J-TECH DIGITAL ®

USER MANUAL V1.0

4K 60HZ WALL PLATE EXTENDER WITH HDMI / TYPE-C INPUTS
JTD-2987 I JTECH-EXW30

HDMI™ HIGH DEFINITION MULTIMEDIA INTERFACE   RoHS compliant   C E   FC

Scan the QR code below or visit
https://resource.jtechdigital.com/products/2987
to view and access detailed digital
resources regarding this unit.

Safety Instructions:

- Before using this product, please carefully read the following safety instructions to ensure its proper use and keep this manual for future reference:
- To prevent electric shock, do not attempt to open the product.
- Only qualified personnel should perform any repairs or maintenance.
- Always place the product on a stable, flat surface to prevent it from falling.
- Do not expose the product to water, moisture, or high-humidity environments to avoid the risk of damage.
- To prevent damage from direct sunlight or high temperatures, do not expose the product to such environments.
- Do no place the product near heat sources like radiators, heat registers, stove, or other heat-producing apparatus.
- Do not place any objects on top of the product to avoid damage.
- Use only the attachments and accessories specified by the manufacturer.
- During lightning storms or prolonged periods of disuse, unplug the power supply to prevent damage.

Table of Contents

1. Introduction

The wall plate is a 2x1 switcher and CAT transmitter with HDMI and USB-C inputs. It features a US one-gang enclosure for Decora-style wall plate openings with interchangeable black and white wall plates and faceplates. Support video resolution up to 4K2K@50/60Hz 4:4:4. CAT6 output can extend video transmission distance up to 164ft / 50m.

The product is remotely powered by the receiver or other CAT-equipped devices via POC.

2. Features

- Compliant with HDMI 2.0b, HDCP 2.2 and Display Port 1.2a
- HDMI input supports 18Gbps video bandwidth;
- USB-C input supports 5.4Gbps video bandwidth
- Video resolution up to 4K2K@50/60Hz 4:4:4
- CAT6 output can extend video transmission distance up to 164ft / 50m for 4K@24 or 115ft / 35m for 4K@60 444 via a single CAT5e/6 cable
- Support 3D, HDR10 and Dolby Vision
- HDMI audio formats support LPCM, Dolby Digital/Plus/EX, Dolby True HD, DTS, DTS-EX, DTS-96/24, DTS High Res, DTS-HD Master Audio, DSD
- Support HDMI and USB-C input
- With USB-C charging port
- US one-gang enclosure for Decora-style wall plate openings
- Input signal selection supports automatic mode and manual mode
- Support POC function (only from Receiver to Transmitter)
- Available in white or black coating

3. Package Contents

- (1) x Wall Plate Transmitter
- (1) x Receiver
- (1) x Faceplate
- (1) x Power Adapter
- (2) x Mounting Brackets
- (1) x User Manual

4. Specifications

Technical	
HDMI Compliance	HDMI 2.0b
HDCP Compliance	HDCP 2.2
DP Compliance	Display Port 1.2a
Video Bandwidth	USB-C: 5.4 Gbps
	HDMI: 18 Gbps
Video Resolution	480i~1080p50/60Hz, 4Kx2K@24/30Hz, 4k2k@60Hz
Color Space	RGB, YCbCr 4:4:4 / 4:2:2, YUV 4:2:0
Color Depth	8/10/12-bit (1080P@60Hz) 8-bit (4K@60Hz)
HDR	Support
HDMI Audio Formats	LPCM, Dolby Digital/Plus/EX, Dolby True HD, DTS, DTS-EX, DTS-96/24, DTS High Res, DTS-HD Master Audio, DSD
Transmission Distance	Max distance (4K@24) : 164ft / 50m over CAT5e/6 Max distance (4K@60) : 115ft / 35m over CAT5e/6
ESD Protection	Human body model — ±8kV (Air-gap discharge) & ±4kV (Contact discharge)
Connection	

Transmitter	Inputs: 1 x HDMI Type A [19-pin female]
	        1 x USB-C
	Outputs: 1 x CAT6 OUT [RJ45, 8-pin female]
	        1x USB-C (only for charging)
	Control: 1x FW [Micro USB, Update port]

