INSTRUCTION MANUAL

SB-6333R or SB-6333T

HDMI HDBaseT™ RECEIVER & TRANSMITTER KIT
up to 230 Ft (70M) (2-way IR, RS-232, HDMI)

4K 2K CAPABLE

HDBT™

Receiver



Transmitter



SHINYBOW™ USA

MULTIMEDIA AUDIO AND VISUAL

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 CATx EXTENDER Series

Thank you for purchasing the SB-6333T/R HDMI CATx extender kit. 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 converter

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INTRODUCTION

Congratulations on your purchase of one of the most innovative HDMI 1.4a over a single CATx cable Transmitter and Receivers on the market today. The SB-6333 HDBaseT™ Transmitter and Receiver can transmit and receive HDMI, IR Remote input or output signals and RS-232 I/O interface signal from a HDBaseT™ transmitter or receiver via LAN (category) cable for long distances of up to 229 feet (70M) maximum. The SB-6333T/R uses CAT5e, CAT6 or CAT6a LAN (category cable) via a RJ-45 8P8C 568B socket. This product provides higher full HD HDMI 1.4a, resolutions of 480i/p, 720p,1080i/p or high HD 4K2K quality that is identical to the high quality full HDMI 1.4 source signals. This HDBaseT™ Transmitter and Receiver are useful for sending HDMI digital video / multi-channel audio format, IR remote input/output and RS-232 control signals via a category LAN cable.

PACKAGE CONTENTS

Check that you have the following components;

- SB-6333 Transmitter and Receiver
- Users Guide
- AC Adaptor: 12VDC/1A
  (universal power switch 50/60Hz,100~240VAC)

Optional Accessories :

- SB-100 set (IR Receiver, Extender assy plug)
- SB-100C cable (IR Receiver)
- SB-101 set (IR Transmitter, Extender assy plug)
- SB-101C cable (IR Transmitter)
- 1 inch High Wall mount pack (Part # WM-1INCH-80MM)
- CAT6 Category cable distance 229 ft (70M), (P/N: UTP6-70)



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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Version 2.0 AUG 2015

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FEATURES & SPECIFICATIONS

FEATURES

- HDBaseT™ HDMI over a single category LAN cable Transmitter and Receiver
- HDBaseT™ transmits and receives HDMI, IR I/O and RS-232 I/O signals
- Uses a CAT5e, CAT6 and CAT6a UTP/FTP single category cable
- Supports link speeds of up to 3.4 Gbps, HDMI 1.4, full HD 4K2K signal, HDCP compliant
- Supports Digital RGB 36bits, HDMI digital video TMDS, digital multi-channel audio format
- Extends higher quality full HD DVI video WUXGA 1920x1200 resolution
- Supports HD High Definition full range resolution 480p, 720p 1080i/1080p and 4K2K
- Supports long distances of up to 229 feet (70M) between the HDBaseT™ Transmitter and Receiver
- Supports wall mount installation 13 pcs. into 19 inch 2U rack mount
- Power supports DC input with low power consumption (Full load 650mA)
- Power supply using universal power switch 50/60Hz,100~230VAC

