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5000817 CUSTOM 12 VDC APX 7500 RELAY
PRODUCT SUPPLEMENT (SDA-009)

December 2012

Introduction:

The 5000817 custom APX 7500 Relay provides the contact closure function as shown in the attached customer supplied drawing. It uses one contact from one of the non-latching relays to latch the relays until power is lost or the normally closed RESET push-button is pressed. The relay and control contacts are made available to the user via a screw type terminal strip. When power is first applied, with no signal present on the VIP activate signal, the relays are in the non-energized state. When the momentary VIP activate signal goes active (connected to ground), the relays are energized. The relays are held in the "energized" state by the +12 volt supply. When the RESET push-button is pressed, it opens the connection to ground, which resets the relays to the non-energized state.

Terminal Strip Wire Configuration:

Terminal	Signal	Notes
1	Power Relay Common	See Power Relay Contact Ratings
2	Power Relay Normally Open Contact	
3	No Connection	
4	Signal Relay Common 1	See Signal Relay Contact Ratings
5	Signal Relay Common 2	
6	Signal Relay Normally Open Contact 1	
7	Signal Relay Normally Open Contact 2	
8	External Jumper/Switch Contact 1	Connect GROUND to position 8 if not using external jumper/switch.
9	External Jumper/Switch Contact 2	Internally connected to position 10
10	GROUND	Internally connected to position 9
11	VIP Activate Signal Input	Momentary connection to ground to set relays to the energized state.
12	+12 Volt DC Supply Input	Typical load 179 ohm when energized.
Terminal Strip Wire Range: 12 to 22 AWG		
Terminal Strip position 1 is marked with a label on the PC board. Position 1 and 2 can also be identified by the large 14 AWG wire used for the Power Relay Connections.		

Power Relay Contact Ratings:
Resistive Load (p.f. = 1): 16 A at 30 VDC
Inductive Load (p.f. = 0.4) (L/R = 7 ms): 8 A at 30 VDC
If the load is inductive, it is recommended to connect a Diode across the load to protect the Power Relay Contacts.
Power Relay Coil: Rated Voltage: 12 VDC, Rated Current 43.6 mA, Coil Resistance: 275 ohm

Signal Relay Contact Ratings:
Resistive Load: 1 A at 30 VDC
Signal Relay Coil: Rated Voltage: 12 VDC, Coil Resistance: 1028 ohm +/- 10%.

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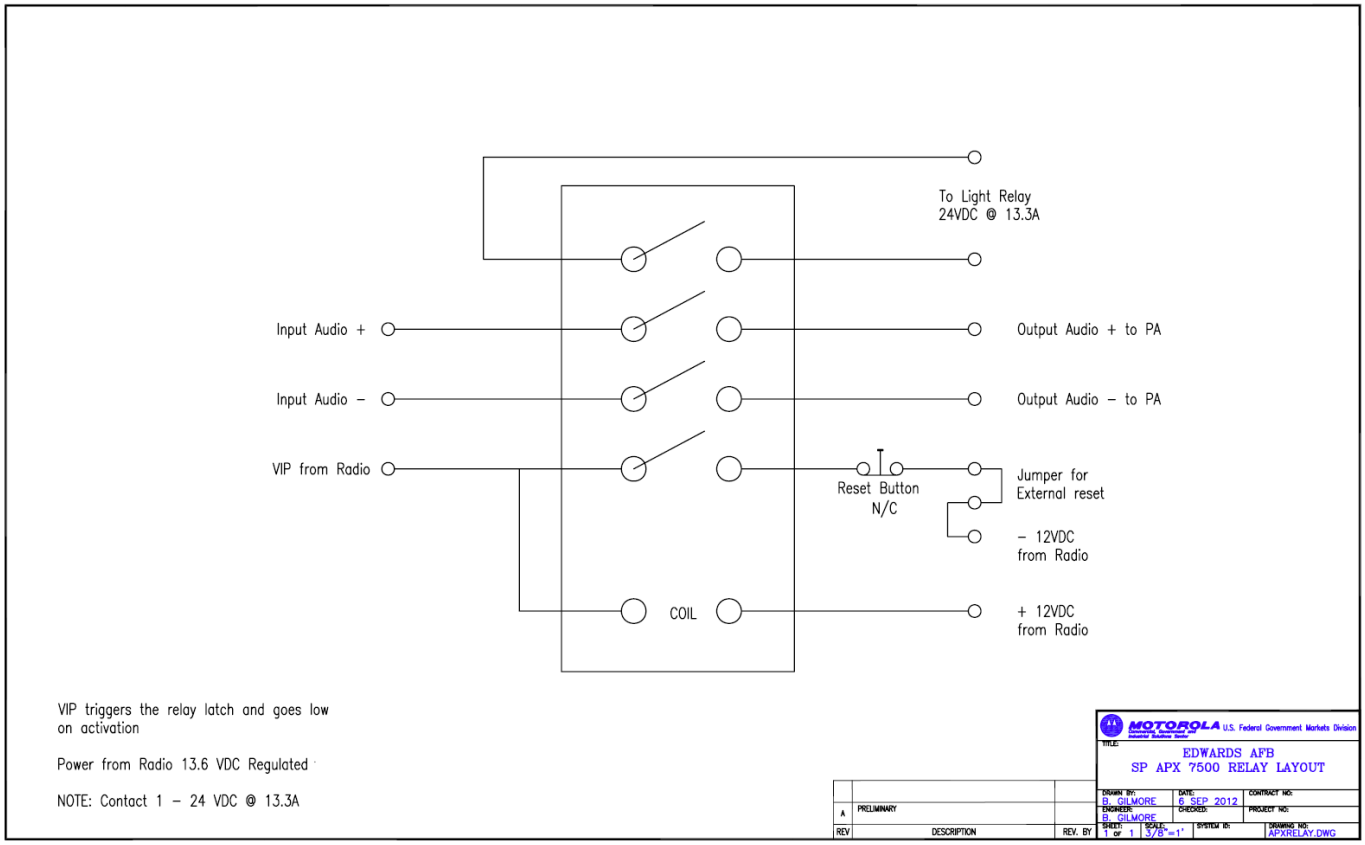

