# GUSTARD

## **H**16

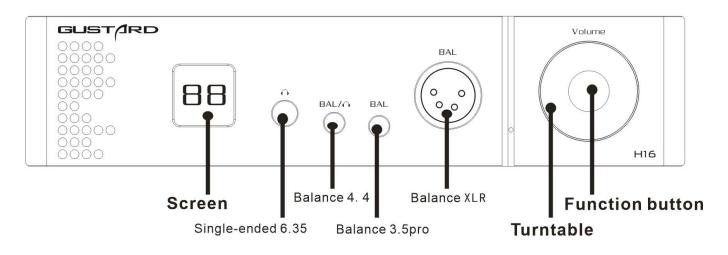
### Headphone Amplifier User's Manual

<b>GUST/IRD</b> 0000 0000 0000 0000 0000 0000 000 000	88	$\bigcirc$	BAL/O	BAL	0	Volume
						H16

### Table of Contents

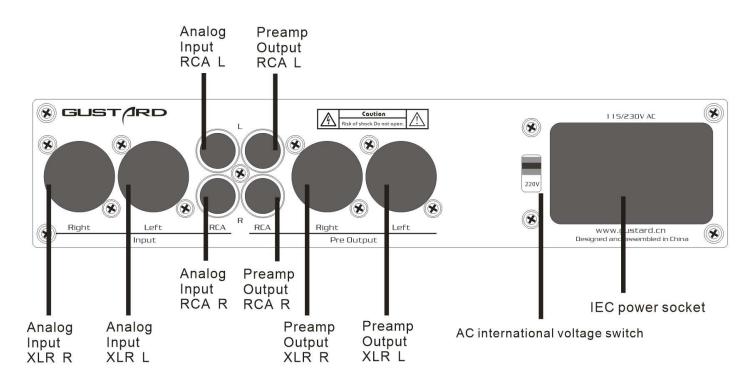
Front panel Introduction 2
Rear panel Introduction2
Menu description ······3
Balanced earphone connection4
IR Remote control5
Product specifications
Output power chart7
After-sales policy

#### Front panel



- 1. The display usually shows the current volume status.
- 2. The Turntable can adjust the volume; or adjust the menu options in the menu state.
- 3. Function button, short press to switch the analog input channel; long press to enter or exit the menu.

#### Rear panel



AC international voltage switching: be sure to select the correct voltage range according to the area of use, otherwise the internal transformer will be damaged!!!

Display and operation menu

1. H16 headphone amplifier uses high-resolution OLED display, real-time volume display and functional operation. The following figure shows the display status of the main page of the screen.



2. Input channel selection:

The H16 headphone amplifier has a total of 2 input channels. In the main page display state, short press the menu key to cycle through the current input channel between XLR and RCA.

3. Volume adjustment

When the screen is the homepage display, you can directly adjust the volume of the H16 headphone amplifier by operating the Turntable. Turn it counterclockwise to attenuate the volume, and turn clockwise to increase the volume. The volume can be from 00-99, a total of 100 volume levels.

4. Gain adjustment:

In the main page screen state, long press the menu button to enter the gain adjustment. In this state, the gain can be adjusted by rotating the Turntable. There are LOW (low) MID (medium) HIGH (high) three gears adjustable



Balanced earphone connection

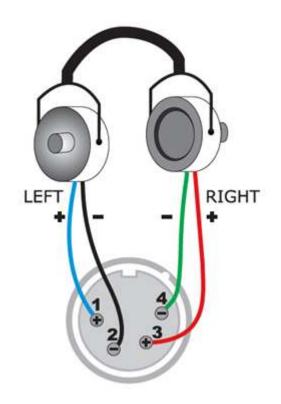
In order to achieve the best driving performance, it is recommended to use an independent pair of wires (positive and negative phase) for each channel to drive the headphones in a balanced manner. When connecting balanced headphones, avoid midpoint or common ground connections.

H16 headphone amplifier provides three different interfaces to connect balanced headphones. The specific pin definitions are as follows:

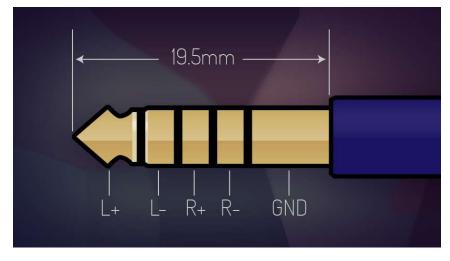
Use a single four-pin XLR connector (male). For example: Neutrik NC4MC-B connector. The signal connection is as follows:

Pin 1=Left+ Pin 3=Right+

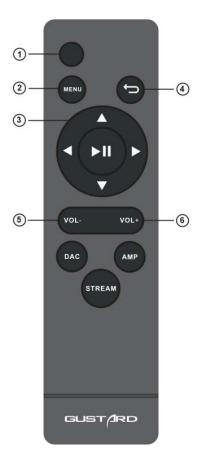
Pin 2=Left-	Pin 4=Right-
-------------	--------------



Use 4.4 balanced connector



#### IR remote control



\*H16 headphone amplifier uses the new remote control, please press and hold the AMP button for more than 3 seconds to enter the amp operation mode.

