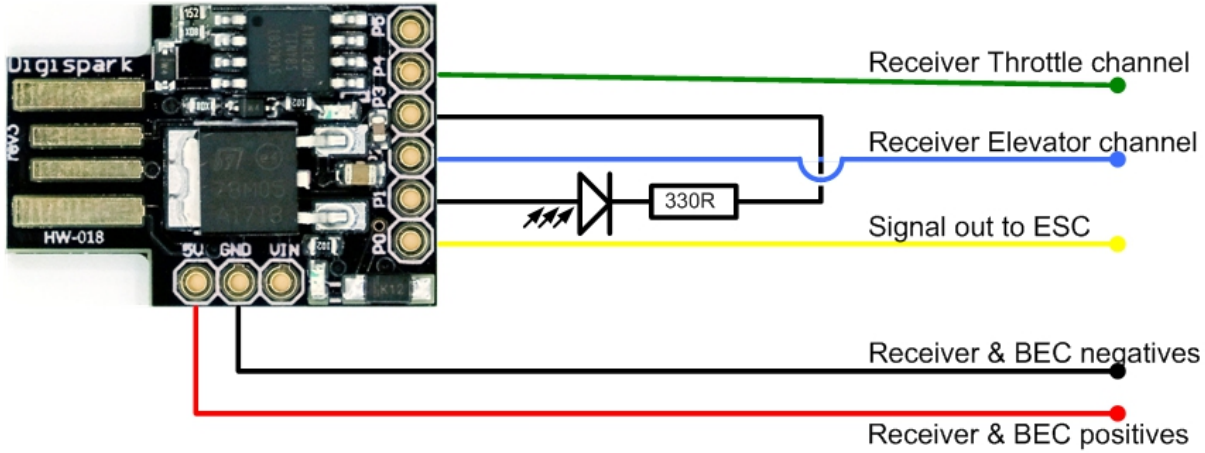
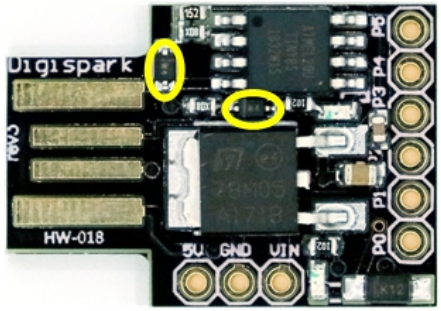
USB tab is unused
& can be sawn off





Remove D1 & D2 from the
DigiSpark – they flick away easily
with a jewellers screwdriver

Forward/Reverse 'gearbox' for boats on reeds using a fwd/reverse ESC and the reeds progressive throttle channel.
Plugs between the receiver and an ordinary reversing speed controller. The widget has two states, forward and reverse, switched by the elevator key - flip the elevator toggle forwards momentarily and the widget stays in forwards mode.
Flip the elevator key backwards momentarily and the widget goes into reverse mode. Whichever mode its in, forward or reverse, you get normal reeds throttle response on the throttle toggle, ie 'off' on power up, push the throttle toggle forwards to increase, pull back to decrease and to stop, with the usual reeds progressive action.
Whether the boat is in reverse or forward, to stop you just pull back on the throttle as usual with reeds.
In a nutshell its like having a "forward or reverse gear" entirely separate from the throttle toggle.
LED shows red for reverse, green for forward.
Built on a defluffed DigiSpark ATTiny85 board, powered by ESC/BEC via the the throttle connector.
Phil_G, May 2020 (UK Coronavirus lockdown period)