



## HDMI 2.1 40Gbps HDBT Extender Kit, 90m

500516



### Overview

The HDMI 2.1 40Gbps HDBT Extender Kit, 90m (model: 500516) enables HDMI 2.1 connectivity at data rates up to 40Gbps & extends HDMI 8K up to 90m (295ft), HDMI 4K up to 120m (394ft) and 1080p up to 150m (492ft) over standard Cat6 UTP cable. Transmitter features with HDMI input, bidirectional IR, analog audio de-embedding and RS-232 pass-through. Receiver features with HDMI output, bidirectional IR, analog audio de-embedding and RS-232 pass-through. The device also supports 24V Bidirectional PoC.

The HDMI 2.1 40Gbps HDBT Extender Kit, 90m supports advanced functionalities like VRR, FVA, ALLM, HDR10, HDR10+, HLG and Dolby Vision. All audio format are supported.

### Applications

- Conference Rooms
- Classroom Projector Systems
- Collaborative PC Systems
- Digital Signage
- Educational Institutions
- Boardroom Systems

### Key Features

- Video bandwidth up to 40Gbps FRL and 18Gbps TMDS
- Supports all industry standard video resolution
- HDMI re-clocking on the HDBT receiver is helpful to solve HDMI and HDCP compatibility and handshaking issues
- Supports bidirectional IR, RS232 and CEC pass-through
- Supports VRR, FVA and ALLM
- Supports HDR10, HDR10+, HLG and Dolby Vision pass-through
- Supports bidirectional PoC (Power over Cable)
- Both the transmitter and receiver support analog audio de-embedding
- Simple plug and play installation

# Specification

## Technical

Protocol Compliance	HDMI 2.1 and HDCP 2.3
Transmission Rate	Up to 40Gbps FRL and 18Gbps TMDS
Video Resolution	Up to 8K/30Hz (4:4:4)
Transmission Distance	8K/30 up to 90m/295ft, 4K/60 up to 120m/394ft and 1080p up to 150m/492ft over CAT6 (F/FTP) cable
IR Frequency	Wideband 20KHz to 60KHz
Color Space	RGB, YCbCr 4:4:4, YCbCr 4:2:2 and YCbCr 4:2:0
Color Depth	8, 10, 12 bit
HDR Standard	HDR, HDR10, HDR10+, HLG and Dolby Vision
HDMI Audio Format	LPCM up to 7.1 channels, Dolby up to Dolby Atmos and DTS up to DTS:X

## Connection

Transmitter	Input: 1 × HDMI Input [HDMI Type A, 19-pin female] Output: 1 × HDBT Output [RJ45, 8-pin female] Control: 1 × IR Input [3.5mm stereo mini jack] 1 × IR Output [3.5mm stereo mini jack] 1 × RS232 [3pin-3.5mm Phoenix Connector] 1 × USB-C Service [USB-C female] 1 × EDID [4-pos DIP Switches]
Receiver	Input: 1 × HDBT Input [RJ45, 8-pin female] Output: 1 × HDMI Output [HDMI type A, 19-pin female] Control: 1 × IR Input [3.5mm stereo mini jack] 1 × IR Output [3.5mm stereo mini jack] 1 × RS232 [3pin-3.5m phoenix connector] 1 × Service [USB-C female]

