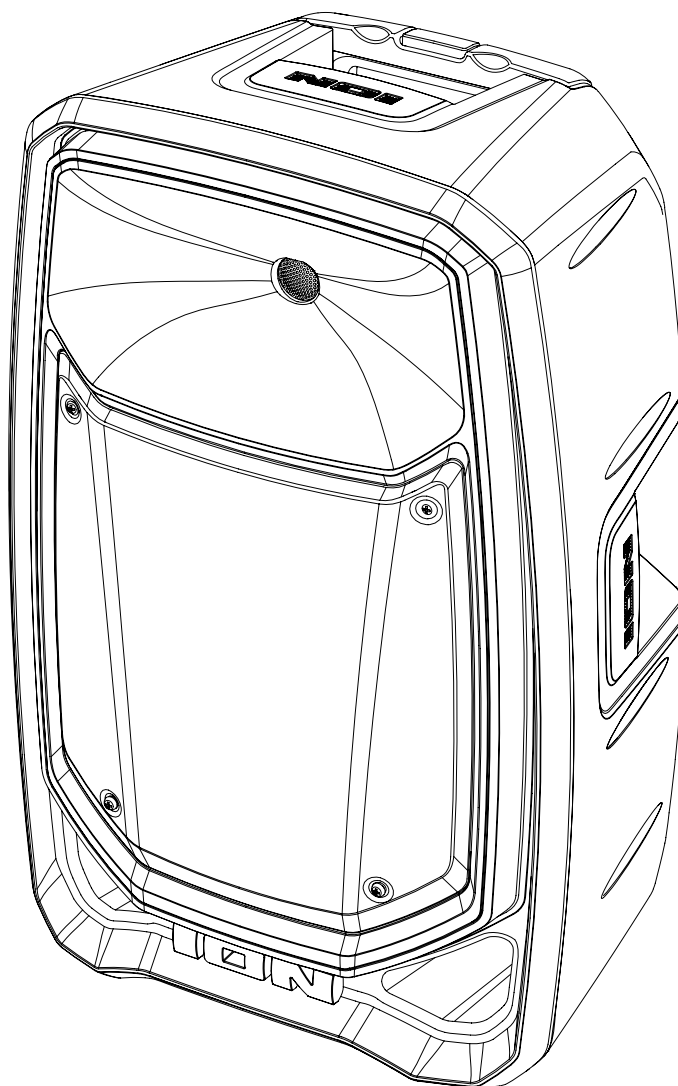


ION[®]

TOTAL PA™ FREEDOM



User Guide

English



Tap or click
for technical
support.

ionaudio.com/support

TABLE OF CONTENTS

INTRODUCTION	4
Box Contents.....	4
Support.....	4
Quick Start.....	5
Balancing Your Levels.....	5
SETUP	7
Speaker Stand Installation	7
Connection Diagram	8
FEATURES	9
Rear Panel.....	9
OPERATION.....	13
Installing Batteries Into the Wireless Mic.....	13
Using the Wireless Mic.....	13
Using the Control Knob	14
Pairing a Bluetooth® Device.....	15
Linking Two Speakers.....	16
Light Modes.....	17
USB Mode.....	18
App Control.....	19

TROUBLESHOOTING	20
APPENDIX.....	22
Technical Specifications.....	22
Trademarks & Licenses	23

INTRODUCTION

Thank you for purchasing the Total PA™ Freedom. 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.

Box Contents

Total PA™ Freedom

Power Cable (5 ft. / 150 cm)

Wireless Microphone

Speaker Stand

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.

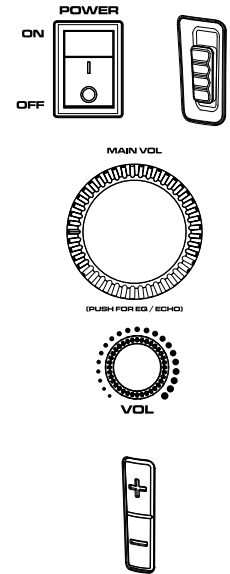
Quick Start

1. Make sure all items listed in the [Box Contents](#) are included in the box. Look in the box under the foam sheet for the power cable and microphones.
2. Study the [Connection Diagram](#).
3. Make sure all input devices (such as microphones, CD players, or digital media players) are turned off with their volume settings set to “zero.”
4. Connect all devices as shown in the [Connection Diagram](#).
5. Switch everything on in the following order:
 - a. Audio input devices (e.g. microphones, instruments, CD players)
 - b. Total PA™ Freedom
6. Adjust the level of your connected devices. Turn audio source (microphone, instruments, Bluetooth devices) volume all the way up. Then, adjust the **Source Volume** knob for the selected channel on Total PA Freedom to an appropriate level. Finally, adjust the **Main Volume** on Total PA Freedom to an appropriate level. For a detailed step-by-step process for setting your levels, please refer to the [Balancing Your Levels](#) section on the following page.
7. When you are finished using Total PA™ Freedom, switch everything off in the following order:
 - a. Total PA™ Freedom
 - b. Audio input devices

Balancing Your Levels

This process shows how you can quickly balance your microphone signal(s) and the signal from your Source Device (Bluetooth, Aux, USB). Levels for the microphones, source, and main volume can be set anywhere between 0 to 30.

