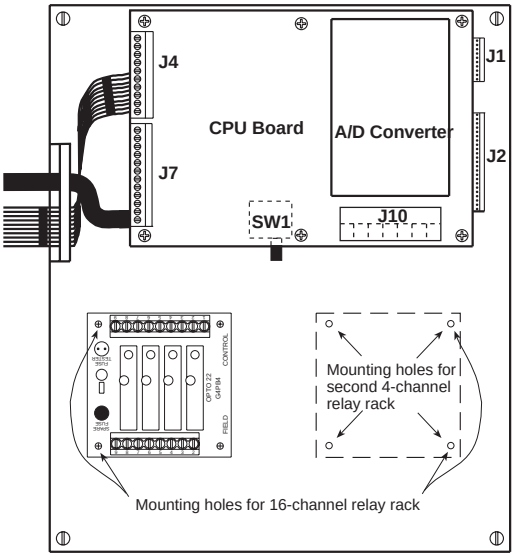
4-Channel and 16-Channel Relay Boards for Setpoint Outputs

Relay boards utilize the 5 VDC setpoint outputs to control external equipment operating with AC or DC voltages. Individually-fused input and output relays are designed to plug into either the 4-channel board or the 16-channel board. Relays have various amp ratings; output relays are typically 3 amps while dry-contact output relays are normally 0.5 amp. Both input and output relays are available in either AC or DC voltage configuration. Each board has a fuse tester for troubleshooting, and one spare fuse.

A single 4-channel board can be mounted in any of the IQplus 810 models. On the SS and HE models, the board is mounted in pre-drilled holes in the panel holding the main CPU board. On the Desktop model, standoffs are furnished to mount a panel for the relay board on the main CPU board.

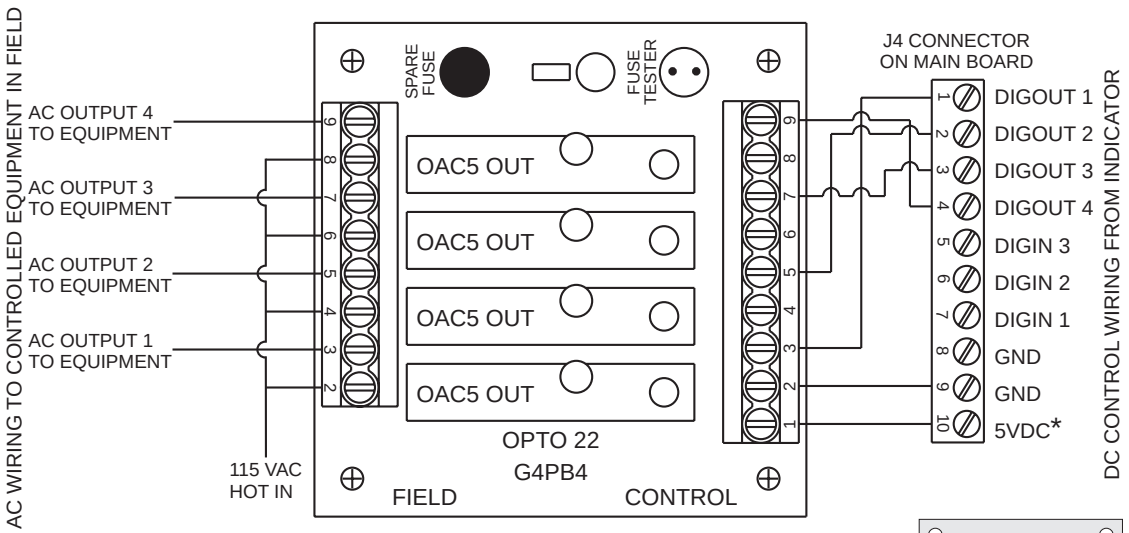
For an 8-channel system, two 4-channel boards can be mounted side by side in either the SS or HE models as shown at right. The Desktop model will not accommodate a second 4-channel board.



The 16-channel board mounts in the same outer holes used for the 4-channel boards in the SS and HE models. The Desktop model will not accommodate the 16-channel board.

