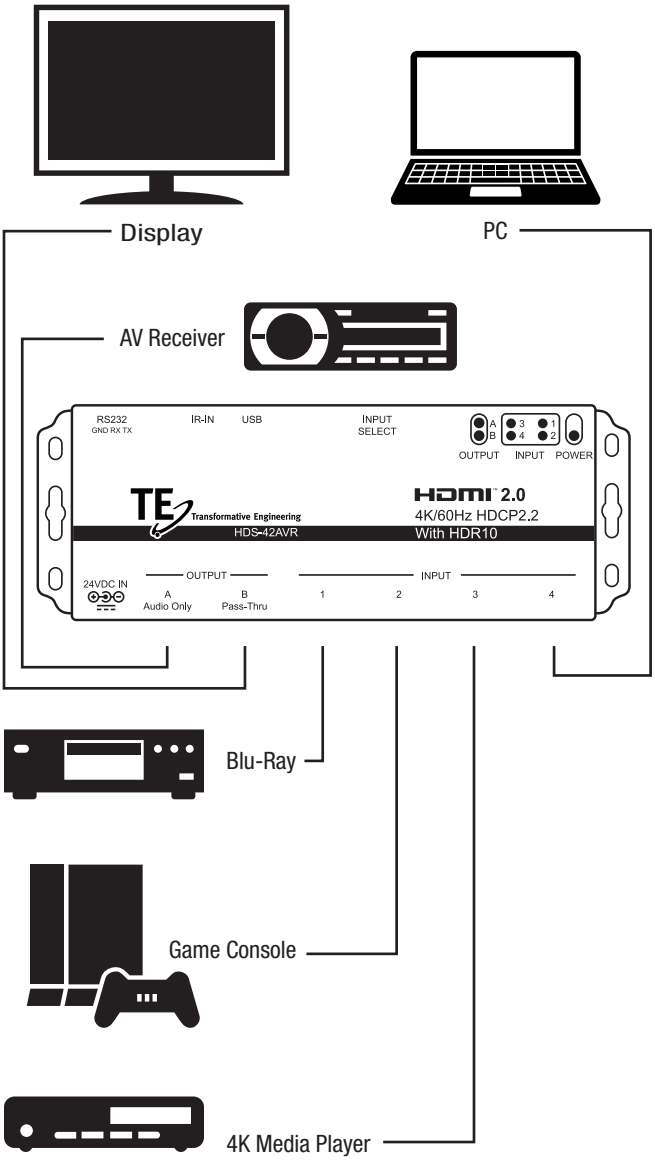
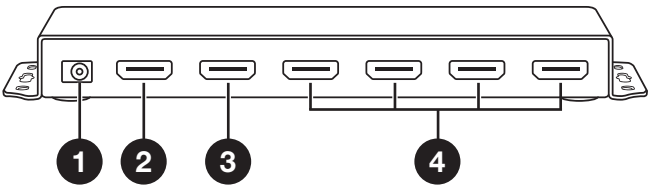
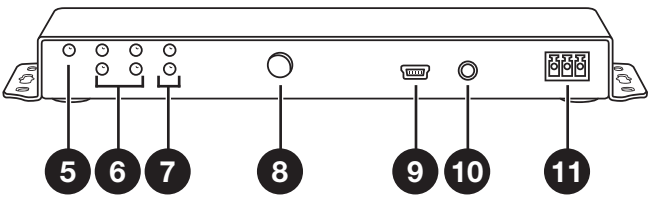
System Installation



S-42AVR-Manual.indd 7 12/20/17 12:10 P

SWITCHER CONNECTIONS





1. Power IN
2. Output A
3. Output B
4. HDMI Inputs 1-4
5. Power Light
6. Input Indicator Lights
7. Output Indicator Lights
8. Input Select Switch
9. Firmware Update Port
10. IR Pickup Port
11. RS232 Connector

S-42AVR-Manual.indd 8 12/20/17 12:10 P

SWITCHER FUNCTIONS – See Page 8

1. **Power In** – This receptacle accepts the supplied 24V DC Power adapter. Do not substitute any other device or possible damage or operational defects may occur.

2. **Out-A** – This HDMI connection is designed for connection to your Audio Receiver or Surround Processor. It carries the audio signal ONLY from your selected Input. There is NO VIDEO on this output.

3. **Out-B** – Connect to your Display for selection of Inputs 1-4. This is a standard HDMI v2.0b connector and will be limited to cable length similar to any other HDMI source. For transmission of UHD ("4K") signals, you must use a High Speed HDMI Cable capable of 18.2 Gbps thru-rate for Full 4K Video.

4. **HDMI In 1-4** – These four HDMI input jacks are standard HDMI v2.0b compatible and will pass all video and audio signals thru to the respective outputs.

5. **Power Light** – Illuminates when Power is active to this device.

6. **Input Lights** – Illuminate when the selected Input is active.

7. **Output Lights** – Illuminate when the Output(s) are actively being used.

8. **Input Selector** – Toggles through the Four Inputs. Indicators (#6) show response.

