

# SB-6353R

HDMI HDBaseT™ EXTENDER  
with PoH HDBaseT™ RECEIVER



### 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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## HDMI-HDBaseT™ EXTENDER Series

Thank you for purchasing the SB-6353R HDMI-HDBaseT™ with PoH 48VDC output Receiver. You will find this unit easy to install and highly reliable but it is essential that you read this manual thoroughly before attempting to use this converter.

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### INTRODUCTION

Congratulations on your purchase of one of the most innovative HDMI over HDBaseT™ with PoH (Power Over HDBaseT™) 48VDC output Receivers on the market today. The SB-6353R is a HDMI over HDBaseT™ with PoH (Power Over HDBaseT™) 48VDC output receiver. This HDBaseT™ receiver can receive the HDMI, IR remote in & out, RS-232 in & out, Ethernet signals and output PoH 48DC power over HDBaseT™ to a HDBaseT™ transmitter via a single category cable for long distances up to 328 feet (100M). The SB-6353R uses CAT6/6a/7 (UTP or FTP) category cable with RJ-45 8P8C connectors and supports the 568a or 568b color specification table. This HDBaseT™ receiver product provides higher full HD HDMI resolutions of 480i/p, 720p, 1080i/p quality that is identical to the source to the HD destination display. The SB-6353R control signals are useful in receiving the HDMI digital video, digital multi-channel audio signals, IR in/out, RS-232 in/out, Ethernet series interface via a category cable from the HDBaseT™ Transmitter.

### PACKAGE CONTENTS

Check that you have the following components:

- SB-6353R HDBaseT™ Receiver console
- SB-100 IR Extender Receiver Set
- SB-101 IR Extender Transmitter Set
- SB-100C IR Extender Receiver Cable (6.5ft (2M))
- SB-101C IR Extender Transmitter Cable (6.5ft (2M))
- HDMI Locking Post Replacement Screws
- 1 in Wall mount bracket (Part # WM-1INCH-L80MM)
- Users Guide
- AC Adaptor: 48VDC, 1A (universal power switch 50/60Hz, 100~240VAC)



Input: HDBaseT™ via single CAT6/6a/7 cable  
 Output: HDMI & PoH (Power Over HDBaseT™)  
 Extra Power Input: +DC48V, 1A



### 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.

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# FEATURES & SPECIFICATIONS

## FEATURES

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- HDBaseT™ RX with 3D, 4K2K over a single UTP/STP cable up to 328ft (100M) / UHD 4K@30Hz CAT6 164ft (50M)
- Supports HDMI 1080p@60 video V1.4a 3D and Ultra HD 4K2K video, CEC / HDCP compliant
- Supports link speeds for TMDS Video format max 10.2Gbit/s, 340MHz signal Deep Color, Full HD 1080p@60Hz@24/36/48bit/pixels
- Supports 1080p TV's at 24/30/60/100/200/240Hz and above as well as Blu-rays at 24FPS
- Supports Digital Audio 7.1 LPCM 192KHz, 24bits, Full HD Dolby TrueHD and DTS-HD Master Audio uncompressed HD audio formats
- Supports PoH power DC48V over HDBaseT™ (Power supports 48VDC to the transmitter)
- Transfers Bi-directional infrared control signals together with the HDMI signal
- RS-232 port for firmware updates or RS-232 to control signal transmission
- Supports HDMI CEC between your connected source and display gear
- LED indicators to show the HDCP/LINK/POWER/POE status
- HDBaseT™ transfers HDMI, PoE, LAN, RS-232 and Bi-Directional IR over a single category cable
- Supports Super Audio CD (DSD), CEC commands protocol table
- Mounting ears and wall mount pack supplied
- Power supply using universal power switch 48VDC, 50/60Hz, 100~240VAC

