

Overview

The Solecis AVS-SL-PR-0401-0601 Presentation Switcher (FG1330-2011-01) combines switching of PC, computer, video and audio for presentation and conference rooms, home cinema, AV Rental Companies and any environment where a number of mixed source types need to be displayed. The AVS-SL-PR-0401-0601 features a total of 10 inputs and a programmable serial output for controlling projectors, plasma displays and other display devices.

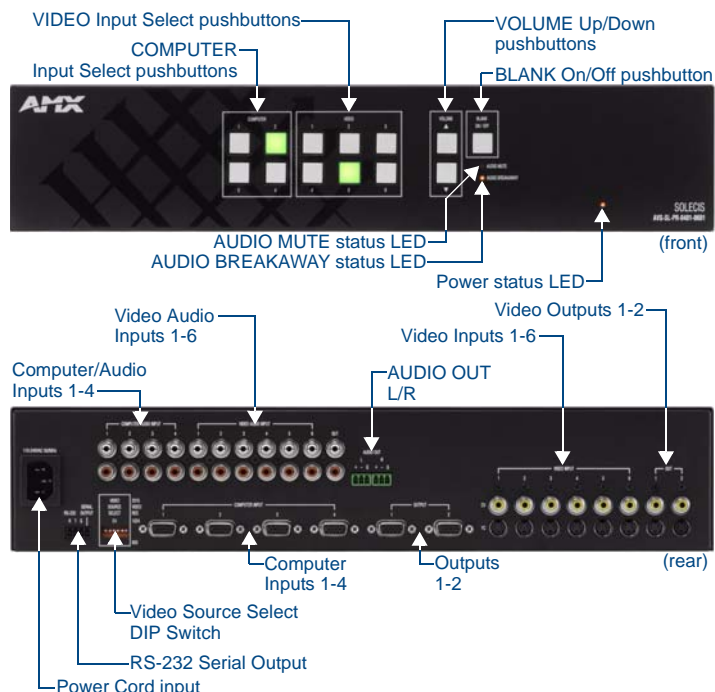


FIG. 1 Solecis AVS-SL-PR-0401-0601 Presentation Switcher

Product Specifications

AVS-SL-PR-0401-0601 Specifications	
RGB Inputs	
Number	4
Connector	HD-15
Level:	Analog
Max Level:	1V p-p
Impedance:	75 ohm
Bandwidth	250MHz -3dB
Return Loss	-38dB@10MHz, -20dB@100MHz
Adjacent Input Crosstalk	-80dB@10MHz, -70dB@100MHz
Sync Input	
Type:	Analog or TTL
Max Level:	5V p-p
Impedance:	75 ohm
Video Input	
Number	6
Connectors	Phono/RCA/Captive-wire 4Pin Din S-Video
Type	YC or Composite
Level:	Analog
Max Input:	1V P-P
Impedance:	75 Ohm
Bandwidth	50MHz -3dB
Return Loss:	-30dB@1MHz, -22dB@5MHz
Differential Phase Error	0.05%
Differential Gain Error	0.03%
Crosstalk	-60dB@1MHz
Audio Input	
Number	10
Connectors	Phono/RCA
Type	Stereo Unbalanced Analog
Max Level	2V P-P

AVS-SL-PR-0401-0601 Specifications (Cont.)

