

User Manual

System Setup

To set up the system, follow these steps:

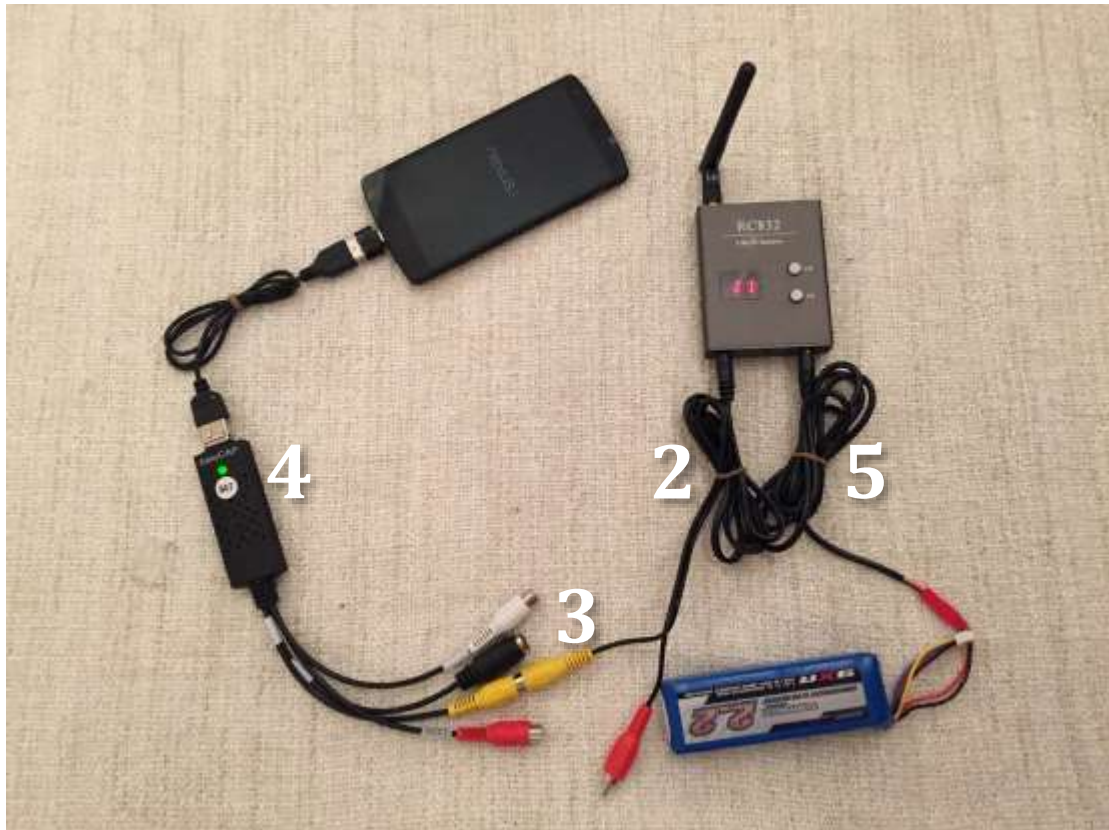
Server:

1. Connect the JeeLink to a USB port of a laptop



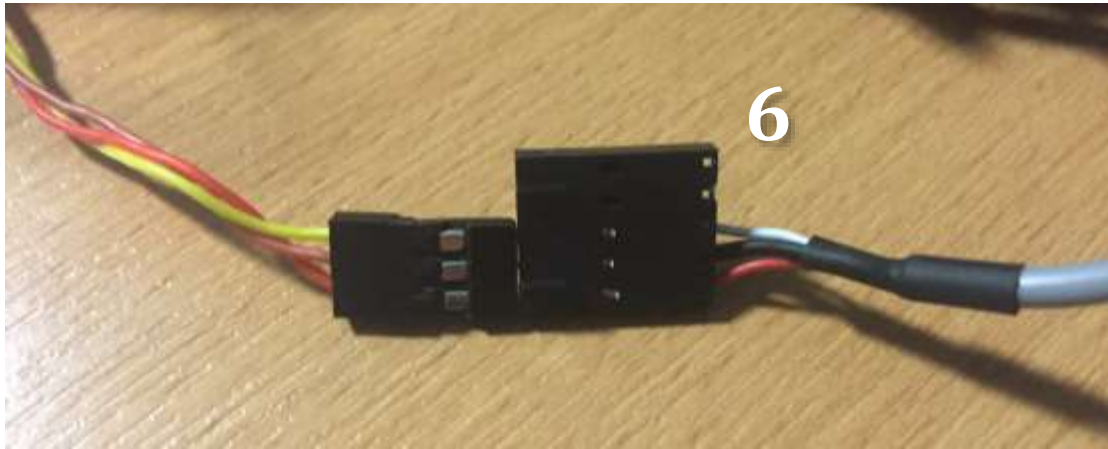
Cardboard sub-system:

