

Extender over Twisted Pair, Cat.5/6, chainable, 100 m

**14.01.3468 (Extender and Receiver)
14.01.3469 (Receiver)**

User Manual

Version 1.0

1. Introduction

Thanks for purchasing the **HDMI Chainable Extender** over CAT.5e/6. We recommend that you read this manual thoroughly and retain for future reference.

1.1.Features

The HDMI Chainable Extender over CAT.5e/6 allows you to extend video and audio up to 100 meters distance between a source or computer and monitor or projector. With the built-in video and audio signals enhancement, you can gain the best video resolution quality and audio stereo sound, and no additional software is needed. Furthermore, the installation and operation is easy.

- **Expandable Receiver**, each Receiver Unit with cascade function enables to link the other two (2) Receiver Units consecutively extending another 100m distance
- Uses easy to install, inexpensive CAT. 5e/6 cables.
- Each pair (TX & RX) extends the signals up to 100m
- Supports video high resolution up to 1920x1080@60Hz, Full HD 1080p.
- HDTV compatible (720p, 1080i, 1080p).
- Supports Stereo 2.0
- Cascaded-chainable receiver up to 10 layers.
- Supports RS-232 (Serial).
- IR (Infrared remote) enabled
- Supports local HDMI monitoring port
- Each receiver (remote) links cascade-chainable 2 receivers.
- Rack mountable

1.2.Package Contents

- | | |
|------------------------------|------------------------------------|
| 1. HDMI Extender Transmitter | x1 |
| 2. HDMI Extender Receiver | x1 |
| 3. Power Adaptor DC 5V | x2 (set units) or x1 (single unit) |
| 4. User Manual | x1 |

2. Specifications

2.1.General

		Transmitter	Receiver
Console Connectors	HDMI Output	HDMI (Female)	HDMI (Female)
	RS-232 Control Port	Phone Jack	Phone Jack
PC Connectors	HDMI Input	HDMI (Male)	N/A
Extension Port	RJ-45	Full HD Video / Audio Extension	
RJ-45		1 (Line Out)	3 (Line In or Line Out)
Cascaded-Chainable		N/A	Yes, up to 10
Audio		Supports Stereo 2.0	
IR		Unidirectional (RX to TX)	
LED Indicators	Local	Power	Red
		Link	Red Green
	Remote	Power	Red
		Link	Red Green
DDC Supported		Yes	
Extension Cable Type & Length		CAT.5e / CAT.6 max. Length: 100m	
Max. Video Resolution		HDMI: 1920 x 1080@60Hz, Full HD 1080p VGA: 1600 x 1200@60Hz.	
Wide Screen Supported		Yes	
OS Compatibility		OS Independent	
Power Supply		External DC 5V / 2A Power Adapter	
Dimension (L x W x H)		115 x 91 x 28 mm	
Weight		340g	380g
Housing material		Metal	
Power Consumption		Transmitter: 5W, Receiver: 4.5W	

3. Details and connection diagram

3.1.Detailed Picture



Transmitter (TX) – Front View



- ①: Connected to Power Adapter DC 5V/2A
- ②: Power LED (Solid Red when power present)
- ③: Link LED (Solid Green when link present)
- ④: RS-232 control port
- ⑤: HDMI IN, connected to HDMI source

Transmitter (TX) – Rear View



- ⑥: HDMI OUT, connected to display
- ⑦: CAT.5e/6 cable connected for data out
- ⑧: IR Blaster Emitter Connector
- ⑨: Reset Button

