

GUSTARD

R26

High-performance Audio DAC
User Manual



About MQA (Master Quality Authenticated)

MQA 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.

When the screen shows 'MQA' or 'MQA.' it indicates that the product is decoding and playing an MQA stream or file, and denotes provenance to ensure that the sound is identical to that of the source material.

'MQA.' indicates that not only is it playing an MQA Studio file, but the file has also either been approved in the studio by the artist/producer or has been verified by the copyright owner.

'OFS' confirms that the product is receiving an MQA stream or file. This delivers the final unfold of the MQA file and displays the original sample rate.

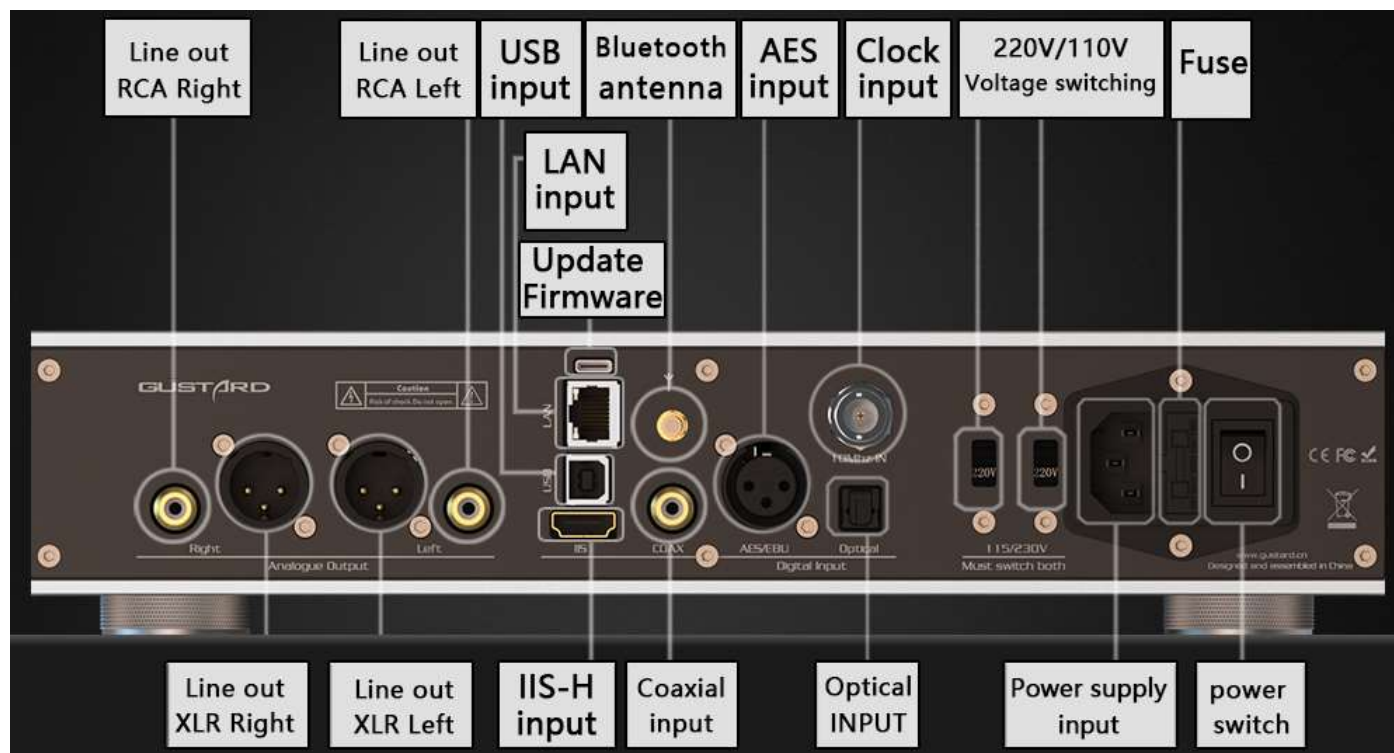
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Front Panel



1. Waiting/using switch (default waiting when power on)
2. Screen: Input Channel, format, rate and volume.
3. Input/menu: short press to switch input channel, long press to enter/exit menu.
4. Scroll wheel: Adjust volume in main screen, change item' s value in menu.

