



## HDMI over IP EXTENDER



**Manual**

DS-55200 • DS-55201

# 1. Introduction

Thanks for purchasing the DS-55200 **HDMI over IP Extender** (DS-55201 receiver only). We recommend that you read this manual thoroughly and retain for future reference.

## Features

The HDMI over IP Extender allows you to extend video and audio up to 100 meters distance between 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 while listening, and no any additional software needed.

Furthermore, the installation and operation are easily more than expected. With using in extension facilities of video and audio, this product, The HDMI over IP Extender, delivers worthy of performing efficiency and value-added.

**With Expandable Receiver**, each Receiver Unit with cascade function enables to link two other (2) Receiver Units consecutively extending another 100m distance, and continue expanding corresponding to custom demand as likely Cascade/Tree Chain web architecture spread.

- Uses easy to install, inexpensive CAT. 5e/6 cables
- Each pair (TX & RX) extends the signals up to 100m (330 feet) using 1-to-1 connection
- Uses network environment for transmission
- 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
- Support local HDMI monitoring port
- Each receiver (remote) links cascade-chainable 2 receivers
- Rack mountable

## Package Contents

### DS-55200

- HDMI Extender Transmitter x 1
- HDMI Extender Receiver x 1
- Power Adaptor DC 5V x 2
- User Manual x 1

### DS-55201

- HDMI Extender Receiver x 1
- Power Adaptor DC 5V x 2
- User Manual x 1

## Specification

		Transmitter	Receiver
Console Connectors	HDMI Output	HDMI (Female)	HDMI (Female)
	RS-232 Control Port	Phone Jack	Phone Jack
PC Connectors	DisplayPort Input	HDMI (Male)	N/A
Extension Port	RJ-45	Full HD Video / Audio Extension	
RJ-45 Ports		1 (Line Out)	3 (Line In or Line Out)
Cascaded-Chainable		N/A	up to 10 layers
Audio		Supports Stereo 2.0	
IR		Uni-directional (from RX to TX)	
RS-232		Bi-directional	
LED Indicators	Local Power	Red LED	
	Local Link	Green LED	
	Remote Power	Red LED	
	Remote Link	Green LED	
DDC supported		Yes	
Extension Cable Type & Length		Cat.5e / Cat.6, max. length: 100m	
Video resolution		HDMI:1920x1080@60Hz, Full HD 1080p, 48-bit VGA: 1600 x 1200@60Hz	
Wide screen supported		Yes	
OS compatibility		OS independent	
Power supply		External DC 5V / 2A power adapter	
Dimensions (L x W x H)		115 x 91 x 28 mm	
Weight		340 g	380 g
Housing material		Metal	
Operating temperature		0 - 50°C	
Humidity		0% - 80% RH	

