WiiM



WiiM Mini: Hi-Res Music Streamer

Make Your Audio Smart

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1. Introduction

At WiiM, our goal is to provide you with the simplest, affordable, Hi-Fi, and lossless audio systems.

With our patented audio streaming solution built into all our high-quality products and app, you will have the ease of playing music throughout your home. All our products are developed with the finest product design and intuitive user interface.

Meet WiiM Mini, a compact, versatile, and high-fidelity wireless music streamer. It delivers lossless audio, Apple AirPlay 2, Alexa, Spotify Connect, Amazon Music casting and TIDAL Connect to your stereo system. It streams music directly from the cloud of all major music services or your own library.

Simply plug the WiiM Mini into your stereo receiver, DAC, or amplifier, and control it using the user-friendly WiiM Home app, popular platforms like Spotify, TIDAL, or Amazon Music. Voice control is also a breeze through iPhone, HomePod, compatible Echo as well as the Alexa app or Apple Home app.

Create synchronized groups with HomePods, Echoes, AirPlay 2 devices, other Alexa-compatible devices, or additional WiiM devices, streaming music throughout your home or playing different tracks in separate rooms. Boasting both digital and analog audio inputs and outputs, the WiiM Mini seamlessly integrates with your existing stereo setup.

Elevate your audio gear with the smart capabilities of the WiiM Mini, delivering high-fidelity, gapless music through the exceptional innovation of WiiM.

Typical Use Cases

The WiiM Mini is designed to enhance your existing audio setup by adding wireless streaming capabilities and smart features. Here are a few common use cases for the WiiM Mini:

- Upgrade your Favorite Legacy Audio Systems: If you have a traditional stereo system or speakers that you want to integrate into your Apple AirPlay 2, Amazon Alexa or WiiM ecosystem, the WiiM Mini allows you to wirelessly stream music to those speakers. It bridges the gap between your older audio equipment and the modern world of streaming music.
- High-Quality Audio: It supports bit-perfect, high-resolution audio formats and delivers rich, detailed sound, enhancing the listening experience of your existing audio system.
- Streaming Services and Music Libraries: The WiiM Mini allows you to access various streaming services such as Spotify, Amazon Music, or TIDAL, bringing a wide range of music to your existing audio setup. You can also connect it to your personal music library stored on a computer or network-attached storage device for seamless playback.
- Podcasts and Internet Radio: In addition to streaming music, the WiiM Mini
 provides access to a wide range of podcasts and internet radio stations. You can
 browse through different genres, podcasts, or specific radio stations to enjoy on
 your existing audio system.
- Multi-room Audio: The WiiM Mini seamlessly integrates with other 3rd party popular smart speakers and components, or another WiiM devices, allowing you to create a whole-home audio system with synchronized music playback in multiple rooms.
- Smart Home Integration: The WiiM Mini supports voice control through platforms like Apple Siri and Amazon Alexa, allowing you to control your music hands-free and integrate with other smart home devices.
- Vinyl or CD Integration: If you have a turntable or CD player that you want to incorporate into your WiiM or AirPlay system, the WiiM Mini can connect to the analog output of these devices. This enables wireless audio streaming to other speakers via another WiiM or AirPlay compatible device, allowing you to relish the sound throughout your entire home.
- Home Theater Integration: The WiiM Mini can be used as a bridge between your home theater system and the WiiM ecosystem. By connecting the WiiM Mini to your AV receiver or soundbar, you can stream music wirelessly to your home theater speakers and synchronize audio playback with other WiiM devices for a cohesive audio experience.

Other Devices Needed to Use the WiiM Mini

To use the WiiM Mini, you will need a few essential devices and components. Here's a list of what you'll need:

- Audio System: The WiiM Mini is designed to connect to an existing audio system. This can be a stereo system, powered speakers, passive speakers with an amplifier/receiver, or a home theater setup with an AV receiver or soundbar. Make sure you have the appropriate audio system in place.
- Wi-Fi Network: The WiiM Mini requires a stable Wi-Fi network connection to function. Ensure that you have a reliable Wi-Fi network available in the area where you plan to set up the WiiM Mini. You'll need the Wi-Fi network credentials during the setup process.
- Smartphone or Tablet: You'll need a compatible smartphone or tablet (iOS or Android) with the WiiM Home app installed. The WiiM Home app is used for initial setup, configuration, and control of the WiiM Mini.
- Power Source: The WiiM Mini needs to be connected to a power source using the included power adapter and cable. Ensure that you have an electrical outlet nearby to power the device.

These are the core components required to use the WiiM Mini. It's important to have a pair of speakers that you want to integrate with the WiiM Mini, a stable Wi-Fi network, and a compatible device with the WiiM Home app for setup and control.

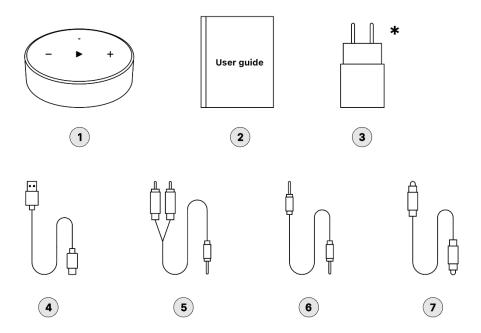
Audio Devices Work with the WiiM Mini

The WiiM Mini can work with your audio source devices, smart speakers and other legacy stereo systems, DAC, amplifier, speakers or soundbars etc. The audio source device includes record player and MP3 player. The diagram below shows how you can connect your audio system with the WiiM Mini.



2. What's in the Box

1.	WiiM Mini	x 1
2.	Quick start guide	x 1
3.	USB power adapter (5V, 1A)	x 1
4.	USB Type-C cable (1.2m)	x 1
5.	3.5mm male to RCA stereo cable (1.2m)	x 1
6.	3.5mm male to male stereo cable (1.2m)	x 1
7	Optical audio cable (1.2m)	x 1



* Availability varies by region.

