

OVERVIEW

A common application in the security industry is providing both 12 and 24VDC within a single system.

Traditionally two independent power supplies and dedicated voltage auxiliary power modules have been used for this purpose, which although a working solution, is not economical in cost, space, or labor.

The FlexPower system utilizes an innovative dual buss structure that runs through the D8 auxiliary power module to make both voltages available on a per zone, user selectable basis. (Fig. 1)

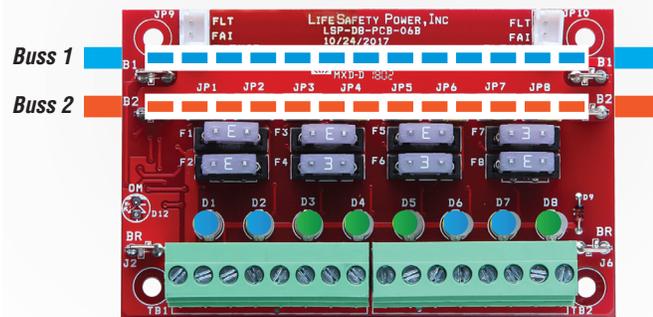


Figure 1



D8 ZONE PROGRAMMING OPTIONS

By using a simple jumper arrangement as an SPDT switch to connect an FPO power supply output to either buss, individual D8 outputs may be selected to operate from either of the two system power supplies. (Fig. 2)

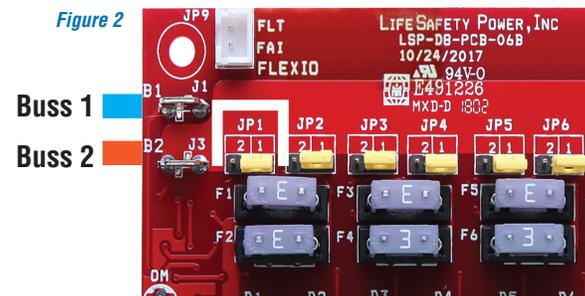
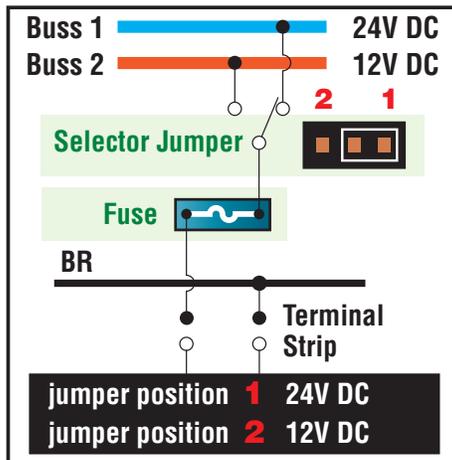


Figure 2



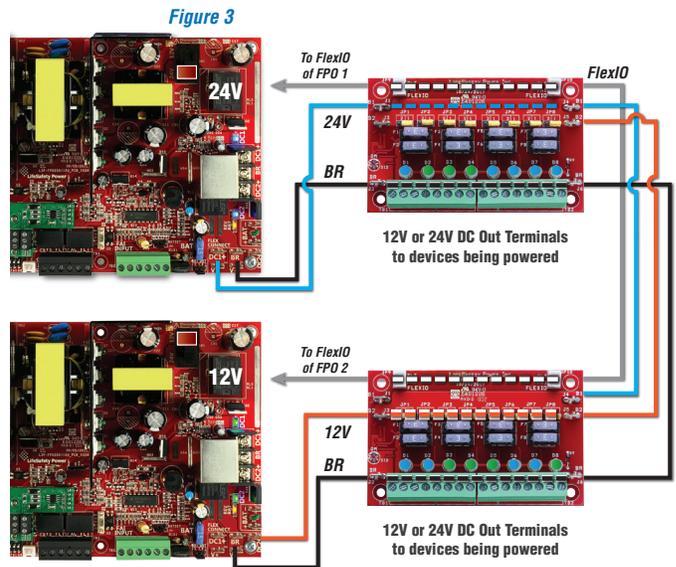
SYSTEM BENEFITS

- 12 and 24V DC locking devices may be mixed on the same power distribution or lock control module
- 12 and 24 volt auxiliary power outputs may be mixed on the same power distribution module
- 12V REX devices may be paired up with their respective 24V locks for system clarity
- Multiple D8 auxiliary power modules can be daisy-chained together to increase the number of outputs in increments of 8

APPLICATION IN A DUAL VOLTAGE SYSTEM

In this example, the 24V FPO power supply is connected to Buss 1 and the 12V FPO power supply is connected to Buss 2.

