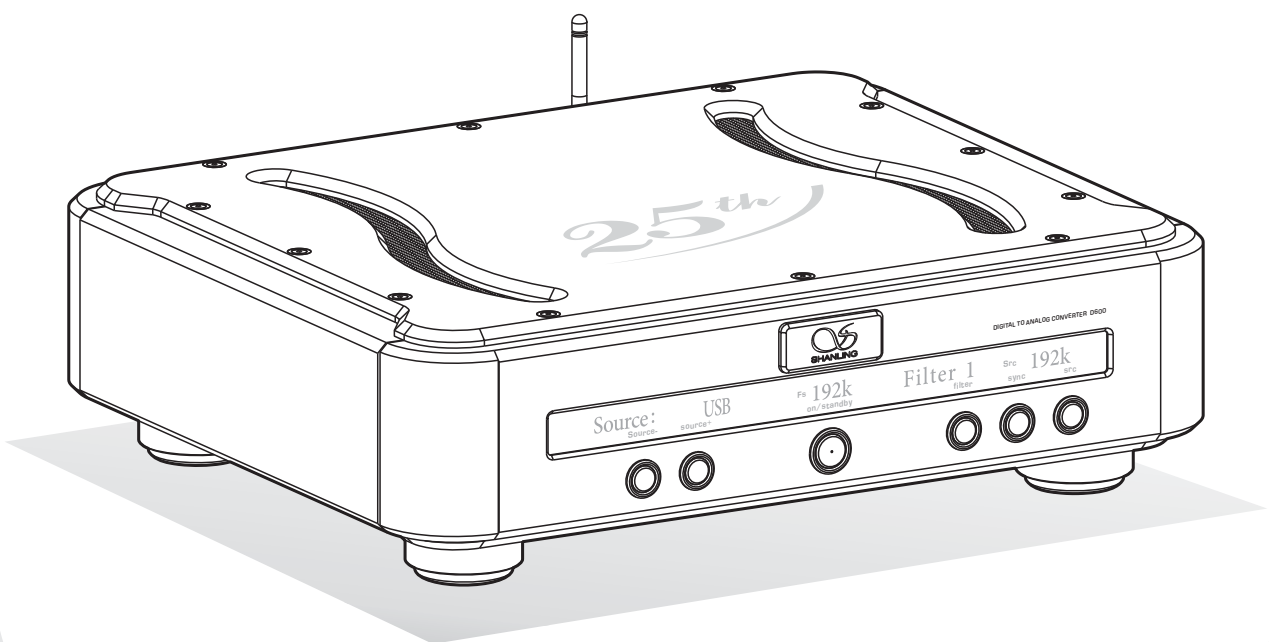




# D600

**DAC解码器**  
**DIGITAL TO ANALOG CONVERTER**







## 敬爱的用户

欢迎购买DAC解码器，让我们借此机会向您表示诚挚的谢意。我们向您建议：在动手操作之前，请仔细阅读此使用说明书，并注意存放好以备随时参考。

## 安全指示

1. 不可自行开启本机进行维修或改造！本产品不设有用户自行检修的零件，本机的维修须请具备专业资格的人员进行。开启机器及随意改造内部电路会令检修人员难以维修本机，而且会对机器造成性能或质量的影响。
2. 为了充分通风，设备背面和两侧应最少保留10cm，顶部应最少保留20cm的空间。
3. 设备不应遭受水滴或水溅，机器上不应放置诸如花瓶一类的装满液体的物品。
4. 通风孔不要覆盖诸如报纸、桌布和窗帘等物品而妨碍通风。
5. 设备上不要放置裸露的火焰源，如点燃的蜡烛。
6. 设备应当连接到带保护接地连接的电网电源输出插座上。
7. 用电源插头和器具耦合器作为断开装置，断开装置应当保持能方便地操作。
8. 必须遵照电池废弃的相关地方条例来废弃旧电池。
9. 仅适用于海拔2000m以下地区安全使用，标志见图1。
10. 仅适用于非热带气候条件下安全使用，标志见图2。


