10-2792, Class A Peripheral Bus Card Installation Instructions

DESCRIPTION

The 10-2792, Class A Peripheral Bus Card (See Exhibit 1) is a peripheral bus device, that when installed, provides a means of wiring the host control panel's RS485 peripheral bus and 24 VDC power output to the peripheral devices in a Class A format. The card is designed to mount in the same location within the control panel enclosure that is used by the secondary power transformer, MIM, or Ethernet cards; however, only one of these devices can be installed at this mounting location at a time.

COMPATIBILITY

The Class A Peripheral Bus Card is compatible with Fike's CyberCat™ Fire Alarm and the Cheetah Xi™ Fire Suppression control panels, firmware version 6.XX and higher.

SPECIFICATIONS

Power Consumption:
57mA (standby), 57mA (alarm)

P1 Terminal (removable):
PERIPHERAL IN (+,-)
- Connects to panel's RS485 Peripheral Bus
- Accepts 12-26 AWG
- Power-limited and supervised

15 - 30V IN (+,-)
- Power input from host control panel
- Accepts 12-26 AWG
- Power-limited and supervised

P2 Terminal (removable):
15 - 30V OUTPUT (+,-,GND,++,--)
- 24 VDC Class-A power output
- Accepts 12-26 AWG
- Power-limited and supervised
- Output voltage = Input voltage[1]

P3 Terminal (removable):
PERIPHERAL OUTPUT (+,-,GND,++,--)
- Class-A, RS485 peripheral bus output
- Accepts 12-26 AWG
- 30 peripheral devices maximum
- Belden 9841 cable or equal[2]
  - 4,000 ft. (1,219 m) max. length
  - Impedance 100Ω max.
  - Capacitance 0.05 µF max.
  - 9600 bps, 5 VDC, 1mA
  - No t-tapping
- Power-limited and supervised

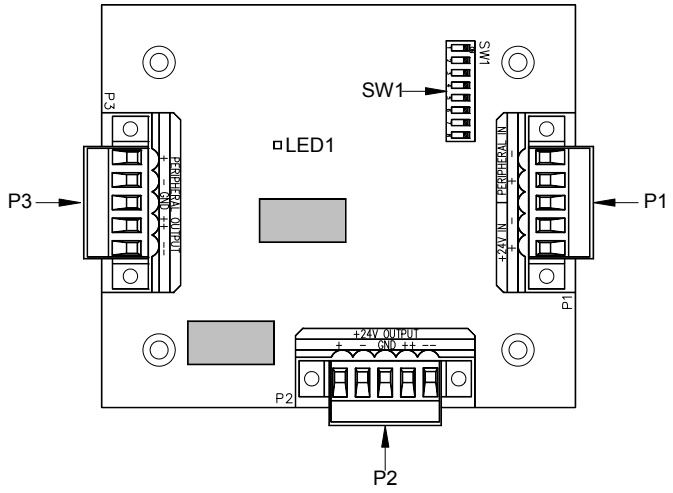

Exhibit 1: Class A Peripheral Bus Card

SPECIFICATIONS - CONTINUED

LED1 (Yellow):
On = RS485 communication O.K.
Flash = RS485 communication lost

Dimensions (L x W x D):
4.125" x 3.5" x 2"
(10.48cm x 8.89cm x 5.08cm)

Operating Temp: 32ºF to 120ºF (0ºC to 49ºC)

Operating Humidity: 93% RH, non-condensing

1 Ensure that devices connected to output terminals can operate at the voltage supplied at the input terminals.

2 Belden 9841 is suited for standard installations only. Consult with the factory for cables that should be used for plenum and other applications.

OPERATION

The Class A Peripheral Bus Card monitors the RS485 and DC power connections to the connect peripheral devices and will transmit a trouble condition to the system control board upon loss of communication or loss of DC power.

PROGRAMMING

The Class A Peripheral Bus Card must be added to the control panel configuration to enable module supervision. The configuration changes can be made using the panel's configuration menus or using the C-Linx system programming software. Refer to the associated control panels programming manual or the C-Linx "Users Guide", P/N 06-448 for programming details.

INSTALLATION

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

⚠ CAUTION

Never remove or install boards, internal cables or components with power applied. Failure to follow the instructions provided in this section can result in irreparable damage to the system components. This damage may adversely affect the operation of the control unit but its effect may not be readily apparent.

2. Unpack the card and check for shipping damage prior to installation.

⚠ CAUTION

The card and associated control panel contains static sensitive components. Always ground yourself with a proper wrist strap before handling any circuits so that static charges are removed from the body. Use anti-static packaging to protect electronic assemblies removed from the unit.

3. Locate the four threaded press studs in the enclosure back-box for mounting the card and install the four M/F standoffs provided (See Exhibit 2). Refer to specific enclosure installation instructions for card mounting location.

