



# HM901R

User Guide

# Welcome

Thank you for purchasing  
the HM901R Portable DAC(Bluetooth & USB-C)  
Please read this quick guide before using the HM901R.

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# Quick Start

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## Bluetooth Direct Connection

1. Press and hold the power button for 3 seconds to turn on, confirm that the Bluetooth LED on the front panel is working normally (i.e. blue light flashes);
2. Connect to earphone or headphone;
3. Search and connect to HIFIMAN-HM901R on your mobile phone or other Bluetooth device;
4. Play music on your mobile phone and begin enjoying high-definition music over Bluetooth.

Note: In this mode, please check the Bluetooth connection mode to ensure the best connection option is used. High definition Bluetooth options may vary depending on the transmitting device/phone.

## USB DAC

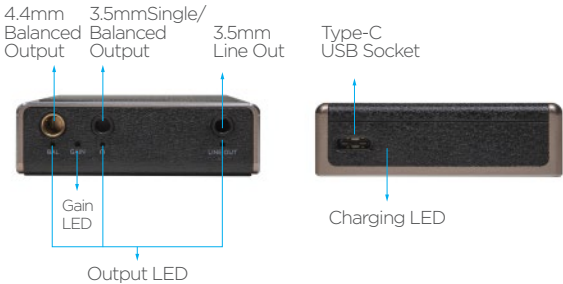
1. For operating systems previous to Windows 10, go to the HIFIMAN Support website to download the driver and install it. For WIN10 and MAC OS operating systems, no installation is needed. Additional cables may be required to connect to a mobile device. HIFIMAN cannot guarantee mobile devices compatibility.
2. Connect a TYPE-C USB data cable to connect the HM901R to your computer;
3. Please press the INPUT button so that the green LED on the main panel is illuminated;
4. Select the playback device "HM901R" on the computer and playback software;
5. Audio playback should now output using the HM901R as an external DAC with headphone out.

## HIFIMAN APP remote play mode

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The HIFIMAN APP can already be found in the Apple App Store, and Apple mobile phone users can download and use it directly. For Android phone users, please contact the official customer service, or download the latest version of the APP from the service section of the official website. After the phone is installed, follow the prompts to connect to Bluetooth, and follow the APP prompts to use the HIFIMAN APP to remotely play the music in the TF card on the HM901R

# Product Overview



\*Important: When the TF Card LED is shining, please do not put off the TF card.

# Operation

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## Power / Play / Pause Button

1. Long press for 3 seconds to turn on/off.
  2. Long press for 10 seconds to force restart.
  3. Using the HIFIMAN APP, a short press will act as play/pause.
- \* It is recommended to insert the microSD card first before powering up the HM901R. When no card is inserted the HM901R will add a delay when powering as it “searches” for a card.

## Volume Dial

1. Rotate the volume dial clockwise to increase the volume. The volume will increase by one level every notch and the maximum volume is 32.
2. Rotate the volume dial anticlockwise to decrease the volume.
3. Please Note: There is no volume display on the HM901R, the volume will only be displayed on the phone / mobile device.

# Operation

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## Output selection key

1. When powering on for the first time, the default output jack is the 3.5mm headphone balanced output. When selected, the 3.5mm Output LED will be green;
2. Click the output selection button to change output ports in sequence. Press the button once to switch to 3.5mm earphone single-ended output. When selected, the 3.5mm Output LED will be blue;
3. Press the button again to switch to 4.4mm headphone balanced output. When selected, the 4.4mm Output LED will be green;
4. Continue to press the button once to switch to 3.5mm line output. When selected, the 4.4mm Output LED will be blue;
5. Press the output selection key again to cycle through in the above sequence. When turned on the HM901R will use the last selected output mode.



