

## HDMI/RS232 Extender Kit with ARC, HDBT, UHD-4K 500458-ARC

## Overview

The HDMI/RS232 Extender Kit with ARC, HDBT, UHD-4K (500458-ARC) allows HDMI equipment to be connected up to 131ft (40m) at 4K/30 (4:4:4) and 4K/60 (4:2:0) resolution, or 230ft (70m) 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 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**

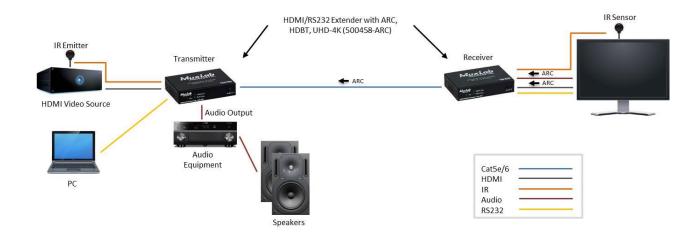
- Supports 4K @ 24/25/30Hz (4:4:4) and 4K @ 60Hz (4:2:0) to distances of up to 131ft (40m) over single Cat5e/6
- Supports 1080p and full 3D to distances of up to 230ft (70m) over single Cat5e/6
- HDCP 2.2 compliant
- Support Audio Return Channel (ARC)
- Supports all digital audio modes
- Supports RS232 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
Cables not included	One (1) HDMI receptacle. One (1) RJ45S for Cat5e/6 unshielded or shielded twisted pair. One (1) DB9 connector for RS232. One (1) TosLink Optical Connector for Audio Return. Two (2) 3.5mm sockets for IR Sensor & Emitter (carrier-wave). One (1) 2.1mm locking power connector.
Max. Distance*  *Based on a maximum length of 6.6	4K/30 (4:4:4): Cat 5e/6: 131ft (40m) 4K/60 (4:2:0): Cat 5e/6: 131ft (40m) 1080p/60: Cat 5e/6: 230ft (70m)  When installed in an electrically noisy environment, STP cable must be used. Also, cross-
ft (2m) of HDMI cable per end	connection reduces the effective distance depending on the grade of twisted cable used.
RJ45 Pin Configuration  Reverse Polarity Sensitive Use EIA/TIA 568 A or B, straight- through wiring.	Pair 3 Pair 1 Pair 2 Pair 4  Pin 1 (R) Pin 2 (T)  Pin 3 (R) Pin 6 (T)  Pin 4 (R) Pin 5 (T)  Pin 7 (R) Pin 8 (T)  Pair 3 Pair 4 Pair 3 Pair 4  Pair 2 Pair 4 Pair 3 Pair 4  Pair 3 Pair 4 Pair 3 Pair 4  Pair 2 Pair 4 Pair 3 Pair 4  Pair 3 Pair 4 Pair 3 Pair 4  Pair 5 Pair 5 Pair 5 Pair 5 Pair 4  Pair 5
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

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## **Typical Application Schematic**





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