

S.M.S.L



# RAW-HA1

## USER MANUAL

The contents of this manual may be changed with the edition, and are subject to change without notice.

Ver 1.2



## Safety Notes

- Install this unit in a well ventilated, cool, dry, clean place-away from direct sunlight, heat sources, vibration, dust, moisture, or cold.
- Use the voltage specified on this unit. Only. Using this unit with a higher voltage than specified is dangerous and may cause fire, damage to this unit, or personal injury. Our company will not be held responsible for any damage resulting from the use of this unit with a voltage other than that specified.
- Do not attempt to modify or fix this unit by yourself. Contact salesperson or customer service when any service is needed. The cabinet should never be opened for any reason.
- When not planning to use this unit for long periods of time (i.e. when going on vacation), disconnect the power cable from the AC wall outlet.

**Important note:**

The product specifications and information mentioned in this manual are for reference only. The content of this manual is subject to change without notice.



## Warranty Terms

1.The Term of Service

Foshan Shuangmusanlin Technology Co., Ltd promises to offer good-quality products. If the product is broken in 7 days after purchasing when you use it normally, you can choose to send it back for return, replacement or repairing (only the product does not affect the second sales can be returned ). Repairing for free in one year if you use it normally.

2.Date of purchase is in accordance with the date on invoice or receipt used by seller, and if you buy it on line, you can show the screenshot of trade.

3.If an inappropriate usage causes the unit damaged, the warranty will be void. As below.

- All damages by inappropriate use, including using it under non-normal working environment or without following the instructions.
- Dismantling, refitting, repairing by user in private.
- Causing damage by using some fittings instead of the designative or accredited ones.
- Cannot provide credible proof of purchase.

4.Sending it back to our company for repairing.

5.Contact your S.M.S.L Audio reseller for a return or replacement.



## Features

- New digital high power amplifier chip from Infineon, Germany, higher quality with high efficiency and low power consumption;
- Using JRC's electronic volume control chip NJW1194 from Japan, precise volume control and ultra-low distortion;
- Support MQA decoding and MQA-CD ;
- New 3rd generation XMOS XU-316, PCM support up to 32bit/768kHz, DSD support up to DSD256;
- The latest Bluetooth supports LDAC, APTX/HD,SBC, AAC;
- Use the latest audio decoding chip CS43131 by Cirrus Logic;
- All Aluminum alloy CNC precision processing shell, anodizing technology and chamfering process, exquisite workmanship and delicate touch;
- User-friendly operating system is simple and easy to understand, equipped with full-featured remote control function;
- A large number of professional Hi-fi audio components are used to enhance the sound experience;
- High-quality gold-plated input and output terminals;
- Perfect protection circuit for overheating, overcurrent etc;
- Built-in high-quality power supply, specially designed for audio.



# Specifications

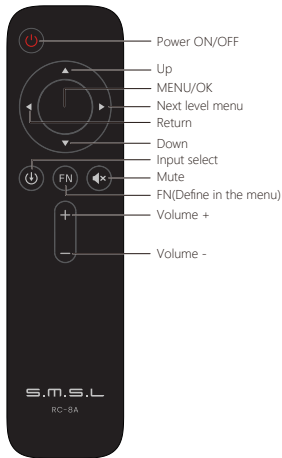
<b>Input</b>	HDMI(ARC)/RCA/BT/USB/Optical/Coaxial		
<b>THD+N</b>	0.003%		
<b>SNR</b>	110dB		
<b>Channel separation</b>	87dB		
<b>Input Sensitivity / Input Impedance</b>	245mV/22k $\Omega$		
<b>Output Power (RMS)</b>	<b>stereophonic</b>	4 $\Omega$	165Wx2
		8 $\Omega$	85Wx2
<b>Headphone Output Power</b>	32 $\Omega$	30mW	
<b>USB transmission</b>	USB2.0(Asynchronous Transfer)		
<b>USB compatibility</b>	Windows 7 / 8 / 8.1 / 10 / 11, Mac OSX, Linux		
<b>MQA decoder</b>	USB/Optical/Coaxial		
<b>MQA-CD decoder</b>	Optical/Coaxial		
<b>Bit Depth</b>	<b>USB</b>	1bit, 16~32bit	
	<b>Optical/Coaxial</b>	1bit, 16~24bit	
<b>Sampling rate</b>	<b>USB</b>	PCM	44.1~768kHz
		DSD	2.8224~11.2896MHz
	<b>Optical/Coaxial</b>	PCM	44.1~192kHz
		DSD	DSD64(DoP)
<b>Bluetooth specification</b>	5.1(support SBC,AAC,aptX,aptX HD,LDAC)		
<b>Power Consumption</b>	40W(Normal Volume)		
<b>Size</b>	219X45X190mm(WxHxD)		
<b>Weight</b>	1.55kg/3.42lbs		

