Safety notes

CAUTION:

TO REDUCE THE RISK OF ELECTRIC SHOCK,
DO NOT REMOVE COVER(OR BACK).

CAUTION
RISK OF ELECTRIC SHOCK
DO NOT OPEN

The lightning flash with arrowhead symbol,with in an equilateral triangle, is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.

The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

Safe use only under elevation 2000m.

WARNING:
TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE.

The contents of this manual are updated without prior notice. If the function of the product you are using is inconsistent with the instructions, the function of the product shall prevail!

Features

- Every detail is high end design.

- 4 pieces of legendary R-2R chip PCM1704U-J from BB, 2 pieces per channel, fully balanced design, maximize chip performance!

- USB uses XMOS second generation 16 core processor XU216, supports native DSD512 and 32-bit 768kHz!

- Top digital filter chip SM5847.

- The clock system uses two accusilicon ultra-low phase noise crystal oscillators.

- Using Altera's high-speed CPLD to process the clock and reduce jitter.

- Support LVDS level I²S transmission (using HDMI interface), can transmit digital audio with the lowest jitter!

- Built in low clock jitter VCXO and PLL, support access to external clock!

- Full function remote control with color LCD and newly developed user interface.

- Use 7 OPA1612 top OP-AMPs from TI.

- High precision, low temperature drift, resistor and capacitor are widely used.

- Low noise discrete component power supply circuit.

- Customized low-noise sealed toroidal transformer manufactured by Noratel, UK,

- All aluminum alloy CNC shell, separate power supply and motherboard design, effectively isolate power interference.
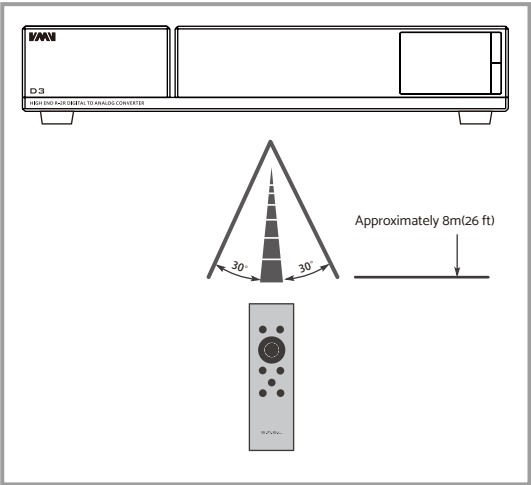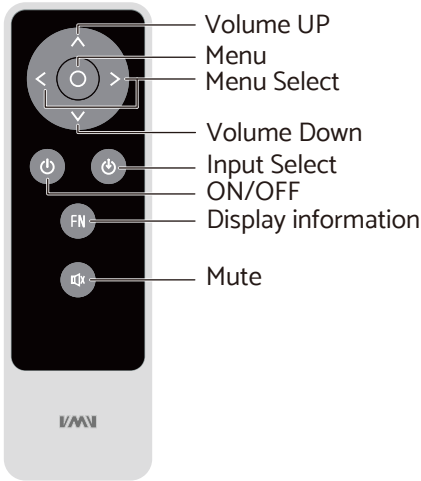
Specification

Input .... USB / Optical / Coaxial / AES(EBU)

Output .... RCA /XLR

THD+N 0.001%

Dynamic range 112dB

SNR 112dB

USB transmission ....Asynchronization

USB compatibility ....Windows 7 / 8 / 8.1 / 10, Mac OSX、Linux

Bit depth ....USB / I²S   1bit，16 ~ 32bit

                   Optical / Coaxial/AES(EBU)   1bit，16 ~ 24bit

Sampling rate ....USB / I²S   PCM   44.1 ~ 768kHz

                                            DSD 2.8224 ~ 22.5792MHz

                   Optical / Coaxial/AES(EBU)   PCM   44.1 ~ 192kHz

Power Consumption 10W

Standby power .... <0.8W

Size ....280X240X51mm (WxHxD)

Weight 3.96kg

Remote Control
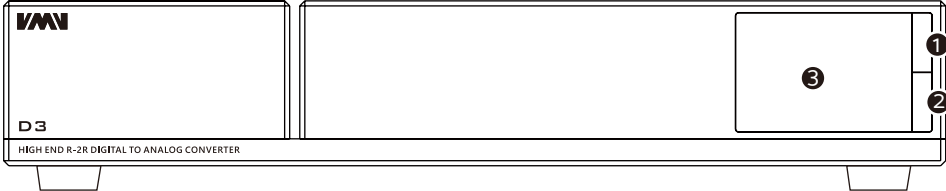
Install 2 x AAA batteries as instructions

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.

