Limited Warranty

Mircom warrants that for a period of five years from the date of purchase, the product shall be free of defects in material and workmanship under normal use and that in fulfillment of any breach of such warranty, Mircom shall, at its option, repair or replace the defective equipment upon return of the equipment to its repair depot. This warranty applies only to defects in materials and workmanship and not to damage incurred in shipping or handling, or damage due to causes beyond the control of Mircom such as, lightning, excessive voltage, mechanical shock, water damage or damage arising out of abuse, alteration or improper application of the product.

The foregoing warranty shall apply only to the original buyer, and shall be in lieu of any and all other warranties, whether expressed or implied and of all other obligations or liabilities on the part of Mircom. This warranty contains the entire warranty. Mircom neither assumes responsibility for, nor authorizes any other person purporting to act on its behalf to modify or to change this warranty, nor assume for it any other warranty or liability concerning this product.

In no event shall Mircom be liable for any direct, indirect or consequential damages, loss of anticipated profits, loss of time or any other losses incurred by the buyer in connection with the purchase, installation or operation or failure of this product.

Important!

Mircom recommends that the entire system be completely tested on a regular basis. However, despite frequent testing and due to but not limited to, criminal tampering or electrical disruption, it is possible for this product to fail to perform as expected.

MIRCOM®
Advanced Life Safety Solutions™

LT-2028MIR Rev. 1

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INSTALLATION INSTRUCTIONS

MIRCOM®
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PR-281 Reverse Polarity/ Municipal Box Module

The PR-281 Reverse Polarity/Municipal Box Module is jumper programmable for polarity reversal operation or Municipal Box operation, Single or Separate Alarm and AC Fail delay.

Parts List

- Qty 1 ... PR-281 Module
- Qty 4 ... Plastic Spacers
- Qty 4 ... KEP Nuts
- Qty 1 ... 4 Pin polarized locking cable assembly
- Qty 6 ... Jumpers

Specifications

Module Specifications

- Standby... 20mA
- Alarm ... Municipal Box Mode = 250mA momentary
- Alarm ... Reverse Polarity Mode = 35mA + load on relay (10mA each)

Municipal Box Output (for use with local energy type (series) master box)

- Maximum Voltage ... 28VDC
- Supervisory Current ... 2mA
- Power Limited Output
- Trip Current ... 1 second momentary @ 250mA (subtracted from AUX power)
- Maximum Wire & Coil Resistance ... 20Ω total

Reverse Polarity Outputs

- Maximum Voltage ... 28VDC
- Maximum Current ... 10mA
- Power Limited ... Yes
- Maximum Loop Resistance ... 2200Ω

NOTE: ***This component must be included in the control panel battery calculation. Refer to the Standby Battery Calculation Sheet included with the control panel.***

Installing the PR-281 Module

The PR-281 module mounts on 4 threaded studs located in the FA-262/265 Fire Alarm Control Unit panel below the power transformer. Refer to Figures 1, 2 and Table 1.

1. Configure Jumpers for desired operating modes.
2. Position the PR-281 Module on the 4 threaded studs. Secure the module to the studs with 4 KEP nuts (provided).
3. Insert the 4-wire Secure-Bus connector into the RPMB Dialer connector located on the FA-262/265 Fire Alarm Unit Control board.
4. Route 14-18 AWG Hookup Wire through the panel access holes in accordance with local regulations.

PR-281 Reverse Polarity/ Municipal Box Module

Table 1: LED Indicators	
LED Label	**Function**
WDOG	Flashes when module is active.
DIS	Active when disconnect switch has been activated.
M-BOX	Active when there is an open circuit on that output (when M-BOX option is enabled).
BUS	Turns on when communications stops between module and panel.
ALM, SUP, TRB	Not used.
PWR	Not used.

Table 2: Disconnect Switch	
Action	**Function**
Press	Activates test lamp.
Press & hold	Activates disconnect mode (LED activates)

When servicing the panel or module, activating the disconnect switch disables the outputs so that no false data will be sent to the receiving station.

Table 3: Jumper Programming				
Option	**Jumper Settings**			**Function**
AC Delay	**P1**	**P2**		
	Off	Off		NO AC fail delay
	On	Off		6 Hr AC fail delay
	Off	On		12 Hr AC fail delay
	On	On		24 Hr AC fail delay
Module Configuration	**P3** - Off			Municipal Box Output enabled - Polarity Reversal disabled
	P3 - On			Polarity Reversal enabled - Municipal Box Output disabled
Polarity Reversal Output Options	**P4**	**P5**	**P6**	
	On	Off	Off	During an Alarm event the Alarm output reverses polarity During a Supervisory event the Supervisory output reverses polarity During a Trouble event the Trouble output reverses polarity
	Off	Off	Off	During an Alarm event the Alarm output reverses polarity During a Supervisory event the Alarm output disconnects (no voltage) During a Trouble event the Trouble & Supervisory outputs do not change states
	Off	Off	On	During an Alarm event the Alarm output reverses polarity During a Supervisory event the Alarm output disconnects During a Trouble event the Alarm output disconnects, the Trouble & Supervisory outputs do not change states
	Off	On	Off	During an Alarm event the Alarm output reverses polarity During a Supervisory event the Supervisory output reverses polarity During a Trouble event the Trouble output does not change states
	Off	On	On	During an Alarm event the Alarm Output reverses polarity During a Supervisory event the Supervisory output reverses polarity During a Trouble event the Alarm and Supervisory outputs are disconnected, the Trouble output does not change states

Fig 1 PR-281 Reverse Polarity/Municipal Box Module

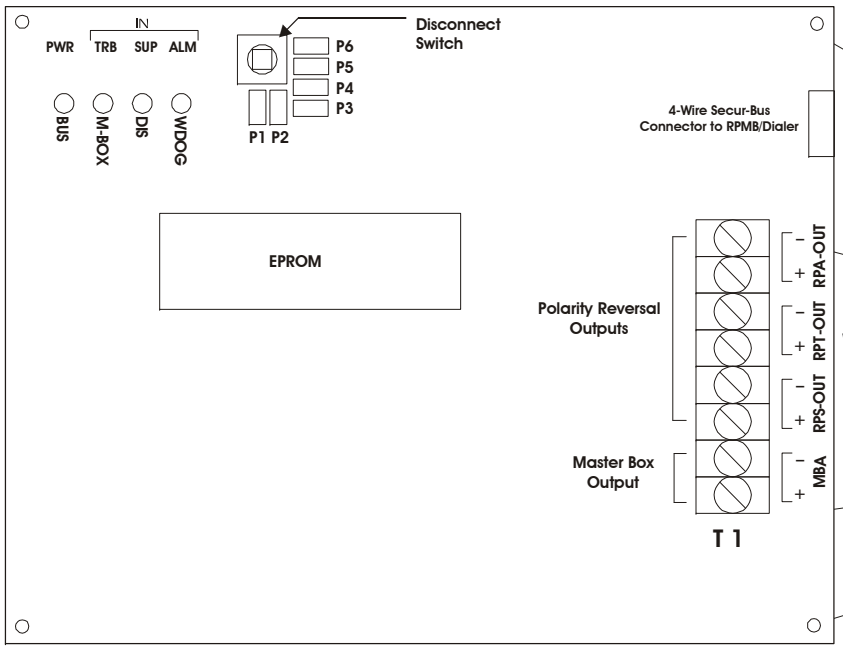

Fig 2 FA-262/265 Fire Panel Layout