



# AU-IP21

IP Audio Controller

**/// 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	05/03/15	Preliminary Release

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## 1. INTRODUCTION

The AU-IP21 has the choice of Optical or analogue stereo inputs, outputting to analogue L/R with the choice of mono or stereo. Telnet and Web GUI control provide remote control over a network. The Web GUI inputs labels can be edited allowing the user to customize the interface. Ideal for adding remote volume control to amplification systems.

## 2. APPLICATIONS

- Entertainment Room / Home Theater
- Show Room / Demo Room
- Audio equipment central control

## 3. PACKAGE CONTENTS

- Optical & L/R to L/R Audio Controller
- 5V / 2.6A DC power supply
- Operation Manual

## 4. SYSTEM REQUIREMENTS

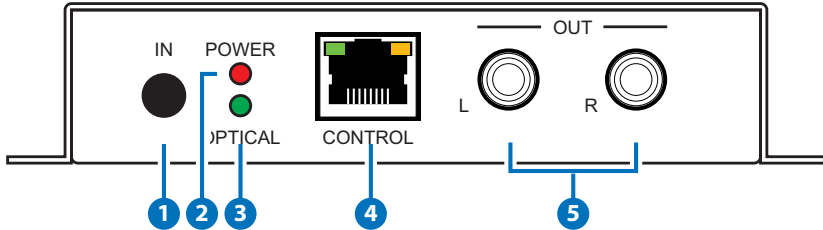
Input source equipment such as CD /DVD player or computer via optical or analog stereo output to amplifier or speaker with analog stereo output.

## 5. FEATURES

- Supports optical input sampling rate up to 192kHz
- Supports Optical & analogue L/R inputs to analogue L/R output
- Support Stereo out or Mono out
- Support Volume control by Telnet or WebGUI
- Single button source selection
- Editable source labels in Web Gui

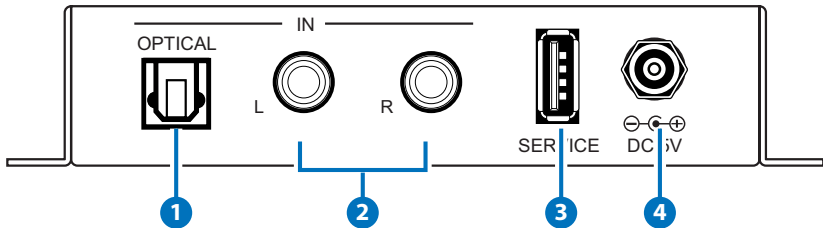
## 6. OPERATION CONTROLS AND FUNCTIONS

### 6.1 Front Panel



- 1 IN Button:** Short press IN button to switch the audio source. Long press IN button up to 4 seconds will reset the device to Default Ethernet Setting. The Power LED will blink 5 times.
- 2 POWER LED:** When power is on, the LED light will illuminate.
- 3 OPTICAL LED:** When source switch to Optical input selection, the LED light will illuminate. When switch to L/R the LED will unilluminate.
- 4 CONTROL:** This slot is to connect with intranet service line for telnet/ WebGUI control.
- 5 L/R OUT:** These slots are to connect with active speakers or amplifier's L/R inputs.

### 6.2 Rear Panel

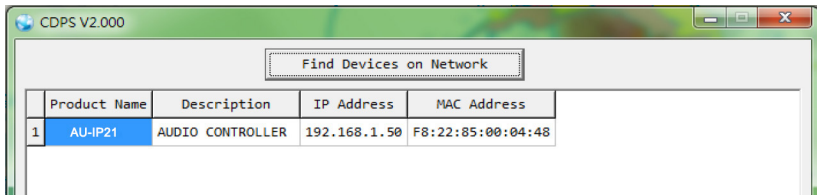


- 1 OPTICAL IN:** This slot is to connect with input source's optical output port.
- 2 L/R IN:** These slots are to connect with input source's L/R output port.
- 3 SERVICE:** This slot is reserved for USB firmware update use only.
- 4 DC 5V:** Connect the adaptor included in the package and connect to AC wall outlet for power supply.

