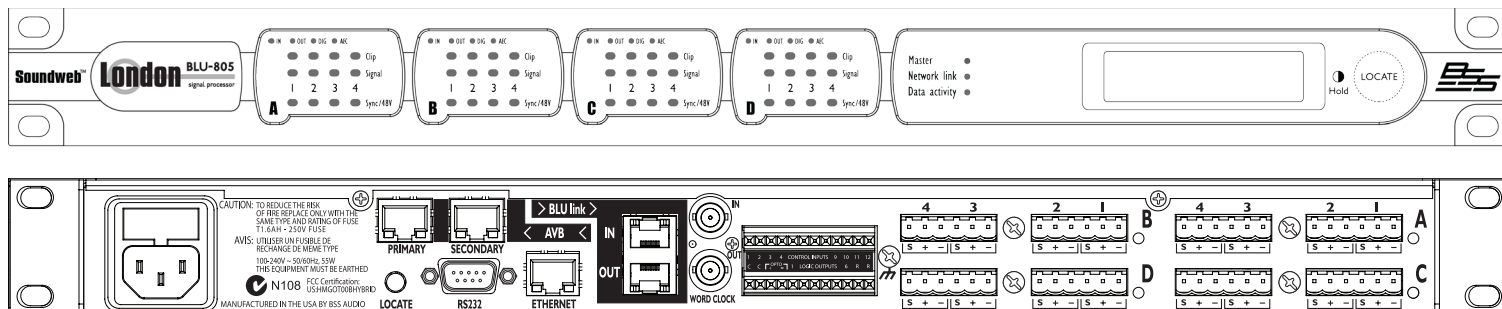


# Soundweb™ London BLU-805



**OVERVIEW:**

The Soundweb London BLU-805 offers configurable I/O, configurable signal processing, Ethernet AVB audio and a high bandwidth, fault tolerant digital audio bus.

The BLU-805 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.

The BLU-805 features Ethernet AVB audio. The BLU-805 is capable of simultaneously transmitting and receiving up to 64 channels of Ethernet AVB audio (64 x 64). Primary and Secondary ports are provided for fault tolerance—a future feature. Support for the Secondary port will become available in a future firmware release. Control is through a separate Ethernet port.

The BLU-805 also 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 facilitate many different device I/O configurations. Each slot can accommodate any of six available I/O cards, including the Analog Input Card, Analog Output Card, Digital Input Card, Digital Output Card, AEC Input Card, and Telephone Hybrid Card. Each card supports four channels.

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. AEC Input Cards and Telephone Hybrid Cards facilitate specialized processing and interfacing primarily for teleconferencing applications. (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-805 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-805 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)
  - AEC Inputs
  - Telephone Interface
- Configurable Signal Processing
- Rich Palette of Processing and Logic Objects
- Ethernet AVB Audio
  - 64 x 64 Audio Input/Output Channels per Device
  - 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-805

**TECHNICAL SPECIFICATIONS:**

**Front Panel Led Indicators:**

Per Input:	Signal Present, CLIP, SYNC/48V, I/O card type (IN, OUT, DIG, AEC)
Other:	LCD Display, Master, Network Link active, 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:	32kHz-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:	32kHz-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/Fs

**Ethernet AVB Audio Network:**

Connectors:	2 x RJ45 connectors
Maximum Cable Length:	100m/300ft on Category 5e cable between device and Ethernet switch

**Power and Dimensions:**

Mains Voltage:	100-240V AC, 50/60Hz
Power Consumption:	<35VA
BTU Rating:	<188 BTU/hr
Operating Temperature Range:	5 (41) to 35 (95) degrees C (degrees 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)

BSS Audio incorporates high quality mechanical fans in some products. All mechanical fans have a limited life expectancy. We recommend annual inspection of fans for dust occlusion and excessive noise. Fan assemblies should be replaced after six to ten years of use. Environmental factors such as elevated temperature, dust, and smoke can adversely affect fan life. Systems exposed to these conditions should be inspected more frequently. Fan replacement can be performed either at the factory or by an experienced technician in the field. Please contact BSS Technical Support for more information on purchasing replacement parts or product service. BSS Audio has a policy of continued product improvement and accordingly reserves the right to change features and specifications without prior notice.