





AU-11DD

Dolby® Digital Downmixer with Digital/Analogue Audio Conversion





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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	25/09/13	Preliminary Release





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1. INTRODUCTION

The AU-11DD is designed to decode and downmix Dolby Digital audio signals to analogue stereo. All outputs are simultaneous which is excellent for multi-room audio environments where both digital and analogue zones are required

2. APPLICATIONS

- Analog audio to digital audio signal conversion (ADC)
- Digital audio to analog audio signal conversion (DAC)
- Simultaneous digital and analog audio output
- Downmixing of Dolby Digital signals

3. PACKAGE CONTENTS

- /// 1×AU-11DD
- **III** 5 V/1 A Power Adaptor
- **III** Operation Manual

4. SYSTEM REQUIREMENTS

Audio source equipment such as CD/DVD Player with connection cable(s) and AV receiver or similar for audio output.



5. FEATURES

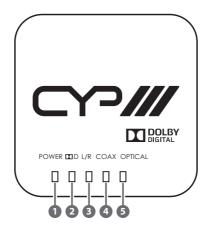
- Dolby Digital decoder technology embedded
- Integrated digital interpolator filter and Digital-to-Analog Converter (DAC)
- Integrated Analog-to-Digital Converter (ADC)
- Supports LPCM input sampling rates from 32 to 96 kHz
- Output sampling rates is adjusted to 48 kHz
- Supports Dolby Digital audio downmixing to 2CH audio
- Supports Dolby Digital sampling rate 48kHz
- Provides electromagnetic-noise-free transmission
- **III** Easy to install and operate
- Compact and elegant design





6. OPERATION CONTROLS AND FUNCTIONS

6.1 Top Panel



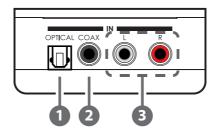
POWER LED Indicator

The LED will illuminate in blue when the power is connected and in red when switched off.

- 2 Dolby Digital LED Indicator
 - When the source is Dolby Digital formatted the LED will illuminate in red and will remain off if not.
- 3 L/R IN LED Indicator
 When selecting the L/R input, the blue LED will turn on.
- 4 COAX IN LED Indicator
 When selecting the Coaxial input, the blue LED will turn on.
- **OPTICAL IN LED Indicator**When selecting the Optical input, the blue LED will turn on.



6.2 Right Panel



1 OPTICAL IN

Connect to the audio source's optical output.

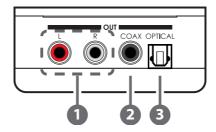
2 COAX IN

Connect to the audio source's coaxial output.

L/R IN

Connect to the analog audio source with a stereo RCA cable.

6.3 Left Panel



1 L/R OUT

Connect to a compatible audio equipment, such as a TV or amplifier with a stereo RCA cable.

COAX OUT

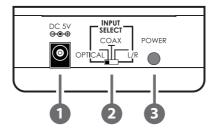
Connect to an audio system's coaxial input.

3 OPTICAL OUT

Connect to an audio system's optical input.



6.4 Rear Panel



1 DC 5V

Connect the 5 V/1 A DC power supply to the unit and plug the adaptor to an AC wall outlet.

2 INPUT SELECT

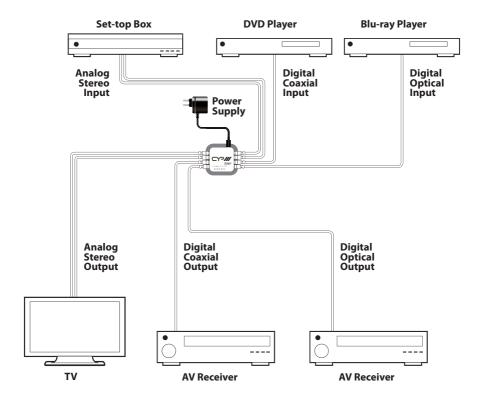
Selects the current audio source, either optical, coaxial or L/R (Analog).

B POWER

Push the button to turn the unit on or off.



7. CONNECTION DIAGRAM





8. SPECIFICATIONS

Input Ports 1×Optical, 1×Coaxial,

1×Analog Stereo (L/R)

Input Format LPCM 2CH & Dolby Digital from Optical/

Coaxial

Sample Rates 32 ∼ 96 kHz

Output Ports 1×Coaxial, 1×Optical,

1×Analog Stereo (L/R)

L/R Input Impedance $47K\Omega$ **L/R Output Impedance** 600Ω

ESD Protection Human body model:

±10 kV (air-gap discharge) ±6 kV (contact discharge)

Power Supply 5 V/1 A DC (US/EU standard, CE/FCC/UL

certified)

Dimensions 97 mm (W)×85 mm (D)×35 mm (H)

Weight 110 g
Chassis Material Plastic
Colour Black

Operating Temperature $0 \circ \mathbb{C} \sim 40 \circ \mathbb{C} / 32 \circ \mathbb{F} \sim 104 \circ \mathbb{F}$ Storage Temperature $-20 \circ \mathbb{C} \sim 60 \circ \mathbb{C} / -4 \circ \mathbb{F} \sim 140 \circ \mathbb{F}$ Relative Humidity $20 \sim 90 \circ \mathbb{R}$ RH (non-condensing)

Power Consumption 2.1 W



Audio Specifications:

OUT IN	Output	Output Level	T.H.D+N (A-Weight)	Frequency Response	SNR	Crosstalk
Optical 0dBFS	Optical	0 dBFS	<0.00005%	0 dBFS	>140 dB	<-155 dB
	Coaxial	0 dBFS	<0.00005%	0 dBFS	>140 dB	<-155 dB
	Line-Out	2Vrms+-0.1	<0.01%	<0.5 dB	>90 dB	<-100 dB
Coaxial 0dBFS	Optical	0 dBFS	<0.00005%	0 dBFS	>140 dB	<-155 dB
	Coaxial	0 dBFS	<0.00005%	0 dBFS	>140 dB	<-155 dB
	Line-Out	2Vrms+-0.1	<0.01%	<0.5 dB	>90 dB	<-100 dB
Line 2Vrms	Optical	0 dBFS	<0.01%	<0.5 dB	>140 dB	<-77 dB
	Coaxial	0 dBFS	<0.01%	<0.5 dB	>140 dB	<-77 dB
	Line-Out	2Vrms+-0.1	<0.01%	<1 dB	>90 dB	<-77 dB

Input Audio to Output Audio Chart:

Audia Imput	Input Format	Audio Output			
Audio input		Analog L/R	COAXIAL	OPTICAL	
Analog L/R	Analog 2CH	Analog 2CH	LPCM 2CH		
COAXIAL/	LPCM 2CH	Analog 2CH	LPCM 2CH		
OPTICAL	Dolby Digital	Decoding Lt/Rt	Bitstream Pass-through		

9. ACRONYMS

ACRONYM	COMPLETE TERM	
Ω	Ohm	
ADC	Analog to Digital Conversion	
COAX	Coaxial	
DAC	Digital to Analog Conversion	
LPCM	Linear Pulse Code Modulation	



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