



J-TECH DIGITAL[®]

V2.0.1

USER MANUAL



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)

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Scan the QR code below or visit <https://resource.jtechdigital.com/?q=JTECH-EX-120M-UN-> 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. 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 use these extenders in a point - point, point - many, or many to many configurations. The point - many, and many to many configurations can be achieved using the JTECH-NS24 or JTECH-NS48 A/V over IP gigabit ethernet switch. Distribute 1080P 60Hz audio/video signals up to 400ft. using these extenders, and take advantage of the IR function that allows you to control your source device from the displays location.

2. Features

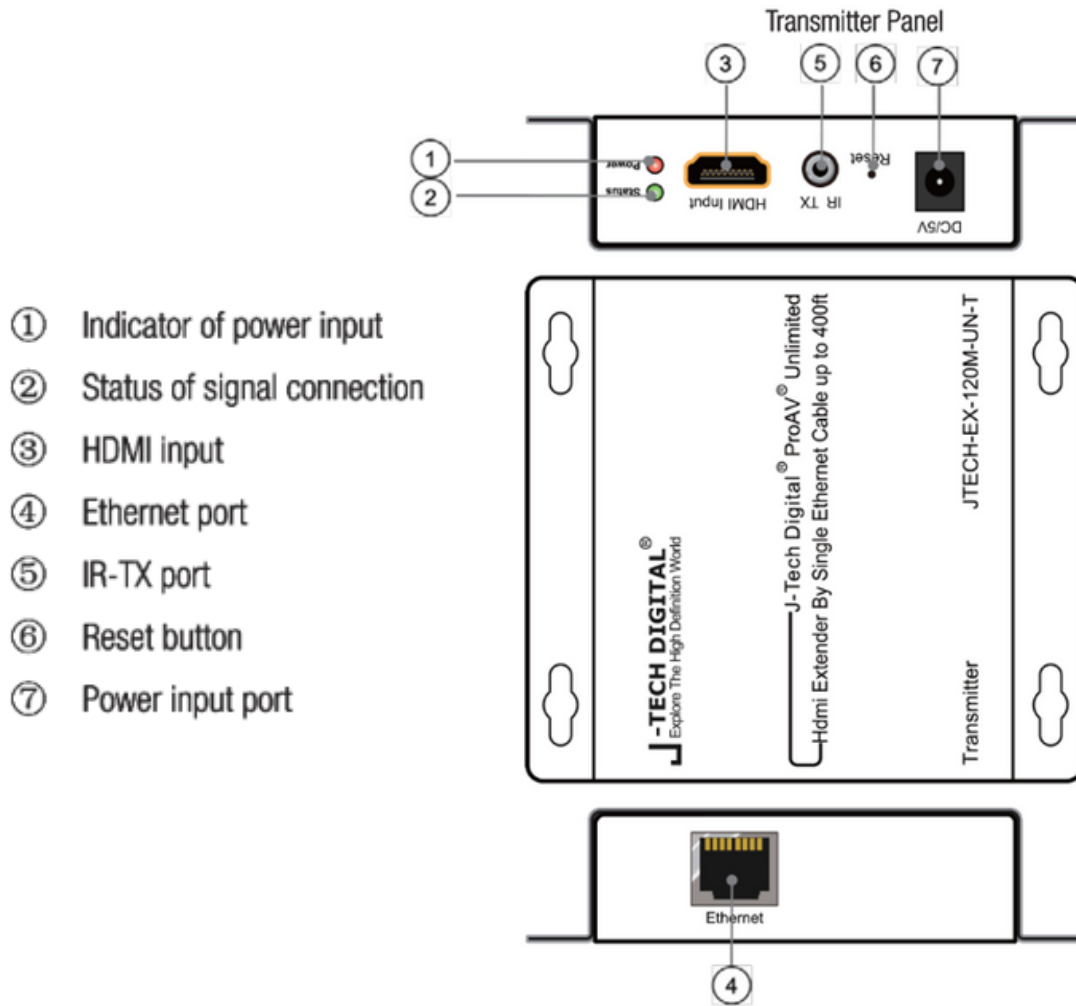
- Extend 1080P HDMI signals up to 400ft. over a single UTP Cat5e/6 cable
- Offers multicasting and broadcasting functions, allowing you to add more displays without adding LAN bandwidth
- Wideband IR (38-56kHz) to control source device from displays location
- Supports point-point, point- many, and many-many configurations
- For optimal performance in point-many or many-many modes, we recommend using our JTECH-NS24 or JTECH-NS48 port A/V over IP gigabit ethernet switch