2. Connect the yellow RCA video cable to the yellow cable on the ADC
3. Connect the ADC to the phone via a USB to micro-USB cable
4. Connect the video receiver to the Turnigy battery through the input labelled DV 12V
5. Connect the RCA video cable to the input labelled AV OUT1 on the video receiver

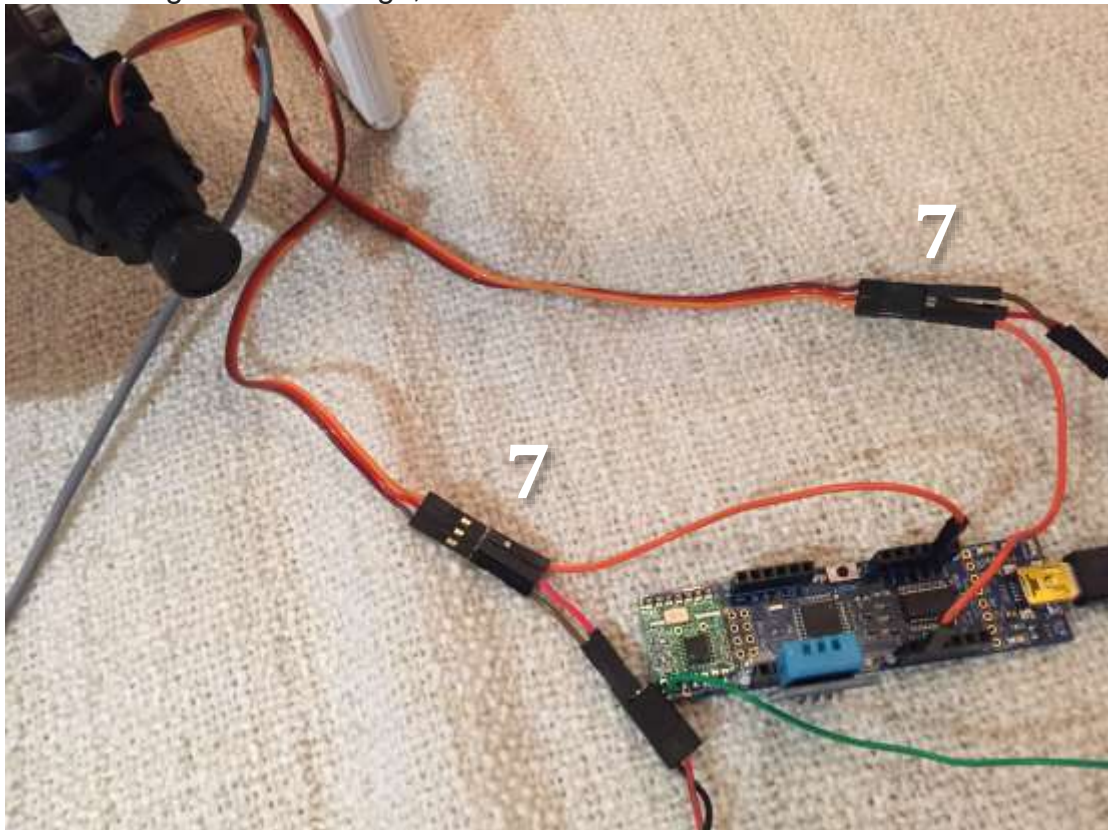


Drone sub-system:

