Installation Manual: RM-1000ECS Remote Microphone

NOTICE TO THE INSTALLER

This manual provides an overview and the installation instructions for the RM-1000ECS module. All terminals are power limited and should be wired in accordance with the requirements of NFPA 70 (NEC) and NFPA 72 (National Fire Alarm Code). Failure to follow the wiring diagrams in the following pages will cause the system to not operate as intended. For further information, refer to the control panel installation instructions. The module shall only be installed with listed control panels. Refer to the control panel installation manual for proper system operation.

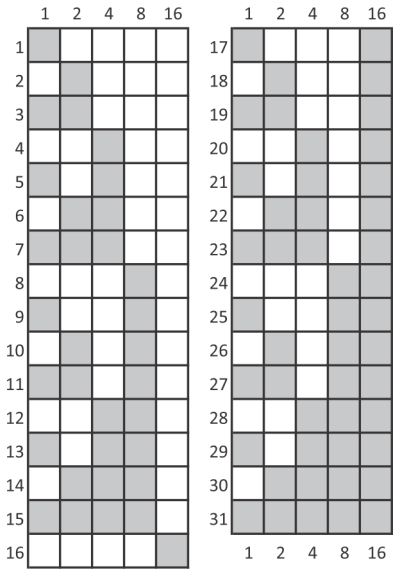
1. Description

The RM-1000ECS remote microphone allows the operator to page and activate ECS messages to desired speaker circuits from a remote area. The remote microphone is equipped with a SB-8 voice user interface which provides 8 programmable soft keys. It is enclosed in a sheet metal enclosure and is equipped with microphone. The RM-1000ECS is a P-Link device and communicates with the control panel via the 4-wire RS-485 connection and distributes paging audio through the V-Link 1 and V-Link 2 audio riser. A maximum of 30 RM-1000ECS can be connected in a voice system. The remote microphone provides LED indication for Power and Ready to Page.

2. Setting the Address

The RM-1000ECS address is set by a five (5) position dip switch, which is used to program the device address ranging from one (1) to thirty-one (31).

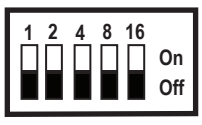
Figure 1. Dip Switch Settings Table (Addresses 1-31)



Note: Each ***"gray" box*** indicates that the dip switch is ***"On,"*** and each ***"white" box*** indicates ***"Off."***

The examples shown below illustrate a P-Link's dip switch settings: the 1st example shows a P-Link module not addressed where all dip switch settings are in the default "Off" position, the 2nd illustrates an addressed P-Link modulevia the dip switch settings

Figure 2. Examples of P-Link Module Showing Default Dip Switch Setting (Unaddressed) & Addressed



All dip switches are shown in the "Off" position.

Example shows this P-Link module address = 10. Dip switches #2 & 8 are in the "On" position.

Note: Unless these are different than other P-Link dip switches they are labeled 1,2,3,4,5 and not 1,2,4,8 & 16

Before connecting a device to the RS-485 connection, take the following precautions to prevent potential damage to the RS-485 connection or device.

- Power to the RS-485 connection is removed.
- Field wiring on module is correctly installed.
- Field wiring has no open or short circuits.

3. Technical Specifications

Operating Voltage	24 VDC
Standby Current	34 mA
Alarm Current	55 mA
Operating Temperature Range	32° to 120° F (0° to 49° C)
Operating Humidity Range	0 to 93% (non-condensing)

4. Installation

The RM-1000ECS is connected to the fire alarm control panel using the P-Link and V-Link. The connection is power limited and supervised. Up to 30 RM-1000ECS remote microphones can be connected to an integrated voice system.

