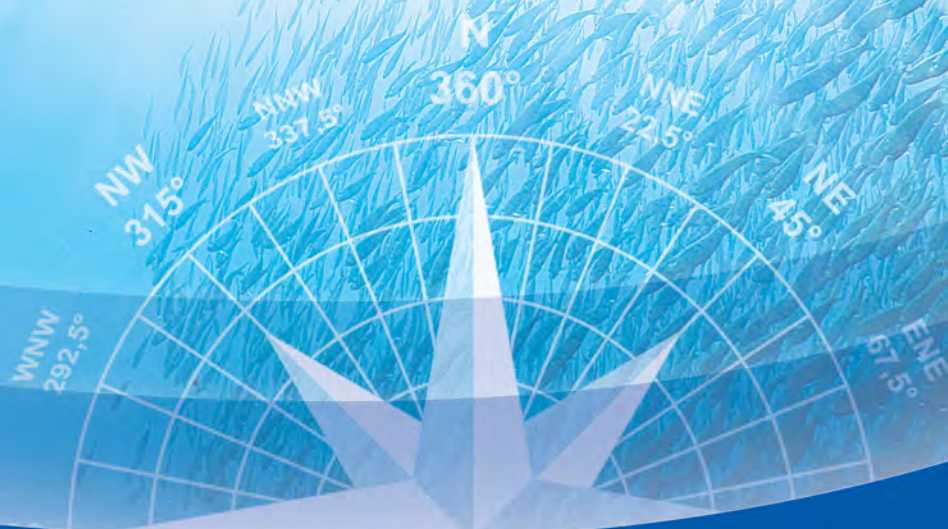


FURUNO



FAQ
FREQUENTLY
ASKED
QUESTIONS

TZT9E
TZT13E



1. System overview

Q1.SYS What models are in the TZtouchE product range?

9" TZT9E and 13" TZT13E.

Q2.SYS How many TZtouchE MFDs and/or TZtouchXL MFDs are allowed in one network?

Any combination of up to a total of six (6) MFDs are allowed in one network. Also, if a Maxsea/TZ TimeZero PC is included, it is counted as one MFD in the network.

Q3.SYS Does one TZtouchE or TZtouchXL MFD need to be set as a master?

Yes. One TZtouch MFD must be set as the "Chart Master" so the MFD can share its System ID over the network. See section (9) for more info on chart master. Make the "Chart Master" the MFD that is always on.

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

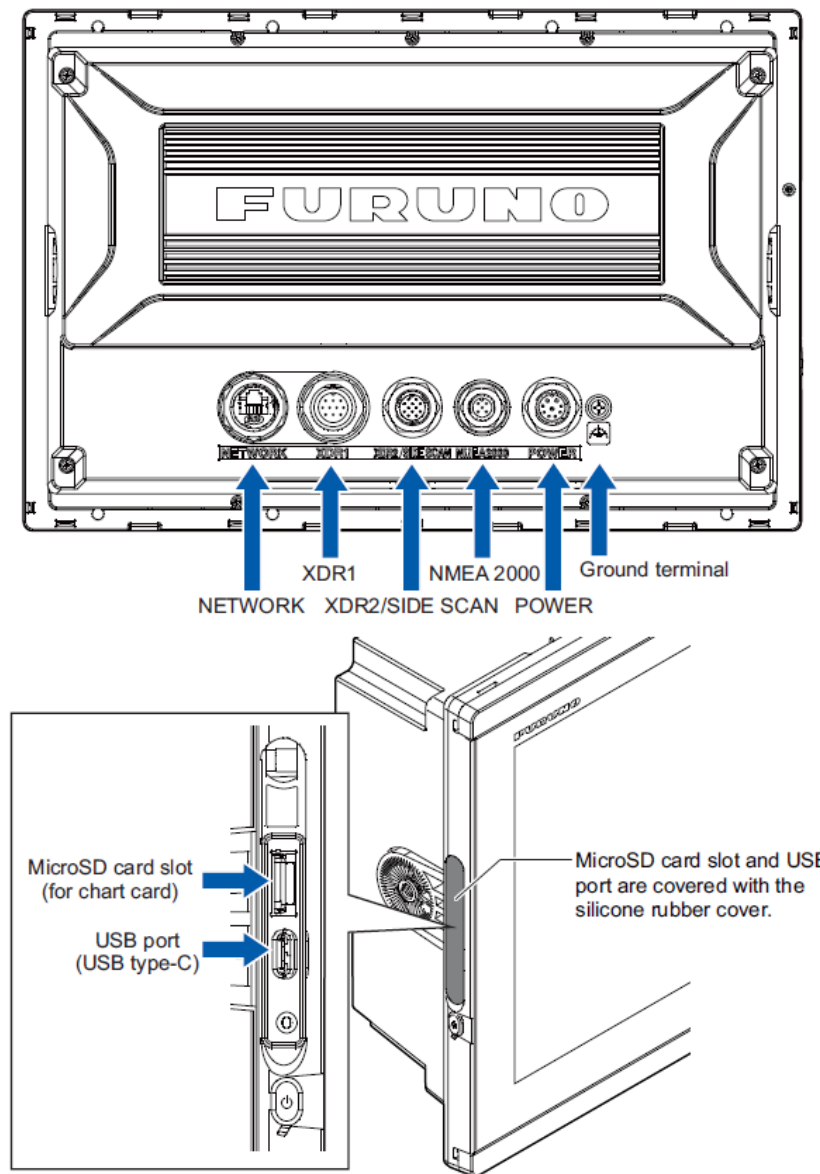
The 256 GB MicroSD card included with every TZtouchE MFD comes preloaded with a global base TZ MAPS chart. For North America, it also includes TZ MAPS for the region and MM3D vector charts for the U.S. East and West Coasts. Outside of North America, the card includes all available TZ MAPS coverage for the rest of the world.

