DIGITOOL®
AUDIO PROCESSORS

Peavey Commercial Audio

Commercial Audio

DIGITOOL®
LIVE, MX16, AND MX32

The Digitool® MX16, MX32 and LIVE are a family of digital audio processing units built on the rich history of the original Digitool MX and designed for the audio professional. Each Digitool has the power and flexibility to perform loudspeaker management functions in addition to matrix mixing, room combining and other audio processing functions for installed and portable sound systems. Each model features a full-color display screen, front navigation and editing controls, front panel input and output mute buttons and LED meters to simplify configuration. Digitools can also be configured using a Windows application via USB or Ethernet.

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FEATURES:

- Full-color, graphic LCD for easy front panel control
- Windows GUI for setup and control
- 8 mic/line inputs and 8 line outputs (MX16 and LIVE)
- 16 mic/line inputs and 16 line outputs (MX32)
- 48V phantom power switchable on each input
- 5-segment LED meters on inputs and outputs
- Front panel input and output mute buttons
- Stereo AES input MX16 and LIVE (2 stereo AES inputs on the MX32)
- 8 CV "control voltage" inputs that can be programmed as level and mute controls
- RS-485 input for external control of level, mute and preset recall
- Front-panel USB "B" port for setup
- Rear-panel Ethernet port for setup
- Euro terminal block termination on MX16, MX32
- XLR input and output connectors on Digitool LIVE
- Rear-panel ears and strap for easy cable management
- Firmware can be field updated
- 100V to 240VAC 50/60 Hz power inlet

PROCESSING FUNCTIONS INCLUDE:

- Full matrix routing with mute and level control at each cross-point
- Input and output filters including: PEQ, hi-shelf, lo-shelf, hi-pass, all-pass and horn-EQ
- Crossover filters to fourth order, including Butterworth, Bessel and Linkwitz-Riley alignments
- Delay of up to 2.5 seconds on each input and output with sample period resolution
- Gate and compressor on every input
- Compressor/limiter on every output
- Digitally controlled analog input and output level controls for maximum dynamic range
- 4 audio-triggered, priority mute buses
- Automix capability
- Signal generator
- Copy/Paste of input and output settings
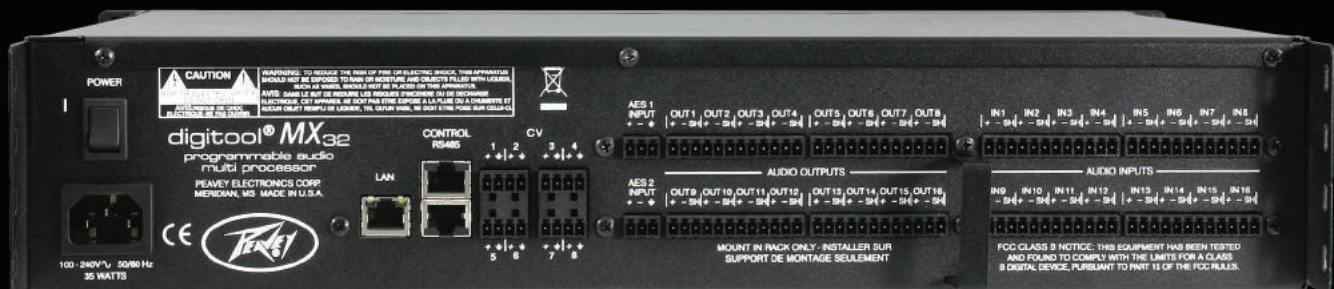- Preset storage and recall (8 internal preset locations)

Digitool® LIVE
8 Inputs / 8 Outputs, Balanced XLR

Digitool® MX16
8 Inputs / 8 Outputs, Euro Connectors

Digitool® MX32
16 Inputs / 16 Outputs, Euro Connectors

DIGITOOL® MX32/MX16/LIVE SPECS

AUDIO INPUTS:

Circuitry:	Balanced
Max Input Level:	+24 dBu (determined by sensitivity setting)
Max Sensitivity for Full Scale:	-40 dBu
Source Select:	Mic/Line, AES-R (even channels), AES-L (odd channels)
Sensitivity Settings:	-39 dBu to +24 dBu in ½ dB steps
Input Impedance:	24 dBu to -6 dBu sensitivity setting = 10K Balanced (LINE)
	-7 dBu to -40 dBu sensitivity setting = 2.2K Balanced (MIC)
Phantom Power:	+48V, enabled per channel
Crosstalk:	Better than 70 dB (@ 1 kHz)
Common Mode Rejection:	Better than 70 dB (@1 kHz)
Equivalent Input Noise: (EIN)	-124 dBu 150 Ohm source. 22 Hz to 22 kHz un-weighted
ADC Dynamic Range:	109 dB un-weighted / 112 dB A-weighted

AUDIO OUTPUTS:

Circuitry:	Enhanced servo balanced.
Maximum Output Level:	+24 dBu (determined by output level setting)
Max Output Level Settings:	24 dBu to +24 dBu
Output Impedance:	100 ohms, balanced, 50 ohms unbalanced
DAC Dynamic Range:	110 dB un-weighted / 113 dB A-weighted

I/O CONNECTORS:

MX16 & 32:	Euro plug 3.81mm (0.150") pluggable terminal block
LIVE:	XLR, Pin 2 Hot

ANALOG INPUT TO OUTPUT:

Total Harmonic Distortion:	< .01% Input to Output, one channel assigned, 22-22 kHz BW
Frequency Response:	10 Hz to 20 kHz +/- 0.5% dB
Latency:	1.7 msec (analog input to analog output)

METERING:

Sixteen 5-Segment Arrays:	8 input and 8 output MX16/LIVE
	16 input or 16 output (switchable) MX 32
Meter levels (dBFS):	-36 dB, -24 dB, -18 dB (GREEN); -12 dB (YELLOW); 0 dB (RED)
	Input levels are taken at the ADC outputs, before the mutes.
	Output levels are taken at the DAC inputs, not at the connectors.
	(The maximum output level adjustment is after the DAC.)

DIGITAL:

Internal Sample Rate:	48 kHz
AES Input:	Sample rate converted. Accepts 24 kHz to 192 kHz sample rates
Delay:	Up to 2.5 Seconds on every input and output with 20.8 uS resolution.
	Distance calculation on delay screens based on speed of sound=1130 ft/Sec

CONTROL:

Serial (RS-485):	Half-Duplex 57.6 kBaud, 1 port with 2 multiple drop RJ-45 connectors.
	+15V, 250mA power is provided on the connector. (+15V pin 4, Gnd pin 5) If more power is required, it must be externally sourced.

COMMUNICATIONS:

Ethernet:	10BaseT/100BaseT, address is DHCP or Static
USB:	2.0 Full speed, "B" connector
CV Inputs:	0 to 10V with an external voltage applied, or remote passive potentiometer

GENERAL:

Dimensions:	19" W x 13.125" D x 3.5" H (48.26 cm x 33.34 cm x 8.89 cm)
Shipping:	22.5" x 21" x 6.625" carton, 15 lbs.
Net Weight:	11 lbs. (5 kg)
AC Power Input Voltage:	100 VAC to 240 VAC, 47 Hz to 63 Hz universal power supply
Power Consumption:	20 Watts (MX16/LIVE), 35 Watts (MX32)

This document provides an overview of the features and functions of these products and details pertaining to installation. For additional information pertaining to the processing functions and screen controls, download the Graphical User Interface at http://aa.peavey.com/download/. The Help screens provide useful information.

Features and specifications subject to change without notice.

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