2x50W Class-D Audio Amplifier with MIC input

OPT   • MIC
       • MUSIC   80%

VOLUME

INPUT

MIC

MUSIC

User Manual

VER 1.1

Thank you for purchasing this product

For optimum performance and safety, please read these instructions carefully before connecting, operating or adjusting this product. Please keep this manual for future reference.

Surge protection device recommended

This product contains sensitive electrical components that may be damaged by electr-ical spikes, surges, electric shook, lighting strikes, etc. Use of surge protection systems is highly recommended in order to protect and extend the life of your equipment.

Table of Contents

1. Introduction

2x50W Class-D Audio Amplifier is energy efficient and easily installed behind a TV where space is limited. It supports mono, stereo and optical audio inputs as well as MIC input. Output can connect stereo, mono and bridge audio speakers. Input source, volume and mute can be selected through panel buttons, IR, RS-232 and Web GUI.

2. Features

☆ 2x50W Class-D audio amplifier
☆ Supports Mono, Stereo and optical (PCM 2ch) audio inputs
☆ Supports Stereo, Mono and bridge audio speaker connections
☆ Audio loop out for cascading to another unit or connecting to other audio amplifier
☆ 3 pin captive screw MIC input can support balanced and unbalanced signals
☆ Press the INPUT SEL button up to 5s on-panel to getting IP address on OLED
☆ Control through the panel buttons, IR, RS-232 and Web GUI
☆ Compact design for an easy and flexible installation

3. Package Contents

① 1× 2x50W Class-D Audio Amplifier
② 1× 24V/3.75A Power Adaptor
③ 1× 38KHz IR Receive Cable
④ 1× Remote Control
⑤ 1× Phoenix Connector (4-pin)
⑥ 4× Phoenix Connectors (3-pin)
⑦ 1× User Manual

4. Specifications

Technical	
Input sensitivity	800mV
Signal-Noise ratio	> 95dB
TND+N	＜0.03%（@1KHz 4Ω 1W） ＜ 3.0% （@1KHz 4Ω 50W） ＜ 3.0% （@1KHz 2Ω 100W）
Frequency Response	20Hz - 20KHz（±3%）
Infrared frequency	38KHz
Inputs port	1×MIC (3-pin Phoenix Jack） 1×MUSIC (3-pin Phoenix Jack） 1×Optical (S/PDIF) 1×LAN (RJ45 control) 1×IR (3.5mm Stereo Mini-jack) 1×RS-232 (3-pin Phoenix Jack)
Outputs port	1×LOOP(3-pin Phoenix Jack） 1×SPEAKER(4-pin Phoenix Jack)
ESD Protection	Human-body Model: ±8kV (Air-gap discharge) , ±4kV (Contact discharge)
Mechanical	
Housing	Aluminum Enclosure
Color	Champagne Gold
Dimensions	193mm(W)×145mm(D)×47mm(H)
Weight	746g
Power Supply	Input: AC100~240V 50/60Hz Output : DC24V/3.75A (US/EU standards，CE/FCC/UL certified)
Output power	2x50W @4Ω / 1x100W @2Ω
Power Consumption	85W
Operating Temperature	0°C ~ 40°C / 32°F ~ 104°F
Storage Temperature	-20°C ~ 60°C / -4°F ~ 140°F
Relative Humidity	20~90% RH (non-condensing)

