



# NAVnet

**TZ3**  
touch

## Installation Checklist

# TZtouch3 Installation Checklist

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## MFD Network Installation

- ❑ Connect all TZtouch3 MFDs to the Ethernet Network. If a HUB101 is used, set the internal HUB101 DIP switches to OFF (HUB101 DIP Switches are OFF by Default). Please see *Appendix* for more detailed information.
- ❑ Connect all TZtouch3 MFDs to a proper NMEA2000 backbone using drop cables (18 feet or less).  
***Note:** TZtouch3 MFDs do not have an internal terminating resistor that can be switched ON or OFF. All connections to the NMEA2000 backbone must be "drop" connections (18 feet or less).*
- ❑ Pick one TZtouch3 MFD as the Chart Master and select "ON" for "Chart Master Device" setting from the "Initial Setup" menu. You will notice that a System ID is generated on the TZT3 that is designated as the Chart Master and all other TZT3(s) on the network will assume the same exact System ID. The MFD that you pick to be the Chart Master should be a unit that is always turned on and left on during operation. However, if you are adding TZT3 MFD(s) to an existing TZT2 network that has pay for charts unlocked you will leave the "Chart Master Device" setting OFF on the TZT3 MFD(s) because the TZT3 MFD(s) will assume the System ID of the current TZT2 Chart Master.
- ❑ If chart unlock code(s) have been purchased for the Chart Master's System ID, you can enter unlock code(s) to unlock your purchased charts. On the Home page you can select "Chart" and press on "Insert Unlock Code" on the top of the page and enter the unlock code(s) when prompted. Note, unlock codes are hexadecimal so you will never have the letter "O" only the number zero "0".
- ❑ If using an external sounder, make sure the DFF1, BBDS1, DFF3, and DFF1-UHD are set up for "Static IP". Please see *Appendix* for more detailed information.
- ❑ Power ON the Ethernet HUB/Switch, NMEA2000 backbone, sensors, then start the TZtouch3 MFDs.
- ❑ If a Sirius Satellite Weather Receiver is installed (BBWX3 or BBWX4), set the "Weather Data Server" to "Sirius" from the "Weather" menu.

- Once the TZtouch3 MFDs have started, press the "Home" button, select "Menu" on each MFD to confirm that you see both a "Radar" and "Fish Finder" menu as well as confirm the "Radar Source" and "Fish Finder Source" is set appropriately (assuming you have both a sounder and radar connected to the Ethernet Network).
  - Confirm all Ethernet and NMEA2000 devices are detected by pressing the "Sensor List" button in the "Initial Setup" menu. All detected devices are bright white, while devices that are no longer seen will be designated in light gray (Press "Reset" button on top right of the screen to refresh list). Take the time ensure no Instance Conflicts exist. Device Instances can be edited by pressing on Keyboard Icon. Any sensor that outputs the same information should have a different Instance Number (Priority). For example, if you have a PG700 and an SCX20 on the NMEA2000 backbone, set the Instance Number of the SCX20 to (0) and the PG700 to (1). Zero (0) is the lowest number and is the higher priority.
  - If you are missing the option to select your sounder model as the "Fish Finder Source" under the "Fish Finder" menu, make sure that the DFF1/BBDS1/DFF3/DFF1-UHD sounder DIP Switch/Mode Switch settings are correct and that you see good traffic on the Ethernet port (blinking green light). See *Appendix* for more detailed information.
  - If you are missing the Radar menu and your radar was/is an original NavNet 3D DRS2D,DRS4D,DRS4A,DRS12A or DRS25A ensure light on the PSU (depending on the model of DRS, either a PSU017 or a PSU012.) is on, if not ensure Jumper is inserted to bypass Power Synch. If power supply is on and still no communication with DRS radar, ensure DRS software was updated to 1.16 or higher. Please see *Appendix* for more detailed information.
  - Note that there is no need to restart the TZT3 MFDs to have the Sounder and/or Radar appear in the menu. As soon as the radar or sounder are detected on the network, they will automatically update and appear in real time.
- Select the "Radar" menu and the select your radar model number under "Radar Source". Scroll down to the "Radar Initial Setup" to adjust, at minimum the following parameters:
  - Heading Alignment
  - Antenna Height
- Select the "Sounder" menu and the select your sounder model number under "Sounder Source". Scroll down to "Sounder Initial Setup" to adjust at minimum the following parameters:
  - Draft
  - Transducer

