





# iOS Apps Guide

# 1. iOS Apps for NavNet TZtouch

	NavNet Remote	NavNet Viewer
Descriptions	Remote desktop app, which shows the TZT9/14 screen images on the iOS screen. Remote operation over the iOS screen is also available.	Multi-function app for: - Sensor indicators - Fish Finder - Alarm synchronization - Setting data reader/writer
Icons (in the Home page of iOS device)		
Compatible Hardware	iPad (1 – 3 & mini), iPhone 4, iPhone 4S, iPhone 5, iPod touch 3 <sup>rd</sup> generation, and iPod touch 4 <sup>th</sup> generation * (1) (2)	iPad (1 – 3 & mini), iPhone 4, iPhone 5, iPod touch 3 <sup>rd</sup> generation, and iPod touch 4 <sup>th</sup> generation * (2)
Software Environments	iOS4.3 and later	
Languages	English and Japanese	
Price	Free of charge	
Latest Versions	<b>1.0.5.8</b>	<b>1.0.6.3</b>
Latest Update	Available now on the Apple App Store	

## Note:

(1) With the NavNet Remote app version **1.0.5.8** or later, you can view TZT9/14 images with the iPhone and iPod touch as well. Note that the Operation mode is not available on these small devices.

(2) The latest devices such as the iPad mini and iPhone 5 are also compatible.

## 2. Getting Started – Wireless LAN Connection to iOS Device

### 2-1. Overview

Wireless connections can be created in two ways:

#### (1) Local Network connections between the TZT9/14's wireless LAN module and iOS devices

This method is called **Ad-Hoc** mode, meaning a point-to-point connection. A Maximum of **five (5) iOS devices** can be connected to the built-in wireless LAN module of each TZT9/14 (**v2.01** or later \* (1)) and each TZT9/14 in a network can support up to five iOS devices. This is the preferred configuration method for optimizing speed and performance between the TZT9/14 MFD and the iOS device. However, Internet access with the TZT9/14 is not possible using this configuration.



When there are two TZT9/14s in the network, a maximum of ten (10) iOS devices can be connected as follows.



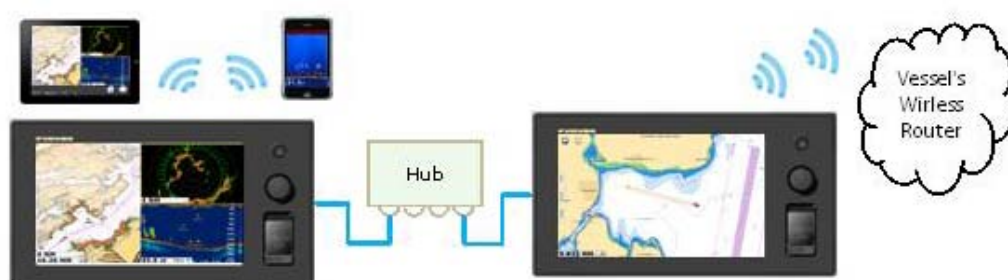
#### Note:

- (1) To be able to connect five (5) iOS devices, the TZT9/14 software should be **v2.01** or later.
- (2) The built-in wireless LAN is approved for use in the US (FCC), Canada (IC), Europe (CE), Australia/New Zealand, and Japan only. Use an external router (local supply) for use in other areas.

## (2) Connecting both TZT 9/14s and iOS devices to an existing wireless network



When using the vessel's wireless router, limit the number of iOS devices running the Viewer and Remote apps to preferably three at a time or less. Only one TZT9/14 in any network may be connected to an existing wireless LAN. The speed and performance of the apps may be noticeably slower than the above Ad-Hoc configurations. Internet Access for Weather and Chart Unlock Codes is available.



When there are multiple TZT9/14s in the network, it is preferable to mix the configuration as shown at left. This will allow both direct iOS connections to a TZT9/14 as well as Internet Access for any TZT9/14 in the network.

## 2-2. Settings for Direct Connections Between TZT9/14s and iOS Devices

### (1) TZT9/14 – Menu Steps to Enable Ad-Hoc/Point-to-Point Configurations

TZT9/14s act as the access point for the iOS devices. The iOS devices will find the SSID and password setting in the [Create local network] box of the TZT9/14 menu.

