

HDMI v1.3 to CAT6 Transmitter & Receiver ID#748 & ID#749



Operation Manual

Introduction

The HDMI 1.3 transmitter and receiver over CAT6 is an extension tool for your long distance HDMI display needs. Instead of using expensive HDMI cables, your existing CAT6 cables/sockets can replace HDMI cables while performing the same functions like transfer Deep Color (12 bits/color) video and new lossless compressed (Dolby TrueHD, Dolby Digital Plus and DTS-HD Master Audio) Digital audio, at a bandwidth of up to 225MHz. Moreover, you can use your existing remote control to control your device over a 30/45 meters distance through the IR blaster. Our HDMI 1.3 Transmitter and receiver is your ideal choice when looking for a HDMI extender.

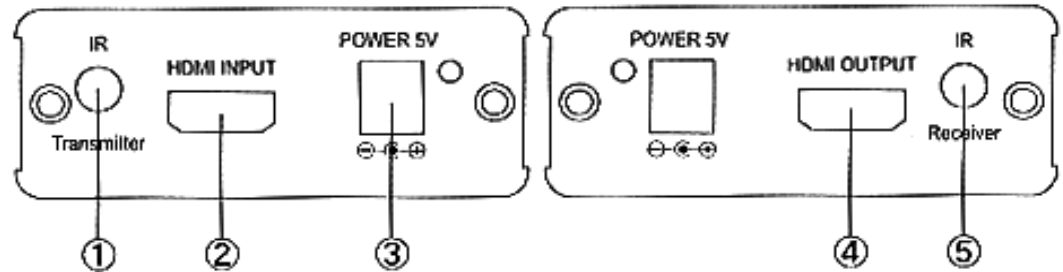
Features

- Complies with HDMI 1.3, HDCP 1.1 and DVI1.1 standards
- Supports digital video formats in Deep Color Mode at up to 36 bits (12bits/color) and new lossless compressed (Dolby TrueHD, Dolby Digital Plus and DTS-HD Master Audio) Digital audio
- Supports CAT6 cables for data/DDC transmission
- Supports equalize and recover incoming TMDS data before re-transmitting them with optimal quality regardless of the incoming signal quality
- Supports high definition resolution, the cable distance test @ 1080p/8bits: Input/Output source can run up to 30/45 meters; @ 1080p/12bits: Input/Output source can run up to 15/15 meters
- Supports CEC bypass
- Supports xvYCC
- Supports IR Receiver & IR Blaster
- Supports full range of IR frequencies from 20~60 KHz

System Requirements

HDMI input source equipment, output HDMI displayer, two CAT6 cables and source equipment's remote control.

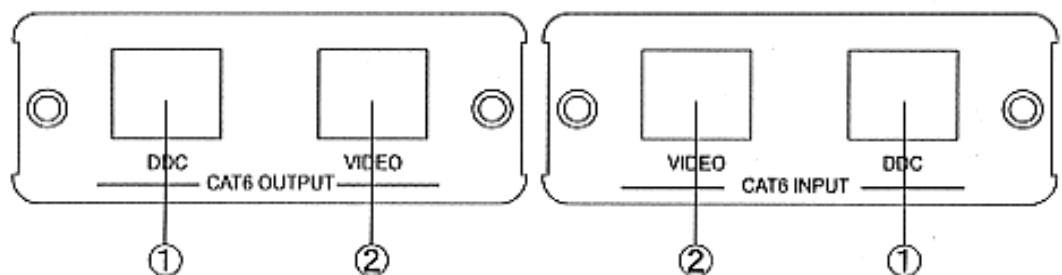
Operating Functions and Controls



Front Panel

- 1. IR Transmitter:** This slot is where you connect the IR blaster cable and place the IR eye in front of the source equipment(s) for sending the IR signal to the source equipment(s). The IR blaster accepts the frequency range from 20KHz to 60KHz.
- 2. HDMI INPUT:** This slot is where you connect to the HDMI or DVI output port of your source equipments such as DVD player or set-top-box with HDMI cable or cascade from the receiver unit of the same family device for extending signal distance.
- 3. Power:** This slot is where you plug the 5V DC power supply into the unit and connect the adaptor to an AC wall outlet.
- 4. HDMI OUTPUT:** This slot is where you connect the HDMI or DVI input port of your displayer such as HD TV or HD monitor or cascade to another transmitter unit of the same family device to extend signal distance.
- 5. IR Receiver:** This slot is where you connect the IR receiver cable and place the IR eye in front of the display then use the existing remote controls to control input source equipment(s). The IR receiver accepts the frequency range from 20KHz to 60KHz.

