



# J-TECH DIGITAL®

## USER MANUAL <sup>V1.0</sup>



### 4K 60Hz 1x4 HDMI Splitter Extender Up To 196ft

JTD-3145 | JTECH-14EX60-AE

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Scan the QR code below or visit <https://resource.jtechdigital.com/products/3145> 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 not 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.

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## 1. Description

JTECH-14EX60-AE is a 196ft. (60m) extender with 1 HDMI input, 1 HDMI loop out and 4 UTP output. It supports 4K 60Hz. The 1x4 extender has the ability to equalize and amplify to ensure that the HDMI signal is transmitter without loss of quality. This splitter can be used for digital entertainment centers, retail and display websites, set-top boxes, security rooms, data control centers, conference rooms, schools, and enterprise training environments.

## 2. Features

- 1 x HDMI Input | 1 x HDMI Loop-out & 4 x UTP Outputs
- 4K 60Hz up to 196ft. over single CAT5e/6
- HDCP 2.2/1.4 compliant
- Supports audio extraction (Analog and Toslink SPDIF)
- Supports HDR10, HLG
- Supports USB upgrade
- Audio formats such as LPCM2.0/5.1, DTS 5.1, Dolby Digital, Dolby Digital+, Dolby True HD
- Support Bi-Directional wide band IR
- Supports PoC (Receivers are powered by the Transmitter)
- Supports auto downscale 4K@60hz to 1080P at RX end
- Features one built-in reset button for factory reset

## 3. Package Contents

- 1 x HDMI Transmitter, 4 x HDMI Receivers
- 1 x 12V / 2A DC Adapter
- 5 x IR TX Cable, 5 x IR RX Cable
- 1 x User Manual
- 2 x Rack mount for TX and 8pcs for RX
- 1 x USB cable

## 4. Specifications

Operating Temperature Range	-5°C ~ 40°C (+23°F ~ 140°F)
Operating Humidity Range	5 to 90% RH (No Condensation)
Input Video Signal	0.5 - 1.0 volts P-P (TTL)
Input DDC Signal	5 volts p-p (TTL)
Data Transfer Speed Rate	18Gbps (Maximum)
Input Port	1 x HDMI
Output Ports	4 x CAT5e/6 , 1 x HDMI Loop-out
Video Formats Supported	DTV/HDTV: 480P / 576P / 720P / 1080P / 4K VESA Resolution: 1280*720 / 1920*1080 / 3840*2160
Vertical Frequency Range	60Hz
Supported Audio Formats	LPCM 2.0 / 5.1, DTS 5.1 Dolby Digital, Dolby Digital+, Dolby True HD
Transmission Distance	60m (197ft.) at 4K@60Hz
Power Consumption	12.5W (Max)
Dimensions (L x W x H)	TX: L229.5 x W113.4 x H24mm RX: L110.2 x W68.3 x H18mm
Net Weight	TX: 1300g, RX: 1600g (4 pcs)

## 5. Product Requirements

### Front Panel:



	Type	Function
1	Power Indicator	Red power indicator shows working data
2	HDMI In Indicator	Blue light indicates working connection
3	HDMI Out Indicator	Blue light indicates working connection
4	Reset	Reset via long press for 3 seconds

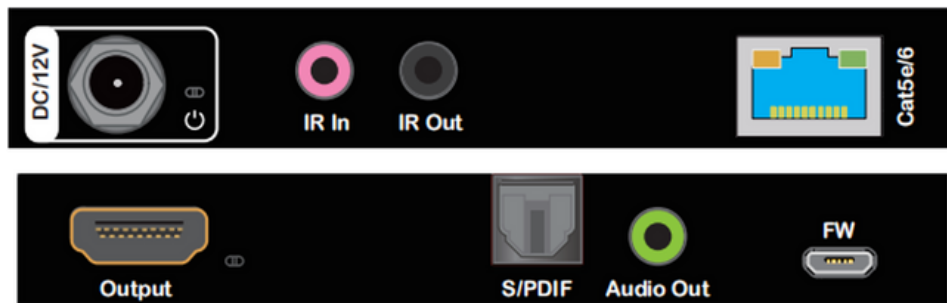
5	EDID	1080P60 2.0CH ~ 4K@60 2.0/5.1CH
6	FW	1 x USB cable for upgrade

**Rear Panel:**



	Type	Function
1	HDMI In	HDMI A port. Supports up to 4K@60Hz
2	HDMI Loop	1 x HDMI Loop output
3	CAT5e/6	4 x UTP ports to transmit signal to the receivers
4	IR IN	1 x 3.5mm Port. Connect with IR TX cable
5	IR Out	1 x 3.5mm Port. Connect with IR TX cable
6	Audio Out	1 x Analog, 1 x Toslink output
7	DC 12V	1 x power port