## 2. Detail and Diagram

### Detail Picture



### Transmitter (TX)-Front



### Transmitter (TX)-Rear



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

### Receiver (RX)-Front



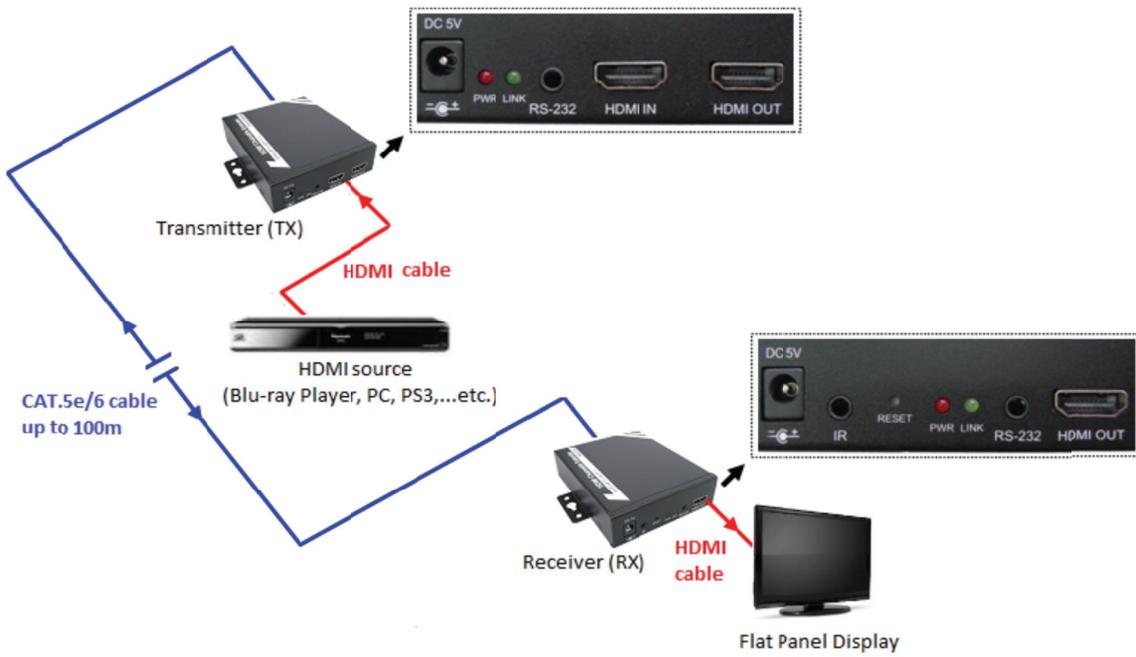
### Receiver (RX)-Rear



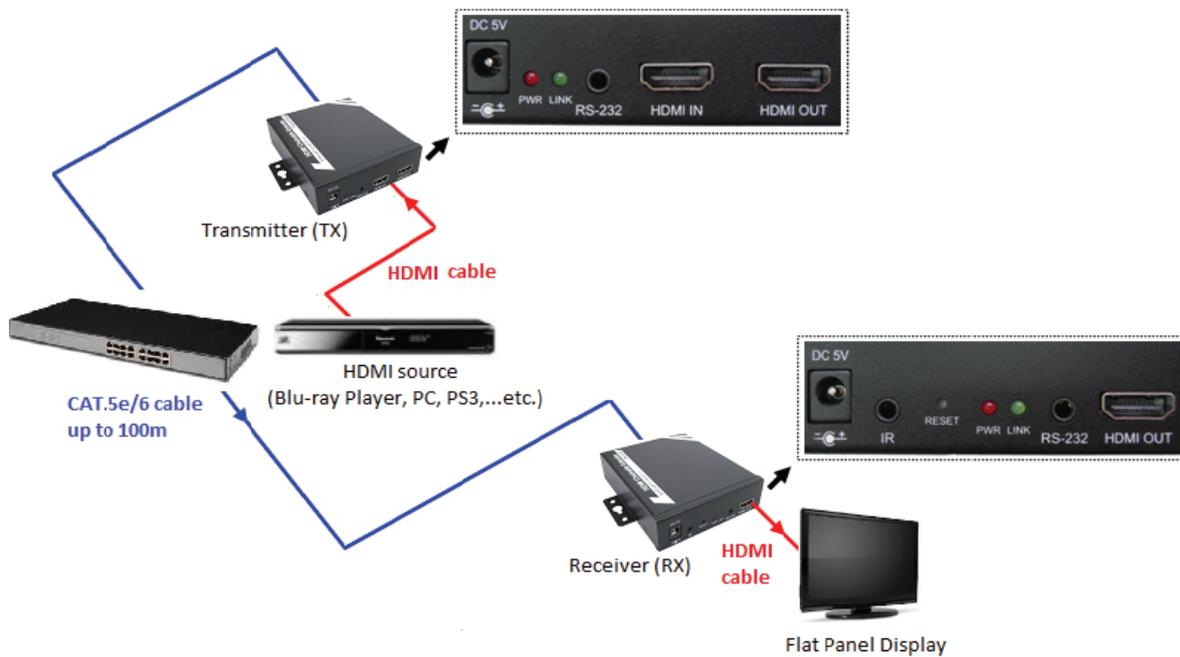
- 1:** CAT.5e/6 cable connected for data in or out
- 2:** CAT.5e/6 cable connected for data in or out
- 3:** CAT.5e/6 cable connected for data in or out
- 4:** Connected to Power Adapter DC 5V/2A
- 5:** IR Receiver
- 6:** Reset Button
- 7:** Power LED (Solid Red when power present)
- 8:** Link LED (Solid Green when link present)
- 9:** RS-232 control port
- 10:** HDMI OUT, connected to display

