

## J-Tech Digital JTD-EX-120M

# J-Tech Digital JTD-EX-120M HDMI Extender User Manual

Extend Full HD 1080p HDMI Signals Over Single Cat5e/6/7 Cable with IR Control

## 1. INTRODUCTION

The J-Tech Digital JTD-EX-120M HDMI Extender is designed to transmit High-Definition Multimedia Interface (HDMI) signals over a single Cat5e/6/7 cable. This system converts the HDMI signal to standard TCP/IP for transmission, allowing for extension up to 120 meters (394 feet) while maintaining full HD 1080p resolution. It also includes Infrared (IR) extension functionality for remote control of source devices. This manual provides detailed instructions for the installation, operation, and troubleshooting of your J-Tech Digital HDMI Extender.

## 2. SAFETY INFORMATION

- Do not expose this unit to water, moisture, or excessive humidity.
- Do not place the unit on an unstable surface.
- Use only the provided power adapters. Using unauthorized power adapters may damage the device and void the warranty.
- Ensure proper ventilation around the unit to prevent overheating.
- Do not attempt to open or repair the unit yourself. Refer all servicing to qualified personnel.
- Keep the unit away from direct sunlight, heat sources, and strong magnetic fields.

## 3. PACKAGE CONTENTS

Verify that all items are present in your package:

- 1x HDMI Extender Transmitter (JTD-EX-120M)
- 1x HDMI Extender Receiver (JTD-EX-120M)
- 2x DC 5V/1A Power Adapters
- 1x IR Receiver Cable
- 1x IR Transmitter Cable

- 1x User Manual

## Packing List



Transmitter



Receiver



User Manual



x2 DCs 5.0V/1A



IR RX Cable



IR TX Cable

Image: Contents of the J-Tech Digital HDMI Extender package, including the transmitter, receiver, power adapters, IR cables, and user manual.

## 4. PRODUCT OVERVIEW

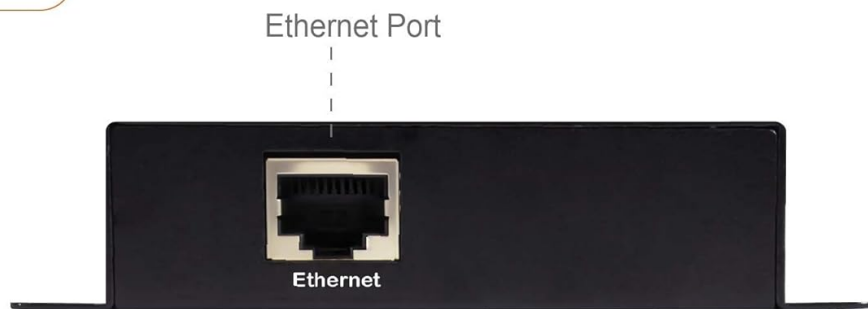
The JTD-EX-120M system consists of a Transmitter unit and a Receiver unit. Both units feature an Ethernet port for Cat5e/6/7 cable connection, HDMI ports, power ports, and IR ports.

### 4.1 Transmitter Unit



## Transmitter

Left



Right

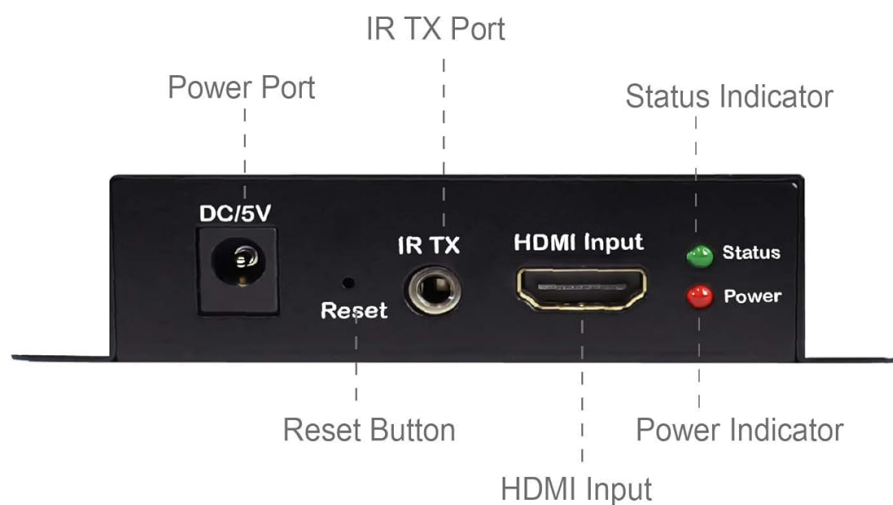


Image: Detailed view of the J-Tech Digital HDMI Extender Transmitter unit, showing the Ethernet Port, Power Port, IR TX Port, Reset Button, Status Indicator, Power Indicator, and HDMI Input.