In this dual voltage system, the D8 module allows each individual output to be selected for either 12 or 24VDC. (Fig. 3)



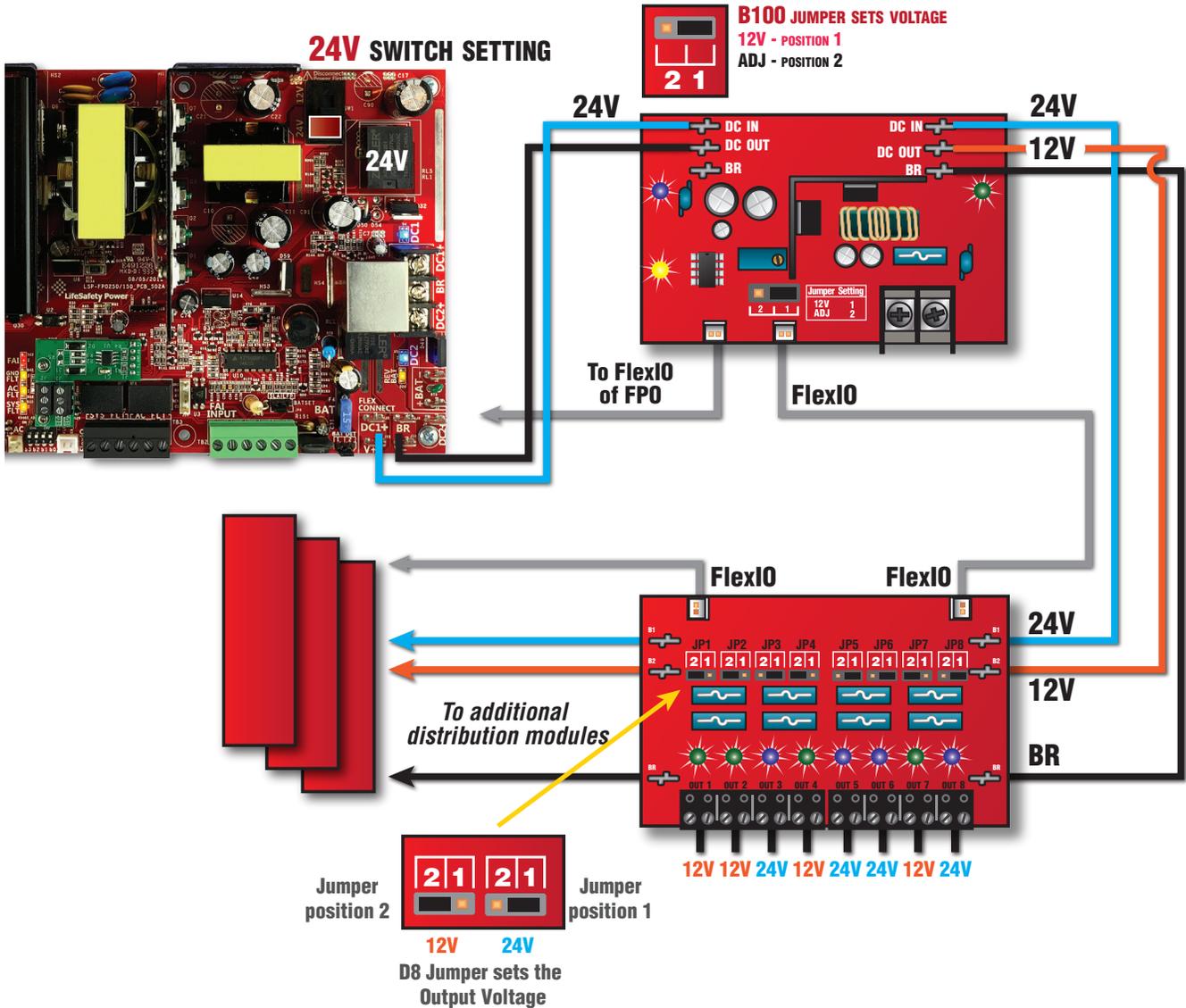
Note:

This example shows 24VDC on Buss 1 and 12V on Buss 2. The D8 can be used with any combination of DC voltages from FPO or B100 power supplies. Both supplies may also be set for the same voltage for increased power capability at a single voltage.

For D8 programming in single voltage systems see Application Note AN 17.