3. Technical Specifications

Category	Specification
Audio Amplification	No
Main Purpose	Connected to amplifier or powered speaker for streaming
Pair with a Sub	No
USB Port (Storage/Audio Out)	No
Wireless Connectivity	Wi-Fi 5
Bluetooth	BT 5.0
Ethernet	No
DAC IC	TI PCM 5121
Analog Out SNR	106 dB
THD+N (Analog Out)	-92dB (0.0025%)
Analog Input (ADC)	Fixed 48k, 16 bit
Google Cast Audio	No
Group with Nest Speakers and Display	No
Group with Echo Speakers and Display	Yes
Alexa Multi-room with UHD	No
Group with HomePods	Yes
Work with Alexa	Yes
Works with Google	No
Works with Siri	Yes
Group with WiiM Devices	Yes

AirPlay 2	Yes	
2-Way Bluetooth	Yes	
Roon Ready	No	
DLNA	Yes	
Spotify Connect & TIDAL Connect	Yes	
Gapless Playback	Yes	
10-band Graphic and Parametric EQ	Yes	
Room Correction	Yes	
WiiM Music Streaming Platform	Yes	
СРИ	Dual Core A7	
DRAM	128 MB	
Flash	128 MB	
Audio Input Ports	Aux In (3.5mm jack): 1 Vrms Analog signal, converted to digital via ADC (48 kHz/16-bit)	
Audio Output Port	Aux Out (3.5mm jack)	
Audio Output Port	SPDIF/Optical Out (up to 192 kHz/24-bit)	
LED	Three-color status LED - Red, Green, and White	
Control	Capacitive touch buttons:Play/PauseVolume +Volume -	
Weight	1.4 oz (40 g)	

Dimension	2.7 x 2.7 x 0.9 in (69 x 69 x 24 mm)	
Power Input	USB Type-C: requires 5V, 1A	
P	Bundled USB power adapter: 5V, 1A	

4. WiiM Mini Controls, Interfaces, and Lights

Top Panel Controls and Lights



Each numbered control or light on the front panel is explained below:

1	Status LED	A three-color (RGW) LED indicator to display the operational status of the WiiM Mini.
		For more information, see <u>LED Status Lights</u> .
2	Volume –	Press to decrease volume.
3		Start or pause the playback.
	Play/Pause	Wi-Fi setup (push and hold for 3 seconds)
		Restore to the factory setting (push and hold for 10 seconds)
4		Press to increase volume.
	Volume +	Press and hold the Volume + and Volume – buttons together for 2 seconds to initiate Bluetooth pairing. For more information, see <u>Audio Input via Bluetooth</u> .

Back Panel Interfaces

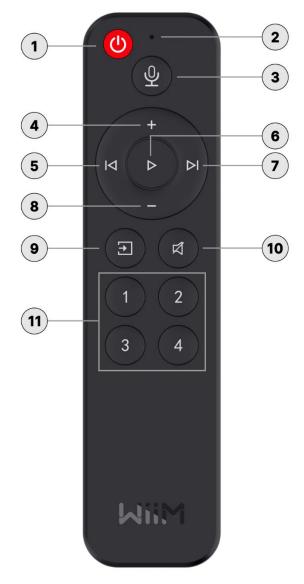


Each numbered interface on the back panel is explained below:

1	AUX IN	players, audio players, and TVs for analog audio input.
2	AUX OUT	Outputs analog audio, ideal for connecting to an external amplifier, powered speakers, or audio receiver.
		USB Type-C power plug (5V, 1A)
3	TYPE-C	Note: This USB Type-C interface is for power input only. It does not support USB storage or USB audio output.
4	SPDIF	Outputs high-quality digital audio up to 192 kHz/24-bit with low jitter.
5	MIC	Used to auto-measure the audio path latency for multi-room sync (i.e., AirPlay 2, Alexa MRM, WiiM MRM, etc.). The MIC is engaged only during latency measurement.

WiiM Voice Remote

You can use the WiiM Voice Remote to effortlessly control the WiiM Mini. For detailed instructions, refer to How to Set Up Your WiiM Voice Remote.



Each numbered control on the WiiM Voice Remote is explained below:

1	Standby	Press to put the WiiM Mini into standby mode.
2	Microphone	Capture voice commands.
3	Voice Control	Press and hold to give voice commands.

4	Volume Up	Press to increase the speaker volume.	
5	Previous	Press to return to the previous playback or restart the current playback.	
6	Play/Pause	Press to start or pause the current playback.	
7	Next	Press to skip to the next playback.	
8	Volume Down	Press to decrease the speaker volume.	
9	Source Switch	Press to change the input source.	
10	Mute/Unmute	Press to mute or unmute the speakers.	
11)	Preset Shortcuts	Press buttons 1~4 to play the corresponding presets.	

LED Status Lights

LED Color/Pattern		State
Fast Flashing White	\	Boot-up
Slow Flashing White	(OOBE/Ready to setup
Slow Flashing Green		Bluetooth ready to pair
Fast Flashing White and Green		Connecting to Wi-Fi
Solid White	•	Connected to Wi-Fi
Solid Green		Bluetooth mode, paired
Solid Light Green	•	Aux-in mode
Slow Flashing White and Green	,	OTA update
Slow Flashing White and Red		Restore to factory settings
Solid Yellow		No network
Slow Flashing Red		Faulty error

5. How to Get Started

Before using your WiiM Mini, follow these main steps to set it up:

- 1. Connect the WiiM Mini to your audio device.
- 2. Power on the WiiM Mini.
- 3. Download and install the WiiM Home app on your mobile device.
- 4. Use the WiiM Home app to connect the WiiM Mini to your network.
- 5. Configure the WiiM Mini in the WiiM Home app to suit your preferences.

By completing these steps, your WiiM Mini will be ready for use. The following sub-chapters will provide detailed instructions for each step.

Connect the WiiM Mini's Audio Output

The WiiM Mini features two distinct audio output interfaces:

- Analog Aux Out
- Digital SPDIF Out

Besides audio output via the above physical interfaces, the WiiM Mini can also output audio via Bluetooth. For detailed instructions, see Audio Output via Bluetooth.

