

Software livre em controladoras de voo de VANTs



Drone Racing!



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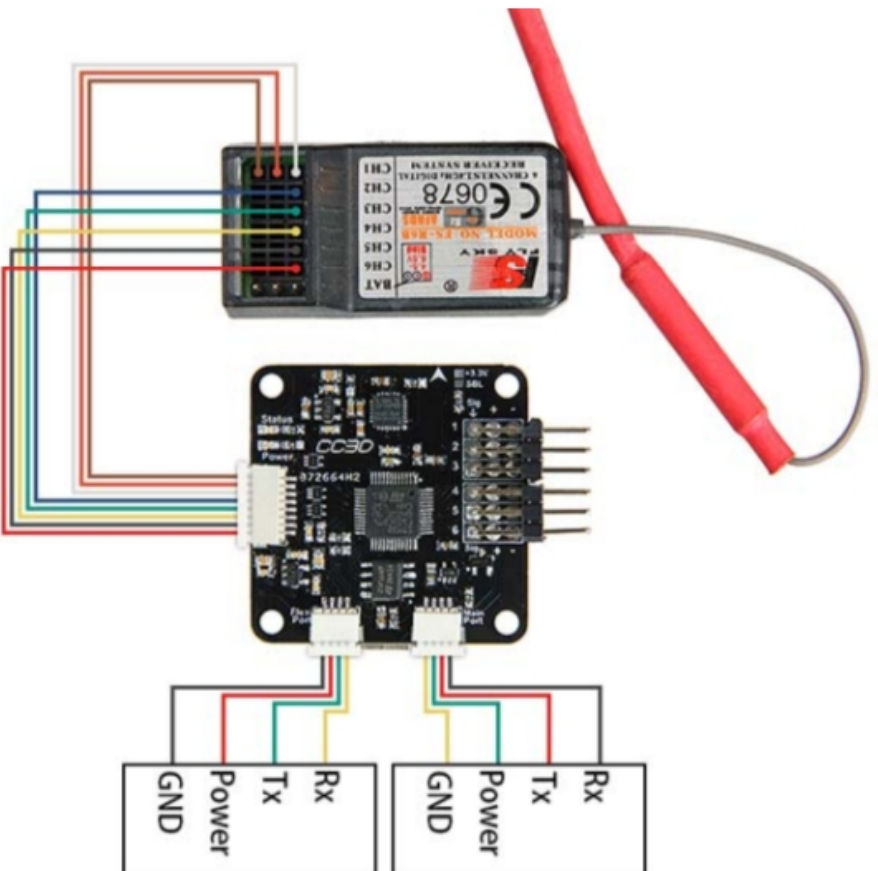
São realmente “drones”?

