S.M.S.L

Hi-Res AUDIO WIRELESS

RAW-MDA 1

USER MANUAL

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

Ver 1.1

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 alesperson 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 uesd 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

- Supports MQA decoding and MQA-CD;
- 2 pieces of ESS new generation high-end DAC chip ES9039Q2M;
- Adapts the latest Bluetooth chip of Qualcomm, supports LDAC 24bit/96kHz, APTX/HD, SBC and AAC;
- Utilizes 6 high-end dual op-amps OPA1612 and numerous audio-grade components;
- The brand-new third-generation XMOS XU-316, supports up to PCM 32bit/768kHz and DSD512;
- The audio clock processing circuit helps reduce clock jitter greatly;
- There are two modes to choose from: USB 1.1 and USB 2.0;
- Input ports (except Bluetooth) support MQA and DSD, coaxial and optical support DoP64;
- Built-in self-developed low-noise switching power supply and multiple analog circuits low-noise power supply;
- Full-fit color display screen with tempered glass
- High-quality gold-plated input and output connectors;
- Japan Audio Association (JAS)Hi-Res certification;
- Equipped with a full-featured remote control.

Specifications

Input		USB/Optical x2/Coaxial x2/Bluetooth
Output		RCA/XLR/HEADPHONE
THD+N		0.00005%(-124.5dB non-Weighting)
Line output amplitude	XLR	5.2Vrms
	RCA	2.5Vrms
	HP	8.2Vrms
Headphone output power	16Ω	2.5Wx2
	32Ω	1.7Wx2
Output Impedance	LINE OUT	100Ω
	HP OUT	Near 0Ω
Dynamic range	XLR	132dB
	RCA	127dB
	HP	122dB
SNR	XLR	132dB
	RCA	127dB
	HP	122dB
USB transmission		Asynchronization
USB compatibility		Windows 7 / 8 / 8.1 / 10 / 11(Needs Driver)
		Mac OSX10.6 or Later、Linux(Driverless)
MQA decoder		USB/Optical/Coaxial

Sampling rate & Bit Depth:

USB	PCM	44.1~768kHz(32bit)
	DSD	2.8224~22.5792MHz(1bit)
	DoP	DoP256
Optical / Coaxial		44.1~192kHz(24bit)
	DoP	DoP64

Bluetooth specification	5.1(Support SBC,AAC,aptX,aptX HD,LDAC)
Power Consumption	<30W
Standby power	<0.5W
Size	189x45x179mm(WxHxD)
Weight	1.02kg/2.24lbs

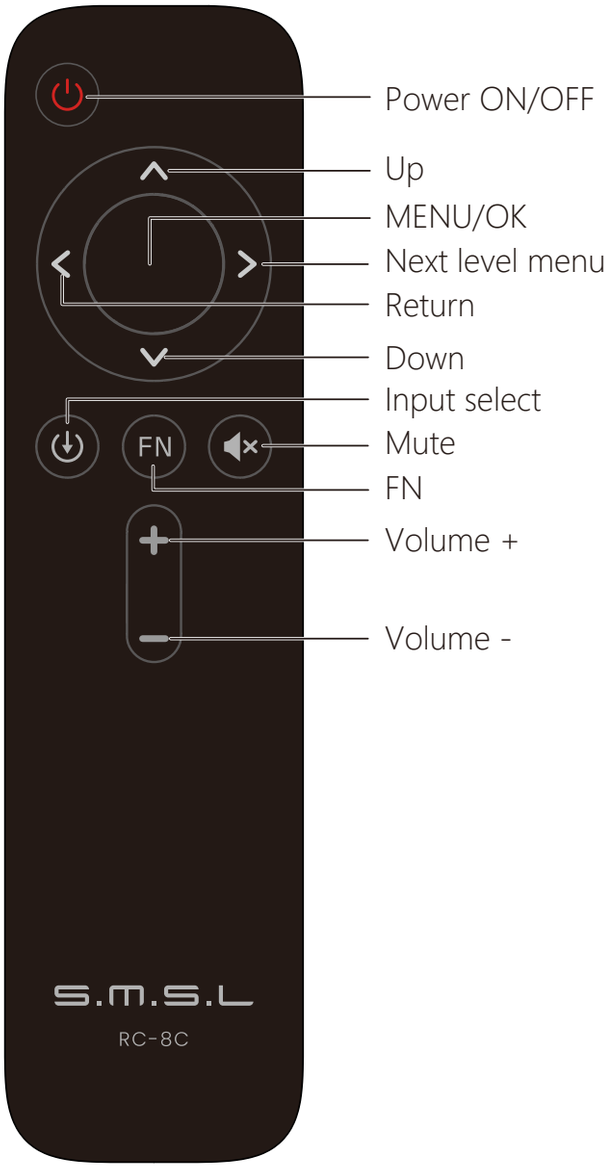
SMSL reserves the right to make improvements which may result in specification or feature changes without notice.

