NAVnet

TZtouch2

Installation Checklist

NavNet TZtouch2 Installation Checklist

NavNet TZtouch2 Network Installation

❑ Connect all TZtouch2 MFDs to the Ethernet Network. If a HUB101 is used, set the internal HUB DIP switches to OFF (HUB101 DIP switches are OFF by Default). TZtouch2 MFDs do not use power synchronization.

Using a generic Ethernet Hub/Switch with TZtouch2 is also acceptable.

❑ Connect all TZtouch2 MFDs to a proper NMEA2000 backbone using drop cables (18 feet or less).

Note: *TZtouch2 MFDs <u>do not</u> have an internal terminal resistor that can be switched ON or OFF. All connections to the NMEA2000 backbone must be "drop" connections (18 feet or less).*

❑ If using an external sounder in addition to the internal RezBoost Sounder, make sure the DFF1, BBDS1, DFF3 and DFF1-UHD are set up for "fixed IP addresses" (See appendix for additional information)

❑ If a Radar is part of the network and a PSU012 or PSU013 is installed, connect the Radar Ethernet and Power cable to the PSU, then connect the second Ethernet port of the PSU to the Ethernet Hub/Switch or directly to the TZtouch2 MFD. Make sure a jumper is inserted inside the PSU on J7. This allows the PSU to start without a power synchronization signal. (See appendix for additional information)

Note: *It is OK to bypass the Ethernet connections on the PSU and plug the Radar RJ45 connector directly into the Ethernet Hub/Switch if the cable run allows. This will reduce the need for an additional cable.*

❑ Power ON the Ethernet Hub/Switch, PSU, the NMEA2000 backbone and all the sensors, and then Power ON the TZtouch2 MFDs.

❑ Furuno recommends at least one TZtouch2 MFD be installed in a location that ensures the MFD can receive a GPS signal, thus providing GPS data to the network. If this is not possible, an external NMEA2000 position source will be required for the network. If you are not sure, continue with the installation and check the position performance to determine whether an external NMEA2000 GPS source will be necessary.

❑ Once the TZtouch2 MFDs have completed the boot-up process, press the "Home" button, then press "Settings" > "Initial Setup" > "Sensor List" on each MFD to confirm you see all of the sensors in the Ethernet and NEA2000 networks.

    ❍ If a DRS Radar sensor is installed and you are missing the Radar, make sure the PSU is ON (Green LED). If the PSU is OFF, make sure jumper J7 is inserted, if using a PSU012 or PSU013. If using a PSU017, jumpers are not necessary.

    __Note:__ There is no need to restart the TZtouch2 MFDs to have the External Sounder or Radar appear in the menu. As soon as the Radar or Sounder is detected on the network, it will automatically appear in the sensor list.

❑ Select the Radar tab in the Settings menu and confirm the Radar Source. Scroll down to the "Radar Initial Setup" to adjust, at minimum, the following parameters:
    ❍ Heading Alignment
    ❍ Antenna Height
    ❍ Radar Optimization

    __Note:__ The Radar must be transmitting to press the "Radar Optimization" button. Repeat this process if multiple DRS Radars are installed on the network.

❑ Select the Sounder menu and choose the Sounder Source. Scroll down to the "Sounder Initial Setup" to adjust, at minimum, the following parameters:
    ❍ Draft
    ❍ Transducer

❑ Select the preferred data/sensor sources for the network by pressing the "Data Source" button in the "Initial Setup" menu.

❑ 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 in the network. The PGN output settings are shared among all TZtouch2 MFDs. However, only one MFD will actually output data on the NMEA2000 bus (the MFD that was powered ON first). If that MFD is turned OFF or fails, another TZtouch MFD will automatically replace it and begin outputting the same PGNs onto the NMEA2000 backbone.

❑ Pick one TZtouch2 MFD as the Chart Master and select "ON" in the "Chart Master Device" setting from the "Initial Setup" menu.

❑ Select the preferred Units from the "Units" menu.