Customers who want additional satellite imagery or expanded chart coverage can download these files directly to their system. Locked TZ MAPS chart areas can be purchased and unlocked right from the MFD when connected to the internet.

TZ MAPS and MM3D charts can also be purchased through Furuno National Distributors and authorized dealers.

Q5.SYS

What ports/connectors do TZtouchE MFDs have?



Q6.SYS

What input/outputs are available on the power/data cable port?

The power/data cable has connections for power along with a NMEA0183 output.

Pin No.	Signal	Wire Color
1	PWR_IN+	Red
2	PWR_IN-	Black
3	SHIELD	—
4	N/C	—
5	N/C	—
6	NMEA_TD-B	Blue
7	NMEA_TD-A	White
8	N/C	—
9	N/C	—

Q7.SYS Do TZtouchE MFDs come with built-in GPS/GNSS?

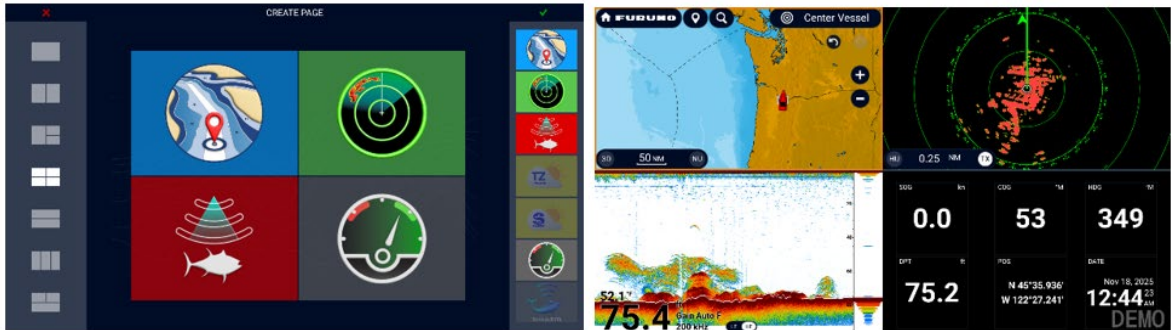
Yes. TZtouchE MFDs have an internal built-in GNSS core/antenna. Supporting GPS, Galileo, QZSS. SBAS: MSAS, WAAS, and EGNOS.

Q8.SYS Can I use polarized glasses to view TZtouchE MFDs?

Yes, polarized glasses are compatible with all TZtouchE MFDs.

Q.9.SYS What are the maximum number of split screens per display page?

Four. TZtouchE can have a combination of up to four (4) screens on a single display page.



2. Connections

Q1.CONN Can Engine, Tank, and Fuel data be displayed on TZtouchE MFDs?

