

▶Intelligent Auto-Configuration

The EQX's exceptional Source-By-Source intelligent auto configuration facility allows the path to each destination to be independently and instantly re-configured to suit the requirements of the source being switched. This includes auto selecting the Reclocking/Non-reclocking circuitry, the ASI mode as well as selecting the correct switch point.

independent SMPTE compliant switching for up to four different digital video signal

## **▶**System Flexibility

The inspired modular approach of the EQX's design provides excellent in-service expansion capabilities. In convenient steps of 18, the number of inputs and/or outputs can be increased from the base size of 18x18 all the way up to 576x576, and beyond, in square and non-square configurations.

# ▶1152x1152 Expansion

The EQX offers the ability to scale up to 1152x1152 without requiring complex, expensive and difficult to install and maintain external splitting and combining or active DA-ing of sources and switching of destinations.

#### ▶High Density

Available Double Density Outputs allow the EQX to grow past 576 outputs in the 26RU chassis and past 288 outputs in the 16RU chassis.

# ▶ Multiview Processor Integration

The EQX now integrates X-Link on both 16 and 26RU models. X-Link is a high density interconnect to a wide variety of Evertz® Multiveiw Processors that DOES NOT use up standard router outputs. A 576x576 EQX will still have the full 576 outputs while supporting more than 200 additional outputs to an Evertz® Multiview Processor. X-Link technology is a unique Evertz® signal interconnect carrying a large block of signals over a single connector.

#### ▶Audio Routing

The EQX router is an integral part of the Evertz Integrated audio system which allows operators the ability to reduce cost and space while giving the flexibility to route embedded AES, discrete analog, discrete AES and MADI inputs to embedded AES, discrete analog, discrete AES and MADI outputs. Any audio input in the system can be routed to any output.

## **▶**Compact Design

The EQX delivers a high broadcast quality 576x576 routing capability in a compact 26RU frame, while expansion to 1152x1152 ensures a migration path for even larger applications.

# **▶**Comprehensive Control

The EQX provides comprehensive connectivity to suit the most demanding installations. The internal frame controllers provide complete connectivity to any number of remote control panels and 3rd party control devices such as automation systems via multiple Q-Link, F-Link, Ethernet and Serial ports. The optional advanced EQX control system makes enterprise installations with advanced tie-lines, automated pathfinding, and advanced control surfaces easy to implement and manage.

## ▶Independent Monitoring

EQX provides extensive signal monitoring of both inputs and outputs, power supply voltages, interior temperatures and fan speeds. All monitored data is available through SNMP for facility-wide monitoring systems such as VLPRO.

#### ▶Simple Maintenance

The advanced design of the EQX ensures that all active components, including input, output, crosspoint modules, frame controllers, cooling fans and power supplies, are accessible from the front of the frame and can be hot swapped at any time for maintenance.

#### **▶**Outstanding Redundant Protection

The EQX is the ultimate design in terms of system availability. The EQX architecture contains redundant protection for all of the critical system elements. The architecture provides redundant cross-point configurations, redundant frame controllers, external redundant load sharing power supplies, redundant easy access cooling fans and a dedicated monitoring bus that is independent of the system cross-points. In the event of a failure, manual or automatic re-routing of signals on an output-by-output Path-by-Path basis is fully supported by the system software.

Using the EQX monitoring capabilities, output quality can be verified prior to switching to redundant signal paths. The EQX is fully SNMP enabled and supports seamless integration with VistaLINK® PRO command and control systems.







## ▶ Features & Benefits

## High performance format independent platform

- SD-SDI, HD-SDI, 3G-SDI, DVB-ASI, SMPTE 310M and more!
- Any fiber optical signal from 3Mb/s up to 3Gb/s
- Scalable to 576x576 in a single 26RU frame
- Scalable to 288x288 in a single 16RU frame
- Input expansion in steps of 18
- Output expansion in steps of 18
- Up to 1152x1152 in multiple frames
- Source-by-source intelligent auto configuration
- Input equalization (On/Off)
- Output reclocking (On/Off)
- ASI Mode (On/Off)
- Switch Point (Variable)

## Advanced system control & interfacing

- Supports the full range of Quartz remote control panels
- Full VistaLINK® PRO command & control, SNMP & AVM
- Full integration with 3rd party automation systems
- Supports a wide selection of control protocols
- Ethernet, Serial RS-422/232, F-Link and Q-Link ports

## High availability, 24/7 design

- Full modular design
- All modules are hot swappable
- All components are front accessible (electronics & cooling fans)
- Passive I/O
- Full redundant design
- Redundant crosspoint
- Redundant frame controller
- Redundant power supply (separate IRO)
- Redundant cooling fans
- Comprehensive system monitoring bus
- VistaLINK® PRO SNMP & AVM monitoring of I/O & crosspoint modules
- Temperature monitoring
- Power supply monitoring

# **▶**Specifications

Configuration: 576x576 in 26RU

(PSU separate 1RU) 288x288 in 16RU (PSU separate 1RU) Selectable in blocks of 18 Inputs Outputs: Selectable in blocks of 18

