

Specification

Product Name: 4×150W Digital Power Amplifier

Product Model: HY-L415

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Production Department: Product Department

Huain (Zhuhai) Digital Technology Co., Ltd.

Catalog

1、 Product Overview	2
1. 1 Product Image	2
1. 2 Dimensions and Weight	2
2、 Product Specifications and Parameters	2
2. 1 Product Description	2
2. 2 Functional Parameters	2
2. 3 Technical Parameters	3
3、 Product Introduction	5

1、 Product Overview

1.1 Product Image



1.2 Dimensions and Weight

Case Dimensions (WxDxH)	483×249×90mm
Main Unit Weight	Net Weight: 16kg
Packaging Method	Foam + Carton

2、 Product Specifications and Parameters

2.1 Product Description

Adopts a digital power amplification module with a four-channel integrated design; equipped with a 160×32 high-brightness display screen to show channel volume and other information; utilizes a high-capacity switch power supply with an independent cooling system and good heat dissipation device; the system features automatic output limiting, short-circuit overload, high temperature, and power-on delay protection functions; includes a delay start system to protect the speakers from damage due to impact.

2.2 Functional Parameters

1. Adopts a digital power amplification module with a four-channel integrated design;
2. Equipped with a 160×64 high-brightness display screen to show channel volume and other information;
3. Utilizes a high-capacity switch power supply with an independent cooling system and effective heat dissipation device;
4. The system features automatic output limiting, short-circuit overload, high temperature, and power-on delay protection functions;
5. Includes a delay start system to protect the speakers from damage due to impact;
6. The cooling fan uses advanced stepless variable speed circuit control;
7. Fan speed varies with the temperature of the heat sink, effectively reducing fan noise;
8. Provides multiple impedance power options: 4×150W/8Ω, 4×300W/4Ω, and bridged 2×300W/8Ω;
9. Inputs feature single-channel and stereo mode selection;
10. Includes independent volume control and an LCD display for signal level indication;
11. Built-in filtering function to eliminate digital noise and other high-frequency interference from equipment;
12. Uses dual XLR inputs, with SPEAKON and Phoenix connectors for output, providing stronger compatibility;
13. Features comprehensive protection facilities, including limiters, short-circuit, over-current, and DC output protection;
14. Frequency response is 20Hz-20KHz;
15. Input impedance is 10KΩ (unbalanced) and 20KΩ (balanced);
16. Damping factor >300@8Ω;
17. Total harmonic distortion ≤0.01%;

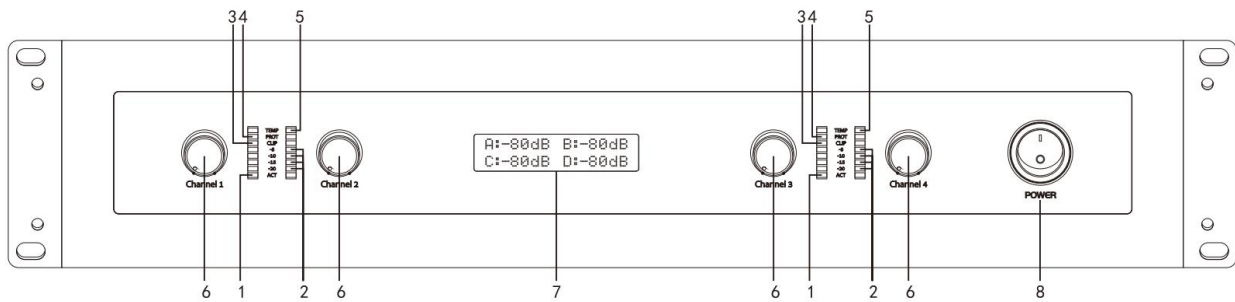
2.3 Technical Parameters

Working Power Supply	AC100~240VA, 50/60 Hz
8 Ω Output Power	4×150W

4 Ω Output Power	4 \times 300W
8 Ω Bridged Power	2 \times 300W
Frequency Response	20Hz-20KHz \pm 3dB
Total Harmonic Distortion	\leq 0.025%
Display Screen Indication	YES
Minimum Load Impedance	Stereo $>$ 3.2 ohms
Signal-to-Noise Ratio	\geq 80dB
Damping Factor	$>$ 300@8 Ω
Input Sensitivity	+4dB * (1.23V)
Channel Separation	1KHz $>$ 80dB
Input Impedance	20K Ω (balanced), 10K Ω (unbalanced)
Dimensions	483 \times 249 \times 90mm
Color	Black
Installation Method	Suitable for 19-inch standard rack

