

HD-44G

4x4 HDMI MATRIX SWITCHER



IMPORTANT WARRANTY INFORMATION.

If you remove the HDMI screw posts, you must use the provided HDMI Locking Post replacement screws to keep the internal HDMI jack secure. Removing the HDMI screws without installing the HDMI Locking Post replacement screws will void your warranty.



SAFETY INFORMATION



1. To ensure the best results from this product, please read this manual and all other documentation before operating your equipment. Retain all documentation for future reference.
2. Follow all instructions printed on unit chassis for proper operation.
3. To reduce the risk of fire, do not spill water or other liquids into or on the unit, or operate the unit while standing in liquid.
4. Make sure power outlets conform to the power requirements listed on the back of the unit. Keep unit protected from rain, water and excessive moisture.
5. Do not attempt to clean the unit with chemical solvents or aerosol cleaners, as this may damage the unit. Dust with a clean dry cloth.
6. Do not use the unit if the electrical power cord is frayed or broken. The power supply cords should be routed so that they are not likely to be walked on or pinched by items placed upon or against them, paying particular attention to cords and plugs, convenience receptacles, and the point where they exit from the appliance.
7. Do not force switched or external connections in any way. They should all connect easily, without needing to be forced.
8. Always operate the unit with the AC ground wire connected to the electrical system ground. Precautions should be taken so that the means of grounding of a piece of equipment is not defeated.
9. AC voltage must be correct and the same as that printed on the rear of the unit. Damage caused by connection to improper AC voltage is not covered by any warranty.
10. Turn power off and disconnect unit from AC current before making connections.
11. Never hold a power switch in the "ON" position.
12. This unit should be installed in a cool dry place, away from sources of excessive heat, vibration, dust, moisture and cold. Do not use the unit near stoves, heat registers, radiators, or other heat producing devices.
13. Do not block fan intake or exhaust ports. Do not operate equipment on a surface or in an environment which may impede the normal flow of air around the unit, such as a bed, rug, carpet, or completely enclosed rack. If the unit is used in an extremely dusty or smoky environment, the unit should be periodically "blown free" of foreign dust and matter.
14. To reduce the risk of electric shock, do not remove the cover. There are no user serviceable parts inside. Refer all servicing to qualified service personnel. There are no user serviceable parts inside.
15. When moving the unit, disconnect input ports first, then remove the power cable; finally, disconnect the interconnecting cables to other devices.
16. Do not drive the inputs with a signal level greater than that required to drive equipment to full output.
17. The equipment power cord should be unplugged from the outlet when left unused for a long period of time.
18. Save the carton and packing material even if the equipment has arrived in good condition. Should you ever need to ship the unit, use only the original factory packing.
19. Service Information Equipment should be serviced by qualified service personnel when:
 - A. The power supply cord or the plug has been damaged.
 - B. Objects have fallen, or liquid has been spilled into the equipment.
 - C. The equipment has been exposed to rain.
 - D. The equipment does not appear to operate normally, or exhibits a marked change in performance.
 - E. The equipment has been dropped, or the enclosure damaged.

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INTRODUCTION

The HD-44G is professional 4x4 matrix routing switch. Supporting (4) HDMI Inputs and (4) HDMI Outputs. The HD-44G is based on HDMI standards and supports full resolution HDMI video with embedded EDID. With a signal bandwidth of 225Mhz, there is no signal degradation. High definition digital signals can be selected and distributed from any of the (4) Inputs to any of the (4) Outputs in any combination. This switcher is certified as being fully CEC and HDCP 1.2 compliant and is full HD HDMI V1.3b compatible with RoHS, CE, FCC certifications. Supports UXGA/WUXGA/DVI 1920x1200 resolutions to any HD display. Supports high resolution HDMI sources routed to HDMI displays, monitors, projector or audio receivers. The EDID management can be selected between (7) different modes. Control is provided via front panel push buttons, IR remote and RS-232. A RS-232 Windows GUI interface is provided for matrix routing control (Windows only). This product has a 1 year warranty.

PACKAGE CONTENTS

Before attempting to use this unit, please check the packaging and make sure the following items are contained in the shipping carton:

- HD-44G Matrix Switch
- RS-232 V2.0 Protocol Instructions
- Master wireless IR Remote Control (SW-HD44)
- 19 inch Ear mount bracket (Part # 1U-440L)
- HD-100 IR Extender Receiver Set
- CD Contents: Windows GUI, ISP V1.0 Windows driver
- HDMI Locking Post Replacement Screws
- Users Guide
- Worldwide Universal Power Supply: DC12V, 3A
 Input: (100~240VAC, AC50/60Hz)



SAFETY PRECAUTIONS

Please read all instructions before attempting to unpack, install or operate this equipment and before connecting the power supply. 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 attach the power supply cabling to building surfaces.
- Use only the supplied power supply unit (PSU). Do not use the PSU if it is damaged.
- 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.

DISCLAIMERS

The information in this manual has been carefully checked and is believed to be accurate. We assume no responsibility for any infringements of patents or other rights of third parties which may result from its use.

We assume no responsibility for any inaccuracies that may be contained in this document. We make no commitment to update or to keep current the information contained in this document.

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 Version 2.4 AUG 2016
 HD44G-20150912-003

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FEATURES

- (4) HDMI digital source devices matrix switched to (4) HDMI devices
- HDMI digital video w/ embedded audio, DVI format and CEC/HDCP 1.2 compliant
- (7) function key control and worldwide EDID modes for HDTV resolutions
- Link clock rate of 225MHz, supports HDMI 1.3b
- Wide range of HD resolutions from PC XGA to WUXGA 1920x1200 and HDTV/DTV resolutions from 480i/480p, 576i/576p, 720p, 1080i & 1080p
- Compatible with all HDMI source devices, PC monitors, Plasma HD displays, HDTVs and audio receivers/amplifiers
- Digital video TMDS formats resolutions up to 1080p-60 with 36-bit Deep color
- Digital Audio Support: Dolby TrueHD, Dolby Digital, Dolby Digital Plug/ex, DTS, DTS-HD, DTS-HD Master, DTS-EX, PCM, PCM2, LPCM2
- Various User Interface Control:
 - Windows based GUI control via RS-232 port
 - Front panel push button
 - IR wireless remote control
 - Third party RS-232 controller (via simple ASCII)
- Supports Worldwide Control Functions: ALL/OFF/RECALL/ENTER/MEMORY/EDID/LOCK
- Supports EDID Modes:
 - Embedded EDID Modes: FSS/H24-3D/H24-3D-M/H36-3D/H36-3D-M/DVI-D 1280x1024-60Hz/DVI-D 1920x1200-60Hz
 - External modes: Learning mode
- Input & output status via front panel
- Supports IR remote and IR extender for a distance of up to ~ 984 ft (300M) Maximum
- EDID configuration via internal modes
- Consumer Electronic Control (CEC) switch all open or OFF