❑ Proceed to the Local Time Offset and adjust the desired time offset in the General menu.

❑ Configure the NMEA0183 Output Port for each MFD that has an NMEA0183 interface. Each TZtouch2 MFD has an independent NMEA0183 Output Port.

❑ If a SiriusXM BBWX3 Satellite Weather Receiver is installed in the network, set the "Weather Data Server" to "Sirius" from the "Weather" menu, as per customer preference. This setting can be changed at any time and both weather services may be used at will.

❑ Any TZtouch MFDs (1st generation) in the network should be configured according to the original TZtouch Installation Checklist. Note that NMEA2000 PGNs will be a global output for both TZtouch2 and TZtouch MFDs.

APPENDIX 1

DFF1-UHD MODE Switch Settings
Connection to NavNet 3D, TZtouch & TZtouch2

The DFF1-UHD is defaulted to work with NavNet TZtouch and TZtouch2 MFDs. If you are connecting the DFF1-UHD to any TZtouch, TZtouch2, or combined system, you do not need to change the default position of the MODE switches.

If the DFF1-UHD will be installed in a network that includes a NavNet 3D MFD (MFD8, MFD12 or MFDBB), the DIP Switches must be changed to the position shown below.

Default settings for TZtouch and TZtouch2

Alternate settings for networks that include a NavNet 3D MFD

DIP Switches – ALL OFF

DIP Switches – 1 and 2 ON

If you have more than one network sounder in the system, please contact Furuno Tech Support for setup information.

APPENDIX 2

DFF1 MODE Switch Settings
Connection to NavNet 1, vx2, 3D, TZtouch & TZtouch2

The DFF1 is defaulted to work with NavNet 3D MFDs. If you are connecting the DFF1 to an original NavNet 1, vx2, TZtouch only network, or TZtouch2, you need to change the MODE switches as shown below.

If the DFF1 will be installed in a network comprised of a NavNet 3D MFD8, MFD12 or MFDBB AND either of the TZtouch displays, the DIP Switches must remain in the default settings shown below.

Please confirm the dip switch selection for your type of NavNet display. To access the dip switches, remove the rubber cap on the front of the DFF1 unit.
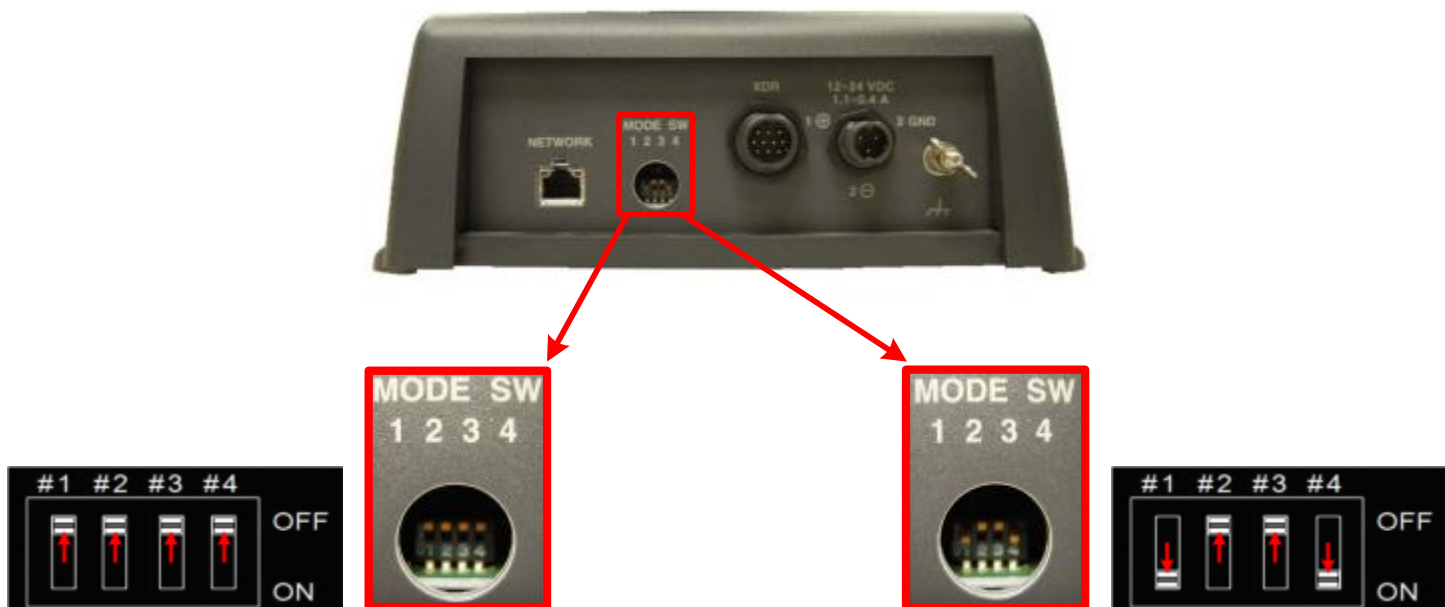
**Default settings
for NavNet 3D**