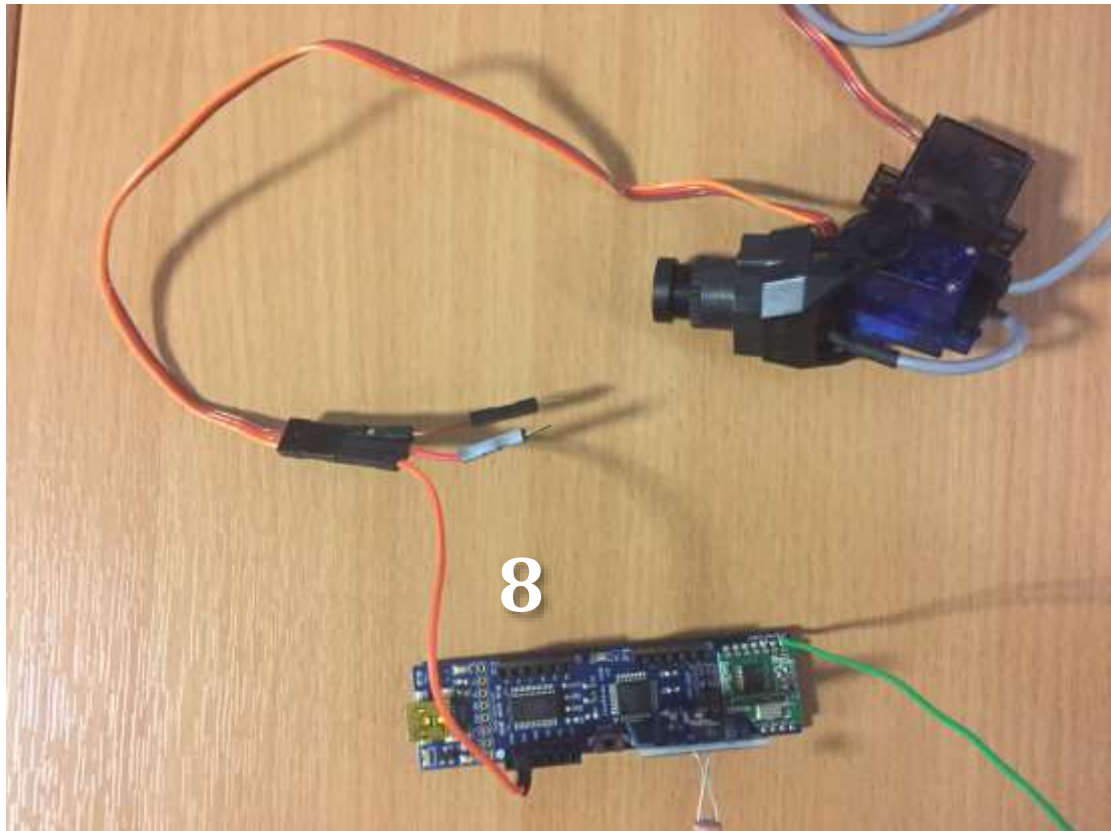
6. Connect the camera to the video transmitter as shown in the picture