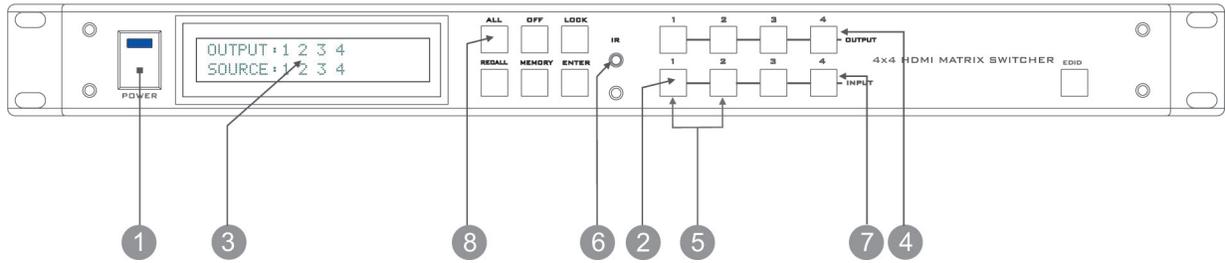
The switcher will remember that last state during a power cycle. When power is removed and resorted, the last configuration will be invoked.

SPECIFICATIONS

- **Type of HDMI Switcher:** (4) HDMI Inputs to (4) HDMI Outputs Matrix Switcher
- **HDMI Support:** HD 1080p@60Hz, H36-bit Deep color, (1.3b) formats
- **HDCP / CEC Support:** HDCP 1.2 Compliant, CEC Compliant
- **Video Bandwidth:** Double Data Rates: 225Mhz
- **Digital Video Support:** Full HD resolutions: 480i / 480p / 720p / 1080i / 1080p
- **Digital Audio Support:** Multi Audio Formats 5.1 / 7.1, MAT(MLP), Dolby Digital, Dolby TrueHD, Dolby Digital Plus, DTS, DTS-ES 6.1, DTS-HD, DTS-HD-HRA, DTS-HD Master (PCM-2CH)
- **Controls:**
 - IR Remote Control
 - IR External port (OD 3.5mm ear phone Jack)
 - Select & Function buttons on front panel
 - RS-232 series interface
- **Function Control Keys:** ALL / OFF / RECALL / ENTER / MEMORY / LOCK / EDID
- **Infrared Frequency:** 38Khz
- **IR External Distance:** ~984 feet / 300M maximum
- **HDMI I/O Connector:** HDMI Type A - SMD 19pin female type
- **Dimensions (LxWxH):** 17.5 x 8 x 1.75 in
- **Rack Mount:** Rack Mount 1RU High 19 in (with rack mount)
- **Power Supply:** DC12V / 3A, Universal world wide type 50/60Hz, 100~230VAC
- **Power Consumption:** 2150mA Maximum
- **Temperature:** 32°F - 100°F Operation (0°C - 38°C)
- **Safety Approvals:** CE, FCC, RoHS
- **Weight:** 5.5 lb (Unit only) / 8.2 lb (Net)

As product improvements are continuous, specifications are subject to change without notice.

FRONT PANEL



1 POWER SWITCH: The power switch turns the unit ON and OFF. The LCM will illuminate red to indicate that the switcher is ON and is receiving power. The switcher will remember the last state during a power cycle. When power is removed and resorted, the last configuration will be evoked.

2 INPUT STATUS DISPLAY: Indicates system setup information and current matrix route cross-points.

3 OUTPUT STATUS DISPLAY: Each Output (destination) channel shows which input (source) it is assigned.

4 DESTINATION SELECT BUTTONS: Indicates system setup information and current matrix route cross-points. Separate outputs 1 thru 4 select buttons are provided for each destination assignment. Routing can be source to destination or one source to multiple destinations.

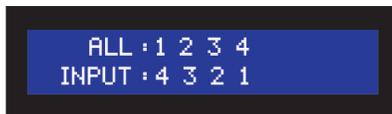
Example: Press Destination 1, 2, 4 then press Source 2. It will route Input 2 to Output 1, 2, 4 respectively.

5 EDID MODE SELECT BUTTONS: Used to select an EDID mode using Input buttons #1 and #2.

6 IR SENSOR: The IR sensor receives IR commands from the supplied remote control or third party IR emitter.

7 SOURCE SELECT BUTTONS: Separate Inputs 1 thru 4 select buttons are provided each source selection.

8 FUNCTION KEY - ALL:



Disables (mutes) video on all destinations OR selects the same source to all destinations.

Option 1

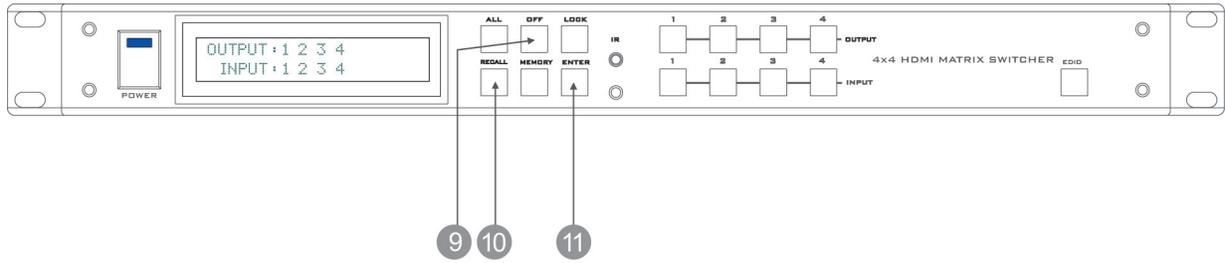
- Press **ALL** followed by **OFF** button. The display will show "0" indicating all destinations have no video selected.