Yes. Just like TZtouchXL MFDs, TZtouchE MFDs have extensive and fully customizable Engine and Data Monitoring pages. Engine (up to 6 engines), tank and fuel data via an NMEA2000 gateway may be displayed on any TZtouchE or TZtouchXL MFD in the Network.

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

***Information must be supported by the manufacturer's engine gateway**

Q2.CONN Is a special Ethernet Hub required for use with TZtouchE/TZtouchXL networks?

We recommend the Furuno waterproof HUB102, along with associated waterproof cables. Most commercially available 100Mbps or Gigabit Ethernet Hub/Switches are compatible. See section 7 for optional available waterproof TZtouchE, TZtouchXL and HUB102 cables.

3. NavNet TZtouchE MFD Compatibility

Q1.COMP Can I mix TZtouchE MFDs and TZtouchXL MFDs on a single network?

Yes. TZtouchE MFDs **can** be mixed with TZtouchXL MFDs as well as TZT2BB and TZtouch3 MFDs with compatible software.

	TZtouch: TZT9/14/BB	TZtouch2: TZTL12F/15F	TZtouch2: TZT2BB ^{*1}	TZtouch3: TZT9F/12F/ 16F/19F ^{*2}	TZtouchXL TZT10X/13X/16X/ 22X/24X/BBX ^{*3}
TZtouchE: TZT9E/13E	No	No	Yes	Yes	Yes

*1: Available in the future (from version 9.7).

*2: Available in the future (from version 3.9).

*3: Available in the future (from version 26.11).

Q2.COMP Are NavNet 3D, original TZtouch, TZT12L and TZT15L compatible with TZtouchE MFDs?

No. TZtouchE MFDs are not compatible with NavNet 3D, original TZtouch, or TZtouch2 12" and 15".

Q3.COMP Can Furuno commercial Radars be connected to NavNet TZtouchE MFDs?

TZtouchE MFDs can be connected to an FAR2XX7, FAR2XX8, FR15X8, or FR15X3, depending on radar software versions. FAR3000 series is not compatible (fixed 192 IP range). Please see "Interfacing FAR Radar with [TZtouch2/3/XL](#) for more information.

Q4.COMP Can I control a SiriusXM Satellite Radio using a TZtouchE MFD?

Yes. TZtouchE MFDs are compatible with SiriusXM audio, SiriusXM Weather and SiriusXM Fish Mapping via the BBWX4 SiriusXM weather receiver. (SiriusXM satellite radio service is only available in North America).

Q5.COMP Are TZtouchE MFDs compatible with Maxsea TZ (TIMEZERO) software?

Yes. TZtouchE MFDs are compatible with TZ Professional and TZ Navigator.

Please contact Maxsea in Europe or [TZ \(TIMEZERO\)](#) in North America for additional information concerning compatible Maxsea/TZ (TIMEZERO) software versions.

Just like TZtouch2/3, and XL, TZtouchE MFDs are part of the Furuno/TimeZero ecosystem. This ecosystem allows various types of user data, such as routes, waypoints, pictures, catches, etc., to be shared among the different platforms.

Q6.COMP Can TZtouchE MFDs be connected to a Fusion radio?

Yes. TZtouchE MFDs can be connected to a Fusion Radio via Ethernet or NMEA2000 depending on the Fusion radio model. [Fusion Link document](#).

Q7.COMP Are TZtouchE MFDs compatible with CZone Digital Switching Systems?

TZtouchE MFDs are compatible with CZone. Please see the "Technical Information" section of the TZtouchE MFD product page for more information. Click here for the [CZone Guide](#).

Q8.COMP Which Remote Controllers are compatible with TZtouchE MFDs?

The MCU005 Ethernet controller, and MCU006/H NMEA2000 controllers are compatible with the TZtouchE MFDs. The MCU005 or 6 can control each TZtouchE or TZtouchXL MFD in a network. More than one MCU005/6 can be connected in a NavNet system. Once connected to an MFD/Ethernet network/NMEA2000 network, any MCU005/or 6 can control any TZtouchE or TZtouchXL in the system. The MCU002/4 and TEU001 remote controllers are not compatible with TZtouchE MFDs.

