

# 650 SERIES

## FUSION® MS-UD/AV650

MARINE ENTERTAINMENT SYSTEM

OWNERS MANUAL

S V M B



**FUSION®**

FUSIONENTERTAINMENT.COM

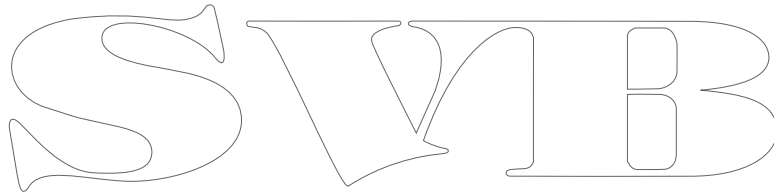
All rights reserved. Under the copyright laws, this manual may not be copied, in whole or in part, without the written consent of Garmin. Garmin reserves the right to change or improve its products and to make changes in the content of this manual without obligation to notify any person or organization of such changes or improvements. Go to [www.garmin.com](http://www.garmin.com) for current updates and supplemental information concerning the use of this product.

Garmin®, the Garmin logo, and the Fusion™ logo are trademarks of Garmin Ltd. or its subsidiaries, registered in the USA and other countries. Fusion, FUSION-Link™, and True-Marine™ are trademarks of Garmin Ltd. or its subsidiaries. These trademarks may not be used without the express permission of Garmin.

Android™ is a trademark of Google Inc. Apple®, the Apple logo, iPod®, iPod touch®, iPod classic®, iPod nano®, iPhone®, and Lightning™ are trademarks of Apple Inc., registered in the U.S. and other countries. Bluetooth® word mark and logos are owned by the Bluetooth SIG, Inc. and any use of such marks by Garmin is under license. NMEA®, NMEA 2000®, and the NMEA 2000 logo are registered trademarks of the National Marine Electronics Association. Pandora® and the Pandora trade dress are trademarks or registered trademarks of Pandora Media, Inc. Used with permission. Sirius, XM and all related marks and logos are trademarks of Sirius XM Radio Inc. Wi-Fi® is a registered mark of Wi-Fi Alliance Corporation. Other trademarks and trade names are those of their respective owners.

Made for iPhone 6 Plus, iPhone 6, iPhone 5s, iPhone 5c, iPhone 4s, iPhone 4, iPod touch (3rd through 5th generation), iPod classic, and iPod nano (4th through 7th generation).

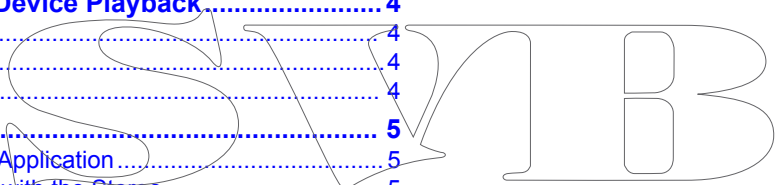
"Made for iPod and iPhone" means that an electronic accessory has been designed to connect specifically to an iPod or an iPhone respectively, and has been certified by the developer to meet Apple performance standards. Apple is not responsible for the operation of this device or its compliance with safety and regulatory standards. Please note that the use of this accessory with an iPhone may affect wireless performance.

The image shows a large, stylized outline logo for the letters 'SWIB'. The letters are rendered in a decorative, serif font with intricate flourishes and a hollow interior. The 'S' is on the left, followed by 'W', 'I', and 'B' on the right. The entire logo is composed of a single continuous line.

# Table of Contents

<b>Getting Started</b> .....	<b>1</b>
What's In the Box.....	1
Stereo Controls.....	1
Using the Dial to Select Items.....	1
Entering Text.....	1
Stereo Screen.....	1
Media Player Connection.....	1
Media Player Compatibility.....	2
Connecting a Media Player Using the Dock.....	2
Connecting a USB Device Using the USB Cable.....	2
Connecting an Auxiliary Device.....	2
Selecting a Source.....	2
Adjusting the Volume.....	2
Adjusting the Tones.....	2
Speaker Zones.....	2
Infrared Remote Control.....	3
<b>Bluetooth Device Playback</b> .....	<b>3</b>
Connecting a Compatible Bluetooth Device.....	3
Bluetooth Range Information.....	4
Selecting a Different Bluetooth Source.....	4
Bluetooth Source Settings.....	4
<b>DVD and CD Playback</b> .....	<b>4</b>
Inserting a DVD or CD.....	4
Setting the DVD Region.....	4
Playing a DVD or CD.....	4
Ejecting a DVD.....	4
<b>USB, MTP, and Apple Device Playback</b> .....	<b>4</b>
Setting a Song to Repeat.....	4
Shuffling Songs.....	4
MTP File Information.....	4
<b>Pandora Service</b> .....	<b>5</b>
Downloading the Pandora Application.....	5
Controlling Pandora Radio with the Stereo.....	5
Controlling Pandora Radio with Your Mobile Device.....	5
<b>Radio</b> .....	<b>5</b>
Setting the Tuner Region.....	5
Changing the Radio Station.....	5
Presets.....	5
Saving a Channel as a Preset.....	5
Removing Presets.....	6
<b>SiriusXM Satellite Radio</b> .....	<b>6</b>
Enabling the SiriusXM Source.....	6
Locating the SiriusXM Radio ID.....	6
Activating a SiriusXM Subscription.....	6
Selecting a Category.....	6
Parental Controls.....	6
Enabling the Parental Controls.....	6
Locking a Channel.....	6
Clearing All Locked Channels.....	6
Changing the Parental Control Passcode.....	6
SiriusXM Troubleshooting.....	6
<b>General Settings</b> .....	<b>7</b>
<b>Appendix</b> .....	<b>7</b>
Registering Your FusionMS-UD/AV650.....	7
True-Marine™ Products.....	7
FUSION-Link.....	7
Audio Control with NMEA 2000.....	7
Optional Wired Remote Controls.....	7
Troubleshooting.....	8
The stereo does not respond to key presses.....	8

