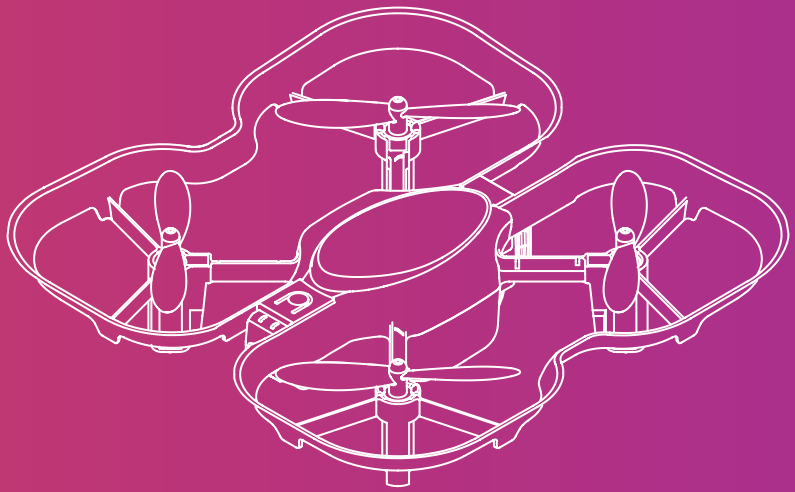
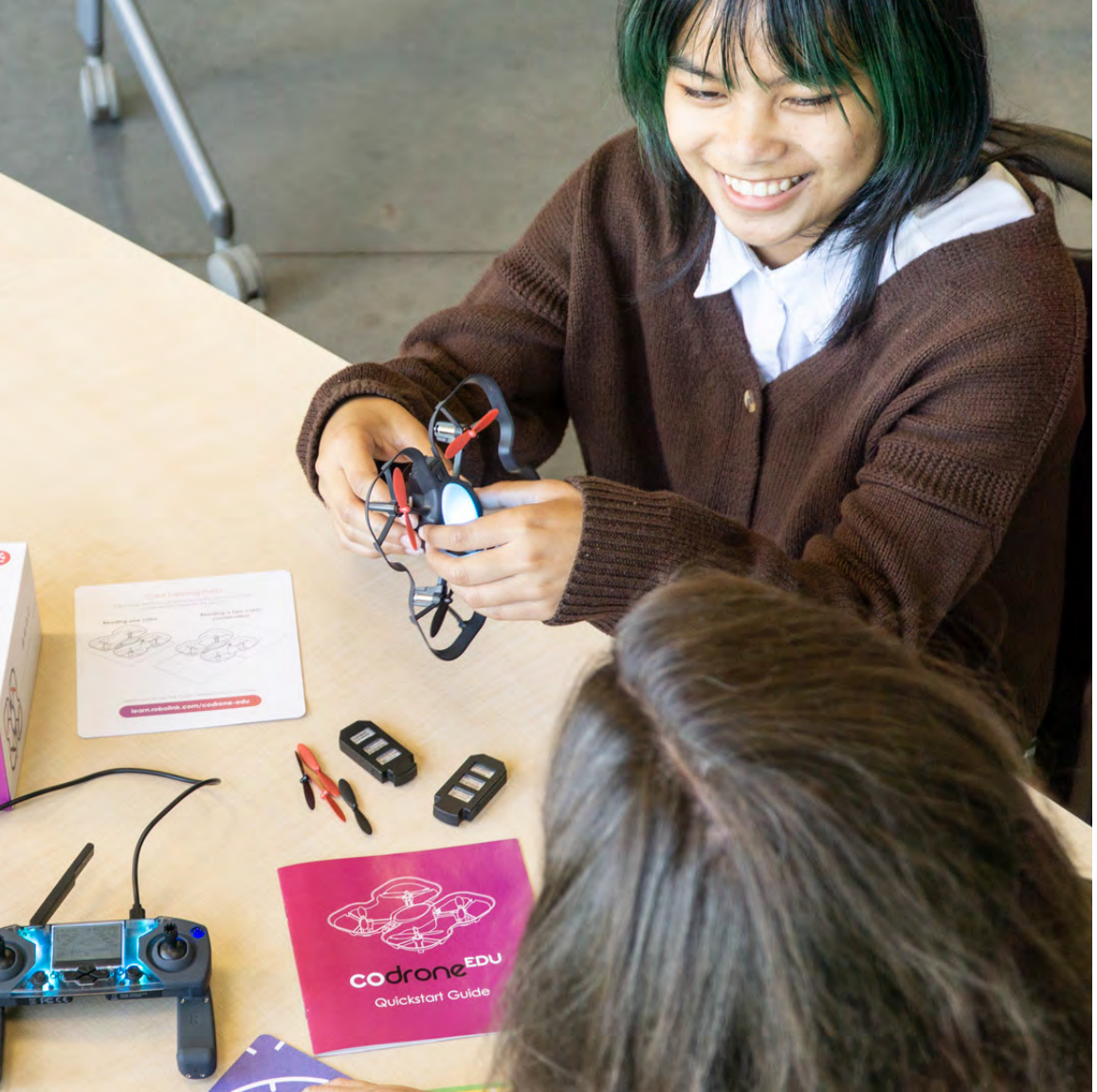


