

# ANI-HDAINSERT4K3

HDMI 4K2K Audio Inserter





## 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.

THIS SAFETY INFORMATION IS OF A GENERAL NATURE AND MAY BE SUPERSEDED BY INSTRUCTIONS CONTAINED WITHIN THIS MANUAL.

## 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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**INTRODUCTION**

The ANI-HDAINSERT4K3 HDMI 4K2K Audio Inserter allows an external audio signal to be inserted into your HDMI or DVI (with an HDMI to DVI adaptor) signal path. The unit allows you to insert analog stereo or multi-channel surround sound (via the digital optical input) giving you the flexibility to add your choice of audio to the video while extending your HDMI signal. It also has the added benefit of 4K2K and 3D support, allowing full resolution video and eliminating the need to downscale the image. This products have 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-HDAINSERT4K3 HDMI 4K2K Audio Inserter
- 5 V/1.2 A DC Power Adaptor
- Users Guide

**APPLICATIONS**

- Embed external audio into an HDMI signal
- Integrate DVI video and an audio signal into a single HDMI output (requires HDMI to DVI adaptor)
- Replace the original HDMI audio with an external audio source

**SYSTEM REQUIREMENTS**

Source device such as a PC/Laptop or Blu-ray/DVD player and TV/ display or AV receiver with suitable HDMI connection cables.

## FEATURES

- Compliant with HDMI, HDCP 1.2 and DVI 1.0
- Supports HDMI audio sampling rates up to 192kHz
- Supports Optical (S/PDIF) digital audio sampling rates up to 192kHz
- Supports selection of original HDMI audio or embedding of external Digital or Analog audio into HDMI signal pathway
- HDMI supports high-bit-rate (HBR) audio
- Supports maximum input and output HDMI cable lengths of up to 15M each at 1080p/8-bit resolution or 10M each at 1080p/12-bit or 4K2K resolution
- Supports DVI conversion with HDMI to DVI adaptor
- Supports CEC bypass function
- Supports 4K2K@24/30Hz resolution and 3D signals

**Note:** For playback of 4K2K/3D HDMI source signals, a 4K2K/3D capable display and High Speed HDMI cables are required.

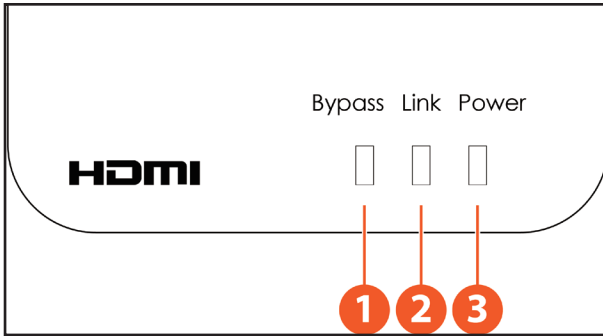
# SPECIFICATIONS

- **Video Bandwidth:** 300 Mbps/10.2 Gbps
- **Input Ports:**
  - HDMI
  - Optical
  - 3.5mm Mini-jack,
  - Mini-USB (Manufacturer use only)
- **Output Port:** HDMI
- **Audio Sampling Rates HDMI:** Up to 192kHz
- **S/PDIF (Optical):** Up to 192kHz
- **HDMI Audio Formats:** LPCM 2/5.1/7.1CH, Dolby Digital 2~5.1CH, DTS 2~5.1CH, Dolby Digital Plus, Dolby TrueHD & DTS-HD Master Audio
- **Optical Audio Formats:** LPCM 2CH, Dolby Digital 2~5.1CH & DTS 2~5.1CH L/R Audio Format Analog Stereo 2CH
- **HDMI Cable I/O Distance:** 49ft/15M (1080p@8-bit), 32ft/10M (1080p@12-bit), 32ft/10M (4K2K)
- **Power Supply:** 5V/1.2A DC ( US/EU standards, CE/FCC/UL certified)
- **ESD Protection Human body model:**
  - ±8kV (air-gap discharge)
  - ±6kV (contact discharge)
- **Dimensions (WxDxH):** 3.3 x 3.4 x 1.3 in (85 x 87.5 x 34mm)
- **Weight:** 3.6 oz / 102g
- **Chassis Material:** Plastic
- **Color:** White
- **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:** 2.37 W

As product improvements are continuous, specifications are subject to change without notice.

