

Glossary

Understanding the vocabulary and acronyms associated drones is key to developing the solid understanding of foundational concepts. The list below includes terms commonly used with drones. If you want to add another acronym or term that we missed, please suggest it in the forums.

A

ACC

Accelerometer. An accelerometer is a device that measures proper acceleration

AUW

All up weight. Max weight of a copter including LiPo Battery and other parts, ready to fly.

AUX

Auxiliary. Additional switches/potentiometers/sliders in a radio transmitter

B

BEC

Battery Eliminator Circuit is a voltage regulator found in some ESCs. Designed to provide constant 5V voltage for RC equipment such as a flight controller and radio receiver

Brushless Motor

A type of electrical motor that is commonly used in multirotors. They have a wide range of voltage input, more durable and powerful than brushed motors.

C

CC3D

CopterControl 3D is a type of flight controller.

D

Drone

An unmanned aerial vehicle, commonly known as a drone, is an aircraft without a human pilot aboard. UAVs are a component of an unmanned aircraft system; which include a UAV, a ground-based controller, and a system of communications between the two

E

ESC

An electronic speed control or ESC is an electronic circuit with the purpose to vary an electric motor's speed, its direction and possibly also to act as a dynamic brake.

F

FPV

First Person View.

Sometimes but less frequently called “through the eye view” basically you are seeing exactly what you would see if you were legitimately piloting the drone, sitting in it, or even if you were it.

G

Gimbal

1. camera stabilizer; 2. the stick controls in a radio transmitter

GPS

Global Positioning System. GPS was initially used by the military as a location positioning service and is used in drones to provide stability but it is also used to “return to home”. In more advanced drones, it can also sometimes be used as a beacon to find a fallen drone.

Ground Effect

Air turbulence from propellers bouncing off the ground when the copter is hovering at really low altitude.

GYRO

Gyroscope. A gyroscope is a technology that is used to aid drones in their direction and promote steady flight.

H

I

IMU

The inertial measurement unit is an element of the drone which works with other components in order to ensure smooth and stable flight by supplying additional information to the flight controller.

J

K

L

LIPO

Lithium Polymer Battery aka LiPoly. Most used power source for RC Hobby these days because of its high energy storage density-to-weight.

LOS

Line of Sight. You can see the drone while in flight. If the drone is no longer visible, the LOS is broken.

M

N

O

OSD

On Screen Display. A piece of hardware that overlays flight data in text or graphical form over an existing live stream video.

P

PCB

Printed Circuit Board. an electronic circuit consisting of thin strips of a conducting material such as copper, which have been etched from a layer fixed to a flat insulating sheet called a printed circuit board, and to which integrated circuits and other components are attached.

PPM SUM

Pulse Position Modulation is a radio receiver protocol used to transfer data from RX to the flight controllers.

Prop

Abbreviation for propeller.

PWM

Pulse Width Modulation is the square-wave signals used in RC control to drive servos and speed controllers.

Q

Quad

And abbreviation for a quadcopter drone. Quadcopters are a multicopter drone housing 4 motors on the same level.

R

RC

Radio control is used for control of model vehicles from a hand-held radio transmitter.

RF

Radio frequency (RF) is any of the electromagnetic wave frequencies that lie in the range extending from around 20 kHz to 300 GHz, roughly the frequencies used in radio communication

RPM

Revolutions per minute is a measure of the frequency of rotation, specifically the number of rotations around a fixed axis in one minute. It is used as a measure of rotational speed of a mechanical component.

RX

A radio receiver that receives commands from radio transmitter, and sends them directly to the servos or to the drone flight controller.

S

T

Throttle

Throttle gives the propellers on your quadcopter enough power to get airborne. When flying, you will have the throttle engaged constantly.

Thrust

Thrust is the force which moves an aircraft through the air. Thrust is used to overcome the drag of an airplane, and to overcome the weight of a rocket. Thrust is generated by the engines of the aircraft through some kind of propulsion system.

TX

TX is a radio transmitter used for racing drones and quadcopters. The transmitter sends commands to a receiver controlled by the drone flight controller.

U

UAV

An unmanned aerial vehicle, commonly known as a drone, is an aircraft without a human pilot aboard. UAVs are a component of an unmanned aircraft system; which include a UAV, a ground-based controller, and a system of communications between the two.

UBEC

A UBEC “Universal Battery Elimination Circuit” is an external electronic circuit that taps power from your motors battery pack and regulates the voltage down to the necessary 5 or 6 volts for the receiver and servos. The maximum input voltage will vary according to the UBEC specs.

V**VTX**

A video transmitter (on-board camera) that sends a video signal to a video receiver.

W**X****Y****Yaw**

A yaw rotation is a movement around the yaw axis of a rigid body that changes the direction it is pointing, to the left or right of its direction of motion.

Z