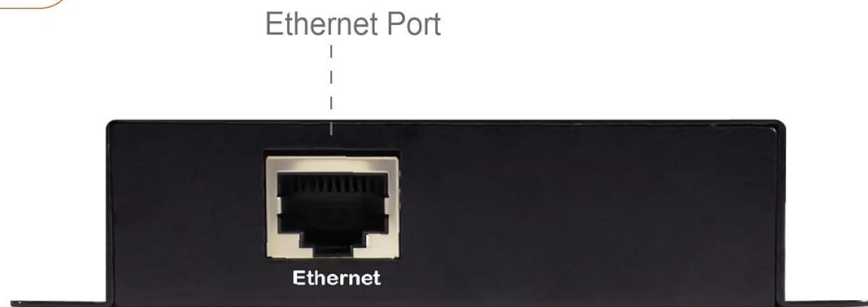
- **Ethernet Port:** Connects to the Receiver unit via Cat5e/6/7 cable.
- **Power Port (DC/5V):** Connects to the included 5V power adapter.
- **IR TX Port:** Connects to the IR Transmitter cable to send IR signals to the source device.
- **Reset Button:** Used to reset the unit.
- **HDMI Input:** Connects to the HDMI source device (e.g., Blu-ray player, cable box).
- **Status Indicator:** Indicates the operational status of the unit.
- **Power Indicator:** Indicates if the unit is receiving power.

### 4.2 Receiver Unit



## Receiver

Left



Right

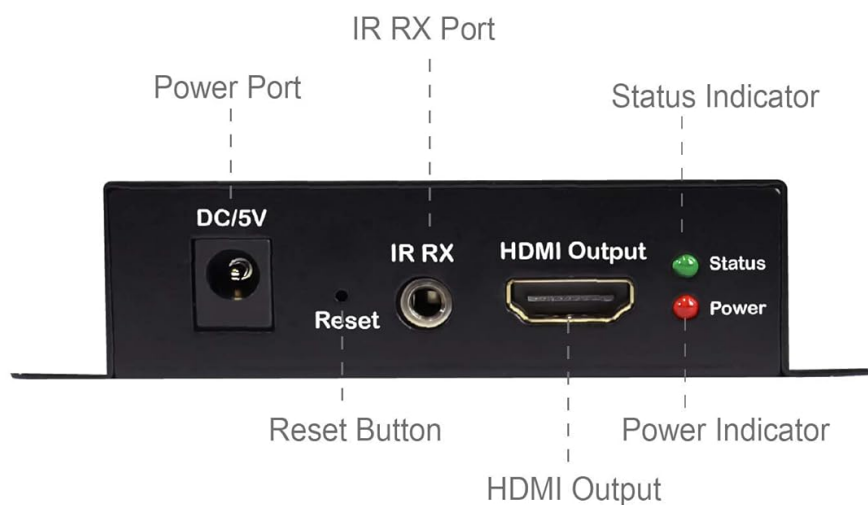


Image: Detailed view of the J-Tech Digital HDMI Extender Receiver unit, showing the Ethernet Port, Power Port, IR RX Port, Reset Button, Status Indicator, Power Indicator, and HDMI Output.

- **Ethernet Port:** Connects to the Transmitter unit via Cat5e/6/7 cable.
- **Power Port (DC/5V):** Connects to the included 5V power adapter.
- **IR RX Port:** Connects to the IR Receiver cable to receive IR signals from a remote control.
- **Reset Button:** Used to reset the unit.
- **HDMI Output:** Connects to the HDMI display device (e.g., TV, projector).
- **Status Indicator:** Indicates the operational status of the unit.
- **Power Indicator:** Indicates if the unit is receiving power.

## 5. SETUP AND INSTALLATION

Follow these steps to set up your J-Tech Digital HDMI Extender:

1. **Prepare Cables:** Ensure you have a high-quality Cat5e, Cat6, or Cat7 Ethernet cable of the appropriate length (up to 120m/394ft). Also, have your HDMI cables ready.
2. **Connect HDMI Source to Transmitter:** Connect an HDMI cable from your source device (e.g., DVD player, game console, PC) to the **HDMI Input** port on the Transmitter unit.
3. **Connect HDMI Display to Receiver:** Connect an HDMI cable from your display device (e.g., HDTV, projector) to the **HDMI Output** port on the Receiver unit.