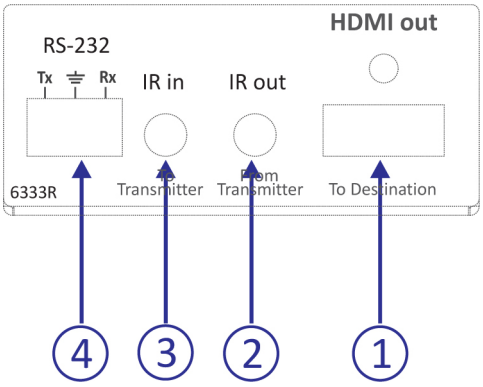
SPECIFICATIONS

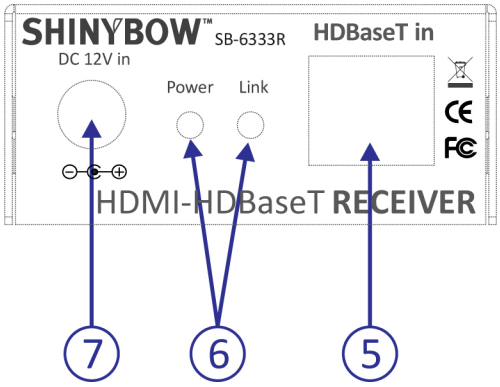
- **Type of Extender:** HDBaseT™ Transmitter and Receiver for HDMI over a single category LAN Cable
- **Input Signals:** HDMI with Digital Video (TMDS)/Audio 0.5~1.0vPP, DDC 5Vpp
- **HDBaseT™ Signal Supports:** HDMI 1.4 Standard, DVI and HDCP Compliant
- **Video Support:** HDMI and DVI TMDS formats for 1920x1200 resolution up to 3.4Gbps Digital RGB 36bits deep color, 3D 1.4a HDMI format
- **HDMI Audio I/O Supports:** Multi-channel 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)
- **Extra DVI Audio I/O:** 2CH-stereo audio (Phone Jack OD3.5mm connector)
- **Category Cable Support:** CAT5e, CAT6, CAT6a UTP or FTP cable
- **Supports HDMI Resolutions:** 480p, 720p 1080i/1080p or 4K2K(24Hz)
- **Scan Rate Accepted:** Supports HDMI full HD Resolution; Frequency 24Hz to 60Hz
- **Controls:**
  - 1x IR in
  - 1x IR out
  - 1x RS-232 I/O series interface
- I**R Infrared Frequency:** 38Khz
- **Extend Distance:** Up to 229 ft (70M) via UTP CAT6 cable
- **Rack Mount:** Total 13 pcs installed into 19 inch 2U rack mount
- **Dimensions (LxWxH):** 3.14 x 3.56 x 1.14 in (80x65x29mm)
- **Product Weight:** 0.385 kgs / 0.847 lb each
- **Power Supply:** Power Input +12VDC, 1A (Universal Type 50/60Hz, 100~240 VAC)
- **Power Consumption:** Max. 650mA (Full load 1080p-60Hz signal with use DC12V input)

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

TYPICAL HOOKUP AND OPERATION

SB-6333R RECEIVER





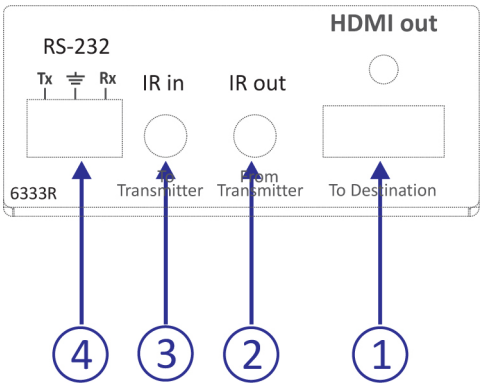
RECEIVER FRONT:

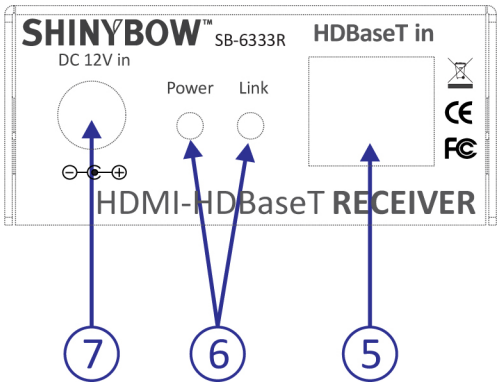
1. HDMI OUT : HDMI output signal from SB-6333T (HDMI source).
2. IR OUT : IR output signal (receives IR signal from SB-6333T).
3. IR IN : IR input signal (sends IR signal to SB-6333T).
4. RS-232 I/O : RS-232 series interface control via a PC.

RECEIVER BACK:

5. HDBaseT™ IN : HDBaseT™ input signal (HDMI signal from SB-6333T)
6. STATUS LED SHOW OUT : POWER & LINK
7. POWER INPUT : DV12V input

SB-6333T TRANSMITTER





TRANSMITTER FRONT:

1. HDMI IN : HDMI input signal (signal from HDMI source device).
2. IR OUT : IR output signal (receive IR signal from SB-6333R).
3. IR IN : IR input signal (send IR signal to SB-6333R).
4. RS-232 I/O : RS-232 series interface control via a PC.

