CYP ///

Source   **Line In**
Volume   **-16.0 dB**

SERVICE

CYP ///
2-Channel Zone Amplifier

MENU EXIT POWER

AU-A50
Integrated 2 Channel Zone Amplifier

//// **OPERATION MANUAL** ////

SAFETY PRECAUTIONS

Please read all instructions before attempting to unpack, install or operate this equipment and before connecting the power supply.

Please keep the following in mind as you unpack and install this equipment:

- Always follow basic safety precautions to reduce the risk of fire, electrical shock and injury to persons.

- To prevent fire or shock hazard, do not expose the unit to rain, moisture or install this product near water.

- Never spill liquid of any kind on or into this product.

- Never push an object of any kind into this product through any openings or empty slots in the unit, as you may damage parts inside the unit.

- Do not attach the power supply cabling to building surfaces.

- Use only the supplied power supply unit (PSU). Do not use the PSU if it is damaged.

- Do not allow anything to rest on the power cabling or allow any weight to be placed upon it or any person walk on it.

- To protect the unit from overheating, do not block any vents or openings in the unit housing that provide ventilation and allow for sufficient space for air to circulate around the unit.

REVISION HISTORY

VERSION NO.	DATE DD/MM/YY	SUMMARY OF CHANGE
VR0	16/06/15	Preliminary Release

CONTENTS

1. INTRODUCTION

The 2-Channel Zone Amplifier can accept analog and digital audio from 3.5Ø line in, L/R RCA, optical and coaxial inputs and output synchronously to L/R speaker and CAT5e/6/7 Audio Receiver. Suitable for any musical events use, sound addition, sound amplifying and AV extension. With audio sampling rate supports up to 96kHz and I/O data rate supports up to 24-bit, it provides a high standard of quality sound presentation and can amplifier sound up to -80dB. The system also support RS-232 and LAN control.

2. APPLICATIONS

• Public Speech

• Show even audio set up

• Home theater/Entertainment

3. PACKAGE CONTENTS

• 1 x 2-Channel Zone Amplifier

• 1 x Remote Control CR-139

• 1 x 24V/2.7A DC Power Adaptor

• 1 x Power Cable

• 1 x Rack Ears Set

• Operational Manual

4. SYSTEM REQUIREMENTS

Input audio source equipment such as PC, CD player, MP3 with output speakers and connection cables.

6. OPERATION CONTROLS AND FUNCTIONS

6.1 Front Panel
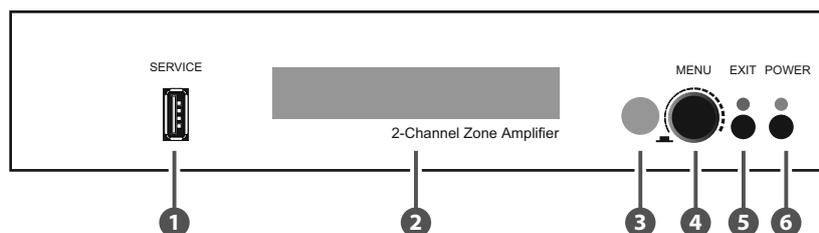
1 Service: Connect with USB flash driver for firmware update only.

2 OLED: Display current input source selection and volume setting.

3 IR Window: Accept IR signal from the remote control included in the package.

4 MENU: This button has two usage, one for volume control and the other for menu selection. Turn the wheel to adjust the output sound volume before entering into menu selection or press it to enter into the menu selection then turn the wheel to rotate from the selection and press it again to enter or to confirm the selection.

5 EXIT: Press this button to exit from the menu selection. When outside the menu selection press this button to mute the output sound, the LED will illuminate. Press it again to unmute.

6 POWER: Press this button to turn on the device and the LED will illuminate in blue, press it again to switch to standby mode and the LED will turn red.

