INSTRUCTION MANUAL

SB-8811

8x8 DVI HDTV Video Matrix Routing Switcher



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

FULL HD DVI Matrix Switcher Series

Thank you for purchasing the SB-8811 DVI Matrix Switcher. 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 switcher.

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INTRODUCTION

The SB-8811 is high-performance 8x8 matrix routing switcher for DVI (Digital Visual Interface) signals. This switcher supports data rates up to 6.75 Gbps, enabling 1080p DVI formats and UXGA/WUXGA/DVI resolution to any HD display. High Definition Digital signals can be selected and distributed to any (8) outputs simultaneously. The switcher is certified as being fully DVI and HDCP compliant, with RoHS, CE, FCC certification. Supports high resolution DVI sources routed to DVI displays, monitors, projector or audio receivers. The EDID can be selected between (4) different modes. Control is provided via front panel push buttons, IR remote or via RS-232. An RS-232 Windows GUI interface is provided for matrix routing.

PACKAGE CONTENTS

Check that you have the following components;

- SB-8811 Matrix Routing Switcher
- IR Remote Controller (SW-8811)
- 19 inch Ear mount bracket (Part # 1U-440L)
- IR Extender receiver (SB-100)
- CD Contents: This manual, Windows GUI
- RS-232 Cable
- Users Guide
- Power Supply: 12VDC, 5A Universal Type 50/60Hz, 100~230VAC

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

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FEATURES & SPECIFICATIONS

FEATURES

- 8x DVI digital source devices matrix switched to 8x DVI devices
- DVI digital video w/ embedded audio, DVI format and CEC/HDCP 2.0 compliant
- (7) function key control and worldwide (4) EDID modes for HDTV resolutions
- Link speeds of up to 6.75 Gbps (link clock rate of 340Mb Hz), Supports DVI 3D formats
- Wide range of HD resolutions from PC XGA to WUXGA 1920x1200 and HDTV/DTV resolutions 480i/480p, 576i/576p, 720p, 1080i & 1080p
- Compatible with all DVI source devices, PC monitors, Plasma HD display, HDTV and audio receivers/amplifiers
- Digital Video TMDS formats Resolution up to 1080p-60 with Deep color 36-bit
- Various user interface controls:
  - Windows-based GUI control via RS-232 port
  - Front panel push buttons
  - 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:
  - Internal modes: AUTO/1080p-2CH/1080p-5.1/1080p-7.1/1080i-2CH/720p-2CH
  - External modes : Passing mode
- Automatic scanning input & output status via LED show on front panel
- Supports preview output port simultaneously output #1
- Supports IR Remote and IR Extender with distance up to ~ 1000ft (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.

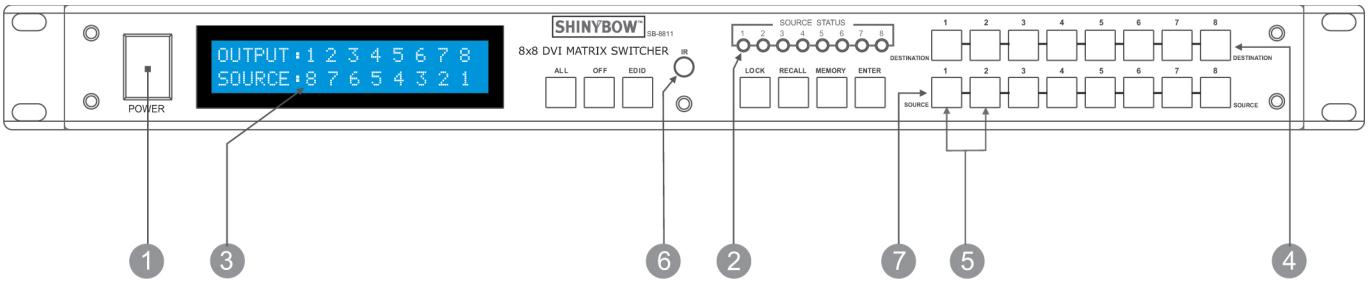
- When power is removed and resorted, the last configuration will be invoked.

SPECIFICATIONS

- **Type of DVI Switcher:** 8x DVI inputs To 8x Outputs DVI Matrix Switcher
- **DVI Support:** HD 1080p@60Hz, H36-bit Deep color, 3D (1.4a) formats
- **HDCP / CEC Support:** HDCP 2.2 Compliant, CEC Compliant
- **Video Bandwidth:** Double Data Rates: 340 MHz, total 6.75 Gbps bandwidth
- **Digital Video Support:** Full HD resolution : 480i / 480p / 720p / 1080i / 1080p
- **Switcher Controls:**
  - IR remote control
  - IR external port (OD 3.5mm ear phone jack)
  - Select & Function buttons on front panel
  - RS-232 serial interface
- **Preview Output:** Supports 1x preview output port simultaneously via Output- #1
- **Source Status:** Automatically Scan Sources Inputs via LED
- **Function Control Key:** ALL / OFF / RECALL / ENTER / MEMORY / LOCK / EDID
- **Infrared Frequency:** 38 Khz
- **IR External Distance:** ~1000 feet / 300M maximum
- **HDMI I/O Connector:** DVI-D - (24+5) pin Female DIP Type
- **Temperature:** Operate in a place between 32°F - 100°F (0°C - 38°C)
- **Dimensions (LxWxH):** 19 x 9.85 x 1.75 in (482x250x44 mm)
- **Rack Mount:** Rack Mount 1RU High 19 in Rack Mount (with rack mount)
- **Power Supply:** DC12V / 5A, Universal world wide Type 50/60Hz, 100~230 VAC
- **Power Consumption:** 3880 mA Maximum
- **Safety Approvals:** CE, FCC, RoHS (2002/95/EC)
- **Product Weight:** 13 lb

As product improvements are continuous, specifications are subject to change and 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 that last state during a power cycle. When power is removed and resorted, the last configuration will be evoked.

