ION®

TROUPER™ 100

User Guide

English

Tap or click for technical support.

ionaudio.com/support

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INTRODUCTION

Thank you for purchasing the Trouper™ 100. At ION, your entertainment is as important to us as it is to you. That's why we design our products with one thing in mind—to make your life more fun and more convenient.

Note: Before you first use the product, please fully charge the batteries. Your unit was purposely shipped with a reduced battery charge to ensure safe transit. For optimal charging, power off the speaker while charging.

Use the included power cable to connect the unit to power outlet and let it charge for up to 2.5 hours. This helps ensure the longest life for your battery.

Box Contents

Trouper™ 100

IEC C13 Power Cable (6 ft. / 183 cm)

Microphone with Cable (8.2 ft. / 250 cm)

Telescoping FM Antenna (Max Length: 2.52 ft. / 76.8 cm)

Quickstart Guide

Support

For the latest information about this product (documentation, technical specifications, system requirements, compatibility information, etc.) and product registration, visit ionaudio.com.

For additional product support, visit ionaudio.com/support.

SETUP

Charging & Battery Information

For the quickest charging time, power off Trouper™ 100 and use the included power cable to connect the **Power Input** on the rear panel of the speaker to a power outlet. A full charge can take up to 2.5 hours.

If Trouper™ 100 is powered on, the **lightning bolt** icon on the display will light up when connected to a power source and charging. The **battery icon** will fill to display the battery life percentage. When charging is complete, the lightning bolt icon will disappear, and the battery icon will be completely filled.
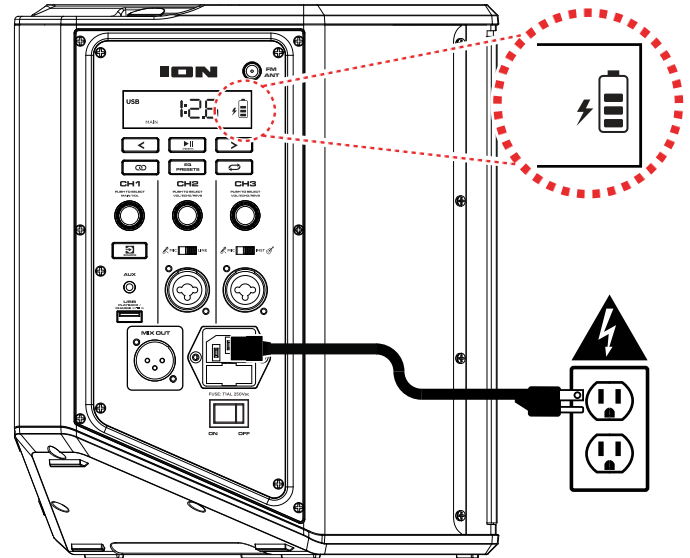
Here are some other recommendations for getting the longest life from the internal battery.

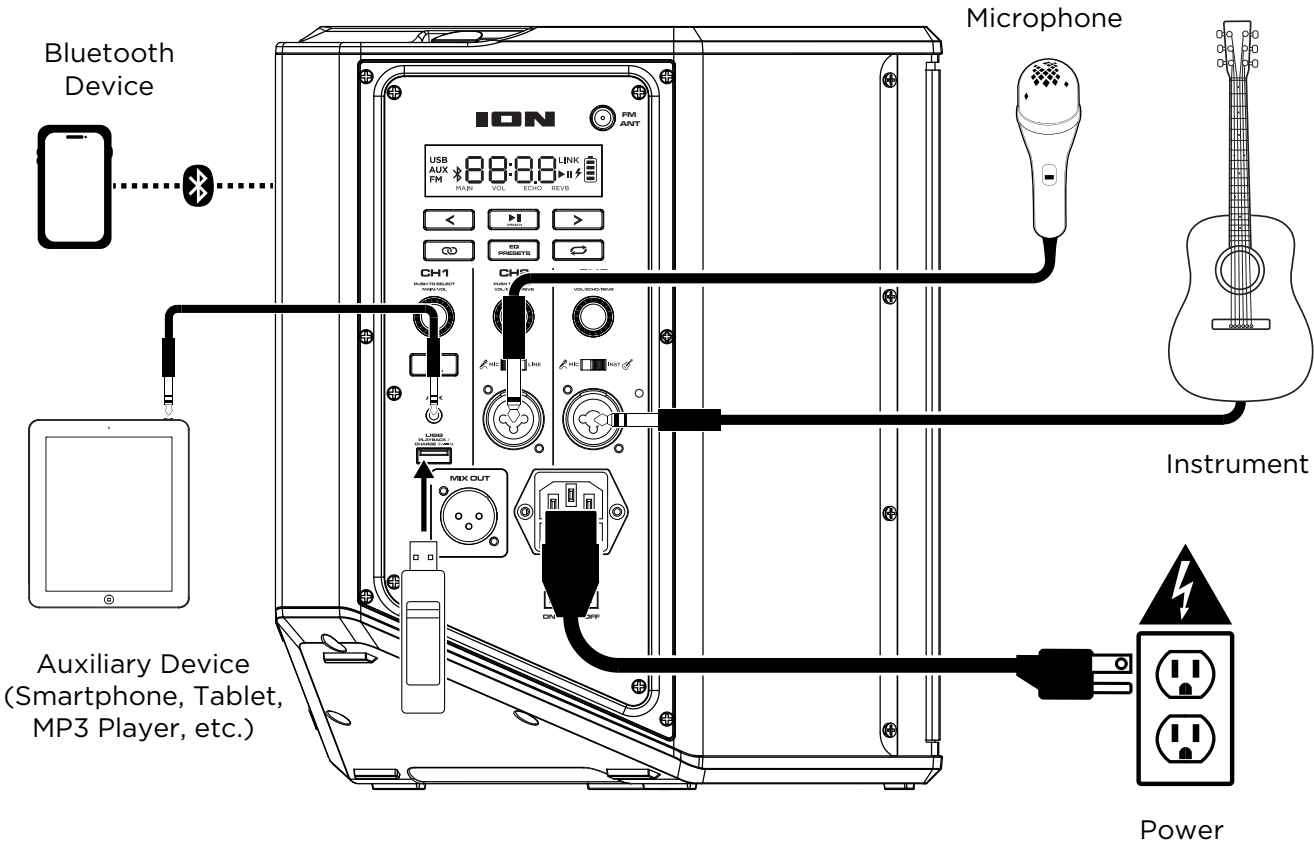|	
General Usage	Fully charge the battery before using it.
	Avoid full discharge of the battery if possible. Li-Ion batteries are maintenance-free, and the battery will last longest when operating between 30–80% charged.
	Charge the battery using the included power cable with the power off in a cool environment indoors. The battery will not charge if its temperature is below 32°F/0°C. Do not use the product while charging the battery.
	If the product has been used continuously, charging will not begin until the buildup of heat on the battery has cooled down.
	Charge the battery completely after each use.
Storage	For best product longevity, do not store at exceedingly hot (greater than 90°F/32°C) or exceedingly cold (less than 32°F/0°C) temperatures.
	For best product longevity, store with a 50% battery charge.
	If you leave the battery level low and do not charge it for 6 months, it may permanently lose capacity.
Repair	If the battery fails to charge, check your fuse near the power cable input. If your fuse is intact and it still will not charge, contact ION Audio at ionaudio.com.
Disposal	Bring the unit to a recycling center or dispose of in accordance with local ordinances.