6.2 Rear Panel
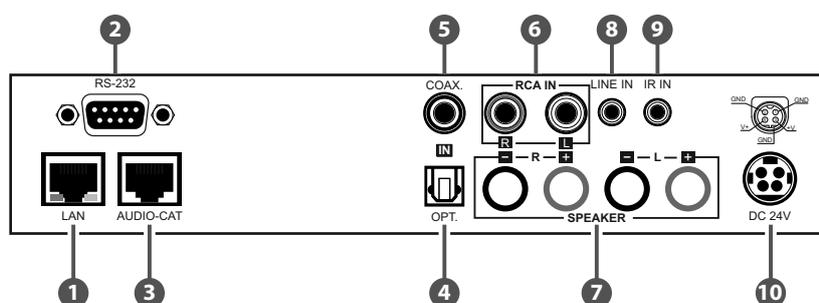
1 **LAN:** Connect from PC/Laptop with RJ-45 cable for Telnet/WebGUI controls.

2 **RS-232:** Connect from PC/Laptop with D-Sub 9pin cable for RS-232 controls.

3 **AUDIO-CAT:** Connect from audio Transmitter over CAT5e/6/7 extender for audio transmitting up to 300m. It is suggested to use the audio Transmitter with in the family line to ensure the transmission of 300m with sampling rate of 48kHz. When the audio Transmitter obtain RS-232 function it can also control the Zone Amplifier.

4 **OPT. IN:** Connect from source equipment such as Set-top-box or PS3 or any other source with optical output for audio signal sending.

5 **COAX. IN:** Connect from source equipment such as Set-top-box or PS3 or any other source with coaxial output for audio signal sending.

6 **RCA IN:** Connect from audio source equipment with RCA jack for stereo audio input.

7 **SPEAKER:** Connect from speakers with wired cable for stereo audio output.

8 **LINE IN:** Connect from audio device with 3.5ø pone jack for stereo audio signal input.

9 **IR IN:** Connect the IR Extender for IR signal reception. Ensure that remote being used is within the direct line-of-sight of the equipment to be controlled. This IR accepts the IR signal from the package included remote control only.

10 **DC 24V:** Plug the 24V DC power supply into the unit and connect the adaptor to an AC outlet.

6.3 RS-232 Pin Assignment

Amplifier	
PIN	Assignment
1	NC
2	Tx
3	Rx
4	NC
5	GND
6	NC
7	NC
8	NC
9	NC

Remote Control	
PIN	Assignment
1	NC
2	Rx
3	Tx
4	NC
5	GND
6	NC
7	NC
8	NC
9	NC

Baud Rate: 115200bps

Data bit: 8 bits

Parity: None

Flow Control: None

Stop Bit: 1

6.4 IR Cable Pin Assignment

IR Receiver

1 IR Signal

2 Power

3 Grounding
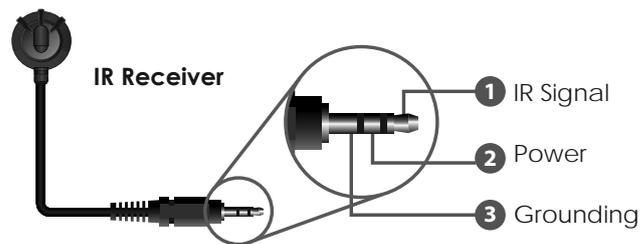
6.5 Remote Control

1 Power: Press this button to turn on the device or to set it to standby mode.

2 Vol +/-: Press these buttons to adjust the volume.

3 MUTE: Press this button to mute the output audio sound. Press it again to unmute.

4 MENU: Press this button to enter into the menu selection

5 EXIT: Press this button to exit the selection.

6 Audio selection: Press one of these hot key to select audio input source.
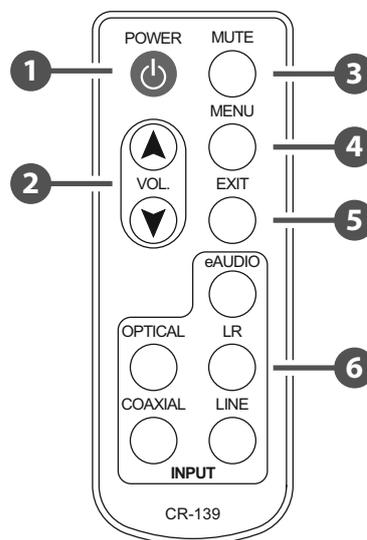
6.6 OLED Menu

