



Model Name: WiiM Ultra
Model Number: ASR004

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1. INTRODUCTION

At WiiM, our goal is to offer you the simplest and most affordable Hi-Fi, lossless audio systems. Every product we create showcases top-tier design and an intuitive user interface.

With our patented audio streaming solution integrated into all our premium products and user-friendly mobile apps, you can effortlessly enjoy music throughout your entire home.

Introducing the WiiM Ultra, the heart of your home audio system. Designed to refine the way you experience music, movie, and more, WiiM Ultra combines power, versatility, and simplicity like never before. Whether you're an audiophile or a home theater enthusiast, WiiM Ultra delivers exceptional sound quality, reliable connectivity, and intuitive control. With support for streaming services, voice assistants, and automatic software updates, it's the amplifier that keeps

smarter. Elevate your audio experience with WiiM Ultra and unlock a world of immersive sound that's tailored to your unique preferences.

It features an ESS Sabre premium DAC, leveraging ESS' patented 32-bit HyperStream DAC architecture to deliver industry-leading low distortion and wide dynamic range. It boasts a Signal-to-Noise Ratio (SNR) of 135 dB (A-wt) and a Total Harmonic Distortion plus Noise (THD+N) of -120 dB across sample rates from 44.1k to 192k, courtesy of its ultra-low noise clock and optimized power and circuit design. Additionally, it features a cutting-edge TI Burr-Brown PCM1861 ADC, which achieves a 110 dB SNR for analog-to-digital conversion, making it the go-to choice for input sources like turntables, MP3 players, or TVs.

Simply add your speaker to the WiiM Ultra, and control it using the user-friendly WiiM Home App, popular platforms like Spotify, TIDAL, Amazon Music, or any Chromecast-enabled apps. Voice control is also a breeze through iPhone, HomePod, compatible Echo and Google Home devices, as well as the included voice remote.

Create synchronized groups with HomePods, Echoes, Google Home, AirPlay devices, Alexa-compatible devices, or additional WiiM devices, and play the same music throughout your home or different songs in separate rooms.

Elevate your passive speaker with the smart and amplification capabilities of the WiiM Ultra, delivering high-fidelity, gapless music and enhanced TV audio, all encapsulated within the exceptional innovation of WiiM.

TYPICAL USE CASES

The WiiM Ultra is designed to simply add your speaker and bring it the wireless streaming capabilities and smart features. Here are a few common use cases for the WiiM Ultra:

- I. **Connect and Power your Favorite Passive Speakers:** Connect and power your traditional wired speakers, including bookshelf, floor-standing, in-wall, in-ceiling or outdoor speakers, integrating them into the wireless streaming system for an elevated audio experience.
- II. **Streaming Music and Music Libraries:** Stream music using Apple AirPlay , Google Chromecast, Alexa Cast, Spotify Connect or LinkPlay streaming platform, allowing you to access hundreds streaming services such as Spotify, Amazon Music, or Tidal. Plus, stream your personal music library stored on a computer or network-attached storage device for seamless playback.
- III. **Podcasts and Internet Radio:** In addition to streaming music, the WiiM Ultra 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.
- IV. **High-Quality Audio:** It supports bit-perfect, high-resolution audio up to 192k/24-bit and delivers rich, clear, and undistorted sound at higher volumes.
- V. **Multi-Room Audio:** The WiiM Ultra is compatible with other 3rd party popular smart speakers and components, or another WiiM/Linkplay device, allowing you to create a whole-home audio system with synchronized music playback in multiple rooms.
- VI. **Smart Home Integration:** The WiiM Ultra supports voice control through platforms like Apple Siri, Amazon Alexa or Google Assistant, allowing you to control your music hands-free and integrate with other smart home devices.
- VII. **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 Ultra can connect to the analog or digital outputs 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, all in sync.
- VIII. **Home Theater Integration:** Elevate your entertainment experience effortlessly with the WiiM Ultra's HDMI ARC port. Plug in your TV and immerse yourself in rich stereo sound for shows, movies, and video games. Craving that extra oomph? Simply add a powered subwoofer to take your audio to cinematic levels. With minimal setup required, the WiiM Ultra offers a seamlessly integrated AV system that turns your living room into a home theater paradise.

OTHER DEVICES NEEDED TO USE WIIM ULTRA

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

- **Passive Speakers:** The WiiM Ultra is designed to connect to your passive speakers such as bookshelf, floor-standing, in-wall, in-ceiling or outdoor speakers. Make sure you have the appropriate speakers in place.
- **Wi-Fi Network:** The WiiM Ultra 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 Ultra. 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 Ultra.
- **Power Source:** The WiiM Ultra needs to be connected to a power source using the included power cable. Ensure that you have an electrical outlet nearby to power the device.
- **Ethernet Cable (optional):** While the WiiM Ultra primarily connects to your Wi-Fi network, it also has an Ethernet port. If you prefer a wired connection for added stability, you can use an Ethernet cable to connect the WiiM Ultra directly to your router or network switch.