Notes:

- The WiiM Mini is designed to output audio through a single one of these audio output interfaces.
- Selecting the appropriate audio output port is crucial to ensure sound output.
 Incorrect selection may result in no audio.
- For bit-perfect audio output, opt for the digital audio output and activate the Fixed Volume Output, disable EQ and mono audio in the WiiM Home app's device settings.
- You have two ways to control the volume of your system:
 - Utilize your AVR or amplifier for volume control (When the Fixed Volume Output is set on the WiiM Mini).
 - o Control volume through the WiiM Home app, but remember to disable the **Fixed Volume Output** for this option.

Scenario 1: AUX Out (Powered Speakers, Amplifiers, AV Receivers)

The **AUX Out** port on the WiiM Mini is typically used to connect to the external audio equipment, e.g., powered speakers, amplifiers, or AV receivers to output analog audio playback.

Cable Requirement: Use one of the following two types of cables:

A 3.5mm Male to Male stereo cable as below:

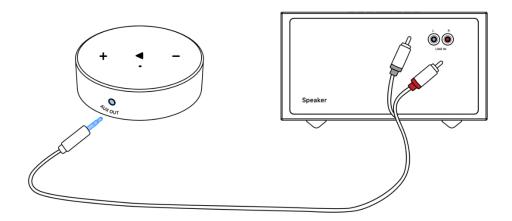


A 3.5mm Male to RCA stereo cable as below:



Cable Connection Steps:

- 1. Plug the 3.5mm connector of the cable into the **Aux Out** port on the WiiM Mini.
- 2. Plug the other end of the cable into the **Aux In** or **Line In** port on your external audio equipment.



Scenario 2: SPDIF Out (Soundbars, DACs, or AV Receivers)

The **SPDIF Out** interface on the WiiM Mini is typically used to connect to the external device, e.g., soundbars, DACs, or AV receivers, to output digital audio playback.



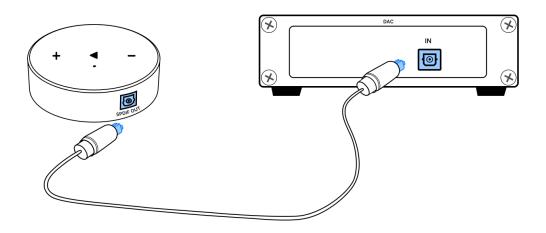


Cable Connection Steps:

1. Plug one end of the optical cable into the SPDIF Out port on the WiiM Mini.

Note: Please ensure the insertion direction of the optical cable matches the port. Incorrect insertion may damage the optical door.

2. Plug the other end of the cable into the **SPDIF In** or **Optical In** port of your external device.



Connect the WiiM Mini's Audio Input

The WiiM Mini features a single audio input interface: **Aux In**.

The **Aux In** interface on the WiiM Mini is typically used to connect to a CD Player, turntable with a built-in preamp, or PC to receive analog audio input.

Cable Requirement: Use one of the following two types of cables:

• A 3.5mm Male to Male stereo cable as below:

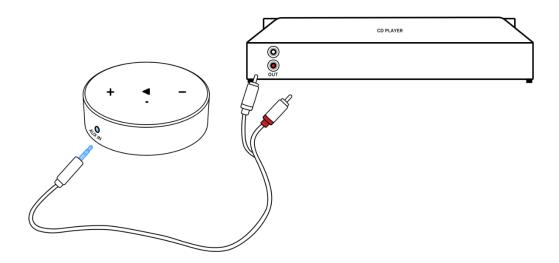


A 3.5mm Male to RCA stereo cable as below:



Cable Connection Steps:

- 1. Plug the 3.5mm connector of the cable into the **Aux In** port on the WiiM Mini.
- 2. Plug the other end of the cable into the **Aux Out** or **Line Out** port on your audio source (CD player, recorder, or PC).



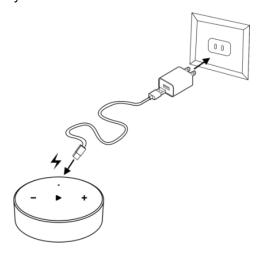
In addition to physical input interfaces mentioned above, you can also stream audio from an external device (e.g., smartphones or tablets) to the WiiM Mini via Bluetooth. For detailed instructions, see <u>Audio Input via Bluetooth</u>.

Notes:

- You can also enable the Auto-sensing feature on the WiiM Mini to automatically play your Aux In source when the WiiM Mini detects a signal. You can enable this feature from the WiiM Home app.
- The WiiM Mini has a built-in EQ to process the audio input based on your taste.
 You can also control the audio volume using the WiiM Home app remotely without altering the input source volume.
- Some source devices may require a preamp. For example, some turntables do not have a built-in preamp, so you will need to connect your turntable to an external preamp first, and then connect the preamp to the WiiM Mini.

Power On the WiiM Mini

Please use the provided USB power adapter (5V, 1A) and USB Type-C cable to power your WiiM Mini.



After powering on the WiiM Mini, wait 30 seconds for it to fully boot up before starting the setup process.

Download and Install the WiiM Home App

• For an iOS or Android device, scan the following QR code to download the app:



• The beta version is also available for Windows and Mac OS. Download it here.

Set Up the WiiM Mini

You can set up the WiiM Mini via Wi-Fi using the WiiM Home app. Before Wi-Fi setup, make sure you have the network password ready. This will ensure a smooth and efficient setup process.

If you use an iOS device, you can also use the Apple Wireless Accessary Configuration (WAC) protocol or the Apple Home app to set up the WiiM Mini.

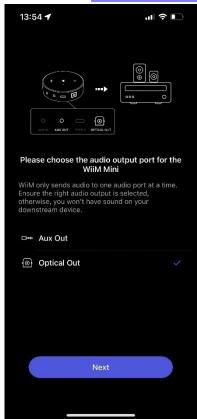
WiiM Mini Setup via Wi-Fi Using WiiM Home App

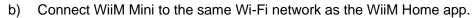
- 1. Open the WiiM Home app on your smartphone or tablet.
- 2. When the **Set Up** pop-up appears in the app, tap it to start the setup.



3. Follow the on-screen instructions to complete the setup:

a) Select the right audio output interface corresponding to the output connection in <u>Connect the WiiM Mini's Audio Output</u>.