Connection Diagram
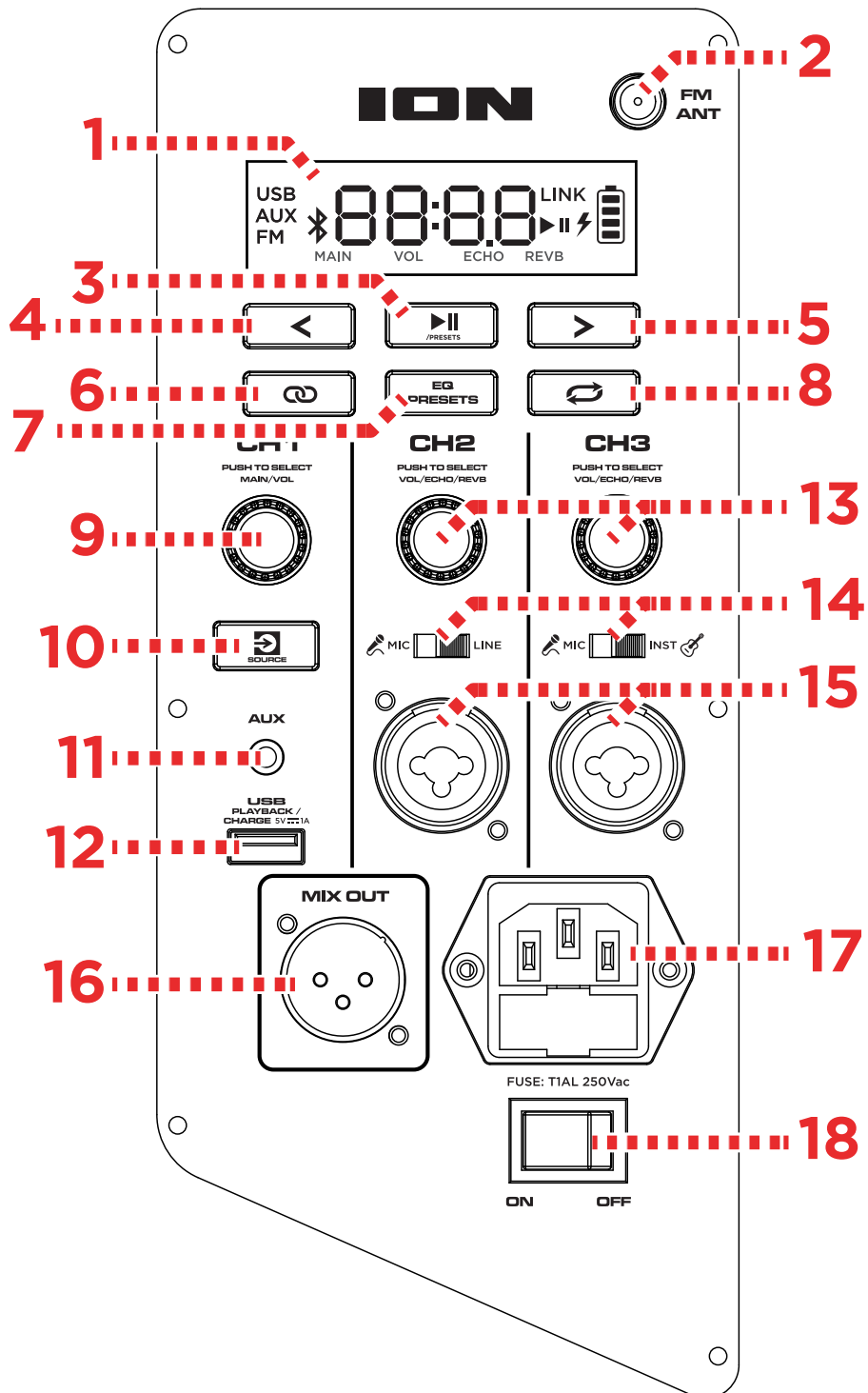
Items not listed under the *Box Contents* are sold separately.