	Audio In
	Display Set
Function Select	IP Config
	Reset to Default
	Line IN
	RCA IN
Audio Select	Optical
	Coaxial
	eAudio
	TimeOut 5s
Display Setting	TimeOut 10s
	TimeOut 15s
	IP Config
IP Configuration	SN
	GW
Reset to Default	OK**?**

6.7 Telnet & RS-232 Command

Command	Description	Parameter
?	DISPLAY LIST OF COMMANDS, CODE ENTRY IS CASE SENSITIVE	
HELP	DISPLAY LIST OF COMMANDS, CODE ENTRY IS CASE SENSITIVE	
PWR	POWER CONTROL	0:OFF 1:ON
SOURCE	AUDIO IN SELECT	S:STATUS 0:LINE IN 1:RCA IN 2:OPT. 3:COAX. 4:eAUDIO
VOL	OUTPUT VOLUME SETTING	S:SHOWVOL +:+0.5dB ++:+2dB -:-0.5dB --:-2dB or 0~-80dB
MUTE	OUTPUT VOLUME MUTE CONTROL.	S:STATUS 0:UN-MUTE 1:MUTE
FADEFAULT	FACTORY DEFAULT SETTING	
REBOOT	REBOOT THE UNIT	
SIPMODE	SET THE IP MODE	0:STATIC IP 1:DHCP
IPCONFIG	PRINT THE IP CONFIGURATION TO THE SCREEN	
SHOWMAC	PRINT THE MAC ADDRESS TO THE SCREEN	
SHOWTPORT	PRINT THE TELNET COMMUNICATION PORT TO THE SCREEN	
SHOWHPORT	PRINT THE HTTP COMMUNICATION PORT TO THE SCREEN	
SIPADD	SET THE IP ADDRESS	

Command	Description	Parameter
SNETMASK	SET THE NET MASK ADDRESS	
SGATEWAY	SET THE GATEWAY ADDRES	
SHTTPPORT	SET THE HTTP COMMUNICATION PORT	[1-65535] [80]
STELNETPORT	SET THE TELNET COMMUNICATION PORT	[1-65535] [23]

Baud Rate: 115200bps

Data Bit: 8 bits

Parity: None

Stop Bit: 1

Flow Control: None

6.8 Telnet Control

To access the telnet control under MS windows, click 'Start' menu and type "cmd" in the search field then press enter.

Under Mac OS X, go to Go → Application → Utilities → Terminal

See below for reference.
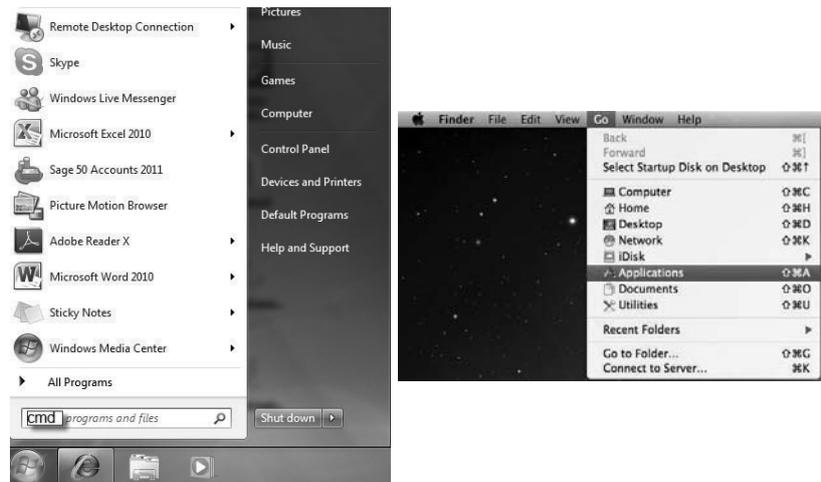
Once in the command line interface (CLI) type "telnet", then the IP address, and hit enter.