The stereo keeps locking up when connected to an Apple device.....	8
The stereo is not finding my Apple device when it is connected in the dock.....	8
My Apple device has gone into thermal protection mode.....	8
My MTP device is unresponsive.....	8
The stereo does not find all of my music files on my MTP device.....	8
My Bluetooth audio is interrupted by short breaks.....	8
The stereo does not display all song information from my Bluetooth source.....	8
Specifications.....	8
<b>Index</b> .....	<b>9</b>



SWIB

# Getting Started

## What's In the Box

- Two Mounting plates
- Mounting hardware
  - Four 8-gauge, self-tapping screws
  - Four M4 machine screws
- Power and speaker wiring harnesses
- RCA splitter
- Micro-USB to USB cable (UD models only)
- Lightning™ connector to USB cable (UD models only)
- Apple® 30-pin to USB cable (UD models only)
- Remote control (AV models only)
- Two AAA batteries (AV models only)

## Stereo Controls



①	<ul style="list-style-type: none"> <li>• Select to open a menu.</li> <li>• Select to return to the previous screen or menu.</li> </ul>
②	Select to cycle the available sources.
③	<ul style="list-style-type: none"> <li>• Select to pause or resume.</li> <li>• AM, FM source:                             <ul style="list-style-type: none"> <li>◦ Select to cycle through the tuning modes: auto, manual, and presets (when two or more presets are saved).</li> <li>◦ Hold to save this station as a preset.</li> </ul> </li> <li>• SIRIUSXM source: Select to cycle through the tuning modes (auto and presets), when you have at least one preset channel.</li> </ul>
④	<ul style="list-style-type: none"> <li>• Select to skip to the previous track, when using an applicable source.</li> <li>• Hold to rewind the current track, when using an applicable source.</li> <li>• AM, FM source:                             <ul style="list-style-type: none"> <li>◦ Select to tune to the previous station.</li> <li>◦ Hold for faster tuning (manual mode only).</li> </ul> </li> <li>• AUX1, AUX2 source: Select to decrease the gain for the connected source.</li> <li>• SIRIUSXM source: Select to return to the previous channel.</li> </ul>
⑤	<ul style="list-style-type: none"> <li>• Select to skip to the next track, when using an applicable source.</li> <li>• Hold to fast forward the current track, when using an applicable source.</li> <li>• AM, FM source:                             <ul style="list-style-type: none"> <li>◦ Select to tune to the next station.</li> <li>◦ Hold for faster tuning (manual mode only).</li> </ul> </li> <li>• AUX1, AUX2 source: Select to increase the gain for the connected source.</li> <li>• SIRIUSXM source: Select to advance to the next channel.</li> </ul>
⑥	<ul style="list-style-type: none"> <li>• Select to mute the audio output.</li> <li>• Select to unmute the muted audio. The volume continues at the previously set level.</li> <li>• Pandora®: Press and hold to tell Pandora not to play this track.</li> </ul>

⑦	<ul style="list-style-type: none"> <li>• Select to adjust the screen and dial brightness, or to adjust the screen contrast.</li> <li>• Pandora: Press and hold to tell Pandora you like this track and would like more tracks similar to this played on this station.</li> </ul>
⑧	<ul style="list-style-type: none"> <li>• Turn to adjust the volume.</li> <li>• Press and hold for at least one second to adjust the subwoofer levels.</li> <li>• Turn to move through the menus or adjust a setting.</li> <li>• Press to select the highlighted option.</li> </ul>
⑨	<ul style="list-style-type: none"> <li>• Select to turn on the stereo.</li> <li>• Hold to turn off the stereo.</li> </ul>

## Using the Dial to Select Items

You can use the dial to highlight and select items on the screen.

- Turn the dial to select an item on the screen.
- Press the dial to select the highlighted option.

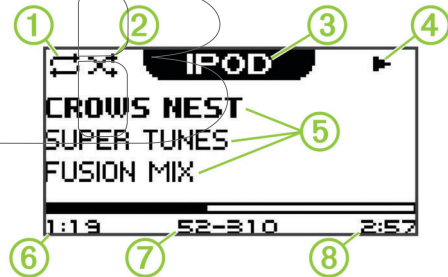
## Entering Text

You can enter text to change names or other specific fields on this device.

- 1 In a settings field that allows you to enter text, select ◀◀ to erase the existing characters.
- 2 Use the dial to choose a letter, and press the dial to select it.
- 3 Add additional letters to finish entering the name.
- 4 Select ▶▶ to save the new text.

## Stereo Screen

The information displayed on the stereo screen varies depending on the source selected. This example shows the stereo playing a track on an iPhone® mobile digital device.



①	Repeat status icon
②	Shuffle status icon
③	Source
④	Play status icon
⑤	Track details (if available)
⑥	Elapsed time
⑦	Current track number out of total number of tracks in the playlist (if available)
⑧	Track duration

## Media Player Connection

### ⚠ CAUTION

You may need to remove the media player from a sleeve or case to fit inside the dock.

Insert the media player with the display facing up.

Never force the media player into the dock.

Be careful when removing the media player from the dock, because the surfaces may be warm.

Always disconnect your media player from the stereo when not in use and do not leave it in your vessel. This helps reduce the risk of theft and damage from extreme temperatures.

Do not remove the media player or use your stereo in a distracting manner while operating the vessel. Check and obey all marine laws in association with use.

The stereo accepts a variety of media players, including smartphones and other mobile devices. You can connect a compatible media player using a Bluetooth® wireless connection or a USB connection to the integrated docking station (UD models only), to the USB cable on the back of the stereo, or to an optional UNI-Dock external media dock.

**NOTE:** If you connect an Apple media player to the USB port on the stereo, you must either disable Bluetooth on the media player, or unpair the Bluetooth connection from the stereo to avoid possible media-playback issues.

### Media Player Compatibility

If you have a UD model, you can use the included adapter cables to connect popular media players to the internal docking station or the connector on the back of the stereo. If you have an AV model, you can use the USB cables that came with your media player to connect the player to the connector on the back of the stereo.