Volume UP
Menu
Menu Select

Volume Down

Input Select
ON/OFF
Display information

Mute

Approximately 8m(26 ft)

30° 30°

Functions

Main unit front
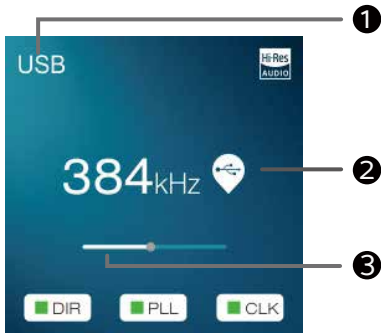

1. Turn on/OFF

2. Input select knob

3. Display

Main unit back
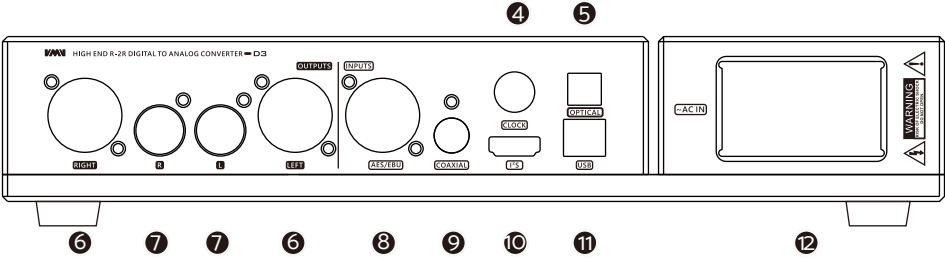
4. Clock in

5. Optical input

6. Balanced output

7. Line output

8. AES/EBU input

9. Coaxial input

10. I²S input

11. USB input

12. Power input

Operation Instructions

Main Display

1. **Input selection**

2. **Audio format / Sampling rate**

3. **Volume**

1. INPUT

- ■ USB AUDIO
- ■ OPTICAL
- ■ COAXIAL
- ■ AES/EBU
- ■ I²S(HDMI)

2. OS Rate

- ■ OSR4x
- ■ OSR8x

Note: This setting is to set the SM5847 to work at 4 times oversampling or 8 times oversampling, the sound will be slightly different, 8 times oversampling performance is better

3. CLOCK MODE

- INTERNAL
- DIR SYNC
  (This setting does not require an external input clock signal, except for the USB input, all are valid. This setting will use the D3 internal VCXO to synchronize with the bit clock of the external input signal, which can greatly reduce the clock jitter generated during digital audio transmission!)
- EXT 10MHz (USB)
  (This setting requires an external input 10MHz clock signal, which only works for the USB input. The internal clock is used for other inputs. At this time, D3 uses a 10MHz clock to generate the clock required for USB playback. This setting can greatly improve the clock accuracy!)
- EXT 10MHz (ALL)
  (This setting requires an external input of 10MHz clock signal, which works on all inputs. When using, the signal source and D3 must use the same 10MHz clock source at the same time to work synchronously, otherwise it will cause noise!)
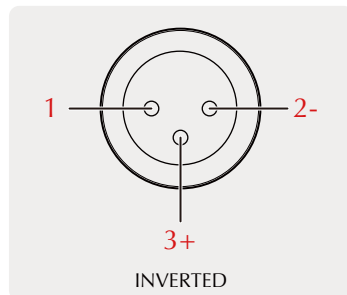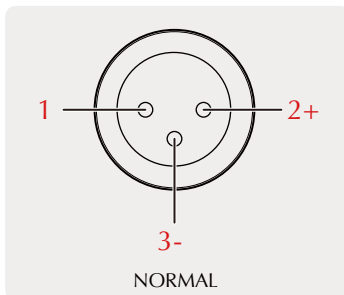- EXT WORD
  (This setting requires an external input word clock (frequency 44.1kHz) signal, which works on all inputs. When using, the signal source and D3 must use the same 44.1kHz clock source at the same time to work in synchronization, otherwise it will cause noise!)
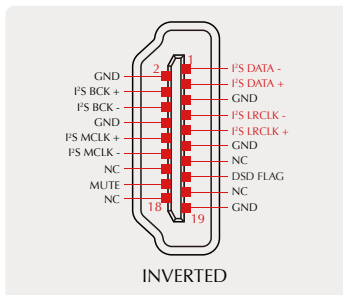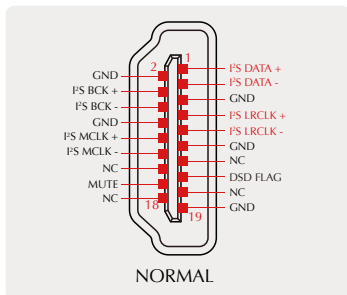
4. AUDIO PHASE