## SPECIFICATIONS

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- **Type of Extender:** HDBaseT™ RX HDMI signal over category UTP/STP cable
- **Input Signals:** HDMI with Digital Video (TMDS)/Audio 0.5~1.0Vpp, DDC 5Vpp
- **HDBaseT™ Support:** HDMI 1.4a HDMI format standard, DVI and HDCP Compliant
- **Video Supported:** HDMI and DVI TMDS format for 1920x1200 resolutions up to 10.2Gbps (340MHz), Digital RGB 48bits/px, deep color, 3D
- **Category Cable Supported:** CAT6, CAT6a, CAT7 UTP/FTP cable
- **Supported HDMI Resolutions:** 480p, 720p 1080i/1080p and Ultra HD 4K2K
- **Scan Rate Accepted:** Supports HDMI full HD resolutions; Frequency 24Hz to 240Hz
- **Control:** (1) IR in, (1) IR out, (1) RS-232 I/O and (1) LAN series interface
- **PoH Supported:** HDBaseT™ Receiver supports 48VDC power to the transmitter (SB-6353T)
- **Transfer Distance:** Up to 328ft (100M) / UHD 4K@30Hz CAT6 164ft (50M)
- **HDMI I/O Connectors:** HDMI Type A - SMD 19pin female type
- **HDBaseT™ I/O Connectors:** HDBaseT™ RJ-45, 8p8c female socket
- **Safety Approvals:** CE, FCC, VCCI, REACH
- **Dimensions (LxWxH):** 5.31 x 5.11 x 1 in (135x130x26mm)
- **Rack Mount:** Use total of 10 pcs installs into one 19 inch rack mount
- **Weight:** 1.1 lb (Unit only) / 2.9 lb (Net)
- **Power Consumption:** Max 1750mA (Full load 1080p-60Hz signal with use DC48V input)
- **Power Supply:** Power Input +48VDC, 1A (Universal Type 50/60Hz, 100~240VAC)

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

## LOOK A PUPPY!! NOW READ THIS!!

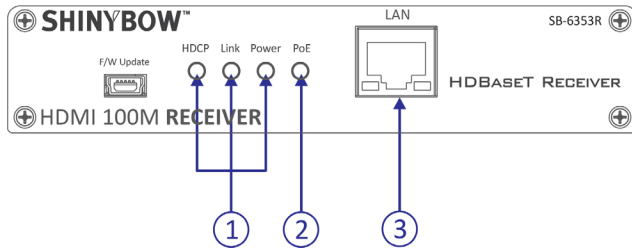


### IMPORTANT WARRANTY INFORMATION.

*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.*

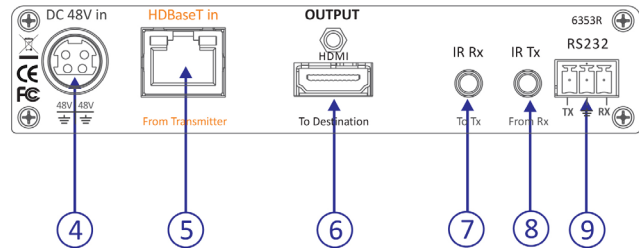
# TYPICAL HOOKUP AND OPERATION

## SB-6353R



### FRONT PANEL:

1. STATUS VIA LED SHOW OUT: POWER, LINK & HDCP
2. PoH ON/OFF LED
3. Ethernet series interface path to the transmitter



### BACK PANEL:

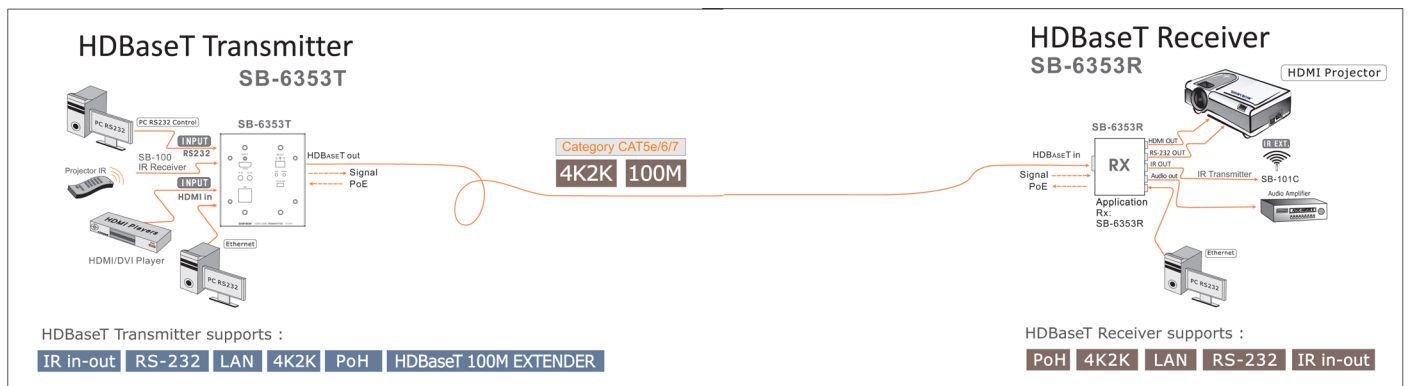
4. DC INPUT: Extra DC48V, 1A
5. RJ-45 IN: HDBaseT™ input, Signal from the HDBaseT™ transmitter
6. HDMI OUT: HDMI output, Signal to the HDMI destination display device
7. IR IN: Sends IR signal to the HDBaseT™ transmitter
8. IR OUT: Receives IR signal from the HDBaseT™ transmitter via a IR external receiver (SB-100)
9. RS-232 I/O: RS-232 series interface in or out control via a PC

