

## Build Guide:

! All parts are somewhat fragile individually and should be handled with care, to ensure your crazyflie gets built effectively !



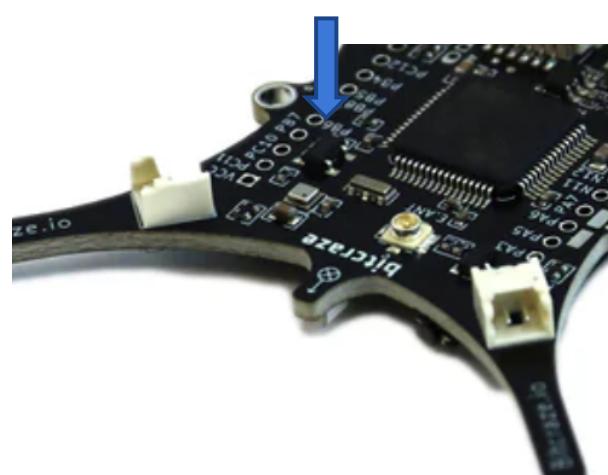
A fully complete crazyflie, refer to this as you follow the guide!

This site has videos and more in depth explanations if you get confused!

<https://www.bitcraze.io/documentation/tutorials/getting-started-with-crazyflie-2-x/>

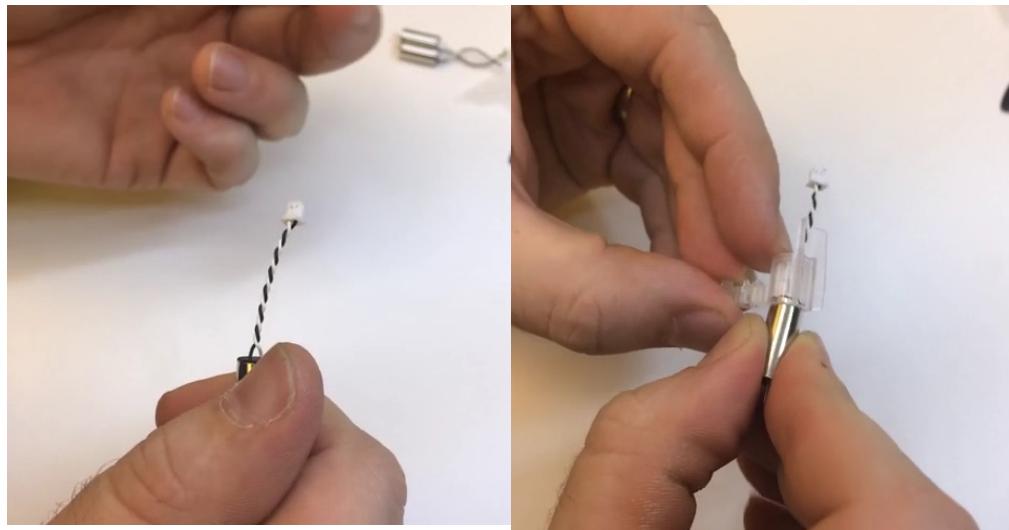
1

This is the body and base of the drone. All parts go here. The on button has a blue arrow, this is also where the front of the drone is, located by the circle with a cross in it.



**2**

Here we have the motors and their mounts. The clear plastic pieces slide right on to the four base arms. Use a little pressure to lock them into place! (The circular holding end should face up where the top of base is)