Option 2

- Press **ALL** followed by Source **1 THRU 4**. The display will show the source selected.

- Press **ENTER**. The pre-set source selection will be assigned all destinations.

FRONT PANEL



9 FUNCTION KEY - OFF:



Disables (mutes) video to selected channels for either destination.

- Press **OFF** button followed by any Destination channel.
- Press output destination **1 THRU 4**. The display will show "0" for the selected channel indicating no video is selected.

10 FUNCTION KEY - RECALL:



The system will show previously stored presets, up to a total of (8). Presets are stored in local memory using Source keys 1 thru 4 or Destination keys 1 thru 4 as the memory preset location.

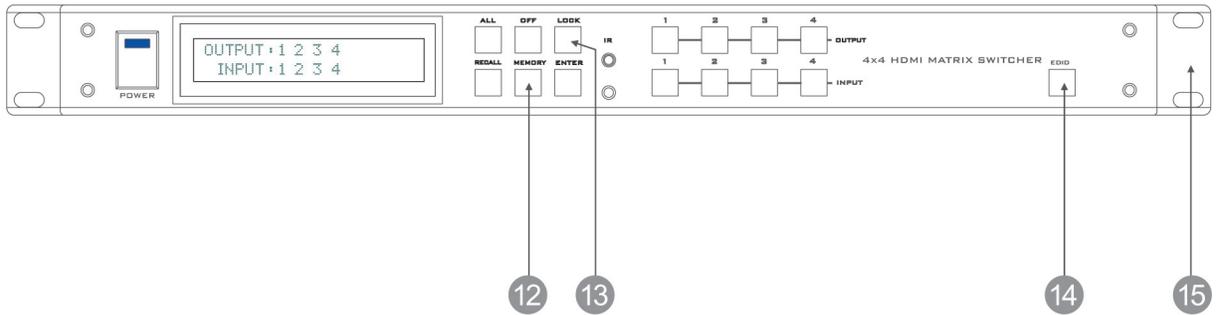
- Press **RECALL** button.
- Press **1 THRU 4** on either Source or Destination row.
- Press **ENTER**. The pre-set configuration will execute.

Operation completes.

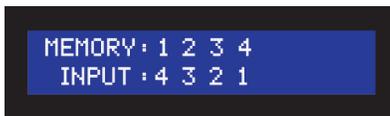
NOTE: Operation will abort if no keys are pressed within 5 seconds.

11 FUNCTION KEY - ENTER: Press **ENTER** to confirm entries.

FRONT PANEL



12 FUNCTION KEY - MEMORY:



The system will show stored presets, up to a total of (8). Presets are stored in local memory using Source keys 1 thru 4 or Destination keys 1 thru 4 as the memory preset location.

- Configure desired matrices.
- Press **MEMORY** button.
- Press **1 THRU 4** on either Source or Destination row.
- Press **ENTER** to ready memory location.
- Or press **MEMORY** again to cancel the operation.

Operation completes.

NOTE: Operation will abort if no keys are pressed within 5 seconds.

13 FUNCTION KEY - LOCK:

- Press and hold **LOCK** button for two seconds lockout the front panel.
- Press and hold **LOCK** button for two seconds to enable the front panel.

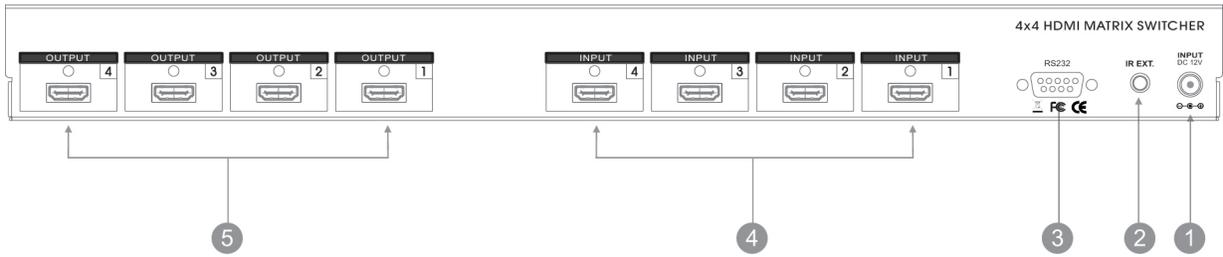
14 FUNCTION KEY - EDID:



- Press **EDID** to select new EDID modes or select source row #1 or #2 for LINK source EDID again.

15 19 INCH EAR MOUNT PAIR: Converts desktop to 19 inch rack mount. Bracket (part # 1U-440L) INCLUDED. Image shows rack mount bracket attached.

BACK PANEL



1 DC POWER INLET: The switcher is fitted with a DC power plug input connector. Ensure that the plug used is of an approved type and is of sufficient current carrying connector capacity with the correct voltage and connector polarity. 12Volt DC power supply 3A Max (Center pin positive).



POWER JACK:

DC Jack - Inner OD Ø 2.1mm (+)
Outside OD Ø 5.5mm (GND)
Power input - 12VDC, 3A

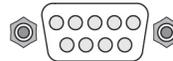
2 IR EXTENDER CONTROL: Supports (1) IR extender. Extends a maximum distance of up to ~1000 feet/300M. When you plug the external IR extender into the switcher, the front panel IR receiver remains active.



IR Extender Jack:

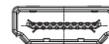
Female Jack
Inner OD Ø 3.5mm

3 RS-232 CONNECTION: RS-232 control port allows for interfacing to a PC, such as a computer or touch panel control, to the switcher via this DB-9pin female connector for serial RS-232 control.



Remote Port: D-SUB-9pin female connector

4 INPUTS- 1,2,3, & 4 HDMI: Connects a HDMI digital video/audio signal link direct to the female HDMI connector. This connector supports HDMI digital video/audio and DVI digital video sources.



