FurunoUSA.com](http://www.FurunoUSA.com).

### Q2.CAM **Are TZtouch3 MFDs compatible with IP Cameras?**

TZtouch3 is currently compatible with Axis IP Cameras only and with FLIR M100 and M200 cameras.

### Q3.CAM **What type of video inputs are available?**

TZtouch3 MFDs have two (2) Analog inputs. Up to four (4) Axis IP cameras and two (2) Axis Quad Video servers are supported. Additionally, the TZT16F and TZT19F have one (1) HDMI IN port. The HDMI IN port along with the USB pass thru port can be used to view and control a PC.

## 7. NavNet Tztouch3 and Apps

### Q1.APP Which Apps are compatible with TZtouch3 MFDs?

TZtouch3 is compatible with the Android Controller App, Android/Apple iOS Viewer Apps, and the Android/Apple iOS remote app, TZ (TimeZero) iBoat, and the new for TZtouch3, First Mate app. Click here for the [iOS and Android Apps guide](#).

### Q2.APP What is the "First Mate" app?

The Furuno TZ First Mate mobile App allows you to quickly create "catches" and "Photos" using the phone you already have in your pocket while boating or fishing. These objects are then automatically synchronized with the MFDs when your phone is connected to the MFDs Wireless Hotspot. As soon as your phone has access to the internet the TZ First Mate App will synchronize and backup all content such as the user objects database (Catches, Photos, Marks, Routes and Boundaries). Lastly, TZ First Mate can be used to get MFDs System ID, Software Versions, and report issues via a Report Log. For more information on the "First Mate" app, please visit the TZtouch3 product page on the Furuno USA website.

## 8. Installation and Retrofit

### Q1.INST What are the display mounting options for NavNet TZtouch3 MFDs?

All TZtouch3 MFD units are supplied with standard flush mounting accessories to mount the MFDs within a console. For the TZT12 and 16F mounting on top of a console or from an overhead can be achieved with an optional mounting bracket, available for purchase from Furuno USA. Additionally, adapter brackets are available when converting from another manufacturer's MFDs and from previous Furuno MFDs. Please refer to the TZtouch3 product and accessories pages on our web site for full details, including part numbers and current pricing. Also see next question.

### Q2.INST Will NavNet TZtouch3 MFDs fit in NavNet 3D or NavNet 1/vx2 MFD Console cut outs?

TZtouch3 has two adapter kits available for retrofitting NavNet 1/vx2 and MFD12 displays:

- Part # **001-563-970-00** is an adapter panel for retrofitting from a 10.4" NavNet 1/vx2 display to a TZT12F.
- Part # **001-563-980-00** is an adapter panel for retrofitting from a Simrad NSS16 evo3 and a Garmin GPSMAP7616 to a TZT16F.

**Note:** The TZT16F has a larger cutout compared to a TZT14, MFD12, or 10.4" NavNet 1/vx2 display. Enlarge the existing cutout when replacing the TZT14, MFD12, or 10.4" NavNet 1/vx2 display with a TZTL16F. For a full description of these retrofit adapter panels, please visit the TZT12F and TZTL16F accessory pages at [www.FurunoUSA.com](http://www.FurunoUSA.com).

**End**