

# Solecis<sup>®</sup> 5x1 4K Multi-Format Digital Switcher with DXLink<sup>™</sup> Output

SDX-514M-DX (FG1010-355)

## Overview

The Solecis SDX is a family of small digital AV switchers. The 5x1 4K Multi-Format Solecis is a 4K and Ultra High Definition (UHD) capable solution that provides five user connection points and includes simplified local control which routes the selected signal to both a DXLink and HDMI output. This provides a low cost solution that combines a DXLink Transmitter and digital switcher into a single small form factor device that is commonly used at a table.

## COMMON APPLICATIONS

Solecis Digital Switchers are ideal for use in huddle spaces or small classrooms to provide simple switching for multiple sources. In larger rooms with multiple work spaces, a Solecis at each table or desk allows users to share content with the work group or the entire room. In even larger integrated environments Solecis digital switchers can provide easy to use source point switching and distance transmission over DXLink to an Enova DVX or DGX for hub-style building or campus-wide distribution.

## FEATURES

- **4K and Ultra High Definition (UHD) Support** – Experience high-quality video resolution for 4K devices
- **Multiple Video, Audio and Ethernet Connections** – All the connections you need at the conference table including audio, video, control and network access
- **Switch Inputs Without the Need for a Central Controller** – Provides low cost solution for huddle spaces and classrooms
- **Works with HydraPort Single Button or Keypad Modules** – Provides an elegant installation in a table or lectern
- **Built-in Support for AxLink Keypads** – Forwards keypad commands to a central controller over Ethernet eliminating the need for a separate AxLink cable run

## SPECIFICATIONS

GENERAL	
Dimensions (HWD)	1 11/16" (42.16 mm) x 10" (253.8) x 7" (177.8 mm)
Weight	3.5 lbs (1.6 kg)
Regulatory Compliance	RoHS FCC Class A CE UL-Listed CSA Approved IEC60950 UL94-V0 Flammability Rating
Mounting Options	Compatible with the following V Style mounting options:

	<ul style="list-style-type: none"> <li>• AVB-VSTYLE-SURFACE-MNT, V Style Module Surface Mount (FG1010-722)</li> <li>• NMX-VRK, V Style Rack Mounting Shelf (FG3201-60)</li> <li>• AVB-VSTYLE-POLE-MNT, V Style Module Pole Mount (FG1010-723)</li> </ul>
Compatible Enova DGX / DVX and DXLink Products	<ul style="list-style-type: none"> <li>• Enova DGX 800/1600/3200/6400 Digital Media Switchers with DGX-I-DXL-4K DGX DXLink Twisted Pair 4K Input Board installed</li> <li>• DX-RX-4K, DXLink 4K HDMI Receiver Module as a point-to-point solution</li> </ul> <p>NOTE: For passage of 4K signal content, 4K products must be used. Solecis 4K Digital Switchers are also compatible with DXLink Twisted Pair (non-4K) equipment and Enova DVX-3255HD, DVX-3155HD, DVX-3256HD, DVX-3156HD, DVX-2255HD and 2155HD All-In-One Presentation Switchers. Conditions may apply, please reference hardware reference manuals or contact technical support for details</p>
Optional Accessories	<ul style="list-style-type: none"> <li>• PSR4.4, 13.5 VDC, 4x4 A Power Supply with 3.5 mm Phoenix Connector with Retention Screws (FG423-46)</li> <li>• PSN6.5, 13.5 VDC, 6.5 A Power Supply with (3) 3.5mm Phoenix Connectors (FG423-41)</li> <li>• AVB-VSTYLE-SURFACE-MNT, V Style Module Surface Mount (FG1010-722)</li> <li>• NMX-VRK, V Style Rack Mounting Shelf (FG3201-60)</li> <li>• AVB-VSTYLE-POLE-MNT, V Style Module Pole Mount (FG1010-723)</li> <li>• MET-6N, Metreau 6-Button Keypad with Navigation <ul style="list-style-type: none"> <li>• White, MET-6N-WH (FG5794-01-WH)</li> <li>• Black, MET-6N-BL (FG5794-01-BL)</li> </ul> </li> <li>• MET-7, Metreau 7-Button Keypad <ul style="list-style-type: none"> <li>• White, MET-7-WH (FG5794-03-WH)</li> <li>• Black, MET-7-BL (FG5794-03-BL)</li> </ul> </li> <li>• SP-08-AX-US, 8-Button KeyPad (US) with AxLink <ul style="list-style-type: none"> <li>• White, SP-08-AX-US-WH (FG1311-08-SW)</li> <li>• Black, SP-08-AX-US-BL (FG1311-08-SB)</li> <li>• Brushed Aluminum, SP-08-AX-US-BA (FG1311-08-SA)</li> </ul> </li> <li>• SP-08-AX-UK, 8-Button KeyPad (UK) with AxLink <ul style="list-style-type: none"> <li>• White, SP-08-AX-UK-WH (FG1311-08-KW)</li> <li>• Black, SP-08-AX-UK-BL (FG1311-08-KB)</li> <li>• Brushed Aluminum, SP-08-AX-UK-BA (FG1311-08-KA)</li> </ul> </li> <li>• SP-08-AX-EU, 8-Button KeyPad (Europe) with AxLink <ul style="list-style-type: none"> <li>• White, SP-08-AX-EU-WH (FG1311-08-EW)</li> <li>• Black, SP-08-AX-EU-BL (FG1311-08-EB)</li> </ul> </li> <li>• HydraPort with: <ul style="list-style-type: none"> <li>• HPX-U400-MET-6N, Metreau 6-Button Keypad Kit with Carrier (FG554-11-BL-K)</li> <li>• HPX-U400-MET-7 Metreau 7-Button Keypad Kit with Carrier (FG554-13-BL-K)</li> <li>• HPX-U400-R-MET-6N Metreau 6-Button Keypad Ramp Mount Kit (FG564-11-BL)</li> <li>• HPX-U400-R-MET-7 Metreau 7-Button Keypad Ramp Mount Kit (FG564-13-BL)</li> </ul> </li> <li>• CBL-HDMI-FL, HDMI High Speed Flat Cable (FG10-2180-16)</li> </ul>

