SHINYBOW™

MULTIMEDIA AUDIO AND VISUAL

Instruction Manual

MODEL : SB-8811
8x8 DVI MATRIX SWITCHER

FULL HD DVI Matrix Switcher Series

Thank you for purchasing the item of 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 throughly before attempting to use 8x8 DVI Matrix switcher.

SAFETY INFORMATION

1. 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.

2. Read all documentation before operating your equipment. Retain all documentation for future reference.

3. Follow all instructions printed on unit chassis for proper operation.

4. Do not spill water or other liquids into or on the unit, or operate the unit while standing in liquid.

5. Make sure power outlets conform to the power requirements listed on the back of the unit.

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. 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.

8. Mains 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.

9. Power down & disconnect unit from mains voltage before making connections.

10. Never hold a power switch in the " ON " position.

11. Do not use the unit near stoves, heat registers, radiators, or other heat Producing devices.

12. 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 matter.

13. Do not remove the cover. Removing the cover will expose you to potentially dangerous voltages. There are no user serviceable parts inside.

14. Do not drive the inputs with a signal level greater than that required to drive equipment to full output.

15. Non-use periods. The power cord of equipment should be unplugged from the outlet when left unused for a long period of time.

16. Service Information Equipment should be serviced by qualifier 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.

IMPORTANT SAFETY INSTRUCTIONS

To insure the best from this product, please read this manual carefully. Keep it in a safe place for future reference.

To reduce the risk of electric shock, do not remove the cover from the unit. No user serviceable parts inside. Refer servicing to qualified personnel.

To reduce the risk of fire, do not expose the unit to rain, water or excessive moisture.

Do not force switched or external connections.

When moving the unit disconnect the serial port connections first then the power cable and finally the interconnecting cables to other devices.

Do not attempt to clean the unit with chemical solvents or aerosol cleaners, as this may damage the unit. Use a clean dry cloth.

Installation of this unit should be in a cool dry place, away from sources of excessive heat, vibration, dust, moisture and cold.

THIS SAFETY INFORMATION IS OF A GENERAL NATURE AND MAY BE SUPERSEDED BY INSTRUCTIONS CONTAINED WITHIN THIS MANUAL

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INTRODUCTION AND PACKAGE CONTENTS

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 1920x1200 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. Support high resolution DVI sources routed to DVI displays, monitors, projector or audio receivers. The EDID can be selected between four (4) different modes. Control is provided via Front panel push buttons, IR remote, TCP/IP (not a web-browser) or RS-232. An RS232 Windows GUI interface is provided for matrix routing control (Windows only).

PACKAGE CONTENTS

1. SB-8811 Matrix Switcher
2. Operating Instructions
3. RS-232 V2.0 Protocol Instructions
4. Ethernet V2.0 Protocol Instructions
5. Master wireless IR Remote Control (SW-8811)
6. 19 inch Ear mount bracket (Part # 1U-440L)
7. SB-100 IR Extender distance ~984 feet (300M) Receiver set.
8. SB-100C IR Extender distance 6ft (2M) Receiver Cable.
9. 16x DVI connector use ISO screw (L5mm/OD3mm)
10 CD Contents : This manual, Windows GUI, ISP V1.0 Windows driver
11 RS232 Cable 6 feet (2M)
12. Power Supply 12VDC, 5A Universal Type 50/60Hz, 100~240 VAC

IR extender 300M set	IR extender 2M	19-inch ear mount	RS-232 Cable (2M)
SB-100 IR Receiver	SB-100C IR Receiver	#1U-440L	D-Sub 9P-9F (L=6ft)

FEATURES

1. 8x DVI signal device sources matrix switched to 8x DVI destination devices.

2. DVI digital video w/embedded, DVI format and HDCP 2.0 compliant

3. Seven (7) function key control and worldwide (4) EDID modes for HD-DVI resolutions.

4. Link speeds of up to 6.75 Gbps (link clock rate of 340Mb Hz), Support DVI 3D formats.

5. Wide range of HD DVI resolutions from PC XGA to WUXGA 1920x1200 and
    HDTV/DTV resolutions 480i/480p, 576i/576p, 720p, 1080i & 1080p

6. Compatible with all DVI source devices, PC monitors, Plasma HD display, HDTV
    and audio receivers/amplifiers.

7. Digital Video TMDS formats Resolution up to 1920x1200 with Deep color 36-bit.

8. Various User Interface control:

    · Windows based GUI control via RS232 port

    · Front Panel push button

    · IR wireless remote control

    · Ethernet series control

    · Third party RS232 controller (via simple ASCII)

9. Support world wide control functions: ALL/OFF/RECALL/ENTER/MEMORY/EDID/LOCK

10. Support Embedded EDID modes :

     Internal modes : FSS/1280x1024-60Hz/1920x1200-60Hz/Auto

     External modes : Learning mode.