## Remote Control

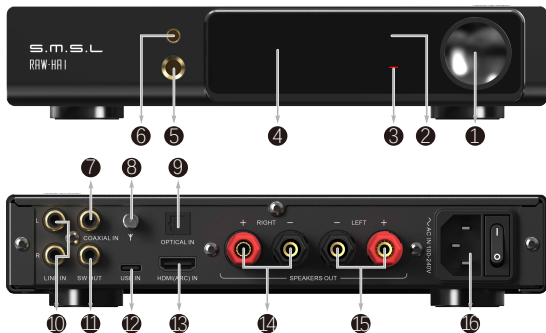
- If the remote control is still ineffective when it is close to the machine, replace it with a new battery.
- If the user does not use the remote control for a long time, remove the battery of the remote control.
- Dispose of used batteries in accordance with local regulations on battery disposal.

## Operating The Remote Control

- This remote controller use 2 x R03/AAA batteries.



# Display Interface and Instructions



- |                         |                                |                               |
|-------------------------|--------------------------------|-------------------------------|
| <b>1</b> Function knob  | <b>2</b> Remote window         | <b>3</b> Indicator light      |
| <b>4</b> Display screen | <b>5</b> 6.35mm headphone jack | <b>6</b> 4.4mm headphone jack |
| <b>7</b> Coaxial input  | <b>8</b> Bluetooth antenna     | <b>9</b> Optical input        |
| <b>10</b> Line input    | <b>11</b> Subwoofer output     | <b>12</b> USB input           |
| <b>13</b> HDMI input    | <b>14</b> Right output         | <b>15</b> Left output         |
| <b>16</b> AC IN         |                                |                               |



# Instructions

## INPUTS

- USB TYPE C
- BLUETOOTH
- OPTICAL
- COAXIAL
- HDMI(ARC)
- AUX IN

## OUTPUTS

- SPEAKERS OUT
- HEADPHONES OUT

## EQUALIZER

- DIRECT
- TONE
- SDB
- BASS
- SUPER BASS
- ROCK
- SOFT
- CLEAR

## FILTER

- Minimum phase fast roll-off
- Fast roll-off,Phase-compensated
- Minimum Phase slow roll-off
- Slow roll-off,Phase-compensated
- Non over-sampling

## TREBLE: -09dB ~ +09dB

- When the EQ mode is in Direct or other EQ mode, adjusting the Treble will automatically change the EQ to Tone mode.

## BASS SOUND: -09dB ~ +09dB

- When the EQ mode is in Direct or other EQ mode, adjusting the Bass will automatically change the EQ to Tone mode.

## FN KEY FOR

- OUTPUTS
- BLUETOOTH



# Instructions

## UI STYLE

- UNIVERSAL
- GRAPHICS

## DIMMER

- OFF
- 5~60 seconds

## BRIGHTNESS

- LEVEL 1~LEVEL 6

## RESET

- Under this interface, long press the button of the function knob, then the system will reset all settings, including Bluetooth pairing status.

## LANGUAGE

- ENGLISH
- CHINESE
- JAPANESE
- RUSSIAN

## Bluetooth operating instructions

- **Connection:**  
Turn on the Bluetooth function of the mobile phone, search for "SMSL RAW-HA1" and tap to pair. When the mobile phone displays "connected", it has been successfully connected. If pairing is not successful, please operate the Bluetooth clear function to clear the Bluetooth previously connected to RAW-HA1 and try to connect again.





## About MQA

MQA (Master Quality Authenticated) is an award-winning British technology that delivers the sound of the original master recording. The master MQA file is fully authenticated and is small enough to stream or download. The machine includes MQA technology, which enables you to playback MQA audio files and streams, delivering the sound of the original master recording.

Visit How it works <https://www.mqa.co.uk/how-it-works> for more information.

## How to play MQA

- SMSL RAW-HA1 supports MQA decoding with USB, optical fiber and coaxial!
- SMSL RAW-HA1 's MQA playback does not require the use of special playback software, such as foobar2000, Audirvanaplus only needs to support ASIO or WASAPI audio output, and when playing MQA audio, it is best to adjust the volume of the computer to the maximum,so that the audio output of the computer is in the best condition.
- When playing an MQA file, the sampling rate of the original master recording is displayed.

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## Notes on playing MQA-CD

- Please make sure that what is being played is a genuine MQA-CD.
- Verify that the optical or coaxial signal output of the CD player is an unprocessed source code.