

Overview

The HDMI/RS232 Extender Kit with ARC, HDBT, UHD-4K (500458-ARC) allows HDMI equipment to be connected up to 230ft (70m) at 4K/30 (4:4:4) and 4K/60 (4:2:0) resolution, or 330ft (100m) at resolutions up to 1080p via one (1) Cat 5e/6 unshielded twisted pair cable in a point-to-point configuration. The kit supports Audio Return Channel (ARC), allowing the Receiver to return audio from a sink device such as a smart TV back to the Transmitter and on to an audio system. The originating ARC signal may be received via the HDMI or TosLink-in port of the 500458-ARC-RX and transmitted via the TosLink-out port of the 500458-ARC-TX. The unit is HDCP 2.2 compliant and supports HDR, as well as RS232 and bidirectional IR pass through transmission for end device remote control. The kit includes one (1) transmitter, one (1) receiver, one (1) IR Emitter, one (1) IR sensor, and two (2) power supplies.



Key Features

- Supports 4K @ 24/25/30Hz (4:4:4) and 4K @ 60Hz (4:2:0) to distances of up to 230ft (70m) over single Cat5e/6
- Supports 1080p and full 3D to distances of up to 330ft (100m) over single Cat5e/6
- Supports HDR
- HDCP 2.2 compliant
- Support Audio Return Channel (ARC)
- Supports all digital audio modes
- Supports RS232 and Bi-directional IR pass through
- Includes IR emitter and IR sensor (carrier-wave)

Specification Chart	
Environment	HDMI 2.0b
Devices	DVDs, Blu-ray players, projectors, monitors, TVs, PCs, laptops, servers supporting HDMI.
Transmission	Transparent to the user
Signals	HDMI 2.0b protocol
Connectors	One (1) HDMI receptacle. One (1) RJ45S for Cat5e/6 unshielded or shielded twisted pair. One (1) 3-Position Terminal Block for RS232.
<i>Cables not included</i>	Two (2) 3.5mm sockets for IR Sensor & Emitter (carrier-wave). One (1) 2.1mm locking power connector.
Max. Distance*	4K/30 (4:4:4): Cat 5e/6: 230ft (70m) 4K/60 (4:2:0): Cat 5e/6: 230ft (70m) 1080p/60: Cat 5e/6: 330ft (100m)
<i>*Based on a maximum length of 6.6 ft (2m) of HDMI cable per end</i>	<i>When installed in an electrically noisy environment, STP cable must be used. Also, cross-connection reduces the effective distance depending on the grade of twisted cable used.</i>
RJ45 Pin Configuration	RJ45 Pin 1 (R) Pin 2 (T) Pin 3 (R) Pin 6 (T) Pin 4 (R) Pin 5 (T) Pin 7 (R) Pin 8 (T)
<i>Reverse Polarity Sensitive Use EIA/TIA 568 A or B, straight-through wiring.</i>	 EIA568A EIA568B
Cable	One (1) Category 5e or better twisted pair cable required.
Power Supply	Two (2) 110-240V/5VDC power supplies with interchangeable blades.
Power Consumption	Transmitter: 1.6 Watt Receiver: 3.2 Watt
Temperature	Operating: 0° to 40° C. Storage:-20° to 85° C. Humidity: up to 95% non-condensing.
Enclosure	Metal
Dimensions	4.40" x 3.00" x 1.00" (11.2 x 7.6 x 2.5 cm)
Weight	1.4 lbs (.6 kg)
Compliance	Regulatory: FCC, CE, RoHS
Warranty	2 years
Order Information	500458-ARC HDMI/RS232 Extender Kit with ARC, HDBT, UHD-4K (UPC: 627699004586)
Accessories	500905 Rackmount Transceiver Chassis 3 Port 500920 Rackmount Transceiver Chassis 16 Port

Typical Application Schematic

