

# HDMI over IP Extender With Looped Output



## User Manual Version 1.2

## Thank you for purchasing this product

For optimum performance and safety, please read these instructions carefully before connecting, operating or adjusting this product. Please keep this manual for future reference.

## Surge protection device recommended

This product contains sensitive electrical components that may be damaged by electrical spikes, surges, electric shock, lightning strikes, etc. Use of surge protection systems is highly recommended in order to protect and extend the life of your equipment.

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## 1. Introduction

HDMI over IP Extender is based on AV over IP solution for distribution of one HD content to one HD display device or to multiple HD display devices over a standard 1G network switcher, and extends distance up to 100m/328ft between encoder and decoder via CAT5e/6 cable. It offers configurable high quality, low-bandwidth H.265 compression video. The resolution up to 1920 x 1200@ 60Hz YCbCr 4:4:4. It also supports HDMI loop output.

HDMI over IP Extender includes two units: Encoder unit and Decoder unit. Encoder unit is used to capture the HDMI input with IR blaster signal and carries the signals via one effective CAT5e/6 cable, and Encoder unit can also support HDMI loop output. The Decoder unit is responsible for outputting HDMI signal from Encoder unit with IR receiver signal. The product offers the most convenient solution for HDMI extension over a single CAT5e/6 and is the perfect solution for any application.

## 2. Features

- Extends up to 100m over CAT5e/6
- HDMI 1.4b, HDCP 1.4
- Supports 10.2Gbps
- 1080p/60Hz, YCbCr 4:4:4
- LPCM 2.0
- Looped HDMI output on transmitter
- IR Pass-Through for source control
- Uses 1G Ethernet Switches, Routers
- H.265 Encoding

## 3. Package contents

1. 1 x Transmitter (ordered seperatley)
2. 1 x Receiver (ordered seperatley)
3. 1 x IR Sender Cable
4. 1 x IR Emitter Cable
5. 2 x Power Adaptor 5V/1A
6. User Manual