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

AUDIO DEVICES WORK WITH WIIM ULTRA

The WiiM Ultra can work with your passive speakers, including bookshelf, floor-standing, in-wall, in-ceiling or outdoor speakers. Besides the network and Bluetooth streaming music, it can play audio from TV, record player and MP3 player.

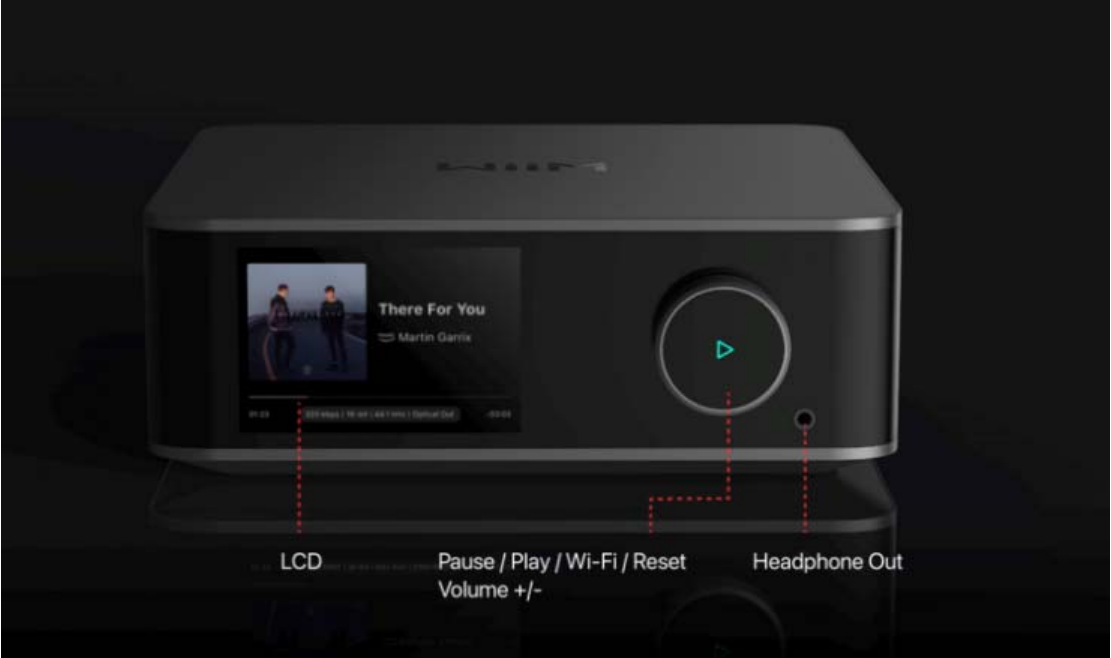
2. WHAT'S IN BOX

- WiiM Ultra
- Quick start guide
- 100~240v AC power cable
- HDMI cable
- RCA audio cable
- Optical audio cable

3. TECHNICAL SPECIFICATIONS

Feature	Description
Power Input	100-240V 50/60Hz AC Power
Audio Output Quality	SNR: 98 dB THD+N: 0.002% (-92 dB)
Network	802.11 b/g/n/ac/ax 2.4 GHz and 5 GHz dual band Wi-Fi 10/100M Ethernet
Bluetooth	Bluetooth 5.3, A2DP, AVRCP Support SBC, AAC Codec
Audio Input	HDMI ARC, Optical, RCA
Audio Output	Passive Speaker Terminal Subwoofer Output
Audio Codec	MP3, AAC, ALAC, APE, FLAC, WAV, WMA, OGG, AIFF
Streaming Protocol	AirPlay , Chromecast Audio, Spotify Connect, TIDAL Connect, Alexa Cast, DLNA, Qplay 2.0, Squeezelite
Streaming Services in App	Spotify, Amazon Music, Deezer, TuneIn, Tidal, Qobuz, SoundCloud, Pandora, iHeartRadio, vTuner, Napster, Sound Machine, etc.
Controls	Volume knob, play/pause, and more

4. LIGHT AND CONTRO



CONTROL AND INPUT/OUT INTERFACE

IO Interface	Functions
Power	100-240V 50/60Hz AC Power
HDMI	HDMI in
USB	USB in
Line In	Standard RCA, Analog audio in
Line out	Standard RCA, Analog audio out
Optical In	Digital Optical audio in
Optical out	Digital Optical audio out
Headphone	3.5 Headphone output
Phono In	Phono input
SUB OUT	Subwoofer output
Coax OUT	Coax output
12V Trigger Out	Automatically turns on your stereo or receiver
Mic	Used to auto-measure the audio path latency for multiroom sync (i.e., AirPlay , Alexa MRM, Chromecast MRM, or Linkplay MRM, etc.)
LAN	10/100Mbps Ethernet port

5. HOW TO SET UP

CONNECT AUDIO INPUT PORT ON WiiM ULTRA

The WiiM Ultra features three distinct audio input interfaces: the analog LINE IN, the digital optical (TOSLINK) SPDIF IN, and HDMI ARC.

