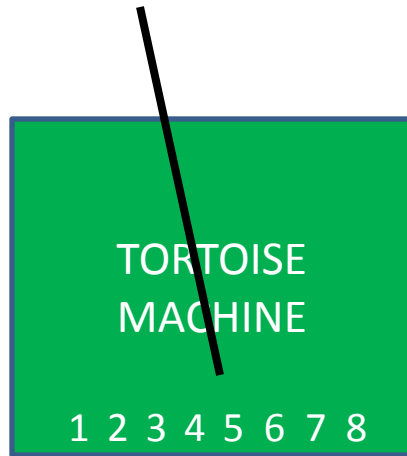


# How To Wire Your Tortoise Switch Machine

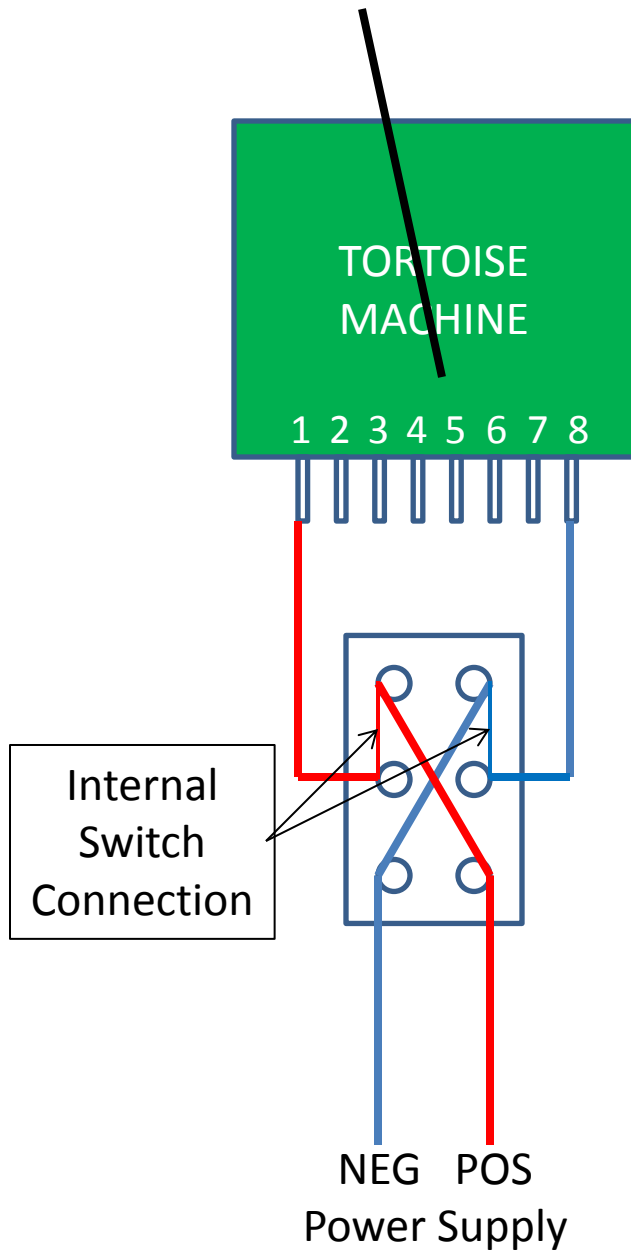


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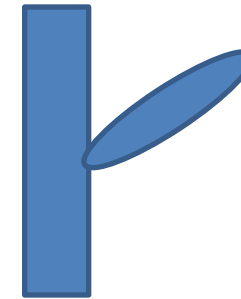


Simple DC connections for a Tortoise is to connect one wire to terminal 1 and one wire to terminal 8.