**Receiver:**



	Type	Function
1	DC 12V	1 x power port
2	IR In	1 x 3.5mm Port. Connect with IR RX cable
3	IR Out	1 x 3.5mm Port. Connect with IR RX cable
4	CAT5e/6	1 x RJ45 port to connect to the transmitter

5	HDMI Output	1 x HDMI output to connect to the display
6	SPDIF	1 x SPDIF output
7	Audio Out	1 x Analog output
8	FW	1 x USB cable for upgrade

## EDID Switch Settings

This splitter supports EDID management through a 3-pin dip switch:

Up dial stands for 0; down dial stands for 1

Different digit combinations have different EDID effects according to the following table.

Switch Status	EDID Information
000	Default 1 (4K@60 4:2:0 2CH)
010	Default 2 (4K@60 4:4:4 2CH)
001	Default 3 (4K@60 4:4:4 5.1CH)
100	Default 4 (4K@30 4:4:4 5.1CH)
110	Default 5 (1080P60 2CH)
111	Copy EDID from loop out display

Note: all other digit combinations not listed above is for EDID 4K@60 4:2:0 2CH

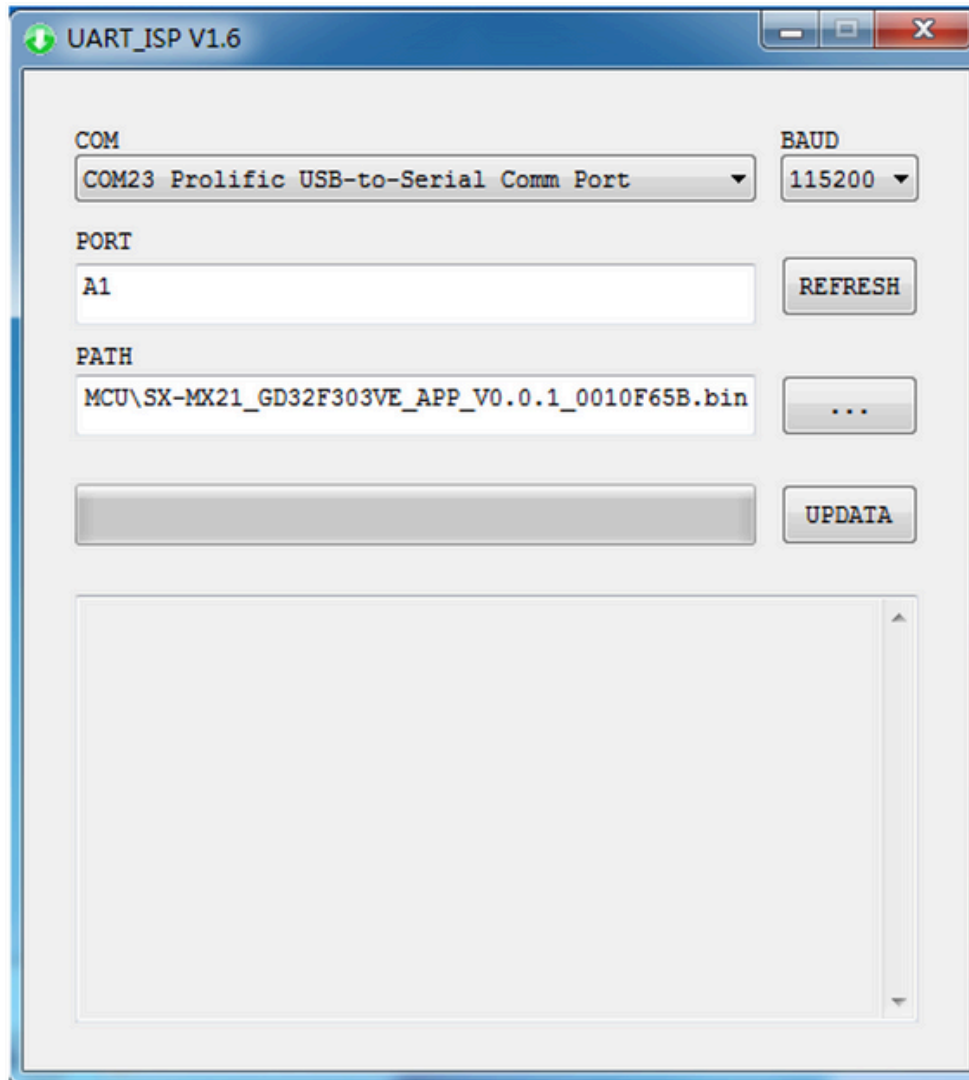
## 6. HDCP

HDMI Input	Display (HDCP 2.2 / 1.4)	Display (HDCP 1.4)	Display (No HDCP)
HDCP 2.2	HDCP 2.2	No Signal	No Signal
HDCP 1.4	HDCP 1.4	HDCP 1.4	No Signal
HDCP Off	No HDCP	No HDCP	No HDCP

