

## PTL-1 Quick Start Guide

### Introduction

The Q-Sys PTL-1 (Pilot Tone Load) is a circuit that provides a 22 kHz impedance “soak” at the end of a 70V/100V loudspeaker line. When used in combination with a QSC DataPort amplifier or CXD-Q amplifier and Q-Sys, the PTL-1 becomes a vital component in the real-time monitoring of each loudspeaker line.

When a 22 kHz pilot tone (outside of the audible range of human hearing and undetectable above the program material) is transmitted along each loudspeaker line, Q-Sys Designer is able to easily detect a deviation in the impedance at 22 kHz. A significant drop below a pre-determined impedance will signify that a short-circuit has occurred, while a significant rise above a pre-determined impedance will signify that an open-circuit has occurred. Each failure scenario will generate time-stamped events into the Q-Sys Event Log, and even trigger alert messages if desired.

The system designer can select whether the pilot tone is only generated during a scheduled maintenance check, or whether it is always active and providing real-time diagnostics on every zone.

### Features

- Pilot tone detection on 70V/100V loudspeaker circuits using QSC DataPort amplifiers or CXD-Q amplifiers.
- Ceramic screw-down Connector block.
- Fuse protects circuit against shorts.
- Fits most plenum-rated multinational standard 2-Gang electrical box types.

### Installation

**Option 1** - Holes in the Electrical box do not line up with the holes in the PTL-1. See Figure 1

1. Install the PTL-1 mounting bracket into customer provided electrical box \ plenum rated enclosure. Some examples: OBO T100, Hensel KD5060, or equivalent.
2. Install the PTL-1 onto the mounting bracket using the supplied screws.

**Option 2** - The holes in the PTL-1 align with the holes in the customer supplied electrical box. For example, Hubbel\Raco 193 or equivalent.

Install the PTL-1 into the enclosure using the (4) nylon standoffs provided. See Figure 2. The mounting bracket is not required for this application.

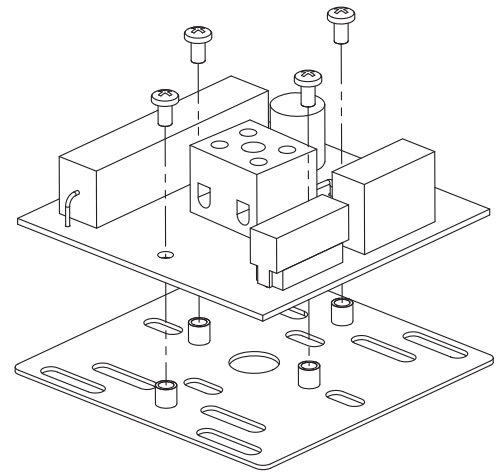
### Connections

1. Connect the end of the loudspeaker line to the + and – terminal of the ceramic header J1 using 24-14 AWG wire.
2. The PTL-1 is now ready for operation

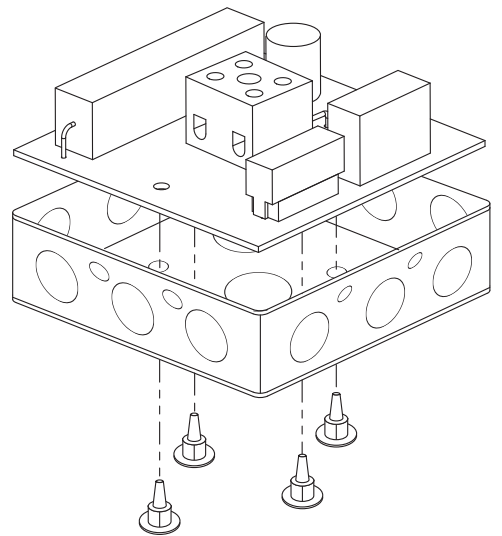


**NOTE:** For configuring the PTL-1 in Q-Sys Designer, refer to the Q-Sys Designer Online Help..

TD-000391-00-A



– Figure 1 –



– Figure 2 –



## Contact

### *Mailing Address*

QSC Audio Products, LLC  
1675 MacArthur Boulevard  
Costa Mesa, CA 92626-1468 U.S.

### *Main Number*

(714) 754-6175

### *World Wide Web*

[www.qsc.com](http://www.qsc.com)

## Sales & Marketing

### *Voice*

(714) 957-7100 International  
Toll free (U.S. only) (800) 854-4079

### *FAX*

(714) 754-6174

### *E-mail*

[info@qsc.com](mailto:info@qsc.com)

## Support

### *24/7 Support*

QSC offers 24/7 support on Q-Sys™  
Networked Audio Systems only.



### *Full Support*

Business Hours: 6 AM to 5 PM Pacific Time (Mon-Fri)

Tel. 800-772-2834 (U.S. only)

Tel. +1 (714) 957-7150

Fax. +1 (714) 754-6173

### *Q-Sys Emergency-only After-Hours and Weekend Support\**

Tel: +1-888-252-4836 (U.S./Canada)

Tel: +1-949-791-7722 (non-U.S.)

\* After hours calls are guaranteed a 30 minute response time from a Q-Sys Support Team member for Q-Sys ONLY!

### *E-mail*

[qsysupport@qsc.com](mailto:qsysupport@qsc.com)

(An immediate e-mail response is not guaranteed. For URGENT issues, use the phone numbers listed above.)

For a copy of the warranty, visit the QSC Audio Products website at [www.qsc.com](http://www.qsc.com)

Para una copia de la Garantía Limitada de QSC, visite el sitio web de QSC Audio Products, en [www.qsc.com](http://www.qsc.com)

Pour obtenir une copie de la garantie limitée de QSC, visitez le site de QSC Audio Products à [www.qsc.com](http://www.qsc.com)

Besuchen Sie die Webseite von QSC Audio Products ([www.qsc.com](http://www.qsc.com)) um eine Kopie der beschränkte Garantie von QSC zu erhalten.

如果您想要QSC有限保修的複印本，請造訪QSC音頻產品的網站[www.qsc.com](http://www.qsc.com)