Receiver (RX) – Front View



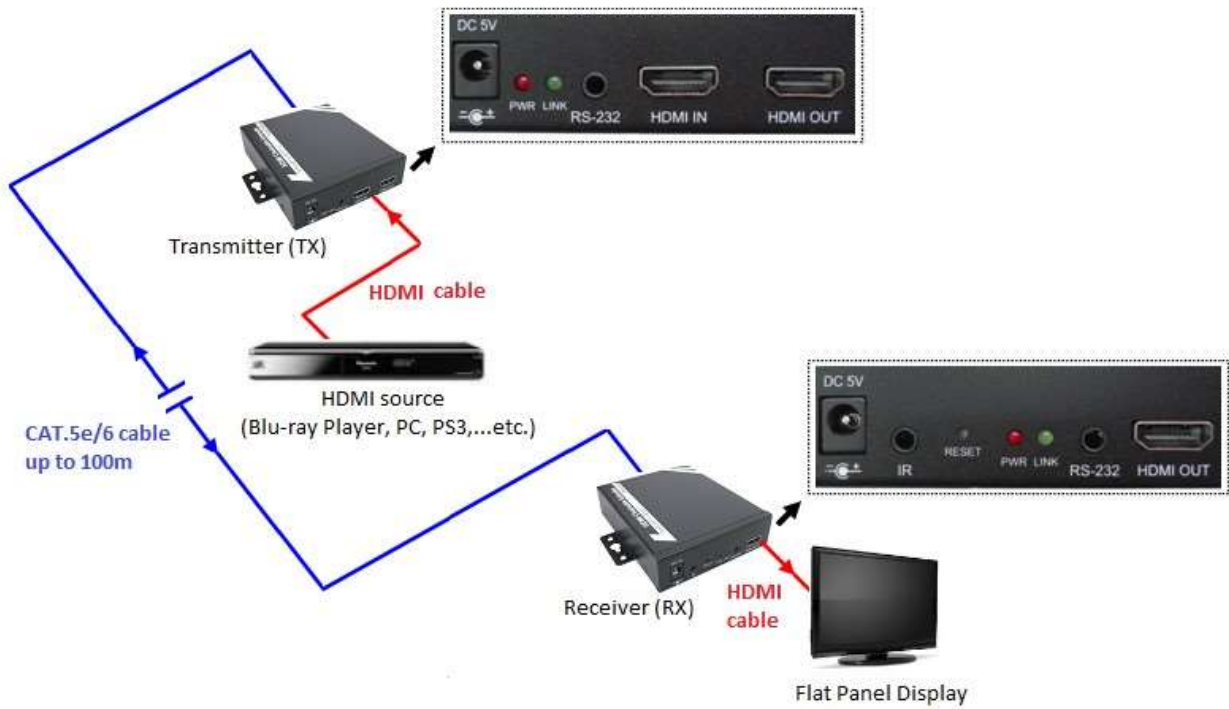
- ①: CAT.5e/6 cable connected for data in or out
- ②: CAT.5e/6 cable connected for data in or out
- ③: CAT.5e/6 cable connected for data in or out
- ④: Connected to Power Adapter DC 5V/2A
- ⑤: IR Receiver

Receiver (RX) – Rear View



- ⑥: Reset Button
- ⑦: Power LED (Solid Red when power present)
- ⑧: Link LED (Solid Green when link present)
- ⑨: RS-232 control port
- ⑩: HDMI OUT, connected to display

3.2. Application Diagram



3.3. Transmitter Installation

- Connect a CAT. 5e/6 Cable with the Transmitter. The cable connector has to be connected to the Transmitter **LINE port (RJ45)**.
- Connect the IR Blaster Emitter cable or RS-232 to 3.5mm adapter to the Transmitter Unit IR Port or RS-232 port if necessary.
- Connect the Transmitter with a HDMI cable to a HDMI connector of the Player, PC, PS3...etc.
- Connect the Transmitter with a HDMI cable to a HDMI connector of Display Monitor if necessary.
- Plug in a DC 5V/2A power adapter