<p>[Menu] – [General] – [Wireless LAN Setting]: Tap [Select].</p>	<p>Wireless: ON Wireless Mode: Create local network Authentication: WEP Network Status: ON</p>
	<p>SSID and Password: The default SSID is [NAVNETTZZT] and password is [NAVNETTZZTOUCH]. To change the default SSID and password, Set the Network Status to OFF and set your own SSID and password.</p>



**IMPORTANT NOTE:** When wireless connections are made via the TZT9/14's built-in wireless LAN module...

- (1) Set Wireless Mode to [Create local network] for iOS devices to access the TZT9/14, and to [Connect to existing LAN] for the TZT9/14 to access the Internet.
- (2) The SSID name and password are always in **upper case letters**. Ensure to enter your password in upper case in iOS

devices. **DO NOT FORGET TO USE CAPS WHEN TYPING THE PASSWORD INTO YOU IOS DEVICE!**



(2) iOS Devices: Wi-Fi Settings

After the TZX9/14 is ready, connect an iOS device to it as follows:



1. Select the SSID of the TZX9/14. In this example, "NNTZTPC" is the SSID of the TZX14 to be connected.

2. Enter the password of the TZX9/14. In this example, the password for the TZX14 is set to "12345". If letters are used in the password, ensure to enter them in **upper case**.



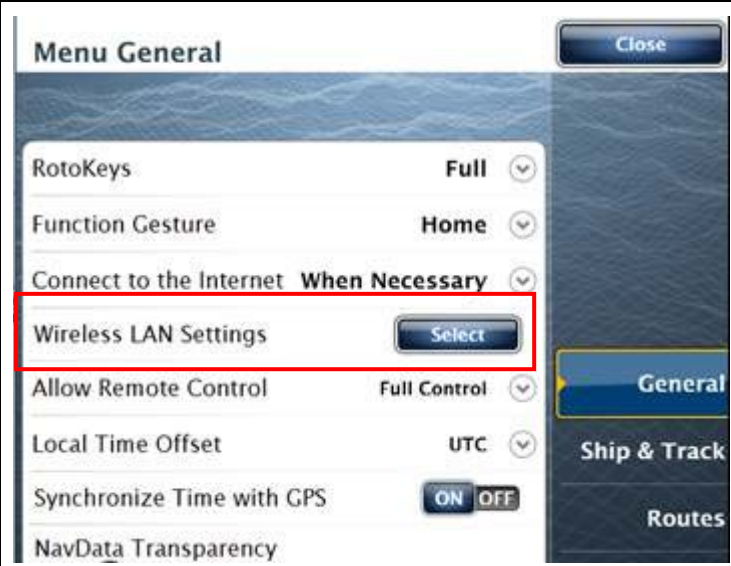
A check mark appears when the Wi-Fi connection is made. To confirm the connection, tap the [ > ] icon to verify that an IP address between [192.168.123.1] and [192.168.123.254] and subnet mask [255.255.255.0] are shown in the DHCP tab. In this example, the IP address [192.168.123.7] is automatically allocated to the iOS device.

2-3. Settings for Connections to an Existing Wireless LAN

(1) TZX9/14 – Menu Steps to Connect to Existing Wireless LAN

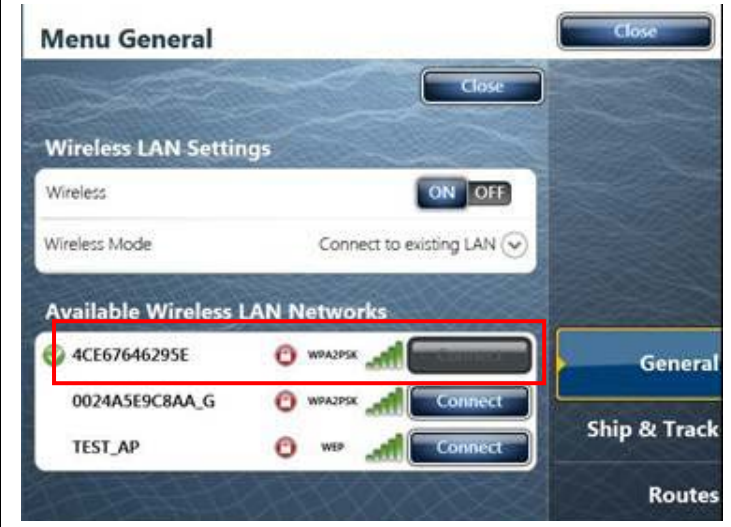
The following settings allow TZX9/14s to connect to an existing wireless LAN. The SSID and the Password of the existing wireless LAN's Router must be known for both the TZX9/14 and iOS devices. The menu steps are similar to the previous procedure. The connection procedure is similar to setting the access point for the iOS devices with the following settings.



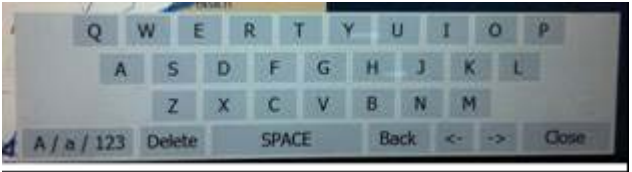


Menu > General > Wireless LAN Setting:  
Tap Select.

Wireless: ON  
Wireless Mode: Connect to existing LAN



Choose the desired network, if there is more than one available.  
Tap [Connect].