This versatile device functions as both a steamer and a network audio transmitter through Wi-Fi or Ethernet. You have the capability to stream analog audio input from sources such as CD players, vinyl players, TVs, or computers to other WiiM devices like WiiM Pro Plus, Pro, or Mini devices, as well as to AirPlay enabled devices (using AirPlay Cast), either singly or in multiple combinations.

Scenario 1: Analog Audio Source Input (CD Player, Vinyl Player, or Computer)

Connect your source device to the WiiM Ultra's LINE IN port using a line-in cable. One of two types' cable as the follows might be used, i.e., RCA to RCA or Aux to RCA.

Connect to WiiM Ultra's Line IN port





Connect to CD player, vinyl player, TV or computer

Steps to set up the WiiM Ultra with the line-in input:

(Perform step 3/4/5 after WiiM Home App is installed)

1. Insert the line-in cable into the LINE IN port located at the back of the WiiM Ultra.
2. Connect the other end of the cable to the AUX or LINE OUT port on your audio source device (CD player, vinyl player, TV, or computer).
3. In the WiiM Home app, navigate to the 'Browse' tab, choose 'Select source on device,' then opt for 'LINE IN' to set it as your audio distribution source.
4. For creating a multiroom music group with your WiiM Ultra, access the Devices section in the WiiM Home app. Select the WiiM Ultra linked to your LINE-IN device, tap the group button (displaying a "link" icon within a box) in the upper-right corner of the device box, and choose the WiiM Ultra you wish to transmit audio to.
5. Once done, the music from the device connected to the WiiM Ultra will play across your multiroom music group.

Scenario 2: Digital Audio Source Input (TV or PC)

Connect your source device to the WiiM Ultra's SPDIF IN (optical) port using an optical cable or HDMI ARC with an HDMI cable.



Steps to set up the WiiM Ultra with the optical or HDMI IN are the same as Line-in, replacing Line-in with Optical IN or HDMI.

Notes:

- To connect your TV to the WiiM Ultra using an HDMI cable, please select HDMI port on your TV marked as 'HDMI ARC'. Please note that connecting to other HDMI ports will not transmit sound to the WiiM Ultra.
- You can also enable "Autosense" on the WiiM Ultra to automatically play your Line-In, Optical-In or HDMI ARC source when WiiM Ultra detects a signal. You can enable this feature from the WiiM Home App.
- WiiM Ultra has a built-in EQ to process the audio input based on your taste. You can also control the audio volume in the App remotely without adjusting your audio input.
- Some source devices may require a preamp. For example, some turntables do not have a preamp built-in, so you will need to connect your turntable to an

external preamp and then connect the preamp to WiiM Ultra.

CONNECT SPEAKER OUT PORT

The WiiM Ultra features one pair of passive speaker terminals (shown in figure below) and a separate subwoofer out to connect to powered subwoofer. You can output audio to speaker terminals in stereo or dual mono mode.

Setting Up WiiM Ultra Audio Output:

1. Depending on your preferred audio equipment, select the appropriate connection method to your passive speaker: Banana plugs (see figure below) or straight wired connection. Banana plugs are recommended for the best sound and more reliable performance.
2. Connect the other end of the speaker wire to your passive speakers.
3. You're now ready to begin playing audio on your speakers.



POWER THE WIIIM ULTRA

For optimal performance of your WiiM Ultra, please ensure to use the AC power cable that is included with your device. This cable is specifically designed to support a wide range of voltages, accommodating 100-240V AC with a maximum current of 4A. This flexibility ensures that your WiiM Ultra can be safely and effectively powered in various locations.

Important Safety Warning: Before connecting the power to your WiiM Ultra, it is crucial to first connect your speakers and any other audio ports. This sequence is important to safeguard both your equipment and the quality of your audio experience. By following this procedure, you ensure a safe and efficient setup process for your WiiM Ultra.

CONNECT TO YOUR NETWORK WITH THE WIIM HOME APP

You can use Ethernet or Wi-Fi to connect WiiM Ultra to your network. Before the setup, please download the WiiM Home App. If you want to use the Wi-Fi to connect your WiiM Ultra, please have your network password ready.

- **DOWNLOAD THE WIIM HOME APP**
- **Wi-Fi OR ETHERNET SETUP**
 - Power on the WiiM Ultra and wait 30 seconds until it fully boots up.
 - Open the WiiM Home App.
 - Click on the device you want to configure.
 - Select the network and enter the correct network password.
(Ethernet doesn't have this step)

If you use an **iOS system**, you can also use Apple Wireless Accessory Configuration (WAC) protocol or Home App to set up the device.

