

12 Volt Timer with 4 Circuit Relay

Timer

Purchased at Amazon

Can be set to run from 1 second to up to 1 hour (60 Minutes)

Optimum operation is 12 Volts DC

See Info—All Timer—World Chip file

RELAY

At rest with no activation

If activation button light is used the button light is lit

Timer activation is run through as activated

(Circuit completed and activation of timer started when button is pushed)

(Activation is disabled when button is pushed and until the timer turns off)

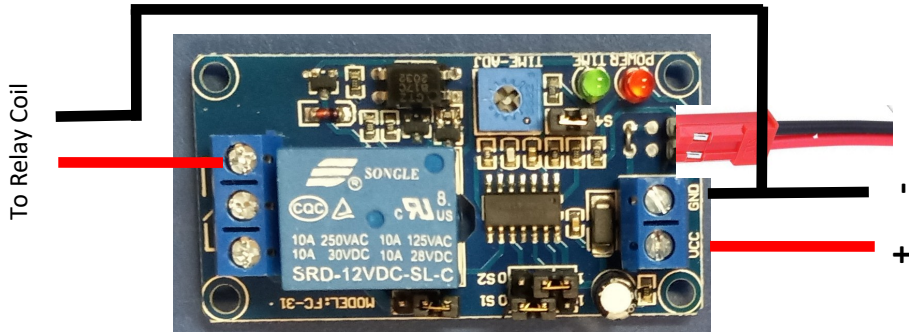
First Item to be operated will run when the timer is activated

Second Item to be operated will run when the timer is activated



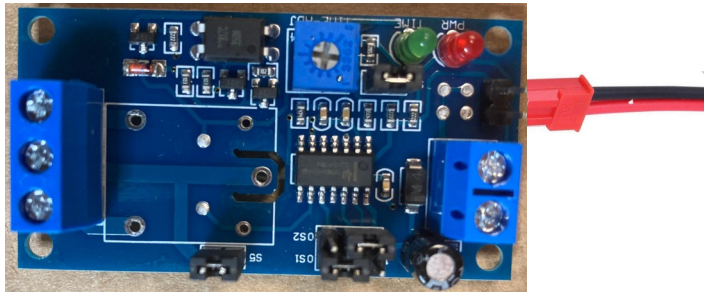
Activation Plug - JST 2 Pin Male Female Connector

Timer Wiring Choices

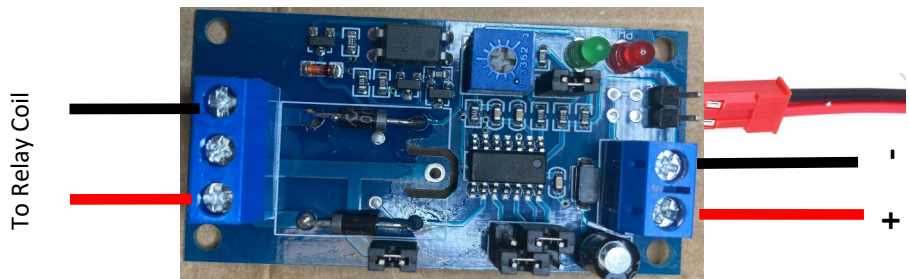


This is the original Timer purchased as of today and it looks the same.

This timer is wired to activate a 12 Volt DC Relay by activating the timer's attached relay. The timer/relay is a one circuit relay as purchased and can use the same power source to use the



This timer is shown with the Relay removed. I have used these timers after removing the relays mostly because some of the attached relays have failed. The timers seem to work



This timer is shown with two diodes replacing the relay.


After I removed the attached relay I then soldered in two diodes across the solder points of the relay. This allows me to wire directly through the timer to activate another relay.

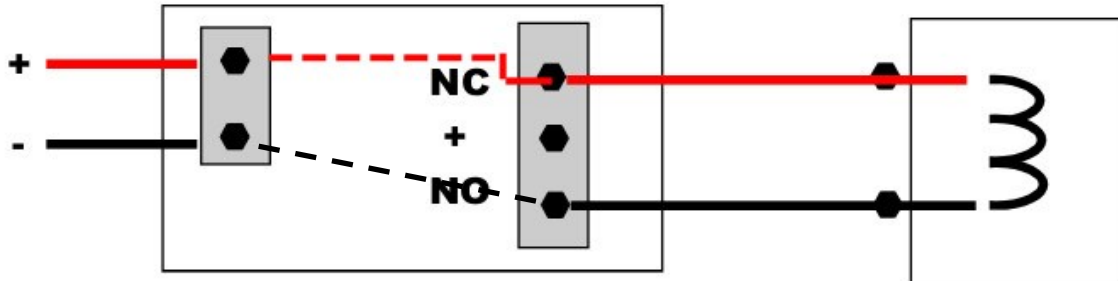


Activation Plug - JST 2 Pin Male Female Connector

Chart to set the Timer's Length of Time

12 Volt DC Power supplies both the timer and the item timed to work with an internal connection.

- | | | |
|----|---|--------------------------------|
| S1 |  | 1 Second to 15 Seconds |
| S2 |  | |
| S1 |  | 1 Second to 60 Seconds |
| S2 |  | |
| S1 |  | 1 Minute to 8 Minutes |
| S2 |  | |
| S1 |  | 6 Minutes to 60 Minutes |
| S2 |  | |



