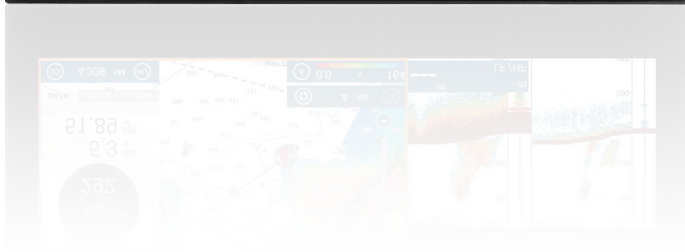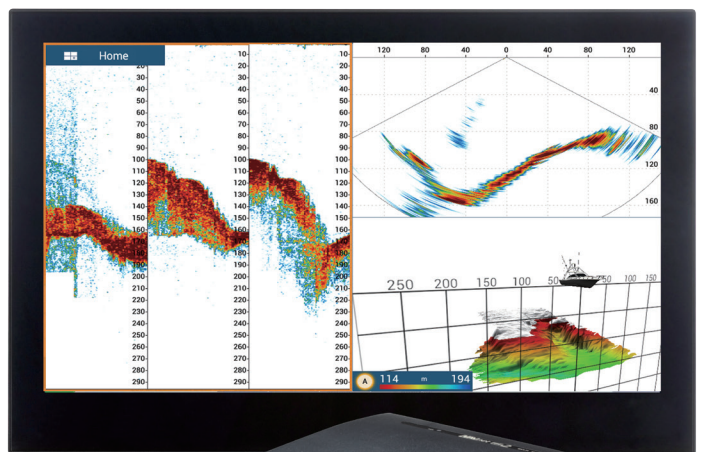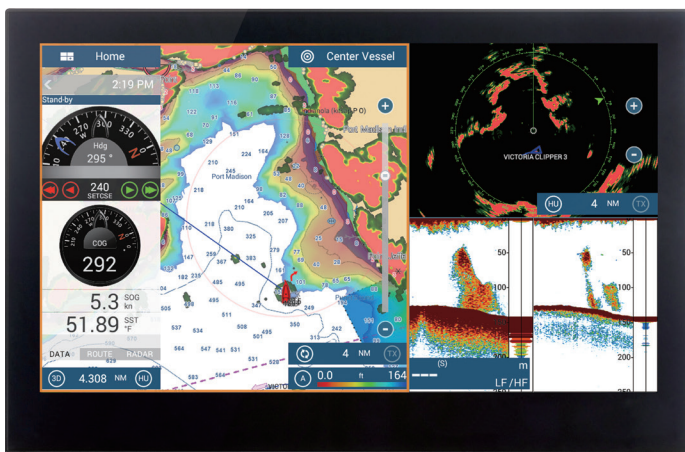# TZT2BB FAQ

Q   Optional remote controllers available for the TZT2BB?

Optional remote controllers are the MCU002, MCU004 and MCU005.

The MCU002 and MCU004 USB remote controllers as well as the MCU005 Ethernet remote controller are compatible with the TZT2BB as well as TZTL12F/15F MFDs with software v6.21 and above. More than one MCU004/5 can be connected to a single TZT2BB. Once connected to the TZT2BB or a TZTL12F/15F, the MCU004/5 can control any TZtouch2 MFD in the system. The MCU002 can only control the unit that it is connected to. In the case of the TZT2BB, you would have to have 2ea MCU002s to control both displays of the TZT2BB. Alternatively, the Android Controller App is freely available for download and can be used with any TZtouch2 MFD using a Wi-Fi connection.

[Click here for more information on optional controllers, MCU002/4/5.](#)

Q   How many MCU remote controllers can I have on a network.

MCU004s and MCU005s are limited to a max of four MCUs or combination of, per network. The MCU002 does not count towards this limit.

Q   Can a single monitor be used with the TZT2BB?

Yes. [Click here for more information.](#)

Q   Can the TZT2BB use monitors with different resolutions?