4. **Connect Ethernet Cable:** Connect one end of the Cat5e/6/7 cable to the **Ethernet Port** on the Transmitter unit and the other end to the **Ethernet Port** on the Receiver unit.
5. **Connect IR Cables (Optional):**
  - Connect the **IR TX Cable** to the **IR TX Port** on the Transmitter unit. Position the IR emitter head near the IR sensor of your source device.
  - Connect the **IR RX Cable** to the **IR RX Port** on the Receiver unit. Position the IR receiver head in a location where it can receive signals from your remote control.
6. **Apply Power:** Connect the two included 5V power adapters to the **Power Ports (DC/5V)** on both the Transmitter and Receiver units, then plug them into power outlets. The Power Indicator LEDs on both units should illuminate.
7. **Verify Connection:** Once all connections are made and power is supplied, turn on your HDMI source and display devices. The Status Indicator LEDs on both units should show a stable connection, and the video should appear on your display.

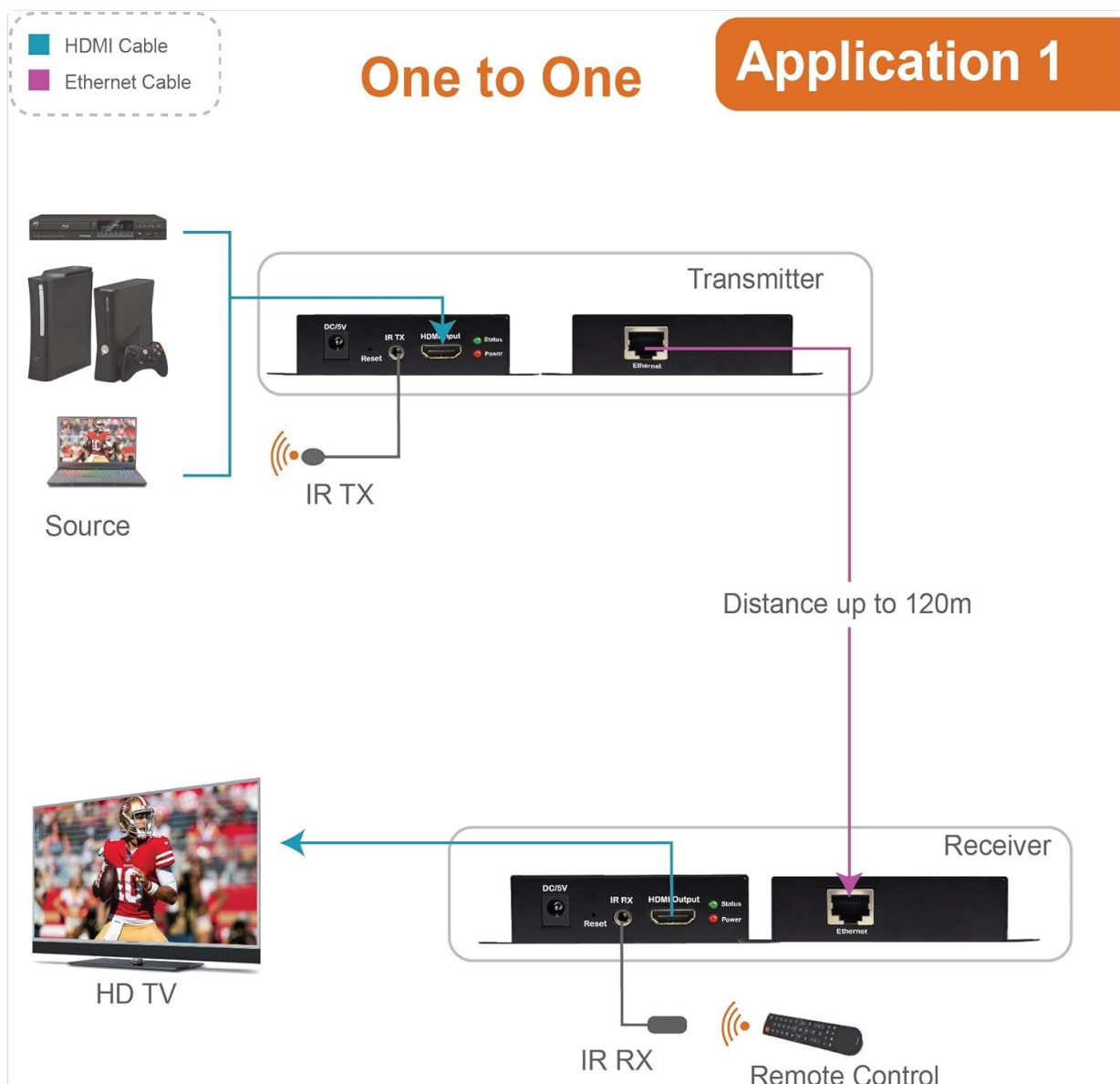


Image: Diagram illustrating a typical one-to-one setup for the J-Tech Digital HDMI Extender, showing a source device connected to the Transmitter, a Cat cable connecting Transmitter and Receiver, and the Receiver connected to an HD TV. IR cables are also shown for remote control functionality.