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.

## Safeguards and Precautions

- A. Keep this unit away from fire, extremely hot areas, water or moisture of any kind.
- B. Do not place this unit on any support that is not firm, level and strong.
- C. Do not service the unit yourself. Opening the unit's housing will void the warranty.
- D. Servicing must be by Shinybow or by an authorized technician.
- C. Illegal duplication of copyrighted material is strictly prohibited by Federal Laws.

## INSTALLING DIAGRAM



# COMPATIBLE OPTIONS

**SB-6353T**   
HDMI HDBaseT Transmitter with PoH



Signal →

← PoH

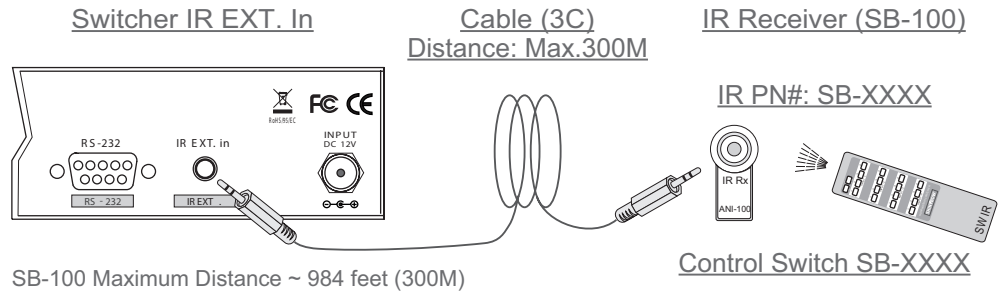
**SB-6353R**   
HDMI HDBaseT Receiver with PoH