# Application Diagram

## 1-to-1 connection

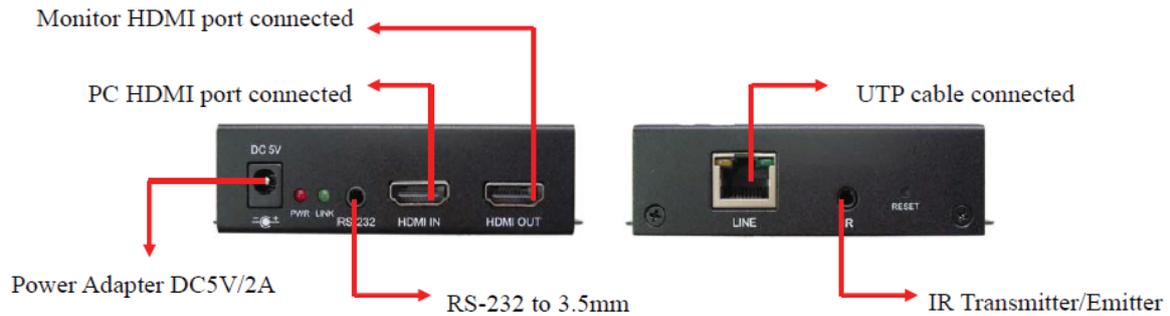


## Using network environment



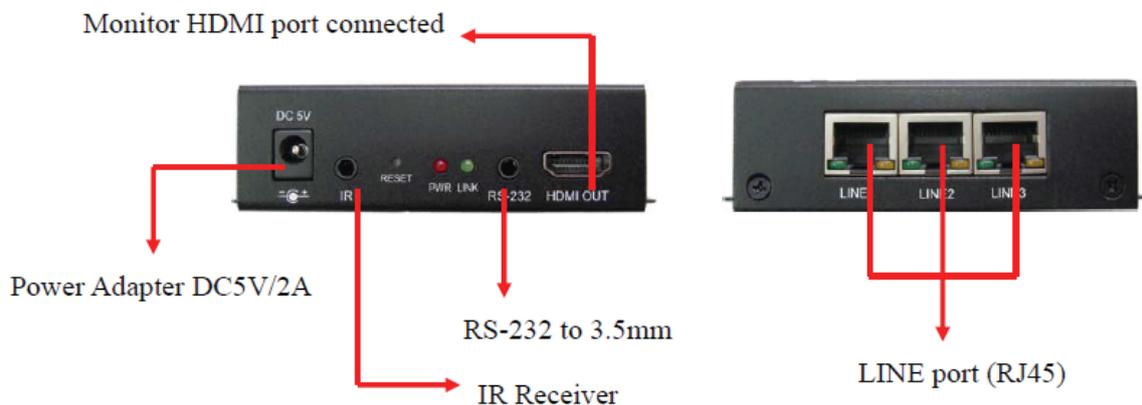
## Transmitter Installation

- Connect UTP Cable to Transmitter, please use CAT.5e/6 Cable
- Connect the IR Blaster Emitter cable or RS-232 to 3.5mm adapter to the Transmitter Unit IR Port or RS-232 control port if necessary.
- Connect Transmitter with HDMI cable to HDMI connector of HDMI source
- Connects Transmitter with HDMI cable to HDMI connector of Display Monitor if necessary
- Plug DC 5V/2A power adapter



## Receiver Installation

- Connect UTP Cable to Receiver, please use CAT.5e/6 Cable
- 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 Receiver with HDMI cable to HDMI connector of Display Monitor
- Plug DC 5V/2A power adapter



## Cascade Chain Connection

Use UTP Cable connected with Receiver to link the other two (2) Receiver Units consecutively to extend another 100m distance, the cable connector node is to connect to Receiver LINE1 or LINE2 or LINE3 port (RJ45), as long as the LINE port is not occupied, and user can continue expanding corresponding to custom demand as likely Cascade/Tree Chain web architecture spread.

