

S.M.S.L



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 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 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

- The top performance D/A chip ES9038PRO from ESS Technology;
- The high-performance power supply chip ES9311, the noise of ES9311 is as low as 1uVrms, to push ES9038PRO to the limit;
- XMOS XU-208, true 32bit audio processing, supports DoP and Native DSD, and reaches 32bit/768kHz and DSD512;
- Ultra-low phase noise and optimized clock system to achieve ultra-low clock jitter;
- USB, optical fiber, coaxial support DSD transmission, coaxial and optical fiber support DOP64
- Use tempered glass display panel for higher light transmission and longer service life;
- Built-in shielded, low noise power supply processing, while improving power efficiency, lower power consumption;
- Specially designed discrete component linear regulated power supply and multiple low noise regulated power supplies to provide low noise power for analog circuits.
- Qualcomm's latest Bluetooth chip supports LDAC 24bit/96kHz, APTX/HD, SBC, AAC;
- High quality gold-plated input and output jacks;
- 3 high-end dual op-amps OPA1612 and a lot of audio grade components are used;
- 1.9 inch TFT LCD display;
- JAS Hi-Res certification;
- Equipped with remote control and full-function remote control.

Specifications

Input	USB / Optical / Coaxial / Bluetooth		
Output	RCA / XLR		
Output level:			
.....Pre mode	XLR	4.8Vrms	
	RCA	2.3Vrms	
.....Fixed mode	XLR	4.3Vrms	
	RCA	2.0Vrms	
THD+N	0.000065%(-123.5dB)		
.....	0.000055%(-125dB)(A-Weighted)		
Dynamic range	XLR	130dB	
	RCA	123dB	
SNR	130dB		
Output impedance	XLR	207Ω	
	RCA	142Ω	
USB transmission	Asynchronization		
USB compatibility	Windows 7 / 8 / 8.1 / 10 / 11, Mac OSX, Linux		
Bit depth	USB	1bit, 16 ~ 32bit	
	Optical / Coaxial	1bit, 16 ~ 24bit	
Sampling rate	USB	PCM	44.1 ~ 768kHz
		DSD	2.8224 ~ 22.5792MHz
	Optical / Coaxial	PCM	44.1 ~ 192kHz
		DSD	DSD64(DoP)
Bluetooth specification:			
LDAC	24bit/96kHz (990kbps/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 Consumption5W		
Standby power	<0.5W		
Size	187.5X154X40mm (WxHxD)		
Weight	0.79kg		

Note

Firmware and driver download:
<http://www.smsl-audio.com/cn/download.asp>

Remote control

- Install 2 x AAA batteries as instructions.
- When using the remote control, point it toward the remote control 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 unintentional operation of other devices that can be controlled by infra.

Operating the remote control



Note

This remote controller use 2 x R03/AAA batteries.

Display Interface and Instructions



- | | | |
|-----------------------|-----------------|-----------------|
| 1 Knob* | 2 Display | 3 Remote window |
| 4 Bluetooth antenna** | 5 Optical input | 6 RCA output |
| 7 Balanced output | 8 Coaxial input | 9 USB input |
| 10 AC IN | | |

Note: Knob*

- Knob: Volume/Menu up or down
- Button: Press to Menu/Enter
Hold to Return or Power ON/OFF

Bluetooth operating instructions**

Connection:

- Step 1: Switch the input source in the SETTING MENU or press the Bluetooth button of the remote;
- Step 2: Turn on the Bluetooth function of the mobile phone, search for "SMSL SU-9n", and tap to pairing. When the mobile phone displays "connected", it has been successfully connected.

Re-connection:

When you had lost the connection with the SU-9n, for example, going out, and back home, some phones will not re-connect the SU-9n if the SU-9n has not been re-boot, so you can press the Bluetooth button on the remote to Re-connect.

Clear pairing: Long press the "Bluetooth" button on the remote control. After clearing the pairing, some phones may no longer be able to search for "SMSL SU-9n". In this case, you need to delete the Bluetooth device "SMSL SU-9n" which saved in the phone, and then search and pairing again.

