

# FUSION<sup>®</sup> MS-BB100

BLACK BOX ENTERTAINMENT SYSTEM  
OWNER'S MANUAL






**FUSION<sup>®</sup>**

## Getting Started

You can use the FUSION® MS-BB100 black box stereo and the included remote control to access the basic functions of the stereo.

FUSION recommends that you download the free FUSION-Link™ application on a compatible Bluetooth® media player or smartphone to control audio playback and configure the FUSION MS-BB100 stereo settings. You can also use an optional remote control such as the FUSION MS-NRX300 remote control or use a compatible multi-function display (MFD) to control audio playback and adjust the settings.






To explain the FUSION MS-BB100 black box stereo features, this manual includes instructions for using the stereo with an optional remote control, such as the FUSION MS-NRX200i/300 remote control. Instructions showing the , , or  keys are using the FUSION MS-NRX200i/300 remote control.

For information about the FUSION-Link application for compatible Apple® and Android™ mobile devices, go to the Apple App Store™ online store or the Google Play™ store.

For more information about using another remote control, such as the FUSION MS-NRX200i/300 remote control, see the FUSION website ([fusionentertainment/marine](http://fusionentertainment/marine)) and the remote control owner's manual.

### Wired Remote Control Buttons

These are the buttons on the included wired remote control.

Button	Function
	<ul style="list-style-type: none"><li>Press to turn on the stereo.</li><li>Press quickly to turn off the stereo.</li><li>Hold for 5 seconds to pair with a Bluetooth device.</li><li>Hold for 12 seconds to reset the stereo.</li></ul>
	<ul style="list-style-type: none"><li>Press to skip to the previous track, station, or station preset.</li><li>Hold to change the source.</li></ul>
	<ul style="list-style-type: none"><li>Press to skip to the next track, station, or station preset.</li><li>Hold to change the source.</li></ul>
	<ul style="list-style-type: none"><li>Press to increase the volume.</li><li>Hold to quickly increase the volume.</li></ul>
	<ul style="list-style-type: none"><li>Press to decrease the volume.</li><li>Hold to quickly decrease the volume.</li></ul>

### Media Player Connection

#### CAUTION

This helps reduce the risk of theft and damage from extreme temperatures.

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 USB port.

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

### Connecting an Auxiliary Device


You can connect various auxiliary devices to the stereo. These devices have either RCA connectors, a line output, or a headphone output jack.

- 1 Locate the auxiliary connectors on the wiring harness.
- 2 If necessary, connect an RCA-to-3.5 mm adapter cable to the auxiliary device.
- 3 Connect the auxiliary device to the RCA connectors on the wiring harness.

### Connecting the Stereo to a Garmin® Watch

For a list of a compatible Garmin watches, go to [fusionentertainment/marine](http://fusionentertainment/marine).

For more information about the watch, see the watch manual at [garmin/manuals](http://garmin/manuals).

- 1 Following the instructions in the watch manual, install the FUSION-Link™ app from the Connect IQ™ store onto the watch.
- 2 On the stereo, hold  for five seconds.  
The stereo remains discoverable for two minutes.
- 3 Bring the watch within 3 m (10 ft.) of the stereo.  
**NOTE:** Stay 10 m (33 ft.) away from other ANT® devices while pairing.
- 4 Open the FUSION-Link app on the watch.  
The first time you open the app on the watch, the watch automatically pairs with and connects to the stereo. If you need to pair to another stereo, in the FUSION-Link app, select **Settings > Pair new**.
- 5 Control the audio playback using the FUSION-Link app on the watch.

After the devices are paired, they connect automatically when they are turned on, within range, and the app is open on the watch.

## 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. The shuffle and repeat status icons are not supported over Bluetooth wireless technology.

### Connecting a Bluetooth Device

You can use the wired remote control to pair and connect a compatible Bluetooth smartphone or media player to the FUSION MS-BB100 stereo.


You can download the free FUSION-Link application and use it to control the FUSION MS-BB100 stereo. For information about the FUSION-Link application for compatible Apple and Android mobile devices, go to the Apple App Store online store or the Google Play store.

- 1 If necessary, enable Bluetooth on your compatible smartphone or media player.
- 2 Bring your Bluetooth smartphone or media player within 10 m (33 ft.) of the stereo.
- 3 Hold  for five seconds to put the stereo into pairing mode.  
The backlight of the wired remote control flashes when the remote control is in pairing mode.
- 4 On your Bluetooth smartphone or media player, search for Bluetooth devices.
- 5 Select the FUSION MS-BB100 stereo.

Now you can stream audio and play music from your connected Bluetooth smartphone or media player.

### 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 **BT** source selected, select .
- 2 Select a Bluetooth device.

### Bluetooth Source Settings

With the BT source selected, select .

**DISCOVERABLE:** Allows the stereo to be visible to Bluetooth devices. This setting turns off automatically after two minutes 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.

## FUSION-Link Smartphone App

You can use the FUSION-Link smartphone app on your compatible Apple or Android device to adjust the stereo volume, change the source, control playback, and adjust some stereo settings.

