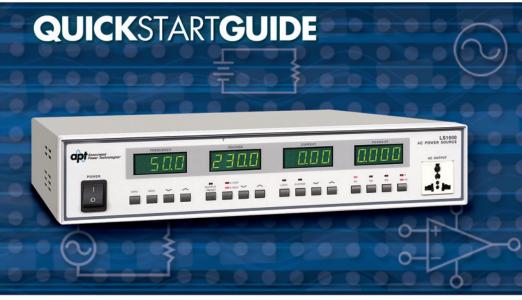


LS Series C€ LINEAR AC POWER SOURCES



For the following models: LS 500, LS 1000

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

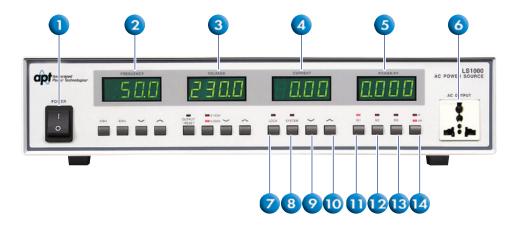
STOP the test first in the event of a problem

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

TURN OFF the output when making any connections to the load

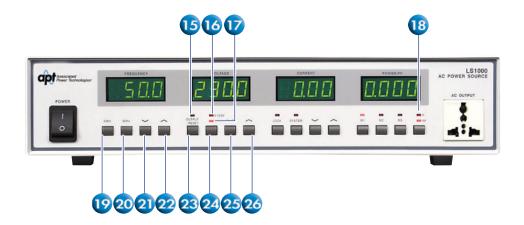
WARNING: THIS GUIDE WAS CREATED FOR OPERATORS HAVING SOME FAMILIARITY WITH AC POWER SOURCES AND HIGH VOLTAGE/HIGH CURRENT TESTING APPLICATIONS. AN AC POWER SOURCE PRODUCES VOLTAGES AND CURRENTS THAT CAN CAUSE HARMFUL OR FATAL ELECTRIC SHOCK. TO PREVENT ACCIDENTAL INJURY OR DEATH, THESE SAFETY PROCEDURES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

FRONTPANELCONTROLS



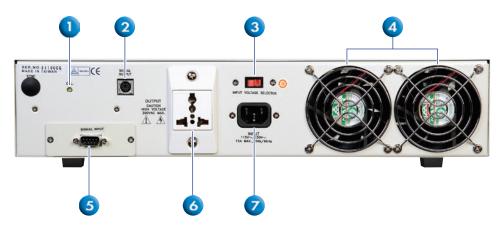
- POWER SWITCH: Turns the power source ON or OFF.
- FREQUENCY DISPLAY: When the output is OFF the display shows the output frequency setting. When the output is ON the display shows the output frequency measurement.
- VOLTAGE DISPLAY: When the output is OFF the display shows the output voltage setting. When the output is ON the display shows the output voltage measurement.
- 4. CURRENT 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
- **5. POWER/PF DISPLAY:** Displays the output power (watts) or power factor.
- UNIVERSAL AC OUTPUT SOCKET: Output Socket (15 A).
- 7. LOCK KEY: Disables all the keys on the front panel. When the LED indicator illuminates all keys are disabled.
- **8. SYSTEM KEY:** Enters or exits the system setting mode. When the LED indicator illuminates the system setting menu is activated.
- CURRENT DOWN KEY: Decreases the output current during operation or selects the system condition in the system setting mode.
- CURRENT UP KEY: Increases the output current during operation or selects the system condition in the system setting mode.
- **11. M1 BUTTON:** Used to recall or store parameter settings in memory one. When the LED indicator illuminates the memory is active.
- **12. M2 BUTTON:** Used to recall or store parameter settings in memory two. When the LED indicator illuminates the memory is active.
- **13. M3 BUTTON:** Used to recall or store parameter settings in memory three. When the LED indicator illuminates the memory is active.
- 14. P/PF SELECT BUTTON: Toggles display of output power or power factor. When the LED indicator illuminates the display shows the output power factor.

FRONTPANELCONTROLS



- 15. OUTPUT/RESET INDICATOR: When the LED is ON the source is operating normally. When the LED is OFF the output voltage is deactivated. When the LED is blinking the source has experienced an error.
- 16. 0-150 V INDICATOR: When the LED is ON, the output is set to Low range.
- 17. 0-300 V INDICATOR: When the LED is ON the output is set to High range.
- 18. WATTMETER INDICATOR: When this LED is ON, the display shows the output power.
- 19. 50 Hz FREQUENCY KEY: Press to set the output frequency to 50 Hz.
- 20. 60 Hz FREQUENCY KEY: Press to set the output frequency to 60 Hz.
- **21. FREQUENCY DOWN KEY:** Decreases the output frequency during operation.
- **22. FREQUENCY UP KEY:** Increases the output frequency during operation.
- 23. OUTPUT/RESET KEY: Turns the output ON and OFF. Resets the source if an error occurs.
- 24. RANGE KEY: Toggles between the High (0-300 V) and Low Voltage Ranges (0-150 V).
- 25. VOLTAGE DOWN KEY: Decreases the output voltage during operation or selects the system item in system setting mode.
- **26. VOLTAGE UP KEY:** Increases the output voltage during operation or selects the system item in system setting mode.