## 安全注意事项




**警告**  
谨防触电  
切勿打开机盖



警告：谨防触电，切勿打开机盖。

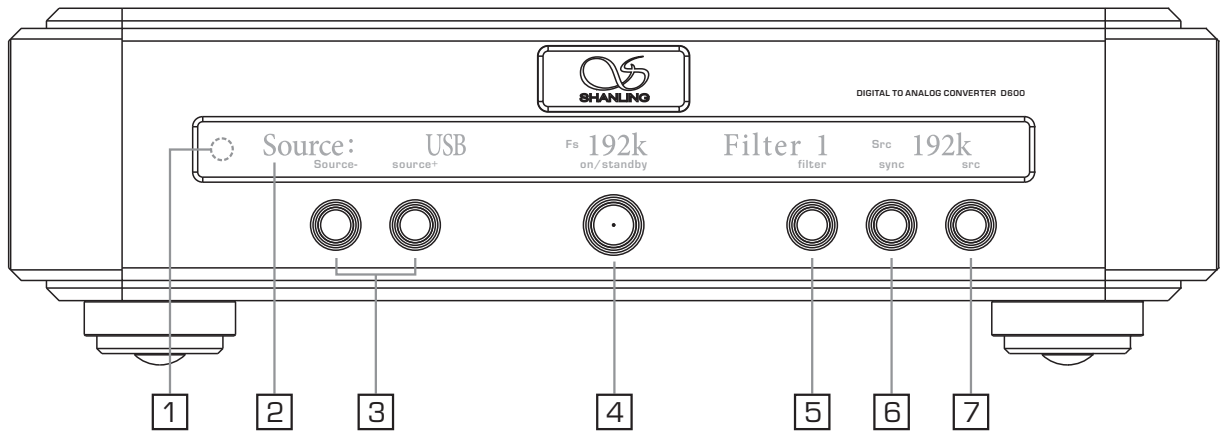
 等边三角形中有箭头闪电符号的图形表示警告使用者在产品内有高压电，会导致人为的触电。

 等边三角形中有叹号的图形表示警告使用者该设备有重要的操作和维护指示。

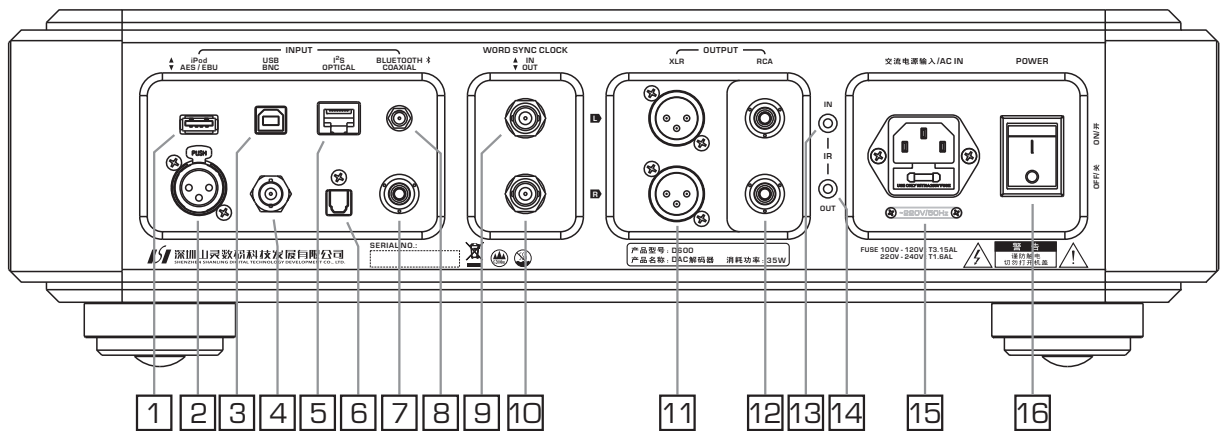
## 操作注意事项

1. 开启电源开关前  
请再次检查所有电缆是否连接好。
2. 关于结露  
如果本机内部和环境之间存在较大温差，则本机内部的运转部件上可能会产生结露，导致本机无法正常运转。如果发生这种情况，请断开电源并将本机搁置1至2个小时，然后等到几乎没有温差时再使用本机。
3. 移动本机  
请断开电源并从电源插座上拔掉电源线，接着请断开接至其它系统设备的连接电缆。