Audio Input (Cont.)	
Impedance	47K
Audio Response	20-50 KHz
RGB Output	
Number:	2
Connector:	HD-15
Level:	Analog
Gain:	Unity
Sync	
Impedance:	75 ohm
Sync Level:	TTL
Sync Impedance:	75 ohm
Video Output	
Number	2
Type	YC or Composite
Connectors	Phono/RCA/Captive-wire 4Pin Din S-Video
Level:	Analog
Gain:	Unity
Audio Output	
Number	2
Connector	Captive-wire
Type	Stereo Unbalanced and Balanced Analog
Attenuation:	0 to -78dB
Impedance	600 Ohm
Control	
Type:	RS232 Send and Receive, Front Panel
Connector:	Captive-Wire
Protocol:	Baud Rate-9600, Data Bits-8, No Parity, Stop Bits-1
Address:	00 - FF software programmable
Input:	RS232
Serial Output:	Programmable Protocol
Type:	Power On/Off, RGB Input, Composite Input and YC Input
Audio Breakaway:	Available through RS232 command
Power:	<ul style="list-style-type: none"> 110 to 240V auto-switching Power Connector: IEC
Dimensions:	2U Rack Mounting x 160mm
Weight:	4.22 lb (1.916 kg)
Included Accessories:	<ul style="list-style-type: none"> IEC Mains Lead Programming Software (available from amx.com)
Certifications:	<ul style="list-style-type: none"> CE UL60950 FCC class B, part 15 RoHS/WEEE compliant

Connections

Typical Installation for Use With a Projector

Connect the RGB, Video and Audio sources to the Input sockets on the rear panel of the unit. The RGB/Video inputs are 75 ohm terminated and the audio inputs 47Kohm terminated.

The RGB/Video and audio outputs are fully 75 ohm and 600 ohm driven respectively for connection to long cable runs. It is imperative that the input sources are fully compatible with the display and sound devices.

Video

- There are 4 PC inputs and 6 video inputs.
- 2 outputs are available for PC and 2 outputs for Composite Video and S-video.
- Video Inputs may be either Composite Video, S-Video, or a combination of both.

Note: Since the switcher now auto-senses between the Composite and S-Video inputs, the dip switches have no effect unless you are using the Device Serial Output. If you are using the Device Serial Output, dip switches 1 to 6 must be set to match the incoming source type on their corresponding inputs. The projector or display device should be switched to match the Source type output. If you are using the serial output, it is also necessary to configure the unit with Solecis DCS. Consult the Solecis DCS Quick Start Guide for more information.

Audio

One unbalanced output is available on Phono (RCA) connectors and one balanced output is available on phoenix connectors.

Power

Connect a Mains Source (110 to 240V) to the AVS-SL-PR-0401-0601.

- The Blank Button will illuminate.
- If any Source is connected to Inputs 1 of the PC and Video groups then Sync only will be present on the output.

Operation (Front Panel Pushbuttons)

Source Selection

To select a Source, press the pushbutton corresponding to the numbered Input.

- The pushbutton will illuminate. A PC input will be routed to the PC output sockets.
- A selected Video Input will also be routed to its respective Composite or S-Video output.
- If a PC input is selected, the last selected video input will remain on its respective output and vice versa.
- The Audio Channel will switch to the highlighted input, unless the unit is controlled by RS232, in which case the Audio can be switched independently.

Note: The front panel displays the status of the PC / Video Inputs.

Blank / Mute

Press the **Blank** pushbutton to blank and mute the outputs.

- The Blank button will illuminate and the Input buttons will extinguish.
- The Sync of the last selected PC and Video Inputs (only) will be present on the outputs.

Note: Blank and Mute are disabled when a source is selected.

Volume

The master volume control adjusts the level of all inputs (via the **Up** and **Down** pushbuttons).

Note: The volume level for the selected audio input is permanently stored, even after switch off.

Attenuation

The initial attenuation level of all the Inputs is set to **0dB**. If some sources are louder than others then they can be adjusted to match.

- To change the attenuation level of an input, press and hold the **Input Select** pushbutton, and press the **Up** and **Down** pushbuttons to set the level.
- Release the pushbuttons to store the new attenuation level.

Display Device Serial Output

This can be used for direct control of any device with RS232 control (i.e.: a projector).

The AVS-SL-PR-0401-0601 can be programmed to transmit Power On/Off as well as RGB, Composite and S-Video mode commands to a display device using the *Solecis Device Configuration Software* application (downloadable from www.amx.com).

- Dip switches 1-6 must be set to match the incoming source type on their corresponding inputs.
- The projector or display device should be switched to match the Source type output.
- The commands are transmitted from the Display Serial terminal.