Only media players with ports on the bottom, not on the sides, fit in the docking station. Media players larger than 144 × 71 × 13 mm (5.67 × 2.80 × 0.52 in.) do not fit in the docking station.

Cable Connector in Dock	Devices
Micro-USB connector	Supported media players. See <a href="http://www.fusionentertainment.com">www.fusionentertainment.com</a> .
Apple 30-pin connector	Apple iPhone 4s, and iPhone 4. iPod touch® (3rd and 4th generation), iPod classic®, and iPod nano® (4th through 6th generation).
Apple Lightning connector	Apple iPhone 6, iPhone 5s, iPhone 5c, and iPhone 5. iPod touch (5th generation) and iPod nano (7th generation).

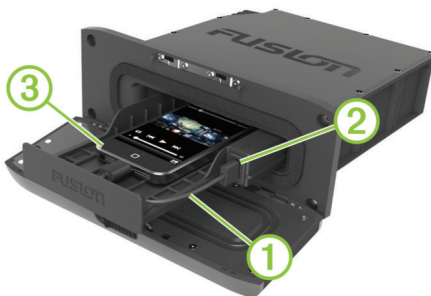
You also can connect a FAT32- or NTFS-formatted USB flash drive directly to the USB port.

### Connecting a Media Player Using the Dock

You can connect a compatible media player using the universal dock built into the UD models.

- Slide the button on the top of the stereo, and pull down to open the door.
- Slide out the device tray.
- Insert the adapter cable ① into the USB port ②.

**NOTE:** You can connect a USB flash drive directly to the USB port.



- Connect the adapter cable to the media player ③, and place it in the device tray.

**NOTE:** If you are connecting an Android™ device to the stereo, you should unlock the device before connecting the adapter cable.

- Slide in the device tray, and close the door.

### Connecting a USB Device Using the USB Cable

You can connect a USB device to the USB cable on the back of the stereo.

- Locate the USB cable on the back of the stereo.
- Connect the USB device to the USB port.

### Connecting an Auxiliary Device

You can connect various auxiliary devices to the stereo, such as TVs, DVD players, game consoles, and media players. These devices have either RCA connectors, a line output, or headphone output jack.

- Locate the auxiliary cable on the back of the stereo.
- If necessary, connect an RCA to 3.5 mm adapter cable to the auxiliary device.
- Connect the auxiliary device to the RCA connectors on the stereo.

### Adjusting the Gain for the Auxiliary Device

You can adjust the gain for the connected auxiliary device to achieve a volume level similar to that of other media sources. You can adjust the gain in 1 dB increments.

- Select an auxiliary source.
- Select an option:
  - To increase the gain, select ►►.
  - To decrease the gain, select ◀◀.

Auxiliary Device	Recommended Gain Setting(dB)
Portable media player with headphone output	from -9 dB to -6 dB
CD/DVD player with line output	-6 dB
Portable media player with line output	0 dB
Game console with line output	0 dB
Older audio/visual equipment with line output (for example, VHS or cassette deck)	from 6 dB to 9 dB

**NOTE:** To achieve the best audio quality when using a portable media player with headphone output, it may be necessary to adjust the volume control on the media player, instead of adjusting the gain.

### Selecting a Source

- Select ⏪.
- Select an option:
  - Turn the dial to highlight a source.
  - Select ⏪ repeatedly to highlight a source.
- Press the dial to select the source.

### Adjusting the Volume

- Use the dial to adjust the volume.
- If necessary, press the dial to switch between zones.

**TIP:** To control all zones at the same time, press the dial until all zones are highlighted.

### Adjusting the Tones

- Select 🗂 > **SETTINGS** > **TONE**.
- Use the dial to adjust the level.
- Press the dial to switch to a different tone.

### Speaker Zones

You can group speakers in one area into speaker zones. You can then control the audio level of the zones individually. For example, you might want the audio quieter in the cabin and louder on deck.

Zones 1 and 2 are powered by the on-board, Class D amplifier. To use the three line outputs and the three subwoofer outputs, you must connect external amplifiers.

You can set the balance, volume limit, subwoofer level, and name for each of the available zones. Up to two pairs of speakers can be connected per zone in parallel to increase the amplifier output.

### Setting up Speaker Zones

1 Select  > **SETTINGS** > **ZONE**.

2 Select a zone.

3 Select one or more options:

**NOTE:** Not all options are available for all zones.

- To disable the zone and remove it from the audio level pages, select **ENABLED** to clear the option button. When a zone is disabled, you cannot change any of the settings for that zone.
- To link zones 1 and 2, select **LINK TO ZONE 1** to fill the option button.
- To adjust the right and left speaker balance of this zone, select **BALANCE**, and use the dial to set the balance.
- To limit the maximum volume output of this zone, select **VOLUME LIMIT**, and use the dial to set the limit.
- To set the subwoofer level for this zone, select **SUB LEVEL**, and use the dial to set the level.

**TIP:** To open the subwoofer level from any screen, press and hold the dial for three seconds.

- To give the zone a specific name, select **ZONE NAME** ([Entering Text](#)).
- To allow the volume of this zone to be controlled by another amplifier or stereo and provide a fixed line level output, select **VOLUME CONTROL** to clear the option button.

### Linking Zones

1 Select  > **SETTINGS** > **ZONE** > **ZONE 2**.

2 Select **LINK TO ZONE 1** to fill the button.

When zones 1 and 2 are linked, **+** appears between zones 1 and 2 on the volume screen.

### Disabling the Internal Amplifiers

When you use external amplifiers for zones 1 and 2, you can disable the internal amplifiers to reduce power consumption.

1 Select  > **SETTINGS** > **ZONE**.

2 Select **AMPS ON** to clear the option button.

### Adjusting the Subwoofer Filter

You can use the subwoofer filter setting to control the subwoofer cutoff frequency, which can enhance the blend of the sound produced by the speakers and the subwoofer. Audio signals above the selected frequency are not passed to the subwoofer. The setting applies to all subwoofer outputs.

