

NAVnet
TZ
touch

NAVnet
TZ2
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NAVnet
TZ3
touch

FUSION-Link



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1. FUSION-Link Compatibility

NavNet TZtouch, TZtouch2, and TZtouch3 series MFDs have been always been compatible with **FUSION-Link** via Ethernet, **NavNet TZtouch2 (v8 and above) and TZtouch3 MFDs (v2 and above) enabled compatibility with via NMEA2000**. The following table summarizes the network compatibility.

Series	Model	Interface with Fusion Stereos	
		Ethernet	NMEA2000
NavNet TZtouch	TZT9/14/BB	✓	No
NavNet TZtouch2	TZTL12F/15F and TZT2BB	✓	✓ Compatible (v8.01 and later)
NavNet TZtouch3	TZT9F/12F/16F/19F	✓	Compatible (v2.01 and later)

See the following sections for network procedures, compatible Fusion stereo models, and FUSION-Link operation.

2. Networking with Fusion Stereos via NMEA2000 – NavNet TZtouch2 and TZtouch3 Only

2.1. Compatible Fusion Stereos

Fusion stereos with NMEA2000 interface can be connected to the NavNet TZtouch2/3 network for control via NMEA2000. When connected by NMEA 2000; they should not be connected to Ethernet. ONLY one method used not both.

For stereo models with NMEA2000, refer to the product information in the Fusion website.

<<http://www.fusionentertainment.com/>>.

2.2. Interconnection with Fusion Stereos

There is no special setting or tips required to connect Fusion stereos to the NavNet TZtouch2/3 network via NMEA2000: Just connect the stereo to the backbone of NMEA2000 bus.

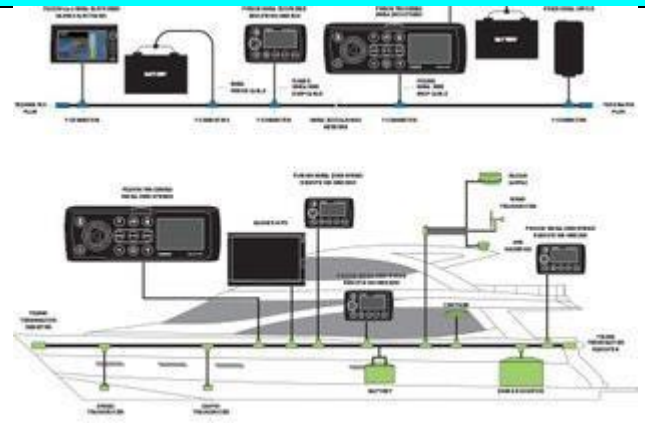


Diagram from Fusion Entertainment


2.3. Limitation for NMEA2000 Network

When Fusion stereos are networked via NMEA2000, album artwork will not be shown on the FUSION-Link page or the media bar. The artwork will be shown with Ethernet connected systems only.

3. Networking with Fusion Stereos via Ethernet

3.1. Compatible Fusion Stereos

The following table shows the compatible Fusion stereos and software versions of NavNet TZtouch, TZtouch2, and TZtouch3 MFDs.

Stereo	Image	TZT9/14/BB	TZTL12F/15F/2BB	TZT9F/12F/16F/19F
APOLLO series	 <p>The MS-SRX400 (right) does not have NMEA2000, only Ethernet.</p>	v6.01 (in 2020)	v6.21 (in 2019) and later	All versions

Note:

The MS755, MS750, and MS700 series, already discontinued can also be networked with MFDs via Ethernet.



3.2. Interconnection with Fusion Stereos

Fusion stereos can be networked with the MFDs as follows. The stereos should be assigned with an IP address by manual setting as shown in [Section 3.3](#).



Notes:

- (1) FUSION-Link supports both NMEA2000 and Ethernet protocols, but NavNet TZtouch and TZtouch2 MFDs use the **Ethernet** network to interface with Fusion stereos for FUSION-Link. Note that the TZT9/14/BB and TZTL12F/15F/2BB **does NOT** support an NMEA2000 connection for FUSION-Link.
- (2) Wi-Fi network between Fusion APOLLO series and MFDs is **NOT** available.
- (3) The **MS700** version should be **1.1.3255** or later in order to have a static IP option. For detailed user update procedures, follow the Fusion MS700 instructions.

