YUEQUN CLEANING DRONE MANUAL

1. Disclaimer and Warning

YUEQUN products are NOT toys and not suitable for children under the age of 18. Adults should keep the product out of the reach of children and DO NOT operate this drone in the presence of children. The operator must have some flight experience. People who DO NOT have any experience are not being suggested flying.

DO NOT drop, launch, fire or project any dangerous payload on or at any buildings, persons or animals, or which could cause personal injury or property damage. DO NOT use the products for any reason other than general personal use. DO NOT use it for any illegal or inappropriate purpose (such as spying, military operations, or unauthorized investigations). DO NOT use this product to violate the right of privacy and private property of others.

YUEQUN product is a multirotor flying platform . It offers easy flight when in good working order. DO NOT use it to do other functions, if you change parts of YUEQUN drone, we are not responsible.

The information in this document affects your safety and your legal rights and responsibilities. Read this entire document carefully to ensure proper configuration before use. Failure to read and follow the instructions and warnings in this document may result in product loss, serious injury to you, or damage to your drone. By using the products, you hereby signify that you have read this disclaimer carefully and that understand and agree to abide by the terms and conditions herein. You agree that you are solely responsible for your own conduct while using the products, and for any consequences thereof. You agree to use the products only for purpose that are proper and in accordance with all applicable laws, rules and regulations YUEQUN has made and may make available.

YUEQUN accepts no liability for damage, injury or any legal responsibility incurred directly or indirectly from the use of the products if users DO NOT obey the instructions and warnings. The user shall observe safe and lawful practices including, but not limited to, those set forth in these safety guidelines.

YUEQUN is a trademark of SHANDONG YUEQUN MACHINERY CO., LTD. （ abbreviated as “YUEQUN” ） and its affiliated companies. Names of products, brands, etc., appearing in this document are trademarks or registered of their respective owner companies.

YUEQUN reserves the right to update this disclaimer.

2. Using This Manual

2.1 Before You Begin

Check all of the included parts listed on the table in the box and read the operating manual. Make sure you fully understand the functionality of each individual part, the flight condition requirements, the key contingency warning functions/systems, and all government regulations before each flight. If you have any question or problems during the assembly, maintenance or use of this product, please contact YUEQUN or YUEQUN authorized dealer.

2.2 Precautions Before First Flight

⚠ **Pre-flight checklist (refer to individual Pre-flight checklist)**

a. Remote controller and drone batteries are fully charged.
b. Every part is in good condition.
c. Propellers are in good condition and been unfolded. Frame arms are unfolded and the screws are firmly tightened.
d. There is nothing obstructing the motors. You can test the motors on the ground to see if they are running in right direction.
e. Spraying system is without any blockage and works properly.
f. Calibrate Compass(GPS) and accelerometer (IMU) before first flight, after long way transportation/crash/big vibration, and calibrate GPS again at new flight location 5km away.

2.3 Operation

a. Stay away from the rotating propellers and motors.
b. The takeoff weight must not exceed Max. take off weight
c. Maintain line of sight of your drone at all times.
d. NEVER stop the motors mid-flight.
e. DO NOT answer incoming calls during flight. DO NOT fly under the influence of alcohols or drugs.
f. In the instance of a Low Battery Warning, land the drone at a safe location.
g. Always keep your hands on the remote controller so long as the motor is still spinning.

h. Turning on remote controller before powering on the drone.
i. Power off the drone before turning off the remote controller after landing.

2.4 Maintenance and Upkeep

a. DO NOT use aged, chipped or broken propellers.
b. Clean the drone immediately with clean water after spraying.
c. Inspect the drone every 100 flights or after flying for over 20 hours.
d. DO NOT over-charge or dis-charge the batteries.
e. For more maintenance guidelines, refer to the following document.

