

## Generic PROG 4 settings for Lithium batteries

Yes, you can do it. Yes, you will probably want to change some settings. No, there isn't a default setting.

Ask your battery supplier if they have suitable settings for you to use. If they do, use those.

If not:

The following are suggestions based on experience. We take no responsibility at all if they don't suit your battery or your application. If you follow these suggestions, you are accepting all the risk.

Check your battery specs to find the charging voltage (sometimes given as a range) and the float voltage ( sometimes given as range and often not supplied at all)

If your charging voltage range includes 14.2V and your float voltage range includes 13.8V (scale up for battery voltages above 12V), then you can (probably) safely use PROG=1 and no other adjustment is necessary.

If you can't use PROG = 1, you will need to use PROG=4 as follows:

Go to [Plasmatronics.com.au](http://Plasmatronics.com.au) and download the reference manual for your controller model. Towards the end of that manual you will find a page called PROGRAM 4 MENU SYSTEM. This page is a map of all the user settings in your controller and will be helpful with the rest of the process.

SET/VOLT = (TO SUIT YOUR NOMINAL SYSTEM VOLTAGE 12,24,36,48)

SET/PROG = 4

SET/REG/BMAX = (The LOWEST voltage in the range you have available)

SET/REG/EMAX = (The MINIMUM setting available in your model of controller)

SET/REG/ETIM = 0.0hrs

SET/REG/EFRQ = (The MAXIMUM setting available in your model)

SET/REG/ABSV = (The same voltage as BMAX)

SET/REG/ATIM = (0.1 hrs)

SET/REG/FLTIV = (The LOWEST voltage in any float voltage range you have available. If you don't have a float voltage available, use 13.8V (scaled up for higher voltages))

SET/REG/HYST = (Ignore this setting, it is not relevant to you. No really, don't think about it again)

SET/REG/BRTN = (leave as default unless you understand it and want to make a change)

SET/REG/CHRG = (if the maximum charging current your battery can take is less than the capacity of the controller, set this limit to suit, otherwise, set to the maximum for your model)

SET/REG/BFRQ = (Maximum for your controller)

SET/REG/TCMP = 0 (DO NOT FIT A TEMPERATURE SENSOR)

SET/MODE/PWM = 1

LOAD/LSET/LOFF = (A voltage that is somewhat higher than the BMS cut off discharge voltage for your battery. It's usually fine to leave this at the default)