3.3. Assigning a Static IP to Fusion Stereos

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

Settings	Class-B	Class-C
IP Address	<u>172.31</u>.xxx.xxx	<u>192.168.252</u>.xxx
Subnet Mask (*2)	255.255.<u>000</u>.000	255.255.<u>255</u>.000
For Network with...	TZT9/14/BB, TZTL12F/15F/2BB (*2), and/or TZT9F/12F/16F/19F (*2)	TZT9/14/BB

Notes:

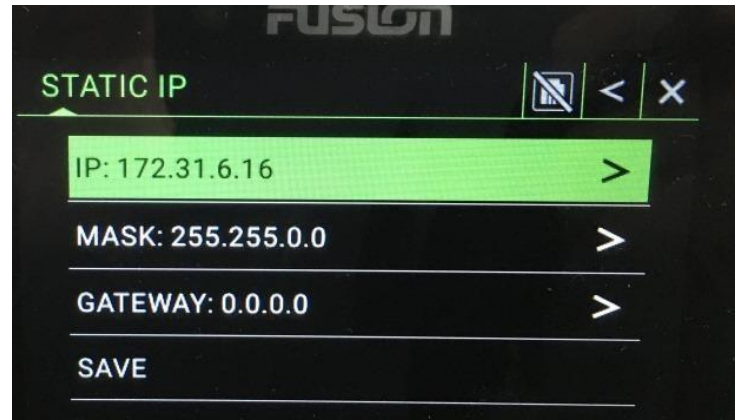
- (1) Make sure to enter the subnet mask corresponding to the IP address.
- (2) **For network with the TZTL12F/15F/2BB and TZT9F/12F/16F/19F, assign a Class-B IP (172.031.xxx.xxx / 255.255.000.000) to the stereos.** The TZT9/14/BB is also compatible with both Class-B and -C IP address ranges.

In [Settings] – [NETWORK] – [ADVANCED] – [ETHERNET IP], check [STATIC IP] and set the IP address to [172.31.xxx.xxx] in [IP] and subnet mask to [255.255.0.0] in [MASK].

E.g. STATIC IP page

IP: 172.31.6.16

MASK: 255.255.0.0



4. Confirming Network

After the stereo is connected to the NMEA2000 backbone (for connection via NMEA2000) or after the IP assignment by manual setting or a DHCP is complete (for connection via Ethernet), you can confirm that the stereo is properly detected

in the MFD network, referring to the Sensor List page: Access [Home] – [Menu] / [Settings] – [Initial Setup] – [**Sensor List**] and see that the stereo is available. In this example, the MS-RA770 from MS770 series is connected to the NMEA2000 backbone and the MS-SRX400 from APOLLO series is connected to the Ethernet.

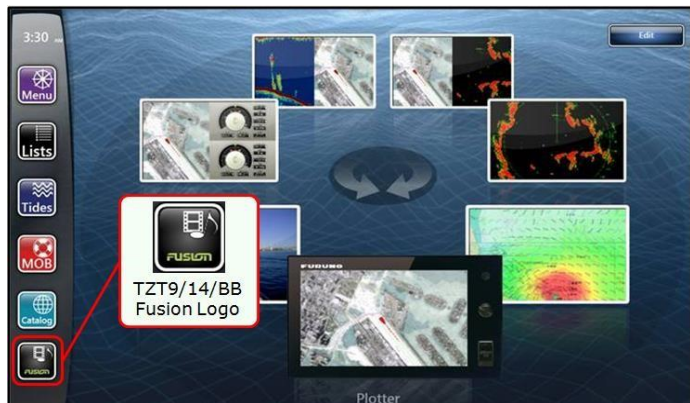
E.g. – TZT16F

Sensor List					
NETWORK SENSOR					
Name	Nickname	Version	IP	HostName	
TZT16F (Me)	TZT16F	210118:201217:02.01:	172.031.252.002	MF252002	>
CAN BUS SENSOR					
Name	Nickname	Version	Device Instance	Sys. Instance	
TZT16F (Me)	TZT16F	210118:201217:02.01:	0	0	>
MS-RA770...	MS-RA770...	2.40.50	0	0	>
FUSION SENSORS					
Name	Mac Address	IP			
MS-SRX400	0c:b2:b7:db:8d:70	172.31.100.8			

5. Operating Fusion Stereos

This section describes how to access and operate the Fusion stereos from the MFD.

