

# How to Troubleshoot an AVR/ECO/Internet/BC Model Tripp Lite UPS that is Intermittently Passing Power

Your Tripp Lite UPS system is designed to provide AC power continuously when AC power is present and to provide a limited amount of battery-backup power when a complete loss of AC power occurs.

If the UPS is intermittently passing power, follow the instructions listed in an attempt to restore normal operation:

1. Turn off and remove any equipment connected to the UPS.
2. Turn off the UPS: press and hold the On/Off button until the UPS beeps, then release the button. Disconnect the UPS from the AC outlet.
3. Determine if the UPS has a removable battery door by examining the bottom of the UPS.
  - If there is no battery door, continue to step 6.
  - If there is a battery door, continue to step 4.
4. Remove the battery door. Carefully remove the battery and inspect it.
  - If the battery is bloated or damaged, install an appropriate replacement battery. When the UPS is returned to service, be sure that it is adequately ventilated.
  - If a voltmeter is available, check the battery's voltage. If the battery's voltage is less than 10V DC, install an appropriate replacement battery. The UPS system's charger cannot recharge a battery with voltage lower than 10V DC.
  - If the UPS and battery are more than two years old, install an appropriate replacement battery. Battery performance and capacity deteriorate over time, and a replacement is needed periodically.
  - If none of the above applies, inspect the battery cables attached to the battery. Remove any build-up of corrosion found on the battery terminals or connectors.
5. Ensure that both the positive and negative connectors are firmly attached to the correct battery leads: the red lead to the positive terminal, the black lead to the negative terminal. Reinstall the battery and battery door.
6. Determine if the UPS has a circuit breaker (button- or plunger-type) by examining the exterior of the UPS.
  - If there is no circuit breaker, continue to the next step.
  - If there is a circuit breaker, press the button inward. If there is no resistance and the button stays recessed, then the circuit breaker is already reset.
7. Confirm that the AC outlet is passing power by connecting another device, such as a radio or lamp, to the outlet.
8. Connect the UPS to the functioning AC outlet, but do not turn on the UPS. The UPS will charge the battery even though the UPS is not turned on. Allow the UPS to charge its battery for four to six hours.
9. Turn on the UPS: press and hold the On/Off button until the UPS beeps, then release the button. The green On/Off LED should now be lit.
10. Verify that the power rating of the equipment to be plugged into the battery-backup/surge-protected outlets does not exceed the UPS output capacity. To do this, add together the power ratings for each piece of equipment and compare the total requirements to the capacity of your unit, which is listed a) on the bottom of the UPS, or b) on the Product Specification tab on the Tripp Lite website's product page. If the total power draw of the connected equipment exceeds the capacity of the UPS, the load **must** be reduced to conform to the output specifications of the unit. Note: This UPS has two types of outlets: battery-backup/surge-protected outlets that **do** provide battery-backup power, and surge-protected-only outlets that **do not** provide battery-backup power.
11. Reconnect the equipment that requires battery-backup power and is within the output capacity of the UPS directly into the battery-backup/surge-protected outlets. Turn on the equipment. Equipment that does not require battery protection or that exceeds the capacity of the UPS can be plugged into the surge-protected-only outlets.
12. Perform a self-test by holding the On/Off button for 3 seconds and releasing it after the **second** beep. The unit will register an alarm while it checks internal components and will briefly operate in battery mode to ensure that it is able to support the attached equipment. If the connected devices remain operational throughout the test, then the UPS is operating properly. Another series of beeps will indicate that the test is complete.



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