Bluetooth Device

Microphone

Auxiliary Device
(Smartphone, Tablet,
MP3 Player, etc.)
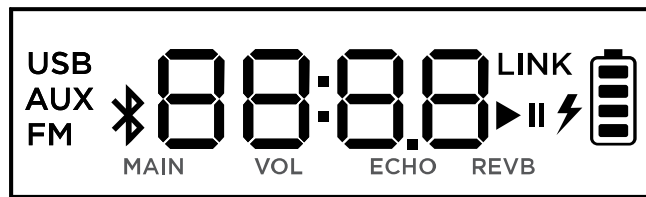
Instrument

Power

FEATURES

Rear Panel

Click a control below to jump to that section.

1. **Display**

   This screen shows information relevant to Trouper™ 100's current operation:

   - **Source Icons (FM, AUX, USB):** These icons will indicate whether Trouper™ 100 is in FM, Aux, or USB playback modes.

   - **Bluetooth Icon (✷):** The Bluetooth icon will display when a device is paired to Trouper™ 100. See *Operation > Pairing a Bluetooth® Device* to learn how to connect a Bluetooth device.

   - **Radio Station:** The centered numerals indicate the current radio station that is selected. This area will also show the volume and the current repeat mode when either are changed. See *Operation > Using the Radio* for more information.

   - **Stereo-Link™ Icon (LINK):** The Stereo-Link™ icon will display when Trouper™ 100 is linked to another speaker. The Stereo-Link™ icon will be off when a single speaker is used. See *Operation > Wireless Stereo-Link™* below for instructions on how to link two speakers.

   - **Play/Pause Icon (▶❚❚):** This icon indicates when connected media is playing or paused.

   - **Lightning Bolt Icon (⚡):** The lightning bolt icon will display when Trouper™ 100 is connected to a power outlet and charging.

   - **Battery Indicator (🔋):** The battery icon displays the battery life percentage. When fully charged, the battery icon will be completely filled.

   - **MAIN/VOL/ECHO/REVB:** These icons indicate the current operation of the **Channel Volume** knobs. Press each knob to cycle between the available options.

2. **FM Antenna**

   Attach the included **FM Antenna** here to improve FM radio reception. If necessary, use a wrench to secure the antenna, but be careful not to over-tighten.
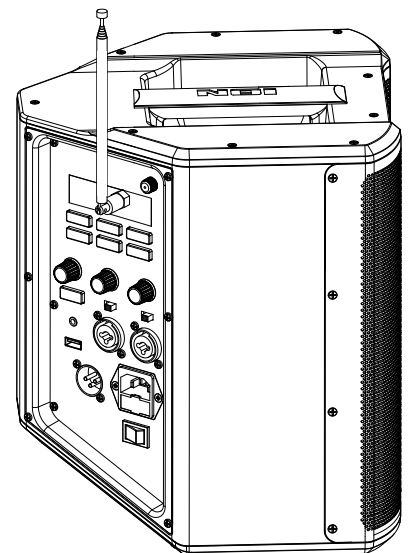
3. **Play/Pause / Presets Button**

   Press this button to play and pause Bluetooth or USB audio.

   In FM mode, use this button to save and recall radio presets. See *Operation > Using the Radio* to learn more.

4. **Previous Button**

   In Bluetooth and USB modes, press this button once to go to the start of the current track. Press the button again within one second to go to the previous track.

   In FM mode, press this button briefly to go to the previous station. Press and hold this button to seek the previous strong station.

5. **Next Button**

   In Bluetooth and USB modes, press this button to go to the next track.

   In FM mode, press this button briefly to go to the next station. Press and hold this button to seek the next strong station.

6. **Link Button**

   See *Operation > Wireless Stereo-Link™* to learn more about syncing two Trouper™ 100 speakers together using this button.

7. **EQ Presets Button**

   Press this button to cycle through these 4 EQ presets:

   i. **Music/DJ:** Default setting for general music playback.

   ii. **Live/Performance:** Optimized for instruments and singing. Great for busking.

   iii. **Speech/Vocals:** Adjusted to boost vocals for clear singing and presentations.

   iv. **User Mode:** Custom EQ setting to personalize from the App. Default is flat. See *Operation > App Control* to learn more.

8. **Repeat Button**

   Press this button to cycle between repeat modes during USB playback. See *Operation > USB Playback Mode* to learn more.

9. **Channel 1 Volume**

   Press this knob to cycle between adjusting the **MAIN** volume, or the channel volume (**VOL**), as indicated on the **display**. The channel volume controls the level of USB, Bluetooth, Aux, and Radio audio signals. Turn the knob to adjust the selected volume.

   TIP: For proper audio level mixing, always set the channel source volume (**VOL**) to a higher level, and *then* adjust the **MAIN** volume setting to the appropriate volume. If you are using a Bluetooth device on this channel, make sure the device volume is turned all the way up before setting the channel volume and Main volume.

