

# Installation Manual

## **ENFORCER**<sup>®</sup>

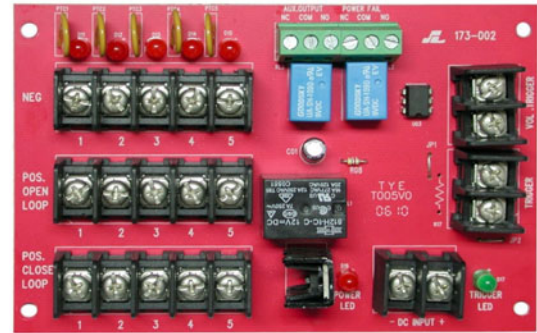
### **PD-5PAQ**



## Access Control Power Distribution Board

### Features:

- Five individually PTC-fused outputs
- Each output will operate in both fail-safe and fail secure modes
- Output fuses rated 1.1 Amps
- Individual LED status indicator for each output, power input, and trigger.
- For 12VDC or 24VDC operation.
- Power failure supervision relay (3 Amps @ 24VDC)
- Auxiliary supervision relay (3 Amps @ 24VDC)
- Equipped with dry and wet trigger inputs.
- Dimensions - 3<sup>9</sup>/<sub>16</sub>" x 5<sup>5</sup>/<sub>16</sub>" x 1<sup>1</sup>/<sub>16</sub>" (90 x 135 x 27 mm)



Compatible with the following ENFORCER power supplies  
**EAP-5D1MQ** – 5 Amp Access Control Power Supply/Charger Module  
**EAP-5D1Q** – 5 Amp Access Control Power Supply with metal enclosure

### What it is:

This 5-output power distribution board centralizes the power sources for access control electronic locking devices, such as electromagnetic locks, sheer locks, electric door strikes, deadbolt locks, and so on. It provides a separate fuse for each output so that problems with one device may be isolated from the other devices. Each output operates in both fail-safe and fail-secure modes. The board includes wet and dry trigger inputs for emergency door activation such as for releasing emergency exit doors. It is also equipped with power failure supervision relays and auxiliary supervision relays.

### Installation:

1. Mount the PC board in the desired location or enclosure. It must be easily accessible for future servicing.
2. Connect the output wires of the 12VDC or 24VDC power supply to the PC board's terminals marked "DC INPUT" as required, see Fig.8.  
**NOTE:** Correct polarity must be observed.
3. Connect the power input wires of the access control devices or accessories to the PC board, see Fig.8. Observe correct polarity. For fail-secure devices, connect positive to terminals marked "POS. OPEN LOOP" and negative to terminals marked "NEG." For fail-safe devices, connect positive to terminals marked "POS. CLOSE LOOP" and negative to terminals marked "NEG."  
**NOTE:** For best results and to minimize voltage drop, these wires should be a minimum of 18-gauge in thickness.
4. Connect a visual or audio indicator device (such as siren or strobe light) to the "POWER FAIL" supervision relay and "Auxiliary output" relay if needed, see Fig.8. Use between 22AWG to 18AWG wire size.
5. Trigger the power distribution board either from a wet and or dry contact switch from the control station by following the connection diagrams shown on Fig. 2~7. See Table 1 on how trigger input function works.

**IMPORTANT NOTE:** If the "TRIGGER" terminal block function will not be used, then a 2.2KΩ resistor must always be connected to the "TRIGGER" terminal block as shown in Fig. 1.

Fig. 1 – Wiring diagram when "Trigger" terminal will not going to be used.

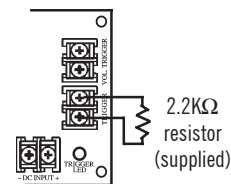


Fig. 2 – Momentary trigger wiring diagram for wet and / or dry N.C. switch.

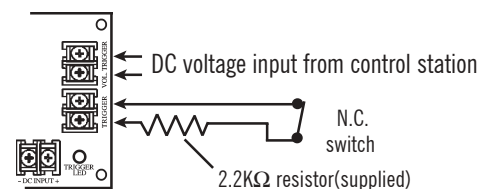


Fig. 3 – Momentary trigger wiring diagram for wet and / or dry N.O. switch.

