

# HDMI HDBaseT Extender, 70m with USB

## SC05.8070U



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### 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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## Description

This 18Gbps Extender extends high definition video, audio, bi-directional IR, RS-232 and USB 2.0 for KVM. The supported transmission distance is up to 40 meters for 4K2K@60Hz 4:4:4 resolution and 70 meters for 1080P60Hz resolution between transmitter and receiver over a single CAT 5e/6 cable.

The transmitter supports local audio extraction, bi-directional IR pass-through for controlling both source and display devices. It also supports PoC (power over cable).

The extender includes two units, transmitter and receiver. The transmitter captures the incoming signals and transmits them over one cost effective Cat5e/6 cable. The receiver unit receives the signals and presents them as outputs for connecting to your devices.

This extender offers the most convenient solution for HDMI extension via a single Cat5e/6 with long distance capability, and is the perfect solution for any application.

## Main Features

- HDMI 2.0b, HDCP 2.2 Compliant
- Up to 4K/60Hz with 24bit RGB/YCBR 4:4:4
- 18Gbps Zero Latency (Uncompressed)
- HDR, HDR10, HDR10+ and Dolby Vision pass through
- LPCM 7.1CH, Dolby True HD and DTS-HD Master Audio
- Up to 70m using CAT6/6a cable
- Supports USB 2.0 for KVM
- Two way IR and Full Duplex RS232
- Receiver Supports Audio Extraction
- Power over Cable (PoC)

## Package Contents

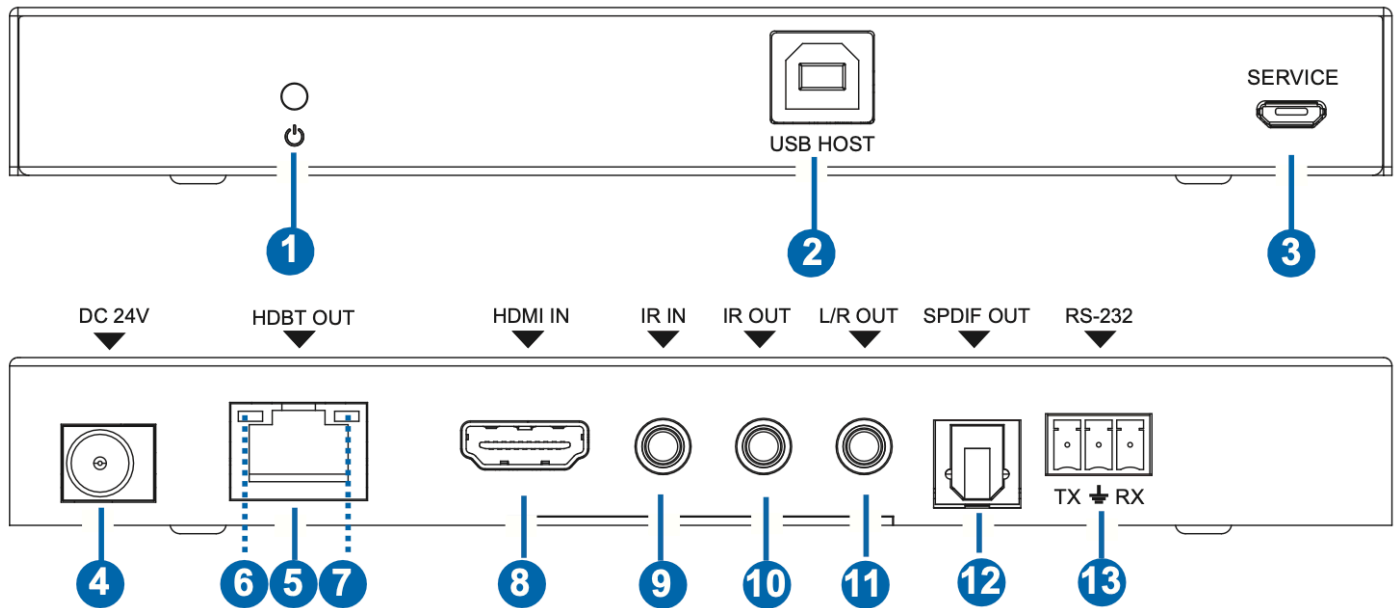
- 1 x Transmitter
- 1 x Receiver
- 1 x IR Blaster Cable (1.5m)
- 1 x IR Receiver Cable (1.5m)
- 1 x 24V / 1A Power Supply
- 2 x 3-Pin Phoenix Terminal
- 4 x Mounting Ears
- 1 x User Manual