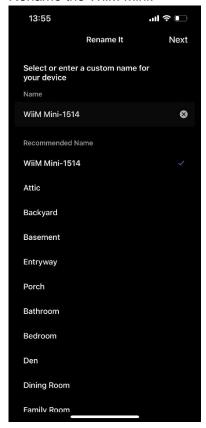




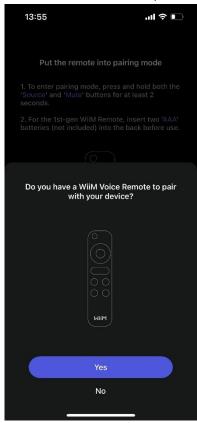
c) Check and update the firmware.



d) Rename the WiiM Mini.



e) Set up the WiiM Voice Remote with the WiiM Mini. For detailed instructions, refer to How to Set Up Your WiiM Voice Remote.



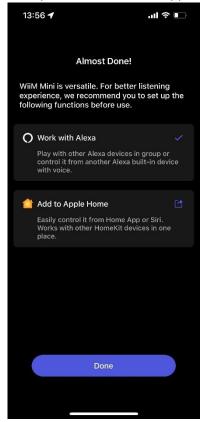
f) Calibrate the audio path latency.



g) Configure sample rate for the optical/SPDIF output.

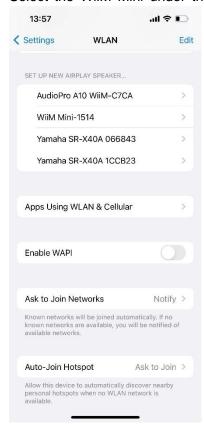


h) Set up Alexa and add to Apple Home.



WiiM Mini Setup Using Apple WAC

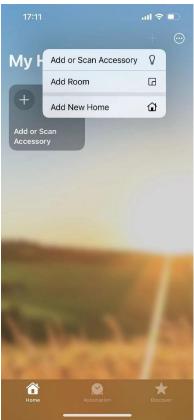
- 1. Open the **Settings** app on your iOS device.
- 2. Tap the WLAN option.
- 3. Select the WiiM Mini under the SET UP NEW AIRPLAY SPEAKER section.



4. Follow the on-screen instructions to complete the setup.

WiiM Mini Setup Using Apple Home App

- 1. Open the Home app on your iOS device.
- 2. Tap the + icon in the top-right corner of the screen. A new menu will pop up.
- 3. Select the Add or Scan Accessory option from the menu.



4. Select More options... in orange.



5. Choose the WiiM Mini from the list.



6. Follow the on-screen instructions to complete the setup.

Configure the WiiM Mini in the WiiM Home App

Once the WiiM Mini is set up, configure it in the WiiM Home app, including settings for audio input, audio output, room correction, and EQ adjustments.

For detailed instructions, see WiiM Mini Configuration.

Fill Your Home with Sound

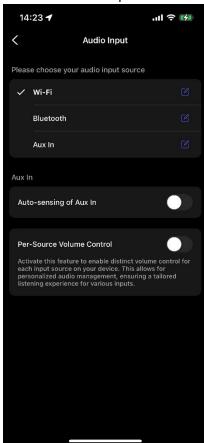
Now, play music from your favorite audio sources, including a TV, amplified turntable, CD player, or MP3 player. Alternatively, enjoy seamless streaming of your favorite music and radio stations over Wi-Fi or Bluetooth.

The WiiM Mini can be grouped with other WiiM devices to create a synchronized music experience across your home. You can further expand your listening experience by grouping the WiiM Mini with AirPlay 2-enabled or Alexa-enabled devices, enabling a seamless multi-room audio system. For more information, see Multi-room Audio and Stereo Pairing.

6. WiiM Mini Configuration

Select Audio Input Source and Configure Audio Input

- 1. Open the WiiM Home app.
- 2. Navigate to the **Devices** tab.
- 3. Tap the **Device Settings** icon of the WiiM Mini.
- 4. Under the **Sound** section, select **Audio Input**.
- 5. Select the audio input source and adjust related settings.

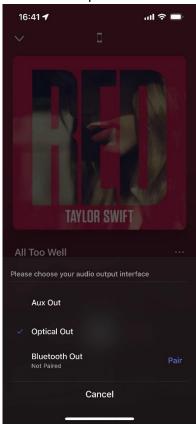


Select Audio Output Interface

Option 1: Select Audio Output Interface from Now Playing

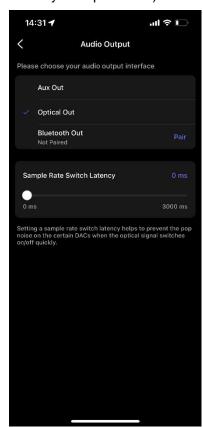
- 1. Open the WiiM Home app.
- 2. Go to the **Now Playing** page.
- 3. Tap the (()) icon at the bottom and select the output interface.





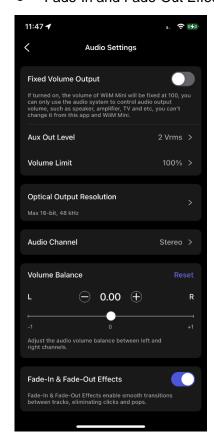
Option 2: Select Audio Output Interface from Device Settings

- 1. Open the WiiM Home app.
- 2. Navigate to the **Devices** tab.
- 3. Tap the **Device Settings** icon of the WiiM Mini.
- 4. Under the **Sound** section, tap **Audio Output**.
- 5. Select the output interface and adjust settings (e.g., Sample Rate Switch Latency for Optical Out).



Adjust Audio Output Settings

- 1. Open the WiiM Home app.
- 2. Navigate to the **Devices** tab.
- 3. Tap the **Device Settings** icon of the WiiM Mini.
- 4. Under the **Sound** section, select **Audio Settings**.
- 5. Adjust audio output settings depending on your preference and output interface:
 - Fixed Volume Output
 - Aux Out Level
 - Volume Limit
 - Optical Output Resolution
 - Audio Channel
 - Volume Balance
 - Fade-In and Fade-Out Effects



Room Correction

You can use the Room Correction feature in the WiiM Home app to enhance audio quality by adapting to your room's unique acoustic properties. This feature minimizes unwanted audio issues such as echoes, reflections, and standing waves, delivering a more balanced and accurate listening experience.