HDMI Digital Video/Audio Connector:

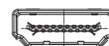
HDMI female connector

If you remove the HDMI screw posts, you must use the provided HDMI Locking Post replacement screws to keep the internal HDMI jack secure. Removing the HDMI screws without installing the HDMI Locking Post replacement screws will void your warranty.

Note: *With the proper adapters, the switcher can be used with DVI digital video signals, and is HDCP compliant. DVI does not support audio.*

HDMI Digital Video/Audio connector with fix screws for Inputs 1 ~ 4.

5 OUTPUTS- 1,2,3,& 4 HDMI: Connects a HDMI digital video/audio signal link direct to the female HDMI connector. This connector supports HDMI digital video/audio and DVI digital video sources.



HDMI Digital Video/Audio Connector:

HDMI female connector

If you remove the HDMI screw posts, you must use the provided HDMI Locking Post replacement screws to keep the internal HDMI jack secure. Removing the HDMI screws without installing the HDMI Locking Post replacement screws will void your warranty.

Note: *With the proper adapters, the switcher can be used with DVI digital video signals, and is HDCP compliant. DVI does not support audio.*

HDMI Digital Video/Audio connector with fix screws for Outputs 1 ~ 4.

BEFORE MAKING ANY CONNECTIONS TO THE SWITCHER. OBSERVE THE FOLLOWING:

- Ensure the main voltage supply matches the label on the supplied plug-pack (+/-10%).
- Ensure that the power switch is OFF.
- Ensure that all system grounds (earth) are connected to a common point.
- Avoid powering equipment within a system from multiple power sources that may be separated by large distances.
- Connect all audio video sources and destination equipment.
- Power up all source and destination audio-visual sources.
- For each destination output select the appropriate input source by using the front panel input select buttons. The supplied IR remote control. Or through the RS-232 serial communications port.
- Upon powering up the switcher, it will return to its last used setting before being powered down.

IR REMOTE CONTROL KEY

1 2 SWITCH POWER ON or OFF:

Power ON and OFF

3 DESTINATION: 1 thru 4 OUTPUT SELECTION:

Destination buttons to select the output display channel

4 SOURCE: 1 thru 4 INPUT SOURCE SELECTION:

Input 1~ 4 source selection buttons

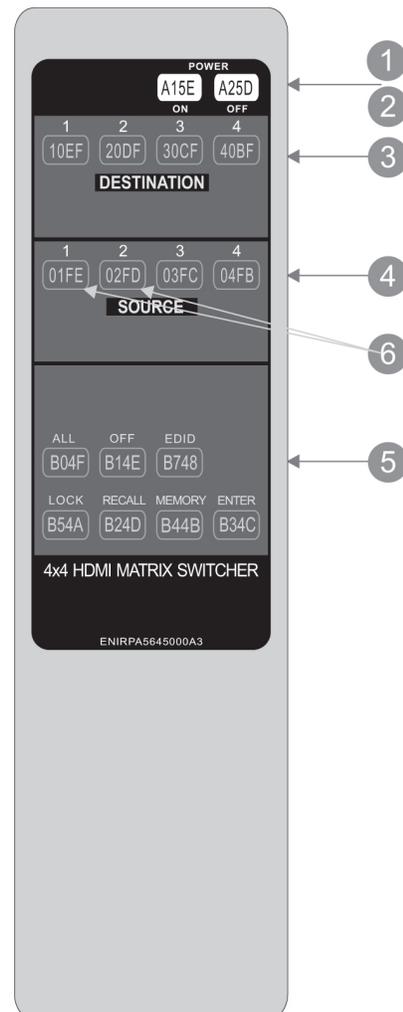
5 FUNCTION KEY: Function selection buttons

ALL DEMO or ENTER EDID LOCK

6 SELECT EDID MODES: PRESS SOURCE BUTTONS 1 thru 2:

1. Mode 1 : FSS (Fast Speed Start)
2. Mode 2 : H24-3D
3. Mode 3 : H24M-3D
4. Mode 4 : H36
5. Mode 5 : H36M
6. Mode 6 : H36-3D
7. Mode 7 : H36M-3D

IR REMOTE : SW-HD44



IR REMOTE CUSTOM AND DATA CODES (NEC STANDARD)

HOW TO SETUP IR CODES:

Model Number: HD-44G

CUSTOM CODE: 837C

POWER ON:	837C	A15E
POWER OFF:	837C	A25D
ALL:	837C	B04F
OFF:	837C	B14E
EDID:	837C	B748
LOCK:	837C	B54A
RECALL:	837C	B24D
MEMORY:	837C	B44B
ENTER:	837C	B34C

PRESS TV DESTINATION - # then PRESS AV SOURCE - #

DESTINATION #1 :	837C	10EF	SOURCE #1 :	837C	01FE
DESTINATION #2 :	837C	20DF	SOURCE #2 :	837C	02FD
DESTINATION #3 :	837C	30CF	SOURCE #3 :	837C	837C
DESTINATION #4 :	837C	40BF	SOURCE #4 :	837C	04FB

For Example: Select Destination # 1 to show Source #1~4**The IR Data Code List:**

Destination # 1, Source #1	837C	10EF	837C	01FE
Destination # 1, Source #2	837C	10EF	837C	02FD
Destination # 1, Source #3	837C	10EF	837C	03FC
Destination # 1, Source #4	837C	10EF	837C	04FB

Press EDID Mode Key:

Mode 1 : FSS	837C	E01F
Mode 2 : H24-3D	837C	E11E
Mode 3 : H24M-3D	837C	E21D
Mode 4 : H36	837C	E31C
Mode 5 : H36M	837C	E41B
Mode 6 : H36-3D	837C	E51A
Mode 7 : H36M-3D	837C	E619

