S.M.S.L

Hi·Res
AUDIO

DO300 EX

USER MANUAL

Ver 1.0

▣ 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 normall.

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

- Support MQA decoding, support MQA-CD;

- New 3rd generation XMOS XU-316, PCM support up to 32bit/768kHz, DSD support to DSD512;

- Flagship DAC chip AK4191+ AK4499EX, tap all the potential of the chip;

- Dual mono design, one AK4499EX per channel, distortion as low as a staggering 0.00006% (-124dB);

- Use 5 high-end dual op amps and a large number of audiophile components;

- Adopt 2nd PLL to eliminate JITTER during SPDIF transmission;

- The new self-developed CK-03 clock processing circuit greatly reduces clock jitter;

- Support DOP independent display function, accurately determine the current decoding format;

- USB, optical fiber, coaxial , AES, I²S support DSD transmission, coaxial and optical fiber support DOP64;

- Use tempered glass to fully fit the color IPS display;

- Built-in low-noise power processing, while improving power efficiency, lower power consumption;

- Combined with multiple low-noise regulated power supplies, it provides a stable, reliable, efficient, and low-noise power supply system.

- Qualcomm high-end Bluetooth chip, support LDAC (24bit/96kHz), APTX/HD, SBC, AAC;

- High quality all-aluminum alloy shell, support high quality gold plated input and output connection terminals;

- Japan Audio Association (JAS) Hi-Res certification;

- Equipped with remote control and full-featured remote control.

Specifications

Input..USB/Optical/Coaxial/Bluetooth/I²S
Output...RCA/XLR/4.4mm+6.35 Headphone Jack

THD+N...0.00006%(-124dB)(UN-WTD)
HPA THD+N...0.0001%(-120dB)(UN-WTD)
Line output amplitude...XLR   5Vrms
....RCA   2.5Vrms
Headphome output power...2Wx2(16Ω)
....1Wx2(32Ω)
Output Impedance...XLR   200Ω
....RCA   100Ω
....HPA   near 0Ω
HPA gain control...low   0dB
....high   +7dB
Dynamic range..XLR   132dB
....HPA   127dB
SNR..XLR   132dB
....HPA   127dB
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 Width:	USB	PCM	44.1~768kHz(32bit)
			2.8224~22.5792MHz(1bit)
		DoP	DoP64~DoP256
	Optical / Coaxial		44.1~192kHz(24bit)
		DoP	DoP64

Bluetooth specification..5.1(Supports SBC,AAC,aptX,apt HD,LDAC(24bit/96kHz))
Power Consumption..<20W
Standby power..<0.5W
Size..222x39x207mm(WxHxD)
Weight..1.54kg/3.40lbs

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.

Power ON/OFF

Up

MENU/OK

Next level menu

Return

Down

Input select

Mute

FN(Define in the menu)

Volume +

Volume -

S.M.S.L

RC-8C

Parts

■ DO300EX Accessories

Display	Remote window	Indicator light
Knob	4.4mm headphone jack	6.35mm headphone jack
RCA output	Bluetooth input	XLR output
Coaxial input	Optical input	I2S input
USB input	AC input	
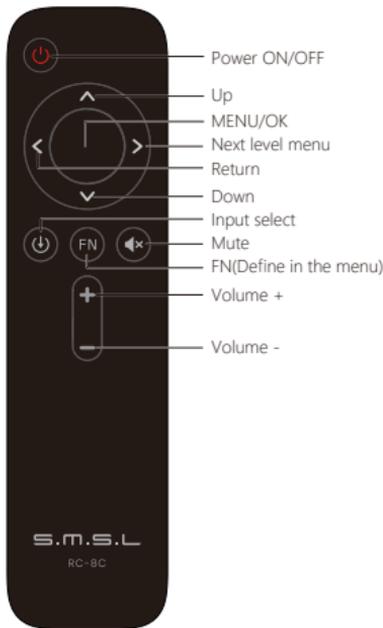
1. Display
2. Remote window
3. Indicator light
4. Knob
5. 4.4mm headphone jack
6. 6.35mm headphone jack
7. RCA output
8. Bluetooth input
9. XLR output
10. Coaxial input
11. Optical input
12. I2S input
13. USB input
14. AC input

1* SMSL DO300EX
1* USB Cable
1* Warranty Card

1* Remote Control
1* AC Cable

1* Bluetooth Antenna
1* User Manual

Instructions

INPUTS

- USB
- BLUETOOTH
- OPTICAL
- COAXIAL
- I2S(HDMI)

PCM FILTER

- SHARP ROLL-OFF
- SLOW ROLL-OFF
- SHORT SHARP
- SHORT SLOW
- SUPER SLOW
- LOW DISPERSION

OUTPUTS

- ALL LINE OUT
- HEADPHONE OUT
- BALANCED
- UNBALANCED

HPA GAIN

- LOW
- HIGH

SOUND COLOR

- SOUND 1(5.6M)
- SOUND 2(5.6M)
- SOUND 3(11M)
- SOUND 4(11M)

DSD FILTER

- WIDE
- NARROW

The AK4499EX operates at a sampling rate of 5.6448MHz.
The AK4499EX operates at a sampling rate of 11.2896MHz.

■ Instructions

PRE MODE

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

- VARIABLE : The output volume is controlled.
- FIXED : Disable the volume adjustment function to keep the volume at the current value.
- FIXED DSD BYPASS : Open the DSD direct access function. At this time, the volume of PCM or DSD is not adjusted. The output amplitude is fixed to about 3.7VRMS. When this function is opened, the DSD is not processed at all, and the output is directly output.

FN KEY FOR

- SWITCH LINE/HPA
- BLUETOOTH

- OUTPUTS
- PHASE

I²S MODE

- NORMAL

- REVERSED

REVERSED

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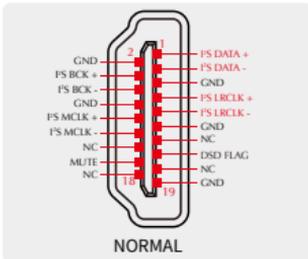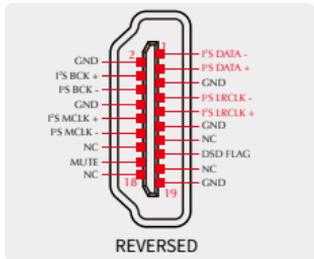
Note: This option is used to match different I²S interface standards, please check the interface definition of the signal source before use.

◨ Instructions

I²S DSD CHANNEL

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

> Note: When using the I²S input to streaming DSD audio, if you find that the left and right channels are incorrect, you can use this option to correct it.

AUDIO PHASE

- NORMAL (2+,3-)

- INVERTED (2-,3+)
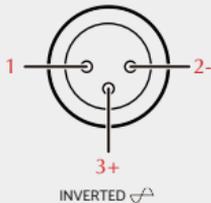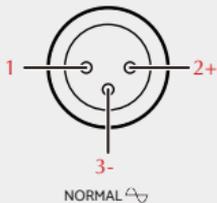
Instructions

DIMMER

- 5 second ~ 60 second

  (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

RESET

- During Bluetooth input, long press the middle button of the knob, the system will only reset the Bluetooth pairing status;

- During other input, long press the middle button of the knob, the system will clear all settings, including Bluetooth.

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 DO300EX 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

- DO300EX supports MQA decoding with USB, optical fiber and coaxial!

- DO300EX'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.

  MQA and the Sound Wave Device are registered trade marks of MQA Limited.© 2016

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.