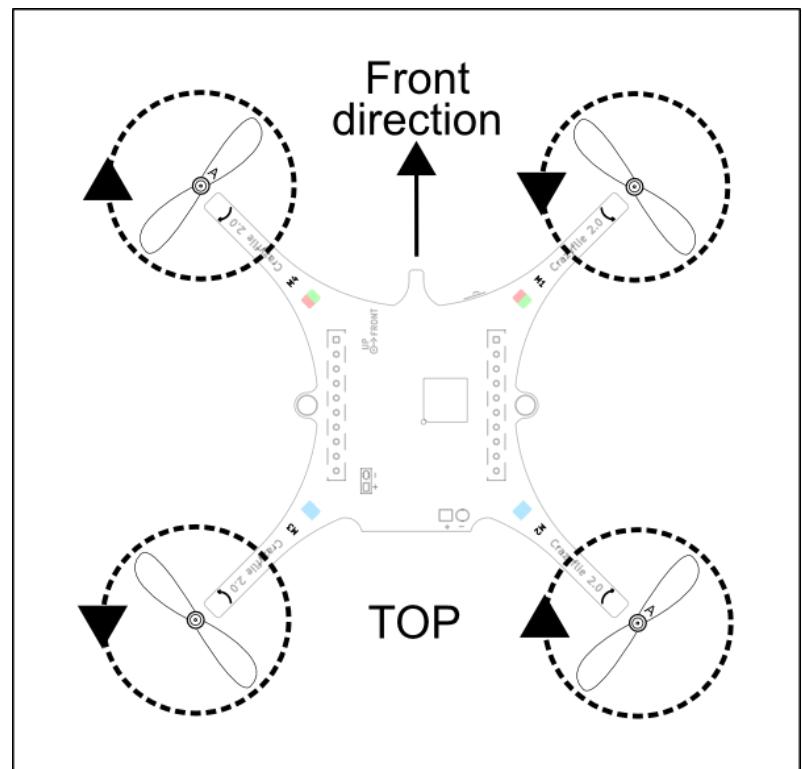
**3**

Feed the motor wire through and lock it into its mount. Twist the wires nice and tight and press them into the teeth to keep them out of the way! Then wiggle the small connector into place. There will be female ends already attached to the base ready to connect.



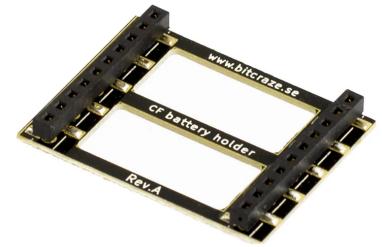
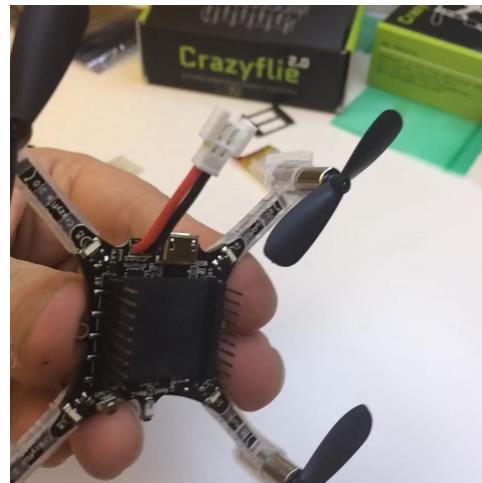
**4**

Once in place, the propellers simply sit atop the small outcropping on the motor. But make sure you pay attention to the direction of the propeller and the way it should be spinning!



5

Now to attach the battery we must use the pins and set up the battery holder deck. Simply insert the pins either side of the front, and place the battery deck on top. To actually connect, just plug the battery into the spot where the red and black wire comes out of the base