11. Automatic scanning input sources status via LED show on front panel.

12. Support ISP function to update the new F/W via RS-232 port.

13. Support IR Remote and IR Extender with distance up to ~ 984' (300M) Maximum.

14. Support Rack Mount 1RU High 19 ” Rack Mount with rack mount (1U-440L).

15. Support Power Supply 12VDC, 5A Universal Type 50/60Hz, 100~230 VAC

The Switcher will remember that last state during a power cycle.

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

SPECIFICATIONS

SPECIFICATIONS

Type of DVI Switcher	8x DVI inputs To 8x DVI Outputs Matrix Switcher
DVI Support	HD DVI 1920x1200, H36-bit Deep color, 3D (HDMI 1.4a) formats.
HDCP / CEC Support	HDCP 2.0 Compliant, CEC Compliant.
Video Bandwidth	Double Data Rates:340Mhz, Total 6.75Gbps bandwidth.
Digital Video Support	Full HD DVI resolution: 1920x1200 & HDMI:480ip/720p/1080i/p
Switcher Controls	IR Remote Controller IR External port x 1 (OD 3.5mm Ear phone Jack) Select & Function buttons on front panel Ethernet Serial Interface and RS 232 series interface
Preview output	Support 1x preview output port simultaneously via Output-#1
Source Status	Automatically Scan Sources Inputs via (8) x LEDs show out
Function Control Key	ALL / OFF / RECALL / ENTER / MEMORY / LOCK / EDID
Infrared Frequency	38 Khz
IR External Distance	~984 feet / 300 meters maximum.
DVI I/O Connector	DVI-D - (24+5) pin Female DIP Type
Temperature	32°F - 100°F Operation (0°C - 38°C)
Dimensions	LxWxH=19″ x 9.85″ x 1.75″ (482mm x 250mm x 44mm)
Rack Mount	Rack Mount 1RU High 19″ 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, REACH.
Product Weight	2.45 Kgs / 4.10 lb

As product improvement is continuous, specifications are subject to change and without notice or liability.

EDID function Setup

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.	

6.1 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. EDID: 3.1920x1200-60HZ DVI-D 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

EDID function : 4x Embedded EDID Modes

Mode 1 . **FSS**® (Fast Speed Start) EDID： 1. FAST SPEED START	**Fast Speed Start** mode shortens the startup time of the switcher. Selecting this mode does not force the EDID setup to be cancelled. Users may first select one EDID mode from mode 2 to 3, and then select mode 1 for fast speed start.
Mode 2 . 1280x1024-60Hz (DVI-D) EDID： 2. 1280x1024-60HZ DVI-D	DVI Support : DVI-D 1280x1024 - 60Hz
Mode 3 . 1920x1200-60Hz (DVI-D) EDID： 3. 1920x1200-60HZ DVI-D	DVI Support : DVI-D 1920 x 1200 - 60Hz
Mode 4 . **AUTO** <Default> EDID： 4. AUTO MODE	All Outputs will be set to the highest common resolution of all connected display devices.

EDID function for DVI Matrix Switcher

6.2 RESET	EDID Return To Factory default
How to RESET EDID mode Press EDID > RECALL > ENTER	RESET To the FACTORY DEFAULT (1280x1024). Press EDID button : The LCM will show the current EDID status. Press RECALL button : The LCM will show the RESET EDID. EDID: RESET EDID Press ENTER to confirm entries. The EDID will return to FSS mode and resolution 1280x1024-60Hz. EDID: 3.1280x1024-60HZ DVI-D

6.3 LEARNING EDID	Learning EDID from Destination to Source
Learning EDID setup Press EDID > DESTINATION > SOURCE > ENTER	Press EDID > DESTINATION Button: The LCM will be show LEARNING. EDID: 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 EPROM.

EDID FUNCTION

EDID Function：LEARNING

6.3.1　Learning EDID　**Single to Single**	Example：Learn Destination #8 EDID To Source #5.
Step 1.　Press **EDID** button	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.

6.3.2　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.

6.3.3　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 for DVI Matrix Switcher

| 6.4 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.

6.5 How to setup FSS® Function	Fast speed start®
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 4 . Press EDID button	To select the EDID **FSS**® mode.
Step 5 . Press ENTER button	To conform entries.

6.6 LEARNING EDID definition	Learning EDID from Destination to Source

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.

6.7 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.