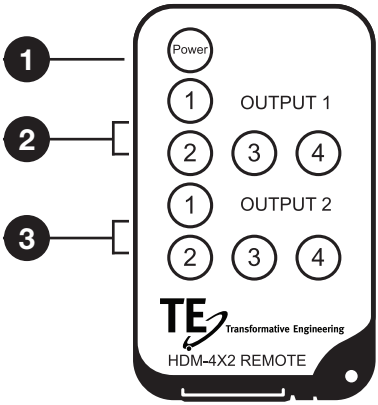
9. **USB** – For Firmware updates (provided if necessary) by Transformative Engineering. DO NOT attempt to connect this port for any other reason. Loss of all operation may result.

10. **IR Sensor** – Receiver for remote control signals to control the Switcher. THE SUPPLIED IR PICKUP IS THE ONLY DEVICE THAT WILL INTERFACE WITH THIS SWITCHER. The remote controller is included in the accessory kit and is the controller recommended. Alternatively, RS232 commands or IR codes programmed into a Control System may be utilized. See Appendix A for the proper protocols.

11. **RS232** – Control command connection for this switcher. Please refer to Appendix A for the command protocols. Three conductors are required.

S-42AVR-Manual.indd 9 12/20/17 12:10 F

HDS-42AVR – REMOTE CONTROL/OPERATION



Please Note: The supplied remote is provided for programming use only. It is not intended for normal operation of this device. The remote is a general remote with extra IR commands designated for other **Transformative Engineering** products

1. **POWER** – This button has no function. The HDS-42AVR should remain ON at all times.

2. **SOURCE SELECT** (Blue 1-4) Use to select the desired input.

3. **AUDIO SELECT** (Yellow 1-4) – Only Yellow Buttons 1 & 2 are Active. With your Audio/Video Receiver OFF, pressing "1" will allow 2-channel audio to pass to the TV over the HDMI plugged into OUTPUT B. Pressing the "2" will mute the audio to the TV.

Additionally, turning OFF your Audio Video Receiver should automatically transfer 2-CH Audio to your TV over the HDMI cable. Returning Power to your Audio-Video Receiver should MUTE the TV's sound.

S-42AVR-Manual.indd 5 12/20/17 12:10 P

TROUBLESHOOTING & WARRANTY

TROUBLESHOOTING

As mentioned previously, most malfunctions can be addressed by careful examination of the HDMI cables and suitability of the cables for the application intended. High quality, high-bandwidth HDMI cables, certified for full UHD transmission are critical. If this has been examined with no resolution of your problem, please contact our Technical Support Department at 781-769-6410 or via email at: info@transformativeengineering.com.

WARRANTY

Transformative Engineering, Inc. guarantees this product for Three Years from your original purchase. We guarantee performance and operation to published specifications including all parts and labor. We do not warranty against mis-use or abuse. To obtain warranty service, please contact our Technical Support Department at **781-769-6410** or via email at: **info@transformativeengineering.com.**

Apendix 1: IR Codes

Remote Code Mapping		HDMI-42AVR
Vendor Code	01FE	
Function	Code	Description
Power	This button has no function. The HDS-42AVR should remain ON at all times.	
Output 1:		
1	0C	Output 1 to Input 1
2	04	Output 1 to Input 2
3	08	Output 1 to Input 3
4	07	Output 1 to Input 4
Output 2:		
1	1F	Output 1 to Input 1
2	1E	Output 1 to Input 2
3	NA	NA
4	NA	NA

S-42AVR-Manual.indd 10 12/20/17 12:10 P

Apendix 2: RS-232 Control

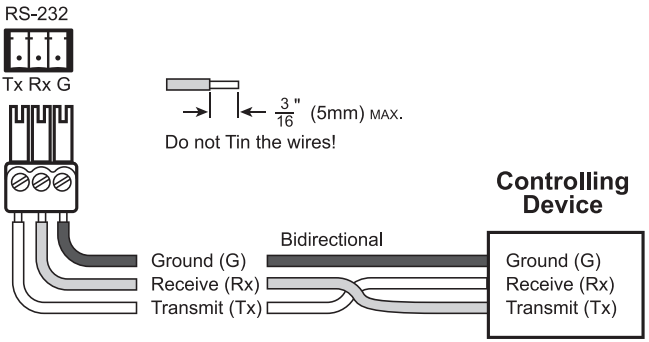
Baud rate 57600
Data Bits. 8
Stop bits. 1

Parity . . . . . None
Append. . . . . <CR><LF>

Control Function	Command	Response	Description
Select Input 1	swc 1 1	Select Rx Port = 1	Switches to Input 1
Select Input 2	swc 2 1	Select Rx Port = 2	Switches to Input 2
Select Input 3	swc 3 1	Select Rx Port = 3	Switches to Input 3
Select Input 4	swc 4 1	Select Rx Port = 4	Switches to Input 4
Request current source	sws ?	Select Rx Port = 1	Reports Current Source
		Select Rx Port = 2	
		Select Rx Port = 3	
		Select Rx Port = 4	

Figure 1: RS-232 Wiring

Control Processor Connections



S-42AVR-Manual.indd 11 12/20/17 12:10 F