

UltraAV® HDMI Splitter and Distribution Amplifier



Model Numbers:
K078C-006B (1x4)
K078C-007B (1x8)

READ ME FIRST – SETUP INSTRUCTIONS

Thank you for purchasing the Accell UltraAV HDMI Distribution Amplifier. This product is designed to provide an exceptional performance and value. Please review the manual before operating and retain for future reference.

- CAUTION -

1. Ensure the unit has sufficient ventilation. Do not cover ventilation openings. Do not install in a confined space.
2. Do not operate near source of heat. Do not stack on top, underneath or between other heat generating unit/s including other amplifiers.
3. Unplug power adapter if not used for an extended period.
4. To prevent damage from power surges, the unit should be plugged

into a surge protector or surge protected power source.

5. Do not use near liquid or areas of heavy moisture.
6. Clean unit with a clean and dry cloth only.
7. This unit cannot be serviced in the field. Contact Accell if service is required.
8. Do not open case, risk of shock - shock hazard.
9. Do not modify power cord or use the product if the power cord is damaged.

Introduction

The UltraAV HDMI Distribution Amplifier (Splitter) accepts a signal from a single HDMI enabled audio/video source and splits the single input into 4 (1x4 Splitter) or into 8 (1x8 Splitter) HDMI outputs. The audio/video signal is mirrored on up to 4 (1x4 Splitter) or 8 (1x8 Splitter) HDMI displays, monitors, projectors or TV's.

Over-Current and Over-Voltage Protection

The circuit boards are equipped with both over-current and over-voltage protection and will automatically power down if encountered. The circuit boards will restore automatically once the excessive current or voltage has passed.

Package Contents

- HDMI Distribution Amplifier (Splitter)
- Power Adapter
- Owner's Manual

1x4 HDMI Distribution Amplifier (Splitter) Model: K078C-006B



Specifications

- Connect 1 HDMI Source to up to 4 HDMI Displays
- Supports HD resolutions up to 1080P and 3D
- HDMI 1.4a, HDCP 1.2 compliant
- Input video signal: 5v p-p, Input DDC signal: 5v p-p (TTL)
- Data transfer speed of 6.75Gbps (225MHz)
- Audio formats supported: DTS-HD 7.1, Dolby True-HD 7.1
- Deep color up to 36-bit
- Maximum input cable length: Up to 20m (24AWG)
- Maximum output cable length: Up to 20m (24AWG)
- Supports cascade up to 3 units
- Shelf or surface mountable
- 5V DC, UL Listed power adapter
- Input AC: 50Hz to 60Hz, 100-240V
- Approximate dimensions: 10.9"W x 1.1"H x 6.1"D
277W x 28H x 156D mm

specifications continued...

- Operating temperature range: 5 to 131°F (-15 to 55°C)
- Operating humidity range: 5% to 90% RH (no condensation)

1x8 HDMI Distribution Amplifier (Splitter) Model: K078C-007B



Specifications

- Connect 1 HDMI Source to up to 8 HDMI Displays
- Supports HD resolutions up to 1080P and 3D
- HDMI 1.4a, HDCP 1.2 compliant
- Input video signal: 5v p-p, Input DDC signal: 5v p-p (TTL)
- Data transfer speed of 6.75Gbps (225MHz)
- Audio formats supported: DTS-HD 7.1, Dolby True-HD 7.1
- Deep color up to 36-bit
- Maximum input cable length: Up to 20m (24AWG)
- Maximum output cable length: Up to 20m (24AWG)
- Supports cascade up to 6 units (Silicon Image chipset)
- Rack shelf or surface mountable
- 5V DC, UL Listed power adapter
- Input AC: 50Hz to 60Hz, 100-240V
- Approximate dimensions: 10.9"W x 1.1"H x 6.1"D
(277W x 28H x 156D mm)
- Operating temperature range: 5 to 131°F (-15 to 55°C)
- Operating humidity range: 5% to 90% RH (no condensation)

Cascading

The HDMI splitter can be cascaded (layered) to expand the number of supported displays.