- **SETUP with Apple WAC**
 - Power on WiiM Ultra and wait 30 seconds until it fully boots up.–
 - Open iPhone settings and tap your selected device's name on the WAC setup section
- **SETUP with Apple Home App**
 - Tap the Home app located on the home screen of the iOS device.
 - Tap the "+" button located at the top-right corner of the screen.
 - Tap "Add Accessory."
 - Tap "Don't Have a Code or Can't Scan?"
 - Tap your selected device, which **MUST** be listed under "Nearby Accessories."

FILL YOUR HOME WITH SOUND

Immerse yourself in your favorite music and radio stations through seamless Wi-Fi or Bluetooth streaming. With multiple WiiM devices, enjoy music throughout your entire home. Alternatively, connect stereo components like an amplified turntable, CD player, or MP3 player, and simultaneously cast music to multiple WiiM Ultra, Pro Plus, Pro, Mini connected speakers, or AirPlay compatible devices via AirPlay Cast.

Expand your audio experience by grouping with AirPlay enabled devices, Amazon Echo,

or Google Home, creating a synchronized whole-home audio setup across multiple rooms. Note that grouping with non-WiiM or LinkPlay devices requires the respective apps like Alexa or Google Home app.

When using Amazon Echo or Google Home devices in conjunction with your WiiM Ultra, it's essential to understand the specific capabilities and limitations of this setup. When grouping with Amazon Echo or Google Home devices, the WiiM Ultra primarily functions as an audio receiver, playing multiroom audio with Echo or Google Home devices.

It's important to note that the WiiM Ultra cannot transmit its physical audio inputs, such as those from Line-In, HDMI ARC or Optical-In connections, to non-WiiM devices or devices that do not support AirPlay, including Amazon Echo and Google Home devices, over Wi-Fi.

However, the WiiM Ultra is capable of transmitting its audio input to AirPlay-compatible speakers. This includes popular options like the Apple HomePod, Sonos speakers, and other devices supporting AirPlay technology.

By understanding these specific functionalities, you can optimize your use of the WiiM Ultra in a smart home environment, ensuring seamless integration with your preferred devices.

AUDIO OUTPUT VIA BLUETOOTH OUT

You can use the WiiM Ultra as a Bluetooth source device, enabling seamless pairing with your Bluetooth speakers or headsets.

Please follow the steps below to pair with your Bluetooth audio devices:

- 1) Launch the WiiM Home App on your iOS or Android device.
- 2) Select '**Device**' Tab and tap the gear icon for device settings.
- 3) Select the '**Audio Output**' setting and opt for '**Bluetooth**' to establish a connection with an external Bluetooth receiver, such as an amplifier or speaker.
- 4) Start playing music.

6. VOICE CONTROL

With voice control, you can navigate and interact with your device to search, play, stop, or skip music and more.

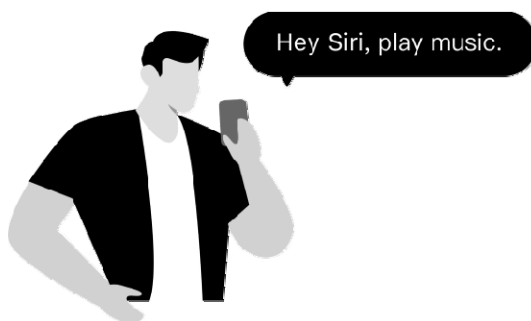
When voice control is configured, you can speak commands as you would act by touch.

WORKS WITH ALEXA

Download the Amazon Alexa App and turn on Amazon devices or 3rd party Alexa built-in devices.

- Setup your Amazon account for your WiiM device
If your WiiM device is not logged into your Amazon account in the WiiM Home App,
 - Open WiiM Home App, click "Browse -> Amazon Alexa -> Sign in to Amazon."
 - Log in to your Amazon account
- Open the Amazon Alexa app
- Tap the "Devices" at the bottom of the page.
- Tap the "+" in the top right corner.
- Tap "Combine speakers," then select "Multi-room music."
- Select the configured Echo or other Amazon devices and the configured WiiM Ultra device
- Click "Next" and choose the group name (i.e., Bedroom)
- Amazon Alexa app prompts that the group has been created.
- Try "Alexa, play some music in the Bedroom" for the multi-room audio with Echo.
- Or
- Choose the WiiM device as the preferred speaker. Thus, you don't need to say your device name when using Alexa.

WORKS WITH SIRI



- Configure one to more devices
- Open a music app (like Apple Music) and select a track to play

- Tap .
- Select your speaker/speakers or Home Pod
- Say “Hey Siri, stop the music/Play music” on your phone or HomePod

WORKS WITH GOOGLE VOICE ASSISTANT

Let’s assume you’ve set up your Google Home and WiiM Ultra separately. Now, you must link them together in the Google Home app for Android or iOS:

- Open the Google Home app, and you will find the WiiM Ultra enabled as a Chromecast audio device under “Local devices.”
- Tap the name of the WiiM Ultra and enter the device control UI.
- Tap the “Add to a room” button under the volume circle to add WiiM Ultra to one room.
- You can use voice to control the WiiM Ultra with your Google Home or Android devices.