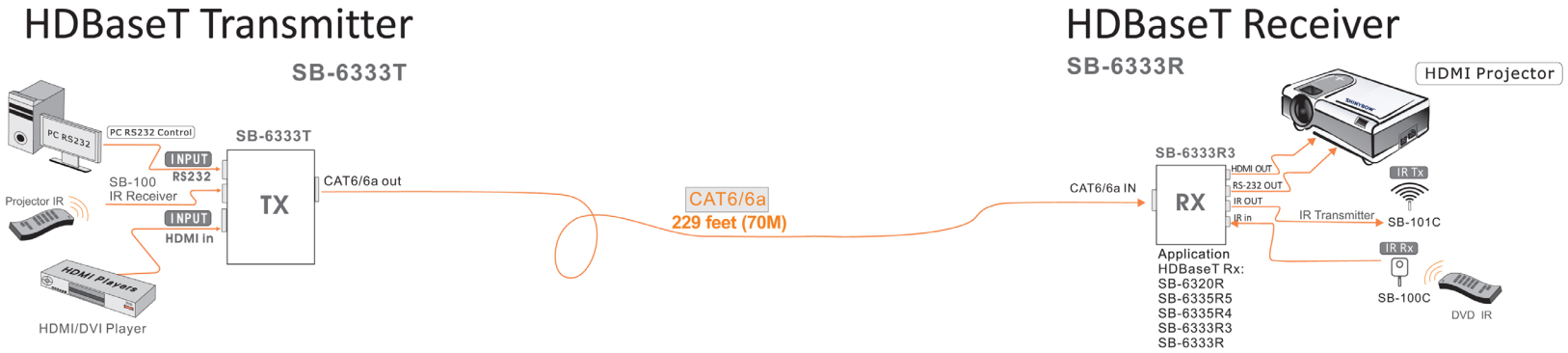
TRANSMITTER BACK:

5. HDBaseT™ OUT : HDBaseT™ output signal to SB-6333R via CATx cable.
6. STATUS LED SHOW OUT : POWER & LINK
7. POWER INPUT : DV12V input

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.

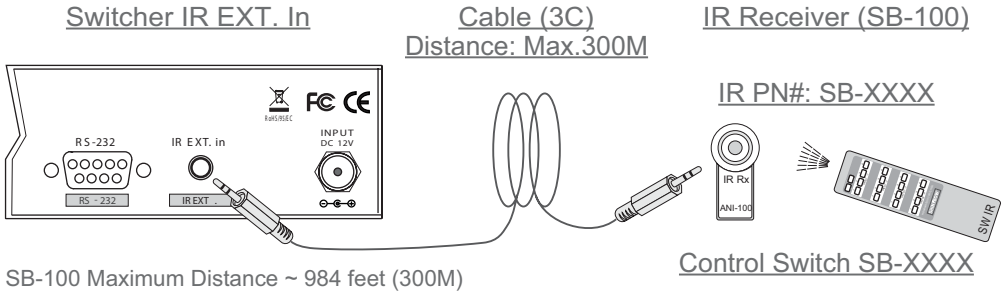
INSTALLING DIAGRAM



IR EXTENDER

1. SB-100 IR 300M Receiver



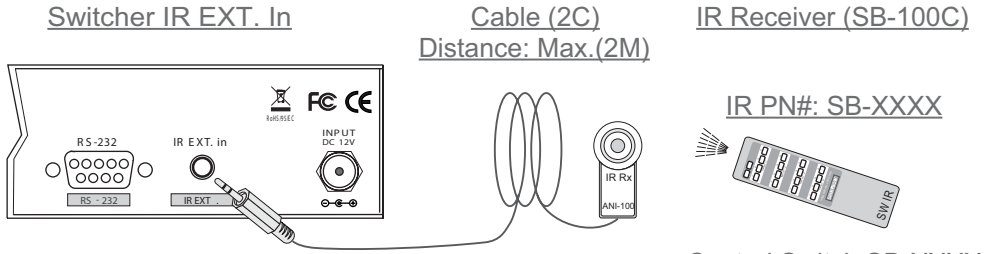


SB-100 Maximum Distance ~ 984 feet (300M)

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

2. SB-100C IR 2M Receiver





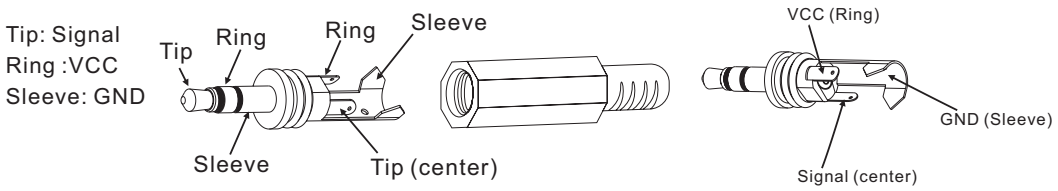
SB-100C Maximum Distance ~ 6 feet (2M)

