NAVnet

TZ touch 2

FUSION-Link

Furuno NavNet TZtouch/2 and Fusion MS700/750 via FUSION-Link...

The Fusion **MS700/750** is an audio system produced by **Fusion Entertainment**. These units provides a feature called **FUSION-Link,** allowing MFDs to control the MS700/750 system. The Furuno models **TZT9/14/BB** and **TZTL12F/15F** offer the audio solution with the Fusion MS700/750. The Fusion MS700/750 audio system is accessible from the TZT9/14/BB and TZTL12F/15F with its intuitive user interface. While users operate the TZT9/14/BB or TZTL12F/15F in the center of the bridge console, users can

also access frequently-used functions, such as volume controls and source selections during navigation.

We believe this solution, together with the MS700/750, will simplify the user interface by integrating the operation station into the TZT9/14/BB and TZTL12F/15F. This document describes the setup procedures to network the TZT9/14/BB and TZTL12F/15F with the Fusion MS700/750 and introduces basic features of FUSION-Link by NavNet TZtouch TZT9/14/BB and NavNet TZtouch2 TZTL12F/15F. For details on Fusion Entertainment and FUSION-Link, see their Website < **http://www.fusionentertainment.com/**>.
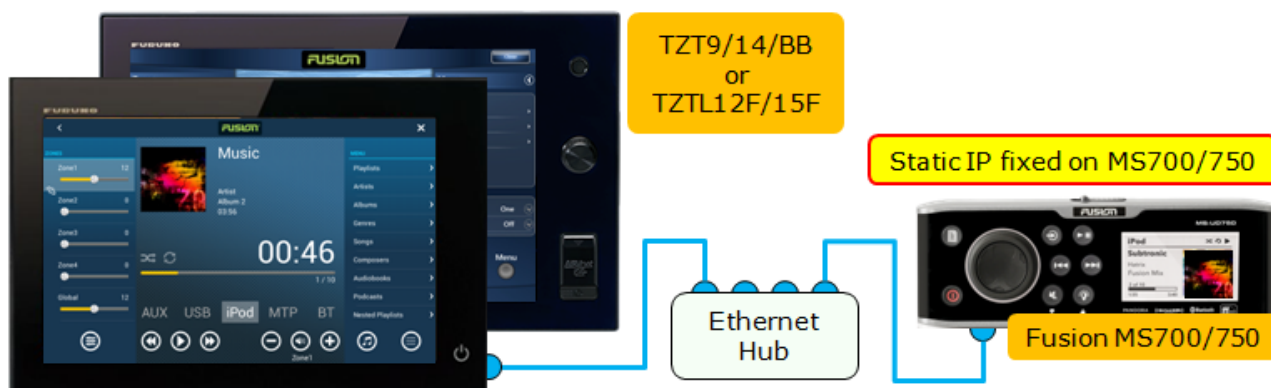
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1. Networking with Fusion Model MS700/750

1-1 Interconnection with Model MS700/750

The MS700/750 can be networked with the TZT9/14/BB or TZTL12F/15F as follows. The MS700/750 should be assigned with an IP address by manual setting as shown in **Section 1-3**.

Note:

FUSION-Link supports both NMEA2000 and Ethernet protocols, **but** the TZT9/14/BB and TZTL12F/15F use the **Ethernet** network to interface with the MS700/750 for FUSION-Link. Note that the TZT9/14/BB and TZTL12F/15F **does NOT** support an NMEA2000 connection for FUSION-Link yet.

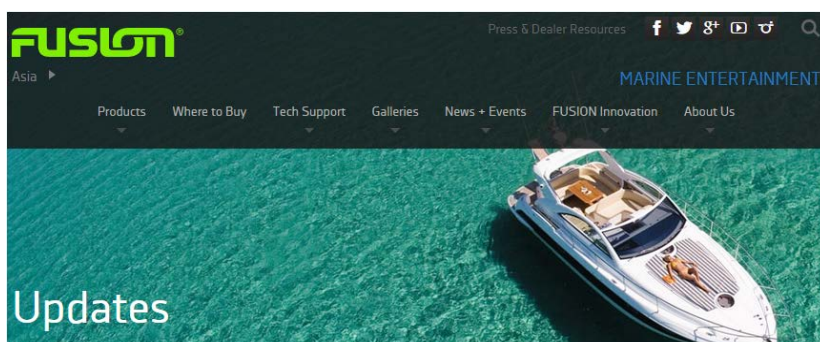## 1-2 Downloading Model MS700 Version 1.1.3255 or Later Software

The **MS700** should be version **1.1.3255** or later in order to have a static IP option. The latest software is available on the Fusion support page or product page. For detailed user update procedures, follow the Fusion MS700/750 instructions.

