

## Remote Powering the LT-84 Transmitter/Radiator Combo

### OVERVIEW:

In the event an AC outlet is not located close to the LT-84 Transmitter/Radiator mounting location, it may be necessary to remotely locate the power supply and run cable to the LT-84. There are two options available to remotely power the LT-84. This tech note outlines the cable distances that can be achieved with each option along with the number of Expansion Radiators (LA-141) supported. If more than two expansion radiators will be connected to the LT-84, then an AC outlet near the LT-84 will be required.

### OPTION 1: Remote Powering the LT-84 using CAT-5 cable (24 AWG)

This option requires the purchase of Listen's [LPT-A117](#) remote power supply kit (MSRP \$9.00).



This kit converts the power supply barrel connector to an RJ-45 connector so that standard CAT-5 cable can be used between the power supply and the LT-84, as shown below. The CAT-5 cable must be 24 AWG to achieve the distances listed in the table below. This option can be used with a standalone LT-84 or an LT-84 with one LA-141 Expansion Unit. To support up to two LA-141's, proceed to option 2.



| Option 1: Maximum Distance using CAT-5 Cable (24 AWG)           |                  |  |
|---|------------------|--|
|   | LT-84 Standalone | LT-84 plus (1) LA-141 Expansion Radiator |
| Maximum CAT-5 cable distance between the power supply and LT-84 | 30 m. (100 ft.)  | 12 m. (40 ft.)                           |

## OPTION 2: Remote Powering the LT-84 using Speaker Wire (14 AWG)

This option requires the purchase of connectors not supplied by Listen.

Vetco Electronics™ - [www.Vetco.net](http://www.Vetco.net) Part Numbers: PH-48-1262B and PH-48-1268B (2.5mm DC Power Inline Jack – Solderless w/Screw Terminals – 2" Pigtail)



This option converts the power supply barrel connector to a terminal connector so that standard 14 AWG speaker wire can be used between the power supply and the LT-84 as shown below. The speaker wire must be 14 AWG to achieve the distances listed in the table. This option can be used with a standalone LT-84, an LT-84 with one LA-141 Expansion Unit or an LT-84 with two LA-141 Expansion Units.



| Option 2: Maximum Distance using Speaker Wire (14 AWG)           |                  |  |   |
|--|------------------|--|---|
|  | LT-84 Standalone | LT-84 plus (1) LA-141 Expansion Radiator | LT-84 plus (2) LA-141 Expansion Radiators |
| Maximum Speaker Wire Distance between the Power Supply and LT-84 | 122 m. (400 ft.) | 61 m. (200 ft.)                          | 38 m. (125 ft.) *                         |

\* Each expansion radiator MUST be connected directly to its own dedicated RJ-45 output jack on the LT-84. You cannot daisy-chain the expansion radiators when remote powering the LT-84.

Please contact Listen Technologies with additional questions at [support@listentech.com](mailto:support@listentech.com) or 1-800-330-0891.