1 Select  > **SETTINGS** > **ZONE** > **SUBWOOFER FILTER**.



2 Select a frequency.










3 Press the dial to save the selection.

## Infrared Remote Control

You can use the infrared (IR) remote control to control the AV stereo. The remote buttons function similarly to the device buttons. The result of a button press varies based on the active media source.

**NOTE:** The remote is included only with AV models.

Button	Function
	Turns the device on and off.
	Cycles the available sources.

Button	Function
DSP	Displays the CD track, DVD chapter, and title you are watching or listening to on the connected TV.
ZOOM	Zooms in on the DVD picture.
SUB-T	Cycles through the available subtitle languages for the DVD.
DVD	Opens the DVD setup menu on the connected TV.
MNU	<ul style="list-style-type: none"> <li>• Opens the navigation menu.</li> <li>• DVD source: Opens the menu in the connected TV.</li> </ul>
	Mutes and unmutes the audio.
Arrows	Moves through the menus and settings.
SEL	Selects the highlighted option or setting.
RPT	Repeats the current selection.
RDM	Plays tracks or chapters in a random order.
	Tells Pandora you like this track and would like more tracks similar to this played on this station.
	Tells Pandora not to play this track.
	<ul style="list-style-type: none"> <li>• Pauses or resumes the current track, when using an applicable source.</li> <li>• Cycles through the tuning modes (auto, manual, and presets), when using an applicable source.</li> </ul>
	Press once to stop the play. Press twice to return to the beginning.
	Skips to the previous channel, preset, or track, when using an applicable source.
	Skips back (rewinds) in the track or chapter.
	Skips ahead (fast forward) in the track or chapter.
	Skips to the next channel, preset, or track, when using an applicable source.
Numeric buttons	Allows you to enter numbers and numeric information, such as specific track numbers.

## Bluetooth Device Playback


You can pair the stereo to up to eight Bluetooth media devices.

You can control the playback using the keys, but you cannot browse the music collection. You should select the song or playlist on the media device.

The availability of song information such as song title, artist name, and track duration depends on the capability of the media player and music application. Album cover artwork and the shuffle and repeat status icons are not supported over Bluetooth wireless technology.

### Connecting a Compatible Bluetooth Device

You can play media from a compatible Bluetooth device using the Bluetooth wireless connection.

- 1 Select the Bluetooth source.
- 2 Select  > **DISCOVERABLE** to make the stereo visible to your compatible Bluetooth device.
- 3 Enable Bluetooth on your compatible Bluetooth device.
- 4 Bring the compatible Bluetooth device within 10 m (33 ft.) of the stereo.
- 5 On your compatible Bluetooth device, search for Bluetooth devices.
- 6 On your compatible Bluetooth device, select the stereo from the list of detected devices.
- 7 On your compatible Bluetooth device, follow the on-screen instructions to pair and connect to the discovered stereo.

When pairing, your compatible Bluetooth device may ask you to confirm a code on the stereo. The stereo does not display

a code, but it does connect correctly when you confirm the message on the Bluetooth device.

- 8 If your compatible Bluetooth device does not immediately connect to the stereo, repeat steps 1 through 7.


To prevent interruption to audio streaming over Bluetooth wireless, you can turn off the **DISCOVERABLE** setting after pairing a Bluetooth device to the stereo.

### Bluetooth Range Information

The stereo and Bluetooth wireless devices have a range of 10 m (33 ft.). For optimal performance, the Bluetooth wireless device should also have a clear line of sight to the stereo.

### Selecting a Different Bluetooth Source

When you have more than one Bluetooth device paired to the stereo, you can select a different source when needed. You can connect the stereo to up to eight Bluetooth devices.

- 1 With the **BLUETOOTH** source selected, select .
- 2 Select a Bluetooth device.

### Bluetooth Source Settings

With the **BLUETOOTH** source selected, select .

**DISCOVERABLE:** Allows the stereo to be visible to Bluetooth devices. You can turn off this setting to prevent possible interruption to audio after pairing a Bluetooth device to the stereo.

**REMOVE DEVICE:** Removes the Bluetooth device from the stereo. To listen to audio from this Bluetooth device again, you must pair the device again.

## DVD and CD Playback

DVD and CD playback is available only on AV models.

### Inserting a DVD or CD


**NOTE:** For best results, before you insert the disc, make sure the disc is not scratched or damaged. If necessary, clean and dry the disc with a clean, soft, and lint-free cloth. Avoid touching the surface of the disc, and avoid exposure to direct sunlight.

- 1 Slide the button on the top of the stereo, and pull down to open the door.
- 2 Insert the disc with the label facing up.
- 3 Close the door.

The source automatically changes to the DVD source.


### Setting the DVD Region

You must select the DVD region in order to play a DVD.

- 1 Select  > **DVD REGION**.
- 2 Select the region.


### Playing a DVD or CD

Before you can play a DVD or CD, you must insert the disc. Before you can play a DVD, you must select the DVD region.

- 1 With the **DVD** source selected, select  on the included IR remote control.
- 2 Use the IR remote control to control the playback.

**NOTE:** Aim the remote at the stereo to control playback. View the selections on the connected TV.

### Ejecting a DVD

- 1 Slide the button on the top of the stereo, and pull down to open the door.
- 2 Press  on the inside of the door.

## USB, MTP, and Apple Device Playback


You can connect various USB media players and smartphones to the stereo. For example, you can connect an Android smartphone, a USB flash drive, or a compatible Apple device. How you access the USB source depends on which type of media player is connected. The stereo is designed to be used with one USB connection at a time. You must disconnect one USB device before connecting another.

**NOTE:** If you connect an Apple media player to the USB port on the stereo, you must either disable Bluetooth on the media player, or unpair the Bluetooth connection from the stereo to avoid possible media-playback issues.

Media Player	Source Selections
Android device	MTP
Apple device	IPOD
USB flash drive	USB
MP3 media player (as a mass-storage device)	USB <b>NOTE:</b> If your MP3 media player does not support mass-storage when connected using USB, you must connect it to the stereo as an auxiliary device ( <a href="#">Connecting an Auxiliary Device</a> ).

