

USAutomatic

7 Day Programmable Timer

Solar Friendly

Part # 550015

Programming Instructions and technical data



Supply voltage 12 to 24 volts dc

Standby current 1 ma

Operating current 1 ma

3 wire harness included

Open collector output

Back up rechargeable battery type B40H

Dimensions 2.375" x 2.375"

Safety Warning – This device when directly connected to an automatic gate or door will activate device when programmed to do so. Proper safety precautions **MUST** be taken to prevent injury to people, property or animals that might be in the area when device is activated. USAutomatic recommends safety devices such as contact sensors, photo beams and motion detectors on all installations. In addition visual or audible devices may also be used to provide warning to persons or animals in the area.

USAutomatic, LTD 118 Hillside Drive, Lewisville, TX 75057

www.usautomatic.com

Programming Instructions (USAutomatic Part # 550015)

NOTE: 24 hour format. Example 8 am is displayed as 8:00 and 8:30 pm is displayed 20:30

The timer has the ability to program up to 24 separate events per day. The instructions below describe the simple setting of just one event per day 01. If more than 1 event needs to be programmed pressing the + or - key while "01 on" is flashing will scroll to the other events such as 02, 03 etc.

Setting clock

1. Press Y
2. Use + or - to scroll menu to CLOCK: Press Y to select clock programming
3. Hour is flashing > Use + or - to change hour
4. Press Y when correct
5. Minute is flashing > Use + or - to change minute
6. Press Y
7. Day is flashing > Use + or - to change day
8. Press Y
9. Time and Date are set

Set Program

1. Press the Y button
2. Use + or - to scroll menu to PROG mode: Press Y to enter program mode
3. "01 on" should be flashing: Press Y to enter "01 on" program mode
4. Use + or - key to set hour: Press the Y key
5. Use + or - key to set minutes: Press the Y key
6. Use + or - key to set the day to execute program: Press the Y key
7. "01 on" will be flashing: Press the + key
8. "01 off" should be flashing: Press the Y key to enter the "01 off" program mode
9. Use + or - key to set hour: Press the Y key
10. Use + or - key to enter the minutes: Press the Y key
11. Use the + or - key to set the day to execute program: Press the Y key
12. Press the N key to exit program mode or wait 5 seconds

Example Program (Example this will set gate to open at 7:15 am and then close at 7:30 pm Monday thru Friday)

1. Press Y
2. Menu on right of display "PROG" should be flashing
3. Press Y to enter program mode
4. "01 ON" is flashing > represents event 01 start time
5. Press Y
6. Hour is flashing > Use + or - to set hour to 7
7. Press Y
8. Minute is flashing > Use + or - to set minute to 15
9. Press Y
10. Days to execute program are flashing > Use + or - select the Monday thru Friday group
11. Press Y
12. "01 ON" is flashing > Press the + key
13. "01 OFF" should now be flashing > represents event 01 stop time
14. Press Y
15. Hour is flashing > Use + or - to set hour to 19
16. Press Y
17. Minute is flashing > Use + or - to set minute to 30
18. Press Y
19. Days to execute program are flashing > Use + or - select the Monday thru Friday group
20. Press Y
21. 01 OFF is flashing > Press N button to exit program mode
22. Program is now complete for Event 01. You may program additional events up to 24

Can I use this timer to control any type of device?

The USAutomatic solar friendly timer is designed to be used with all USAutomatic products. The special solar friendly design will not allow for use on all types of devices. The open collector output should only be connected to low current (max 50 ma) applications. This allows for operation on most 12 volt dc devices.

Timer display is blank

If the timer display is blank connect power red wire (12 vdc) and black wire (ground)

If timer display continues to be blank press the reset button "R" for 1 second and release

Timer will not execute the program

Verify that the timer is in program mode – look just below the time and observe the mode timer is set in.

If "always off" is selected press the N button until PROG with the empty light bulb to the left is selected.

Timer is executing the program always

Verify that the timer is in program mode – look just below the time and observe the mode timer is set in. If "always on" is selected press the N button until PROG with the empty light bulb to the left is selected.

Which PROG mode should the timer be set to?

The PROG mode has 2 settings (use the N button to toggle between modes)

1. PROG with empty light bulb to the left indicates ON state of timer
2. PROG with half full light bulb to the right indicates OFF state of timer

By toggling the mode with the N key you can temporarily override the event programmed. No matter which mode the timer is left in the event programmed will execute as programmed in the next 24 hours.

Example: Timer is programmed to the ON state at 7:00 and OFF state at 19:00 and it is 12:00. The timer should be executing the program and displaying the PROG with empty light bulb to the left. Pressing the N key until mode changes to PROG and half full light bulb to the right will temporarily turn timer OFF. The timer will stay OFF until 7:00 cycles back around.

Menu contents:

To view menu items press the Y button and the menu will appear on the right side of the display

PROG – This mode is for setting the ON and OFF times of all events

DOWN – This mode will activate device connected when timer counts down to zero.

CLOCK- This mode is used to set the time date and time of the clock.