### 5.1 Multi-Receiver Application (via Ethernet Switch)

This extender supports a one-to-many configuration using an Ethernet switch. To achieve this, connect the HDMI Transmitter to an Ethernet switch, and then connect multiple HDMI Receivers to the same Ethernet switch. Each Receiver will then connect to its respective display.

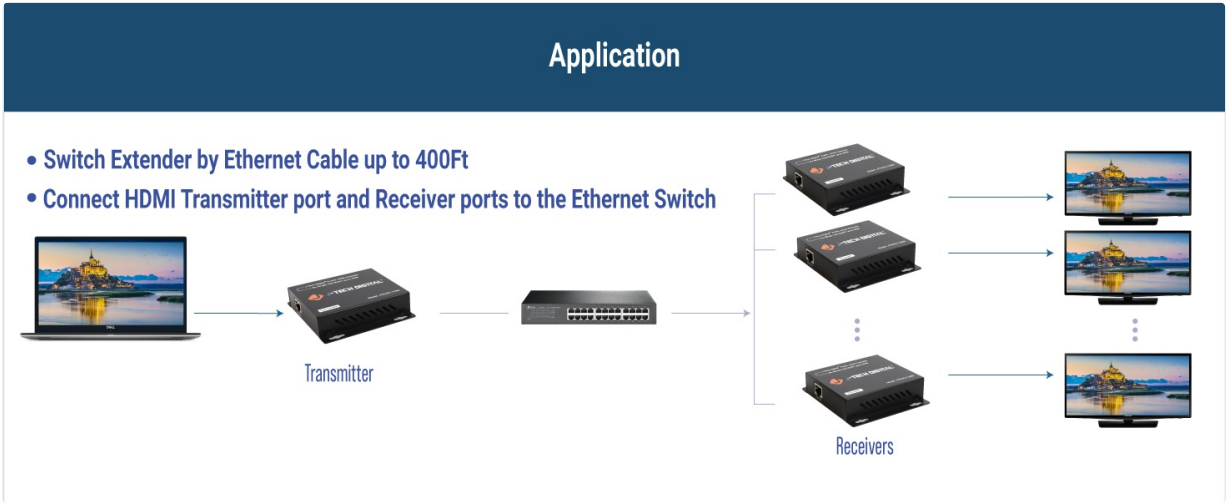


Image: Diagram showing the J-Tech Digital HDMI Extender in a multi-receiver setup. A laptop (source) connects to the Transmitter, which then connects to an Ethernet switch. Multiple Receiver units are connected to the switch, each feeding a separate display, extending the signal up to 400ft.

## 6. OPERATING INSTRUCTIONS

Once the setup is complete, the extender operates automatically. Ensure all devices are powered on in the correct sequence (source, then extender units, then display) for optimal performance.

### 6.1 IR Control Functionality

The IR extension feature allows you to control your HDMI source device from the location of your display. Point your remote control at the IR Receiver head connected to the Receiver unit. The signal will be transmitted through the Cat cable to the IR Emitter head connected to the Transmitter unit, which then relays the command to your source device.