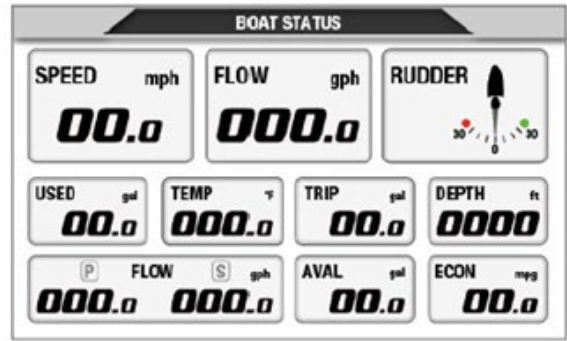
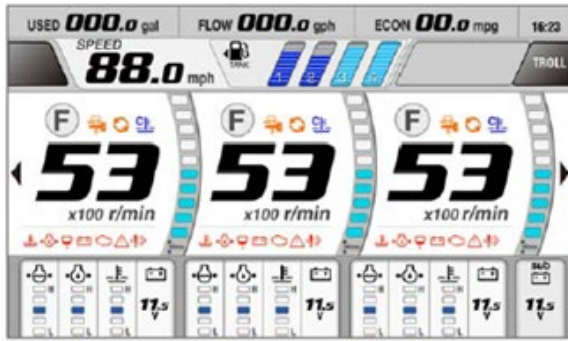


Q10.COMP Are standard Microsoft USB Mice, Pointing Devices, and Keyboards compatible with TZtouchE MFDs?

No. TZtouchE MFDs do not support USB devices such as mice, pointing devices, or keyboards. If this functionality is required, purchase a TZtouchXL MFD instead. Also, the rubber waterproof cover needs to be properly seated during normal use. The USB port is only used to Import/Export user data and can be used for software updates.

Q11.COMP Are TZtouchE MFDs compatible with Yamaha Engine display modes?

No. TZtouchE cannot show Yamaha engine graphics. Instead, Yamaha information is displayed using standard TZtouchE gauges and graphics. Yamaha engine graphics require an HDMI input. TZtouchE does not have an HDMI input. If this functionality is required, purchase a TZtouchXL MFD with an HDMI input (TZT16X, TZT22X, or TZT24X) instead.



Q12.COMP Are TZtouchE MFDs compatible with the Suzuki Engine Mode?

Yes. The Suzuki engine mode offers unique Suzuki instruments gauges, Troll Mode, Suzuki engine alarms, and diagnostic QR codes.



Q2.CAM Are TZtouchE MFDs compatible with IP/FLIR Cameras?

No, TZtouchE MFDs are not compatible with any IP cameras including FLIR.

4. NavNet DRS Radars

Q1.DRS What DRS radar sensors are compatible with TZtouchE MFDs?

Any NavNet DRS radar Sensor is compatible with a TZtouchE MFD except for the DRS4W Wi-Fi radar Sensor. Older NN3D DRS radar Sensors require software version 1.16 or higher and a dedicated power supply. Contact Tech Support for more information.

Q2.DRS What DRS radar sensors are required for Risk Visualizer and/or AI Avoidance Route?

Risk Visualizer is compatible with any current DRS radar sensor, Magnetron or Solid State except for the DRS4W.

AI Avoidance Route is only available with Solid State DRS NXT radar sensors.

5. NavNet Fish Finder and DFF3D Multi-beam Sonar

Q1.FF Can I use an external Fish Finder with a TZtouchE MFD?

Yes, you can access and control any compatible networked black box Fish Finder or the internal Fish Finder of any TZtouch3 MFD, TZtouchXL 10X, 13X, 16X, or TZX2BB from the TZtouchE MFD. The following Furuno black box fish finders are compatible, BBDS1, DFF1, DFF1-UHD, DFF1UHD+, DFF3, and the DFF3-UHD.

Note: Older black box fish finders such as the BBFF1 (ETR610) and BBFF3 (ETR30N) are not compatible.

Q2.FF Is the DFF3D compatible with a TZtouchE MFD?

Most DFF3D Multi-beam Sonar functions are compatible with a TZtouchE MFD. However, TZtouchE cannot record/display DFF3D PBG data or display the History Mode.

Q3.FF How many active Fish Finders can I have in a TZtouchE network?

A maximum of two active/selected fish finder sources, one CHIRP Side-Scan, and one DFF3D Multi-beam Sonar are allowed on one TZtouchE/XL network. The CHIRP Side-Scan and the DFF3D multibeam Sonar are not counted as Fish Finders.

