SPDT Switch

(Single Pole Double-throw)

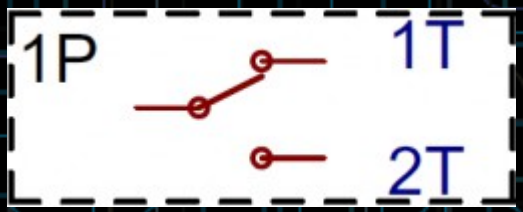
A switch works by controlling the state of a circuit. With a switch that state can be either open (disconnected) or closed (connected). The switch we are using is defined as a;

Single Pole, one input pin
Double-throw, two output pins

The SPDT switch works by changing which output pin (throw) is connected to the common input pin. Only one output pin can be connected to the input pin at a time, and the output pin that is connected is determined by the position of the sliding button on top of the switch.

This diagram represents how a SPDT switch works internally

1P = Single Pole, the input



1T = a throw or output pin

2T = a throw or output pin

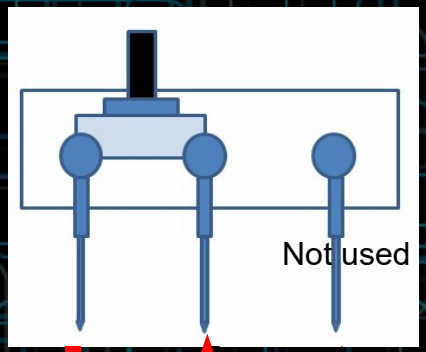
By moving the sliding switch position on the top of the switch you are changing which output pin is connected to the input pin inside the switch.

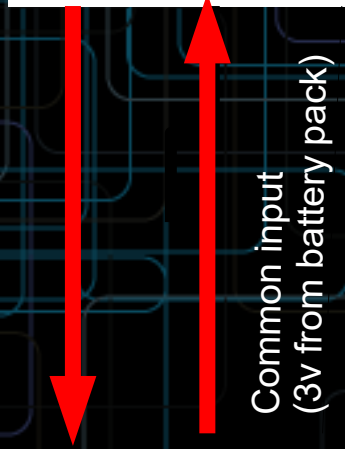
SPDT Switch for On and Off

This SPDT switch has three pins, to use it as an On and Off switch we only need to use two of those pins. The center pin is connected (on the circuit board) to the 3v positive coming from the battery pack and one output (throw) pin is connected to the positive circuit on the board.

ON

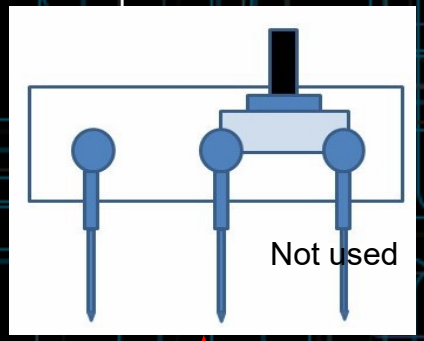
input and output connected





OFF

No connection between input and output

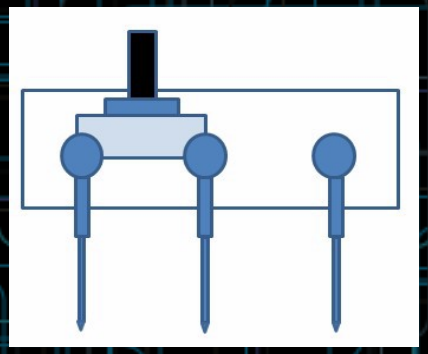


SPDT Switch for Tracking and Avoidance

In this case the SPDT switch will be used to control the current mode the D2-3 is using, either tracking or avoidance.

All three pins on the switch will be used to accomplish this.

Switch Position 1
Turns on tracking mode



Switch Position 2
Turns on avoidance mode