Support Page

http://www.fusionentertainment.com/marine/support/stereo-units/software-updates

Product Page

http://www.fusionentertainment.com/marine/products/stereo-units

1-3   Assigning a Static IP to Model MS700/750

Assign either one of the following Class-B or -C IP addresses and subnet mask to the MS700/750 as shown in the following procedures.

| Settings	Class-B	Class-C
IP Address	172.031.xxx.xxx	192.168.252.xxx
Subnet Mask (*2)	255.255.000.000	255.255.255.000
For Network with...	TZT9/14/BB and/or TZTL12F/15F (*2)	TZT9/14/BB

Notes:

(1) Make sure to enter the subnet mask corresponding to the IP address.

(2) **For network with the TZTL12F/15F, assign a Class-B IP (172.031.xxx.xxx / 255.255.000.000) to the MS700/750.** The TZT9/14/BB is compatible with both Class-B and -C IP address ranges.

Procedures (Screenshots from MS700)

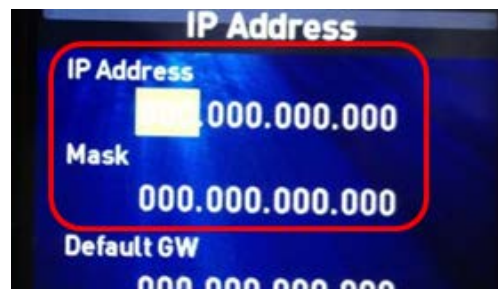(1) Access [Menu] – [Settings] – [**IP Address**].

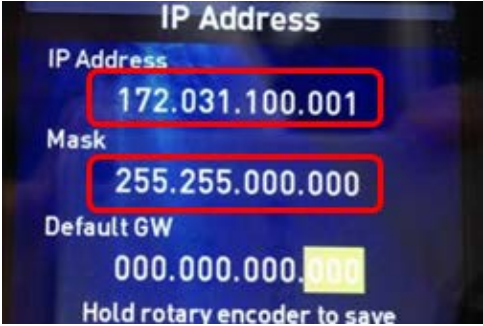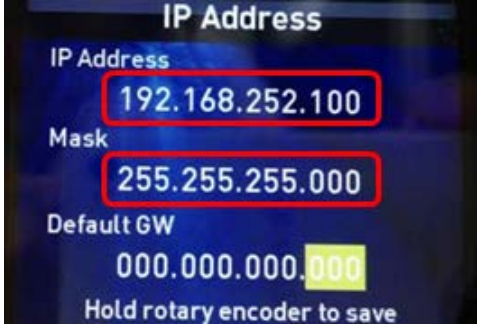(2) Access [Static IP/DHCP] and select [**Static IP**]. (Default: [DHCP])
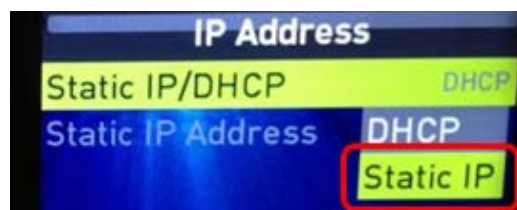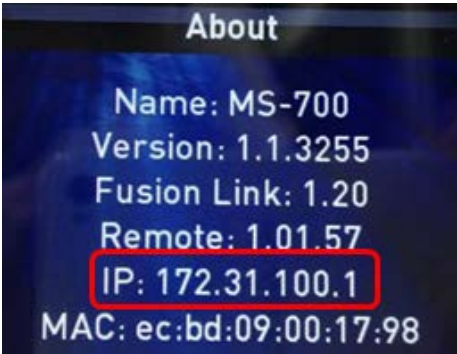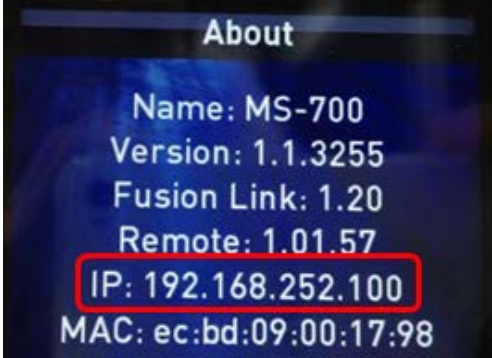