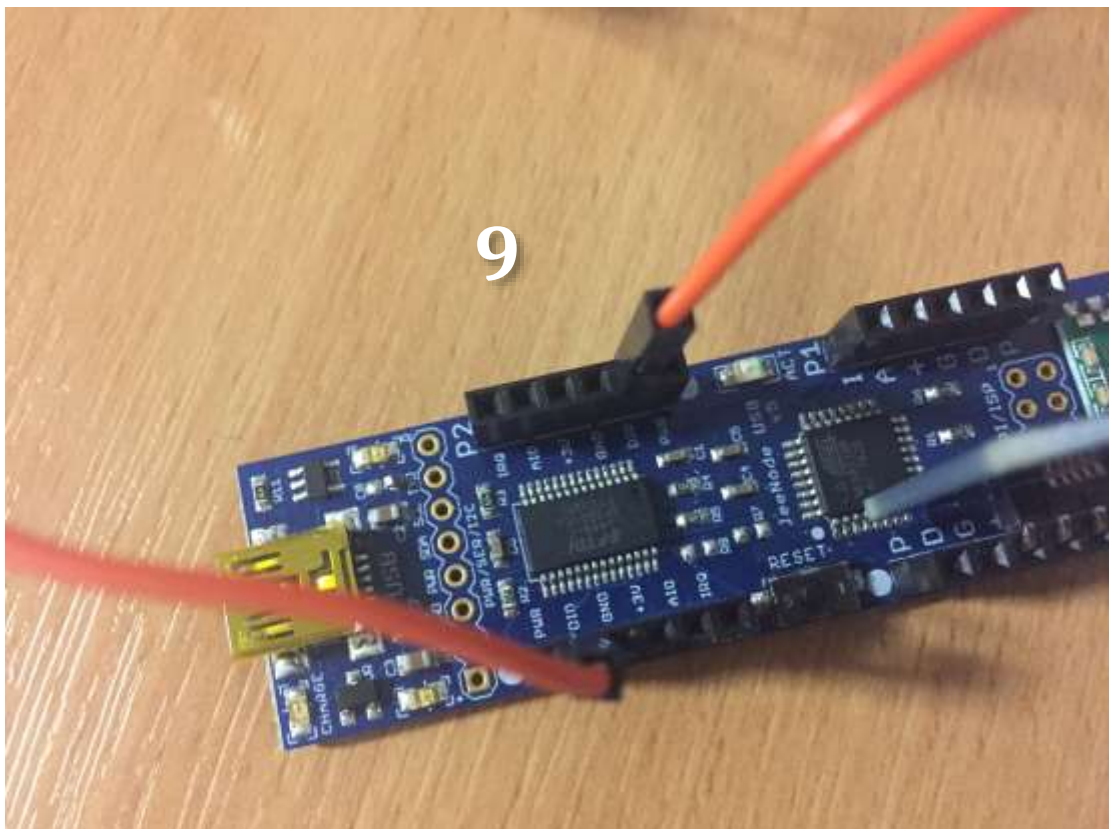
7. Connect each motor of the gimbal as shown in the picture below, orange wire to orange, red to red and brown to brown



8. Connect the orange wire leading from the motor closer to the camera (in a blue box) to the DIO pin on port 3



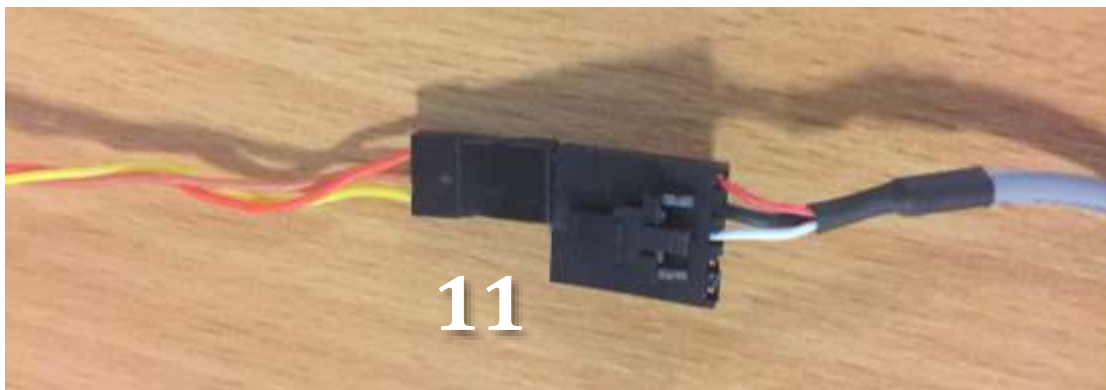
9. Connect the orange wire leading from the motor further away from the camera (in a grey box) to the DIO pin on port 2