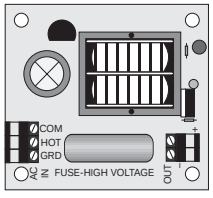
Wiring connections will vary according to the application. Some sample diagrams are shown below and on the next page to illustrate the general principles. Each relay board must be energized with a +5VDC supply to #1 of the CONTROL terminal strip. Boards manufactured after August, 1996 (rev. 2.0 and higher) can supply that power from #10 of the J4 main board terminal strip. Boards manufactured prior to that date require a separate power supply as noted below.

Typical Wiring to Provide 4 AC Outputs from J4 on Main Board

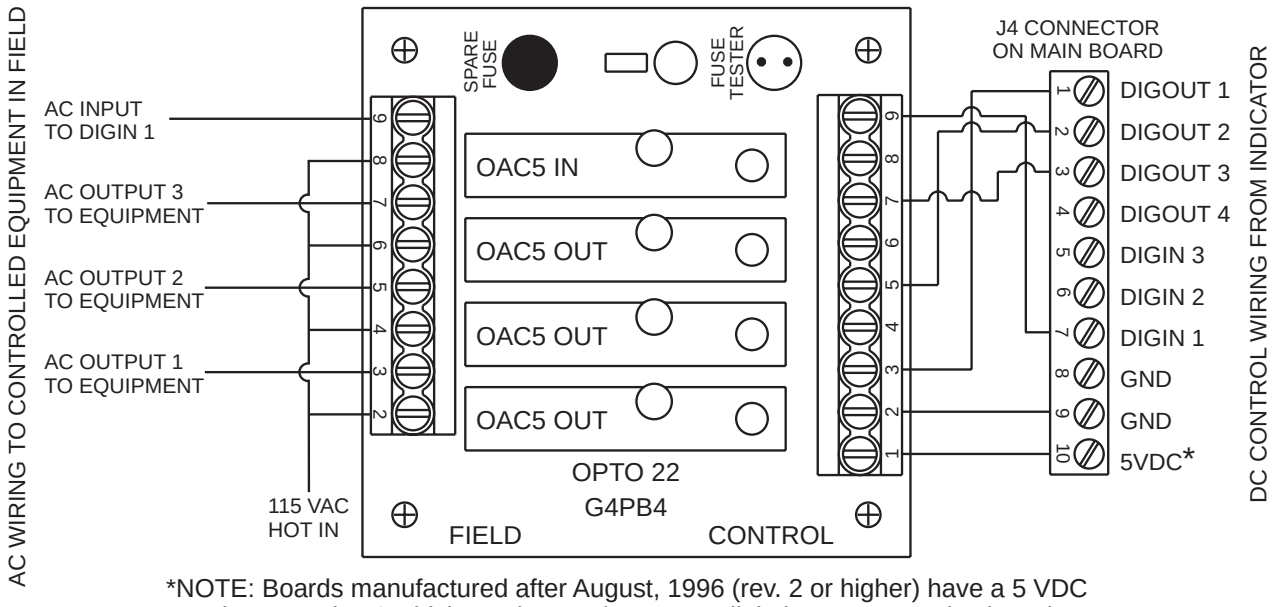


*NOTE: Boards manufactured prior to August, 1996 may not have 5 VDC power supplied to J4, pin 10. To provide 5 VDC power for digital output operation with those boards, use external power supply board (part # 16418) as shown at right.

Boards manufactured after that date have a 5 VDC supply at J4, pin 10 which can be used to power digital outputs on relay boards.

