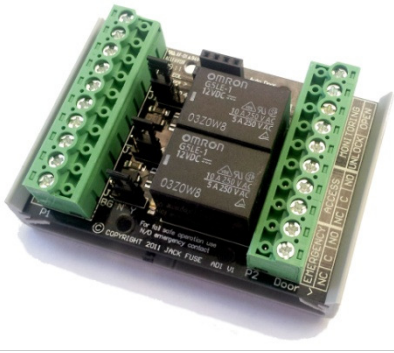
Automatic Door Interface – ADI

Installation Notes



Interface module for connecting automatic doors to access control and fire systems.

1) Mounting
2) Termination
   2.1) Access Control Signal
   2.2) Fire Trip/Emergency Signal
   2.3) Break Glass
   2.4) Alarm Contacts
3) Jumper Settings
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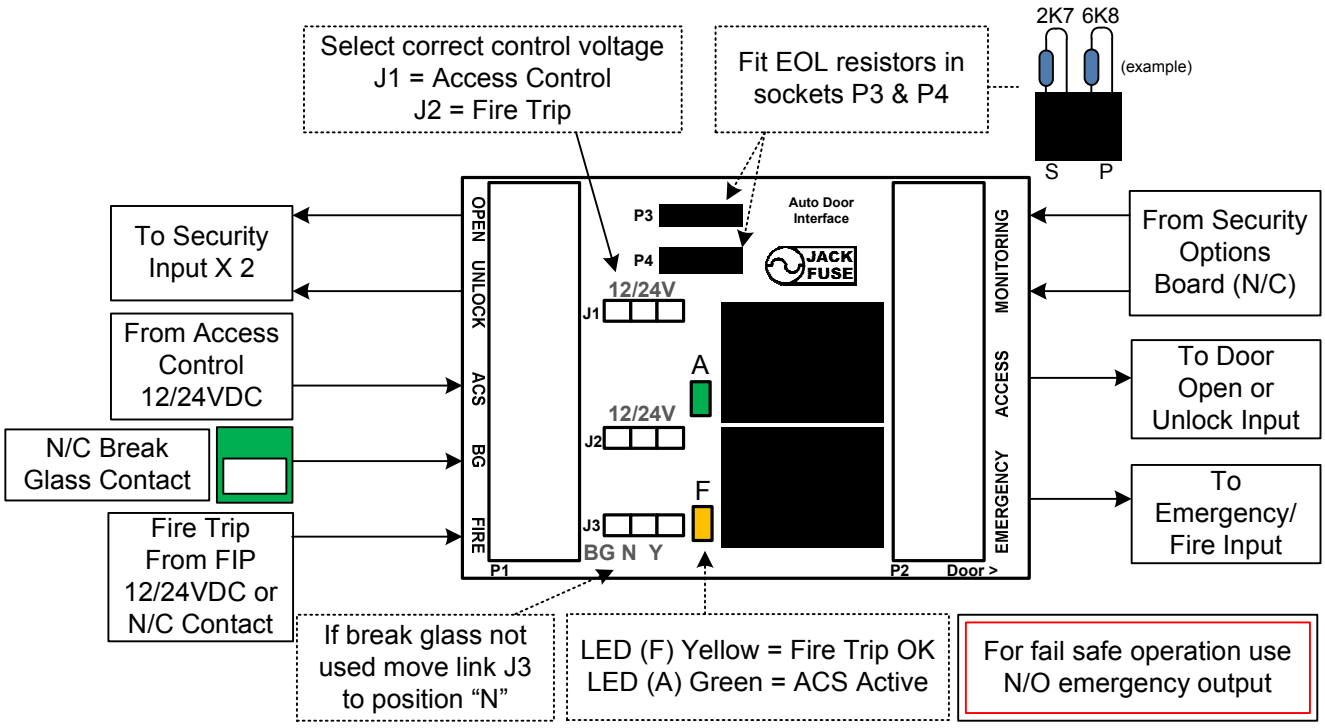
Before powering the ADI you must take the time to read and understand all installation notes.

1) Mounting

The ADI is designed to be mounted in the auto door head adjacent the auto door controller. Affix the supplied mounting track inside the door head and simply clip in the ADI, preferably on a vertical surface in such a position that the LED indicators can be checked easily. Be careful to place the ADI and associated cabling away from moving parts of the auto door.

2) Termination

The most common termination options are illustrated below; other configurations are outlined elsewhere in these notes. For ease of termination and testing the connectors can be removed from the ADI board. Both the ACS and FIRE relays have on board back EMF protection diodes.



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2.1) Access Control Signal

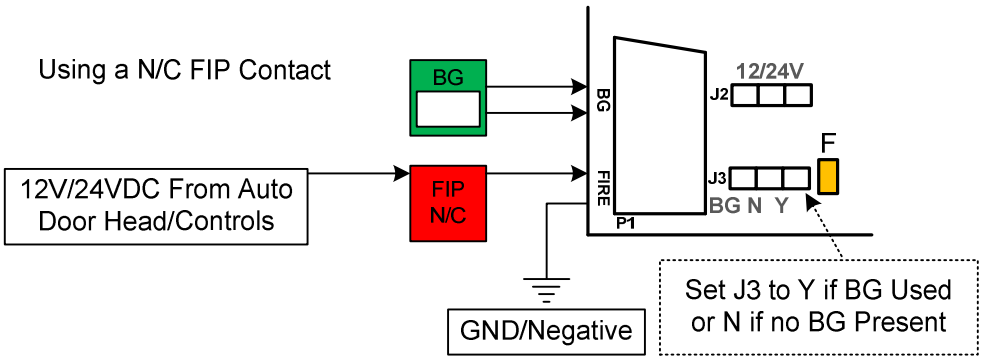
The signal to open or unlock the auto door from the access control panel can be either 12 or 24V DC, power to open, this is the same method used for a fail secure lock and the connection can be made in the same way. For correct operation this connection should not be fire tripped. The link J1 must be set to the voltage used by the access control system. (12 or 24VDC)

The *Access* output from the ADI is wired directly into the open or lock input of the automatic door. This output has N/C and N/O contacts to suit any automatic door.