Redundant Protection: Redundant Crosspoint Redundant Frame Controller

Redundant Power Supply Redundant Cooling Fans

Video Inputs:

SMPTE 259M, SMPTE 292M, Formats SMPTE 310M, SMPTE 424M, ASI SMPTE 292M, G-Link, any optical Optical Formats signal between 3Mb/s and 3Gb/s

Signal Level 800mV p-p

Impedance 75Ω terminating Return Loss >15db typical (5-1500 MHz)

>10db typical (1.5-3GHz) Belden 1694A @ 270 MHz 300m Cable Equalization Belden 1694A @ 1.5GHz 100m

Connectors BNC IEC 61169-8 Annex A

Video Outputs:

Signals Supported Same as Input Reclocking Configurable Non-Reclocking Configurable Signal Level 800mV p-p ± 10% 75 $\Omega$  terminating Impedance

Return Loss >10db typical (1.5-3GHz)

DC Offset Output Jitter 0.2 UI

Connectors

>15 db typical (5-1500 MHz)

 $0 \pm 0.5 \text{V}$ 

BNC IFC 61169-8 Annex A

Fiber Inputs/Outputs: SFP1T13-2

Dual Optical SFP Transmitter, Up to

3Gb/s, 1310nm LC/PC Connector Wavelengths Output Power 1310nm -2dBm ±1dBm

SFP1R-2 Dual Optical SFP Receiver, Up to 3Gb/s

Connector Operating Wavelength LC/PC 1270nm to 1610nm Maximum Input Power Optical Sensitivity -1dRm -21dBm+/-1dBm

Reference Timing:

Analog 525/625/tri-level HD Switching Reference: Looping connections

Connector: 2 BNC IEC 61169-8 Annex A Signal Level: 1 V p-p ± 3dB 75Ω terminating active loop out Impedance:

optional

Reference Timing 4 independent timing planes,

programmable output by output

Control: Q-Link:

 $4 \times 75\Omega$  video cable (max length 500m)

2x RJ45 Serial RS422/232 2x D9 female

10/100baseT, 2x RJ45 Ethernet:

Physical:

Height: EQX-26FR: 45.5" (115.5cm) 26RU EQX-16FR: 28" (49cm) 16RU

Width: 19" (483mm) 19" Rack Mount 19.4" (493mm) over hinges and Depth:

Weight: EQX-26FR:

374Lbs (171Kg) Fully Loaded EQX-16FR: 218Lbs (99Kg) Fully Loaded

0°C to -40°C Operating Tem: Cooling: Fan cooled, front to rear

Electrical - Router:

Input Voltage: **48 VDC** Maximum Input Current: EQX-26FR: 7 75 amps

100 amps Typical Input Power: 1500W for fully loaded 288x288

confia

3000W for fully loaded 576x576

Redundancy: Separate 1RU frame with up to 4 PS

modules for 1:1 redundancy

available

**Electrical - External Power Supply:**Configuration: Up to 4 load sharing PS modules in

1RU frame Connector IEC 60320 - separate mains input for

each PS module Input Voltage: Auto ranging 100 ó 240V nominal,

50/60Hz

13.2 A (@ 120 VAC), 7.2 A (@ 220 Max Input Current: VAC) per PS module at 1200W load

Output Voltage:

Output Power: 1200W per PS module

# Ordering Information - Contact factory for system configuration

576x576- 26RU Frame:

18 input, 18 output SDI/ASI Video Router 18 input, 18 output HD/SDI/ASI Video Router 18 input, 18 output 3G/HD/SDI/ASI Video Router EQX26-18X18H EQX26-18x18-3G

18 input, 36 output 3G/HD/SDI/ASI Video router with Fiber I/O EQX26-18x36-3G-F

288x288 - 16RU Frame

18 input, 18 output SDI/ASI Video Router EQX16-18X18S EQX16-18X18H 18 input, 18 output HD/SDI/ASI Video Router EQX16-18x18-3G 18 input, 18 output 3G/HD/SDI/ASI Video Router EQX16-18x36-3G-F 18 input, 36 output 3G/HD/SDI/ASI Video router with Fiber I/O

Ordering Options (to expand 26RU up to 576x576, 16RU up to 288x288):

EQX-PS-FR 1RU frame which holds up to 4 power supply modules (EQX-PS) EQX-PS Power Supply module 4 for 26RU frame & 2 for 16RU frame EQX-FC Redundant frame controller for 26RU and 16RU frame EQX-XPT-576x288 Redundant crosspoint module for 26RU frame EQX-XPT-288x288 Redundant crosspoint module for 16RU frame Multi-Channel Passive Splitter/Combiner EQXS64-1x2-3G

Available for either 16RU frame or 26RU frame:

EQX-IP18S 18 Input SDI/ASI Module EQX-IP18H 18 Input HD/SD/ASI Module EQX-IP18-3G 18 Input 3G/HD/SD/ASI Module 18 Output SD/ASI Module EQX-OP18S 18 Output HD/SD/ASI Module EQX-OP18-3G 18 Output 3G/HD/SD/ASI Module

Ordering Options (to expand 26RU up to 1152x1152):

For fiber optics options contact factory Greater than 576x576, contact factory