2. INPUT STATUS DISPLAY: Input sources 1 to 8 LCM illuminates blue to indicate that a video source is present on that input.

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

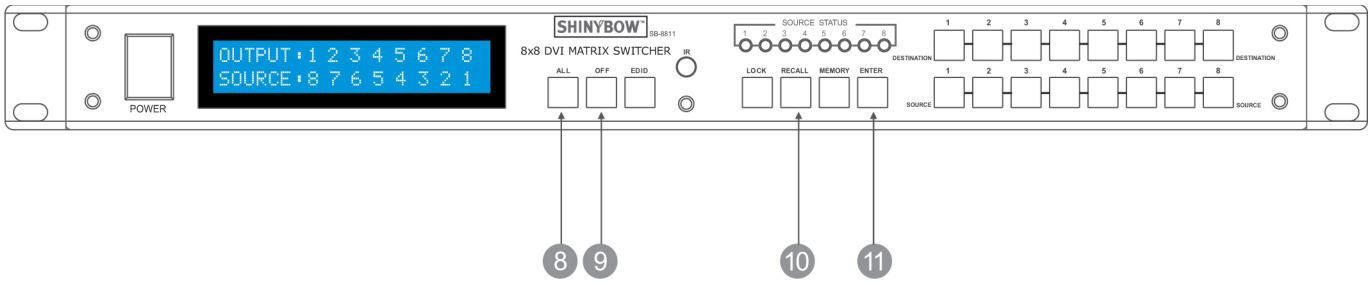
4. DESTINATION SELECT BUTTONS: Separate outputs 1 thru 8 select buttons are provided for each destination assignment. Routing can be source to destination or one source to multiple destinations.
Example: Press Destination 1, 3, 5 then press Source 2 will route Input 2 to Output 1, 3, 5 respectfully.

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

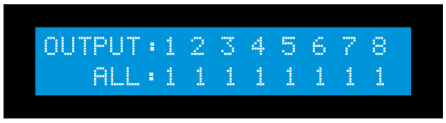
6. IR SENSOR: The IR sensor receives IR commands from the supplied remote controller or a third party IR emitter.

7. SOURCE SELECT BUTTONS: Separate inputs 1 thru 8 select buttons are provided each source selection.

FRONT PANEL



8. FUNCTION KEY - ALL:



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

Option 1

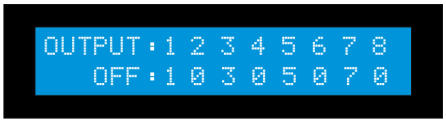
- Press **ALL** followed by **OFF** button. The display will show " **0** " indicating all destinations have no video selected.

Option 2

- Press **ALL** followed by Source 1 thru 8. The display will show the Source selected.
- Press **ENTER** The pre-set source selection will be assigned all destinations.

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9. FUNCTION KEY - OFF:



Disables (mutes) video to selected channels. Either destinations.

- Press **OFF** button followed by any Destination channel.
- Press 1 thru 8 output destination. The display will show " **0** " for the selected channel indicating no video selected.

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10. FUNCTION KEY - RECALL:





The system will show previously stored presets, up to a total of 16. Presets are stored in local memory using Source keys 1 thru 8 or Destination keys 1 thru 8 as the memory preset location.

- Press **RECALL** button.
- Press 1 thru 8 on either Source or Destination row.
- Press **ENTER** The pre-set configuration will execute.

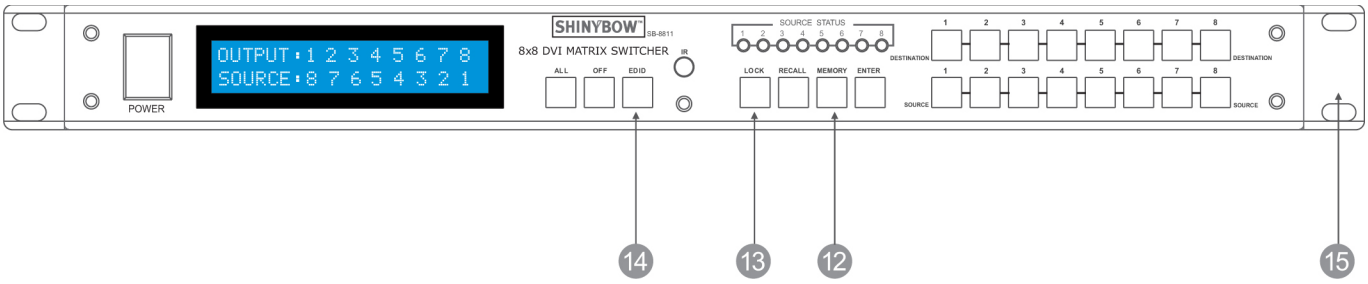
Operation completes.