5. Operation Controls and Functions

5.1 Front Panel
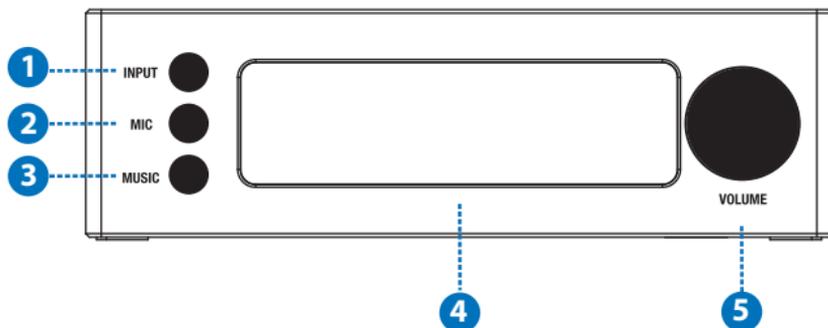
Number	Name	Function description
1	INPUT button	Select audio source from LINE or OPTICAL, corresponding the OLED screen will display relevant information. (Press this button up to 5s to getting IP address on OLED.)
2	MIC button	Turn on/off the microphone channel . When turn on the microphone channel, corresponding the OLED screen will display relevant information. Then you can adjust the MIC channel volume through the VOLUME roll key.
3	MUSIC button	Turn on/off the MUSIC channel. When turn on the MUSIC channel, corresponding the OLED screen will display relevant information. Turn off the MIC channel, then you can adjust the MUSIC channel volume through the VOLUME roll key.
4	OLED screen	Display the INPUT, MIC, MUSIC and VOLUME information.
5	VOLUME roll key	Adjust MIC and MUSIC channel volume. Press the key can mute and press again can unmute.

5.2 Rear Panel
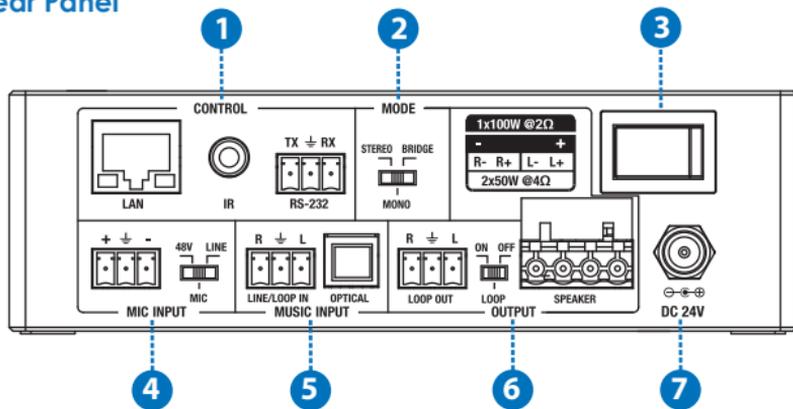
Number	Name	Function description
1	CONTROL	LAN: Connect to active Ethernet link by an RJ-45 cable. IR: IR Receiver window to receive the remote control of this device only. RS-232: Connect to PC or control system by 3-pin Phoenix terminal for transmission RS-232 commands.
2	MODE	Select power amplifier mode about STEREO/MONO/BRIDGE.
3	Switch power	Power on/off switch.
4	MIC INPUT	Phoenix terminal: Using Phoenix terminal cable to connect microphone input. Dial switch: Switch the input microphone type.
5	MUSIC INPUT	LINE/LOOP input: Using Phoenix terminal cable to connect stereo analog audio input or LOOP mode audio input. OPTICAL input: Connect to digital optical audio input.
6	OUTPUT	LOOP OUT: Using Phoenix terminal cable to connect LOOP audio output. LOOP dial switch: Switch the left to turn on the LOOP audio output and switch the right to turn off. SPEAKER output: Connect to speaker out.
7	DC 24V	Connect 24V/3.75A adaptor to AC wall outlet for power supply.

6. Remote Control
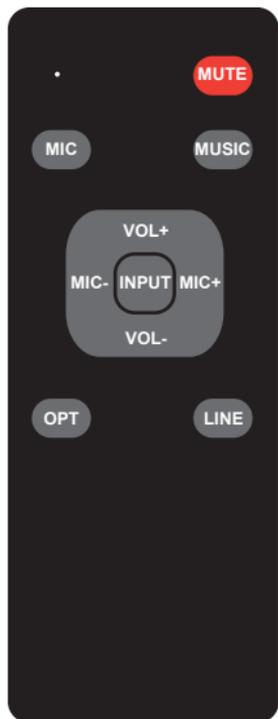
MUTE: Mute or unmute voice.

●:   The dot is the button signal indicator light.

