

# *pixhawk*<sup>®</sup> 4

The most advanced development kit for the PX4 autopilot



## IN THE BOX

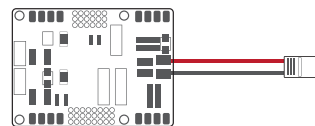
Pixhawk 4 autopilot



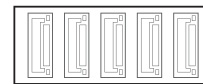
GPS module  
with safety switch and LED



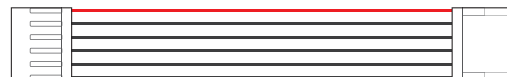
Power board



I2C splitter



6 to 6 pin cable (power) x 3



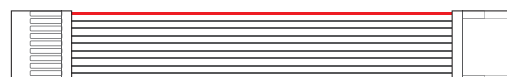
4 to 4 pin cable (CAN) x 2



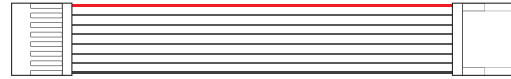
6 to 4 pin cable (Data)



10 to 10 pin cable (PWM) x 2



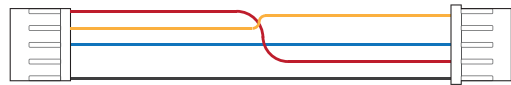
8 to 8 pin cable (AUX)



PPM/SBUS out cable



XSR receiver cable



DSMX receiver cable



SBUS receiver cable



USB Cable



## MOUNT

Use the provided foam pads to mount Pixhawk 4 as close as possible to your vehicle's center of gravity. Make sure to orient the board with the arrow pointing forward.

## CONNECT

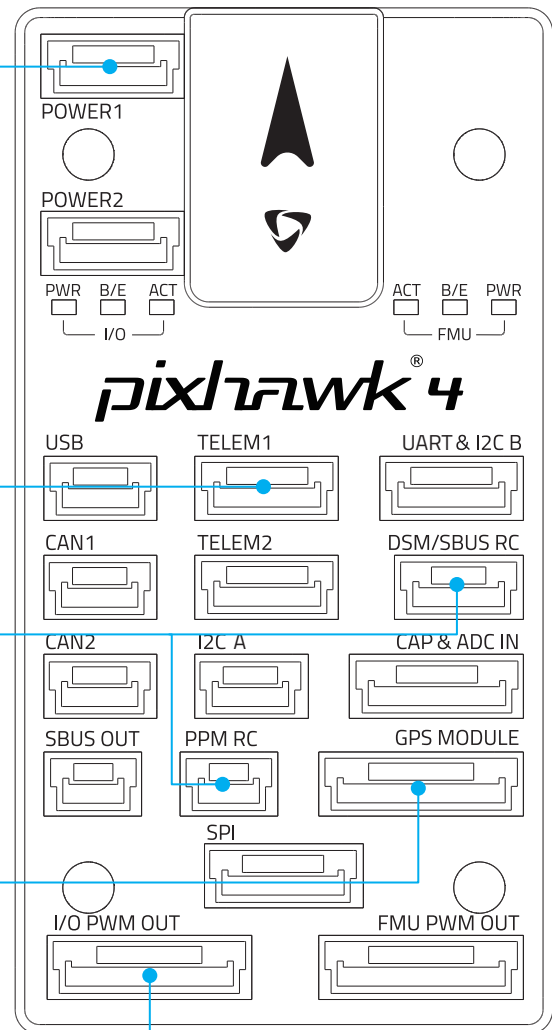
Connect the Power Management Board to the Power port using the 6-wire cable to direct power from your lithium polymer (LiPo) battery to the autopilot.

(Optional) Connect a Telemetry Radio to the TELEM port to receive data in Ground Control Station and communicate with the autopilot in flight.

Connect PPM, DSM or SBUS Radio Control receiver to provide the autopilot with RC input in manual and assisted flights modes.

Connect the provided GPS module (with integrated magnetometer, safety switch and buzzer) to provide the autopilot with positioning data during flight.

Connect I/O PWM-IN port of the Power Management Board to the I/O PWM OUT of Pixhawk4 using the 10 wire cable to send PWM signals to the motors.