The app communicates with the stereo using the Bluetooth connection for the mobile device. You must connect your compatible device to the stereo using Bluetooth to use the app.

For information about the FUSION-Link smartphone app for compatible Apple or Android devices, go to the Apple App Store or the Google Play store.

## USB 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 for use 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	ANDROID
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> , page 1).

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.

## USB Device Compatibility

You can use a USB flash drive or the USB cable included with your media player to connect a media player or mobile device to the USB port.

The stereo is compatible with iAP2 Apple devices such as the iPhone® 7 Plus, iPhone 7, iPhone 6s Plus, iPhone 6s, iPhone 6 Plus, iPhone 6, iPhone 5s, iPhone 5c, iPhone 5, and iPod touch® (5th and 6th generation).

The stereo is compatible with Android devices that support the Android Open Accessory (AOA) protocol.

**NOTE:** The stereo is not compatible with Android devices in MTP or PTP mode. See the instructions for your Android device to connect using AOA, if necessary.

The stereo is compatible with media players and other USB mass storage devices, including USB flash drives. Music on USB drives must meet these conditions:


- The USB mass storage device must be formatted using the FAT32 file system.
- The music files must be formatted as MP3 files.
- Each folder on the storage device can contain a maximum of 250 MP3 files.

## Connecting a USB Device

You can connect a USB device to the USB port on the FUSION MS-BB100 black box stereo.

- 1 Locate the USB port on the FUSION MS-BB100 black box stereo.
- 2 Connect the USB device to the USB port.
- 3 Select the **USB** source.

## Controlling Music Playback on a USB Flash Drive

- 1 Connect a compatible USB flash drive or media player to the stereo.
- 2 Select the **USB** source.
- 3 Select .
- 4 Select the name of the USB drive to view the file structure of the USB flash drive or media player.
- 5 Select a song to begin music playback.

## Controlling Music Playback on an Apple or Android Device

- 1 Connect a compatible Apple or Android device to the stereo using USB or Bluetooth.
- 2 Select the appropriate source.
- 3 Launch a music application on the connected Apple or Android device and begin playback.

You can use the stereo controls to play, pause, and skip tracks.

## Shuffling Songs

The shuffle feature is available on the USB source only.


**NOTE:** The shuffle feature is controlled by the music application on connected Apple and Android devices, if supported by the application.

- 1 From the **USB** source, select .
- 2 Select **SHUFFLE**.

## Setting a Song to Repeat

The repeat feature is available on the USB source only.

**NOTE:** The repeat feature is controlled by the music application on connected Apple and Android devices, if supported by the application.

- 1 From the **USB** source, select .
- 2 Select **REPEAT**.

## 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. For instructions on connecting an AM/FM antenna, see the stereo installation instructions.


To listen to DAB stations, you must have the appropriate equipment ([DAB Playback](#), page 3). For instructions on connecting a DAB adapter and antenna, see the installation instructions provided with your adapter and antenna.

## Setting the Tuner Region




You must select the region you are in to receive AM and FM stations properly.

If you are connected to a compatible DAB module and antenna (not included), you must select the region you are in to receive DAB stations properly.

**NOTE:** DAB stations are not available in all regions.

- 1 Select  > **SETTINGS** > **TUNER REGION**.
- 2 Select the region you are in.


## Changing the Radio Station


- 1 Select an applicable source, such as **FM**.
- 2 Select  repeatedly to move through the tuning modes:
  - 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  or  to tune to the station.

## Presets

You can save your favorite AM stations and FM stations as presets for easy access.


### Saving a Station as a Preset

- 1 With an applicable source selected, tune the stereo to a station.
- 2 Select  > **PRESETS**.
- 3 Select **SAVE CURRENT**.


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

### Selecting a Preset from a List

Before you can select a preset from a list, you must save at least one station as a preset.

- 1 Select the applicable source.
- 2 Select  > **PRESETS**.
- 3 Select a preset from the list.

### 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**.


## DAB Playback

When you connect a compatible Digital Audio Broadcasting (DAB) module and antenna, such as the FUSION MS-DAB100A to the FUSION MS-BB100 stereo, you can tune in to and play DAB stations.

DAB broadcasts are not available in all regions. When the stereo is not set to a compatible region, the DAB source is not available.


## Setting the Tuner Region

You must select the region you are in to receive DAB stations properly.


- 1 Select  > **SETTINGS** > **TUNER REGION**.
- 2 Select the region you are in.

## Scanning for DAB Stations




Before you can scan for DAB stations, you must connect a compatible DAB module and antenna (not included) to the stereo. Because DAB signals are broadcast in select countries only, you must also set the tuner region to a location where DAB signals are broadcast.

- 1 Select the **DAB** source.
- 2 Select  to scan for available DAB stations.

When scanning is complete, the first available station in the first ensemble found begins playing.



**NOTE:** After the first scan is complete, you can select  again to re-scan for DAB stations. When the re-scan is complete, the system starts playing the first station in the ensemble you were listening to when you started the re-scan.