Input Mode Only

When the AVS-SL-PR-0401-0601 is powered up a mode command will be sent to a display on the first press of any Input select button. The command will either be RGB, Composite or S-Video depending on the button pressed. This will ensure a display device is set to the correct mode to display the input selected. Each time a different source type is selected then a mode command will be sent to the display device. For this function to work the Display must be ON.

Power On/Off Mode

When the AVS-SL-PR-0401-0601 is powered up, a Power On command is sent to a display on the first press of any input button.

Note: If the Power ON/OFF function is to be enabled, set a warm up/cool down time via the **Power On Timer** and **Power Off Timer** settings, and click on **Set / Enable** - see *Controlling External Display Devices*.

- The button will flash for a programmed set time and the unit will disable. This allows a projector to warm up.
- At the end of the warm up period an RGB, Composite or S-Video command is sent to the display, the AVS-SL-PR-0401-0601 enables and the system is ready for use.
- To turn the controlled display (projector) off, press and hold the "Blank ON/OFF" pushbutton (on the front panel) for 5 seconds.

Programming Cable Connections

PC Serial Port (D9)	AVS-SL-PR-0401-0601
Pin 2	TX
Pin 3	RX
Pin 5	GND

Display Connections

Display device	AVS-SL-PR-0401-0601
RX	Display serial o/p
GND	GND

RS232 Control

The unit may be controlled using an RS232 outputting system as follows.

Connections

Controller	AVS-SL-PR-0401-0601
TX	RX
RX	TX (if feedback information required)
GND	GND

Set the RS232 Protocol as follows: Baud Rate **9600**, Data Bits **8**, No Parity, Stop Bit **1**.

The default address is **0**.

Note: All commands are hexadecimal. For a complete listing of all supported GET and SET commands, refer to the AVS-SL-PR-0401-0601 Operation/Reference Guide.

Solecis Device Configuration Software

This software (downloadable from www.amx.com) is used for configuring the AVS-SL-PR-0401-0601 to control external display devices.

Connection

1. Connect the serial port of the PC as follows:

PC (D9)	AVS-SL-PR-0401-0601
Pin 2	TX
Pin 3	RX
Pin 5	GND

2. Launch the *Solecis Device Configuration Software* application. If the connection is correct, the software will automatically detect the AVS-SL-PR-0401-0601.
3. Click on the AVS-SL-PR-0401-0601 to access the virtual panel (FIG. 2):



FIG. 2 Device Manager - Virtual Panel

Operation

Inputs can be selected and their respective attenuation levels can be set.

The Master volume level can be adjusted and the front panel can be enabled/disabled.

If several units are to be externally controlled from one serial port, the address of each unit can be changed.

Controlling External Display Devices

To program the AVS-SL-PR-0401-0601 to control external display devices:

1. Click **Setup Display**.



FIG. 3 Device Manager - Setup Display

2. Click **Change** and select the required *Manufacturer*, *Display Type* and *Model*. The protocol and command strings will appear in the relevant fields.
 - If the required device is not in the library, then it can be added by selecting **Library** from the menu bar and following the instructions.



FIG. 4 Device Manager - Adding a Device to the Library

Note: The device manufacturer's data sheet will be required.

- If the string needs to be transmitted more than once, select the number of times from the **Count** drop-down list and set a suitable interval period.
3. If the Power ON/OFF function is to be enabled, set a warm up and cool down time via the **Power On Timer** and **Power Off Timer** settings, and click on **Set / Enable**.

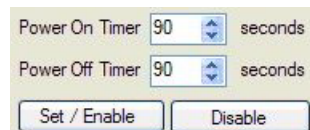


FIG. 5 Set warm up/cool down times via the Power On Timer and Power Off Timer settings

Note: If the warm up/cool down times are not enabled, Power ON/OFF will not work!

4. Click on **Program Device** to download the information.

Additional Documentation

Refer to the *Solecis AVS-SL-PR-0401-0601 Presentation Switcher Operation/Reference Guide* (available online at www.amx.com) for details on installing and configuring the unit as well as supported Commands and Troubleshooting info.