

EICAS SWITCHING WITH FSXPAND



Gert Hejnis at FLYWARE has given us the ability in v5.6.2 of FSXPAND of changing the panel in view using user defined keystrokes.

Previously I was changing the EICAS screen using the method of Joystick Axes which proved to be a little 'unstable'. However giving Gert feedback has now resulted in a very accurate method of changing the displayed panel.

So, this is how I went about it.

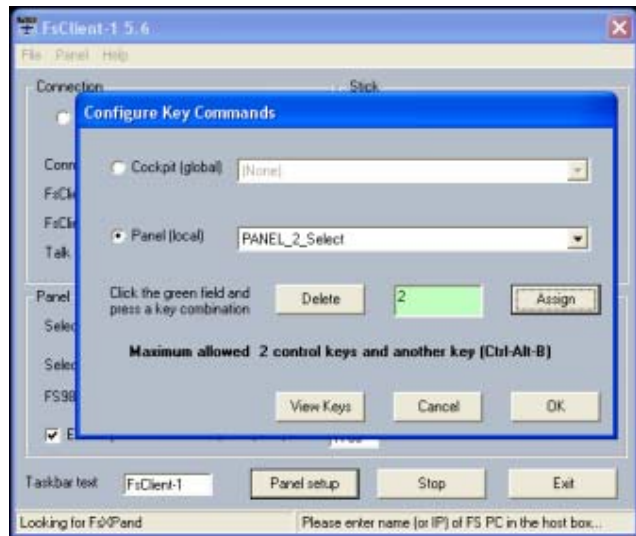
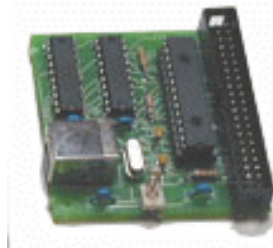
First of all I constructed a basic template because whatever panel was being used, I still wanted the Three standby Instruments and the Flaps Gauge in view (and in the same position on the screen).



This then became the OFF/INOP panel. From there the other 4 panels were assembled and included in the 737NG folder. A couple of examples are included in this document. These are actual screenshots from my installation.

Now I had the 5 panels I wanted ready, it's into the key assignment menu (under Panel/Configure key Commands) to assign a keystroke to display each panel. I kept it simple by using 1 - 5. Checking the display behaviour using the keyboard proved the concept was working, so it was off to the workshop to assemble the switch wiring.

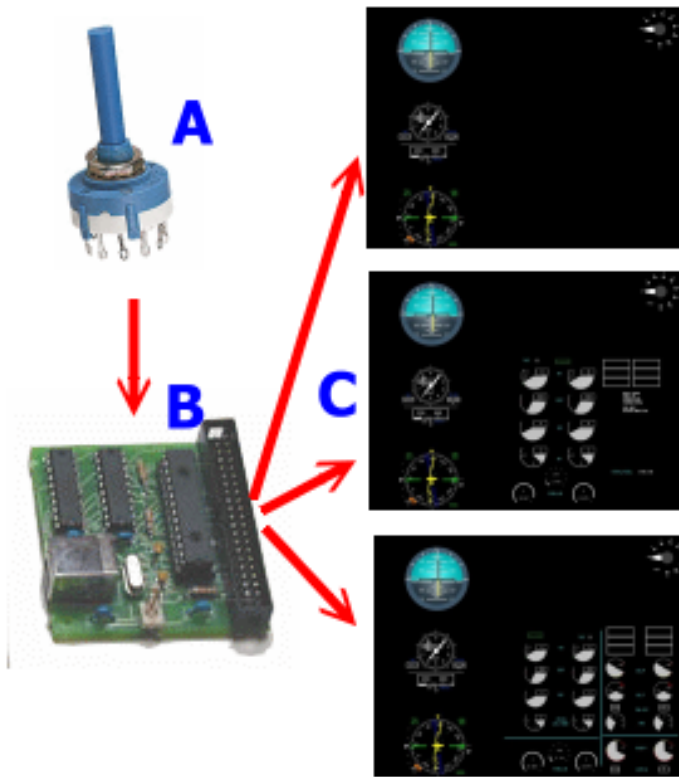
Given that we can now select for display any given panel by way of a keystroke, it then followed that it was possible to input that keystroke from a keyboard emulator. My keyboard emulator of choice is the Opencockpits USBKeys card. It is cheap, reliable and works.



So, I'm going to connect 5 pins on two rotary switches to the USBKeys card matrix and assign the characters 1 to 5 to these matrix addresses (key #).

Result is when the rotary switch is turned to a given position, the USBKeys card sees the contact and recognises it as key # (n (1 to 5)). It then sends the requested number and the corresponding EICAS panel is displayed.

In short, this is what happens.....



Rotary Switch (A) has five contacts connected to USBKeys card (B) at Matrix addresses A1 to A5 that represent key # 1 to 5.

In the encoder_keys.ini file I have assigned the numbers 1,2 3,4 & 5 to the corresponding lines. When encoder_keys.exe is started it knows which number to send for each key.

Now in FSClient (C), these numbers have been assigned in the panel switching menu to display the 5 panels I want.

If you are uncertain how to work with the OPENCOCKPITS USBKeys card, refer to this document on my website OPENCOCKPITS page.



Now we are cookin'. All I need to do now is fit the switches into the Upper DU switch position on the MIP. OH, don't forget to connect the F/O switch the opposite way round from the Capt's because they operate in different directions.



Remember I'm building a Boeing 737 and these are EICAS screens. You can apply this technique to any set of panels whatever your aircraft type.

Thanks for taking the time to read this and have a great day.

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