## 4. Specifications

### Connectivity

#### *Transmitter*

**HDMI Input:** 1 x HDMI Type A, 19-Pin Female

**HDMI Output (Looped):** 1 x HDMI Type A, 19-Pin Female

**CAT5e/6 Output:** 1 x RJ45 Data Socket

**Infra-Red Out:** 1 x 3.5mm Jack Socket

**Power:** 1 x 2.1mm DC Jack

#### *Receiver*

**CAT5e/6 Input:** 1 x RJ45 Data Socket

**Infra-Red Input:** 1 x 3.5mm Jack Socket

**HDMI Output:** 1 x HDMI Type A, 19-Pin Female

**Power:** 1 x 2.1mm DC Jack

### Signal

**Signal Input:** HDMI

**Standards:** HDMI 1.4b, HDCP 1.4

**Bandwidth:** 10.2Gbps

**Video Resolutions:** 1080p/60Hz, 4:4:4

**Colour Space:** RGB/YCbCr 4:4:4, YCbCr 4:2:2

**Colour Depth:** 8-bit

**Audio:** LPCM 2.0, 48KHz

**Infra-Red:** Wide Bandwidth, Frequency 20KHz to 60KHz (940nm)

### Power

**Type:** 2 x AC to DC Mains Adaptor (Tx and Rx require power)

**Input:** 100~240V AC 50/60Hz

**Output:** Transmitter 5V/1A

**Consumption:** Transmitter 1.5W and Receiver 1.25W

### Environment

**Operating Temperature:** -0° to 40°C

**Storage Temperature:** -20° to 60°C

**Operating Humidity:** 20 to 90% RH (no condensation)

**Dimensions:** Tx = (W) 61 x (D) 88 x (H) 16, Rx = (W) 61 x (D) 88 x (H) 16

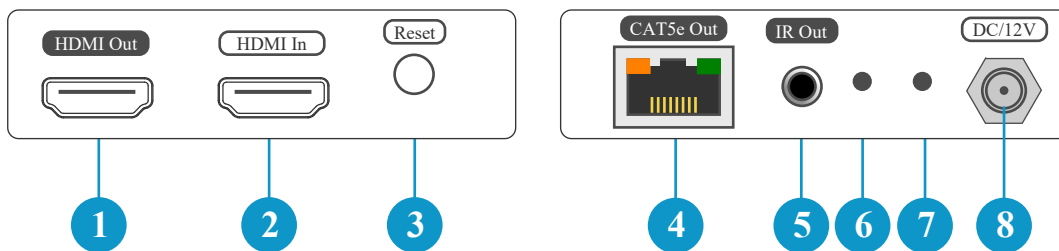
**Weight:** Tx = 155g, Rx = 150g

**Colour:** Black

**ESD:** Human Body - +/-8kV, (air gap discharge) & +/-4kV (contact discharge)

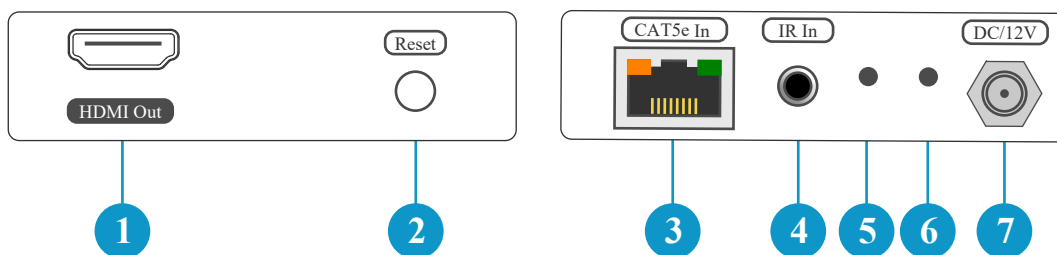
**Safety and Emissions:** CE, FCC, RoHS

### 5. Front Panel Description



Number	Name	Function / Description
1	HDMI Out	Looped HDMI output for connection to a local screen.
2	HDMI In	Connect the HDMI source device using a Premium High Quality HDMI cable to achieve the best results.
3	Reset Button	Reset the product including IP address and video resolution to 1080p/60Hz.
4	CAT5e/6 Out	Connect to CAT5e/5 cabling for direct end to end or via 1G Ethernet switch or router for a one to many configuration.
5	IR Out	Connect the IR Emitter cable and place the emitter over the source device IR sensor.
6	Link LED	Flashes Blue when connected to PC or LAN device.
6	Power LED	Illuminates Blue when powered on.
7	DC Jack	Connect the 5V/1A power supply