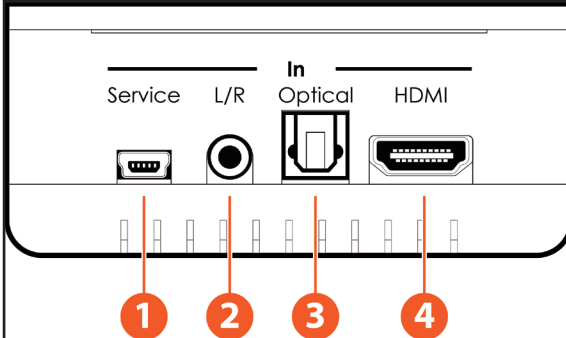
# OPERATION CONTROLS AND FUNCTIONS

## TOP PANEL



- ❶ **Bypass LED:** This LED will illuminate when the audio input is switched to HDMI, bypassing the external audio inputs.
- ❷ **Link LED:** This LED will illuminate when an active HDMI signal is being received.
- ❸ **Power LED:** This LED will illuminate when the unit is connected to an active power supply and switched ON.

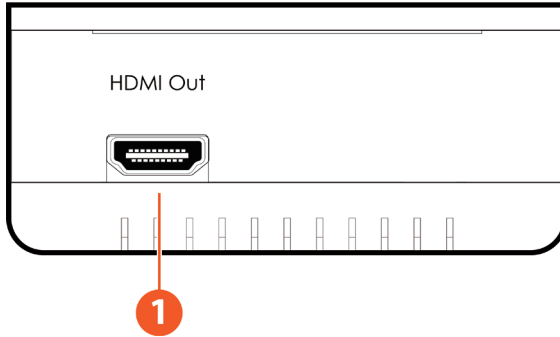
## RIGHT PANEL



- ❶ **Service:** Manufacturer use only.
- ❷ **L/R In:** Connect to an analog audio source such as a PC/Laptop or DVD/Blu-ray player with a stereo analog (L/R) audio signal output.
- ❸ **Optical In:** Connect to a digital audio source such as AV receiver or DVD player with a digital optical signal output.
- ❹ **HDMI In:** Connect to a source such as Blu-ray player, games console or PC/laptop with an HDMI output.

# OPERATION CONTROLS AND FUNCTIONS

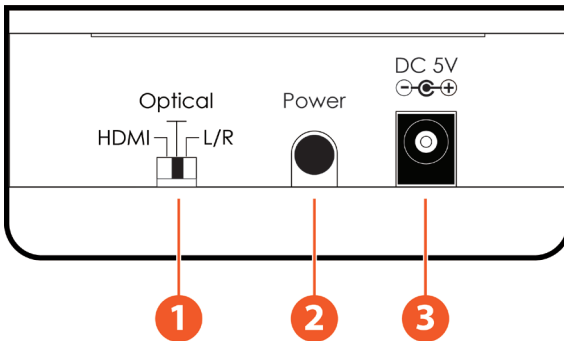
## LEFT PANEL



**1 HDMI Out:** Connect to a TV/display with an HDMI cable for output of the combined audio/video HDMI signal.

**Note:** For playback of 4K2K/3D HDMI source signals, a 4K2K/3D capable display and High Speed HDMI cables are required.

