

For the following model: 105

SAFETYCHECKLIST

KEEP unqualified/unauthorized personnel away from test area

ARRANGE test stations in a safe and orderly manner

NEVER touch products or connections during a test

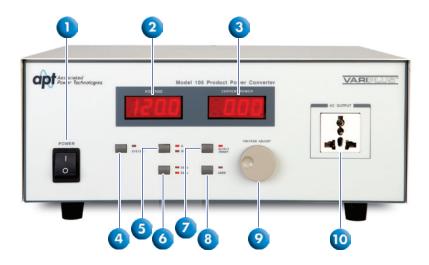
STOP the test first in the event of a problem

BE SURE to use the appropriate AWG for your input and output cabling

TURN OFF the output when making any connections to the load

WARNING: THIS GUIDE WAS CREATED FOR OPERATORS HAVING SOME FAMILIARITY WITH AC POWER SOURCES AND HIGH VOLTAGE/HIGH CURRENT TESTING APPLICATIONS. AN AC POWER SOURCE PRODUCES VOLTAGES AND CURRENTS THAT CAN CAUSE HARMFUL OR FATAL ELECTRIC SHOCK. TO PREVENT ACCIDENTAL INJURY OR DEATH, THESE SAFETY PROCEDURES MUST BE STRICTLY OBSERVED WHEN HANDLING AND USING AN AC POWER SOURCE.

FRONTPANELCONTROLS



- POWER SWITCH: Rocker style power switch with international ON (|) and OFF (0) markings.
- VOLTAGE DISPLAY: When the output is OFF, the display shows the output voltage setting. When the output is ON, the display shows the output voltage measurement.
- CURRENT/POWER DISPLAY: When the output is OFF, the display shows the output current setting. When the output is ON, the display shows the output current measurement. The display can be toggled to show the output power measurement.
- SYSTEM KEY: Cycles through the user-system parameters. All parameters may be edited.
- 5. DISPLAY KEY: Toggles the Current/Power Display to show either the output current measurement or the output power measurement.
- **6. FREQUENCY KEY:** Toggles the output frequency to 50 or 60 Hz.
- 7. OUTPUT/RESET KEY: Enables and disables the output relay.
- 8. LOCK KEY: Locks out the front panel controls when active. The display may still be toggled to review output current and power measurements, and the output frequency may be adjusted.
- VOLTAGE ADJUST ROTARY KNOB: Increases and decreases the output voltage. Allows the user to adjust system parameters.
- UNIVERSAL AC OUTPUT SOCKET: 300 VAC max voltage and 20 A max current.

BACKPANELCONTROLS



- 1. THERMAL FAN: Used to cool the instrument.
- 2. GROUND LUG: Additional ground connector in addition to power cord ground.
- 3. FUSE RECEPTACLE: Fuse rating is 10 A at 250 V. To change the fuse, unplug the power (mains) cord and turn the fuse cap counter clockwise to remove fuse. The fuse compartment will be exposed. Please replace the fuse with one of the proper rating.
- 4. INPUT POWER RECEPTACLE: Standard IEC 320 connector for connection to a standard NEMA style line power (mains) cord.
- 5. INPUT POWER SWITCH: Line voltage input selection is set by the position of the switch 115/230 V.

INSTRUMENTSETUP

SETTING THE OUTPUT VOLTAGE:

The output voltage is controlled using the Voltage Adjust rotary knob located on the front panel. Turn the rotary knob clockwise to increase the voltage or turn the rotary knob counter clockwise to decrease the voltage. The voltage will increase and decrease more rapidly depending on the speed of rotation.



Voltage Adjust rotary knob

SETTING THE FREQUENCY:

Press the 50/60 Hz Frequency key to toggle the frequency. The LED will indicate which frequency the instrument is outputting.