VANTs multirotores – asas rotativas

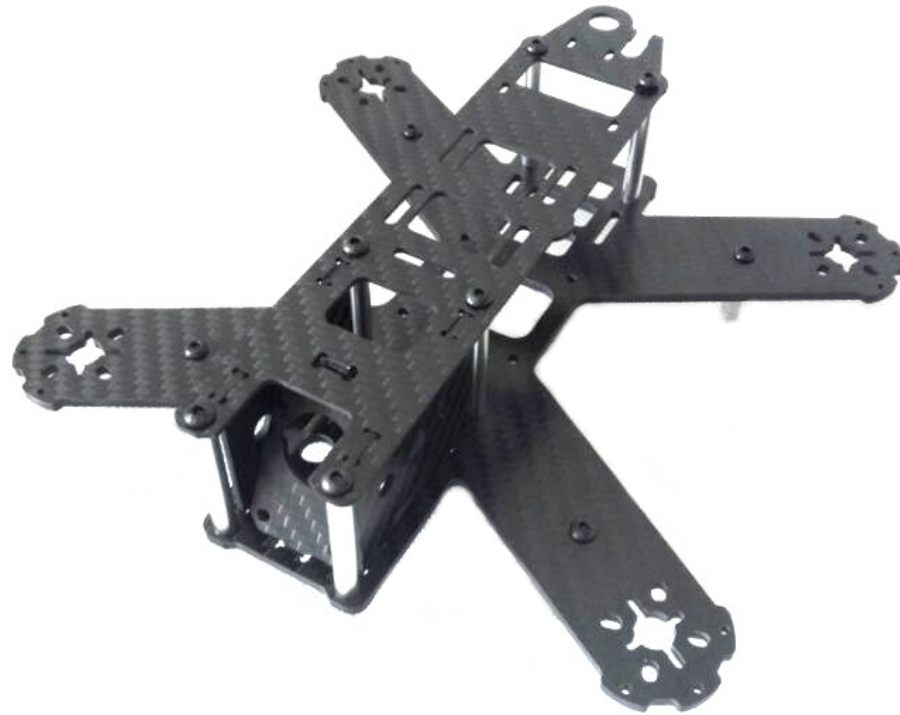


VANTs de asas fixas





Frames para “drone racing”



ESCs



ESCs

O ESC recebe os sinais enviados pela controladora de voo e usa essas informações para enviar a energia necessária para o motor.

- É importante observar que mesmo sendo os ESCs que recebem os sinais da controladora, quem define a amperagem “puxada” são os motores.