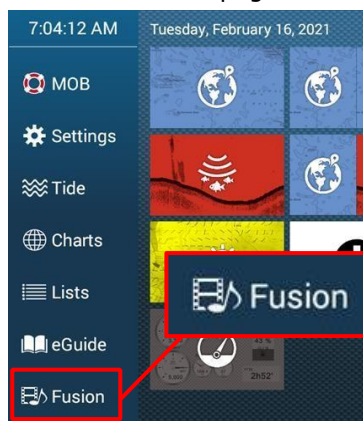
5.1. Accessing FUSION-Link Page



TZT9/14/BB

TZTL12F/15F/2BB and TZT9F/12F/16F/19F

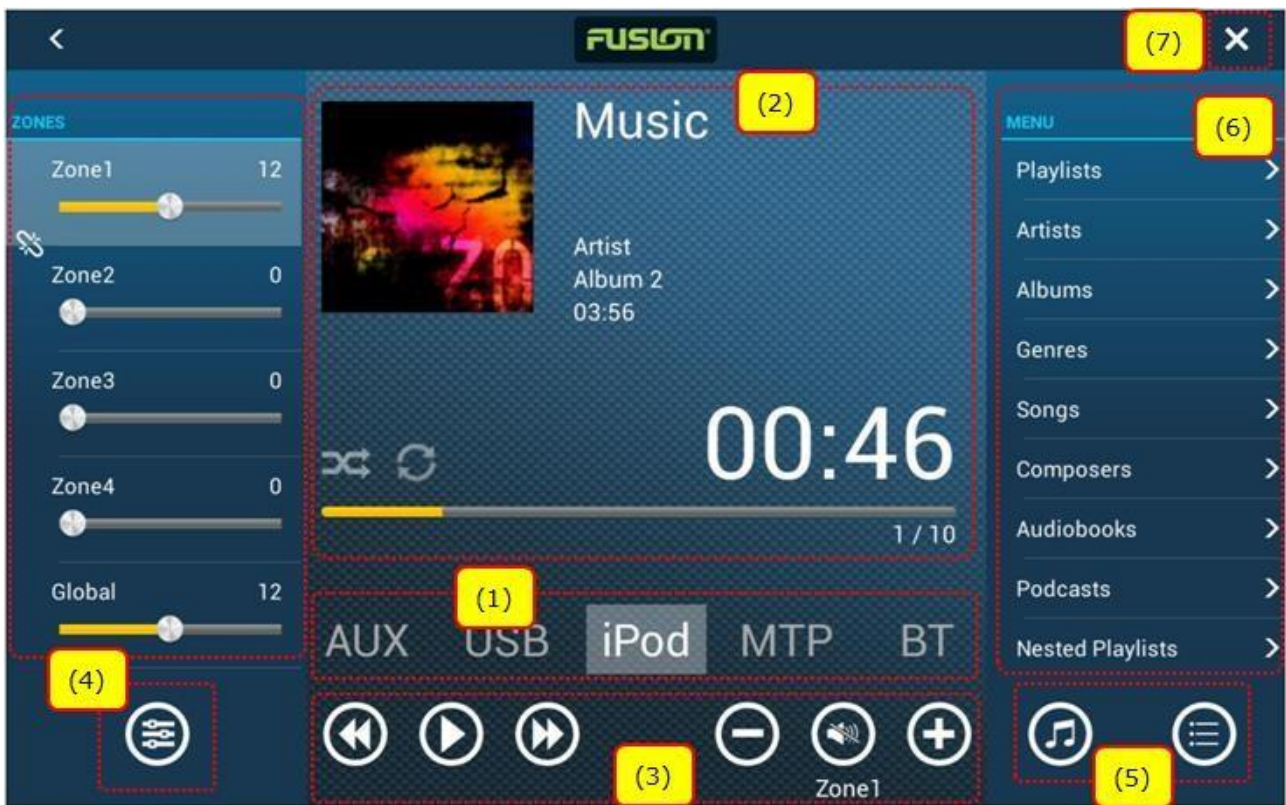
If the stereo is available in the MFD network, the Fusion logo/icon will appear in the Home page: Tap it to access the FUSION-Link page.



