CAT6 to HDMI v1.3 Transmitter and Receiver - ID# 15183

Operation Manual

Introduction

This HDMI over CAT5e/6 Transmitter and Receiver Set with IR Source Control can extend HDMI signals over dual CAT5e/6 cabling up to 45m. It has the added benefit of allowing the control of a source device with your existing Remote Control with the included IR Extender and Blaster cables.

Features

- HDMI, HDCP 1.1 and DVI 1.0 compliant
- Supports high definition digital video and lossless, compressed digital audio (Dolby TrueHD, Dolby Digital Plus and DTS-HD Master Audio)
- Supports dual CAT5e/6 cables for Video/Audio and data/DDC transmission
- Equalizes and recovers incoming TMDS data before re-transmitting it in optimum quality
- Supports CEC bypass and x.v.YCC
- Includes an IR Extender and Blaster
- Supports a wide range of IR frequencies, from 30 kHz to 50 kHz
- Supports transmission of 1080p@8-bit resolution signals up to 45 meters over dual CAT5e/6 cables
- Supports HDMI input cable length of up to 6 meters and output cable length of 10 meters at 1080p@8-bit resolution
- Supports connection to a repeater or another transmitter and receiver set to extend the HDMI signal
  Note:
  1. This system was tested with CAT-6/23AWG solid core cables, results may vary with cables of a different specification.
  2. Cable distance tested with the following devices: PS3 40G, 37" Philips 8 bit LCD TV
  3. Figures provided in this manual are for reference only, actual performance may vary depending on the source and display devices as well as the type of cable being used.

Applications

- Showroom Display and Control
- Home Entertainment systems
- Commercial/Retail Installations
- Commercial Display
- University Lecture Hall display

System Requirements

HDMI source device such as a DVD/Blu-ray player and HDMI equipped display (TV or monitor), dual CAT5e/6 cables and the source device's remote control.

Transmitter Front and Rear Panels
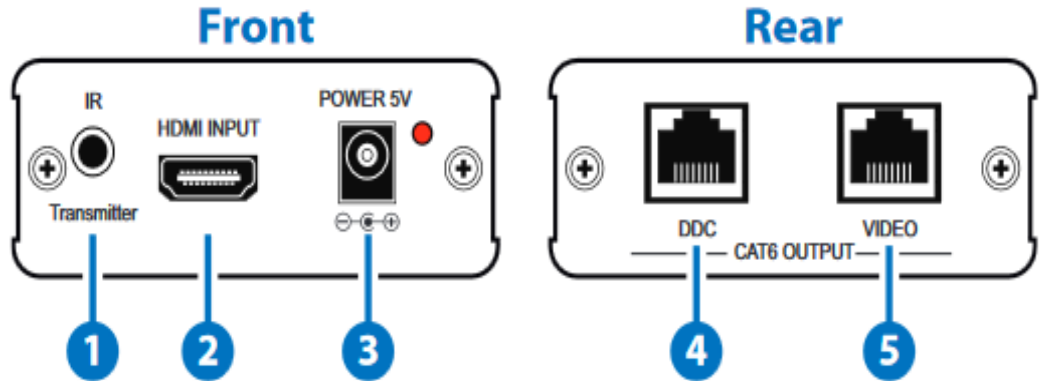
1．IR TRANSMITTER

Connect to the supplied IR blaster cable for IR signal transmission. Place the IR blaster in direct line of sight of the equipment to be controlled.

2．HDMI INPUT

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

3．POWER 5V

Connect the 5
V DC power supply to the unit and plug the adaptor
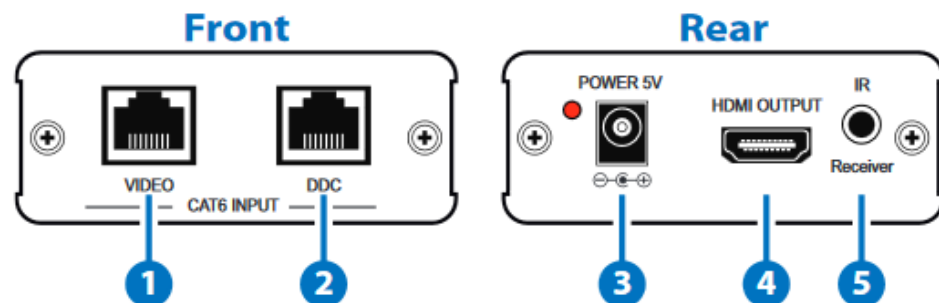into an AC outlet.

