

**OVERVIEW**

Power distribution options - selecting what's best for your application.

**FLEXPOWER** offers four levels of distribution board sophistication, from basic fused outputs, up through fully network managed with individual output control.

Choosing the correct distribution option for your application allows you to simplify your system, reduce installation labor and time, and offer the most flexibility to you and your customer.

This application note covers the differences between the various LifeSafety Power distribution modules in the **FLEXPOWER** system and when each should be used.



**LEVEL 1 - BASIC DISTRIBUTION** ■

This level consists of the basic distribution boards that convert one or two single power supply outputs into eight (8) individually protected outputs using either fuses or PTCs for Class II, power limiting.

**DC Distribution**

D8 - 8 fused outputs at 3A each

D8P - 8 class II power limited outputs at 2.5A each

The D8 provides 8 outputs for DC voltage applications. There are no control functions provided by the D8 board, however in single voltage applications, the D8 may be used to distribute the DC2 output of an FPO power supply for basic FAI functions. Each output may then be selected for constant or fire alarm controlled. All FAI controlled outputs will either drop on fire alarm, or power up on fire alarm.

See App note AN17 and AN18 for more information.

**APPLICATIONS**

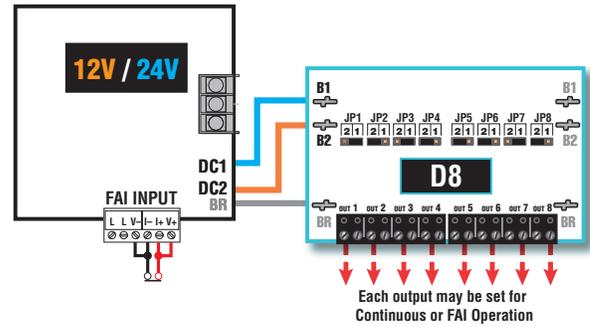
**Single Voltage**

- ◆ Access Control Panel Power
- ◆ REX Devices
- ◆ Readers
- ◆ DC Cameras
- ◆ Locks w/FAI (when using the Access Panel's control relay)
- ◆ Other FAI or non-FAI devices

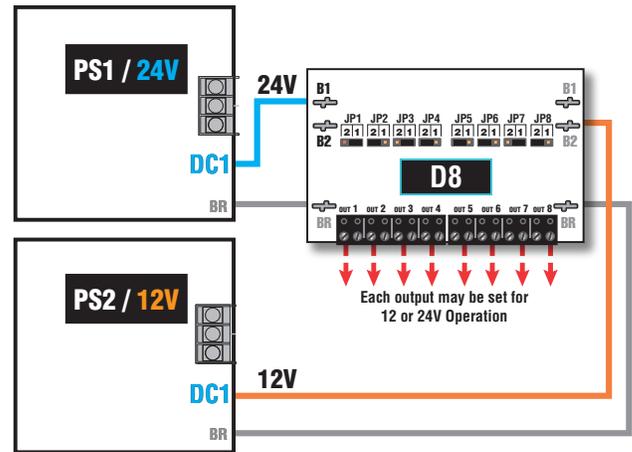
**Dual Voltage**

- ◆ Access Control Panel Power
- ◆ REX Devices
- ◆ Readers
- ◆ DC Cameras
- ◆ Locks without FAI (when using the Access Panel's control relay)
- ◆ Other non-FAI devices

**Single Voltage DC Distribution**



**Dual Voltage DC Distribution**



**AC Distribution**

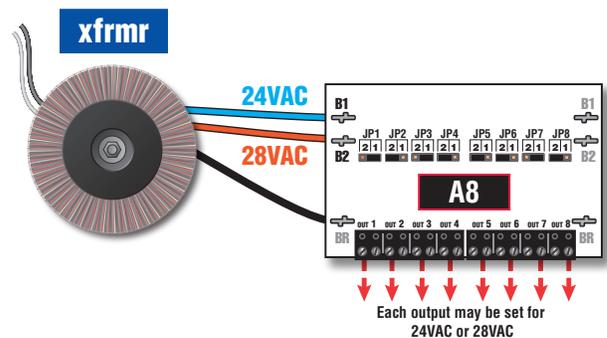
A8 - 8 fused outputs at 3A each

A8P - 8 class II power limited outputs at 2.5A each

The A8 provides 8 outputs for AC voltage applications. There are no control functions on the A8 board.

**APPLICATIONS**

- ◆ AC Cameras
- ◆ Single port AC PoE Midspan
- ◆ Other AC powered devices





**LEVEL 3 - LOCK CONTROL DISTRIBUTION**  

This level consists of relay control output distribution. Each input and output can be individually set for failsafe or fail-secure with or without FAI control. Outputs may also be set for a constant output or even a dry contact output. Each output may also be individually set for either voltage in dual voltage applications. Note: Dry contact mode may only be used after removing lock transient protection diodes (see manual).