Note: Operation will abort if no keys are dressed within 5 seconds.

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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 16.
Presets are stored in local memory using Source keys 1 thru 8 or Destination keys 1 thru 8 as the memory preset location.

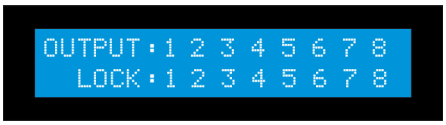
- Configure desired matrices.
- Press **MEMORY** button.
- Press 1 thru 8 on either Source or Destination row.
- Press **ENTER** to ready memory location.
- Or press **MEMORY** again to cancel operation.

Operation completes.

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

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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.

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14. FUNCTION KEY - EDID



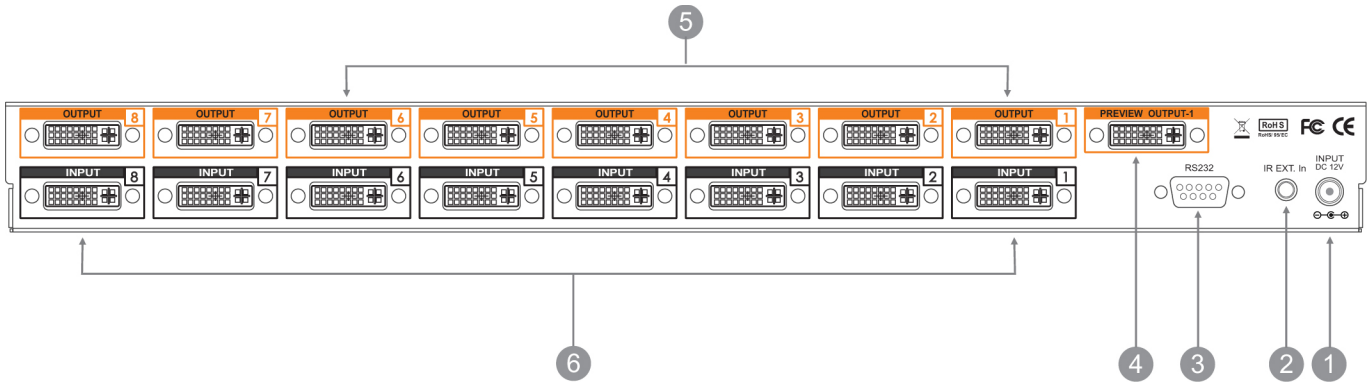


- Press **EDID** to select new EDID mode or select source row #1 or #2 for LINK source EDID again.
- Press the **DESTINATION #** to learn EDID The Destination EDID has been learned.

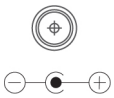
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15. 19 INCH EAR MOUNT PAIR: Converts desktop to 19 inch rack mount. Bracket (part # 1U-440L) INCLUDED. Image shows rack mount bracket attached.

BACK PANEL



1. DC POWER INLET: The switcher is fitted with a DC power plug input connector. Ensure that you use an approved type and is of sufficient current carrying connector capacity with the correct voltage and connector polarity. 12Volt DC power supply 5A Max (Center pin positive).



POWER JACK:
DC Jack - Inner OD Ø 2.1 mm (+)
Outside OD Ø 5.5mm (GND)
Power input -12VDC, 5A

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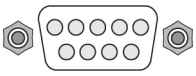
2. IR EXTENDER CONTROL: Supports the IR Extender. Extends a maximum distance of 300M/~1000 ft. When you plug the external IR extender into the switcher, the front panel IR receiver remains active.



IR EXTENDER JACK:
Female Jack - inner OD Ø 3.5 mm

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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.

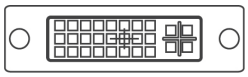


REMOTE PORT : DB-9pin Female connector

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4. PREVIEW OUTPUT-01 DVI-D: Connect a HDMI digital video/audio signal link direct to this Female DVI digital video/audio connector. This connector supports DVI-D digital video/audio and DVI-D digital video sources.

Preview port DVI-D signal as the same as Output 1

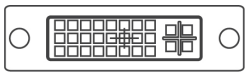


DVI-D DIGITAL VIDEO/AUDIO CONNECTOR:
DVI Female connector.
Note: With the proper adapters, the switcher can be used with DVI-D digital video signals HDCP compliant. DVI does not support audio.

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5. INPUTS- 1,2,3,4,5,6,7, & 8 DVI-D: Connect a HDMI digital video/audio signal link direct to this Female DVI connector. This connector supports DVI-D digital video/audio and DVI-D digital video sources.

DVI-D Digital Video, Connector with fix screw Input 1 ~ Input 8

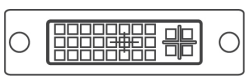


DVI-D DIGITAL VIDEO/AUDIO CONNECTOR:
DVI Female connector.
Note: With the proper adapters, the switcher can be used with DVI-D digital video signals HDCP compliant. DVI does not support audio.