FRONT PANEL
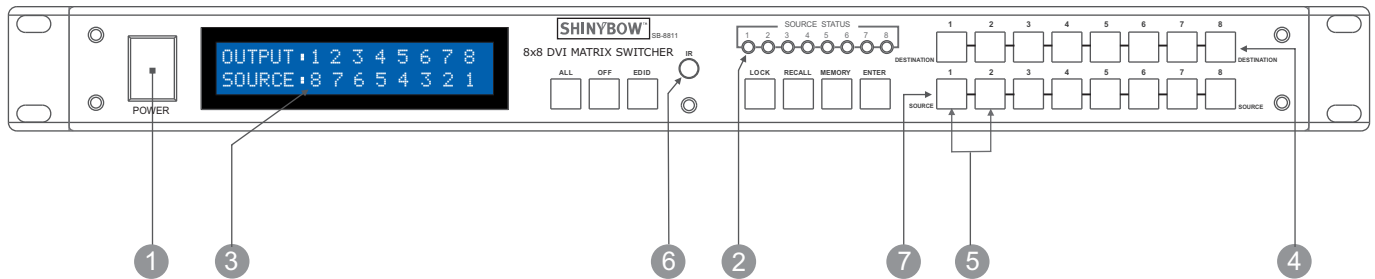
① POWER SWITCH

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 third party IR emitter.

⑦ SOURCE SELECT BUTTONS

Separate inputs 1 thru 8 select buttons are provided each source selection.

FRONT PANEL
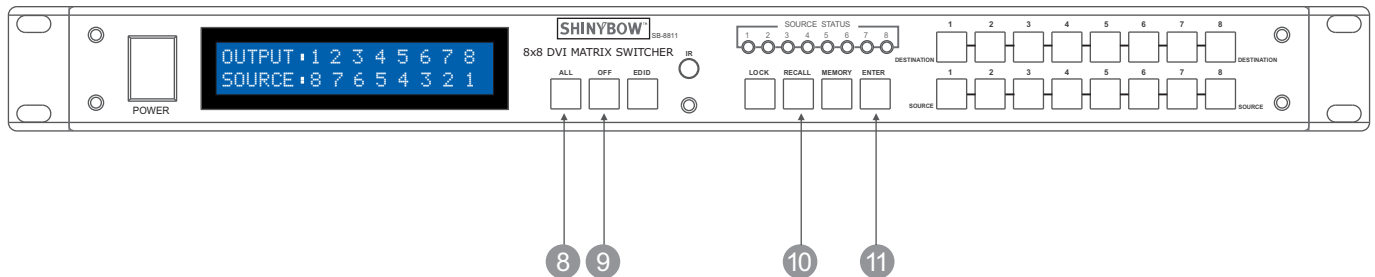
8 FUNCTION KEY - **ALL**

Disables (mute) 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.

9 FUNCTION KEY - **OFF**

Disables (mute) 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.

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.*

11 FUNCTION KEY - **ENTER**
Press **ENTER** to confirm entries.

FRONT PANEL

⑫ FUNCTION KEY - **MEMORY**

```
MEMORY :1 2 3 4 5 6 7 8
  D-02   2 2 2 2 2 2 2 2
```

```
MEMORY :1 2 3 4 5 6 7 8
  S-05 :2 2 5 5 8 8 1 1
```
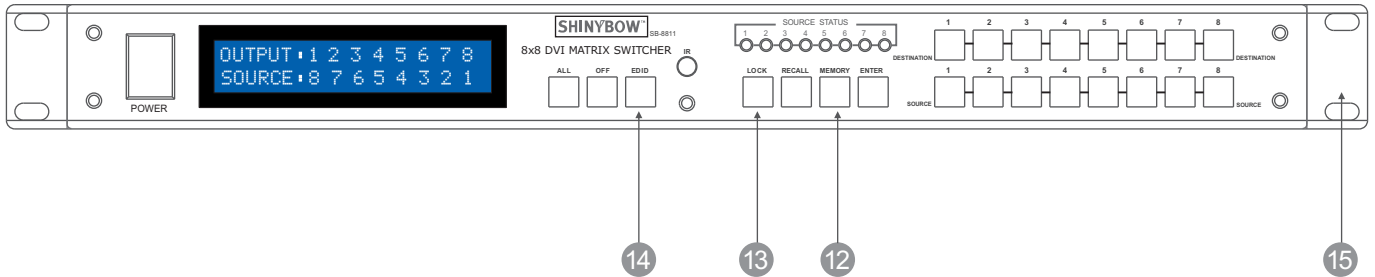
The system will show store presets, up to a total of 16.
Presets are stored in local memory using Source keys 1 thru 8 or Destination keys 1 thru 8
as the memory preset location.
- Configure desired matrices..
- Press **MEMORY** button.
- Press 1 thru 8 on either Source or Destination row.
- Press **ENTER** 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.