## 4. Specifications

Connections		
Transmitter	Input:	1 x HDMI Type A (19-Pin Female)
		1 x IR IN (3.5mm Jack Socket)
		1 x Service (Mini-USB)
		1 x USB (USB-B, 4-Pin Female)
	Output:	1 x HDBaseT (RJ45 Data Socket)
		1 x IR Out (3.5mm Jack Socket)
		1 x L/R Stereo Audio (3.5mm Jack Socket)
		1 x SPDIF (Optical)
		1 x RS232 (Phoenix Terminal)
Receiver	Input:	HDBaseT (RJ45 Data Socket)
		1 x IR IN (3.5mm Jack Socket)
		1 x Service (Mini-USB)
	Output:	1 x HDMI Type A (19-Pin Female)
		1 x RS232 (Phoenix Terminal)
		1 x IR Out (3.5mm Jack Socket)
		2 x USB (USB-A, 4-Pin Female)
Technical		
HDMI and HDCP Compliance	HDMI 2.0b, HDCP 2.2 / HDCP 1x and DVI 1.0	
HDMI in/out Video Resolutions	4K2K 50/60Hz 4:4:4	
	4K2K 50/60Hz 4:2:0	
	4K2K 30Hz 4:4:4	
	1080p, 1080i, 720p, 480p, 480i	
	All PC resolutions including 1920 x 1200	
Colour Space	RGB, YCbCr 4:4:4, YCbCr 4:2:2, YCbCr 4:2:0	
Colour Depth	8-bit, 10-bit, 12-bit, [1080p, 4K/30Hz, 4K/60Hz (YCbCr 4:2:0) 8-bit [4K/60Hz (YCbCr 4:4:4)]]	
HDMI Audio Formats	PCM 2.0 / 5.1 / 7.1CH, Dolby Digital/Plus/EX, Dolby True HD, DTS, DTS-EX, DTS-96/24, DTS High Res, DTS HD Master Audio, DSD	
HDR Formats	HDR10, HDR10+, HLG	
USB	USB 2.0, Transmission Rate up to 480mb/s	
L/R Audio Formats	LPCM 2.0CH	
Power		
Power Supply	Input:	100~240V 50/60Hz
	Output:	DC 24V / 1A
Power Consumption	13W (max)	
Operating Temperature	Operating Temp. 0°C ~ 40°C, Storage Temp. -20°C ~ 60°C	
Relative Humidity	20~90% RH (non-condensing)	
Mechanical		
Housing	Metal Enclosure, Colour Black	
Dimensions	TX & RX = (W) 165 x (D) 88 x (H) 20mm	
Weight	TX = 170g and RX = 165g	

