

# ANI-0104POE

HDMI POE 1x4 Splitter Over CAT5e/6 Extender





## SAFETY INFORMATION



1. To ensure the best results from this product, please read this manual and all other documentation before operating your equipment. Retain all documentation for future reference.
2. Follow all instructions printed on unit chassis for proper operation.
3. To reduce the risk of fire, do not spill water or other liquids into or on the unit, or operate the unit while standing in liquid.
4. Make sure power outlets conform to the power requirements listed on the back of the unit. Keep unit protected from rain, water and excessive moisture.
5. Do not attempt to clean the unit with chemical solvents or aerosol cleaners, as this may damage the unit. Dust with a clean dry cloth.
6. Do not use the unit if the electrical power cord is frayed or broken. The power supply cords should be routed so that they are not likely to be walked on or pinched by items placed upon or against them, paying particular attention to cords and plugs, convenience receptacles, and the point where they exit from the appliance.
7. Do not force switched or external connections in any way. They should all connect easily, without needing to be forced.
8. Always operate the unit with the AC ground wire connected to the electrical system ground. Precautions should be taken so that the means of grounding of a piece of equipment is not defeated.
9. AC voltage must be correct and the same as that printed on the rear of the unit. Damage caused by connection to improper AC voltage is not covered by any warranty.
10. Turn power off and disconnect unit from AC current before making connections.
11. Never hold a power switch in the "ON" position.
12. This unit should be installed in a cool dry place, away from sources of excessive heat, vibration, dust, moisture and cold. Do not use the unit near stoves, heat registers, radiators, or other heat producing devices.
13. Do not block fan intake or exhaust ports. Do not operate equipment on a surface or in an environment which may impede the normal flow of air around the unit, such as a bed, rug, carpet, or completely enclosed rack. If the unit is used in an extremely dusty or smoky environment, the unit should be periodically "blown free" of foreign dust and matter.
14. To reduce the risk of electric shock, do not remove the cover. There are no user serviceable parts inside. Refer all servicing to qualified service personnel. There are no user serviceable parts inside.
15. When moving the unit, disconnect input ports first, then remove the power cable; finally, disconnect the interconnecting cables to other devices.
16. Do not drive the inputs with a signal level greater than that required to drive equipment to full output.
17. The equipment power cord should be unplugged from the outlet when left unused for a long period of time.
18. Save the carton and packing material even if the equipment has arrived in good condition. Should you ever need to ship the unit, use only the original factory packing.
19. Service Information Equipment should be serviced by qualified service personnel when:
  - A. The power supply cord or the plug has been damaged.
  - B. Objects have fallen, or liquid has been spilled into the equipment.
  - C. The equipment has been exposed to rain.
  - D. The equipment does not appear to operate normally, or exhibits a marked change in performance.
  - E. The equipment has been dropped, or the enclosure damaged.

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**DEAR CUSTOMER**

Thank you for purchasing this product. For optimum performance and safety, please read these instructions carefully before connecting, operating or adjusting this product. Please keep this manual for future reference.

**INTRODUCTION**

The ANI-0104POE splits a single HDMI signal into five (5) separate signals (1 local, 4 remote), transmitting a 1080p (60Hz) signal to (4) monitors up to 150 ft. away using a CAT5e/6 cable. The ANI-0104POE allows for the video source to be in a secure, remote location for controlled access while still delivering a signal to devices in other areas. The receivers obtain power from the base unit over the same CAT5e/6 cable (PoE). This eliminates the need for an additional power outlet at each receiver.

The ANI-0104POE 4-Port HDMI over CAT5/6 Extender/Splitter allows extension of a HDMI signal beyond the 15 ft. (5M) distance limitation. The ANI-0104POE can extend a 1080p (60Hz) resolution up to 150 ft. Supports 24bit True Color (8bits per channel), HDCP, 3D and both stereo audio and 7.1 channel surround sound audio (7.1 channel surround sound signal will be Multi-Channel or PCM). Installation is simple. Connect the ANI-0104POE transmitter to a HDMI source using a HDMI cable (not included). Connect the ANI-0104POE receivers (included) to each display using a HDMI cable (not included). Finally, each remote receiver is connected to a RJ-45 port on the ANI-0104POE using a single CAT5e/6 cable. For maximum distance performance, always use 24 AWG Solid Wire CAT5e/6 cable.