- ❑ If you have a Fusion radio(s) installed confirm you have a "Fusion" menu selection on the Home screen. If not, ensure you have connected the Fusion radio via LAN (Ethernet) or NMEA2000 (not both) and have followed our instructions on [furunousa.com](http://furunousa.com) concerning IP and Subnet configuration of the Fusion radio(s) if on LAN. Click on the following link to access Fusion Link information. [Fusion Link Setup](#)
- ❑ If you have Axis IP Cameras or Axis Video Servers but you do not have the option to select them as a video source or, you only see a "Video Decoding Error" message on the screen for the video source that is selected. Ensure you have set them up correctly as per our documentation. Click on the following link to for detailed information. [AXIS IP Camera and Video Server Setup](#)
- ❑ If you have a CZONE interface but you notice you do not have CZONE as an option under "Graphic Instrument Setup" found in the "Initial Setup" menu. Ensure you have set up the interface correctly per our documentation. Click on the following link to for detailed information. [CZONE Setup](#)
- ❑ If you have NMEA2000 engine interface(s), initiate the automatic engine setup option by selecting "Engine and Tank Automatic Setup" found under the "Initial Setup" menu.
- ❑ If you have an SCX20 and/or SC33 use the "Sensor Management" menu found under "Initial Setup" to perform installation settings, adjustments, offsets, change NMEA2000 output settings, and self-tests as needed.
- ❑ Select the NMEA2000 PGNs that you want to output on the NMEA2000 backbone from the "PGN Output" button of the "Initial Setup" menu.

**Note:** *The PGN output configuration is a global setting to the system (the PGN output settings are shared among all the TZtouch3 MFDs). However, only one MFD will actually output data on the NMEA2000 bus (the one that was first powered ON). If that MFD is turned OFF or fails, another TZtouch3 MFD will automatically replace it and start outputting the same PGNs onto the NMEA2000 backbone. Do not turn on every PGN. Only turn on the PGN(s) that are needed for other pieces of equipment on the NMEA2000 network. If you have an Autopilot connected, you would normally turn on PGN 129025,026,029,033,283,284 and 129285.*

- ❑ Select the “Preferred” data/sensor sources for the network by pressing the “Data Source” button in the “Initial Setup” menu.
- ❑ Select your preferred units of measurement such as Foot, Meters, Celsius, Fahrenheit, etc. from the “Units” menu.
- ❑ Ensure that you have set the appropriate “Local Time Offset” value under the “General” menu or the time displayed will be incorrect.


### **Mixed TZtouch2 and TZtouch3 Network Installations**

- ❑ *TZtouch2 MFD(s) must have software **version 7.0 or higher**.* If any “For pay charts” were purchased for the TZT2 system, keep that unit as the chart master. All other MFD(s) Chart Master setting should be turned off (default).
- ❑ If you have a TZT3(s) mixed network with TZT2(s), one TZT2 will be a Chart Master. If there is an existing TZT2 Chart Master, leave it as the Chart Master. You will notice the TZT3 will assume the System ID of the master TZT2 in the network. The MFD that you pick to be the Chart Master should be a unit that is always turned on and left on.

### **Recommend Customizations**

- ❑ You can set parameters for Tracks under the “Ship & Track” menu. Typically, the “Track Interval” is either set for “Time” or “Distance” however, there are other options available. For example, recording tracks by “Depth”, “SST” (Sea Surface Temperature) or “Bottom Discrimination”.
- ❑ Increasing the “Chart Object Size” (Names, Symbols, Sounding Depth Numbers etc..) especially Sounding Depth Numbers can very helpful. This setting is found in the “Vector Chart” menu.
- ❑ You can adjust the time in which user interface objects such as pop up information, data boxes or menus remain open before they “Auto-Hide”, you can set a longer dwell time by increasing the “User Interface Auto-Hide” value. This setting is found in the “General” menu. Options are:
  - 3 sec
  - 5 sec
  - 10 sec (Default)
  - 15 sec



