

ECHO Memo #47

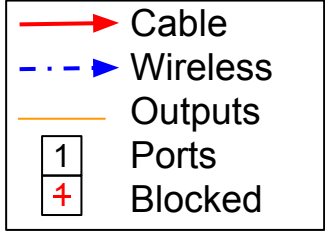
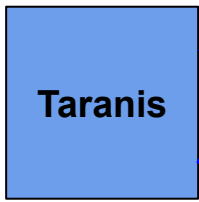
Date: July 2020

From: M. Horn

To: ECHO Project archive

Subject: Notes on RC channel configuration for the Chiropter (ECHO Mk 7) drone

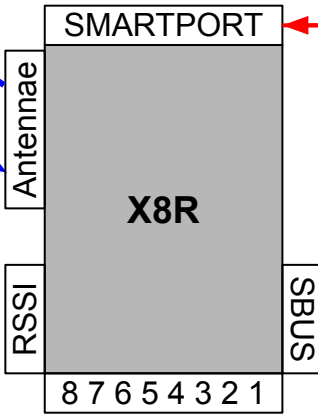
The following is a block diagram depicting the pin labelling and proper connections between the X8R receiver and the pixhawk radio. It was drawn in the process of diagnosing why some channels didn't work. *We tentatively conclude that AUX channels are not properly passed through by the pixhawk.*



- Ch1:** Throttle
- Ch2:** Rudder
- Ch3:** Elevator
- Ch4:** Aileron
- Ch5:** Flight Mode
- Ch6:** Kill Switch
- Ch15:** Payload

Telemetry to Taranis

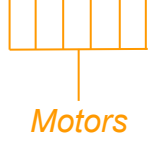
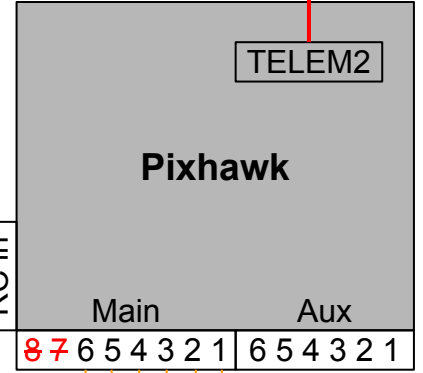
PWMs of Channels 1-16



Outputs of Ch 9-16

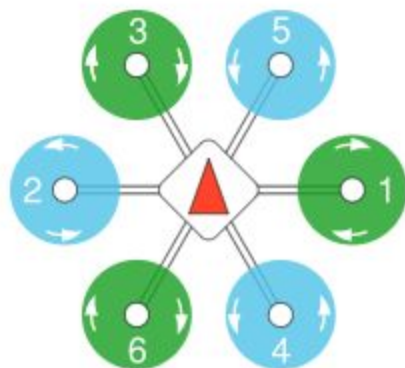
Telemetry to Taranis

PWMs of Channels 1-16



Should be Aux Passthrough, but not working

## Hexarotor x



### Common Outputs

- **MAIN1**: motor 1
- **MAIN2**: motor 2
- **MAIN3**: motor 3
- **MAIN4**: motor 4
- **MAIN5**: motor 5
- **MAIN6**: motor 6
- **AUX1**: feed-through of RC AUX1 channel
- **AUX2**: feed-through of RC AUX2 channel
- **AUX3**: feed-through of RC AUX3 channel