



## DCT-1DD

Coaxial to Analog Audio Converter  
with Dolby® Digital & DTS® 2.0 Decoder



Operation Manual





## DISCLAIMERS

The information in this manual has been carefully checked and is believed to be accurate. Cypress Technology assumes no responsibility for any infringements of patents or other rights of third parties which may result from its use.

Cypress Technology assumes no responsibility for any inaccuracies that may be contained in this document. Cypress also makes no commitment to update or to keep current the information contained in this document.

Cypress Technology reserves the right to make improvements to this document and/or product at any time and without notice.

## COPYRIGHT NOTICE

No part of this document may be reproduced, transmitted, transcribed, stored in a retrieval system, or any of its part translated into any language or computer file, in any form or by any means—electronic, mechanical, magnetic, optical, chemical, manual, or otherwise—without express written permission and consent from Cypress Technology.

© Copyright 2011 by Cypress Technology.

All Rights Reserved.

Version 1.1 August 2011

## TRADEMARK ACKNOWLEDGMENTS

All products or service names mentioned in this document may be trademarks of the companies with which they are associated. Manufactured under license from Dolby Laboratories. "Dolby" and the double-D symbol are trademarks of Dolby Laboratories.

Manufactured under license under U.S. Patent Nos: 5,956,674; 5,974,380; 6,487,535 & other U.S. and worldwide patents issued & pending. DTS, the Symbol, & DTS and the Symbol together are registered trademarks & DTS 2.0 is a trademark of DTS, Inc. Product includes software. © DTS, Inc. All Rights Reserved.





## 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
VS1	19/04/18	Updated section 3



## CONTENTS

<b>1. Introduction</b> .....	<b>1</b>
<b>2. Applications</b> .....	<b>1</b>
<b>3. Package Contents</b> .....	<b>1</b>
<b>4. System Requirements</b> .....	<b>1</b>
<b>5. Features</b> .....	<b>2</b>
<b>6. Operation Controls and Functions</b> .....	<b>3</b>
6.1 Front Panel.....	3
6.2 Rear Panel .....	3
<b>7. Connection Diagram</b> .....	<b>4</b>
<b>8. Specifications</b> .....	<b>5</b>
<b>9. Acronyms</b> .....	<b>6</b>





## 1. INTRODUCTION

The Coaxial to Analog Audio Converter (DAC) with Dolby® Digital & DTS™ 2.0 Decoder provides the ideal solution for converting an coaxial digital audio signal to analog stereo audio. It provides high quality sound conversion. The Dolby Digital & DTS 2.0 function guarantees that Dolby digital/DTS2.0 audio signals are downmixed to analog stereo without loss of quality. This unit is perfect for use in computer audio systems or digital mixing consoles.

## 2. APPLICATIONS

- Converting digital coaxial audio into analog stereo
- Converting Dolby Digital formatted audio into analog stereo
- Converting DTS 2.0 formatted audio into analog stereo
- HDTV with only digital audio output to analog amplifier input
- Improving the digital to analog conversion quality from any stereo optical digital audio source

## 3. PACKAGE CONTENTS

- 1×Coaxial to Analog Audio Converter with Dolby Digital Decoder & DTS 2.0 Decoder
- 1×5V/1.2A DC Power Adapter
- 1×Operation Manual

## 4. SYSTEM REQUIREMENTS

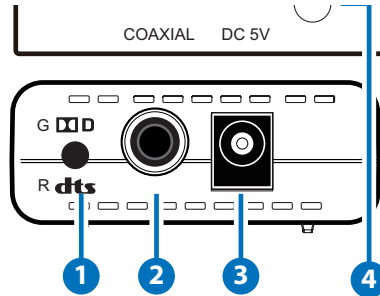
Digital audio source device such as DVD/Blu-ray player or Media player with an coaxial output cable and to a device such as an amplifier or AV receiver with analog stereo input.

## 5. FEATURES

- Supports coaxial digital audio signal input and conversion into analog audio signal L/R output
- Supports LPCM 2CH audio sampling rates from 32 to 96 kHz (32, 44.1, 48, 88.2 and 96 kHz)
- Supports DTS 2.0 5.1CH audio sampling rates up to 96 kHz
- Supports Dolby Digital 5.1CH audio sampling rates up to 48 kHz
- Supports Dolby Digital & DTS 2.0 audio downmixing to 2-channel audio
- Supports S/PDIF bitstream 24-bit of data for the left and right channels
- Compact, elegant design and easy to install

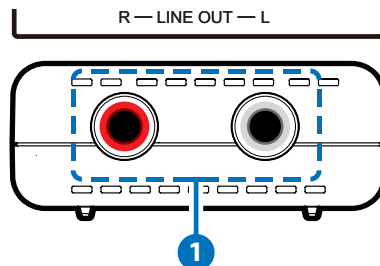
## 6. OPERATION CONTROLS AND FUNCTIONS

### 6.1 Front Panel



- 1 Dolby/DTS LED Indicator:** When the source audio is encoded with Dolby Digital the LED will illuminate in green and when with DTS 2.0 the LED will illuminate in red other types of audio the LED will not illuminate.
- 2 COAXIAL IN:** Connect the Coaxial input to an Coaxial digital audio source, such as a Games Console, HDTV or Set-top Box.
- 3 POWER 5V:** Plug the 5V DC power supply into the unit and connect the adaptor to an AC outlet.
- 4 Power LED:** The LED will illuminate when connected to power.

