

ACCELL_® UltraCat[™] HDMI to Single Cat5e Extender Instructions

Introduction: The Accell UltraCat HDMI to Cat5e Extenders enables an HDMI audio and video signal to travel across a single twisted-pair category cable. The UltraCat extender supports up to 1080p resolution over long cable runs with lengths of up to 164 feet (50m) using Cat5e or Cat6 cable.

Not all Cat5e and Cat6 cables are of the same quality. The above supported lengths are achievable using high quality and certified, solid core, 24AWG Unshielded Twisted Pair (UTP) cable that is rated at 350MHz for Cat-5e (500MHz for Cat6), configured straight through and operating in normal conditions. In normal conditions UTP solid core Cat5e/Cat6 cable is sufficient. If running new category wire, <u>Cat6 wire is highly recommended</u> and will better ensure a full 164ft. cable run supporting 1080p resolution. In irregular conditions, those environments containing noise from electromagnetic (EMI) or RF interference, a Shielded Twisted Pair (STP) cable may provide improved noise immunity over UTP.

The Cat5e/6 cable RJ-45 connectors must be shielded and the cables terminated to the TIA/EIA-568B standard. The Cat5e or Cat6 cabling should be straight through and not be split or routed through a hub or switcher.

Setup: The Extenders requires a run of a single Cat5e or Cat6 cables with a pin configuration conforming to the EIA/TIA 568B standard.



- 1. Using an HDMI cable, connect the HDMI output of the Audio/Video source to the HDMI port located on the Transmitter labeled "HDMI Input". See illustration below.
- 2. Using an HDMI cable, connect the port on the Receiver labeled "HDMI Output" to the display's HDMI input.
- **3.** Run a Cat5e/6 cable from the port labeled "Cat5e/6" on Transmitter to the port labeled "Cat5e/6" on the Receiver. The cabling should be straight through with no splits or taps.
- 4. Plug the power adapter into the ports labeled "DC/5V" on the Transmitter and the Receiver. Plug the adapters into a sure protected power outlet.
- **5.** Power-on the video equipment.

EDID Copy Button: In some cases,

display problems may occur due to incorrect EDID communication between a display and the extenders. The EDID copy function allows the Transmitter to copy EDID from an EDID-compliant display. To copy the EDID,

1. If needed, disconnect the Receiver unit from the display.

2. Connect the **Transmitter** unit to your display using an HDMI cable.

3. Turn on the monitor and change the input to the appropriate source.

3. Connect the power adapter to the Transmitter unit.

4. Press and hold the EDID button on the transmitter for 3 seconds.

5. Disconnect the power adapter and HDMI cable from the transmitter unit. Disconnecting the power and HDMI cable is required for the EDID copy process.

6. Reconfigure the setup as instructed under **Setup** above.

7. The source should now detect the device name and resolution of the monitor.

Note: To reset EDID to the default setting, press and hold the EDID copy button for 3 seconds. Disconnect the power adapter and HDMI cable from the transmitter unit. Reconfigure the setup as instructed under **Setup** above.

Specifications:

- Supported Resolutions: Up to 1080P including 3D video
- Transmission Distance: Up to 164ft/50m (approximately) at 1080p
- Suggested Cable Type: Certified Cat6/24AWG/solid core
- Supported Color Depth: Up to 36-Bit Deep Color
- Audio Support: Up to DTS-HD Master Audio & Dolby True HD
- Operating Temperature Range: -5 to +35°C (-41 to +95°F)
- Operating Humidity Range: 5 to 90 % RH (no condensation)
- Signaling Rates: 6.75Gbps (225 MHz)



Transmitter

the transmitter's output. 5. DC/5V: Power adapter input.



Specifications continued:

- Input Video Signal: 0.5-1.0 volts p-p
- Input DDC Signal: 5 volts p-p (TTL)
- Cat-5e/6 Termination: TIA/EIA-568B
- Power Consumption: 5W (max.)
- Dimensions: 1.9" x 3.3" x 0.9"

Included:

- HDMI to Cat-5e Transmitter & Receiver
- 2 Power Adapters
- Instructions

Troubleshooting

Symptom	Possible Cause	Potential Solutions
No video	EDID	Use the EDID button on the transmitter to copy the EDID from the display. See EDID Copy Button above
No video Blinking video Blinking video	EMI (Interference)	Use a shielded Cat-6 cable for the video line. Use metal RJ-45 connector with drain wire soldered to connector.
Red or green tint	Wrong DDC signal	Power off the entire system including the HDMI to Cat-5e extender. Power system back on.
Red or green tint	DDC signal loss	Connector termination may be incorrect. Try a confirmed working or factory terminated category cable
Odd colors	Video signal loss	Try a shielded Cat-5e or Cat-6 cable to see if colors improve
Weak contrast	Exceed distance	Use a higher-grade cable. Increase the contrast on display.
Smeared picture	Exceed distance	Use a higher-grade cable. Lower the video resolution.
Background pattern	Interference	Power lines, wireless LANs, electric motors can cause EMI. Isolate these from the video line. Use shielded cable.

CAUTION

- 1. Ensure the units have sufficient ventilation. Do not cover. 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.
- 3. Unplug power adapter if not used for an extended period.
- 4. To prevent damage from power surges, the power adapters should be plugged into a 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. The extenders 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.

Assistance: If you have questions please check out our Web site at: www.accellcables.com. Technical Support can be reached by E-mail at support@accellcables.com or at 510-438-9288 (M-F 9am-5pm PST).

Warranty Returns Procedure: To return an item under warranty, contact Customer Support by E-mail at support@accellcables.com or call 510-438-9288 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 Accell issued RMA number clearly printed on the outside of the package will be returned unopened. All returns must be shipped prepaid at the expense of the shipper. All returns must include a copy of the dated sales receipt.

Accell UltraCat HDMI Extenders are 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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