For detailed instructions, see Room Correction Guide.

Equalizer (EQ)

You can enhance your audio experience with the Per-Source EQ feature in the WiiM Home app.

Choose from 24 preset EQ settings for quick adjustments, utilize the 10-band Graphic EQ (GEQ) for intuitive control, or fine-tune your sound with the 10-band Parametric EQ (PEQ) for precise and detailed customization.

For detailed instructions, see **EQ Guide**.

7. Audio Output/Input via Bluetooth

Audio Input via Bluetooth

With Bluetooth, you can stream tunes from various devices like smartphones, tablets, TVs, and laptops. To start streaming, first pair your device with the WiiM Mini.

You can select any of the following options to pair your device with the WiiM Mini:

Option 1: Bluetooth Pairing Using Volume Buttons

Press and hold the **Volume +** and **Volume –** buttons on the WiiM Mini together for 2 seconds to initiate pairing mode.

Option 2: Bluetooth Pairing Using WiiM Voice Remote

Press and hold the **Play** button on the WiiM Voice Remote for 3 seconds or more to initiate pairing mode.

Option 3: Bluetooth Pairing Using WiiM Home App

If the WiiM Mini is connected to your network, you can initiate Bluetooth pairing mode in the WiiM Home app by selecting **Bluetooth** as source input in the **Browse** tab.

In this case, if there's no device connected to the WiiM Mini, the app will initiate pairing mode for the WiiM Mini automatically.

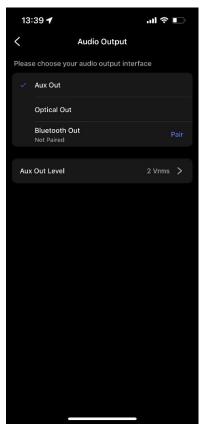
Note: The Bluetooth feature is compatible with A2DP and AVRCP profiles, and supports both SBC and AAC codecs.

Audio Output via Bluetooth

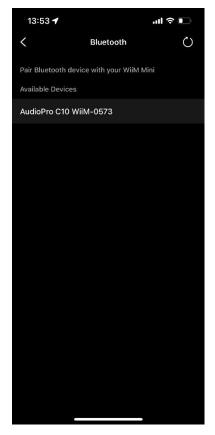
You can use the WiiM Mini as a Bluetooth source device, enabling seamless pairing with your Bluetooth speaker, headphone, or earphone.

Follow these steps to complete the Bluetooth pairing procedure for audio output:

- 1. Open the WiiM Home app on your iOS or Android device.
- 2. Select the **Devices** tab.
- 3. Tap the **Device Settings** icon of the WiiM Mini.
- 4. Select Audio Output, then tap Pair next to Bluetooth Out to initiate pairing.



5. Select the desired external Bluetooth device (e.g., a speaker) to pair.



You can also complete this procedure by selecting the Bluetooth output from the **Now Playing** page. For details, see <u>Select Audio Output Interface</u>.

8. Voice Control

Navigate and control the WiiM Mini with voice commands to search, play, stop, or skip music and more.

The WiiM Mini supports the following voice control services:

Amazon Alexa

Refer to How to Use Amazon Alexa with Your WiiM Device for instructions.

Siri

Refer to <u>Using Siri to Play Music on Your WiiM Device</u> for instructions.

9. Direct Control via Your Favorite App

You can stream from your favorite apps directly to your WiiM Mini with the following approaches.

Depending on your mobile devices and music service, there may be multiple ways to stream from your music app to WiiM devices. For example, if you use the Spotify app on an iOS device, you can use either Spotify Connect or AirPlay 2. However, Spotify Connect gives you better audio quality compared with AirPlay 2 and liberate your phone for other tasks.

Spotify Connect

Spotify Connect is a way of playing Spotify through your wireless-compatible device over Wi-Fi. That means you can play your favorite tunes anywhere in the house without the need for convoluted Bluetooth pairing between devices whenever you want to listen to music.

Spotify Connect works from smart phone, tablet or PC that functions as a remote control for Spotify. Both free and premium account are supported. For more information, visit Spotify Connect.

Using Spotify Connect ensures the best audio quality and streaming experience on the WiiM Mini.



Multi-room and Stereo Pairing

To use Spotify Connect for multi-room or stereo pairing, follow these instructions:

- 1. Group multiple WiiM devices in the WiiM Home app. For instructions, see WiiM Multi-room Audio/Stereo Pairing.
- 2. Stream Spotify to the grouped WiiM devices. The group name will match the group lead device.

License Information

The Spotify Software is subject to third-party licenses found here: https://www.spotify.com/connect/third-party-licenses

AirPlay 2

With the support of AirPlay 2, the WiiM Mini turns your speaker into an AirPlay 2-enabled speaker to stream the music you love from iOS, Mac, and PC devices or stream audio from Apple TV. It's an easy and affordable way to connect your Apple devices to your favorite audio equipment and upgrade it to an AirPlay 2 receiver.

How to Use AirPlay 2

AirPlay 2 lets you stream music from your iOS, Mac, PC, and Apple TV to the WiiM Mini over Wi-Fi.

For instructions, refer to How to Stream Audio with AirPlay on WiiM Devices.

AirPlay 2 Multi-room Audio

For instructions, refer to AirPlay 2 Multi-room Audio.

Notes:

- To use AirPlay 2, you need an Apple device running iOS 11.4 or later.
- Your Apple device and WiiM device must be connected to the same Wi-Fi network.
- For more information about AirPlay 2, visit https://www.apple.com/airplay.

TIDAL Connect

TIDAL is a global music streaming platform bringing fans closer to artists through unique experiences and the highest sound quality. Stream your favorite music seamlessly from the TIDAL app straight to your devices in the highest possible quality.

TIDAL Connect allows you to stream music from the TIDAL app to compatible devices. It's similar to Apple AirPlay and Spotify Connect in that it lets users stream music to connected devices from within the app. This means you can use your smartphone or computer as a controller to play music on the WiiM Mini.

How to Use TIDAL Connect

- 1. Launch the TIDAL app on your mobile device.
- 2. Play a song and go to the **Now Playing** screen.
- 3. Tap the Cast icon at the top right.
- 4. Select your WiiM device from the list.

