Cicada Drone Layout

M1

CW

M2

CCW

M3

CCW

M4

CW

2

1

3

4

7

6

8

5

|  |  |  |
| --- | --- | --- |
| **Button** | **Action** | **Implementation** |
| 1 | Goes up | All motors accelerate uniformly |
| 2 | Turn left | M1 and M4 accelerate, M2 and M3 hold steady |
| 3 | Goes down | All motors decelerate uniformly |
| 4 | Turn right | M2 and M3 accelerate, M1 and M4 hold steady |
| 5 | Move front | M1 and M2 accelerate |
| 6 | Move left | M1 and M3 accelerate |
| 7 | Move back | M3 and M4 accelerate |
| 8 | Move right | M2 and M4 accelerate |

Implementation Steps:

1. Buy single motor, single ESC and ESP32 dev board
2. Understand how to accelerate and decelerate using ESP32 dev board
3. Control acceleration and deceleration using BLE
4. Buy 3 more motors, 3 more ESCs and a battery
5. Make/Buy a frame (If making a light-weight frame, remember to find a way to screw the motors to the frame)