Overview

The BA/PS17 provides unregulated power for the BAPI Electronic Technicians Assistant modules. The customer provides a 120 VAC to 24 VAC transformer based on power consumption. Four 2.4 amp and two 3.2 amp outputs are provided.

NOTE: The BA/PS17 is full wave rectified. Connecting the 24VAC on J15 to a halfwave rectified controller will blow fuse F1. Many halfwave rectified controller boards may be powered from any of the DC outputs. Consult your controller manufacturer for applicability.

Transformer Selection

The BA/PS17 is designed to use a 120VAC to 24VAC transformer. Transformers with ratings of 75VA to 400VA may be used. Total your current consumption and pick the appropriate transformer.

Table 1		Minimum Wire Size	
Current Needed	Transformer Power	J7	J15
1.875 amps or less	75VA	18 Gauge	18 Gauge
2.500 amps or less	100VA	18 Gauge	18 Gauge
3.750 amps or less	150VA	18 Gauge	18 Gauge
5.000 amps or less	200VA	18 Gauge	16 Gauge
6.250 amps or less	250VA	18 Gauge	16 Gauge
7.500 amps or less	300VA	18 Gauge	14 Gauge
12.500 amps or less	400VA	18 Gauge	12 Gauge

Table 1: Transformer selection guide and wire size recommendations.

Mounting

Supplied with the PS17 is a piece of 2 3/4 inch snap track 12.5 inches long. Using the end holes in the snap track, attach the snap track to an appropriate mounting surface. Mount the transformer nearby so that the transformer's primary wires can easily connect to J7 and the transformer's secondary wires can easily connect to J15. For extra stablility, slide the PS17 over the mount screws in the middle of the snap track.