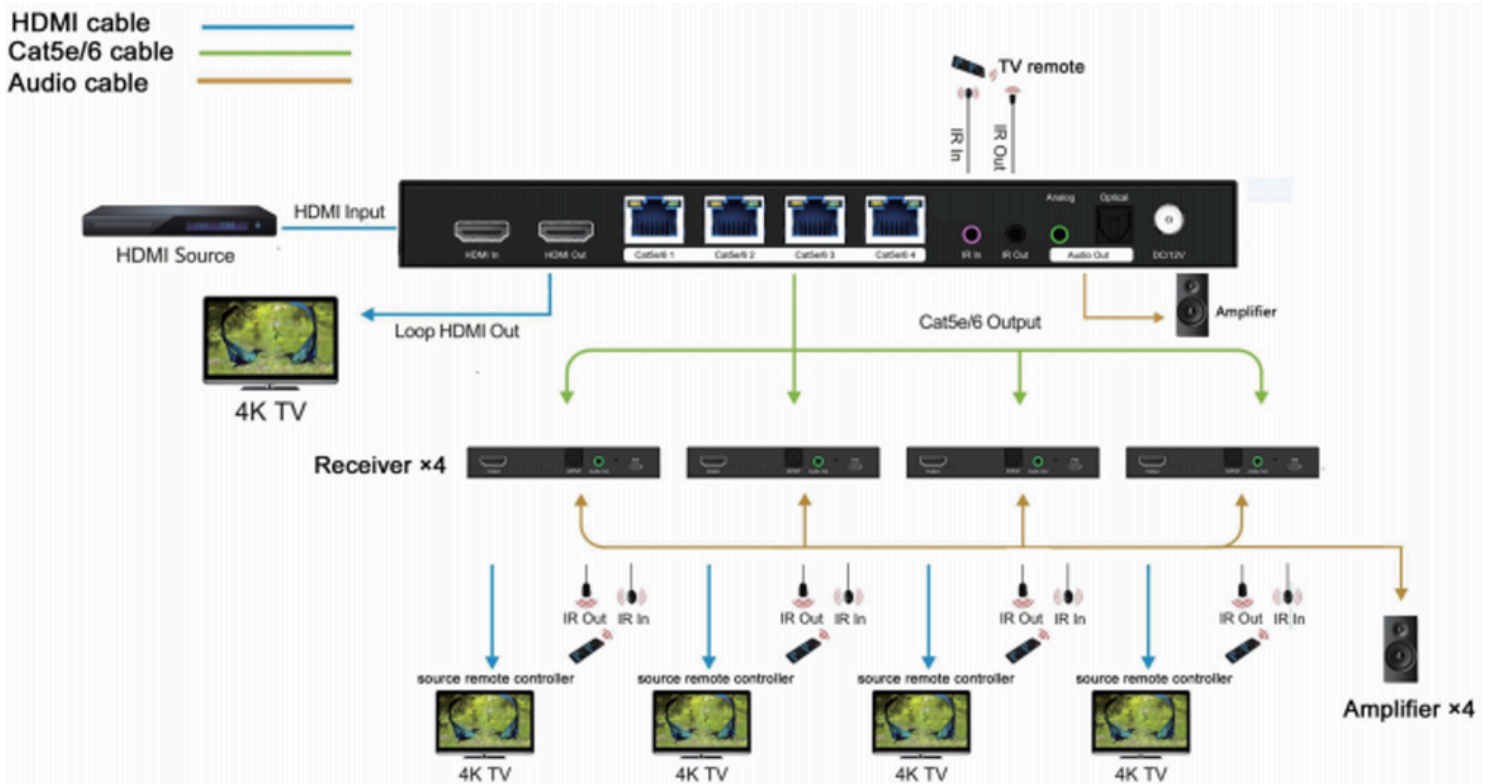


## 7. Upgrade

1. Connect between PC and product by USB cable, and open upgrade tool “UART\_ISP\_V1.7.exe”
2. Click “Refresh”, and choose correct COM
3. Baud rate: 115200
4. Type “A1” into port, choose the firmware for upgrade
5. Click “UPDATA” until successful



## 8. Connection



## 9. Maintenance

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

## 10. 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 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.

## **11. 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.

## **12. 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.



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