## Modification of a switch for the AUX COMM panel.



One of the obstacles we run into when building a pit is the fact that several switches are hard to find and when they can be found the price will ruin your sense of humor fore several days.

On the Aux Comm panel we find the switches to set the Tacan channel manually. There are several lookalike switches in most cases the price is a little high, and the layout on the wheels isn't in most cases correct. The last wheel has to show only an X or an Y symbol.

I bought on a fancy fair some used industrial panels with a couple of those little s\*ckers on them.

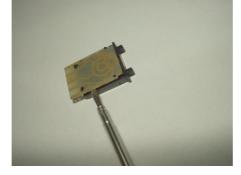
Here I will give a description how I modified them so they can be used to set the channels with only using one push contact.

When you buy them when they are used they normally will be soldered together with four or more digits in a row.

The first thing to do will be to separate them and to take one apart.



Then you have to brake open the casing with some gentle force, always avoid collateral damage when possible ;-).



When opened take a closer look. The switches I use have two buttons.

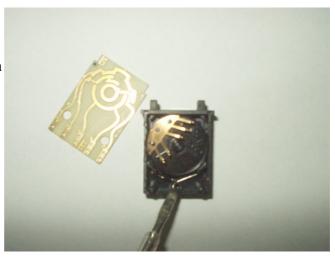
I want to use one button to rotate the wheel without the wheel telling Falcon or some other program that there is happening something. So when you start a flight in mid air you can synchronize the simulator with the wheel in the program.

I want the other button to make a contact so the program knows a button has been pressed and the wheel will turn in the program as intended.

In the switches I have there is a little spring at the bottom. It will press the little buttons back in the original position after it is pressed. In the mean time the wheel will rotate one step.

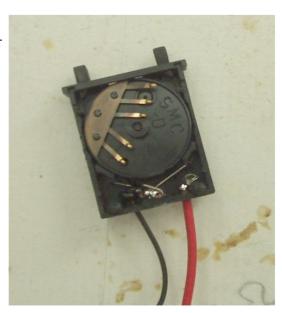
I can use the metal spring to make a contact just by soldering a wire on the spring and gluing another wire on the bottom of the little housing.

When pressed the button will make a contact and the other button will never make a contact and only turn the wheel.





After removing the wheel we can drill some little holes and connect a wire on the spring and another wire on the other side at bottom.



With the wheel removed we can make the correct X Y symbols. The first wheel only has the 1 and the 0.

I used Corel Draw to make the label to put on the wheel.

To determine what length the label should be you can easily use some sticky tape or a label.

Just put it on the wheel, and after removing it is simple to measure.

Knowing what size the new label will have to be it is a matter of minutes to draw in a graphics program. Print it out on a sticker sheet and you can cut it with a knife and put in on the wheel.



Just put the wheel back in place and close the housing.

Probably you will have to use some glue or sticky tape. (The internet and tape have made it possible for us to build a simulator I just realized ;-)

The method described above will make it possible to have a working tacan panel without spending to much money. Similar working solutions will work for as far as I know with the most used electronic system used by pitbuilders, like EPIC, X-Keys, etc.

You can also take an cheap usb stick apart and use the buttons on the contact you want to program. The only thing you have to do is to put the buttons under the right keystrokes in the Falcon setup (are there any other programs ;-).

Keep them flying,

Rien "HAMMER" Heideveld

HTTP://www.f16simulator.nl

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