The ANI-0104POE includes surface mounting hardware enabling it to be installed in any venue. A rack mount option is available separately. This unit has a 3 year warranty.

**PACKAGE CONTENTS**

Before attempting to use this unit, please check the packaging and make sure the following items are contained in the shipping carton:

- ANI-0104POE HDMI Splitter
- (4) Receivers
- (1) Wideband IR Tx
- (4) Wideband IR Rx
- (2) Surface Mounting brackets (Main unit only)
- (1) 12V 2.5A DC Power Supply adapter - Main Unit
- Users Guide
- *Optional: 19 in EIA Rackmount*

**SAFETY PRECAUTIONS**

Please read all instructions before attempting to unpack, install or operate this equipment and before connecting the power supply. Please keep the following in mind as you unpack and install this equipment:

- Always follow basic safety precautions to reduce the risk of fire, electrical shock and injury to persons.
- To prevent fire or shock hazard, do not expose the unit to rain, moisture or install this product near water.
- Never spill liquid of any kind on or into this product.
- Never push an object of any kind into this product through any openings or empty slots in the unit, as you may damage parts inside the unit.
- Do not attach the power supply cabling to building surfaces.
- Use only the supplied power supply unit (PSU). Do not use the PSU if it is damaged.
- Do not allow anything to rest on the power cabling or allow any weight to be placed upon it or any person walk on it.
- To protect the unit from overheating, do not block any vents or openings in the unit housing that provide ventilation and allow for sufficient space for air to circulate around the unit.

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## FEATURES

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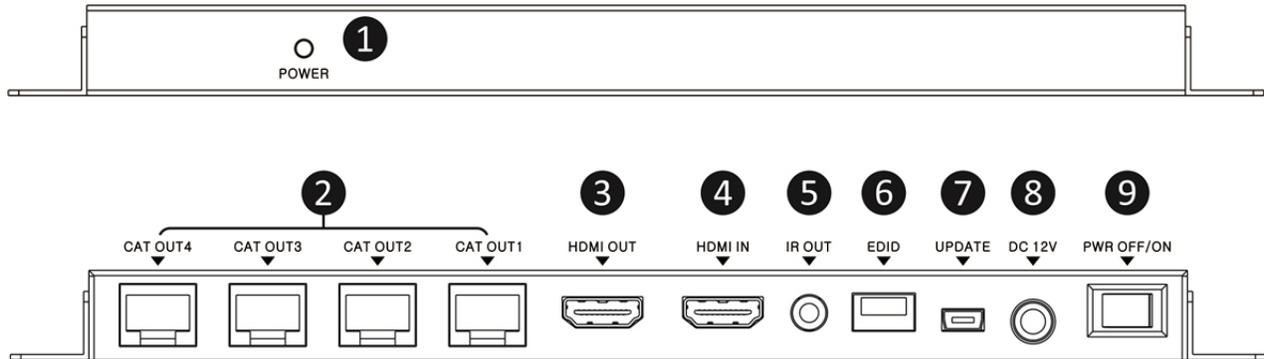
- HDMI 1.3, HDCP 1.2 and DVI 1.0 compliant
- Full HD support: 1080p@60Hz@24bit/pixels
- Supports LPCM 7.1CH, Dolby True HD and DTS-HD master audio
- Operates for TMDS clock frequencies up to 148.5MHz
- Supports Power Over Ethernet function
- Uses a single UTP LAN cable (CAT5E/6) as a substitute for a HDMI cable to achieve long distance transmission
- UTP cable termination follows IEEE-568B standards
- Supports EDID control via EDID selector
- The ANI-0104POE is **NOT** compatible with EZ-45 connectors

