



ALFATRON ELECTRONICS GmbH GERMANY

ALF-USBC-EXT



• Important Safety Notice

1. Do not mix up the transmitter and the receiver before installation.
2. Keep the installation environment dry and ventilated.

• Introduction

Featuring a Type-C transmitter and an HDMI receiver, this product achieves zero latency transmission via CAT6/6A/7 network cable of UHD audio and video signals. It supports 4K@60Hz Type-C video signal transmission up to 60 meters and 25 meters for 4K@120Hz. A variety of applications can be achieved with this kit, such as education, training, conferences, etc.

• Features

1. Zero latency transmission
2. Support up to 4K@120Hz resolution, backward compatible
3. Compatible with Cat6/6A/7 network cable, transmission distance up to 60 meters for 4K@60Hz signal and 25 meters for 4K@100/120Hz signal
4. Support HDR10
5. Support EDID passthrough and self-adaptive display on resolutions
6. Support Type-C input and HDMI output
7. Also receiver can be powered by USB Type-C port
8. Compact design, plug and play

• Package Contents



Transmitter x1



Receiver x1

Power adapter
x1

User manual x1

Mounting
ear x4

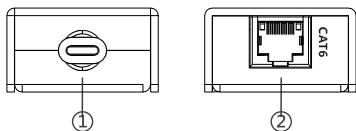
Screw x8

• Installation Requirements

1. USB Type-C source device like smartphone, tablet, PC, Macbook etc. with a USB Type-C port supporting USB-C DisplayPort (DP Alt mode).
2. HDMI display device like TV, projector, LED screen, etc. with HDMI IN port.
3. UTP or STP CAT6/6A/7 cable, following standard IEEE-568B wiring.

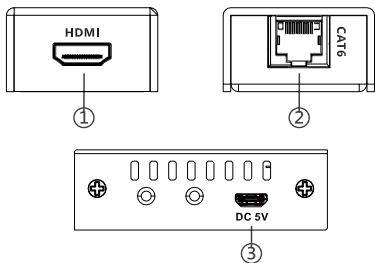
• Panel Description

Transmitter



①	Type-C signal input	Connect with the source device
②	RJ45 signal output	Connect with CAT6/6A/7 network

Receiver



①	HDMI signal output	Connect with the display device
②	RJ45 signal input	Connect with CAT6/6A/7 network
③	Power input	Connect to the USB-C port with supplied power adapter

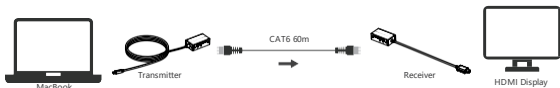
• Installation and Connection

1. How to make a network cable, follow the standard of IEEE-568B:

- | | | | |
|--------------------|----------|-------------------|---------|
| 1-white and orange | 2-orange | 3-white and green | 4-blue |
| 5-white and blue | 6-green | 7-white and brown | 8-brown |



2. Connection



3. Connection instruction

- 1) Signal sources are connected through the Type-C port of the transmitter, and displays are connected via the HDMI port of the receiver.
- 2) The transmitter and receiver are connected together by a CAT6/6A/7 network cable.
- 3) Use the micro-USB cable to power up the receiver, then the unit is ready for use.

• Specification

Items		Specifications
Compatibility	Voltage	TX: Power by the signal source RX: DC 5V500mA
	Power consumption	TX < 3W, RX < 3W
HDMI performance	HDMI version	HDMI 2.0
	HDCP version	HDCP 2.2, HDCP 1.4
	Max transmission rate	18Gbps
	Resolution	1280x720, 1280x960, 1366x768, 1440x900, 1680x1050, 1920x1080, 1920x1200, 720p@50/60Hz, 1080i@50/60Hz, 1080p@24/25/30/50/60/ 120Hz, 2560x1440@50/60/120/144Hz, 3840x2160@24/25/30/50/60/100/120Hz, 4096x2160@24/25/30/50/60Hz
	TMDS signal	0.7~1.2Vp-p (TMDS)
DDC signal	5Vp-p (TTL)	
Transmission distance	CAT6/6A/7	4K@60Hz≤60m 2560x1440@120/144Hz ≤30m 4K@100/120Hz≤25m
Audio formats	PCM, DTS, Dolby	
HDR10	Supported	
HDMI 3D	Supported	
EDID passthrough	Supported, auto downscaling	
Operating environment	Working temperature	-20~55°C
	Storage temperature	-30~60°C
	Humidity	0~90%RH (no condensation)
Physical properties	Material	ABS
	Color	Black
	Dimension	71.5 (L) x 26.0 (W) x 15.0 (H) mm

Physical properties	Dimension	67 (L) x 40 (W) x 23 (H) mm
	Weight	TX: 85g RX: 72g
ESD protection	1a Contact discharge level 2 ($\pm 4\text{KV}$) 1b Air discharge level 3 ($\pm 8\text{KV}$) Implementation of the standard: IEC61000-4-2	

Warranty

1.1 This limited warranty covers defects in materials and workmanship in this product.

1.2 Should warranty service be required, proof of purchase must be presented to the Company. The serial number on the product must be clearly visible and not have been tampered with in any way whatsoever.

