INSTRUCTION MANUAL

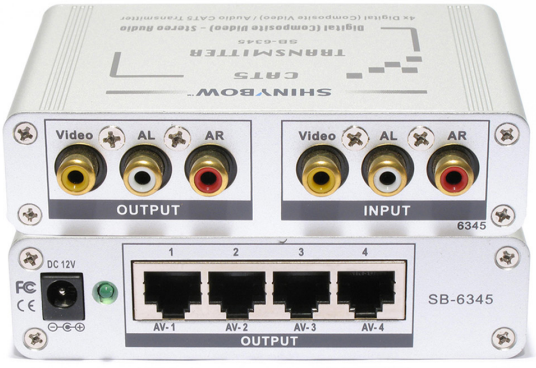
SB-6345R or SB-6345T

CAT5/Composite Video - Digital & Stereo Audio
REPEATER + RECEIVER or TRANSMITTER

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.

TABLE OF CONTENTS

CAT5 Transmitter/Repeater/Receiver Series

Thank you for purchasing the AV CAT5 SB-6345T Transmitter or SB-6345R 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 Extender.

CONTENTS

INTRODUCTION & PACKAGE CONTENTS 1
FEATURES & SPECIFICATIONS 2
TYPICAL HOOKUP AND OPERATION 3

INTRODUCTION

Congratulations on your purchase of one the most innovative CAT5 Transmitter/Repeater/Receiver products on the market today. The SB-6345T is a transmitter driving AV signals (Composite Video or Digital Audio +Stereo Audio) over long distances by category cable to the CAT5 component video receiver or repeater such as models SB-6135R, SB-6235R, SB-6330R and SB-6345R. Using a high performance HDTV A/V system for 480p-720p-1080i-1080p driving ADCs digital signals. Composite video signals use the same path with digital audio (PCM) with a maximum extension of 1000ft between transmitter and receiver useing a category 5 cable. Uses RJ-45 (Category 5) jack terminators and component video sockets.

PACKAGE CONTENTS

Check that you have the following components;

- SB-6345 Transmitter or Repeater or Receiver
- Users Guide
- AC/DC Adapter: 12VDC, @300mA

Input: Composite(Digital Audio)-Stereo Audio(AR/AL)

Power Input: SB-6345T +12V DC@300mA
SB-6345R +12V DC@300mA

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

SB-6345 TRANSMITTER

- Input: 1x A/V Video (composite)+Stereo Audio
- Output: 1x A/V Video (composite)+Stereo Audio
  4x CAT5 (Tx) Transmitter Distribution

SB-6345 RECEIVER

- Input: 1x CAT5 (Rx) Receiver
- Output: 1x CAT5 (Tx) Repeater
  2x A/V Video (composite)+Stereo Audio Distribution

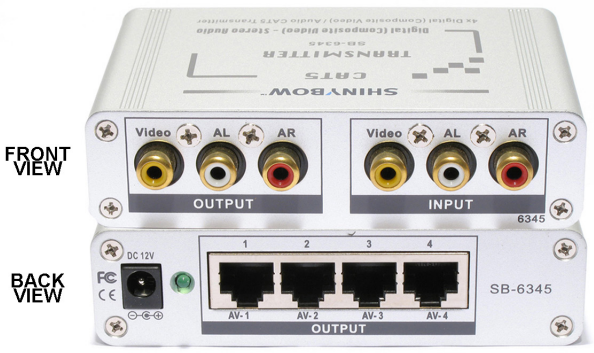
SPECIFICATIONS

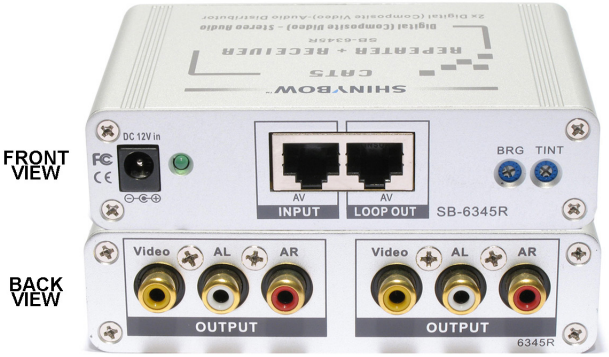
- **Model Number:** SB-6345T Transmitter, SB-6345R Repeater & Receiver
- **Type of Signals:** AV system , Composite video=Digital Audio(PCM**)**
- **SB-6345T Connects to Receivers:**
  - SB-6135R
  - SB-6235R
  - SB-6345R
- **Cable for CAT5, 5e, 6:**
  - AV Resolution:
    - 1080i (1920x1080) 450 feet
    - 720p (1080x720) 600 feet
    - 480p (720x480) 1000 feet
- **Video Bandwidth:**
  - Tx : 400 Mhz, 13dB full power
  - Rx : 270MHz 1090V/us@G= +1
- **Tx Slew Rate:** 2000 V/us
- **Video Maximum Input Levels:** 1.45 Vp-p
- **Rx High input Impedance:** 1 MΩ differential
- **Audio Frequency Response:** 20Hz to 20KHz, +/-1db
- **Audio Maximum Input Levels:** 3.1 Vp-p (line level)
- **Low Distortion:**
  - Tx: 68dB SFDR@5 Mhz 200Ω load
  - Rx: 1 Vp-p@5MHz
- **In/Out Terminal:** RJ-45 Jack, HD-15 and Ear phone Jack female connectors
- **Size(LxWxH):** 2.75 in x 4.40 in x 1 in (70x112x26mm)
- **Net Weight (Unit only):** 0.4 lbs (0.24kg) Approx
- **Power Consumed:** @150mA
- **Power Source:** DC 12 Volts @300mA