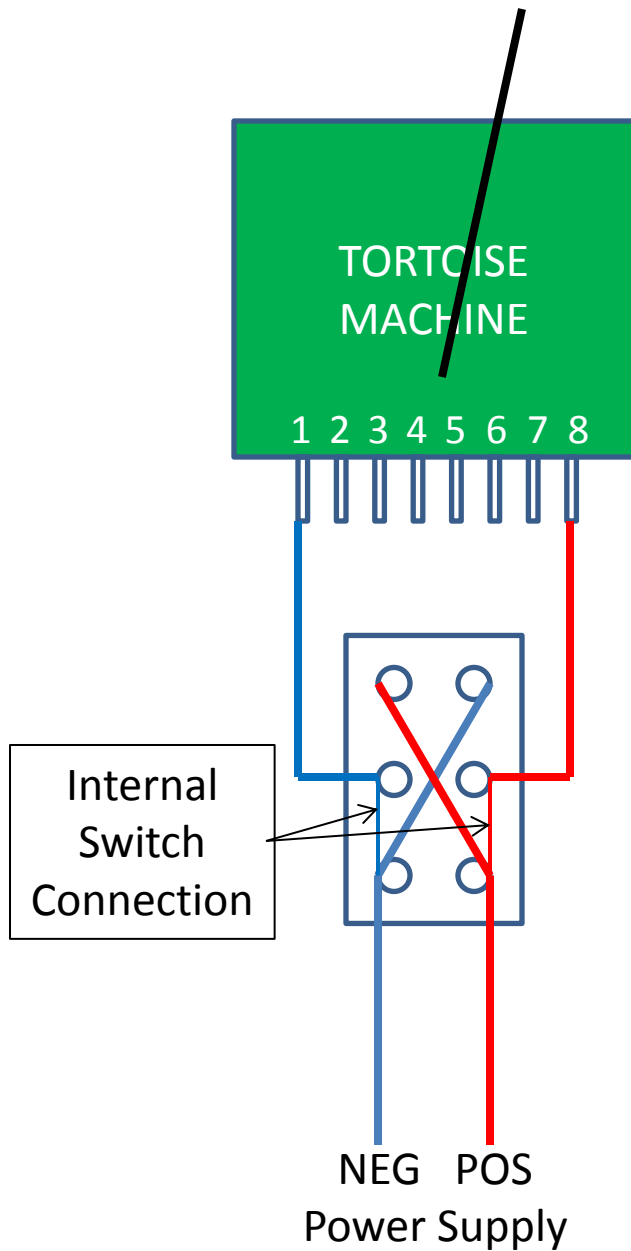
Reversing polarity on terminals 1 and 8 will change the direction of the switch machine.



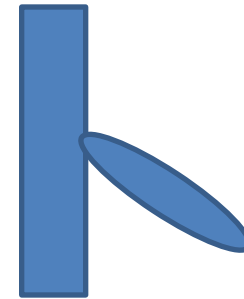
Reversing polarity on terminals 1 and 8 will change the direction of the switch machine.



DPDT  
Double Pole Double Throw  
ON-ON



Reversing polarity on terminals 1 and 8 will change the direction of the switch machine.



DPDT  
Double Pole Double Throw  
ON-ON

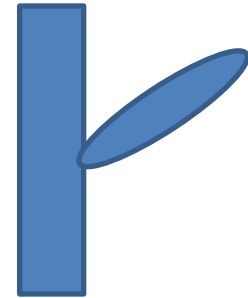
# TORTOISE MACHINE

1 2 3 4 5 6 7 8

Add a 2 Lead Bi-Polar LED for a Panel Indicator. Changing the polarity of the leads will change the color

Internal Switch Connection

NEG POS  
Power Supply



DPDT  
Double Pole Double Throw  
ON-ON

Good practice is to make "up" your normal traffic flow. One glance down the fascia And you know you're set for the Main.

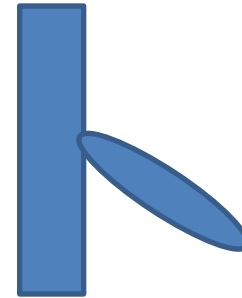
TORTOISE  
MACHINE

1 2 3 4 5 6 7 8

Add a 2 Lead  
Bi-Polar LED for a  
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Changing the polarity  
of the leads  
will change the color