Note: You can have more than two fish finders on the network, but only two can be active at any time.

Q4.FF What transducers can be connected to the TZtouchE MFD?

Airmar and Furuno 50/200 kHz CW transducers (max. 1 kW), Airmar single band CHIRP transducers 40-225 kHz (max. 1 kW), and 230kHz or 455kHz CHIRP Side Scan transducers.

Please visit the TZTE9 or TZTE13 product pages for a complete list of compatible transducers.

Q5.FF Is it possible to connect a Side-Scan transducer and a conventional down view transducer at the same time to the internal Fish Finder of a TZtouchE?

Yes. Possible combinations with the TZtouchE Fish Finder are shown below.

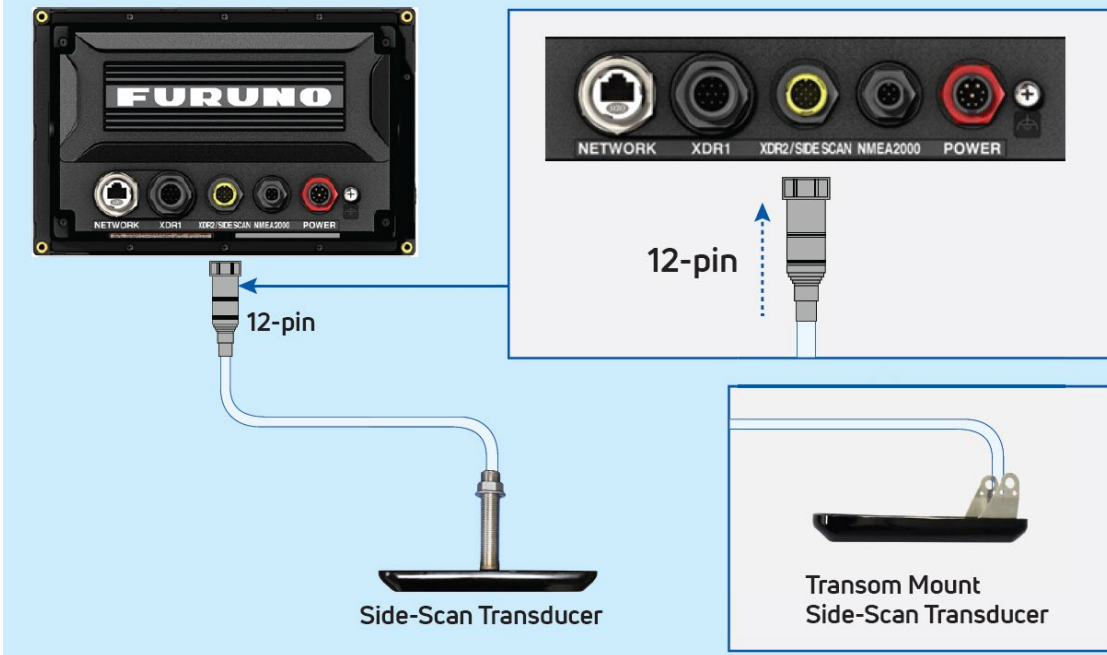
Without Side-Scan	With Side-Scan
<ul style="list-style-type: none">➤ One single CHIRP is possible➤ One CW is possible➤ One single Mid-CHIRP + one CW is possible*	<ul style="list-style-type: none">➤ One single CHIRP + CHIRP Side-Scan is possible➤ One CW + CHIRP Side-Scan is possible

* CW information is only used for ACCU-FISH™ or Bottom Discrimination. CW target returns are not displayed, only the CHIRP returns.