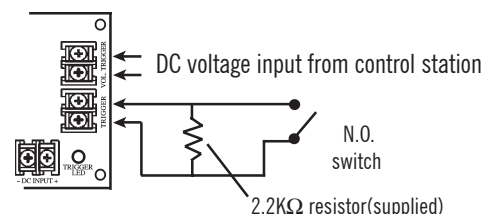


Fig. 4 – Latch trigger wiring diagram for wet and / or dry N.O. switch

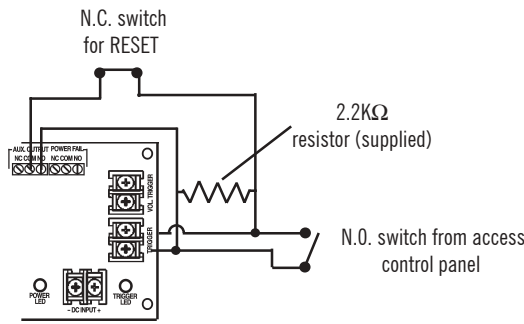


Fig. 5 – Latch trigger wiring diagram for wet and / or dry N.C. switch

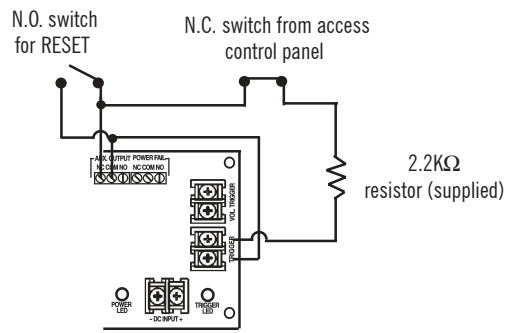


Fig. 6 – Multiple PD-5PAQ momentary trigger wiring diagram for wet and / or dry N.O. switch.

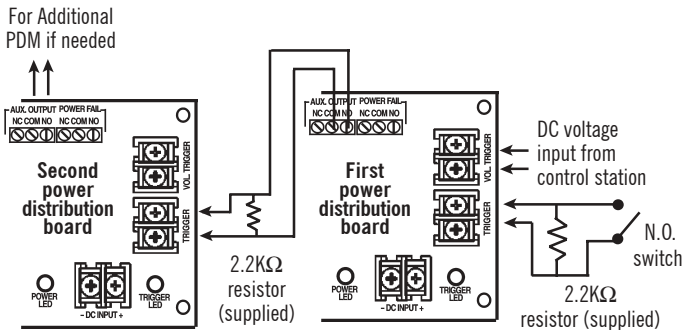


Fig. 7 – Multiple PD-5PAQ momentary trigger wiring diagram for wet and / or dry N.C. switch.

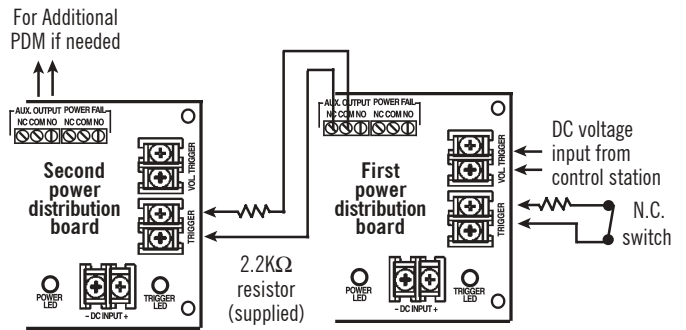


Fig. 8 – Wiring diagram.

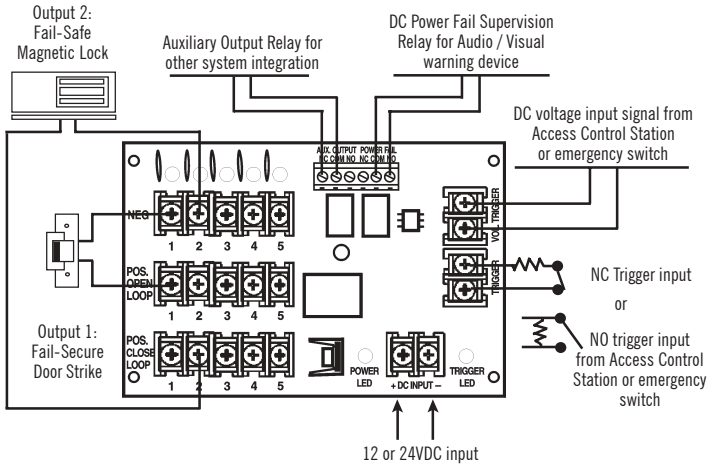


Table 1 – Terminal Function

Terminal Legend	Functions
TRIGGER	Used to connect N.O. or N.C. input trigger signal (supervised 2.2KΩ resistor) from access control panel. A short or open circuit will transfer power from "POS. CLOSE LOOP" to "POS. OPEN LOOP".
VOL. TRIGGER	Used to connect wet (5-30VDC) input trigger signal from access control panel. Applying Voltage will transfer power from "POS. CLOSE LOOP" to "POS. OPEN LOOP".
POWER FAIL	Used to notify loss of DC power. To connect a visual or audio warning device (such as siren or strobe light). Dry contact relay rated at 3 Amps @ 24VDC. If VDC input to the PDM is interrupted, the connected warning device will be activated.
AUX OUTPUT	Used to activate other auxiliary device when trigger signal is received from the "TRIGGER" or "VOL TRIGGER" terminals.
- DC INPUT +	12 or 24 VDC input from main board.

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