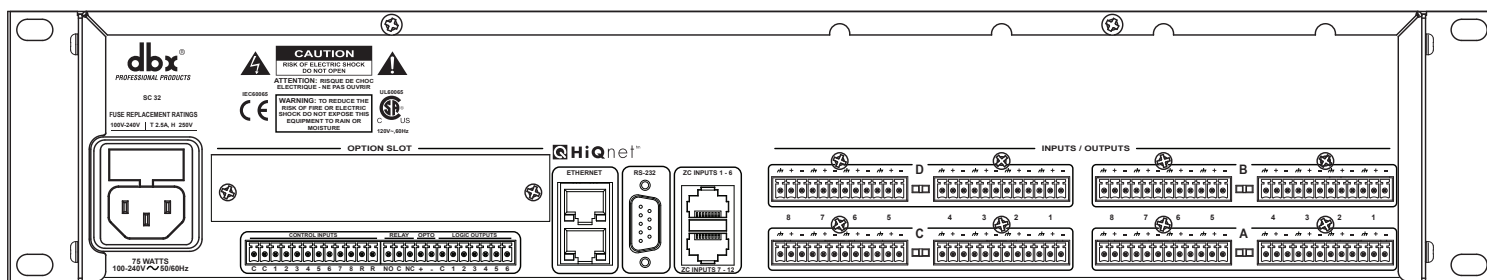
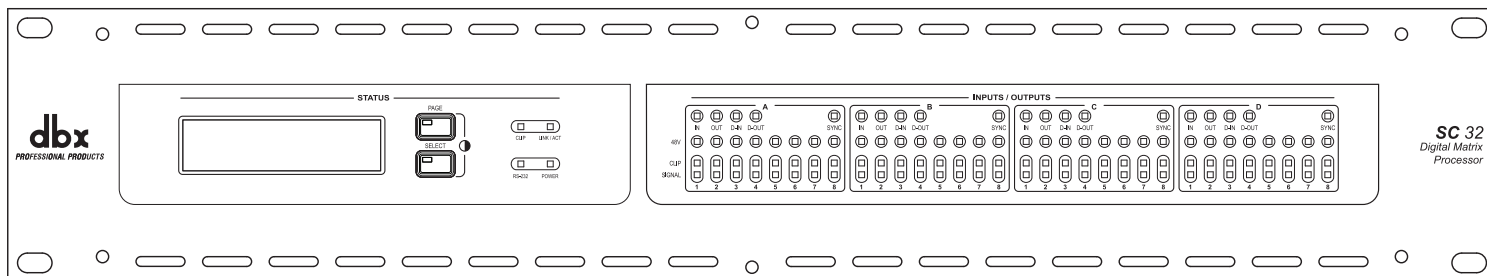


SC 32

DIGITAL MATRIX PROCESSOR



OVERVIEW:

Based on the principles of the dbx ZonePRO® products, the SC 32 Digital Matrix Processor is the new flagship product for Digital Matrix Processing. Wizard driven configuration using HiQnet™ System Architect makes unprecedented DSP power, incredible routing flexibility and a rich palette of processing tools accessible with the minimum of training. The SC 32 represents the professional choice of foundation on which to build even the most demanding integrated system.

The SC 32 has a total analog I/O count of 32, configurable in banks of eight. Analog input cards and analog output cards facilitate five different fully loaded configurations. Analog input cards accommodate a wide range of sources with mic/line switching and phantom power per input. One high-speed option slot provides facility for adding forthcoming high bandwidth audio transport I/O cards. The Media Engine factory option allows for flash-based, multi-channel playback of stored media. All of these features are housed in a sleek 2U rack chassis.

With dedicated DSP for common processing functions and insert positions for specialized processing, the SC 32 offers many processing functions including Advanced Feedback Suppression (AFS), Ambient Noise Compensation (ANC), priority ducking, parametric equalization (PEQ), delay and dynamics. The SC 32 has a diverse range of control options including HiQnet™ System Architect custom control panels, Ethernet, serial, contact closure, the popular ZC wall controllers and even automatically scheduled events. With so many methods of control, an SC system can truly be tailored to suit the needs and technical expertise of even the most scrutinizing contractor.