1. Power on Total PA Freedom and the wireless microphone. Connect your preferred Bluetooth, Aux device, or USB drive.
2. Using the **Control Knob** on the speaker, set the main volume to around 10 or lower while balancing your levels. This will allow you to set your levels to a clear and audible level without being overpowering. You can adjust it again later once a balance has been achieved.
3. Adjust the **Source Volume Knob** down to 0. We'll turn this up in a later step.
4. Set the **MIC 1 Volume** using either the +/- volume control on the microphone or the **MIC 1 Volume Knob** on the speaker. Setting the level to 25 is a good starting point if you're unsure. If using a second, wired microphone, use the **MIC 2 Volume Knob** to set the levels the same way until both microphones are clearly audible.
5. Now, set the volume on your Aux or Bluetooth source device (phone, tablet, etc.) to 100%. This will guarantee a strong signal.
6. With the **Source Volume Knob** still set to 0, start playback on your device and slowly turn up the **Source Volume knob** on the speaker until it reaches a clear and audible level. If you are using a microphone, set the source volume level to where you can still hear the microphone above the music.
7. Once the microphone and audio source are clearly audible and balanced, use the **Control Knob** to set the overall output level of the speaker to your desired volume.

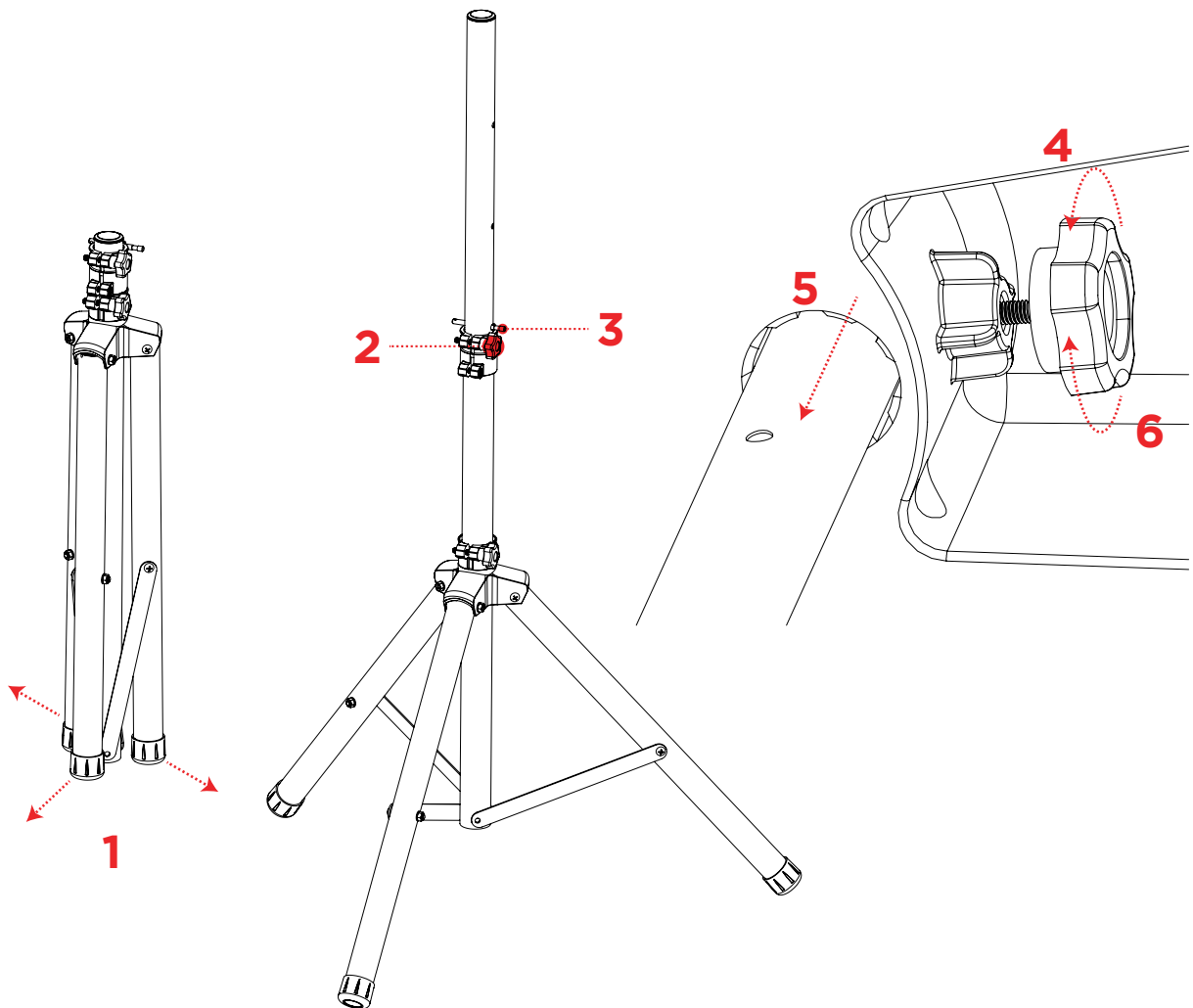


For specific troubleshooting steps, please see the [Troubleshooting](#) section.