10. Source Button

Press this button to cycle between USB, AUX, FM, and Bluetooth modes. See the *Operation* chapter for more details on using each mode.

11. Aux Input

Connect an external audio device (such as a tablet or MP3 player) to Trouper™ 100 here using a 1/8" (3.5 mm) auxiliary cable (not included). See *Operation > Using the Aux Input* for more information.

12. USB Playback / Charge (5V, 1A) Port

Connect a USB drive here for USB mode playback. See *Operation > Using USB Mode* for more information.

Trouper™ 100 includes a power bank function, which allows you to charge a compatible 5V, 1A smartphone, tablet, or other device using the unit's internal battery (Capacity: 2000mAh/11.1V, 22.2Wh) by connecting a cable here. See *Operation > Using the USB Charge Port* for more information.

Note: To charge smartphones and tablets faster, put the device's screen to sleep.

13. Channels 2/3 Volume

Press this knob to cycle between adjusting the channel volume (**VOL**), **ECHO** amount, and reverb (**REVB**) amount, as indicated on the **display**. The channel volume controls the level of the **MIC/LINE** inputs.

TIP: For proper audio level mixing, first make sure your connected MIC/LINE source volume is turned all the way up (if applicable). Then set channel source volume (**VOL**) to a higher level, and *then* adjust the **MAIN** volume setting to the appropriate volume.

14. MIC/LINE and MIC/INST Switches

Adjust these switches depending on the type of device connected to the **Channel Inputs 2/3**. When a microphone is connected to either input, set the switch to **MIC**. When a line-level device is connected to **Channel 2**, set the switch to **LINE**. When an instrument is connected to **Channel 3**, set the switch to **INST**.

15. Channel Inputs 2/3 (1/4" [6.35 mm] / XLR)

Connect audio sources (mic, keyboard, guitar, etc.) after adjusting the **MIC/LINE** and **INST/LINE** switches to the appropriate positions.

16. Mix Out (XLR)

Connect this output to an additional amplifier system or speaker. This output will send the combined Channels 1–3 mix to the connected device.

17. Power

Connect the included power cable here to power the unit and charge the internal battery. A full charge may take up to 15 hours.

**Note:** The speaker will go into ERP energy saving mode when running on battery power after 30 minutes of no signal or panel interaction. This mode is cancelled when a signal is detected or with panel interaction.

18. Power Switch

Use this switch to power the speaker on or off. When powered on, the blue indicator on the front panel will be lit. Return the **MAIN** volume to "zero" before powering off the speaker.

OPERATION

Pairing a Bluetooth® Device

1 - POWER ON   **2 - BLUETOOTH PAIRING**   **3**
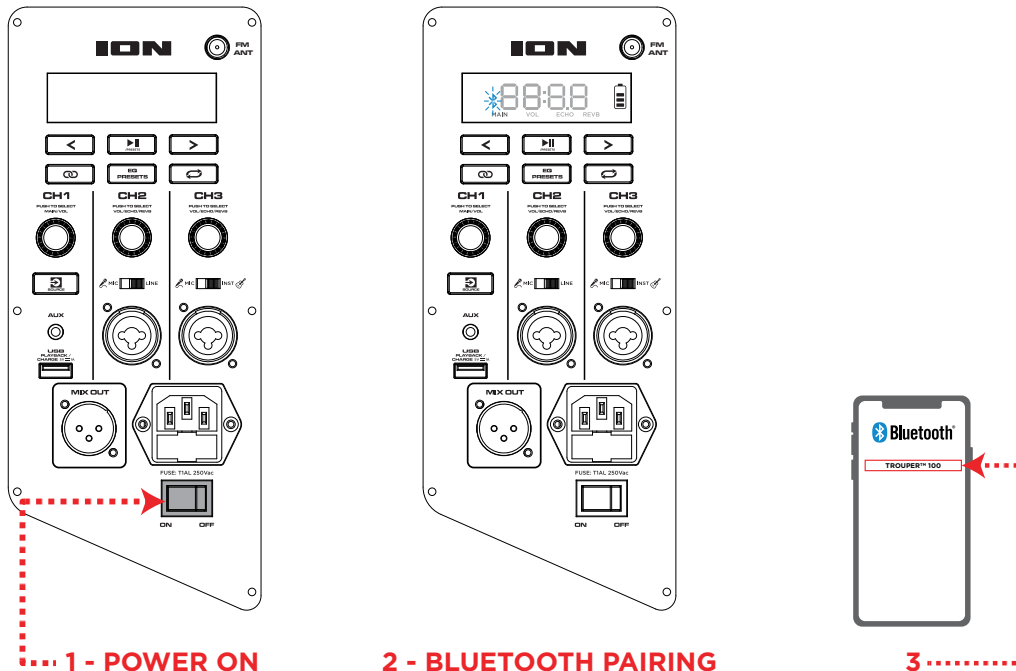
1. Power on Trouper™ 100 using the **Power** switch.

2. Upon powering on, Trouper™ 100 will be available to pair, so make sure your Bluetooth device is within range of the speaker, no more than 100 ft. (30.5 m). While in pairing mode, the **Bluetooth icon** on the **display** will flash blue.

    If Trouper™ 100 is powered on and you are using another source, you will need to press the **SOURCE** button to switch to Bluetooth mode, as indicated on the **display** with the **Bluetooth icon**.