7. DIRECT CONTROL VIA YOUR FAVORITE APP

You can stream from your favorite apps directly to your WiiM Ultra 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. I.e., if you use Spotify App on iOS device, you can use either Spotify Connect or AirPlay . However, Spotify Connect gives you better audio quality compared with AirPlay and liberate your phone for other tasks.

SPOTIFY CONNECT

Use your phone, tablet, or computer as a remote control for Spotify. Go to spotify.com/connect to learn how.

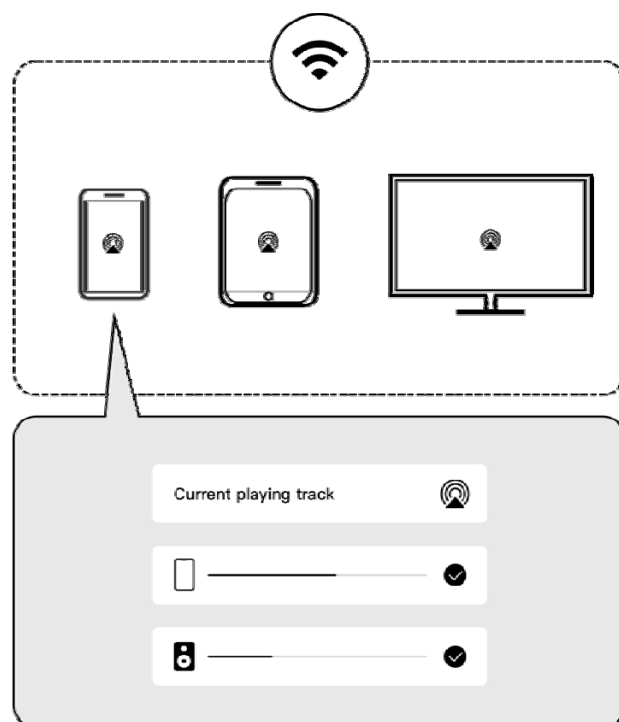


The Spotify Software is subject to third-party licenses found here:
<https://www.spotify.com/connect/third-party-licenses>

AIRPLAY

WiiM device turns your speaker into an AirPlay 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 to an AirPlay receiver.

AirPlay lets you stream music from your iOS, MAC, PC, and Apple TV device to more than one product to create a multiroom audio experience over Wi-Fi.

**NOTES:**

- To use AirPlay , 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 , visit: <https://www.apple.com/airplay>

You can either start the AirPlay streaming from the music App or the iOS control center. The steps are shown below for both cases.

STREAM AUDIO FROM THE CONTROL CENTER

1. On your Apple device, open the Control Center.
2. Tap and hold the audio card in the top-right corner of the screen, then tap the AirPlay icon .
3. Select your WiiM device.

STREAM AUDIO FROM AN APP

1. Open a music app (like Apple Music) and select a track to play.
2. Tap .
3. Select your WiiM device.

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 TIDAL App straight to your devices in the highest possible quality.

TIDAL Connect is a feature that 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 WiiM device.

WiiM Ultra also supports MQA decoder for the TIDAL Connect up to 24-bits/96 kHz and Hi-Res FLAC up to 24-bits/192 kHz if you subscribe to TIDAL Hi-Fi+ tier.

To use TIDAL Connect, you need to launch the TIDAL App on your mobile device. Then find and play a song you like and head to the 'Now Playing' screen. Touch on the 'cast' icon at the top right on the 'Now Playing' screen and select a 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 Ultra is one of the first devices that support Alexa Cast with bit-perfect output up to 192 kHz/24-bit. Thus, you can listen to your Amazon Music Ultra HD directly from the native Amazon Music to WiiM Ultra in the highest possible quality.

To use this, please log in to your Amazon account for Amazon Alexa on the WiiM Home App. Also, make sure you have the latest version of the Amazon Music app. Next, on the "Now Playing" screen, you will see a casting icon in the top right. Tapping the icon will bring up the list of all your available Alexa devices for you to select.

Once you have started casting, you can still use voice to control the music playing on the device. You can switch between using your voice and your App based on your convenience. When you want to stop casting to a device and resume playing on your phone, you will have to pull up the device list and tap the disconnect button.

CHROMECAST AUDIO

Chromecast audio lets you instantly stream your favorite music, radio, or podcasts from your favorite Chromecast-enabled apps on the mobile device to your speakers over Wi-Fi. Once you have set up WiiM Ultra, you can enable Chromecast from the WiiM Home companion app. Then, open a compatible app on your smartphone or tablet and tap the Cast button. This will allow you to select your WiiM Ultra and start streaming audio to it.