codrone EDU

User Manual

ROBOLINK



Welcome to your CoDrone EDU journey!

We recommend **everyone** go through our "Getting Started" course online. It will give you an in-depth look into everything in this manual.

learn.robolink.com/codrone-edu

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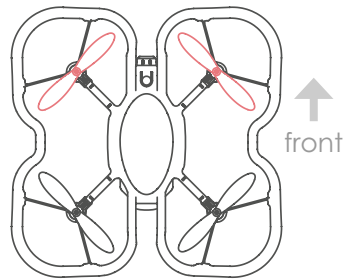
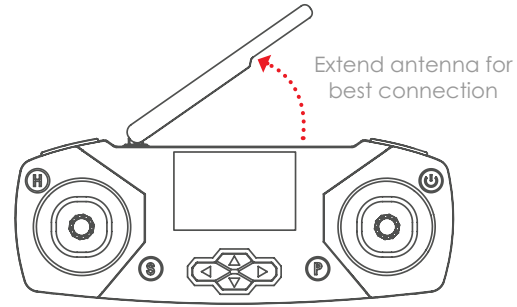
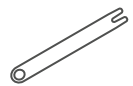
What's Included



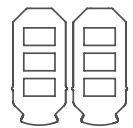
CoDrone EDU



Smart Controller

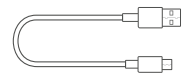


Propeller removal tool

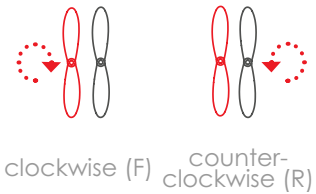


Battery x 2

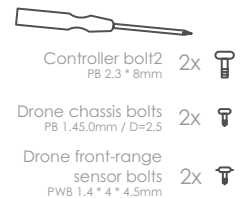
Dual-charger



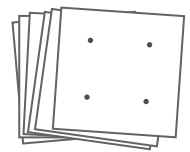
Micro USB cable



Spare propellers x 4



Screw driver, spare screws and bolts



Color landing pads x 8

Labels

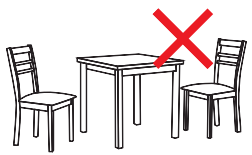
Before You Fly

Whether you're new to drones or a seasoned pilot, we recommend reading through the following safety guidelines before using your CoDrone EDU.

CAUTION

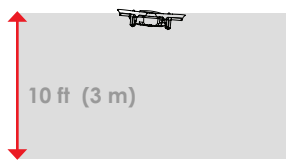
CoDrone EDU is designed for **indoor use** only. Rules for drone flight outdoors will vary depending on your location. The CoDrone EDU also cannot withstand wind. For those reasons, you should keep CoDrone EDU indoors.

1 Check the environment

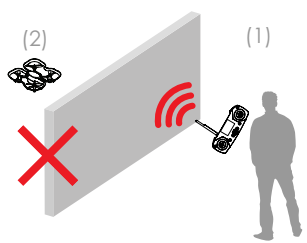


Designate an open area for flight without obstacles.

Put away fragile items and open liquids.

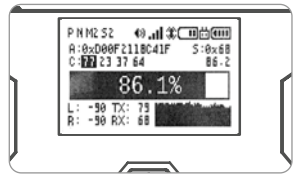


Try to keep your drone below 10 ft to avoid damage.



To maximize signal strength and safety, maintain line of sight between yourself/the controller (1) and the drone (2).

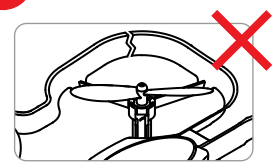
The signal has difficulty passing through people, glass, and walls.



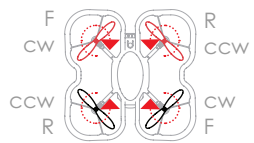
Your connection status screen will display your signal strength. Use (S) and (P) to change display mode screens in the remote control state.