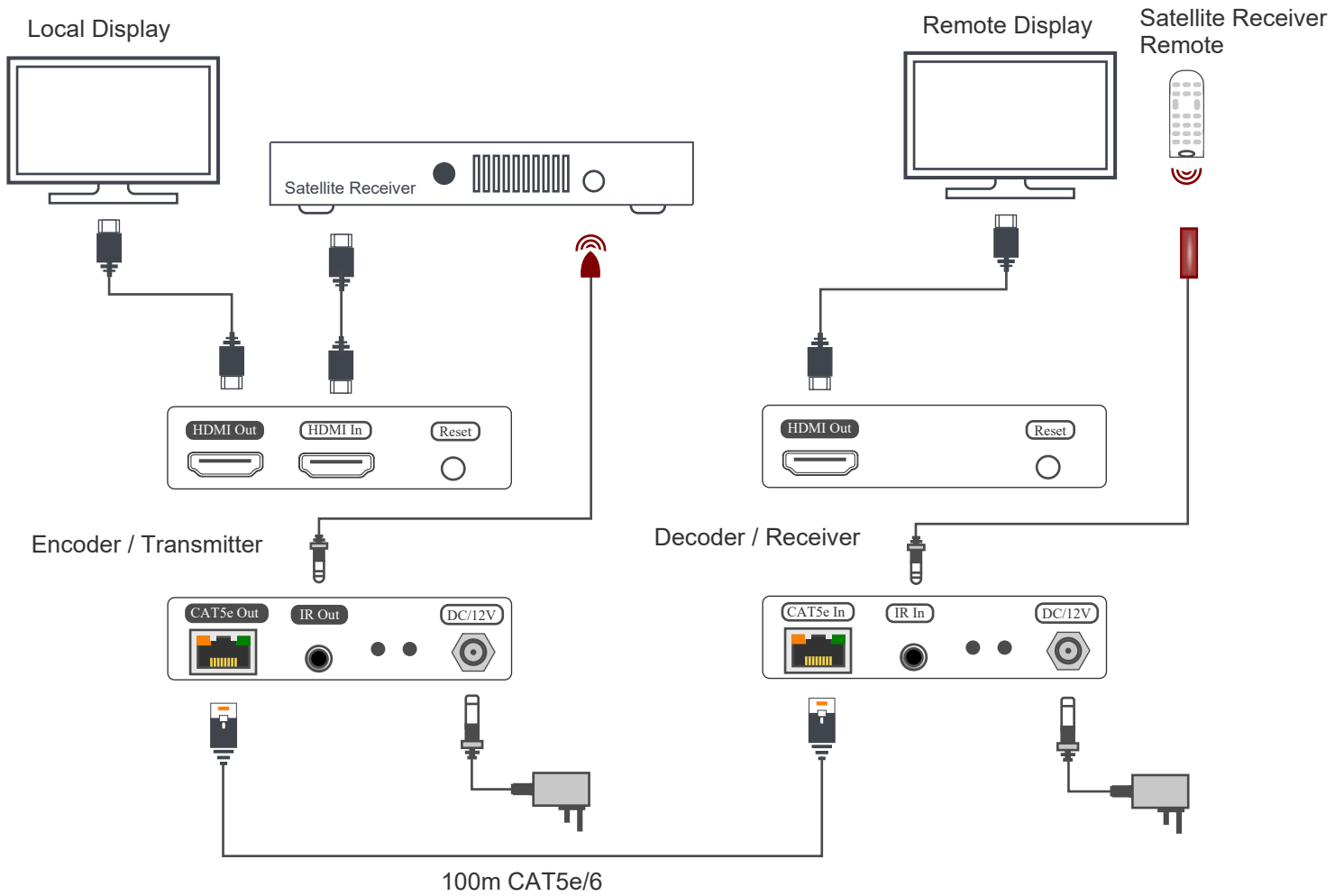
### 6. Rear Panel Description



Number	Name	Function / Description
1	HDMI Out	Connect the HDMI screen using a Premium High Quality HDMI cable.
2	Reset Button	Reset the product including IP address and video resolution to 1080p/60Hz.
3	CAT5e/6 In	Connect to CAT5e/5 cabling for direct end to end or via 1G Ethernet switch or router for a one to many configuration.
4	IR In	Connect the IR Sender cable and place the receptor in line of sight of the IR remote.
5	Link LED	Flashes Blue when connected to the encoder or LAN device.
6	Power LED	Illuminates Blue when powered on.
7	DC Jack	Connect the 5V/1A power supply.