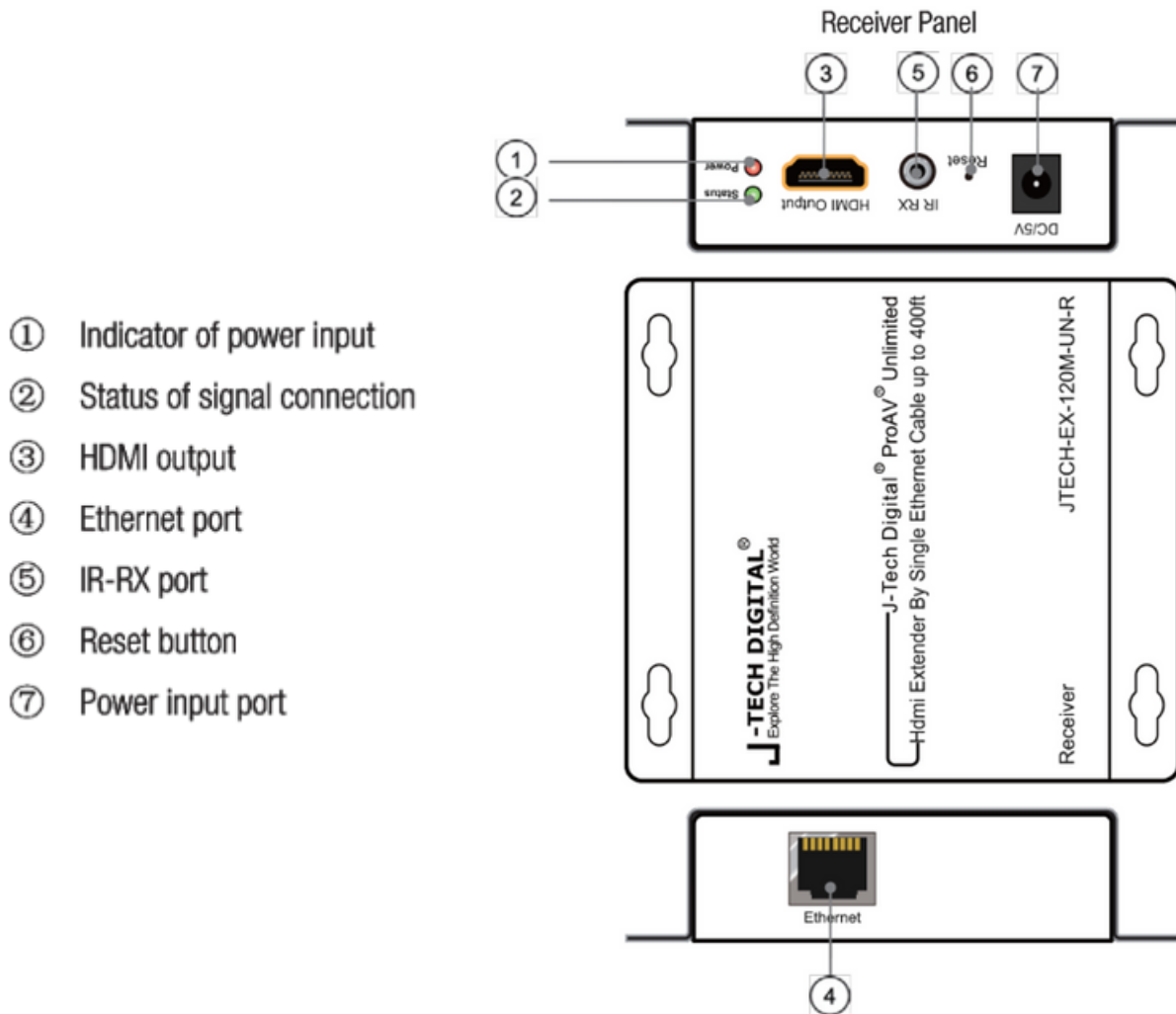
3. Specifications

Operating Temperature Range	-5 to +35 °C(+23 to +95 °C)
Operating Humidity Range	5 to 90%RH (No Condensation)
Input Video Signal	0.5-1.0 Volts P-P
Input DDC Signal	5 volts p-p(TTL)
Support Video Format	DTV/HDTV:480i/576i/480P/576P/720P/1080i/1080P
Video Output	HDMI
Transmission Distance	1080P 8-bit 120m(Maximum) over single CAT5E/6 /24AWG/Solid
Power consumption	TX:3watts;RX:3watts((Maximum)
IR Frequency	38-56kHz
Dimension (L×W×H)	103.5x93.5x24.6mm
Net Weight	Receiver:220g,Transmitter:220g