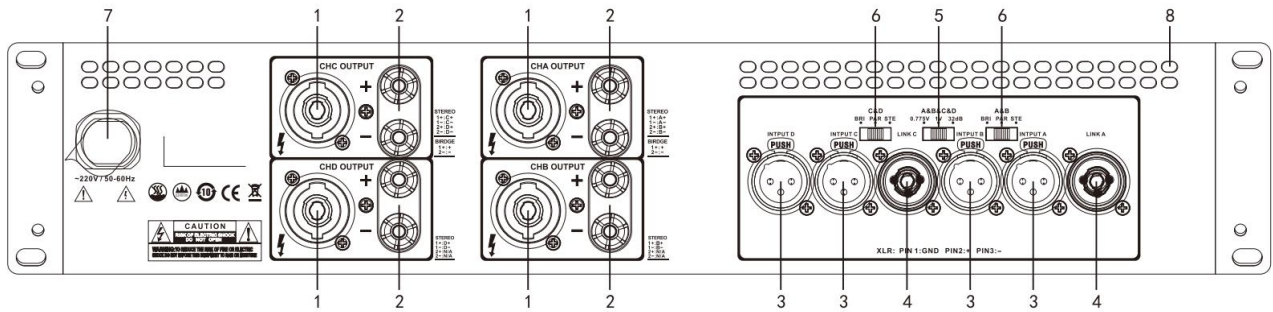
3、Product Introduction

Front Panel



- 1、 Power Indicator: This indicator lights up when the power amplifier is turned on.
- 2、 Signal Indicator: This indicator shows the signal level of the channel, ranging from -20dB to -5dB.
- 3、 Clip Indicator: The clip indicator flashes bright red when clipping occurs, with intensity and duration related to the severity of clipping.
- 4、 Protection Indicator: This red light turns on whenever a protection circuit is activated.
- 5、 Overtemperature Indicator: This indicator lights up when the amplifier is operating continuously under overload conditions, posing a risk of overheating, which may lead to reduced output power or a shutdown of the unit.
- 6、 Channel A Volume Control: Adjusts the volume for channel A or the volume during bridging.
- 7、 Channel B Volume Control: Adjusts the volume for channel B; this control is inactive during bridging.
- 8、 Channel C Volume Control: Adjusts the volume for channel C or the volume during bridging.
- 9、 Channel D Volume Control: Adjusts the volume for channel D; this control is inactive during bridging.
- 10、 LCD Display: Shows real-time temperature and volume levels of the power amplifier.
- 11、 Power Switch: Press (“I”) to turn on the power; press (“0”) to turn off the power.

Rear Panel



1. Speaker Terminal Output Socket: Connect this output to the speakers for channels A, B, C, and D.
2. Speaker Binding Post Output: Connect this output to the speakers for channels A, B, C, and D; use the red terminal for positive (+) and the black terminal for negative (-).
3. Balanced XLR Signal Input: Pin 2 is positive, Pin 3 is negative, and Pin 1 is shield (ground). Used for long or short-distance connections, fixed or frequently plugged and unplugged.
4. Link Socket: 2CH: Channels A and B; 4CH: Channels A and C. Use this balanced socket to connect to another power amplifier.
5. Sensitivity Selector Switch: Options are 0.775V, 1V, and 32dB.
6. Operating Mode Selector Switch: Bridge/Parallel/Stereo.
7. Power Input: The power supply voltage must match the nominal voltage specified for the unit.
8. Ventilation: To ensure proper cooling and ventilation, maintain a minimum distance of 10cm between the ventilation openings and other devices or walls.