C4 - 4 fused outputs at 3A each

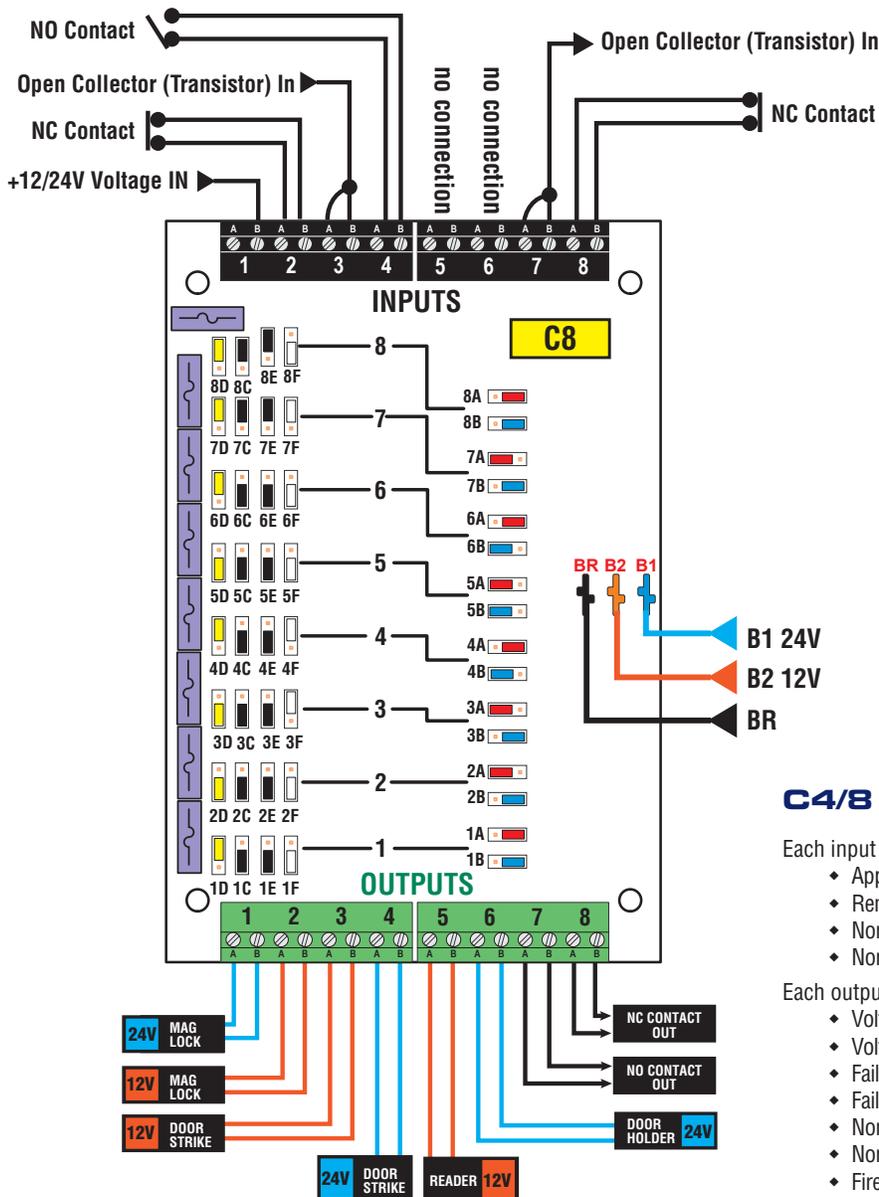
C4P - 4 class II power limited outputs at 2.5A each

C8 - 8 fused outputs at 3A each

C8P - 8 class II power limited outputs at 2.5A each

**APPLICATIONS**

- ◆ Mag Locks
- ◆ Door Strikes
- ◆ Other FAI or non-FAI devices



**JUMPER PROGRAMMING**

Reference Jumper Color

A	RED	FAI
B	BLUE	INVERT input
C&E	BLACK	WET/DRY output
D	YELLOW	V SELECT
F	WHITE	INVERT output

**C4/8 Module Programming**

- Each input may be programmed to respond to:
- ◆ Application of voltage between 9 and 33VDC
  - ◆ Removal of voltage between 9 and 33VDC
  - ◆ Normally open dry contact transition
  - ◆ Normally closed dry contact transition

- Each output may be programmed for the following modes:
- ◆ Voltage output from power supply one
  - ◆ Voltage output from power supply two
  - ◆ Fail-safe
  - ◆ Fail-secure
  - ◆ Normally open dry contact
  - ◆ Normally closed dry contact
  - ◆ Fire alarm for egress lock control

### LEVEL 4 - FULLY MANAGED OUTPUTS

This level consists of managed relay control output distribution. The M8 provides the same functionality as the C8, but adds full network monitoring, configuration, and management. Each output can be monitored for voltage and current out of range and cycle count. Remote disabling of any or all outputs is possible for resetting of frozen IP Cameras or EDGE devices. M8 must be used with the NetLink NL4 or NLX communication module.