## 部件名称

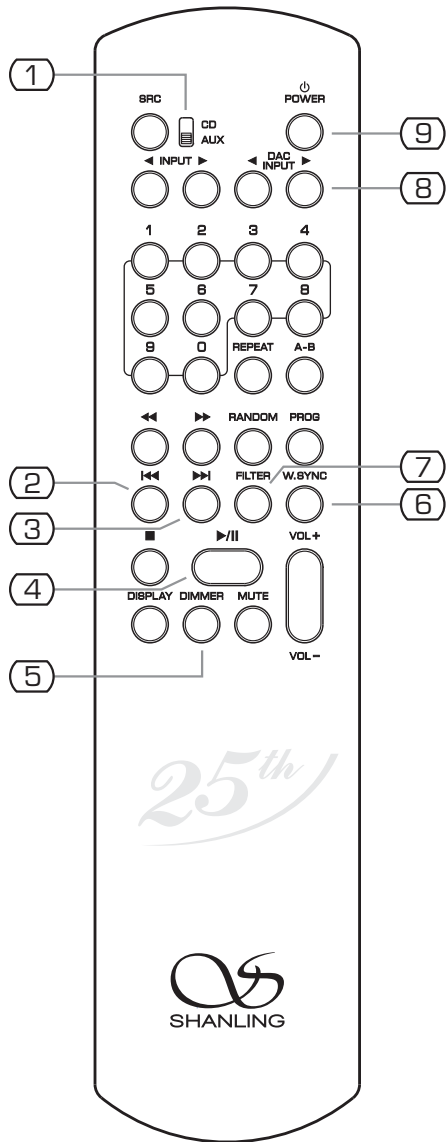


- |           |          |           |          |
|-----------|----------|-----------|----------|
| 1. 遥控接收窗口 | 3. 输入选择键 | 5. 滤波器选择键 | 7. 升频选择键 |
| 2. 多功能显示窗 | 4. 待机开关键 | 6. 时钟选择键  |          |

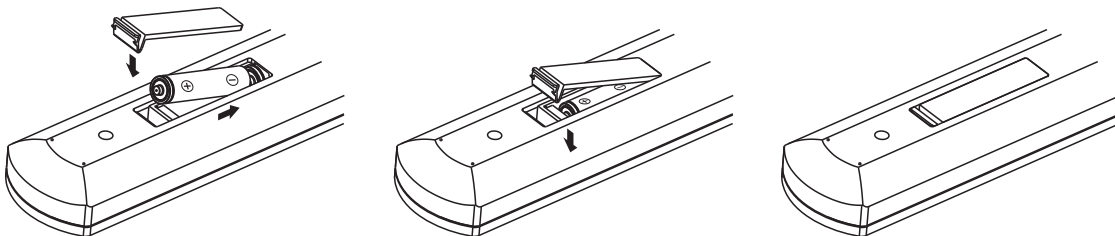


- |                            |                     |
|----------------------------|---------------------|
| 1. iPod 信号输入接口             | 9. 字同步时钟信号输入接口      |
| 2. AES/EBU 信号输入接口          | 10. 字同步时钟信号输出接口     |
| 3. USB 信号输入接口              | 11. XLR 信号输出接口      |
| 4. BNC 信号输入接口              | 12. RCA 信号输出接口      |
| 5. I <sup>2</sup> S 信号输入接口 | 13. 遥控信号输入接口        |
| 6. 光纤信号输入接口                | 14. 遥控信号输出接口        |
| 7. 同轴信号输入接口                | 15. 交流电源输入插座 (带保险管) |
| 8. 蓝牙天线接口                  | 16. 总电源开关           |

## 遥控器示意图



1. CD/DAC切换开关: 置于AUX位置
2. 上一曲选择键 (iPod有效)
3. 下一曲选择键 (iPod有效)
4. 播放/暂停键 (iPod有效)
5. 显示屏亮度调节键
6. 字同步时钟切换键
7. 滤波器选择键
8. 输入选择键
9. 待机开关键



注:

1. 遥控器有效距离不大于10米, 遥控夹角不大于30度。
2. 遥控器未标示按键非本机功能, 操作无效属正常现象。

## 操作说明

### ■ 开/关机器

1. 首先连接好机器的电源线及信号线，再将机器后板上的电源开关置于 [ON/开] 位置，此时面板上的电源指示灯点亮为红色，再按 [on/standby] 键或遥控器上的 [POWER] 键，指示灯变成绿色并闪烁，机器进入预热状态，约30秒钟后机器进入正常工作状态。
2. 要关闭本机电源时，先按下面板上的 [on/standby] 键或遥控器上的 [POWER] 键，再将机器后板上的电源开关置于 [OFF/关] 位置，此时机器处于关闭状态。
3. 在长时间不使用本机时，请将机器的交流输入电源线与市电插座分离。

### ■ 输入切换

按下面板上的 [source-/source+] 键或遥控器上的 [◀DAC INPUT ▶] 键可将音频信号切换到相对应的输入接口，面板上多功能显示窗会显示相应的输入状态。

### ■ USB/DSD输入

1. 将USB电缆从电脑连接到机器后板上。
2. 打开机器电源并按下面板上的 [source-/source+] 键或遥控器上的 [◀DAC INPUT ▶] 键，选择到对应的USB输入信号。
3. 将随机附带的 "USB驱动光盘" 安装到电脑上。您也可以到官方网站 <http://www.shanling.com/cn/product-detail-130.html> 直接下载驱动程序。
4. 将电脑的 "声音" 选项进行设置，并把 "扬声器 XMOS XS1-L1 Audio" 勾选为默认设备。
5. 本机支持最新的DoP技术，也就是使用PCM的框架传输DSD信号，并按照DSD格式解码。DSD传输同样使用USB接口，用户可以下载DSD格式音乐，Windows和Mac下均有相应的播放软件。

