BSS BLU-100

BSS Soundweb London BLU-100 Signal Processor User Manual

Model: BLU-100

1. INTRODUCTION

The BSS Soundweb London BLU-100 is a 1RU rack-mount 12x8 Signal Processor featuring BLU Link connectivity. This DSP processor is engineered for networked audio routing applications, offering a fixed configuration of 12 inputs and 8 outputs. It provides configurable signal processing capabilities and a high-bandwidth, fault-tolerant digital audio bus. The BLU-100 operates with an open architecture, fully configurable via HiQnet London Architect software, utilizing a rich palette of processing and logic objects for a flexible design environment.

2. SAFETY INFORMATION

Please read and understand all safety instructions before operating the BLU-100. Retain this manual for future reference.

- **Electrical Safety:** Ensure the unit is connected to a grounded power outlet. Do not expose the unit to rain or moisture. Disconnect power before servicing.
- **Ventilation:** Ensure adequate ventilation around the unit. Do not block ventilation openings.
- **Environment:** Operate the unit in a dry environment, away from extreme temperatures and direct sunlight.
- **Servicing:** Refer all servicing to qualified service personnel. Do not attempt to open the unit.

3. PACKAGE CONTENTS

Verify that all items are present in the package:

- BSS Soundweb London BLU-100 Signal Processor
- AC Power Cable
- Documentation (Quick Start Guide, Safety Information)
- Rack Mount Ears and Screws
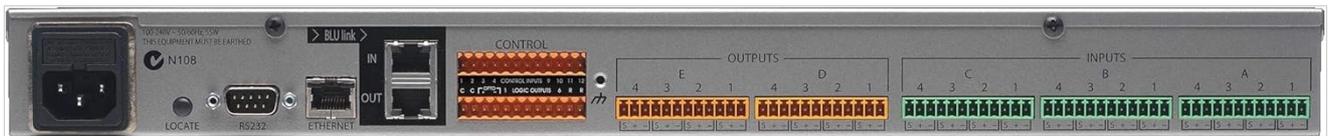
4. PRODUCT OVERVIEW

4.1 Front Panel

The front panel of the BLU-100 features LED indicators for input and output activity, as well as network status. These indicators provide visual feedback on signal presence, clipping, and phantom power status for each channel, along with BLU Link and Ethernet connection status.

4.2 Rear Panel

The rear panel provides all necessary connections for power, audio, and control. This includes the AC power inlet, RS232 control port, Ethernet port for network configuration, BLU Link IN/OUT ports for digital audio networking, and Phoenix-style connectors for the 12 analog inputs and 8 analog outputs.

5. SETUP

5.1 Rack Mounting

The BLU-100 is designed for standard 1RU rack mounting. Secure the unit using the provided rack ears and screws into a standard 19-inch equipment rack. Ensure sufficient space for ventilation.

5.2 Power Connection

1. Connect the supplied AC power cable to the power inlet on the rear panel of the BLU-100.
2. Plug the other end of the power cable into a grounded electrical outlet.
3. The unit will power on automatically.

5.3 Audio Connections

The BLU-100 features 12 analog inputs and 8 analog outputs via Phoenix-style connectors.

- **Analog Inputs:** Connect your audio sources (e.g., microphones, line-level devices) to the input terminals. Each input supports software-configurable gain up to +48dB and software-selectable 48V phantom power.
- **Analog Outputs:** Connect your audio destinations (e.g., amplifiers, other processors) to the output terminals.

5.4 Network Connection

- **BLU Link:** Connect BLU Link IN/OUT ports using standard Category 5e cabling for digital audio bus integration with compatible Soundweb London devices. The BLU Link supports a low-latency, fault-tolerant digital audio bus of 48 channels.
- **Ethernet:** Connect the Ethernet port to a network switch or directly to a computer for configuration using HiQnet London Architect software.

6. OPERATING INSTRUCTIONS

6.1 Software Configuration (HiQnet London Architect)

The BLU-100 is configured using the HiQnet London Architect software. This software provides a graphical interface for designing and controlling your audio system.

1. Install HiQnet London Architect on your computer.
2. Connect your computer to the BLU-100 via the Ethernet port.
3. Launch the software and discover the BLU-100 on the network.
4. Use the drag-and-drop interface to create and configure signal processing paths, logic objects, and routing.
5. Download the configuration to the BLU-100.

6.2 Input Gain and Phantom Power

Analog input gain and phantom power are configured within the HiQnet London Architect software. Navigate to the input object properties to adjust gain in 6 dB increments and enable/disable 48V phantom power for individual channels.

6.3 Digital Audio Bus (BLU Link)

The BLU Link digital audio bus allows for seamless integration with other Soundweb London devices. The BLU-100's 48-channel digital audio bus represents channels 1-48 of the larger 256-channel digital audio bus when integrated with devices like the BLU-800, BLU-320, BLU-160, BLU-120, and BLU-BOB.

7. MAINTENANCE

- **Cleaning:** Use a dry, soft cloth to clean the exterior of the unit. Do not use liquid cleaners or solvents.
- **Firmware Updates:** Periodically check the BSS Audio website for firmware updates. Follow the instructions provided with the update package for installation.
- **Ventilation:** Ensure that the ventilation openings remain clear of dust and debris to prevent overheating.

8. TROUBLESHOOTING

- **No Power:** Check the power cable connection and the electrical outlet. Ensure the power switch (if present) is in the ON position.
- **No Audio Input/Output:** Verify all audio cable connections. Check input gain settings and phantom power status in HiQnet London Architect. Ensure the signal routing is correctly configured.
- **Network Connection Issues:** Check Ethernet cable connections. Verify IP settings and ensure the BLU-100 is discoverable in HiQnet London Architect.
- **BLU Link Not Functioning:** Ensure Category 5e cables are properly connected between BLU Link ports. Verify BLU Link settings in the software.

9. SPECIFICATIONS

Feature	Description
Model	BLU-100
Analog Inputs	12 (with 48V phantom power per channel, software configurable gain up to +48dB)
Analog Outputs	8

Digital Audio Bus	48-channel BLU Link (fault-tolerant, low-latency)
Control Interface	Ethernet, RS232
Configuration Software	HiQnet London Architect
Rack Size	1RU
Dimensions	25 x 6 x 11 inches
Weight	9.7 pounds
Material	Aluminum

10. WARRANTY AND SUPPORT

The BSS Soundweb London BLU-100 comes with a 5-year limited warranty. For detailed warranty terms and conditions, please refer to the official BSS Audio website or contact your authorized dealer.

For technical support, troubleshooting assistance, or service inquiries, please visit the BSS Audio support page or contact their customer service department. Keep your product's serial number and purchase information readily available when seeking support.

Online Resources: BSS Audio Official Website