EDID FUNCTION SETUP

EDID SETUP	TO CHANGE THE EDID SETUP								
Step 1. Press the EDID button	The display will show the currently selected EDID mode								
Step 2. Press SOURCE #1 or #2 button row	The button will flash blue and the display will show the current Embedded EDID Status.								
Step 3. Press the ENTER button	To set EDID mode. The switcher will return to operation mode.								
Operation will abort if no keys are pressed within 5 seconds.									
EDID STATUS	TO VIEW THE CURRENT EDID STATUS								
Step 1. Press the EDID button	The button will flash blue and the display will show the current Embedded EDID Status.								
Step 2. Press the EDID button	To exit.								
EMBEDDED EDID MODES	TOTAL 7 EDID MODES								
<p style="text-align: center;">Embedded EDID setup</p> <p style="text-align: center;">Press EDID > SOURCE > ENTER</p> <p style="text-align: center;">SOURCE #1 or SOURCE #2</p> 	<p>To select Embedded EDID mode or LEARNING mode Press EDID button: The LCM will show the current EDID status.</p> <p>Repeatedly pressing the SOURCE 1 button will cycle UP thru the options. Repeatedly pressing the SOURCE 2 button will cycle DOWN thru the options.</p> <p>Select Embedded EDID :</p> <table style="width: 100%; border: none;"> <tr> <td style="width: 50%;">Mode 1 : FSS</td> <td style="width: 50%;">Mode 5 : H36-3D-M</td> </tr> <tr> <td>Mode 2 : H24-3D</td> <td>Mode 6 : DVI-D 1280x1024-60Hz</td> </tr> <tr> <td>Mode 3 : H24-3D-M</td> <td>Mode 7 : DVI-D 1920x1200-60Hz</td> </tr> <tr> <td>Mode 4 : H36-3D</td> <td></td> </tr> </table>	Mode 1 : FSS	Mode 5 : H36-3D-M	Mode 2 : H24-3D	Mode 6 : DVI-D 1280x1024-60Hz	Mode 3 : H24-3D-M	Mode 7 : DVI-D 1920x1200-60Hz	Mode 4 : H36-3D	
Mode 1 : FSS	Mode 5 : H36-3D-M								
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Mode 3 : H24-3D-M	Mode 7 : DVI-D 1920x1200-60Hz								
Mode 4 : H36-3D									
RESET	EDID RETURN TO FACTORY DEFAULT								
<p style="text-align: center;">How to RESET EDID mode</p> <p style="text-align: center;">Press EDID > RECALL > ENTER</p>  	<p>RESET To the FACTORY DEFAULT (1080p-2CH). Press EDID Button: The LCM will show the current EDID status.</p> <p>Press RECALL Button: The LCM will show the RESET EDID.</p> <p>Press ENTER to confirm entries. The EDID will return to FSS mode and resolution 1080p-2CH.</p>								

EDID FUNCTION: (7) EMBEDDED EDID MODES	
<p>Mode 1. FSS® (Fast Speed Start)</p> 	<p>Fast Speed Start® mode shortens the startup time of the switcher. Selecting this mode does not force the EDID setup to be cancelled. Users may first select one EDID mode from mode 2 to 3, and then select mode 1 for fast speed start®.</p>
<p>Mode 2. H24-3D (1080p-24 bits)</p> 	<p>Video Support: All resolutions up to and including 1080p. Audio Support: PCM 2CH</p>
<p>Mode 3. H24-3D-M (1080p-24bits)</p> 	<p>Video Support: All resolutions up to and including 1080p. Audio Support: MAT(MLP) 7.1CH, PCM 2CH, One Bit Audio 2CH, AC-3 5.1CH, DTS 5.1CH, PCM 7.1CH, Dolby Digital + 7.1CH, DTS-HD 7.1CH</p>
<p>Mode 4. H36-3D (1080p-36 bits)</p> 	<p>Video Support: All resolutions up to and including 1080p. Audio Support: PCM 2CH</p>
<p>Mode 5. H36-3D-M (1080p-36 bits)</p> 	<p>Video Support: All resolutions up to and including 1080p. Audio Support: MAT(MLP) 7.1CH, PCM 2CH, One Bit Audio 2CH, AC-3 5.1CH, DTS 5.1CH, PCM 7.1CH, Dolby Digital + 7.1CH, DTS-HD 7.1CH</p>
<p>Mode 6. 1280x1024-60Hz (DVI-D)</p> 	<p>DVI Support: DVI-D 1280x1024 60Hz</p>
<p>Mode 7. 1920x1200-60Hz (DVI-D)</p> 	<p>DVI Support: DVI-D 1920x1200 60Hz</p>

EDID FUNCTION: LEARNING

LEARNING EDID SINGLE TO SINGLE	EXAMPLE: LEARN DESTINATION #4 EDID TO SOURCE #2.
Step 1. Press the EDID button	The button will flash blue and the display will show the current Embedded EDID Status.
Step 2. Press the DESTINATION #4 button row	Copy the Destination #4 Display EDID.
Step 3. Press the SOURCE #2 button row	Learning the Destination #4 EDID to Source # 2.
Step 4. Press ENTER button	To confirm entries.
LEARNING EDID SINGLE TO MULTIPLE	LEARNING DESTINATION EDID LINK TO THE MAJORITY SOURCES
Step 1. Press the EDID button	The button will flash blue and the display will show the current Embedded EDID Status.
Step 2. Press the Destinations #1~4 button row	Copy any 1~4 Destinations EDID.
Step 3. Press the Source #1, #3 ~ #4 button row	Learning the Destination EDID link to source #1, #3 ~ #4.
Step 4. Press ENTER button	To confirm entries.
LEARNING EDID SINGLE TO ALL	LEARNING DESTINATION EDID LINK TO ALL SOURCES
Step 1. Press the EDID button	The button will flash blue and the display will show the current Embedded EDID Status.
Step 2. Press Destination button 1 THRU 4	Learning anyone 1~4 Destination EDID to all sources.
Step 3. Press ALL button	Learning selected destination EDID to all sources.
Step 4. Press ENTER button	To confirm entries.
HOW TO SETUP FSS® FUNCTION	FAST SPEED START®
Step 1. Press the Destination #1~4 button row Then Press the Source #1~4 button row	To setup and Install all devices.
Step 2. Press the EDID button	Select a optimum status of Embedded EDID mode.
Step 3. Press ENTER button	To conform entries.
Step 4. Press the EDID button	To select the EDID FSS® mode.
Step 5. Press ENTER button	To conform entries.
LEARNING EDID	LEARNING EDID FROM DESTINATION TO SOURCE
<p>Learning EDID setup Press EDID > DESTINATION > SOURCE > ENTER</p> 	<p>Press EDID > DESTINATION Button: The LCM will be show LEARNING</p> <p>Switcher will LEARN destination HDMI EDID and pass the selected source.</p> <p>Learning EDID setup for HDMI Key Press Sequence: EDID > DESTINATION # > SOURCE # > ENTER The EDID for HDMI has been learned</p>
<p>NOTE: The already learned EDID cannot be modified. You can only rebuild a new Learning EDID. For Example: When the Source has “Learned” the EDID data from a destination, It will save that EDID information into EPROM and the EDID data cannot change. Please select new learning destination to sources or change to one of the embedded EDID modes when you want to remove the learning EDID memory from EPROM.</p>	
LEARNING EDID Definition	Learning EDID from Destination to Source
<ol style="list-style-type: none"> Switcher will LEARN destination EDID and pass the selected source. To set up learning between a single destination and single source: Press EDID button > Press DESTINATION 1 THRU 4 > Press SOURCE 1 THRU 4 > Press ENTER to confirm. Switcher will learn destination EDID to source device. To set up learning between a single destination and Multiple sources: Press EDID button > Press DESTINATION 1 THRU 4 > Press the majority SOURCES 1 THRU 4 > Press ENTER. Switcher will learn single destination EDID to many source devices. How to Learning single destinations with all sources. Press EDID button > Press ALL button > Press ENTER to confirm. 	

