

Binary 260 Series 4K HDR Audio Extractor  
B-260-HDMI-2A

**BINARY**

## INSTALLATION MANUAL



FC CE



## IMPORTANT SAFETY INSTRUCTIONS

To reduce the risk of fire or electric shock, read and follow all instructions and warnings in this manual. Keep this manual for future reference.

1. Do not expose this apparatus to rain or moisture. Do not expose this equipment to dripping or splashing, and ensure that no objects filled with liquids, such as vases, are placed on the equipment. Do not use this apparatus near water.
2. Do not remove cover. No user serviceable parts inside.
3. Clean only with a dry cloth.
4. Do not block any ventilation openings. Install according to manufacturer's instructions.
5. Do not install near any heat sources such as radiators, heat registers, stoves or other apparatus (including amplifiers) that produce heat.
6. Do not override the safety purpose of the polarized or grounding plug. A polarized plug has two blades, one of which is wider than the other. A grounding plug has two matching blades and a third grounding prong. The wide blade or the third prong is provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
7. Protect the power cord from being walked on or pinched, particularly at the plug end and where the power cord is attached to the apparatus.
8. Only use attachments and accessories specified by the manufacturer.
9. Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as when the power supply cord or plug is damaged, liquid has been spilled on or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, the apparatus does not operate normally, or it has been dropped.
10. To completely disconnect this equipment from power, disconnect the power supply cord from the power outlet.



The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of uninsulated dangerous voltage within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.



The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.



## FCC WARNINGS

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

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## 1. PRODUCT OVERVIEW

B-260-HDMI-2A is a 4K audio extractor with resolutions supported up to 4K@60Hz (Chroma sub-sampling 4:4:4 8-bit) and HDCP 2.2 compatibility.

Its digital or analog audio output allows audio to be de-embedded from HDMI input and sent to audio distribution system, such as an Amplifier. Third-gear slide switch for audio setting in EDID has 3 EDID presets (pass-through, 2.0ch and 5.1ch) for EDID management.

By auto-detecting input signal status, it could automatically trigger CEC commands to turn on or off a CEC-enabled display. It can be used in any AV application, such as homes, offices, digital entertainment centers, control centers, conference rooms, schools and corporate training environments which HDMI audio extraction is needed.

## 2. FEATURES

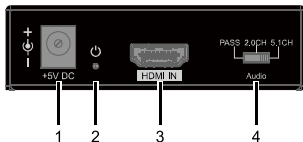
- Supports HDMI input and output resolutions up to 4k@60Hz 4:4:4 8bit.
- Supports HDCP 2.2.
- HDMI audio de-embedded out with S/PDIF (Toslink) and L/R audio (RCA, white and red).
  - > S/PDIF supports PCM 2.0 and multichannel audio up to Dolby Digital and DTS 5.1.
  - > L/R output supports PCM 2.0 only.
- Third-gear slide switch for audio setting in EDID: pass-through, 2.0ch and 5.1ch.
- Built-in CEC controller to control display to be powered on or off.
- Automatic input cable equalization and signal regeneration compensation.

## 3. PACKAGE CONTENT

- 1 x B-260-HDMI-2A
- 1 x DC 5V 1A Power Adapter with US Pins
- 2 x Mounting Brackets (with Screws)
- 2 x Drywall Screws
- 4 x Rubber Feet
- 2 x Power Cord Labels
- 1 x Installation Manual

## 4. DEVICE LAYOUT

### 4.1. B-260-HDMI-2A Front Panel



#### 1. DC 5V

Connect to the power adapter provided.

#### 2. Power LED

On/Off: The device is powered on/off.

#### 3. HDMI In

Connect to an HDMI source device.

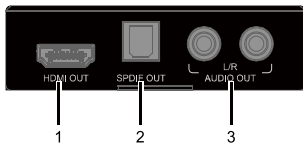
#### 4. Audio

Slide Switch for EDID Management.

- **Pass-through:** For EDID pass-through from the display to the source.
- **2.0ch:** For 2.0ch EDID transferring from this device to the source.
- **5.1ch:** For 5.1ch EDID transferring from this device to the source.

**Note:** For more information, please refer to **EDID Management** section.

### 4.2. B-260-HDMI-2A Rear Panel



#### 1. HDMI Out

Connect to an HDMI display.