Enter Router Password if encrypted. Note that the Router SSID must be set to broadcast with the current TZT9/14 software revision. It can be reset after configuration.

# 3. NavNet Remote App

## 3-1. Overview

The NavNet Remote App displays the TZT9/14 screen images on the iOS screen. Remote operation from an iPad is also available.

iPad	iPhone / iPod touch
	
<p><b>Note:</b></p> <p>(1) The screen mode is <b>landscape</b> only.</p> <p>(2) Operations are not available from iPhone or iPod touch. These small devices are for viewing only.</p> <p>(3) While the “Pinch To Zoom” function is supported, the dual-tap gesture (to access functions) and rotation with two fingers (to change orientations) that are available on the TZT9/14 are not supported with the NavNet Remote App.</p>	

**Tips:**


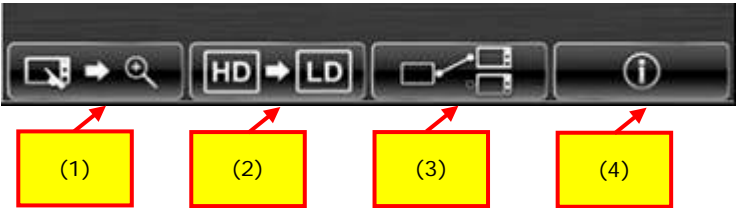
- 1. (iPad mini)  
Operations are also available from the iPad mini 7” screen.
- 2. (iPhone 5)  
As shown at right, when TZT9/14 images are shown on the iPhone 5, both edges of the screen will be blank in order to make the TZT9/14 images fit on the iPhone 5’s wider screen.







3-2. Icons for Operations and Settings

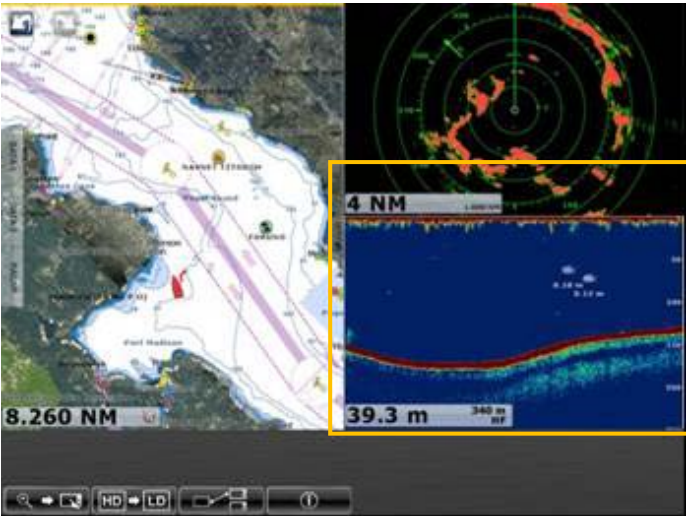
Icons at the bottom of the screen support operations as described below.

Icons	Descriptions
	These icons act as the Home key (left) and RotoKey™ (right) respectively. Note that these icons are available on the iPad only.
	Each setting is accessible from icons located at the bottom of the screen as shown in (1) to (4).

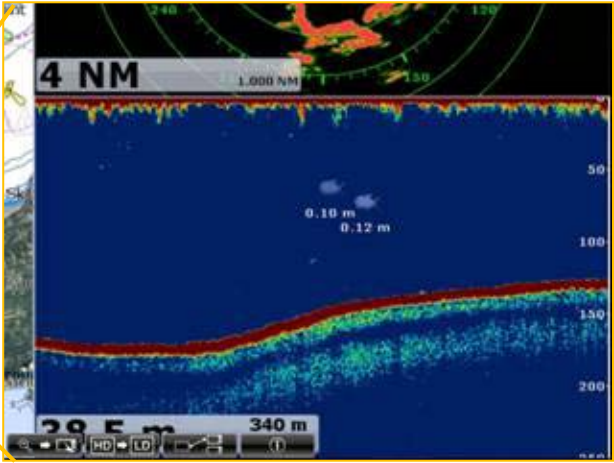
(1) Operation Mode and Digital Zoom Mode

Icons	Descriptions
	This icon appears when in Operation Mode, which enables you to control the TZT9/14 from the iPad screen. Tap this icon to change it into the Digital Zoom Mode. Note that this icon is for iPad only, because operations are not available with iPhone and iPod touch.
	This icon appears when in Digital Zoom Mode, which provides the ability to view only. Tap this icon to change it back to the Operation Mode.