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

TYPICAL HOOKUP AND OPERATION

SB-6345





TRANSMITTER
Front: Input: 1x AV (Composite or Digital Audio)

Rear: Output: 1x AV (Composite or Digital Audio)
4x CAT5 (Tx) Transmitter
Power Output: DC12V@300mA

RECEIVER
Front: Input: 1x CAT5 (Rx) Receiver / 1x CAT5 (Tx) Repeater
Power Output: DC12V@300mA

Rear: Output: 2x AV (Composite or Digital Audio) Distribution Amplifier

Transmitter signals : AV system as Composite Video=Digital Audio(PCM) + Audio 480p(720x480), 720p(1080x720), 1080i(1920x1080)

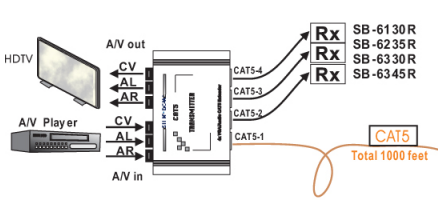
Safeguards and Precautions

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.

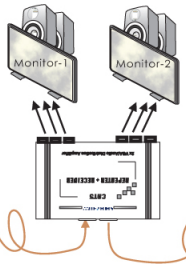
CAT5 AV-DIGITAL EXTENDER

APPLICATIONS
TX : Video line driver, Digital line driver, Low power differential ADC driver, Signal-ended input to differential output driver
RX : High speed differential line receivers, Differential-to-sigle ended converters, High speed instrumentation amps, level shifting.

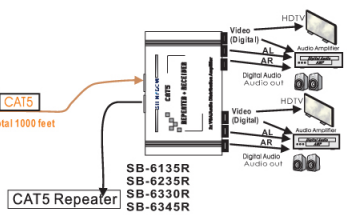
TRANSMITTER
SB-6345



REPEATER
SB-6345R



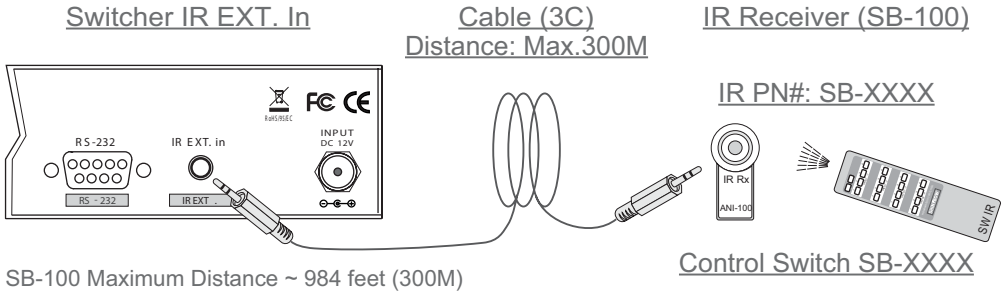
REPEATER+RECEIVER
SB-6345R



IR EXTENDER

1. SB-100 IR 300M Receiver



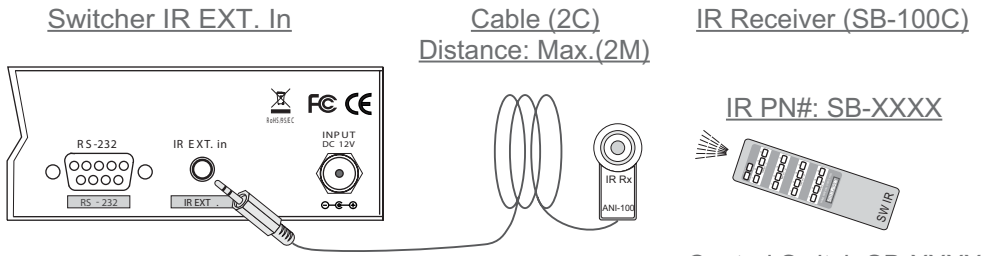


SB-100 Maximum Distance ~ 984 feet (300M)