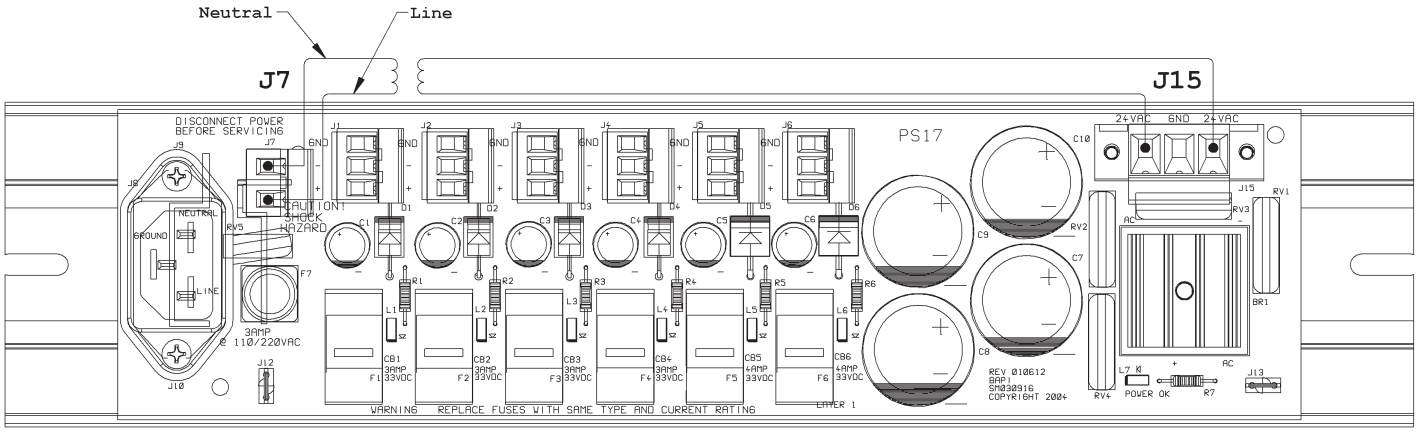

Figure 1: Top View of PS17

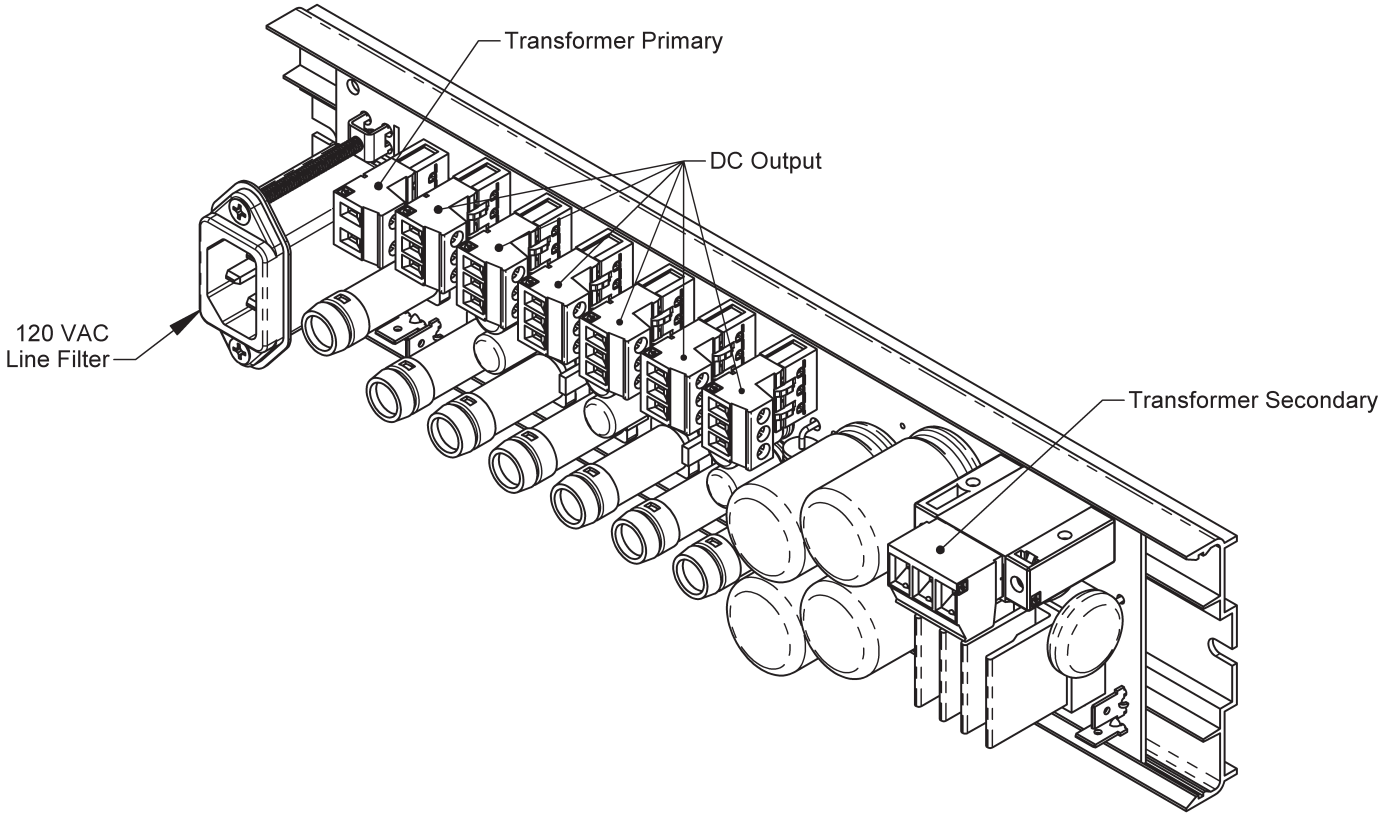

Figure 2: PS17 Mounted in Snap Track

Termination

Table 2	
Connector	Maximum Recommended Load
J1, J2, J3 and	2.4 Amps
J5 and J6	3.2 Amps

Note: All wiring must comply with the National Electrical Code and all local codes.

Connect a green wire to one of the 1/4 inch quick connect terminals on the PS17. Connect to other end to a good earth ground.

Use at least 18 gauge wire to connect the power transformers 120VAC primary wiring to J7. Use table 1 to select the proper wire gauge to connect the transformers 24VAC secondary wiring to J15. (see Figure 1)

Warning: Be sure to double check the transformer connections. Inadvertently swapping the primary and secondary windings of the transformer will result in extremely high and potentially dangerous voltages, damage the PS17 or attached equipment and void the warranty.

Connect the loads to PS17 through one of J1, J2, J3, J4, J5 or J6. Use an appropriate length of 18 gauge to reach from the PS17 to the load. If powering a BP4 or BP8 use a two pin connector on the backplane end of the wire.

Connect a 120VAC power cable to the power filter. Disconnect the power cable whenever you are servicing this unit.

Diagnostics

Problems:	**Possible Solutions:**
LED L7 does not light	Check the 120VAC to make sure it is on Check F7 Check the transformer for proper connections Check the transformer for proper output
Fuse F7 is open	Check transformer for proper connections Check transformer primary for short Check loads for proper wiring or short circuit
LED L1, L2, L3, L4, L5, or L6 does not light but L7 is lit	Check the fuse associated with LED that does not light Check associated load for proper wiring or short circuit