

# AU-D820S

### 8 to 20 Digital Audio Switchable Distribution Amplifier





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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
v1.01	24/06/2019	Updated Format/Diagrams





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### **1. INTRODUCTION**

The AU-D820 allows the user to switch and distribute 4 Digital Coaxial inputs and 4 Digital Optical audio inputs to 10 Digital Coaxial and 10 Digital Optical outputs. Select any audio input for distribution of the audio signal to all outputs simultaneously. Incoming audio signals are converted to allow all optical and coaxial outputs to operate simultaneously.

Supporting sampling rate up to 192kHz and audio signal up to 5.1CH, this device maximises audio distribution to multiple outputs. A typical application for this switching and distribution device is for use in retail environments such as a hi-fi store. It allows multiple audio source signals to be easily managed for demonstration of sources and amplifiers to a consumer, for example.

Control is via selection buttons on the device or via IR or RS-232.

# **2. APPLICATIONS**

- Home sound system
- Conference and meeting room audio system sharing
- Show Room sound system
- Public audio system

### **3. PACKAGE CONTENTS**

- Coaxial and Optical Switcher/Distributor
- // Remote Control CR-137
- M 5V/2.6A DC Power Adaptor
- Operation Manual

#### **4. SYSTEM REQUIREMENTS**

Input source equipment such as Blu-ray/DVD player, games console or Set-Top-Box and output to active speakers or sound systems.

### **5. FEATURES**

- Supports 4 Coaxial and 4 Optical inputs and 10 Coaxial and 10 Optical outputs
- Supports LPCM 2CH audio signal
- Supports sampling rate up to 192kHz
- Supports Dolby and DTS audio signal bypass
- III Low power consumption





# 6. OPERATION CONTROLS AND FUNCTIONS

#### 6.1 Front Panel



- **1** IR Window: Receive IR signal from the included Remote Control.
- POWER Button: Press this button to turn ON or set the device to standby mode.
- **3 POWER LED:** This LED will illuminate in Green when the device is turned ON and in Red when in standby mode.
- COAXIAL & OPTICAL LED 1~4: These LEDs will illuminate according to the input selection.
- 5 INPUT Button: Press this button to select input Coaxial and Optional from 1~4.

#### 6.2 Rear Panel



- **RS-232:** Connect from a PC/Laptop device with RS-232 tool to send RS-232 command to control the device.
- **2 IR IN:** Connect with IR Receiver included in the package for IR signal receiving from the remote control.
- **COAXIAL & OPTICAL IN:** Connect from source equipment such DVD, Blu-ray, PS3 or etc. with audio signal.
- COAXIAL & OPTICAL OUT: Connect to active speakers or audio equipment for audio distribution.
- **5V DC:** Connect with power supply from the AC wall outlet.





#### 6.3 RS-232 Protocols

Switcher		
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	Тх
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 RS-232 & Telnet Commands

Command	Status
POWER OFF/ON	Set Power Status
INPUT COAX 1~4	Choose a Coaxial input
INPUT OPTICAL 1~4	Choose an Optical input
STATUS	Show Current Information
?/H/HELP	Show all commands

RS-232 commands will not be executed unless followed by a carriage return. Commands are case-sensitive.





# 7. CONNECTION DIAGRAM



Inputs

Optical Digita Outputs

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# 8. SPECIFICATIONS

Input port	4 x Coaxial 4 x Optical 1 x IR
Output port	10 x Coaxial 10 x Optical
Sampling Rate	32~192kHz
IR Frequency	30~50kHz
ESD Protection	Human body model: ±8kV (air-gap discharge) ±4kV (contact discharge)
Power Supply	5VDC/2.6A (US/EU standards, CE/FCC/UL certified)
Dimensions	436mm (W) x 120mm (D) x 44mm (H)/ Jacks Excluded
	436mm (W) x 127mm (D) x 48mm (H)/ Jacks Included
Weight	1596 g
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)
Audio Sampling Rate	Up to 192 kHz

Coaxial/Optical Input	Coavial output	Ontical output	
(Up to 192kHz)	Coaxial output	Optical output	
LPCM 2CH	$\checkmark$	$\checkmark$	
Dolby Digital 2~5.1CH/	$\checkmark$	$\checkmark$	
DTS 2~5.1CH			





### 9. ACRONYMS

ACRONYM	COMPLETE TERM
COAX	Coaxial
S/PDIF	Sony/Philips Digital Interconnect Format
TOSLINK	Toshiba Link





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