

# LLD-Plus Interface Expansion Cable Installation

## Overview

Multiple Line Leak Detector consoles may be linked to a single EECO SYSTEM for applications requiring monitoring of more than 4 lines. A 10-wire cable is required to provide communications between the LLD consoles. The LLD console to which the EECO SYSTEM is connected is referred to as the Master.

The Master console supports lines 1 through 4. The Master console may have fewer than 4 lines installed. The installed lines can be identified by inspecting the circuit board on the console cover. Line 1 is supported by chip U9; line 2 by U12; line 3 by U14 and line 4 by U16. Missing chips indicate unavailable lines.

The second LLD console supports lines 5 through 8. This is referred to as the Slave unit. Available lines are identified by the same process as in the Master unit.

## Procedure

1. Mount the LLD consoles side-by-side and complete all field wiring as described in the system installation instructions (Manual 340235). The consoles must be located as close as possible to each other (no farther apart than one foot) to avoid communications problems.
2. Route the 10-wire communications cable between the two consoles. If conduit is used take care not to damage the connectors when feeding the cable through the piping.
3. Plug the cable at the Master console into the header on the console door marked "Master". Note the color coding of the cable if the connector is not polarized.
4. Plug the cable at the Slave console into the header on the console door marked "Slave". Make sure to orient the cable to maintain the same color-coding at both consoles.

5. Connect the LLD communication cable between the EECO SYSTEM Local Port (DB-9 connector) and the RJ45 plug on the Master PLLD console door.
6. Power up the entire system. Run field service test #390 on the EECO SYSTEM to confirm that both LLD consoles are communicating with the EECO SYSTEM. For a properly installed system the field service test should print Version “058” for each installed channel.

*If the message “no response” is printed:*

- Check to make sure the communication cable is plugged into the Local port on the EECO SYSTEM.
- Toggle the “STOP/RUN” switch on the LLD door circuit board. (Finish with it in the RUN position.)
- Repeat field service test #390.

Complete the installation process by following the system configuration and calibration procedure in the LLD-Plus Installation Instructions (manual 340235).