3. Navigate to your device's Bluetooth setup screen, find **TROUPER 100**, and connect.

    Note: Do not connect to **iPA173_BLE**; this is reserved exclusively for connecting to the ION Sound Control™ app. If you experience trouble in connecting, select "Forget this Device" on your Bluetooth device and try to connect again.

4. Once paired, you will hear "Connected" (if voice prompts are enabled), and the **Bluetooth** icon on the **display** will become solid blue.

5. You can now press play in your music player app of choice on your device.

To disconnect a paired device, navigate to your device's Bluetooth settings and disconnect or turn off Bluetooth. The speaker will enter Bluetooth pairing mode to make it available for another device. When you disconnect a Bluetooth device, you will hear "Disconnected" if voice prompts are enabled.

Wireless Stereo-Link™
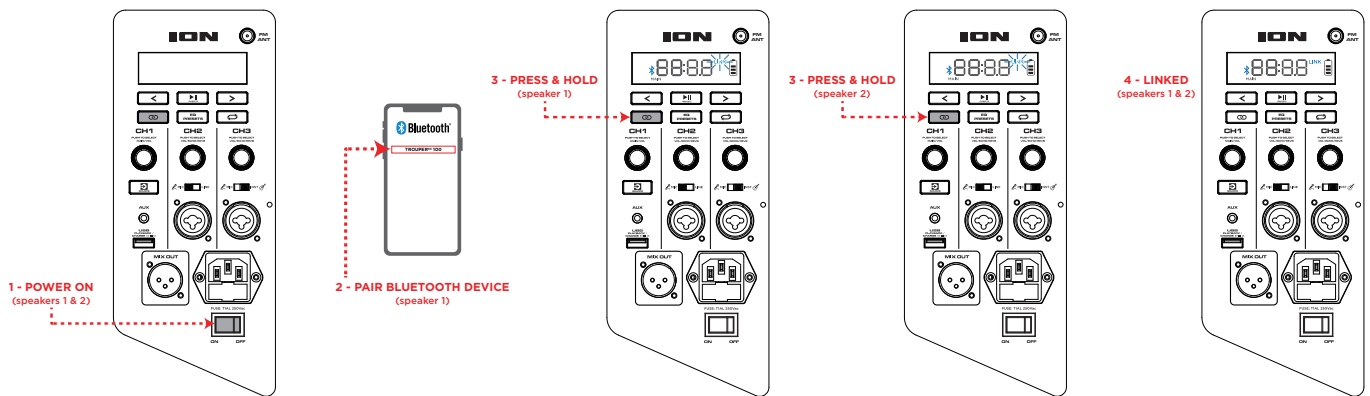
To sync audio between two Trouper™ 100 speakers:

1. Power on both Trouper™ 100 speakers using the **power switches**.
2. Follow the steps in *Pairing a Bluetooth® Device* to connect your device to one of the speakers. This will be your "primary" (left) speaker.
3. Press and hold the **Link** button on your primary speaker for two seconds and release it. Then, press and hold the **Link** button on your secondary (right) speaker for two seconds and release it.

    The **LINK** icon on both speakers' display will begin flashing and a linking tone will be heard while the speakers establish a link. Please allow 10 to 30 seconds for the speakers to link.

    Note: Speakers should be within 50' (15 m) of each other to properly link. The closer the speakers are, the faster they will link.
4. Once the speakers are successfully linked, the **LINK** icon on both speakers' display will be lit solid and a confirmation tone will be heard.

    The default linking process enables stereo playback by providing half of the stereo signal to each speaker.

    Note: FM Radio, Aux, and USB modes will be disabled when Stereo-Link™ is active.

    Tip: The Bluetooth range will be determined by the distance that your Bluetooth device is to the primary speaker. See *Technical Specifications* for Bluetooth and Stereo-Link™ ranges.

To exit Stereo-Link™ mode, press and hold the **Link** button on the primary speaker. The primary speaker will remain paired to your Bluetooth device. The secondary speaker will begin searching for a new Bluetooth device to pair to, and you will hear "Bluetooth Pairing" if voice prompts are enabled.

To erase the Stereo-Link™ settings on both units, press and hold the **Link** button on the primary (left) speaker for 10 seconds. A confirmation tone will be heard to indicate that the link settings have been erased.

Using the Radio
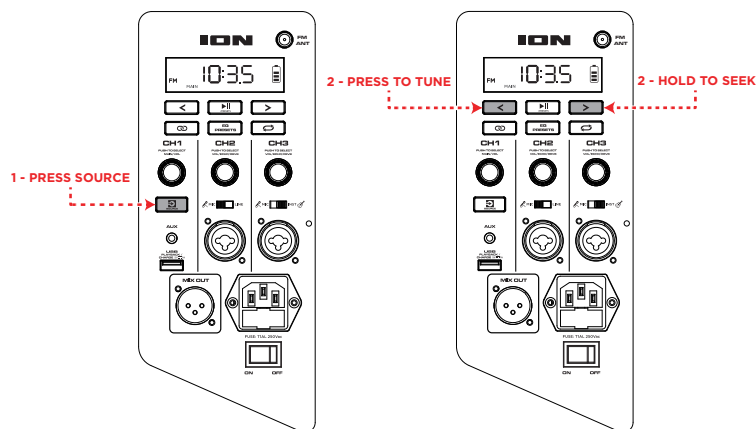
Note: For best results when using the FM radio, attach the included FM antenna to the **FM ANT** port on the rear panel.