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6. OUTPUTS- 1,2,3,4,5,6,7 & 8 DVI-D: Connect a HDMI digital video/audio signal link direct to this Female DVI connector. This connector supports DVI-D digital video/audio and DVI digital video sources.

DVI-D Digital Video, Connector with fix screw Output 1 ~ Output 8



DVI-D DIGITAL VIDEO/AUDIO CONNECTOR:
DVI Female connector.
Note: With the proper adapters, the switcher can be used with DVI-D digital video signals HDCP compliant

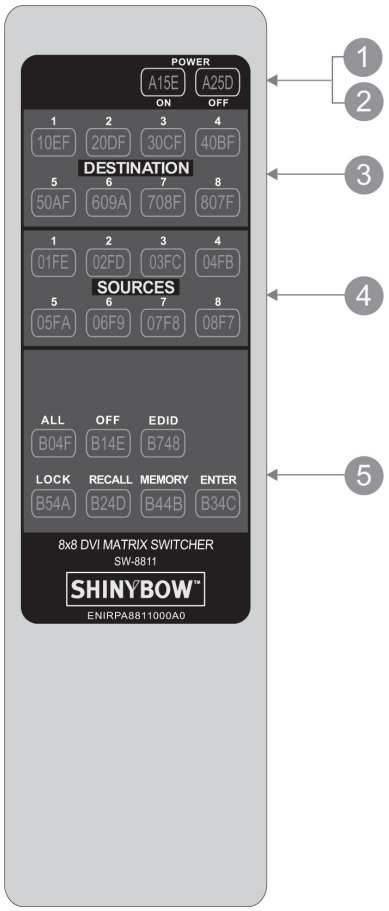
REMOTE CONTROL

Before making any connections to the SB-8811. Observe the following:

- Ensure the mains 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 power up the switcher will return to its last used setting before Powered down.

REMOTE CONTROL

IR REMOTE : SW-8811



1. & 2. SWITCH POWER ON or OFF:

Controller with a power ON and OFF

3. DESTINATION : 1 thru 8 OUTPUT SELECTION:

Press the destination button to select the output display channel.

4. SOURCE : 1 thru 8 INPUT SOURCE SELECTION:

Press input 1~8 sources with selection button

5. FUNCTION KEY:

ALL - function selection button
OFF - function selection button
EDID - function selection button
RECALL - function selection button
ENTER - function selection button
MEMORY - function selection button
LOCK - function selection button

REMOTE PROTOCOL COMMANDS

IR REMOTE CUSTOM AND DATA CODES (NEC STANDARD)

HOW TO SETUP IR CODES :		CUSTOM CODE : 33CC
POWER ON :	33CC	A15E
POWER OFF :	33CC	A25D
ALL :	33CC	B04F
OFF :	33CC	B14E
LOCK :	33CC	B54A
RECALL :	33CC	B24D
MEMORY :	33CC	B44B
ENTER :	33CC	B34C

PRESS DESTINATION - # THEN PRESS SOURCE -

DESTINATION #1 : 33CC 10EF	SOURCE #1 : 33CC 01FE
DESTINATION #2 : 33CC 20DF	SOURCE #2 : 33CC 02FD
DESTINATION #3 : 33CC 30CF	SOURCE #3 : 33CC 03FC
DESTINATION #4 : 33CC 40BF	SOURCE #4 : 33CC 40BF
DESTINATION #5 : 33CC 50AF	SOURCE #5 : 33CC 05FA
DESTINATION #6 : 33CC 609F	SOURCE #6 : 33CC 06F9
DESTINATION #7 : 33CC 708F	SOURCE #7 : 33CC 07F8
DESTINATION #8 : 33CC 807F	SOURCE #8 : 33CC 08F7

For example;

Select Destination # 1 to show Source #1~8,

THE IR DATA CODE LIST :

Destination # 1 , Source #1 33CC 10EF 33CC 01FE
Destination # 1 , Source #2 33CC 10EF 33CC 02FD
Destination # 1 , Source #3 33CC 10EF 33CC 03FC
Destination # 1 , Source #4 33CC 10EF 33CC 40BF
Destination # 1 , Source #5 33CC 10EF 33CC 05FA
Destination # 1 , Source #6 33CC 10EF 33CC 06F9
Destination # 1 , Source #7 33CC 10EF 33CC 07F8
Destination # 1 , Source #8 33CC 10EF 33CC 08F7

EDID FUNCTION

IR REMOTE CUSTOM AND DATA CODES (NEC STANDARD)

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.	
Embedded EDID modes	**Total 4 EDID Modes**
Embedded EDID setup Press **EDID > SOURCE > ENTER** **SOURCE #1** **or** **SOURCE #2** 	To select **Embedded EDID mode** or **LEARNING mode**. Press **EDID** button : The LCM will show the current EDID status. Repeatedly depressing the **Source 1** button will cycle up thru the options. Repeatedly depressing the **Source 2** button will cycle down thru the options. Select Embedded EDID : Mode 1 : FSS Mode 2 : 1280x1024-60Hz Mode 3 : 1920x1200-60Hz Mode 4 : AUTO

EDID FUNCTION FOR DVI MATRIX SWITCHER

View the current EDID mode	
Learning EDID setup Press **EDID > DESTINATION > SOURCE > ENTER** 	Press **EDID > DESTINATION** Button: The LCM will be show **LEARNING** Switcher will **LEARN** destination **EDID** and pass the selected source.
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 EPRPM.	