TX	Default IP address:192.168.168.55 MAC address:00:0b:78:00:60:01
RX	Default IP address:192.168.168.56 MAC address:00:0b:78:00:60:02

4. Panel Description





- ① Indicator of power input
- ② Status of signal connection
- ③ HDMI output
- ④ Ethernet port
- ⑤ IR-RX port
- ⑥ Reset button
- ⑦ Power input port

5. Package Contents

- (1) x Transmitter
- (1) x IR-TX Cable
- (1) x DC5V/1A Power Adapter
- (1) x User Manual

6. Connecting and Operating

- Connect the HDMI source device (such as Blu-ray, Media Player, Laptop etc.) to the HDMI port on the transmitter
- Connect a Cat5e/6 cable to the ethernet ports of both the transmitter and the receiver units (The cables must follow the standard of EIA-TIA 568B)
- Connect the HDMI display to the HDMI port on the receiver
- Connect the power supply for both the transmitter and the receiver

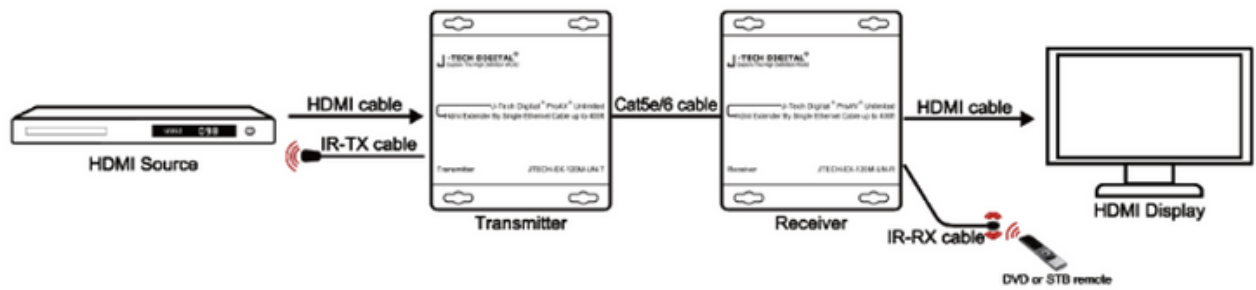
- Plug in the IR-TX cable in to the IR port on the transmitter, and the IR-RX cable in to the IR port on the receiver

*Note:

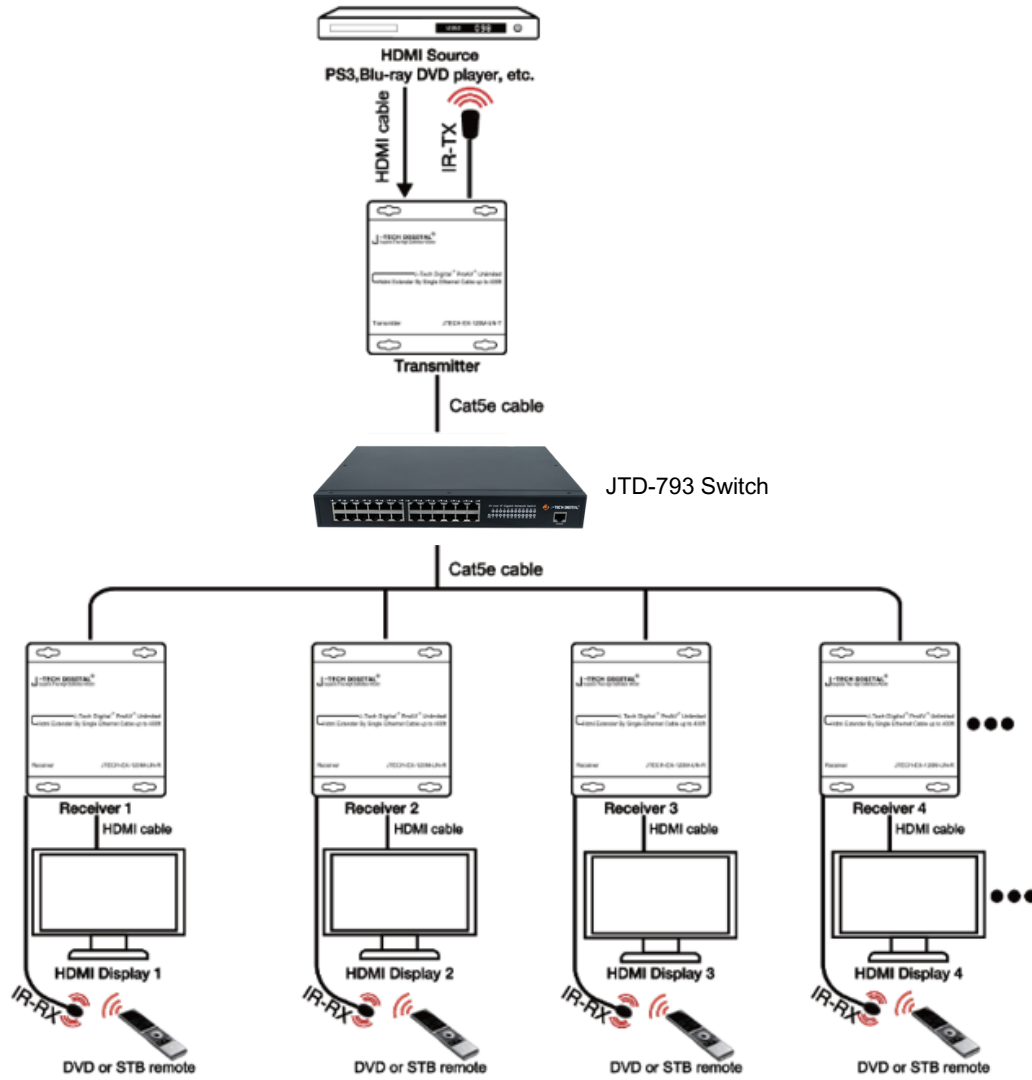
- Place the IR transmitter cable's emitter bulb directly in front of the source devices' IR window
- Ensure that the IR receiver is in direct line of sight with the remote control of the source device
- Insert/extract cables gently

