

SB-6320R or SB-6320T

HDMI HDBaseT™ RECEIVER or TRANSMITTER
(Dual LAN, 2-way IR, RS-232, HDMI & Audio for DVI)

Receiver



Transmitter



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 CAT6 EXTENDER Series

Thank you for purchasing the SB-6320R or SB-6320T HDMI CAT6/6a extender. 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 these converters.

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INTRODUCTION

Congratulations on your purchase of one of the most innovative HDMI HDBaseT™ Receiver/Transmitter on the market today. The SB-6320R/T is an HDMI Version 1.4 HDBaseT™ Receiver/Transmitter that support all of the latest audio formats such as Dolby True HD, DTS-master, etc... and all (7) types of 3D. Front panel LED status display indicates a valid HDMI source, connection between the Transmitter and Receiver and Power. The SB-6320R HDBaseT™ receiver can receive HDMI signals from the SB-6320T HDBaseT™ Transmitter for lengths up to 328 ft/100M. The SB-6320R/T uses HDBaseT™ to receive and transmit HDMI, IR, RS-232 & Ethernet signals via a CAT6/6a/7 category cable with a RJ-45 connector. This product provides higher full HD resolutions of 480i/p, 720p, 1080i/p sw I/O quality that is identical to the HD source quality signals. Build-in mounting tabs for surface mounting are included. Also supports DVI with use of an external adapter (not included). The SB-6320R uses the Audio Output jack to provide audio from your DVI Audio Input OR extracts the audio from your HDMI signal. The SB-6320T uses the Audio Input jack to provide audio with your DVI signal.

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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CONFORMANCE TEST REPORT

FOR **EN 61000-6-1 / EN 61000-6-3**

REPORT NUMBER: 09-07-MAS-282-18-R



FOR **FCC 47 CFR/Part 15 Subpart B**

REPORT NUMBER: 09-07-MAS-282-19-R



Model Number: SB-6320R / SB-6320T

Comment Number: SB-6215, SB-6215R, SB-6215R, SB-6220R, SB-6220R, SB-6240R, SB-6240R, SB-6335, SB-6335R, SB-6320T, SB-6320R

RECEIVER:

Input: HDBaseT™ CAT6/6a/7 cable

Output: HDMI & SPDIF(LPCM)

Power Input: +DC12V@2000mA

TRANSMITTER:

Input: HDMI (with DVI-Audio)

Output: press HDMI signal via CAT6/6e/7 Cable

Power Input: +DC12V@2000mA



FEATURES & PACKAGE CONTENTS

FEATURES

- HDBaseT™ HDMI over (1) CAT6/6a/7 category cable extends signals for up to 328 ft/100M long distances
- Extends signals for HDMI, IR in/out, RS-232 in/out with (2) Ethernet ports, HDCP compliant
- HDMI digital Video/Audio and Video TMDS format with HDCP compliant and supports HDBaseT™ Specifications
- Supports all latest Audio formats such as DTS-HD Master Audio, Dolby True-HD Dolby Digital Plus
- 3D Enabled
- Uses CAT6, CAT6a or CAT7 UTP category cable
- Supports link speeds of up to 3.4 Gbps
- Supports digital RGB 36bits HDMI TMDS formats
- Extends high quality DVI video for 1920x1200 resolution
- Supports HD High Definition full range resolutions of 480p, 720p 1080i/1080p
- Extends signals for long distances up to 328 ft/100M with CAT6/7, CAT5e 200 feet (75M), CAT5 100 feet (35M) between the HDBaseT™ Transmitter and HDBaseT™ Receiver
- Transmitter supports IR EXT and RS-232 control display
- Surface mountable ready with included tabs
- Wall mountable. Easy to install without any adjustment
- Power supports DC input with low power consumption (Full load 1750mA)
- Power supply using universal power switch 50/60Hz, 100~230VAC

PACKAGE CONTENTS

Check that you have the following components:

RECEIVER

- SB-6320R HDMI HDBaseT™ CATx Receiver
- SB-100 IR Extender Receiver Set
- SB-101 IR Extender Transmitter Set
- Mounting tabs w/ screws
- HDMI Locking Post Replacement Screws
- North American Power Cord
- Users Guide
- Power Supply: DC12V, 2A
- *Optional: SB-100C IR Extender Receiver Cable (6.5ft (2M))*
- *Optional: SB-101C IR Extender Transmitter Cable (6.5ft (2M))*

TRANSMITTER

- SB-6320T HDMI HDBaseT™ CATx Transmitter
- SB-100 IR Extender Receiver Set
- SB-101 IR Extender Transmitter Set
- Mounting tabs w/ screws
- HDMI Locking Post Replacement Screws
- North American Power Cord
- User's Guide
- Power Supply: DC12V, 2A
- *Optional: SB-100C IR Extender Receiver Cable (6.5ft (2M))*
- *Optional: SB-101C IR Extender Transmitter Cable (6.5ft (2M))*



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.