Yes, each processor is configurable to the connected display. For example, you can have one 24" wide screen monitor and the other could be a 17" or 19" 4:3 monitor.

Q   Which screen resolutions are compatible with NavNet TZT2BB?

Each side is fully independent.

1920 x 1080 (16:9, FHD)

1280 x 1024 (5:4, SXGA)

1024 x   768 (4:3, XGA)

Q   Do I need to use only touch screen monitors?

No. Non-touch monitors can be used along with an optional remote controller, MCU002/4/5. [Click here for more information.](#)

Q   Can standard PC monitors be used with TZtouch2 MFDs for remote displays?

Yes. While standard monitors can be used, it is recommended that the monitor be tested with the TZT2BB before it is mounted to see if it is compatible or not. The TZT2BB does not support proprietary drivers, such as 10-point touch features. The TZT2BB supports dual point touch only. Any touch monitor that requires that a driver be loaded into the TZT2BB will not work. The TZT2BB can use standard 4:3 or widescreen PC monitors that are either HDMI or DVI (with an adapter plug) compatible. Non-marine monitors are not recommended for outside installations or in high bright areas. Also consider night time viewing for installations using non-marine grade monitors.

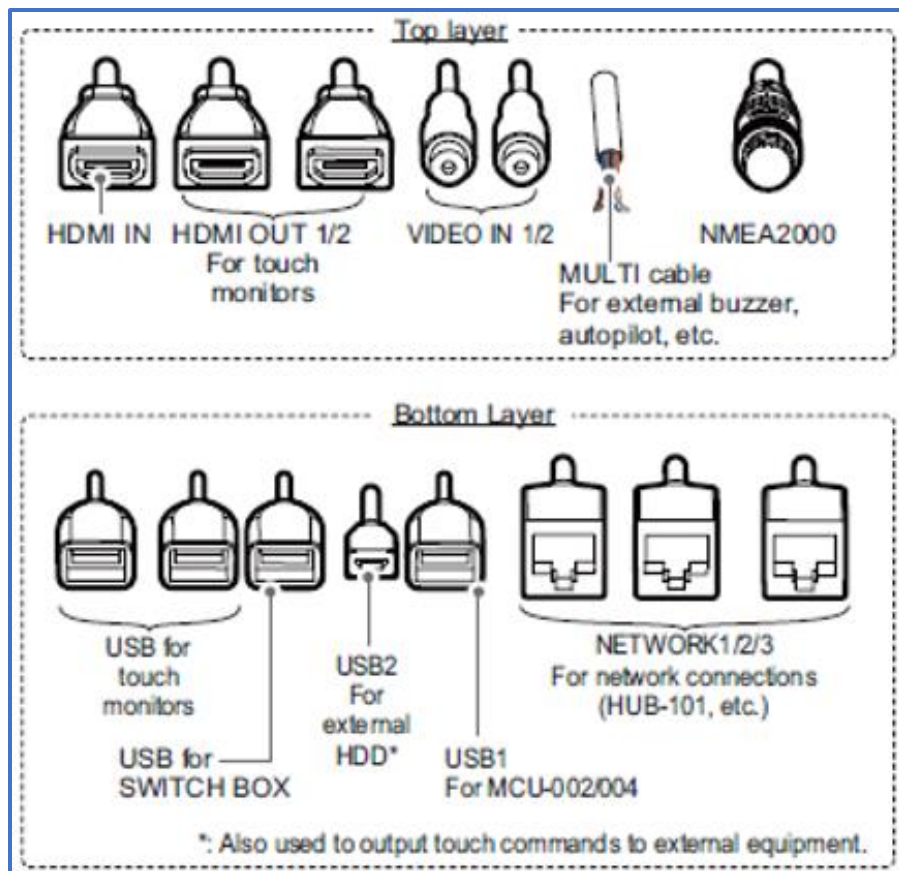**Q**   How many NavNet TZtouch2 MFDs are allowed in one network?