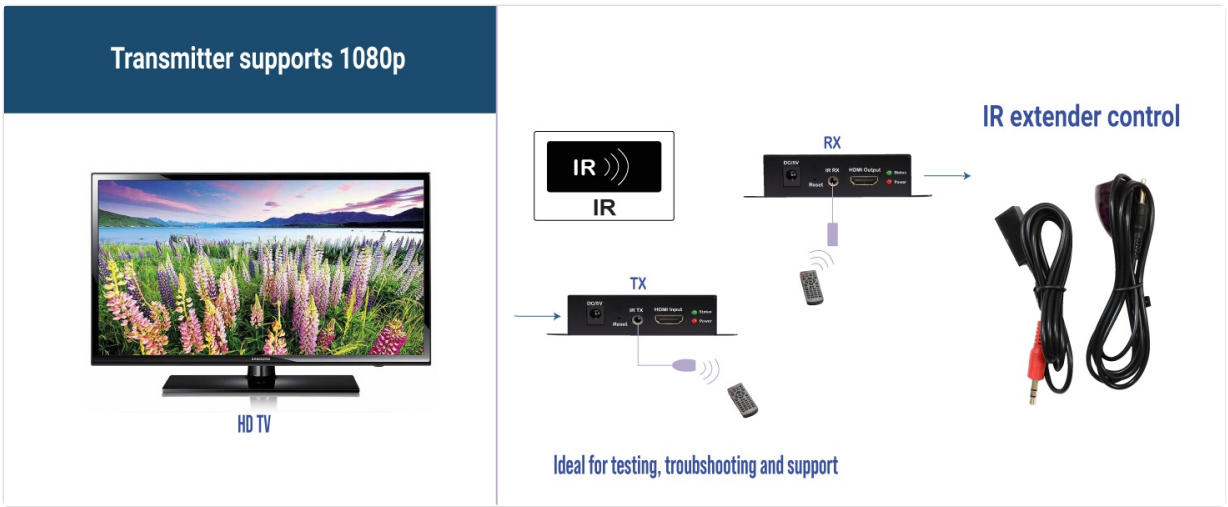


Image: Diagram illustrating the IR extender control feature. A remote control sends a signal to the IR RX connected to the Receiver unit. This signal is then transmitted via the Cat cable to the IR TX connected to the Transmitter unit, which controls the source device.

## 7. MAINTENANCE

- Clean the unit with a soft, dry cloth. Do not use liquid or aerosol cleaners.
- Keep the unit free from dust and debris to ensure proper ventilation.
- Regularly check cable connections to ensure they are secure.

## 8. TROUBLESHOOTING

If you encounter issues with your HDMI Extender, refer to the following common problems and solutions:

Problem	Possible Cause	Solution
No video or audio on display.	Loose cable connections, power issue, incorrect input selection on display.	Check all HDMI and Ethernet cable connections. Ensure both Transmitter and Receiver units are powered on. Verify the display is set to the correct HDMI input. Try restarting all devices.
Poor video quality (flickering, distortion).	Low quality or damaged Cat cable, excessive cable length, interference.	Use a high-quality Cat6 or Cat7 cable. Ensure cable length does not exceed 120m (394ft). Avoid running Cat cable near strong electrical interference sources.
IR remote control not working.	IR emitter/receiver misaligned, IR cables not connected properly.	Ensure the IR emitter is directly over or very close to the IR sensor of the source device. Confirm the IR receiver is positioned to receive signals from your remote. Check that both IR cables are securely plugged into their respective ports.
Power indicator not lit.	Power adapter not connected, faulty power outlet.	Ensure the power adapter is securely connected to the unit and a working power outlet. Try a different power outlet.

## 9. SPECIFICATIONS

Feature	Detail
Model Number	JTD-EX-120M
HDMI Version	Supports 1080p, 3D, HDCP
Audio Support	Dolby TrueHD, DTS Master Audio
Transmission Distance	Up to 120m (394ft) over single Cat5e/6/7 cable
Video Color Support	36bit (CAT7); 24bit (CAT6)
Image Compression	M-JPEG technique (no image quality loss)
IR Extension	Yes
Power Supply	DC 5V/1A (x2)
Product Dimensions	4 x 3 x 1 inches (each unit)
Item Weight	1 pound (total)





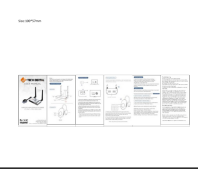


## 10. WARRANTY AND SUPPORT

J-Tech Digital products are designed for reliability and performance. For warranty information and technical support, please refer to the official J-Tech Digital website or contact their customer service directly. Contact information is typically provided in the product packaging or on the manufacturer's website.

