

# 10-2254 Reverse Polarity Module (RPM) Installation Instructions









## **DESCRIPTION**

The 10-2254, Reverse Polarity Module (RPM) provides two (2) individual nonsupervised, reverse polarity contacts intended for connection to a polarity reversal circuit of an Underwriter's Laboratories (UL) approved remote station receiving unit having compatible ratings (direct leased line connection). The module mounts directly to the associated control panel circuit board using the following mounting hardware provided with the module.

Standoff Hardware Kit, P/N 02-12031

02-3794 Standoff, 1.25" F/F, 6/32 hex (qty. 4) 02-1589 Screw, 6-32 x 0.375" Phillips (qty. 8)

## **COMPATIBILITY**

The RPM is compatible with the following Fike control panels: Cheetah™, CyberCat™ 254, CyberCat™ 1016 and Cheetah Xi™ Fire Alarm or Suppression panels.

## **SPECIFICATIONS**

Current Consumption: 30mA per active output/ alarm

P42 Terminal (removable):

- Accepts 12-14 AWG
- Two 24 VDC reverse polarity outputs rated for 30 mA
- Supervised and power-limited

Dimensions (LxWxD):

Operating Humidity:

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3.5" x 1.5" x 2" (8.9cm x 3.8cm x 5.08cm)

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93% RH, non-condensing

vveignt:	0.08 lbs. (36 grams)	
Operating Temp:	32°F to 120°F (0°C to 49°C)	

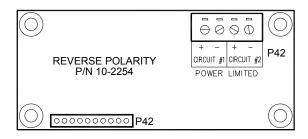


Exhibit 1 Reverse Polarity Module (RPM)

#### **PROGRAMMING**

The RPM must be added to the control panel configuration to enable module supervision and to configure module operation for one of the options described below.

	Operating		
<b>Option</b>	Condition	RPM Circuit 1	<b>RPM Circuit 2</b>
1	Alarm	Reverse Polarity	No Change
	Trouble	0 Volts	No Change
	Supervisory	No Change	Reverse Polarity
2	Alarm	Reverse Polarity	No Change
	Trouble	No Change	Reverse Polarity
	Supervisory	No Change	No Change

The RPM can be configured using either the panel's configuration menus or the panel's respective system configuration software.

## **OPERATION**

During normal system operation, the RPM sends a steady signal over one or two pairs of leased telephone lines to the monitoring station. Alarm, Trouble and Supervisory conditions are communicated to the monitoring station by either reversing or interrupting the polarity of the steady signal.

#### MODULE MOUNTING LOCATIONS

The acceptable mounting location(s) for the RPM module varies depending upon the control panel that the module is to be connected to. Exhibits 2 and 3 show the acceptable module mounting locations for each control panel for the reference purposes.

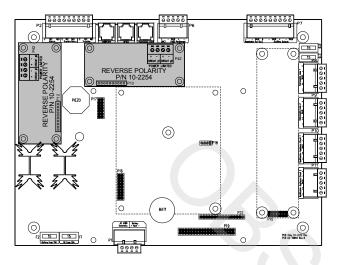


Exhibit 2 RPM to Cheetah Xi™ and CyberCat™ Installation (P12 or P13)

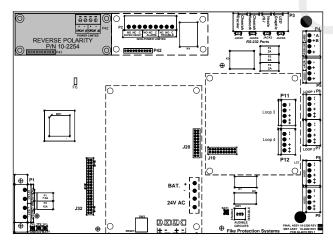


Exhibit 3 RPM to Cheetah™ Installation (P41)

## **INSTALLATION**

 If the panel is already in service, disable critical panel functions and power down system by disconnecting the storage batteries then deenergize the AC circuit supplying power to the panel.

## **⚠** CAUTION

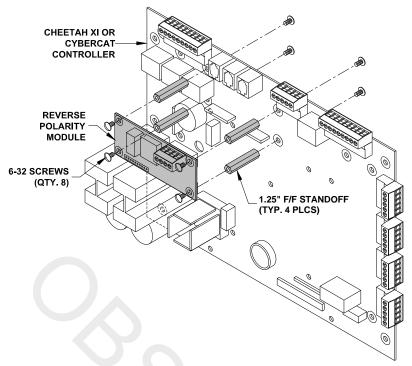
The RPM circuit board contains static sensitive components. Handle the electronics by the edges only and avoid touching the integrated components. Keep the electronics in the protective static bag it was shipped in until time for installation. Always ground yourself with a proper wrist strap before handling the module(s). If the installer is properly grounded at all times, damage due to static discharge will not occur. If the module requires repair or return to Fike, it must be shipped in an anti-static bag.

- If the main controller is already installed in the back-box, remove it by disconnecting the field removable terminal blocks and removing the four hex nut/lock washers located in each corner of the board (qty. 4).
- 3. Carefully unpack the module and check for shipping damage.
- 4. Secure the F/F standoffs (qty. 4) to the main board by threading the four 6/32 screws through the back of the board into the standoffs (See Exhibit 4). Make sure that the screws are not making contact with any of the electronic components on the circuit board.
- Re-install the main board by aligning the four mounting holes with standoffs in the enclosure back-box. Secure in place with the four #6 hex nuts and lock washers.
- Insert the RPM module into the respective header provided on the main board making sure that header pins are properly aligned. Secure the module to the F/F standoffs using four 6/32 screws (See Exhibit 4).
- 7. Prior to connecting field wiring, power up the controller. Once each board has successfully powered, power down and connect field wiring.

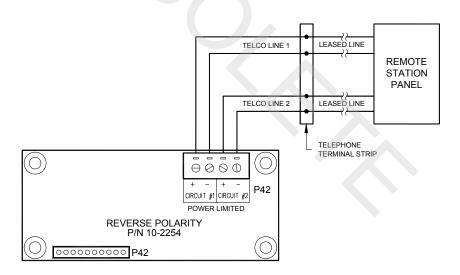
# **⚠** CAUTION

During the first few seconds of power-up, the Fire Control Panel may not have full control of the RPM output circuits and they may momentarily chatter. If connected to the remote station, control the output or notify the remote station that the contacts may transfer on power-up or power-down.

8. Power back up and complete installation procedures for the system.



**Exhibit 4 RPM Module Mounting** 



**Exhibit 5 RPM Wiring Diagram** 

Reserved for future use.