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

## Network Switch Extending

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



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



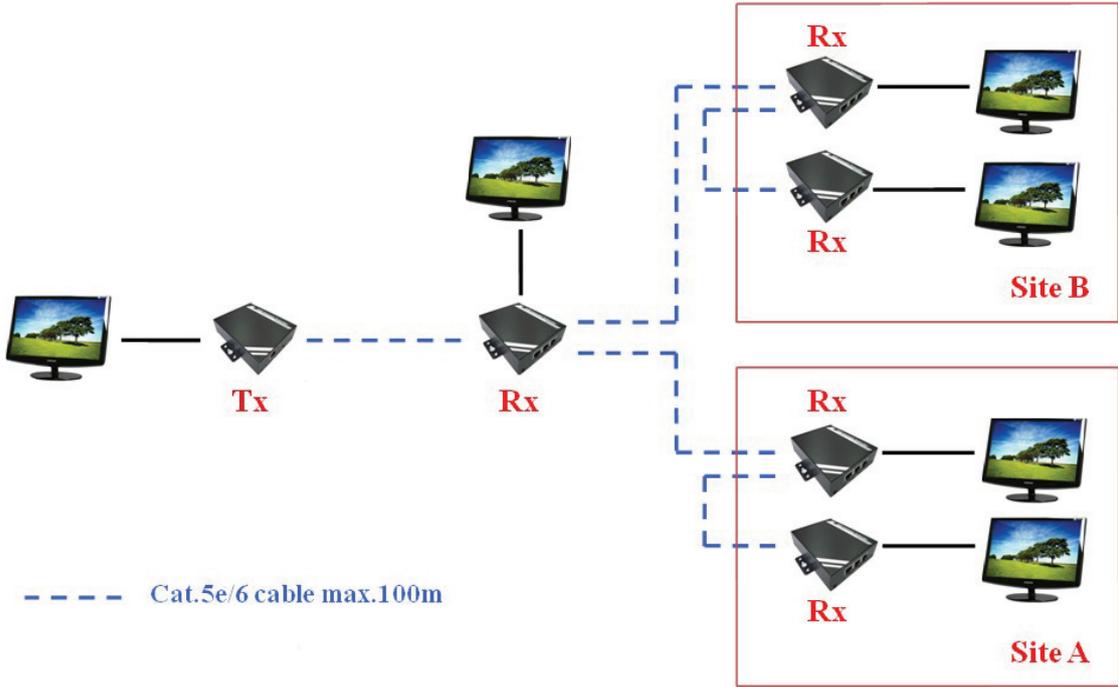
## Single Source Extension



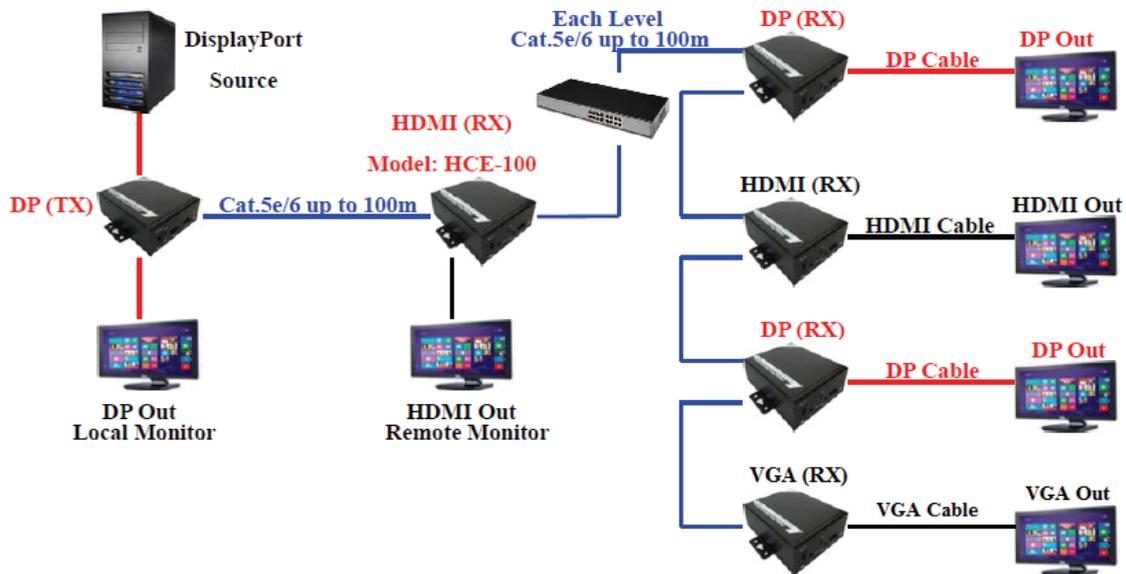
# Single Source Extension and Receivers Cascade Chaining



# Single Source with Multiple Receivers Cascaded

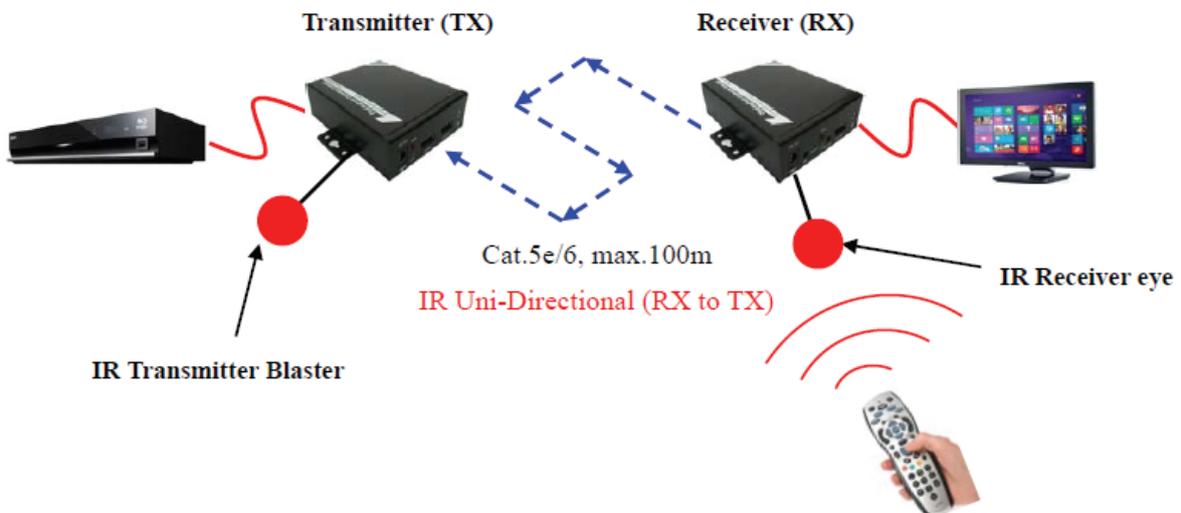


## Cascaded and mixed with VGA / HDMI / DisplayPort



## IR Bypass Function Connection

- Connect the IR Transmitter (or Emitter) cable to the IR Connector on the DisplayPort Transmitter Unit (TX)
- Connect the IR Receiver cable to the IR Connector on the DisplayPort 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



# RS-232 Bypass Function Connection

- Connect the device, such as a PC, projector...etc, to the RS-232 port of the DisplayPort Transmitter Unit or DisplayPort 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