Most music apps on both iOS and Android already support Chromecast such as Spotify, Apple Music, TIDAL, Amazon Music, YouTube Music and Deezer. You can also cast any audio from your Chrome browser by selecting 'Menu' > 'Cast'.

Chromecast can also be used for multi-room audio, playing music in sync to multiple speakers from compatible brands and WiiM Ultra, using the Google Home app.

DLNA

DLNA stands for Digital Living Network Alliance. It is a trade organization that sets standards and guidelines for home networking devices, including PCs, smartphones, tablets, smart TVs, Blu-ray Disc players, home theater receivers, and media streamers, among others. When a DLNA certified device is added to a home network, it can automatically communicate and share media files with other connected DLNA products on the network.

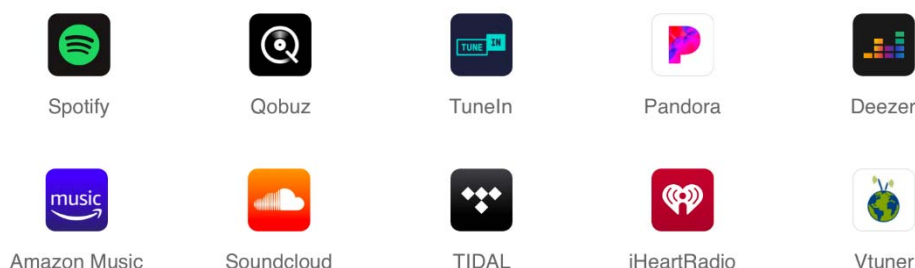
WiiM Ultra is the DLNA digital media render. When it's connected to the same network as your other DLNA devices or apps, it appears in the menus of other networked components. Your computer and other media devices discover and recognize the WiiM Ultra without any setup.

You can control the WiiM Ultra from other DLNA digital media player or controller. You can also play content to the WiiM Ultra from other DLNA digital media servers, all without additional setup.

8. ALL MUSIC IN ONE APP

With the free WiiM Home App, you can control your content and devices from one place. We support many popular music streaming services in the App, such as Spotify, iHeartRadio, Tidal, Amazon Prime Music and Unlimited, SoundCloud, Qobuz, Pandora, Deezer, TuneIn & more to come. You can also play music stored in your mobile device, local network media servers, or personal cloud server.

The App supports the unified search across multiple music services and your local network for artist, track, station, playlist, etc. It's a powerful tool to discover your favorite content from your online and local library.



The WiiM Home App supports equalization (EQ) with two options: 24 EQ presets, a 10-band graphical EQ, and a 4-band parametric EQ. These EQ settings can be assigned to different sources, such as AUX, Optical or HDMI in, online music, or Bluetooth streaming.

The App has twelve music presets that allow you to save your favorite station, playlist, album, etc., and access them later with the preset button on the remote, or the App with one tap.

9. MULTIROOM AND STEREO PAIRING

With the WiiM Ultra, it's easy to build your wireless multiroom sound system with other AirPlay speakers, Amazon Echo (or Alexa built-in devices) or Google Home. You can create an even more flexible multiroom sound system with multiple WiiM Ultras, Pro Plus, Pros Minis, and your existing audio devices.

LINKPLAY MULTIROOM/STEREO PAIRING

With our proprietary multiroom scheme, all types of audio input, including Wi-Fi, BT, analog Line in, or digital SPDIF in, can be used as the audio source for the multiroom system.

In addition, you can group two speakers connected with WiiM devices as a stereo pair for a wider, more immersive sound stage. It supports all four input options too. Thus, it can work with almost every music listening option.

- Configure two or more devices.
- Open WiiM Home App.
- Select the device and click the plus sign in the upper right corner “”
- Select the other WiiM device, click “Done”
- Click the LR icon “” and set the device to "L/R/LR"
- Select Browse tab, choose your music to play.

AMAZON ALEXA MULTIROOM

TIP: Download Amazon Alexa App and get ready with Echo or other Amazon devices.

For detailed steps please refer to 6.1.

Since the WiiM Ultra is an Alexa Cast audio receiver, not a transmitter, it can't transmit the Line-in, HDMI, or Optical-in audio to other Alexa-enabled devices such as Echo.

MULTIROOM WITH CHROMECAST AUDIO DEVICES

You can group WiiM Ultra with other Google Home or Chromecast audio enabled devices

to play the same music on all devices via the Google Home App.

- Enter Google Home App, tap the “+” in the top left corner
- Tap “Create speaker group” to create a speaker group
- Select the devices that are in the same network
- Give a group name
- Stream music to the group

Since the WiiM Ultra is a Chromecast audio receiver, not a transmitter, it can’t transmit the Line-in, HDMI ARC, or Optical-in audio to other Chromecast audio devices such as Google Home.