#### 2. S/PDIF Out

Optical fiber port for HDMI audio de-embedded output. Connect to an audio receiver for S/PDIF digital audio output.

### 3. Audio Out

RCA coaxial port for HDMI audio de-embedded output. Connect to an audio receiver (e.g. amplifier) for L/R analog audio output.

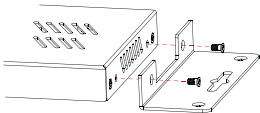
## 5. INSTALLATION AND WIRING

### 5.1. Installation

**Note:** Before installation, please ensure the device is disconnected from the power source.

#### Steps to install the device in a suitable location:

1. Attach the installation bracket to the device's enclosure using the screws provided in the package separately. The bracket is attached to the enclosure as shown.



2. Repeat step 1 for the other side of the device.
3. Attach the brackets to the surface you want to hold the unit against using the screws (provided by others).

### 5.2. Wiring

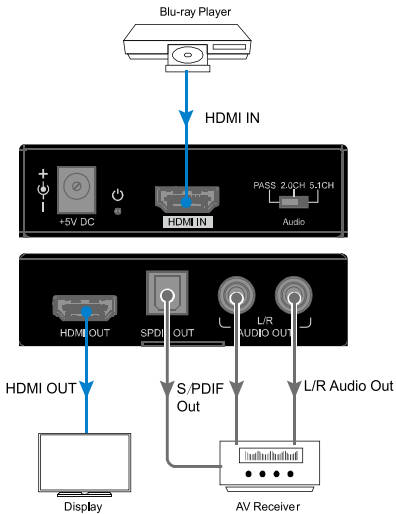
#### **Warnings:**

- Before wiring, disconnect the power from all devices.
- During wiring, connect and disconnect the cables gently.

#### Steps for device wiring:

1. Connect an HDMI source (such as PC, Blu-ray, games console, satellite/cable TV, media server etc.) to HDMI IN of this device.
2. Connect an HDMI display device (such as projector) to the HDMI OUT of this device.
3. Connect audio receiver to the S/PDIF OUT and AUDIO OUT port of this device.
4. Connect the power adapter provided. Power on all devices.

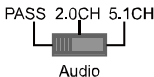




## 6. EDID MANAGEMENT

EDID (Extended Display Identification Data) is a data structure provided by a digital display to describe its capabilities to a video source.

The device features EDID management, should any device compatibility issues occur during installation, please refer to the table below and set up the EDID slide switch manually.



By default, the slide switch is set in **PASS** position.

Position	Description
PASS (default)	Allows EDID pass-through from the display to the source for optimal video and audio outputs to the display.
2.0ch	Transfers 2.0ch EDID of the device to the source for optimum video and 2.0ch audio outputs to the display.
5.1ch	Transfers 5.1ch EDID of the device to the source for optimum video and 5.1ch audio outputs to the display.

### Note:

- If EDID copy fails, the fixed EDID 1920 x 1080P@60Hz 2.0ch would be provided to source device.
- In order to achieve better user experience, please refer to the following EDID setting examples during installation.

### Examples

1. Set the switch to **Pass** position (default setting) -- for EDID copy from HDMI Out

Display's EDID	HDMI Output Audio	S/PDIF Output Audio	L/R Output Audio
Dolby/DTS 7.1	Dolby/DTS 7.1	No signal	No signal
Dolby/DTS 5.1	Dolby/DTS 5.1	Dolby/DTS 5.1	No signal
PCM 7.1	PCM 7.1	PCM 2.0	PCM 2.0
PCM 5.1	PCM 5.1	PCM 2.0	PCM 2.0
PCM 2.0	PCM 2.0	PCM 2.0	PCM 2.0

In **PASS** position, when connected to a TV with 1080P, DTS 5.1 EDID, the device transmits the 1080P, DTS 5.1 signal to the TV, S/PDIF output audio is DTS 5.1, while L/R output has no audio signal.