# Operation

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## Input Selector

1. When turned on the input defaults to Bluetooth mode, The Bluetooth status light on the main panel flashes blue when pairing, then constant when connected
2. After connecting a USB cable to the HM901R, click the input selection button to switch to USB DAC mode. After the switch the USB DAC status light will be steady green. Click the input selection button again to return to Bluetooth mode;

## Gain Selection

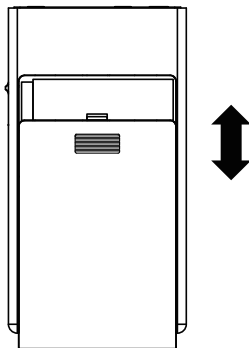
Please refer to the Gain LED on top of the HM901R. Press Gain to switch the gain level. Red denotes High Gain and Blue indicates Low Gain mode. High Gain is suitable for headphones with low sensitivity and high impedance. Low Gain driving is suitable for earphones or headphones with high sensitivity and low impedance.

# Operation

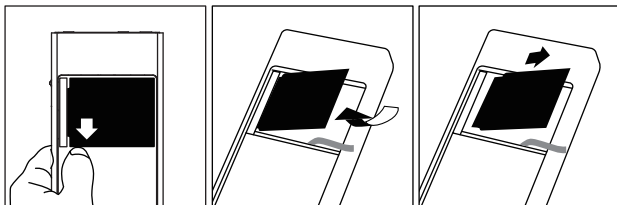
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## Removable Back Cover

Gently push the back cover down to unlock the back cover. Align the back cover with the slide rails on both sides from the bottom of the body. Push up from the bottom in parallel to close.



Open the back cover to change the amplifier card. In order to customise for different headphones, earphones and customers, HIFIMAN provides a variety of amp cards to choose from. Please see the following diagram for the steps to replace the amplifier card:



# Operation

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## Charge Button

1. Connect USB charging cable to a power supply device to begin charging. The charging status LED will be red. The LED will turn green when fully charged;
2. Press the charging button once and HM901R will switch to non-charging mode. In this state, the charging status LED flashes red and green alternately;
3. When the battery is low, the charging status LED will flash red. If the battery is too low, the HM901R will shut down.

\* It is recommended to use a 5V2A or more fast charging charger, this can significantly speed up the charging process.

## Lock/Unlock Key

1. Slide up and down to lock / unlock the HM901R in its current state. Locked will disable all other buttons.

# Interface

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## Type-C Interface

Use a Type-C USB cable to connect to

1. a computer for data transfer/delete;
2. a power source for charging;
3. computer or mobile phone for USB DAC functionality.

Note, your mobile phone is required to support USB AUDIO and OTG to be compatible.

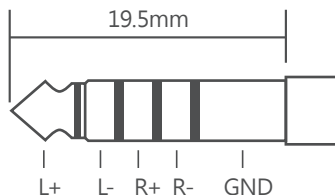
## Headphone Jack / Line Output

1. Equipped with 3.5mm and 4.4mm headphone outputs, Use with headphones with 3.5mm or 4.4mm jacks;
2. The 3.5mm headphone socket supports Balanced and Normal (single ended) modes, which are suitable for TRRS Balanced headphones and TRS normal (single ended) 3.5mm headphones;
3. The 4.4mm headphone jack is in Balanced mode by default;
4. When using the 3.5mm line output jack. Before use, pay attention to the output mode to avoid damage to your headphone/earphone and hearing.

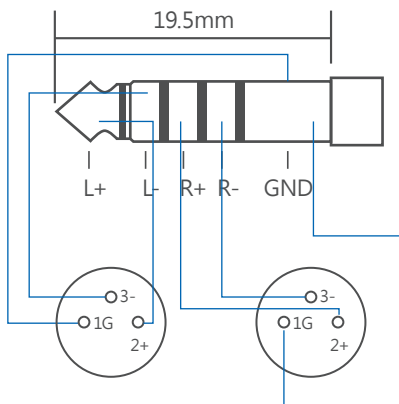
## 4.4mm Balanced Line Output Wiring Specifications