You can browse the music collection on the USB source using the categories the device supports, such as songs, albums, and artists on MTP and Apple devices.

**NOTE:** The USB source does not support library browsing. You can browse the folder structure.


You can also browse the files according to the folder structure on your media player. For example, from the IPOD source, you can select  > **ALBUMS**.

The availability of song information such as song title, artist name, track duration, and album cover artwork depends on the capability of the media player and music application.

**NOTE:** Different operating systems and media players provide different levels of support for MTP. Go to [www.fusionentertainment.com](http://www.fusionentertainment.com) for device compatibility information.


### Setting a Song to Repeat

The repeat feature is available on the IPOD, MTP, and USB sources.

- 1 With an applicable source selected, select .
- 2 When using the **IPOD** source, select **IPOD SETTINGS**.
- 3 Select **REPEAT**.
- 4 Select an option:
  - To repeat all songs in the current selection, select **ALL**.
  - To repeat the current selection, select **ONE**.

### Shuffling Songs

The shuffle feature is available on the IPOD, MTP, and USB sources.

- 1 With an applicable source selected, select .
- 2 When using the **IPOD** source, select **IPOD SETTINGS**.
- 3 Select **SHUFFLE**.

### MTP File Information

After you connect the MTP device, the stereo downloads the full list of song names from the device and creates a song title index. This process must be completed before music playback can begin. For devices with large music collections, this may take several minutes. The song count appears during this process. You can use other sources while this process is underway.



For best results, the music folders on an MTP device should not contain more than 300 files each. Exceeding 300 files per folder can cause the MTP device to become unresponsive and reset the connection to the device.

Music files must be located in a folder using one of these names. The folder must be located in the root directory of the MTP device.

- My Music
- My\_Music
- mobile
- Music

These guidelines also apply to memory cards installed in the MTP device.

## Pandora Service

Pandora is free personalized radio that offers effortless and endless music enjoyment and discovery. Pandora integration requires a compatible mobile device with the Pandora application installed. For more information on compatible mobile devices visit [www.pandora.com/everywhere/mobile](http://www.pandora.com/everywhere/mobile).

**NOTE:** Pandora is currently available in the United States, Australia, and New Zealand.

### Downloading the Pandora Application

Before you can use the Pandora service on your device, you must download and install the Pandora app to your smartphone.

- 1 On your compatible smartphone, open the application store and search for Pandora.
- 2 Install the Pandora app.

See the owner's manual for your smartphone or mobile media device for more information.

### Controlling Pandora Radio with the Stereo

You can control Pandora radio using the stereo instead of your Apple mobile device. While you are controlling Pandora using the stereo, you cannot control Pandora using your mobile device.

Stereo control of Pandora radio is available only on Apple mobile devices.

- 1 Open the Pandora app on the Apple mobile device.
- 2 Connect an Apple mobile device using a USB connection, and select the **IPOD** source.  
**NOTE:** For the best results, you must connect an Apple mobile device using a USB connection instead of a Bluetooth connection when controlling Pandora with the stereo.
- 3 Select an option:
  - If Pandora controls are visible on the stereo, proceed to step 6.
  - If Pandora controls are not visible on the stereo, proceed to step 4.
- 4 Select **[Menu] > PANDORA**.
- 5 Select **PANDORA CONTROL** to fill the option button.
- 6 If necessary, select an option on the stereo:
  - To pause the stations, select **[Pause]**.
  - To skip to the next track, select **[Next]**.
  - To tell Pandora you like this track and would like more tracks similar to this played on this station, select **[Like]**.
  - To tell Pandora not to play this track, select **[Dislike]**.
  - To change to a different station, select **[Menu]**, and select the station.
  - To add a new station, select **[Menu] > ADD STATION**, and select the station.

- To delete a station, select **[Menu] > DELETE STATION**, and select the station.
- To shuffle all Pandora stations, select **[Menu] > SHUFFLE**.

If you want to control Pandora with your mobile device again, select **[Menu] > Pandora > PANDORA CONTROL** to clear the option button.

### Controlling Pandora Radio with Your Mobile Device

- 1 Open the Pandora app on the mobile device.
- 2 Connect to the mobile device using a USB or Bluetooth connection.  
**NOTE:** For the best results, you must connect an Apple mobile device using a USB connection instead of a Bluetooth connection when playing music from Pandora. You must connect an Android device using a Bluetooth connection to play music from Pandora.
- 3 Select an option:
  - If Pandora controls are visible on the mobile device, proceed to step 6.
  - If Pandora controls are not visible on the mobile device, proceed to step 4.
- 4 Select **[Menu] > PANDORA**.
- 5 Select **PANDORA CONTROL** to clear the option button.
- 6 Begin playing a station on the mobile device.
- 7 Control the playback with your mobile device.

## Radio

To listen to AM or FM radio, you must have a suitable marine AM/FM antenna properly connected to the stereo and be within range of a broadcasting station.

To listen to SiriusXM® radio, you must have the appropriate equipment and subscriptions ([SiriusXM Satellite Radio](#)).

For instructions on connecting an AM/FM antenna or SiriusXM Connect Vehicle Tuner, see the stereo installation instructions.

### Setting the Tuner Region

You must select the region you are presently in to receive AM, FM, and SiriusXM (USA only) stations properly.

- NOTE:** SiriusXM is not available in all regions.
- 1 Select **[Menu] > SETTINGS > TUNER REGION**.
  - 2 Select your present region.

### Changing the Radio Station

- 1 Select an applicable source, such as **FM**.
- 2 Select **[Tune]** repeatedly to cycle through the tuning mode:
  - Select **AUTO** to scan and stop on the next available station.
  - Select **MANUAL** to select a station manually.
  - Select **PRESETS** to select a saved station preset.
- 3 Select **[Left Arrow]** or **[Right Arrow]** to tune to the station.

### Presets

You can save your favorite AM stations, FM stations, or SiriusXM channels as presets for easy access. You can save up to 15 presets for each radio band.