2.5 Environment

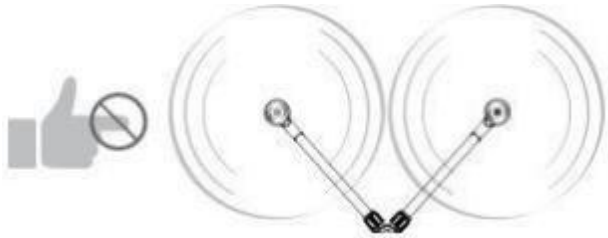
a. The area where the drone is working should be away from crowds and cars, and pay attention to surrounding obstacles.
b. Be very careful when flying over 2,000 m above sea level.
c. Fly in moderate weather conditions with temperatures between 0° to 40° C.

2.6 Observe Local Laws and Regulations

a. DO NOT fly in the No Fly Zones, must comply with local laws and regulations.
b. Calibrate GPS before flight and fly with strong GPS signal.

d. Avoid flying over or near obstacles, crowds, high voltage power lines, airports, mines or bodies of water. DO NOT fly near strong electromagnetic sources such as power lines and base stations as it may affect on magnetic compass.
e. DO NOT fly in adverse weather conditions such as rain (precipitation rate exceeding 25mm in 12 hours), wind speeds exceeding 8m/s, fog, snow, and lightning.

f. Stay away from working propellers and motors, otherwise it may cause serious injuries to people and property.



3. Product description

3.1 cleaning drone

3.1.1 Profile

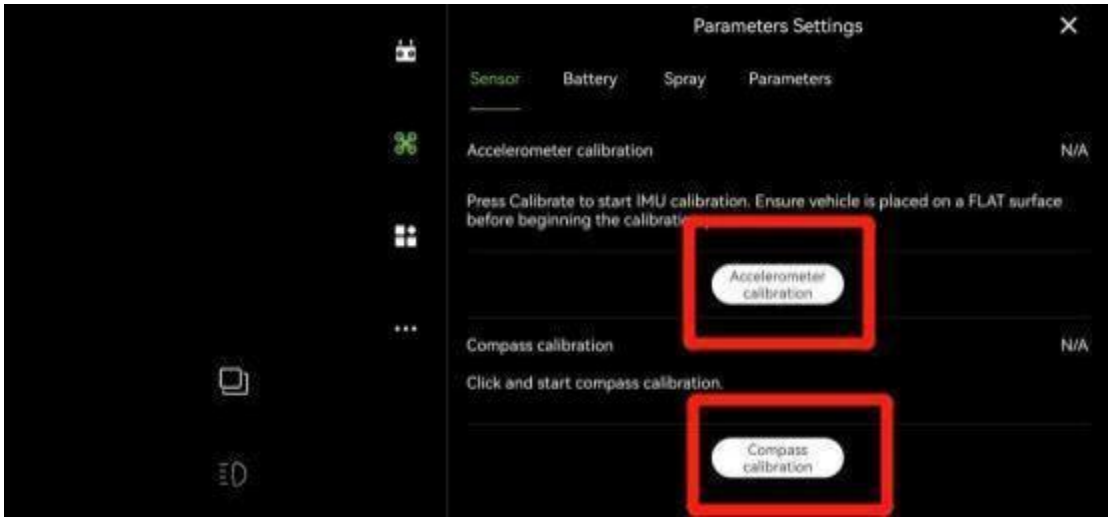
The YUEQUN drone is a battery-powered multirotor drone designed for cleaning facade building wall , window ,roof panel ,solar panel , advertisement panel , factory wall etc .

The drones also include industry-leading flight control system and three operation modes: attitude (ATT), Manual mode and attitude (ATT ） ， only in attitide (ATT) can unlock the drone .

The remote controller features a range of controls for navigation, While the drone does all the hard work , you keep full control over it in the palm of your hands.

4. Preparation before use

4.1 Fully charge the battery (charge to 100%).
4.2 Unfold the aircraft and propeller and lock the folder sleeve.
4.3 Calibrate the Accelerometer and magnetic compass (please refer to the video tutorial).



(1) **Calibrate Accelerometer:** it will be finished in about 8s. There will be a text prompt after the calibration is successful.

