



DCT-9DD

Universal Digital/Analog Audio Converter
with Dolby® Digital & DTS® 2.0+Digital Out Decoder



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 DD/MM/YY	SUMMARY OF CHANGE
VR0	24/07/15	Preliminary Release



CONTENTS

1. Introduction	1
2. Applications	1
3. Package Contents	1
4. System Requirements	1
5. Features	2
6. Operation Controls and Functions	3
6.1 Top Panel	3
6.2 Right Panel.....	4
6.3 Left Panel	4
6.4 Rear Panel	5
7. Connection Diagram	6
8. Specifications	7
9. Acronyms	9





1. INTRODUCTION

The Universal Digital/Analog Audio Converter with Dolby® Digital & DTS® 2.0+Digital Out Decoder can convert among Optical, Coaxial and analog audio signals. With the ability to convert digital signals into analog and analog signals into digital, this device supports the simultaneous conversion of audio formats so when converting Optical into analog audio you can also convert it into Coaxial. Therefore, if you find yourself limited by multiple audio formats the Universal Digital/Analog Audio Converter with Dolby Digital & DTS 2.0+Digital Out Decoder is the perfect choice.

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
- Downmixing of DTS 2.0+Digital Out signals

3. PACKAGE CONTENTS

- Universal Digital/Analog Audio Converter with Dolby Digital & DTS 2.0+Digital Out Decoder
- 5 V/1 A Power Adaptor
- Operation Manual

4. SYSTEM REQUIREMENTS

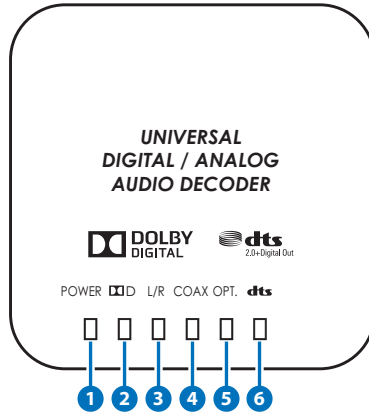
Audio source equipment such as CD/DVD Player with connection cable(s) and AV receiver or similar for audio output.

5. FEATURES

- Dolby Digital Decoder technology embedded
- DTS 2.0+Digital Out Decoder technology embedded
- Integrated digital interpolator filter and Digital-to-Analog Converter (DAC)
- Integrated Analog-to-Digital Converter (ADC)
- Supports input sampling rates from 32 to 96 kHz and output at 48kHz
- Provides electromagnetic-noise-free transmission
- Supports last power memory function
- Easy to install and operate
- Compact and elegant design

6. OPERATION CONTROLS AND FUNCTIONS

6.1 Top Panel



1 POWER LED Indicator

The LED will illuminate in blue when the power is connected and in red when switched off. When connected to an AC wall outlet the unit will automatically turn on.

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.

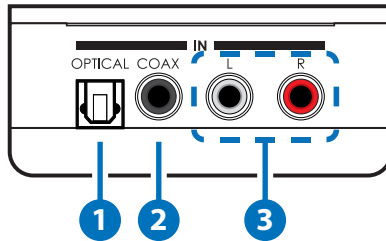
5 OPTICAL IN LED Indicator

When selecting the Optical input, the blue LED will turn on.

6 DTS 2.0+Digital Out LED Indicator

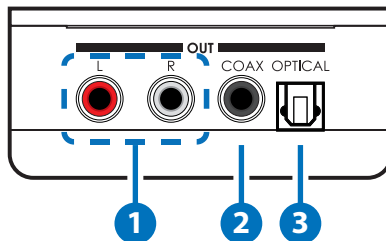
When the source is DTS 2.0+Digital Out formatted the LED will illuminate in red and will remain off if not.

6.2 Right Panel



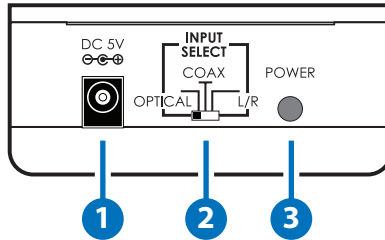
- 1 OPTICAL IN**
Connect to the audio source's optical output.
- 2 COAX IN**
Connect to the audio source's coaxial output.
- 3 L/R IN**
Connect to the analog audio source with a stereo RCA cable.

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.
- 2 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.

