MATRIX™
AUDIO

stage HPA-2 CLASSIC

Manual

www.matrix-digi.com

Overview

- HPA-2 CLASSIC headphone amplifier is the improved model of HPA-2, the optimized circuit design, new style exterior, exquisite processing technology and excellent performance to make it better.

- Class A work mode can feature it easily to drive all kinds of low sensitivity dynamic headphones. Equipped with two sections of gain control, have line output, the headphone protection and power on/off noise elimination functions to prevent the wrong voltage to damage your headphones and brings you the better user experience.

- The new design of the USB module is used the XMOS U series chip and CS4398 high-performance D/A chip, support PCM-24Bit/192kHz and DSD2.8MHz/5.6MHz signal playback, not only support DoP and ASIO Native two DSD playback methods, but also can be used with the iOS and some android devices.

- The ALPS 27 series volume potentiometer, WIMA/Nichicon audio grade capacitances, audio dedicated power supply transformer, and precision non-inductive resistances, all of these cherry-pick components to ensure get the best playback performance.

1 Headphone Jack

2 Output Indication LED

3 Source Switch

4 Volume Controller

1. USB Input

2. Gain Switch

3. RCA Input

4. Line Output

5. Power Switch

6. AC Socket

AC Power

HPA-2 CLASSIC compatible with AC 110-120V and AC 220-240V voltage specifications. Please set the voltage switch according to your local voltage environment before using.

The voltage switch is on the left side of the HPA-2 CLASSIC, the two sections of the voltage switch is 115V and 230V, the following is the corresponding voltage range:

115V position is fit for AC100V-120V 50/60Hz

230V position is fit for AC220V-240V 50/60Hz

Please ensure the input voltage in the right range, incorrect voltage input can damage your HPA-2 CLASSIC.

For reducing the noises and get the best playback performance, please use the three-phase power cable which is include the ground terminal, and ensure the ground is reliable connection.

Settings & Usage

● Power On/Off

Plug into the power cable, turn on the HPA-2 CLASSIC, the power LED will light up, and the HPA-2 CLASSIC into working state.

For reducing the electricity consumption, if you do not use HPA-2 CLASSIC for a long time, please turn it off and unplug the power cable.

● Input Channel

Switching the source switch on the front panel to select input channel between USB and RCA.

● Volume Control

Rotate volume knob on the front panel can both control the headphone output and line output. For avoiding the excessive volume to make your hearing impairment, please ensure the volume knob is in the right position before turn on the power.

● Headphone Output and Protection

 HPA-2 CLASSIC has a 6.35mm standard stereo headphone jack, if your headphone plug standard is 3.5mm, please use the 6.35/3.5mm headphone plug adapter. When the headphone plug in, the line output on the rear panel will be muted automatically.

HPA-2 CLASSIC has a headphone protection function, the output has about one second delayed after you turn on the HPA-2 CLASSIC, this function can eliminate the impact sound on the headphone when power on. It also keeps detecting output voltage in working period, when it detected a wrong voltage output which may damage your headphone it will disconnect headphone output immediately, effectively protect your headphones, at this time output indication LED will be turned off.

Driver Setup

● Install HPA-2 CLASSIC driver for Windows.

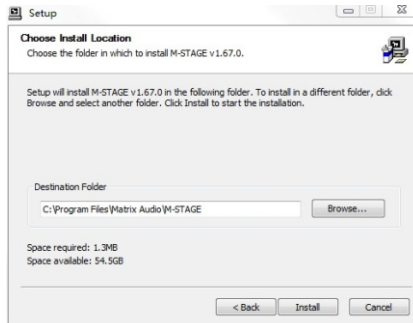Find and double click "setup.exe ",click "Next".
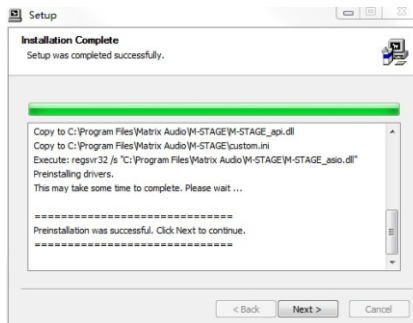

Please unplug and replug USB cable, click "Next".

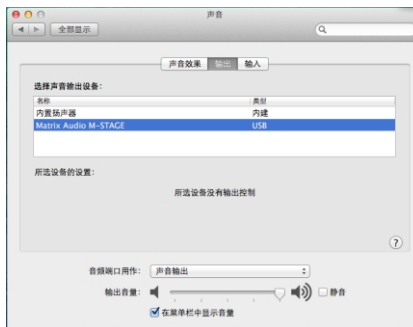Click "Install" to start installing the driver.

Installation completed, click "Next".

Click"Finish", installation is done.

● Native support Mac OS X 10.6.4 and above, goes to "SYSTEM PREFERENCES" and chooses the "Matrix Audio M-STAGE" to complete the settings.

Technical Specification

- Line output
  - SNR: 95dB A-Weighting
  - THD+N: < 0.0017% at 1kHz 1Vrms A-Weighting
  - Frequency Response: 20Hz-20kHz (+0.01dB/-0.04dB)
  - Out Impedance: 51ohms
- Headphone output
  - SNR: 95dB A-Weighting
  - THD+N: < 0.0017% at 300ohms 13mW 1kHz A-Weighting
  - Frequency Response: 20Hz-20 kHz (+0.01dB/-0.04dB)
  - Out Impedance: 10ohms
  - Output power : 110mW at 33ohms / 310mW at 300ohms
    / 160mW at 600ohms at THD+N=1%
- Gain
  - L=+6dB   H=+15dB
- USB Input
  - USB chip: XMOS Asynchronous USB Audio class 2.0
  - D/A chip: CIRRUS LOGIC CS4398
  - SNR: 103dB A-Weighting

Technical Specification

THD+N: <0.0009% at 1kHz A-Weighting

PCM: 16-24 Bit/44.1kHz 48kHz 88.2kHz 96kHz 176.4kHz 192kHz

DSD : DSD2.8MHz/DSD5.6MHz（DoP&ASIO Native）

- System Support

Windows 7/8/8.1/10 systems need to install the driver supplied

Mac OS X 10.6.4 and above version have native support and do not require a driver

Can be used with the most of android devices via the OTG cable

Can be used with iOS devices via the Lightning to USB Camera Adapter

- Power

Power Voltage:

230V position is fit for AC220V-240V 50/60Hz

115V position is fit for AC100V-120V 50/60Hz

Power Consumption: <25W

Fuse: AC250V/500mA 5×20mm

- Others

Dimension: 280x120x47mm (L×W×H Including the protruding part)

Weight: 1.22kg

NOTE: For the purpose of improvement, specifications subject to changes without prior notice.

Customer Service

From purchase date, we provide one-year-limited warranty for you, warranty service does not contain the accessories.

Any faults caused by product quality problems during the warranty period, we will provide free maintenance, but not include fault caused by wrong use、 negligence、 accidental damage and unauthorized modifications or replace components.

For more information, please visit www.matrix-digi.com.

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Xi'an Matrix Electronic Technology Co., Ltd.
C2-2411, No.22 Fengcheng 2nd Rd. ,Xi'an , Shaanxi, China
support@matrix-digi.com
info@matrix-digi.com
+86-29-65693537