# IR EXTENDER

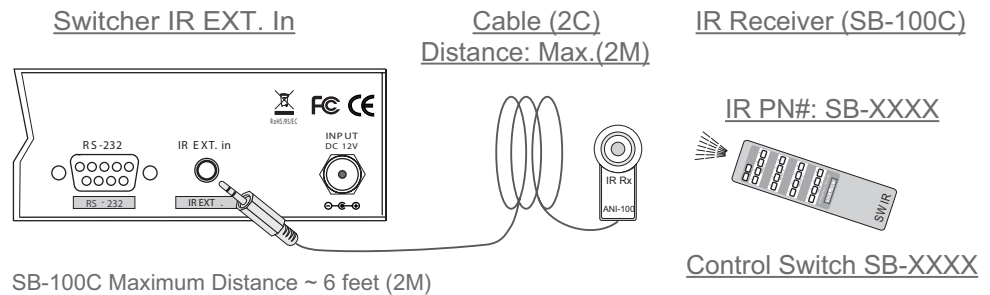
## IR EXTENDER

### 1. SB-100 IR 300M Receiver



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

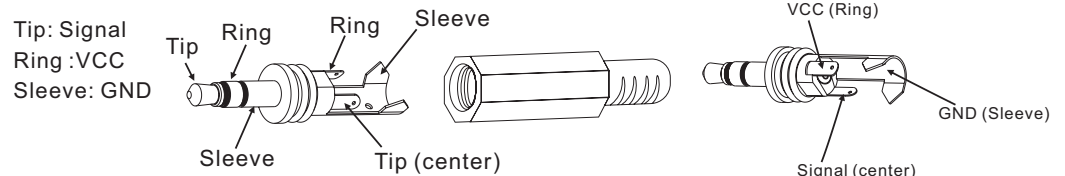
### 2. SB-100C IR 2M Receiver



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

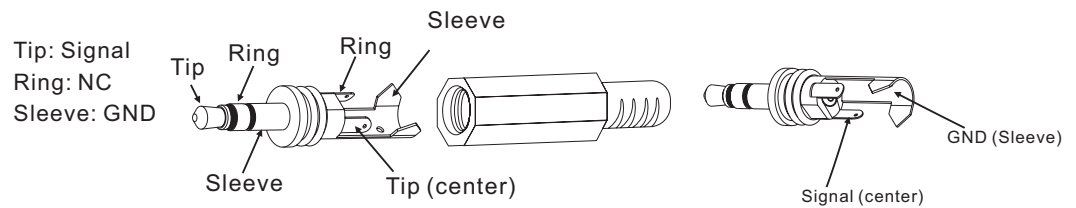
\*\*\* When you plug the External IR extender into the switcher, the front panel IR receiver remains active. \*\*\*

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



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

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



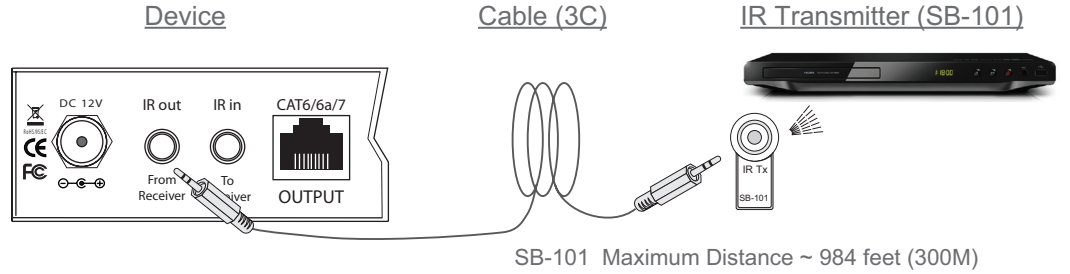
SB-100 Receiver and SB-101C Transmitter The DISTANCE maximum ~ 984 feet (300M)

**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.

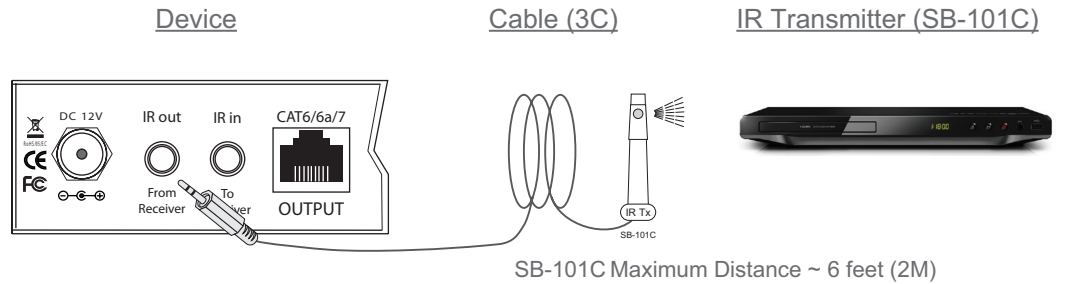
# IR EXTENDER

## IR EXTENDER

### 1. SB-101 IR 300M Transmitter



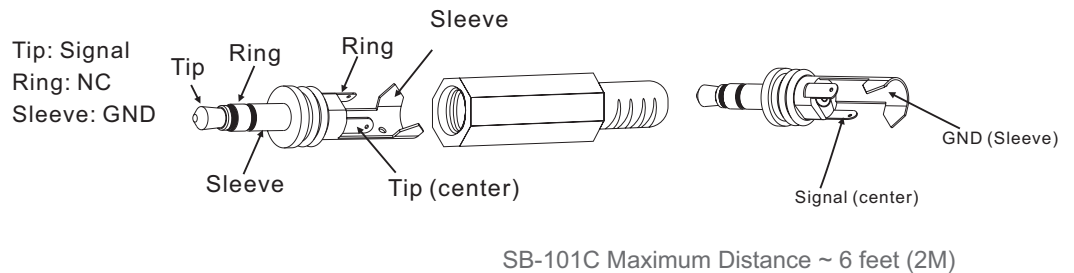
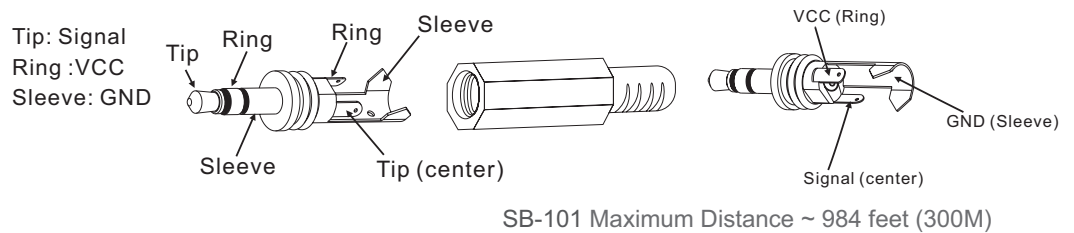
### 2. SB-101C IR 2M Transmitter