SUMMER – This mode is for daylight savings time the + or – can be used to toggle clock time 1 hour.

RANDOM – This mode will randomly activate the device connected to it.

How do I manually change timer to the always ON or always OFF mode?

When one of these modes are used the timer will not execute any programs.

Press the N button cycling the mode (indicator below time display) until "ALWAYS ON" or "ALWAYS OFF" appears.

Place back into program mode by pressing N button cycling the mode back to "PROG" with empty light bulb to left.

The timer only has 3 wires what are they used for?

Red wire: is supply voltage +12 vdc

Black wire: is supply voltage ground

Blue wire: is the signal wire: When timer is running program or in the always ON mode this wire will supply a ground connection. Only connect to circuits that need a ground to activate the device.

Is this timer Solar Friendly?

YES, the current draw in standby or program mode is less than 1 ma. This meets the requirements of the Solar Friendly Manufacturers Association.

Event programming conflicts with other event programming

In case you program ON and OFF times that overlap the earliest ON time and OFF time will be executed.

Can this timer be used to turn on and off devices such as keypads, Free exit sensors or other devices?

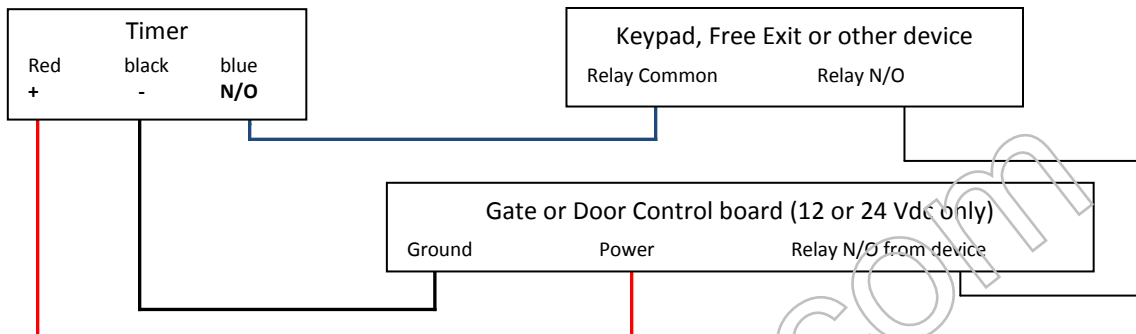
Yes, if you desire to control operational time of such devices connect the Relay N/O from the device to the blue wire only. The device will only operate when the program is running or timer is in the always on mode. This disconnects the device relay common thus disabling the device from operating what it is connected to. See illustration below.

The illustration below shows how to wire the 7 day timer so that it controls the functional time of the hard wired device. The timer should be programmed with an ON time and OFF time corresponding to the time of the day the device needs to be functional.

If you toggle the timer to the always ON mode the device will always work.

If you toggle the timer to the always OFF mode the device will not work.

If you toggle the timer to the PROG mode it will execute the events programmed.

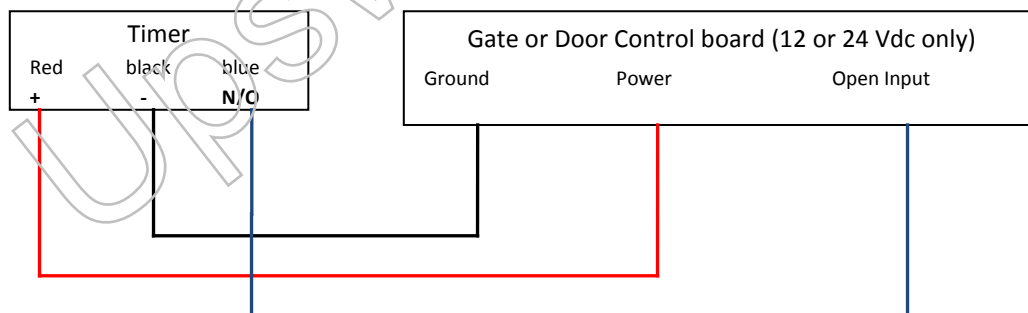


The illustration below shows how to wire the 7 day timer directly to a gate or door. The timer should be programmed with an ON time and OFF time corresponding to the time of the day the gate or door is to be held open. The close function must be part of the gate or door control board. The timer only holds the gate or door open overriding any automatic close function of the gate or door control board.

If you toggle the timer to the always ON mode the gate or door would always be open.

If you toggle the timer to the always OFF mode the gate or door will operate as if no timer is present.

If you toggle the timer to the PROG mode it will execute the events programmed.



Safety Warning – This device when directly connected to an automatic gate or door will activate device when programmed to do so. Proper safety precautions MUST be taken to prevent injury to people, property or animals that might be in the area when device is activated. USAutomatic recommends safety devices such as contact sensors, photo beams and motion detectors on all installations. In addition visual or audible devices may also be used to provide warning to persons or animals in the area.

This product is warranted against defects in material and workmanship for one year. This warranty does not cover defects caused by, but not limited to: acts of God, improper installation, abuse, fire and water damage, electrical surges. For more information, contact US Automatic.