1. Press the **SOURCE** button until **FM** is shown on the **display**.

2. Press the **</>** (Previous/Next) buttons to go to the previous or next station.

   Press and hold the **</>** buttons to seek to the previous or next strongest station.
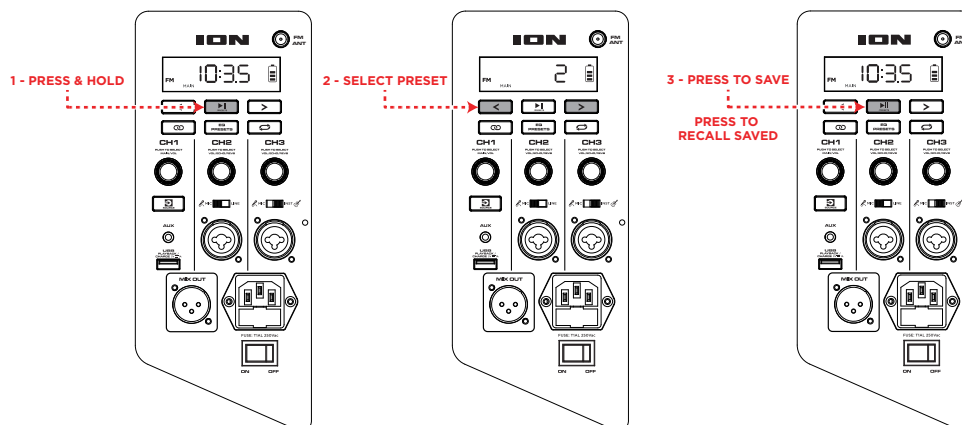
To save a radio station as a preset:

1. Press and hold the **Play/Pause / Presets** button.

2. Use the **</>** buttons to select a preset number, 1–10, shown on the display.

3. When you have selected the desired preset number, quickly press and release the **Play/Pause / Presets** button again to save it.

To recall a previously saved preset, briefly press the **Play/Pause / Presets** button to cycle between the 10 presets.

You can also use the ION Sound Control™ app to save and recall presets. See *Operation > App Control* for more information.

Using the Aux Input

1 - CONNECT DEVICE

2 - PRESS SOURCE

3 - ADJUST VOLUME
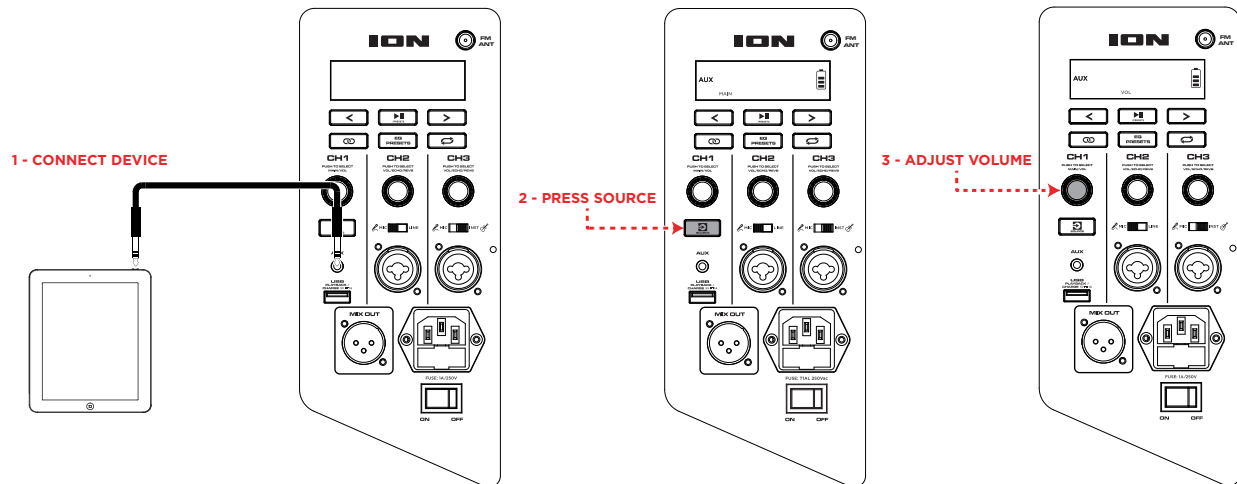
1. Connect a 1/8" (3.5 mm) auxiliary cable to the input on the rear panel of Trouper™ 100 and connect the other end to an audio device such as an MP3 or CD player.

2. Press the **SOURCE** button so that **AUX** is selected and shown on the display. Doing so will also cause Bluetooth devices to disconnect.

3. Press play on your device's music player. Use the **Channel 1 Volume** knob to adjust the Aux volume.

    TIP: For proper audio mixing, first make sure your device volume is turned all the way up. Then set the Channel Volume to an appropriate level. Finally, adjust the **MAIN** volume level. This will help ensure the best quality audio signal from your device. If signal distortion occurs, try lowering the volume on your device.

To exit Aux mode, press the **SOURCE** button to switch to USB, FM, or Bluetooth modes.

