DXP 44 SDI & DXP 88 SDI

SERIAL DIGITAL VIDEO MATRIX SWITCHERS

- Serial digital data rates from 143 Mbps to 360 Mbps
- SMPTE 259M compliant
- Automatic input cable equalization
- Digital Sync Validation Processing (DSVP™)
- Automatic rate selection
- Output data muting when input source is lost
- 16 global memory presets
- LCD display
- RS-232/422 remote control
- Extron's Simple Instruction Set (SIS™)
- Windows®-based control program

DXP 44 SDI

DXP 88 SDI

The Extron Digital XPoint Series of SDI digital matrix switchers is ideal for switching multiple serial digital video signals to multiple digital video devices in post production studios, non-linear editing suites, staging events, and video broadcast studios.

Extron Electronics

www.extron.com

DESCRIPTION

Extron's **Digital XPoint Series** of digital video matrix switchers is the ideal solution for switching multiple serial digital video signals to multiple digital video devices in video production studios, non-linear editing suites, staging events, and video broadcast studios.

There are two models available in the Digital XPoint line: a four input by four output model (DXP 44 SDI) and a eight input by eight output model (DXP 88 SDI). Each input has an equalized and buffered loop-through, and each output has dual buffered and re-clocked BNC outputs.

The Digital XPoint series conforms to the SMPTE 259M specification. These digital matrix switchers handle all composite (143 and 177 Mbps), component 4:2:2 (270 Mbps), and widescreen 16:9 (360 Mbps) serial standards. Automatic cable equalization typically equalizes greater than 300 meters at 270 Mbps of Extron SHR or equivalent high quality cable.

The Digital XPoint matrix switcher series is housed in a rack mountable, 1U high, 19" wide enclosure. These switchers come standard with a front panel control and are capable of communicating with Extron's remote keypad (MKP 1000) and/or remote control panel (MCP 1000). Control of the Digital XPoint series from a third party control system can be done via RS-232 or RS-422 using Extron's Simple Instruction Set (SIS™).

FEATURES

- **Inputs with equalized and buffered loop-throughs**
- **Outputs each with two buffered and re-clocked BNCs**
- **Serial digital data rates from 143 Mbps to 360 Mbps –**
- **Capable of switching 4fsc (composite) or 4:2:2 (component) serial digital video transmission standards.**
- **SMPTE 259M compliant**
- **Automatic input cable equalization** – Typically equalizes greater than 300m at 270 Mbps of Extron SHR or equivalent high quality cable.
- **Digital Sync Validation Processing (DSVP™)** – When input serial data is locked, the matrix indicates the presence of a carrier source.
- **Automatic rate selection** – Automatically accepts four SMPTE data rates, including 143, 177, 270, and 360 Mbps. The auto mode is ideal for multirate serial data protocols where the matrix automatically detects and locks onto the incoming data signal.
- **Output data muting when input source is lost** – An internal muting function forces the serial data outputs to a static state when input data is not present or not locked.

FEATURES

- **16 global presets** – Frequently-used I/O configurations may be saved and recalled either from the Front Panel Controller or serial control. This time-saving feature allows you to set up I/O configurations and store them in memory for future use.
- **RS-232 and RS-422 control** – Allows for firmware updates and serial control via a third-party control system using Extron's Simple Instruction Set (SIS™)
- **Simple Instruction Set (SIS™)** – A set of basic ASCII code commands for serial control. Instead of programming in long, obscure strings of code, SIS makes it easy to program and operate the DXP Series using serial control.
- **Control Software** – Provides a graphical, drag-and-drop interface for I/O configuration and other customization functions via RS-232 and RS-422 remote control. This software also offers an emulation mode for configuration of an offsite matrix switcher; the I/O configuration may be saved for future downloading to the matrix switcher.
- **MCP 1000 and MKP 1000 control** – Optional control panels and keypads provide the flexibility to control a DXP Series matrix switcher from a remote location.

MKP 1000

MCP 1000

- **LCD display** – Displays current input/output configuration, preset configurations, data rate, and input carrier detect, as well as the status of additional system features.
- **Extron's control software** – Extron has developed a Windows®-based control software that provides the ability to control every Extron matrix switcher. This program makes input/output configuration and other customization functions simple and convenient because it uses graphic icons.