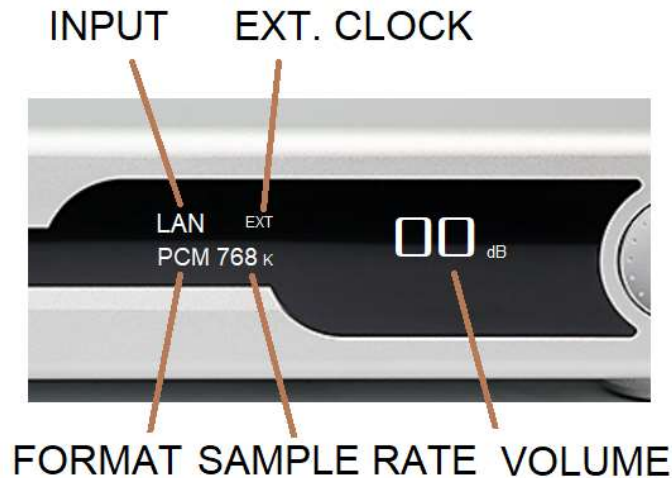
Back Panel



*two switches of AC standard must be set to the same to prevent the product

Screen and menu

1. R26 uses a high-resolution OLED screen to display the working situation and functions. The following figure is main page of the display.



2. Input select:

In main page, short-press the menu button can select the input port by the order of COAX—AES—IIS—USB—OPT—BT—LAN.

Bluetooth name: GUSTARD BT

3. Volume:

In main page, the encoder can adjust the digital attenuator by rotating clockwise to increase the volume and counterclockwise to decrease the volume. There are 90 steps of digital volume from -90dB to 0dB.

Increase the volume when it is 0dB can bypass the attenuator

4. Menu:

Long-press the menu button can switch between main page and menu page. On the menu page, short-press the menu button to choose the option and turn the encoder to change the value.

1. PCM FILTER:



R26 has 3 built-in PCM filters

short-press the menu button can select the input port by the order of FAST — MID — SLOW

FAST: Detailed sound.

MID: Balanced sound, recommended.

SLOW: Soft sound.

2. PCM NOS:



Default is Disable. Enable to bypassing the internal interpolating FIR filter. The raw PCM stream is sent into the R-2R ladder directly.

*The volume adjustment is bypassed when enable, so it is better to decrease the volume of amplifiers before entering this mode.

3. DSD DIRECT:



Default is Disable. Enable to bypassing the internal interpolating FIR filter. The raw DSD stream is sent into the separate DSD decoding circuit.

*the volume adjustment is bypassed when enable, so it is better to decrease the volume of amplifiers before enter this mode.

4. ATTENUATION



When there is no independent pre-amp, the DAC is directly connected to high-gain amplifier or high-gain active speakers, so it is very likely that a large digital volume attenuation (for example, -40dB) will be used to listen to music at a proper volume, which will bring big impact to the sound quality.

This function is designed for this kind of application.

When this feature is on, a very good analog attenuator provides a gain of -30dB.

For a global gain of -40 dB, only -10 dB digital attenuation is required when using this function. That provides a much better DNR performance.

5. REF CLOCK:



R26' s built in clock is generated by Gustard-K2, a low noise clock

synthesizer. With ultra-low phase noise, the synthesized clock has ultra-low jitter in femtosecond level, and can directly provided the near-end performance of the reference clock. Thanks to the high-precision divider, the frequency accuracy of its synthesized audio clock reaches ppb level.

INT.: Built-in clock with jitter in femtosecond level.

EXT.: 10Mhz external clock (Gustard C16&C18)

When the external clock is working normally, the word "EXT" will be displayed.



When the external clock is lost or it drifts over ± 150 ppm, the word "EXTERR" will be displayed.