**Alternate settings for NavNet 1,
vx2, TZtouch & TZtouch2**

Default settings:	**This setting is used when connecting the DFF1 directly to a NavNet 3D MFD or to a NavNet 3D network using the HUB101.**

Alternate settings:	**This setting is used when connecting the DFF1 to NavNet 1, vx2, TZtouch or TZtouch2. This setting must also be used when connecting to a NavNet 3D network using an Ethernet Hub or Switch, other than the HUB101.**

If you have more than one network sounder in the system, please contact Furuno Tech Support for setup information.

APPENDIX 3

DFF3 MODE Switch Settings
## Connection to NavNet 1, vx2, 3D, TZtouch & TZtouch2

The DFF3 is defaulted to work with NavNet 3D MFDs. If you are connecting the DFF3 to an original NavNet 1, vx2, TZtouch or TZtouch2 only network, you need to change the MODE switches as shown below.

If the DFF3 will be installed in a mixed system comprised of a NavNet 3D MFD8, MFD12 or MFDBB and either of the TZtouch displays, the DIP Switches must remain in the default settings shown below.
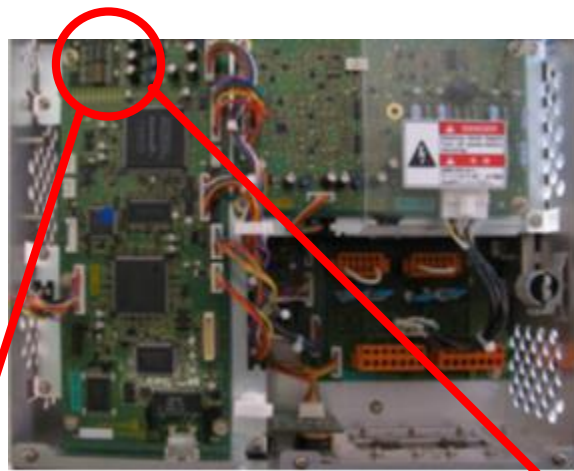
**Default settings
for NavNet 3D**