TYPICAL DUAL VOLTAGE (12V & 24V), 8 ZONES MIXED AUX POWER USING B100

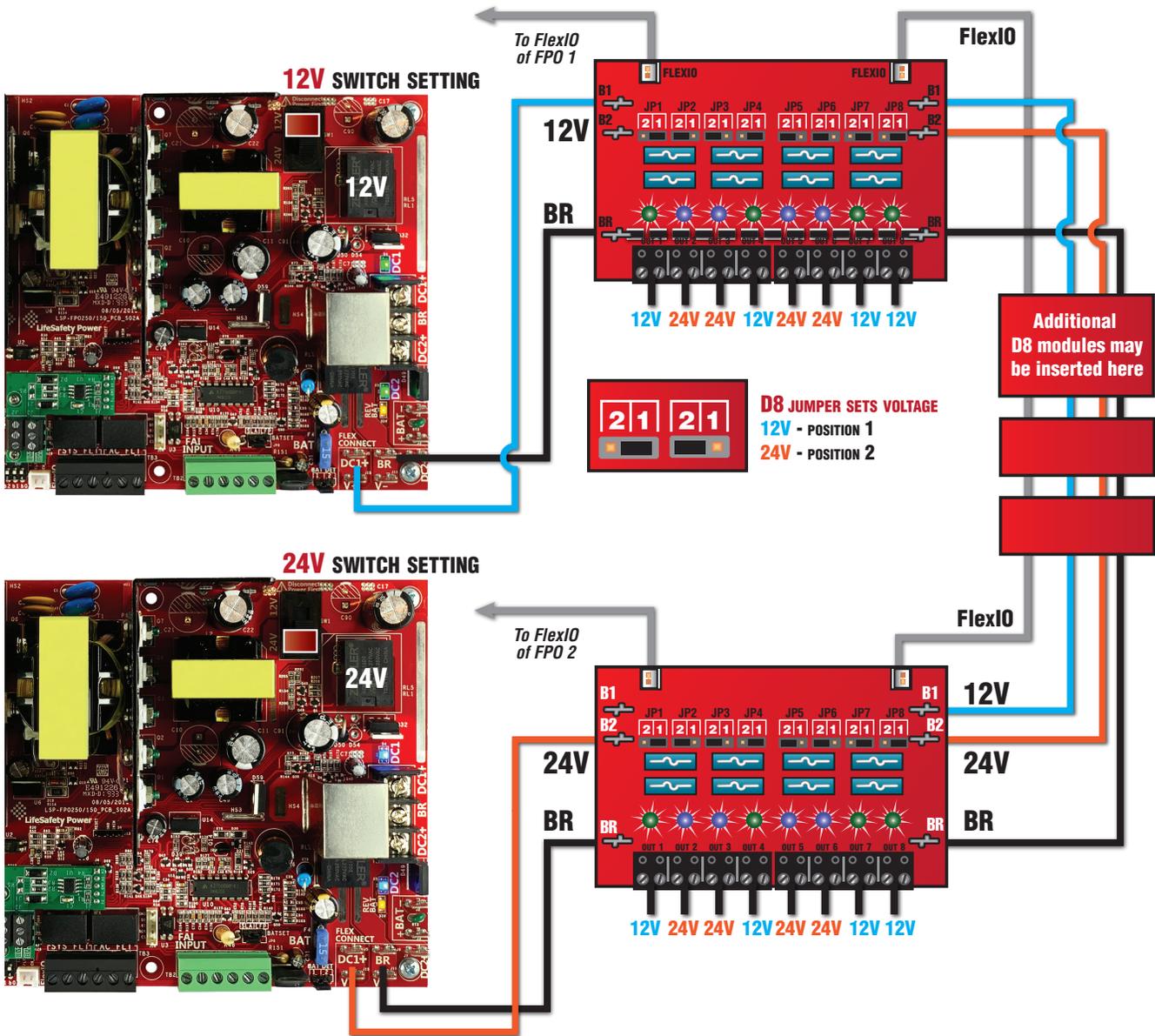
Single 24V battery set on FPO backs up both voltages



Model Number for Application Example:

FPOxxx-B100D8Ey (xxx = FPO power level i.e. 150 for FPO150 | y = Enclosure Type)