## SPECIFICATIONS

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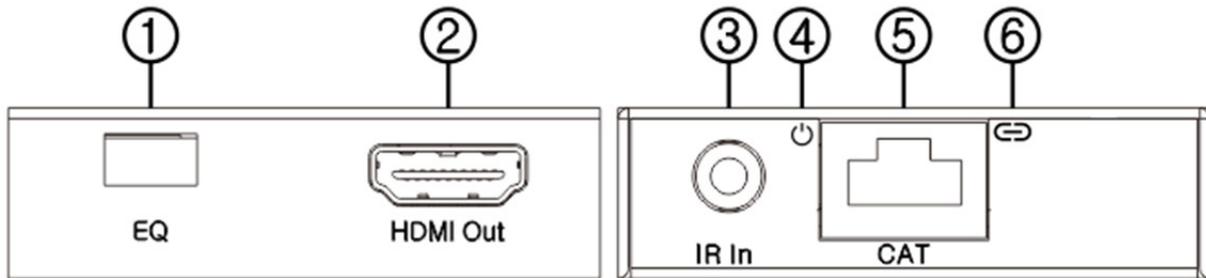
- **HDMI Splitter Input Ports:**
  - HDMI female port
  - Mini USB
- **HDMI Splitter Output Ports:**
  - HDMI (Looping out)
  - (4) RJ-45
  - IR out
- **Receiver Input Ports:**
  - RJ-45
  - IR in
- **Receiver Output Ports:**
  - HDMI
- **Pixel Clock Maximum:** 165MHz
- **Video Resolutions Supported:** Up to 1080p@60Hz
- **ESD Protection Human Body Model:**
  - ±8kV (air-gap discharge)
  - ±4kV (contact discharge)
- **Dimensions:**
  - Splitter (WxDxH): 8.25 x 3.25 x 0.75 in
  - Receiver (WxDxH): 3.25 x 2.75 x .625 in
- **Weight:** 2.2 lb (Net)
  - Splitter: 1.0 lb (Unit only)
  - Receiver: 0.2 lb (Unit only)
- **Operating Temperature:** 0°C ~ 40°C / 32°F ~ 104°F
- **Storage Temperature:** -20°C ~ 60°C / -4°F ~ 140°F
- **Relative Humidity:** 20 ~ 90% RH (Non-condensing)
- **Power Consumption (Max):** 8W
- **Power Supplies:** DC 12V 2.5A
- **NOTE:** POH does **NOT** follow IEEE 802.3af
- **POH PINS Used:** PIN 4&5: “+” / PIN 1&2: “-”

## SPLITTER



- ① **POWER LED:** Illuminates when the device is connected to the power supply.
- ② **CAT OUT1-4:** (4) RJ45 jacks provided for signal output.
- ③ **HDMI OUT:** Local HDMI loop output port.
- ④ **HDMI IN:** HDMI Input port. Connects the source with a HDMI cable.
- ⑤ **IR OUT:** Connects with the IR Blaster cable, included in the package, for IR signal transmission. Place the IR blaster in direct line-of-sight of the equipment to be controlled.
- ⑥ **EDID SELECTOR:** Selects the output signal format via the EDID Selector.
- ⑦ **UPDATE:** System software port for updates.
- ⑧ **DC IN:** Plug the 12V 2.5A DC power supply into the main unit.
- ⑨ **POWER SWITCH:** Power ON/OFF switch.

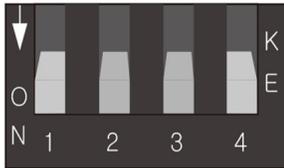
## RECEIVER



- ① **EQ SWITCHER:** HDMI Receiver equalizer switch. See the EQ description.
- ② **HDMI OUT:** Connects with the HDMI input port of your display such as an HDTV.
- ③ **IR IN:** Connects to the IR Receiver for IR signal reception. Ensure that the remote being used is within the direct line-of-sight of the IR receiver.
- ④ **POWER LED:** Illuminates when the device has a valid connection to the base unit.
- ⑤ **CAT:** Connect the CAT input of the receiver with the CAT output of the transmitter using a CAT5e/6 cable.
- ⑥ **LOCK LED:** Illuminates when the HDMI signal from the transmitter is stable.