Motores eléctricos



Baterias LIPO



Hélices



Rádios(moduladores) 2.4GHz

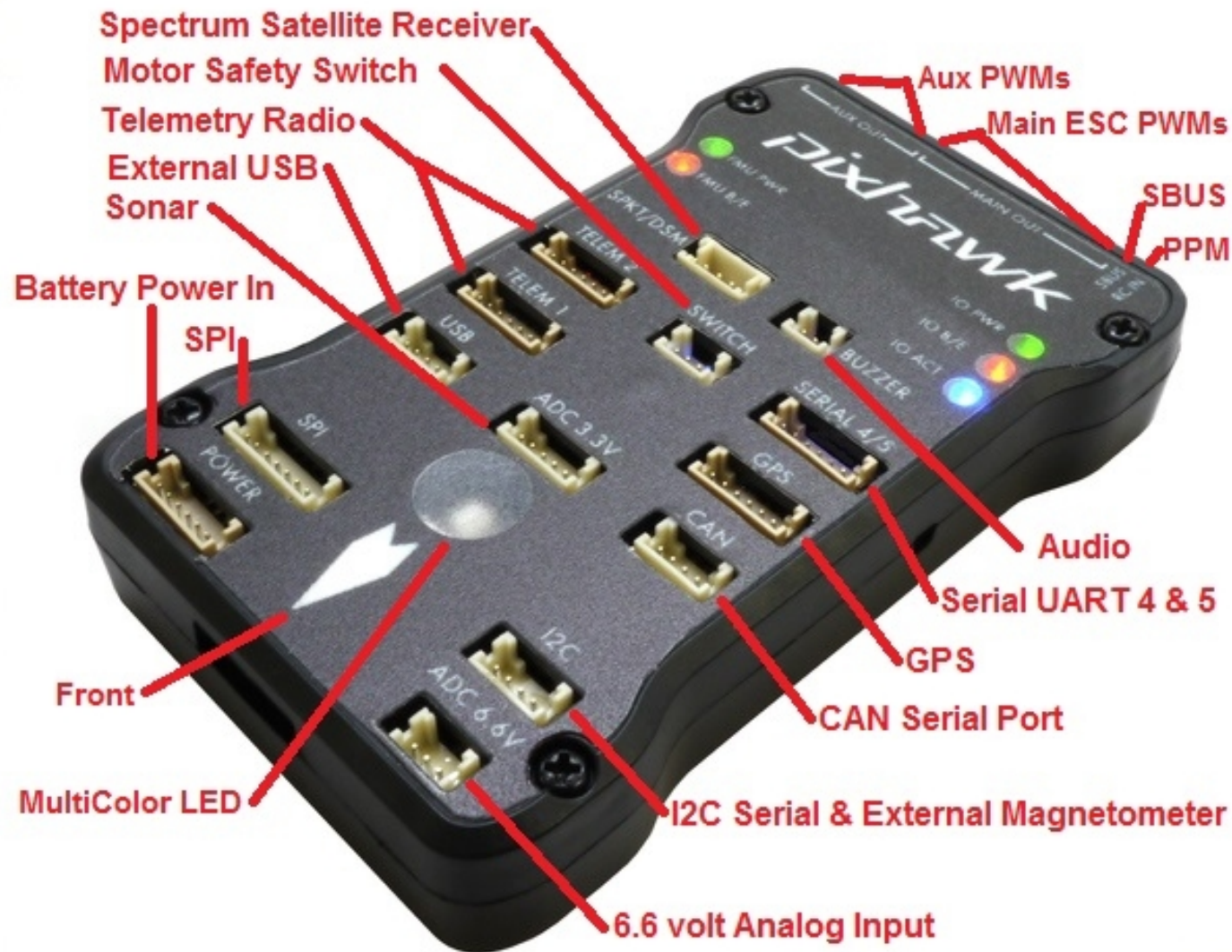


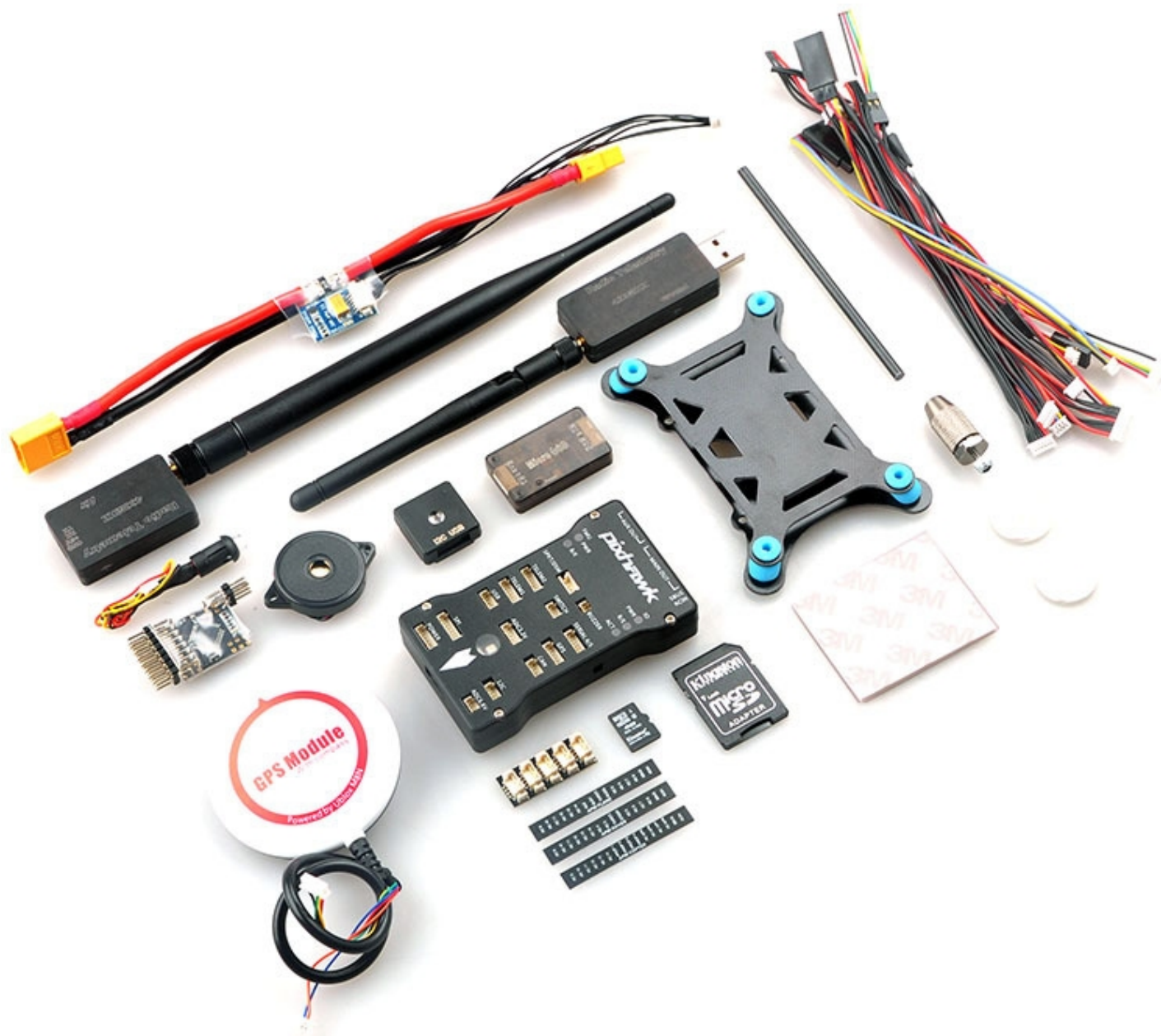
Receptores de rádio



APM – PIXHAWK

<https://github.com/PX4/Firmware>





Mission Planner – APM PIXHAWK

Distance: 0.8993 km
Prev: 257.36 m
Home: 391.27 m

COM50 115200