### ■ iPod 输入

此功能对应的是机器后面板上的 "iPod" 接口，它是一个USB类型的接口，可以用iPod自带的数据线连接，此接口提供5V/1A的供电能力。

1. 将iPod/iPhone/iPad接入机器后板上的 "iPod" 接口。
2. 打开机器电源并按下面板上的 [source-/source+] 键或遥控器上的 [◀DAC INPUT ▶] 键，选择到对应的iPod输入信号。
3. 可以通过遥控器上的 [▶||]、[◀◀]、[▶▶] 键控制 iPod。

▶|| : 播放/暂停键

◀◀ : 向上选择曲目

▶▶ : 向下选择曲目

注: iPad 在本机上无法充电。

### ■ I<sup>2</sup>S 输入

1. 本接口使用RJ-45连线连接信号源，如连接 "SHANLING T600"。
2. 将信号源切换到 "I<sup>2</sup>S" 状态。

注: 为了提升音质，本接口采用异步连接，因此本接口无法关闭SRC功能。

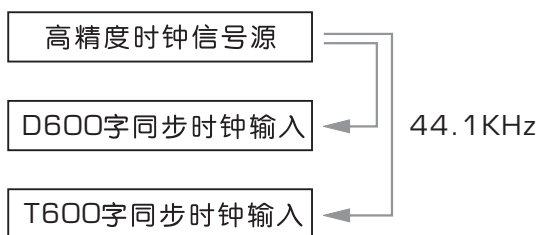
### ■ Bluetooth 输入

1. 连接附件所配的蓝牙天线。
2. 将信号源切换到 "BT" 状态。
3. 此时本机蓝牙会一直处于可以被搜索状态，打开手机或iPad等搜索蓝牙设备。
4. 在搜索到的设备中选择 "SHANLING D600"。
5. 设备连接好后，使用播放软件播放音乐即可。

注: 本机支持APT-X音频传输协议，当用户手机支持APT-X功能时，此传输方式会自动打开，给用户高品质音频体验。

## ■ 字同步时钟输入

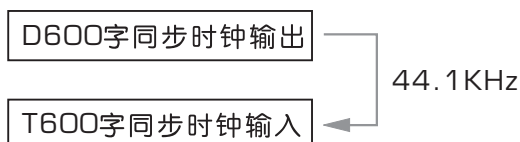
1. 从外部输入一个高精度的字同步时钟信号 (44.1KHz) 至机器的字同步时钟输入接口, 按下面板上的 [sync] 键或遥控器上的 [W.SY NC] 键, 将机器切换到外部字同步时钟状态, 显示屏上显示 "WordSync" 字符, 机器内部的锁相环控制器将自动锁定外部输入的字同步时钟信号。如果输入的时钟频率是不正确的, 同步锁相环控制器将不会锁定, 显示屏上的 "WordSync" 字符将处于闪烁状态, 机器使用的时钟信号将自动切回到内部时钟状态。
2. 在外部字同步时钟状态下, 按下面板上的 [sync] 键或遥控器上的 [W.SY NC] 键, 机器将切回到内部时钟状态, 显示屏上的 "Word Sync" 字符将取消。
3. 字同步时钟输入连接示意图:



注: 时钟同步功能打开时, 机器会自动禁用SRC功能, 因为此时SRC不会再有提升效果的作用。

## ■ 字同步时钟输出

1. 按下面板上的 [sync] 键或遥控器上的 [W.SY NC] 键, 将机器切换到外部字同步时钟状态, 显示屏上显示 "WordSync" 字符, 此时机器会输出一个44.1KHz的频率供其它机器同步使用。
2. 字同步时钟输出连接示意图:



## ■ SRC 功能

1. 本机采用先进的双时钟系统, 并且根据输入的采样频率自动识别, 并选择相应的升频时钟。
2. 升频频率, 按下面板或遥控器上的 [SRC] 键, 最右边显示屏显示变化如下:
  - a. 44.1KHz或其倍数输入  
44.1KHz → 88.2KHz → 176.4KHz  
↑
  - b. 48KHz或其倍数输入  
48KHz → 96KHz → 192KHz  
↑

注: 中间显示屏显示的频率为输入信号的采样频率, 当WordSync功能打开时, 显示的频率为输入同步时钟的频率。

## ■ Filter 滤波器设置

本机提供了两种用户可供选择的滤波器设置模式, 按下面板或遥控器上的 [FILTER] 键, 可在 "Filter 1" 或 "Filter 2" 两种模式之间切换。通过改变这项设置, 可以体验到不同的音色输出。