SPECIFICATIONS

SPECIFICATIONS

RECEIVER Inputs/Outputs:

- (2) HDMI
- (2) Ethernet (RJ-45)
- (2) RS-232
- (1) 3.8mm Audio (for use with DVI only)
- (1) IR Emitter port
- (1) IR Receiver port
- (1) HDBaseT™ RJ-45

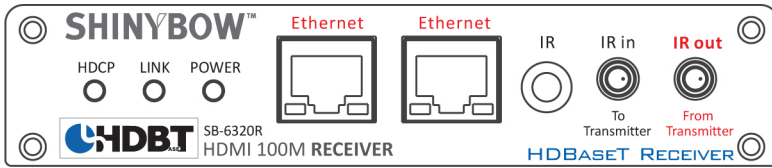
TRANSMITTER Inputs/Outputs:

- (2) HDMI
- (2) Ethernet (RJ-45)
- (2) RS-232
- (1) 3.8mm Audio (for use with DVI only)
- (1) IR Emitter port
- (1) IR Receiver port
- (1) HDBaseT™ RJ-45
- **Type of Extender:** HDMI signal over CAT5/6a/7 Cable Receiver or Transmitter
- **Signal Supports:** HDMI Standard, DVI and Audio, with HDCP Compliant
- **Video Signals:**
 - HDMI with Digital Video (TMDS)/Audio .5~1.0Vpp, DDC5Vpp
 - DVI up to 1920x1200 resolution
- **Video Support:**
 - HDMI and DVI TMDS formats for 1920x1200 resolutions up to 3.4Gbps
 - Digital RGB 36bits HDMI TMDS format deep color
- **Audio Support:** DTS-HD Master Audio, Dolby True-HD & Dolby Digital Plus
- **DVI Audio Support:** (1) DVI Audio output via phone-plug 3.5mm(OD) port
- **Supported HDMI Resolutions:** 480p, 720p 1080i/1080p
- **Scan Rate Accepted:** HDMI Resolution 24-240Hz
- **Control Link Series:** (1) IR in, (1) IR out, (1) RS-232 and (2) Ethernet series interface
- **IR Infrared Frequency:** 38KHz (IR in)
- **Extender Distance:** Up to 328 ft/100M (CAT6/7) / CAT5e 200 ft (75M) / CAT5 100 ft (35M)
- **Safety Approvals:** CE, FCC, VCCI & RoHS (2002/95/EC)
- **Dimensions (LxWxH):** 5.31 x 5.11 x 1 in
- **Weight:** 1.3 lb (Unit only) / 2.9 lb (Net)
- **Power Supply:** Power switch supply +12VDC / 2000mA

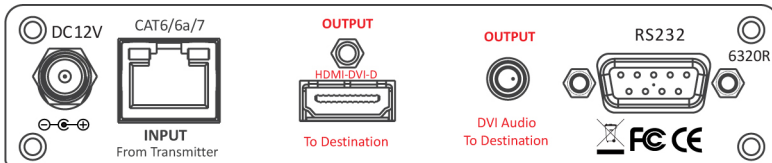
As product improvements are continuous, specifications are subject to change and without notice.

TYPICAL HOOKUP AND OPERATION

FRONT PANEL: SB-6320R HDMI 100M RECEIVER



REAR PANEL: SB-6320R HDMI 100M RECEIVER

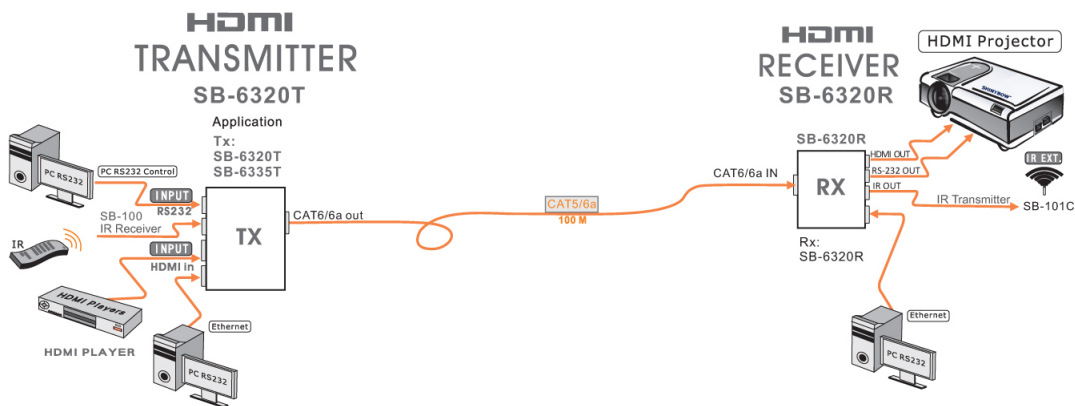


If you remove the HDMI screw posts, you must use the provided HDMI Locking Post replacement screws to keep the internal HDMI jack secure. Removing the HDMI screws without installing the HDMI Locking Post replacement screws will void your warranty.