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4.4mm balanced Plug schematic is as follows:



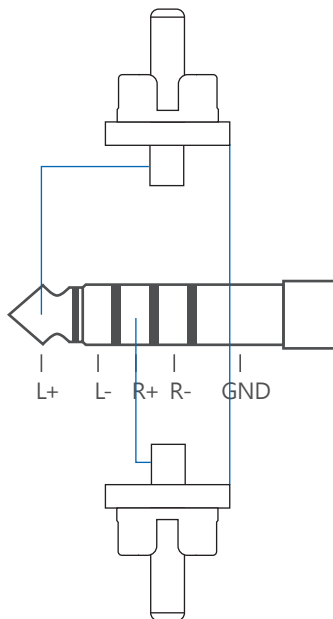
For 4.4mm Balanced to dual XLR connections, the balanced output should be as wired as follows:



## 4.4mm Balanced Line Output Wiring Specifications

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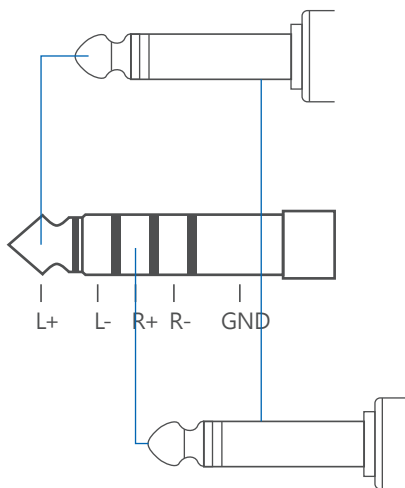
4.4mm balanced to single-ended RCA connections should be made as follows:



## 4.4mm Balanced Line Output Wiring Specifications

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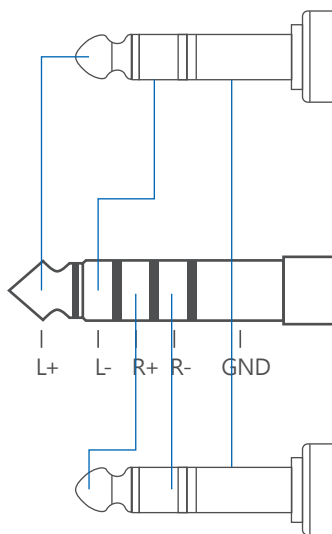
4.4mm balanced to dual mono 6.3mm connections should be made as follows:



## 4.4mm Balanced Line Output Wiring Specifications

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4.4mm balanced to dual stereo 6.3mm connections should be made as follows:

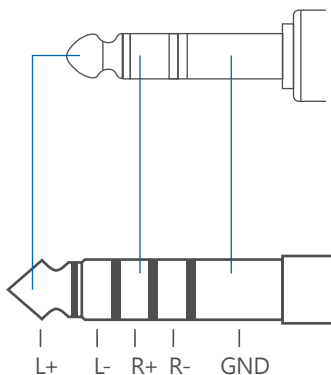




## 4.4mm Balanced Line Output Wiring Specifications

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4.4mm balanced to single-ended 3.5mm connections should be made as follows:

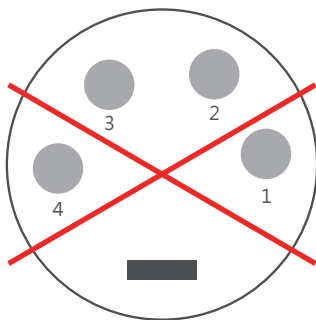
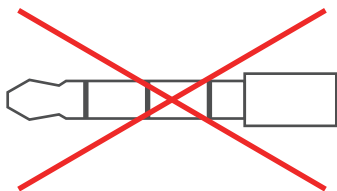


## 4.4mm Balanced Line Output Wiring Specifications

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Please note:

Do not use an ungrounded connector as prolonged use may damage the HM901R.