Using USB Mode

CONNECT USB DRIVE

ADJUST VOLUME

PLAYBACK CONTROLS
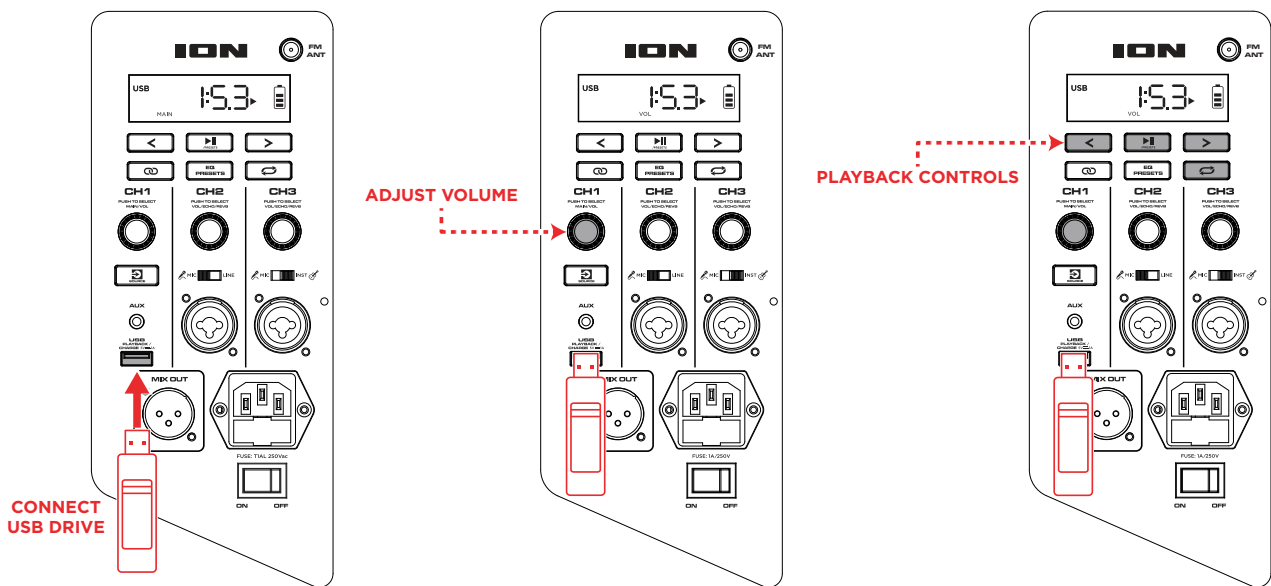
Connect a USB drive to the USB-A port on the rear panel of Trouper™ 100 to play music files.

USB Mode will be automatically selected, and music files will begin playing. If you have switched to another source while the USB drive is connected, press the **SOURCE** button to select **USB** mode, as indicated on the **display**.

Press the **CH1** knob so that **VOL** is shown on the display, and then turn the knob to adjust the USB playback level to an appropriate volume.

While in USB playback mode, you can use the following buttons on the front panel to control playback:

- Press the **Play/Pause / Presets** button to start or stop USB playback.

- Use the **</>** (Previous/Next) buttons to skip to the previous or next USB track.

- Briefly press the **Repeat** button to cycle between repeat modes, as shown on the display:
  - o **ALL:** Repeats all tracks on the USB drive.
  - o **FOLd:** Repeats all tracks in the current folder of the USB drive.
  - o **OnE:** Repeats the currently playing track.
  - o **rAn:** Randomly shuffles the track order.

To exit USB mode, press the **SOURCE** button to switch to AUX, FM, or Bluetooth modes.

Using the USB Charge Port

To use the USB charge port:

1. Connect a USB type-A cable to the **USB Playback / Charge Port** on the rear panel of your Trouper™ 100 (see image). Trouper™ 100 must be powered on for charging to work.

2. Connect the other end of the cable to the charging input on your smartphone, tablet, or other compatible device.

   Note: To charge smartphones and tablets faster, put the device's screen to sleep.
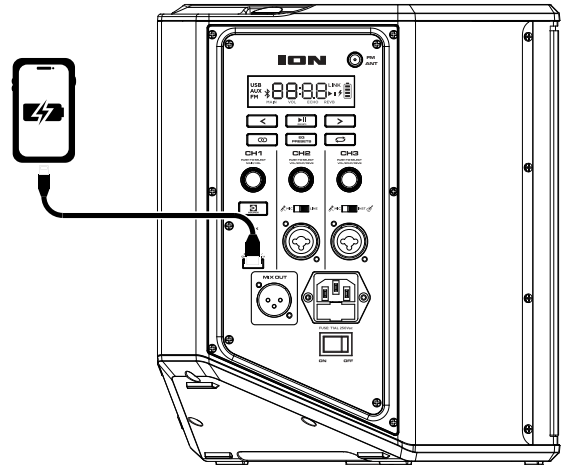
App Control

IMPORTANT: To ensure the best possible experience with the app, use the most current Android OS or iOS on your device.

Follow these steps to download the free app on your device:

1. Open the Apple App Store or Google Play on your device. Then, search for the **ION Sound Control™** app.

2. Follow the on-screen instructions to download and install the app. Once downloaded, the **ION Sound Control™** app will appear on your device's home screen.

3. Connect your device to Trouper™ 100 via Bluetooth. See *Operation > Pairing a Bluetooth® Device* to learn how to do this.

4. Open the ION Sound Control™ app. If prompted, allow the app to access your device's Bluetooth and Location Services.

5. Follow the steps on screen to find and connect to your Trouper™ 100. Once connected, you can control various functions of the speaker, such as:

    *   **Volume:** Adjust the speaker's overall volume.

    *   **Channels 1–3 Volume:** Adjust the incoming volume for the USB/AUX/FM/Bluetooth sources and 1/4" (6.35 mm) / XLR input channels.