Example of digital-zoom on the iPad:




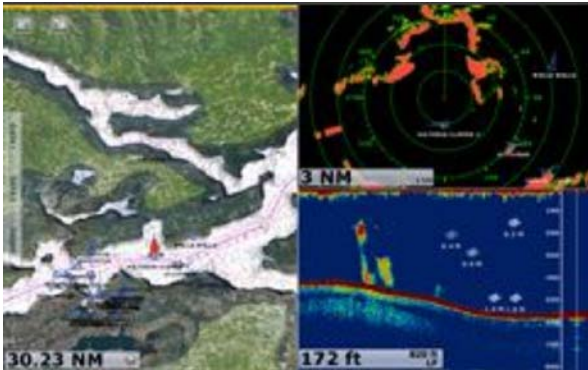

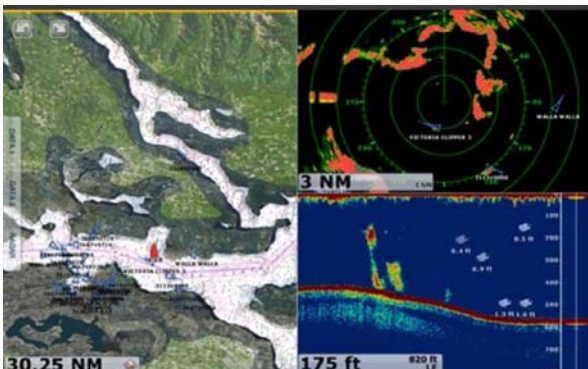

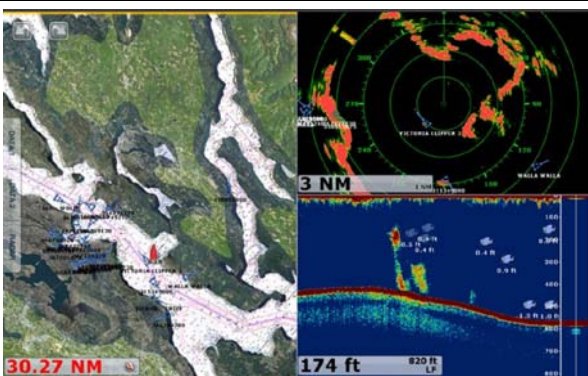
Original Screen  
(No Home or RotoKey™ icons)



Digitally Zoomed

## (2) Picture Quality

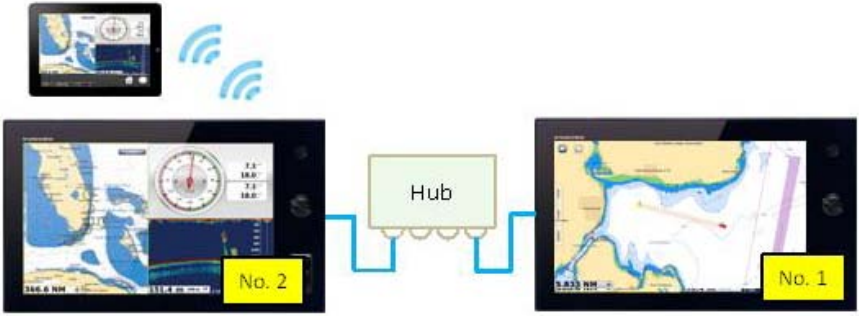
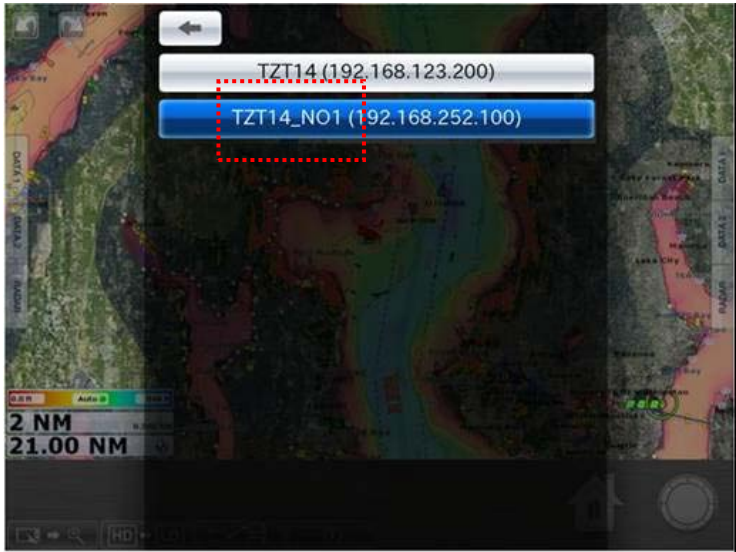
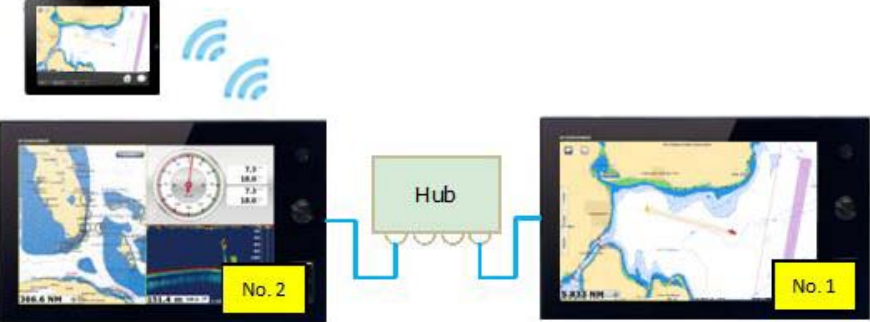
The picture quality settings can be set directly from the top page with the dedicated icon. “LD” setting provides a faster response, but a decrease in resolution on the device. “HD” setting provides better resolution, but response time may decrease. “SD” is combination of the two with faster response than “HD” and an increase in resolution from “LD”. Tap the icon to switch between the screen definitions.

