



# CYP AVX-101C-KIT UHD HDMI Over CAT 5 Transmitter and Receiver Instruction Manual

[Home](#) » [CYP](#) » CYP AVX-101C-KIT UHD HDMI Over CAT 5 Transmitter and Receiver Instruction Manual 

## Contents

- [1 CYP AVX-101C-KIT UHD HDMI Over CAT 5 Transmitter and Receiver](#)
- [2 SAFETY PRECAUTIONS](#)
- [3 PACKAGE CONTENTS](#)
- [4 SYSTEM REQUIREMENTS](#)
- [5 FEATURES](#)
- [6 OPERATION CONTROLS AND FUNCTIONS](#)
  - [6.1 Receiver Front Panel](#)
  - [6.2 Rear Panel](#)
- [7 CONNECTION DIAGRAM](#)
- [8 SPECIFICATIONS](#)
  - [8.1 Video Specifications](#)
  - [8.2 Audio Specifications](#)
- [9 ACRONYMS](#)
- [10 Documents / Resources](#)
- [11 Related Posts](#)



**CYP AVX-101C-KIT UHD HDMI Over CAT 5 Transmitter and Receiver**



## INTRODUCTION

This 4K UHD+ HDMI over CAT Transmitter and Receiver Set is designed for high-quality AV extension with minimum latency. By using a sophisticated ultra-light compression scheme (lossless for most content) it's a great solution for extending 4K@60Hz (4:4:4) HDMI audio/video streams. Advanced HDMI content such as HDR (High Dynamic Range), 10-bit colour and multi-channel HD Bitstream audio can be easily transmitted. The use of 10 Gigabit Ethernet allows for extension distances of up to 100m when using Cat.6A/7. Additionally, this unit's compact form factor makes it ideal for installation in tight spaces, or inclusion in A/V travel kits.

## SAFETY PRECAUTIONS

Please read all instructions before attempting to unpack, install or operate this equipment and before connecting the power supply. Please keep the following in mind as you unpack and install this equipment:

- Always follow basic safety precautions to reduce the risk of fire, electrical shock and injury to persons.
- To prevent fire or shock hazard, do not expose the unit to rain, moisture or install this product near water.
- Never spill liquid of any kind on or into this product.
- Never push an object of any kind into this product through any openings or empty slots in the unit, as you may damage parts inside the unit.
- Do not attach the power supply cabling to building surfaces.
- Use only the supplied power supply unit (PSU). Do not use the PSU if it is damaged.
- Do not allow anything to rest on the power cabling or allow any weight to be placed upon it or any person walk on it.
- To protect the unit from overheating, do not block any vents or openings in the unit housing that provide ventilation and allow for sufficient space for air to circulate around the unit.
- Please completely disconnect the power when the unit is not in use to avoid wasting electricity.

## APPLICATIONS

High quality, low latency, video extension Household entertainment  
Lecture halls, meeting rooms, and classrooms Point-to-Point secure video conferencing

## PACKAGE CONTENTS

- 1x UHD+ HDMI over Copper Transmitter 1x 5V/2.6A DC Power Adapter
- 1x Shockproof Feet (Set of 4)

- 1× Operation Manual

## SYSTEM REQUIREMENTS

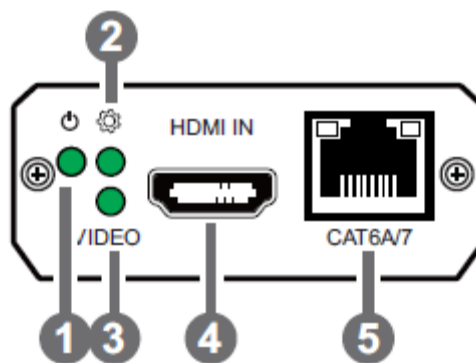
- HDMI source equipment such as a media player, video game console, PC, or set-top box
- Compatible copper-based receiver
- The use of Premium High-Speed HDMI cables, and industry-standard Cat.6A, or Cat.7 Ethernet cable is highly recommended.

