

Back-UPS (VA):

**350, 450, 500, 550, 600, 650, 725, 750,
800, 900, 1000, 1050, 1200, 1250, 1300, 1500**

STEP 1:

Connect the UPS's Internal batteries (Figure 1):

NOTE: Battery Cartridge installation will differ depending on UPS model. Figure 1 illustrates some of the variations in Battery Cartridges. Please follow the illustration which best resembles your UPS.

Procedure for Figure 1: (1, 2, 3,4)

- 1.1 Using a table or raised surface, seat the UPS in the stand 1
- 1.2 Remove the Battery Compartment Door 2
- 1.3 Connect the Battery Connectors 3
- 1.4 Replace the Battery Compartment Door 4

OR

Procedure for Figure 1: (A,B,C,D)

- 1.1 Remove the Battery Compartment Door A
- 1.2 Slide the battery out enough to get access to the Battery Connector B
- 1.3 Insert the Battery Connector into the matching connector on the inside of the UPS Battery Compartment C
- 1.4 Replace the Battery Compartment Door D

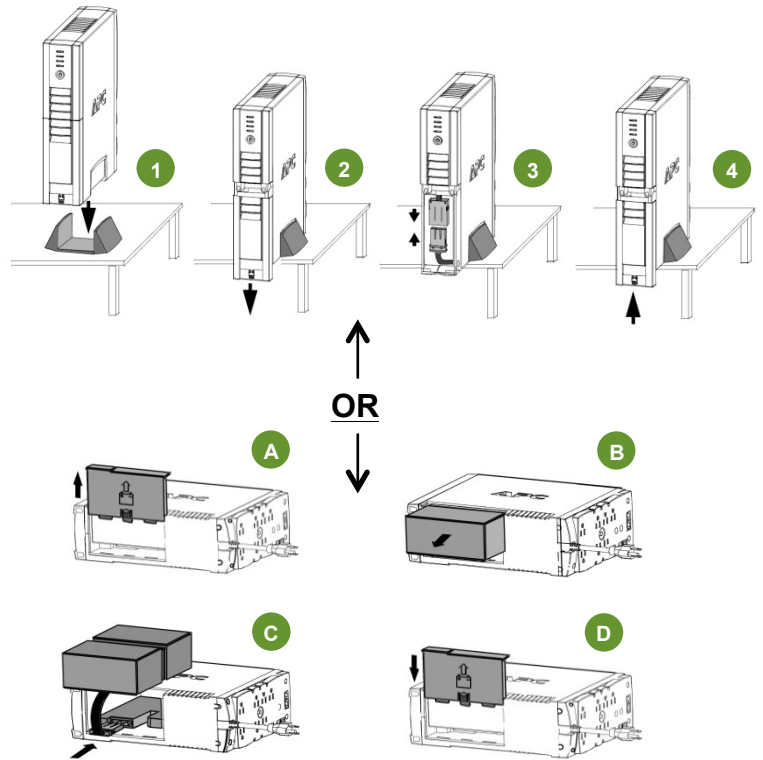


Figure 1

STEP 2:

Install UPS accessories (Figure 2):

NOTE: Ensure the UPS is turned off prior to installing any accessories. Some accessories are not provided with the UPS, please contact APC or CBM for the compatible accessories.

- 2.1 Install all external Battery Packs (if applicable). The External Battery Pack connector is located on the rear panel of the UPS and is typically a Grey connector 1

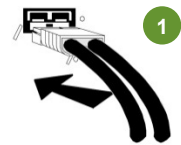


Figure 2

STEP 3:

Connect wiring & charge UPS (Figure 3):

NOTE: Ensure equipment is turned off.

- 3.1 Connect equipment to UPS.
- 3.2 Connect UPS Power Cord to a suitable power receptacle.
- 3.3 Reset the UPS Circuit Breaker by pushing-in the button or flipping the toggle switch (Circuit breakers may differ on some models)
- 3.4 Power-up the UPS by pressing the power button.
- 3.5 Wait for the Self-Test to complete, then Power-up equipment.
- 3.6 Allow UPS to charge batteries for 24 hours prior to operating on battery or performing additional Self-Test or Calibration tests.

