





USER MANUAL



s.m.s.L



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.

S.M.S.L



Features

- Support MQA decoding, support MQA-CD;
- ESS new generation high-end digital-to-analog chip ES9039Q2M;
- Qualcomm latest Bluetooth chip supports LDAC 24bit/96kHz, APTX/HD, SBC, AAC;
- 4x high-end dual op amp OPA1612 and a large number of audio grade components;
- New third generation XMOS XU-316 with PCM support up to 32bit/768kHz and DSD support up to DSD512;
- Audio clock processing circuit, greatly reducing the clock jitter;
- Input ports (except Bluetooth) support DSD transmission, coaxial and optical supports DoP64;
- Built-in specially designed low-noise switching power supply;
- Built-in discrete component linear power supply and multiple low-noise power supplies for analog circuits;
- High-quality gold-plated input and output connection terminals:
- Japan Audio Association (JAS) Hi-Res certification;
- · Equipped with full-function remote control.



Specifications

| прис | | | |
|-------------------------|---------------|-------------------|---------------------------|
| Output | | | |
| Output Level | | | 5.0Vrms |
| | | | 2.5Vrms |
| Headphone output power. | | 16Ω | 3Wx2 |
| | | 32Ω | 1.5Wx2 |
| Headphone Gain | | low gain | 0dB |
| | | high gain | 11dB |
| THD+N | | line out | 0.00006% (-123dB) |
| | | HP out | 0.00009% (-120dB) |
| Dynamic range | | XLR | 130dB |
| | | RCA | 127dB |
| | | HP out | 125dB |
| SNR | | XLR | 130dB |
| | | RCA | 127dB |
| | | HP out | 125dB |
| Output impedance | | Line out | 100Ω |
| | | HP out | Near 0Ω |
| USB transmission | | USB1.1, U | JSB2.0(Asynchronization) |
| USB compatibility | | Windows 7/ | 8/8.1/10/11(Needs Driver) |
| | | | |
| Bit depth | USB | | 1bit, 16~32bit |
| Opti | cal / Coaxial | | 1bit, 16~24bit |
| Sampling rate | USB | PCM | 44.1~768kHz |
| | | DSD | 2.8224~22.5792MHz |
| Opti | cal / Coaxial | PCM | 44.1~192kHz |
| | | DSD | DSD64(DoP) |
| Bluetooth specification | | | 5.1 |
| LDAC | | . 24bit/96kHz (99 | 0kbps/660kbps/330kbps) |
| aptX-HD | | | 24bit/48 kHz_576kbps |
| aptX | | | 16bit/44.1 kHz_352kbps |
| SBC | | | 16bit/44.1 kHz 328kbps |
| AAC | | | 16bit/44.1 kHz_320kbps |
| Power Consumption | | | <30W |
| Standby power | | | |
| Size | | | |
| Weight | | | |
| - | | | |

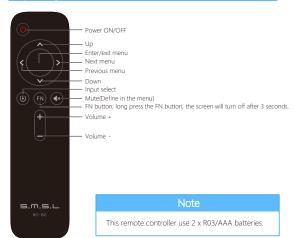
InputUSB / Optical / Coaxial / Bluetooth



Remote control

- Install 2 x AAA batteries as instructions.
- When using the remote control, point it toward the remote con-trol signal receiver
 on the main unit from a distance of 5 m (16 ft) or less. Do not place obstructions
 between the main unit and the remote control.
- The remote control might not work if the remote control signal receiver on the unit is exposed to direct sunlight or bright light. If this occurs, try moving the unit.
 Beware that use of this remote control could cause the unin-tentional operation of other devices that can be controlled by infra.

Operating the remote control





Display Interface and Instructions





- Knob
- 2 Remote window
- 3 Indicator light
- 4 MQA Indicator light
- 5 DSD Indicator light
- 6 Display
- **1** 4.4mm balanced headphone jack
- 8 6.35mm headphone jack

- 9 AC power input(AC100-240V)
- USB Input
- Optical input
- Bluetooth antenna
- Coaxial input
- RCA output
- IS TRS balanced output



Instructions

Knob Instructions:

Short press the knob (0.5-1 second) to enter the menu, short press the knob again to enter the next level menu, enter the menu to be adjusted, rotate left and right to select, when the selection is complete, press and hold for 2 seconds to exit to the main interface.

 Example: Select switching input: short press the knob to see the current input, then rotate left and right to select the desired input.

Function introduction

INPUT

USB (USB input)
 BT (Bluetooth input)
 OPT (Optical input)
 COA (Coaxial input)

OUTPUT

L o (Line output)
 H o (Headphone output)

GAIN

G H (Gain high)
 G L (Gain low)



Function introduction

PCM FILTER

• FL1 (Minimum phase)

FL2 (Linear phase apodizing fast roll-off)

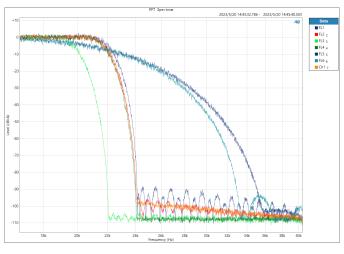
FL3 (Linear phase fast roll-off)

FL4 (Linear phase fast roll-off low ripple)

• FL5 (Linear phase slow roll-off)

FL6 (Minimum phase fast roll-off)

FL7 (Minimum phase slow roll-off)





DPLL

 $\bullet~$ DPLL 1~9, the lower the value, the smaller the clock jitter.

This DPLL setting is a unique function of ESS series products. It can adjust the bandwidth of the DPLL digital phase-locked loop circuit inside the chip, so that the chip can achieve a balance between anti-clock jitter and input tolerance.

Effect:

- 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 the occurrence of audio interruption!
 Especially when using TV as the signal source.

USB MODE

- U11 MODE
 - Can connect all USB devices without driver.
 - Can support a variety of game console connection, such as PS5, Switch etc.USB1.1 only supports maximum 24bit/96kHz.
- U2.0 MODE (USB2.0 in connection with WIN system needs to install the driver, support high specification sampling rate)

BRIGHTNESS

 bL1-8 (Brightness level 1~8. The smaller the value, the brightness will be lower)