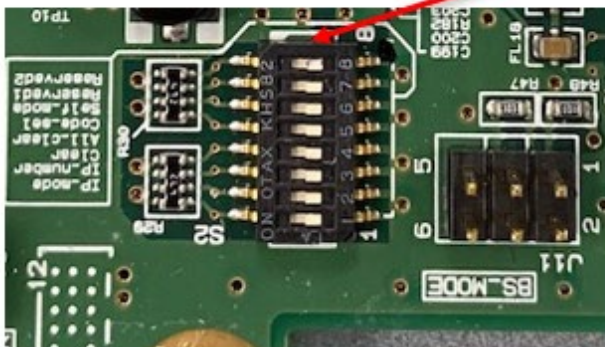
- You can choose to increase the size of font, data boxes and the menu(s) . The "Scale & Layout" setting is found under the "General" menu. You have the following options:
  - Smallest
  - Small
  - Normal
  - Large
- Customize your Data Boxes simply by performing a left edge swipe from the left-hand side of the MFD. You can reorganize the preset data boxes by tapping and holding anywhere in the databox area. You can use the grip symbol  (drag and drop) or you can completely customize the data box environment by deleting/changing presets and selecting the type of data display (Numeric or Graphic) and type of data (Navigation, Radar, Waypoint etc..).
- The "Two Finger Tap Function" and "Two Finger Long Tap Function" settings is are found in the "General" menu. These settings help create a quick and easy way to access menus and/or functions by simply taking two fingers and quickly tapping on the screen or taking two fingers tap then hold. The following are available menus/functions:
  - Full Screen (Default Two Finger Tap)
  - Screen Capture
  - Event Mark
  - Home (Default Two Finger Long Tap)
  - Settings
  - Lists
  - Tides
- Your Instrument page has several preset pages such as Sailing, Cruising, Highway, Inboard and Outboard engines, etc. You can choose to rename, edit, delete or add data on these preset pages, or you can delete the preset pages altogether and create your own customized page simply by adding a New Page and selecting the type of instruments and data you want to display.
- Create boundaries and alarms to notify you of known protected or prohibited areas. Tap on the screen select " New Boundary" to create your custom boundary. You can also set an alarm to show you how close you are and to notify you that you have entered into these boundaries. Tap on the boundary you have created and toggle the "Alarm" to "ON". Then add "Boundary Alarm Zone" to the Nav Data Bar.

## DFF1-UHD DIP Switch Settings

### Connection to NavNet 3D,TZtouch,TZtouch2 and TZtouch3

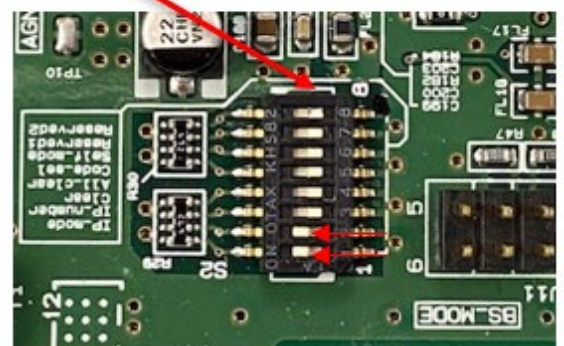
The DFF1-UHD Dip Switches on S2 are defaulted to work with NavNet TZtouch, TZtouch2 and TZtouch3 MFDs. When connecting the DFF1-UHD to a TZtouch network you do not need to change the default position of the Dip Switches on S2.

If the DFF1-UHD was installed in a NavNet 3D MFD (MFD8, MFD12 or MFD8B) network, the DIP Switches on S2 must be changed to the position shown below.



Defaulted for TZtouch Series Networks

DIP Switches – ALL SET to OFF



Alternate for NavNet3D Networks

DIP Switches – 1 and 2 set to ON

## DFF1/BBDS1 Mode Switch Settings

### Connection to NavNet 3D,TZtouch,TZtouch2 and TZtouch3

DFF1/BBDS1 Mode Switches are defaulted to work with NavNet 3D MFD (MFD8, MFD12 or MFDBB) network. When connecting the DFF1/BBDS1 to a TZtouch network you will need to change the default position of the MODE Switches.

If the DFF1/BBDS1 was installed in a NavNet 3D MFD (MFD8, MFD12 or MFDBB) network, the Mode Switches must be changed to the position shown below.