EDID FUNCTION

EDID function : 4x Embedded EDID Modes	
Mode 1. FSS (Fast Speed Start) 	Automatic capture most suitable EDID from Destination to Source.
Mode 2. 1280x1024-60Hz (DVI-D) 	DVI Support : DVI-D 1280x1024 - 60Hz
Mode 3. 1920x1200-60Hz (DVI-D) 	DVI Support : DVI-D 1920 x 1200 - 60Hz
Mode 4. AUTO <Default> 	All Outputs will be set to the highest common resolution of all connected display devices.

EDID FUNCTION : LEARNING

Learning EDID Single to Single	Example : Learn Destination #8 EDID To Source #5.
Step 1. Press **EDID** button ***Example : Learn Destination #8 EDID To Source #5.***	The button will flash blue and the display will show the current Embedded EDID Status.
Step 2. Press the **Destination #8** button row	Copy the Destination #8 Display EDID.
Step 3. Press the **Source #5** button row	Learning the Destination #8 EDID To Source # 5.
Step 4. Press **ENTER** button	To confirm entries.
Learning EDID Single to multiple	**Learning destination EDID link to the majority Sources**
Step 1. Press **EDID button**	The button will flash blue and the display will show the current **Embedded EDID** Status.
Step 2. Press the **Destinations #1~8** button row	Copy any 1~8 Destinations EDID.
Step 3. Press the **Source #1, #6,~#8** button row	Learning the Destination EDID link to source #1,#6,~#8 .
Step 4. Press **ENTER** button	To confirm entries.
Learning EDID Single to ALL	**Learning destination EDID link to All Sources**
Step 1. Press **EDID** button	The button will flash blue and the display will show the current **Embedded EDID** Status.
Step 2. Press **Destination** button 1 thru 8	Learning anyone 1~8 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.