At this time, any combination of up to six (6) TZtouch2 (v6.21 and higher) MFDs are allowed in one network. One TZT2BB counts as two MFDs. If a Maxsea Explorer or Nobeltec PC is included, it is counted as one MFD in the network.

Q   Does the TZT2BB have a built in GPS antenna?

No. The TZT2BB does not have a built in GPS receiver/antenna since it will be mounted in a location that would not reliably pick up GPS signals. It will be necessary to add a NMEA2000 sensor, such as the GP330B to the network.

Q   What type of connections does the TZT2BB have?

Power supply		1 port
Switch Box PSD-003		1 port
Transducer		1 port
Pigtails	Ethernet	3
	NMEA2000	1
	Multi	1 (NMEA0183 output, External Power SW, Alarm output etc.)
	Video input	1 HDMI (1080p, 720p, 480i, HDCP compliant) 2 Analog
	USB	5 (4 x USB + 1 x micro USB for USB Output)
	Video output	2 HDMI (HDCP compliant) / Independent displays

Top layer

HDMI IN | HDMI OUT 1/2 (For touch monitors) | VIDEO IN 1/2 | MULTI cable (For external buzzer, autopilot, etc.) | NMEA2000

Bottom Layer

USB for touch monitors | USB2 (For external HDD*) | NETWORK1/2/3 (For network connections (HUB-101, etc.))

USB for SWITCH BOX | USB1 (For MCU-002/004)

*: Also used to output touch commands to external equipment.

Q   What 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.

Wire color	Connect to....
White	NMEA - TD_A
Blue	NMEA - TD_B
Gray	External buzzer ON/OFF
Red	External buzzer power (12 V)
Orange	Event switch (MOB, etc.)
Black	Event Switch Ground
Purple	Power Switch
Brown	DC_N
White/Red	Unused
White/Black	
Black (Braided shield)	Ship's ground

Q   Does NavNet TZtouch2 have built in NMEA0183 functionality?

Yes. TZT2BB has a single NMEA0183 output port. TZT2BB does not have an NMEA0183 input port.

Q   What NMEA 0813 Sentences can the TZT2BB output?

The TZT2BB can output the following NMEA0183 sentences. All sentences use GP as the talker.

Sentence	Description
AAM	Waypoint Arrival Alarm
APB	Autopilot B Sentence Data
BOD	Bearing Origin to Destination
DBT	Depth Below Transducer
DPT	Depth
GGA	Global positioning system fix data
GLL	Geographic position (Latitude/Longitude)
GNS	GNSS fix data
GSA	Overall satellite data
GSV	Detailed satellite data
RMB	Recommended navigation data for GPS
RMC	Recommended minimum data for GPS
RTE	Route message
TLL	Target Latitude/Longitude
TTM	Tracked Target Message
VTG	Vector track and Speed Over the Ground (SOG)
WPL	Waypoint Location information
XTE	Measured cross-track error
ZDA	Date and time

Q   How many Ethernet ports does the TZT2BB have?

Three external Ethernet ports are available.

Q   Can I also add additional Ethernet Hubs/switches as well? What about a generic off the shelf switch.

The TZT2BB does not require a special Ethernet Hub. While we recommend the Furuno HUB101, any standard 100MB Ethernet Hub/Switch is compatible with the network. If a HUB101 is not used, a Gigabit Switch is recommended.

Q   How many Ethernet hub/switches can I have on my network?

Max number of Ethernet Hubs or switches on a NavNet network is three. The TZT2BB counts as one switch if more than one (1) port is used.

Q   I have limited dash space. Do I have to install the PSD003 switch box?

No. You can utilize the power on switch wires of the Multi-cable. Connect the purple and brown wires to a momentary contact switch (not provided). You could also mount the PSD003 in an out-of-the-way location and still install a momentary contact switch in a more convenient location.

Q Are standard Microsoft USB Mice and Pointing Devices compatible with the TZT2BB?

