



AU-A300 Integrated 2 Channel Zone Amplifier

OPERATION MANUAL



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#### 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	SUMMARY OF CHANGE
v1.00	09/05/13	First release
v1.01	30/08/13	Corrections to RS-232 Volume Commands





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### 1. INTRODUCTION

The AU-A300 is a compact 2 channel amplifier that is perfect for matrix zone amplification or corporate/educational presentations. This solution provides a flexible and versatile input/output structure, enabling a wide range of sources and systems to integrate with the product. It also boasts some unique features including a bespoke HDMI pathway with audio embedding and an analogue line output that can either be fixed or variable level. With these and other more common features it's an ideal amplifier for many different installation scenarios.

### 2. APPLICATIONS

- Matrix Zone Audio Routing and Amplification
- Corporate events
- Educational Presentation
- Stereo Ceiling Speaker Systems
- Analogue to Digital and Digital to Analogue Conversion
- **III** HDMI Audio Embedding and de-embedding

#### 3. PACKAGE CONTENTS

- **III** 1× Integrated Zone Amplifier
- /// 1× IR Receiver
- **III** 1× Remote Control CR-126
- 11× 24V/ 3.75A DC Power Adaptor and Power Cable
- **III** Operational Manual

## 4. SYSTEM REQUIREMENTS

Input a wide variety of audio and HDMI sources such as DAB radios, HDTVs, Sonos systems, PCs, Set-top Boxes and output to speakers, an additional AU-A300 or other amplifiers.



#### 5. FEATURES

- **3**0 watts per channel Digital Stereo Amplifier
- III Inputs: 2×HDMI, 1×L/R Analogue Stereo, 1×Optical digital audio, 1×Coaxial digital audio, 1×3.5mm mini-jack, 1×Microphone (XLR)
- Outputs: Stereo speaker terminals, 1×HDMI, 1×Optical digital audio, 1×Coaxial digital audio, 1×L/R Analogue Stereo
- Control via IR (Remote and IR Receiver input), RS-232 or IP (Telnet)
- Dedicated XLR microphone input with independent volume control
- Analogue to Digital and Digital to Analogue Conversion
- ## HDMI Audio Embedding and de-embedding
- Compact design supplied with wall brackets
- Analogue line output selectable to be either fixed or variable output level

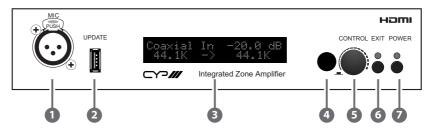
Note: Does not support the decoding of Dolby Digital signals





## 6. OPERATION CONTROLS AND FUNCTIONS

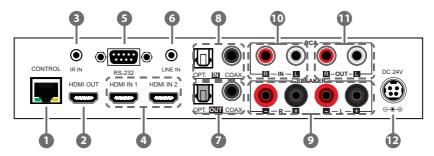
#### 6.1 Front Panel



- **MIC:** Connect to a microphone or a mono balanced source
- 2 UPDATE: Manfacturer use only.
- **3 LCM:** Displays current source selection and volume setting.
- 4 IR Window: Accepts the IR signal from the supplied remote control.
- **SOUTROL:** Control and direct volume adjustment. Turn to adjust volume output or to navigate through the menu system. Volume is adjustable from 0 dB (maximum) to −80 dB (minimum)
- **6 EXIT:** Press this button to exit the menu. When not in the menu press this button to mute the output, the LED will illuminate in red. Press it again to unmute.
- **POWER:** Press this button to turn on the device, the LED will illuminate in blue to indicate that it is powered. Press it again to switch to standby mode, the LED will turn red to indicate that it is in standby.



#### 6.2 Rear Panel



- IP CONTROL: Connect to an active network with RJ-45 cable for telnet control.
- **2 HDMI OUT:** Connect to HDTV/monitor for both audio and video display.
- **3 IR IN:** Connect the IR receiver included in the package for receiving the IR signal from the device's remote control.
- 4 HDMI IN 1& 2: Connect to HDMI source equipment such as a Set-top Box or Blu-ray player.
- **S RS-232:** Connect to a PC/Laptop or control system with D-Sub 15pin cable for RS-232 control.
- **6 LINE IN:** Connect to an audio source with 3.5mm mini-jack cable for stereo audio signal input.
- **OPT. & COAX. OUT:** Digital audio output. Connect to additional amplifiers or active speakers.
- **8 OPT. & COAX. IN:** Connect to source equipment such as a Set-top-box or games console with an optical or coaxial digital output.
- **9 R/L SPEAKER:** Connect to speakers with standard speaker cable.
- **R/L IN:** Connect to audio source equipment with an RCA cable for analogue stereo audio input.
- **R/L OUT:** Connect L/R output to active speakers or an additional AU-A300 with an RCA cable for analogue stereo audio output.
- **DC 24V:** Connect the 24V DC power supply to the unit and plug the adaptor into an AC outlet.



## 7. REMOTE CONTROL

#### 1 POWER:

Press this button to turn the device On or to set it into standby mode.

#### 2 MUTE:

Press this button to mute the audio output.