Safeguards and Precautions

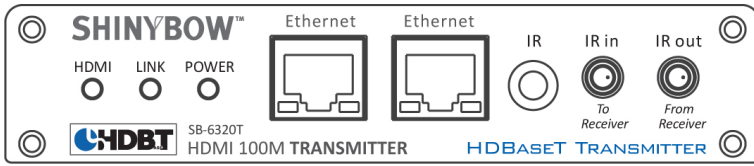
- Keep this unit away from fire, extremely hot areas, water or moisture of any kind.
- Do not place this unit on any support that is not firm, level and strong.
- Do not service the unit yourself. Opening the unit's housing will void the warranty.
- Servicing must be by Shinybow or by an authorized technician.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

INSTALLING DIAGRAM

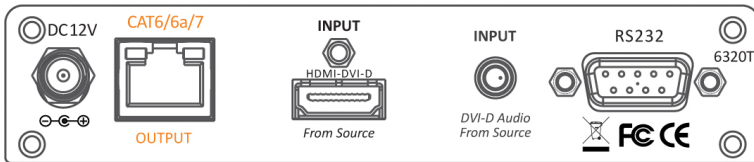


TYPICAL HOOKUP AND OPERATION

FRONT PANEL: SB-6320T HDMI 100M TRANSMITTER



REAR PANEL: SB-6320T HDMI 100M TRANSMITTER

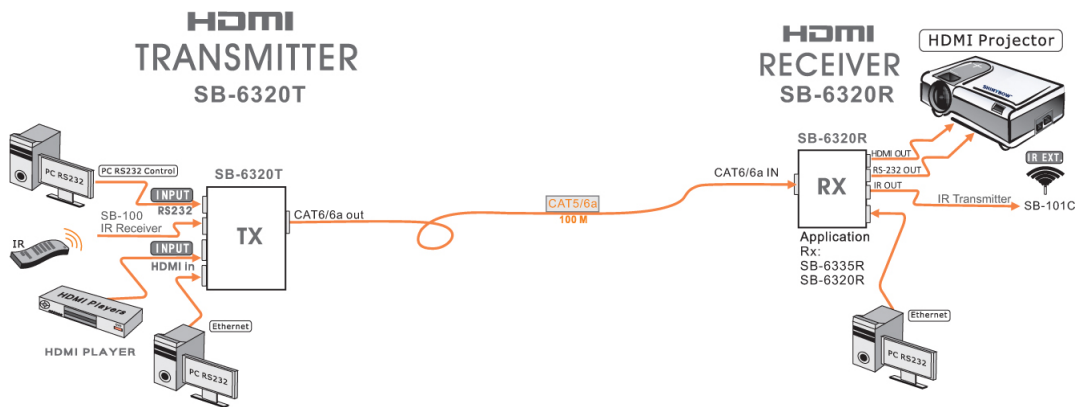


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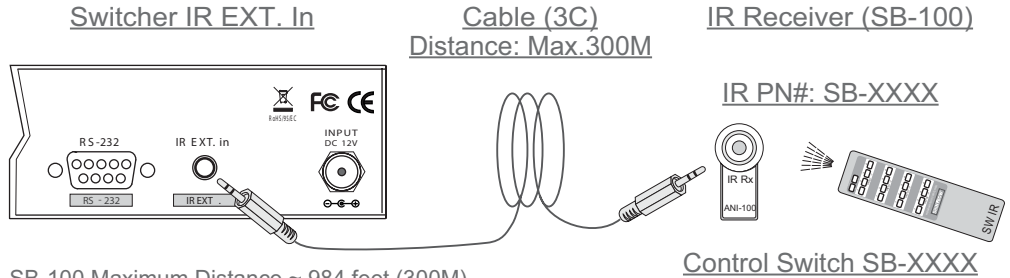
INSTALLING DIAGRAM