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

## PIN CONFIGURATION:

### SB-101 and SB-101C Transmitter Pin configuration



**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.

The frequency range of the IR emitter and receivers is 38khz.

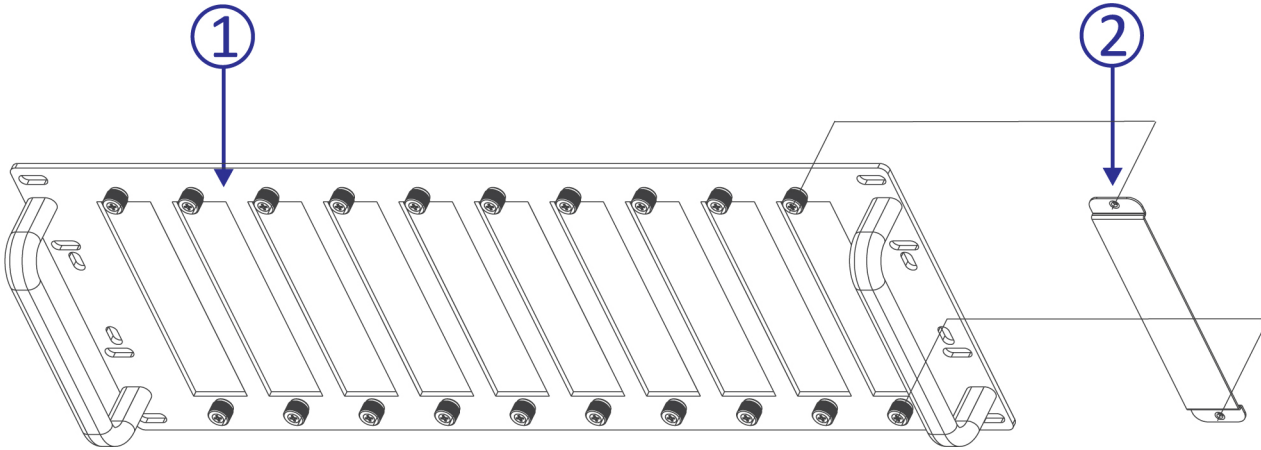


# RACK MOUNT

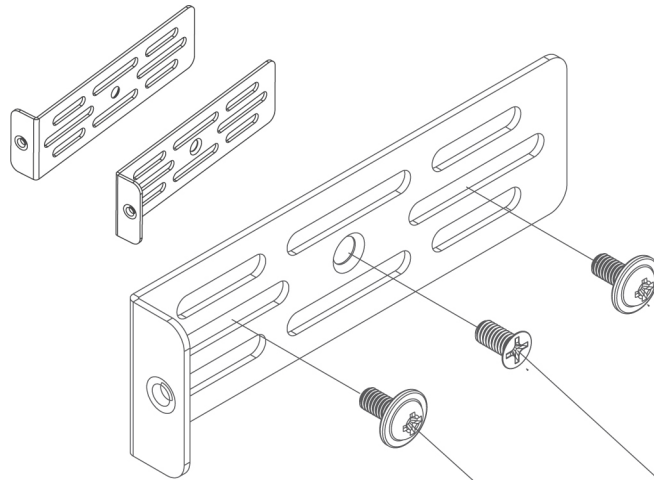
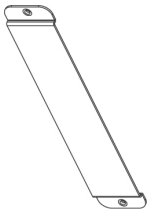
## SB-6069