- NORMAL (2+,3-)
- INVERTED(2-,3+)

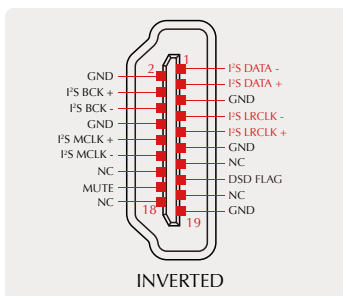Note: This setting valid for both RCA and XLR output !

5. I²S MODE

■ NORMAL

■ INVERTED

NORMAL

Left side labels (top to bottom): GND, I²S BCK +, I²S BCK -, GND, I²S MCLK +, I²S MCLK -, NC, MUTE, NC

Right side labels (top to bottom): I²S DATA +, I²S DATA -, GND, I²S LRCLK +, I²S LRCLK -, GND, NC, DSD FLAG, NC, GND

(Pins labeled 2, 1 at top; 18, 19 at bottom)

INVERTED

Left side labels (top to bottom): GND, I²S BCK +, I²S BCK -, GND, I²S MCLK +, I²S MCLK -, NC, MUTE, NC

Right side labels (top to bottom): I²S DATA -, I²S DATA +, GND, I²S LRCLK -, I²S LRCLK +, GND, NC, DSD FLAG, NC, GND

(Pins labeled 2, 1 at top; 18, 19 at bottom)
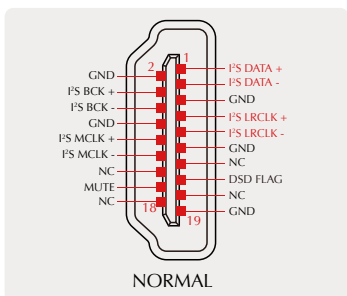
Note: This option is used to match different I²S interface standards, please check the interface definition of the signal source before use

6. I²S DSD CH

■ DSDL=PCM DATA (The DSD left channel using the PCM DATA pin)

■ DSDL=PCM LRCK (The DSD left channel using the PCM LRCK pin)

NORMAL

Left side labels (top to bottom): GND, I²S BCK +, I²S BCK -, GND, I²S MCLK +, I²S MCLK -, NC, MUTE, NC

Right side labels (top to bottom): I²S DATA +, I²S DATA -, GND, I²S LRCLK +, I²S LRCLK -, GND, NC, DSD FLAG, NC, GND

(Pins labeled 2, 1 at top; 18, 19 at bottom)

INVERTED

Left side labels (top to bottom): GND, I²S BCK +, I²S BCK -, GND, I²S MCLK +, I²S MCLK -, NC, MUTE, NC

Right side labels (top to bottom): I²S DATA -, I²S DATA +, GND, I²S LRCLK -, I²S LRCLK +, GND, NC, DSD FLAG, NC, GND

(Pins labeled 2, 1 at top; 18, 19 at bottom)

Note: This option is used to match different I²S interface standards, please check the interface definition of the signal source before use
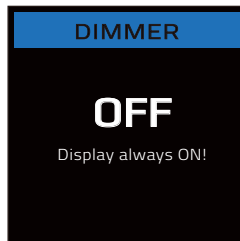
7. I²S DSD FLAG

- DSD FLAG=PIN15
- DSD FLAG=PIN14

DSD FLAG 15

DSD FLAG 14
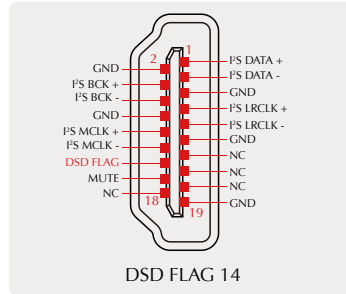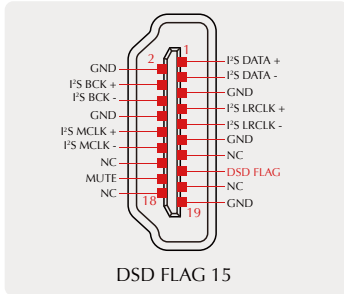
8. DIMMER

- 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.

9. BRIGHTNESS

- LEVEL1-6

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Factory Reset

Connect the power cord when pressing the power button, until the screen shows logo.

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.