**Alternate settings for NavNet 1,
vx2, TZtouch & TZtouch2**
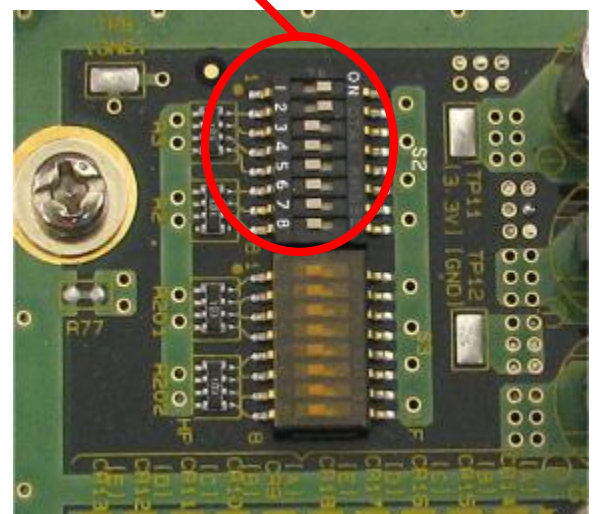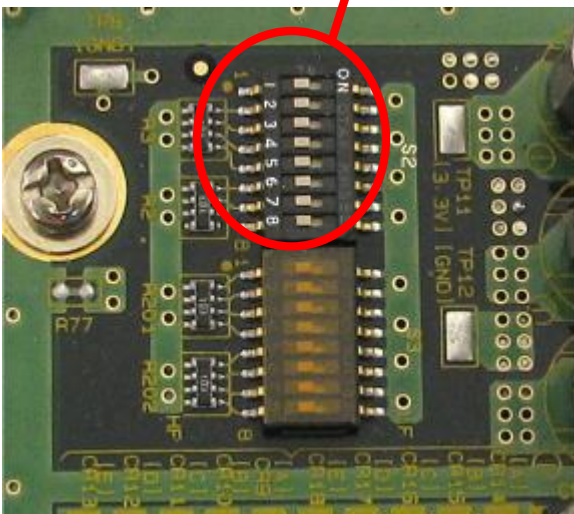
**Only change
settings for S2.**
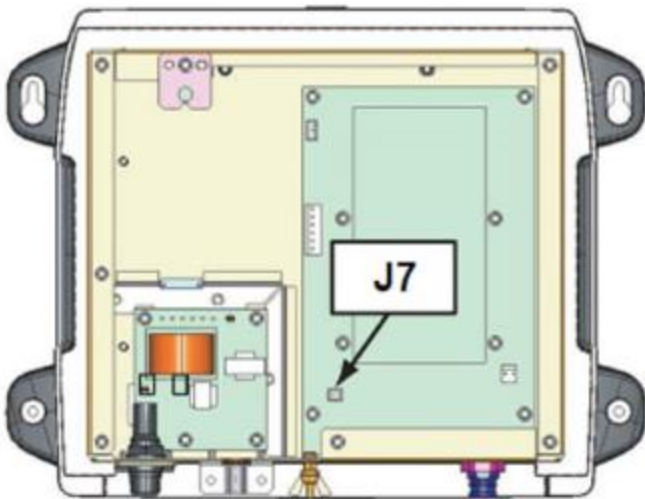
**Do not change
settings for S3.**

If you have more than one network sounder in the system, please contact Furuno Tech Support for setup information.
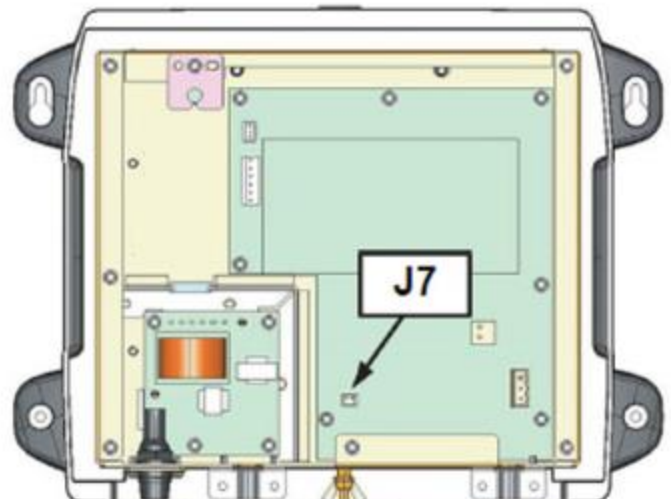
APPENDIX 4

PSU012/PSU013 Jumper location for TZtouch & TZtouch2 Installations

When the PSU012 or PSU013 power supply unit is connected to a TZtouch or TZtouch2 MFD, attach the shorting jumper (supplied) to J7 on the PWR Board.

(PSU012 = 03P9481)   (PSU013: 03P9483)

*00017655010 *