10-2204 Relay Module (CRM4)  
Installation Instructions  

DESCRIPTION  
The 10-2204, CRM4 Relay Module provides four (4) individual single pole, double throw (SPDT) relay contacts. Each relay is configurable to transfer upon activation of the associated zone/state. 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, 6x32 hex (qty. 4)  
02-1589 Screw, 6-32 x 0.375 Phillips (qty. 8)

COMPATIBILITY  
The CRM4 is compatible with Fike’s Cheetah™, Cheetah Xi™ and SHP-Pro™ Fire Alarm and Suppression panels, and the CyberCat™ 254 and 1016 Fire Alarm panels.

SPECIFICATIONS  
Current Consumption:  
- 11mA (normal standby)  
- 39mA (alarm), all relays active

P42 Terminal (Relays 1 – 4):  
- SPDT Form C relay contact  
  C = Common  
  NO = Normally Open  
  NC = Normally Close

DC Operation:  
- 2 A @ 30 VDC (pf = .35)

AC Operation:  
- 0.5 A @ 120 VAC (pf = .35)

Dimensions (LxWxD):  
- 3.5” x 1.5” x 2” (8.9cm x 3.8cm x 5.08cm)

Weight:  
- 0.10 lbs. (45 grams)

Operating Temp:  
- 32°F to 120°F (0°C to 49°C)

Operating Humidity:  
- 93% RH, non-condensing

Note: Relay connections shall be power-limited or nonpower-limited, not both.

PROGRAMMING  
The CRM4 must be added to the control panel configuration to enable module supervision and to configure relay functions. Each relay output can be individually configured for any zone and state output on the Cheetah™, Cheetah Xi™, and CyberCat™ control systems using the panel’s configuration menus or the panel’s respective system configuration software.

The SHP-Pro™ will operate with specific states as per the dip switch settings as noted in the SHP-Pro™ manual, no other programming is allowed.

OPERATION  
The CRM4 provides a versatile option to connect equipment interfaces directly located at the Fire Control Panel. The addressable control panels (i.e. Cheetah™, Cheetah Xi™, and CyberCat™) provide full programmability of the CRM4 relay contacts for any zone and state in the system. The conventional SHP-Pro™ control panel provides relay activation per the dip switch selections. Common functions consist of HVAC system shutdowns, door closures, fans control, and communication to building interfaces.

Note: Relays may temporarily transfer on power-up. If using relay(s) for critical functions, it is strongly recommended that the relays be disabled on power-up of the control panel.

MODULE MOUNTING LOCATIONS  
The acceptable mounting location(s) for the CRM4 relay module varies depending upon the control panel that it is to be connected to. Exhibits 2, 3 and 4 show the acceptable module mounting locations for each control panel for reference purposes.
INSTALLATION

1. If the system is already powered, disable critical functions and power down system.

**CAUTION**
The CRM4 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.

2. 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. Secure the F/F standoffs (qty. 4) to the main board by threading the four 6x32 screws through the back of the main board into the standoffs (See Exhibit 5 or 6). Make sure that the screws are not making contact with any of the electronic components on the circuit board.

4. Re-install the main board by aligning the four mounting holes with the standoffs in the enclosure back-box. Secure in place with the four #6 hex nuts and lock washers.

5. Carefully unpack the module and check for shipping damage.

6. Insert the CRM4 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 the four 6/32 screws (See Exhibit 5).

7. Prior to connecting field wiring, power up the controller. Once each board has been successfully powered, power down and connect field wiring.

**CAUTION**
During the first few seconds of power-up, the associated control panel may not have full control of the CRM4 relay contacts and they may momentarily chatter. If using the relays for critical functions, control the output closed or open respectively during controller power-up and power-down.

8. Power back up and complete installation procedures for the system.
Exhibit 5  CRM4 to CyberCat™ or Cheetah Xi™ Mounting

Exhibit 6  CRM4 to SHP-Pro™ Mounting
Reserved for future use.