⑬ FUNCTION KEY - **LOCK**

```
OUTPUT:1 2 3 4 5 6 7 8
  LOCK:1 2 3 4 5 6 7 8
```

- 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.

⑭ FUNCTION KEY - **EDID**

```
EDID:
3.1920 X 1200 – 60 HZ
```

```
EDID:
LEARNING
```

- 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.

⑮ 19 INCH EAR MOUNT PAIR

Converts desktop to 19 inch rack mount. Bracket (part # 1U-440L) INCLUDED.
Image shows rack mount bracket attached.

REAR PANEL
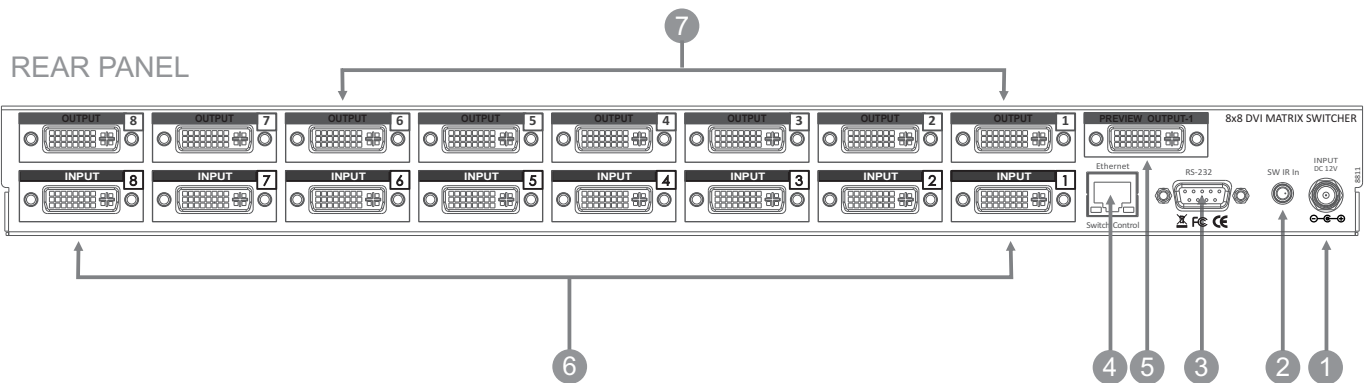
1 DC POWER INLET

The Switcher is fitted with a DC power plug input connector.
Ensure that the used is of 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 ∅ 2.1mm (+)
              Outside OD ∅ 5.5mm (GND)
Power input - 12VDC, 5A

2 IR EXTENDER CONTROL

Support one of IR Extender (IR input)
Extend distance maximum 984 feet (300 meters)

Note: DO NOT install or remote this connection with the power ON.

IR Extender Jack:
Female Jack - inner OD ∅ 3.5 mm

3 RS 232 CONNECTION

RS 232 control port to allow 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 :
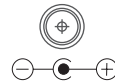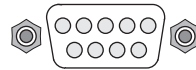DB-9pin Female connector

4 ETHERNET CONNECTION

ETHERNET control port to allow for TCP/IP interfacing to a PC,
Such as a computer or touch panel control (not a web-browser),
to the switcher via this RJ-45 Female connector to control switcher.

Ethernet
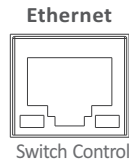
Switch Control

Remote port : Control the switcher
RJ-45 Female connector

Ethernet Port:
Note: the Ethernet port and RS-232 port cannot be used
simultaneously. Any connection to the Ethernet port will
disable serial commands send to the RS-232 port.

5 PREVIEW OUTPUT-01 DVI-D

Connect a signal link of HDMI direct digital video/audio to this
Female DVI 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
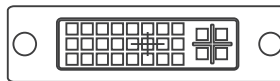
DVI-D digital video/audio connector:
DVI Female connector.

Note:
With the proper adapters, the switcher
can be used with DVI-D digital video signals
HDCP compliant. DVI does not support audio.

6 INPUTS- 1,2,3,4,5,6,7, & 8 DVI-D

Connect a signal link of HDMI direct digital video/audio 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
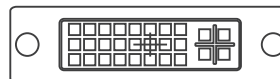
DVI-D digital video/audio connector:
DVI Female connector.

Note:
With the proper adapters, the switcher
can be used with DVI-D digital video signals
HDCP compliant. DVI does not support audio.

7 OUTPUTS- 1,2,3,4,5,6,7 & 8 DVI-D

Connect a signal link of DVI-D direct digital video/audio 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
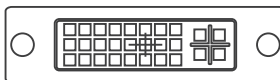
DVI-D digital video/audio connector:
DVI Female connector.

