



Service Bulletin

Title: **PLX Gain Modification**
 Bulletin #: PLC0004 Issue Date: July 13, 2000
 Models Affected: All PLX Bulletin Revision: A
 Production Range: All

Description

Some PLX users need an amplifier gain structure that is different from the amplifiers' standard 40x, or 32 dB. This is an elective customization procedure, not a remedial one.

This bulletin describes the procedure for modifying the amplifier circuitry to obtain certain other common gain values.

Instructions

Replacing the input resistors in the amplifier's differential input circuitry with ones of a different value will result in a different gain value.

Tools and materials required:

- Soldering iron with fine tip (recommended range 25 to 60 W)
- Rosin-core solder (60/40 or 63/37 eutectic type)
- Long-nose pliers
- #1 and #2 Philips screwdrivers
- Small diagonal cutters
- Desoldering equipment or solder braid
- Precision resistors (1% tolerance or better recommended); 2 required per amp channel; see table at right for values

Desired gain, in dB	Desired gain	Resistance
20 dB	10x	22.1 kΩ
22 dB	12.5x	17.8 kΩ
23 dB	14.1x	15.8 kΩ
26 dB	20x	11.3 kΩ
28 dB	25x	8.87 kΩ
30 dB	32x	6.98 kΩ
32 dB	40x	5.62 kΩ*

*Standard gain for PLX Series amplifiers.

Procedure: replacing resistors

Prepare (bend and trim) the leads of the new resistors before installing them.

1. Disconnect the amplifier from AC and wait at least 10 minutes for internal voltages to bleed down.
2. Turn the amplifier over and remove the screws from the bottom cover of the chassis, then remove the cover.
3. To change the gain of Channel 1, locate resistors R8 and R9 (Figure 1). Replace them with matching resistors that will provide the desired voltage gain (see table above right).
4. To change the gain of Channel 2, locate resistors R129 and R130 (Figure 1). Replace them with matching resistors that will provide the desired voltage gain (see table above right).
5. Replace the bottom cover and check the amplifier to make sure it works correctly.

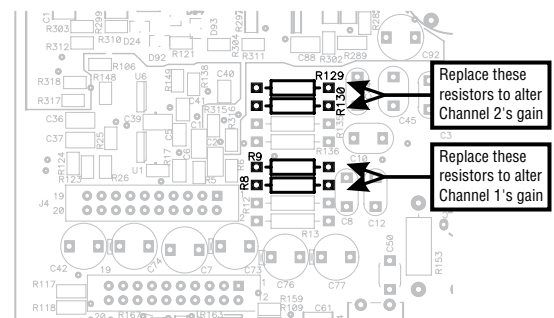


Figure 1. Locating resistors R8, R9, R129, and R130

Contact information

If you need any further information regarding this service procedure, please contact QSC Technical Services at the addresses or numbers below.

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