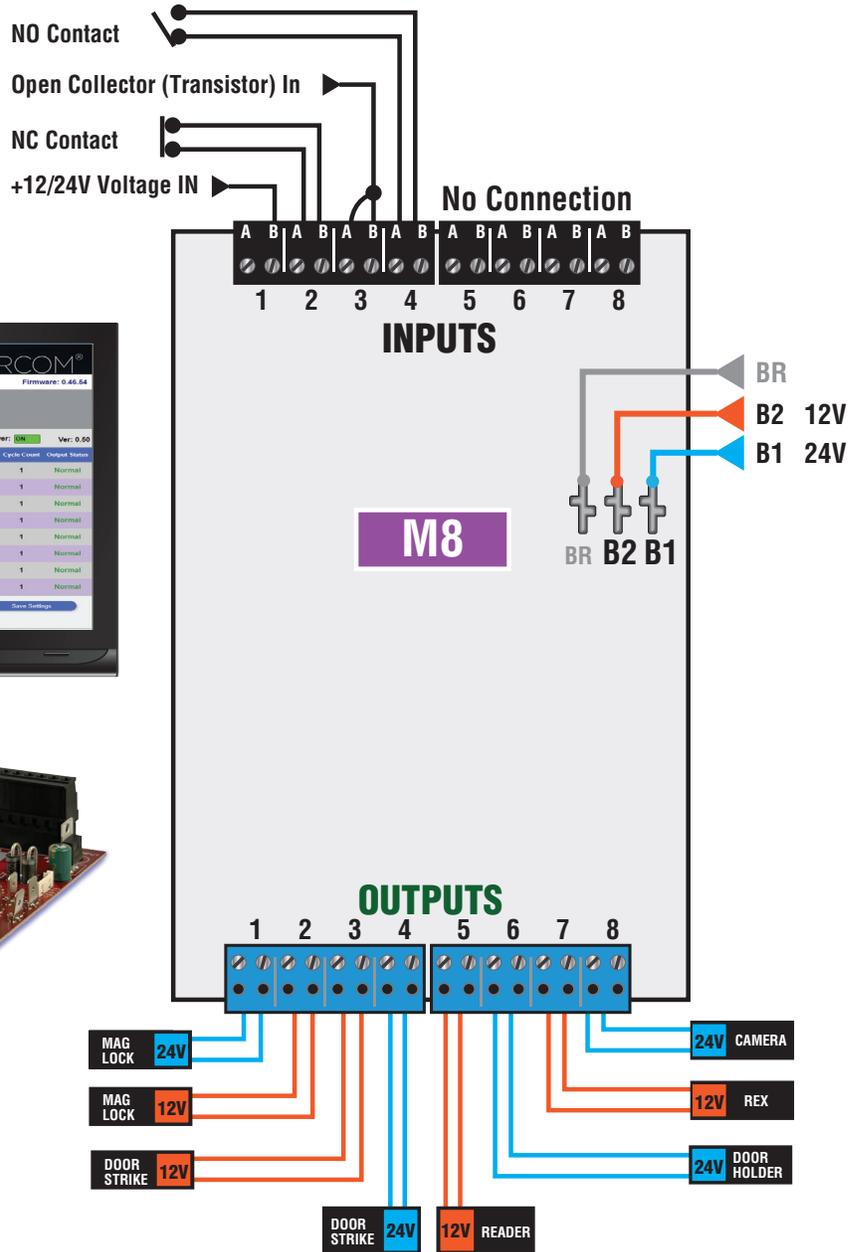
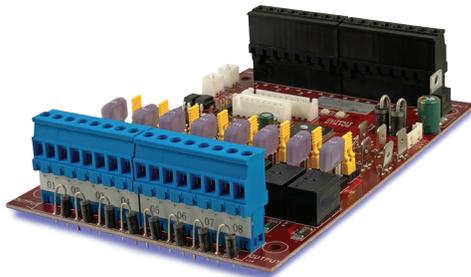
M8 - 8 fused outputs at 3A each

M8P - 8 class II power limited outputs at 2.5A each

### APPLICATIONS

Where remote monitoring and management are desired

- ◆ Mag Locks
- ◆ Door Strikes
- ◆ DC Cameras (allows remote resetting)
- ◆ Other FAI or non-FAI devices



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