6. PHASE:



Non-inverted: RCA non-inverted phase
XLR 1-Ground 2-Hot 3-Cold
Inverted: RCA inverted phase
XLR 1-Ground 2-Cold 3-Hot

7. BRIGHTNESS:



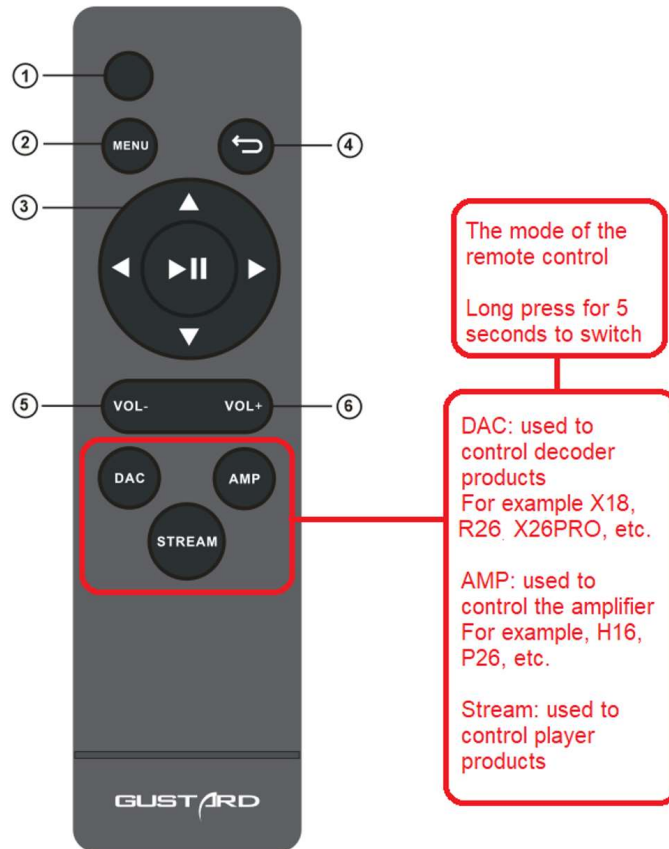
It has the function of brightness adjustment, screen saver and automatic screen shutdown

8. POWER LED



Light setting for the power button aperture in standby

Remote

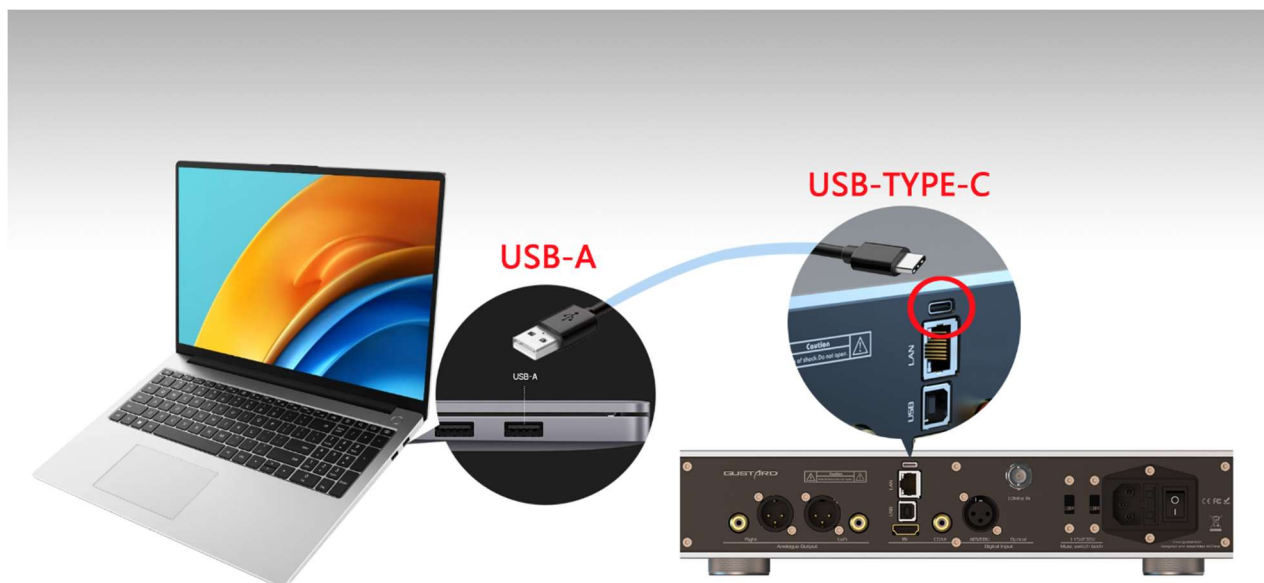


*R26 use the new model of remote, enter DAC mode by long-press the DAC key 3s.