5.2. FUSION-Link – Full Screen

The stereo can be controlled from the MFD in a full screen.





TZTL12F/15F/2BB and TZT9F/12F/16F/19F – 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. The artwork (graphic image) will appear for Ethernet network only, not for NMEA2000.
(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	
(7)	Close Icon	The FUSION-Link full page can be closed by tapping this icon.

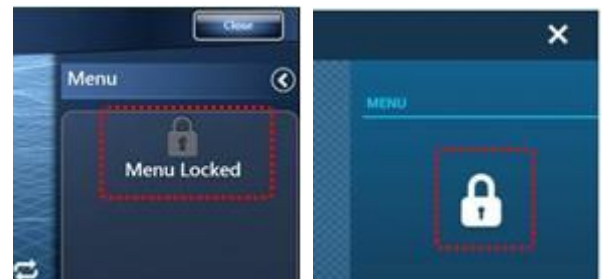
Notes

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



(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 all versions from **TZTL12F/15F/2BB** and **TZT9F/12F/16F/19F**.

(3) When the stereo menu is operated by another MFD in the network, menu operation will be locked, showing the lock icon in the menu as shown at right.



E.g. TZT9/14/BB (Left) and TZTL12F/15F/2BB (Right)

5.3. 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	<p><u>TZT9/14/BB</u></p> <p>The media bar will appear by selecting [Fusion Ctrl] from the context or RotoKey™ menu.</p> <p><u>TZTL12F/15F/2BB and TZT9F/12F/16F/19F</u></p> <p>The media bar will appear by selecting [Fusion] from the universal setting option accessible by edge swipe at the right side of the screen.</p>
(2)	Status	The status of the selected audio source is shown. In this example, music information from an iPod is shown. The artwork (graphic image) will appear for Ethernet network only, not for NMEA2000.
(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.
(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.

5.4. Quick Access to FUSION-Link by Two Finger Tap



TZT9/14/BB

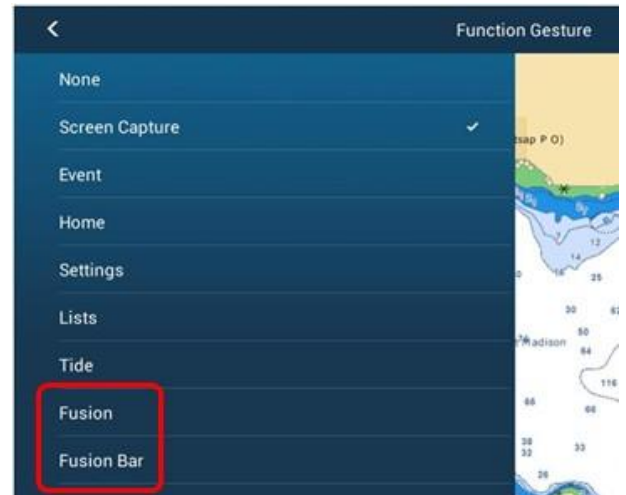
[Fusion]

Dual-tap the screen to access the FUSION-Link full page.

[Fusion Ctrl] / [Fusion Bar]

Dual-tap the screen to open the media bar.