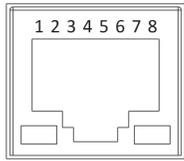
ETHERNET / RS-232 SERIAL INTERFACE CONNECTS A PC OR CONTROL SYSTEM VERSION COMPATIBLE V2.0

For a complete list of commands, please reference external document extended Ethernet Protocol Instruction Manual.

Example of the commanded string to select Inputs:

FUNCTION	COMMAND	VARIABLES
Select source	Source xxx;	xxx = Input Channel (001=Source1, 002=Source2.etc)
COMMAND EXAMPLE	RESPONSE	DESCRIPTION
Source 001;	Source 001#ok;	Select source number 1

Ethernet



Note: Control the switcher
 SPD: Speed
 LINK: Ethernet link
 RJ-45 Female 8P-8C Connector

ETHERNET SERIAL INTERFACE

Pin	Ethernet	Reference
1	TXOP	TX +
2	TXON	TX -
3	RXIP	RX +
4	NC	
5	NC	
6	RXIN	RX -
7	NC	
8	GND	

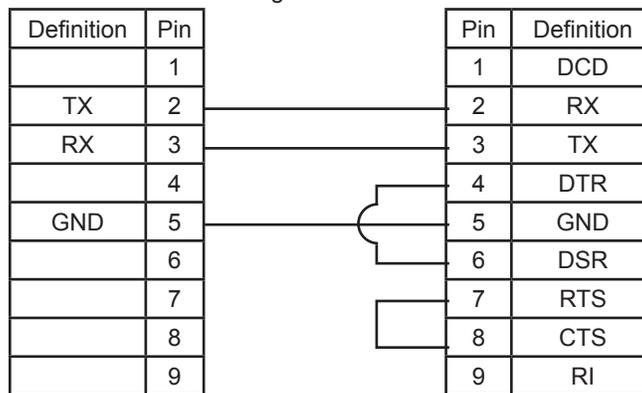
TCP, Port 5000

ETHERNET TCP/IP PROTOCOL COMMANDS (ETHERNET / RS-232 CONTROL DRIVER V2.0)

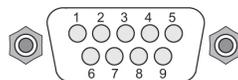
*** The Ethernet port and RS-232 port cannot be used simultaneously. Any connection to the Ethernet Control port will disable serial commands sent to the RS-232 port.***

RS-232 Configuration

RS-232 cable is a straight thru cable and not null-modem



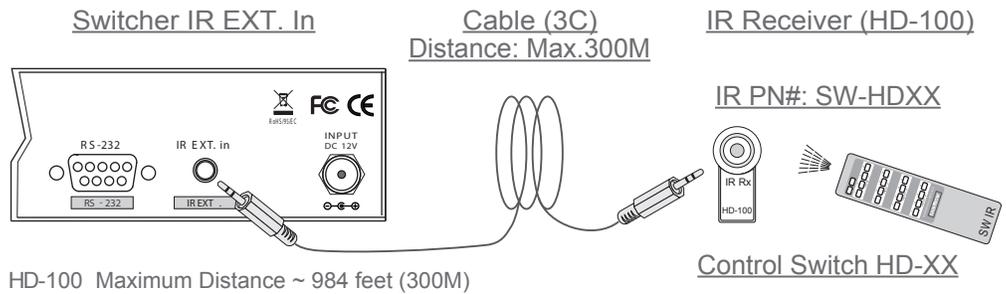
RS-232 Pin Diagram



RS-232 SERIAL INTERFACE PROTOCOL COMMANDS (ETHERNET / RS-232 CONTROL DRIVER V2.0)

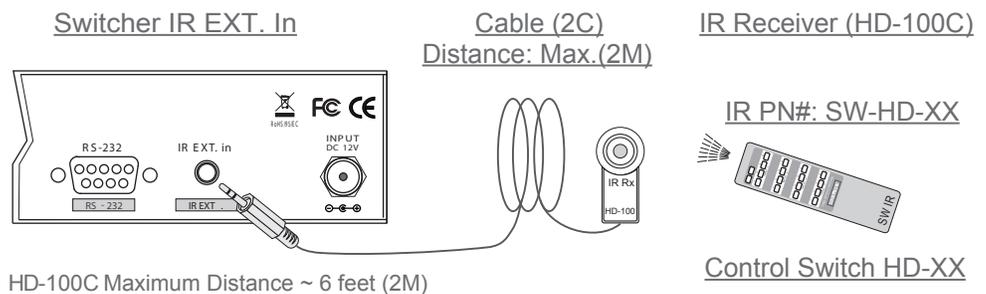
The HD-44G switcher can be controlled via the RS-232 serial control port to allow for interfacing to a PC, or similar third party control system. The serial communication parameters are 9600 baud, 8 bit, No Parity and 1 stop bit - this is often referred to as 9600 8N1. When the unit recognizes a complete command it will perform the requested action - there is no delimiter character required.