Icons and Descriptions	Screen Samples
 <p><b>LD: Low Definition</b> – This icon shows that the screen is in Low Definition. Though screen image resolution decreases, operational response is faster than the other settings. This is an excellent option when using the iPad as a remote control.</p> <p>Tap this icon to change it into the Standard Definition screen.</p>	
 <p><b>SD: Standard Definition</b> – This icon shows that the screen is in Standard Definition. The operational response is better than the “High”. To view and operate using an iPad screen, the “SD” setting is recommended.</p> <p>Tap this icon to change it into the High Definition screen.</p>	
 <p><b>HD: High Definition</b> – This icon shows that the screen is in High Definition. Response in operation may decrease compared with lower definition. If you want to view the screen images without operation, this is the recommended setting.</p> <p>Tap this icon to change it into the Low Definition screen.</p>	

## (3) Select Server



Tapping this icon opens up the Select Server page. When there are multiple TZT9/14s in the network, first connect an iOS device to either one of the TZT9/14s. To see another TZT9/14 screen image, tap this icon to select the TZT9/14 to be shown on the iOS device screen. In the following example, there two TZT14s and an iPad is connected to the TZT14 No. 2.

	<p>An iPad is connected to the Tzt14 No. 2 and shows the No. 2 images.</p>
	<p>Tap the Select Server icon.</p> <p>A list of nicknames of networked Tzt14s pops up. Select the one to be shown in the iPad screen. In this example, the Tzt14 No. 1 is selected.</p>
	<p>With the Tzt14 No. 1 selected, Tzt14 No. 1 images are shown on the iPad, being transferred via the Ethernet hub and Tzt14 No. 2's wireless LAN.</p>

#### (4) Info – Version



Tapping this icon opens up the Info page, showing the app version.





### 3-3. Number of iPads that can be used with the NavNet Remote App

With the **TZT9/14 v2.01** or later software, a maximum of **five (5) iOS devices** can be connected to one TZT9/14 for the **NavNet Remote app v1.0.5.8**.