**EDID CONTROL**

Under normal circumstances, a source device (digital and analog) will require information about a connected device/display to assess what resolutions and features are available. The source can then cater its output to send only resolutions and features that are compatible with the attached device/display. This information is called EDID (Extended Display Information Data). A source device can only accept and read one EDID from a connected device/display. Likewise, the source can only transmit one resolution to be used by the connected device/display. The EDID switch allows for EDID learning or for an EDID pre-set to encourage a “handshake” between the display and source.



**MANUAL EDID LEARNING MODE**

When you switch to any number from “0-8”, the Transmitter will set a fixed EDID to the source. For a detailed EDID description, please refer to the EDID table.

**AUTO EDID LEARNING MODE**

When you switch to “9”, the Transmitter will copy the HDMI LOOP output and display EDID to source.

**ATTENTION:** Please confirm that the extender is working normally before modifying the EDID. When you want to modify the EDID, change the EDID setting to the corresponding number first and then power cycle the Transmitter.

EDID TABLE:			
POSITION	EDID DESCRIPTION	POSITION	EDID DESCRIPTION
	1080p, 2CH AUDIO		3D, 1080p, HD AUDIO
	1080p, DOLBY/DTS 5.1		Copy EDID from the Transmitter HDMI loop out
	1080p, HD AUDIO		1080p, 2CH AUDIO
	1080i, 2CH AUDIO		1080p, 2CH AUDIO
	1080i, DOLBY/DTS 5.1		1080p, 2CH AUDIO
	1080i, HD AUDIO		1080p, 2CH AUDIO
	3D, 1080p, 2CH AUDIO		1080p, 2CH AUDIO
	3D, 1080p, DOLBY/DTS 5.1		1080p, 2CH AUDIO

## RX EQUALIZER DISTANCE ADJUST

If you see a flickering or blinking image on the display, adjust the EQ switch to improve the cable skew. MAX stands for the strongest HDMI signal level for the longest possible transmission length. MIN stands for the weakest HDMI signal level for short transmission length. Adjust the signal level from MIN to MAX until the desired video quality is displayed. Adjustments can be made with the system installed and powered on.

### RECOMMENDED EQ SETTINGS *(Cable distances are approximate)*

EDID TABLE:								
CABLE LENGTH								
1	20	40	60	80	100	120	140	160
<p>0</p>	<p>1</p>	<p>2</p>	<p>3</p>	<p>4</p>	<p>5</p>	<p>6</p>	<p>7</p>	

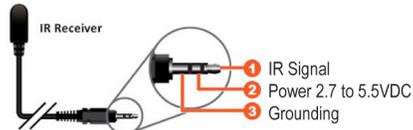
## WIDEBAND IR (30KHZ--60KHZ) INTRODUCTION

Control a local device (Blu-ray player or DVD player, etc) from a remote: Connect the IR Receiver to the receiver IR input port. The CAT output connector on the HDMI Splitter is connected via a CAT6 cable to a HDMI receiver. The IR Transmitter is connected to the HDMI Splitter IR output. The IR remote can then be used to control a local source device.

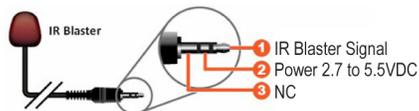
Included in each kit:



