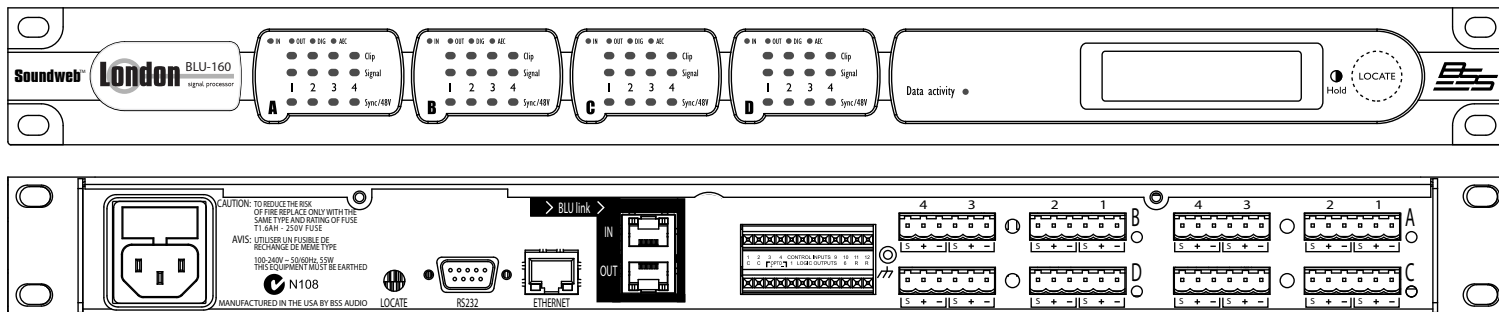


# Soundweb™ London BLU-160



**OVERVIEW:**

The Soundweb London BLU-160 offers configurable I/O, configurable signal processing and a high bandwidth, fault tolerant digital audio bus.

The BLU-160 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 256 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.

Four card slots which accommodate analog inputs, analog outputs, digital inputs and digital outputs in banks of four facilitate many different device I/O configurations.

Analog Input Cards provide software configurable gain in 6dB steps up to +48dB per channel and software selectable Phantom Power per channel. Digital Input Cards and Digital Output Cards process AES/EBU and/or S/PDIF audio and offer a variety of clocking and syncing options. (Further information about the I/O cards can be found on dedicated datasheets)

Phantom Power, Sync, Signal Present and Clip information per channel is easily accessible, without the requirement for a PC, from clear front panel LED indication. Device-specific information such as Device Name, Device Type, Firmware Version Number, Time, IP Address and Subnet Mask is available from the front panel display. A bi-directional locate function allows devices to be identified both from and within HiQnet London Architect.

12 Control Inputs and 6 Logic Outputs allow the BLU-160 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 BLU-160 and the other members of the Soundweb London family provide the building blocks of the perfectly tailored system solution.

**KEY FEATURES:**

- Four Input / Output Card Slots
- Configurable Inputs / Outputs
  - Analog Inputs (with Phantom Power per Channel)
  - Analog Outputs
  - Digital Inputs (AES/EBU and S/PDIF)
  - Digital Outputs (AES/EBU and S/PDIF)
- Configurable Signal Processing
- Rich Palette of Processing and Logic Objects
- 256 Channel, Low Latency, Fault Tolerant Digital Audio Bus
- Clear Front Panel LED Indication
- Informative Front Panel Display
- 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



# Soundweb™ London BLU-160

## TECHNICAL SPECIFICATIONS:

### Front Panel Led Indicators:

Per Input: Signal Present, CLIP, SYNC/48V, I/O card type (IN, OUT, DIG, AEC)

Other: LCD Display, Data Activity

**Analog Inputs:** Up to 16 electronically balanced on Phoenix Combicon removable screw connectors

Mic/Line Inputs: Nominal gain 0dB, electronically switchable up to +48dB, in +6dB steps

Input Impedance: 3.5kΩ

Maximum Input Level: +20dBu with 0dB input gain, +8dBu with 12dB gain

CMRR: >75dB at 1KHz

Input Noise (E.I.N.): <-128dBu typical with 150Ω source

Phantom Power: 48V nominal, selectable per input

A/D Latency: 38.7/Fs

**Digital Inputs:** Up to 16 AES/EBU or S/PDIF on Phoenix/Combicon removable screw connectors

Input Impedance: 110 ohm (AES/EBU), 75 ohm (S/PDIF)

Sample Rate: 48kHz or 96kHz

Sample Rate Conversion: 8kHz-96kHz

THD+N: <-140dB

Latency: 3/Fso + (56.581/Fsi) + (55.658/Fso)

**Analog Outputs:** Up to 16 electronically balanced on Phoenix/Combicon removable screw connectors

Maximum Output Level: +19dBu

Frequency Response: 20Hz-20KHz (+0.5dB/-1dB)

THD: <0.01% 20Hz to 20KHz, +10dBu output

Dynamic Range: 108dB typical, 22Hz-22KHz unweighted

Crosstalk: <-75dB

D/A Latency: 28/Fs

**Digital Outputs:** Up to 16 AES/EBU or S/PDIF on Phoenix/Combicon removable screw connectors

Output Impedance: 110 ohm (AES/EBU), 75 ohm (S/PDIF)

Sample Rate: 48kHz or 96kHz

Sample Rate Conversion: 8kHz-96kHz

THD+N: <-140dB

Latency: 3/Fso + (56.581/Fsi) + (55.658/Fso)

**Control Ports:** 12 inputs and 6 outputs

Control Input Voltage: 0 to 4.5v

Control Input Impedance: 4.7kΩ to +5V (2-wire mode), >1MΩ (3-wire mode)

Logic Output Voltage: 0 or +5V unloaded

Logic Output Impedance: 440Ωs

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

### Digital Audio Bus:

Connectors: 2 x RJ45 Ethernet connectors

Maximum Cable Length: 100m/300ft on Category 5e cable between devices

Maximum Number of Nodes: 60

Latency Per Node: 4(+/-1)Fs

### Power and Dimensions:

Mains Voltage: 100-240V AC, 50/60Hz

Power Consumption: <35VA

BTU Rating: <188 BTU/hr

Operating Temperature Range: 0° to 45° C (32° to 113° F)

Dimensions (H(U) x W x D): 1.75" (1U) x 19" x 12.5" (45mm x 483mm x 318mm)

Weight: 9 lbs / 4.1 kgs (estimated)