EDID FUNCTION

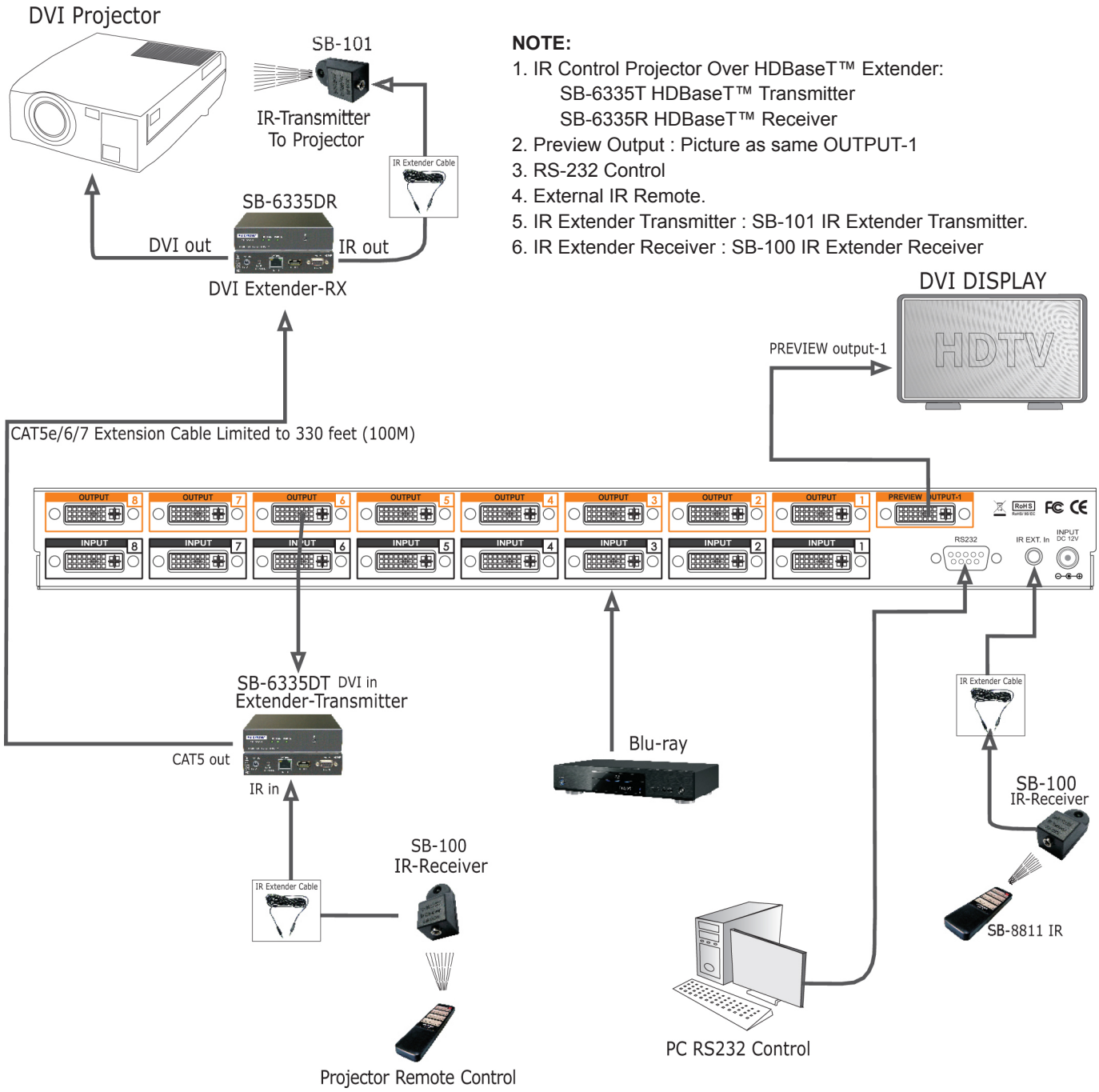
EDID FUNCTION FOR DVI MATRIX SWITCHER

EDID status	**To view the current EDID status.**
Step 1. Press **EDID** button	The button will flash blue and the display will show the current Embedded EDID Status.
Step 2. Press **EDID** button	To exit.
How to setup FSS Function	**Learning EDID from Destination to Source**
Step 1. Press the **Destination #1~8** button row Then Press the **Source #1~8** button row	To setup and Install all devices.
Step 2. Press **EDID** button	Select a optimum status of **Embedded EDID** mode.
Step 3. Press **ENTER** button	To conform entries.
Step 5. Press **EDID** button	To select the EDID **FSS** mode.
Step 5. Press **ENTER** button	To confirm entries.
LEARNING EDID definition	**Learning destination EDID link to All Sources**
1. Switcher will **LEARN** destination EDID and pass the selected source. 2. To set up learning between a single destination and single source: Press **EDID** button > Press **Destination** 1 thru 8 > Press **Source** 1 thru 8 > Press **ENTER** to confirm. Switcher will learn destination EDID to source device. 3. To set up learning between a single destination and Multiple sources: Press **EDID** button > Press **Destination** 1 thru 8 > Press the majority **Sources** 1 thru 8 > Press **ENTER**. Switcher will learn single destination EDID to many source devices. 4. How to Learning single destinations with all sources. Press **EDID** button > Press **ALL** button > Press **ENTER** to confirm.	
Auto mode definition	**Common Resolution and Audio**
Switcher will find highest common Resolution and Audio from all destination EDID to link Source. ***Example for single source*** Destination > press #1 and then Source > press #1 Destination device #1 will set to the highest common resolution and Audio of source #1 ***Example for multiple sources*** Destination device #1, #2, #3 will be set to the highest common resolution and Audio available and source device #1 will output this same resolution.	

TYPICAL APPLICATION

INSTALLING DIAGRAM

Sample connection using IR Transmitters (SB-101) and IR Receiver (SB-100) with SB-6335T & SB-6335R to control a projector.



NOTE:

1. IR Control Projector Over HDBaseT™ Extender:
   SB-6335T HDBaseT™ Transmitter
   SB-6335R HDBaseT™ Receiver
2. Preview Output : Picture as same OUTPUT-1
3. RS-232 Control
4. External IR Remote.
5. IR Extender Transmitter : SB-101 IR Extender Transmitter.
6. IR Extender Receiver : SB-100 IR Extender Receiver

Support HDBaseT™ Extender by SB-6335T Transmitter and SB-6335R Receiver via CAT5e/6/7 cable