### SB-6353R 19 INCH 4U-10 units RACK MOUNT

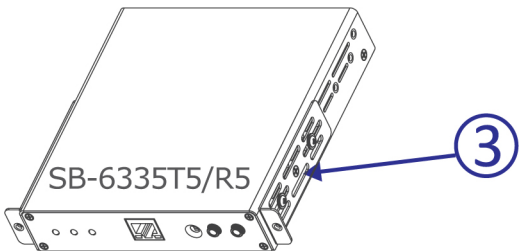
Model No.: #4U-10p-L130MM  
SB-6353R 4U ear mount pairs  
Parts No.: MEER6069ER13000



Model No.: #4U-10p-L130MM-COV  
SB-6353R 4U ear mount pairs  
Parts No.: MEER6069ER11000



Model No.: #4U-10p-L80MM-EAR  
SB-6353R 4U ear mount pairs  
Parts No.: MEER6320ER11001



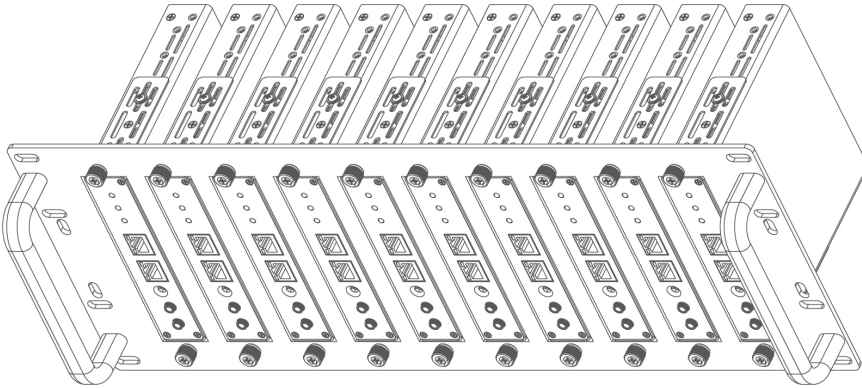
P/N: TP-ISO-M3x6mm(x2)  
(MESCW30006ISO02)

P/N: ISO-M3x6mm  
(MESCF30006ISO02)

# RACK MOUNT

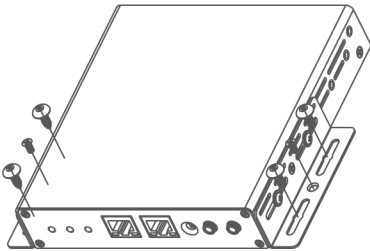
## SB-6069

Complete 19 inch 4U rack mount

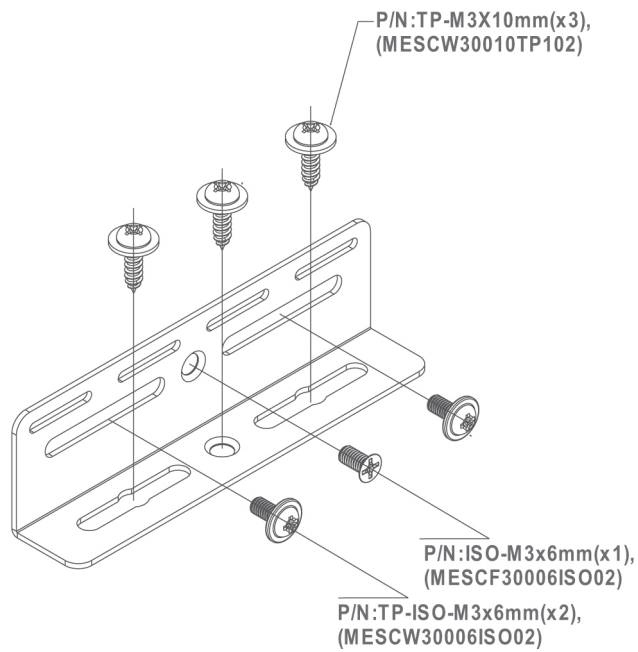
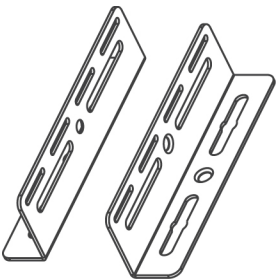


Install (10 units) Application: SB-6353R

SB-6353R: Wall mount accessories



Model No.: #WM-1INCH-L80MM  
SB-6353R Wall mount pairs  
Parts No.: MEER6320ER11000



# LIMITED WARRANTY

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