Note:
With the proper adapters, the switcher
can be used with DVI-D digital video signals
HDCP compliant.

TYPICAL APPLICATION

INSTALLING DIAGRAM

Sample connection using HDBaseT Transmitter (SB-6334T DVI) and HDBaseT Receiver (SB-6334R DVI) extend the signal via category CATx (6/6a/7) cable with distance 100M.
Use the IR Transmitters (SB-101) and IR Receiver (SB-100) to extend the IR signals to control a projector.

NOTE:
1. IR Control Projector Over HDBaseT Extender:
   SB-6334T HDBaseT DVI Transmitter
   SB-6334R HDBaseT DVI 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-6334T Transmitter and SB-6334R Receiver via CAT5e/6/7 cable

INSTALLING DIAGRAM   8x8 DVI MATRIX SWITCHER

Sample connection using IR Transmitters (SB-101) and IR Receivers (SB-100) with SB-6334T and SB-6334R
to control a Satellite Receiver.

NOTE :
1. IR Control Satellite Receiver Over HDBaseT
    CAT5e/6/7 Extender from room:
    SB-6334T HDBaseT DVI Transmitter
    SB-6334R HDBaseT DVI Receiver
2. IR Extender Transmitter :
    SB-101 IR Extender Transmitter.
3. IR Extender Receiver :
    SB-100 IR Extender Receiver.

SB-6334R
Extender-Receiver

DVI DISPLAY

CAT5 in   DVI out

IR in

IR Extender Cable

SB-100
IR-Receiver

Satellite Receiver Remote Control

CAT5e/6/7 Extension Cable Limited to 330 feet (100M)

8x8 DVI MATRIX SWITCHER

DVI in
SB-6334T
Extender-Transmitter

CAT5 out

IR out

IR Extender Cable

HD Satellite Receiver

SB-101

IR Signal from Satellite
Receiver Remote Control
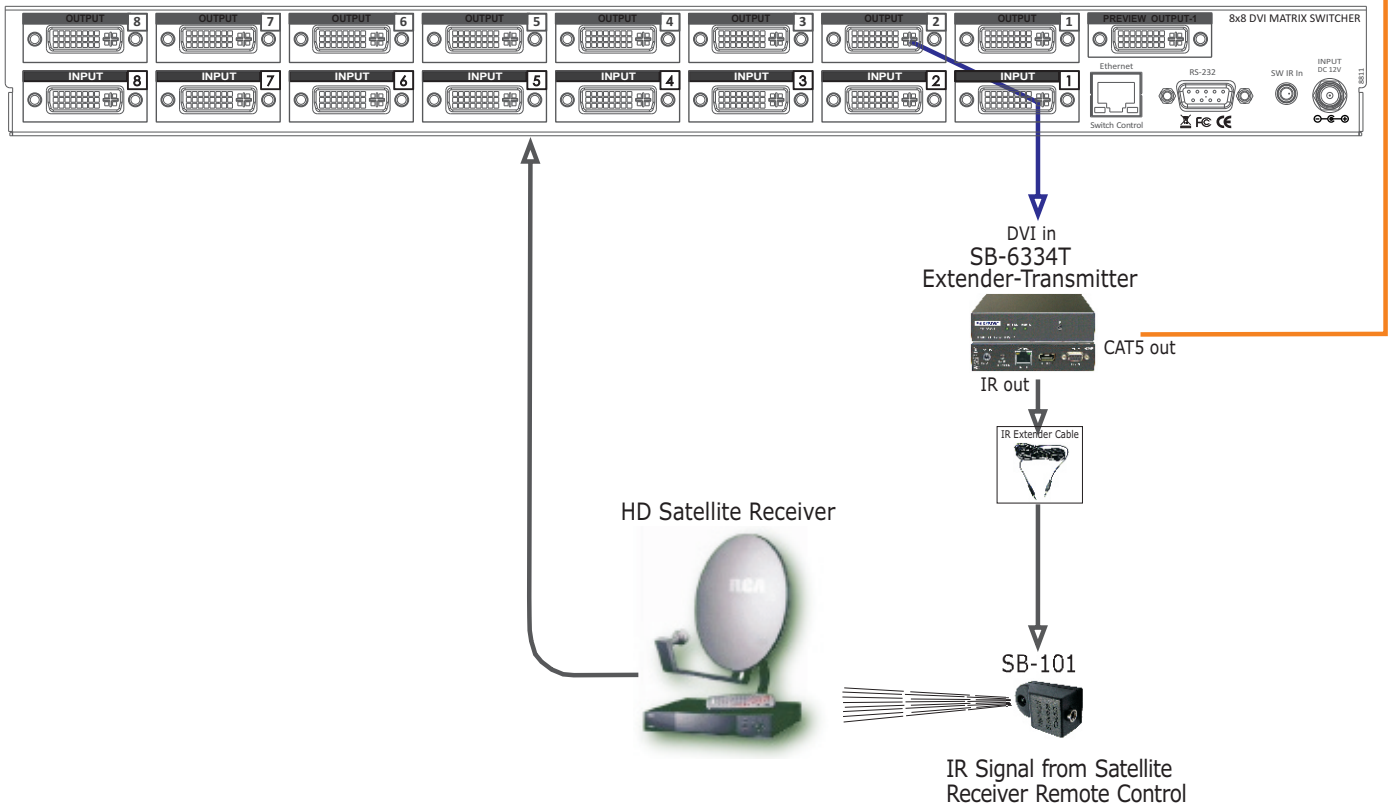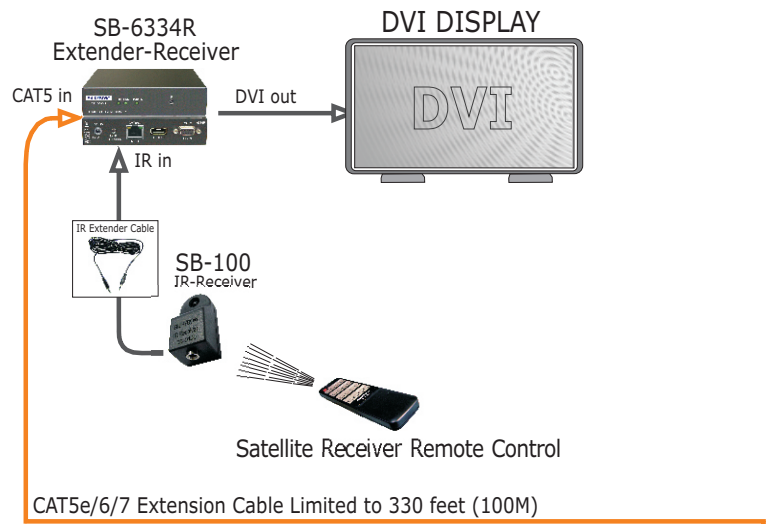
Support HDBaseT Extender by SB-6334T Transmitter and SB-6334R Receiver via CAT5e/6/7 cable