(3) Access [**Static IP Address**].

In the IP Address page, you can enter an IP address and subnet mask. In default, all the numbers are [0].

(4) Enter an IP address and subnet mask in [**IP Address**] and [**Mask**] respectively.

(5) Hold the rotary encoder to save the settings.

Class-B IP Address	Class-C IP Address
In this example, a Class-B IP address is assigned. [IP Address] 172.031.100.001 [Mask] 255.255.000.000	In this example, a Class-C IP address is assigned. [IP Address] 192.168.252.100 [Mask] 255.255.255.000

(6) In [Menu] – [Settings] – [**About**], confirm that the IP address is assigned.

Example: Class-B IP address	Example: Class-C IP Address
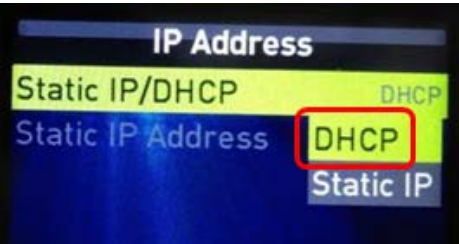
Note:

Even when there is a router (DHCP) in the network, the MS700/750 can be networked via a static IP. However, to keep the MS700/750 as a Client to the DHCP, access [Menu] – [Settings] – [IP Address] – [Static IP/DHCP] and select [**DHCP**], so that the router (DCHP) will assign an IP address to the MS700/750.

2. Confirming Network

After the MS700/750 IP assignment by manual setting or a DHCP is complete, you can confirm that the MS700/750 is properly detected in the TZT9/14/BB or TZTL12F/15F network in the Sensor List page.

Access [Home] – [Menu] (TZT9/14/BB) / [Settings] (TZTL12F/15F) – [Initial Setup] – [**Sensor List**] and see that the MS700/750 is available. In this example, the assigned IP address of MS700/750 [172.31.100.1] is indicated.

Sample Screen from TZTL12F/15F

3. Operating Fusion Model MS700/750

This section describes how to access and operate the Fusion MS700/750 from the TZT9/14/BB and TZTL12F/15F.

3-1 Accessing FUSION-Link Page
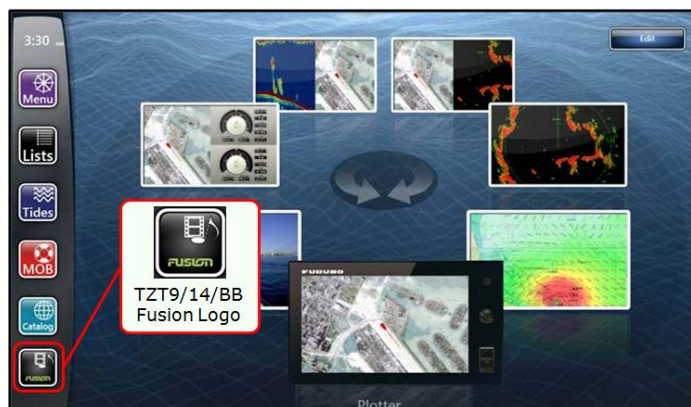
TZT9/14/BB – Home Page