BACKPANELCONTROLS



(Model LS500, Back Panel)

- **1. CALIBRATION KEY:** Press and hold during power-up to enter Calibration Mode.
- REMOTE SIGNAL OUTPUT: 6-pin mini-DIN female connector for monitoring FAIL and PROCESSING output relay signals.
- **3. INPUT VOLTAGE SELECTION SWITCH:** Configures the power source to accept 115 VAC or 230 VAC inputs.
- 4. THERMAL FANS: Used to cool the instrument.
- REMOTE SIGNAL INPUT: 9-in D sub-miniature female connector for remote control of TEST, RESET, and MEMORY SELECTION functions.
- UNIVERSAL AC OUTPUT SOCKET: Universal Output Socket (15 A).
- 7. INPUT POWER RECEPTACLE: Standard IEC 320 connector for connection to a standard NEMA style line power (mains) cord.

BACKPANELCONTROLS



(Model LS1000, Back Panel)

- 1. LINE OUTPUT TERMINAL: High voltage output screw terminal.
- 2. NEUTRAL OUTPUT TERMINAL: Neutral (return) screw terminal.
- 3. GROUND INPUT TERMINAL: Earth ground (chassis) connection for line cord.
- 4. LINE INPUT TERMINAL: High voltage input screw terminal for line cord.
- 5. NEUTRAL INPUT TERMINAL: Neutral (return) screw terminal for line cord.

NOTE: The LS series includes a hard cover for the input/output terminal block when shipped from the factory.

- INPUT VOLTAGE SELECTION SWITCH: Configures the power source to accept 115 VAC or 230 VAC inputs.
- CALIBRATION KEY: Press and hold during power-up to enter Calibration Mode.
- REMOTE SIGNAL INPUT: 9-in D sub-miniature female connector for remote control of TEST, RESET, and MEMORY SELECTION functions.
- REMOTE SIGNAL OUTPUT: 6-pin mini-DIN female connector for monitoring FAIL and PROCESSING output relay signals.



SYSTEM PARAMETERS:

Press the SYSTEM key to change the system parameters. The LED indicator illuminates when the SYSTEM key is activated. The SYSTEM key is only available if the output is off. Press the SYSTEM key to cycle through the following: PLC Remote, Alarm, Power Up, Frequency LO Limit, Frequency HI Limit, Voltage LO Limit, Voltage HI Limit, and Over Current Fold Back. Use the up and down arrow keys to change the parameter values.

SETTING THE PLC REMOTE

Press the SYSTEM key and then press the Voltage up or down arrow key until the voltage display reads "PLC". Press the Current up or down arrow key to enable or disable this parameter. When the PLC Remote parameter is active, the overall operation of the power source may be controlled through the PLC connector on the rear of the instrument. When enabled, all keys on the front panel will be disabled except the LOCK, SYSTEM and P/PF keys. Press the SYSTEM key again to accept the setting and move to the next parameter.



SETTING THE ALARM VOLUME:

Press the SYSTEM key and then press the Voltage up or down arrow key until the frequency and voltage displays read "Alarm". Press the Current up or down arrow key to adjust the volume of the alarm from 0-9. Press the SYSTEM key again to accept the setting and move to the next parameter.



SYSTEMSETUP

SETTING THE POWER UP STATUS:

Press the SYSTEM key and then press the Voltage up or down arrow key until the voltage display reads "P-UP". Press the Current up or down arrow key to enable or disable this parameter. This parameter controls the output configuration during power up and can be changed to one of three conditions: ON, OFF, or LAST. If Power Up Status is set to OFF, the output will be disabled when the unit is powered up. If Power Up Status is set to ON, the output will be enabled when the unit is powered up. If Power Up Status is set to LAST, the output will be enabled in the same condition as it was when power was turned off. Press the SYSTEM key again to accept the setting and move to the next parameter.



SETTING THE FREQUENCY LO LIMIT:

Press the SYSTEM key and then press the Voltage up or down arrow key until the frequency and voltage displays read "Freq LO". Press the Current up or down arrow key to adjust the frequency low limit from 45-500 Hz. The output frequency cannot be lowered to a value that falls below this limit during a test. Press the SYSTEM key again to accept the setting and move to the next parameter.



SETTING THE FREQUENCY HI LIMIT:

Press the SYSTEM key and then press the Voltage up or down arrow key until the frequency and voltage displays read "Freq HI". Press the Current up or down arrow key to adjust the frequency high limit from 45-500 Hz. The output frequency cannot be raised to a value that exceeds this limit during a test. Press the SYSTEM key again to accept the setting and move to the next parameter.





SETTING THE VOLTAGE LO LIMIT:

Press the SYSTEM key and then press the Voltage up or down arrow key until the frequency and voltage displays read "Volt LO". Press the Current up or down arrow key to adjust the voltage low limit from 0-300 volts. The output voltage cannot be lowered to value that falls below this limit during a test. Press the SYSTEM key again to accept the setting and move to the next parameter.



SETTING THE VOLTAGE HI LIMIT:

Press the SYSTEM key and then press the Voltage up or down arrow key until the frequency and voltage displays read "Volt HI". Press the Current up or down arrow key to adjust the voltage high limit from 0-300 volts. The output voltage cannot be raised to a value that exceeds this limit during a test. Press the SYSTEM key again to accept the setting and move to the next parameter.



SETTING THE OVER-CURRENT FOLD BACK:

Press the SYSTEM key and then press the Voltage up or down arrow key until the frequency and voltage displays read "OC Fold". Press the Current up or down arrow key to enable or disable the OC fold back feature. If OC Fold is set to ON, the instrument will automatically reduce the output voltage in order to maintain a constant current. When OC Fold is set to ON, the output current limit may be set in the same way as the high current limit. Press the SYSTEM key again to accept the setting and move to the next parameter.







For additional information about these and other key features of the LS Series, please consult the full Operation and Service Manual or call us toll free +1-877-322-7693 or +1-909-860-1646 ©2012 Associated Power Technologies www.aspowertechnologies.com