#### Saving a Channel as a Preset

- 1 With an applicable source selected, tune the stereo to a channel.
- 2 Select **[Menu] > PRESETS**.

3 Select **SAVE CURRENT** or **ADD PRESET**.

**TIP:** You can quickly save the selected channel as a preset by holding ►.

### Removing Presets

- 1 With an applicable source selected, select > **PRESETS** > **REMOVE PRESET**.
- 2 Select an option:
  - To remove one preset, select the preset.
  - To remove all presets, select **REMOVE ALL PRESETS**.

## SiriusXM Satellite Radio

Only SiriusXM brings you more of what you love to listen to, all in one place. Get over 140 channels, including commercial-free music plus the best sports, news, talk, comedy and entertainment. Welcome to the world of satellite radio. A SiriusXM Vehicle Tuner and subscription are required. For more information, go to [www.siriusxm.com](http://www.siriusxm.com).

### Enabling the SiriusXM Source

You must enable the SiriusXM source before you can listen to SiriusXM Satellite Radio.

Select > **SETTINGS** > **TUNER REGION** > **USA**.

### Locating the SiriusXM Radio ID

You must have the radio ID of your SiriusXM Connect Tuner before you can activate your SiriusXM subscription. You can locate the SiriusXM Radio ID on the back of the SiriusXM Connect Tuner or its packaging, or by tuning your stereo to channel 0.

With the SiriusXM source selected, select > **CHANNELS** > **ALL CHANNELS** > **000 RADIO ID**.

The SiriusXM Radio ID does not include the letters I, O, S, or F.

### Activating a SiriusXM Subscription

Before you can activate the SiriusXM subscription, you must have the Radio ID ([Locating the SiriusXM Radio ID](#)).

- 1 With the SiriusXM source selected, tune to channel 1.
 

You should be able to hear the preview channel. If not, check the SiriusXM Connect Tuner and antenna installation and connections, and try again.
- 2 Tune to channel 0 to locate the Radio ID.
- 3 Contact SiriusXM listener care by phone at (866) 635-2349 or go to [www.siriusxm.com/activatenow](http://www.siriusxm.com/activatenow) to subscribe in the United States. Contact SiriusXM by phone at (877) 438-9677 or go to [www.siriusxm.ca/activatexm](http://www.siriusxm.ca/activatexm) to subscribe in Canada.
- 4 Provide the Radio ID.
 

The activation process usually takes 10 to 15 minutes, but can take up to an hour. For the SiriusXM Connect Tuner to receive the activation message, it must be turned on and receiving the SiriusXM signal.

## SiriusXM Troubleshooting

Advisory	Description	Resolutions
Check Antenna	The radio has detected a fault with the SiriusXM antenna. The antenna cable may be disconnected or damaged.	<ul style="list-style-type: none"> <li>• Verify that the antenna cable is connected to the SiriusXM Connect Vehicle Tuner.</li> <li>• Inspect the antenna cable for damage and kinks. Replace the antenna if the cable is damaged. SiriusXM products are available at your local car audio retailer, or at <a href="http://www.shop.siriusxm.com">www.shop.siriusxm.com</a>.</li> </ul>
Check Tuner	The stereo is having difficulty communicating with the SiriusXM Connect Vehicle Tuner. The tuner may be disconnected or damaged.	Verify that the SiriusXM Connect Vehicle Tuner cable is connected securely to the stereo.

- 5 If the service is not activated within the hour, go to <http://care.siriusxm.com/refresh> or contact SiriusXM by phone at 1-855-MYREFRESH (697-3373).

### Selecting a Category

You can control which categories of channels are available when using the CATEGORY tuning method.

- 1 With the SiriusXM source selected, select > **CATEGORY**.
- 2 Select a category.

### Parental Controls

The parental control feature allows you to limit access to any SiriusXM channels, including those with mature content. When the parental control feature is enabled, you must enter a passcode to tune to the locked channels. You can also change the 4-digit passcode.

#### Enabling the Parental Controls

- 1 With the **SIRIUSXM** source selected, select > **PARENTAL**.
- 2 Select **UNLOCK** to fill the option button.
- 3 Enter the passcode.

**NOTE:** The default passcode is 0000.

After you lock channels and set up the parental controls, you must select UNLOCK again to lock the channels.

#### Locking a Channel

- 1 With the **SIRIUSXM** source selected, select > **PARENTAL** > **UNLOCK**.
- 2 Enter the passcode.
- 3 Select > **PARENTAL** > **LOCK/UNLOCK**.
- 4 Select the channels to restrict.
- 5 Select > **PARENTAL** > **UNLOCK**.

You cannot access the locked channels. Locked channels can be accessed when in parental mode only.

#### Clearing All Locked Channels

- 1 With the **SIRIUSXM** source selected, select > **PARENTAL** > **UNLOCK**.
- 2 Enter the passcode.
- 3 Select > **PARENTAL** > **CLEAR ALL LOCKED**.

#### Changing the Parental Control Passcode

- 1 With the **SIRIUSXM** source selected, select > **PARENTAL** > **UNLOCK**.
- 2 Enter the passcode.
- 3 Select > **PARENTAL** > **CHANGE PIN**.
- 4 Follow the on-screen instructions.

