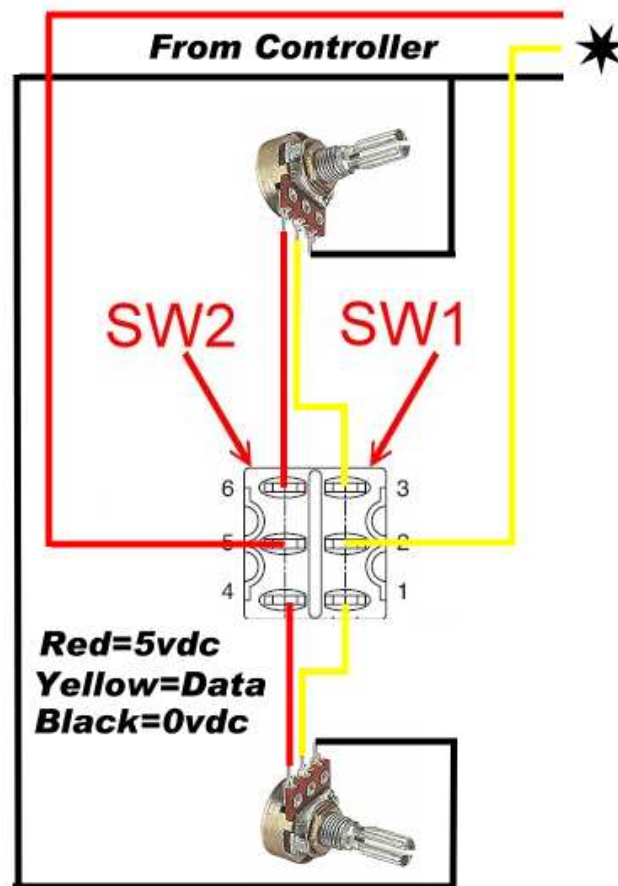# 2 Potentiometers On 1 Input

Here's something for you :o)) I was having some issues with my nosewheel steering because I have 2 potentiometers connected to a BU0836X board and assigned in FSUIPC to the Steering Tiller. I suspect that they were conflicting with each other for authority.
So I devised this simple solution to isolate one tiller from the other dependant on which side of the cockpit the Pilot Flying was in.

A very simple solution. On the 737MIP is a Nosewheel Steering NORMAL/ALT selector switch. So I used this switch as my selector. NORM = Captain's tiller has authority and ALT = F/O Side is doing the driving.

A quick rundown for those of you who do not fully understand how potentiometer's work when connected to a Joystick Controller card.   Basically a potentiometer is a 'variable resistance'. Inside is a track to which is connected a 5vdc (RED) supply from the controller card at one end and 0vdc (BLACK or GND) at the other. This has a predetermined resistance.   Along this track runs a 'Wiper' which sends a return voltage to the Controller card (YELLOW).   The return the wiper sends to the card depends on it's position on the track.   It is this 'differential voltage' sent back to the controller which tells it where the position of the wiper is on the track.   Easy, init :o))

So it then followed that if the 5vdc and data return (RED & YELLOW) were not connected to a pot, it has no influence over an axis to which it assigned.   This is where the switch comes into play.

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Your controller card is going to have 3 connections, the 5vdc, the return and a GND connector. Using a DPDT (Double Pole, Double Terminal) switch (basically 2 separate switches in one housing), it's easy to have two potentiometers connected to one input with only one of them connected at any one time. Throw the switch to the other position and the second potentiometer becomes connected instead of the first and vice versa.

Problem Solved :o))

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