IR EXTENDER

IR EXTENDER

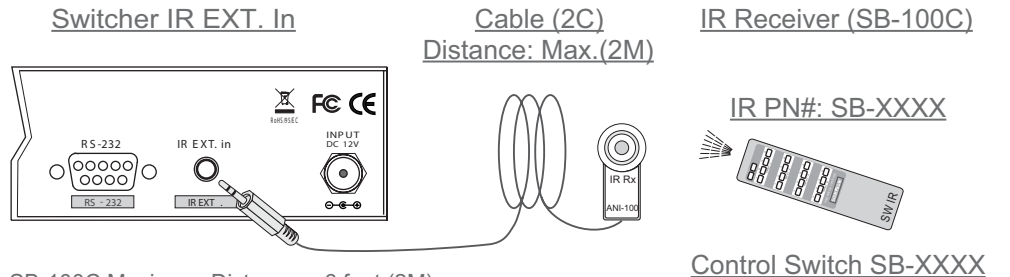
1. SB-100 IR 300M Receiver



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

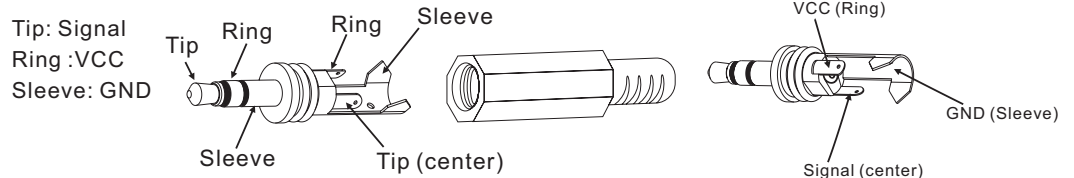


SB-100C Maximum Distance ~ 6 feet (2M)

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

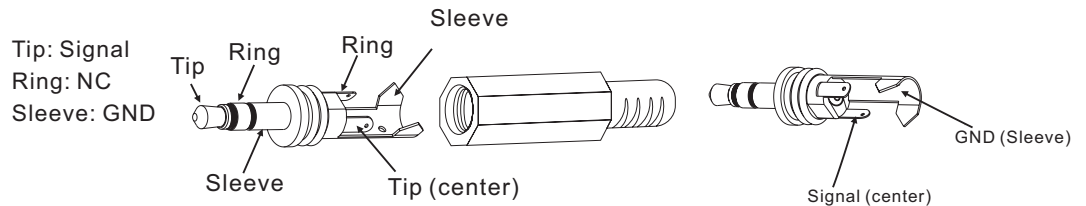
*** When you plug the External IR extender into the switcher, the front panel IR receiver remains active. ***

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



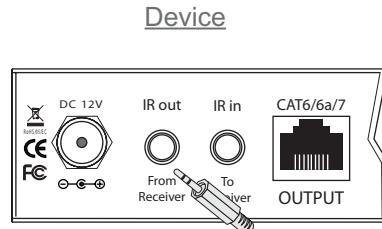
SB-100 Receiver and SB-101C Transmitter The DISTANCE maximum ~ 984 feet (300M)

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.

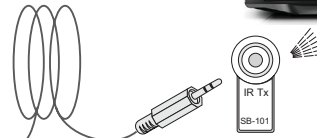
IR EXTENDER

IR EXTENDER

1. SB-101 IR 300M Transmitter



Cable (3C)

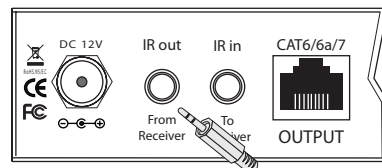


IR Transmitter (SB-101)

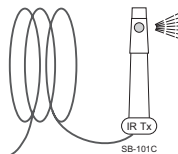


SB-101 Maximum Distance ~ 984 feet (300M)

2. SB-101C IR 2M Transmitter



Cable (3C)



IR Transmitter (SB-101C)



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

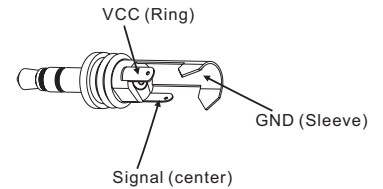
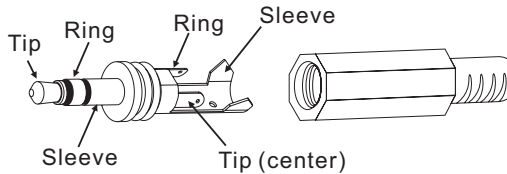
*** When you plug the External IR extender into the switcher, the front panel IR transmitter remains active. ***

PIN CONFIGURATION:

SB-101 and SB-101C Transmitter Pin configuration



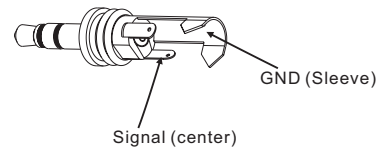
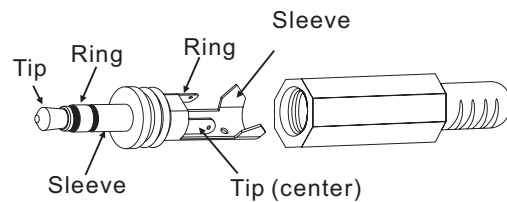
Tip: Signal
Ring :VCC
Sleeve: GND



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.

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