## 6.3 IP Searching Software Application and Installation

Please download the software from [www.cypeurope.com](http://www.cypeurope.com) with file name CDPS V2.000 and save it in a directory where you may use it later.

Connect the AUDIO CONTROLLER with an active network system and open the CDPS V2.000 application from the directory in a PC/Laptop. Click on Find Devices on Network and a list of the devices will show up.



Double click on the product name and an InfoFrom page will appear to show the products' detail or use the IP Address listed to control the device directly.

Default Ethernet Setting is on Static mode with:

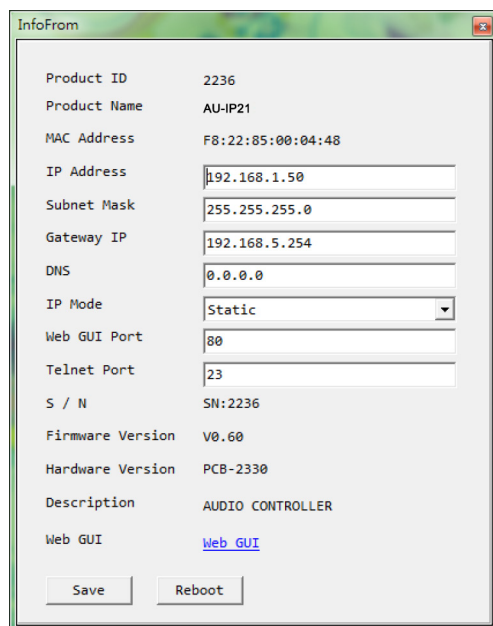
IP: 192.168.1.50

SUBNET: 255.255.255.0

GATEWAY: 192.168.5.254

HTTP PORT: 80

TLENET PORT: 23



The screenshot shows a web browser window titled 'InfoFrom'. The page displays configuration details for a device named 'AU-IP21'. The configuration is organized into two columns. The left column lists various settings, and the right column shows their current values. Some values are in text input fields, while others are read-only or displayed as links. At the bottom, there are 'Save' and 'Reboot' buttons.

Product ID	2236
Product Name	AU-IP21
MAC Address	F8:22:85:00:04:48
IP Address	<input type="text" value="192.168.1.50"/>
Subnet Mask	<input type="text" value="255.255.255.0"/>
Gateway IP	<input type="text" value="192.168.5.254"/>
DNS	<input type="text" value="0.0.0.0"/>
IP Mode	<input type="text" value="Static"/>
Web GUI Port	<input type="text" value="80"/>
Telnet Port	<input type="text" value="23"/>
S / N	SN:2236
Firmware Version	V0.60
Hardware Version	PCB-2330
Description	AUDIO CONTROLLER
Web GUI	<a href="#">Web GUI</a>

## 6.4 Telnet Commands

Command Name	Description	Description of parameter
SOURCE N	SOURCE SELECTION	N=0/Optical, 1/RCA IN or ?
VOL N	OUTPUT VOLUME SETTING	N=-40~10dB (0) or ?
MUTE N	OUTPUT VOLUME MUTE CONTROL	N=0(Unmute), 1(Mute) or ?
MONO N	SET MOMO OR STEREO MODE	N=0(Stereo), 1(Mono) or ?
NAME N1 N2	SET INPUT NAME	N1=0(Optical), 1(RCA) N2=Up to 24 Characters or ?
IPCONFIG	SHOW IP CONFIGURATION STATUS	None
SIPADDR N	SET ETHERNET IP ADDRESS	N=X.X.X.X X=0~255 (192.168.1.50)
SNETMASK N	SET ETHERNET NETMASK	N=X.X.X.X X=0~255 (255.255.255.0)
SGATEWAY N	SET ETHERNET GATEWAY	N=X.X.X.X X=0~255 (192.168.5.254)
RSTIP	IP CONFIGURATION RESET TO <DHCP>	None (Statics)
VER	SHOW UNIT FIRMWARE VERSION	None
REBOOT	SYSTEM REBOOT	None
FADEFAULT	FACTORY RESET	None
ETH_FADEFAULT	ETHERNET PARAMETER SET FACTORY DEFAULT	None
?	SHOW COMMAND LIST	None
HELP	SHOW COMMAND LIST	None

