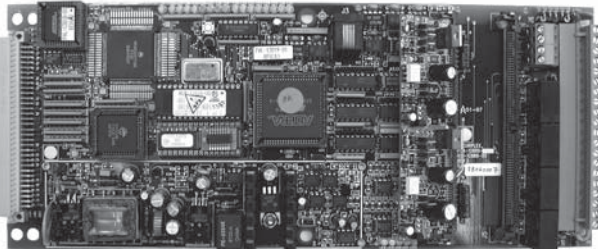


PRO-2000

Addressable Detector Interface (ADI) Card



Description

The Addressable Detector Interface (ADI) card is the connection point for all field devices to the PRO-2000 panel. Any type of analog addressable sensor or module (control or monitor) as well as the Addressable Conventional Detector Interface (ACDI) module can be connected to the ADI card.

Each ADI card can monitor or control: Two (2) analog loops as defined by the NFPA signaling line Class A, Style 6 or 7 circuits or Four (4) analog stubs as defined by the NFPA signaling line SLC Class B, Style 4 circuits.

The ADI card also features four (4) output relays which can be used for signaling or relay output. The relay output can be a supervised or non-supervised output.

All outputs are transient protected to prevent card damage in the event that a field power surge should occur. The field electronics on the card are fully isolated from system electronics insuring an exceptional electrical noise immunity from the field connection.

The built-in ground fault detection circuit is designed to pinpoint a ground fault source at the board level, unlike other systems that give a global system level ground. This makes it easier to identify the fault wiring/circuit. A high efficiency power supply insures low power consumption.

The ADI card has two (2) slots for driver cards. The size of the detection system dictates the need for one (1) or two (2) driver cards. Each driver card can handle one (1) Loop (NFPA Signalling Line Class A, Style 6 or 7 circuits) or two (2) Stubs (NFPA SLC Class B, Style 4).

The ADI card is microprocessor controlled. The microprocessor is monitored by a watchdog circuit which halts the system's operation if a hardware or software failure occurs.

When connected to an X2S, X2E or X2M panel, the ADI card is controlled by the Processing and Display Unit. When connected to an X6S, X6E or X6M panel, the ADI card is controlled by the MPU card.

Features

- Microprocessor controlled
- Up to Four (4) Stub outputs or Two (2) Loop outputs for addressable devices
- Up to 99 addressable devices per stub or loop output
- Up to 99 addressable modules per stub or loop output
- Short circuit protection on each output circuit
- Four (4) supervised/unsupervised relay outputs
- Fuseless power input with supervision and power limiting
- Full transient protection on all outputs
- Field electronics fully isolated from system electronics for increased electrical noise immunity
- Built-in local ground fault detection for easier maintenance and troubleshooting
- Built-in isolated switching power supply for increased power efficiency
- Software based analysis for easy configuration and upgradability
- Built-in self diagnostics
- Surface mount technology
- Removable connectors for easy servicing
- Removable driver cards for easy servicing
- Maximum of 600 devices per ADI card
- 1000 event history log for alarm, trouble and supervisory conditions

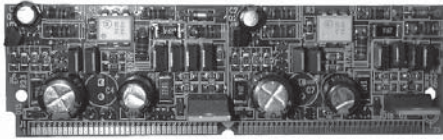
Specifications

Electrical Specifications			
Input Voltage	20 to 28.5 VDC		
Standby Current (1 Driver card)	230 mA		
Standby Current (2 Driver cards)	285 mA		
Addressable Device Driver Output			
Maximum current (short circuit)	0.5A		
Maximum voltage	28 V		
Maximum cable length	Max. 4000 ft., 40 ohm, 0.5 mF		
Max. cable resistance (Loop/Stub)	40 ohm		
Maximum cable capacitance	0.5 mF		
ADI Card - Output Relays			
Contact type	1 Form C (SPDT)		
Contact rating	2A @ 28VDC or 120VAC 2A @ 240VAC Resistive		
EOL Resistor for signaling outputs	6.8K, ¼W, 5%		
Physical Specifications			
Length	11.9" (302.3 mm)	Thickness	1" (25.4mm)
Width	4.85" (123.2mm)	Weight	15.9oz. (450g)