Note: Be sure to place the drone on a level ground and do not touch the drone during calibration.

（2） **Compass calibration:** click the “compass calibration”. When the flight control LED lights up yellow, lift the aircraft and rotate clockwise for 2-3 turns horizontally until LED indicator turns to solid green(the remote controller also show X-axis calibration completed). Keep the LED indicator up, rotate clockwise for 2-3 turns vertically until the LED indicators flash red, yellow and green(the remote controller also show Y-axis calibration completed). If the calibration fails, try again or contact us immediately, don’t take off the drone.

4.4 Secure the spray gun on the drone.

4.5 Connect the water hose to spray gun handle..
4.6 Connect the other end water hose to ground pump.
4.7 Connect transparent hose with filter to the ground pump, put the filter end in the water tank

5. Flying and cleaning functions

5.1 Unlock. push two sticks to bottom as below until motors start running at the same time, then release back to central position, the motor will keep idle running speed.

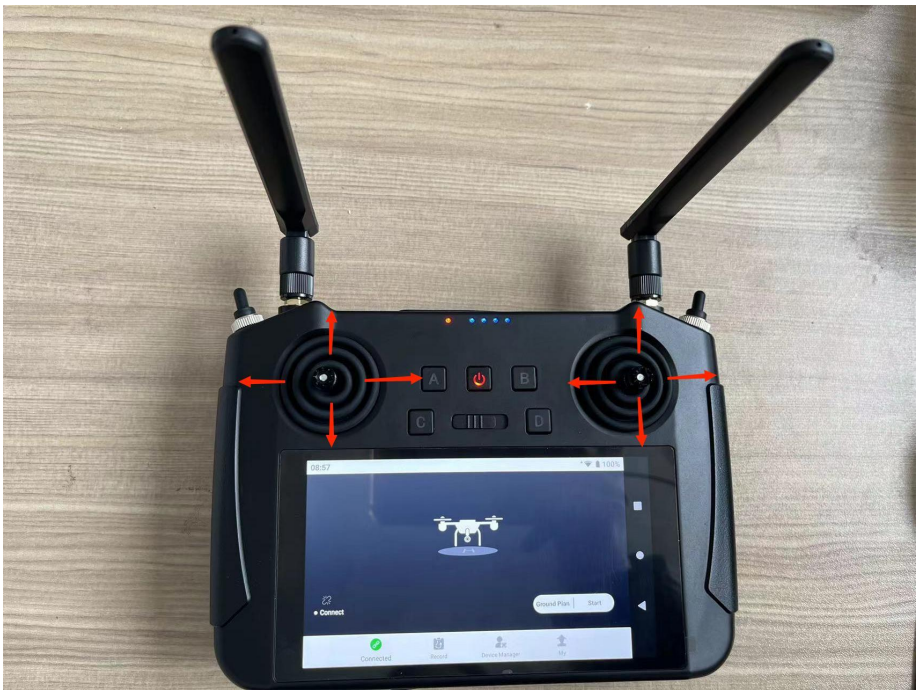
5.2 Flight Control

Leftstick:

The up and down of the joystick corresponds to the ascent and descent of the aircraft.
The left and right of the joystick correspond to the left and right turns of the aircraft.

Right stick:

Up and down of the joystick corresponds to forward and backward of the aircraft.
The left and right of the joystick correspond to the left and right of the aircraft.



D button: One key return （only be used where there are no obstacles）
A button : Take photos
B button : Record video
C button : Turn on/off the obstacle avoidance

Functional operation start spraying
(1) After takeoff, first turn on the ground water pump.

End spraying
(1) Turn off the ground water pump

5.3 Landing

Pull down the left joystick slightly to let the aircraft descend slowly, and straighten the joystick to the lowest position after the aircraft touches the ground.

FCC Warning

This device complies with part 15 of the FCC rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any inte rference received, including interference that may cause undesired operation.

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interferenceto radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Radiation Exposure Statement

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator and your body.