K078C-006B (1x4 Splitter) - Supports up to 3 layers.
K078C-007B (1x8 Splitter) - Features a Silicon Image chipset supporting up to 6 layers.

To create a 2 layer cascade, two same distribution amplifiers must be used. Run an HDMI cable from an output on unit #1 to the input of unit #2. A 2 layer cascade of the 1x4 splitter will support up to 7 outputs. A 2 layer 1x8 splitter cascade will support up to 15 outputs.

Setup

With the splitter power switch in the OFF position, connect an HDMI High Speed cable from the HDMI Output on the audio/video source to the HDMI Input 1 on the back of the splitter.

Tips: Use the shortest length HDMI cables possible in each point in the installation. Use only High Quality and High Speed HDMI cables.

Next, connect an HDMI cable to the HDMI Output Port 1 on the splitter and then connect the other end to an HDMI Input Port on the display device. Similarly, using HDMI cables, connect the remaining HDMI Output Ports on the rear of the splitter to the HDMI Input ports of the other displays.

Connect the power adapter to the splitter. Plug the power adapter into a surge protected AC power outlet. Turn ON the video source, and turn ON the displays. Turn the splitter's power switch to the ON position.

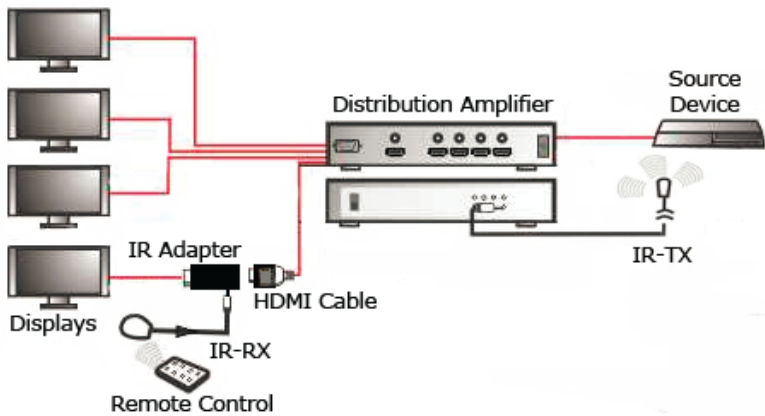
Infrared Control (IR)

The area on the front panel labeled **IR or IR Extender** is the IR Transmitter (IR-TX) port.

Using the Ultra-IR Adapter Kit (optional) enables the control of the source device from the location of the display. Plug the HDMI cable into the IR Adapter at the display end. Next plug the IR Adapter's HDMI connector into the display. The IR Adapter has a port that accepts an optional IR Receiver (IR-RX). When the IR-RX receives an IR signal from the source devices remote control, it uses the HDMI cable's CEC line to send the signal to the splitter. Plug the optional IR-TX into the IR port on the front panel of the splitter. Point the end of the IR-TX at the source device. The signal is transmitted through the IR-TX sending the IR signal to the source device.

Note: As the Ultra IR-Adapter uses the CEC channel of the HDMI cable, the CEC function cannot be used when using this device. Turn off CEC or HDMI Link functionality in the source devices and displays.

The illustration below shows the optional Ultra-IR Adapter Kit controlling the source device on a 1x4 splitter. The 1x8 splitter is setup in a similar manner. Note: Due to specific pin requirements, only use Accell Ultra-IR transmitters or receivers.



Ultra-IR Adapter Kit: PN: B164B-001B
Includes IR-Adapter: 1 pc.
IR Transmitter (5 ft.): 1 pc.
Dual Frequency: 38KHZ-60KHZ
IR Receiver (5 ft.): 1 pc.