**S5 leave attached to run the relay
From the timer power 12 V DC**

- S1 = Switch 1
- S2 = Switch 2
- NC = Normally Closed
- NO = Normally Open
- + = Positive DC
- = Negative DC

Activation Wire Pin +
Activation Wire Pin -

Activation Plug - JST 2 Pin
Female Connector

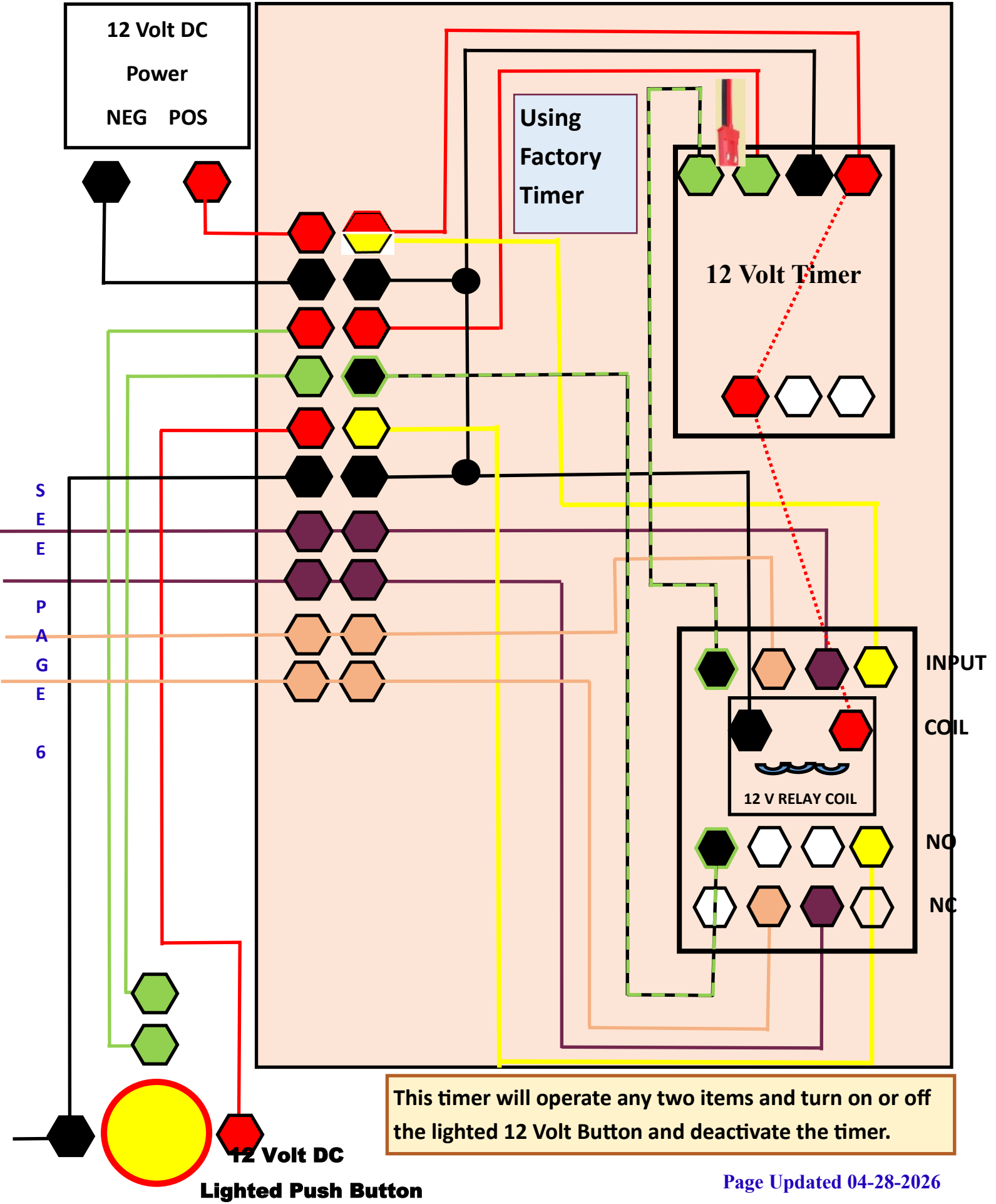
PDF-12 Volt Timer diagram



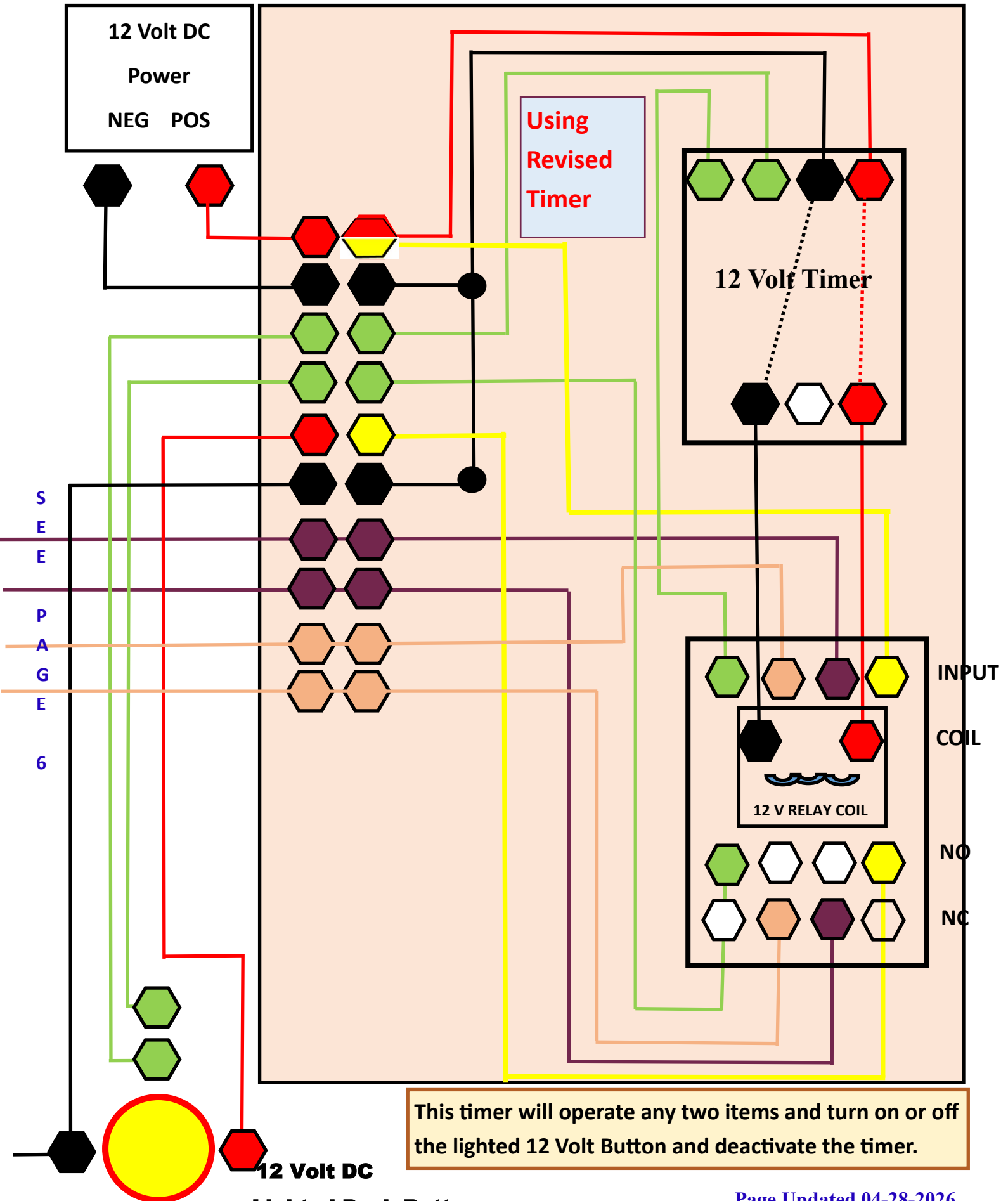
Activation Plug - JST 2 Pin Male Female



All - Timer D - 12 volt Timer Diagram with 4 Position - 12 V Relay.pub



All - Timer D - 12 volt Timer Diagram with 4 Position - 12 V Relay.pub



This timer will operate any two items and turn on or off the lighted 12 Volt Button and deactivate the timer.

Two Operating Items wired to 4 Circuit Relay

Below shows the wiring to hook up to the preceding page two operating accessories to the four circuit relay. They can be wired to either turn on or off individually or together.

You can also use a DC and an AC powered items to operate at the same time. Or different voltages of the same type of power AC or DC.