## BACK PANEL



**1 Input Switch:** This switch allows the user to select the required audio input to be inserted into the HDMI signal.

**HDMI:** Selects the original audio of the HDMI source device.

**Optical:** Selects the external audio of the digital optical audio source.

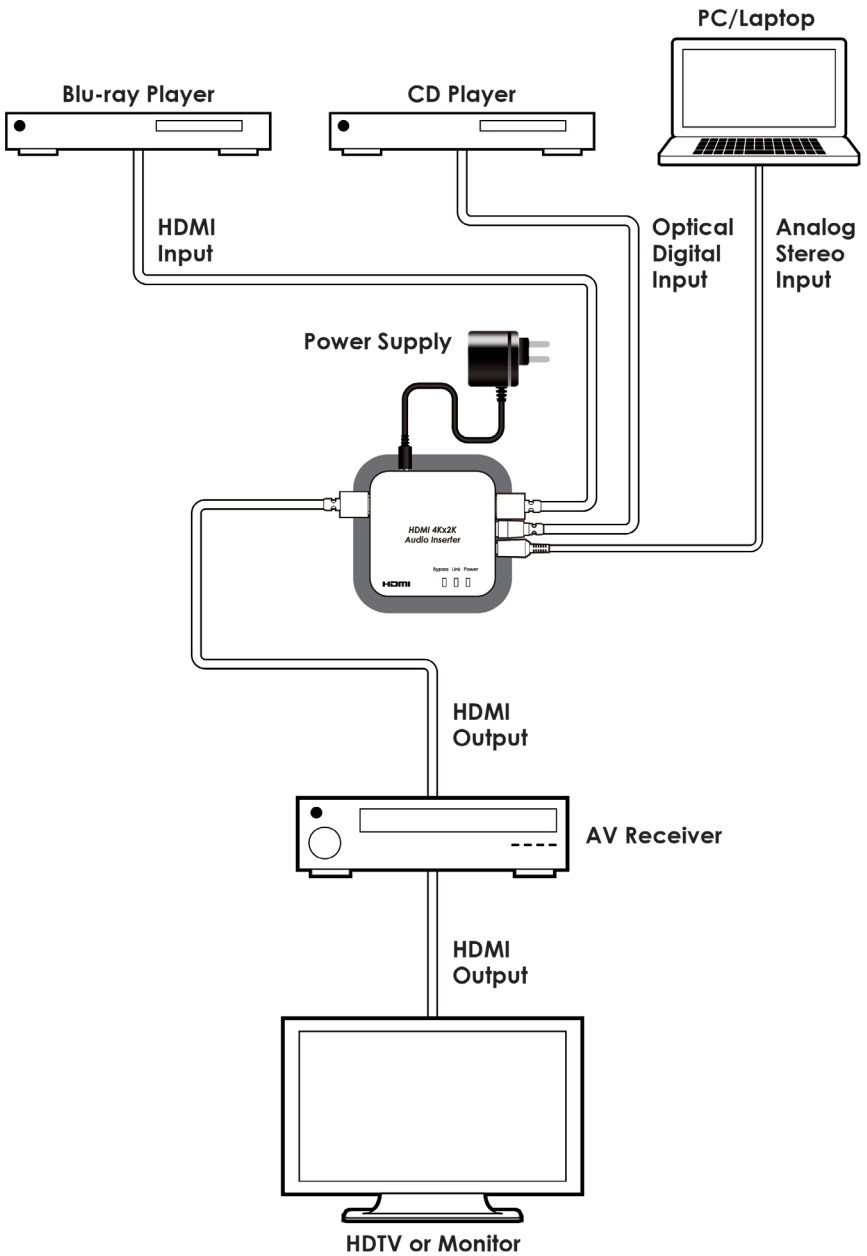
**L/R:** Selects the external audio of the analog stereo (L/R) audio source.

**2 Power Button:** Press this button to switch the unit on or to set it into standby mode.

**3 DC 5V:** Connect the 5V DC power supply to the unit and plug the adaptor to an AC wall outlet.



# CONNECTION DIAGRAM



## SUPPORTED AUDIO FORMATS

| INPUT           | HDMI | Optical | Analog |
|-----------------|------|---------|--------|
| FORMAT          |      |         |        |
| LPCM 2CH        | ✓    | ✓       | ✓      |
| LPCM 5.1CH      | ✓    | -       | -      |
| LPCM 7.1CH      | ✓    | -       | -      |
| Bitstream 5.1CH | ✓    | ✓       | -      |
| Bitstream 7.1CH | ✓    | -       | -      |

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