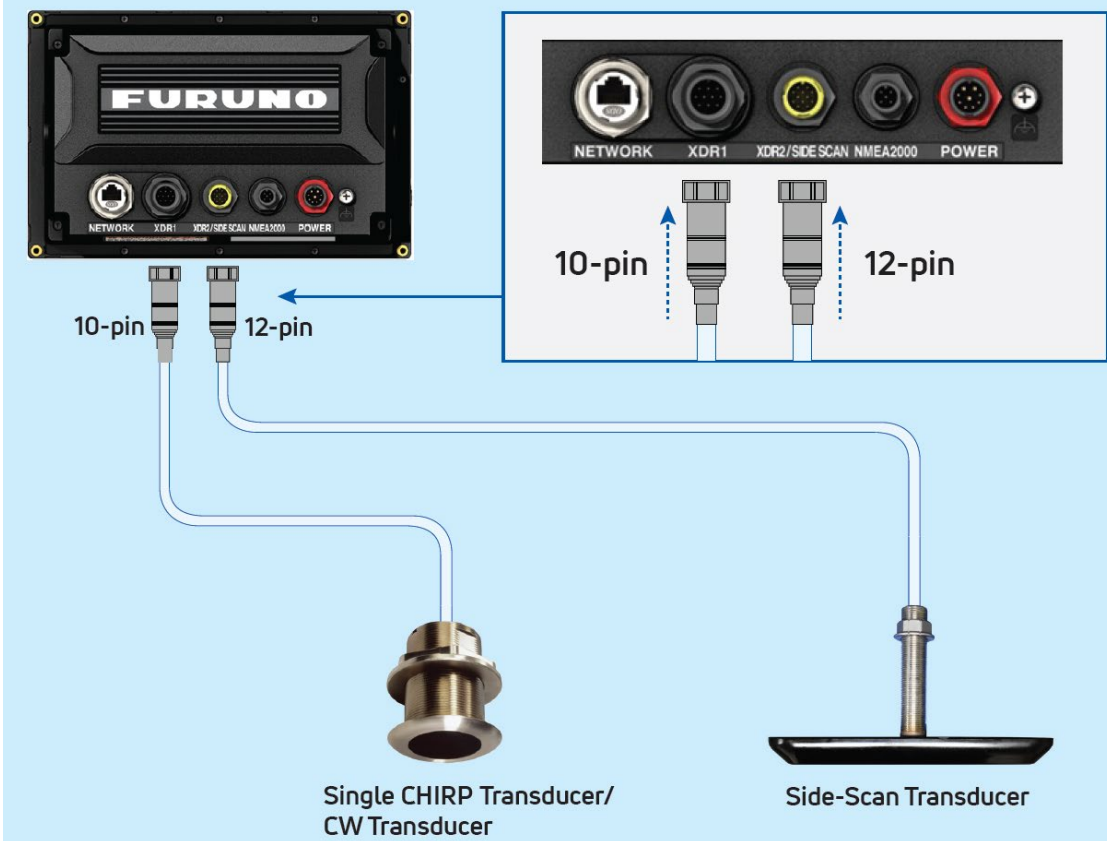
Single CHIRP or Conventional CW Connection Diagram:



CHIRP Side-Scan (230 kHz or 455 kHz) Connection Diagram:



CHIRP Side-Scan + Single CHIRP/CW Connection Diagram:



Q6.FF What TZtouchE Side-Scan frequencies are available?

230Khz or 455khz. Transducer dependent. Available Side-Scan transducers are Transom, Thru-hull and paired versions of both 230 or 455khz.

230Khz Chirp Side Scan Transducer part numbers

225T-PR904	Paired Thru-Hull CHIRP Side-Scan for NavNet TZtouch3 and TZtouchXL
225T-TM904	Transom Mount CHIRP Side-Scan for NavNet TZtouch3 and TZtouchXL
225T-SS904	Thru-Hull CHIRP Side-Scan for NavNet TZtouch3 and TZtouchXL

455Khz Chirp Side Scan Transducer part numbers

455T-PR903	Paired Thru-Hull CHIRP Side-Scan for NavNet TZtouchXL
455T-TM903	Transom Mount CHIRP Side-Scan for NavNet TZtouchXL
455T-SS903	Thru-Hull CHIRP Side-Scan for NavNet TZtouchXL

6. NavNet Command Center, Apps, and Furuno/TZ ecosystem

Q1.MISC What Third party HTML5 Command Center Applications are available for TZtouchE MFDs?

Below is a list of HTML5 .enc files that will be included in the initial release software.

- Airmar Seeker
- Ocean LED
- ZipWake
- SeaKeeper
- SeaKeepr Ride

[Click here](#) for Information concerning NavNet Command Center 3rd party applications. Additional Command Center Applications are **continuously being added**.

Q2.MISC Which Apple and Android Apps are compatible with TZtouchXL MFDs?

TZ [First Mate](#), and [TZ iBoat](#).

Q3.MISC Does TZtouchE offer a way to save user information to the cloud?