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

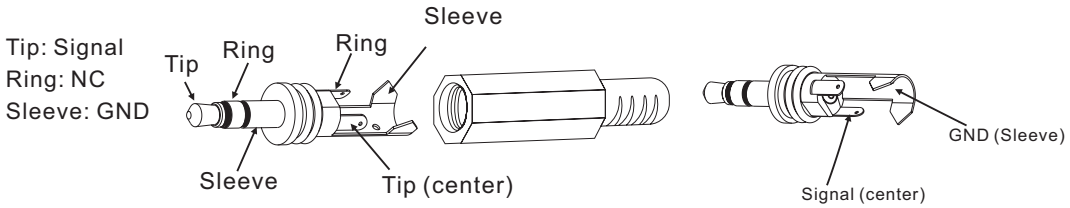




SB-100 Receiver and SB-101 Transmitter The DISTANCE maximum ~ 984 feet (300M)

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)

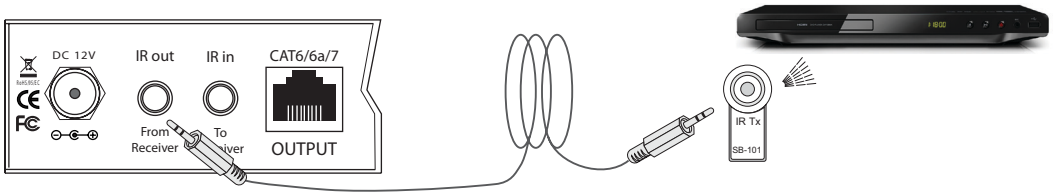
Note: *The External IR jack has voltage on the “Ring” portion of a 3-conductor plug. You must use a 3-conductor plug (aka: stereo plug). Using a 2-conductor plug will short out the power supply. Always make connections with the switcher power off.*

IR EXTENDER

1. SB-101 IR 300M Transmitter



Device | Cable (3C) | IR Transmitter (SB-101)

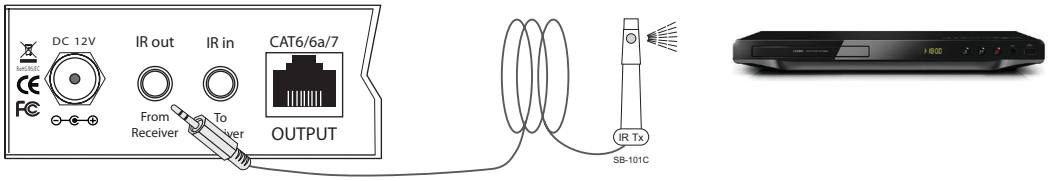


SB-101 Maximum Distance ~ 984 feet (300M)

2. SB-101C IR 2M Transmitter



Device | Cable (3C) | IR Transmitter (SB-101C)



SB-101C Maximum Distance ~ 6 feet (2M)

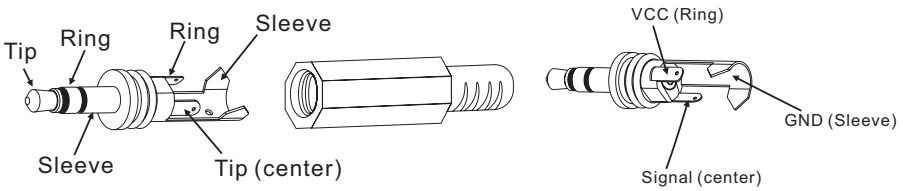
**** When you plug the External IR extender into the switcher, the front panel IR transmitter remains active. ****

PIN CONFIGURATION:

SB-101 and SB-101C Transmitter Pin configuration



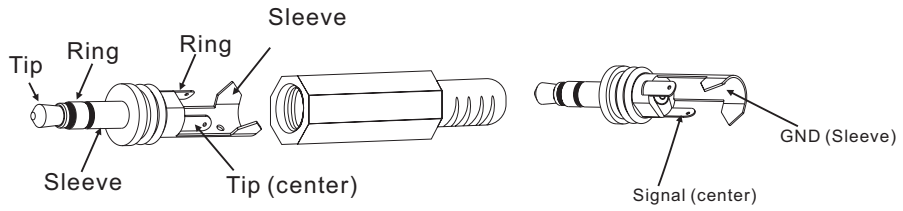
Tip: Signal
Ring :VCC
Sleeve: GND



SB-101 Maximum Distance ~ 984 feet (300M)