VIDEO

Routing
- DXP 44 SDI ..... 4 x 4 matrix
- DXP 88 SDI ..... 8 x 8 matrix

Data rates ..... 143 Mbps, 177 Mbps, 270 Mbps, 360 Mbp
Auto data rate lock ..... Yes
Standard ..... SMPTE 259M
Data types ..... 8 bit or 10 bit

VIDEO INPUT

Number/signal type
DXP 44 SDI ..... 4 SDI serial digital video (8 or 10 bit SMPTE 259 M widescreen 16:9, component 4:2:2, and composite video) inputs, and 4 buffered loop-throughs
DXP 88 SDI ..... 8 SDI serial digital video (8 or 10 bit SMPTE 259 M widescreen 16:9, component 4:2:2, and composite video), and 8 buffered loop-throughs
Connectors
- DXP 44 SDI ..... 4 female BNC for input, 4 female BNC for loop-through
- DXP 88 SDI ..... 8 female BNC for input, 8 female BNC for loop-through

Input cable equalization..... 1 to 300 m for data rates up to 270 Mbps 1 to 200 m for data rates up to 360 Mbps
Auto equalization..... Yes
Input return loss ..... >15 dB, 5 MHz to 270 MHz
Recommended cable type ..... Extron SHR or equivalent
Impedance..... 75 ohm
External sync (genlock) ..... 0.3 V to 0.4 Vp-p

VIDEO OUTPUT

Number/signal type
- DXP 44 SDI ..... 4 dual SDI serial digital video (SMPTE 259 M widescreen 16:9, component 4:2:2, and composite video)
- DXP 88 SDI ..... 8 dual SDI serial digital video (SMPTE 259 M widescreen 16:9, component 4:2:2, and composite video)

Connectors
- DXP 44 SDI ..... 4 x 2 BNC female
- DXP 88 SDI ..... 8 x 2 BNC female

Number of outputs per channel .. 2 outputs per channel
Nominal level..... 0.8 V ±10%
Impedance..... 75 ohms
Return loss..... >40 dB @ 5 MHz
DC offset ..... ±500 mV maximum with input at 0 offset
Jitter..... <0.2 µs p-p
DC offset ..... 0.5 V (±) (termin. @ 75 ohms)
Rise and fall time (20-80%) ..... 0.6 ns = 100 ps

CONTROL/REMOTE — SWITCHER

Serial control port ..... RS-232 or RS-422, 9-pin female D connector
Baud rate and protocol ..... 9600 baud, 8 data bits, 1 stop bit, no parity
Serial control pin configurations .. 2 = TX, 3 = RX, 5 = GND
Program control..... Extron's control/configuration program for Windows® Extron's Simple Instruction Set (SIS™)