## FEATURES

- HDMI 2.0 and DVI 1.0 are compatible
- HDCP 2.2 and HDCP 1.x compliant
- 1 HDMI input
- 1 10GbE output
- Ultra-light compression, lossless for most content
- Extension up to 100m when using at.6A/7
- Supports up to 4K UHD+ (18Gbps, 4K@50/60Hz 4:4:4, 8-bit) video input and output
- Supports pass-through of 10/12-bit HDR sources
- Supports pass-through of audio formats including LPCM (up to 8 channels), Bitstream and HD Bitstream
- Simple, hassle free, point-to-point connection

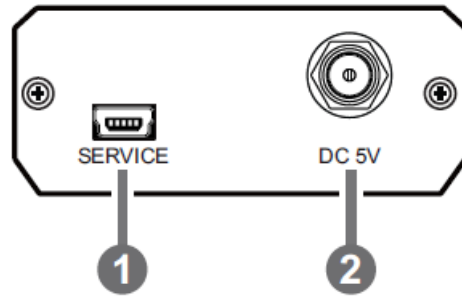
## OPERATION CONTROLS AND FUNCTIONS

### Transmitter Front Panel



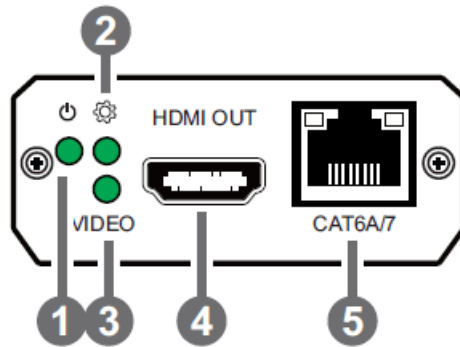
1. Power LED: This LED will illuminate to indicate the unit is on and receiving power.  
Note: This LED will blink during the firmware update process.
2. System LED: This LED will illuminate to indicate that the system is stable and ready to process audio/video streams.  
**Note:** This LED will blink during the firmware update process.
3. VIDEO LED: This LED will illuminate to indicate that the video source is stable, and streaming is in process.
4. HDMI IN Port: Connect to HDMI source equipment such as a media player, game console, or set-top box.
5. CAT6A/7 Port: Connect directly to a compatible receiver for audio and video extension.

### Transmitter Rear Panel



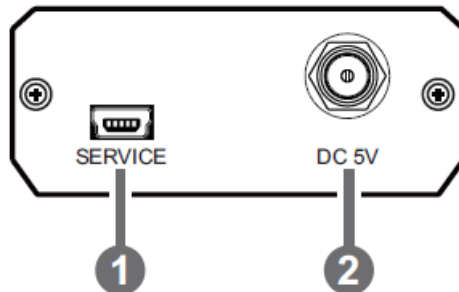
1. SERVICE (USB Mini-B) Port: This port is for firmware update only.
2. DC 5V Port: Plug the 5V DC power adapter into this port and connect it to an AC wall outlet for power.