Tip: Signal
Ring: NC
Sleeve: GND



SB-101C Maximum Distance ~ 6 feet (2M)

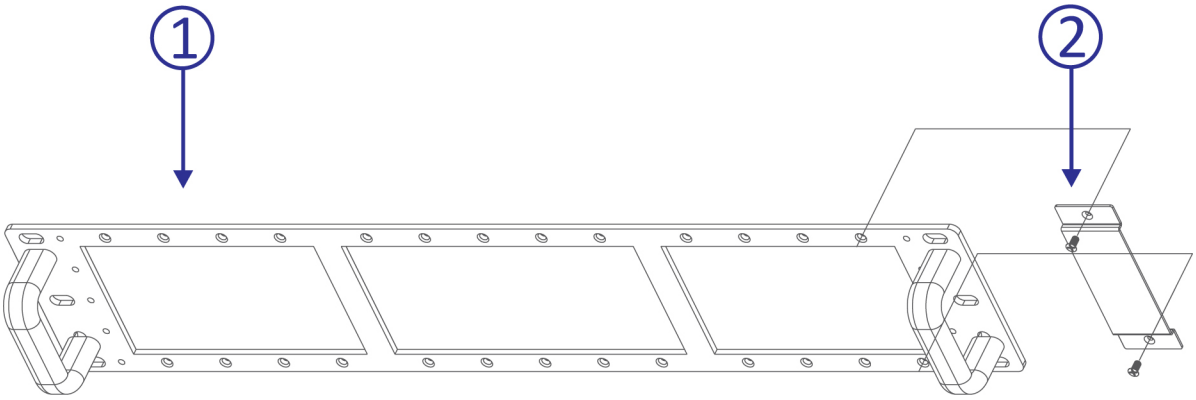
Note: *The External IR jack has voltage on the "Ring" portion of a 3-conductor plug. You must use a 3-conductor plug (aka: stereo plug). Using a 2-conductor plug will short out the power supply. Always make connections with the switcher power off.*

RACK MOUNT

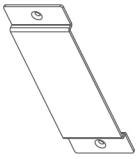
SB-6001 (OPTIONAL)

SB-6333T/R - 19 INCH 2U-13P RACK MOUNT

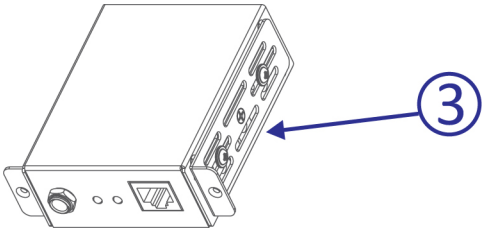
Model No. : #2U-13p-M80MM
SB-6333T/R 2U Ear mount pairs
Parts No.: MEERCAT5FT1300

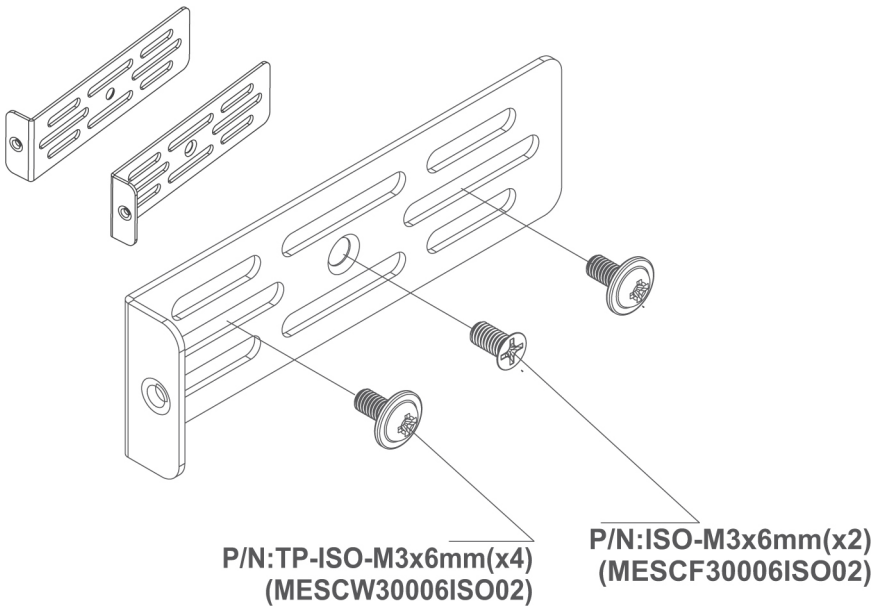


Model No. : 2U-13p-M80MM-COV
SB-6333T/R 2U Ear mount pairs
Parts No.: MEERCAT5RP11000



