

# DCT-30RX Optical and RS-232 Receiver



Operation Manual



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Version VR1.0 March 2014

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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



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#### 1. INTRODUCTION

The Optical (S/PDIF) IN/OUT with RS-232 Receiver can send or 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 Receiver can pair with Transmitter 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 Receiver
- 12V Power Adaptor
- Operation Manual

#### 4. SYSTEM REQUIREMENTS

Input Transmitter with source equipment such as Blu-ray/DVD player and output to active speakers or sound systems. Connect RS-232 to control device for RS-232 command receiving.

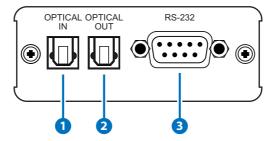
#### 5. FEATURES

- 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

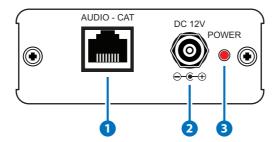
Connect to active speakers and or AV amplifiers with optical cable for audio output.

#### 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 input to the AUDIO-CAT output of the Transmitter 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.

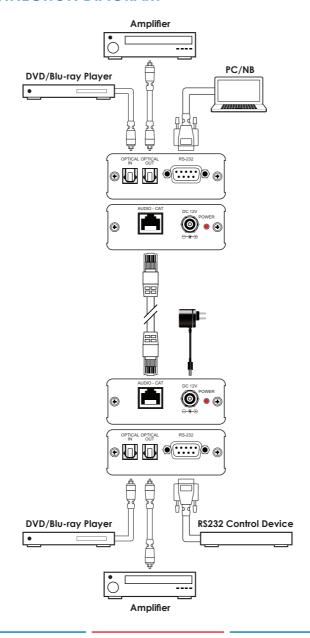


# 6.3 RS-232 Pin Definition

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)**  $78.5(W) \times 83.5(D) \times 30(H) (W/Connector)$ 

78.5(W) x 72(D) x 30(H) (W/O Connector)

Weight (g)

Chassis Material

Metal

Silkscreen Color

Black

Operating Temperature  $0^{\circ}\text{C} \sim 40^{\circ}\text{C} / 32^{\circ}\text{F} \sim 104^{\circ}\text{F}$ Storage Temperature  $-20^{\circ}\text{C} \sim 60^{\circ}\text{C} / -4^{\circ}\text{F} \sim 140^{\circ}\text{F}$ 

**Relative Humidity** 20 ~ 90% RH (non-condensing)

**Power Consumption** 0.85w



# 9. ACRONYMS

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