7. Typical Applications

- Point - Point

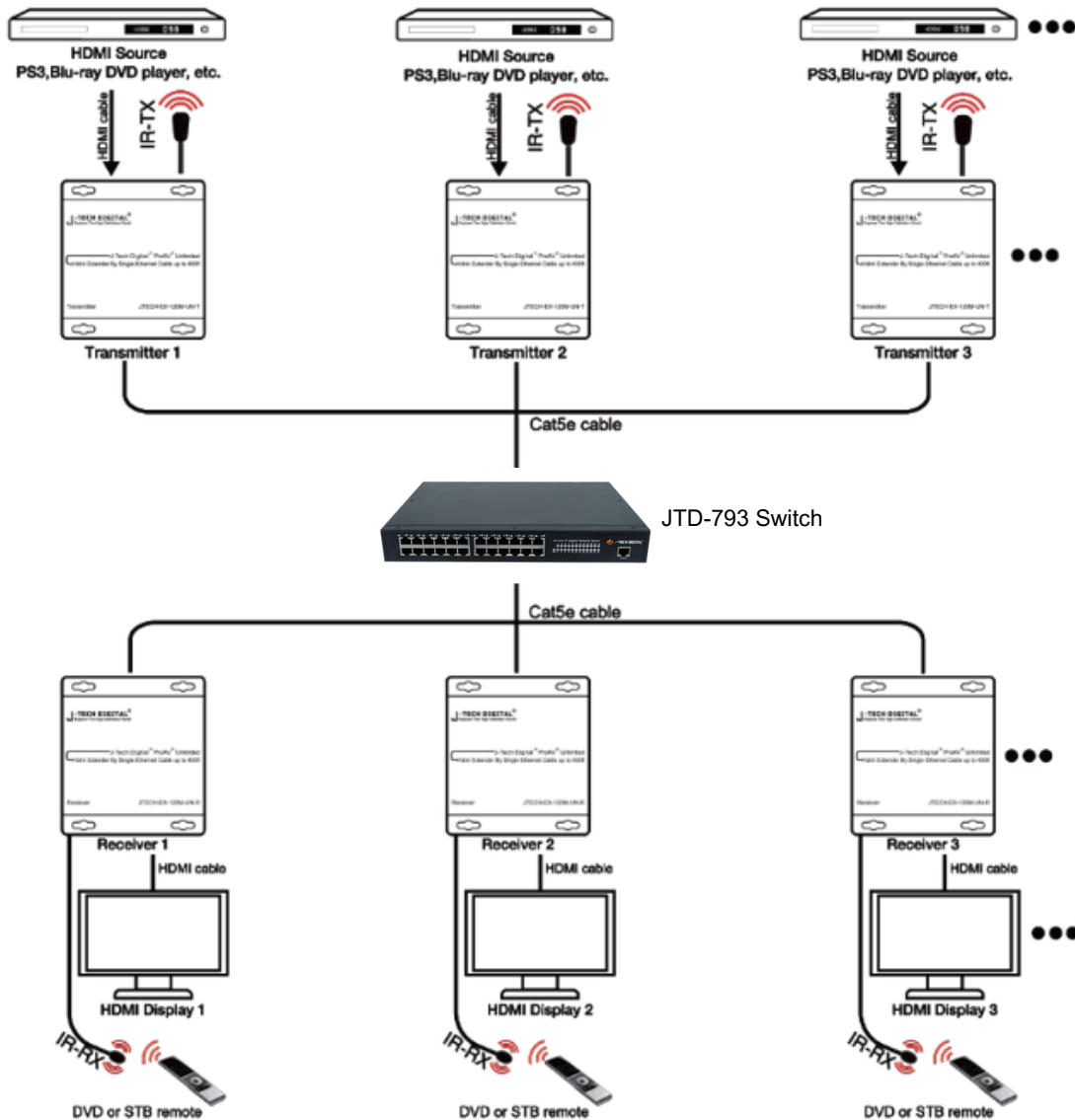


. Point - Many



 Note Connect HDMI Transmitter port and Receiver ports to the Ethernet Switch

• Many - Many



8. Transmitter / Receiver IP and MAC Address Setup

An HTTP server is embedded in each transmitter and receiver. You can set up IP address for these extenders via web browser.

- The default IP address of the TX is **192.168.168.55**, MAC address is **00:0b:78:00:60:01**
- The default IP address of the RX is **192.168.168.56**, MAC address is **00:0b:78:00:60:02**

Step 1: Assign the PC (or laptop) a static IP address. “Control Panel > Network Connections > Local Area Connection Status > Properties > Internet Protocol (TCP/IP)”. In the IP address field, type 192.168.168.11 and subnet mask 255.255.255.0. Press OK to save.

Note: The IP address of the PC should be different from the IP address of TX and RX.

Step 2: Use an ethernet cable to connect the PC (or laptop) to the extender unit. The extenders status light should turn green.

Step 3: Ping the connected device through command prompt. "Start > Run > Type CMD and hit Enter > Input "ping 192.168.168.55" for transmitter or "ping 192.168.168.56" for receiver. If the connection is established, you will receive a reply after pinging.

Step 4: Open a browser and type in 192.168.168.55 for transmitter or 192.168.168.56 for receivers web interface login page. Here, you can set up the extender units IP address, subnet mask, gateway, and MAC address. If using for point - many configuration, ensure that each receiver has a unique IP address and MAC address. If using for many - many configuration, ensure that each transmitter and receiver have a unique IP and MAC address.

Step 5: Click Apply and the green light on the extender units will briefly go out. This mean that you have successfully set the IP address and MAC address for your units.

Note: If you need to restore the devices to their factory settings, follow these steps:

- Power on the device and the red light should appear
- Wait about 10 seconds and the green light should appear
- At this time, press the reset button for 7-10 seconds, the green light will go out meaning that you have successfully restored the unit to factory IP and MAC address

