Soundweb™ London BLU-50





OVERVIEW:

The Soundweb London BLU-50 offers a a fixed configuration of four inputs and four outputs, configurable signal processing, logic processing and a high bandwidth, fault tolerant digital audio bus.

The BLU-50 has open architecture which is fully configurable through HiQnet[™] London Architect. A rich palette of processing and logic objects and a "drag and drop" method of configuration provide a simple and familiar design environment.

This processor features a low latency, fault tolerant digital audio bus of 48 channels which uses standard Category 5e cabling giving a distance of 100m between compatible devices. Fiber media converters can be used to increase the distance between devices to over 40km.

The BLU-50 is compatible with the entire Soundweb London family and its 48 channel digital audio bus represents channels 1-48 of the larger 256 channel digital audio bus when integrated with the BLU-806, BLU-805, BLU-800, BLU-326, BLU-325, BLU-320, BLU-160, BLU-120, BLU-102, BLU-101, BLU-100, BLU-BIB and BLU-BOB devices.

Analog Inputs provide software configurable gain in 6dB steps up to +48dB per channel and software selectable Phantom Power per channel.

Phantom Power, Signal Present and Clip information per channel is easily accessible, without the requirement for a PC, from clear front panel LED indication. A bi-directional locate function allows devices to be identified both from and within HiQnet London Architect.

12 Control Inputs and 6 Logic Outputs and an RS-232 port allow the BLU-50 to be integrated with GPIO compatible devices. The Soundweb London Interface Kit, comprehensive documentation which details how Soundweb London systems can be integrated with third party control systems, is included within the installation of HiQnet London Architect.

The chassis is a half rack wide and can be rack mounted using the BSS Audio 1U Rack-Mount Kit. It can also be undertable mounted or wall mounted using the included mounting brackets.

The device can be powered with the included 12VDC power supply, but can accept 12-48VDC via a terminal block connector. The BLU-50 can also be powered with PoE+ via the Ethernet port, allowing the device to be powered, configured, controlled and monitored using a single Cat 5e cable.

The BLU-50 and the other members of the Soundweb London family provide the building blocks of the perfectly tailored system solution.

KEY FEATURES:

- 4 Analog Inputs (with 48v Phantom Power per Channel)
- 4 Analog Outputs
- Configurable Signal Processing
- Rich Palette of Processing and Logic Objects
- 48 Channel, Low Latency, Fault Tolerant Digital Audio Bus
- Clear Front Panel LED Indication
- Bi-Directional Locate Functionality
- 12 Control Inputs and 6 Logic Outputs for GPIO Integration

- Soundweb London Interface Kit for Third Party Control System Integration (Documentation)
- HiQnet Device
- Configuration, Control and Monitoring from HiQnet London Architect
- 12-48VDC or PoE+ Powering Options (12VDC Power Supply Included)
- Rack Mount, Surface Mount and Desk Mount Installation Options



Soundweb[™] London BLU-50

Per Input:	Signal Present, CLIP, 48V (Input only)
Other:	COM, STAT, ERR, PWR
Analog Inputs:	4 electronically balanced on Phoenix Mini Combicon removable screw connectors
Mic/Line Inputs:	Nominal gain 0dB, electronically switchable up to +48dB, in +6dB steps
Input Impedance:	3.5 k Ω
Maximum Input Level:	+20dBu with 0dB input gain,+8dBu with 12dB gain
CMRR:	>45dB at 1KHz
Input Noise (E.I.N.):	<-128 dBu typical with 150 Ω source
Phantom Power:	48V nominal, selectable per input
A/D Latency:	37/Fs [0.77ms@48k]
Analog Outputs:	4 electronically balanced on Phoenix Mini Combicon removable screw connectors
Maximum Output Level:	+20dBu
Frequency Response:	20Hz-20KHz (+0.5dB/-1dB)
THD:	0.005% typical at +4 dBu, 1kHz, 0 dB input gain
Dynamic Range:	110dB A-weighted, >107dB unweighted
Crosstalk:	<-100dB
Output Impedance:	120Ω
D/A Latency:	29/Fs [0.60ms@48k]
Control Ports:	12 inputs and 6 outputs
Control Input Voltage:	0 to 4.5v
Control Input Impedance:	4.7k Ω to +5V (2-wire mode), >1M Ω (3-wire mode)
Logic Output Voltage:	0 or +5V unloaded
Logic Output Impedance:	440Ω
Logic Output Current:	10mA source, 60mA sink
Watchdog Output:	Phoenix/Combicon connector for failsafe control
Opto Output Current:	14mA maximum
Withstanding Voltage:	80V maximum (Off)
Series Impedance:	220Ω (isolated)
Control Network:	
Connectors:	RJ45 Ethernet connector
Maximum Cable Length:	100m/300ft on Category 5 cable between device and Ethernet switch
BLU link:	
Connectors:	2 x RJ45 Ethernet connectors
Maximum Cable Length:	100m/300ft on Category 5e cable between devices
Max. Number of Nodes:	60
Latency:	11/Fs [0.23ms@48k]
Pass Through Latency:	4/Fs [0.08ms@48k]
Power and Dimensions:	
Power Requirements:	12-48VDC
Power Adapter:	100-240VAC 50/60 Hz, 12VDC output
Power Consumption:	<55VA
BTU Rating:	<188 BTU/hr
Operating Temp. Range:	0° to 45° C (32° to 113° F)
Dims: $(H(U) \times W \times D)$:	1.625" (41mm) x 8.63" (219mm) x 7.75" (197mm)
Weight:	2.82 lbs / 1.28 kg

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