- ① Standby: Switch between standby and working.
- ② Menu: Enter menu.
- ③ Pad with 4 direction keys: On menu page, use up/down to choose the option, left/right to change the value, central key to save and exit.
- ④ Back: Back to the main page.
- ⑤ Vol-: On menu page, decrease the volume.
- ⑥ Vol+: On menu page, increase the volume.

Note: ●Care about the distance and angle ● The remote may not work with obstacle in front ●Please take the battery out if you will not use the remote for over one month ●If the battery leaked, please fully clean the battery case and change new batteries ●The remote may not work correctly with other devices.

Streamer upgrade



Remove the power cable and use a USB A to C cable to connect the computer and R26. R26 will enter the streamer upgrade mode.

Computers running Windows 10 or newer are preferred.

Detailed instructions are included in the released firmware package, please read carefully before operation. And the latest streamer firmware package can be downloaded from <http://www.gustard.com/>

Specifications

Input

- COAX/AES/OPT :PCM 16-24bit/44.1-192kHz; DSD DOP64
- USB :
 - PCM 16-32bit/44.1-768kHz;
 - DSD DOP64-DOP256;
 - NATIVE DSD: DSD64-DSD512
 - OS support: Windows 7~11 32/64bit; macOS; Linux
- IIS: PCM 16-32bit/44.1-768kHz; DSD DOP64-DOP256;
 - NATIVE DSD: DSD64-DSD1024
- LAN: ROON UPNP (more in the future)
- Bluetooth: LDAC, AAC, SBC, APTX, APTX LL, APTX HD
- 10M Clock in: 50 Ohm BNC, 0dBm-20dBm, square wave 0.2V-3.3V, sinewave 0.5-3.3V.

Output

Frequency Response: 20-20kHz /+-0.2dB (Oversampling)
Dynamic range: >115dB
Signal-to-noise ratio: >122dB
Crosstalk: -134dB @ 1kHz
THD+N: <=0.003% @1kHz
IMD: ≈0.008% @ 0dbfs
RCA: 2.5Vrms (VOLUME FIXED) 100Ω
XLR: 5.0Vrms (VOLUME FIXED) 100Ω
XLR pinout: 1-Ground 2-Hot 3-Cold

Other

Power Supply: AC 115V/230V 50/60Hz
Power Consumption<30W
Size: 330mm (Width) * 260mm (Length) * 65mm (Height) (protrusion not included)
Packing size: 420mm (Width) * 360mm (Length) * 175mm (Height);
Weight: 7Kg (with package)

Product Warranty:

You will enjoy the 2-year free warranty and lifetime maintenance after the date purchasing GUSTARD' s product.

*The manufacturer bears only the freights from Chinese mainland. Part of the freight and tax generated from overseas will be solved by the user with the dealer negotiation.

Free Warranty Service

GUSTARD product from the purchasing date in the free warranty period, the user uses the product in normal, and the product fails due to component quality or manufacturing problems.

Beyond the Warranty Service

Belonging to one of the following circumstances, products are no longer provided warranty service.

- a. Products from the date of purchase has exceeded a predetermined warranty period.
- b. Model, barcodes and purchase date do not match the actual product and warranty card.
- c. Without GUSTARD technician permission, unauthorized modifications to the circuit, components or self-repaired product.
- d. Damaging caused by irresistible natural forces.
- e. Beyond the permitted use of environmental damage.
- f. Damaging due to incorrect use or improper storage. Including but not limited to: the voltage is too high to burn the circuits or components; Bumping and resulting in damaging the shell or internal; damaging due to water, oil, liquid and excessive dust; product oxidation or corrosion, etc.
- g. Beyond the warranty period, such as an individual component damage, appearance due to human damage, firmware modifications lead to unable to work by unauthorized users. GUSTARD commits to take reasonable maintenance fees (except large area components or circuit board burned beyond repair). Freight and maintenance costs, material costs are required the user to bear.