

WARNING! BEWARE OF RAPID RELAY SWITCHING!

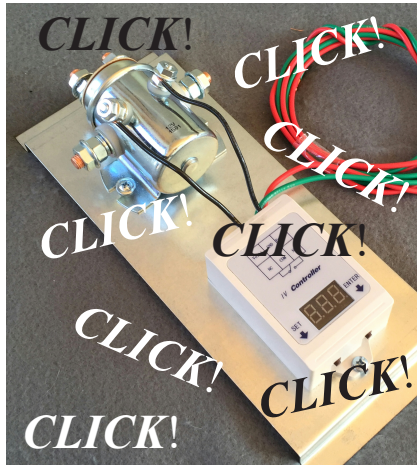
Battery regulators have been set by the factory to accommodate very large and common 16 piece battery banks. - For smaller battery banks, oversized power invertors, perpetually over-charged battery banks or dump resistors that are too large the stock low-end voltage settings will need to be reprogrammed and lowered in voltage range or the click rate on the relay will be too fast.

The normal click rate should be once or twice every 3 to 6 minutes or even slower. If the click rate is much faster it can decrease relay life and overheat parts.

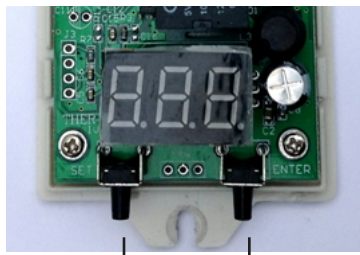
Things that can effect click cycle timing are:

- #1. Undersized battery banks.
- #2. Over sized battery load demands.
- #3. Fully charged batteries with no job to do.
(Typical of "Cut-Load" arrangements)
- #4. Dump Load Resistor or Device too large.

FIX - Reprogramming D, E, F, - Start by lowering the bottom voltages by 1 V (12.7V) for 12V systems. Lower voltage by 2 V (25.2) for 24V systems and lower voltage by 4V (51.1) for 48 volt systems.) If the regulator still clicks too fast you must continue dropping the D, E, F, voltage ranges (low voltage settings) until it the solenoid settles down and clicks very slowly, once every 4 to 7 minutes during strong winds or full Sun.



CLICK, CLICK, CLICK, CLICK! NOT GOOD!!!



SET ENTER

See your original programming sheet for more info on reprogramming D,E,F, voltage.

V-BOX Must be programmed like this (Skip DL9)

- #4 - The next number flashes in V-BOX "D". Changed by pressing ENTER. press SET when done
 - #5 - The next number flashes in V-BOX "E". Changed by pressing ENTER. press SET when done
 - #6 - The next number flashes in V-BOX "F". Changed by pressing ENTER. press SET when done
 - #7 - The next number flashes in V-BOX "G". Changed by pressing ENTER. Keep at ZERO
 - #8 - The next number flashes in V-BOX "H". Changed by pressing ENTER. Keep at ZERO
 - #9 - The next number flashes in V-BOX "I". Changed by pressing ENTER. Keep at ZERO
- The last screen returns to reading battery voltage
- Notes: If you press SET and go to far keep pressing and it will restart at ZERO
- P-O raw programming Press set button until it gets to "P-3"

A, B, C,	2	8	.8	High Volts
D, E, F,	2	5	.6	Low Voltage
G, H, I,	0	0	.0	Do not use
J, K, L,	?	?	.?	Battery Volts

Example for 24 V system (Skip DL9)

Used to make fine adjustments to the voltage reading to match

TO ENTER "P" MODES - PRESS AND HOLD "ENTER" BUTTON FOR 3 SECONDS. After "P" mode shows up on screen click on SET button to find the mode you need and once found hit the ENTER button to enter the mode and you can immediately start programming it. (P-2 and P-4 are not used) Programming Code line #1 in the P-1 MODE / Code line #1 should read "000" / Code line #2 "001" (This gives 1 second delay and gets P-3 mode to turn off a reset properly! VERY IMPORTANT!) Then the next code line is set at "D-9" which gives the display 9 seconds of "ON" time before it turns off (when you get to P-3 you will see the D-9 code too. Next we will program P-3 (See above V-BOX programming once your are in P-3 programming mode)