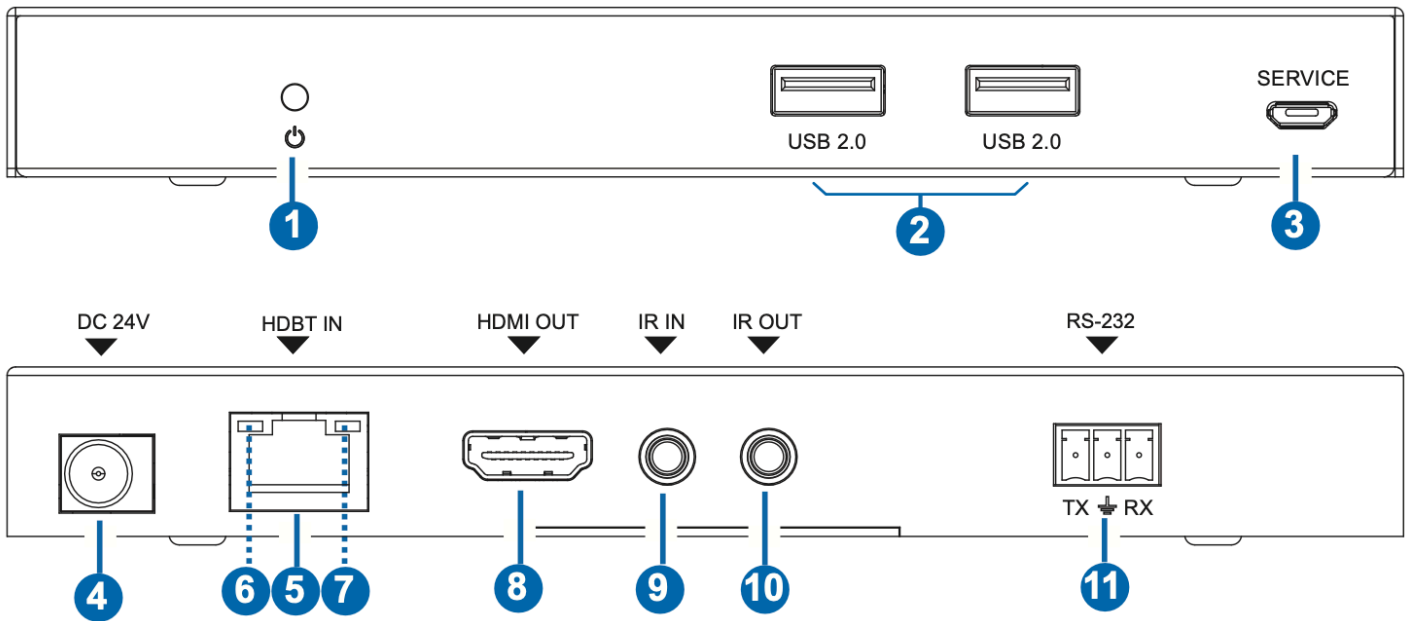
## 5. Operation Controls and Functions

### 5.1 Transmitter Panel



Number	Name	Description / Function
1	Power LED	The LED will illuminate RED when powered ON
2	USB Host	USB Type B port. Connection for PC.
3	Service Port	Used only for firmware updates
4	Power	DC 24V /1A Power Input. Note: The products support PoC and therefore only one end (either the transmitter or receiver) requires power.
5	HDBaseT Out	RJ45 Data output for connecting directly to the receiver. Note: This product does not support routers, switches or other network devices and should be connected end to end only.
6	Connection LED	Illuminates: Good connection between transmitter & receiver Flashes: Poor connection between transmitter & receiver Dark: No connection between the transmitter & receiver
7	Signal LED	Illuminates: HDMI signal with HDCP Flash: HDMI signal without HDCP Dark: No HDMI Signal
8	HDMI In	Connect HDMI source
9	IR In	IR input for receiver IR signals from a remote control
10	IR Out	IR output for controlling source device.
11	L/R Out	Stereo analogue audio output
12	SPDIF Out	SPDIF digital audio output
13	RS232	Full Duplex RS232 data between transmitter & receiver

## 5.2 Receiver Panel

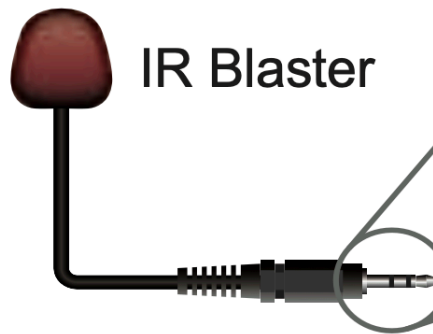


Number	Name	Description / Function
1	Power LED	The LED will illuminate RED when powered ON
2	USB 2.0	Two USB 2.0 ports for devices (keyboard & mouse) etc.
3	Service Port	Used only for firmware updates
4	Power	DC 24V /1A Power Input. Note: The products support PoC and therefore only one end (either the transmitter or receiver) requires power.
5	HDBaseT In	RJ45 Data output for connecting directly to the transmitter. Note: This product does not support routers, switches or other network devices and should be connected end to end only.
6	Connection LED	Illuminates: Good connection between transmitter & receiver Flashes: Poor connection between transmitter & receiver Dark: No connection between the transmitter & receiver
7	Signal LED	Illuminates: HDMI signal with HDCP Flash: HDMI signal without HDCP Dark: No HDMI Signal
8	HDMI Out	Connect HDMI display
9	IR In	IR input for receiver IR signals from a remote control
10	IR Out	IR output for controlling source device.
11	RS232	Full Duplex RS232 data between transmitter & receiver

### 5.3 IR Pin Connections

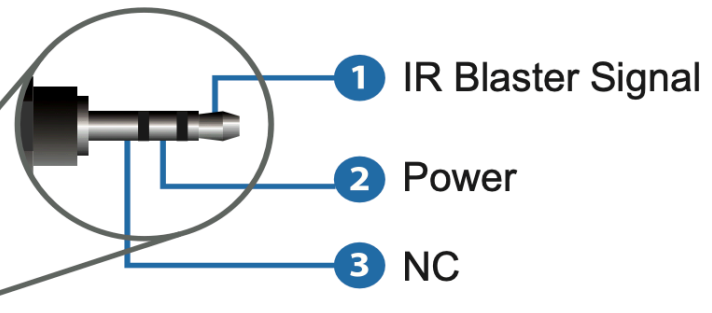
IR receiver and blaster pin connections.