#### Receiver Front Panel



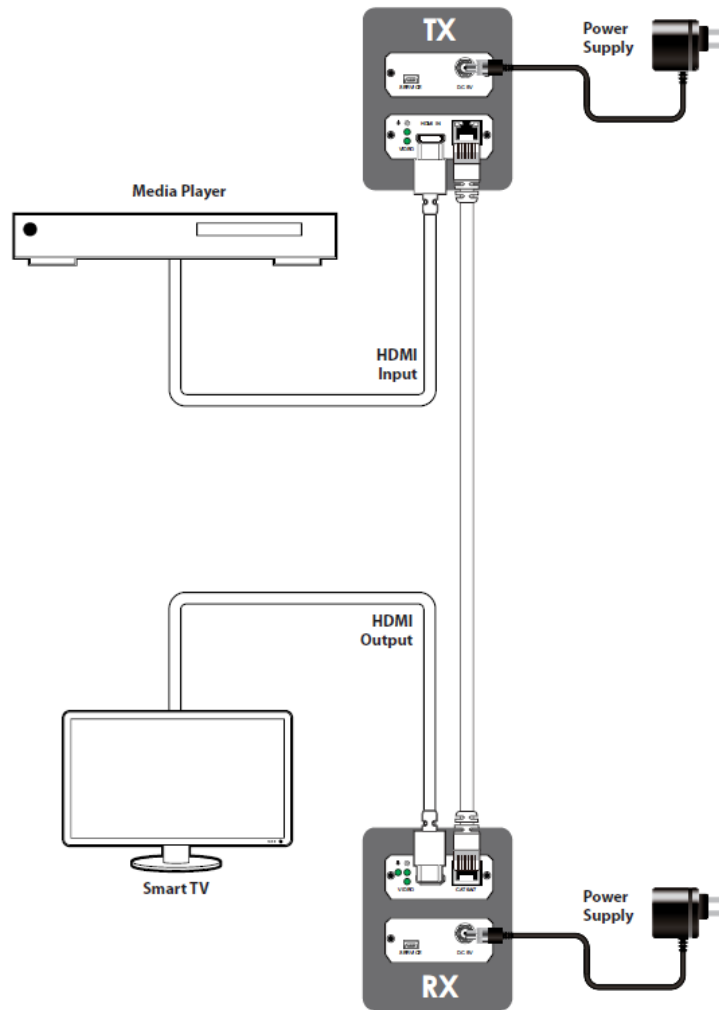
1. Power LED: This LED will illuminate to indicate the unit is on and receiving power. Note: This LED will blink during the firmware update process.
2. System LED: This LED will illuminate to indicate that the system is stable and ready to process audio/video streams.  
**Note:** This LED will blink during the firmware update process.
3. VIDEO LED: This LED will illuminate to indicate that the video source is stable, and streaming is in process.
4. HDMI OUT Port: Connect to an HDMI TV, monitor, or amplifier for digital video and audio output.
5. CAT6A/7 Port: Connect directly to a compatible transmitter for audio and video extension.

#### Rear Panel



1. SERVICE (USB Mini-B) Port: This port is for firmware update only.
2. DC 5V Port: Plug the 5V DC power adapter into this port and connect it to an AC wall outlet for power.

## CONNECTION DIAGRAM



## SPECIFICATIONS

### Technical Specifications

- HDMI Bandwidth 18Gbps
- Ethernet Bandwidth 10Gbps
- Input Ports 1×HDMI (Type-A)
- Output Ports 1×10GbE (RJ-45)
- Service Port 1×USB 2.0 (Mini-B)
- Power Supply 5V/2.6A DC
- (US/EU standards, CE/FCC/UL certified)
- ESD Protection (HBM) ±8kV (Air Discharge) ±4kV (Contact Discharge)
- Dimensions (W×H×D) 57mm×20.6mm×87mm [Case Only]
- 60mm×20.6mm×87mm [All Inclusive]
- Weight 139g
- Chassis Material Metal (Steel)
- Chassis Colour Black
- Operating Temperature 0°C – 50°C/32°F – 122°F
- Storage Temperature -20°C – 60°C/-4°F – 140°F
- Relative Humidity 20 – 90% RH (Non-condensing)
- Power Consumption 4.51W

## Video Specifications

Supported Resolutions (Hz)	Input	Output
	HDMI	10GbE
720×400p@70/85	✓	✓
640×480p@60/72/75/85	✓	✓
720×480i@60	✓	✓
720×480p@60	✓	✓
720×576i@50	✓	✓
720×576p@50	✓	✓
800×600p@56/60/72/75/85	✓	✓
848×480p@60	✓	✓
1024×768p@60/70/75/85	✓	✓
1152×864p@75	✓	✓
1280×720p@50/60	✓	✓
1280×768p@60/75/85	✓	✓
1280×800p@60/75/85	✓	✓
1280×960p@60/85	✓	✓
1280×1024p@60/75/85	✓	✓
1360×768p@60	✓	✓
1366×768p@60	✓	✓
1400×1050p@60	✓	✓
1440×900p@60/75	✓	✓
1600×900p@60RB	✓	✓
1600×1200p@60	✓	✓
1680×1050p@60	✓	✓
1920×1080i@50/60	✓	✓