GENERAL

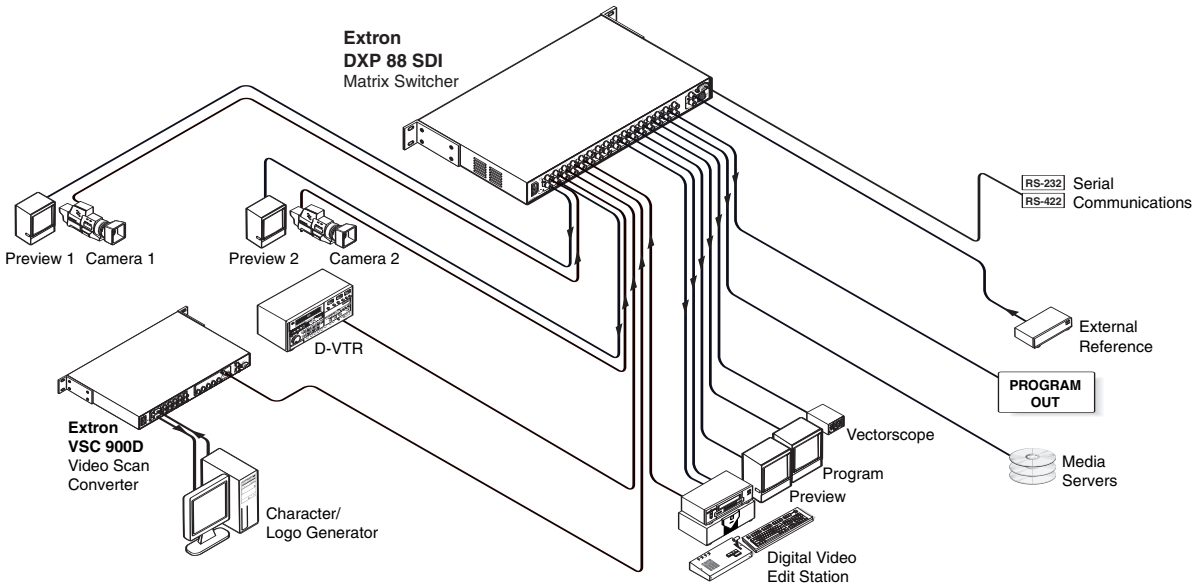
Power ..... 100 VAC to 240 VAC, 50/60 Hz, 40 watts, internal, autoswitchable
Temperature/humidity..... Storage: -40 to +158 °F (-40 to +70 °C) / 10% to 90%, noncondensing Operating: +32 to +122 °F (0 to +50 °C) / 10% to 90%, noncondensing
Rack mount ..... Yes, with included mounting brackets, 1U high. These can also be mounted under or through furniture with the provided brackets.
Enclosure type ..... Metal
Enclosure dimensions..... 1.75" H x 17.5" W x 9.5" D (1U high, full rack wide) 4.4 cm H x 44.4 cm W x 24.1 cm D (Depth excludes connectors. Width excludes rack ears.)
Product weight ..... 4.9 lbs (2.2 kg)
Shipping weight ..... 8 lbs (4 kg)
Vibration ..... ISTA 1A in carton (International Safe Transit Association)
Listings ..... UL, CUL
Compliances ..... CE, FCC Class A, AS/NZS, ICES
MTBF..... 30,000 hours
Warranty ..... 3 years parts and labor

NOTE: All nominal levels are at ±10%.

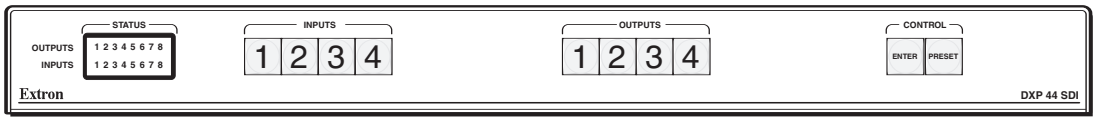
Model	Part Numbers
DXP 44 SDI	60-402-01
DXP 88 SDI	60-401-01

Specifications are subject to change without notice.

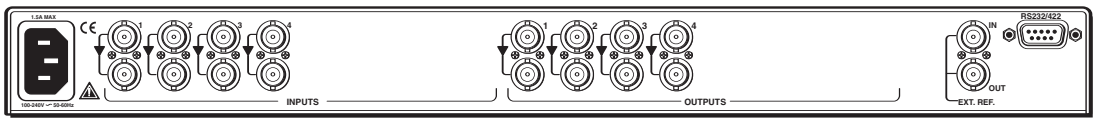
Application Diagram



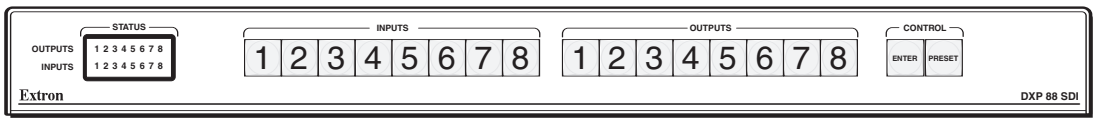
Panel Drawings



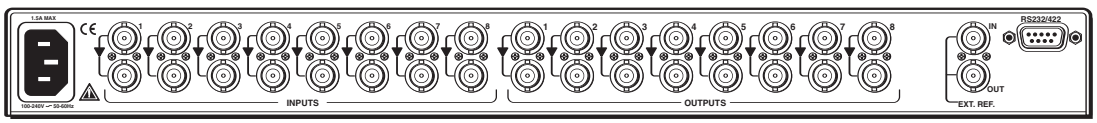
DXP 44 SDI Front



DXP 44 SDI Back



DXP 88 SDI Front



DXP 44 SDI Back

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