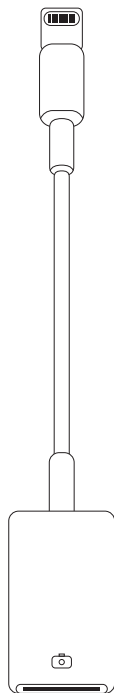
# DAC

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## USB DAC

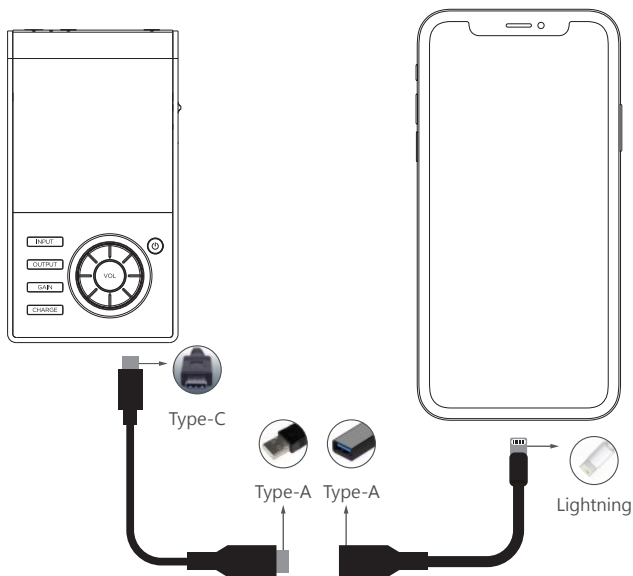
Connect the Type-C USB cable to a computer or phone to enable the USB DAC function. Your phone must support the USB AUDIO and OTG function. For iOS devices, we recommend connecting a Lightning cable to a USB Camera Converter. (Lightning to USB3 Camera Converter. Type-C to Lightning cables cannot be used. Please use Apple's Type-C to Type-A adapter when connecting to MAC.)

**Note:** When connecting the HM1000 to products running iOS, first change the charging button to the no-charging mode, then connect the HM901R to the device, and switch the input mode of HM901R to USB AUDIO mode.



# DAC

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# DAC

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## USB DAC Driver

For MAC there's no need to install the driver.

This driver supports Windows XP to Windows 10.

Driver installation and usage:

1. Please go to HIFIMAN's Official website([www.hifiman.com](http://www.hifiman.com))→Service and support→Driver, and download the HM901R driver.
2. Unzip the compressed package, select the driver and continue to install the driver.
3. Use a type-C USB data cable to connect the HM901R to the computer.
4. Set the HM901R to USB DAC mode.
5. In Windows controls set "Control Panel→Sound→Play," and select "HM901R."
6. Now you can use the HM901R listen to audio from the computer.

# Specifications

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Size (L\*W\*H): 109.7mm\*60mm\*18mm

Weight: 125g

Charging time: 1.5 hours

Battery life: 9 hours (classic card, varies with amp card)

Micro SD card maximum support: 1TB/FAT32

Output mode: 3.5mm single-ended, 3.5mm balanced,  
4.4mm balanced,

3.5mm line output

Bluetooth protocol support: LDAC, aptX-HD, aptX,  
AAC, SBC

## 3.5mm Line Output Parameters

Frequency response: 20Hz-20kHz

Distortion: 0.0019% S/N

ratio: 115dB

# Supported Music Formats

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	WAV	FLAC	ALAC	APE	AIFF (aif-f)	DFF	DSF
16bit 44.1kHz	✓	✓	✓	✓	✓	-	-
16bit 48kHz	✓	✓	✓	✓	✓	-	-
16bit 88.2kHz	✓	✓	✓	✓	✓	-	-
16bit 96kHz	✓	✓	✓	✗	✓	-	-
16bit 176.4kHz	✓	✓	✓	✗	✓	-	-
16bit 192KHz	✓	✓	✓	✓	✓	-	-
24bit 44.1kHz	✓	✓	✓	✓	✗	-	-
24bit 48kHz	✓	✓	✓	✓	✗	-	-
24bit 88.2kHz	✓	✓	✓	✓	✗	-	-
24bit 96kHz	✓	✓	✓	✓	✗	-	-
24bit 176.4kHz	✓	✓	✓	✗	✗	-	-
24bit 192kHz	✓	✓	✓	✗	✗	-	-
1bit 2.8MHz (DSD64)	-	-	-	-	-	✓	✓