## Sol. Up or Down (▲ ▼):

Press these buttons to turn the output volume up or down.

#### **MENU:**

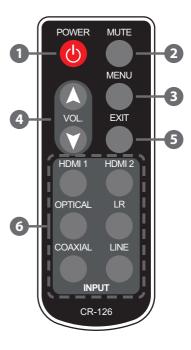
Press this button to enter the OSD MENU then press the  $\blacktriangle\& \blacktriangledown$  buttons to select the required option and press it again to confirm the selection.

#### **6** EXIT:

Press this button to go back one step or exit from the menu.

## **6** INPUT:

Press these hot keys to switch the required input source directly.





## 7.1 RS-232 Protocols

AU-A300		
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
1	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



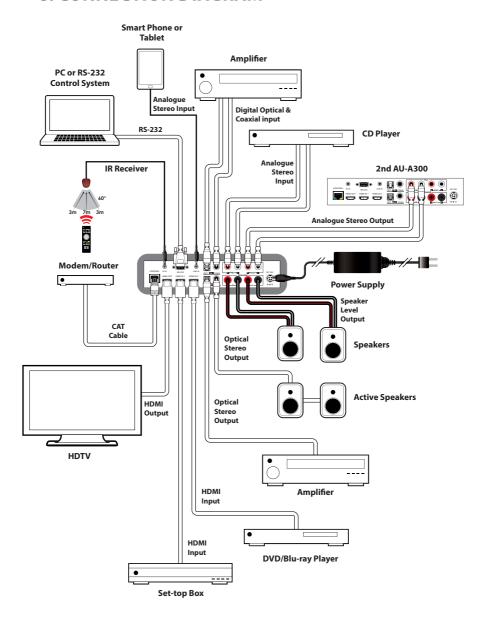
## 7.2 RS-232/Telnet Commands

Command	Description
PWR 0/1	POWER CONTROL 0:OFF / 1:ON
SOURCE 0~5	SOURCE IN SELECTION 0:HDMI 1, 1:HDMI2, 2:OPT, 3:COAX, 4:LINE IN, 5:RCA IN
VOL -80 ~ 0	OUTPUT VOLUME SETTING -80~0dB
MUTE 0/1	OUTPUT VOLUME MUTE CONTROL 0:UNMUTE, 1:MUTE
MICVOL -60~0	MIC VOLUME CONTROL -60~ 0dB
MICMUTE 0/1	MIC VOLUME MUTE CONTROL
MICSET	0: OFF, 1:NORMAL, 2:PHANTOM, 3: LINE
FADEFAULT	FACTORY DEFAULT SETTING
IPCONFIG	PRINT THE IP CONFIGURATION TO THE SCREEN
RESETIP	RESET THE IP CONFIGURATION TO FACTORY DEFAULTS
SIPADD	SET THE IP ADDRESS
SNETMASK	SET THE NET MASK ADDRESS
SGATEWAY	SET THE GATEWAY ADDRESS
SHTTPPORT	SET THE HTTP COMMUNICATION PORT
STELNETPORT	SET THE TELNET COMMUNCATION PORT
HELP	DISPLAY LIST OF COMMANDS
?	DISPLAY LIST OF COMMANDS

**Note:** RS-232 commands will be not executed unless followed by a carriage return. All commands are case-sensitive.



## 8. CONNECTION DIAGRAM



### 9. SPECIFICATIONS

**Input port**  $2 \times HDMI$ ,  $1 \times Optical$ ,  $1 \times Coaxial$ ,  $1 \times 3.5$ mm

Mini-jack Line in,  $1 \times R/L$  RCA,  $1 \times D$ -Sub 15pin

(RS-232),  $1 \times$  RJ-45 (Control),  $1 \times$  IR

**Output port**  $1 \times HDMI$ ,  $1 \times Optical$ ,  $1 \times Coaxial$ ,  $1 \times R/L$  RCA,

 $1 \times R/L$ 

Digital Audio Input/OutputLPCM 2CHStereo Input/Output Level $2 \text{ Vrms} \pm 0.2$ 

**ESD Protection** Human body model:

±8kV (air-gap discharge) ±4kV (contact discharge)

**Power Supply** 24V/ 3.75A DC (US/EU standards, CE/FCC/UL

certified)

**Dimensions**  $255mm(W) \times 170mm(D) \times 48mm(H)$ 

Weight 1060g

Chassis Material Aluminum

**Color** Black

Operating TemperatureOperating from  $0 \,^{\circ}\text{C} \sim 40 \,^{\circ}\text{C}$ Storage Temperature $-20 \,^{\circ}\text{C} \sim 60 \,^{\circ}\text{C} / -4 \,^{\circ}\text{F} \sim 140 \,^{\circ}\text{F}$ Relative Humidity $20 \sim 90\% \, \text{RH} \, (\text{non-condensing})$ 

**Power Consumption** 9W

# 10. ACRONYMS

ACRONYM	COMPLETE TERM
COAX	Coaxial
DAB	Digital Audio Broadcasting
HD	High Definition
HDMI	High-Definition Multimedia Interface
OLED	Organic Light-Emitting Diode
ОРТ	Optical



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