Connect

Zoom

Action >>

Mouse Location
Lat 40.12887660
Long -105.1075208
Alt 1525

GoogleSatellite

Status: loaded tiles

Read WPs

Write WPs

Home Location
Lat 40.13040239
Long -105.1116621
Alt (abs) 20

Waypoints

WP Radius 2 Loiter Radius 5 Default Alt 100 ☒ Hold default Alt ☐ Verify Height Add Below

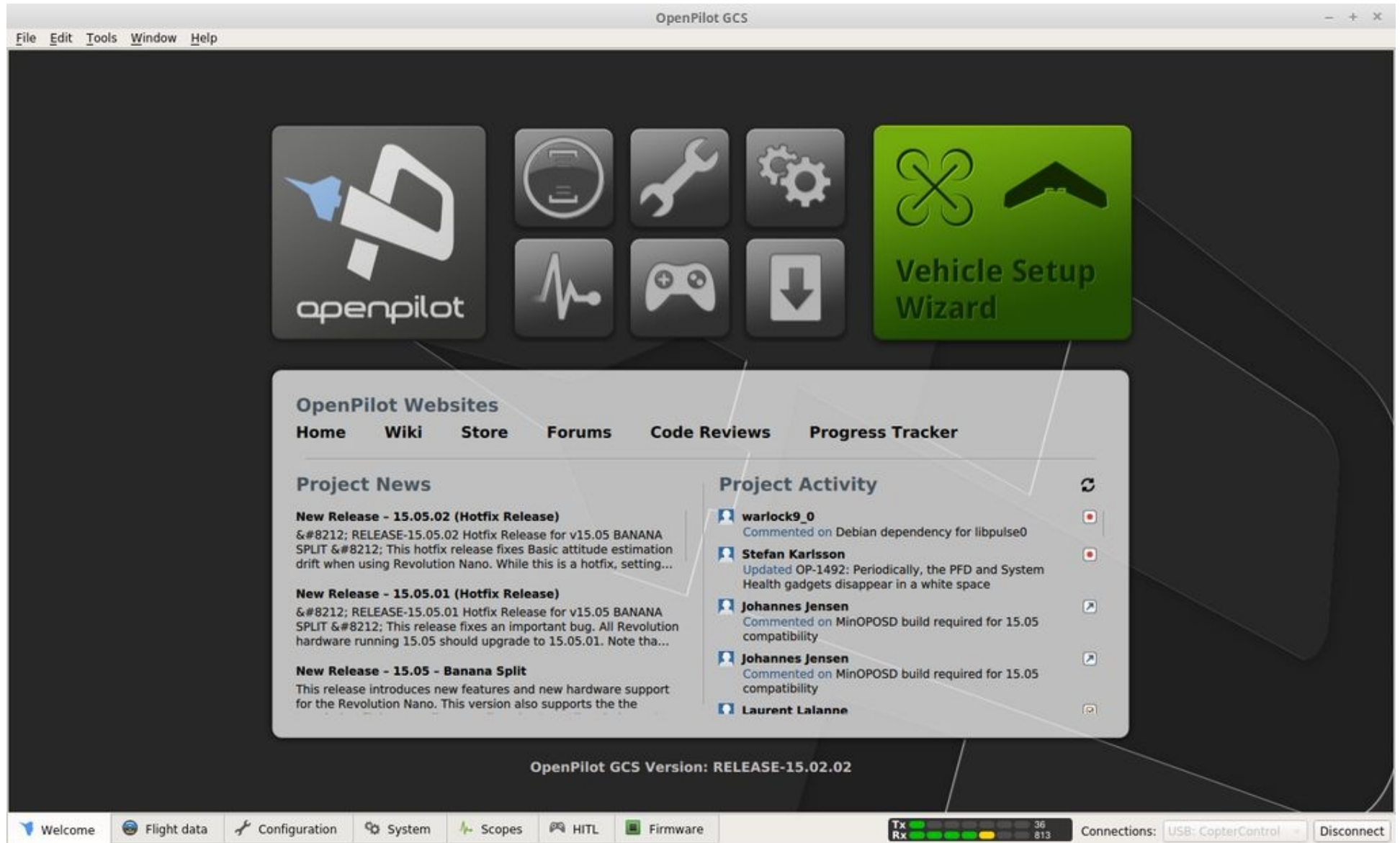
	Command	Delay	Hit Rad	Yaw Ang	Lat	Long	Alt	Delete	Up	Down
1	WAYPOINT	0	0	0	40.1312555	-105.1109326	100	X	⬆	⬇
2	WAYPOINT	0	0	0	40.1314442	-105.1090014	100	X	⬆	⬇
3	WAYPOINT	0	0	0	40.1309684	-105.1076925	100	X	⬆	⬇
4	WAYPOINT	0	0	0	40.1297133	-105.1081109	100	X	⬆	⬇
5	WAYPOINT	0	0	0	40.1294180	-105.1104605	100	X	⬆	⬇