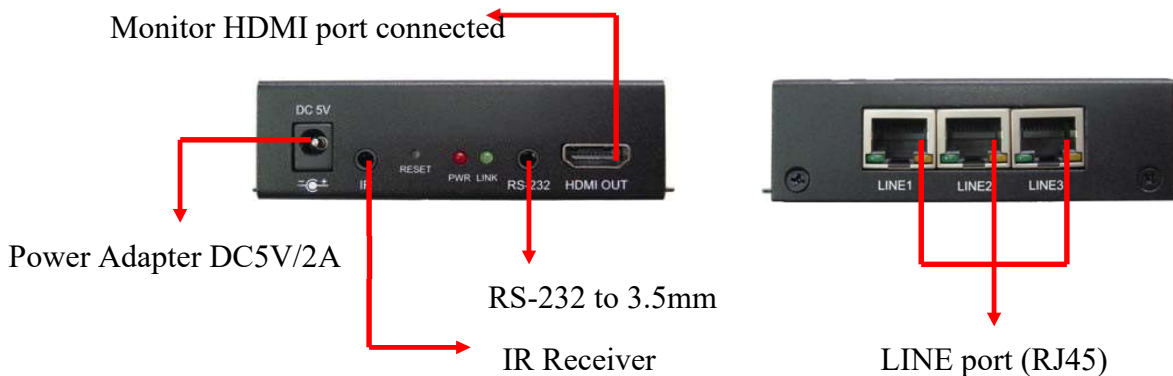
3.4. Receiver Installation

- Connect a CAT. 5e/6 cable with the Receiver. The cable connector has to be connected to the Receiver **LINE1 or LINE2 or LINE3 port (RJ45)**
- Connect the IR Receiver cable or RS-232 to 3.5mm adapter to the Receiver Unit IR Port or RS-232 port if necessary.
- Connect a Receiver with a HDMI cable to a HDMI connector of Display Monitor.
- Plug in a DC 5V/2A power adapter.



3.5. Cascade Chain Connection

- Connect a CAT. 5e/6 cable with the Receiver to link the other two (2) Receiver Units consecutively to extend another 100m distance. The cable connector has to be connected to the Receiver **LINE1 or LINE2 or LINE3 port (RJ45), as long as the LINE port is not occupied.**
- Connect the IR Receiver cable or RS-232 to 3.5mm adapter to the Receiver Unit IR Port or RS-232 port if necessary.
- Connect a Receiver with a HDMI cable to a HDMI connector of a Display Monitor.
- Plug in a DC 5V/2A power adapter.



Each Receiver has three (3) LINE ports. One is used for the source input, and the other two are used for expanding the source to other receivers. You can choose any LINE port as source input at random, and use the other two LINE ports for expanding the source to the next tier receiver, as long as the LINE port is not occupied.

3.6. Network Switch Extending

The maximum distance between each tier could be up to 100 meters long, while this could be extended through a Network Switch. You can add one Network Switch to extend another 100 meters.



The more Network Switches, the longer is the distance extended. The number of Network Switches is as many as you want.