注: 推荐在多数应用下采用 "Filter 1" 模式。

## ■ 显示屏亮度调节

1. 结合播放环境的光线强度, 可按下遥控器上的 [DIMMER] 键进行显示字符的亮度调节。每按一次显示屏亮度将从 "亮、暗、关" 中循环变换。
2. 开机时显示屏自动置于 "亮" 状态。

## ■ 输出接口介绍

RCA非平衡输出:

经过电子管, 胆味十足, 十分适合聆听音乐。

XLR平衡输出:

不经过电子管, 将DAC的信号直接以全平衡的方式输出, 以达到超低失真, 超高信噪比。

## 技术规格

技术参数	输出电平: 2.5V (RCA), 4.6V (XLR) 频率响应: 20Hz - 20KHz ( $\pm 0.1$ dB) 信噪比: $> 115$ dB (RCA), $> 120$ dB (XLR) 总谐波失真: $< 0.05\%$ (RCA), $< 0.0002\%$ (XLR) USB接收器规格: USB2.0, 24bit/384KHz (MAX) DSD信号规格: DSD 1bit/2.8MHz, DSD 1bit/5.6MHz
常规	消耗功率: 35W 待机功耗: $< 0.5$ W 体积 (宽 x 深 x 高): 480 x 400 x 142mm 净重: 约19.5kg

## 随机附件

三联电源线: 1根 3.5mm双声道耳机连接线: 1根 蓝牙天线: 1根 遥控器: 1个 说明书: 1本 保修卡: 1张
---



## Dear customer

Thank you for buying digital to analog converter. We would like to take this opportunity to express our sincere appreciation to you. We recommend you to read this user's manual carefully before operating the unit and keep it available for reference when needed.

## Safety Instructions

1. Do not open this unit for repair or modification by anyone other than a qualified technician! This product has no user-serviceable parts. Opening the unit and modifying the internal circuitry can make subsequent maintenance difficult or impossible and affect performance and sound quality.
2. For good ventilation, a minimum of 10cm clearance shall be maintained at the back and two sides and 20cm at the top of the unit.
3. Allow no water dripping or splashing into the unit. Place no object containing liquid on the unit, e.g. Vase.
4. Do not cover any ventilation hole with newspaper, cloth, curtain, etc. in case of ventilation blocking.
5. Allow no exposed flame source on the unit, e.g. burning candle.
6. The unit shall be connected to AC power output socket with grounding protection.
7. If power plug and appliance coupler are used as disconnecting device, the disconnecting device shall be easily operable.
8. The waste battery must be treated according to relevant local battery wasting regulations.