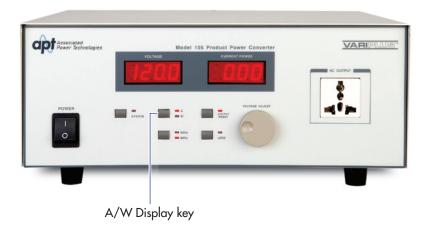


50/60 Hz Frequency key

INSTRUMENTSETUP

SETTING THE CURRENT/POWER DISPLAY:

Press the A/W Display key to select whether the Current/Power display will show amps or wattage. If the LED indicator for A is lit the current will be displayed. If the LED indicator for W is lit the wattage will be displayed.



SETTING THE LOCK:

Press the LOCK key to lock out the front panel during testing. If the LOCK key is active, the LED indicator will be lit. When Lock is active, the operator cannot change any settings from the front panel. If the LOCK key is active when the unit is powered OFF it will remain active when the unit is powered back ON.



INSTRUMENTSETUP

SETTING THE OUTPUT/RESET:

Press the OUTPUT/RESET key to set the output. If the LED indicator is lit, the decimal points in the displays of voltage and current/power will blink continuously notifying the operator that output is ON. If the LED indicator is not lit and the decimal points in the displays of voltage and current/power are lit steadily this indicates that the output is OFF. When the output is OFF the displays will show their present settings.



If the Output/Reset LED indicator is flashing, this is a notification that a limit threshold has been exceeded, a failure has occurred, or an instrument protection circuit has been activated. Press the OUTPUT/RESET key to reset the instrument to a normal state.

SYSTEMSETUP

Press the SYSTEM key to change the system parameters. The LED indicator will be on when the SYSTEM key is activated. The SYSTEM key is only available if the output is off or the LED indicator is off on the OUTPUT/RESET key. Press the SYSTEM key to cycle through the parameters. Use the rotary knob to adjust the system parameter settings.

DISPLAY		EXPLANATION
Voltage	Current	EXPLANATION
V-HI	300.0	High voltage limit setting (0.0 – 300.0 V), 0.0 disables feature
V-LO	0.0	Low voltage limit setting (0.0 – 300.0 V), 0.0 disables feature
Vout	LAST	Output is set to voltage based on last setting prior to power off when the instrument is powered up
Vout	0	Output is 0 volts when the instrument is powered up
P-UP	OFF	Output relay is open when the instrument is powered up
P-UP	ON	Output relay is closed when the instrument is powered up

SYSTEMSETUP

SETTING THE VOLTAGE HI LIMIT:

Press the SYSTEM key until the voltage display reads V-HI. Use the rotary knob to select the high limit voltage (0.0 – 300.0 V). Press the SYSTEM key again to accept the setting and move to the next parameter setting, low voltage limit.



SETTING THE VOLTAGE LO LIMIT:

Press the SYSTEM key until the voltage display reads V-LO. Use the rotary knob to select the low limit voltage (0.0-300.0 V). Press the SYSTEM key again to accept the setting and move to the next parameter setting.



SETTING THE SMARTVOLT:

Press the SYSTEM key until the voltage display reads Vout. Use the rotary knob to select from the following parameters:

LAST



0



The LAST setting will configure the VariPLUS to power up at the same output voltage that was last used before the unit was powered off. The 0 setting will configure the VariPLUS to power up at 0 volts regardless of the previous output voltage setting. Press the SYSTEM key again to accept the setting and move to the next parameter setting.



SETTING THE P-UP:

Press the SYSTEM key until the voltage display reads P-UP. Use the rotary knob to select from the following parameters:

OFF



ON



The OFF setting will configure the instrument to power up with the output relay open. In this condition, voltage will not be present at the output receptacle during power-on. The ON setting will configure the instrument to power up with the output relay closed.

WARNING: If P-UP is set to ON, voltage will be present at the output receptacle when the instrument is powered on.

ONLINE VIDEO RESOURCES



Scan the QR code with your smart-phone or visit the web addresses listed below to view the following application videos to learn more about the VariPLUS.

VariPLUS at a Glance
VariPLUS – Soft Starting a Device Under Test
VariPLUS – Domestic and International Product Testing

http://aptsources.com/variplussupport/



For additional information about these and other key features of the VARIPLUS, please consult the full Operation and Service Manual or call us toll free +1-877-322-7693 or +1-847-367-4378 © 2012 Associated Power Technologies www.aptsources.com