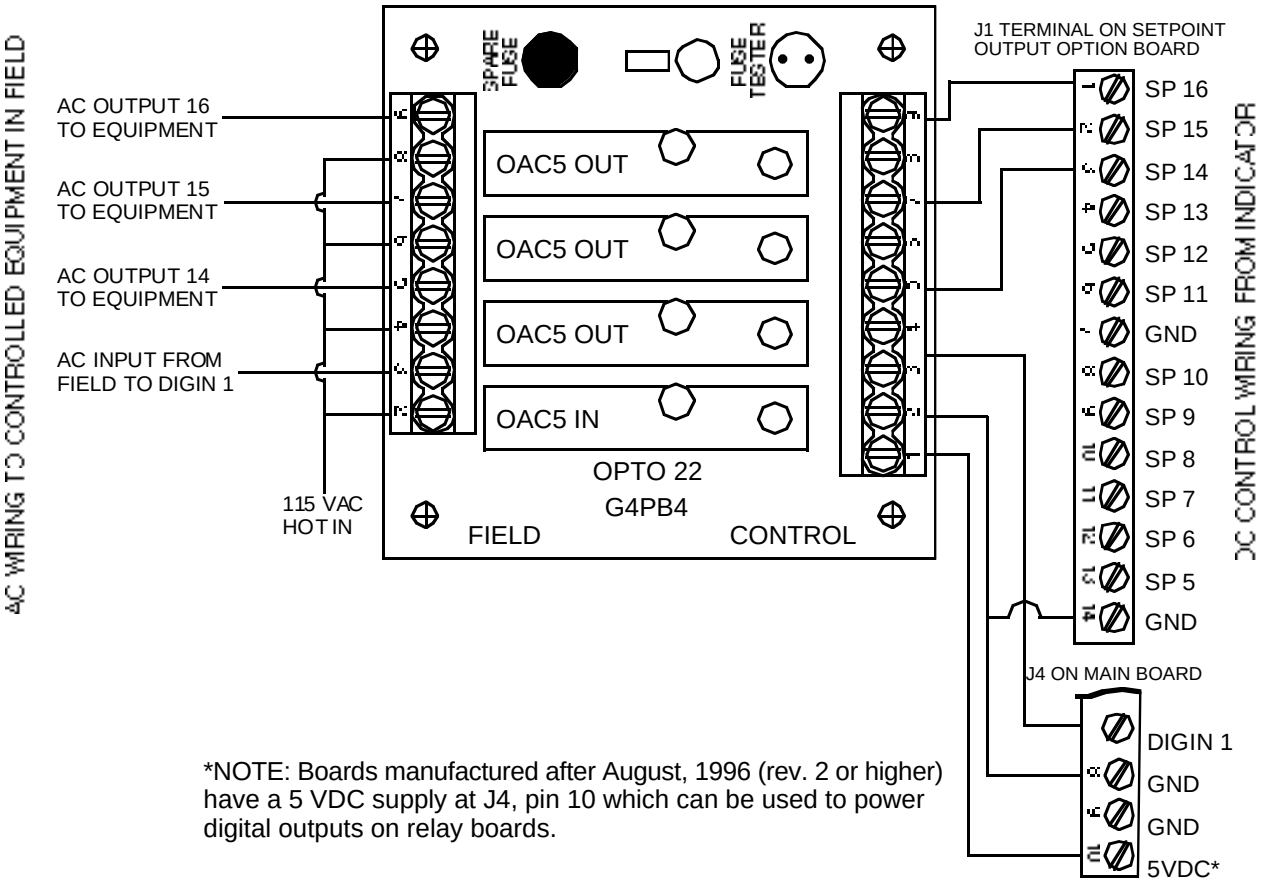


Typical Wiring for 3 AC Outputs, 1 AC Input from J4 0n Main Board



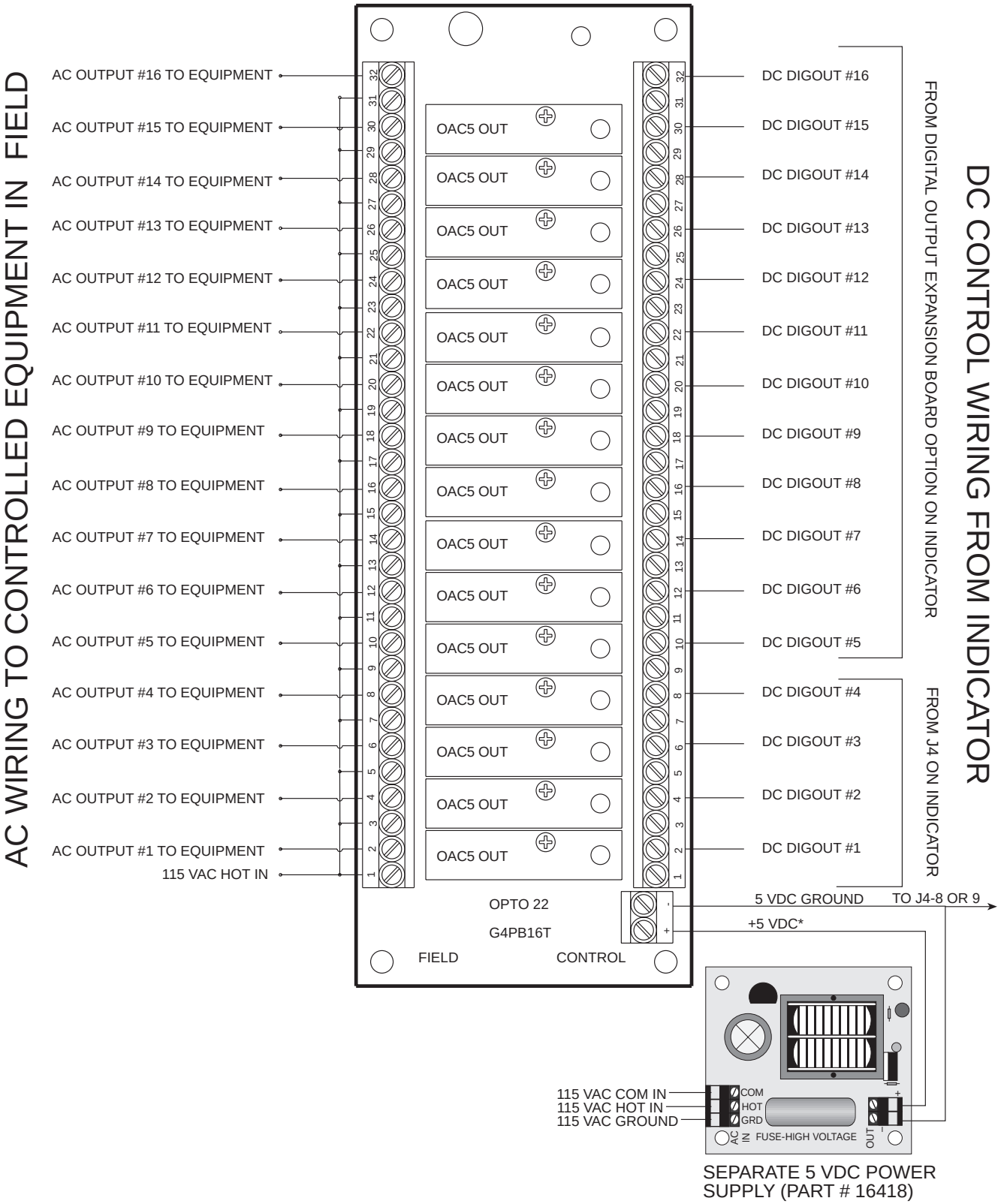
*NOTE: Boards manufactured after August, 1996 (rev. 2 or higher) have a 5 VDC supply at J4, pin 10 which can be used to power digital outputs on relay boards.

Typical Wiring for 1 AC Input from J4 on Main Board, and 3 AC Outputs from J1 on Setpoint Output Expander Board



*NOTE: Boards manufactured after August, 1996 (rev. 2 or higher) have a 5 VDC supply at J4, pin 10 which can be used to power digital outputs on relay boards.

Typical Wiring for 16 AC Outputs (4 from Main Board, 12 from Setpoint Output Expander Board)



*When using a main CPU board manufactured after August, 1996 (rev. 2 or higher), +5VDC power can be provided to the relay board from J4-10 on the main board. Boards manufactured prior to that date must use the separate 5 VDC power supply to energize the relay board. In either case, run a 5 VDC ground wire to J4-8 or J4-9.