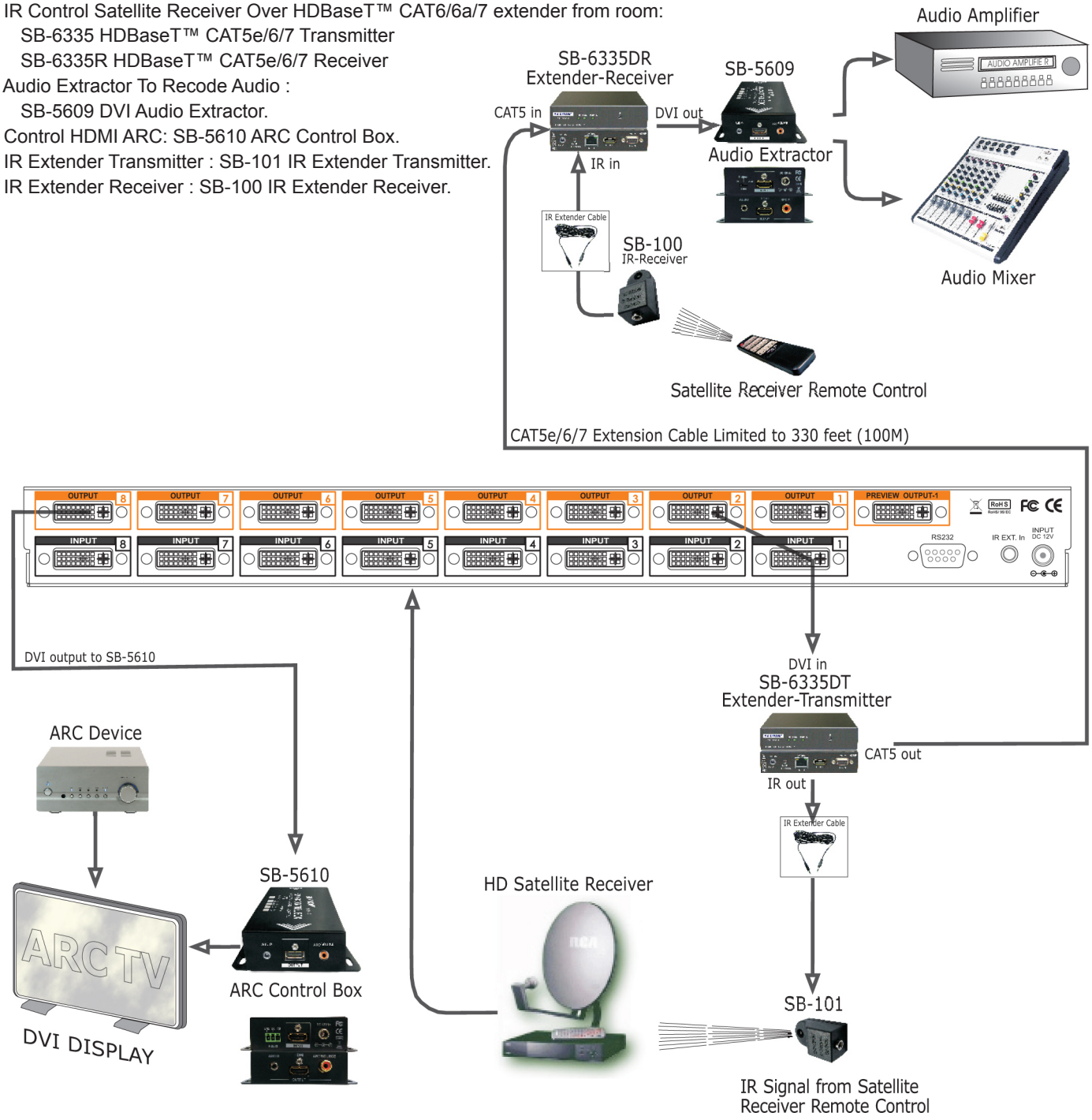
TYPICAL APPLICATION

INSTALLING DIAGRAM

Example connection using IR transmitters (SB-101) and IR receivers (SB-100) with SB-6335T and SB-6335R to control a satellite receiver.

NOTE:

1. IR Control Satellite Receiver Over HDBaseT™ CAT6/6a/7 extender from room:
   SB-6335 HDBaseT™ CAT5e/6/7 Transmitter
   SB-6335R HDBaseT™ CAT5e/6/7 Receiver
2. Audio Extractor To Recode Audio :
   SB-5609 DVI Audio Extractor.
3. Control HDMI ARC: SB-5610 ARC Control Box.
4. IR Extender Transmitter : SB-101 IR Extender Transmitter.
5. IR Extender Receiver : SB-100 IR Extender Receiver.

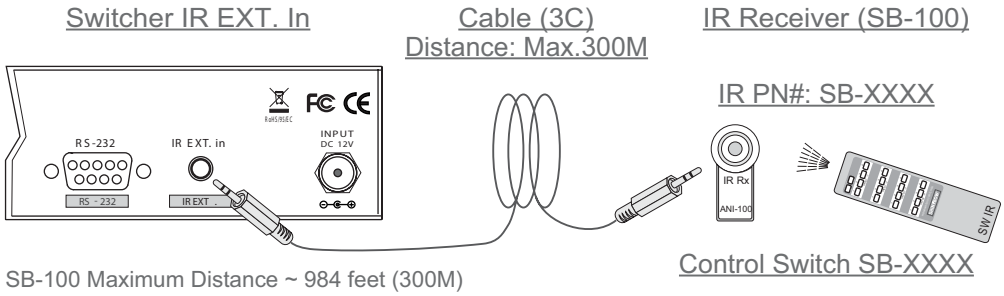


Support HDBaseT™ Extender by SB-6335T Transmitter and SB-6335R Receiver via CAT5e/6/7 cable

IR EXTENDER

1. SB-100 IR 300M Receiver



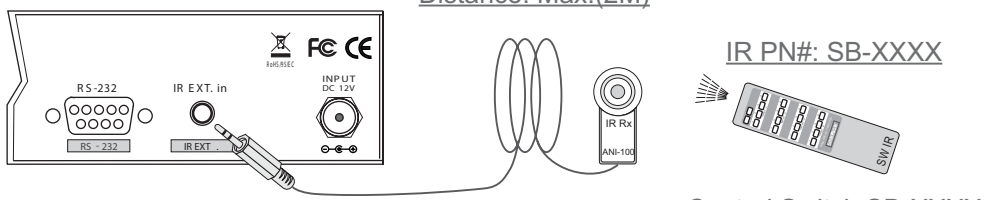


SB-100 Maximum Distance ~ 984 feet (300M)