CC3D

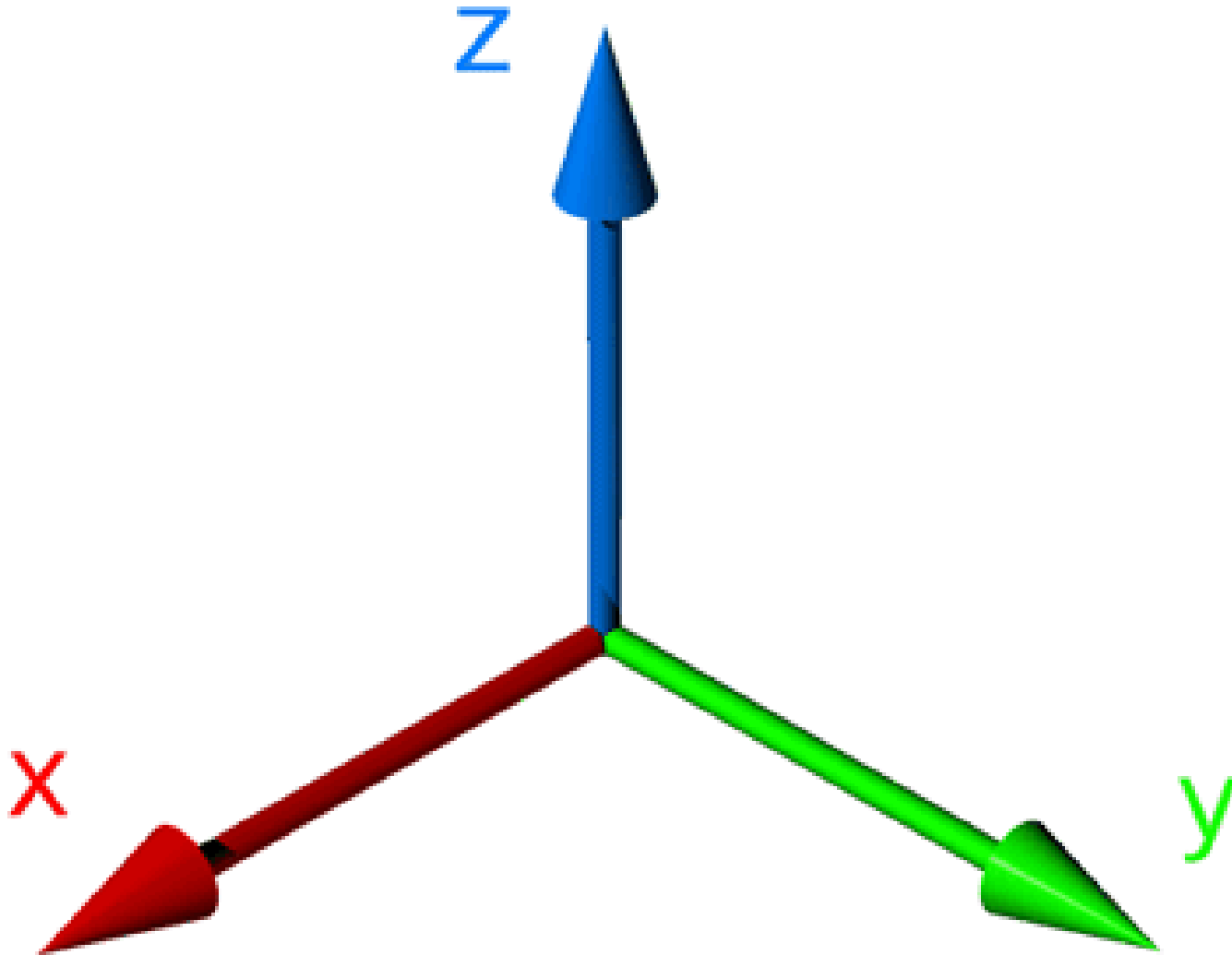


Open Pilot

<https://github.com/openpilot/OpenPilot>



Eixos de movimentos



Cleanflight

<https://github.com/cleanflight/cleanflight>

The screenshot shows the Cleanflight Configurator web interface in a browser window. The interface has a dark grey header with the Cleanflight logo and version (1.0.0) on the left. On the right, there are dropdown menus for 'COM48' and '115200', an 'Auto-Connect' toggle, and a 'Connect' button with a USB icon. Below the header, a status bar shows the date and time (2015-11-11 21:38:00), the operating system (Windows), browser (Chrome 46.0.2490.86), and configurator version (1.0.0). A 'Show Log' link is on the far right of the status bar.

The main content area has a green background. On the left, there is a sidebar with a 'Welcome' section and two links: 'Documentation & Support' and 'Firmware Flasher'. The main area contains a large 'Welcome to CLEANFLIGHT' message, followed by a description: 'Welcome to Cleanflight - Configurator, a utility designed to simplify updating, configuring and tuning of your flight controller.'

Below the welcome message, there are three columns of text:

- Hardware:** The application supports all hardware that can run cleanflight (SP Racing F3, Vortex, Sparky, DoDo, CC3D/EVO, Air Hero 32, Flip32+/Deluxe, DragonFly32, CJMCU Microquad, Chebiuzz F3, STM32F3Discovery, Hermit, Naze32 Tricopter Frame, Skyline32, Naze32/Mine/Pro/Blackbox etc). The firmware source code can be downloaded from [here](#). The newest binary firmware image is available [here](#), development builds available [here](#). Latest CP210x Drivers can be downloaded from [here](#).
- Contributing:** If you would like to help make Cleanflight even better you can help in many ways, including:
 - Answering other users questions on the forums and IRC.
 - Contributing code to the firmware and configurator - new features, fixes, improvements
 - Testing new features/fixes and providing feedback.
 - Helping out with issues and commenting on feature requests.
 - Donating, buying a T-Shirt or buying an SP Racing F3 board
- Open Source / Donation Notice:** This utility is fully open source and is available free of charge to all cleanflight users. If you found the cleanflight or cleanflight configurator useful, please consider supporting its development by donating. A 'Donate' button is located at the bottom of this section.

At the bottom of the interface, there is a 'SPONSORS' section with logos for MassiveRC, Armatan Quads, Bungeecow Multicopters, Immersion RC, RadioC, MultiWiiCopter, OverSkyRC, Multi Rotor Mania, Scorpion Power Systems, and MultiGP.

The footer shows port utilization (D: 0% U: 0%), packet error (0), I2C error (0), cycle time (0), and the version (1.0.0).

Drone Racing League

<http://thedroneracingleague.com/>



Uma nova experiência na captura de imagens

Skitzo

<https://www.youtube.com/watch?v=YvijhUKnBzo>