Model No. : #2U-13p-M80MM-EAR
SB-6333T/R 2U Ear mount pairs
Parts No.: MEER6300ER11001

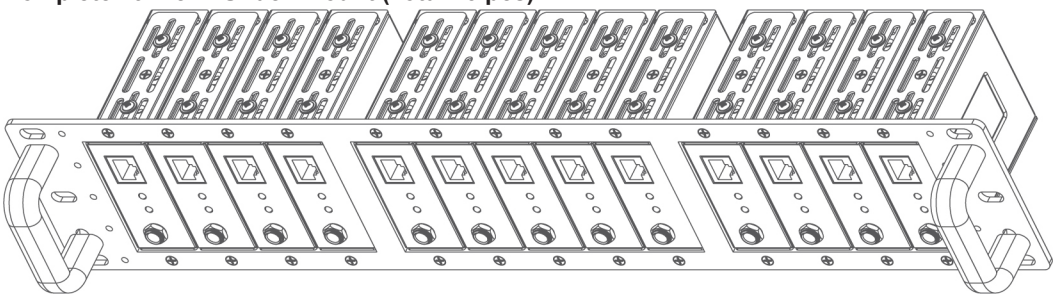




RACK MOUNT

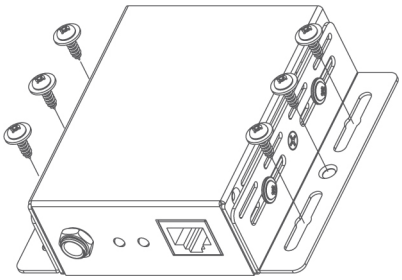
SB-6001

Complete 19 inch 2U rack mount (Total 13 pcs)

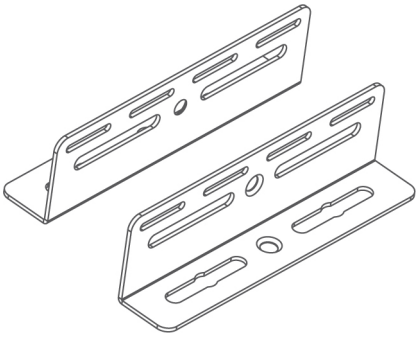


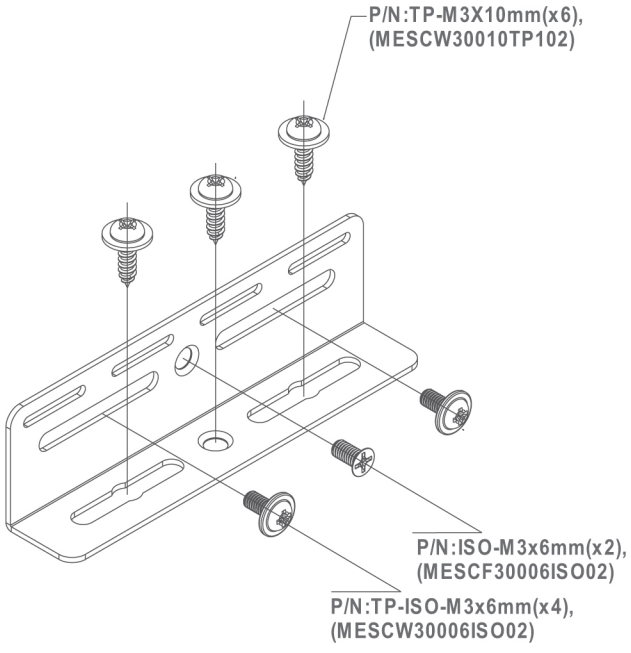
Install Application : SB-6333T3, SB-6333T, SB-6333R3 & SB-6333R

SB-6333T/R : Wall mount accessories



Model No. : #WM-1INCH-80MM
SB-6333T/R Wall mount pairs
Parts No.: MEER6300ER11000





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