Connect the PMB to the POWER port using the 6-wire cable to direct power from your lithium polymer (LiPo) battery to the autopilot.

(Optional) Connect a Telemetry Radio to the TELEM port to receive data in Ground Control Station and communicate with the autopilot in flight.

Connect I/O PWM-IN port of the PMB to the I/O PWM OUT of Pixhawk 4 using the 10 wire cable to send PWM signals to the motors.

Connect PPM, DSM or SBUS Radio Control receiver to provide the autopilot with RC input in manual and assisted flights modes.

Connect the GPS module to provide the autopilot with positioning data during flight.


For more details on how to connect Power Management Board(PMB) with Pixhawk 4 and the motors, refer to PX4 User Guide:

[https://docs.px4.io/en/assembly/quick\\_start\\_pixhawk4.html](https://docs.px4.io/en/assembly/quick_start_pixhawk4.html)

## SET UP

The PX4 firmware is the brains of your autopilot operation and Version 1.7 is already loaded on your Pixhawk 4.

To configure your vehicle as well as do mission planning and flight monitoring, you can use the free QGroundControl application (Windows, Mac, Linux), which you can download from <http://qgroundcontrol.com/>

Once you have installed and successfully run QGroundControl, plug in Pixhawk 4 with the supplied USB cable, it should be automatically recognized. Click on  and follow the on-screen instructions to finish the setup steps.

As part of a first time setup, you'll need to configure some of the required hardware components, such as:

- Frame type configuration
- Compass calibration
- Radio control calibration
- Accelerometer calibration
- RC transmitter mode setup
- ESC calibration

In addition to mandatory calibrations, you may also choose to configure optional hardware including battery monitor, sonar, airspeed sensor, optical flow, OSD, camera gimbal, antenna tracker etc.

## ADDITIONAL INFORMATION

Refer to [pixhawk.org](http://pixhawk.org) for detailed pin-outs of Pixhawk 4 connectors.

Visit PX4 user guide at [px4.io](http://px4.io) for detailed instructions including tutorials on how to change firmware and do advanced configurations with QGroundControl.

Join PX4 Slack (<http://slack.px4.io/>) to receive support from the community and the PX4 team.



Компания «ЭлектроПласт» предлагает заключение долгосрочных отношений при поставках импортных электронных компонентов на взаимовыгодных условиях!

Наши преимущества:

- Оперативные поставки широкого спектра электронных компонентов отечественного и импортного производства напрямую от производителей и с крупнейших мировых складов;
- Поставка более 17-ти миллионов наименований электронных компонентов;
- Поставка сложных, дефицитных, либо снятых с производства позиций;
- Оперативные сроки поставки под заказ (от 5 рабочих дней);
- Экспресс доставка в любую точку России;
- Техническая поддержка проекта, помощь в подборе аналогов, поставка прототипов;
- Система менеджмента качества сертифицирована по Международному стандарту ISO 9001;
- Лицензия ФСБ на осуществление работ с использованием сведений, составляющих государственную тайну;
- Поставка специализированных компонентов (Xilinx, Altera, Analog Devices, Intersil, Interpoint, Microsemi, Aeroflex, Peregrine, Syfer, Eurofarad, Texas Instrument, Miteq, Cobham, E2V, MA-COM, Hittite, Mini-Circuits, General Dynamics и др.);

Помимо этого, одним из направлений компании «ЭлектроПласт» является направление «Источники питания». Мы предлагаем Вам помощь Конструкторского отдела:

- Подбор оптимального решения, техническое обоснование при выборе компонента;
- Подбор аналогов;
- Консультации по применению компонента;
- Поставка образцов и прототипов;
- Техническая поддержка проекта;
- Защита от снятия компонента с производства.



#### Как с нами связаться

**Телефон:** 8 (812) 309 58 32 (многоканальный)

**Факс:** 8 (812) 320-02-42

**Электронная почта:** [org@eplast1.ru](mailto:org@eplast1.ru)

**Адрес:** 198099, г. Санкт-Петербург, ул. Калинина, дом 2, корпус 4, литера А.