Press "Help" or "?" then hit enter to bring up all available commands.

```
Command List
_____

HELP
PWR
SOURCE
VOL
MUTE
FADEFAULT
REBOOT
SIPMODE
IPCONFIG
SHOWMAC
SHOWTPORT
SHOWHPORT
SIPADD
SNETMASK
SGATEWAY
SHTTPPORT
STELNETPORT
```

Note: Any commands will not be executed unless followed by a carriage return. Commands are case-insensitive. If the IP is changed then the IP Address required for Telnet access will also change accordingly.

6.9 WebGUI Control

On a PC/Laptop that is connected to an active network system, open a web browser and type device's IP address (available from LCM monitor) on the web address entry bar. The browser will display the device's control page.

Control	
Power :	ON

Network		Audio	
☑ DHCP		Source :	OPTICAL ▼
IP :	192.168.5.121		
Netmask :	255.255.255.0	Volume :	-20 dB
Gateway :	192.168.5.254		
HTTP port :	80		
Telnet port :	23	Mute :	OFF
	Save Changes		Reset to Default

7. CONNECTION DIAGRAM

DVD or Blu-ray Player

IR Extender

7m

3m   3m

60°

PC/NB

RS-232

COAX.

RCA IN   LINE IN   IR IN

IN

LAN   AUDIO-CAT

OPT.

R   L

SPEAKER

DC 24V

Speakers

DVD or Blu-ray Player

PC/NB

OPTICAL   OPTICAL   RS-232

AUDIO-CAT   DC 12V   POWER
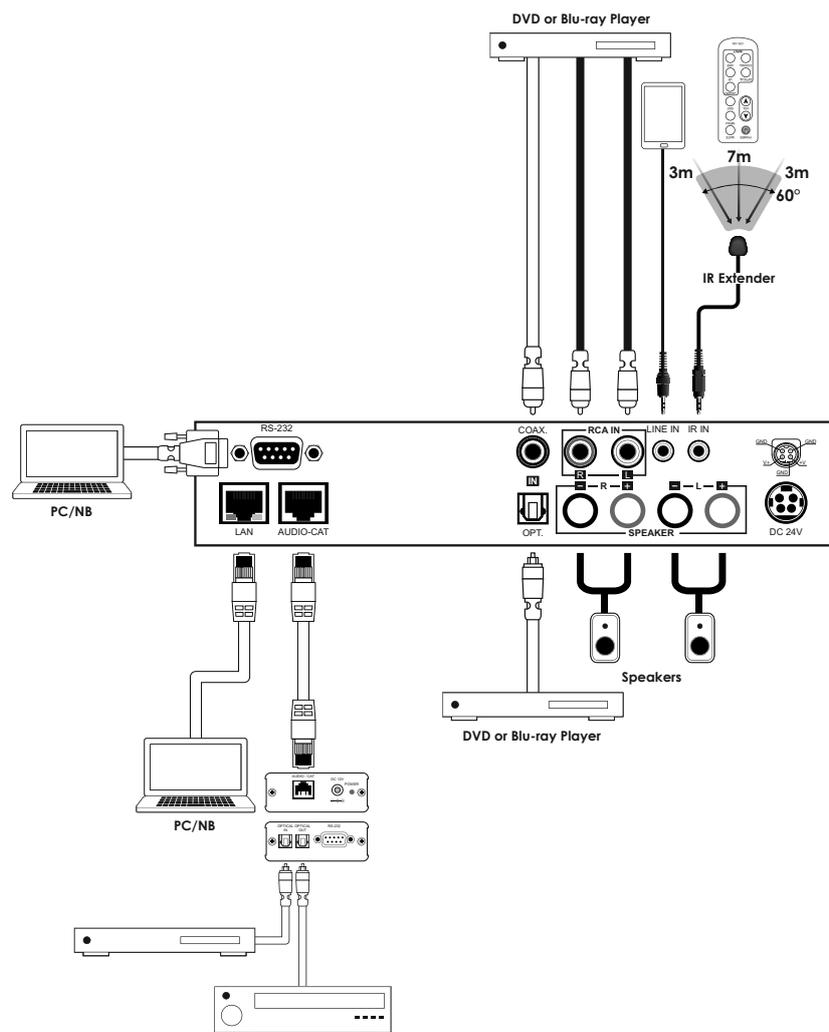
8. SPECIFICATIONS