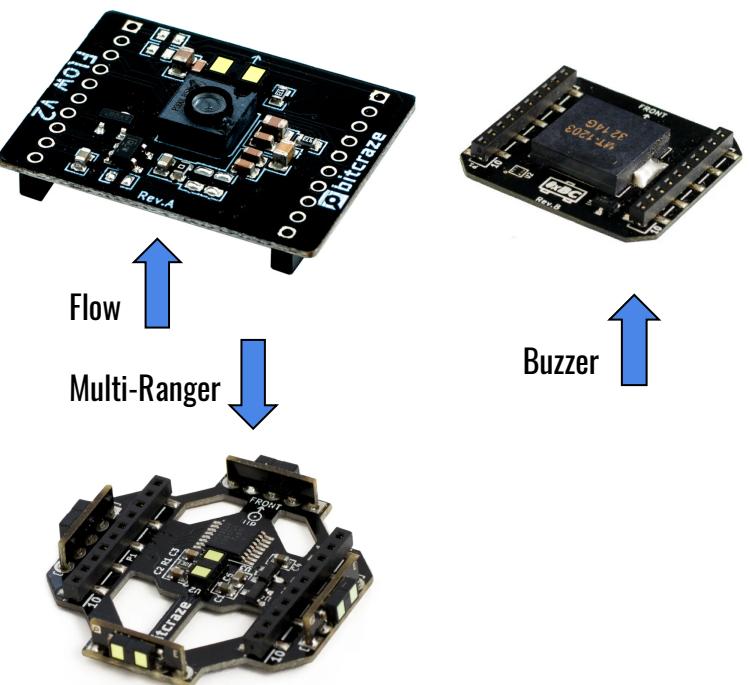
6

The battery will slide in between the attached deck and the base. Try to center it as best you can to keep the balance. The deck should also be as level as possible for the same reason.



7

Now we need to add the other modifier decks so that the flie can do some advanced things. The Flow, Buzzer, and Multi-Ranger decks all attach the same as the battery holder. The buzzer deck will stack on top of the holder and the multi-ranger above that. The flow deck will attach below.



## **Safety Checklist:**

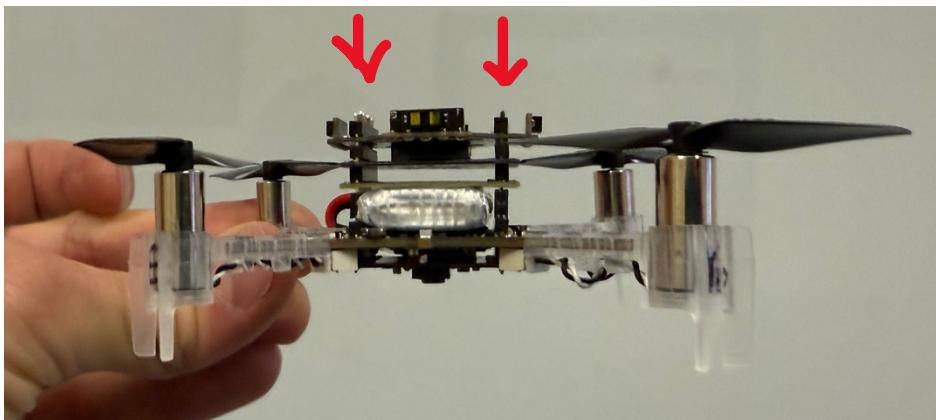
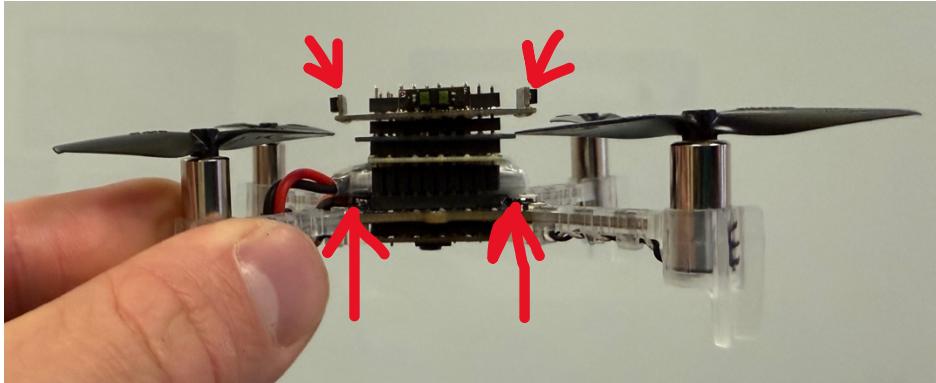
- The colors match across the computer, drone, box, radio and all.
- Find a open space with little to no obstructions up to the roof.
- Separate yourself from other groups and give everyone space!
- Tie back any hair, hide any jewelry to avoid catching the propellers.
- Throw on some safety glasses, just in case!
- Once flying avoid moving abruptly around the sensors.
- Don't put anything under the crazyflie – it will rapidly increase altitude and probably go unstable and crash
- Don't be alarmed if the drone crashes, or bumps into things it is meant to be durable!
- Always keep the landing module active.