Ultra-IR Receiver (5 ft.)
Dual Frequency: 38KHZ-60KHZ
PN: B164B-002B



Ultra-IR Transmitter (5 ft.)
Dual Frequency: 38KHZ-60KHZ
PN: B164B-003B

Ultra-IR Receiver and
Transmitter Pin assignment

Troubleshooting

Q. One of the display does not show a picture or output audio.

A. Check the displays input setting to ensure it is set to receive a signal from the connected HDMI port.

Q. One or more of the connected displays will not display a picture while one or more of the displays do display a picture:

A1. Press the **RESET** button on the front of the splitter to reset it. Alternatively turn off the power to the splitter, source and displays. Wait 60 seconds. Turn the source on. Turn the displays on. Turn the splitter on.

A2. The HDMI cables on the non-functional display/s cannot support their long length. Use only high-quality High Speed HDMI cables. Keep the cable length as short as possible. Test by locating the non-working display close to the splitter. Use a short HDMI cable to connect the splitter to the TV. A working TV using a short HDMI cable indicates an issue with the HDMI cable.

Q. Get the message "This protocol is not supported" or other error message.

A. See answer A1 above and repeat the steps outlined.

Q. The splitter is not down sampling the video and some of the TV's are not displaying a picture.

troubleshooting continued...

A1. Go into the TV's setup and configure the resolution to match all the connected TV's. The TV's should share the same resolution.

A2. In the source devices menu options set the source device to output a resolution that matches all the connected displays.

Q. My TV's resolution are not optimized.

A. The splitter will query the displays and provide the highest common video resolution amongst them. Example: Using a 1080p source, if 3 of the displays support a maximum resolution of 1080p and 1 display supports a maximum resolution of 720p, all 4 display will operate at a resolution of 720p. If the 720p TV in the example is then turned off, the other 3 displays can then operate in 1080p resolution. Press the **RESET** button on the front panel of the splitter to refresh the configuration. The three 1080p TV's will refresh (flicker) then each will display a 1080p resolution picture.

ASSISTANCE: Questions regarding this product or its product warranty, please check out our Web site at: www.accellcables.com. Customer service can be reached by email at support@accellcables.com or phone at 510-438-9288, toll free 877-353-0772 (M-F 9am-5pm PST).

1-YEAR MANUFACTURERS WARRANTY

The Accell UltraAV Splitter is warranted for one year from date of purchase to be free of defects in material and workmanship. In the event of such defects, the Accell product will be repaired without charge or replaced with a new one at our option, if delivered to Accell Corporation prepaid, together with a copy of the sales receipt indicating the proof of purchase date and place of purchase. This warranty excludes defects due to normal wear, abuse, shipping damage, or failure to use the product in accordance with the instructions. **ACCELL CORPORATION SHALL NOT BE LIABLE FOR DAMAGES BASED UPON INCONVENIENCE, LOSS OF USE OF THE PRODUCT, LOSS OF TIME, INTERRUPTED OPERATION OR COMMERCIAL LOSS, OR ANY OTHER DAMAGES, WHETHER INCIDENTAL, CONSEQUENTIAL OR OTHERWISE. YOU AGREE THAT ACCELL'S MAXIMUM LIABILITY ARISING FROM ANY PRODUCT SOLD BY ACCELL SHALL NOT EXCEED THE PRICE OF SUCH PRODUCT. SOME JURISDICTIONS DO NOT ALLOW THE LIMITATION OF EXCLUSION OF LIABILITY FOR CERTAIN DAMAGES, SO THE ABOVE MAY NOT APPLY TO YOU TO THE EXTENT SUCH JURISDICTION'S LAW IS APPLICABLE TO THIS AGREEMENT.** This warranty gives you specific legal rights, and you may have other rights that vary from state to state.

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WARRANTY RETURNS PROCEDURE

Contact Customer Support to obtain a Return Authorization (RMA) number. RMA numbers are valid for 30 days from the date of issuance. We are unable to accept returns without an RMA number. Returns without an RMA number clearly printed on the outside of the package will be refused and returned unopened. All returns must be shipped prepaid at the expense of the shipper.

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