Yes, as long as a special driver is not required. You cannot load any drivers into the TZT2BB. You can perform almost every function using a mouse trackball and wheel. The only function that is not supported is pan and tilting the plotter in 3D mode. That is only supported by the two-finger touch operation.

Q Can I use a standard USB keyboard?

No. TZT2BB does not support a USB keyboard.

Q Can additional USB devices be connected using a generic USB Hub?

Yes.

Q What video inputs are available on the TZT2BB?

The TZT2BB has one (1) HDMI IN, two (2) Analog "PAL" inputs and up to four (4) Axis IP cameras are supported. TZT2BB also supports two Axis Quad Video servers.

Q

What IP Cameras is the TZT2BB compatible with?

TZT2BB is currently compatible with most Axis (H.264) IP Cameras or cameras that also support the Axis IP camera CODEC. TZT2BB also supports two Axis Quad Video servers.

Q

Does the TZT2BB offer FLIR camera integration?

Yes. Further information on compatible models can be found here.

Q

Can FLIR M-Series Cameras be controlled from the TZT2BB?

Yes. Configuration information can be found in a dedicated document on TZtouch2 product pages at www.FurunoUSA.com or by clicking here.

Q

I currently have a NavNet 3D MFDBB system on my boat and I would like to upgrade to the TZT2BB. What items of my current system can I reuse?

Radar Sensors

The DRS radar sensor that was connected to your NavNet 3D system is compatible with the TZT2BB. The DRS software might need to be updated for it to work with a TZtouch/2 MFD. We recommend that this is done while still connected to the NavNet 3D MFD. Current software can be found under the software tab for the DRS radar sensor. If the DRS radar sensor was powered via the MFD, a DRS power supply needs to be added. Depending on the DRS model this will be either a PSU017 or PSU012.

Sounders

The DFF1 and DFF3D are compatible with the TZT2BB. The dip switch settings of the DFF1 or DFF3 will have to be changed to a static IP address.

MCU001 (MFDBB Controller)

The MCU001 needs a modification kit to be compatible with the TZT2BB or any TZtouch2 MFD. This kit includes software for the MCU001, new rubber keypad, new bezel, two 5m Ethernet cables and a POE injector. Part # for the kit is 001-506-900-00

Q   Overview of procedures to update a NavNet 3D MFD system to a TZT2BB system

- Check that legacy DRS software is at V1.16 or higher
- If the DRS radar sensor is powered from the NavNet 3D MFD than an appropriate external DRS power supply must be added.
- PSU012/013 must have XH connector jumper installed on J7. This sends power to radar without using power-sync
- Change IP address mode switches on sounders to Down/Up/Up/Down for TZT2BB connections.
- MUST turn off all Power-sync switches in the HUB101. Power-sync was only required in NN3D architecture. Leaving this on WILL cause problems.
- Chart licenses do not transfer to upgraded systems. New chart unlock codes need to be purchased for any "For pay" charts. You cannot transfer chart unlock codes from the NavNet 3D system to a TZtouch2 system.
- Convert MCU001 to MCU005 using mod kit part # 001-506-900-00

Q   Which charts are pre-installed on the 256GB Micro SD-Card in the TZT2BB?

The 256GB Micro SD-Card included with the TZT2BB card contains every NOAA Raster, NOAA Vector, C-MAP Vector, and Navionics Vector chart file in the entire Mapmedia Library for all of North, Central and South America. The entire Western Hemisphere chart file is preloaded. Only customers wishing to access additional satellite photo areas or charts on the other side of the world will need to add more chart files to their system. Locked chart areas will need to be purchased from an Authorized Furuno Dealer. Once chart areas are purchased, they can be automatically unlocked by connecting the TZT2BB to the Internet. Alternatively, the charts can be manually unlocked by entering the chart license unlock codes.

Q Does the TZT2BB have a built in sounder?

Yes. The TZT2BB has the same built-in RezBoost sounder as a TZTL12F/15F. You may also add a DFF1-UHD TruEcho CHIRP Fish Finder, DFF3D, BBDS1 or DFF3.