If the MS700/750 is available in the TZT9/14/BB or TZTL12F/15F network, the Fusion logo/icon will appear in the Home page: Tap it to access the FUSION-Link page.
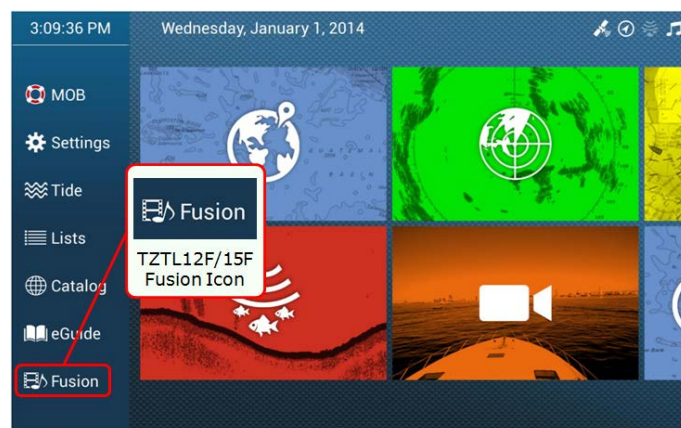
TZTL12F/15F – Home Page

3-2 FUSION-Link – Full Screen

The MS700/750 can be controlled from the TZT9/14/BB and TZTL12F/15F in a full screen.

TZT9/14/BB – Full SCreen

TZTL12F/15F – Full Screen

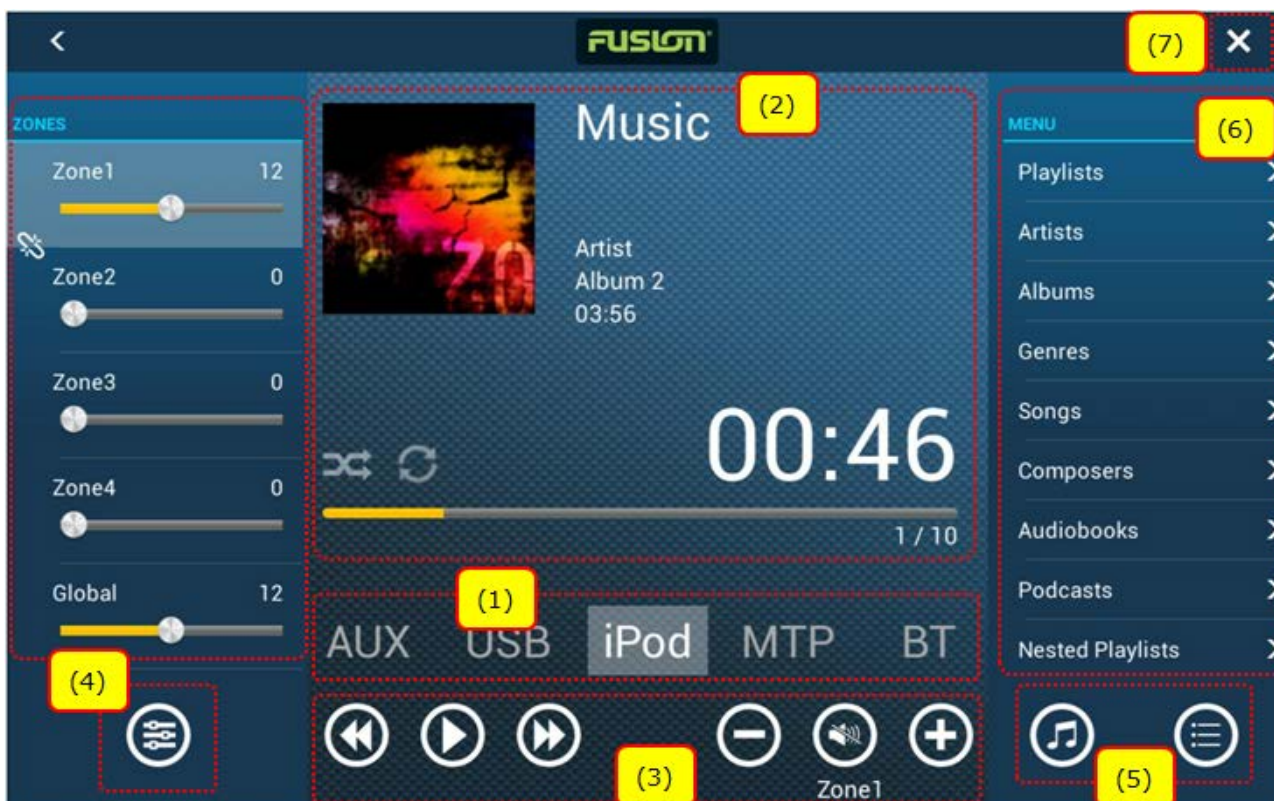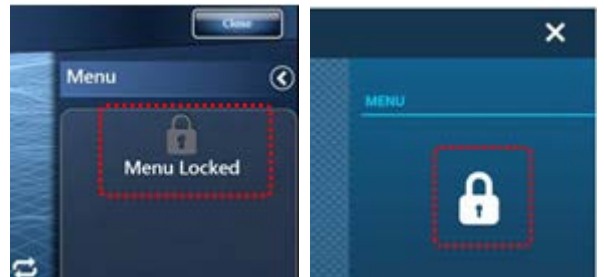| No	Item	Descriptions
(1)	Source	Audio sources are selectable by sliding this space or tapping the source indication.
(2)	Main Window	The status of selected audio source is shown. In this example, music information from an iPod is shown.
(3)	Main Control	Controls such as Play, Forward, Rewind, and Volume are available. Available controls depend on the selected source.
(4)	Zone Control	If you tap the Zone icon, audio controls by zones are available on the left side of the page.
(5)	Menu and Tone Icons	If you tap the Menu or Tone icon, setting items will appear on the right side of the page.
(6)	Menu/Tone Page	In this example, Menu is open.
(7)	Close Icon	The FUSION-Link full page can be closed by tapping this icon.