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

1 Knob
2 Remote window
3 Standby indicator light
4 Display
5 4.4mm headphone jack
6 6.35mm headphone jack
7 XLR outputs
8 Coaxial input 2
9 Coaxial input 1
10 Bluetooth antenna
11 RCA outputs
12 Optical input 2
13 Optical input 1
14 USB input
14 AC IN

Instructions

INPUTS

- USB TYPE C
- BLUETOOTH
- OPTICAL 1
- COAXIAL 1
- OPTICAL 2
- COAXIAL 2

HPA GAIN

- LOW
- HIGH

PRE MODE

PRE MODE is the volume adjustment function switch for the output.

- VARIABLE : The output volume is controlled.
- FIXED : The output connector volume is fixed.

FN KEY FOR

- Switch LINE/HPA
- All Outputs
- Bluetooth

OUTPUTS

- ALL LINE OUT
- HEADPHONE OUT
- BALANCED
- UNBALANCED

SOUND COLOR

There are 9 sound color settings：

- Rich1、Rich2、Rich3
- Tube1、Tube2、Tube3
- Crystal1、Crystal2、Crystal3

This setting is usingthe DSP of DAC,to make some different sound color, all of these settings will not change the frequency res ponse curve.When set to "Standard", this setting will be bypassed.

USB

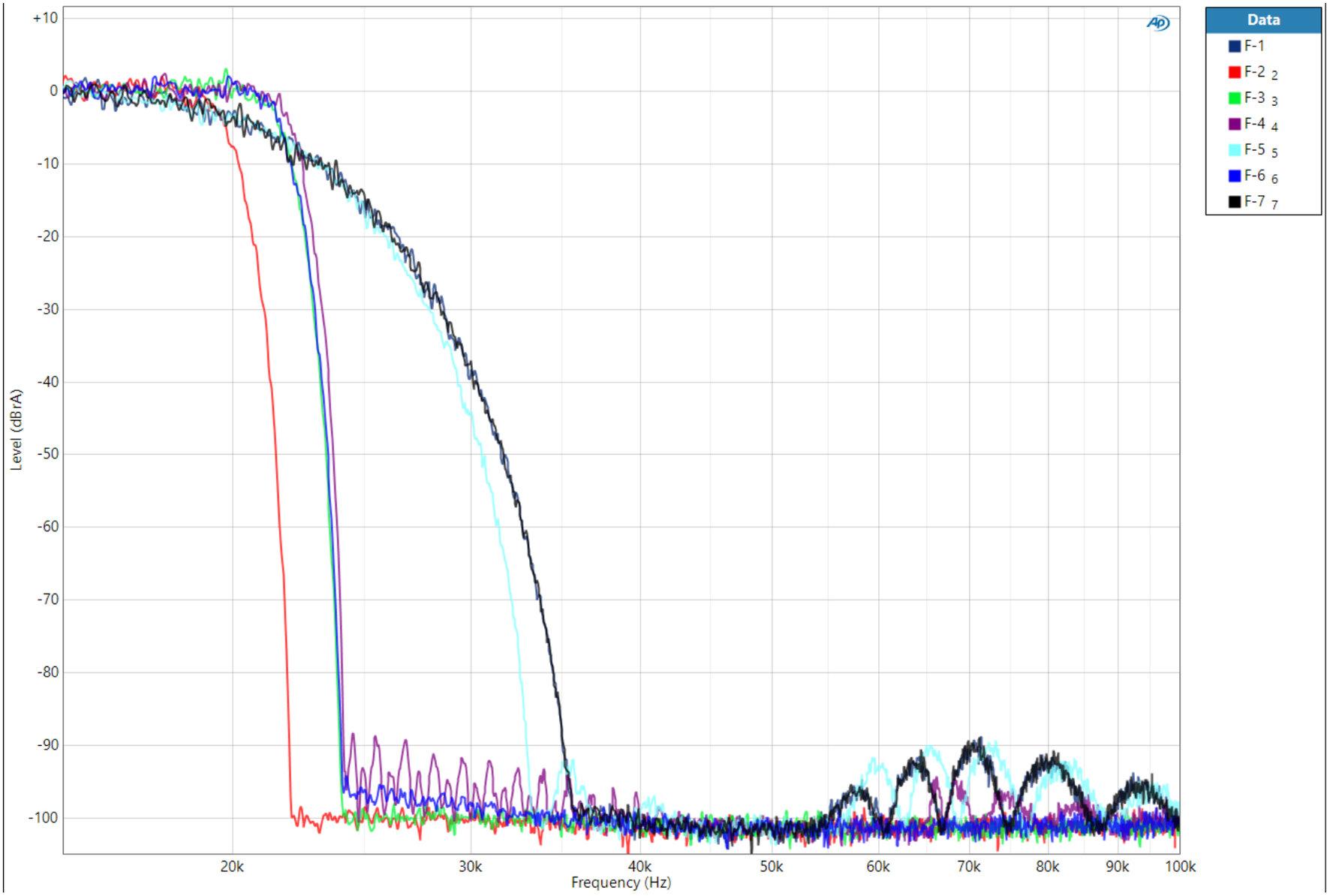
- USB1.1 (Corresponding to USB 1.1 mode.)
- USB2.0 (Corresponding to USB 2.0 mode.
  WIN system needs to install driver, support DSD)

1. It is possible to connect all USB devices without a driver.
2. It can support the connection of various game consoles, such as PS4,PS5,Nintendo Switch etc.
3. USB 1.1 only supports a maximum of 96kHz.

Instructions

PCM FILTER

- F-1:Minimum phase
- F-2:Linear phase apodizing fast roll-off
- F-3:Linear phase fast roll-off
- F-4:Linear phase fast roll-off low ripple
- F-5:Linear phase slow roll-off