	<ul style="list-style-type: none"> <li>• CBL-DP-FL, DisplayPort High Speed Flat Cable (FG10-2181-16)</li> <li>• CBL-ETH-FL, Ethernet Flat Cable (FG10-2182-16)</li> <li>• CBL-RGB+A-FL, RGB with Audio Flat Cable (FG10-2183-16)</li> <li>• CC-USB, USB Programming Cable (FG10-5965)</li> </ul>
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SIGNAL TRANSPORT – DXLink	
Connector	(1) RJ-45
Supported Signal Styles	Digital video, audio, Ethernet, bi-directional control and power
Transport Layer Throughput (Max)	10.2 Gbps
Twisted Pair Cable Type	Shielded Cat6, Cat6A and Cat7 <b>DXLink twisted pair cable runs for DXLink equipment shall only be run within a common building where a common building is defined as: the walls of the structure(s) are physically connected and the structure(s) share a single ground reference</b>  For more details and helpful cabling information, reference the white paper titled <a href="#">Cabling for Success with DXLink</a> , or contact your AMX representative
Twisted Pair Cable Length	Up to 70 m with 4K video Up to 328 ft (100 m) with 1080p video
HDCP Support	Yes

ACTIVE POWER REQUIREMENTS	
Voltage, AC (Typical)	110-240VAC, 47-63 Hz
Power Consumption (Max)	48 W
Power Connector	IEC Power Cord Connector 100-240 VAC 47-63 Hz
DXLink Power	Supplies power to a DXLink Twisted Pair RX, when used in point-to-point applications

POWER SUPPLY	
Internal, Included	Yes

ENVIRONMENTAL	
Temperature (Operating)	32° to 104° F (0° to 40° C)
Temperature (Storage)	-22° to 158° F (-30° to 70° C)
Humidity (Operating)	5% to 85% RH (non-condensing)
Humidity (Storage)	0% to 90% RH (non-condensing)

USB (HID) KEYBOARD & MOUSE	
USB (HID)	(1) USB Type B Connector (“TO HOST”); connect a Solecis SDX-510M-DX Digital Switcher with DXLink to a PC and emulate keyboard and mouse commands from a DXLink Receiver

FRONT CONNECTORS	
ID Pushbutton	(1) ID Pushbutton, can be used to assign the unit’s Device ID, switch between Static and Dynamic IP addressing modes, and reset the unit to factory defaults

AxLink Keypad Control	(1) 4-pin, 3.5 mm Screw Terminal Connector
Ethernet LAN OUT Port	(3) RJ-45
HDMI Output	(1) HDMI Type A Female Connector
DXLink Output	(1) RJ-45
USB Host Port	(1) USB Type B Connector "TO HOST"
USB Device Port	(1) USB Type A Connector, reserved for future use

<b>BACK CONNECTORS</b>	
Advanced Configuration Interface	(1) USB Mini-B Connector
HDMI Inputs	(3) HDMI Type A Female Connectors
VGA Inputs	(2) HD-15 Connectors
Single External Button/LED Control Connector	(1) 3-pin 3.5mm Screw Terminal Connector
Dual External Button/LED Control Connector	(2) 5-pin 3.5mm Screw Terminal Connector
Analog Stereo Inputs	(2) 1/8" mini-Stereo Jack
AC Power Connection	IEC Power Cord Connector