For best performance, avoid flying over dark carpets or highly reflective surfaces. Surfaces that are bright, flat, well-lit, and patterned will work best.

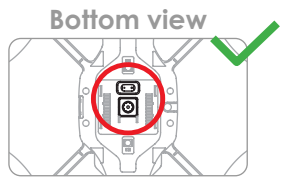
2 Check your drone



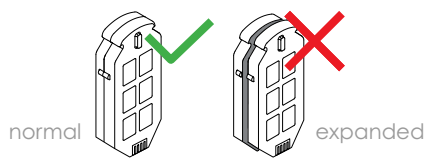
No major structural damage to motor arms or frame.



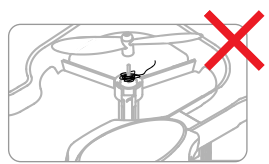
Propellers and motors are in the correct position (see page 18).



Bottom sensors are not obstructed.



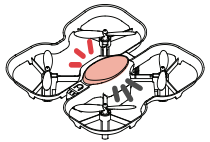
Drone battery has not expanded and has no signs of structural damage.



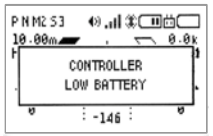
There is no debris beneath the propellers, and the propellers can spin freely.

Avoid flying when the drone or controller are on low battery.

Flight and signal stability will be less reliable when the battery is low.

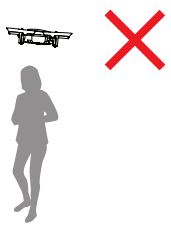


flashing red beeping sound

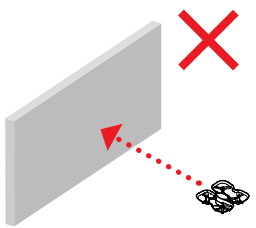


low battery message controller vibration

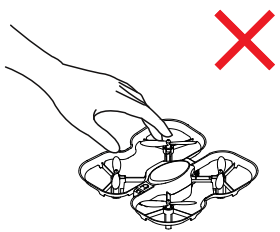
3 Know the rules of operation



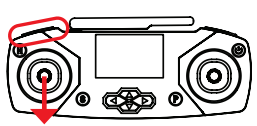
Do not fly over people.



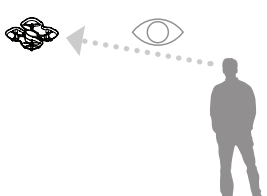
Do not fly at walls or at people.



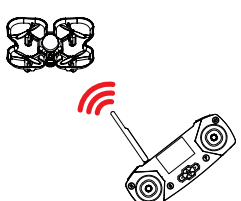
Keep hands, fingers, and other objects away from propellers.



If the drone crashes, Emergency Stop to shut off motors and avoid motor damage.



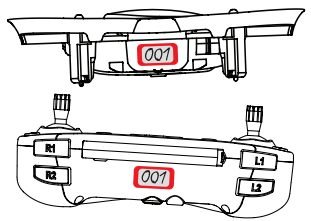
The pilot or a spotter should always maintain a visual on the drone.



Extend and point the antenna at the drone for best signal strength.

4 Label your drone

Side view



We've included a set of stickers for you to label your paired drone and controller. For example, you can label them with "001." That way, you'll know which drone and controller go together without powering them on.

This is **especially important in classroom settings**, or anywhere there are multiple drones and controllers.

5 Check your firmware

The drone and controller occasionally have firmware updates. We recommend updating to the latest version.

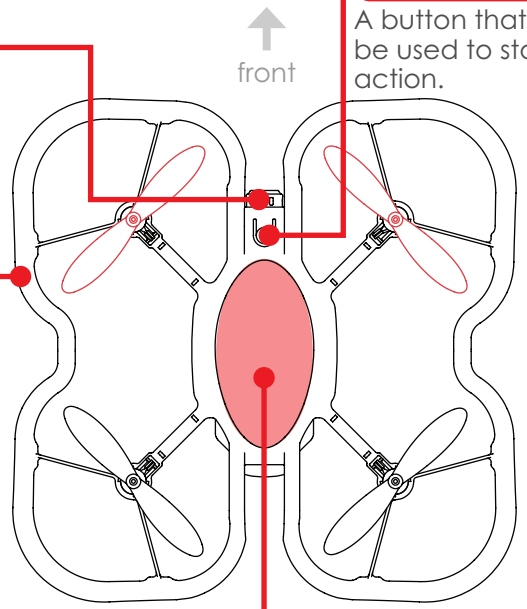
robolink.com/codrone-edu-firmware

Complete safety guide

These steps only cover the basics for safe use of the CoDrone EDU. If it's your first time flying, please read our complete safety guide.