SETUP

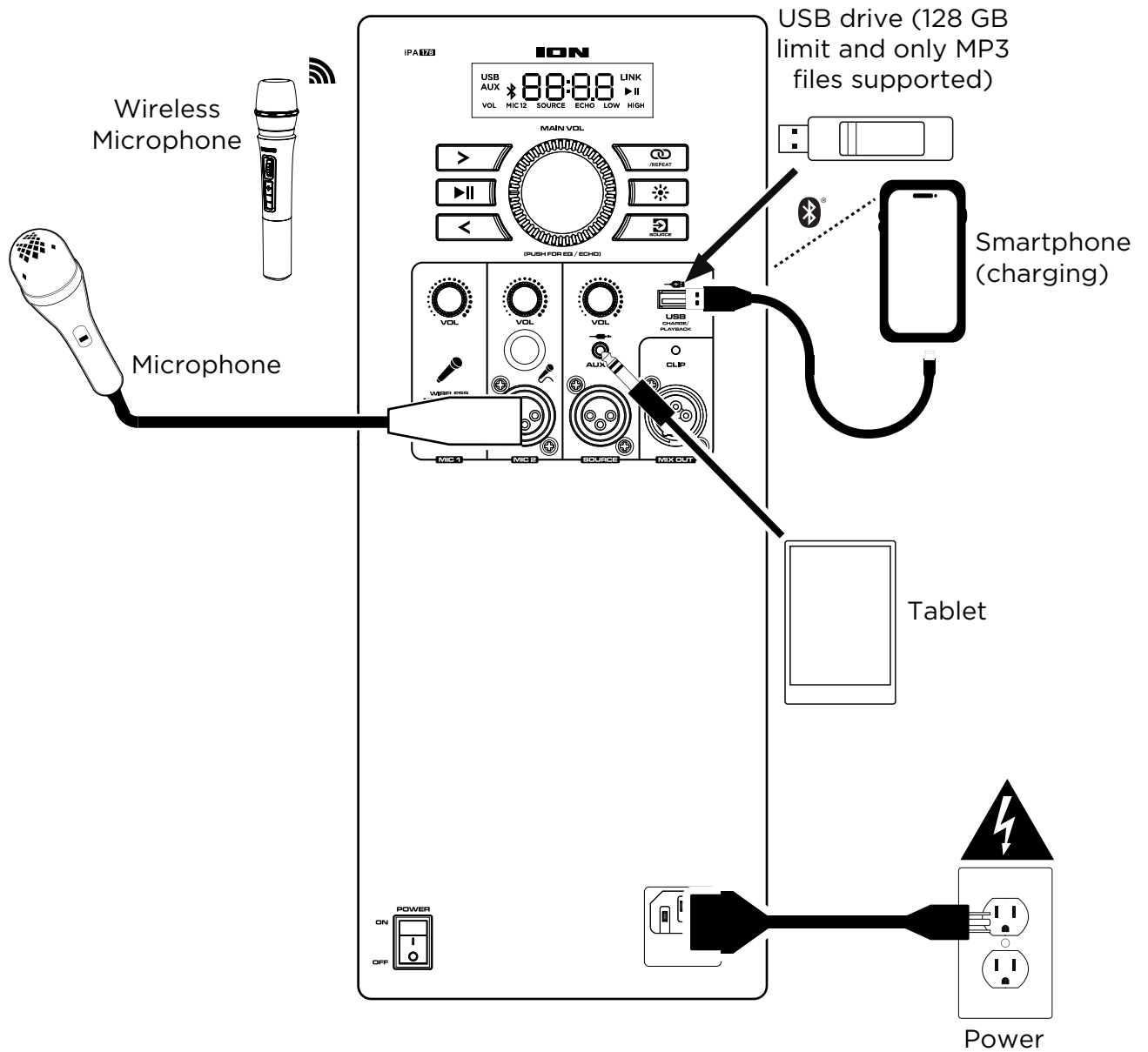
Speaker Stand Installation

1. Fully extend the speaker stand tripod legs on a flat, stable surface.
2. Raise the mounting pole up to the appropriate height needed and tighten the side adjustment knob.
3. Insert the pin into the bottom pin-hole so the mounting pole stays at your set height.
4. On the Total PA™ Freedom, adjust the bottom knob counter-clockwise so the screw is not blocking the opening.
5. Line up the Total PA™ Freedom mounting hole with the speaker stand pole and place on the pole.
6. Tighten the mounting knob clockwise on Total PA™ Freedom to secure it to the pole.



Connection Diagram

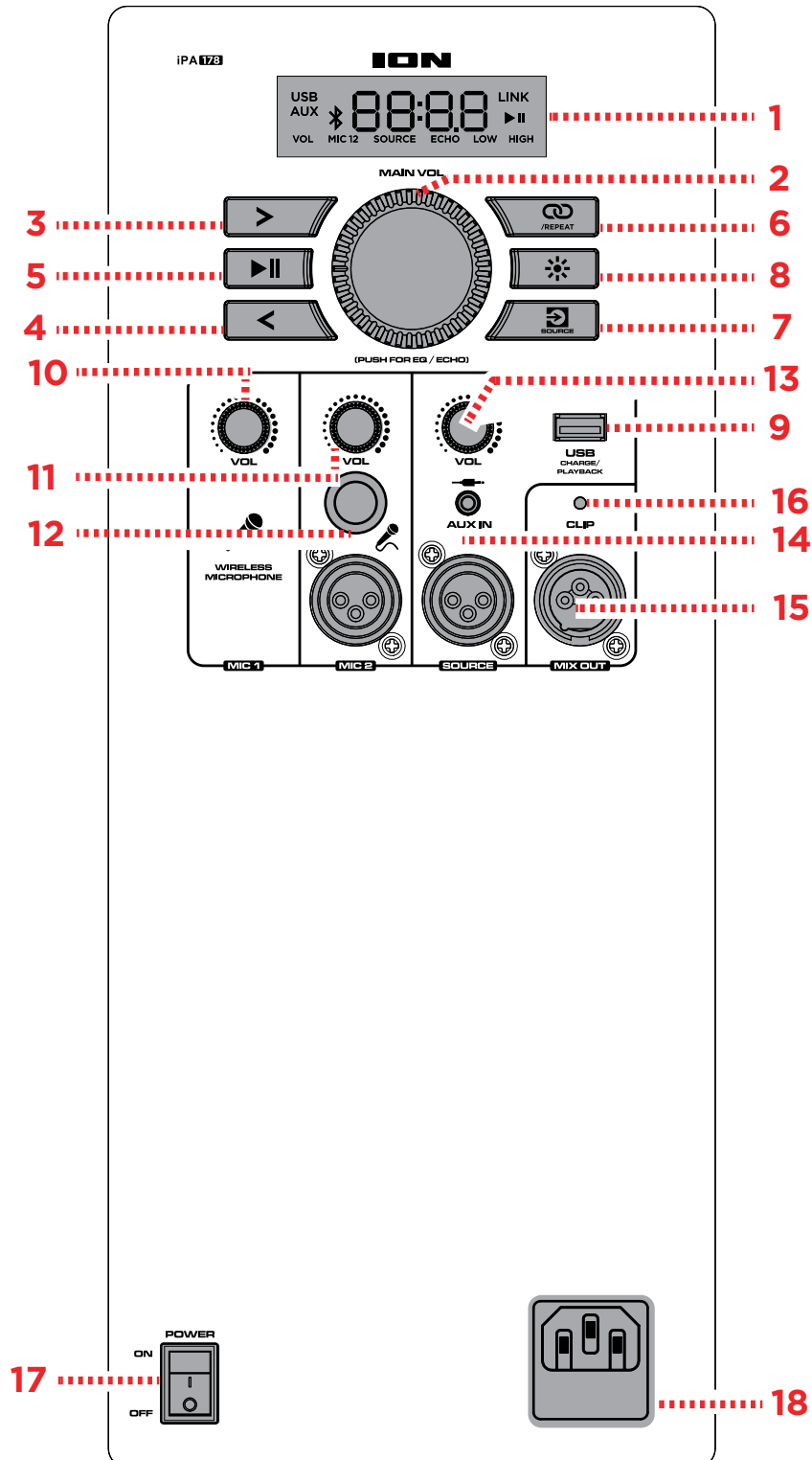
Items not listed under the *Box Contents* are sold separately.



