

Smart-UPS Tower (VA):

750, 1000, 1500, 2200, 3000, 5000

STEP 1:

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

NOTE: The Battery Disconnect/Connector may vary or be omitted on some models. Figure 1 illustrates a couple variations. Please follow the illustration which best resembles your UPS.

Procedure 1 (top diagram – 750, 1000, 1500):

- 1.1 Locate the 'Battery Disconnect' or 'Battery Connector' on the rear panel of the UPS.
- 1.2 Connect the battery by pressing the black connector into the Battery Jack 1

OR

Procedure 2 (bottom diagram – 2200, 3000, 5000):

- 1.1 Remove the lower front cover by first grasping the top edges and then by tilting it forward and out 2
- If the battery connectors are inaccessible, you may swing the metal battery door open by removing the two fastening screws.
- 1.2 Connect the battery by pressing the Anderson connector into the plug at the top of the battery compartment. A snap will be felt as the connector engages the jack 3
- 1.3 Close the metal battery door (replace the screws) and reinstall the lower front cover 4

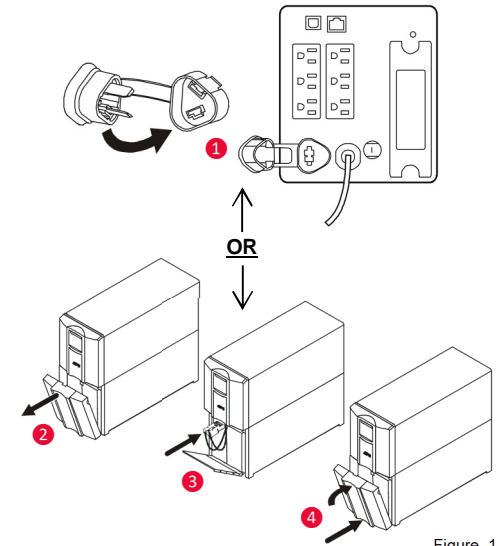


Figure 1

STEP 2:

Install UPS accessories (Figure 2):

NOTE: Ensure the UPS is turned off prior to installing any additional accessories. Please contact APC or coastTec for more information on compatible parts.

- 2.1 Install SmartSlot accessory (if applicable) 1
- 2.2 Install Step-down transformer (if applicable).
- 2.3 Install all external Battery Packs (if applicable).
The External Battery Pack connector is located on the rear panel of the UPS, and is either BLUE (48V) or GREY (24V).
If the Connector is obstructed by a metal cover, remove the fastening screws and cover 2

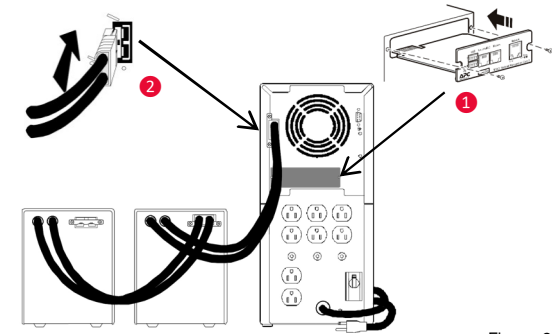




Figure 2

STEP 3:

Connect wiring & charge UPS (Figure 3):

NOTE: Ensure equipment is turned off.

- 3.1 Connect equipment to the UPS (computer, network switches etc.) 1
- 3.2 Connect the UPS's Power Cord to a suitable power receptacle 2
- 3.3 Set UPS circuit breakers to the 'ON' position (if applicable) 3
- 3.4 Turn on the UPS by pressing the power button:
 or 
- 3.5 Wait for the UPS's Self-Test to complete, then power-up any equipment.
- 3.6 Allow UPS to charge batteries for 24 hours prior to operating on battery or performing additional Self-Test or Calibration tests.

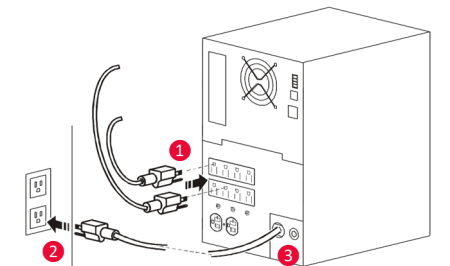


Figure 3



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.