**TIP:** You can reset the passcode to 0000 by holding for 15 seconds.

Advisory	Description	Resolutions
No Signal	The SiriusXM Connect Vehicle Tuner is having difficulty receiving the SiriusXM satellite signal.	<ul style="list-style-type: none"> <li>Verify that your vessel is outdoors with a clear view of the sky.</li> <li>Verify that the SiriusXM antenna is mounted securely to the vessel.</li> <li>Remove obstructions above or next to the SiriusXM antenna.</li> <li>Inspect the cable antenna for damage and kinks. Replace the antenna if the cable is damaged. SiriusXM products are available at your local car audio retailer or at <a href="http://www.shop.siriusxm.com">www.shop.siriusxm.com</a>.</li> <li>Consult the SiriusXM Connect Vehicle Tuner installation manual for more information on antenna installation.</li> </ul>
Subscription Updated	The radio has detected a change in your SiriusXM subscription status.	<ul style="list-style-type: none"> <li>Select any button to clear the message.</li> <li>Go to <a href="http://www.siriusxm.com">www.siriusxm.com</a> or call 866-635-2349 with questions about your subscription</li> </ul>
Channel Not Available	The channel you requested is not a valid SiriusXM channel, or the channel that you were listening to is no longer available. You may see this message briefly the first time you connect a new SiriusXM Connect Vehicle Tuner.	Go to <a href="http://www.siriusxm.com">www.siriusxm.com</a> for more information about the SiriusXM channel lineup.
Channel Not Subscribed	The channel you requested is not included in your SiriusXM subscription package, or the channel you were listening to is no longer included in your SiriusXM subscription package.	Go to <a href="http://www.siriusxm.com">www.siriusxm.com</a> or call 866-635-2349 for more information about your subscription package or to subscribe to the channel.
Channel Locked	The channel you requested is locked by the parental control feature.	Refer to the parental control section in the manual to unlock channels.

## General Settings

Select  > **SETTINGS**.

**NOTE:** When an option button is filled, the option is on. When the button is clear, the option is off.

**TONE:** Adjusts the bass, middle, and treble tones.

**ZONE:** Enables you to configure the speaker zones.

**KEY SOUND:** Enables and disables audible key tones.

**LANGUAGE:** Sets the language on the device.

**SEARCHING:** Enables Fusion Alpha Search Technology (FAST), which allows you to quickly search for tracks by letter or number. You can select a number to enable the FAST menu if your music device contains more than the selected number of items.

**POWER SAVE:** Enables and disables the LCD backlight after one minute of inactivity to save battery power.

**NRX200 POWER:** Turns off the power the stereo provides to the wired remote controls not on a NMEA 2000® network. If the remote control is connected to a NMEA 2000 network, you must disable this option.

**TEL MUTE:** Sets the behavior of the mute function when the device is connected to a hands-free mobile phone. When a call is received, the device can either mute the audio or broadcast the call through the AUX2 input. See your hands-free kit instructions.

**TUNER REGION:** Sets the region used by the FM, AM, and SiriusXM source.

**SET DEVICE NAME:** Sets a name for this stereo ([Entering Text](#)).

**UPDATE:** Updates the stereo, updates the connected remote controls, or resets all settings to the factory defaults.

**ABOUT:** Shows the software versions of the stereo, FUSION-Link™, and connected remote.

## Appendix

### Registering Your FusionMS-UD/AV650

Help us better support you by completing our online registration today.

- Go to [www.fusionentertainment.com](http://www.fusionentertainment.com).
- Keep the original sales receipt, or a photocopy, in a safe place.

### True-Marine™ Products

True-Marine products are subjected to rigorous environmental testing under harsh marine conditions to surpass industry guidelines for marine products.

Any product that bears the True-Marine stamp of assurance has been designed for simplicity of use and combines the most advanced marine technologies to deliver an industry leading entertainment experience. All True-Marine products are supported by the Fusion 3-year worldwide limited consumer warranty. You can be assured Fusion stands by its products and takes pride in delivering True-Marine quality products for your vessel.

### FUSION-Link

FUSION-Link technology allows you to fully control compatible Fusion entertainment systems on compatible multi-function displays installed at the helm, flybridge, or navigation station of the vessel. This provides you with integrated entertainment control and a less cluttered console.

The partnered multi-function display becomes the portal on which all audio on the vessel is controlled, no matter where on the vessel the stereo is installed. The FUSION-Link equipped stereo can be installed out of sight if space is an issue and users need to access the stereo only to replace removable media.

FUSION-Link technology offered on this device operates over existing industry-standard NMEA 2000 networks.

For a list of FUSION-Link capable products from companies that are partnering with Fusion, go to [www.fusionentertainment.com](http://www.fusionentertainment.com).

### Audio Control with NMEA 2000

NMEA 2000 is the most popular marine standard for data communication within vessels. It has become the standard for sending navigation and engine management data within vessels. Fusion introduces an industry-first product by incorporating NMEA 2000 functionality in its audio remote control devices. This enables the user to monitor a series of available NMEA® sentences.

Go to [www.fusionentertainment.com](http://www.fusionentertainment.com) for a full list of supported NMEA sentences.

### Optional Wired Remote Controls

The stereo can be controlled by compatible Fusion wired remote controls installed in the audio zones throughout the vessel. Operating the entertainment system from the remote control is similar to operating it from the main stereo.

The wired remote controls can operate over an existing NMEA 2000 network, so wiring the remotes directly to the stereo is not necessary. The standard Fusion remote control network can connect Fusion wired remote controls to stereos in vessels without a NMEA 2000 network by connecting the remote directly to the WIRED REMOTE NMEA 2000 connector on the stereo.

The remote control can also serve as an NMEA display showing NMEA navigation data or vessel performance data from other NMEA devices on an existing NMEA 2000 network.

## Troubleshooting

### The stereo does not respond to key presses

- Press and hold the power button to reset the stereo.

### The stereo keeps locking up when connected to an Apple device

- Press and hold the power button to reset the stereo.
- Reset the Apple device. Go to [www.apple.com](http://www.apple.com) for more information.
- Make sure you have the latest version of iTunes® and the latest operating software on your Apple device.

### The stereo is not finding my Apple device when it is connected in the dock

- Make sure you have the latest version of iTunes and the latest operating software on your Apple device.
- Reset the Apple device. Go to [www.apple.com](http://www.apple.com) for more information.
- Contact your Fusion dealer or send an email to Fusion from [www.fusionentertainment.com](http://www.fusionentertainment.com).

### My Apple device has gone into thermal protection mode

#### ⚠ CAUTION

The temperature of the internal dock in the stereo is slightly higher than the ambient temperature outside the stereo. The Apple device shuts down when the operating temperature is exceeded. In addition, using the Apple device in a low charged state increases the heat generated while it is charging. For more information, go to [www.apple.com](http://www.apple.com).

