

E3632A

DC Power Supply

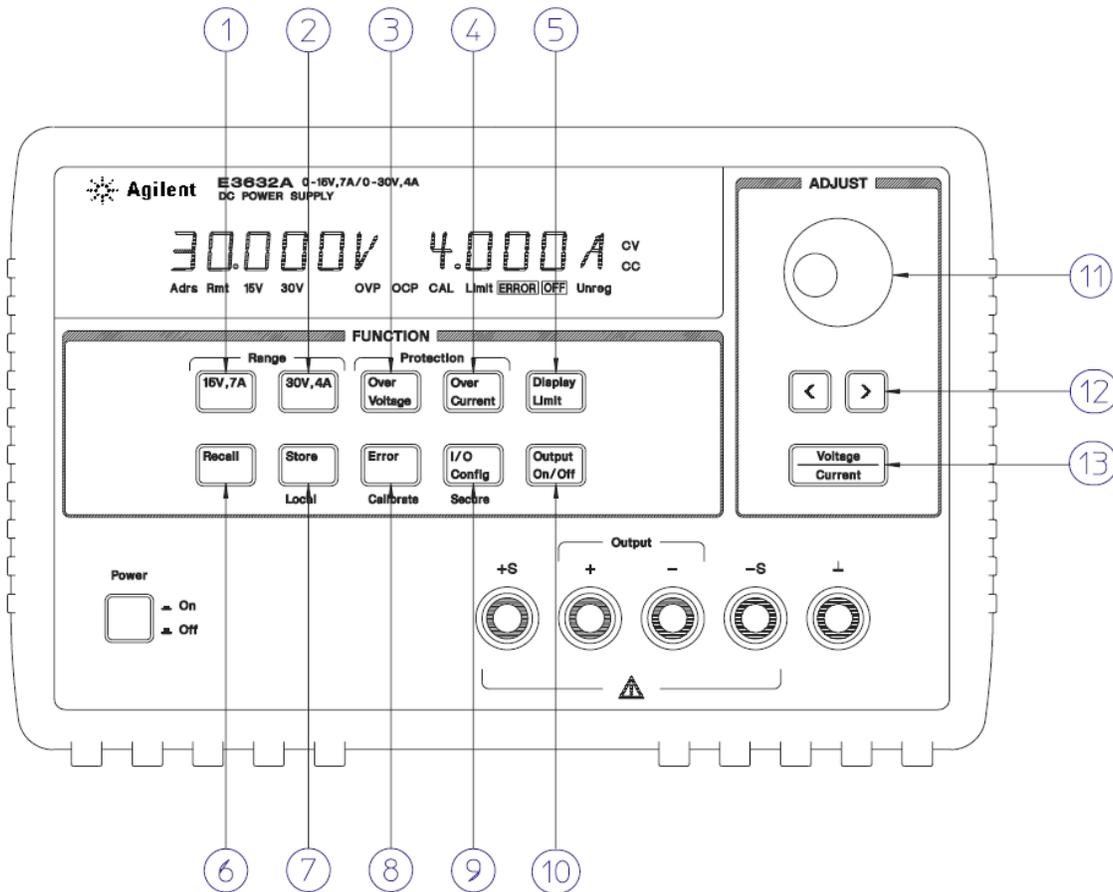
Instructions for the use of the E3632A DC Power Supply

This pamphlet is intended to give you (the student) an overview on the use of the E3632A Power Supply. This pamphlet will instruct you on how to set and adjust the output voltage and current.

Please visit the Agilent website

**<http://www.home.agilent.com/agilent/home>
to view the complete user manual for more
information.**

Front-Panel Controls and Indicators

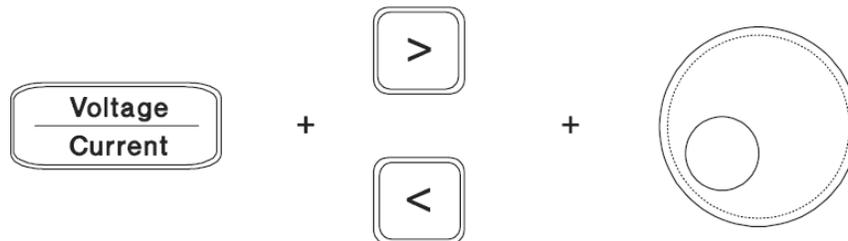


1. 15V/7A range selection key
2. 30V/4A range selection key
3. Overvoltage protection key
4. Overcurrent protection key
5. Display limit key
6. Recall operating state key
7. Store operating state/Local key
8. Error/Calibrate key
9. I/O Configuration/Secure key
10. Output On/Off key
11. Control ↻ knob
12. Resolution selection keys
13. Voltage/current adjust selection key