FEATURES

Rear Panel

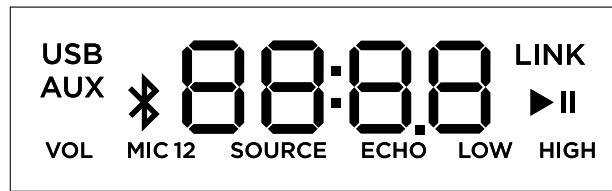
Click a control below to jump to that section.



1. Display

This screen shows information relevant to Total PA™ Freedom's current operation.

Note: The **Display** comes with a plastic protector on it. Remove this for optimal viewing.



2. Control Knob

Turn this knob to adjust the Main Volume (overall output) of the loudspeaker. Press the knob and turn to cycle through to select EQ or the Echo effect. See the section [Using the Control Knob](#) for more details.

3. Next Track

When USB or Bluetooth is selected as the audio source, press this button to go to the next track in the playlist.

4. Previous Track

When USB or Bluetooth is selected as the audio source, press this button to go to the previous track in the playlist. Press the button again within one second to skip to the previous track.

5. Play/Pause

When USB is selected as the audio source, press this button to play/pause the currently selected track. Double press this button to stop playback and return to the beginning of the track list.

When Bluetooth is selected as the audio source, press this button to play/pause the currently selected track.

Press and hold for 5 seconds to turn voice prompts on or off.

6. Stereo-Link™ / Repeat

Press and hold this button to start stereo linking to another Total PA™ Freedom. See the section [Linking Two Speakers](#) for more details.

In USB mode, press this button to repeat a single track, folder, or all tracks. See the section [USB Mode](#) for more details.

7. Source

Press this button to select the audio source to use: USB, AUX, or Bluetooth. The default source when powering on Total PA™ Freedom is Bluetooth. The USB source is only selectable if a USB drive is plugged into Total PA™ Freedom; otherwise, the Source button will toggle between Bluetooth and Aux.

8. Lights

Press this button to select how the lights on the front panel function. See the section [Light Modes](#) for more details.

Note: For the best lighting effect, you may need to adjust the volume of your device and/or the Source volume.

9. USB Charge/Playback Port

You can use this port for charging a USB device, such as a tablet or smartphone. To charge a device that is streaming music via Bluetooth, pause the music first and then wait for it to reconnect after the USB cable is inserted.

Connect your USB flash drive here to play music. Use the SOURCE Volume knob to adjust the volume. Press the **Stereo-Link™ / Repeat** button to cycle through the five repeat/shuffle options. See the section [USB Mode](#) for more details.

Note: Your USB drive cannot be more than 16 GB and it must contain playable MP3 files in order for its data to appear properly in the Display. When you connect a USB drive with MP3 files, Total PA™ Freedom will order the files alphabetically by folder on the root directory and then by track name in the folder.

10. MIC 1 Wireless Mic Volume

Adjust the volume of the included wireless mic using this knob. See the section [Using the Wireless Mic](#) for more details on setting up and turning on the microphone.

11. MIC 2 Volume

Adjust the volume of the microphone or mic-level source connected to the **MIC 2 Inputs** using this knob.

TIP: For proper audio level mixing tips for MIC 1, MIC 2, and other Source volumes, see the section [Balancing Your Levels](#).

12. MIC 2 Inputs (1/4" / 6.35 mm & XLR)

Connect a microphone or mic-level source to these inputs.

13. Source Volume

Adjust the volume of devices connected to the **Aux Inputs** or a **Bluetooth** source.

14. Aux Inputs (1/8" / 3.5 mm & XLR)

Connect a CD player, MP3 player, or other audio source to these line-level inputs.

15. Mix Out (XLR)

Connect this output to a speaker, mixer, or recorder.

16. Clip LED

The Clip LED will flash red if the signal from the input jacks or **Media Panel** audio source is clipping (distortion from an overly loud signal). If this happens, decrease the setting of the **Main Volume** or the volume for the **Aux/Mic Input** (if a loud device is plugged into either).

17. Power Switch

Flip this switch to toggle the speaker's power on or off.