KEY FEATURES:

- 32 channels of analog I/O configurable in banks of 8
- Mic / Line and Phantom Power per channel on Analog Input Cards
- Ethernet / Serial Control
- Logic I/O
- Rich Palette of Processing Tools
- Wizard configuration
- Selectable DSP inserts on all inputs and outputs including Advanced Feedback Suppression (AFS)
- Automatic Gain Compensation (AGC), Compression, De-Essing and Notch Parametric Equalization
- Complete routing flexibility
- Comprehensive configuration, control and monitoring from HiQnet System Architect
- Events Scheduler
- Optional ZC wall panel control
- Optional Media Engine



SC 32 Digital Matrix Processor

TECHNICAL SPECIFICATIONS:

Front Panel Led Indicators:

Per Input:	Signal Present, Clip, 48V Phantom Power, SYNC, I/O card type (IN, OUT, D-IN, D-OUT)
Other:	LCD Display, Page Button, Select Button and LED indicators for: Global CLIP, Link/Active, RS-232 and Power

Card Slots:

Audio Cards:	4 Card Slots (A, B, C, D)
High Speed Option Slot:	1 Card Slot
Analog Inputs:	(8) per Input Card
Connectors:	Phoenix/Combicon, 3.5mm pitch
Mic/Line Inputs:	Nominal gain 0 dB, Electronically switchable to +6, +12, +18, +24, +30, +36, +42, +48 dB
Type:	Electronically balanced, RF filtered
Impedance:	3.5 k Ω
Maximum Input Level:	+20 dBu
CMRR:	>40 dB typical, >50 dB at 1 kHz
Phantom Power:	+48 VDC, selectable per input
Analog Outputs:	(8) per Output Card
Connectors:	Phoenix/Combicon, 3.5mm pitch
Type:	Electronically balanced, RF filtered
Impedance:	44 Ω
Max Output Level:	+20 dBu

System Performance:

Dynamic Range:	107 dB unweighted, 110 dB A-weighted
Internal Processing:	32 bit floating point
THD + Noise:	0.0045% typical at 0 dBu, 1 kHz, 0 dB input gain
Frequency Response:	20 Hz- 20 kHz, +/-0.50 dB
Sample Rate:	48 kHz
GPIO Ports:	8 Control Inputs and 6 Logic Outputs (Phoenix/Combicon, 3.5mm pitch)
Control Input Voltage:	0 to 4.5v
Control Input Impedance:	4.7 k ohm to +5V (2-wire mode)
Logic Output Voltage:	0 or +5V unloaded
Logic Output Impedance:	440 ohm
Logic Output Current:	10mA source, 60mA sink

Relay Contact Closure:

Connector:	Phoenix/Combicon, 3.5mm pitch
Contacts:	Common (C), Normally Open (NO), Normally Closed (NC)
Contact Rated Load:	0.3A at 125VAC, 1A at 30VDC
Watchdog Output:	Phoenix/Combicon, 3.5mm pitch for failsafe control Opto-isolated
Output Current:	14mA maximum
Withstanding Voltage:	80V maximum (Off)
Series Impedance:	220 Ω (isolated)

Input Signal Processing per Channel

Delay:	Up to 5120ms of input delay
EQ:	4 Band Parametric
Gate:	Downward Expander
Insert Processing:	Two selectable Input Processing blocks per input
Insert Types:	Advanced Feedback Suppression, Automatic Gain Control, Compressor, De-Esser, 12-Band Notch EQ, 12-Band Parametric EQ, Sub-Harmonic Synthesizer
Ducker:	24 level priority ducker

Routing/Mixing:

Output Signal Processing per Channel:	24x1 mixer per output channel
Insert Processing:	One selectable Output Processing block per output.
Insert Types:	Gain, Automatic Gain Control, Ambient Noise Compensation, Auto-Warmth™
Crossover Configurations:	1x1, 1x2, 1x3, 1x4
Crossover Types:	Bessel 6, 12, 18 and 24 dB/Octave, Butterworth 6, 12, 18 and 24 dB/Octave, Linkwitz-Riley 12 and 24 dB/Octave
EQ:	6 Band Parametric
Limiter:	dbx PeakStopPlus™
Delay:	Up to 5120ms of output delay

Miscellaneous:

Control:	Ethernet, RS-232, Optional dbx ZC Wall Panels
Power Requirements:	100V to 240VAC 50/60Hz, 75 Watts
Dimensions (H(U) x W x D):	3.5" (2U) x 19" x 15" (89mm x 483mm x 381mm)
Weight:	15.7 lbs. / 7.12 kgs. (with all audio cards installed)