USCG
161.002/41/1
ABS
05-MO602743-X

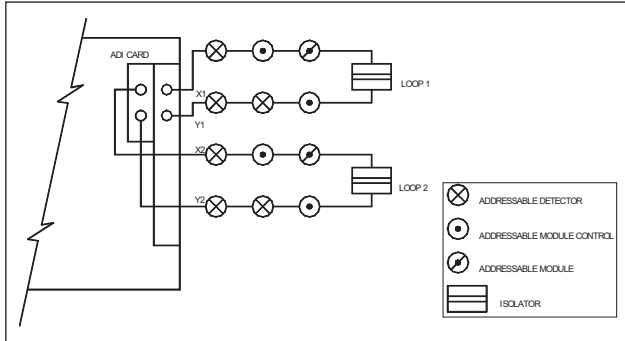
CCG
Accepted



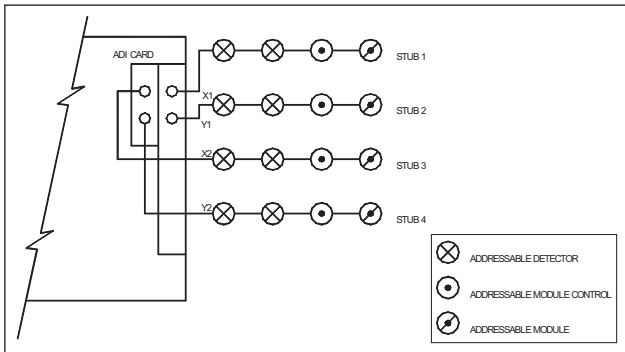
ADI Driver Card

The Driver Card acts as a switching device that translates digital signals into a sequence of voltages (0, 5 or 24V) needed to drive the output line of addressable devices. The ADI card can have either one or two Driver cards. Input and output signals from the Driver card to the ADI card pass through two 72-pin sockets mounted on the ADI card. The Driver Card is held in place by two metallic locks. This arrangement facilitates for field servicing.

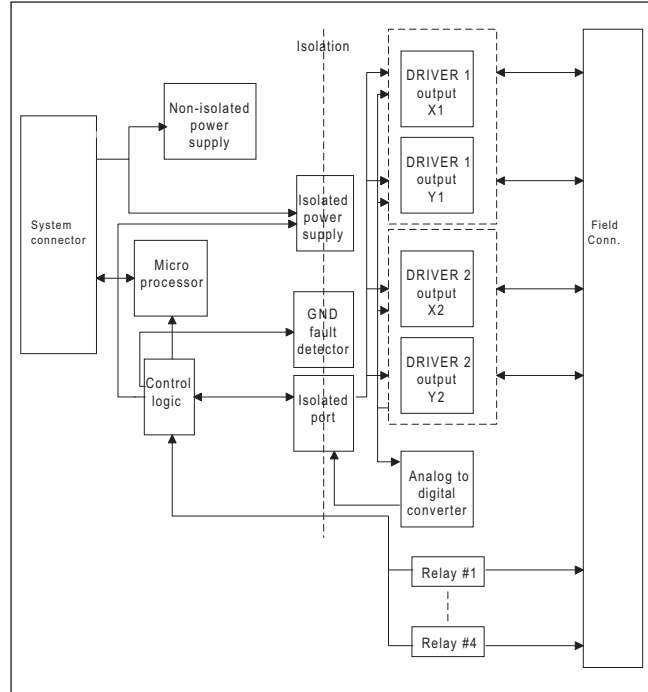
Loop Connection



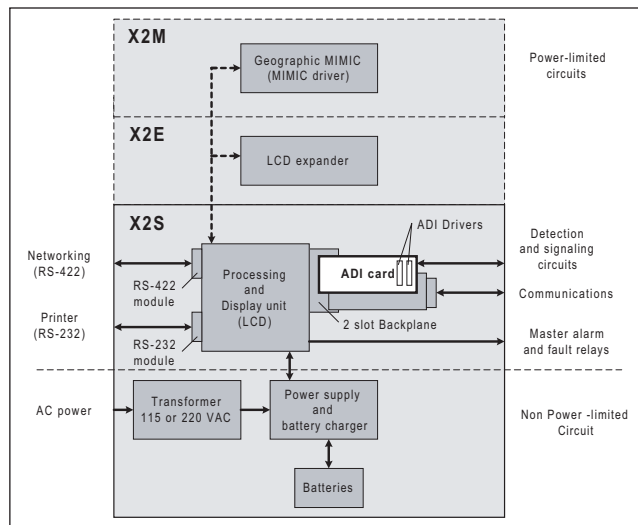
Stub Connection



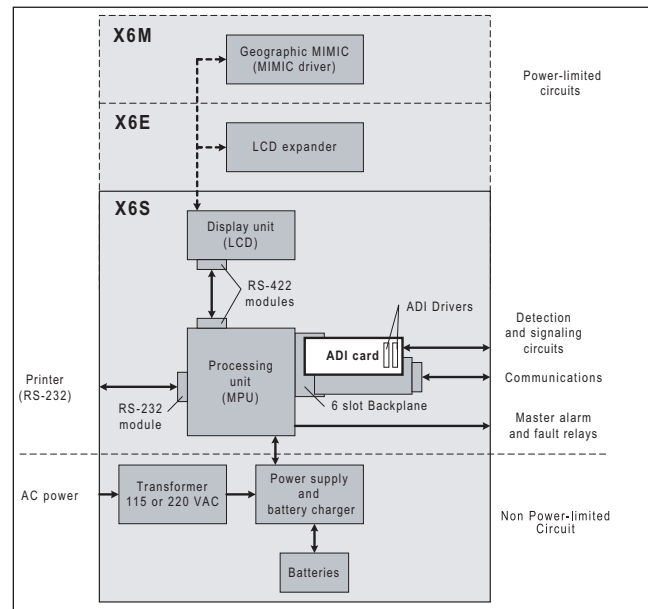
Block Diagram



ADI Card Connected to an X2 Panel



ADI Card Connected to an X6 Panel



Ordering Information

Model Number	Description
PCA-12889-00	PRO-2000 ADI Card, UL/ULC
PCA-12889-01	PRO-2000 ADI Card, Marine
PCA-14292-00	PRO-2000 ADI Driver Card, UL/ULC
PCA-14292-01	PRO-2000 ADI Driver Card, Marine