### Changing DAB Stations



- 1 Select the **DAB** source.
- 2 If necessary, select  to scan for local DAB stations.
- 3 Select  or  to change the station.

When you reach the end of the current ensemble, the stereo automatically changes to the first available station in the next ensemble.

### Selecting a DAB Station from a List

- 1 Select the **DAB** source.
- 2 If necessary, select  to scan for local DAB stations.
- 3 Select  > **BROWSE** > **STATIONS**.
- 4 Select a station from the list.

### Selecting a DAB Station from a Category


- 1 Select the **DAB** source.
- 2 If necessary, select  to scan for local DAB stations.
- 3 Select  > **BROWSE** > **CATEGORIES**.
- 4 Select a category from the list.
- 5 Select a station from the list.


## DAB Presets

You can save your favorite DAB stations as presets for easy access.

You can save up to 15 DAB-station presets.


### Saving a DAB Station as a Preset

- 1 With the **DAB** source selected, change the stereo to a DAB station.
- 2 Select  > **BROWSE** > **PRESETS** > **SAVE CURRENT**.


**TIP:** You can quickly save the selected DAB station as a preset by holding .

### Selecting a DAB Preset from a List

Before you can select a DAB preset from a list, you must save at least one DAB station as a preset.

- 1 Select the **DAB** source.
- 2 Select  > **BROWSE** > **PRESETS** > **VIEW PRESETS**.
- 3 Select a preset from the list.

### Removing DAB Presets

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

## General Settings

Select  > **SETTINGS**.

**NOTE:** When a check box is selected, the option is on. When the box is clear, the option is off.

**NOTE:** Some options are specific for the optional remote control, such as the one on the FUSION MS-NRX200i/300. See the remote control owner's manual for more information.

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

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

**LCD:** Sets the brightness and contrast of the optional remote control.

**POWER SAVE:** Enables and disables the backlight power-save feature on the optional remote control.

**KEY SOUND:** Enables and disables the sound on the optional remote control.

**NMEA MONITOR:** Sets the data to view, the data display cycle, and the units of measure for NMEA 2000® data displayed on the optional remote control.

**LANGUAGE:** Sets the language used on the optional remote control.

**TUNER REGION:** Sets the region used by the FM, AM, or DAB source.

**TEL/MUTE:** Sets the behavior of the mute wire. The device can either mute the audio or switch to the AUX input when the optional mute wire is activated.

**SET DEVICE NAME:** Assigns a name to a connected stereo.

**STEREO:** Assigns the remote control to a connected stereo.

**UPDATE:** Updates the connected stereo, remote control, or accessory.

**UPDATE > FACTORY RESET:** Resets the connected stereo settings to factory default values.

**ABOUT:** Shows the installed software version.

## More Information

### Registering Your FUSION MS-BB100

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

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

### Troubleshooting

#### The stereo does not appear on the NMEA 2000 network or is unresponsive

- You must connect the stereo to the included wired remote control for the stereo to function properly. Connect the included remote control if it is not already installed.
- Check the NMEA 2000 cables and connectors to make sure they are installed properly. A properly constructed NMEA 2000 network must be connected to power and must contain backbone terminators.
- Turn off the power to the stereo for two minutes 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 [apple](http://apple) 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 connected Apple device

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

#### 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.

### Software Updates

For best results, you should update the software in all FUSION devices at the time of installation to ensure compatibility.

Go to [fusionentertainment/marine](http://fusionentertainment/marine) to download the latest software. Software updates and instructions are available on your device product page.

### Specifications

Specification	Measurement
Dimensions (black box stereo) (W × H × D)	Approximately 155 mm (6.10 in.) × 60 mm (2.63 in.) × 94 mm (3.70 in.)
Water resistance (black box stereo)	IEC 60529 IPX3
Water resistance (remote control)	IEC 60529 IPX7 (front), IEC 60529 IPX3 (rear)
Operating temperature	From 0 to 50°C (from 32 to 122°F)
Storage temperature	From -20 to 70°C (from -4 to 158°F)
Input voltage	From 10.8 to 16 Vdc negative ground
Fuse rating	15 A
NMEA 2000 LEN	1 (50 mA)
ANT wireless range	Up to 3 m (10 ft.)
Compass-safe distance	15 cm (5.91 in.)
Pre-output voltage	3 V peak
Current (standby)	less than 15 mA
Current (max.)	15 A
Output music power per channel	50 W
Total output music power	200 W
Speaker impedance	4 Ohm per channel
Total harmonic distortion (1 W output, 4 ohm load, from 20 Hz to 20 kHz)	0.04 typical Less than 0.1% max.

Tuner	Europe and Australasia	USA	Japan
FM radio frequency range	87.5 to 108 MHz	87.5 to 107.9 MHz	76 to 95 MHz
FM frequency step	50 kHz	200 kHz	50 kHz
AM radio frequency range	522 to 1620 kHz	530 to 1,710 kHz	522 to 1,620 kHz
AM frequency step	9 kHz	10 kHz	9 kHz