Figure 3. RM-1000ECS Enclosure

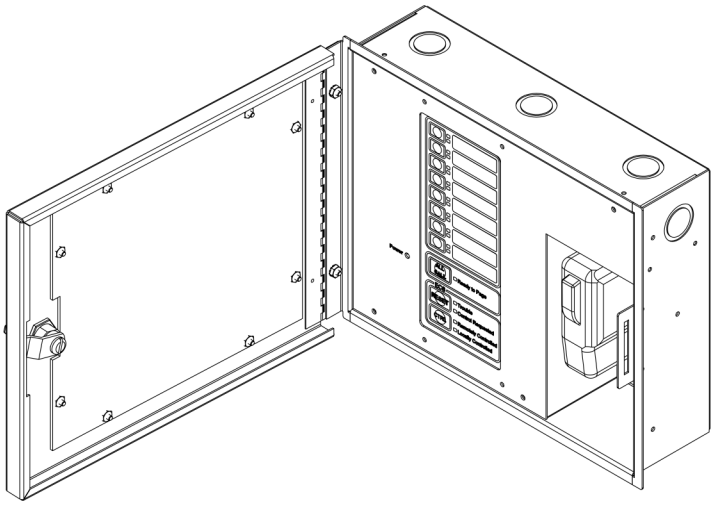


Figure 4. RM-1000ECS Installation

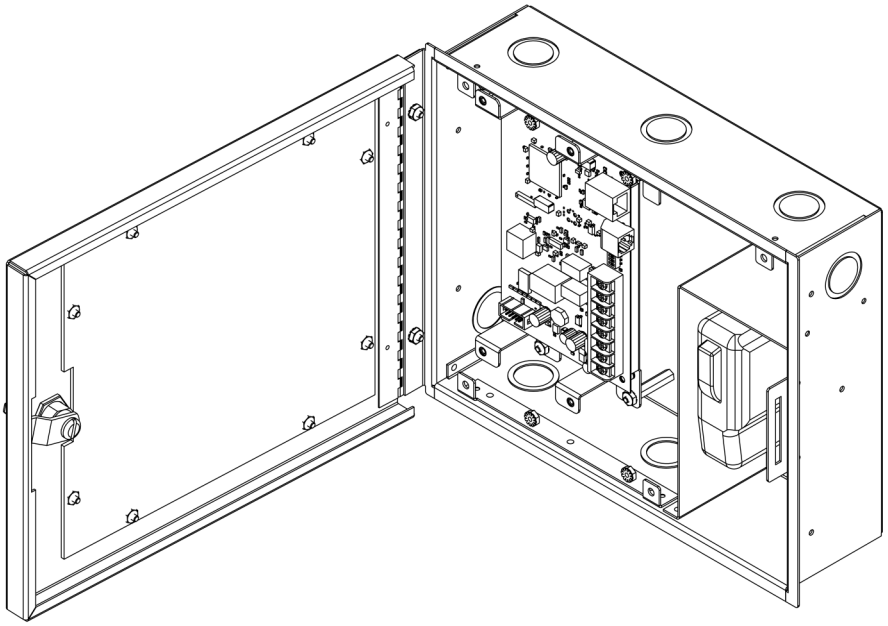


Figure 5. RM-1000ECS Connections

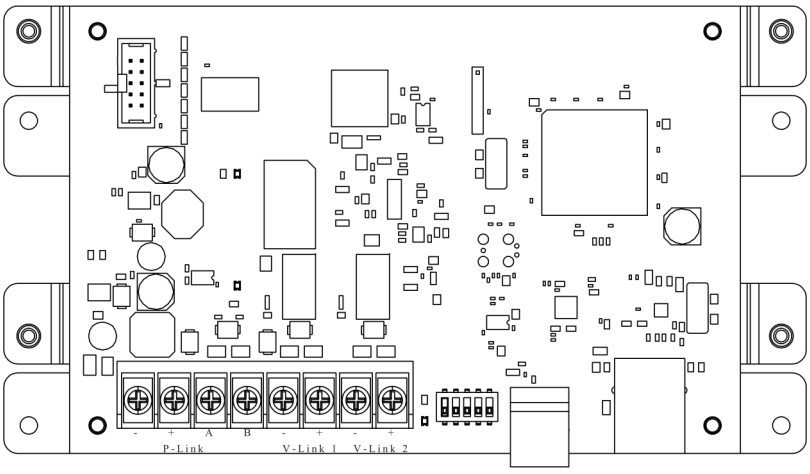


Figure 6. RM-1000ECS P-Link Wiring Class A and Class B

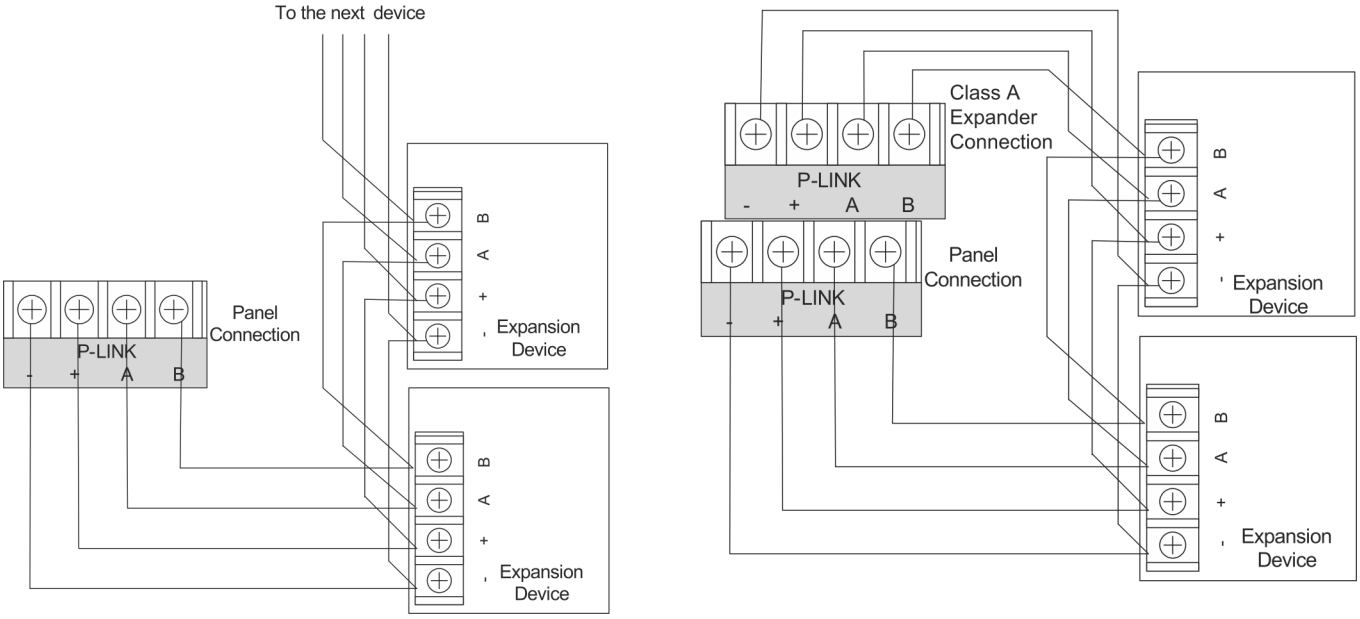


Figure 7. RM-1000ECS V-Link 1 Wiring Class B

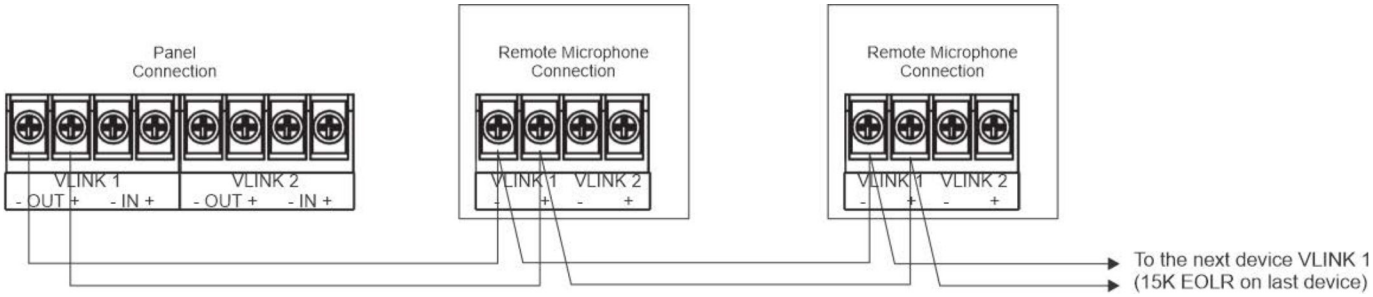


Figure 8. RM-1000ECS V-Link 1 Wiring Class A

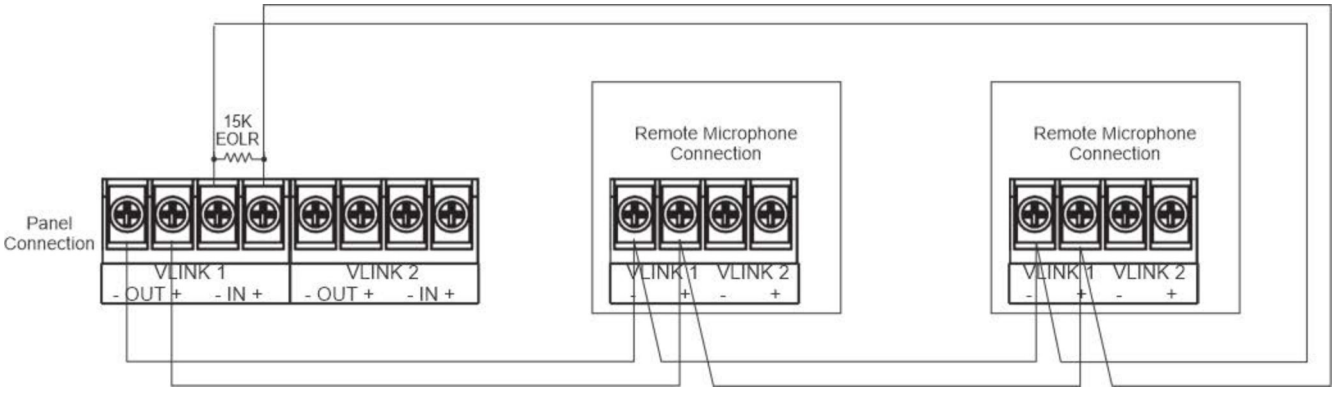


Figure 9. RM-1000ECS V-Link 1 and V-Link 2 Wiring Class B

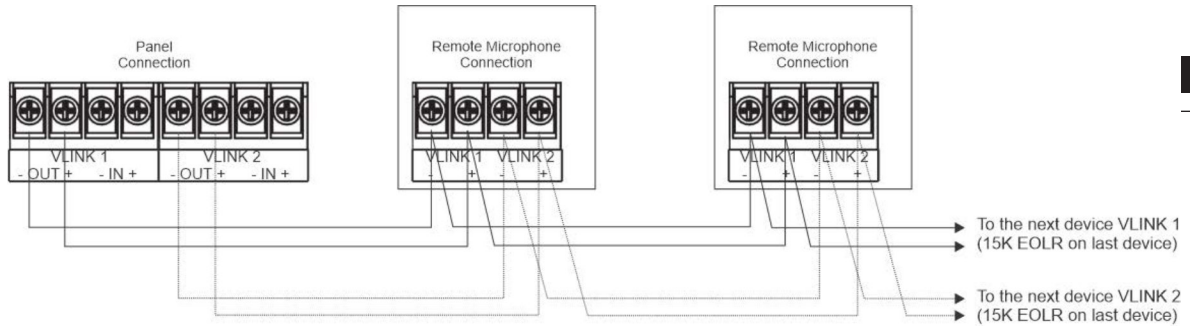
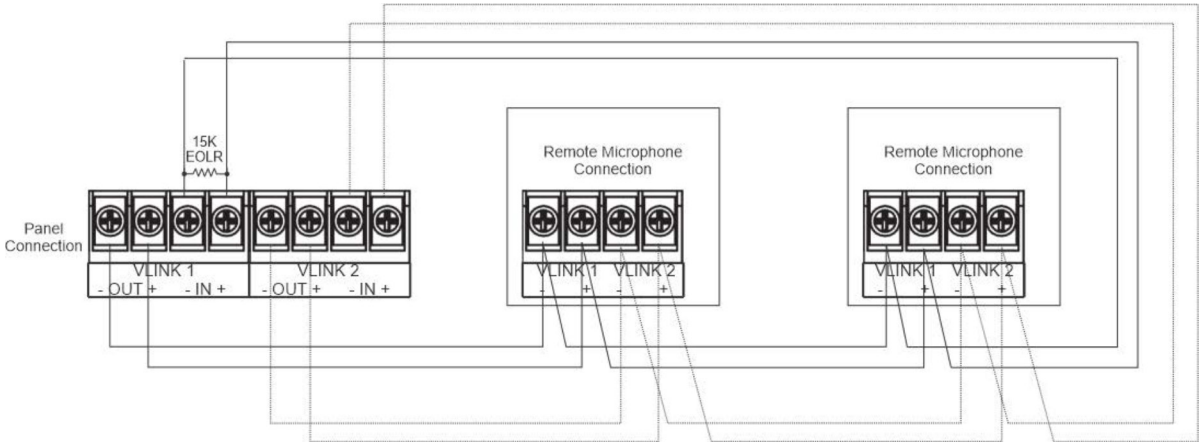


Figure 10. RM-1000ECS V-Link 1 and V-Link 2 Wiring Class A



5. Notes

- RS-485 wiring style supports class A and class B.
- RS-485 is power limited
- Wiring for terminals (A, B) and (+,-).