1.3 This limited warranty does not cover any damage, deterioration or malfunction resulting from any alteration, modification, improper or unreasonable use or maintenance, misuse, abuse, accident, neglect, exposure to excess moisture, fire, improper packing, and shipping (such claims must be presented to the carrier), lightning, power surges, or other acts of nature. This limited warranty does not cover any damage, deterioration or malfunction resulting from the installation or removal of this product from any installation, any unauthorized tampering with this product, any repairs attempted by anyone unauthorized by the Company to make such repairs, or any other cause which does not relate directly to a defect in materials and/or workmanship of this product. This limited warranty does not cover equipment enclosures, cables or accessories used in conjunction with this product.

This limited warranty does not cover the cost of normal maintenance. Failure of the product due to insufficient or improper maintenance is not covered.

1.4 The Company does not warrant that the product covered hereby, including, without limitation, the technology and/or integrated circuit(s) included in the product, will not become obsolete or that such items are or will remain compatible with any other product or technology with which the product may be used.

1.5 Only the original purchaser of this product is covered under this limited warranty. This limited warranty is not transferable to subsequent purchasers or owners of this product.

1.6 Unless otherwise specified, the goods are warranted in accordance with the

manufacturer' s product specific warranties against any defect attributable to faulty workmanship or materials, fair wear and tear being excluded.

1.7 This limited warranty only covers the cost of faulty goods and does not include the cost of labor and travel to return the goods to the Company' s premises.

1.8 In the event of any improper maintenance, repair or service being carried out by any third persons during the warranty period without the Company' s written authorization, the limited warranty shall be void.

1.9 A 7 (seven) year limited warranty is given on the aforesaid product were used correctly according to the Company' s instructions, and only with the use of the Company' s components.

1.10 The Company will, at its sole option, provide one of the following three remedies to whatever extent it shall deem necessary to satisfy a proper claim under this limited warranty:

1.10.1 Elect to repair or facilitate the repair of any defective parts within a reasonable period of time, free of any charge for the necessary parts and labor to complete the repair and restore this product to its proper operating condition.; or

1.10.2 Replace this product with a direct replacement or with a similar product deemed by the Company to perform substantially the same function as the original product; or

1.10.3 Issue a refund of the original purchase price less depreciation to be determined based on the age of the product at the time remedy is sought under this limited warranty.

1.11 The Company is not obligated to provide the Customer with a substitute unit during the limited warranty period or at any time thereafter.

1.12 If this product is returned to the Company this product must be insured during shipment, with the insurance and shipping charges prepaid by the Customer. If this product is returned uninsured, the Customer assumes all risks of loss or damage during shipment. The Company will not be responsible for any costs related to the removal or re-installation of this product from or into any

installation. The Company will not be responsible for any costs related to any setting up this product, any adjustment of user controls or any programming required for a specific installation of this product.

1.13 Please be aware that the Company' s products and components have not been tested with competitor' s products and therefore the Company cannot warrant products and/or components used in conjunction with competitor' s products.

1.14 The appropriateness of the goods for the purpose intended is only warranted to the extent that the goods are used in accordance with the Company' s installation, classification, and usage instructions.

1.15 Any claim by the Customer which is based on any defect in the quality or condition of the goods or their failure to correspond with specification shall be notified in writing to the Company within 7 days of delivery or (where the defect or failure was not apparent on reasonable inspection by the Customer) within a reasonable time after discovery of the defect or failure, but, in any event, within 6 months of delivery.

1.16 If delivery is not refused, and the Customer does not notify the Company accordingly, the Customer may not reject the goods and the Company shall have no liability and the Customer shall pay the price as if the goods had been delivered in accordance with the Agreement.

1.17 THE MAXIMUM LIABILITY OF THE COMPANY UNDER THIS LIMITED WARRANTY SHALL NOT EXCEED THE ACTUAL PURCHASE PRICE PAID FOR THE PRODUCT