Other Music Formats: MP3, OGG, AAC, WMA

DSD file support to DSD64 (DFF and, DSF)

# Safety Instructions

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## Warning

1. Do not expose the player to water or other solvents.
2. Do not expose the player to humidity, dust, smoke and other harsh conditions.
3. A suitable operating temperature environment should be between -6°C To 40°C. Storage should be at normal room temperature.
4. Do not use any chemicals or detergents to clean the player.
5. Do not use while driving or operating motorized vehicles.
6. If you experience physical discomfort, please discontinue use and consult your audiologist.



# Safety Instructions

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## Disposal and Recycling

The disposal of your player should be separated from household waste because the player contains electronic parts and a battery. When your player reaches the end of its life, please contact your local environmental department for disposal and recycling information or you could simply send it back to us. The battery will be removed and properly recycled.

European Union—Disposal information:



This symbol means that according to local laws and regulations your product should be disposed of separately from household waste. When this product reaches its end of life, take it to a collection point designated by local authorities. Consumers can be punished by penalty for inappropriate disposal of electronic device. The separate collection and recycling of your product at the time of disposal will help conserve natural resources and ensure that it is recycled in a manner that protects human health and the environment.

## FCC Warning

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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 1: 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.

## FCC Warning

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- 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.

NOTE 2: Any changes or modifications to this unit not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

## Warranty & Customer Service

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HIFIMAN warrants this product to be free of defects in material or workmanship for a period of one year from the date of original retail purchase. If your product is found to be defective during the warranty period, HIFIMAN will, at its sole option, either repair the product or replace the product with a new or factory reconditioned or substantially equivalent model. This limited warranty does not apply to any defects attributable to damage beyond the reasonable control of HIFIMAN including damage caused by abuse, misuse, misapplication or modifications performed by anyone other than HIFIMAN.

If your product is under warranty and a problem appears, please contact HIFIMAN customer service or your authorized dealer. If necessary, and at our discretion, we will provide a warranty repair or replacement of your product.

Caution: do not disassemble or modify the product in any way. Tampering with or modifying your HIFIMAN product will void its warranty.

# Warranty & Customer Service

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This Limited Warranty does not apply to :

1. Defective or discolored parts if damage is caused by fluids, dirt, missing keys, broken plastic parts or improper use.
2. Damage caused by misuse with another product.
3. Use of the product for other than its normal intended use, including, without limitation, failure to use the product in accordance with the supplied Owner's Guide.
4. Damage caused by accident, abuse, neglect or misuse.
5. If you do not have a valid dated receipt showing proof of purchase.
6. Damage caused by services / repairs or other modifications to the system carried out by anyone other than HIFIMAN or an authorized HIFIMAN distributor or dealer.
7. Damage caused by self-repair or if the unit has been disassembled or modified in any way.

HIFIMAN greatly desires your satisfaction and will do everything reasonable to achieve that. If you have any questions or concerns with your product, simply contact your authorized dealer or HIFIMAN directly (if purchased

# Warranty & Customer Service

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from us) and explain the issue in detail. Should a return be required, a Return Authorization will be issued. Return shipping to HIFIMAN or authorized service facility will be at the owner's expense.

The warranty applies to the first purchaser and is not transferable.

**For further information, please contact your authorized HIFIMAN dealer or email us directly at [customerservice@HIFIMAN.com](mailto:customerservice@HIFIMAN.com).**



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Innovating the Art of Listening



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