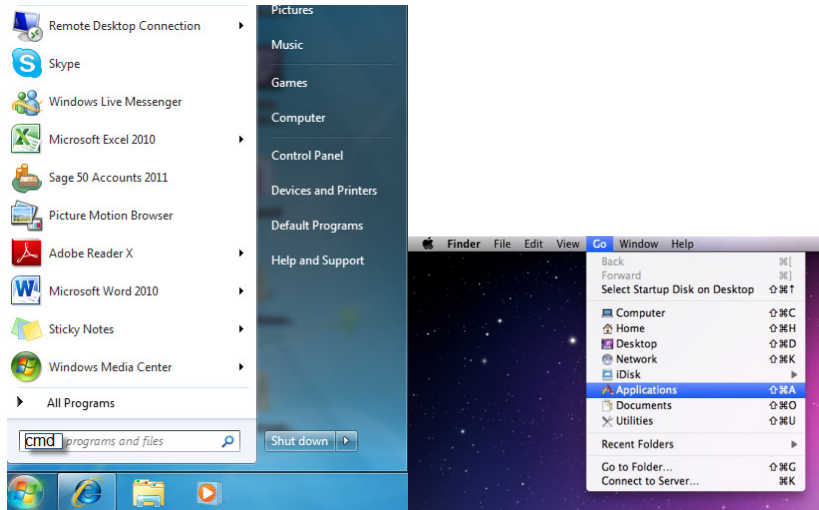
**Note:** All the RS-232 command will be not executed unless followed with a carriage return. All commands are case-sensitive

## 6.5 Telnet Control

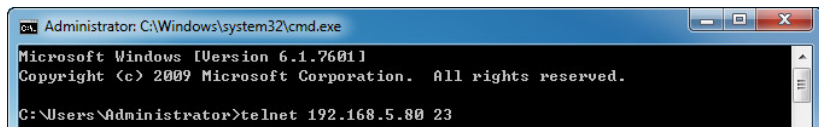
To access the telnet control in Windows 7, click on 'Start' menu and type "cmd" in the Search field then press enter.

Under Windows XP go to the 'Start' menu and click on "Run", type "cmd" and press enter.

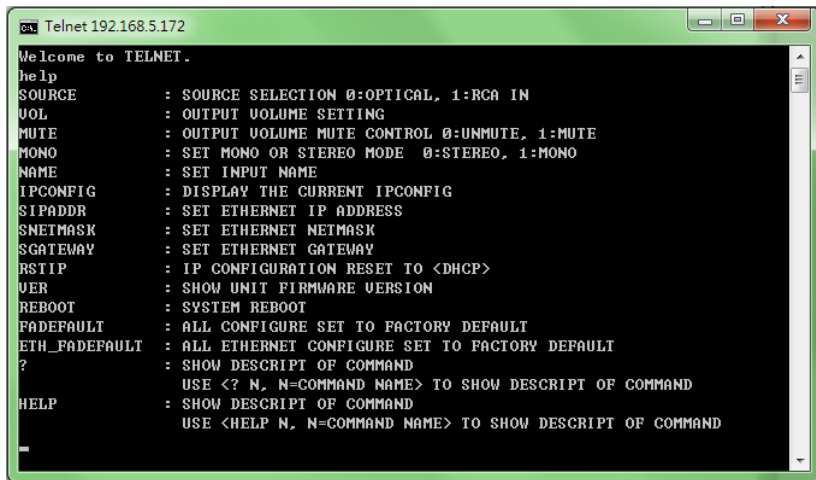
Under Mac OS X, go to Go → Application → Utilities → Terminal



Once in the command line interface (CLI) type "telnet", then the IP address of the unit and hit enter.



Type HELP or ? to bring out all the commands.