4．DDC OUTPUT

Connect the DDC output of the transmitter to the DDC input of the receiver using a CAT5e/6 cable.

5．VIDEO OUTPUT

Connect the video output of the transmitter to the video input of the receiver using a CAT5e/6 cable

Receiver Front and Rear Panels

1. VIDEO INPUT

Connect the video output of the transmitter to the video input of the receiver using a CAT5e/6 cable.

2. DDC INPUT

Connect the DDC output of the transmitter to the DDC input of the receiver using a CAT5e/6 cable.

3. POWER 5V

Plug the 5
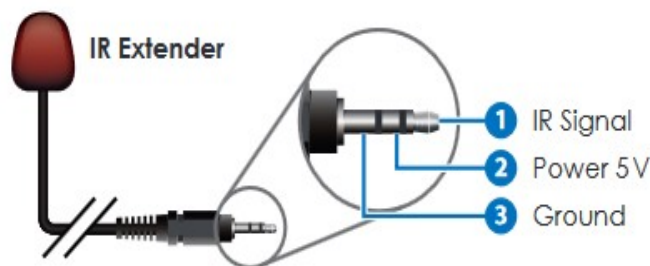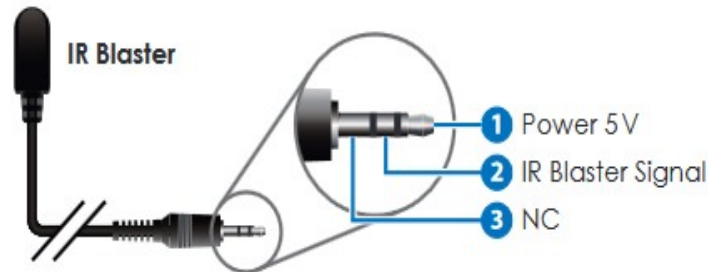V DC power supply into the unit and connect the adaptor to an AC outlet.

4. HDMI OUTPUT

Connect the HDMI output to the HDMI or DVI input (with a HDMI to DVI adaptor) of a display such as an HDTV or HD monitor.