9. Only applicable for safe use in the area with elevation under 2000m.  
See Fig. 1 for the sign.



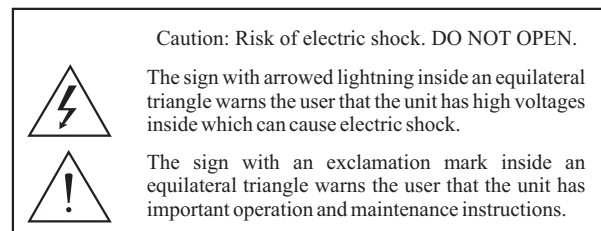
Fig. 1

10. Only applicable for safe use under non-tropical climate conditions.  
See Fig. 2 for the sign.



Fig. 2

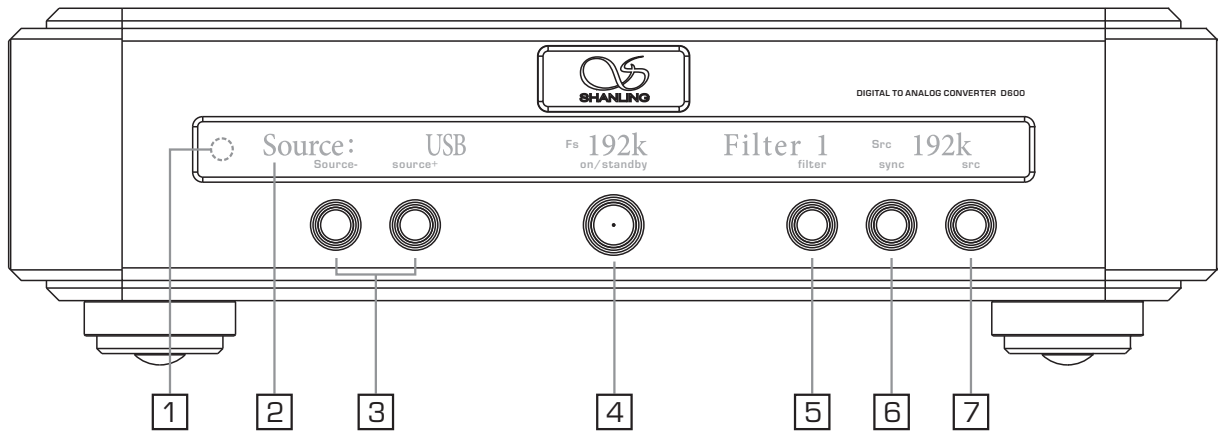
## Safety Precautions



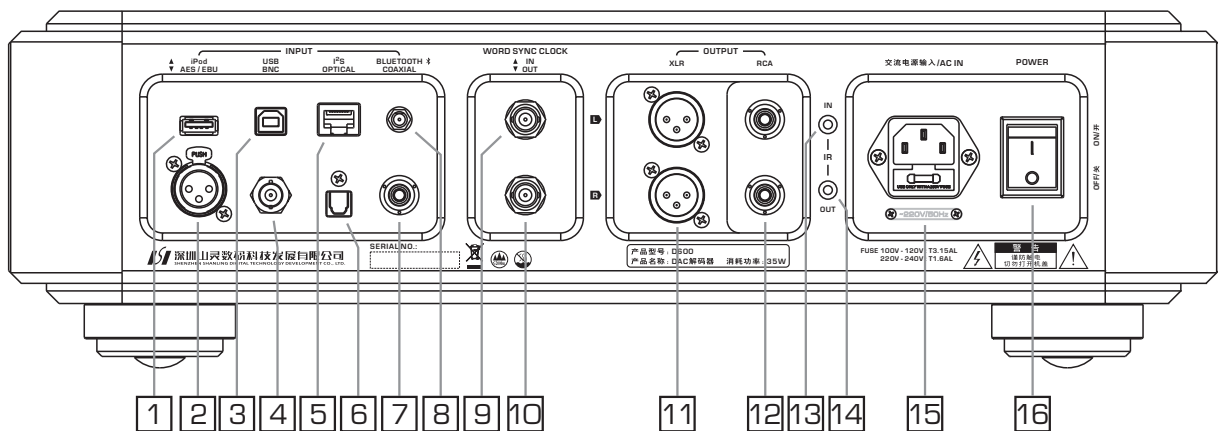
## Operation Precautions

1. Before Turning on  
Please check again the accuracy of all connections cables.
2. About Condensation  
If a great temperature difference exists between the unit interior and the environment, humidity may condense on the internal parts and the unit will not function normally. If this happens, please disconnect power and wait for one or two hours until the temperature difference almost completely disappears.
3. Moving the Unit  
Please turn it off and disconnect it from power socket. Then disconnect all cables connecting with other system devices before moving the unit.

## Parts Identification

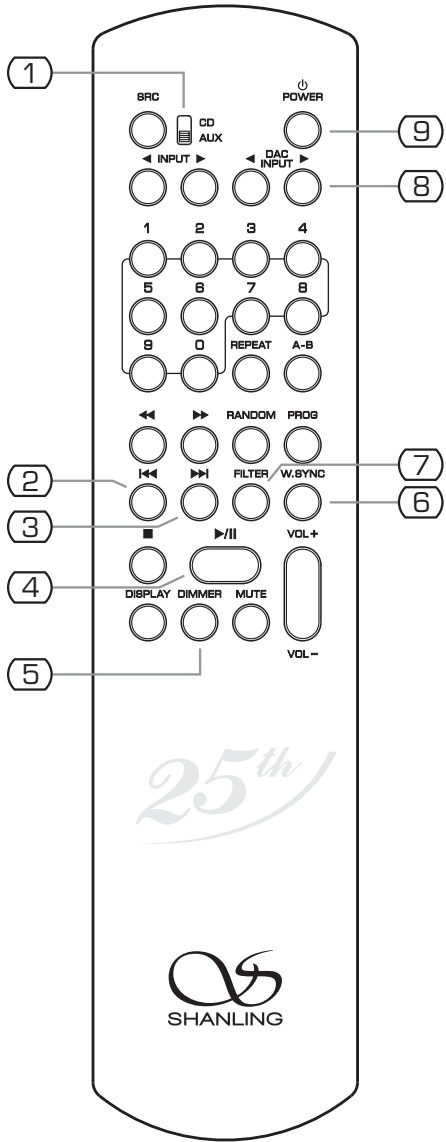


- |                                    |                         |
|------------------------------------|-------------------------|
| 1. Remote control receiving window | 5. Filter selection key |
| 2. Multifunction display window    | 6. Sync selection key   |
| 3. Input selection key             | 7. SRC selection key    |
| 4. Standby switch                  |                         |