- Wire Preparation – Strip all wires 1/4 inch from their edges as shown here:
  – Stripping too much insulation may cause a ground fault.
  – Stripping too little may cause a poor connection and subsequently an open circuit.

These instructions do not purport to cover all the details or variations in the equipment described, nor provide for every possible contingency to be met in connection with installation, operation and maintenance.

Specifications subject to change without prior notification.

For Technical Assistance contact Potter Electric Signal Company at 866-956-1211.

RM-1000ECS Operating instructions

All Call	When the button is pressed, all programmed speaker zones are selected and corresponding LEDs on the RM-1000ECS will illuminate to indicate the zones are enabled. Speaker zones can be deselected individually by selecting the corresponding button or can relinquish all speaker zones by pressing the All Call button.
ECS Reset	When the RESET button is pressed, all active ECS events will relinquish.
CTRL	When the CTRL button is pressed, this allows operator consoles to request control of the system when a remote operator console is in use.
Control Requested	A steady amber LED indicates a LOC-1000 is requesting control of the system.
Remotely Controlled	A steady amber LED indicates a remote operating console is currently in control.
Locally Controlled	A steady red LED indicates the local operating console is currently in control.

Frame and display instructions adjacent to the fire alarm panel.

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For service, contact:

Name: _____

Company: _____

Address: _____

Telephone: _____