robolink.com/codrone-edu-safety

Getting to Know Your CoDrone EDU



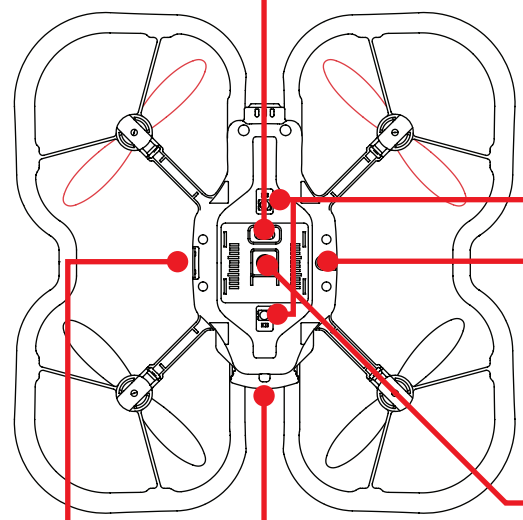
Front range sensor
Reads the distance from the front of the drone to the nearest surface up to 1.5 meters.

Action button
A button that can be used to start an action.

Frame
Protects the propellers and the drone from impact. Also, protects you and others!

LED light
Programmable LED light that also indicates the drone's different states.

Top view



Bottom range sensor
Reads the distance from the bottom of the drone to the nearest surface below it up to 1.5 meters.

Front and rear color sensors
Reads colors on the surface directly beneath the drone when landed. Deactivated during flight.

Pairing button
Press and hold to go into pairing mode.

(See page 14 for how to pair.)

Optical flow sensor
Downward-facing sensor used to estimate the drone's x and y positions.

Battery slot

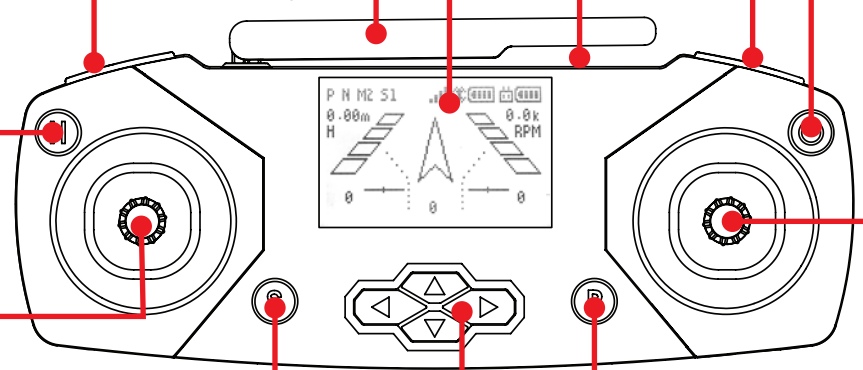
Bottom view

Micro USB port
Used for firmware updates. This port does not charge the battery or program the drone.

Getting to Know Your Controller

Using your controller, you can pilot your drone or connect your controller to your computer for coding. These are the controls for the controller while in the remote control state. For a complete video guide to the controller, visit:

robolink.com/codrone-edu-controller



L1

Press: Change flight speed (30%, 70%, 100%).

Press and hold: Take off / Land.

H

Press: Turn LCD screen backlight on / off.

Press and hold: Return home during flight.

Left joystick

Left and right: Yaw (rotate left and right).

Up and down: Throttle (move up and down).

S

Press: Go to previous display mode screen.

Press and hold: Go to the Settings menu.

Antenna

Extend and point at drone for best connectivity.

Micro USB port

Used for coding and controller firmware updates.

LCD screen

Displays drone information and settings. Can also be programmed with code.

Direction pad

If the drone begins to drift while flying, use the direction pad to trim (stabilize) it.

(See page 17 for how to trim.)

R1

Press: Change LED color on drone and controller.

Press and hold: Prepare drone to flip during flight. Then, push the right joystick in the direction you want to flip.

⏻

Press: When connected to a computer by USB cable, this button switches between the remote control and LINK state, which is used for coding.

Press and hold: Power on / off when using AA batteries.

Right joystick

Left and right: Roll (move left and right).

Up and down: Pitch (move forward and backward).

P

Press: Go to next display mode screen.

Press and hold: Pair.
(See page 14 for how to pair.)