5. IR RECEIVER

Connect to the supplied IR extender cable for IR signal reception. Ensure that remote control being used is within the direct line-of-sight of the IR extender.
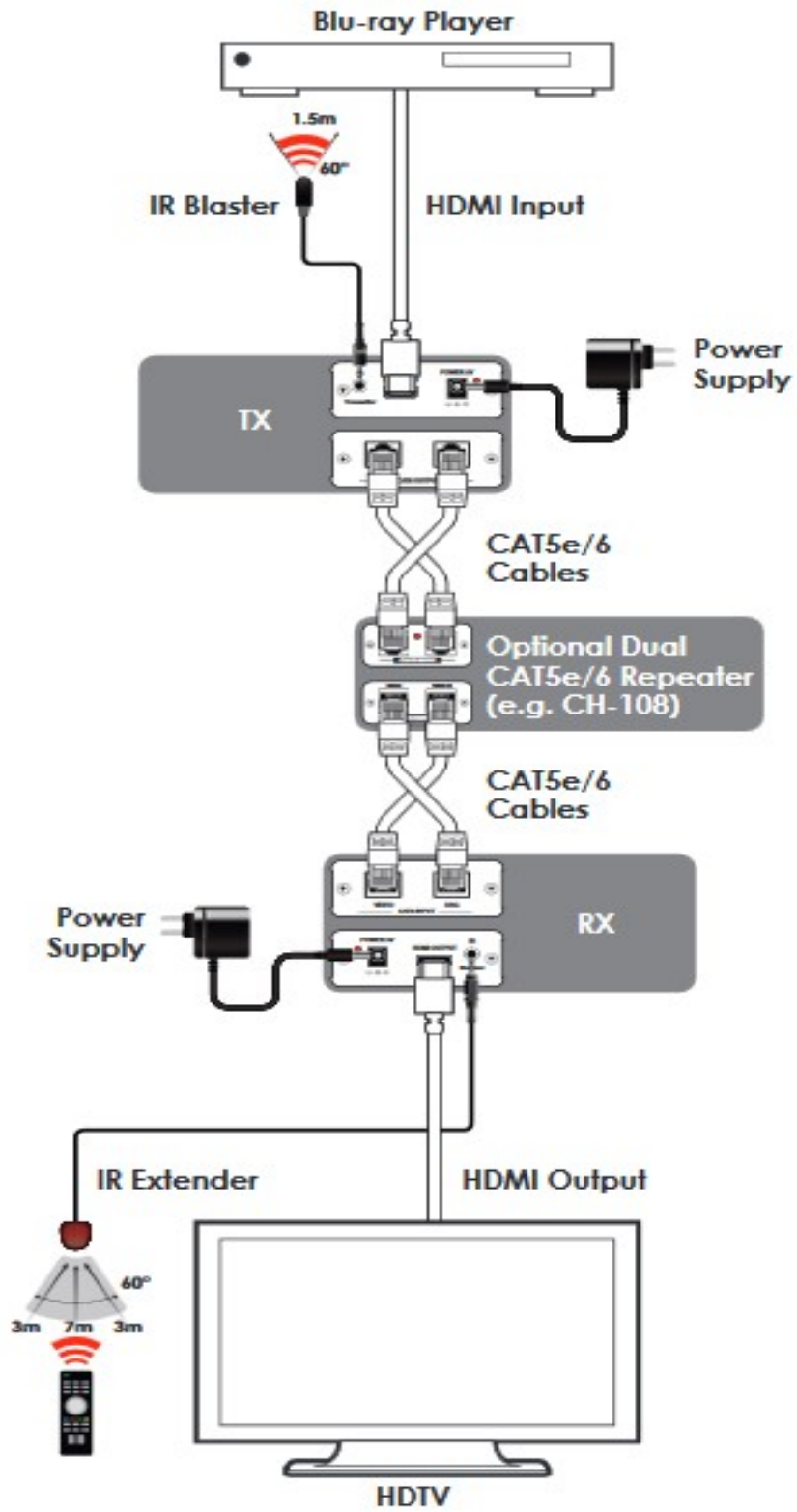
IR Cable Pin Assignment

IR Blaster

1 Power 5V
2 IR Blaster Signal
3 NC

IR Extender

1 IR Signal
2 Power 5V
3 Ground

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RJ-45 Pin Definition

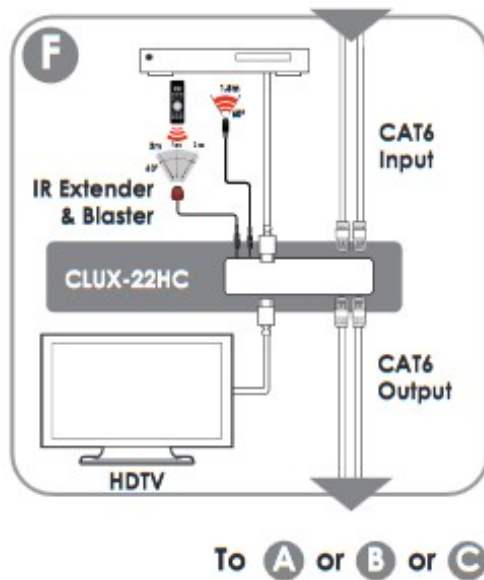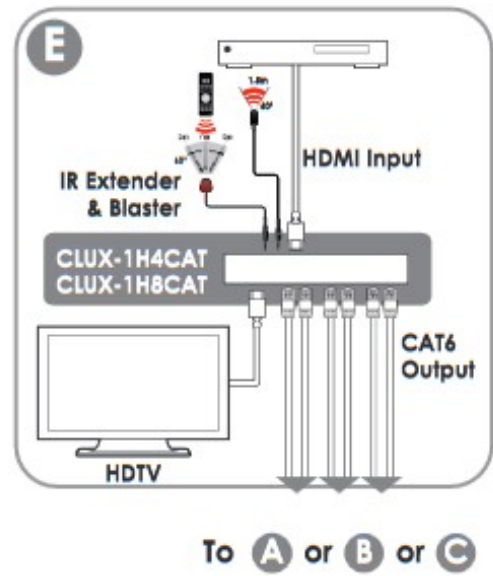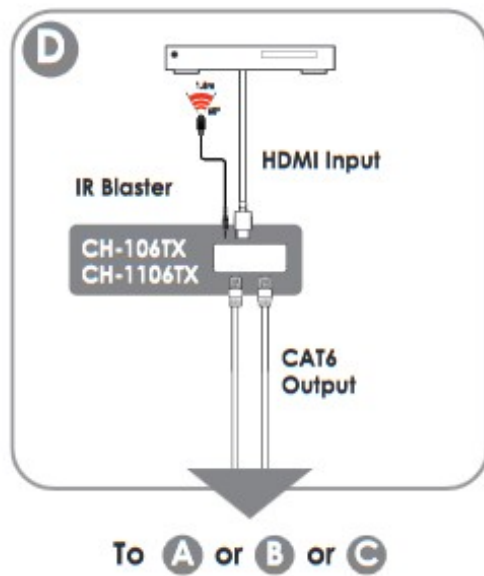| PIN	VIDEO	DDC
1	TMDS2+	SLC
2	TMDS2-	N/A
3	TMDS1+	SDA
4	TMDS1-	Power 5V
5	TMDS0+	GND
6	TMDS0-	IR
7	TMDSC+	HPD
8	TMDSC-	CEC