IR Rx  
RECEIVERS



IR Tx  
TRANSMITTERS



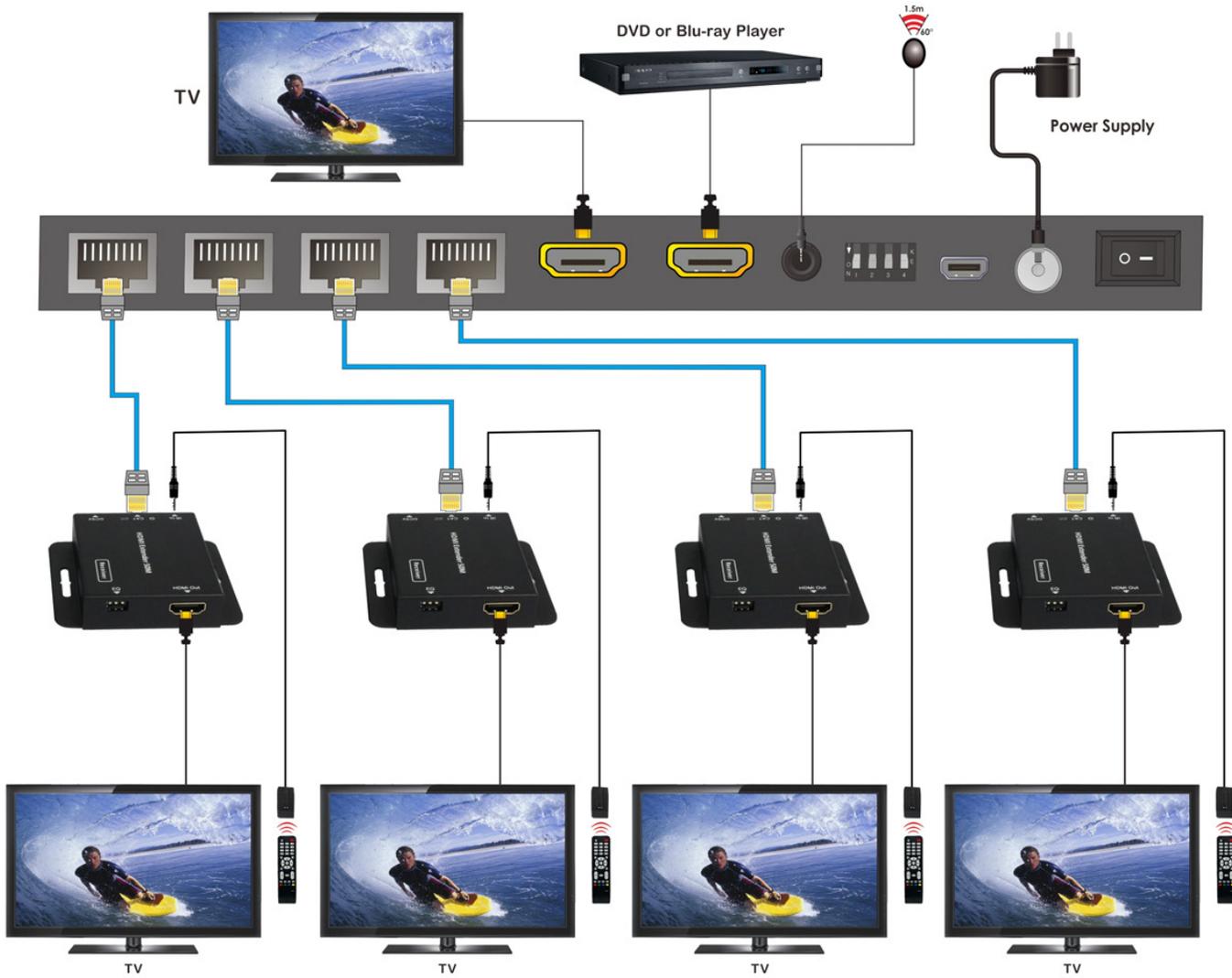
### IR RECEIVER (RX):

- **To control the source:** Plug IR Receiver into the IR RX port of the receiver unit. Place the receiver at or near the display.

### IR BLASTER (TX):

- **To control the source:** Plug the IR Blaster into IR TX port of the transmitter unit. Place the blaster in front of the IR eye of the source.

APPLICATION EXAMPLE



1. Connect a source (Blu-Ray Player, game console, A/V Receiver, Cable or Satellite Receiver, etc.) to the HDMI input on the Transmitting base unit.
2. Connect a display (HDTV, HD Projector, etc.) to the HDMI output on the Receiving unit.
3. Connect a single CAT5e/6 cable (up to 164 ft/50M) between the output of the Transmitting base unit and the input of the Receiving unit.
4. Connect power to the Transmitting base unit using the included power supply.

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