DSP LOTO

1-2 IN / 4 OUT Advanced DSP board with AES3 digital input and Dante

TOURING
INSTALLATION

DSP ON BOARD | ROUTING CHANNEL | AUDIO NETWORK | ArmoníaPlus System Manager | Dante™

LOTO is a 1-2 in/4 out processing board specifically designed to provide advanced DSP functions to any powered product.

Featuring the same characteristics of the high-end X-Series platform, LOTO delivers up to 2 sec of input delay, multi-layer input and output EQ, parametric raised cosine filters, custom FIR and IIR equalizers, as well as TruePower™, RMS and Peak limiters, Active DampingControl™, and Live Impedance.

Loto is available in 2 different flavors: Basic and Advanced, both of which completely supported and managed via ArmoníaPlus™.

LOTO Basic features state of the art analog inputs and outputs, whilst LOTO Advanced furtherly increases routing options by adding AES3 digital input through XLR connectors, and the support of Dante™ digital audio networking architecture, with 2 inputs and 2 outputs.

Flexible and reliable networking capabilities are granted by an auto-sensing Fast Ethernet (1Gbit/s), with an automatic configuration to quickly set up redundant and daisy-chained network topologies and assuring solid connectivity without any audio or control signal loss.

Compatible with all Digimod PFC2- PFC4, Litemod family, and Minimod4 amp modules, LOTO is ideal for any application with high processing and digital audio networking requirements, and represents the perfect DSP add-on for top-level multi-way systems and line arrays where complete control and premium performances are needed.

- Highly integrated
  - ✓ Top-grade DSP with high dynamic range and extensive feature set.
  - ✓ Multi-stage signal processing: innovative solutions for modeling speakers behavior and power handling.
  - ✓ Input and output IIR, FIR, IIR+FIR equalizers and raised-cosine filters.
  - ✓ Complete sets of limiters: peak, RMS voltage, RMS current, and TruePower™.
  - ✓ Active DampingControl™.

- Basic and Advanced versions available
- Custom FIR and IIR equalizers
- Group controllable advanced EQ with raised cosine filters
- Very long FIR filters (42.6 ms)
- Dante™
- AES3, AES67
- 1.8” TFT Display

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Specifications

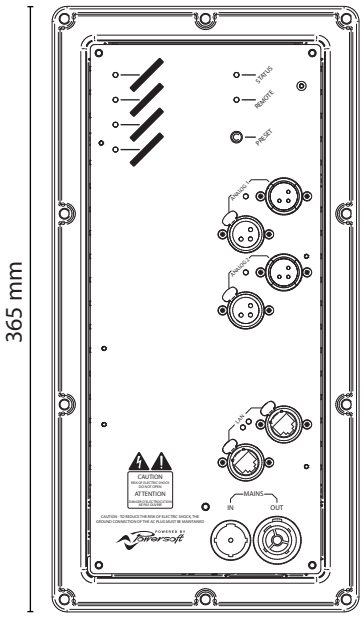
Connectors and controllers	
Analog	2x XLR analog input + 2x XLR analog link thru
AES3	1x XLR in + 1x XLR out carrying AES3 (Advanced version)
AES67	Supported (depending on Audinate timeline)
Dante	2 inputs / 2 outputs on 2x Ethercon (Advanced version)
Display	1.8" TFT display (Advanced version)

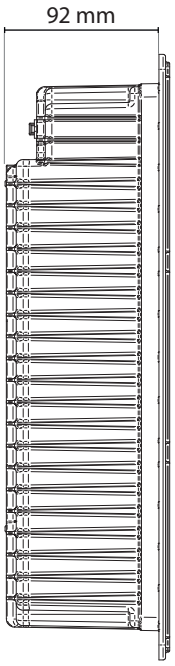
General	
Internal processing	32 bits floating point, 48kHz sample rate
Latency	2.5ms fixed latency architecture
Configuration	2 input / 4 outputs
User date storage	Up to 24 local presets, up to 50 via ArmoníaPlus™
Firmware update	Via ArmoníaPlus™

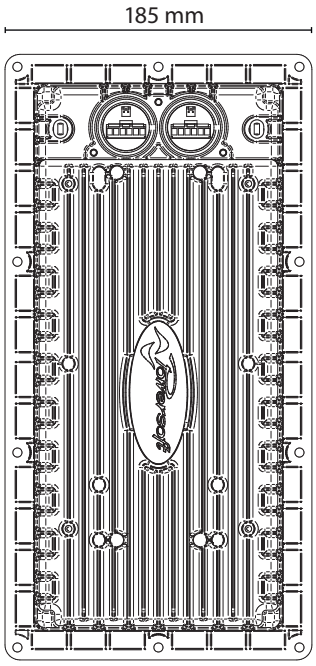
Audio	
Frequency response	20 Hz - 20 kHz (+0, -1 dB)
Input impedance	10kOhm (unbalanced) 20kOhm (balanced)
Max input Voltage	12.27Vrms / 24dBu / 127dB SNR
Max output Voltage	5.3Vrms / 16.7dBu / 118dB SNR
SNR	>118dB
THD+N	< 0.02% (20 Hz - 20 kHz)

DSP	
AD Converters	24 Bit Tandem™ @ 48 kHz 125 dB-A Dynamic Range 0.005 % THD+N
DA Converters	24 Bit Tandem™ @ 48 kHz 117 dB-A Dynamic Range 0.003 % THD+N
Sample rate converter	24 Bit @ 44.1 kHz to 192 kHz 140 dB Dynamic Range 0.0001 % THD+N
Internal precision	32 bit floating point
Latency	2.5 ms fixed latency architecture
Memory/Presets	256 MB (RAM) plus 512 MB flash for presets
Delay	2 s (input) + 100 ms (output) for time alignment
Equalizer	Raised-cosine, custom FIR, parametric IIR: peaking, hi/lo-shelving, all-pass, band-pass, band-stop, hi/lo-pass
Crossover	Linear phase (FIR), Butterworth, Linkwitz-Riley, Bessel: 6 dB/oct to 48 dB/oct (IIR)
Limiters	TruePower™, RMS voltage, RMS current, Peak limiter
Damping control	Active DampingControl™ and LiveImpedance™ measurement

Networking	
Standard compliance	Integrated two port 1G ethernet switch
Remote control	ArmoníaPlus™ Software







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