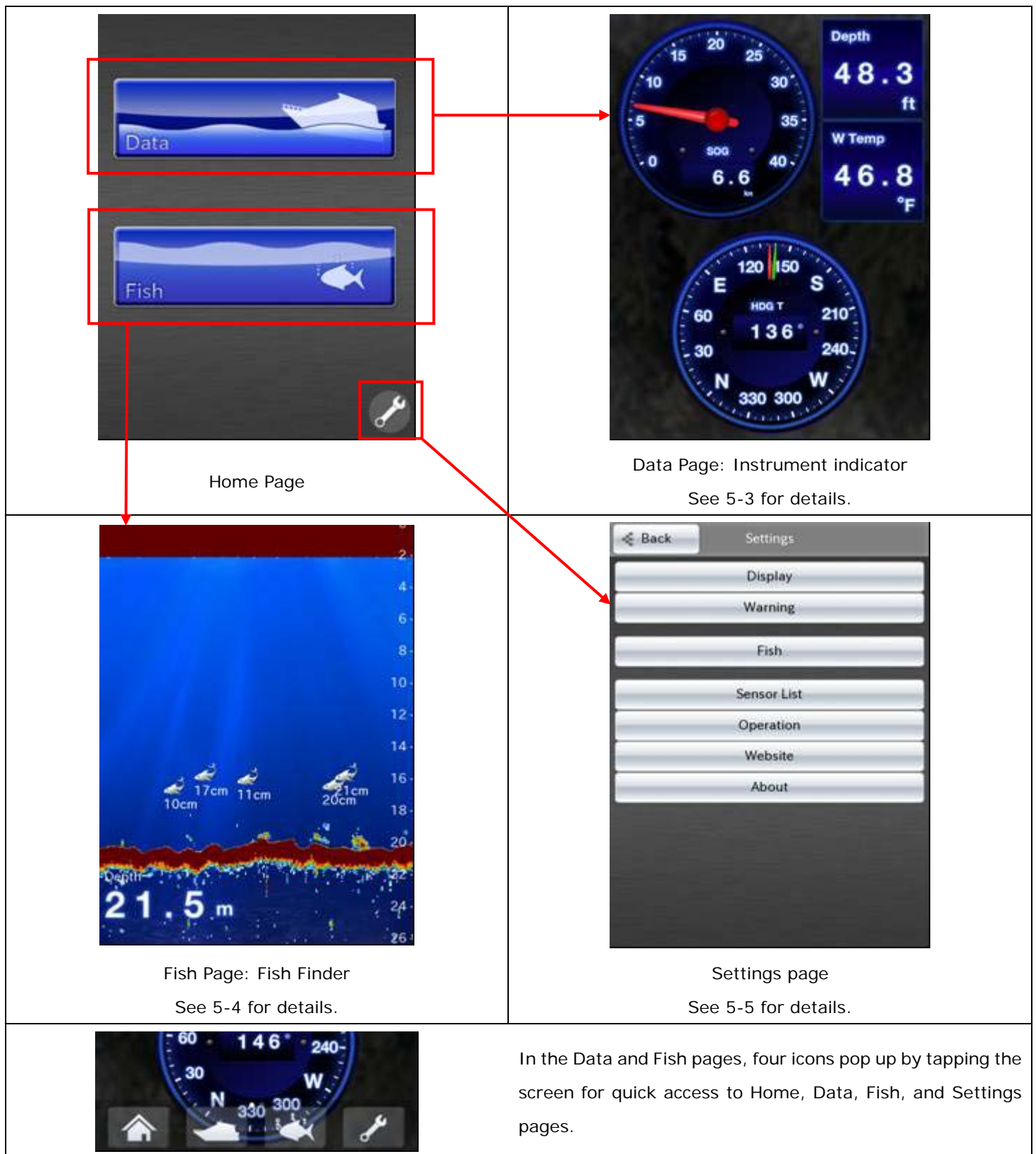
The following example shows that two (2) iPads, two (2) iPhones, and one (1) iPod touch are wirelessly connected to the TZT14 v2.01. With this network, the iPad can be used to control the TZT9/14, while the iPhone and iPod touch can be used for viewing.







## 4-2. Layout



### Note:

Both portrait and landscape images are available.

## 4-3. Sensor Indicator

Navigation data runs through the NavNet TZtouch's Ethernet and CAN bus network. iOS devices wirelessly receive this information via the connected TZT9/14 and display the data in instrument windows. The graphical images are based on the layout found in Furuno RD-33.

### (1) Top Page of the Instrument Indicator



Multiple graphic patterns are preset in Fishing, Sailing, Ship, Navigation, Environment, and Engine pages.

The Custom page, allows for a maximum of eight (8) graphic patterns to be shown on the iOS screen, according to the user's preference.

### (2) Instrument by Category



The following graphics are preset. Available data in the network is transferred to iOS devices and shown on each page.

Fishing	Sailing	Ship
Navigation	Environment	Engine



**Note:**

- (1) Display designs of these preset graphics are not customizable
- (2) A maximum of four (4) engines can be displayed, same as on the TZT9/14.

**(3) Full Display vs Single Display**



Full Display	Single Display
	
<p>In the full display, all graphics are shown on one page. Double-tapping one of the graphics changes the screen mode into a single display. To show another instrument graphic in the single display, just swipe the screen right to left or left to right.</p>	

**(4) Portrait vs Landscape**

Portrait	Landscape
	
<p>In the full display mode, two graphics are shown. In the single display mode, the graphic is scaled down compared with landscape.</p>	<p>In the full display mode, four graphics are shown. In the single display mode, a large instrument graphic is shown.</p>

(5) Dark vs Light

Two color designs are selectable from Dark and Light in the Settings page. The default setting is Dark.

Dark	Light
 A grid of six blue-themed dashboard widgets. The top row contains 'Fishing' and 'Sailing' widgets, each with a gauge and numerical data. The second row contains 'Ship' and 'Navigation' widgets. The third row contains 'Environment' and 'Engine' widgets. The bottom row features a 'Custom' widget with a hand icon, a cloud icon, a fish icon, a house icon, and a wrench icon.	 A grid of six light-themed dashboard widgets, mirroring the layout of the dark theme. The top row contains 'Fishing' and 'Sailing' widgets. The second row contains 'Ship' and 'Navigation' widgets. The third row contains 'Environment' and 'Engine' widgets. The bottom row features a 'Custom' widget with a hand icon, a cloud icon, a fish icon, a house icon, and a wrench icon.
 A close-up of a dark-themed widget. On the left is a circular gauge with a red needle pointing to 0, labeled 'SOG' and 'kn'. To the right are two stacked rectangular displays: 'Depth' showing '45.9 ft' and 'W Temp' showing '46.8 °F'.	 A close-up of a light-themed widget. On the left is a circular gauge with a red needle pointing to 0, labeled 'SOG' and 'kn'. To the right are two stacked rectangular displays: 'Depth' showing '49.7 ft' and 'W Temp' showing '46.8 °F'.