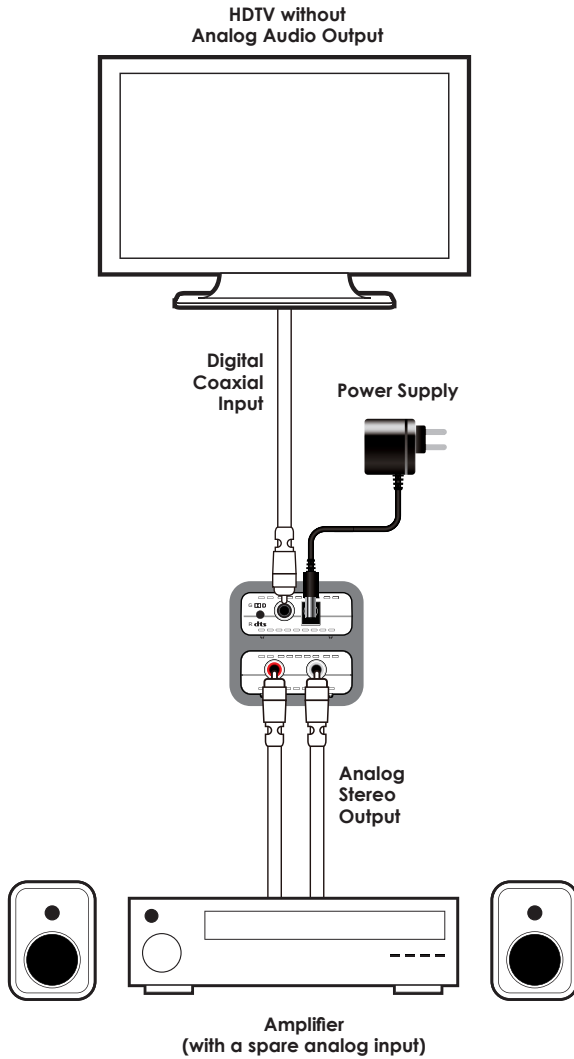
### 6.2 Rear Panel



- 1 R/L LINE OUT:** Connect the R/L analog audio output to the input of your AV Receiver or audio system.



## 7. CONNECTION DIAGRAM





## 8. SPECIFICATIONS

<b>Input Port</b>	1×Coaxial
<b>Output Port</b>	1×L/R (2×RCA)
<b>Power Supply</b>	5V/1A DC (US/EU standards, CE/FCC/UL certified)
<b>Output Level</b>	2Vrms ± 10%
<b>THD+N</b>	<0.007%
<b>Frequency Response</b>	±1 dB
<b>SNR</b>	>100 dB
<b>Crosstalk</b>	<-119 dB
<b>Dimensions</b>	55 mm (W)×75.5 mm (D)×22.5 mm (H)/ Jacks Excluded 55 mm (W)×86 mm (D)×22.5 mm (H)/ Jacks Included
<b>Weight</b>	42 g
<b>Chassis Material</b>	Plastic
<b>Silkscreen Color</b>	White
<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 (non-condensing)
<b>Power Consumption</b>	1.7 W

### Audio Specifications:

<b>OUT IN</b>	<b>Output Level</b>	<b>T.H.D+N (A-Weight)</b>	<b>Frequency Response</b>	<b>SNR</b>	<b>Crosstalk</b>
Coaxial 0dBFS/1kHz	2Vrms±10%	<0.01%	±1 dB	>100 dB	<-115 dB

### Input Audio to Output Audio Chart:

AUDIO INPUT	INPUT FORMAT	AUDIO L/R OUTPUT
COAXIAL	LPCM 2CH	Analog 2CH
	Dolby Digital	Decoding Lt/Rt
	DTS	Decoding Lo/Ro

## 9. ACRONYMS

ACRONYM	COMPLETE TERM
<b>DAC</b>	Digital to Analog Converter
<b>RCA</b>	Audio Connector (Radio Corporation of America)
<b>SNR</b>	Signal-to-noise Ratio
<b>THD</b>	Total Harmonic Distortion
<b>USB</b>	Universal Serial Bus



**CYPRESS TECHNOLOGY CO., LTD**  
Home page: <http://www.cypress.com.tw>

MPM-DCT1DD