MIC: Turn on/off the MIC input channel.

MUSIC: Turn on/off the MUSIC input channel .

MIC+/MIC-:   Adjust the microphone volume.

VOL+/VOL-:   Adjust the music volume.

INPUT: Select audio source from LINE or OPTICAL.

OPT: Select optical input.

LINE: Select line input.

7. Web GUI User Guide

The Amplifier can be controlled via Web GUI through LAN port. You must know current Amplifier IP address. The static IP address is 192.168.1.100. You can connect PC Web GUI through dynamic IP adress. In this unit, you can get the IP address via PC Controller and the INPUT SEL button on-panel (Note: press the INPUT SEL button need up to 5s to displaying on OLED). If you is via PC Controller to getting IP address. Firstly, opening Amplifier PC Controller software, as following page:
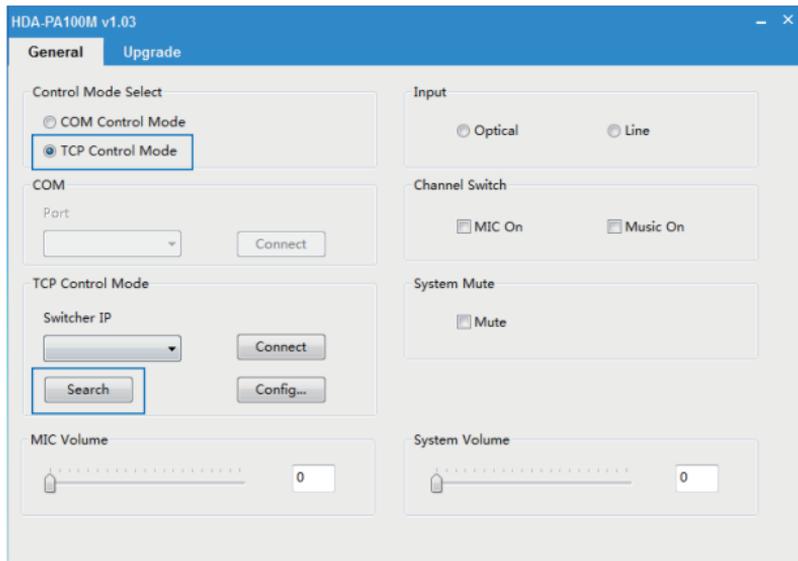
Then select the "TCP Control Mode" port, click the "Search" button. At this moment, you can get current IP adress. You can set the IP address to your PC/laptop/mobile Internet Explorer and click "Search" to enter Web GUI page. The Web GUI likes below:

General page
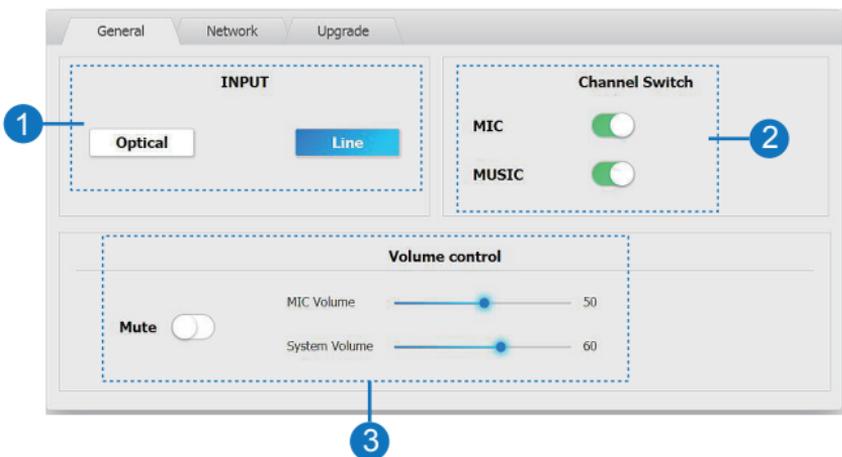
① Optical Input: Select to digital optical audio input.
Line Input: Select to stereo analog audio input.
② MIC switch: Turn on/off the MIC channel.
MUSIC switch: Turn on/off the MUSIC channel.
③ Mute switch: Turn on the Mute switch, the System will mute. Turn off the
Mute switch, the System will unmute.
MIC Volume: Adjust to the MIC volume.
System Volume: Adjust to the System volume.