Input ports	1 x Optical, 1 x Coaxial, 1 x 3.5Ø Line in, 1 x R/L RCA, 1 x D-Sub 9pin (RS-232), 1 x RJ-45 (LAN), 1 x Service, 1 x IR, 1 x AUDIO-CAT
Output ports	1 x Power Rated Output Amplifer L/R
Digital Audio	LPCM 2CH
Audio Sampling Rate	Up to 96kHz
Stereo Input/Output Level	2 Vrms ± 0.2
ESD Protection	Human body model: ±8kV (air-gap discharge)
Power Supply	24V/ 2.7A DC (US/EU standards, CE/FCC/UL certified)
Dimensions	215mm(W) x 144mm(D) x 42mm(H)/ Jacks Excluded
	215mm(W) x 174mm(D) x 47mm(H)/ Jacks Included
Weight	1060 g
Chassis Material	Aluminum
Silkscreen Color	Black
Operating Temperature	Operating from 0°C ~ 40°C
Storage Temperature	-20˚C ~ 60˚C / -4 ˚F ~ 140 ˚F
Relative Humidity	20 ~ 90% RH (non-condensing)
Power Consumption	52W

Amplifier Performance:

- 2 X 45 W @4Ω < 0.5% THD+N

- 2 X 25 W @8Ω < 0.5% THD+N

- Frequency Response <+/- 1dB

- SNR > 70dB @ 20hz-20Khz A weighted

- THD+N @1W <0.05% @ 1KHz

- THD+N @1W <0.1% @ 20Hz-20KHz

- Crosstalk@1W <-70dB @ 20Hz-20KHz
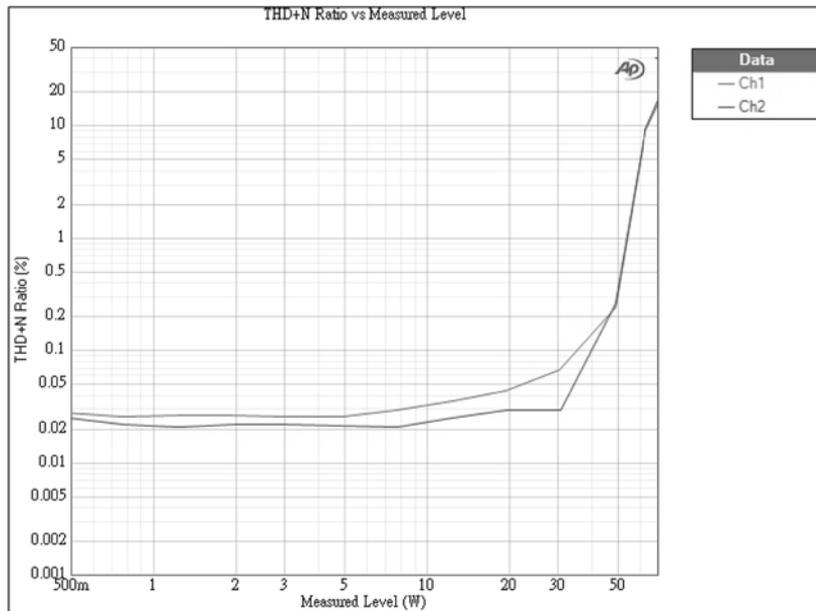
5. FEATURES

- Supports Digital to Analog audio Conversion (DAC) and Analog to
- Digital audio Conversion(ADC)
- Supports input sampling rate up to 96kHz and output at 48kHz
- Supports 2 Passive speaker with 4Ω ~ 8Ω each
- Speaker each output channel supports 45W/4Ω
- Hi-Efficient 2 x 45W class D amplify > 80% efficient
- Synchronous output sound on both digital and analog
- Supports distances up to 300 meters through CAT5e/6/7 cables
- Supports RS-232, IR remote and on-panel controls
- Sound supports up to -80dB with volume up moderation at power ON

CYP///