9. Frequently Asked Questions

1) What kind of ethernet cable should be used?

A. We recommend using Cat5e/6 Solid 24AWG UTP Cable. For optimal performance, use J-Tech Digital ethernet cables which can be found on our website.

2) Can I use these transmitter and receivers with other models?

A. No. The J-Tech Digital JTD-EX-120M-UN-T transmitter only works with the JTD-EX-120M-UN-R receivers.

3) Do these models supports 4K resolution?

A. No, these units support up to 1080P 60Hz.

4) What kind of switch is required for a point-many or many-many configuration?

A. You can use a managed switch with VLAN function for a point-many or many-many configuration, but we recommend using the JTD-793 24-port A/V over IP ethernet switch or the JTD-636 48-port A/V over IP ethernet switch with these extenders since our switches have a custom web-interface to help with input/output routing.

5) Do these extenders support bi-directional IR?

A. No, these unit only support IR one way allowing you to control your source device from the displays location.

6) While using it in a point-many or many-many configuration, there is noticeable video and audio stuttering. What could be the issue?

A. By default, all transmitters and receivers are flashed with the same IP and MAC address. While using for a point-many configuration, ensure that all receivers being used have a unique IP and MAC address. While using for a many-many configuration, ensure that all transmitters and receivers have a unique IP and MAC address. Having matching IP and MAC addresses between different transmitters and receivers could cause issues within the setup such as audio/video stuttering.

- The default IP address of the TX is **192.168.168.55**, MAC address is **00:0b:78:00:60:01**
- The default IP address of the RX is **192.168.168.56**, MAC address is **00:0b:78:00:60:02**

10. Maintenance

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

11. 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.

12. 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.

13. 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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