1. HD-100 IR 300M Receiver



The HD-100 IR Receiver is required when using the port "ALL in" Jack.

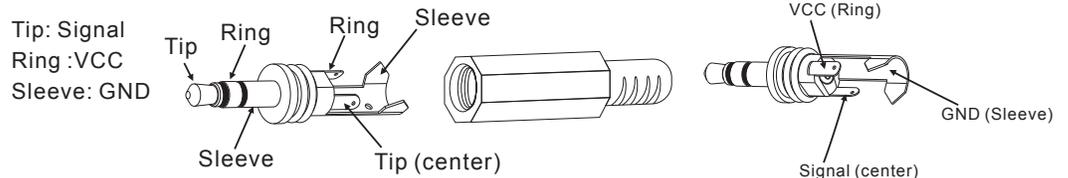
2. HD-100C IR 2M Receiver



The HD-100C IR Receiver will not function on the port "ALL in" Jack.

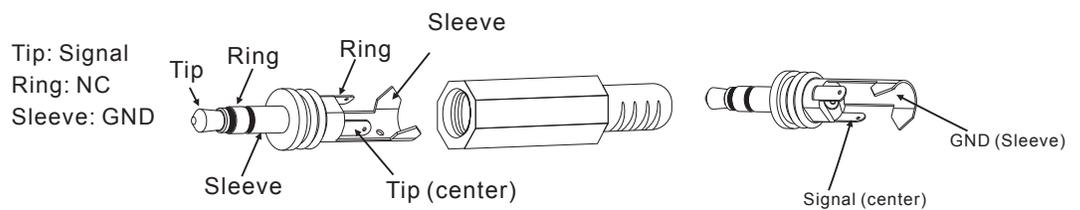
*** When you plug the External IR extender into the switcher, the front panel IR receiver remains active. ***

Pin configuration for IR 984 feet (300M) Extender Receiver such as HD-100 compatible



HD-100 Receiver and HD-101 Transmitter The DISTANCE maximum ~ 984 feet (300M)

Pin configuration for IR Receiver 6 feet (2M) cable such as HD-100C compatible



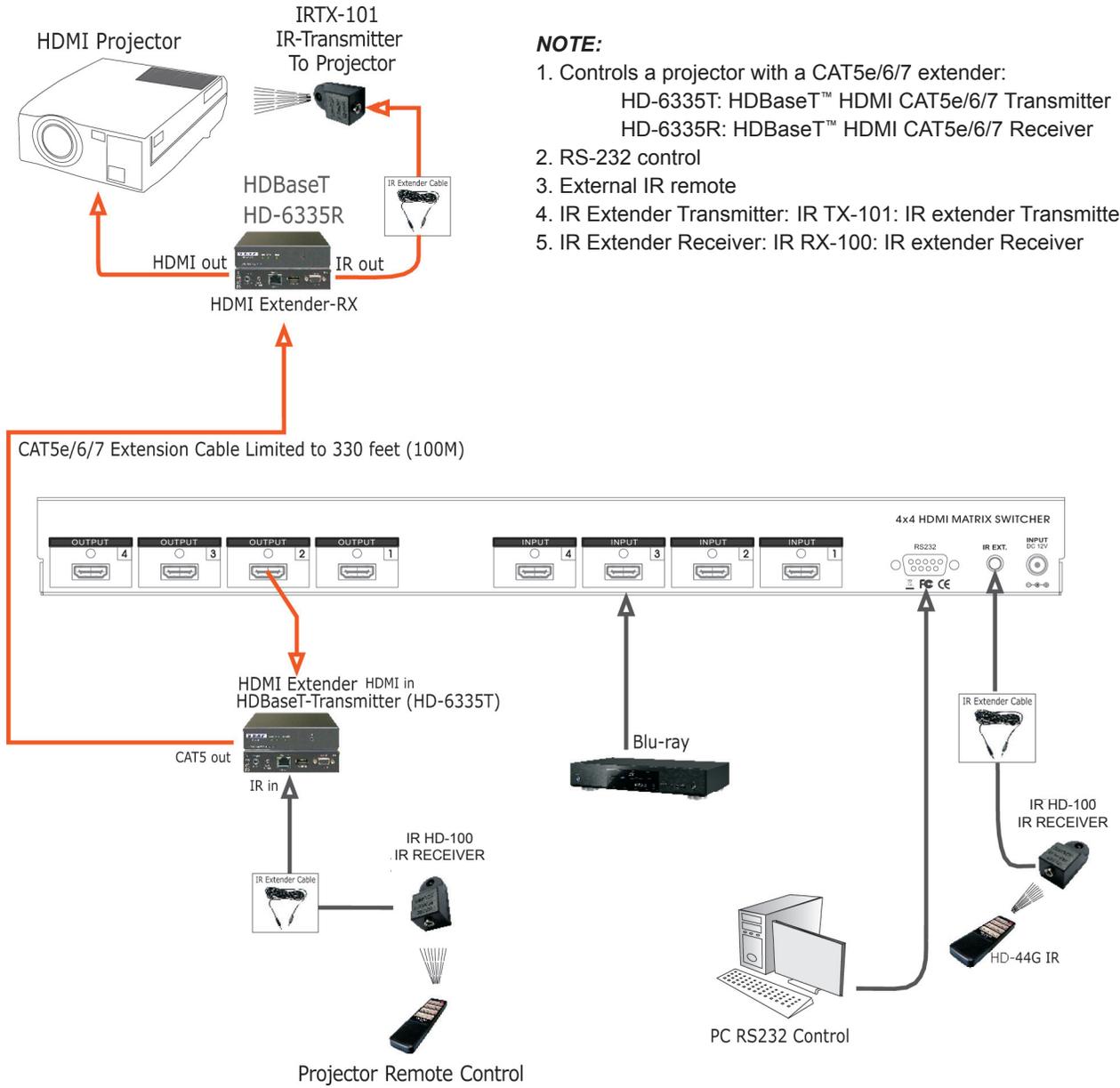
HD-100 Receiver and HD-101C Transmitter The DISTANCE maximum ~ 984 feet (300M)

Note: The External IR jack has voltage on the "Ring" portion of a 3-conductor plug. You must use a 3-conductor plug (aka: stereo plug). Using a 2-conductor plug will short out the power supply. Always make connections with the switcher power off.