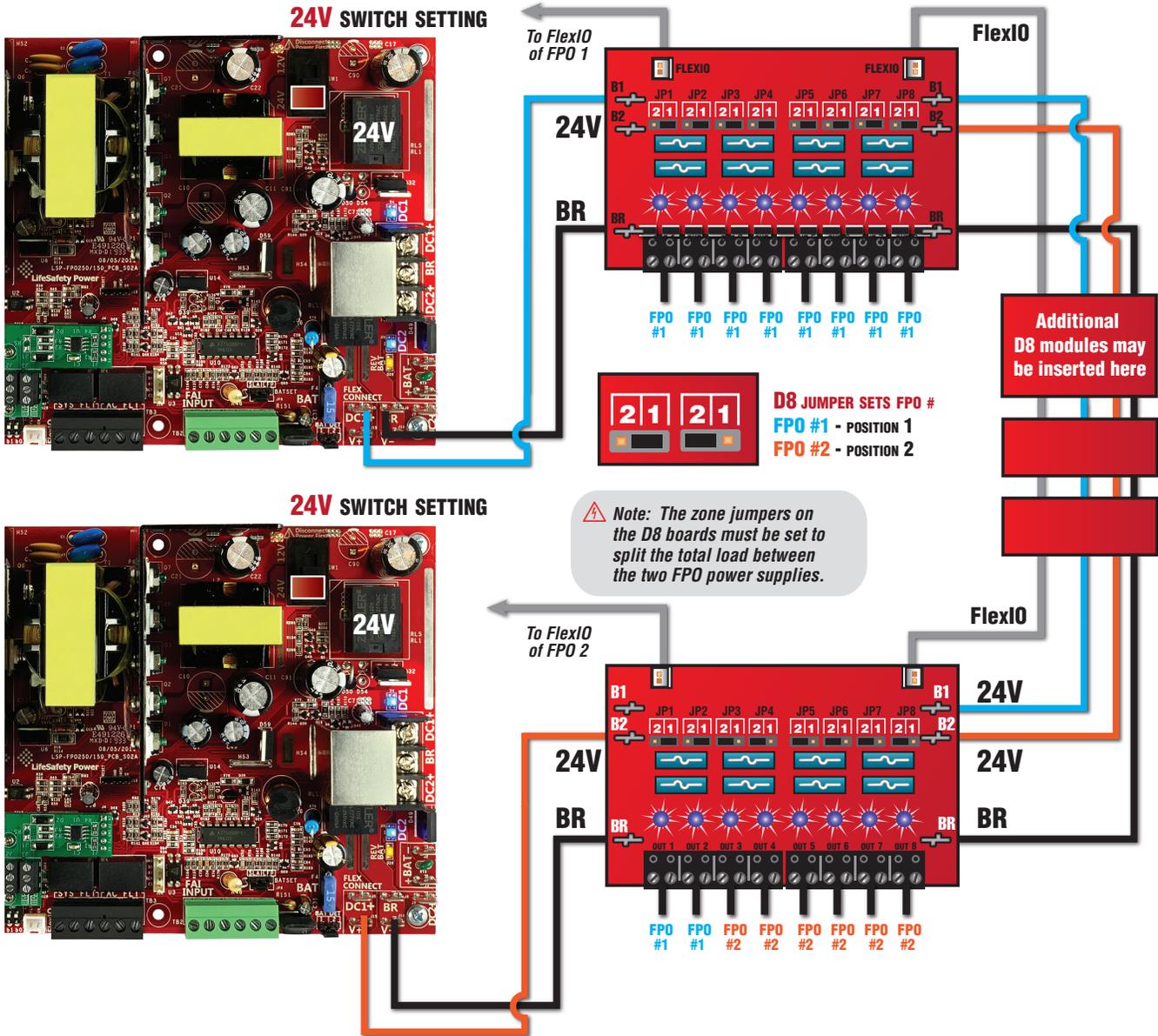
TYPICAL DUAL VOLTAGE (12V & 24V), 16 ZONES MIXED AUX POWER



Model Number for Application Example:
FPOxxx/xxx-2D8Ey (xxx = FPO power level i.e. 150 for FPO150 | y = Enclosure Type)

TYPICAL DUAL SUPPLY, SINGLE VOLTAGE, 16 ZONES AUX POWER - 24V @ 20A

Both FPO250's may also be set for 12V to output 12V @ 40A



Model Number for Application Example:
 FPO250/250-2D8Ey (y = Enclosure Type)

ACCESSORY BOARD ORDERING

The specific LifeSafety Power part number is:

Model Number	Description
B100-Boxed	DC to DC converter provides +12VDC and adjustable voltage of 5 to 18VDC
C4-Boxed	4 input, 4 output lock controller, fuse protected
C4P-Boxed	4 input, 4 output lock controller, power limited
C8-Boxed	8 input, 8 output lock controller, fuse protected
C8P-Boxed	8 input, 8 output lock controller, power limited
D8-Boxed	8 output DC power distribution module, fuse protected
D8P-Boxed	8 output DC power distribution module, power limited
F8-Boxed	8 output programmable power distribution module, fuse protected
F8P-Boxed	8 output programmable power distribution module, power limited
RB2-Boxed	2A Relay, 12VDC or 24VDC input range, DP/DT
RB5-Boxed	5A Relay, 12VDC or 24VDC input range, DP/DT
RB8-Boxed	8A Relay, 12VDC or 24VDC input range, DP/DT

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