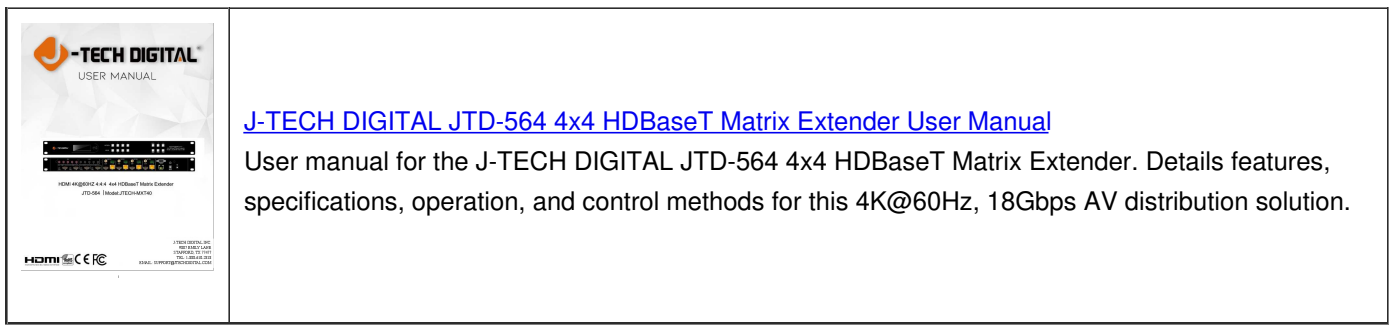
**Manufacturer:** J-Tech Digital INC

**Website:** [www.jtechdigital.com](http://www.jtechdigital.com)

### Related Documents - JTD-EX-120M

	<p><a href="#">J-Tech Digital JTECH-EX100M HDMI Ethernet Extender User Manual</a></p> <p>User manual for the J-Tech Digital JTECH-EX100M, a 1080P 60Hz HDMI Ethernet Extender that supports up to 328ft transmission over a single CAT5E/CAT6 cable, featuring IR pass-through and H.265 encoding.</p>
	<p><a href="#">J-Tech Digital ARC &amp; SPDIF Audio Extender 492ft (JTD-3081) User Manual</a></p> <p>User manual for the J-Tech Digital JTD-3081, an HDMI ARC and SPDIF audio extender that supports transmission up to 492 feet (150 meters) over a single CAT5e/CAT6 cable. Includes setup, features, specifications, and troubleshooting.</p>
	<p><a href="#">J-Tech Digital JTECH-WDEX-50M2 Wireless HDMI Extender User Manual</a></p> <p>User manual for the J-Tech Digital JTECH-WDEX-50M2 Wireless HDMI Dongle Extender. Learn about hardware and software casting, pairing, settings, troubleshooting, and warranty information.</p>
	<p><a href="#">J-TECH DIGITAL JTDHDEX-1P 1080P HDMI Extender User Manual   PoC, 200ft</a></p> <p>Comprehensive user manual for the J-TECH DIGITAL JTDHDEX-1P 1080P 60Hz HDMI over Ethernet Extender with PoC. Learn about features, specifications, installation, EDID copy function, and warranty.</p>
	<p><a href="#">J-TECH DIGITAL JTD-3023 4K@120Hz HDMI Extender User Manual</a></p> <p>User manual for the J-TECH DIGITAL JTD-3023 HDMI over Ethernet extender, detailing features, specifications, installation, and warranty for 4K@120Hz resolution up to 150ft.</p>





## [J-TECH DIGITAL JTD-564 4x4 HDBaseT Matrix Extender User Manual](#)

User manual for the J-TECH DIGITAL JTD-564 4x4 HDBaseT Matrix Extender. Details features, specifications, operation, and control methods for this 4K@60Hz, 18Gbps AV distribution solution.

## Documents - J-Tech Digital – JTD-EX-120M

### [\[pdf\]](#) Datasheet

artisantg info J Tech Digital JTD EX 120M Datasheet 2020915115255 All trademarks brand names and brands appearing herein are the property of their respective owners Artisan Scientific Corporation dba Technology Group is not an affiliate representative or authorized distributor for any manufacturer listed

Documents Site Map |||

-I -- ARTISAN TECHNOLOGY GROUP Your definitive source for quality pre-owned equipment. Artisan Techn ... nd brands appearing he rein are the pro perty of their respective owne rs. Find the J-Tech Digital **JTD-EX-120M** at our website: Click HERE 9/15/2020 J-Tech Digital HDMI Extender Over TCP/IP Etherne...

lang:en score:42 filesize: 4.39 M page\_count: 5 document date: 2020-10-04



### [\[pdf\]](#) User Manual Instructions

JTD 791 792 User Manual DAFxvO2RLTA BAFVmscAsrs J Tech Digital Inc AV iQThe EX 120M UN T transmitter works in conjunction with R receiver and allows users to use these extenders a point cdn docs av iq other |||

V2.0.1 USER MANUAL HDMI Extender By Single Ethernet Cable up to 400ft. JTD-791 JTECH-EX-120M-UN-T ... ervices 13 13. Limited Warranty Limits and Exclusions 13 4 1. Introduction The J-Tech Digital **JTD-EX-120M-UN-T** transmitter works in conjunction with **JTD-EX-120M-UN-R** receiver and allows users to...

lang:en score:36 filesize: 1.56 M page\_count: 14 document date: 2023-10-19

### [\[pdf\]](#) User Manual Frequently Asked Questions Specifications Warranty

JTD 791 792 User Manual DAFxvO2RLTA BAFVmscAsrs J Tech Digital Inc 1080P 60Hz HDMI Extender Balun Over Ethernet For AV IP System 400ft Transmitterjtd user manual v2 1cdn sanity io files in2xx5vb development 99733752a7a077d1357248e335bd663cebd995ab TransmitterJ 1080p Receiverjtd 99733752a7a077d1357248e335bd663cebd995abcdn 8uyhk74v production ||| ||| USER MANUALV2.0.1 HDMI Extender By Single Ethernet Cable up to 400ft. JTD-791 JTECH-EX-120M-UN-T Transmitter JTD-792 JTECH-EX-120M-UN-R REceiver J-TECH DIGITAL INC. 9807 EMILY LANE STAFFORD, TX 77477 TEL: 1-888-610-2818 E-MAIL: SUPPORT@JTECH