Notes

(1) Operation of Sirius source is **NOT** available. You will see the screen shown at right when selecting [**Sat Rad**] or [**Sat**] (Satellite Radio). Make sure to operate the Sirius source on the MS700/750.

(2) The sources of [**MTP**] (Media Transfer Protocol) such as Android™ devices and [**BT**] (Bluetooth) are available on the **TZT9/14/BB v4.01 or later** and **TZTL12F/15F all versions**.

(3) When the MS700/750 menu is operated by another TZT9/14/BB or TZTL12F/15F unit in the network, menu operation will be locked, showing the lock icon in the menu as shown at right.

TZT9/14/BB (Left) and TZTL12F/15F (Right)

3-3 FUSION-Link – Media Bar

A media bar is available at the bottom of each navigation page to show the audio status and partially operate the audio.


TZT9/14/BB – Media Bar

TZTL12F/15F – Media Bar

No	Item	Descriptions
(1)	Fusion Option	**TZT9/14/BB** The media bar will appear by selecting [**Fusion Ctrl**] from the context or RotoKey™ menu. **TZTL12F/15F** The media bar will appear by selecting [**Fusion**] from the universal setting option accessible by edge swipe at the right side of the screen.
(2)	Status	The status of the selected audio source is shown. In this example, music information from an iPod is shown.
(3)	Play Control	Controls such as Play, Forward, and Rewind are available. Available controls depend on the selected source.
(4)	Volume Control	The volume of the selected zone is adjustable by sliding the volume icon as shown at right (TZT9/14/BB) or tapping the [**+**]/[**-**] icons (TZTL12F/15F), and the sound can be mute by tapping the Mute icon. *TZT9/14/BB – Media Bar*
(5)	Hide Icon	Tapping this icon hides the media bar.
(6)	Fusion Logo	Tapping this icon turns the page into the FUSION-Link full page.

3-4 Quick Access to FUSION-Link by Function Gesture
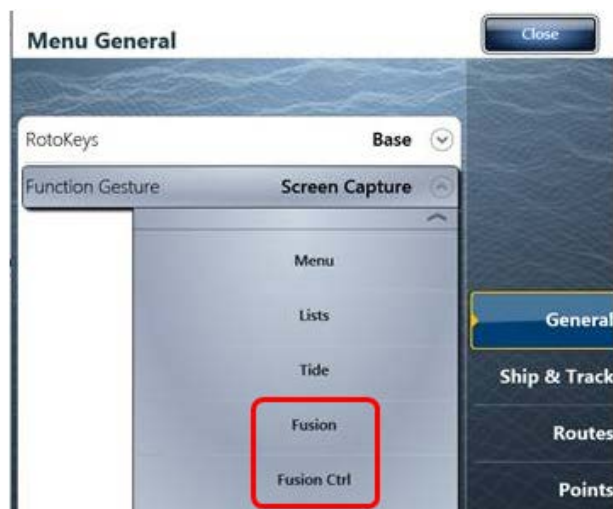
TZT9/14/BB