4. Position the card onto the standoffs and secure using the four screws provided (See Exhibit 2).

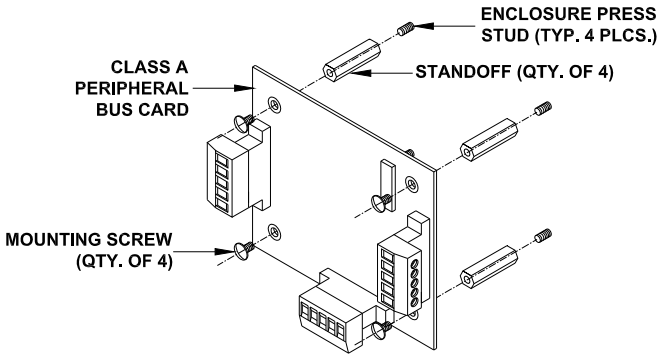

Exhibit 2: Card Mounting

5. Connect field wiring to the card as shown in Exhibit 3. The cards terminal blocks are removable to allow easy connection of field wiring.

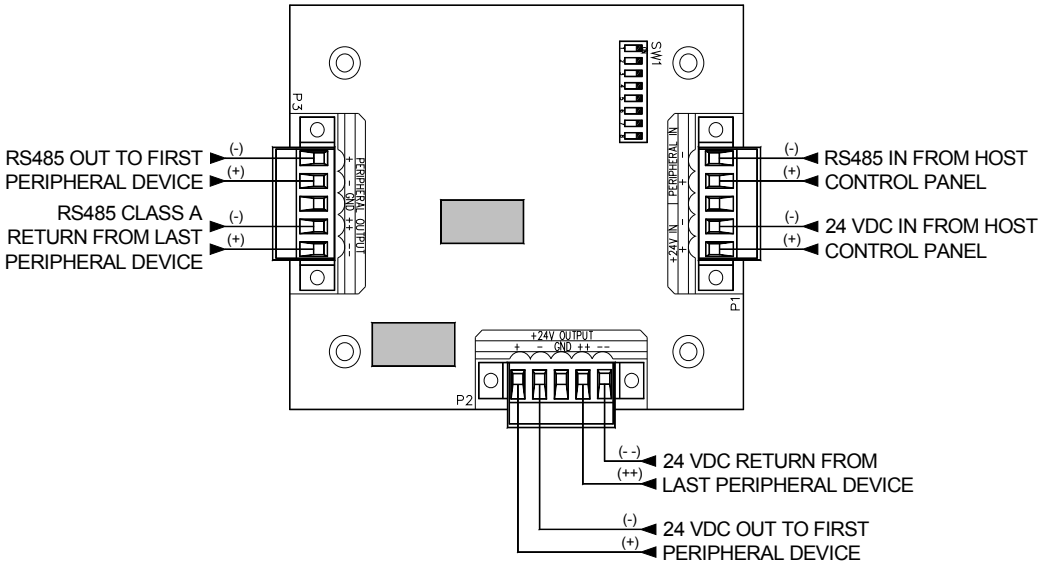

Exhibit 3: Card Wiring

6. Set the card's peripheral address using the SW1 DIP-switches 1 - 6. The card requires a unique address for identification on the host control panel's RS485 bus (2 – 32). See Exhibit 4 for DIP-switch settings for each binary addres (ID number).

Binary Value	1	2	4	8	16	32
Dip Switch #	1	2	3	4	5	6
Address						
0	NOT VALID					
1	ON	◄ PANEL ONLY				
2		ON				
3	ON	ON				
4			ON			
5	ON		ON			
6		ON	ON			
7	ON	ON	ON			
8				ON		
9	ON			ON		
10		ON		ON		
11	ON	ON		ON		
12			ON	ON		
13	ON		ON	ON		
14		ON	ON	ON		
15	ON	ON	ON	ON		
16					ON	
17	ON				ON	
18		ON			ON	
19	ON	ON			ON	
20			ON		ON	
21	ON		ON		ON	
22		ON	ON		ON	
23	ON	ON	ON		ON	
24				ON	ON	
25	ON			ON	ON	
26		ON		ON	ON	
27	ON	ON		ON	ON	
28			ON	ON	ON	
29	ON		ON	ON	ON	
30		ON	ON	ON	ON	
31	ON	ON	ON	ON	ON	
32						ON

Exhibit 4: Binary Addressing

ⓘ **Note:** 00 is not a valid address and 01 is reserved for the control panel.

7. Enable or disable supervision of the P2, Class-A 24V output terminals (++ and - -) using the SW1 DIP-switch 7.

   ON = Class A terminals are supervised
   OFF = Class A terminals are not supervised

8. Set the communication baud rate for the card using the SW1 DIP-switch 8.

   ON = 38.4K baud rate
   OFF = 9600 baud rate

ⓘ **Note:** Selected baud rate must match the rate used by the host control panel.