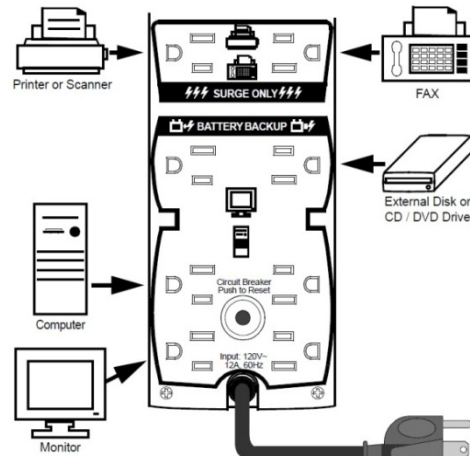


Figure 3

UPS Front Panel (Figure 4):

NOTE: Symbols & functions may differ on some UPS models. Figure 4 illustrates some of the variations in displays. Please use the illustration which best resembles your UPS.

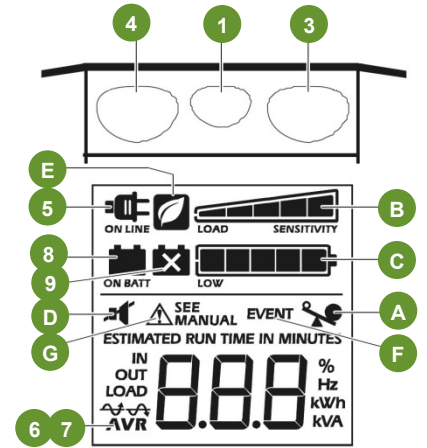
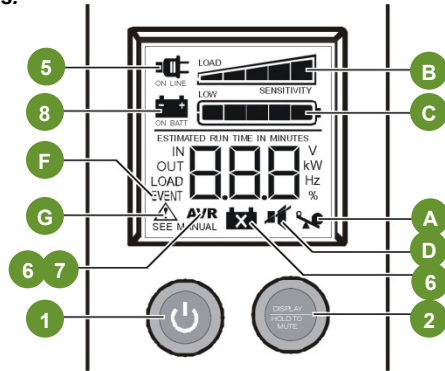
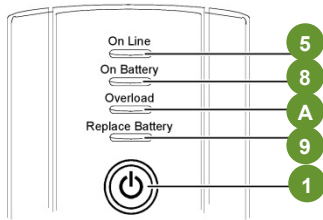


Figure 4



1 POWER 'ON/OFF' BUTTON - Button to turn UPS on or off.



2 DISPLAY/HOLD TO MUTE BUTTON - Button to display messages & mute UPS alarm.



3 DISPLAY BUTTON - Button to illuminate the display.



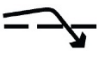
4 MUTE BUTTON - Button to mute UPS alarms.



5 ONLINE - UPS is supplying utility power to the connected equipment. If not lit, the UPS is not turned ON, or is supplying battery power.



6 AVR BOOST - UPS is compensating for a low utility input voltage.



7 AVR TRIM - UPS is compensating for a high utility input voltage.



8 ON BATTERY - UPS is supplying battery backup power to the connected equipment. UPS will beep four times every 30 seconds.



9 REPLACE BATTERY - UPS fails a self-test, or battery is bad. UPS makes short beeps for a minute.
BATTERY DISCONNECTED - Flashes to indicate the battery is disconnected. UPS will beep every two seconds.



A OVERLOAD - The power demand from the load has exceeded the capacity of the UPS. A sustained alarm tone is also emitted.



B LOAD CAPACITY - The load is indicated by the number of sections illuminated, one to five. Each bar represents 20% of the load.



C BATTERY CHARGE - The battery charge level is indicated by the number of sections illuminated. When all five blocks are illuminated, the UPS is at full charge.



D MUTE - If the line through the speaker icon is illuminated, the audible alarm has been turned off.



E POWER SAVING - Master and Controlled outlets are enabled, saving power when the master device goes into sleep or standby mode.



F EVENT - The event counter shows the number of events that occurred that caused the UPS to switch to battery operation.



G SYSTEM FAULTS - The system has a fault. The fault number will illuminate on the display interface. See "UPS Troubleshooting" on page 3

UPS Outlets (Figure 5):

NOTE: Panel Layout may differ depending on model.