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

2. SB-100C IR 2M Receiver





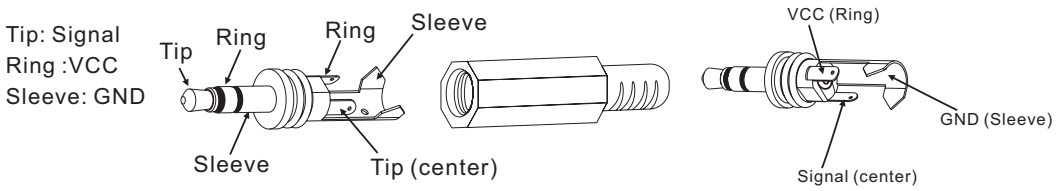
SB-100C Maximum Distance ~ 6 feet (2M)

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

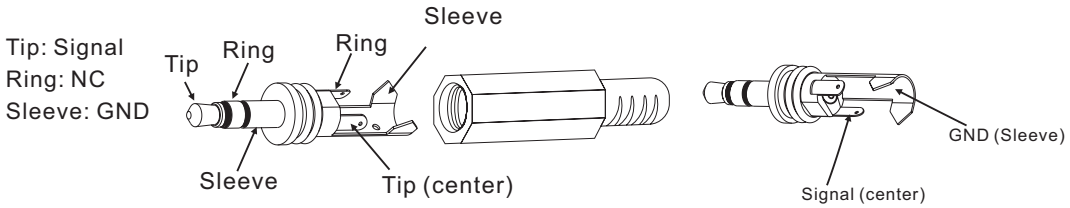




SB-100 Receiver and SB-101 Transmitter The DISTANCE maximum ~ 984 feet (300M)

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





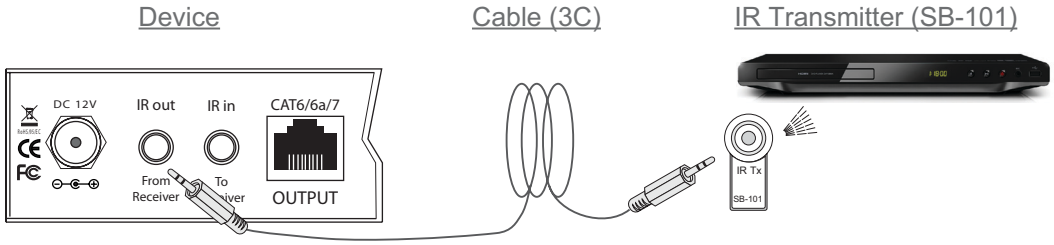
SB-100 Receiver and SB-101C Transmitter The DISTANCE maximum ~ 984 feet (300M)

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

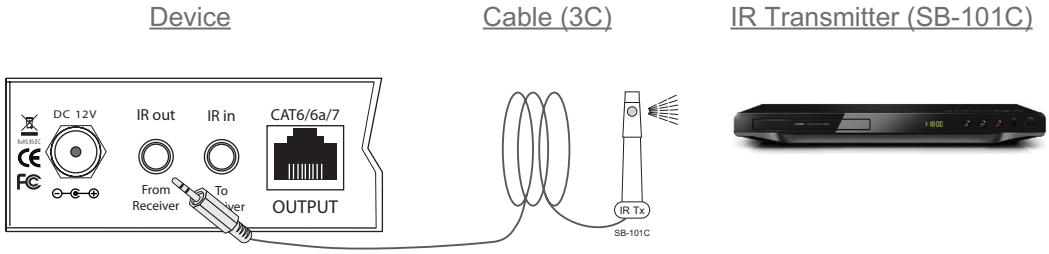




SB-101 Maximum Distance ~ 984 feet (300M)

2. SB-101C IR 2M Transmitter





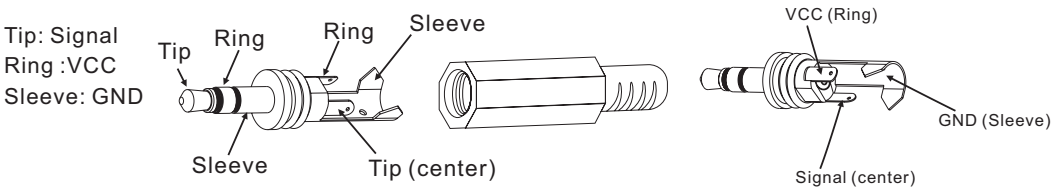
SB-101C Maximum Distance ~ 6 feet (2M)

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

PIN CONFIGURATION:

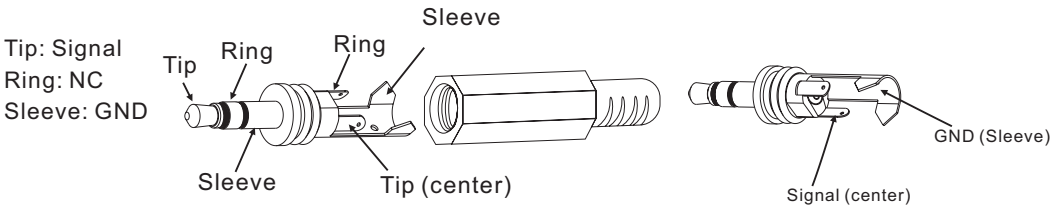
SB-101 and SB-101C Transmitter Pin configuration





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





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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