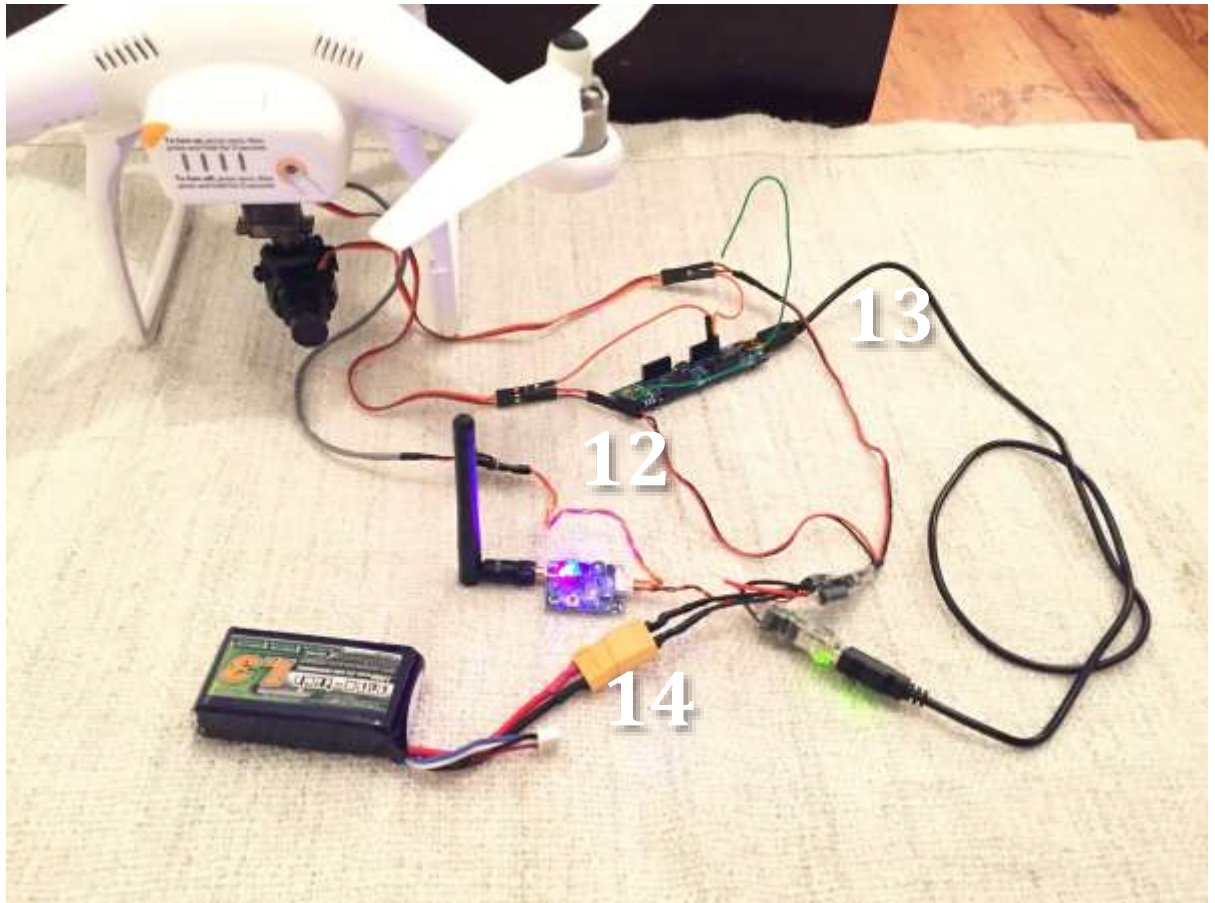
10. Insert the DHT11 Keyes sensor into Port 1. The DHT sensor should connect to the digital input/output pin (A), the +3V pin (+), and the GND pin (G). The image provided shows the respective pins.



11. Connect the grey camera cable to the twisted yellow, brown and red wire like shown on the picture, red to red, black to brown, white to yellow



12. Follow the cables from both of the motors, and connect the brown wire to the black wire, and the red wire to the red wire
13. Connect the JeeNode to the power source via a USB to micro-USB cable
14. Connect the nano-tech battery to the yellow socket



System Running

To run the system, follow these steps:

Server:

1. Download the zip folder (if not already done so) from:
<https://github.com/deldarwand/MSF-SE-Project>
2. Traverse to the Java folder
3. Run the run-server.bat file or the run-server.sh file, either via the terminal or by double-clicking the file

Cardboard sub-system:

4. Download the zip folder (if not already done so) from:
<https://github.com/deldarwand/MSF-SE-Project>
5. Open up Android Studio, and import the GoogleCardboard folder as a project
6. Run the application

Drone sub-system:

If the JeeNode is correctly supplied with power, and the JeeLink is connected to a USB port of a laptop, then you're good to go!