- Mute button: By default, press this button once to enter the mute state of the H16 headphone amplifier; when the H16 headphone amplifier is in the mute state, press this button to unmute.
- (2) Menu button: Press this button once to enter the function setting menu of the H16 headphone amplifier.
- 3 Four-dimensional direction button: When entering the menu of the H16 headphone amplifier, adjust the options by left/right.
- (4) Press the middle button to confirm the adjustment result and return to the main page screen at the same time.
- 5 Back button: Return to the main screen display state.
- 6 Volume down button: When the H16 headphone amplifier is in the main screen display, press this button to decrease the output volume.
- ⑦ Volume up button: When the H16 headphone amplifier is in the main screen display, press this button to increase the output volume.

Note: • The operating distance varies depending on the angle. • If there is something between the remote control and the IR sensor, it may not operate normally. • If the remote control will not be used for a long time (one month or longer), remove the battery. • If the battery Leaking, please thoroughly clean all the residues in the battery compartment and install new batteries. • When using other devices controlled by infrared rays, using this remote control may operate these devices by mistake.

#### Product specifications

#### Analog input :

One set of RCA standard input, typical input sensitivity: 2Vrms; input impedance  $4.7k\Omega$ One set of XLR balanced input, typical input sensitivity: +18dBu maximum +26dBu; input impedance  $10k\Omega$ 

#### Preamplifier analog output (XLR on the rear panel) :

Frequency response: 20-80kHz /-0.1dB Signal to noise ratio: 120dB Channel crosstalk: -120dB @ 1kHz THD+N: <0.0004% IMD: <0.0004%

#### Headphone output (front panel output) :

Single port output impedance (6.35mm):  $0.1\Omega$ Balance port output impedance (XLR 4 PIN, TRS4.4, 3.5PRO):  $0.2\Omega$ Frequency response: 20-80kHz /-0.1dB Signal to noise ratio: >118dB Channel crosstalk: -118dB @ 1kHz THD+N (1KHz): <0.0005% @3700mW into  $64\Omega$  LOAD IMD: <0.0005% @3700mW into  $64\Omega$  LOAD Maximum undistorted output power 3700mW into  $64\Omega$  LOAD balanced output

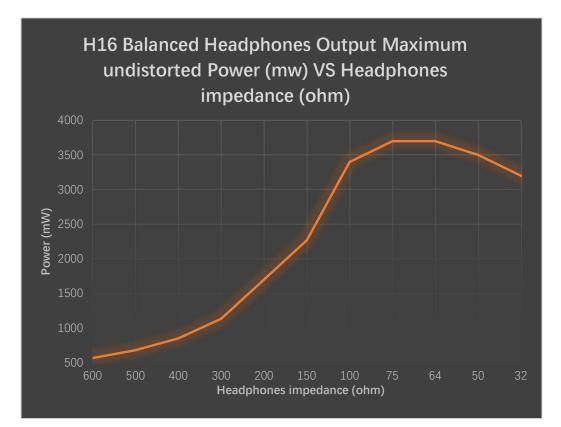
#### Load power (balanced output, high gain) :

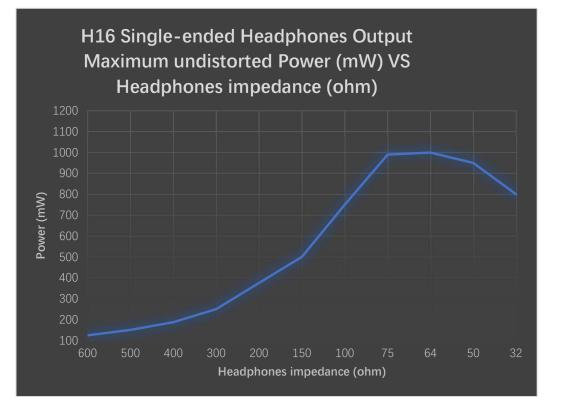
64Ω	3700mW
150Ω	2268mW
300Ω	1133mW
600Ω	566mW

#### Other specifications :

AC Power supply: AC 115V/230V 50/60Hz Power consumption: <20W Dimensions: Width 220mm \* Height 50mm \* Depth 170mm (Excluding protrusions) Weight: 2.5Kg (including packaging)

#### Output power curve chart





#### Product Warranty:

You will enjoy the 2-year free warranty and lifetime maintenance after the date purchasing GUSTARD's H16 HEADPHONE AMPLIFIER 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 H16 HEADPHONE AMPLIFIER 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.