USER MANUALV2.0.1 HDMI Extender By Single Ethernet Cable up to 400ft. JTD-791 JTECH-EX-120M-UN-T ... ervices 12 13. Limited Warranty Limits and Exclusions 12 3 1. Introduction The J-Tech Digital **JTD-EX-120M-UN-T** transmitter works in conjunction with **JTD-EX-120M-UN-R** receiver and allows users to...

lang:en score:36 filesize: 4.48 M page\_count: 12 document date: 2023-11-06



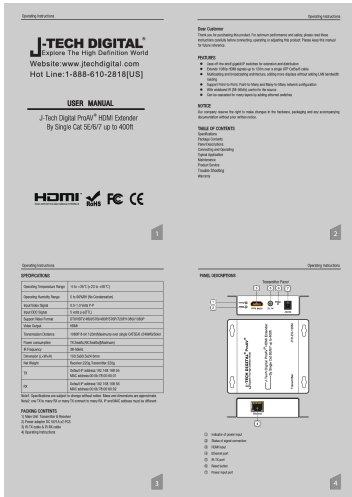


## [\[pdf\]](#) User Manual Instructions

JTD 791 792 User Manual DAFxvO2RLTA BAFVmscAsrs J Tech Digital Inc Amazon ® ProAV Unlimited N x HDMI Extender Over Ethernet Cat6 Matrix 12X12 8X8 Switch Switcher by Single Cable up to 400ft Transmitter Electronics A1KQvHeBF L m media amazon images I |||

V2.0.1 USER MANUAL HDMI Extender By Single Ethernet Cable up to 400ft. JTD-791 JTECH-EX-120M-UN-T ... services 13 13. Limited Warranty Limits and Exclusions 13 4 1. Introduction The J-Tech Digital **JTD-EX-120M-UN-T** transmitter works in conjunction with **JTD-EX-120M-UN-R** receiver and allows users to...

lang:en score:35 filesize: 1.56 M page\_count: 14 document date: 2023-10-19



## [\[pdf\]](#) User Manual Instructions

JTD EX 120M Operating Instructions AV iQ6 Connect IR RX cable into port on the receiver and affix in direct line of site with handheld remote control It is recommended JTD 172 User Manualcdn docs av iq instructions Manual iQOperating recommended 6 ManualJTD 120M 1 Indicator power input 2 Status signal J Tech Digital ProAV HDMI Extender Cat5e 6 ExtenderJTD Manualv1cdn 87 |||

...

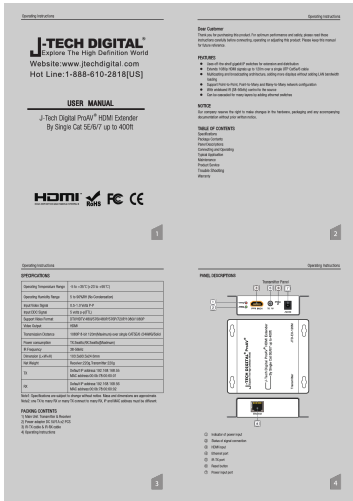
lang:en score:30 filesize: 4.5 M page\_count: 3 document date: 2016-03-01



## [\[pdf\]](#) Accessories Catalog

CATALOG J Tech Digital Catalog 2018 jtechdi1 nextmp net page 9048 |||

CATALOG 2017-2018 Company Introduction J-Tech Digital, based in Sugar Land, Texas, was founded in ... eral receivers Supported IR frequency range of 38 kHz to 56 kHz JTD-230 ProAV 1080p HDMI Extender **JTD-EX-120M** Supports 1080p resolutions up to 394 feet Supports TCP/IP protocols. IP/MAC addresses c... lang:en score:25 filesize: 2.44 M page\_count: 19 document date: 2018-05-21



## [pdf] User Manual

JTD EX 120M update 87 user manual J Tech Digital Note2 one TX to many RX or connect IP and MAC address must be different Ethernet PACKING CONTENTS 1 Main Unit jtechdigital woocommerce product jtd Title Created Date 3 31 2021 10 30 36 AM

...

lang:en score:22 filesize: 2.88 M page\_count: 3 document date: 2021-03-31



## [pdf] Catalog

J Tech Digital Catalog 24 25 DAF8nMhIZs BAFVmscAsrs Inc jtechdigital other ||| Product Catalog 2024 - 2025 888 610-2818 sales jtechdigital.com support jtechdigital.com www.jte ... www.jtechdigital.com 22 support jtechdigital.com sales jtechdigital.com AV over IP 23 JTD-87 **JTD-EX-120M** 1080P HDMI Extender Over Ethernet TCP/IP 400ft. Features AV Over IP Utilizes TCP/IP ...