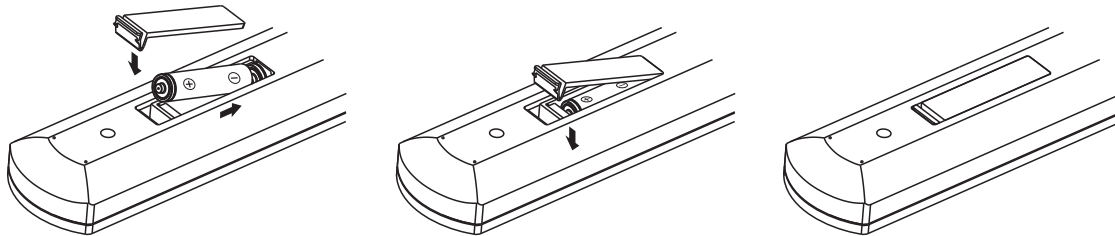


- |  |   |
|--|---|
| 1. iPod signal input interface             | 9. Word sync clock signal input interface   |
| 2. AES/EBU signal input interface          | 10. Word sync clock signal output interface |
| 3. USB signal input interface              | 11. XLR signal output interface             |
| 4. BNC signal input interface              | 12. RCA signal output interface             |
| 5. i <sup>2</sup> S signal input interface | 13. Remote control signal input interface   |
| 6. Optical signal input interface          | 14. Remote control signal output interface  |
| 7. Coaxial signal input interface          | 15. AC power input socket (with fuse)       |
| 8. Bluetooth antenna interface             | 16. Main power switch                       |

Remote Control Diagram



- 1. CD/DAC switch, located at AUX position
- 2. Previous track selection key (iPod valid)
- 3. Next track selection key (iPod valid)
- 4. Play/pause key (iPod valid)
- 5. Screen brightness adjustment key
- 6. Word sync clock key
- 7. Filter selection key
- 8. Input selection key
- 9. Standby switch key



Note:

- 1. The valid distance of the remote controller is not more than 10m and the included angle of remote control is not more than 30°.
- 2. Keys without function names on the remote controller are useless for this product. It is normal that there will be no response when you press them.

## Operation Instructions

### ■ Turn on/off

1. First connect the unit power line and signal line. Locate the power switch on the rear panel at the position [ON], and the power indicator on the panel turns red. At this time, press [on/standby] key or [POWER] key on the remote controller, and the indicator turns green and blinks. The unit enters warming-up status. After about 30 seconds, the unit enters normal working status.
2. To turn off this unit, first press [on/standby] key on the panel or [POWER] key on the remote controller, and then locate the power switch on the rear panel at the position [OFF]. At this time, the unit is in "off" status.
3. If the unit is not to be used for some time, it should be unplugged to disconnect it from AC power.

### ■ Input Switching

Press [source-/source+] key on the panel or [◀ DAC INPUT ▶] key on the remote controller to switch the audio signal to the corresponding input interface, and the multifunction display window displays the corresponding input status.

### ■ USB/DSD Input

1. Connect USB cable from computer to the rear panel of the unit.
2. Turn on the unit and press [source-/source+] key on the panel or [◀ DAC INPUT ▶] key on the remote controller to choose corresponding USB input signal.
3. Install the accompanying "USB driver disc" in the computer, or you may download the driver directly from the official website <http://www.shanling.com/cn/product-detail-130.html>.

4. Set the "sound" option in the computer and set the "speaker XMOS XS1-L1 Audio" as default device, as shown in the right figure.
5. The unit supports the newest DoP technology, it's using the PCM frame to transfer the DSD signal, and decoding by DSD format. DSD transferring by the same USB interface, the consumers can download the music file with DSD format. Both Windows and Mac have the corresponding playback software.

### ■ iPod Input

The function corresponds to the "iPod" interface on the rear panel. It's a USB type interface which can be connected with iPod data cable. The interface provides 5V/1A power supply.

1. Connect iPod/iPhone/iPad to the "iPod" interface on the rear panel.
2. Turn on the unit and press [source-/source+] key on the front panel or [◀ DAC INPUT ▶] key on the remote controller to choose corresponding iPod input signal.
3. iPod may be controlled with [▶/II], [◀◀], [▶▶] keys on the remote controller.

▶/II : play/pause key

◀◀ : backward track selection key

▶▶ : forward track selection key

Note: The iPad can not be charging on the unit.

### ■ I<sup>2</sup>S Input

1. The interface is using RJ-45 cable to connect the digital source, for example, connect it to the equipment of "SHANLING T600".

2. Switching the source to I<sup>2</sup>S status.

Note: In order to improve the sound quality, the interface is using the asynchronous connection way, so this interface can not close the SRC feature.