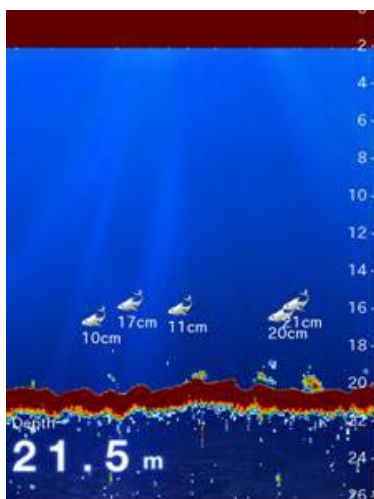


## 4-4. Fish Finder

When the DFF1/3 or BBDS1 is available in the Ethernet network, **iOS devices show Fish Finder echoes independent of the screen mode setting of the TZT9/14**. In the following example, even if the TZT9 screen shows the full plotter display, the iPhone shows the Fish Finder graphical display. Essentially, your iPhone becomes a second NavNet TZtouch Fish Finder display, in your pocket!



### (1) Screen Layout



The Fish Finder screen consists of range scales and a depth data box. The display mode in the iOS screen is always in **single-frequency**:

- When the **single-frequency mode** is selected in the TZT9/14 screen, **the iOS device shows the same frequency echoes**. Zoom and Bottom Lock displays are not available on the iOS screen.
- When the **Dual-Frequency mode (High + Low)** is selected in the TZT9/14 screen, **the iOS device shows the high frequency echoes**.
- When no Fish Finder is displayed in the TZT9/14 screen, **the iOS device shows echoes according to the screen mode of the previously-opened Fish Finder display**. As an example, if the TZT9/14 was previously set to the low frequency mode, the iOS device shows low frequency echoes.

#### Note:

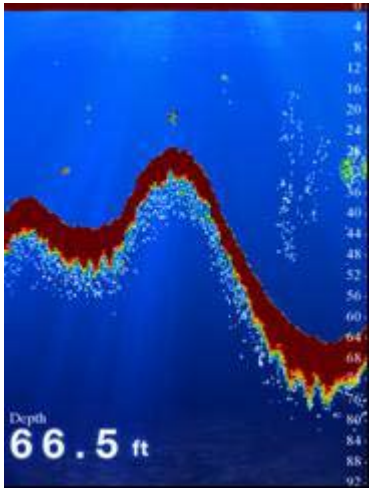

(1) **ACCU-FISH™** – With the NavNet Viewer app **v1.0.6.3** or later, fish icons appear when the ACCU-FISH™ mode is ON at the TZT9/14 side.

The following functions are **not available** with iOS devices.

- (2) **Bottom Discrimination** – Even if the BBDS1 is networked, iOS devices show fish echoes only.
- (3) **Zoom, Bottom Lock screen** – iOS devices always show echoes in a single screen.
- (4) **Manual Range, Shift** – Echoes are always shown in the Auto range.



(2) Portrait vs Landscape

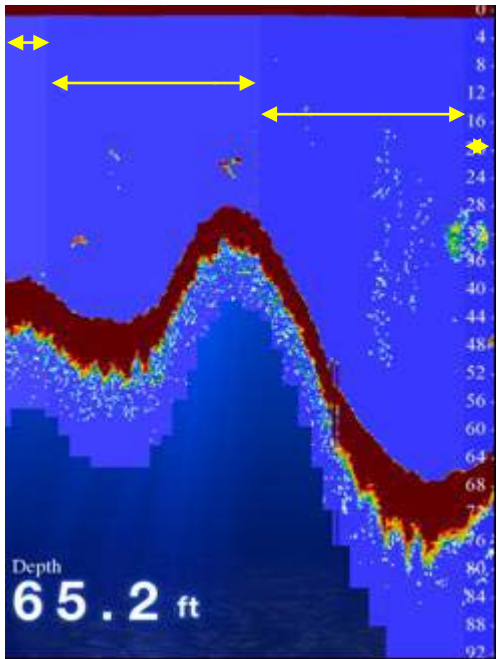
Portrait	Landscape
	

Fish Finder echoes can be shown in Portrait and Landscape screen modes. The Landscape images are scaled from the Portrait images.

(3) Back-scrolling Echoes

As you operate the Fish Finder in the TZT9/14, the Fish Finder screen on iOS devices can also be scrolled back to see the historical echoes.