Receiver	Input: 1x CAT IN [RJ45, 8-pin female] Output: 1x HDMI OUT [Type A, 19-pin female] Controls: 1x IR IN [3.5mm Stereo Mini-jack] 1x SERVICE [Micro USB, Update port]

| Mechanical	
Housing	Metal Enclosure
Color	White / Black
Dimensions	Wall plate: 33.3mm [W] x 65.7mm [D] x 68.7mm [H] Faceplate: 69.9mm [W] x 3mm [D] x 114.3mm [H] Receiver: 88mm (W) × 61mm (D) × 18mm (H)
Weight	Wall plate: 195g, Receiver: 155g
Power Supply	POC (only from Receiver to Transmitter)
Power Consumption	Wall plate: 3W (Max), Receiver: 3.72W (Max)
Operating Temperature	32 - 104°F / 0 - 40°C
Storage Temperature	-4 - 140°F / -20 - 60°C
Relative Humidity	20 - 90% RH (no condensation)

5. Product Dimensions

Front   **Side**   **Back**
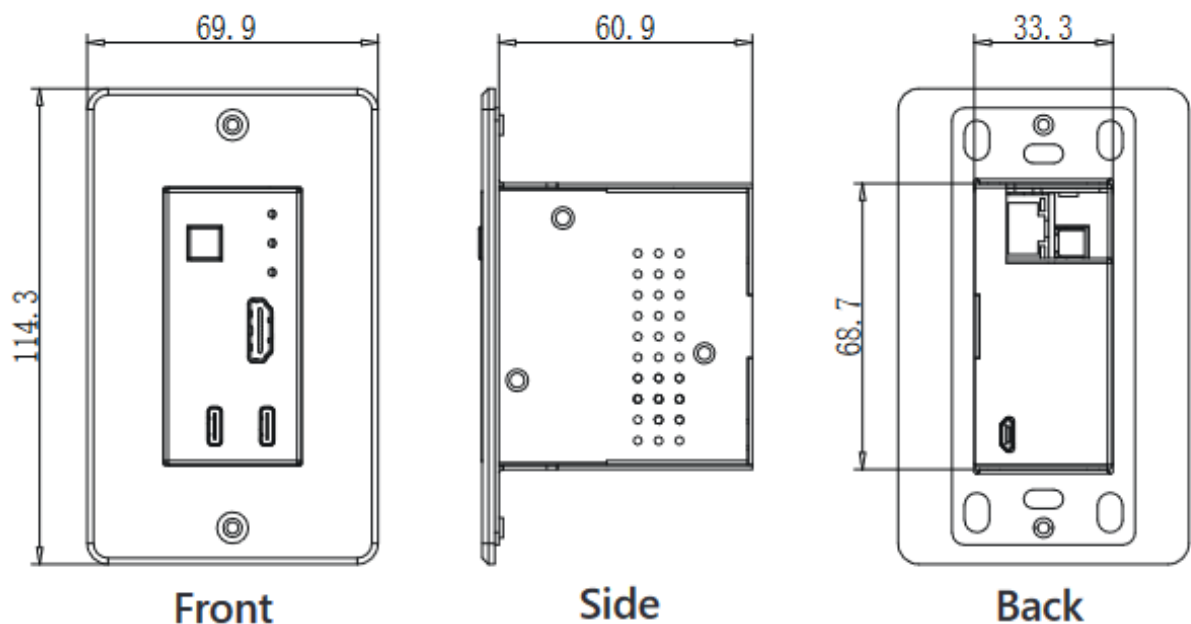
Unit: mm

6. Operation Controls and Functions

6.1 Transmitter Panel
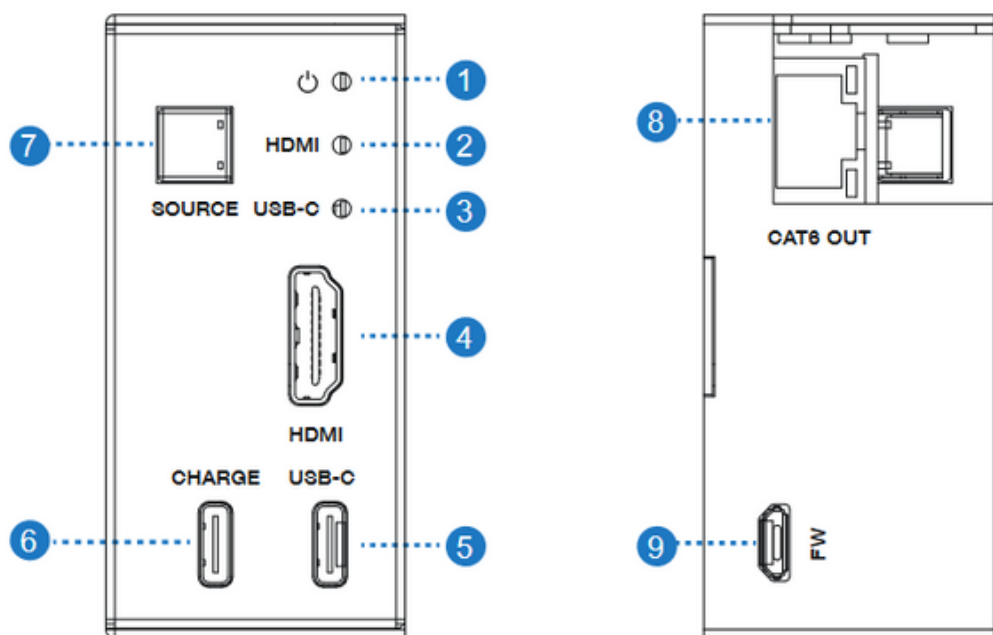
| No.	Name	Function Description
1	Power LED	The power LED indicator will illuminate in green when the product is powered on, and red when the product is on standby.
2	HDMI LED	When the HDMI input port is active and the HDMI signal is detected, the green LED will be on.
3	USB-C LED	When the USB-C input port is active and USB-C signal is detected, the green LED will be on.
4	HDMI port	HDMI input port, connect to HDMI source device.
5	USB-C port	(1) USB-C signal input port. (2) Charging port for devices with USB-C port.