REMOTE CONTROL

Before making any connections to the switcher. 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 1~8 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
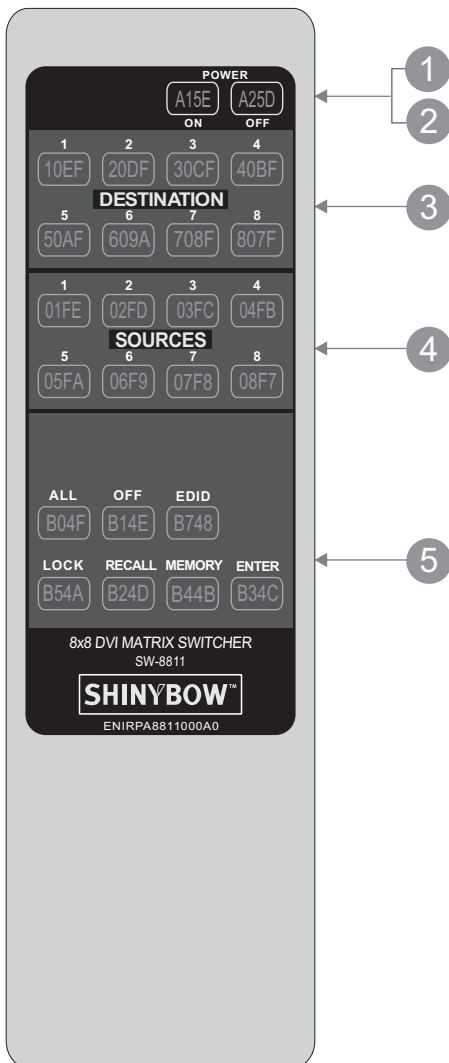
IR REMOTE CONTROL KEY :

1 2 SWITCH POWER ON or OFF
Controller with a separate 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
MEMORY	- function selection button
ENTER	- function selection button
LOCK	- function selection button

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
EDID	:	33CC B748
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 04FB
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	04FB
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

IR EXTENDER

REAR PANEL IR EXTENDER PORT

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

SB-100 IR Receiver pack

Switcher IR EXT. In

Cable(3C)
Distance:Max.300M

IR Receiver (SB-100)