<b>ETHERNET</b>	
Ethernet Connections	(3) RJ-45, 10/100 Port provides TCP/IP communication. This is an Auto MDI/MDI-X enabled port, which allows you to use either straight-through or crossover Ethernet cables. The Ethernet Port LEDs show communication activity, connection status, speeds, and mode information
Ethernet Link/Act Indicator	(1) Link/Activity LED (green) blinks when receiving Ethernet data packets, one on Ethernet RJ-45 connector and one on the front panel
Ethernet Speed Indicator	(1) Speed LED (yellow) lights On when the connection speed is 100 Mbps Ethernet connection and turns OFF when the speed is 10 Mbps

<b>CONTROLS &amp; INDICATORS</b>	
AxLink Keypad Port	(1), 4-pin 3.5 mm captive-wire connector, provides data and power to up to 2 external AxLink Keypads
AxLink Indicator	(1) AxLink Keypad LED (green) indicates the state of the AxLink Keypad port
LINK/ACT Indicator	(1) LED (green), lights when the Ethernet cable is connected and an active link is established. This LED also blinks when receiving Ethernet data packets
Status Indicator	(1) LED (green), indicates boot and connection status
Power Indicator	(1) Power LED (green) indicates the unit is powered on
ID Pushbutton	(1) ID Pushbutton, can be used to assign the unit's Device ID, switch between Static and Dynamic IP addressing modes, and reset the unit to factory defaults

<b>INTEGRATED SWITCHER</b>	
Video Switching	5x1 (dual) audio/video switching, any of 5 inputs can be routed to the HDMI and DXLink output simultaneously
Video Inputs	(2) HD-15; supports RGBHV (3) HDMI; supports HDMI/HDCP
Video Outputs	(1) HDMI; supports HDMI/HDCP (1) DXLink; supports digital video, audio, Ethernet, bi-directional control and power
HDCP Support	Yes

<b>HDMI</b>	
Compatible Formats	HDMI, HDCP , DVI
Input Signal Type Support	HDMI DVI-D (Single Link With Cable Adapter) DisplayPort ++ (Input Only, With HDMI Cable Adapter)
Input Connectors	(3) HDMI Type A Female
Output Signal Type Support	HDMI, HDCP, DVI
Input Re-clocking (CDR)	Yes
Deep Color Support	Yes
Color Space Support	RGB 4:4:4 YCbCr 4:4:4 and 4:2:2 (Input signal support for YCbCr 4:4:4 and 4:2:2, output color-space is converted to RGB 4:4:4)
3D Format Support	HDMI Primary Formats  Frame Packing 1080p up to 24Hz Frame Packing 720p up to 50/60Hz Frame Packing 1080i up to 50/60Hz Top-Bottom 1080p up to 24Hz Top-Bottom 720p up to 50/60Hz Side-by-Side Half 1080p up to 50/60Hz Side-by-Side Half 720p up to 50/60Hz 3D supported when the HDMI DXLink RX Scaler is in Bypass mode and format is 1080p60 or less
4K Resolution Support	<ul style="list-style-type: none"> <li>• 3840 x 2160p @ 24/25/30 Hz</li> <li>• 4096 x 2160p @ 24/25/30 Hz</li> <li>• 3840 x 2160p @ 60 Hz, 4:2:0*</li> <li>• 4096 x 2160p @ 60 Hz, 4:2:0*</li> </ul> <p>* Supported by DX-RX-4K when in Bypass Scaling mode NOTE: See full list of supported formats in "DXLink Twisted Pair 4K Transmitters and Receivers Hardware Reference Manual".</p>
Audio Format Support	Dolby TrueHD, Dolby Digital, DTS-HD Master Audio, DTS, 2 CH through 8 CH L-PCM Dolby Digital and DTS support up to 48kHz, 5.1 channels
Audio Resolution	16 bit to 24 bit
Audio Sample Rate	32 kHz, 44.1 kHz, 48 kHz, 96 kHz, 192kHz
HDCP Support	Yes Supports AMX HDCP InstaGate Pro Technology When used with an AMX Digital Media Switcher the key support is up to 16 sinks per output, independent of source device  When used as a single point-to-point solution the key support is defined by the source device

<b>ANALOG VIDEO</b>	
Compatible Formats	RGBHV
Input Connector	HD-15
Resolution Support	up to 1920x1200@60 Hz Reduce Blanking
Auto-Adjust Input	Supported
Digital Processing	24-bit, 165 MHz

<b>STEREO AUDIO</b>	
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Input Signal Types	Stereo Analog
Input Connectors	2 - 1/8" Mini-Stereo Jack
Analog Input Level (Max)	+2 dBu, unbalanced
Analog to Digital Conversion	48 kHz Sample Rate, 24-bit
Analog to Digital Reference Level	+2.5 dBu = 0 dBfs