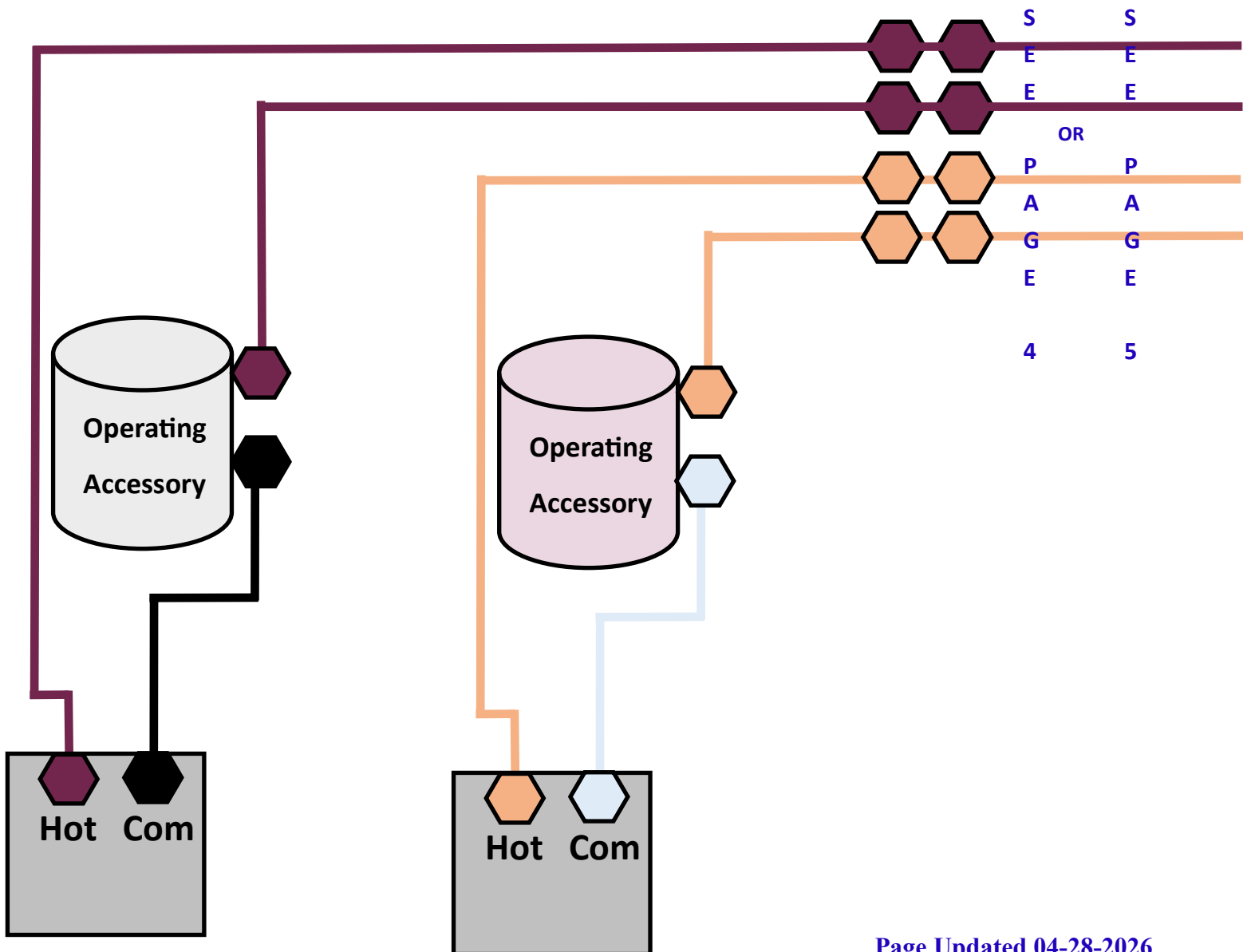


Chart to set the Timer's Length of Time



Activation Plug - JST 2 Pin Male Female Connector

Terminal Strip Input wiring to make the relay work



12 Volt DC Positive for Timer, Relay and LED Button Light



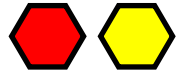
12 Volt DC Negative for Timer, Relay and LED Button Light



Push Button Leads to start the timer



Push Button Leads to start the timer



12 Volt DC Positive to operate the LED Button Light



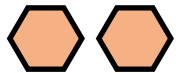
12 Volt DC Negative to operate the LED Button Light



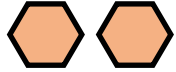
Input for first item to operate



Output to the first item to operate



Input for second item to operate



Output to the second item to operate

Relay Connections Color Codes



Red and Black ar to power the relay coil



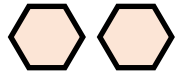
Button Light to be turned off when timer activated



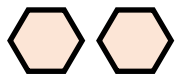
Hot or Positive from power source to operate an item



Hot or Positive to the first item to be switched on or off



Hot or Positive from power source to operate an item



Hot or Positive to the second item to be switched on or off



Activation Leads through the Relay to turn activation OFF



Activation Leads through the Relay to turn activation OFF

Relays Old vs New Styles 2 and 4 Circuits

Old Style

New Style