Amazon Music Cast (Alexa Cast)

Alexa Cast is a feature that allows you to play and control music on any of your Alexa devices from your Amazon Music iOS or Android app. You can discover all your Alexa devices from your music app. Your devices do not need to be on the same Wi-Fi network as your mobile device. You can target any device from anywhere. Once you pick a target device, the music you selected on your app will start playing on the chosen device. You can now follow along on your app. When you tap skip on your app, your device skips to the next track. Your app becomes a remote control for the device.

WiiM Mini and Alexa Cast

The WiiM Mini is one of the first devices that support Alexa Cast with bit-perfect output up to 192 kHz/24-bit. You can stream Amazon Music Ultra HD directly from the native Amazon Music app to the WiiM Mini, delivering the highest possible audio quality.

How to Use Alexa Cast

- Log In: Ensure you are logged into your Amazon account for Alexa on the WiiM Home app.
- 2. **Update**: Have the latest version of the Amazon Music app.
- 3. Cast Music: On the Now Playing screen, tap the Casting icon in the top right.
- 4. Select Device: Choose the WiiM Mini from the list.

Control Options

- Voice Control: Use voice commands to control music on the device.
- App Control: Switch between voice and app control for convenience.
- Stop Casting: To stop casting and resume playing on your phone, open the
 device list and tap the Disconnect button.

Amazon Alexa Multi-room Audio

Amazon Alexa can also be used for multi-room audio, allowing you to play music in sync on multiple speakers from compatible brands and the WiiM Mini using the Amazon Alexa app.

For detailed instructions, see Amazon Alexa Multi-room Audio.

DLNA

DLNA (Digital Living Network Alliance) sets standards for home networking devices to communicate and share media files seamlessly. The WiiM Mini is a DLNA-compatible digital media renderer (DMR).

How It Works

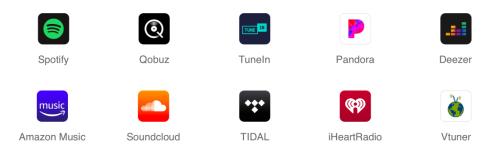
When connected to the same network as your other DLNA devices or apps, the WiiM Mini automatically appears in the menus of these networked components. Your computer and other media devices will discover and recognize the WiiM Mini without any additional setup.

Controlling and Streaming

You can control the WiiM Mini from other DLNA digital media players or controllers. Additionally, you can stream content from DLNA digital media servers directly to the WiiM Mini, with no extra configuration required.

10. All Music in One App

With the free WiiM Home app, you can control your content and WiiM devices from one place. The app supports many popular music streaming services such as Spotify, iHeartRadio, TIDAL, Amazon Music, SoundCloud, Qobuz, Pandora, Deezer, TuneIn, and more.



The WiiM Home app offers the follow features:

- Stream from Any Source: Enjoy seamless playback from streaming services, NAS, or other connected storage.
- All-in-One Control: Manage your music services and devices effortlessly in a single app for complete, centralized control.
- **Customized Listening Experience**: Tailor your listening experience with adjustable EQ settings, sleep timers, and scheduled music alarms.
- Effortless Discovery: Instantly find and save your favorite tracks using WiiM's universal search, scanning through all your music sources.
- Whole Home Music: Enjoy multi-room music by grouping devices for synchronized playback or play different music on each speaker.
- Built-in Support Center Access: Quickly access our Support Center directly within the app, giving you instant assistance whenever you need it.

For more information, refer to WiiM Home App User Manual.

11. Multi-room Audio and Stereo Pairing

With the WiiM Mini, it's easy to build your wireless multi-room sound system with other AirPlay 2 speakers or Amazon Echo (or Alexa built-in devices). You can create an even more flexible multi-room sound system with multiple WiiM devices and your existing audio devices.

Notes:

- Alexa multi-room must be set up using the Alexa app.
- Alexa multi-room features support network-based music services only.
- To enable multi-room audio for other input sources, such as Aux-In or Bluetooth, the multi-room group must consist exclusively of WiiM devices.

WiiM Multi-room Audio/Stereo Pairing

With our proprietary multi-room technology, the WiiM Mini supports all types of audio inputs—Wi-Fi, Bluetooth, analog Aux—as sources for your multi-room system.

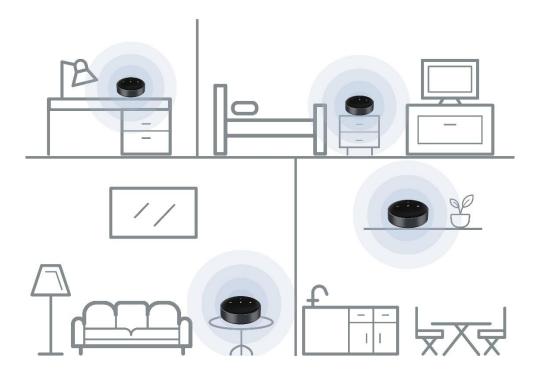
WiiM Multi-room Setup

For example, to set up a multi-room system with the **Aux In** source input, follow the steps below:

- 1. Insert the 3.5mm Aux cable into the **Aux In** port on the WiiM Mini.
- Connect the other end of the cable to the Aux Out or Line Out port on your source device, e.g. a record player.
- 3. Open the WiiM Home app.
- 4. Go to the **Browse** tab, then under the **Source Input** section, select **Aux In** as the audio source.
- 5. Set up a multi-room music group with the WiiM Mini:
 - Go to the **Devices** tab and select the WiiM Mini connected to your source device.
 - b) Tap the **Group** icon in the upper right corner of the device box.
 - c) Choose other desired WiiM devices to include in the multi-room audio group.

Now, the music from the connected device will play across your multi-room music group.

You can follow the same procedure to set up a WiiM multi-room system with any other source input supported by your source device.



WiiM Stereo Pairing

In addition, you can group two speakers connected to two WiiM devices as a stereo pair for a wider, more immersive sound stage. This feature supports all input options, ensuring compatibility with virtually every music listening preference.