## Mechanical

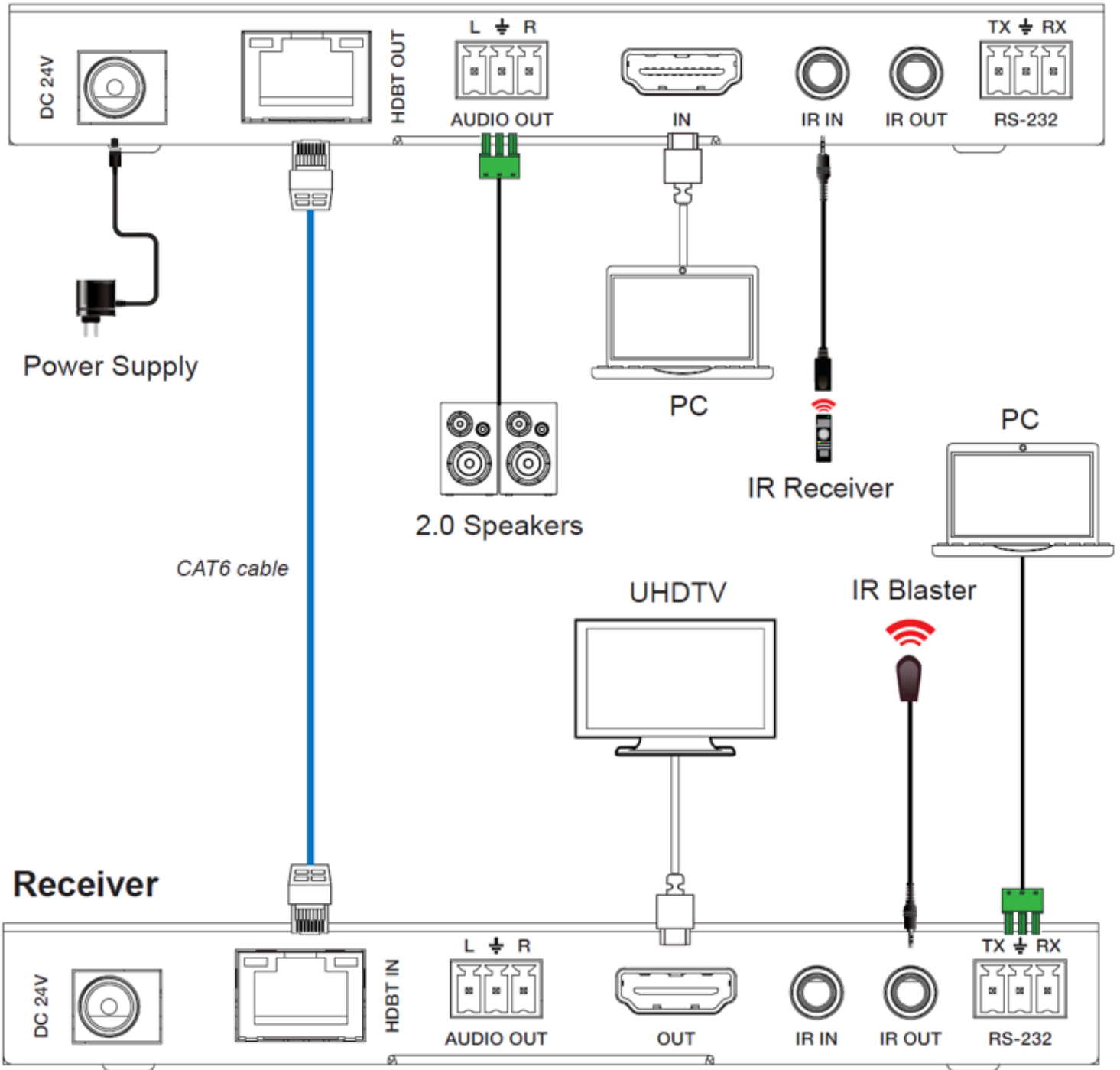
Housing	Metal Enclosure
Color	Black
Dimensions	Transmitter/Receiver: 140mm [W] × 65mm [D] × 18mm [H]
Weight	Transmitter/Receiver: 240g
Power Supply	Input: 100~240VAC 50/60Hz Output: 24VDC/1A
Power Consumption	Transmitter: 11.28W, Receiver: 10.8W
Operating Temperature	0°C ~ 40°C / 32°F ~ 104°F
Storage Temperature	-20°C ~ 60°C / -4°F ~ 140°F
Relative Humidity	20~90% RH (non-condensing)

## Generic Specification

Warranty	2 years
Order Information	500516 HDMI 2.1 40Gbps HDBT Extender Kit, 90m (UPC: 627699005163)

# Application Example

## Transmitter



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