INSTALLING DIAGRAM

Sample Connection:

Using RS-232 serial interface or IR external in to control switch (HD-44G).



NOTE:

1. Controls a projector with a CAT5e/6/7 extender:
 HD-6335T: HDBaseT™ HDMI CAT5e/6/7 Transmitter
 HD-6335R: HDBaseT™ HDMI CAT5e/6/7 Receiver
2. RS-232 control
3. External IR remote
4. IR Extender Transmitter: IR TX-101: IR extender Transmitter
5. IR Extender Receiver: IR RX-100: IR extender Receiver

Supports a HDBaseT™ extender with a HDBaseT™ Transmitter and Receiver via a CAT5e/6/7 cable.

INSTALLING DIAGRAM

Sample Connection:

Using an audio extractor and ARC control box with linked TV return audio to an audio device, controlling a satellite receiver source via HDBaseT™ transmitter (HD-6335T) and HDBaseT™ receiver (HD-6335R).

NOTE:

1. Control a satellite receiver over a HDMI CAT5e/6/7 extender from a room:

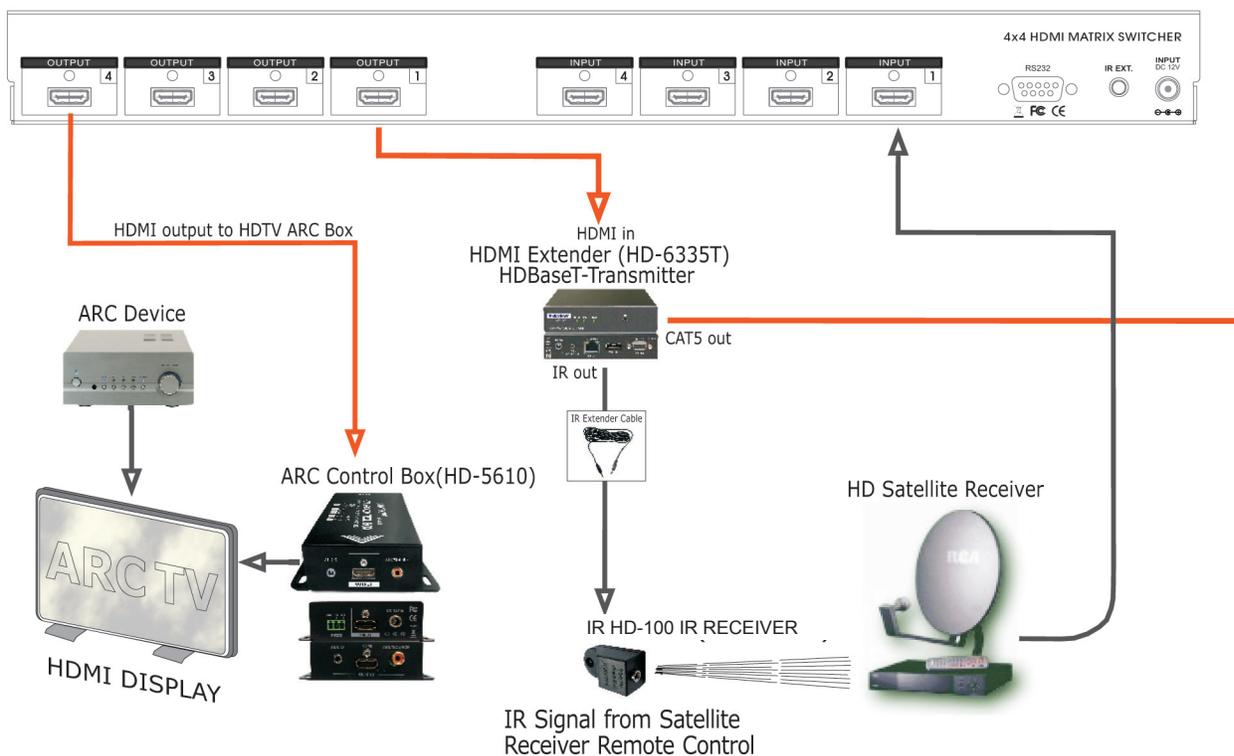
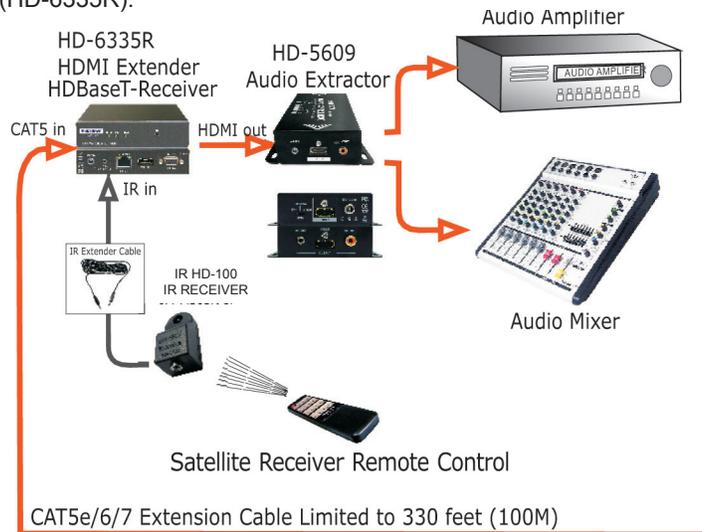
- HD-6335T: HDBaseT™ HDMI Transmitter
- HD-6335R: HDBaseT™ HDMI Receiver

2. Audio extractor to recode audio :
HD-5609: HDMI audio extractor.

3. Control HDMI ARC:
HD-5610: HDTV ARC control box

4. IR Extender Transmitter:
IR TX-101: IR Extender Transmitter

5. IR Extender Receiver:
IR RX-100: IR Extender Receiver



Supports a HDBaseT™ extender with a HDBaseT™ Transmitter and HDBaseT™ Receiver via a CAT5e/6/7 cable.

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