



**NETWORK
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ST-C64K9GB-R-HDBT

HDMI over CAT5e/6/7 Receiver



Operation Manual

SAFETY PRECAUTIONS

Please read all instructions before attempting to unpack, install or operate this equipment and before connecting it.

Please keep the following in mind as you unpack and install this equipment:

- Always follow basic safety precautions to reduce the risk of fire, electrical shock and injury to persons.
- To prevent fire or shock hazard, do not expose the unit to rain, moisture or install this product near water.
- Never spill liquid of any kind on or into this product.
- Never push an object of any kind into this product through any openings or empty slots in the unit, as you may damage parts inside the unit.
- Do not allow anything to rest on the power cabling or allow any weight to be placed upon it or any person walk on it.
- To protect the unit from overheating, do not block any vents or openings in the unit housing that provide ventilation and allow for sufficient space for air to circulate around the unit.

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1. INTRODUCTION

The HDMI over CAT5e/6/7 Receiver set can receive uncompressed video/audio and IP data over an single run of CAT5e/6/7 cable up to 100 meters. It has the added benefit of control through the built-in RS-232 pass-through and 2-way IR control and a LAN serving connection. Additionally, it has Power over Cable (PoC) functionality that allows for greater flexibility in installations.

2. APPLICATIONS

- Household entertainment sharing and control
- Lecture room display and control
- Showroom display and control
- Meeting room presentation and control
- Classroom display and control

3. PACKAGE CONTENTS

- 1×HDMI over CAT5e/6/7 Receiver
- 1×IR Blaster (Accessory for Receiver)
- 1×IR Extender (Accessory for Receiver)

4. SYSTEM REQUIREMENTS

-HDMI source device such as a DVD/Blu-ray player -HDMI equipped display (TV or monitor).

-SM-8X8-C64KR-POE-HDBT 4K HDMI Matrix over HDBT or

-ST-C64K-HDBT-L8-R Multiple HDMI Extender Over HDBase-T

5. FEATURES

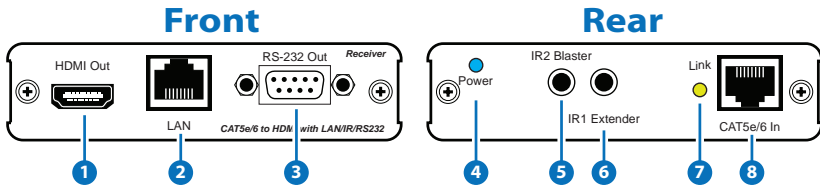
- HDMI (with 3D format and 4K2K resolution support), HDCP and DVI compliant
- Supports CEC bypass function
- Simultaneous transmission of uncompressed video/audio and data over a single CAT5e/6 cable up to 100m/328ft
- Supports uncompressed video up to 4K2K resolution (3840×2160@30Hz or 4096×2160@24Hz)
- Supports pass-through of high-definition audio formats: LPCM 7.1CH, Dolby TrueHD and DTS-HD Master Audio
- HDBaseT™ convergence: uncompressed high-definition Video and Audio, LAN serving, Power over Cable (PoC) and IR/RS-232 Control pass-through
- Installation friendly

Note:

1. *This system was tested with CAT6/23AWG cables, results may vary with cables of a different specification.*
2. *The PoC function is designed for powering compatible receiver units only—non-PoC receivers will need their own power supply. Receivers of another brand may not be compatible.*
3. *For playback of 4K2K HDMI source signals, a 4K2K capable display and High Speed HDMI cables are required.*

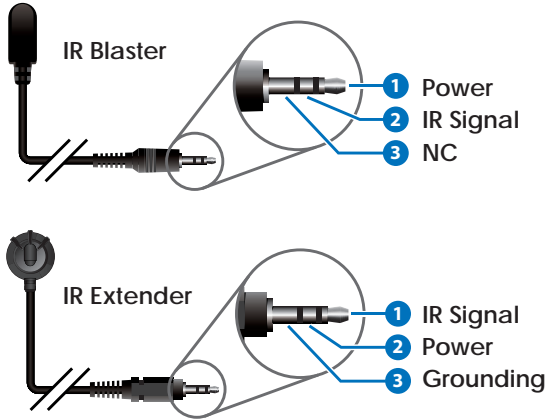
6. Operation Controls

6.1 Receiver Front and Rear Panels



- 1 HDMI Out:** Connect to a HDMI equipped TV/monitor for display of the HDMI input source signal.
- 2 LAN:** Connect to a PC or Laptop to the Internet or network connection.
- 3 RS-232 Out:** Connect to the device that is to be controlled (via D-sub 9-pin female cable) by RS-232 commands.
- 4 Power LED:** This blue LED will illuminate when the receiver is receiving a power supply via PoC from a compatible transmitter unit.
- 5 IR2 Blaster:** Connect to the IR Blaster cable for IR signal transmission. Place the IR blaster in direct line-of-sight of the equipment to be controlled.
- 6 IR1 Extender:** Connect to the IR Extender cable for IR signal reception. Ensure that remote being used is within the direct line-of-sight of the IR extender.
- 7 Link LED:** The yellow LED will illuminate when both the input and output signals are connected.
- 8 CAT5e/6 In:** Connect to the transmitter unit with an single CAT5e/6 cable for transmission of all data signals.

6.2 IR Cable Pin Assignment



6.3 RS-232 Cable Pin Definitions

PIN	ASSIGNMENT
1	N/C
2	RxD
3	TxD
4	N/C
5	GND
6	N/C
7	N/C
8	N/C
9	N/C

8. SPECIFICATIONS

Video Bandwidth	300 MHz/9 Gbps
Ethernet Speed	100Mbps
Input Ports	1×CAT5e/6/7, 1×IR Extender
Output Ports	1×HDMI, 1×LAN, 1× IR Blaster, 1×RS-232
HDMI Cable Distances	Up to 10 meters
CAT6 Cable Distances	Up to 100 meters
HDMI Resolutions	480i~1080p@50/60, 1080p@24, 4K2K (3840×2160@30/4096×2160@24) & VGA~WUXGA
IR Frequency	30~50kHz
	UL certified)
ESD Protection	Human Body Model: ±8 kV (air-gap discharge) ±4 kV (contact discharge)
Dimensions	102 mm (W)×107 mm (D)×25 mm (H)
Weight	256 g
Chassis Material	Aluminum
Silkscreen Color	Silver
Operating Temperature	0°C~40°C / 32°F~104°F
Storage Temperature	-20°C~60°C / -4°F~140°F
Relative Humidity	20~90% RH (non-condensing)
Power Consumption	13 W

9. ACRONYMS

ACRONYM	COMPLETE TERM
CAT5e	Category 5 Cable
CAT6	Category 6 Cable
CAT7	Category 7 Cable
CEC	Consumer Electronics Control
DVI	Digital Visual Interface
HDCP	High-bandwidth Digital Content Protection
HDMI	High Definition Multimedia Interface
IR	Infrared
PoC	Power over Cable