DCT-30TX

Optical and RS-232 Transmitter

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
RDV1	04/11/13	Preliminary Release

CONTENTS

1. INTRODUCTION

The Optical (S/PDIF) IN & OUT with RS-232 Transmitter can send and receive S/PDIF audio signal synchronously over a single run of CAT5e/6 cable up to 300m. With RS-232 control and PoE feature added this Transmitter can pair with Receiver unit together that support device control and one side power supply.

2. APPLICATIONS

- Home sound system extension
- Conference and meeting room audio system sharing
- Showroom audio extension
- Airport announcement system
- Public sound system installation

3. PACKAGE CONTENTS

- Optical IN & OUT and RS-232 Transmitter
- 12V Power Adaptor
- Operation Manual

4. SYSTEM REQUIREMENTS

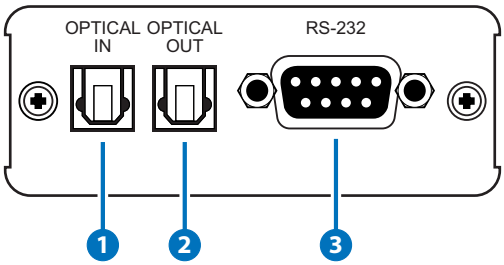
Input source equipment such as Blu-ray/DVD player and output connect to Receiver for active speakers or sound systems. PC/Laptop for RS-232 command sending or RS-232 control device.

5. FEATURES

- Supports S/PDIF IN & OUT and RS-232 control
- Supports Optical S/PDIF audio sampling rate up to 192 kHz
- The S/PDIF with 192kHz sampling rate over a single CAT5e/6/7 cable up to 100m/328ft, 96kHz sampling rate the cable up to 150m/492ft and 48kHz sampling rate the cable up to 300m/984ft
- Supports LPCM 2CH,Dolby Digital 2~5.1CH, DTS 2~5.1CH (Pass through)
- Support Bi-direction Power over Cable (PoC)
- Bi-directional RS-232 control

6. OPERATION CONTROLS AND FUNCTIONS

6.1 Front Panel



1 OPTICAL IN

Connect to source equipment such as DVD/Blu-ray player, Set-Top Box or game console for audio input signal routing.

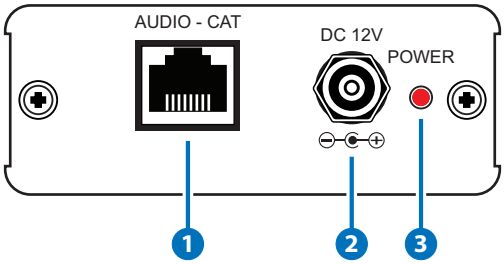
2 OPTICAL OUT

Connect to active speakers and or AV amplifiers with optical cable for audio output.

3 RS-232

Connect from PC/Laptop for RS-232 command sending to control the device or with control device.

6.2 Rear Panel



1 AUDIO-CAT

Connect the AUDIO-CAT output to the AUDIO-CAT input of the Receiver unit using CAT5e/6/7 cable.

2 DC 12V

Connect the adaptor with power cord included in the package and connect to AC wall outlet for power supply.

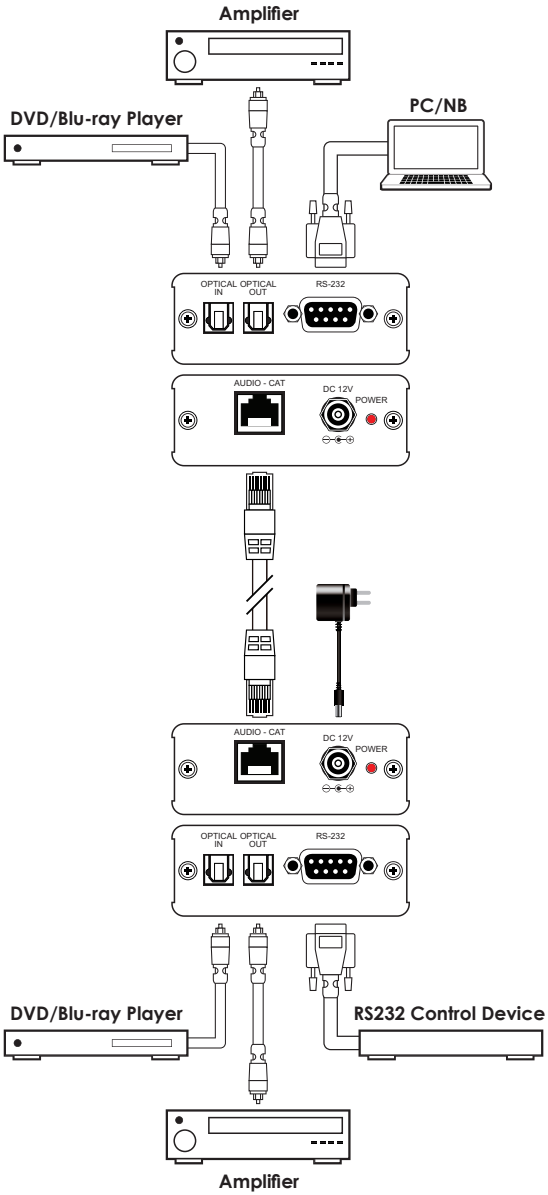
3 POWER indicator

When power is ON, the LED will illuminate.

6.3 RS-232 Pin Definition

Pin	Define TX/RX
1	N/C
2	TxD / RxD
3	RxD / TxD
4	N/C
5	GND
6	N/C
7	N/C
8	N/C
9	N/C

7. CONNECTION DIAGRAM



8. SPECIFICATIONS

Input Port	1 x Optical
Output Port	1 x Optical
Control Port	1 x RS-232
Audio Sampling Rate	Up to 192 kHz
Audio Format	LPCM 2CH, Dolby Digital 2~5.1CH, and DTS 2~5.1CH (Pass through)
CAT Cable Distance	192k@100m/328ft 96k@150m/492ft 48k@300m/984ft
Input Level/Frequency	
Output Level	
THD+N	
Frequency Response	
SNR	
Crosstalk	
Power Supply	12V / 1.25A DC (US/EU standards, CE/ FCC/UL certified)
ESD Protection	Human body model: ± 8kV (air-gap discharge) ± 6kV (contact discharge)
Dimensions (mm)	78.5(W) x 83.5(D) x 30(H) (W/Connector) 78.5(W) x 72(D) x 30(H) (W/O Connector)
Weight (g)	N/A
Chassis Material	Metal
Silkscreen Color	Black
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	0.85w

9. ACRONYMS

ACRONYM	COMPLETE TERM
Dolby	Dolby Laboratories, Inc.,
DTS	Digital Theater System

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