IR PN#: SW-8811

SB-100 DISTANCE maximum ~ 984 feet (300 meters)

Control Switcher SB-8811

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

IR Receiver cable 6ft (2M)

SB-100C Receiver Cable

Switcher IR EXT. In

Cable(2C)
Distance: Max.(2M)

IR Receiver (SB-100C)

IR PN#: SW-8811

SB-100C DISTANCE 2M (6feet)

Control Switcher SB-8811
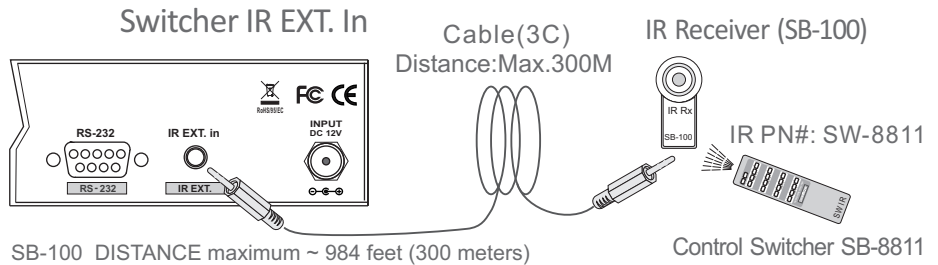
Note: When you plug the External IR extender into the switcher, the front panel IR receiver remains active.

IR EXTENDER PACKAGE :

HOW TO SETUP THE IR EXTENDER RECEIVER COMPONENTS

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

IR Extender 300M Receiver

SB-100 IR Receiver set

Tip: Signal
Ring :VCC
Sleeve: GND

Tip · Ring · Ring · Sleeve · Sleeve · Tip (center)

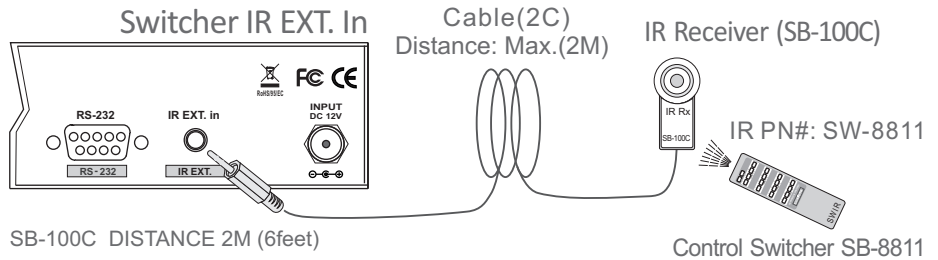VCC (Ring) · GND (Sleeve) · Signal (center)

SB-100 Receiver and SB-101 Transmitter The DISTANCE maximum ~ 984 feet (300 meters)
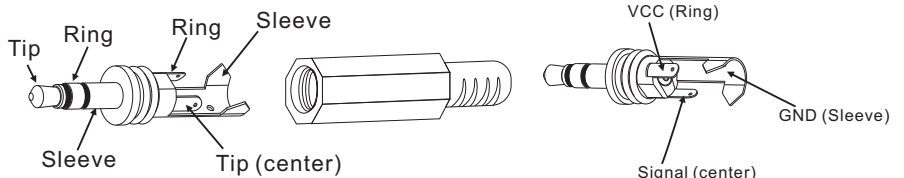
Pin configuration for IR Receiver 6 feet (2 meters) cable such as **SB-100C** compatible

IR Receiver cable 6 feet (2M)

SB-100C Receiver Cable

Tip: Signal
Ring: NC
Sleeve: GND

Tip · Ring · Ring · Sleeve · Sleeve · Tip (center)

GND (Sleeve) · Signal (center)

SB-100C Receiver Cable and SB-101C Transmitter Cable The DISTANCE maximum 6 feet (2 meters)
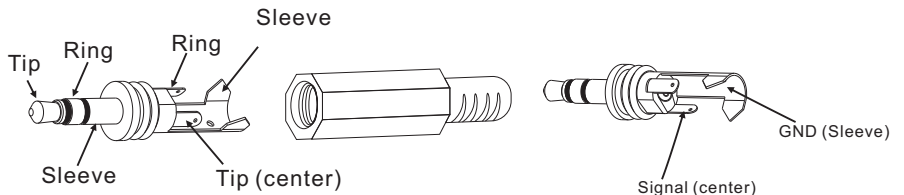
Note:
The External IR jack has voltage on the "Ring" portion of a 3-conductor plug. Do not use a
2-conductor IR (aka:stereo plug) as this will short out the power supply.