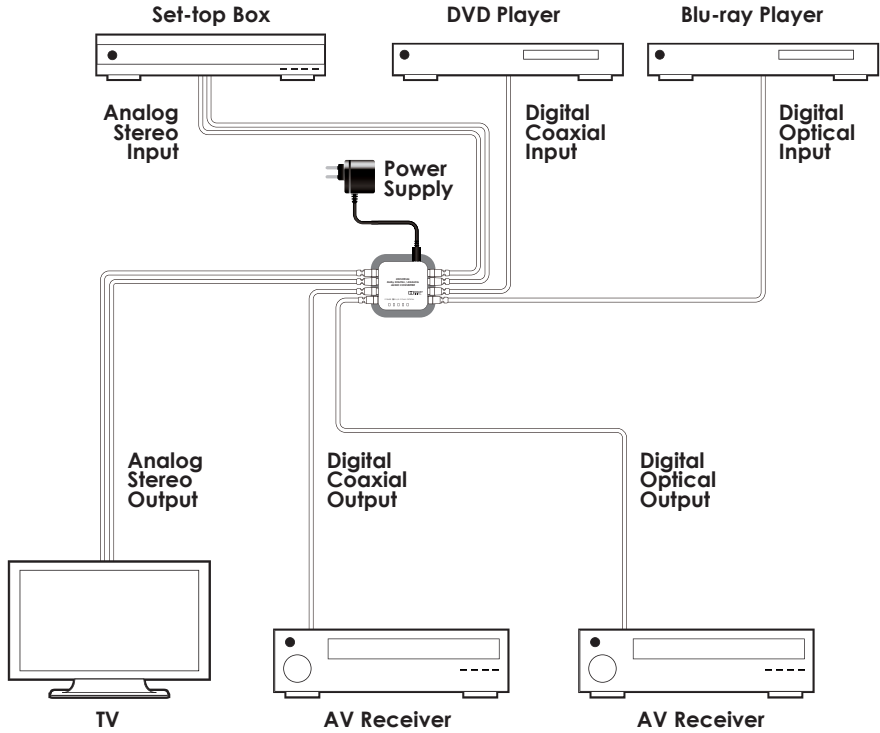
2 INPUT SELECT

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

3 POWER

Push the button to turn the unit on or off. The device supports last power memory function therefore, when the power supply is reconnected it will bring up the last power status.

7. CONNECTION DIAGRAM





8. SPECIFICATIONS

Input Ports	1×Optical, 1×Coaxial,
Input Format	1×Analog Stereo (L/R) LPCM 2CH & Dolby Digital/DTS 2.0+Digital from Optical or Coaxial
Input Sample Rates	32 ~ 96 kHz
Output Ports	1×Coaxial, 1×Optical,
L/R Input Impedance	1×Analog Stereo (L/R) 47KΩ
L/R Output Impedance	600Ω
ESD Protection	Human body model: ±10kV (air-gap discharge) ±6kV (contact discharge)
Power Supply	5 V/1 A DC (US/EU standard, CE/FCC/UL certified)
Dimensions	85 mm (W)×85 mm (D)×35 mm (H)/Jacks Excluded 97 mm (W)×85 mm (D)×35 mm (H)/Jacks Included
Weight	108 g
Chassis Material	Plastic
Silkscreen Color	White
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)
Power Consumption	2.2W

Audio Specifications:

OUT IN	Output	Output Level	T.H.D+N (A-Weight)	Frequency Response	SNR	Crosstalk
Optical 0dBFS	Optical	0~-1 dBFS	<0.001%	±1 dBFS	>135 dB	<-155 dB
	Coaxial	0~-1 dBFS	<0.001%	±1 dBFS	>135 dB	<-155 dB
	Line-Out	1.9Vrms±10%	<0.01%	±1 dB	>85 dB	<-100 dB
Coaxial 0dBFS	Optical	0~-1 dBFS	<0.001%	±1 dBFS	>135 dB	<-155 dB
	Coaxial	0~-1 dBFS	<0.001%	±1 dBFS	>135 dB	<-155 dB
	Line-Out	1.9Vrms±10%	<0.01%	±1 dB	>85 dB	<-100 dB
Line 2Vrms	Optical	0~-1 dBFS	<0.001%	±1 dB	>100 dB	<-95 dB
	Coaxial	0~-1 dBFS	<0.001%	±1 dB	>100 dB	<-95 dB
	Line-Out	1.9Vrms±10%	<0.01%	±1 dB	>85 dB	<-95 dB

Input Audio to Output Audio Chart:

Audio Input	Input Format	Audio Output		
		Analog L/R	COAXIAL	OPTICAL
Analog L/R	Analog 2CH	Analog 2CH	LPCM 2CH	
COAXIAL or OPTICAL	LPCM 2CH	Analog 2CH	LPCM 2CH	
	Dolby Digital	Decoding Lt/Rt	Bitstream/Pass-through	
	DTS	Decoding Lo/Ro	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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