10. AUDIO INPUT VIA LINE IN OR SPDIF IN

Unlock the full potential of the WiiM Ultra by employing it as a network audio transmitter via Wi-Fi or Ethernet. You can seamlessly stream analog or digital audio input from devices like CD players, vinyl players, TVs, or computers to other WiiM connected devices, or AirPlay compatible speakers such as HomePod or Sonos.

To set up your WiiM Ultra with Line-IN:

1. Insert the line-in cable into the LINE IN port on the WiiM Ultra's rear.
2. Connect the other end of the cable to your record player.
3. In the WiiM Home app, navigate to 'Browse' tab > Select source on device > LINE IN, and designate LINE IN as the audio source.
4. Form a multiroom music group with your WiiM Ultra. In the WiiM Home app, go to Devices and choose the WiiM Ultra linked with your LINE-IN device. Tap the group button (depicted by a "link" icon within a box) at the upper right corner of the device box. Select the desired WiiM Ultra for audio transmission.
5. To cast audio to a wide array of AirPlay enabled devices, please select from the list of the AirPlay receivers on "Now Playing" UI or device settings.

Upon completion, the music from the connected device will play across your multiroom music group.

You can follow the same procedure using the SPDIF input port of the WiiM device if your source device offers a digital audio output via SPDIF.

Additionally, you can enable the "Autosense" feature on the WiiM device, allowing it to automatically play your Line-In, HDMI ARC, or Optical-In source upon detection of a signal. This feature can be activated within the WiiM Home App.

The WiiM device features a built-in EQ to tailor audio input to your preferences. Moreover, you can control audio volume remotely through the app, eliminating the need to adjust the audio input directly.

Note that certain source devices may require a preamp. For instance, some turntables lack a built-in preamp, necessitating connection to an external preamp before linking to the WiiM Ultra.

11. AUDIO OUTPUT VIA LINE/SPDIF/COAX/BT OUT

There are three separate audio output interfaces on WiiM Ultra that you can use to connect your DAC, Amplifier, or powered speaker. These are the analog LINE out, the digital optical (TOSLINK), and the Coaxial port. Please note that WiiM Ultra only outputs audio to one of the audio outputs.

It's important to select the correct audio output port. Otherwise, you may not be able to hear the sound.

If you want the bit-perfect audio output, please use the digital audio output and enable the fixed volume output. You can do so from the device setting on the WiiM Home App.

Thus, you have two ways to control the volume of your system.

- Control volume from your AVR or amplifier (Fixed volume output)
- Control the volume from the WiiM Home App. To do so, you need to turn off the fixed volume output.

AUDIO OUTPUT VIA SPDIF/COAX/LINE OUT

- Depending on the output you prefer to use, plug the SPDIF/RCA/COAX end of the cable into the corresponding output port on the WiiM Pro.
- Open the WiiM Home App on your iOS or Android device.
- Start playing on the output devices.

AUDIO OUTPUT VIA BT OUT (BT sourcing mode)

- Open the WiiM Home App on your iOS or Android device.
- Select Device Tab, and tap the device setting gear icon.
- Tap the Audio Output setting and select Bluetooth to connect to an external Bluetooth device (such as an amplifier or speaker)
- Start playing music.

12. STREAM AUDIO WITH BLUETOOTH

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

Simple Pairing Process:

- **Manual pairing:** To pair your device manually, simply press and hold the volume knob on the WiiM Ultra for 3 seconds to initiate pairing mode.
- **App-Assisted Pairing:** If your WiiM Ultra is connected to your network, you can enable the Bluetooth pairing directly from the WiiM Home App. Just navigate to the 'Browse' tab and select the 'Bluetooth' as your input source. In this case, if there's no device connected to the WiiM Ultra, the App will initiate pairing mode for WiiM Ultra automatically.

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

13. ADVANCED FEATURES

FIRMWARE UPDATES

- WiiM Ultra updates automatically when connected to your Wi-Fi network.
- Upgrades happen from 2:00-5:00 a.m. in your time zone. During the silent upgrade, there will be no sound and no indication. Upon opening the App, you will see the latest updates made to WiiM Ultra.

USE ETHERNET INSTEAD OF Wi-Fi

When an Ethernet cable is connected, the WiiM Ultra will automatically switch off Wi-Fi to use the Ethernet network. To confirm which connection is active, open the WiiM Home App, go to the 'Browse' tab, and scroll down to the 'Select Audio Source' section at the bottom. If Ethernet is being used, it will display 'Ethernet' instead of 'Wi-Fi.'

14. 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?
 - 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 device and WiiM Ultra are connected to the same Wi-Fi network.
 - Make sure you have the latest version of the WiiM Home App on your device.
 - Try restarting your device, WiiM Ultra, and router.
 - If still can't find, reconfigure the device to the network.

- What can I do if my device has no sound?