2. Set the switch to **2.0CH** position -- for 2.0ch audio output

Display's EDID	HDMI Output Audio	S/PDIF Output Audio	L/R Output Audio
Dolby/DTS 7.1			
Dolby/DTS 5.1	PCM 2.0	PCM 2.0	PCM 2.0
PCM 7.1/5.1/2.0			

In "2.0CH" position, when connected to a TV with 1080P, DTS 5.1 EDID, the device transmits the 1080P, PCM 2.0 signal to the TV, both S/PDIF and L/R output audio are PCM 2.0.

3. Set the switch to **5.1CH** position - for 5.1ch audio output

Display's EDID	HDMI Output Audio	S/PDIF Output Audio	L/R Output Audio
Dolby/DTS 7.1	Dolby/DTS 5.1	Dolby/ DTS 5.1	No signal
Dolby/DTS 5.1	Dolby/DTS 5.1	Dolby/ DTS 5.1	No signal
PCM 7.1	PCM 5.1	PCM 2.0	PCM 2.0
PCM 5.1	PCM 5.1	PCM 2.0	PCM 2.0
PCM 2.0	PCM 2.0	PCM 2.0	PCM 2.0

In "5.1CH" position, when connected to a TV with 1080P, PCM 7.1 EDID, the device transmits the 1080P, PCM 5.1 signal to the TV, both S/PDIF and L/R output audio are PCM 2.0.

## 7. SPECIFICATIONS

Technical	
Input	1 x HDMI IN
Output	1 x HDMI OUT
Input/Output Signal Type	HDMI up to 4K@60Hz (4:4:4 8-bit), HDCP 2.2
Input/Output Resolution Supported	<p><b>VESA:</b> 800x600<sup>3</sup>, 1024x768<sup>3</sup>, 1280x768<sup>3</sup>, 1280x800<sup>3</sup>, 1280x960<sup>3</sup>, 1280x1024<sup>3</sup>, 1360x768<sup>3</sup>, 1366x768<sup>3</sup>, 1440x1050<sup>3</sup>, 1440x900<sup>3</sup>, 1600x900<sup>3</sup>, 1600x1200<sup>3</sup>, 1680x1050<sup>3</sup>, 1920x1200<sup>3</sup></p> <p><b>SMPTTE:</b> 720x480P<sup>3</sup>, 720x576P<sup>6</sup>, 1280x720P<sup>6,8</sup>, 1920x1080P<sup>1,2,3,4,5,6,7,8</sup>, 3840x2160P<sup>2,3,5,6,8</sup>, 4096x2160P<sup>2,3,5,6,8</sup></p> <p>1 = at 23.98 Hz, 2 = at 24 Hz, 3 = at 25 Hz, 4 = at 29.97 Hz, 5 = at 30 Hz, 6 = at 50 Hz, 7 = at 59.94 Hz, 8 = 60 Hz</p>
Maximum Data Rate	18Gbps
Audio Format	<ul style="list-style-type: none"> <li>● <b>S/PDIF:</b> PCM 2.0, up to Dolby Digital and DTS 5.1</li> <li>● <b>L/R Output:</b> PCM 2.0</li> <li>● <b>HDMI In/Out:</b> PCM 2.0/5.1/7.1, Dolby True HD and DTS HD Master Audio</li> </ul>

General	
Operating Temperature	0°C to 50°C (32°F to 122°F)
Storage Temperature	-20°C to 60°C (-4°F to 140°F)
Humidity	10% to 90%, non-condensing
ESD Protection	Human-body Model: ±15kV (Air-gap discharge)
Power Supply	DC 5V 1A
Power Consumption (Max)	2.88 W
Device Dimension (W x H x D)	80mm x 90mm x 22mm/3.15" x 3.54" x 0.87"
Product Weight	0.23kg/0.51lb

## 8. WARRANTY

### 2-Year Limited Warranty

This Binary product has a 2-Year limited warranty. This warranty includes parts and labor repairs on all components found to be defective in material or workmanship under normal conditions of use. This warranty shall not apply to products that have been abused, modified or disassembled. Products to be repaired under this warranty must be returned to SnapAV or a designated service center with prior notification and an assigned return authorization number (RA).

## 9. SUPPORT

### Need Help? Contact Tech Support!

If you need further clarification, please call tech support at **800.838.5052**, or email **support@snapav.com**. For other information, instructional videos, support documentation, or ideas, visit our website and view your item's product page at **www.snapav.com**.





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