When the MS700/750 is available in the network, functions associated with FUSION-Link can be allocated in [Menu] (TZT9/14/BB)/[Setting] (TZTL12F/15F) – [General] – [**Function Gesture**].
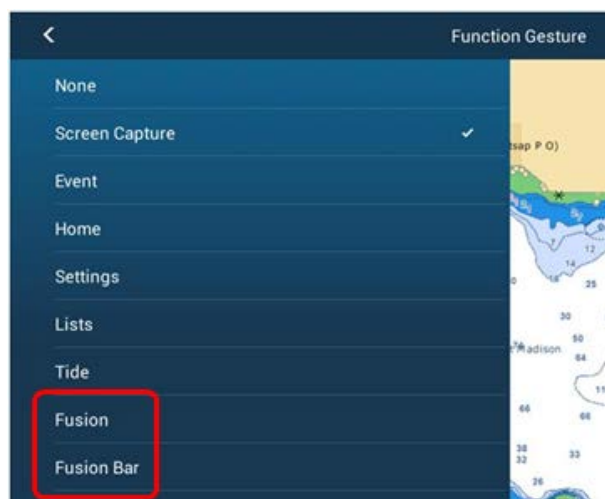
[Fusion]
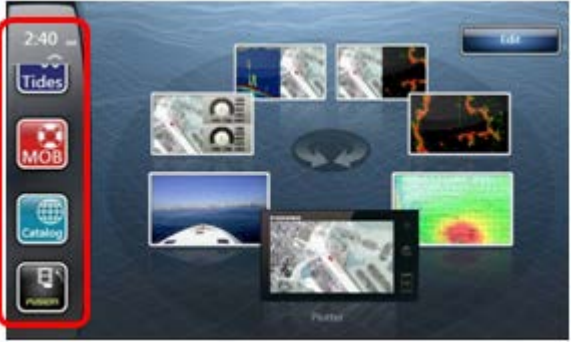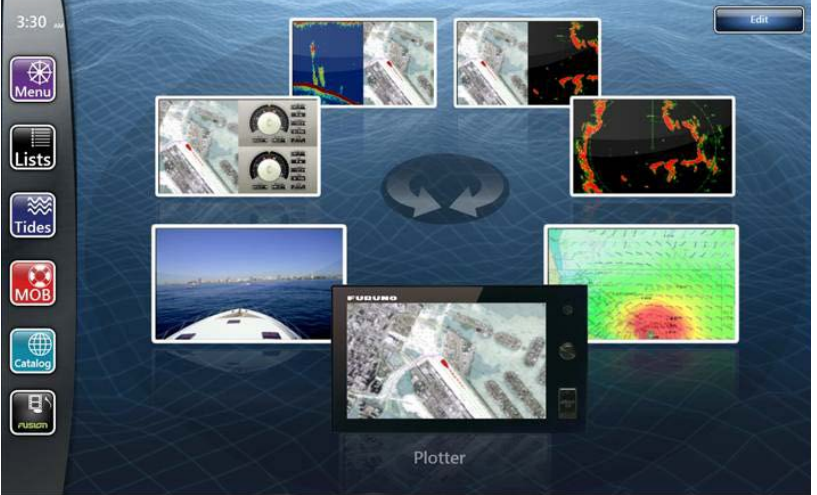
Dual-tap the screen to access the FUSION-Link full page.

[Fusion Ctrl] / [Fusion Bar]

Dual-tap the screen to open the media bar.

TZTL12F/15F

3-5 FUSION-Link Page – Models TZT9 vs. TZT14/BB

Due to different screen resolutions, the media bar on the TZT9 occupies some space at the bottom of the navigation page. See the following screenshots for comparison of the TZT9 with the TZT14 and TZTBB (wide resolutions).

