# 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

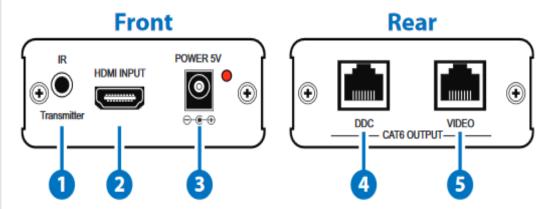
#### **System Requirements**

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.



## **Operation Controls** and Functions

#### **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.

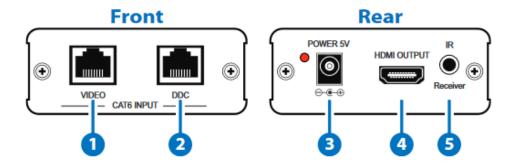
#### 4. DDC OUTPUT

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.

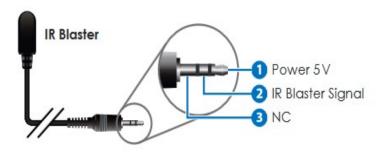
#### 4. HDMI OUTPUT

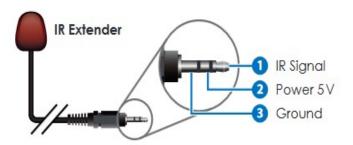
Connect the HDMI output to the HDMI or DVI input (with a HDMI to DVI adaptor) of a display such as an HDTV or HD monitor.

#### 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







## **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

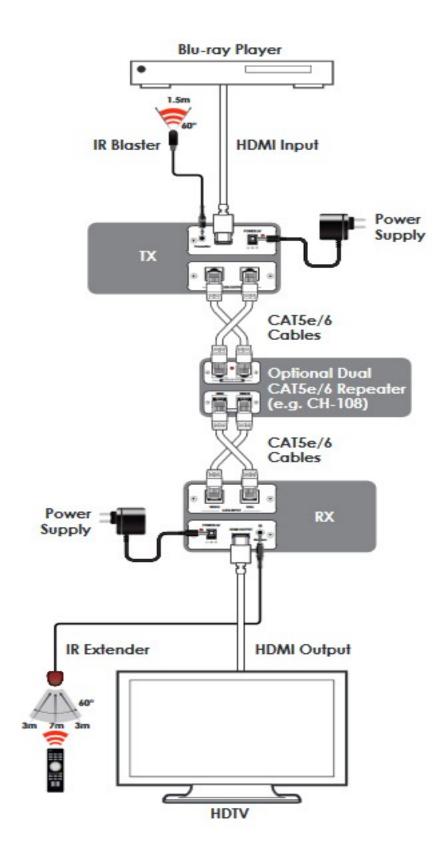
**Weight** 200 g/TX, 140 g/RX

Chassis Material Aluminum Color Silver

 $\begin{array}{ll} \textbf{Operating Temperature} & 0 \, ^\circ \text{C} \, \sim \, 40 \, ^\circ \text{C} \, / \, 32 \, ^\circ \text{F} \, \sim \, 104 \, ^\circ \text{F} \\ \textbf{Storage Temperature} & -20 \, ^\circ \text{C} \, \sim \, 60 \, ^\circ \text{C} \, / \, -4 \, ^\circ \text{F} \, \sim \, 140 \, ^\circ \text{F} \\ \textbf{Relative Humidity} & 20 \, \sim \, 90\% \, \, \text{RH (non-condensing)} \\ \textbf{Power Consumption} & 2.7 \, \text{W/TX, } 3.2 \, \text{W/RX} \end{array}$ 

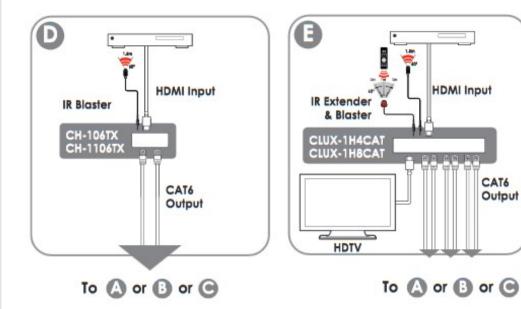


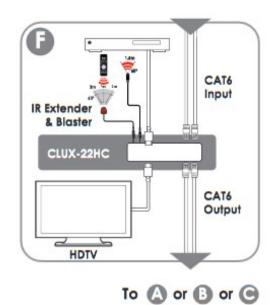
## **Connection Diagram**





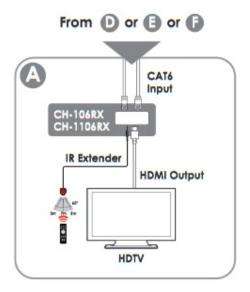
# **Input Connection Examples**

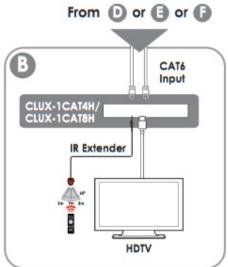


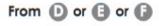


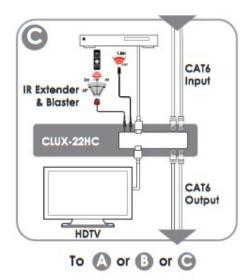


# **Output Connection Examples**









### **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,

