ANN-I/O

LED Driver Module

Fire·Lite Alarms
by Honeywell

General

The ANN-I/O is an LED driver module that can be used in a wide variety of applications including as an interface with the Fire Alarm Control Panel (FACP) to drive most customized graphic annunciators. It comes in a plastic enclosure that may be mounted inside a custom annunciator or accessory cabinet and can drive up to 40 LEDs.

The ANN-I/O and the FACP communicate over a two-wire serial interface employing the ANN-BUS communication format. An additional two wires are used for 24-volt DC power. A single four-conductor unshielded cable may be used for both power and data communications.

Up to eight ANN-BUS devices may be connected to the ANN-BUS of each FACP.

Features

- ANN-I/O connects to the ANN-BUS terminal on the FACP and requires minimal programming.
- Each ANN-I/O module drives up to 40 LEDs.
- Programmable to indicate activity for points or zones.
- Compatible with the MS-9050UD, MS-5UD, and MS-10UD.
- Can be remotely located up to 6,000 feet (1,829 m) from the panel.
- May be powered by 24 VDC from the host FACP or by remote power supply (requires 24 VDC).
- Up to eight ANN-BUS devices may be connected to the ANN-BUS of each FACP.

Specifications

- Maximum ANN-BUS Voltage: 24 VDC
- Maximum Current:
  - **Alarm:** 200 mA, **Standby:** 35 mA, **Each LED:** 10mA
- Maximum wiring distance from FACP: 6000 ft. (1829 m.)
- Ambient Temperature: 32ºF to 120ºF (0ºC to 49ºC)
- Relative Humidity: 93% ± 2% RH (noncondensing) at 32ºC ± 2ºC (90ºF ± 3ºF)
- For use indoors in a dry location
- Connections to FACP are power-limited and supervised.
- External measurements: 6.00" (15.2 cm.) high x 7.76" (19.7 cm.) wide x 1.46" (3.7 cm.) deep.

Agency Listings and Approvals

The listings and approvals below apply to the ANN-I/O. In some cases, certain modules may not be listed by certain approval agencies, or listing may be in process. Consult factory for latest listing status.

- **UL:** S2424
- **CSFM:** 7120-0075:213
- **MEA:** 442-06-E

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The ANN-BUS

POWERING THE DEVICES ON THE ANN-BUS FROM AUXILIARY POWER SUPPLY

ANN-BUS devices can be powered by an auxiliary power supply when available panel power is exceeded. See FACP manual for information.

ANN-BUS DEVICE ADDRESSING

Each ANN-BUS device requires a unique address (ID Number) in order to communicate with the FACP. A maximum of eight devices can be connected to the FACP ANN-BUS communication circuit. See the FACP manual for more information.

WIRE REQUIREMENTS

The ANN-I/O connects to the FACP ANN-BUS communications circuit. To determine the type of wire and the maximum wiring distance, calculate the total worst case current draw for all modules on a single 4-conductor bus. Use the following table to determine the maximum distance the modules can be located from the FACP. In general, the wire length is limited by resistance, but for heavier wire gauges, capacitance is the limiting factor. These cases are marked in the chart with an asterisk (*). Maximum length can never be more than 6,000 feet (1,829 m), regardless of gauge used. *Refer to the appropriate FACP manual for wiring details and printer settings.*

Communication Pair Wiring Distance: FACP to last ANN-BUS Module				
Total Worst Case Current Draw (amps)	22 Gauge	18 Gauge	16 Gauge	14 Gauge
0.100	1,852 ft.	4,688 ft.	* 6,000 ft.	*6,000 ft.
0.200	926 ft.	2,344 ft.	3,731 ft.	5,906 ft.
0.300	617 ft.	1,563 ft.	2,488 ft.	3,937 ft.
0.400	463 ft.	1,172 ft.	1,866 ft.	2,953 ft.
0.500	370 ft.	938 ft.	1,493 ft.	2,362 ft.
0.600	309 ft.	781 ft.	1,244 ft.	1,969 ft.
0.700	265 ft.	670 ft.	1,066 ft.	1,687 ft.
0.800	231 ft.	586 ft.	933 ft.	1,476 ft.
0.900	206 ft.	521 ft.	829 ft.	1,312 ft.
1.000 (max.)	185 ft.	469 ft.	746 ft.	1,181 ft.
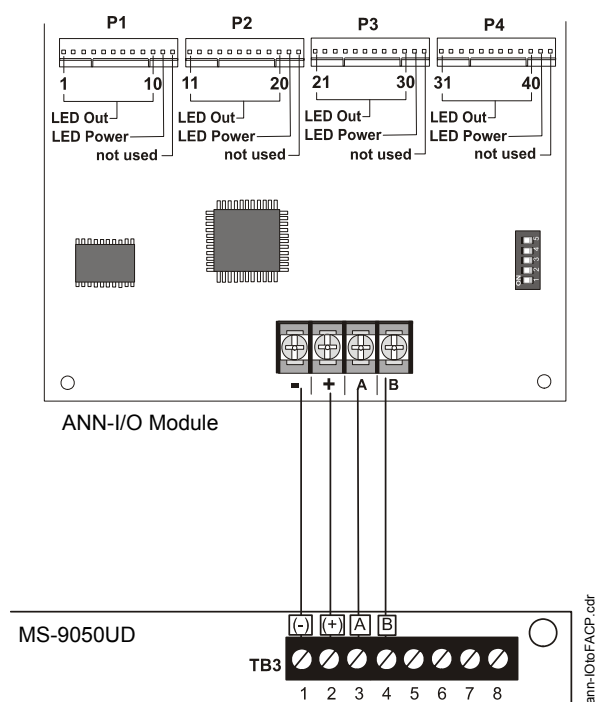
ANN-I/O Connection to FACP

NOTE: *Sample shows MS-9050UD; refer to your panel's FACP Manual for actual connections.*

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This document is not intended to be used for installation purposes.
We try to keep our product information up-to-date and accurate.
We cannot cover all specific applications or anticipate all requirements.
All specifications are subject to change without notice.

Made in the U.S. A.

For more information, contact Fire•Lite Alarms. Phone: (800) 627-3473, FAX: (877) 699-4105.
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