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

2. SB-100C IR 2M Receiver





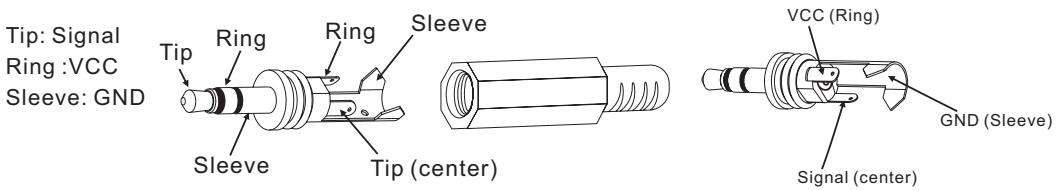
SB-100C Maximum Distance ~ 6 feet (2M)

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

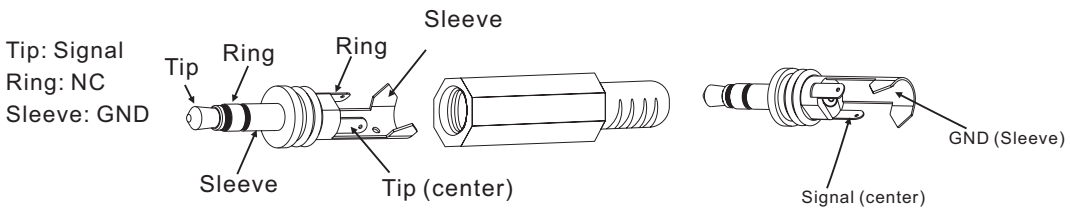




SB-100 Receiver and SB-101 Transmitter The DISTANCE maximum ~ 984 feet (300M)

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)

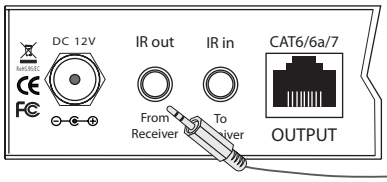
Note: *The External IR jack has voltage on the “Ring” portion of a 3-conductor plug. You must use a 3-conductor plug (aka: stereo plug). Using a 2-conductor plug will short out the power supply. Always make connections with the switcher power off.*

IR EXTENDER

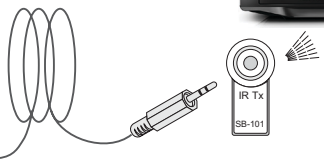
1. SB-101 IR 300M Transmitter



Device



Cable (3C)



IR Transmitter (SB-101)

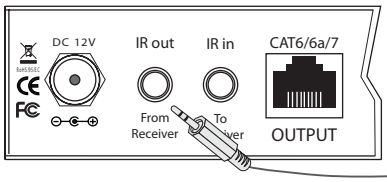


SB-101 Maximum Distance ~ 984 feet (300M)

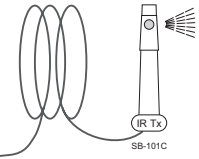
2. SB-101C IR 2M Transmitter



Device



Cable (3C)



IR Transmitter (SB-101C)



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

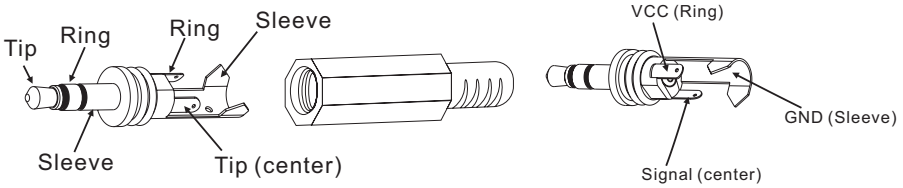
**** When you plug the External IR extender into the switcher, the front panel IR transmitter remains active. ****

PIN CONFIGURATION:

SB-101 and SB-101C Transmitter Pin configuration



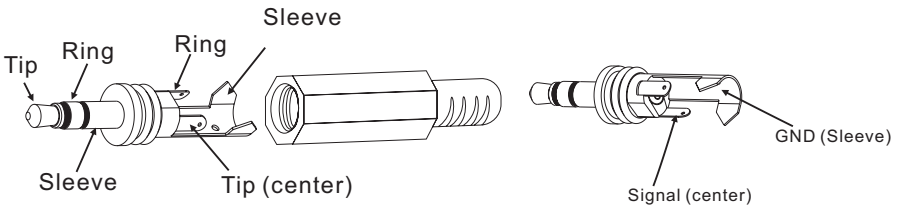
Tip: Signal
Ring :VCC
Sleeve: GND



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



Tip: Signal
Ring: NC
Sleeve: GND

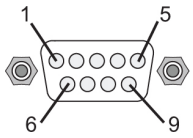


SB-101C Maximum Distance ~ 6 feet (2M)

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.*

RS-232 SERIAL INTERFACE

RS-232 SERIAL INTERFACE CONNECT a PC or CONTROL SYSTEM. VERSION -2.0 COMPATIBLE



RS-232 SERIAL CONNECT

Pin	RS-232	Definition
1	------	Not used
2	TX	Transmitter
3	RX	Receiver
4	------	Not used
5	GND	Ground
6	------	Not used
7	------	Not used
8	------	Not used
9	------	Not used

RS-232 PROTOCOL COMMANDS (RS-232 CONTROL DRIVER V2.0.1)

The ShinybowUSA 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.

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