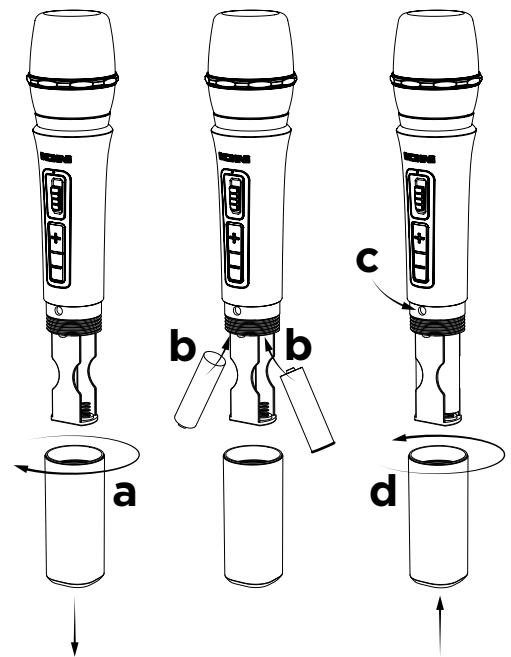
18. Power Cable Input (IEC)

Insert the included power cable here to power the unit.

OPERATION

Installing Batteries Into the Wireless Mic

- Remove battery compartment cover by turning it clockwise.
- Install two fresh AA batteries (not included) in the orientation indicated in the compartment.
- The microphone should pair automatically if Total PA Freedom is powered on. If it does not, use a straightened paper clip or similar object to press the reset switch inside the compartment for 3 seconds.
- Reattach battery cover by turning it counterclockwise.



Using the Wireless Mic

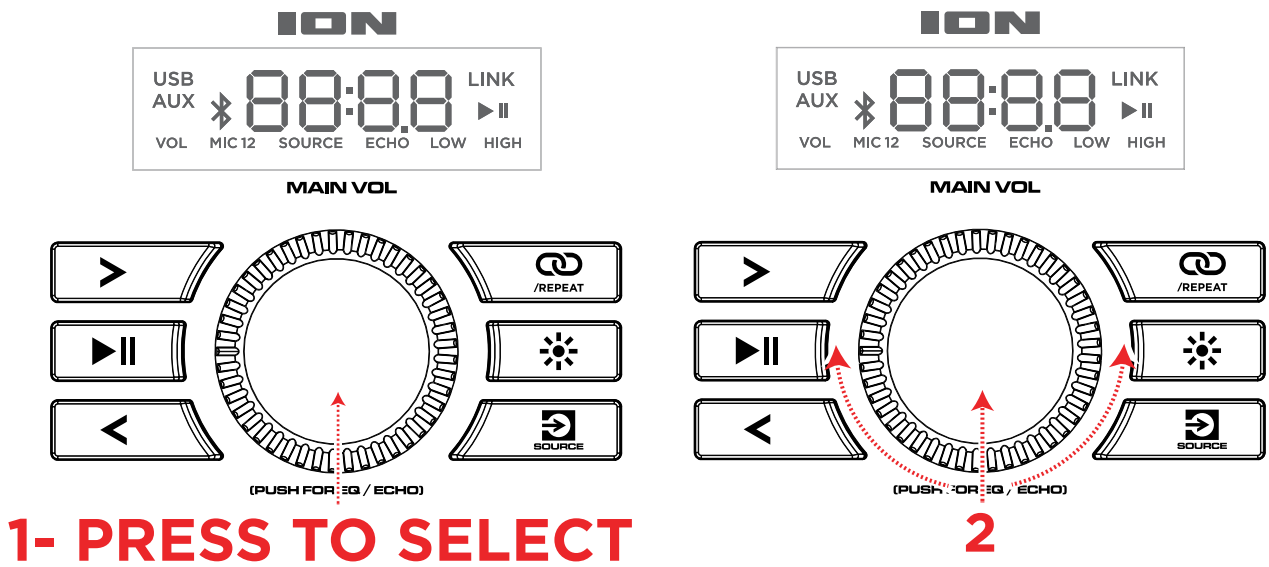
- Power on the wireless microphone with the mic's on/off switch.
- Use the +/- controls on the microphone or the MIC 1 Volume knob to adjust the mic level. If you cannot hear the microphone over your audio source, you may need to decrease the SOURCE Volume level or increase the microphone volume.

Note: If the wireless microphone becomes disconnected from the speaker, press the reset switch inside the battery compartment for 3 seconds using a straightened paper clip or similar object to reset the mic's connection to the speaker.

Note: The wireless microphone will only connect to one Stereo-Linked™ speaker (the closest speaker). If using two Total PA™ Freedom speakers you will need to connect the first speaker's **Mix Out** to the second speaker's **XLR Source input**.

TIP: For more details on balancing your volume levels, see the section [Balancing Your Levels](#).