- Carefully remove the Apple device from the stereo and allow it to cool down before using it again.
- When the Apple device is low on battery charge, charge the Apple device.

### My MTP device is unresponsive

For best results, the music folders on an MTP device should not contain more than 300 files each. Exceeding 300 files per folder can cause the Android device to become unresponsive and reset the connection to the device.

**NOTE:** Different operating systems and media players provide different levels of support for MTP. Refer to [www.fusionentertainment.com](http://www.fusionentertainment.com) for device compatibility information.

### The stereo does not find all of my music files on my MTP device

Music files must be located in a folder using one of these names. The folder must be located in the root directory of the media player.

- My Music
- My\_Music
- mobile
- Music

### My Bluetooth audio is interrupted by short breaks

- Ensure the media player is not covered or obstructed.

Bluetooth technology performs best with line-of-sight operation.

- Bring the media player within 10 m (33 ft.) of the stereo.
- Turn off the **DISCOVERABLE** setting after pairing a Bluetooth device to the stereo.

### The stereo does not display all song information from my Bluetooth source

The availability of song information such as song title, artist name, track duration, and album cover artwork depends on the capability of the media player and music application.

Album cover artwork and shuffle and repeat status icons are not supported by Bluetooth technology.

## Specifications

General	
Weight	0.88 kg (1.96 lb.)
Water resistance	IPX5
Operating temperature range	From -5 to 50°C (from 23 to 122°F)
Storage temperature range	From -20 to 70°C (from -4 to 158°F)
Input voltage	From 10.8 to 16 Vdc
NMEA 2000 LEN	1 (50 mA)
Compass-safe distance	15 cm (5.9 in.)

On-board, Class D Amplifier	
Output music power per channel	70 W max. x 4 at 2 Ohms
Total output music power	280 W max.
Current (standby with ignition off)	< 3 mA
Current (max)	15 A
Current (muted)	< 900 mA

Tuner	Europe and Australasia	USA	Japan
FM radio frequency range	87.5–108 MHz	87.5–107.9 MHz	70–90 MHz
FM Frequency step	50 kHz	200 kHz	50 kHz
AM radio frequency range	522–1620 kHz	530–1710 kHz	522–1620 kHz
AM Frequency step	9 kHz	10 kHz	9 kHz

# Index

**V**  
volume **3**  
adjusting **2**

## A

AM **5**  
amplifier **3**  
Android device **1, 4, 8**  
Apple device **1, 4, 8**  
auxiliary input **2**

## B

backlight **1**  
bass **2**  
Bluetooth devices **3, 4**

## D

device  
    keys **1**  
    registration **7**  
DVD **4**

## F

FM **5**  
FUSION-Link **7**

## G

gain **2**

## I

iPod **1, 4, 8**

## K

keys **1, 7**

## L

language **7**

## M

media player, connecting **2**  
menu key **1**  
MTP **4, 8**

## N

NMEA 2000 **7**

## P

Pandora radio **5**  
power key **1**  
presets **5, 6**  
product registration **7**

## R

radio  
    AM **5**  
    FM **5**  
    SiriusXM **6**  
registering the device **7**  
remote control **3, 7**  
repeat **4**

## S

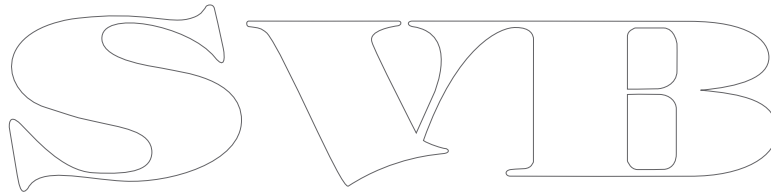
shuffle **4**  
SiriusXM **5**  
    parental controls **6**  
    Satellite Radio **6**  
source **1, 2**  
speaker zones **2, 3**  
subwoofer **3**

## T

thumbs down **5**  
thumbs up **5**  
time  
    format **7**  
    setting **7**  
tone **2, 7**  
treble **2**

## U

USB **1, 2, 4**  
    flash drive **4**



## FUSION SUPPORT

New Zealand	09 369 2900
Australia	1300 736 012
Europe	+44 (0) 870 8501242
USA	623 580 9000
Pacific	+64 9 369 2900

# SWIB

© 2014 Garmin Ltd. or its subsidiaries



190-01760-00\_0B April 2015 Printed in Taiwan

Garmin®, the Garmin logo, Fusion®, and the Fusion logo are trademarks of Garmin Ltd. or its subsidiaries, registered in the USA and other countries. FUSION-Link™ and UNI-Dock™ are trademarks of Garmin Ltd. or its subsidiaries. These trademarks may not be used without the express permission of Garmin.

Apple®, the Apple logo, iPod®, iPod touch®, iPod classic®, iPod nano®, iPhone®, and Lightning™ are trademarks of Apple Inc., registered in the U.S. and other countries. Bluetooth® word mark and logos are owned by the Bluetooth SIG, Inc. and any use of such marks by Garmin is under license. Pandora® and the Pandora trade dress are trademarks or registered trademarks of Pandora Media, Inc. Used with permission. Sirius®, XM® and all related marks and logos are trademarks of SiriusXM Radio Inc. Other trademarks and trade names are those of their respective owners.

Made for iPhone 6 Plus, iPhone 6, iPhone 5s, iPhone 5c, iPhone 4s, iPhone 4, iPhone 3G, iPhone 3GS, iPod touch (2nd through 5th generation), iPod classic, and iPod nano (4th through 7th generation).

"Made for iPod and iPhone" means that an electronic accessory has been designed to connect specifically to an iPod or an iPhone respectively, and has been certified by the developer to meet Apple performance standards. Apple is not responsible for the operation of this device or its compliance with safety and regulatory standards. Please note that the use of this accessory with an iPhone may affect wireless performance.

**FUSION**<sup>®</sup>  
FUSIONENTERTAINMENT.COM