Internal  
Switch  
Connection

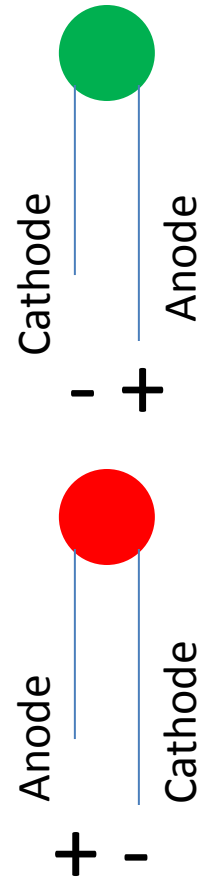
NEG POS  
Power Supply



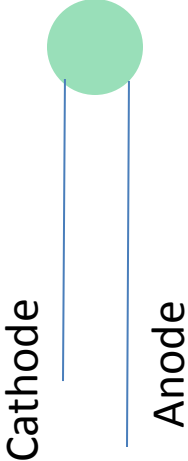
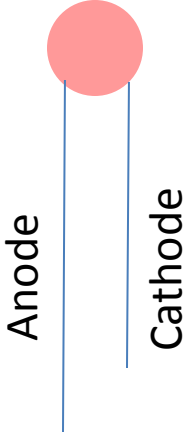
DPDT  
Double Pole Double Throw  
ON-ON

Good practice is to make  
“up” your normal traffic flow.  
One glance down the fascia  
And you know you’re set for the Main.

Bi-Polar LEDs are two LEDs inside one package. Leads serve as both Anode and Cathode.

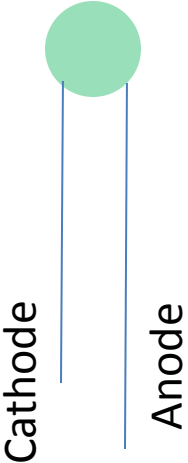
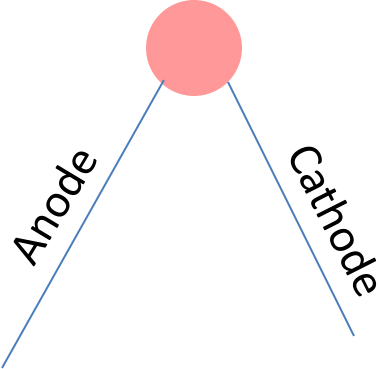


