



BSC-2 Buscard

A U D I O

INSTALLATION INSTRUCTIONS

DESCRIPTION

The BSC-2 BusCard is an internal adapter for 2RU, DataPort-equipped QSC PowerLight Series amplifier models. It accommodates as many as two QSC embedded processor card accessories, such as the UF-2 Universal Filter, SPL-1 Stereo Power Limiter, SEQ-1 Stereo Shelving Equalizer, SEQ-2 Stereo 5-Band Graphic Equalizer, and others.

Accessibility

The BusCard mounts behind the amplifier's front panel display board in such a way that it allows user access, through the amplifier's front vent slots, to a group of switches. One pair of pushbutton microswitches allows you to bypass or engage either accessory slot independently and without having to open the amp chassis. Also accessible in this way are two 4-section DIP switches, used for programming the channel thresholds of an SPL-1 Stereo Power Limiter.

COMPATIBLE AMPLIFIER MODELS

All 2RU PowerLight amplifiers, including the PL 1.0, PL 1.0^{HV}, PL 1.4, PL 1.5^X, PL 1.6^{HVX}, PL 1.8, and PL 2.0^{HV}.

BSC-2 Kit Contents:	Qty.
BSC-2 BusCard	1
#6-32 × 1/4" PP black screws	3
#6-32 × 0.625" (16 mm) M/F hex standoff	3

INSTALLATION

Tools needed for installation:

1. Long-nose pliers
2. Philips screwdriver
3. Small slot screwdriver
4. ¼" (6.3 mm) nutdriver
5. Soldering iron and rosin-core solder



CAUTION: To reduce the risk of electric shock, refer servicing to a qualified technician.

WARNING: To prevent fire or electric shock, do not expose this equipment to rain or moisture.

CAUTION: Before opening the amplifier chassis, disconnect the amplifier from AC power.

BSC-2 BUSCARD PREPARATION

The following procedure is necessary to prepare and install the BSC-2 in a QSC amplifier. Please follow these steps carefully.

The space inside the amplifier is limited, so install the processor card(s) on the BSC-2 *before* you install the BusCard in the amplifier.

The two slots on the BSC-2 are fully compatible with QSC's embedded ("Mini-Slot") processor accessories. In order of signal flow, Slot 1 precedes Slot 2; therefore, if one of the accessories to be installed is an SPL-1 limiter, it should always go in the last position, Slot 2. Conversely, if one of them is to be a UF-2 or UF-3 filter/crossover card, it should install in Slot 1.

Follow the accessories' installation and configuration instructions. The SPL-1, though, requires a slight variation from the procedure detailed in its manual.

SPL-1 INSTALLATION

The programming shunt jumpers of an SPL-1 installed in Slot 2 are inaccessible if another processor card is installed in Slot 1. Therefore, a special ribbon cable interface (part # WC-BCCABLE-AX) is needed to bring the jumper functions out to the BusCard's DIP switch. If the cable is not included with the BusCard, call QSC Technical Services for a free replacement.

STEP 1

For each channel of the SPL-1, set the desired limiter attack/release speed: fast, medium, or slow. For bi-amp operation, the high-frequency band's limiter should usually be set to **medium** or **fast**, while the low frequency band should be **slow** or **medium**.

STEP 2

Remove the SPL-1's shunt jumpers for programming the limiting thresholds. There are four shunts per channel. (The DIP switches on the BSC-2 will directly take over the functions of these shunt jumpers.)

STEP 3

Install the ribbon interface cable from J3 on the BSC-2 to the two 8-pin threshold adjustment headers on the SPL-1. The short section goes to Channel 1's header and the long to Channel 2's. The interface cable is designed so that pin 1 of each section fits to jumper A's position on the header; the cable does not need to be twisted or inverted for correct connection.

STEP 4

Install the SPL-1 into Slot 2 on the solder side of the BSC-2. The component side of the accessory should face up, away from the wide cutout in the BusCard circuit board. Note that two holes in the BusCard slot at the Channel 2 end of the SPL-1 will be unused. Solder each of the 20 pins, then clip off the excess length.

UF-2 or UF-3 INSTALLATION

STEP 1

Program the filters on the UF-2 or UF-3 accessory as instructed in the accessory manual.

STEP 2

Install the accessory into Slot 1 on the solder side of the BSC-2. The component side of the accessory should face up, away from the wide cutout in the BusCard circuit board. Solder each of the 22 pins, then clip off the excess length.

BUSCARD INSTALLATION PROCEDURE

Before proceeding, make sure the amplifier is not connected to AC power.

STEP 1

Remove the top cover from the amplifier.

STEP 2

Remove three mounting screws on the amplifier's display board and disconnect the 26-conductor ribbon cable from connector J1. Do not disconnect the cables at J2 and J3.

STEP 3

Plug the amplifier's ribbon cable into the input connector, J1, on the BSC-2.

The BSC-2's output ribbon cable will have to be routed over the top edge of the BusCard. To do this, put a 90° bend in the ribbon cable by folding it at 45°. Connect the cable to J1 on the display board.

STEP 4

Hold the display board in position and thread the three hex standoffs (from the BSC-2 kit) into the mounting screw holes. Tighten the standoffs to secure the display board in place, but do not over-torque them.

STEP 5

Remove the plastic covers from the backs of the gain controls on the display board. They are not needed as long as the BusCard is installed.

Use the three #6-32 mounting screws (from the BSC-2 kit) to loosely attach the BusCard to the standoffs on the back of the display board. Make sure all cables will be routed correctly and neatly, and all excess lengths are folded and tucked.

To allow access to the BusCard switches, slide the BSC-2 as far to the left as it will go, then tighten the screws. Do not over-torque them.

STEP 6

Carefully inspect your work. Reinstall the amplifier's top cover; the amplifier is now ready to place in service.

**FOR FURTHER ASSISTANCE, PLEASE CONTACT
QSC TECHNICAL SERVICES**

1-800-772-2834 (USA only)