Supported Resolutions (Hz)	Input	Output
	HDMI	10GbE
1920×1080p@24/25/30	✓	✓
1920×1080p@50/60	✓	✓
1920×1200p@60RB	✓	✓
2560×1440p@60RB	✓	✓
2560×1600p@60RB	✓	✓
2048×1080p@24/25/30	✓	✓
2048×1080p@50/60	✓	✓
3840×2160p@24/25/30	✓	✓
3840×2160p@50/60 (4:2:0)	✓	✓
3840×2160p@24, HDR10	✓	✓
3840×2160p@50/60 (4:2:0), HDR10	✓	✓
3840×2160p@50/60	✓	✓
4096×2160p@24/25/30	✓	✓
4096×2160p@50/60 (4:2:0)	✓	✓
4096×2160p@24, HDR10	✓	✓
4096×2160p@50/60 (4:2:0), HDR10	✓	✓
4096×2160p@50/60	✓	✓

#### Audio Specifications

#### Digital Audio



<b>HDMI Input / 10GbE Output</b>	
<b>LPCM</b>	
<b>Max Channels</b>	8 Channels
<b>Sampling Rate (kHz)</b>	32, 44.1, 48
<b>Bitstream</b>	
<b>Supported Formats</b>	Standard & High-Definition

### Cable Specifications

	1080p		4K30	4K60
	8-bit	12-bit	(4:4:4) 8-bit	(4:4:4) 8-bit
<b>Cable Length</b>				
<b>High Speed HDMI Cable</b>				
<b>HDMI Input</b>	15m	10m	5m	3m
<b>Ethernet Cable</b>				
<b>Cat.5e/6</b>	70m			
<b>Cat.6A/7</b>	100m			

### Bandwidth Category Examples: 1080p (FHD Video)

- Up to 1080p@60Hz, 12-bit colour
- Data rates lower than 5.3Gbps or below 225MHz TMDS clock

#### **4K30 (4K UHD Video)**

- 4K@24/25/30Hz & 4K@50/60Hz (4:2:0), 8-bit colour
- Data rates higher than 5.3Gbps or above 225MHz TMDS clock but below 10.2Gbps

#### **4K60 (4K UHD+ Video)**


- 4K@50/60Hz (4:4:4, 8-bit)
- 4K@50/60Hz (4:2:0, 10-bit HDR)
- Data rates higher than 10.2Gbps

### ACRONYMS

ACRONYM	COMPLETE TERM
10GbE	10 Gigabit Ethernet
4K UHD	4K Ultra-High-Definition (10.2Gbps max)
4K UHD+	4K Ultra-High-Definition (18Gbps max)
AV	Audio/Video
AVoIP	Audio/Video over IP
Cat.5e	Enhanced Category 5 cable
Cat.6	Category 6 cable
Cat.6A	Augmented Category 6 cable
Cat.7	Category 7 cable
CEC	Consumer Electronics Control
DVI	Digital Visual Interface
EDID	Extended Display Identification Data
Gbps	Gigabits per second
HDCP	High-bandwidth Digital Content Protection
HDMI	High-Definition Multimedia Interface
HDR	High Dynamic Range
kHz	Kilohertz
LAN	Local Area Network
LED	Light-Emitting Diode
LPCM	Linear Pulse-Code Modulation
MHz	Megahertz
TMD5	Transition-Minimized Differential Signaling
USB	Universal Serial Bus

CYP (UK) Ltd., Unit 7, Shepperton Business Park, Govett Avenue, Shepperton, Middlesex, TW17 8BA  
Tel: +44 (0) 20 3137 9180 | Fax: +44 (0) 20 3137 6279  
Email: [sales@cypeurope.com](mailto:sales@cypeurope.com) . [www.cypeurope.com](http://www.cypeurope.com)

## Documents / Resources

	<p><a href="#">CYP AVX-101C-KIT UHD HDMI Over CAT 5 Transmitter and Receiver</a> [pdf] Instruction Manual</p> <p>AVX-101C-KIT, UHD HDMI Over CAT 5 Transmitter and Receiver, AVX-101C-KIT UHD HDMI Over CAT 5 Transmitter and Receiver, HDMI Over CAT 5 Transmitter and Receiver, CAT 5 Transmitter and Receiver, 5 Transmitter and Receiver, Receiver</p>
---	--