Yes. TZtouchE is part of a complete [Furuno/TZ ecosystem](#) that offers a way to save and load user information such as waypoints, marks, routes, pictures, etc., to and from the cloud.

7. Installation

Q1.INST What display mounting options are available for TZtouchE MFDs?

TZT9E and TZT13E are supplied with a tabletop bracket. For flush mount installations, the TZT13E is mounted from the front while the TZT9E is mounted from the rear. Installation materials are supplied for both bracket and flush mount.

Q2.INST What comes in the box?

- 9-pin Power/NMEA0183 out cable
- Mounting bracket and knobs
- Silicone rubber cover
- 001-646-980-00 5m Ethernet waterproof to non-waterproof
- WRJ-ADP-05M .5m waterproof to field attachable RJ-45 connector
- Operator's and Installation manuals
- Installation materials

Q3.INST What optional cables are available?

Ethernet waterproof to waterproof (for use with HUB102)

- HUB-102-JMP .5m HUB102 to HUB102 connector cable
- 001-653-250-00 2m
- 001-653-260-00 5m
- 001-653-270-00 10m
- WRJ-ADP-05M .5m waterproof to field attachable RJ-45 connector.

Ethernet waterproof to non-waterproof

- 001-646-960-00 2m
- 001-646-980-00 5m
- 001-647-000-00 10m

Fish Finder 12pin to 10pin adapter cable

- 000-200-955-10 12-pin to 10-pin Transducer adapter cable
- AIR-033-270 Y-cable for depth and temperature

8. New TZ MAPS and MM3D legacy charts (TZtouch2/3 charts)

Q1.MAPS Which charts are pre-loaded on the 256GB Micro SD-Card in TZtouchE MFDs?

The 256 GB MicroSD card included with every TZtouchE MFD comes preloaded with a global base TZ MAPS chart. For North America, it also includes TZ MAPS for the region and MM3D vector charts for the U.S. East and West Coasts. Outside of North America, the card includes all available TZ MAPS coverage for the rest of the world.

Customers who want additional satellite imagery or expanded chart coverage can download these files directly to their system. Locked TZ MAPS chart areas can be purchased and unlocked right from the MFD when it's connected to the internet.

Available free space on the chart card is as follows. Approximately 8GB for MFDs sold in North America and 48GB for ROW. For reference, Satellite photos and MM3D chart files are 2GB or less.

TZ MAPS charts can also be purchased through Furuno National Distributors and authorized dealers, just like MM3D charts.

Q2.MAPS What chart areas are available for TZ MAPS?

Link to complete TZ MAPS coverage areas, <https://mytimezero.com/tz-maps-catalog/>
You can also view the coverage areas on the TZtouchE MFD. Press Home, Charts, TZ MAPS store. Areas that are not covered by TZ MAPS are covered by MM3D charts.

Q3.MAPS Can I still use MM3D charts?

Yes. MM3D charts can still be used on TZtouchE MFDs. Some areas such as India and most of Africa do not have TZ MAPS coverage yet. These and other selected areas will continue to use MM3D charts. You can also use MM3D charts in areas that have TZ MAPS coverage. However, without TZ MAPS unlocked for your area, you will not be able to take advantage of all the new features that TZ MAPS offers.

Q4.MAPS What are the advantages TZ MAPS compared to MM3D charts?

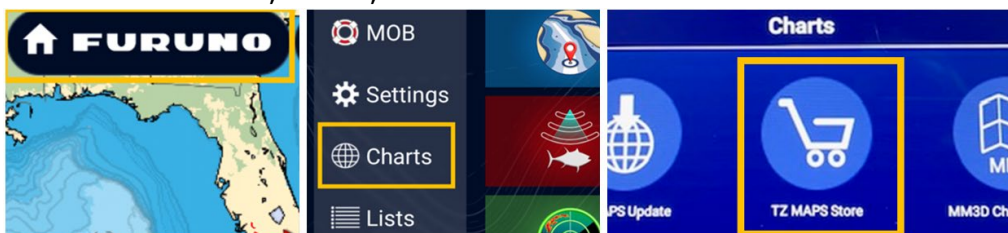
- AI auto routing
- Avoidance routing: combines TZ MAPS with live DRS NXT radar sensor target information to provide routes around dangerous targets)
- BathyVision: high resolution depth contour lines dynamically generated from bathymetric data.
- Community edits: Chart improvements made and shared by Furuno TZtouchXL, TZMAP, TZtouchE, TimeZero Pro, TZ Navigator and TZ iBoat users.
- Dynamic Mooring: With just a date selection and the current weather forecast, the system analyzes the coming wind conditions and topography to provide a clear mooring status.
- Ability to purchase and update TZ MAPS directly from the MFD.
- Other improvements such as new chart color palettes, open street maps, shaded bottom, terrain shading, etc.