Using the Control Knob



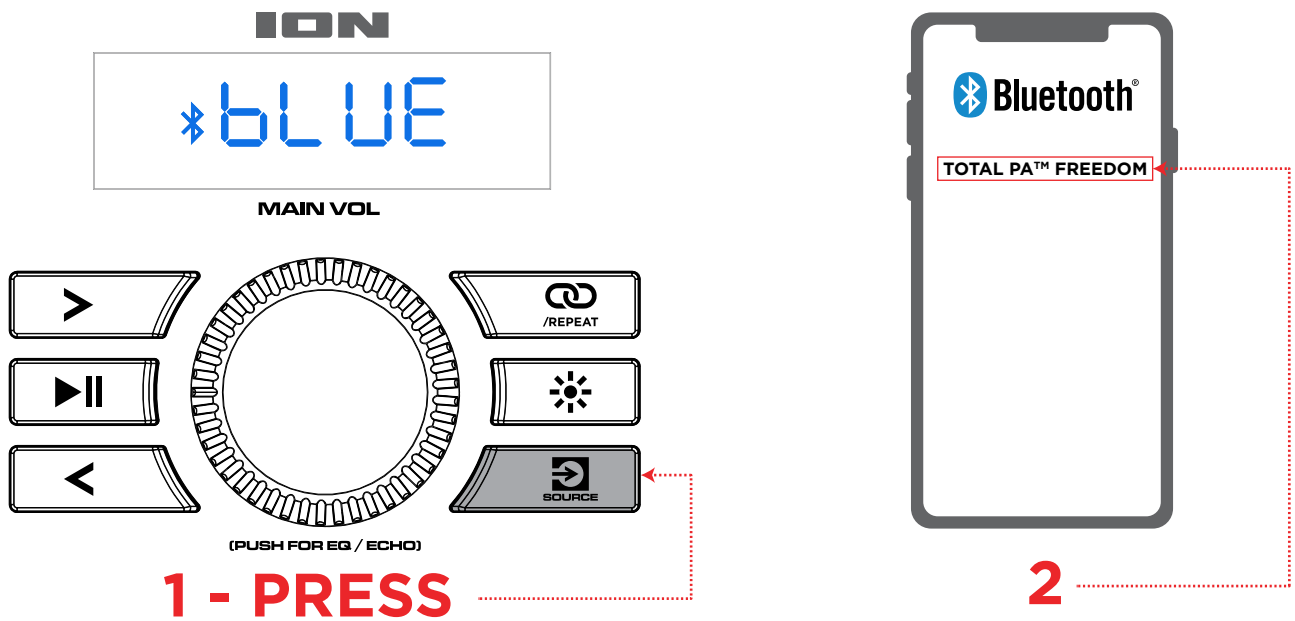
The **Control Knob** defaults to controlling the Main Volume for all channels. Press the Control Knob to toggle through different functions. Rotate the Control Knob to change the selected setting:

Press	Control	Rotate
1x	ECHO	Adjust mic echo
2x	LOW	Adjust low EQ
3x	HIGH	Adjust high EQ
4x	VOL	Adjust main volume

If there is no activity on the Control Knob for 5 seconds, the function will go back to Main Volume.

To factory reset the speaker to default settings, hold down the Control Knob for 5 seconds. The speaker will power cycle and the reset will be successful.

Pairing a Bluetooth® Device



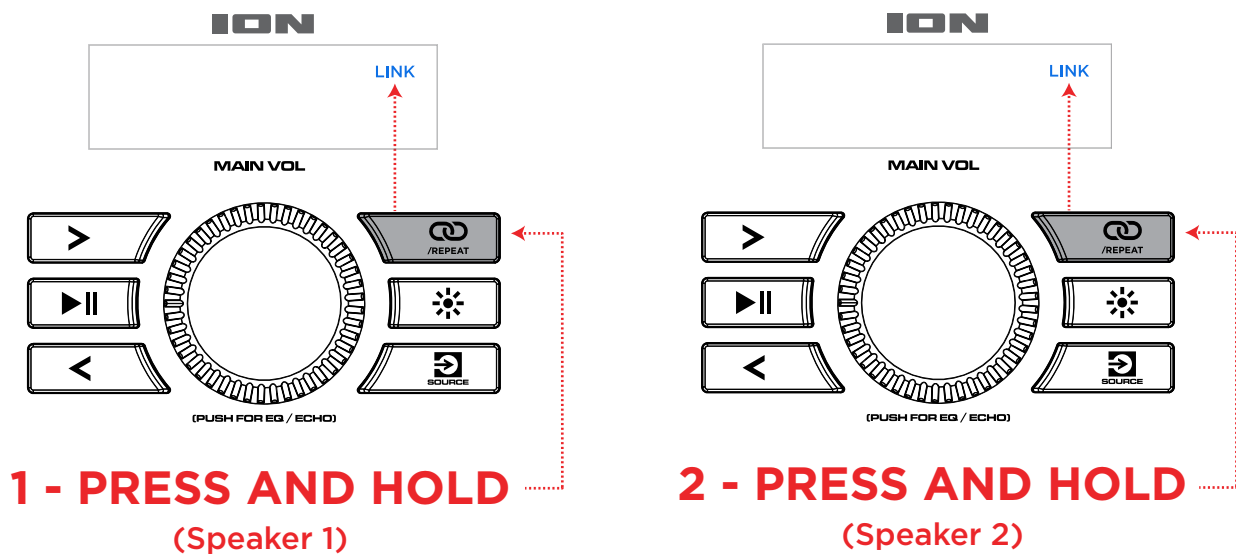
1. Power on the Total PA™ Freedom by flipping the power switch on.
2. When the unit is first turned on, it will automatically enter Bluetooth pairing mode. If necessary, press the **Source** button to select Bluetooth mode. If voice prompts are enabled, you will hear “Bluetooth Pairing.”
3. Navigate to your device’s Bluetooth setup screen, find **Total PA Freedom**, and connect. Do not connect to **iPA178_BLE**; this is reserved exclusively for connecting to the **ION Sound Control™** app. When connected, the Bluetooth icon on the display will flash and you will hear “Bluetooth Connected”.

Note: If you experience trouble in connecting, select “Forget this Device” on your Bluetooth device and try to connect again.

Note: The Volume of Total PA Freedom does not affect your Bluetooth device volume. For the best sound quality, set your input source volume to 100% and use the Source and Main Volume control of the speaker to adjust the volume.

To disconnect, turn off Bluetooth from your device’s Bluetooth settings.

Linking Two Speakers



1. Power on both Total PA™ Freedom speakers by flipping the power switches on. Make sure they are in Bluetooth pairing mode and not connected to a device.
2. Press and hold the **Stereo-Link™ / Repeat** button on one speaker (the primary speaker which will control both) and then the **Stereo-Link™ / Repeat** button on the secondary speaker to enter Stereo-Link™ mode. Once a link has been established, the word LINK will appear on both speaker displays.
3. Connect to the primary speaker via Bluetooth.