Defaulted for NavNet 3D Series  
Networks

Mode Switches – ALL SET to OFF



Alternate for TZtouch Series  
Networks

Mode Switches – 1 and 4 ON

Leave 2 and 3 OFF

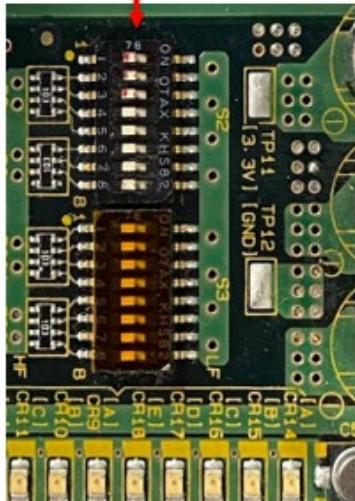


## DFF3 DIP Switch Settings

### Connection to NavNet 3D, TZtouch, TZtouch2 and TZtouch3

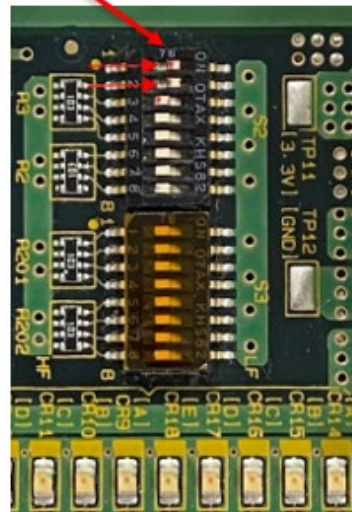
The DFF3 Dip Switch setting on S2 is defaulted to work with NavNet3D (MFD8, MFD12 or MFDDBB) network. When connecting the DFF3 to a TZtouch network you will need to change the default position of the Dip Switches.

If the DFF3 was installed in a NavNet 3D MFD (MFD8, MFD12 or MFDDBB) network, the Dip Switches must be changed to the position shown below.



Defaulted for NavNet3D  
Networks

S2 Mode Switches – 1-8 ALL OFF



Alternate for TZtouch Series  
Networks

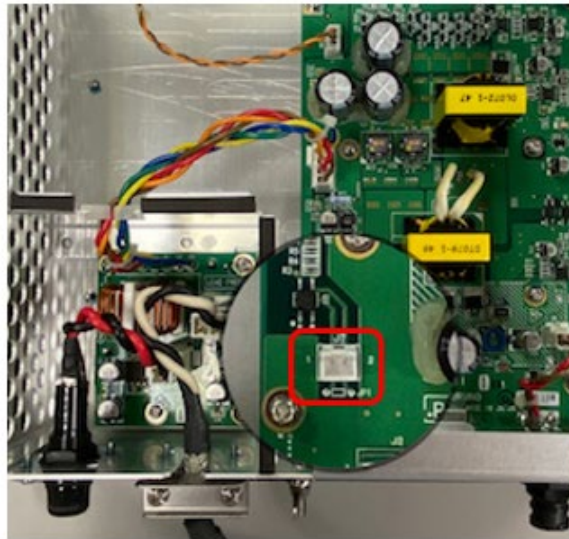
S2 Mode Switches – 1 and 2 ON

Leave 3 - 8 OFF

## PSU012/PSU013

### Jumper Location for TZtouch Series Installations

If PSU013 or PSU012 was used in a NN3D network with HUB101 the J7 Jumper would not have been inserted. Jumper must be inserted in J7 to bypass Power Synch. TZtouch networks do not use Power Synch (DHCP). If you are missing the Jumper you can order a replacement. The part number for Jumper is 000-153-879.



PSU013/PSU012 new out of the box will not have a jumper inserted in J7



Ensure Jumper is inserted in J7 to bypass Power Synch or PSU will not turn on.

## HUB101 Switch Settings

### Connection to NavNet 3D, TZtouch, TZtouch2 and TZtouch3

HUB101 Power Synch Dip Switches are defaulted to the OFF position which works with NavNet TZtouch, TZtouch2 and TZtouch3 MFD(s), you will **not need** to change the default position.

If the HUB101 was installed in a NavNet 3D MFD (MFD8, MFD12 or MFD8B) network, the DIP Switches that are set to the ON position must be changed and set to the OFF position to bypass Power Synch.



Defaulted for TZtouch Series  
Networks

Power Synch – 1-8 ALL OFF



Alternate for NavNet3D Series Networks

Power Synch – 1-8

Corresponding Ports with Power Synch capable devices connected would be set to ON. Any port used to connect to devices not capable of Power Synch would have been left OFF.

**March 10, 2020**