OVERVIEW

The FPO power supply line allows the user to build a modular power system with one or more voltages and various voltage distribution options. This application note will give the user a thorough understanding of using the FPO power supply boards in basic single, dual, and multi-voltage configurations.
SINGLE VOLTAGE COMMON POWER SUPPLY

Wiring connections to use an FPO75, 150, or 250 as a power supply with two outputs.
DC1 is a continuous output, DC2 is switched in response to the FAI input.
DC2+ NO and DC2+ NC program the DC2 output to energize or deenergize on FAI activation.

Observe battery polarity or damage may result.
DUAL DUAL VOLTAGE COMMON POWER SUPPLY USING TWO FPOS

Wiring connections to use a combination of two FPO75, 150, or 250 boards as a dual power supply, each with two outputs. DC1 is a continuous output, DC2 is switched in response to the FAI input. Moving the DC2 fuse between DC2+ NO and DC2+ NC programs the DC2 output to energize or de-energize on FAI activation.

The FAI input may be connected to a switched voltage or a relay contact to switch DC2 ON or OFF. See AN27 for more information on using the FAI Input.

This system is typical of a 12 and 24V dual voltage system.
MULTI-VOLTAGE COMMON POWER SUPPLY USING B100S

Wiring connections to use an FP075, 150 or 250 and two B100 DC-DC converters as a triple voltage power supply.
DC2 may be switched in response to the FAI input.
F2 and F3 program the DC2 output to energize or deenergize on FAI activation.

Add B100 boards as necessary for additional voltages

Set Output to 24V

Set JP3 to position 2 and adjust voltage

Set JP3 to position 1 for fixed 12VDC

24V Continuous

24V Switched
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