    *   **Voice Prompts:** Enable or disable the voice prompts (on by default).

    *   **Battery Life:** Check the speaker's battery life status.

    *   **Radio:** Play the radio, change stations, and edit presets.

    *   **EQ:** Adjust the speaker's equalization.

    *   **Support:** Visit ionaudio.com, contact Technical Support, and view Warranty information and Frequently Asked Questions.

TROUBLESHOOTING

If the unit is not charging: Make sure the power cable is properly connected to the power input and the power outlet.

If the sound is distorted: You may need to adjust the levels of your sources and Trouper™ 100 for proper mixing.

i. First, turn your source volume all the way up.

ii. Then, adjust the selected **Channel Volume** knob on Trouper™ 100 to an appropriate level.

iii. Finally, adjust the **MAIN** volume to an appropriate level.

If the sound is still distorted, try lowering the volume control of your sound source, then lowering the **Channel Volume** knob of the channel in use on Trouper™ 100.

I hear a hum when cables are connected:

- Disconnect cables from the input jacks to see if it's a faulty cable.
- Use balanced cabling connections whenever possible.
- Make sure the signal cables are not placed near power cables.
- Connect all audio equipment power cables to outlets which share a common ground.

If there is a high-pitched whistling noise when using microphones: This is probably feedback. Point the microphone away from the speaker.

If feedback continues, try lowering the **Channel Volume** knob on Trouper™ 100 of the channel in use.

If you can't hear the microphone over the music volume:

i. First, turn down the volume from your source using the appropriate **Channel Volume** knob on Trouper™ 100.

ii. Then, make sure your microphone volume is turned all the way up (if applicable), and then turn up the appropriate **Channel Volume** knob on Trouper™ 100 where the microphone is connected.

If you can't hear your instrument:

i. Check that the **INST/LINE** switch is set to **INST**.

ii. If applicable, make sure your instrument volume is turned all the way up. Then, adjust the **Channel Volume** on Trouper™ 100.

If there is too much bass: Try adjusting the tone or EQ control on your sound source or on Trouper™ 100 via the ION Sound Control™ app to lower the bass level. This will allow you to play the music louder before clipping (distortion) occurs.

If you cannot connect your audio device to Trouper™ 100 via Bluetooth:

i. Power off Trouper™ 100 and then power it back on.

ii. Have your audio device (e.g., smartphone or tablet) and Trouper™ 100 as close together as possible while trying to connect. Make sure both the audio device and Trouper™ 100 are unobstructed by walls, furniture, etc.

iii. Reset the Bluetooth connection on your audio device by turning Bluetooth off and back on. You can find this under the Bluetooth menu in the Settings for your phone or other audio device.

   If this does not work, and you have connected to Trouper™ 100 before, find Trouper™ 100 in the list of available or previously connected devices in your audio device's Bluetooth menu, tap the "gear" or "i" icon located next to it and then select **Unpair** or **Forget**. Turn Trouper™ 100 off and back on and try pairing again once it reappears in your available devices list.

   Note: If Trouper™ 100 has been paired to another audio device recently that is still within range, you may need to repeat this process with that audio device to fully disconnect.

If you experience audio dropouts while playing music from a Bluetooth device, this may be happening because your unit is trying to link to another speaker. This can occur if you power off a speaker that was linked to your unit or if you have just turned on your unit and it is in Stereo-Link™ mode.

To stop the audio dropouts, exit Stereo-Link ™ mode by pressing and holding the **Link** button. Alternatively, you can wait for your unit to link to another speaker if there is one within range.

If there is a delay in the audio signal between the left and right speakers when linked, break the link by disconnecting your Bluetooth device from Trouper™ 100, and pair them again following the instructions in the *Operation > Wireless Stereo-Link™* section.

APPENDIX

Technical Specifications

Output Power	24 W (RMS)
Drivers	**Low-Frequency**: 6.5" (165.1 mm) woofer **High-Frequency**: 1.0" (25.4 mm) tweeter
Max SPL (@ 1 m)	105 dBSPLA (peak)
Frequency Response	64 Hz – 16 kHz (-3 dB) 58 Hz – 18 kHz (-10 dB)
Connectors	(2) Combo XLR-1/4" (6.35 mm) Inputs (1) 1/8" (3.5 mm) AUX Input (1) USB Charging Port (1) XLR Line Out
Charge Port	5V, 1 A
Speaker Pole Cup Size	35 mm
Bluetooth Specifications	**Profile**: A2DP, AVRCP **Version**: 5.0 **Frequency**: 2402 – 2480 MHz **Maximum Transmission Power**: 10 dBm **Codec**: SBC **Range**: 100 ft. (30.5 m) *
Battery	**Type**: Lithium Ion 2000 mAh / 11.1 V, 22.2 Wh **Life:** Up to 15 hours **Charging Time**: Up to 2.5 hours
Power	**Connection**: IEC **Voltage**: 100–240V~, 50/60 Hz, 60 W **Fuse**: T1AL 250Vac
Dimensions (height x width x depth)	11.77" x 10.00" x 8.62" 29.9 x 25.4 x 21.9 cm
Weight	11.9 lbs. 5.4 kg

Specifications are subject to change without notice.

* Bluetooth and wireless reception and range are affected by walls, obstructions, and movement. For optimal performance, place the product so it is unobstructed by walls or furniture and is raised off the ground.

** Battery life may vary based on temperature, age, and volume usage of product.

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