TZT9	TZT14 and TZTBB (Wide)
  You need to scroll the left side of the Home page to reach the Fusion icon before opening the FUSION-Link full page.	
  There is no significant difference in the full page.	
  When the media bar is shown at the bottom of the screen, the active area of the navigation page reduces, compared to the TZT14/BB.	

Note:

There is no significant difference between the TZTL12F and TZTL15F because they have similar screen resolutions.

TZTL12F	TZTL15F
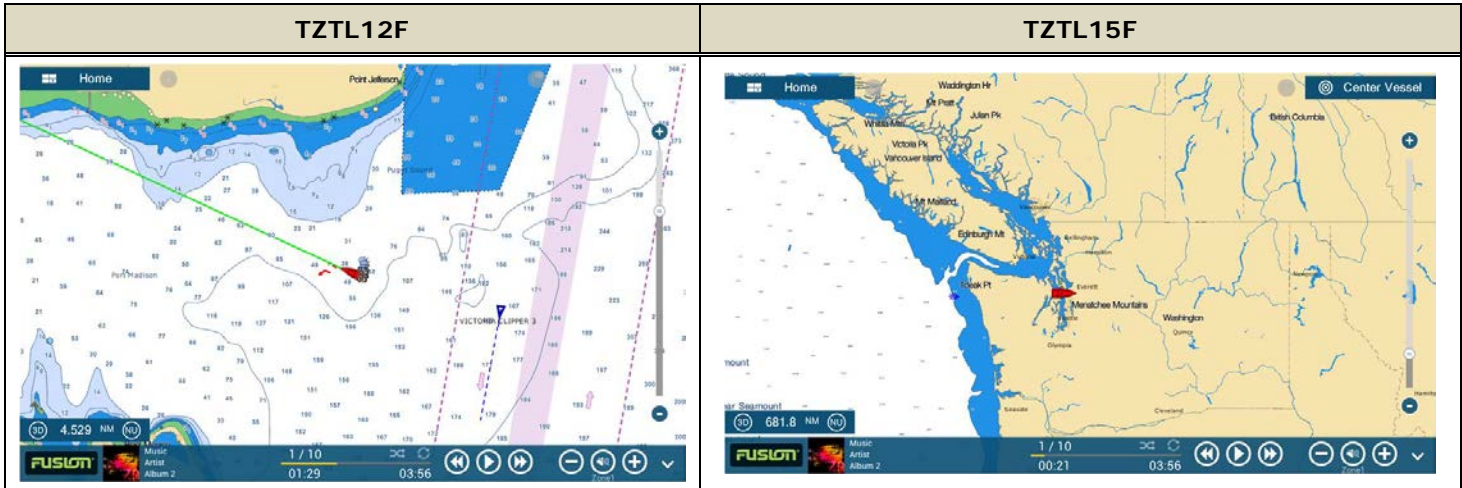
3-6 Automatic Volume Adjustment by Speed

The faster the boat speed is, the louder the audio volume should be because the engine noise will be louder. However, it is sometimes inconvenient to adjust the volume while running a boat. The **automatic volume adjustment** feature helps to **automatically increase or decrease the volume based on the preset boat speeds**. Note that this feature is available on the **TZT9/14/BB v4.01 or later** and **TZTL12F/15F all versions**.

Settings

[Menu] (TZT9/14/BB) / [Settings] (TZTL12F/15F)

      – [Initial Setup] – [**Fusion**]

[**Fusion Auto Volume**]   – [**ON**]

[**Minimum Speed**]   – [**0**] to [**99**] (Default: **6** kn)

[**Maximum Speed**]   – [**0**] to [**99**] (Default: **20** kn)

[**Volume Increase %**]   – [**10**] to [**50**] (Default: **20%**)

In the default settings above, the volume will be automatically adjusted when the boat speed is between 6 and 20 knots. As an example, the volume is set to [15] first. When the ship speed reaches 6 knots, the volume is still [15]. When the speed reaches 20 knots, the volume will be [18], increased from 15 by 20%. As the speed increases from 6 to 20 knots, the volume incrementally changes from 15 to 18.

__Sample Screens from TZT14__

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*- **Caution: Any Fusion model besides these two units should not be connected to the Furuno Ethernet. Doing so can cause MFD lock-up or rebooting problems.***