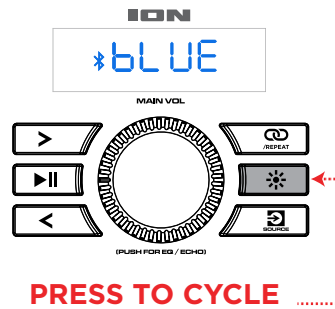
To disconnect, double press the **Stereo-Link™ / Repeat** button.

Note: The speakers should be within 85' (29.5 m) of each other to properly link.

Note: The wireless microphone will only connect to one Stereo-Linked™ speaker (the closest speaker). If using two Total PA™ Freedom speakers you will need to connect the first speaker's **Mix Out** to the second speaker's **XLR Source input**.

Note: Total PA™ Freedom is not compatible with previous ION PA models. To link to a previous model, you will need to use an XLR cable (not included). Connect the XLR cable to the MIX Out XLR port on the Total PA™ Freedom to the XLR In port on the previous model.

Light Modes

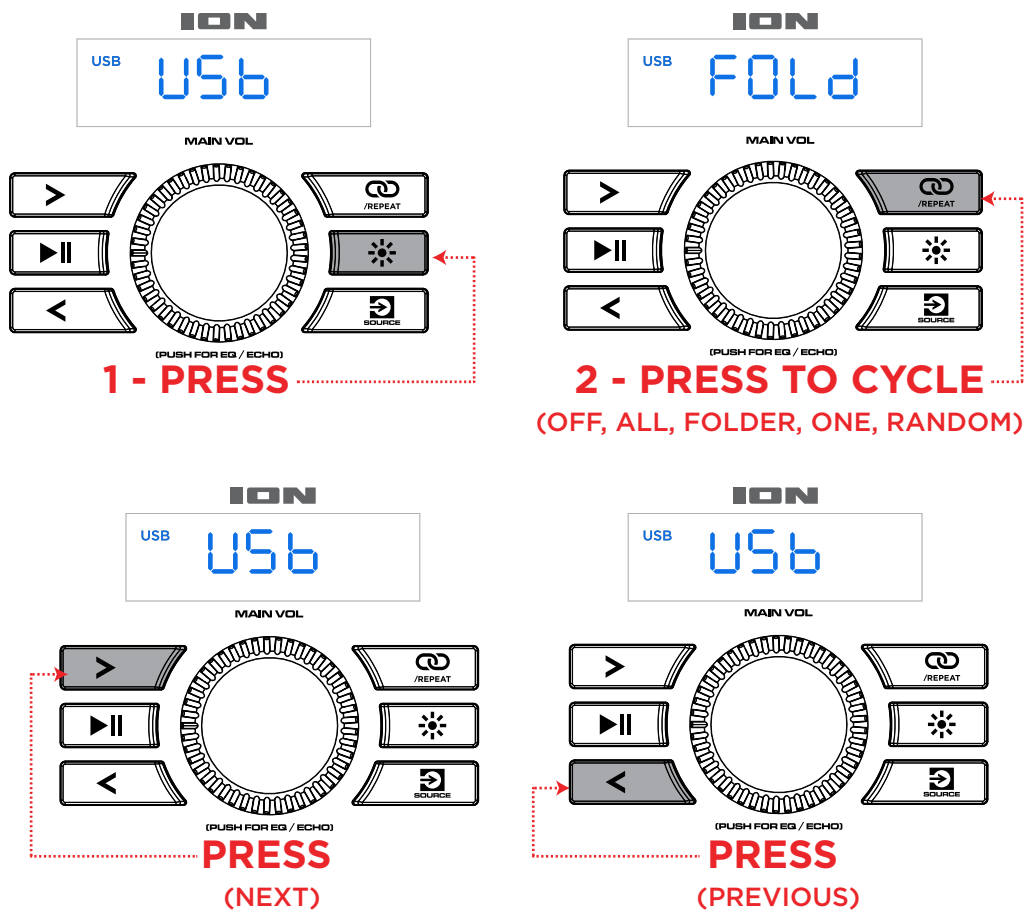


Press the **Lights** button to toggle between ten modes for the LEDs on Total PA™ Freedom.

Note: For the best lighting effect, you may need to increase the volume of your connected device or input source.

- **Crazy Rainbow Beat Sync:** A rainbow of colors will spin around the perimeter. The woofer lights will match the bottom middle LED. The higher the music volume, the faster the speed of the spinning rainbow pattern.
- **Spinning Stars:** The LEDs will move around the perimeter and fade through the color spectrum in a shooting star pattern. The woofer lights will pulse with the same color when the perimeter LEDs reach the middle.
- **Beat Sync Star:** A long shooting star pattern will circle the perimeter changing speed as the song volume changes. The woofer lights will pulse to the beat of the song. The higher the music volume, the faster the speed of the shooting star pattern.
- **Bouncing Stars:** Light streaks will flow down the sides. When they meet at the middle bottom part of the speaker, they will bounce back up to the top in the next color in the spectrum and flow downward again. Woofer lights will pulse with the new color when the light streaks bounce in the middle areas, repeating down the color spectrum.
- **Starlight Effect - Beat Sync:** Random LEDs will flash a random color and slowly fade away according to the beat of the song. More LEDs will be illuminated based on the song volume.
- **Firepit - Beat Sync:** The lights will flicker red, yellow, and orange and the side lights rise up and down based on the volume of the music.
- **Static Color:** All LEDs will stay the same color (the color can be adjusted from the ION Sound Control™ app). By default the color is blue. There are the 15 colors that can be selected from the ION Sound Control™ app.
- **Diagonal Waves - Beat Sync:** Three waves of one color will pass by and after they have gone from the top left side to the bottom right side new waves in the next color will appear. Waves will speed up or slow based on music volume. Woofer lights will pulse to the low frequency's beat.
- **Two-Tone Cycle:** One side of the LEDs (including 2 from the prong light and 1 from the edge glow light) will show one color while the other side of the LED will light up with a nearby color on the full color spectrum.
- **Random:** The side LEDs cycle through the full color spectrum randomly, changing every 5-7 seconds.
- **Off:** All LEDs are off.

