

CUTTING EDGE POWER

"Innovative Renewable Energy Solutions"

PWM CHARGE CONTROLLER GUIDELINES

The default behavior of this device is to charge a battery. If there is no battery connected, it initializes the (middle) battery connection.

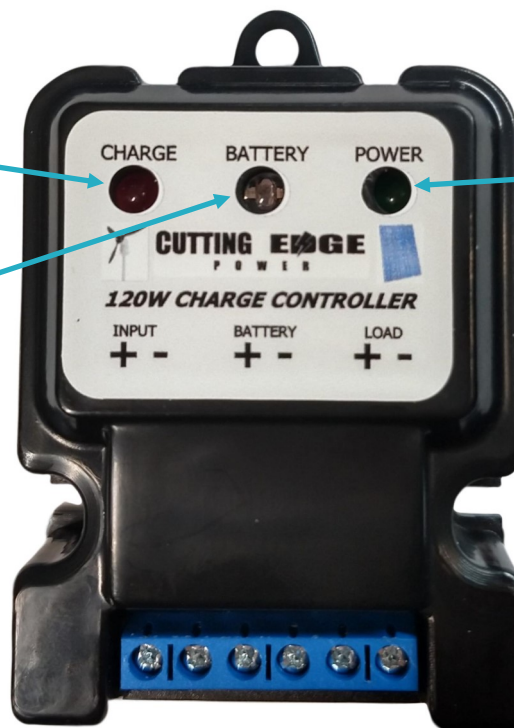
Although a device could connect to the Battery connection, it is an unregulated supply voltage, and could routinely be above 5v if using a 12 solar panel.

This charge controller has three connections (all positive first, then negative). From left to right, they are Charge (solar panel), Battery, and Power (load).

The LED illuminates to display the status. Low supply voltage (4.6V) is indicated by all 3 LEDs blinking.

SOLAR PANEL(S)
(red when connected properly.)

BATTERY:
(green is good) When solar and battery are connected, it will attempt to charge the battery if supply voltage is greater than battery voltage. Charge Controller appears to open circuit to prevent battery from being overcharged.



POWER:

(green when supplying power).
This connection will not be energized until the solar supply is interrupted (darkness).

When the solar is off, and battery connected, the controller will activate Power according to the setting on the four position dip switch on main board. The factory default is on (down, down, down, down). Down, down, down, up turns power on for one hour (if there is enough battery voltage).

CHARGE CONTROLLER WIRING DIAGRAM

SMART TURBINE INPUT



14VDC \pm 0.5V REGULATED

120W PWM CHARGE CONTROLLER



12VDC LOAD OUTPUT

(LOAD CAN BE LIGHTING, ETC. AND CAN BE PROGRAMMED VIA DIP SWITCHES FOR CONSTANT ON, OR NIGHTLIGHT MODE. THE DURATION OF LOAD OUTPUT IN HOURS CAN ALSO BE PROGRAMMED. NIGHTLIGHT MODE: LOAD OUTPUT CAN ALSO BE PROGRAMMED TO TURN ON WHEN CHARGE CONTROLLER HAS NO POWER INPUT + OFF WHEN IT HAS POWER INPUT.)



DC BATTERY VOLTAGE

12VDC BATTERY CHARGING
VOLTAGE (VARIABLE)

