

Charging method D

STEP 1 - CONSTANT CURRENT CHARGE

Charge cycle starts automatically when input is connected to mains and battery is connected to the output. The charger is in constant current mode (CC), charging with the maximum current indicated on the charger. The LED-indication on the charger is YELLOW. This step allows rapid charging of your battery until the battery reaches typically 80-95% of its capacity.

NOTE! If battery is less than 3V/cell, charger will apply low current start up. If normal voltage is not reached during start timer period, charge will terminate and 4 red blinks error will be indicated.



STEP 2 - CONSTANT VOLTAGE (TIMER) CHARGE

The charger is in constant voltage mode (CV). Charge current is decreasing.

The LED-indication on the charger is changed to FLASHING YELLOW shortly after entering this mode. The charger will remain in this mode until the current has decreased to end of charge detection level or until CV timer runs out. The battery is charged to its full capacity at the end of this step.



STEP 3 - CHARGE COMPLETE

The LED-indication on the charger is GREEN and the battery is fully charged. The charge current is zero and the battery has been charged to its full capacity. Charger may remain connected to the battery. A new charge cycle will be initiated if battery voltage decrease with 0.1V/cell.



BATTERY NOT CONNECTED INDICATIONS

Battery not connected is indicated by FLASHING GREEN. In this mode charger will apply short pulses attempting to wake up deeply discharged batteries.



Green
flashing

ERROR INDICATIONS

- 2 red blinks: Battery is connected to charger with wrong polarity!
- 3 red blinks: Charger output is shorted. Check output cable connection!
- 4 red blinks: Battery voltage is low. Check battery status or voltage.
- 5 red blinks: Safety timer has run out. Check battery status or capacity.
- LED off: Battery voltage is too high. Check battery voltage.



WAIT MODE INDICATIONS

- Yellow with 1 red blink: Battery temperature is too low (<0°C)
- Yellow with 2 red blinks: Battery temperature is too high (>45°C)

Diagram: D