6	CHARGE port	Connect this port to power supply, then the USB-C port will power the connected device.
7	SOURCE button	Used to switch HDMI / USB-C input signal.
8	CAT6 OUT	Connect to the CAT IN port of Receiver with a CAT5e/6 cable.
9	FW port	Firmware update port.

6.2 Receiver Panel
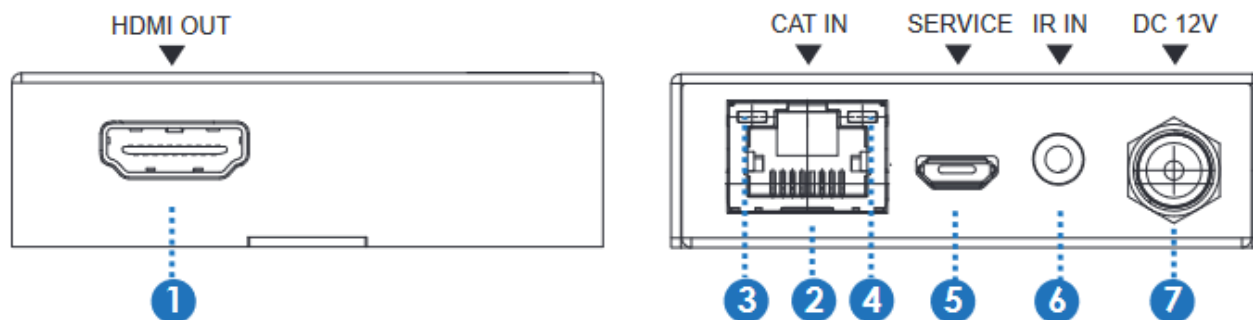
No.	Name	Function Description
1	HDMI OUT	HDMI output port, connect to HDMI display device such as TV or Projector with an HDMI cable.
2	CAT IN	Connect to the CAT6 OUT port on the transmitter with a CAT cable.
3	Power Indicator Lamp (Green)	When the receiver is powered on, the power indicator lamp will be on.
4	Data signal Indicator Lamp (Orange)	When there is signal transmission between the transmitter and the receiver, the lamp will be on.
5	SERVICE port	Used for firmware update.
6	IR IN	IR signal input port. Connect to the IR Receiver cable.
7	DC 12V	Plug DC 12V/1A power supply into the unit and connect the adapter to an AC outlet. (Note: The CAT receiver provides power for the transmitter via a CAT cable.)

Note:

This transmitter supports automatic/manual mode for source signal input. In manual switching mode, press the SOURCE button to select HDMI/ USB-C input source.

In automatic switching mode, the last connected or the currentlly connected source signal will be selected automatically; When both HDMI and USB-C ports are connected to active signal, HDMI signal input is preferred.

