Flexcharge Programmable Timer Wiring Harness

The wiring harness for the timer is easy to build, but you first have to understand the wiring diagram that is supplied with the Flexcharge Programmable Timer. Instructions supplied with the timer read that “the timer must operate from 12 volts AC or DC but the switch will control any voltage up to 250V. The BAT+ and BAT- terminals must be connected to a 12 volt source to switch the load on and off. You must supply power to the Common (C) terminal for the load to obtain power. This can be any voltage up to 250 volts to meet your load requirements. For example if your load is to operate from the same power source as the timer clock, connect the (C) terminal to the battery positive terminal.”

You will be setting up the timer to run from a 12 volt DC power source (external battery) and the load will operate from the same power source (external battery) as the timer clock.

The wiring harness can be constructed with the following parts from Radio Shack
1 each Automotive Inline Fuse Holder for 1-¼ x ¼” fuses, rated 250VAC, 10A, part number 270-1281
1 each Fast-Acting 10-Amp 250-Volt fuses (4pack), part number 270-1015
1 each Automotive Inline Fust Holder for 5 x 20 mm fuses, rated 250VAC, 5A, part number 270-123
1 each Fast-Acting 1-Amp 250-Volt fuses (4pack), part number 270-1049
You will also need two pieces (12-18 inches) of 2 conductor wire preferably 12-16 gauge. Heavy duty lamp wire will work OK. MMC will typically use extra cable that is cut from the end of the solar panel power cable. You will be soldering the fuse holders to this wire and attaching terminal rings to connect this wiring harness to the timer and battery.

Connect BAT(+) to positive battery terminal through 1 amp fuse holder. Connect the BAT(-) directly to the battery negative terminal.

Modem power (+) wire connects to the Normally Open (NO) connection on the timer when setting the timer for modem ON times. Connect to the Normally Closed (NC) connection on the timer when setting the timer for modem OFF times. Use either but not both connections.

The Common (C) terminal is connected to the battery through the 10 amp fuse holder.

Photo above shows the load portion of the wiring harness. The Modem power cable (-) negative side is connected to the battery negative side at the orange wirenut. The Red cable with terminal ring and the 10 amp fuse holder is connected to the (+) positive battery terminal. The black wire with the terminal ring is attached to the battery (-) negative terminal.
The photo above shows the timer power portion of the wiring harness. The Red cable with terminal ring and the 1 amp fuse holder is connected to the (+) positive battery terminal. The black wire with the terminal ring is attached to the battery (-) negative terminal.

NOTE: Both Black wires for each side of the wiring harness share the same terminal ring at the battery negative terminal.