1. **15V/7A range selection key:** Selects the 15V/7A range and allows the full rated output to 15V/7A.
2. **30V/4A range selection key:** Selects the 30V/4A range and allows the full rated output to 30V/4A.
3. **Overvoltage protection key:** Enables or disables the overvoltage protection function, sets trip voltage level, and clears the overvoltage condition.
4. **Overcurrent protection key:** Enables or disables the overcurrent protection function, sets trip current level, and clears the overcurrent condition.
5. **Display limit key:** Shows voltage and current limit values on the display and allows knob adjustment for setting limit values.
6. **Recall operating state key:** Recalls a previously stored operating state from location “1”, “2”, or “3”.
7. **Store operating state / Local key:** Stores an operating state in location “1”, “2”, or “3” / or returns the power supply to local mode from remote interface mode.
8. **Error / Calibrate key:** Displays error codes generated during operation, self-test and calibration / or enables calibration mode (the power supply must be unsecured before performing calibration).
9. **I/O Configuration / Secure key:** Configures the power supply for remote interfaces / or secure or unsecure the power supply for calibration.
10. **Output On/Off key:** Enables or disables the power supply output. This key toggles between on and off.
11. **Control  knob:** Increases or decreases the value of the blinking digit by turning clockwise or counter clockwise.
12. **Resolution selection keys:** Move the blinking digit to the right or left.
13. **Voltage/current adjust selection key:** Selects the knob control function for voltage or current adjustment.

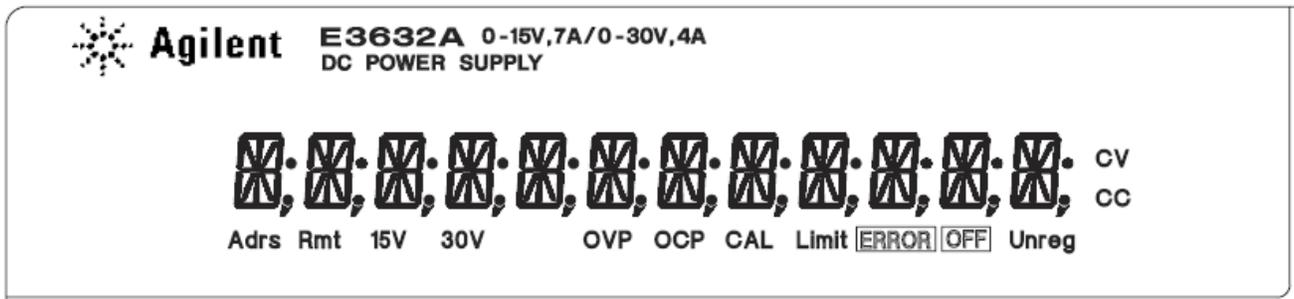
Front-Panel Voltage and Current Limit Settings

To set the voltage and current limit values from the front panel use the following.



1. Select the desired range using the range selection keys after turning on the power supply.
2. Press the **[Display Limit]** key to show the limit values on the display.
3. Move the blinking digit to the appropriate position using the resolution selection keys and change the blinking digit value to the desired voltage limit by turning the control  knob. If the display limit times out, press the **[Display Limit]** key again.
4. Set the control  knob to current control mode using the voltage/current adjust selection key.
5. Move the blinking digit to the appropriate position using the resolution selection keys and change the blinking digit value to the desired current limit by turning the control  knob.
6. Press the **[Output ON/OFF]** key to enable the output. After about 5 seconds, the display will go to output monitoring mode automatically to display the voltage and current at the output or the display will go to output monitoring mode immediately by pressing the **[Output ON/OFF]** key again.

Display Annunciators



- Adrs** Power supply is addressed to listen or talk over a remote interface.
- Rmt** Power supply is in remote interface mode.
- 15V** Shows the 15V/7A range is selected.
- 30V** Shows the 30V/4A range is selected.
- OVP** The overvoltage protection function is enabled when the annunciator turns on or the overvoltage protection circuit has caused the power supply to shutdown when the annunciator blinks.
- OCP** The overcurrent protection function is enabled when the annunciator turns on or the overcurrent protection circuit has caused the power supply to shutdown when the annunciator blinks.
- CAL** The power supply is in calibration mode.
- Limit** The display shows the limit values of voltage and current.
- ERROR** Hardware or remote interface command errors are detected and the error bit has not been cleared.
- OFF** The output of the power supply is.
- Unreg** The output of the power supply is unregulated (output is neither CV nor CC).
- CV** The power supply is in constant voltage mode.
- CC** The power supply is in constant current mode.