

Standby Instrument Battery - Functions Summary

LEVEL TEST pushbutton	When pressed, this momentary pushbutton tests the battery energy level by temporarily turning off the charger and placing an internal load (heater blanket) across the battery. When the pushbutton is depressed, the LOW, MID, or FULL LED illuminates indicating the battery energy level. A level test is also initiated when CB1 is closed after the unit has been stored with CB-1 open. Remote test, J1-18 at ground also initiates a Battery Level Test.
LOW LED	Red LED illuminates when the battery energy is low (0 to 50 percent) during the level test. The Level Test output on pin 14 is open drain.
MID LED	Yellow LED illuminates when the battery energy is (50 to 75 percent) during the level test. The Level Test output on pin 14 is open drain.
FULL LED	Green LED illuminates when the battery energy is full (75 to 100 percent) during the level test. The Level Test output on pin 14 is held low.
BITE TEST pushbutton	The BITE TEST pushbutton is used to start the built-in self-test. Test faults are introduced to verify proper operation of the fault detection circuits, LEDs, and discrete output. All four FAULT LEDs initially illuminate when BITE TEST is first pressed; they extinguish as the pushbutton is released. Holding the BITE TEST pushbutton depressed causes the BATT, CHGR, O TEMP, and HTR LEDs to flash on and off when the unit is operating on battery power only.
BATT LED	Red LED illuminates, and the BITE signal on pin 10 is held low, when there is a 4.0 Vdc difference between the battery center tap and either end of the battery. This measurement is only performed when the charger is off.
CHGR LED	Red LED illuminates, and the BITE signal on pin 10 is held low, when the charge circuit has a fault. The Charge Fault shall be active when any of the following conditions are active: Charger output voltage out of range BITE test performed.
O TEMP LED	Red LED illuminates, and the BITE signal on pin 10 is held low, when a Batt Over Temperature (>75°C) is detected, or if a BITE test is performed. The charger shuts down.
HTR LED	Red LED illuminates, and the BITE signal on pin 10 is held low, when the four 40 W battery heaters are commanded ON and heater current is low, or when heater current is detected and heaters were not commanded ON.
FAULT RESET	Pressing FAULT RESET for five seconds clears the stored BITE TEST faults, if the faults were removed.