

COH-TX2 & COH-RX2

4K x 2K HDMI to Optical Transmitter and Receiver



Operation Manual



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Version 1.1 August 2011

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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
VR01	31/07/2013	Preliminary Release



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1. INTRODUCTION

The 4Kx2K HDMI to Optical Transmitter and Receiver set uses fiber optic cables to give you longer transmission distances (up to 300m) utilizing thinner, lighter cables for greater flexibility in installations. With this system the HDMI signal is uncompressed and is fully compliant with HDMI and HDCP.

2. APPLICATIONS

- Digital signage
- Airport signage
- · Advertising displays
- Video wall dsplays
- Surveillance systems
- Residential Installations

3. PACKAGE CONTENTS

- 1×HDMI to Optical Transmitter
- 1×Optical to HDMI Receiver
- 2×5V DC Power Adaptors
- · Operational Manual

4. SYSTEM REQUIREMENTS

Source device such as a DVD or Blu-ray player with HDMI cables and output displays such as HDTV's and Monitors with HDMI ports.

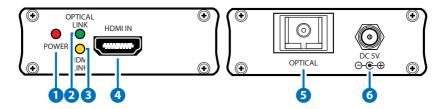
5. FEATURES

- HDMI, HDCP and DVI compliance
- Supports 3D Signal and 4K x 2K resolutions
- Long transmission distances up to 300m with OM3 50/125um cable (SC-SC connector)
- Thinner and lighter cables for easier and more flexible installations
- Faster data transmission and lower power consumption
- Supports the reading of EDID information



6. OPERATION CONTROLS AND FUNCTIONS

6.1 Transmitter Front and Rear Panels



1 POWER LED

This LED will illuminate when connected to an AC wall outlet.

OPTICAL LINK LED

The LED will illuminate when the optical cable is connected and has successfully detected and communicated data between the Transmitter and Receiver. If the LED is not illuminated then check that the fiber optic cable is properly connected and that the cable itself is undamaged.

3 HDMI LINK LED

This LED will illuminate when the Transmitter unit is receiving a HDMI signal from the source device.

4 HDMI IN

Connect to an HDMI input source such as a DVD or Blu-ray player with a HDMI cable.

OPTICAL

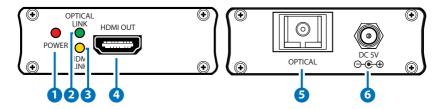
Connect the SC-SC multi-mode optical cable to the Transmitter and Receiver units.

6 DC 5V

Connect to the power adaptor included in the package to an AC wall outlet for power supply.



6.2 Receiver Front and Rear Panels



1 POWER LED

This LED will illuminate when connected to an AC wall outlet..

OPTICAL LINK LED

The LED will illuminate when the optical cable is connected and has successfully detected and communicated data between the Transmitter and Receiver. If the LED is not illuminated then check that the fiber optic cable is properly connected and that the cable itself is undamaged.

3 HDMI LINK LED

This LED will illuminate when the device is successfully communicating with the display.

4 HDMI OUT

Connect to a HDMI Display device, such as a TV or monitor, with a HDMI cable.

5 OPTICAL

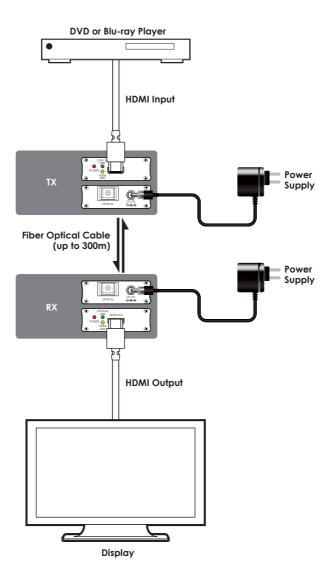
Connect the SC-SC multi-mode fiber optical cable to the Transmitter and Receiver units.

6 DC 5V

Connect to the power adaptor included in the package from the AC wall outlet for power supply.



7. CONNECTION DIAGRAM





8. SPECIFICATIONS

Video Bandwidth 340 MHz/10.2 Gbps

Optical Fiber OM3 50/125um, SC-SC connector

Transmitter

Input Port 1×HDMI

Output Port 1×Multi-mode Fiber Optical

Receiver

Input Port 1×Multi-mode Fiber Optical

Output port 1×HDMI

Resolution Support PC: VGA ~ WUXGA

HD: 3D & 480i ~ 1080p (50/60 Hz), 4K×2K

(24/25/30 Hz)

HDMI In/Out Cable Up to 10m (In) and 10m (Out) at 8-bit

Distance Up to 6m (In) and 6m (Out) at 12-bit

Optical Cable Distance Up to 300 Meters with OM3 50/125um

Optical Fiber Cable

Power Supply 5 V/2.6 A DC (US/EU standards, CE/FCC/

UL certified)

ESD Protection Human Body Model:

±8kV (air-gap discharge) ±4kV (contact discharge)

Dimensions 65.5mm (W)×125.5mm(D)×21.6mm(H)/

Each

Weight 200 g/Each
Chassis Material Aluminum

Color Black

Operating Temperature $0 \, ^{\circ}\text{C} \sim 40 \, ^{\circ}\text{C}$

Storage Temperature $-20 \,^{\circ}\text{C} \sim 60 \,^{\circ}\text{C} / -4 \,^{\circ}\text{F} \sim 140 \,^{\circ}\text{F}$ Relative Humidity $20 \sim 90 \,^{\circ}\text{RH}$ (non-condensing)

Power Consumption 1.5 W/TX, 1.3 W/RX



9. ACRONYMS

ACRONYM	COMPLETE TERM
HDCP	High-bandwidth Digital Content Protection
HDMI	High-Definition multimedia Interface