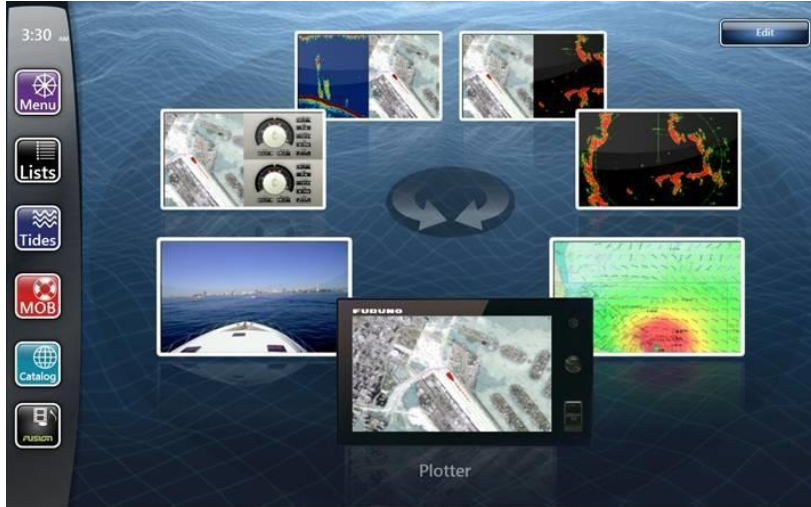
When the stereo is available in the network, functions associated with FUSION-Link can be allocated in [Menu] / [Setting] – [General] – [**Function Gesture**] (TZT9/14/BB) or [**Two Finger Tap**] (TZTL12F/15F/2BB and TZT9F/12F/16F/19F).



E.g. TZTL12F/15F/2BB

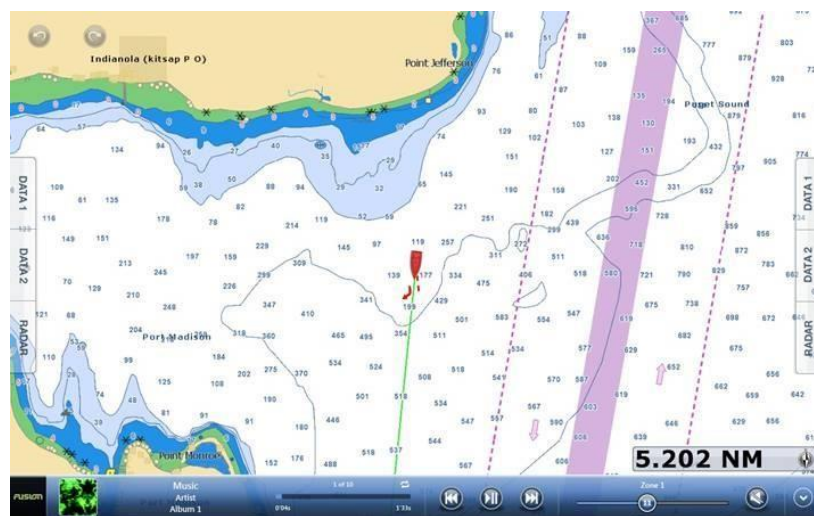
5.5. FUSION-Link Page for Different Resolutions

Due to different screen resolutions, the media bar on a small MFD such as the TZT9 and TZT9F 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)
 <p>You need to scroll the left side of the Home page to reach the Fusion icon before opening the FUSION-Link full page.</p>	



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.

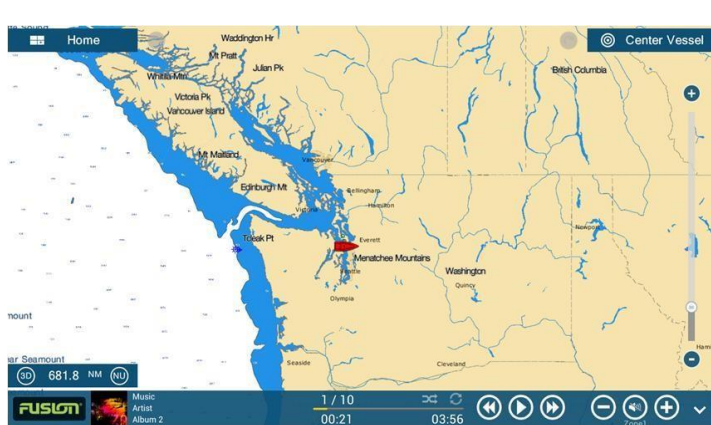
Note:

There is no significant difference between the TZTL12F/TZT12F and TZTL15F/TZT16F because they have similar screen resolutions.

TZTL12F and TZT12F



TZTL15F and TZT16F



5.6. 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 **auto 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 all versions from **TZTL12F/15F/2BB** and **TZT9F/12F/16F/19F**.



Settings

[Menu] / [Settings] – [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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