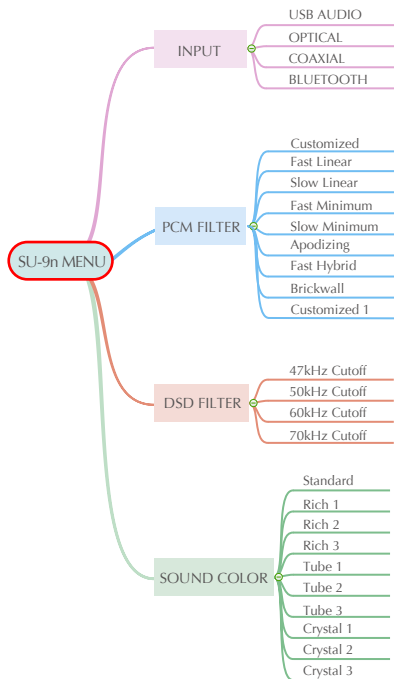
User interface

1. Main

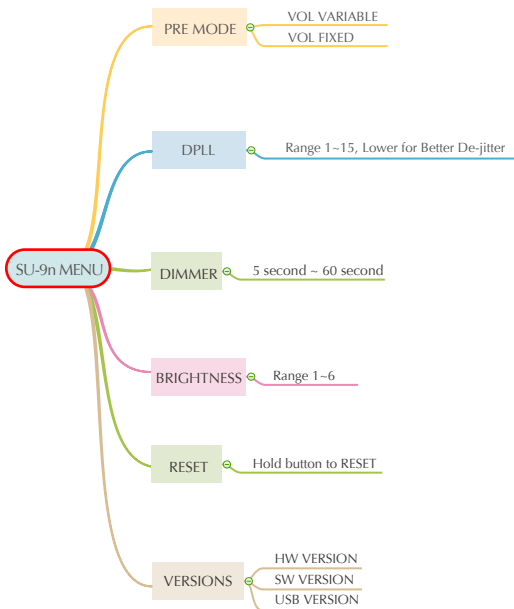


- 1、 Audio format
- 2、 Volume Level
- 3、 Sampling rate

MENU TREE



MENU TREE



Instructions

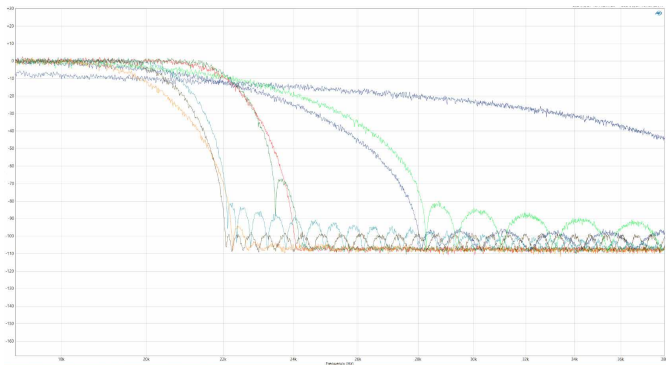
■ INPUT

- USB AUDIO
- OPTICAL
- COAXIAL
- BLUETOOTH

■ PCM FILTER

- Customized
- Fast Linear
- Slow Linear
- Fast Minimum
- Slow Minimum
- Apodizing
- Fast Hybrid
- Brickwall
- Customized 1





■ DSD FILTER

There are 4 kinds of digital filtering in total. It's the way that the digital operation means the clutter outside the audio filter out, respectively

- 47kHz Cutoff
- 50kHz Cutoff
- 60kHz Cutoff
- 70kHz Cutoff

■ SOUND COLOR

There are 9 sound color settings in SU-9n.

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

This setting is using the DSP of ES9038PRO, to make some different sound color, all of these settings will not change the frequency response curve. When set to "Standard", this setting will be bypassed.



Instructions

■ PRE MODE

Volume control enable or disable.

- Vol Fixed : In this mode, volume is fixed on max output level, and the SU-9n will ignore the volume operations.
- Vol Variable: In this mode, volume can be adjust by remote controller, and make SU-9n a pre-amplifier.

■ 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 DPLL digital phase locked loop circuit Bandwidth, so that the chip achieves a balance between anti clock jitter and input tolerance.

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. Increase this value can avoid the sound interruption! Especially when using TV as signal source!

■ 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

- In this interface, press and hold the button of the knob, the system will reset all settings, including Bluetooth pairing status.

■ VERSIONS

- This page shows the system infomations, model name, version...