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

- The volume level on the WiiM Ultra.
- The physical connections between WiiM Ultra and your speakers, are connected correctly and securely.

- Audio dropout or no sound on AirPlay ?

If you experience no sound with AirPlay but has sound with other service, please check if the progress bar of music app on your Apple device is moving.

- Check network connectivity: Ensure the signal of your WiiM Ultra and your streaming device are strong. Move the WiiM Ultra and the streaming device closer to your wireless router or access point to improve the signal strength.
- Restart your network devices: Power cycling your network devices, including your router, modem, WiiM Ultra, and streaming devices, can often resolve connectivity issues.
- Update firmware and software: Ensure that your WiiM Ultra and all devices involved in the AirPlay 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 the WiiM Ultra: As a last resort, you can try performing a factory reset on your WiiM Ultra and set it up again.

- What can I do if my device cannot power on normally?
 - Check the device LED status and ensure it's on.
 - Ensure the original power cable is used.

SUPPORT

If you are unable to resolve your issue, please send us a ticket through the App or send us an email about the issue you're experiencing.

WiiM Home App: Settings > Feedback, Settings > FAQ

Website: faq.wiimhome.com/support/solutions

Email: support@wiimhome.com

Product User Guides: wiimhome.com/guides

RESETTING WIIM ULTRA

Press and hold the play/pause for 10s 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 WiiM Ultra and returns it back to the original factory settings.

15. IMPORTANT SAFETY INSTRUCTIONS

IMPORTANT, RETAIN FOR FUTURE REFERENCE: READ CAREFULLY

1. Read these instructions.
2. Keep these instructions.
3. Heed all warnings.
4. Follow all instructions.
5. Do not use this apparatus near water.
6. Clean only with a dry cloth.
7. 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, power-supply 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. FCC/IC Statements

RF Exposure Information: The equipment complies with FCC/IC RSS-102 radiation exposure limits set forth for an uncontrolled environment. The equipment should be installed and operated with minimum distance 20cm between the radiator & your body.

FCC Statement:

This device complies with Part 15 of the FCC Rules and contains license-exempt transmitter(s)/receiver(s) that comply with Innovation, Science and Economic Development Canada's licence-exempt RSS standard(s). 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.

For radio equipment operates in 5150-5850MHz

High power radars are allocated as primary users of the 5.25 to 5.35 GHz and 5.65 to 5.85 GHz bands. These radar stations can cause interference with and/or damage to LE LAN (Licence-Exempt Local Area Network) devices. No configuration controls are provided for this wireless equipment allowing any change in the frequency of operations outside the FCC grant of authorization for US operation according to Part 15.407 of the FCC rules.

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; for devices with detachable antenna(s), the maximum antenna gain permitted for devices in the bands 5250-5350 MHz and 5470-5725 MHz shall be such that the equipment still complies with the e.i.r.p. limit; for devices with detachable antenna(s), the maximum antenna gain permitted for devices in the band 5725-5850 MHz shall be such that the equipment still complies with the e.i.r.p. limits specified for point-to-point and non-point-to-point operation as appropriate.

CAN ICES-003(B)/NMB-003(B)

Énoncé d'exposition aux rayonnements FCC/IC

L'équipement est conforme aux limites d'exposition aux rayonnements FCC/IC RSS-102 établies pour un environnement non contrôlé. L'équipement doit être installé et utilisé avec une distance minimale de 20cm entre le radiateur et votre corps.

L'émetteur/récepteur exempt de licence contenu dans le présent appareil est conforme aux CNR d'Innovation, Sciences et Développement économique Canada applicables aux appareils radio exempts de licence.

L'exploitation est autorisée aux deux conditions suivantes:

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

Les radars de puissance élevée sont attribués comme utilisateurs principaux des fréquences de 5,25 à 5,35 GHz et Bandes de 5,65 à 5,85 GHz. Ces stations radar peuvent causer des interférences avec

Et/ou dommages aux périphériques LE LAN (réseau Local exempté de licence). Non non
Des contrôles de configuration sont fournis pour cet équipement sans fil permettant toute
Modification de la fréquence des opérations en dehors du FCC octroi d'autorisation
Pour les opérations américaines conformément à la partie 15.407 des règles de la FCC.

les dispositifs fonctionnant dans la bande 5150-5250 MHz sont réservés uniquement pour une utilisation à l'intérieur afin de réduire les risques de brouillage préjudiciable aux systèmes de satellites mobiles utilisant les mêmes canaux;

le gain maximal d'antenne permis pour les dispositifs utilisant les bandes 5250-5350 MHz et 5470-5725 MHz doit se conformer à la limite de p.i.r.e.;

le gain maximal d'antenne permis (pour les dispositifs utilisant la bande 5725-5850 MHz) doit se conformer à la limite de p.i.r.e. spécifiée pour l'exploitation point à point et non point à point, selon le cas.

IC: 30828-ASR004

FCC ID: 2BABF-ASR004