Figure 1: Customer Supplied Drawing

12-6-2012 Note: Customer provided correction to the above drawing. (- 12VDC from Radio) should be ground, and VIP from Radio is a momentary contact to ground.

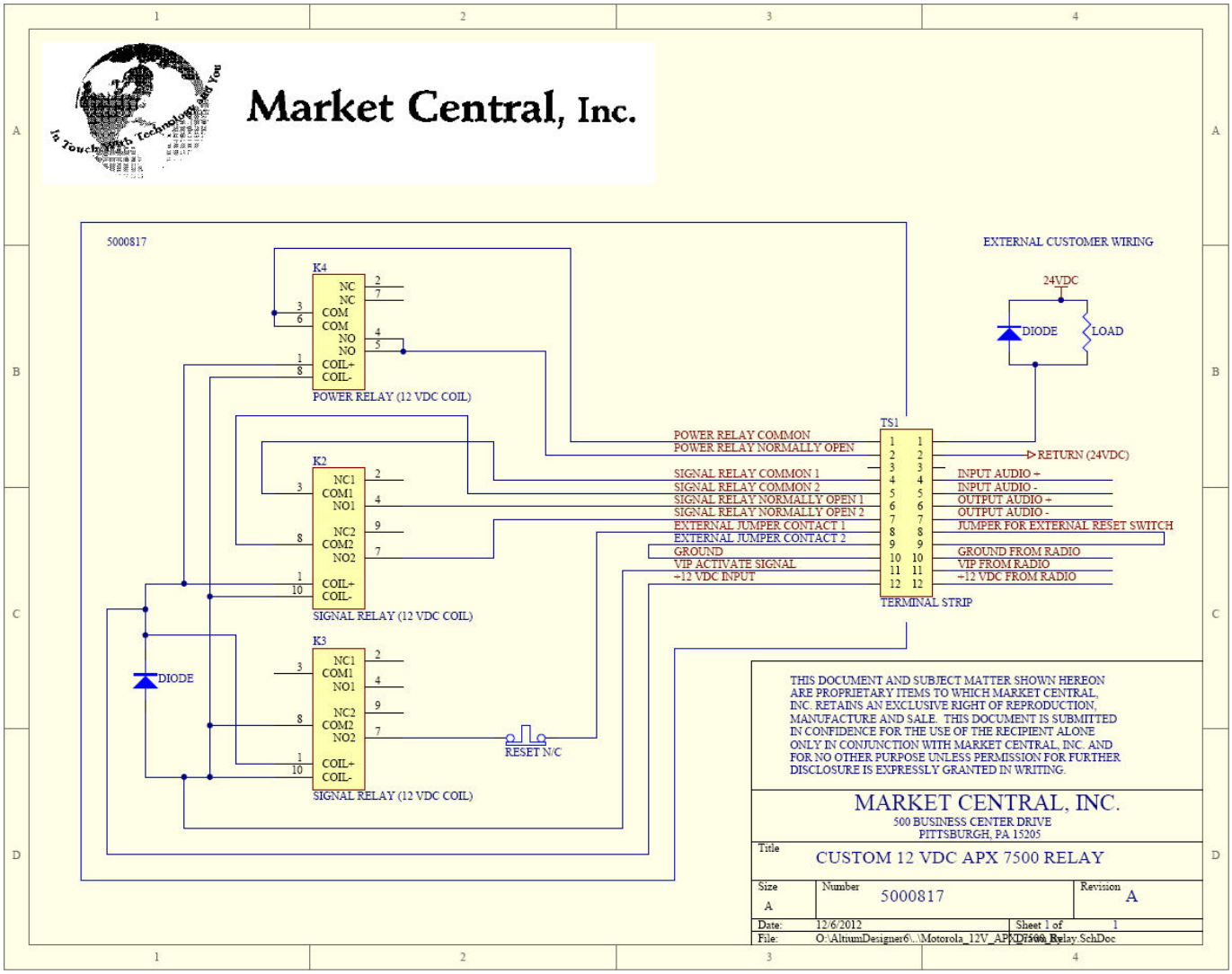

Figure 2: 5000817 Schematic and External Load