To use stereo pairing, follow the steps below:

- 1. Set up two WiiM devices.
- 2. Open the WiiM Home app.
- 3. Select a WiiM device and tap the **Group** icon in the upper right corner.
- 4. Select the other WiiM device, then tap **Done**.
- 5. Tap the icon and set the two WiiM devices to L and R, respectively.
- 6. Go to the **Browse** tab, then select your music to play.

AirPlay 2 Multi-room Audio

For instructions, refer to How to Add Multi-room Audio to Your WiiM Devices with AirPlay.

Amazon Alexa Multi-room Audio

- 1. Open the Amazon Alexa app on your smartphone or tablet.
- 2. Tap **Devices** at the bottom of the screen.
- 3. Tap the + icon in the top right corner of the screen.
- 4. In the menu that appears, choose **Combine speakers**, then select **Multi-room** music.
- 5. Select the **Echo** and WiiM devices you want to include in your multi-room music setup, then tap **Next**.
- 6. Assign a group name for the multi-room music setup (e.g., "Bedroom").
- 7. Follow the on-screen prompts to complete the setup.

Note: When used with Amazon Echo or other Amazon devices, the WiiM Mini functions as an audio receiver and cannot transmit its physical audio input (**Aux In**) to these Amazon devices over Wi-Fi.

12. Advanced Features

Firmware Updates

- The WiiM Mini updates automatically when connected to your network
- Updates occur silently between 2:00 a.m. and 5:00 a.m. local time, with no sound or notifications during the process. Upon opening the app after the upgrade, you'll see the latest updates applied to the WiiM Mini.

13. FAQ and Support

FAQ

If you experience problems with the audio streamer, try these solutions first:

• What can I do if my WiiM Home app can't find the device?

- o Make sure your network is available and the device is powered on properly.
- Check the LED on the device is solid white.
- Make sure your smartphone/tablet and WiiM Mini are connected to the same Wi-Fi network.
- o Make sure you have the latest version of the WiiM Home app on your device.
- Try restarting your smartphone/tablet, WiiM Mini, and router.
- If still can't find, reconfigure the device to the network.

For more instructions, refer to Troubleshooting: WiiM Device Not Found in WiiM Home App.

What can I do if my device has no sound?

If you are not getting any sound from your WiiM Mini, make sure you have checked the following things:

- Volume Levels: Ensure that the volume is turned up both in the WiiM Home app and on your external device (e.g., AV receiver) connected to the WiiM Mini.
- Input Source: Make sure the correct input source is selected on your receiver or device that corresponds to the output of the WiiM Mini.
- Audio Output Selection: Confirm that the correct audio output is selected in the WiiM Home app.
- Physical Connections: Verify that all physical connections between the WiiM Mini and your receiver or device are plugged in correctly and securely.

For more instructions, refer to <u>Troubleshooting: How to Resolve No Sound Issues with</u> Your WiiM Device.

Audio dropout or no sound on AirPlay 2?

If you experience no sound with AirPlay 2 but has sound with other service, follow these steps to troubleshoot the issue:

 Check the music app: Ensure the progress bar in the music app on your Apple device is moving during playback.

- Check network connectivity: Ensure the signal of your WiiM Mini and your streaming device are strong. Move your WiiM Mini and the streaming device closer to your wireless router or access point to improve the signal strength.
- Restart your network devices: Power cycle your router, modem, WiiM Mini, and any streaming devices. This simple step can often resolve connectivity issues.
- Update firmware and software: Ensure that your WiiM Mini and all devices involved in the AirPlay 2 setup have the latest firmware and software updates installed. Additionally, update your streaming device (e.g., iPhone, iPad, Mac) to the latest version of iOS, iPadOS or macOS.
- Reset your WiiM Mini: As a last resort, you can try performing a factory reset on your WiiM Mini and set it up again.

For more instructions, refer to <u>Troubleshooting: How to Fix AirPlay Dropouts</u>.

• How can I reset my device?

- Press and hold the Play/Pause button on the WiiM Mini for 10 seconds until you will hear the voice prompts of "Restore to factory setting" and see the light flashing red and white.
- Factory reset clears all source, volume, and network settings for the WiiM Mini and returns it back to the original factory settings.

• What can I do if my device cannot power on normally?

- o Check the device LED status and ensure it's on.
- Make sure to use the provided USB power adapter or a USB power adapter rated for 5V, 1A.

Support

If you are unable to resolve your issue, please follow one of the methods below to reach out to us for assistance:

- WiiM Home app: Go to More > Feedback or More > FAQ to submit a ticket. You
 will receive email response from WiiM Support in the next 24 hours.
- FAQ Website: Find more FAQ at https://faq.wiimhome.com/en/support/solutions.
- **Email**: Send an email to support@wiimhome.com for assistance.
- WiiM Mini Support Website: Visit https://wiimhome.com/support/wiimmini.

14. Public Network Interfaces and Services

This chapter describes the public network interfaces (Wi-Fi and Bluetooth) on the WiiM Mini and the services they support.

Bluetooth Interface

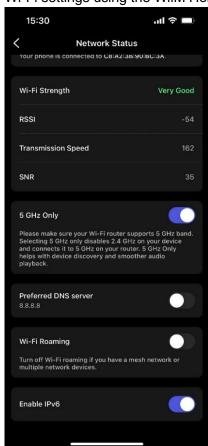
The Bluetooth interface is used for both Wi-Fi setup and audio streaming.

- Supported Protocols/Services: Bluetooth 5.0 LE (A2DP Sink and A2DP Source)
 - BLE Broadcasting: BLE broadcasting is automatically enabled during Wi-Fi setup, allowing the WiiM Home app to discover the device and connect it to the Wi-Fi network. For details, see <u>WiiM Mini Setup via Wi-Fi</u>.
 - A2DP Sink: Supports receiving audio streams from mobile devices, tablets, etc., for audio playback via Bluetooth.
 - A2DP Source: Output audio to Bluetooth speakers or headphones for wireless audio streaming.
- Configuration: Bluetooth pairing is required for audio streaming. For details, see Audio Output/Input via Bluetooth.

Wi-Fi Interface

The Wi-Fi interface allows the device to connect to a wireless network, providing flexible setup and streaming options without the need for a wired connection.