Q Does the TZT2BB support the new BBWX4 Sirius/XM marine weather/audio receiver?

Yes. Both weather and entertainment audio. Click here for more info.

Q Does the TZT2BB have a built-in operator's manual?

Yes. TZT2BB has a built-in operator's guide called "eGuide." The "eGuide" can be accessed from the home screen and is fully indexed.

Q Which Smart phone/Tablet Apps are compatible with the TZT2BB?

TZT2BB is compatible with the Android/Apple Controller App, Android/Apple iOS Viewer Apps, and the Android/Apple iOS remote app.

Q Does the TZT2BB have an internal LAN antenna for Wi-Fi?

Yes, while the TZT2BB does not have an internal GPS antenna it does have an internal LAN Wi-Fi antenna. Depending on location of the TZT2BB, an external Wi-Fi router might be required for extended ranges and better connectivity.

Q Are NavNet 3D networks compatible with NavNet TZtouch2?

No. TZT2BB and TZtouch2 MFDs are not compatible with NavNet 3D. NavNet 3D and TZtouch2 MFDs cannot exist together on the same network.

Q Can Furuno commercial radars be connected to a TZT2BB?

Yes. The FAR2XX7, FR15X8 and FR15X3 Depending on software versions) are compatible with the TZT2BB and TZtouch2 MFDs with software version 6.21 and above. There are some feature limitations, but basic functions are available on the TZtouch2 MFDs. Contact Furuno Tech support for more information.

Q Is the TZT2BB and TZtouch2 MFDs compatible with Nobeltec TZ?

TZ Professional and TZ Navigator (with Radar module) can be connected to a TZtouch2 network. The following features are available:

- Chart License sharing (link a TZtouch2 System ID with Nobeltec TZ Serial Number)
- Navigation Data from the TZtouch2 network (GPS, Speed, Heading, etc.)
- Radar WorkSpace and Radar Overlay (with full control of the DRS Radar)
- DFF1, BBDS1, DFF1-UHD or DFF3 compatibility with optional Sounder module
- DFF-3D compatibility with optional PBG and DFF-3D module (requires Satellite Compass for stabilization)
- Active Route and Waypoint with TZ software
- A Nobeltec TimeZero PC counts as one MFD in any network of up to six (6) MFDs

Also, with the TZT2BB you can utilize the HDMI IN port along with the USB passthrough port to view and control a Nobeltec PC using the same monitor that is connected to the TZT2BB. You can also view and control the Nobeltec PC in a quarter screen.

Q   Is the TZT2BB compatible with CZone Digital Switching Systems?

Yes. Click here for more info on CZone and TZtouch2.

Q   Is TZtouch2 compatible with the Active Captain POI database?

Yes. However, at this time, you can only view Active Captain POI information. You cannot login to update the POI data base or provide updates to the database.

Q   Does the TZT2BB have to be opened during installation to attach cables, set switches, etc.?

No. All connections are made using pigtail cables and are external to the TZT2BB. No switches need to be changed inside the TZT2BB.

Q   Can a Fusion radio be connected to the TZT2BB?

Yes. The following models are compatible with the TZT2BB and all TZtouch2 MFDs with software v6.21 and higher. Fusion models 700, 750, 755 and Apollo. TZtouch2 MFDs connect to Fusion radios via an Ethernet connection, not via NMEA2000.

Q   If I have two DRS radar sensors in my TZT2BB system, can I display dual range radar video on both screens?

Yes. You can view a different radar on a different monitor. You can also show the different DRS radar sensors in dual mode.

Q   TZT2BB has two different weather options. It has the built in free NavCenter weather and an optional BBWX4 SiriusXM weather receiver can be added. Can I view NavCenter weather on one display and SiriusXM weather on the other display?

Yes. You can set the displays up independently of each other. You can also set both sides to display SiriusXM weather information.

Rev 3-4-19