ETHERNET SERIAL INTERFACE CONNECT a PC or CONTROL SYSTEM. VERSION COMPATIBLE V2.0

For a complete list of commands, please reference external document extended Ethernet Protocol Instruction Manual.

Ethernet

1 2 3 4 5 6 7 8

SPD   LINK
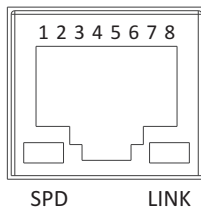
Note :
Control the switcher
SPD : Speed
LINK : Ethernet link
RJ-45 Female 8P-8Cconnector

ETHERNET SERIAL INTERFACE

Pin	Ethernet	Reference
1	TXOP	TX+
2	TXON	TX -
3	RXIP	RX+
4	NC	
5	NC	
6	RXIN	RX -
7	NC	
8	GND	

ETHERNET TCP/IP PROTOCOL COMMANDS (Ethernet / RS232 Control driver V2.0)

*** *When Ethernet id used, the switcher will not accept commands from the RS-232 port.* ***

RS-232 SERIAL INTERFACE

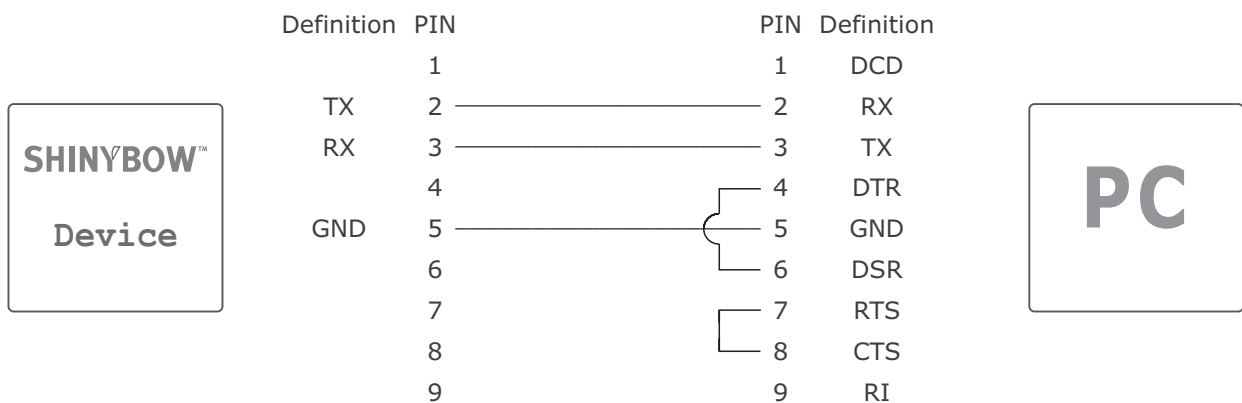RS-232 SERIAL INTERFACE CONNECT a PC or CONTROL SYSTEM. VERSION COMPATIBLE V2.0

For a complete list of commands, please reference external document extended RS-232 Protocol Instruction Manual.

RS-232 Configuration

RS-232 cable is a straight thru cable and not null-modem

Definition	PIN		PIN	Definition
	1		1	DCD
TX	2	————	2	RX
RX	3	————	3	TX
	4		4	DTR
GND	5	————	5	GND
	6		6	DSR
	7		7	RTS
	8		8	CTS
	9		9	RI

SHINYBOW™ Device

PC

RS-232 Pin Diagram

1 2 3 4 5
6 7 8 9
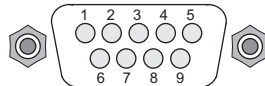
RS-232 SERIAL INTERFACE PROTOCOL COMMANDS (Ethernet / RS232 Control driver V2.0)

The Shinybow 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 recognises a complete command it will perform the requested action - there is no delimiter character required.

LIMITED WARRANTY

SHINYBOW WARRANTY

SHINYBOW Technology warrants this product against defects in materials and workmanship for a period of 1 year from the date of purchase.

Should this product, in SHINYBOW Technology's opinion, prove defective within this warranty period, SHINYBOW Technology, at its option, will repair this product without charge, to whatever extent it shall deem necessary to restore the product to proper operation condition. This does not extend the warranty period.

This warranty does not apply if the fault has been caused by misuse, improper handling care, electrical or mechanical abuse, and abnormal operating condition or non-SHINYBOW Technology authorized modification to the product.

If repairs are necessary under the warranty policy, the original purchaser must return the product to local distributor, freight prepaid.

After repairs are complete, the product will be returned.

REGULATORY COMPLIANCE

The product complies with the relevant standards for CE, FCC and RoHS approval.
The power Adaptor/Supply has been tested for compliance with UL.CSA and CE standards.

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