

The XD-Series of Fixed Architecture DSP for Live Sound Production and Fixed Audio Installations from XILICA.



# XD-4080

- 4 x XLR Line Inputs / 8 x XLR Line Outputs (XP-4080"M" version provides switchable Mic/Line inputs w 48v phantom power).
- AES/EBU Digital Inputs & Outputs on Separate Connectors.
- Ethernet, USB, and RS232 Connectivity for Configuration and Control (wireless ready) (up to 16 devices in a Xilica network).
- 96kHz, 40 Bit Floating Point DSP Engine and High Performance 24 Bit Converters.
- Processor Configuration via Front Panel or easy to use XConsole Software GUI.
- Matrix Mixer.
- 31 Band, 1/3 Octave GEQ per Input.
- 8 Band PEQ per Input and Output.
- Dual IIR Crossover Filters per Input and Output with Bessel, Linkwitz-Riley & Butterworth Slopes.
- Dual "FIR" Multi-Tap Brick Wall Crossover Filters per Output.
- 640ms Delay per Input and Output.
- Input Compressors and Output Limiters.
- · Phase Correction.
- High Performance Switching Power Supply.
- · 30 Presets / Password Protection.
- Optional XPanel Wall Control.
- Designed and Engineered in Canada.
- Warranty: 2 Years Parts and Labour.











#### Introduction:

The Xilica XD-Series is our most complete fixed architecture digital processor. Building on the success of our original Classic "DLP" family of processors the Xilica XD-Series brings a new level of audio performance and processing power to the world of fixed architecture DSP for live sound production and fixed audio installations.

Designed and engineered in Canada, only Xilica provides a "state of the art" 96kHz 40 Bit Floating Point DSP Engine, High Performance 24 Bit Converters, Precise Algorithms, FIR Crossover Filters and AES/EBU Digital In/Out at this value level. The result is "best in class" audio performance and feature set.

## **Description:**

The XD-4080 is a 4 input / 8 output fixed architecture, fully programable, digital, audio system processor. Inputs can be matrix mixed/routed to any or all outputs; Our standard signal processing functions (as listed to the left) are joined by the addition of high performance FIR Crossover Filters and AES/EBU Digital Inputs and Outputs; Ethernet, USB and RS232 connectivity for configuration, control and software/firmware updates is standard; Processor configuration can be accomplished in real time from the front panel or with a computer running our easy to use XConsole software GUI (download XConsole at www.xilica.com); And with the Ethernet connection and a basic wired or wireless router the XConsole GUI can control individual or multiple XD-Series processors from any location.

## **Applications:**

Critical Front-Of-House Loudspeaker Management; Floor Monitors; Time/Phase Crossover Alignment; Fixed Audio Installations; Recording Studio Monitor Speaker Crossover and EQ; Broadcast Facilities; Delayed Speakers; Zoned Systems; Room Equalization; Acoustic Correction.



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## XD-4080

## **Specifications**

## **Inputs and Outputs**

Input Impedance: >10k Ohms Output Impedance: 50 Ohms Maximum Level: +20dBu Type: Electronically balanced

("M" model version provides switchable mic/line inputs with 48v phantom power)

#### **Audio Performance**

Freq Response: +/- 0.1dB (20 to 30kHz) Dynamic Range: 115 dB typ (unweighted)

CMMR: >100dB (50 to 10kHz)

Crosstalk: < -100dB

Distortion: 0.002% (1kHz @ +4dBu)

## **Digital Audio Performance**

Processor (DSP): 40-Bit Floating Point

Sampling Rate: 96kHz

Analog Converters: Super Performance

24-bit

Propogation Delay: 1.5ms 1.75 – 7.75ms with FIR

#### **Audio Control Parameters**

Gain: -40 to +15dB in 0.25 dB steps

Polarity: +/-

Delay: Up to 650 ms per I/O

#### **Equalisation**

Variable Equalizers: 8 per I/O
Type: Parametric, Hi-shelf, Lo-self,
Phase (1st and 2nd order)
Gain: -30 to +15dB in 0.25dB steps
Bandwith: 0.02 to 2.50 Oct (Q=0.5 to 72)
Graphic EQ: 1 per Input, 31 Band 1/3 Oct steps

#### Crossover

IIR Filter Type:

2 Individual filters per input & output. Type - Butterworth, Linkwitz-Riley &

Bessel.

FIR Filter Type:

2 Individual filters per Output.

Type - Multi-Tap.

Slopes: 6 to 48dB per Oct for IIR 50 to 1200 Taps for FIR

## **Compressors and Limiters**

1 Compressor per input channel 1 Limiter per output channel Threshold: -20 to +20dBu Attack: 0.3 to 100ms

Release: 2 to 32x the attack time Ratio: 1:1 to 1:40 (Compressor Only)

## **System Parameters**

No. Of Programs: 30 Delay Units: ms, ft, m

Frequency Modes: 36 steps/Oct, 1Hz Resolution

Security locks: Password
Channel names: 6 Characters

#### **Front Panel Controls**

Display: 4x26 Characters Backlit LCD Level meters: 5 Segment LEDs Buttons: 12 Mute/Channel Controls 6 System Menu Controls

1 Dial Encoder

#### Connectors

Analog: 3-pin XLR

(All XD8080 models use Phoenix type input/output connectors in place of XLR's)

Digital: 25-pin DB-25 (AES/EBU)

RS-232: Female DB-9

USB: Type B

Ethernet: Standard CAT-5 Power: Standard IEC Socket

#### General

Power: 90-265 VAC (50/60Hz) - 20VA

Dimensions: 19"x1.75"x9"

(483x44x229mm) Weight: 10 lbs / 4.6 Kg EAN Code: 885799100014

Designed and Engineered in Canada. Warranty: 2 Years Parts and Labour.

Note: specifications subject to change

without notice