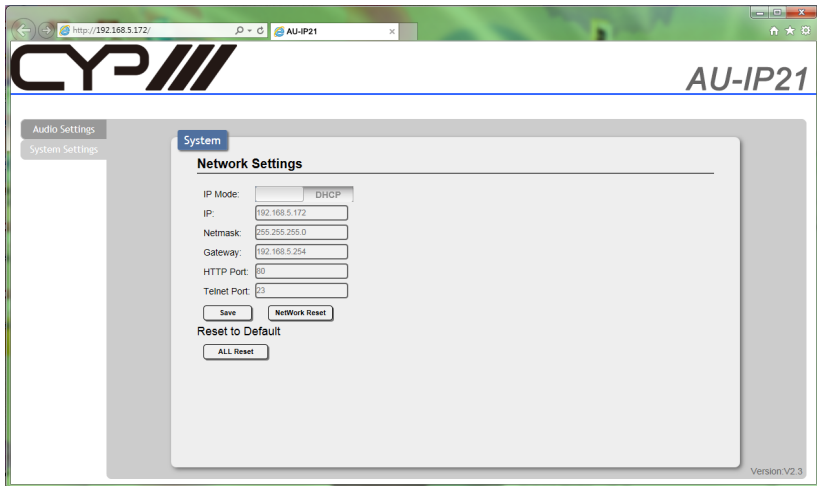
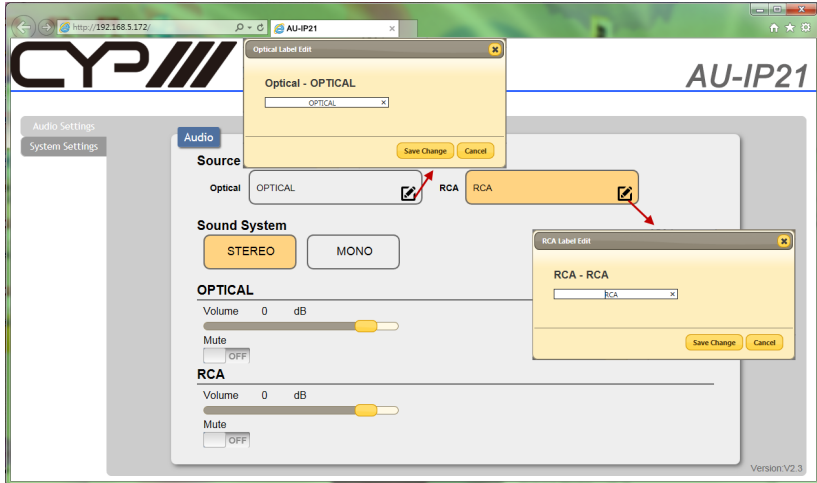


```
ca Telnet 192.168.5.172
Welcome to TELNET.
help
SOURCE      : SOURCE SELECTION 0:OPTICAL, 1:RCA IN
UOL         : OUTPUT VOLUME SETTING
MUTE        : OUTPUT VOLUME MUTE CONTROL 0:UNMUTE, 1:MUTE
MONO        : SET MONO OR STEREO MODE 0:STEREO, 1:MONO
NAME        : SET INPUT NAME
IPCONFIG    : DISPLAY THE CURRENT IPCONFIG
SIPADDR     : SET ETHERNET IP ADDRESS
SNETMASK    : SET ETHERNET NETMASK
SGATEWAY    : SET ETHERNET GATEWAY
RSTIP       : IP CONFIGURATION RESET TO <DHCP>
UER         : SHOW UNIT FIRMWARE VERSION
REBOOT      : SYSTEM REBOOT
FADEFAULT   : ALL CONFIGURE SET TO FACTORY DEFAULT
ETH_FADEFAULT : ALL ETHERNET CONFIGURE SET TO FACTORY DEFAULT
?           : SHOW DESCRIPT OF COMMAND
             USE <? N, N=COMMAND NAME> TO SHOW DESCRIPT OF COMMAND
HELP        : SHOW DESCRIPT OF COMMAND
             USE <HELP N, N=COMMAND NAME> TO SHOW DESCRIPT OF COMMAND
```