lang:en score:22 filesize: 32.78 M page\_count: 59 document date: 2024-02-20

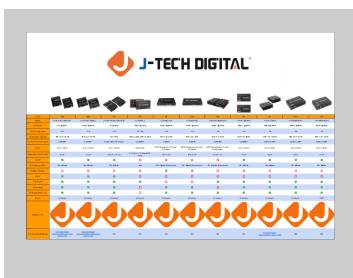


## [pdf] Catalog

2019 2020 CATALOG J Tech Digital HDMI Switch w j t e c h d i g a l o m JTD4KSP0501 JTD 136 5x1 4K Aluminum JTECH B S31 372 Direction 3x1 HDMI2 0 18G SW3 383 3 Port HDR catalog JTD2019 digital version619 compression jtechdigital other Based in Sugar Land TX Inc has become premier industry leader audio and video solutions for both residential

2019-2020 CATALOG www.jtechdigital.com Company Introduction Based in Sugar Land, TX, J-Tech Digi ... several receivers Supported IR frequency range of 20 kHz to 60 kHz Additional receivers available **JTD-EX-120M-R** - JTD-172 JTD-8473 1080p HDMI Extender JTD-EX-100M-IR Supports 1080p resolutions up...

lang:en score:21 filesize: 5 M page\_count: 44 document date: 2019-06-19

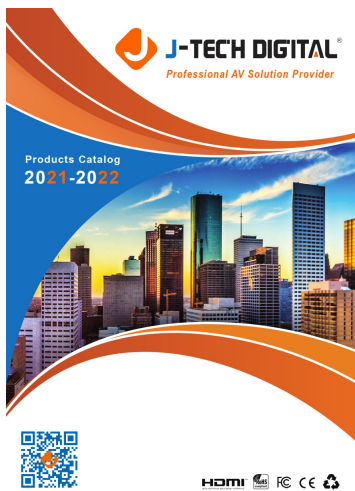


## [pdf]

Wired HDMI Non HDBaseT J Tech Digital HDbiT One to Many IR Support RX TX Power 5V Adapter Sheet1 jtechdigital post 116421 |||

JTD-ID Model Resolution HDCP Compliance Transmission Distance TX - RX Connection Cable 293 JTECH-EX ... 38 - 56kHz 5V Adapter 5V Adapter 5V Adapter 5V Adapter 5V Adapter 5V Adapter 5V Adapter 87 **JTD-EX-120M** 1080P 60Hz 1.4 394 Feet / 120M Cat5e / Cat6/7 Built-in EDID 2 CH 20 - 60kHz 5V Adapter...

lang:en score:21 filesize: 748.09 K page\_count: 1 document date: 0000-00-00



#### [pdf] Catalog

jtech catalog 2021 2022 final Professional AV Solution Provider J Tech Digital Catalog jtechdigital other ||| Professional AV Solution Provider Products Catalog 2021-2022 Company Introduction Based in Sugar L ... ransmission Distance 200 FT over CAT6 HDMI 1080p DTS-HD Dolby Digital EDID IR 200FT CAT6 JTD-87 **JTD-EX-120M** 1080p 400 FT AV Over IP AV Over IP Utilizes TCP/IP to allow interoperability with... lang:en score:21 filesize: 10.8 M page\_count: 60 document date: 2021-09-24



#### [pdf] Catalog

J Tech Digital Catalog 24 25 DAF8nMhIZs BAFVmscAsrs Inc Home v 1741718276 cdn shopify s files 1 0250 0175 4708 ||| Product Catalog 2024 - 2025 888 610-2818 sales jtechdigital.com support jtechdigital.com www.jte ... ww.jtechdigital.com 22 support jtechdigital.com sales jtechdigital.com AV over IP 23 JTD-87 **JTD-EX-120M** 1080P HDMI Extender Over Ethernet TCP/IP 400ft. Features AV Over IP Utilizes TCP/IP ... lang:en score:20 filesize: 3.49 M page\_count: 59 document date: 2025-03-11



#### [pdf] Catalog

2019 CATALOG catalog JTD2019 review jtechdigital other ||| 2019 CATALOG www.jtechdigital.com Company Introduction Based in Sugar Land, TX, J-Tech Digital, I ... o several receivers Supported IR frequency range of 20 kHz to 60 kHz Additional receivers available **JTD-EX-120M-R** - JTD-172 JTD-8473 1080p HDMI Extender JTD-EX-100M-IR Supports 1080p resolutions up... lang:en score:17 filesize: 23.45 M page\_count: 44 document date: 2019-05-10