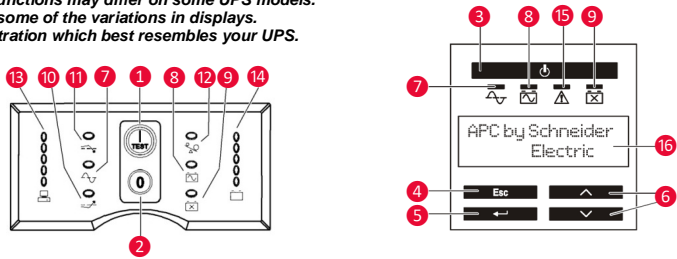


Figure 4

	1 POWER 'ON' BUTTON - Button to turn the UPS on. If UPS on and connected to utility power, press and hold to self-test.		10 AVR BOOST - UPS is compensating for a low utility input voltage.
	2 POWER 'OFF' BUTTON - Button to turn the UPS off.		11 AVR TRIM - UPS is compensating for a high utility input voltage.
	3 POWER 'ON/OFF' BUTTON - Button to turn the UPS on or off.		12 OVERLOAD - The power demand from the load (connected equipment) has exceeded the capacity of the UPS. A sustained alarm tone is also emitted.
	4 ESCAPE BUTTON - Button to exit a sub-menu.		13 LOAD CAPACITY - The load is indicated by the number of sections illuminated, one to five. Each bar represents 20% of the load.
	5 ENTER BUTTON - Button to confirm a selection on the menu.		14 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.
	6 UP/DOWN BUTTONS - Buttons to scroll through menu options.		15 SYSTEM FAULTS - The system has a fault. For some models, a fault number will appear on the display interface. See "UPS Troubleshooting" on page 3
	7 ONLINE - UPS is supplying utility power to the connected equipment. If not lit, the UPS is either supplying battery power or not turned ON.		16 DISPLAY SCREEN - Displays important information about the UPS and connected equipment.
	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 has failed a self-test, or the battery is bad. UPS will also produce short beeps for a minute.		
	10 BATTERY DISCONNECTED - Flashes to indicate the battery is disconnected. UPS will beep every two seconds.		

UPS Back Panel (Figure 5):

NOTE: Layout may differ on some models.

1 USB port	
2 UPS monitoring port (RJ45 connector)	
3 TVSS GND (Chassis ground connection screw)	
4 SmartSlot for optional NMC accessory card	
5 Circuit breaker/Overload protection	
6 UPS Power Cord	
7 Power Outlets	
8 EPO connector (Emergency Power Off)	
9 Battery Connector / Battery Disconnect	

Figure 5

UPS Troubleshooting:

NOTE: Troubleshooting procedures may differ depending on UPS model.

Problem:	Solution:
UPS will not turn on	
• Power/Test button not pushed.	Press the Power/Test button once to power the UPS and the load.
• UPS not connected to AC power supply.	Check that the power cable from the UPS to the wall outlet is securely connected.
• UPS input circuit breaker tripped.	Reduce the load on the UPS by unplugging equipment. If available, reset the circuit breaker (on back of UPS): for the plunger-type, press the plunger back in. For the toggle-type, flip the switch to the 'ON' position.
• Very low or no utility voltage.	Check the AC power supply to the UPS with a multimeter or table lamp. If the meter reads a voltage below the UPS's acceptable operating range, or the light bulb is dimly lit, have the utility voltage checked.
• Battery not connected properly.	Confirm the external Battery Connector / Disconnect, or internal connections. A connector may appear to be connected, additional insertion force may be required to firmly seat any loose connections.
UPS will not turn off	
• Internal UPS fault.	Do not attempt to use the UPS. Unplug the UPS and have it serviced immediately.
UPS operates on-battery although normal line voltage exists	
• UPS's input circuit breaker tripped.	Reduce the load on the UPS by unplugging equipment and reset the circuit breaker (on the back of UPS): for the plunger-type, press the plunger back in. For the toggle-type, flip the switch to the 'ON' position.
• Very high, low, or distorted utility line voltage. Generator sets with poor line regulation.	Move the UPS to a different outlet on a different circuit. Test the input voltage with the utility voltage display. If acceptable to the load, reduce the UPS's sensitivity. See <i>User's Manual</i> for procedures.
UPS beeps occasionally	
• Normal UPS operation.	None. The UPS is protecting the load.
UPS does not provide expected backup time	
• The UPS's battery is weak due to a recent outage or is near the end of its service life.	Allow the UPS time to charge the battery, batteries require recharging after extended outages. Also, batteries wear faster when put into service often or when operated at elevated temperatures. If the battery is near the end of its service life, consider replacing the battery even if the 'replace battery' indicator is not yet lit.
• The UPS is overloaded.	Check the UPS's load display. Unplug less needed equipment, such as printers or reconsider the sizing requirements of the setup – a larger VA capable UPS might be required.
Front panel indicators flash sequentially	
• The UPS has been shut down by remote control.	None. The UPS will restart automatically when utility power returns.
All indicators are lit (or Fault LED & message) and UPS emits a constant beeping sound	
• Internal UPS fault.	Do not attempt to use the UPS. Turn the UPS off and have it serviced immediately.
All indicators are off and UPS is plugged into wall outlet	
• The UPS is shut down and the batteries are discharged from an extended outage.	None. The UPS will return to normal operation when the power is restored and the battery has a sufficient charge.
The replace battery light is lit	
• Weak batteries.	Perform an additional self-test to see if the warning clears.
• Replacement batteries not connected properly.	Confirm the battery connections.
The display has a Site Warning Fault message	
• Wiring faults detected include missing ground, hot-neutral (polarity reversal), and overload neutral circuit.	If the UPS indicates a site wiring fault, have a qualified electrician inspect the building wiring.

For the complete User Manual or comprehensive troubleshooting, please visit the following websites:

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