

# RCHub: USB-to-PPM Converter

## RCHub lets you control

- a plane with a stick or H.O.T.A.S.;
- a car with a USB steering wheel and pedals;
- a mini-quad with a game console controller;
- and any combination of above, plus connect a wireless bluetooth head tracker!

## Features

- **Auto-discovery joystick devices**
  - Recognizes and pre-configures any new USB controller;
  - **Up to 8 joysticks** simultaneously.  
you'll need a separate USB hub for that, as RCHub has only one physical USB port.
- **Built-in display** with 5-way joystick and 3 buttons for easy configuration
  - **Up to 16 output channels** configurable directly on screen, no config file editing needed
  - **Color-coded** channel visualisations, by source
    - red - axis,
    - green - button,
    - blue - bluetooth.
  - **Raw data view** page  
see the raw data your joystick sends, access state of it, deadzones, axis and button numbers
- **Bluetooth wireless PARA trainer support**  
Automatically connects to devices that support Bluetooth PARA trainer protocol and allows you to mix in these channels to PPM output. As such, RCHub can be used as Bluetooth-to-PPM bridge for radios w/o bluetooth support. Especially convenient when used with wireless head trackers, with or without USB joystick.
- **Processing adds minimal delay**  
Just half of the PPM frame, or approximately 10ms.
- **Simple firmware upgrades**  
Download latest release ( <https://github.com/skygadgetsab/rchub/releases> ) and place the .bin file into "app" folder on Micro SD card.
- **Fully autonomous** and provides power to connected joysticks.  
Accepts well known and widely used **18650 Li-ion battery** (not included due to shipping restrictions).  
Battery is optional as RCHub can be powered via USB-C from a power bank or a phone charger.

## Contacts

Yurii Soldak / [ysoldak@gmail.com](mailto:ysoldak@gmail.com) / +46708778645