

INSTRUCTIONS FOR SETTING THE MIDNITE CLASSIC FOR HYDRO

The Classic does not come with the latest hydro firmware. If you got the Classic from us, we have installed the latest firmware. Otherwise, you will need to upgrade it with new firmware.

Typically, we will make all the changes necessary to use the Classic with the hydro. If, however, you enter the Wizard or change the battery voltage, many of the settings will default to the factory standards, which will not work with hydro.

If you want to change the time and date on the Classic, or protect the changes with a password, you will have to enter the Wizard, which means you will lose all the hydro settings we have made.

Below are the changes you will have to make if you entered the Wizard to set the time and date, if you changed the battery voltage, or installed password protection. Be sure you have turned the hydro off while making these settings, as the open circuit voltage of the hydro can often damage the controller.

These settings will make the charger stay online continuously, while regulation is performed by a solid state relay connected to the aux 2 output of this controller or with the auxiliary of the solar controller, if you have one. Using the aux of the solar controller will avoid the controllers conflicting with each other.

Once you have set the time, date and battery voltage in the Wizard, go back to the Main Menu and enter the Charge Menu.

On the Volt screen, set the EQ absorb and float 5V above what you want the regulation voltage to be. Press Enter after each change and then go back to the Charge Menu by pushing the Menu button once. Then right arrow to the End Amps screen. The End Amps can be set to 1-2% of your battery capacity or left at the default.

Then right arrow to the Rebulk, which must be set a few 10ths of a Volt below your float voltage. If this is not set, the controller will always stay in Float, unless the hydro is turned off for two hours. Press Enter after each change.

Go back to the Main Menu by pressing the Menu button and right arrow to the Tweak screen. Enter the Tweak screen, change the first item (AF) to Off, change the next item (GF) to Off, press Enter after each change.

Then press the top right hand button under More 2 to get to the next screen. Press the same button under More 3 again, and change the first item (Insomnia) to ON. Press Enter again, and then Menu three times to get back to the Main Menu.

Left arrow to Mode and press Enter. Make sure the Mode is On. Press Enter.

Then right arrow to Function. Up arrow to Hydro and press Enter.

Press the top right hand button below Setup to enter the Hydro Setup screen.

Down arrow to the first item (Interval) to Twiddledither and press Enter.

Right arrow to Min Voltage and increase this to your hydro voltage (12, 24, 48 or 120). This will stop the controller turning on and working below your hydro voltage. Press Enter.

Right arrow 4 times to the next item (Depth). Reduce the Depth to the minimum 1% and press Enter. Press the Menu button twice to return to the Main Menu.

Right arrow to the Aux window. Press Enter to enter the Auxiliary window and then right arrow to Aux 2. Press the up or down arrow to select Diversion High and press Enter. Right arrow back to Aux 2 and press the top right hand button below Setup. Use the up and down arrows to select Waste not High and press Enter. Use the right arrow to highlight Waste not High and then press the button below Setup twice to enter the Volt Menu. Use the down arrow to set the volts to -5, making the aux go off 5V below the voltage selected in the Charge Menu.

Leave the Width on 1V unless you experience pulsing on your lights, in which case increase the Width. Remember to press Enter after any changes.

Once changes have been made, do not enter the Wizard again, as you will have to repeat the process if you do.

Pressing the Status button will get you back to the Classic window, which will tell you the hydro output and the battery voltage. Pressing the Status button again will show the hydro Amps, not shown on the first screen. Pressing it repeatedly will get you back to the first screen.

If you have a solar controller with an aux option, you do not have to set the aux on the Hydro Classic. Instead, set the aux on the solar controller to go off at the same time (0), if you want to divert all available power. Or a few 10ths above the solar, if you only want to divert the hydro power.

The solid state relay and diversion load are not provided by Midnite and has to be bought seperately from us or another supplier.

Go through the Menus again without entering the Wizard to make sure all the changes have been made and kept.

The Classic will take a few seconds to wake up, so turn the hydro on slowly, giving it time to wake up. Once you hear the hydro loading up, you can open it all the way. Call us, if you have any problems.