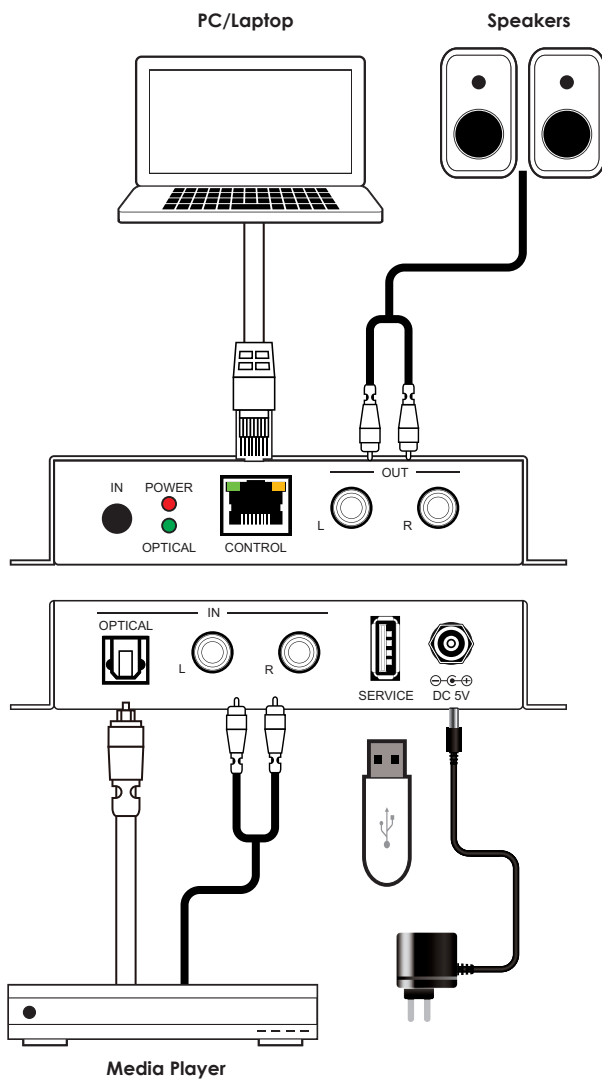
**Note:** All the commands will be not executed unless followed by a carriage return. Commands are case-insensitive. If the IP is changed then the IP Address required for Telnet access will also change accordingly.

## 6.6 Web GUI Control

On a PC/Laptop that is connected to an active network system, open a web browser and type device's IP address on the web address entry bar. The browser will display the device's Audio and System Settings for users to control.



## 7. CONNECTION DIAGRAM



## 8. SPECIFICATIONS

<b>Input Ports</b>	1 x RJ45(Control) 1 x L/R 1 x Optical 1 x USB(service)
<b>Output Ports</b>	1 x L/R
<b>Power Supply</b>	5VDC/2.6A (US/EU standards, CE/ FCC/ UL certified)
<b>ESD Protection</b>	Human body model: ±8kV (air-gap discharge) ±4kV (contact discharge)
<b>Chassis Material</b>	Metal
<b>Silkscreen color</b>	Black
<b>Dimensions</b>	55mm (W) x82mm (D) x 22.5mm (H)
<b>weight</b>	342g
<b>Operating Temperature</b>	0°C~40°C / 32°F ~ 104°F
<b>Storage temperature</b>	-20°C~60°C / -4°F ~ 140°F
<b>Relative Humidity</b>	20~90% RH (no condensation)
<b>Power Consumption</b>	2w

Audio Specification						
Input	Output	Output Level	T.H.D+N (A-Weight)	Frequency Response	SNR	Crosstalk
Optical 0dBFS 1kHz	L/R	2Vrms±10%	<0.01%	±1dBFS	>80dB	<-80dB
L/R 2Vrms 1kHz	L/R	2Vrms±10%	<0.01%	±1dBFS	>80dB	<-80dB





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