

Frsky V8HT Bind Board – an alternative.

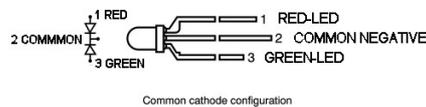
A few people have asked about this so I thought it might be worth posting.

The standard Frsky V8HT bind-board is quite aptly named. It really can be a bind to fit, especially with their unnecessarily thick and rigid wiring. Due to component placement variations, no two are exactly alike, so a template doesn't always work out, and you cant really bend the LED as it stands on three sturdy wires.

On a recent Skyleader Clubman conversion using another V8HT the donor transmitter had a convenient and unused shrouded button intended for the trainer facility, and a transparent meter through which an LED could be arranged to shine.

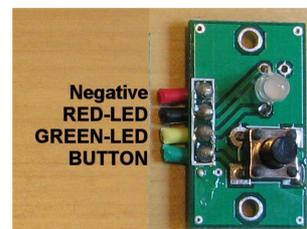
I decided to ditch the bind board altogether, and wire a new LED and the existing 'trainer' button in its place.

The LED is a 3-wire component, basically its two LEDs with their cathodes (negative) connected together. They're readily available from such as RS, Rapid etc.



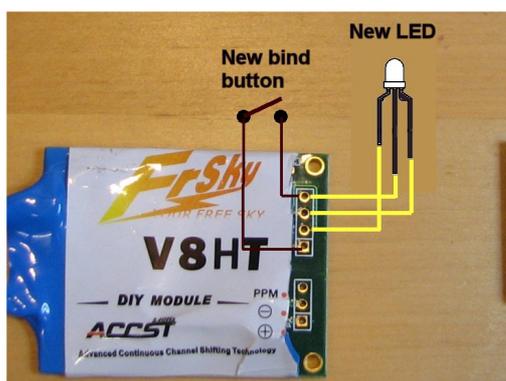
Note the three different lengths of the leads - this identifies the internal connections, red , green & common.

Now, Frsky use some strange colour conventions in their wiring. Negative (common to the LED and one of the two button contacts) is red. Yes, on the bind board connections, neg is red. The red LED is connected by the black wire, and the green LED is via the yellow wire. The green wire is the other button contact:



For now, lets just ignore the logic of this colour scheme!

You can common (ie connect together) the two negatives either on the button contact, or on the module. I wouldnt common them on the LED as its quite fragile. If the LED and button are to be mounted close together, then common them on the button. If they are well separated, then common them on the module. Electrically it makes no difference:



To make the connection you can either snip the Frsky wires to an inch or so, then solder the new wiring to whats left, or you can do as I did and remove all the horrible standard wire as that makes a much neater job. Use 3-wire ribbon for the LED (servo cable will do nicely) and 2-wire for the button (strip two wires from same servo wire)

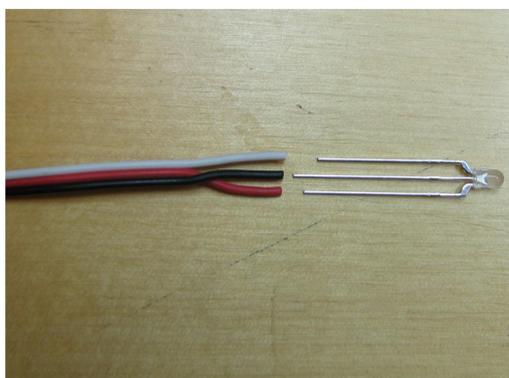


If you're doing the same on the PPM connector, note that the Frsky order doesnt match standard servo cable. On the module it goes pos, neg, signal (ppm) as can be seen from the label. Servo cable goes neg, pos, signal - so you have to cross-over the pos & neg:



Remember that by removing the original PPM wiring you've also removed the Schottky diode, so ensure that your conversion includes that component somewhere in the PPM wire, banded end to the encoder, non-banded end to the module. My encoders have a PPM schottky built-in so no worries there.

For anyone wanting to do this, you can use the original LED if you remove it carefully, but its easier to use a new one. You can use more logical colours for the cable, red is the red-LED, black is common neg, and white is green-LED (as a famous fat bloke once said, 2 out of 3 aint bad).



Maplin part number is CH09K @ 99p

RS part number 228-5685 @ 33p (who says RS are expensive?)

Rapid part number is L-93WEGW @ 24p

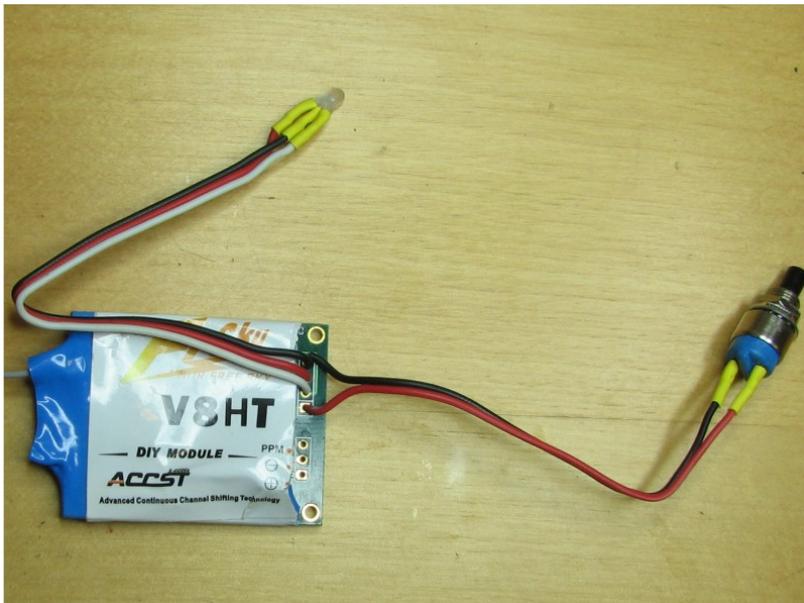
Remember, its a common-cathode type we need.

For the pushbutton, any small panel-mount momentary-action button will do the job, eg Maplin FH59P @ £1.69

If you can find a smaller one, all the better. A shroud would be good.

For the wiring, you can use the thinnest, most flexible servo-wire as its carrying very little current, but do support the joints with heat-shrink tubing.

Here's an example:



The result is a much neater installation, much easier to do, and which takes up much less room inside the transmitter case.

What would be absolutely spot on for the job would be a small red/green illuminated button, they do exist but they're ridiculously expensive!

Cheers

Phil_G