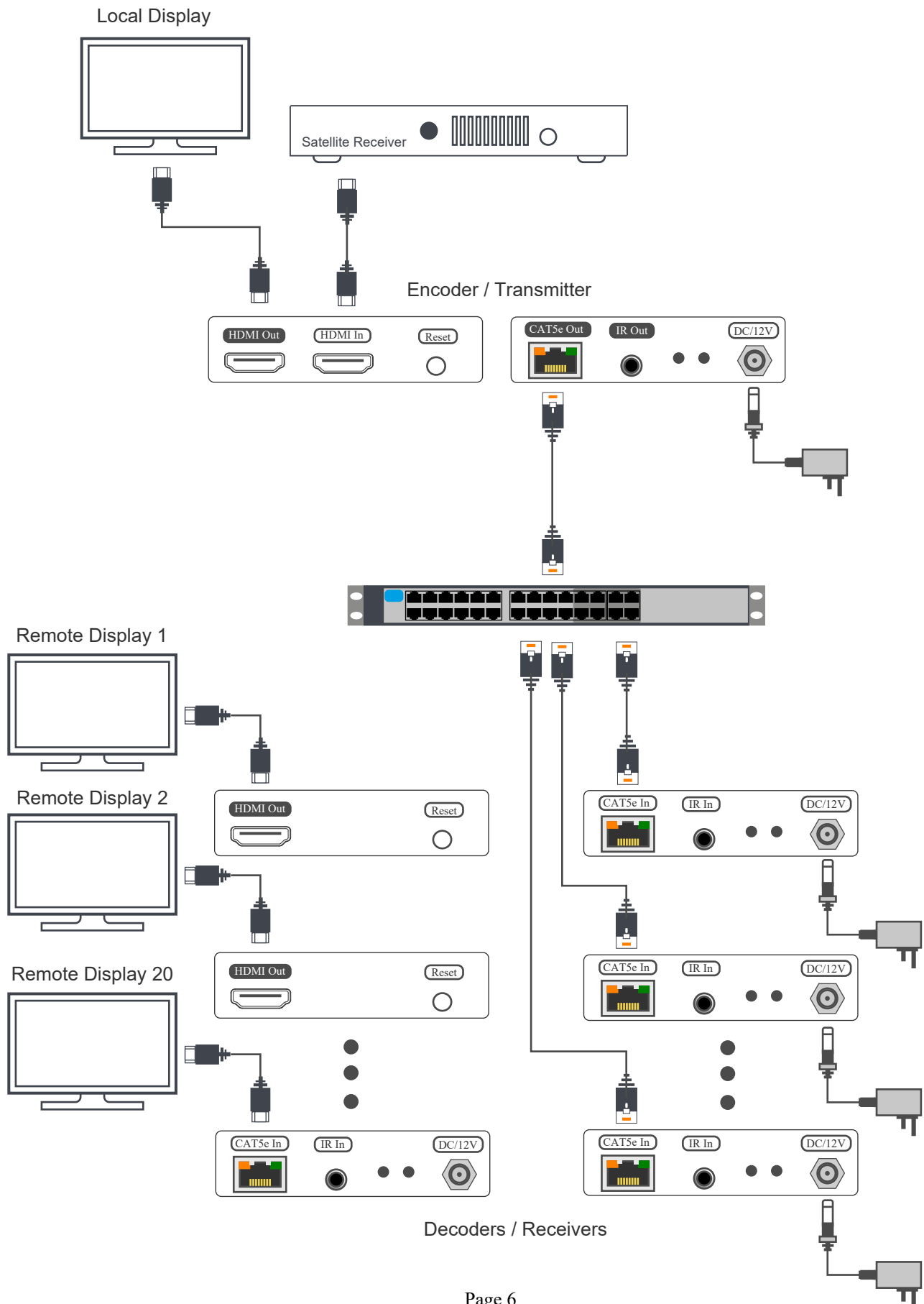
### 7. Application Drawing 1

Transmitter and Receiver connected using a CAT5e/6 cable.



### 8. Application Drawing 2

Transmitter and Receiver connected using 1G Ethernet Switch.



## 9. Maintenance

Clean this unit with a soft, dry cloth. Never use alcohol, paint thinner or benzene to clean these devices.

### Servicing

Damage requiring service: This product should be serviced by a qualified service engineer if:

- The DC power cord or AC adaptor has been damaged.
- Objects or liquids have entered the housings.
- The product has been exposed to rain.
- The product has stopped working or shows signs of significant change in operating performance or function.
- The unit has been dropped or severely damaged externally.

Servicing personnel: Do not attempt to service the product beyond that described in these instructions. Refer all other servicing to authorised servicing personnel.

Replacement parts: When parts need replacing ensure the service engineer uses parts specified by the manufacturer or parts that have the same characteristics as the original parts. Unauthorised substitutes may result in fire, electric shock or other hazards.

Safety check: After a repair or service, ask the engineer to perform safety checks to confirm the product is in proper working condition.

### Warranty

If your product does not work properly because of a defect in materials or workmanship, our Company (referred to as "the warrantor" ) will , for the length of the period indicated as below, (Parts and labour 2 years) which starts with the date of original purchase ("Limited Warranty period"), at its option either (a) repair your product with new or refurbished parts, or (b) replace it with a new or a refurbished product. The decision to repair or replace will be made by the warrantor.

During the "Labour" Limited Warranty period there will be no charge for labour. During the "Parts" warranty period, there will be no charge for parts. You must mail-in your product during the warranty period. This Limited Warranty is extended only to the original purchaser and only covers product purchased as new. A purchase receipt or other proof of original purchase date is required for Limited Warranty service.

### Returning a Product

When shipping the unit carefully pack and send it prepaid, adequately insured and preferably in the original carton. Include a letter detailing the complaint and provide a day time phone number and/or email address where you can be reached.



### Limited warranty limits and exclusions

This Limited Warranty ONLY COVERS failures due to defects in materials or workmanship, and DOES NOT COVER normal wear and tear or cosmetic damage. The Limited Warranty ALSO DOES NOT COVER damages which occurred in shipment, or failures which are caused by products not supplied by warrantor, or failures which result from accidents, misuse, abuse, neglect, mishandling, misapplication, alteration, faulty installation, set-up adjustments, maladjustment of consumer controls, improper maintenance, power line surge, lightning damage, modification, or service by anyone other than a Factory Service centre or other authorized service engineer, or damage that is attributable to acts of God.

THERE ARE NO EXPRESS WARRANTIES EXCEPT AS LISTED UNDER "LIMITED WARRANTY COVERAGE". THE WARRANTOR IS NOT LIABLE FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES RESULTING FROM THE USE OF THIS PRODUCT, OR ARISING OUT OF ANY BREACH OF THIS WARRANTY. (As examples, this excludes damages for lost time, cost of having someone remove or re-install an installed unit if applicable, travel to and from the service, loss of or damage to media or images, data or other recorded content. The items listed are not exclusive, but are for illustration only).

PARTS AND SERVICE, WHICH ARE NOT COVERED BY THIS LIMITED WARRANTY, ARE YOUR RESPONSIBILITY. This returns policy does not affect your legal rights. Details of your legal rights are available from Trading Standards or Citizens Advice Consumer Service.

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