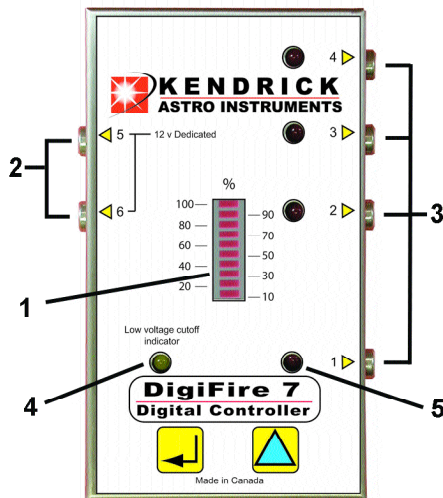
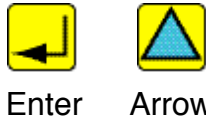


The Kendrick DigiFire 7 Controller



Programming Keys



- #1. Bar graph LED
- #2. 12 VDC constant
- #3. Programmable outputs.
- #4. Low Voltage Cut-off indicator.
- #5. Power on indicators LEDs (outputs 1 through 4)

Specifications:

- Operating voltage: 12 VDC
- Supplied fuse: 7 amp
- Maximum amperage: 8 amps, Requires an 8 amp fuse upgrade.
- Low voltage cut-off: 11.6 volts
- Variable Power Control (**Duty cycle**): 0 to 100% (in 10 % increments). Outputs 1 through 4 only.
- Outputs 5 & 6: 12vdc constant.

Fuse location:

Center pin of cigarette lighter plug. To replace fuse, push pin in, turn counterclockwise and then pull out. Remove fuse and replace. (extra fuses not supplied)

OPERATING INSTRUCTIONS

Power up: Plug into a cigarette lighter plug on any 12VDC power source. There will be no LED indication that the controller is actually on. The default settings for the outputs 1 through 4 on first time power up is set to 50%. Outputs 5 & 6 will provide 12 vdc at power up.

PROGRAMING OUTPUTS

Note: If the yellow low voltage cut-off indicator is on, you will not be able to program your controller. Recharge your battery and try again.

Outputs 1 through 4 are programmable. These outputs can be programmed to have a variable power output, known from here on as **DUTY CYCLE**, from 0% to 100% in 10% increments.

Outputs 5 and 6 are non-programmable and are 12 volts constant. These can be used to power any 12 vdc accessories that do not exceed 8 amps (total amperage requirements of all the heaters and other accessories being operated from the controller must be taken into account). **Please note the controller is provided with a 7 amp fuse so amperage requirements larger than this will require a fuse upgrade.**

Program output 1

To enter programming mode, press the Enter and Arrow keys simultaneously. Output #1 LED will come on. All other LEDs will be off with the bar graph showing the default setting of the output. Press the arrow key. Each press of the arrow key will increase duty cycle 10% and the bar graph will illuminate 1 segment per 10% increase in duty cycle. When you have reached the desired duty cycle % for this output, press the enter key to set output #1. This will also take you to output #2 and output #2 LED will light up.

Program output 2

Press the arrow key. Each press of the arrow key will increase duty cycle 10% and the bar graph will illuminate 1 segment per 10% increase in duty cycle. When you have reached the desired duty cycle % for this output, press the enter key to set output #2. This will also take you to output #3 and output #3 LED will light up.

Program output 3

Press the arrow key. Each press of the arrow key will increase duty cycle 10% and the bar graph will illuminate 1 segment per 10% increase in duty cycle. When you have reached the desired duty cycle % for this output, press the enter key to set output #3. This will also take you to output #4 and output #4 LED will light up.

Program output 4

Press the arrow key. Each press of the arrow key will increase duty cycle 10% and the bar graph will illuminate 1 segment per 10% increase in duty cycle. When you have reached the desired duty cycle % for this output, press the enter key to set output #4. The controller will now function at the presets you have just programmed.

The LEDs for outputs 1 through 4 will now be on. Note that the LEDs do not flash to correspond to the duty cycle presets. If an output has been set to "0", it's LED will be off.

TO REVIEW SETTINGS

Enter the programming mode by pressing both programming keys simultaneously. Press the enter key to preview each output. Changes may be made to each output accordingly by pressing the arrow key.

Once set, the controller will remember your programming presets until you decide to change them.

SOME RECOMMENDED SETTINGS

For eyepieces and telescopes up to 90mm in optical diameter, we recommend a setting of about 20% to 30%.

For optics from 90mm to 155mm, we recommend a setting of about 30% to 50%.

For optics from 155mm and up, we recommend a setting of about 40% to 60%.

Please note that these settings are only suggested settings based on our experience for observing on a moderately humid summer night with air temperatures about 15° to 24° C (60° to 75° F). You will need to adjust for your conditions, site and equipment accordingly.

LOW VOLTAGE CUT-OFF

This function will turn off the controller when your battery reaches 11.6 volts. The LED flashes on and off when the battery voltage has reached 11.8 volts. The length of time the LED flashes will be variable, depending on how much current is being drawn from your battery. When the cut-off voltage has been reached the Low voltage cut-off indicator LED will stop flashing and be on solid.