- **Supported Standards**: IEEE 802.11a/b/g/n/ac (2.4GHz and 5GHz bands)
- Supported Protocols/Services:
 - Wi-Fi Client Mode: By default, the WiiM Mini is set to Wi-Fi Client Mode, automatically connecting to a known Wi-Fi network.
 - AP Mode: Allows the WiiM Mini to be set up via Wi-Fi. The AP mode is automatically enabled when the WiiM Mini enters setup mode.
 - o **mDNS**: Allows the WiiM Mini to be discovered within the local network.
 - UPnP/DLNA: Enables media sharing and control with compatible devices.
- **Configuration**: Once connected via Wi-Fi, check connection status and modify Wi-Fi settings using the WiiM Home app.



15. Important Safety Instructions

- Read these instructions carefully.
- 2. Keep these instructions for future reference.
- 3. Heed all warnings.
- 4. Follow all instructions.
- 5. Do not use this apparatus near water.
- 6. Clean only with a dry cloth.
- Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.
- 8. Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
- 9. Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.
- 10. Only use attachments/accessories specified by the manufacturer.
- 11. Unplug this apparatus during lightning storms or when unused for long periods of time
- 12. Refer all servicing to qualified personnel. Servicing is required when the apparatus has been damaged in any way, such as external power supply, powersupply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.
- 13. To reduce the risk of fire or electrical shock, do NOT expose this product to rain, liquids or moisture.
- 14. Do NOT expose this product to dripping or splashing, and do not place objects filled with liquids, such as vases, on or near the product.
- 15. Keep the product away from fire and heat sources. Do NOT place naked flame sources, such as lighted candles, on or near the product.
- 16. Do NOT make unauthorized alterations to this product.
- 17. Do NOT use in vehicles or boats.
- 18. Use this product only with the power supply provided.
- 19. Where the mains plug or an appliance coupler is used as the disconnect device, the disconnect device shall remain readily operable.
- 20. Due to ventilation requirements, does not recommend placing the product in a confined space such as in a wall cavity or in an enclosed cabinet.
- 21. Contains small parts which may be a choking hazard. Not suitable for children under age 3.

- 22. This product contains magnetic material. Consult your physician on whether this might affect your implantable medical device.
- 23. Do not place or install the bracket or product near any heat sources, such as fireplaces, radiators, heat registers, or other apparatus (including amplifiers) that produce heat.

16. CE/FCC/IC/TELEC Statements

FCC Statement:

This device complies with part 15 of the FCC rules. Operation is subject to the following two conditions:

- (1) this device may not cause harmful interference, and
- (2) this device must accept any interference received, including interference that may cause undesired operation.

NOTE: The manufacturer is not responsible for any radio or TV interference caused by unauthorized modifications or changes to this equipment. Such modifications or changes could void the user's authority to operate the equipment.

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- -Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- -Consult the dealer or an experienced radio/TV technician for help.

Federal Communication Commission (FCC) Radiation Exposure Statement When using the product, maintain a distance of 20cm from the body to ensure compliance with RF exposure requirements.

FCC ID: 2ANOG-ASR001

CE Statement:

RF exposure information: The Maximum Permissible Exposure (MPE) level has been calculated based on a distance of d=20 cm between the device and the human body. To maintain compliance with RF exposure requirement, use product that maintain a 20cm distance between the device and human body.

Do not use the device in the environment at too high or too low temperature, never expose the device under strong sunshine or too wet environment.

The suitable temperature for the product and accessories is 0°C-40°C.

Operating Frequency Range, Max Output Power

Bluetooth: 2402MHz ~ 2480MHz, 9.28dBm WLAN 2.4GHz: 2412MHz ~ 2472MHz, 17.18dBm WLAN 5GHz: 5150MHz ~ 5825MHz, 15.96dBm

The device for operation in the band 5150~5350 MHz is only for indoor use to reduce the

potential for harmful interference to co-channel mobile satellite systems.

!	AT	BE	BG	CH	CY	CZ	DE	DK
	EE	EL	ES	FI	FR	HR	HU	IE
	IS	IT	LI	LT	LU	LV	MT	NL
	PL	PT	RO	SE	SI	SK	TR	UK(NI)
	UK							

This product can be used across EU member states.

EU Regulatory Conformance

Hereby, Linkplay Technology Inc. Corporation declares that this device is in compliance with the essential requirements and other relevant provisions of Directive 2014/53/EU. For the declaration of conformity, visit the Web site https://wiimhome.com/guides



IC Statement:

This device complies with Industry Canada licence-exempt RSS standard(s). Operation is subject to the following two conditions:

- (1) this device may not cause interference, and
- (2) this device must accept any interference, including interference that may cause undesired operation of the device.

Under Industry Canada regulations, this radio transmitter may only operate using an antenna of a type and maximum (or lesser) gain approved for the transmitter by Industry Canada. To reduce potential radio interference to other users, the antenna type and its gain should be so chosen that the equivalent isotropically radiated power (e.i.r.p.) is not more than that necessary for successful communication.

Radiation Exposure Statement:

This equipment complies with IC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator & your body.

The device for operation in the band 5150–5250 MHz is only for indoor use to reduce the potential for harmful interference to co-channel mobile satellite systems.

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radioexempts de licence. L'exploitation est autorisée aux deux conditions suivantes:

- (1) l'appareil ne doit pas produire de brouillage, et
- (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

Conformément à la réglementation d'Industrie Canada, le présent émetteur radio peut fonctionner avec une antenne d'un type et d'un gain maximal (ou inférieur) approuvé pour l'émetteur par Industrie Canada. Dans le but de réduire les risques de brouillage radioélectrique à l'intention des autres utilisateurs, il faut choisir le type d'antenne et son gain de sorte que la puissance isotrope rayonnée équivalente (p.i.r.e.) ne dépasse pas l'intensité nécessaire à l'établissement d'une communication satisfaisante.

Déclaration d'exposition aux radiations:

Cet équipement est conforme aux limites d'exposition aux rayonnements IC établies pour un environnement non contrôlé. Cet équipement doit être installé et utilisé avec un minimum de 20 cm de distance entre la source de rayonnement et votre corps.

IC: 30828-ASR001