## **Extra Tips:**

- When the drone crashes it will stop, don't worry it's not broken, just a safety thing! Turn the drone off and reconnect.
- There will be some trial and error involved, nothing should work on your first try 😊
- If your drone is having stability issues, check how the pins and decks are put onto the base, if they are not straight/level it will cause problems.

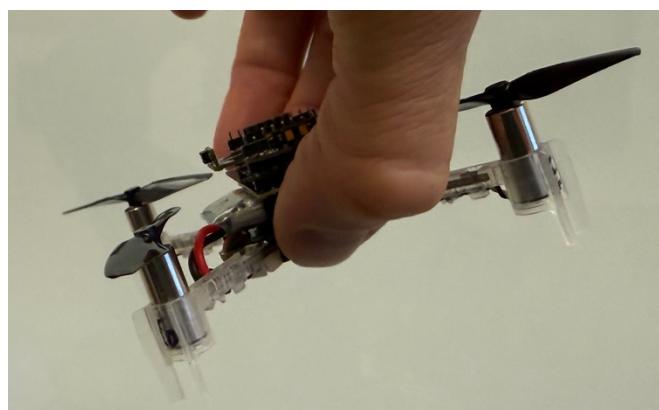
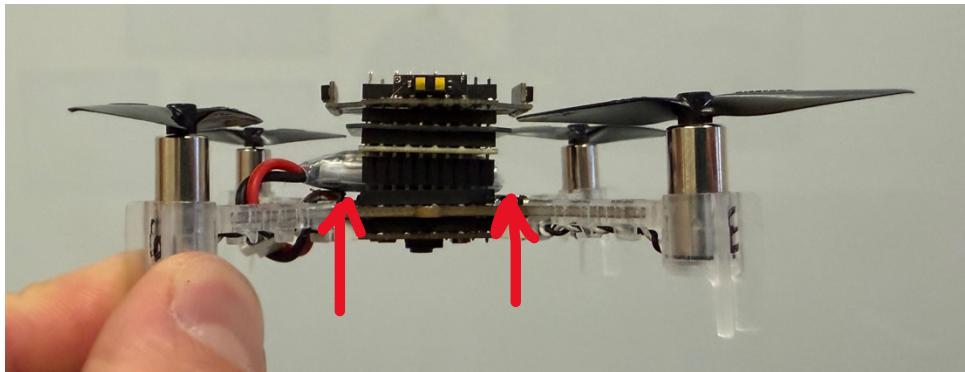
## **Balance is key:**

Good balance is key, here is a well balanced crazyflie:

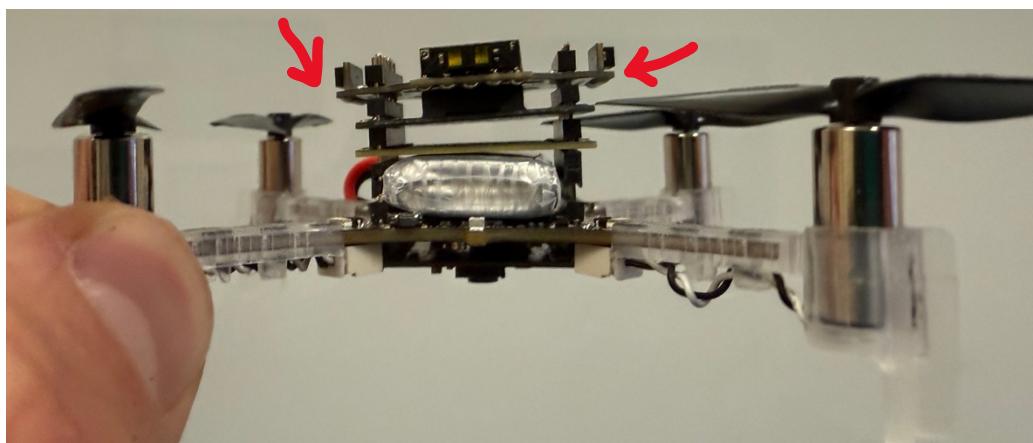


- battery needs to be balanced in the center
- boards need to be flat, parallel to main body

Here is a *poorly* balanced crazyflie:



- You can test the battery balance by lightly holding the tabs with your fingers to see if it wants to rotate.



- Decks are crooked!