- F-6:Minimum phase fast roll-off
- F-7:Minimum phase slow roll-off low dispersion



Instructions

DPLL

- MIN ~ MAX

  (A total of 15 kinds, the default is 7 kinds. The larger the number is, the stronger the range to adapt to jitter, and the smaller the number, the better the performance against clock jitter.) This DPLL setting is a special function of ESS series products. It can adjust the internal

  Its function:

- When the clock stability of the input signal is good, this value can be reduced, so that the clock performance of the system is better;

- When the clock stability of the input signal is not good, the sound may be interrupted. Increasing this value can avoid sound interruption! Especially when using TV as a signal source!

DIMMER

- 5 ~ 60 seconds

  (The range is 5 seconds-60 seconds. After setting, the screen will automatically go off within this time, and the screen will re-light up if you operate the remote control or the knob at any time.)

BRIGHTNESS

- LEVEL 1 ~ LEVEL 6

UI STYLE

- UNIVERSAL
- GRAPHICS

Bluetooth operation instructions:

- Short press the panel knob to enter the decoding mode for input switching. Rotate the knob left and right to switch the display to "BT" and enter Bluetooth matching mode.
- By pressing the input switch shortcut key on the remote control and switching to "BT", you can enter Bluetooth matching mode.

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 MDA1 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

- MDA1 supports MQA decoding with USB, optical fiber and coaxial!
- MDA1'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.