Network page
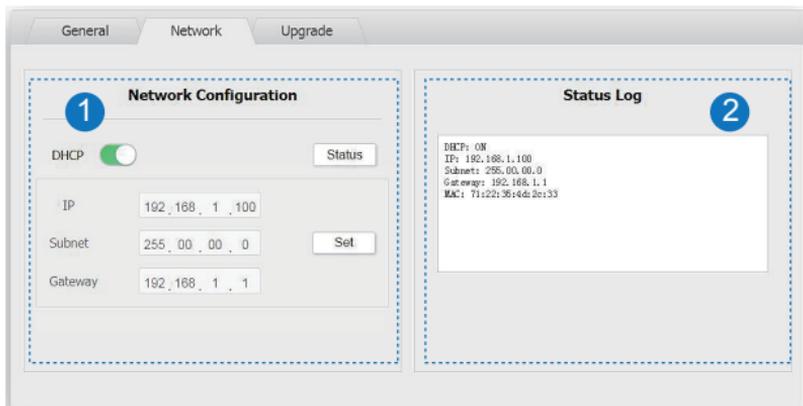
① Network Configuration

◆ In DHCP open status:

HDCP switch: Obtian the network configuration information, including IP address, Subnet and Gateway. Then click "Set" button to save DHCP status.

◆ In DHCP close status:

HDCP switch: If the DHCP switch has been closed, user can set IP, Subnet and Gateway address. In this moment, click the "Set" button to save current status information. (Note: If user have set the IP address, click the "Set" button. In this moment, user need set the IP address again to your PC/laptop/mobile Internet Explorer and click "Search" to entering Web GUI page.)

In this unit, Mac address can check only, you can not set it.

Status button: Press this button refresh current network configuration information to displaying in the Status Log.

② Display the network configuration information.

Upgrade page
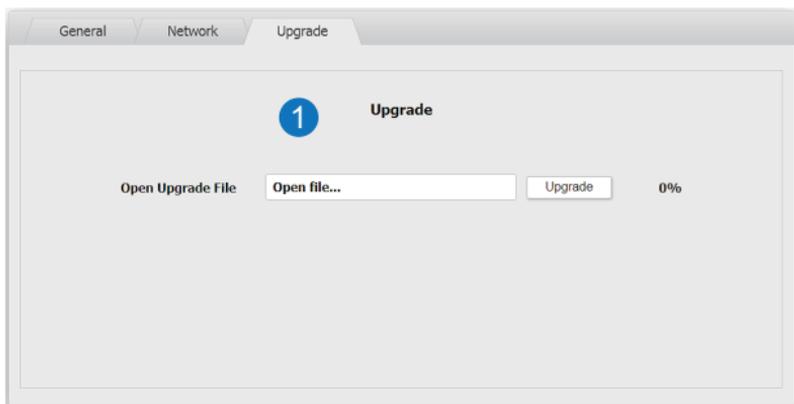
① Open upgrade file to upgrade.

8. Application Example

Webpage

Upper Computer

Microphone Input

Power Supply

Speaker(50w@4Ω)

Speaker(50w@4Ω)

Blu-ray Player

Speaker(100w@2Ω)