3.7. Connection Diagram

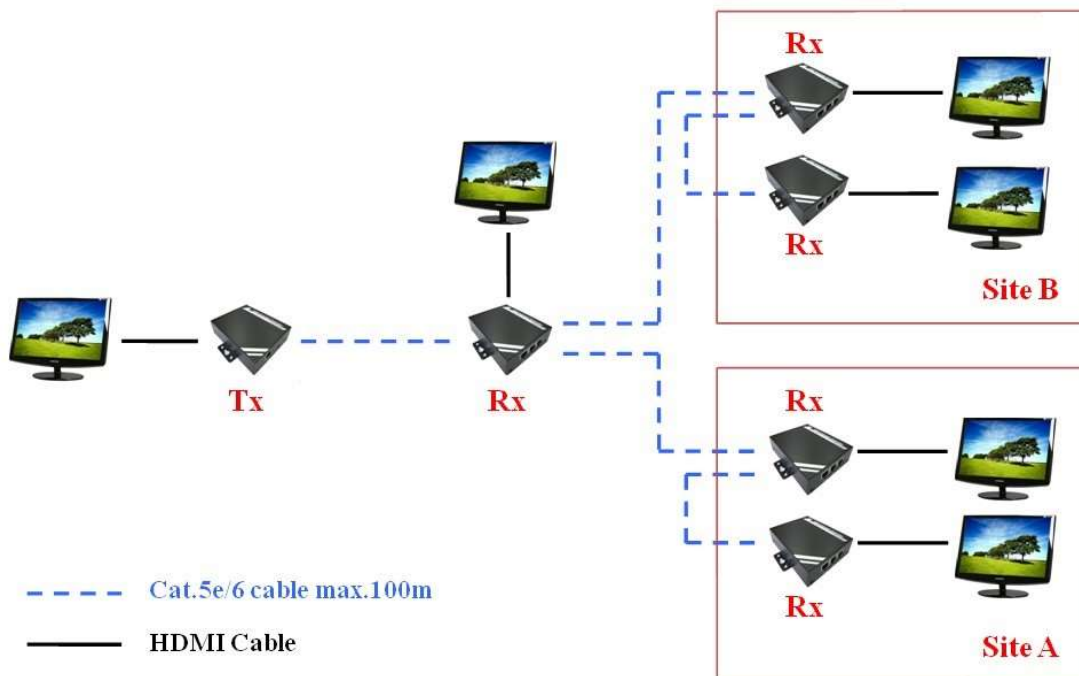
(1) Single Source Extension



(2) Single Source Extension and Receivers Cascade Chaining



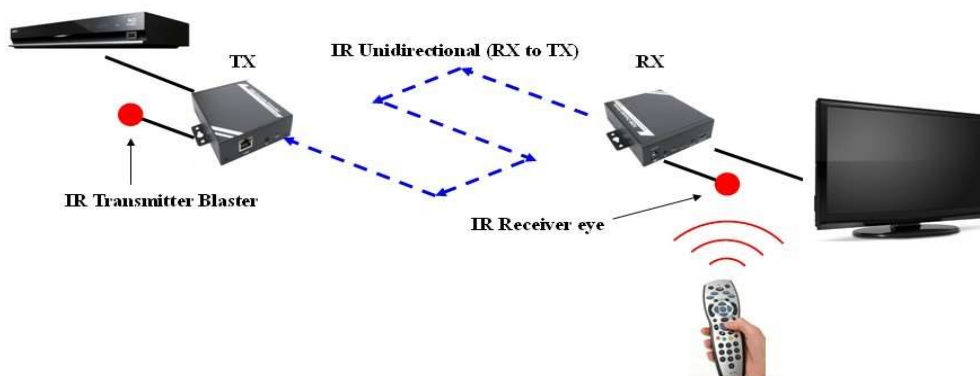
(3) Single Source with Multiple Receivers Cascaded



3.8. IR Bypass function connection

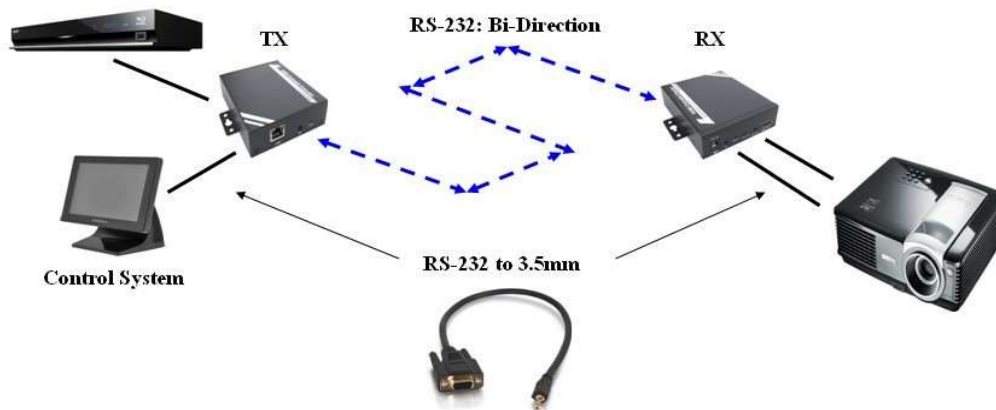
- Connect the IR Transmitter (or Emitter) cable to the IR Connector on the HDMI Transmitter Unit (TX)
- Connect the IR Receiver cable to the IR Connector on the HDMI Receiver Unit (RX)
- Place the IR Eye of the IR Receiver cable near the Remote Controller

- Place the IR Blaster of the IR Transmitter cable near the device that intend to be controlled by the Remoter controller



3.9. RS-232 Bypass function connection

- Connect the device, such as a PC, projector...etc, to the RS-232 port of the HDMI Transmitter Unit or HDMI Receiver Unit via a RS-232 to 3.5mm adapter
- Connect the controlling device to the RS-232 port of the HDMI Receiver Unit or HDMI Receiver Unit via a RS-232 to 3.5mm adapter
- Operate the control system



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