#### IR RECEIVER

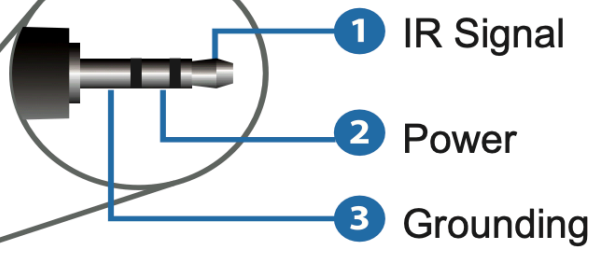


IR Blaster

#### IR BLASTER

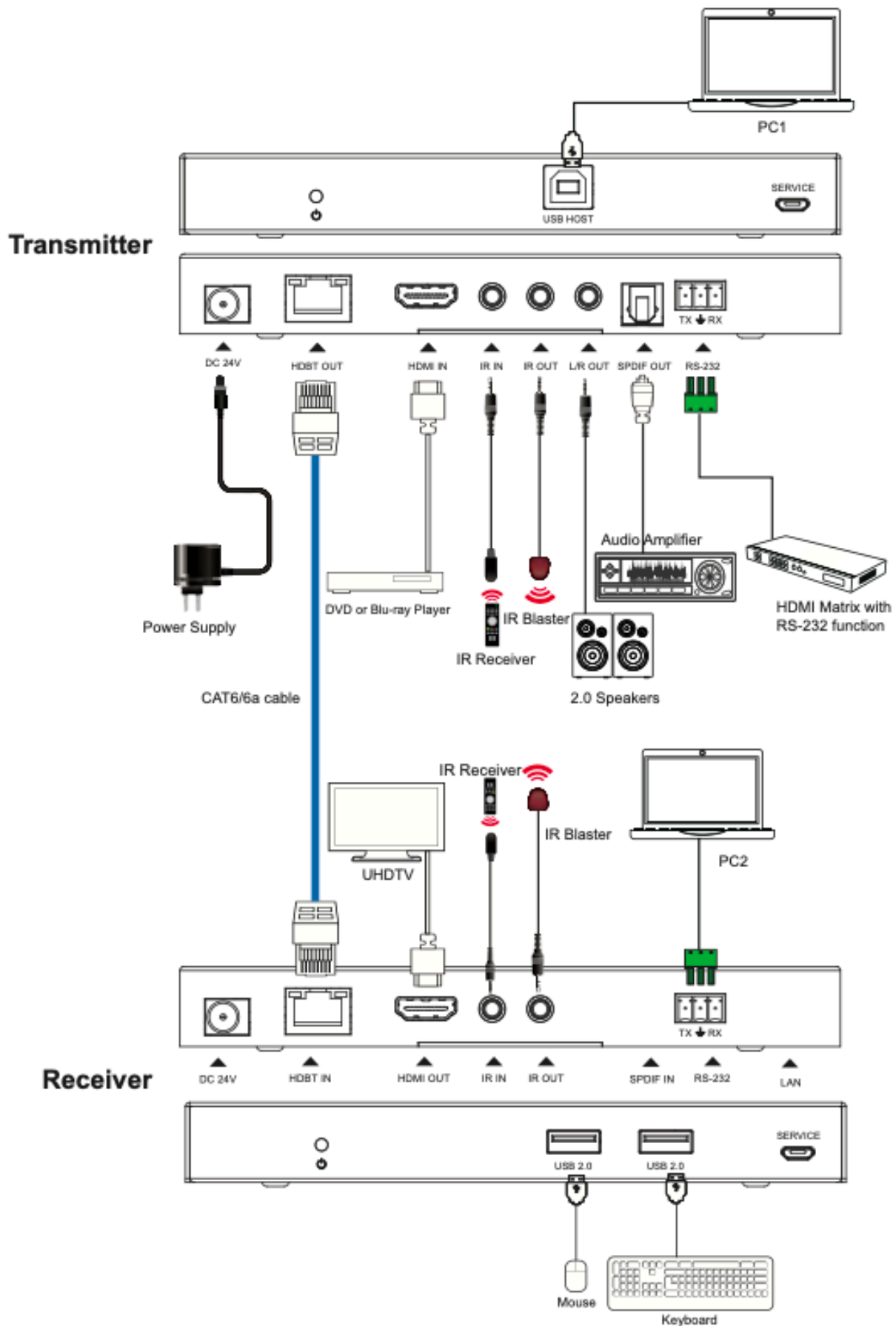


IR Receiver



**Note:** When the angle between the IR receiver and the remote control is  $\pm 45^\circ$ , the transmission distance is 0-5 meters; when the angle between the IR receiver and the remote control is  $\pm 90^\circ$ , the transmission distance is 0-8 meters. the angle between the IR receiver and the remote

6. Application Drawing





## 7. Maintenance, Service & Warranty

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

### 7.1 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 manufacture 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.

### 7.2 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.

### 7.3 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.

## 7.4 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 authorised 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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