Q5.MAPS How can I purchase TZ MAPS or MM3D charts for my TZtouchE MFD/s.

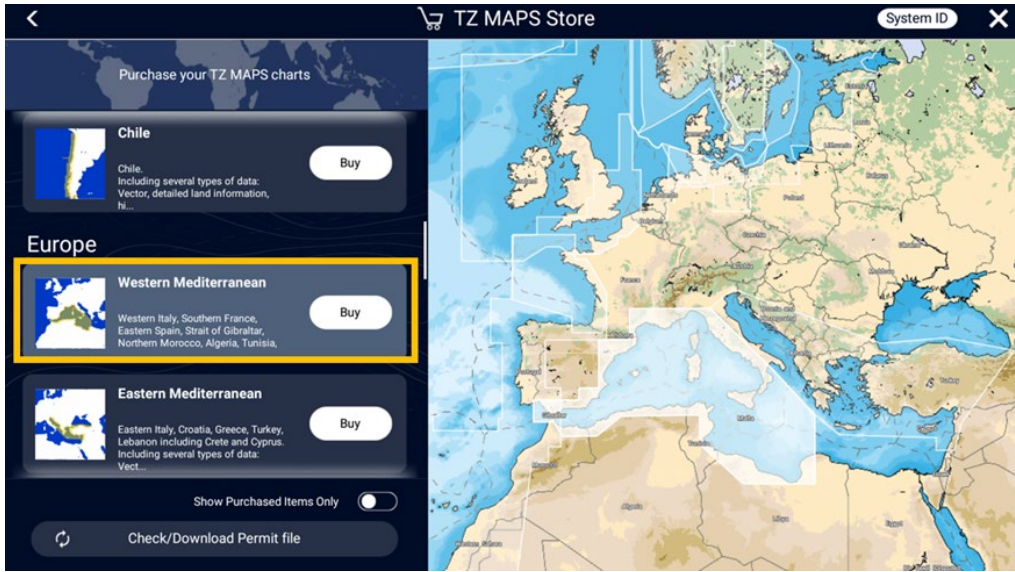
You can purchase TZ MAPS directly from the MFD using your credit card information or you can purchase TZ MAPS through your Furuno National Distributor and/or their authorized dealer network. You can only purchase MM3D charts through your Furuno National Distributor and/or their authorized dealer network. See [TZ MAPS FAQ](#) for additional information.

Q6.MAPS What are the steps to purchase and unlock TZ MAPS directly from the MFD?

Make sure your TZtouchE MFD is connected to a Wi-Fi network. Once connected to Wi-Fi, select Furuno home button, Charts, TZ MAPS Store.



Now select the chart for your area.



Enter your credit card information to complete your purchase.

The screenshot shows the 'Complete your purchase' checkout page. At the top, it says 'Complete your purchase'. Below that is a 'Cart' section with the following details:

- Western Mediterranean** (Ref: em001)
- Western Italy, Southern France, Eastern Spain, Strait of Gibraltar, Northern Morocco, Algeria, Tunisia, Balearic Is. Sardinia & Corsica. Including several types of data: Raster, Vector, detailed land information, high-resolution satellite photos, high resolution Bathymetry.
- Price: \$250.00

Below the cart item, there is an 'Order for license: TLB7C1BA8FBB38FA57A9'.

The total amount is displayed as **Total: \$250.00**. There are links for 'Tax Exempt?' and 'Enter Promotional Code'.

The form includes an 'Email' field, a card payment section with a 'Securely save payment details for future use' checkbox, and fields for 'First Name', 'Last Name', 'Card Number', 'MM', 'YY', 'CVC', and 'Zip Code'. The tax amount is shown as 'Tax: \$0.00'. At the bottom, there is a large blue button labeled 'Pay \$250.00'.

For complete instructions, please reference the Operator's Manual.