USB Mode



When a USB drive with compatible files is inserted into the **USB Charge/Playback Port**, Total PA™ Freedom will automatically switch to USB mode. If the USB drive has already been inserted and you are using another mode, press the **Source** button until USB mode is selected. Total PA™ Freedom will automatically play the first compatible MP3 file. Files are played in alphabetical order of what is on the root level, then alphabetical by folder, and then alphabetical by track name. Media playback will stop when all media has been played on the USB drive. Press and hold the **Next** and **Previous** buttons to fast forward or rewind within the song.

Note: The USB drive must have playable MP3 files for it to appear on the media panel's display.

Press the **Stereo-Link™ / Repeat** button to cycle through the repeat shuffle options (abbreviations will show on the display):

- Play the current USB track on repeat (**OnE**). This is the default mode when powered on.
- Play the tracks in random order (**rAn**).
- Play all the tracks on the USB drive on repeat (**ALL**).
- Play the current folder's tracklist on repeat (**FOLD**). The folder used is based on what song is playing when it is activated. For instance, if a song playing is on the root level, selecting **FOLD** will repeat only songs at the root level. If a song is in folder "A", then only songs in folder "A" will be repeated.

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 Total PA™ Freedom via Bluetooth. See the [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. Select the **Total PA™ Freedom** icon to go to the next screen, where you can use the app to control various functions of the speaker such as:
 - **Main Volume:** Adjust the main speaker output volume.
 - **Source Selection:** Select the source to use: Bluetooth, USB, or Aux.
 - **Source Volume:** Adjust the incoming volume for Bluetooth, USB, and Aux sources.
 - **Mic 1 Volume:** Adjust the volume for the wireless mic.
 - **Mic 2 Volume:** Adjust the volume for the 1/4" / 6.35 mm and XLR microphone inputs.
 - **EQ:** Adjust the speaker's equalization.
 - **Mic Echo:** Turn the mic echo effect on/off.
 - **Voice Prompts:** Enable or disable the voice prompts.
 - **Support:** Visit ionaudio.com, contact Technical Support, and view Warranty information and Frequently Asked Questions.
 - **Light Effect:** Choose the lighting effect.
 - **Over-The-Air Firmware Updates:** Stay up to date with the latest firmware installation.

TROUBLESHOOTING

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

- i. First, turn your source volume all the way up.
- ii. Then, adjust the selected **Channel Volume (VOL)** knob on Total PA™ Freedom 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 (VOL)** knob on Total PA™ Freedom of the channel in use.

I hear a hum when cables are connected:

- Disconnect cables from the input jacks to see if it's a faulty cable.
- 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 too much bass: Try adjusting the EQ control on your sound source or on Total PA™ Freedom to lower the bass level. This will allow you to play the music louder before clipping (distortion) occurs.

What does the wireless mic battery notification mean?: The light indicator will be blue+red when the battery is low and will flash red when it is almost empty.

What do I do if the wireless mic is not working?:

- Check to see that the batteries are properly installed.
- Install two fresh AA batteries (not included) in the orientation indicated in the compartment. The microphone should pair automatically if Total PA Freedom is powered on. If it does not, use a straightened paper clip or similar object to press the reset switch inside the compartment for 3 seconds.

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

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

If you cannot connect your audio device to Total PA™ Freedom via Bluetooth:

- Have your audio device (e.g., smartphone or tablet) and Total PA™ Freedom as close together as possible while trying to connect. Make sure both the audio device and Total PA™ Freedom are unobstructed by walls, furniture, etc.
- Reset the Bluetooth connection on Total PA™ Freedom to disconnect Total PA™ Freedom from any other audio device and restart the search process. If this does not work right away, power off Total PA™ Freedom and then power it back on. See [Pairing a Bluetooth® Device](#) for more information.
- 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 Total PA™ Freedom before, find Total PA™ Freedom 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 Total PA™ Freedom off and back on and try pairing again once it reappears in your available devices list.

Note: If Total PA™ Freedom 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 double-pressing the **Stereo-Link™ / Repeat** button. Alternatively, you can wait for your unit to link to another speaker if there is one within range.

APPENDIX

Technical Specifications

Output Power	650 W (peak)
Speakers	Low Frequency: 12.0" (305 mm) High Frequency: 1.0" (25.4 mm)
Frequency Response	50 Hz - 20 kHz
Bluetooth	Profile: A2DP, AVCTP Bluetooth Version: Bluetooth 5.0 Range*: Up to 100 ft. (30.5 m) Stereo-Link™ Range*: 85 ft. (29.5 m)
Wireless Microphone Range*	100 ft. / 30.5 m
USB	Audio: Music playback from USB drive Supported File System: FAT32 Supported File Type: MP3 Maximum File Size: 4 GB Maximum USB Drive Size: 128 GB
Power	Cable: IEC 320 C13 Input Voltage: 100 - 120V~ 60 Hz, 320W Fuse: F5AL AC250V
Dimensions (width x depth x height)	16.21" x 12.50" x 25.63" 412 x 318 x 651 mm
Weight	37.48 lbs. 17 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 in the center of the room so it is unobstructed by walls, furniture, etc.

Trademarks & Licenses

ION Audio is a trademark of inMusic Brands, Inc., registered in the U.S. and other countries. App Store is a trademark of Apple Inc., registered in the U.S. and other countries.

Android and Google Play are registered trademarks of Google Inc.

The *Bluetooth* word mark and logos are owned by the Bluetooth SIG, Inc. and any use of such marks by ION Audio is under license.

All other product names, company names, trademarks, or trade names are those of their respective owners.



ionaudio.com