## ■ Bluetooth Input

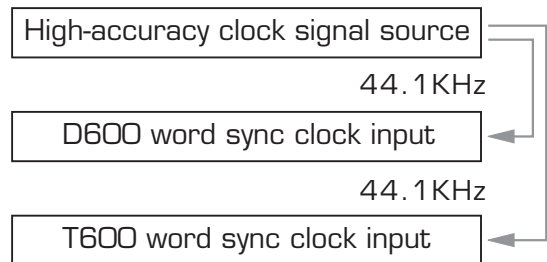
1. Connect the equipped Bluetooth antenna accessory.
2. Switching the source to "BT" status.
3. In this case, the local Bluetooth has been in a state can be searched, open search for Bluetooth devices such as mobile phone or iPad etc.
4. Selected the "SHANLING D600" from the searched devices.
5. When the device is connected, using the playback software to play music.

Note: The unit supports the APT-X Audio Transfer protocol, when consumer using the mobile phone which supports the APT-X feature, the transmission mode will be opened automatically, to offer a high quality audio performance to consumers.

## ■ Word Sync Clock Input

1. Input a high-accuracy word sync clock signal [44.1KHz] from the outside to the word sync clock input interface of the unit. Press [sync] key on the panel or [W.SYNC] key on the remote controller and switch the unit to external word sync clock status, and the screen displays "WordSync" and the internal phase locked loop controller will automatically lock the word sync clock signal inputted from the outside. If the inputted clock frequency is inaccurate, the phase locked loop controller will not lock, and the "WordSync" displayed on the screen will keep blinking and the clock signal of the unit will automatically go back to internal clock status.

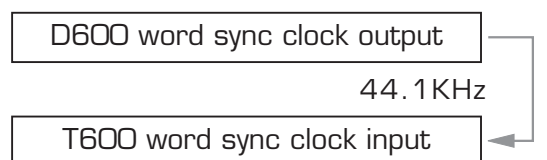
2. In the status of external word sync clock, Press [sync] key on the panel or [W.SYNC] key on the remote controller, and the unit will go back to internal clock status and "WordSync" displayed on the screen will disappear.
3. Schematic diagram of word sync clock input connection:



Note: When you open the sync clock function, the SRC feature will be forbidden automatically, as the SRC feature can not improve the sound effect under this condition.

## ■ Word Sync Clock Output

1. Press the [sync] button on the front panel or press the [W.SYNC] key on the remote controller, switching the unit to external word sync clock status, the character "WordSync" displayed on the screen, the unit will output a 44.1KHz signal as sync usage for other equipments.
2. Schematic diagram of word sync clock output connection:



## ■ SRC feature

1. The unit is using the advanced dual clock system, it can be selected the corresponding upsampling clock automatically by the input sampling frequency identification.

2. Upsampling frequency, press the [SRC] key on the front panel or remote controller, the rightmost display changes as follows.

a. 44.1 KHz or its multiple input  
44.1KHz → 88.2KHz → 176.4KHz  
↑──────────────────────────────────┘

b. 48 KHz or its multiple input  
48KHz → 96KHz → 192KHz  
↑──────────────────────────────────┘

Note: The middle screen will display the input frequency, when you open the WordSync feature, the displayed frequency is the input sync clock frequency.

## ■ Filter setup

The unit supports two optional filter setup mode, press the [FILTER] key on the front panel or remote-controller, it can switching the filter mode between "Filter 1" or "Filter 2". Through this filter mode change, the consumers will experience a different tone output.

Note: "Filter 1" mode is recommended by most of applications.

## ■ Screen Brightness Adjustment

1. Use [DIMMER] key on the remote controller to adjust the brightness of display based on the brightness of surrounding environment. Each press will circularly change the screen brightness from "bright", "dim" to "off".

2. The screen brightness is automatically set as "bright" at startup.

## ■ Output instructions

RCA un-balance output:

Through the vacuum tube circuit, the classical tube sounding, very good for music listening.

XLR balance output:

Doesn't pass through the tube circuit, direct take the DAC signal as full-balance output, in order to achieve the effect of ultra-low distortion and high signal-to-noise ratio.

## Technical Specifications

Technical parameters	Output level: 2.5V (RCA), 4.6V (XLR) Frequency response: 20Hz - 20KHz ( $\pm 0.1$ dB) Signal noise ratio: $> 115$ dB (RCA), $> 120$ dB (XLR) Total harmonic distortion: $< 0.05\%$ (RCA), $< 0.0002\%$ (XLR) USB receiver spec.: USB2.0, 24bit/384KHz (MAX) DSD signal spec.: DSD 1bit/2.8MHz, DSD 1bit/5.6MHz
General parameters	Power consumption: 35W Standby power consumption: $< 0.5$ W Dimension (W x D x H): 480 x 400 x 142(mm) Net weight: about 19.5kg

## Accompanying Accessories

Power cord w/3-prong plug: 1 3.5mm double channel earphone connection line: 1 Bluetooth antenna: 1 Remote controller: 1 User's manual: 1 copy Warranty card: 1
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