(4) SST Shading



If a temperature sensor is available on the network, you can use this unique feature on the Fish Finder screen. The background color varies incrementally every 0.5 °C, between 0 °C and 30 °C. You can see the changes of temperature during fishing.

In this example, you can see variable colors in the screen, showing changes in temperature.

This mode is selectable in Settings page > Fish > SST Shading – ON.

4-5. Settings – Alarm, Sensors List, and Setting Reader/Writer

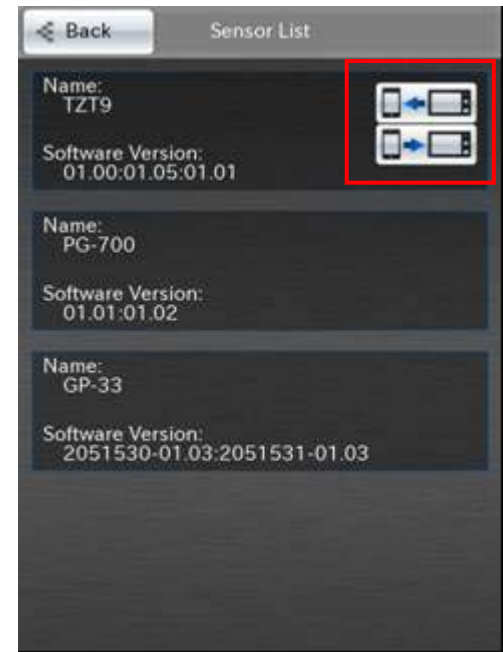
The settings page leads you to several unique functions of the NavNet Viewer App.

(1) Alarm Synchronization



The alarms generated in the TZT9/14 can be transferred to iOS devices with sound and/or vibration. In the Settings > Warning page, select Alarms To Be Transferred. As shown at the left, selected items are highlighted in blue.

(2) Sensors List





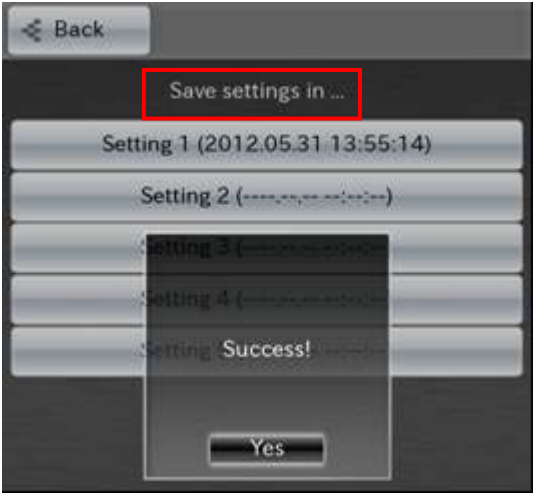
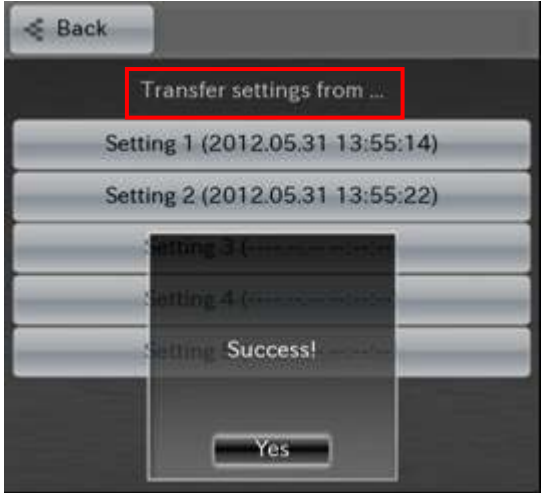
Available sensors in the network can be seen with model name (nick name) and software version, in the Settings > Sensor List page.

Display icons in the TZT9/14 box are used to read and write settings between the TZT9/14 and iOS device. See (3) below for details.

(3) Setting Reader/Writer

iOS devices can read settings of the TZX9/14 and also transfer them to the TZX9/14. A maximum of **five (5) settings** can be saved in one iOS device.

	Tap this icon to read setting data from the TZX9/14 to the iOS device in use.
	Tap this icon to transfer the setting already copied in the iOS device to the TZX9/14.

Reading TZX9/14 settings to iOS	Transferring settings from iOS to TZX9/14
	
To read TZX9/14 settings, tap one of Settings 1 to 5. After the reading is complete, the [Success!] window pops up as shown above.	To transfer settings to the TZX9/14, tap one of settings 1 to 5. After the transfer is complete, the [Success!] window pops up as shown above. <b>Reboot the TZX9/14</b> to reflect the transferred settings.

**Note:**  
With the NavNet Viewer app **v1.0.6.3** or later, gain settings, data source, and other specific sensor-related settings can be imported and exported.

--- END ---

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