# Single LEDs

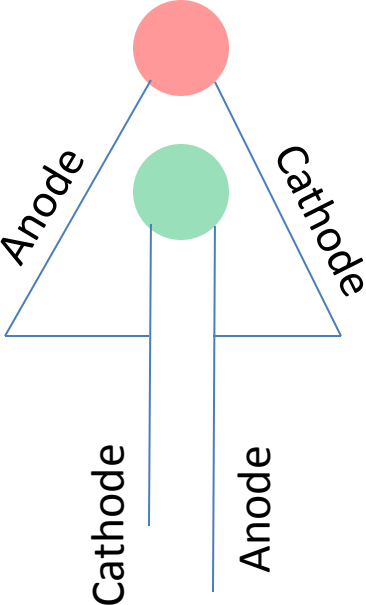




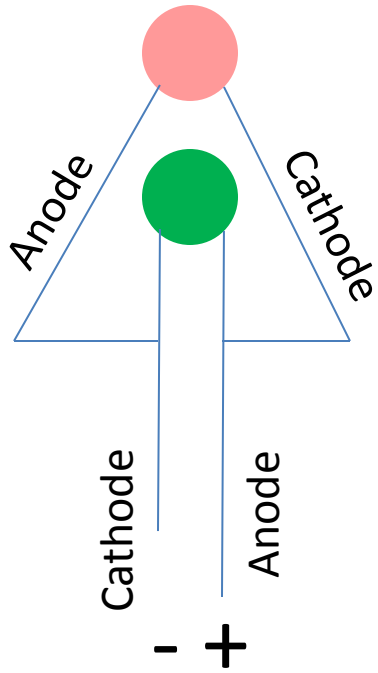
# Single LEDs



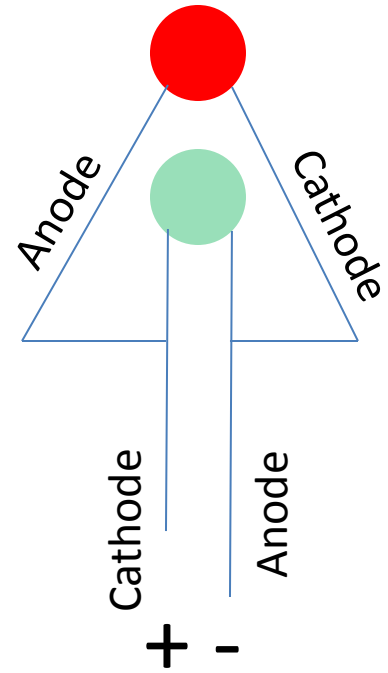
# Single LEDs



Single LEDs



Single LEDs





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A good, inexpensive, source  
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DPDT ON-ON is 75 cents.  
In quantities of 100, 65 cents.



**DPDT ON-ON Mini Toggle Switch**

Item #: 31886 SW

**\$0.75**



**DPDT On-Momentary Mini Toggle Switch**

Item #: 16073 SW

**\$0.69**



**DPDT Momentary-Off-Momentary Mini Toggle Switch, UL**

Item #: 25016 SW

**\$0.79**

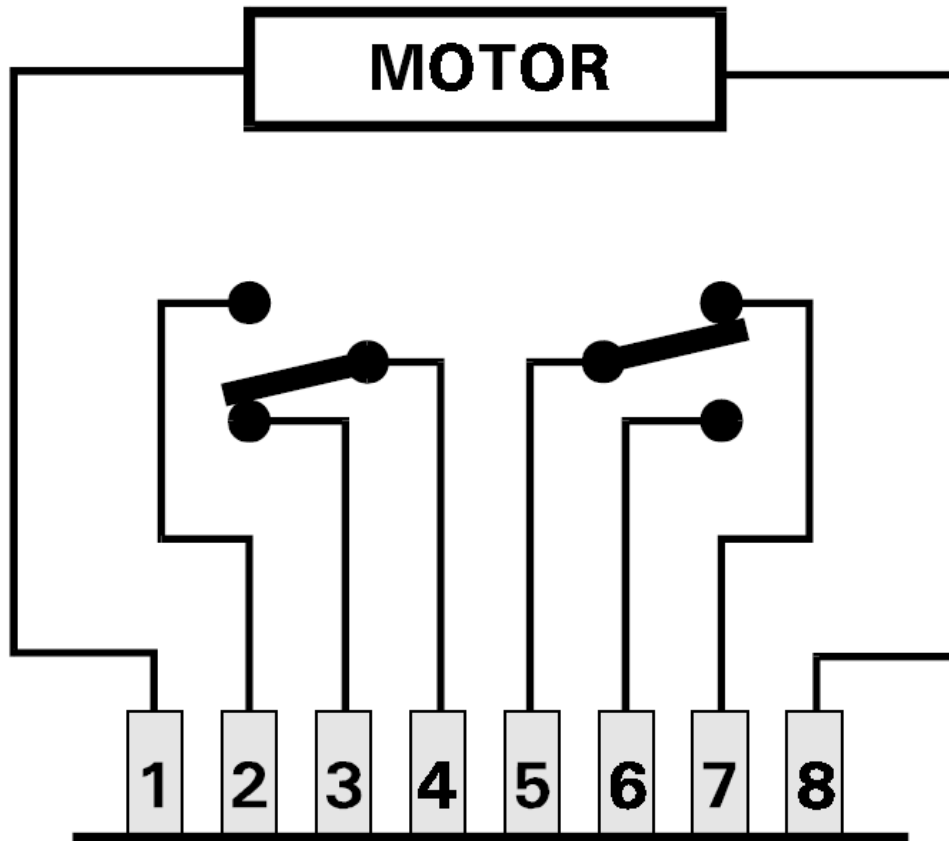


**DPDT On-Off-Momentary Mini Toggle Switch**

Item #: 16074 SW

**\$0.69**

# Internal connections of the Tortoise with 2 SPDT Switches



If you wish to power your frogs use one of the internal SPDT switches built into the Tortoise.

*FIGURE 2.*

# Questions?

Ron St.Laurent  
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