7. Application Example
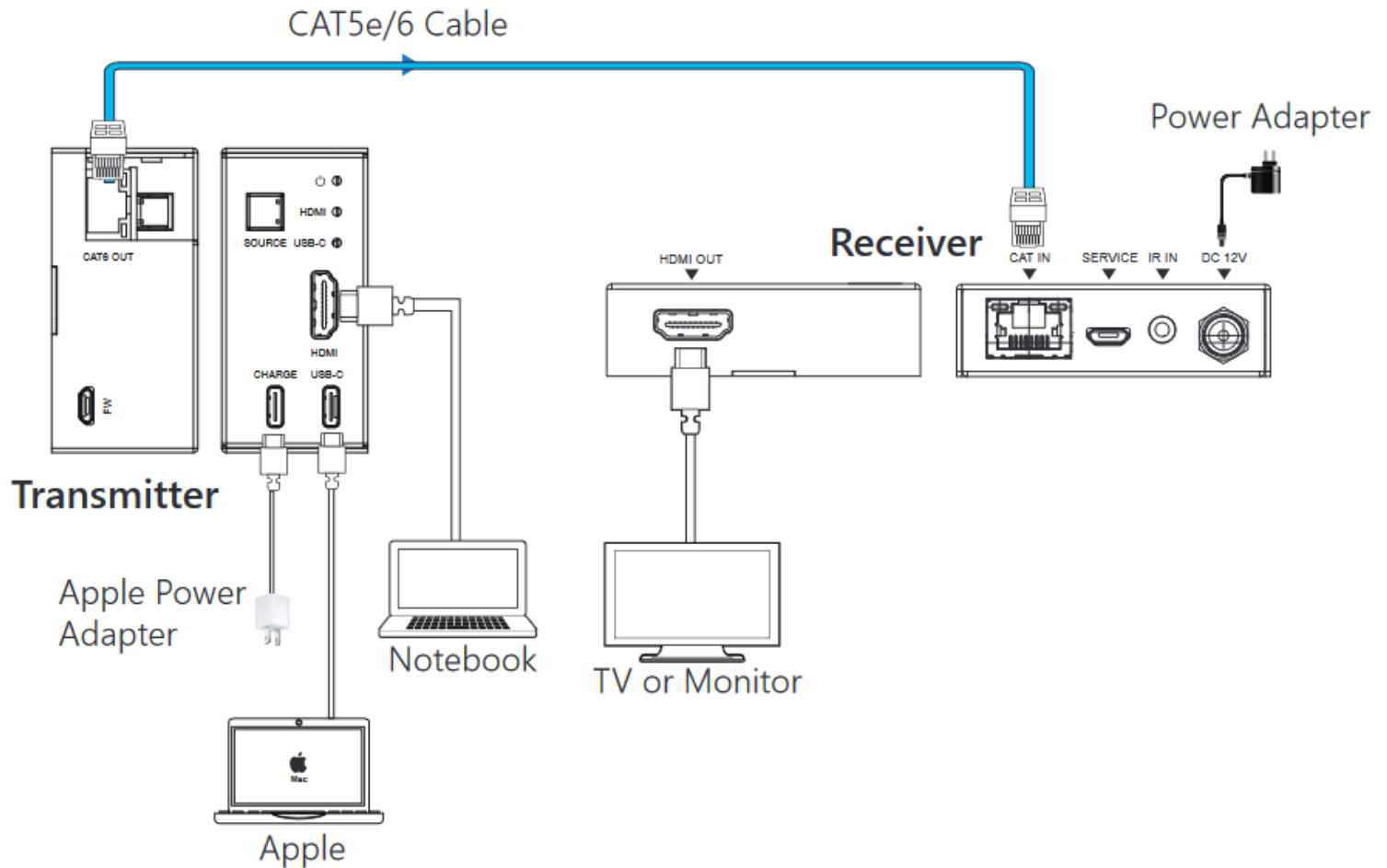
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8. Maintenance

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

9. Warranty

If your product does not work properly because of a defect in materials of workmanship, our company (referred to as "the warrantor") will, for the length of the period indicated as below, "Parts and Labor (1) Year", 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 "Labor" limited warranty period, there will be no charge for labor. 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 products purchased as new. A purchase receipt or other proof of original purchase date is required for Limited Warranty service.

10. Mail-In Service

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 and/or email address where you can be reached.

11. Limited Warranty Limits and Exclusions

This Limited Warranty ONLY COVERS failures due to defects in material 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, mis- adjustment of consumer controls, improper maintenance, power line surge, lightning damage, modification, or service by anyone other than a Factory Service center or other Authorized Servicer, or damage that is attributed 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.