The green *Access (A)* LED will illuminate when the access signal is active, i.e. when the access system is set to open or unlock the door.

2.2) Fire Trip/Emergency Signal

The fire trip signal can be either 12 or 24V DC (set by link J2) and can come from the FIP (Fire Indicator Panel) or from the access control system via another fire trip. The connection is fail safe and requires voltage present on the input to keep the door locked/closed. A voltage free N/C contact from a FIP or other fire relay can be used in conjunction with voltage from the door head/controller as shown in the illustration below. **NOTE: Remember to set J2 to the correct voltage.**



For fail safe operation the E*mergency* output should be connected to the auto door emergency/fire input via the N/O contact on the ADI. (The contact goes open in the event of an alarm.) This output also has an N/C contact.

The yellow *Fire (F)* LED will illuminate when the fire/emergency signal is in the sealed or non-alarm state. As soon as there is a fire trip situation or the break glass is activated the yellow LED will turn off.

2.3) Break Glass

If a break glass is required connect the N/C contact from the break glass directly to the BG input on the ADI. Make sure that link J3 is set to position "Y." The break glass connection cannot be used if there is no fire trip signal. Activating the break glass will turn off the yellow fire trip LED.

2.4) Alarm Contacts, Open/Unlock Monitoring

The EOL resistors for the two monitoring connections can be fitted on board by plugging resistors in to sockets P3 and P4 (S = Series P = Parallel.) Trim leads approximately 6-8mm bellow resistor body and shape to fit socket. (See termination illustration above)

Connect the monitoring (door) side to either the auto door options board (N/C outputs) or to other any other alarm input such as a reed switch. Connect the Open/Unlock side to cables from the security/access control panels.

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3) Jumper Settings

Warning: It is important to correctly set and check the jumper/link settings before use of the ADI. Incorrect settings may cause undesirable operation or damage.

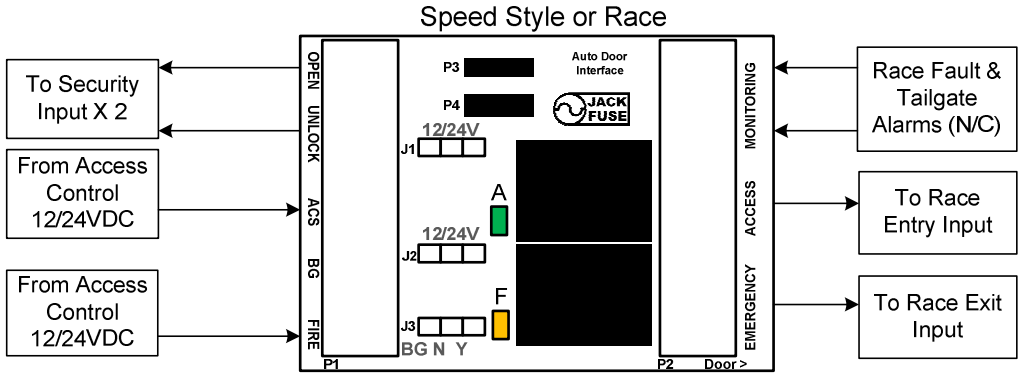
Jumper/Link	Position	Description
J1	12	12VDC operation of the *Access* relay
	24	24VDC operation of the *Access* relay
J2	12	12VDC operation of the *Emergency* relay
	24	24VDC operation of the *Emergency* relay
J3	N	Break glass unit not installed
	Y	N/C break glass unit installed

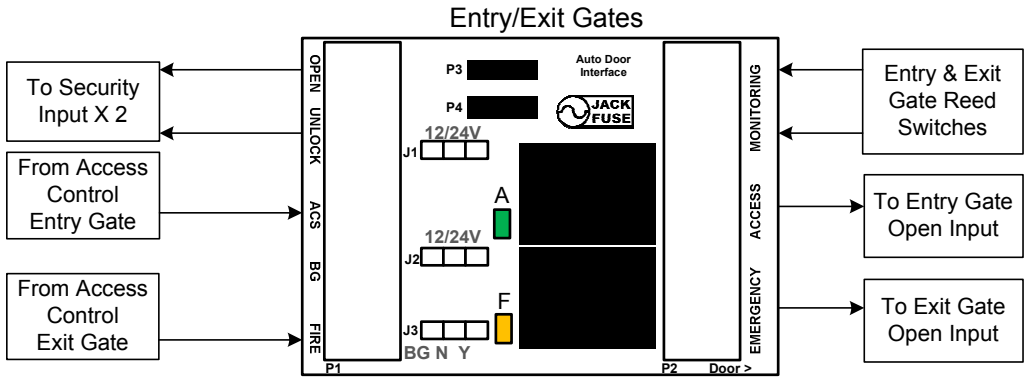
4) Technical Data

ACS & Fire input voltage	12V or 24V DC
Max current via Access and Emergency contacts	5A
Max conductor size terminals P1 & P2	1.5mm^2 or 14 AWG
Mounting	Screw on Snap Track
Dimensions (with terminals & mounting track)	55 L X 80 W X 33 H (mm)

5) Alternative Configurations

The ADI can be used for interface to almost any type of automatic access control device including gates, speed styles, booms and shutters. The ACS and Emergency inputs can also be used as standard interface relays. Some alternative configurations are illustrated below.





For complete install notes, data sheets and technical support please visit

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