1	Data port
2	Modem/Phone/FAX/Network Wall Outlet
3	Chassis ground connection screw (TVSS GND)
4	Modem/Phone/FAX/Network
5	Circuit breaker/Overload protection
6	UPS input
7	Outlets
8	Power button
9	Power On/ replace Battery indicator
A	Site/Building Warning Indicator

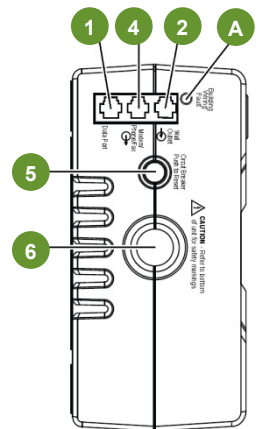
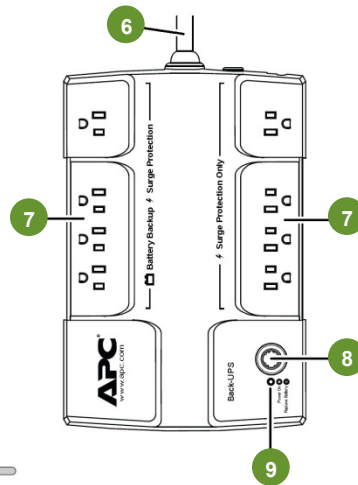
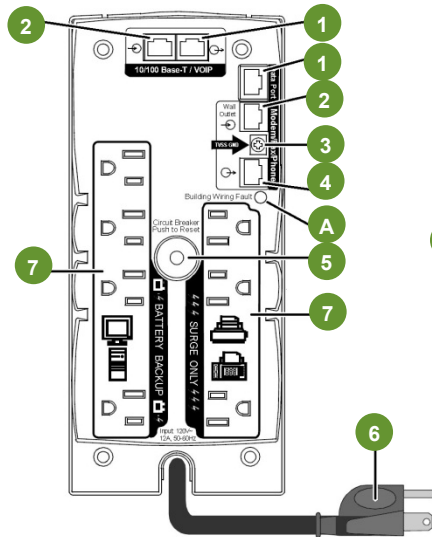


Figure 5

UPS troubleshooting:

NOTE: Troubleshooting procedures may differ depending on UPS model.

Problem:

Solution:

UPS will not turn on

• UPS not connected to AC power source.	Ensure the UPS is securely connected to an AC outlet.
• UPS circuit breaker “tripped”.	Disconnect non-essential equipment from the UPS. Reset (push in) the rear panel circuit breaker. Switch on the UPS and plug in devices one at a time. If the circuit breaker trips again, disconnect the device that caused the breaker to trip.
• Utility input voltage quality is out of range.	Consider adjusting the transfer voltage and sensitivity (See <i>Transfer Voltage and Sensitivity Adjustment</i> in the full User Manual)
• Internal battery cartridge is not connected.	Connect battery cartridge (see <i>Connect Battery Cartridge</i> in the full User Manual)

UPS does not power essential equipment during an outage

• Equipment plugged into a Surge Only outlet.	Unplug device from 'Surge Only' outlet and move to a 'Battery Backup' outlet.
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UPS operates on battery although utility power exists

• UPS circuit breaker “tripped”.	Disconnect non-essential equipment from the UPS. Reset (push in) the rear panel circuit breaker. Switch the UPS on and plug equipment in one-at-a-time. If the circuit breaker trips again, disconnect the device that caused the breaker to trip.
• Utility input voltage quality is out of range.	Consider adjusting the transfer voltage and sensitivity (See <i>Transfer Voltage and Sensitivity Adjustment</i> in the full User Manual)

UPS does not provide expected backup time

• UPS is heavily loaded.	Unplug non-essential equipment (printers, scanners, etc) from the Battery Backup outlets and plug into 'Surge Only' outlets.
• UPS battery cartridge is discharged due to recent power outage and has not had time to recharge.	Charge the battery cartridge for 8 hours. UPS runtime is reduced until the battery cartridge is fully charged.
• Battery has reached the end of its life.	Replace battery cartridge (see <i>Order Replacement Battery Cartridge</i> in the full User Manual)

Red Replace Battery indicator is flashing. Green On Line indicator is on

• Internal battery cartridge is not connected.	Connect battery cartridge (see <i>Connect Battery Cartridge</i> in the full User Manual)
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Red Replace Battery indicator is on

• Battery has reached the end of its life.	Replace the battery cartridge (see <i>Order Replacement Battery Cartridge</i> in the full User Manual)
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Red Overload indicator is on or flashing

• Connected equipment is drawing more power than the UPS can provide.	Move one or more equipment power plugs from Battery Backup outlets to Surge Only outlets.
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Green On Line indicator is on and all other front panel indicators are flashing

• Internal UPS fault.	Contact CBM Technical Support.
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For the complete User Manual or comprehensive troubleshooting, please visit the following websites:

APC: <http://www.apc.com> or **coastTec:** <http://www.coastTec.com>