Specifications

Transmitter	1×HDMI, 1×IR Blaster, 1×CAT5e/6 Output Video, 1×CAT5e/6 Output DDC
Receiver	1×HDMI, 1×IR Extender, 1×CAT5e/6 Input Video, 1×CAT5e/6 Input DDC
HDMI Input Cable	1080p/8-bit (6 m)
HDMI Output Cable	1080p/8-bit (10 m)
CAT5e/6 Cable	1080p/8-bit (45 m)
Power Supply	5 V/1 A (US/EU standards, CE/FCC/UL certified)
ESD Protection	Human body model: ± 8kV (air-gap discharge) ± 4kV (contact discharge)
Dimensions	78.5 mm (W)×117 mm (D)×30 mm (H)/TX 78.5 mm (W)×72 mm (D)×30 mm (H)/RX
Weight	200 g/TX, 140 g/RX
Chassis Material	Aluminum
Color	Silver
Operating Temperature	0℃ ~ 40℃ / 32℉ ~ 104℉
Storage Temperature	−20℃ ~ 60℃ / −4℉ ~ 140℉
Relative Humidity	20 ~ 90% RH (non-condensing)
Power Consumption	2.7 W/TX, 3.2 W/RX

Connection Diagram

Blu-ray Player

1.5m
60°

IR Blaster

HDMI Input

Power
Supply

TX

CAT5e/6
Cables

Optional Dual
CAT5e/6 Repeater
(e.g. CH-108)

CAT5e/6
Cables

Power
Supply

RX

IR Extender

HDMI Output

60°

3m   7m   3m

HDTV

Input Connection Examples

D

IR Blaster

HDMI Input

CH-106TX
CH-1106TX

CAT6
Output

To **A** or **B** or **C**

E

IR Extender
& Blaster

HDMI Input

CLUX-1H4CAT
CLUX-1H8CAT

CAT6
Output

HDTV

To **A** or **B** or **C**

F

CAT6
Input

IR Extender
& Blaster

CLUX-22HC

CAT6
Output

HDTV

To **A** or **B** or **C**

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Output Connection Examples

From **D** or **E** or **F**

A

CAT6 Input

CH-106RX
CH-1106RX

IR Extender

HDMI Output

HDTV

From **D** or **E** or **F**

B

CAT6 Input

CLUX-1CAT4H/
CLUX-1CAT8H

IR Extender

HDTV

From **D** or **E** or **F**

C

IR Extender
& Blaster

CAT6 Input

CLUX-22HC

HDTV

CAT6 Output

To **A** or **B** or **C**

Compatible Products

The models (Daul CAT5e/6) listed below are compatible with each other:

#733, #743, #744, #745, #748, #749, #761, #787 #874 and #995,

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