Rear Panel

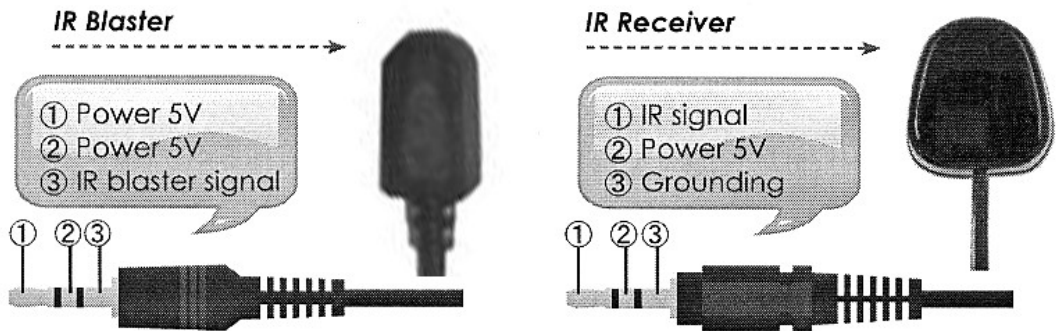


- 1. DDC input/output:** Connect the DDC output of transmitter to the DDC input of the receiver unit using CAT-6 cable.
- 2. Video input/output:** Connect the video output of transmitter to the video input of the receiver unit using CAT-6 cable.

Note:

- Cable tested with CAT-6E / 23AWG / Solid and therefore, cable with different specification may result in different distance.
- Cable distance tested with equipment PS3 20G, 37" Philips 8 bit LCD TV and 37" SamSung 12 bit LCD TV.

C. Figures provided in this manual are reference figures only, actual figures may depend on source and display use with cable specification.



**Connectors
Pin Definition**

IR IN Pin Definition

Pin	Assignment
1	Power 5V
2	IR Signal
3	GND

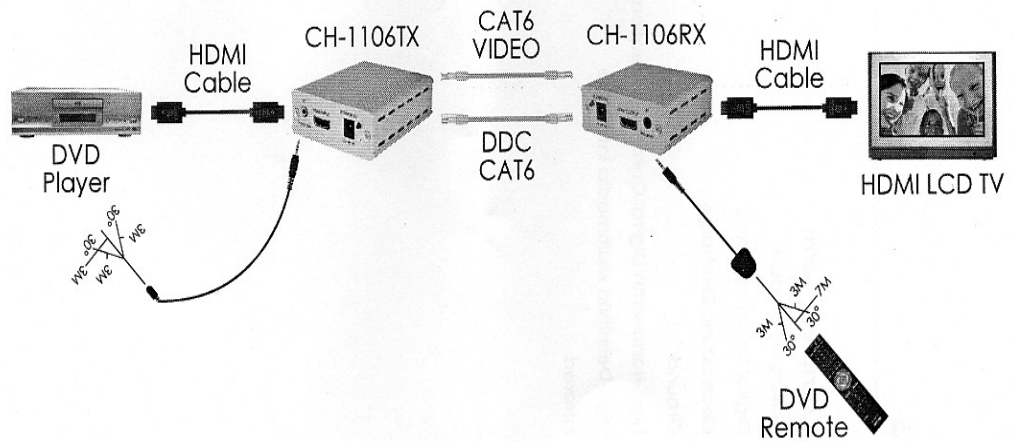
IR OUT Pin Definition

Pin	Assignment
1	Power 5V
2	Power 5V
3	IR Blaster Signal

RJ-45 Pin Definition

Pin	Video	DDC
1	TMDS2+	SCL
2	TMDS2-	N/A
3	TMDS1+	SDA
4	TMDS1-	Power 5V
5	TMDS0+	GND
6	TMDS0-	IR
7	TMDS+	HPD
8	TMDS-	CEC

Installation Input Connection



Specifications

Transmitter	1 x HDMI 1 x IR Blaster 1 x CAT-6 Input Video 1 x CAT-6 Input DDC
Receiver	1 x HDMI 1 x Receiver 1 x CAT-6 output for Video, 1 x CAT-6 output for DDC
HDMI Input Cable	1080p 8-bit (15M), 12-bit (15M)
HDMI Output Cable	1080p 8-bit (15M), 12-bit (15M)
CAT6 Cable	1080p 8-bit (45M), 12-bit (20M)
Power Supply	5V/1A (US/EU standards, CE/FCC/UL certified)
ESD Protection	Human body model: $\pm 8\text{kV}$ (air-gap discharge) $\pm 4\text{kV}$ (contact discharge)
Dimensions (mm)	78.5(W) x 117(D) x 30(H) / Transmitter 78.5(W) x 72(D) x 30(H) / Receiver
Weight(g)	200/ Transmitter 90 / Receiver
Chassis Material	Aluminum
Silkscreen Color	Silver
Operating Temperature	0°C - 40°C / 32°F - 104°F
Storage Temperature	-20°C - 60°C / -4°F - 140°F
Power Consumption	5W/TX, 5W/RX
Relative Humidity	20 - 90% RH (non-condensing)