

**Ages 14+**

***Potensic***

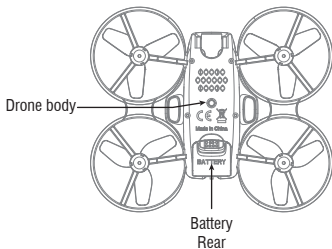
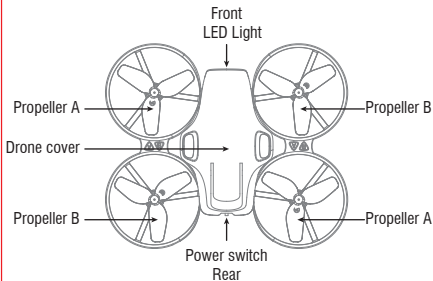


# **A30**

## **Operation Guidance**

# Overview of drone and transmitter

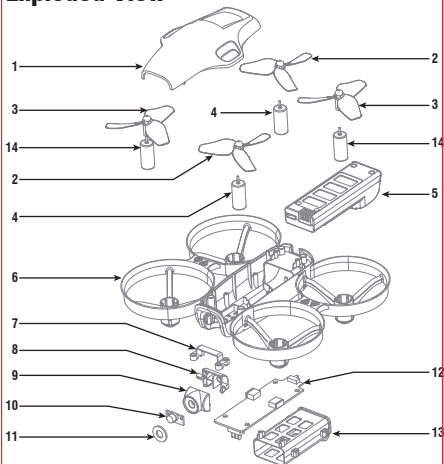
## Drone



## Main parameter

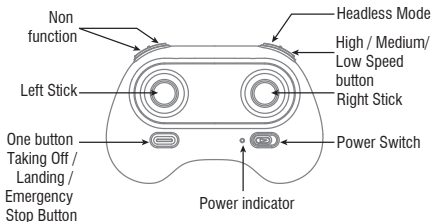
Drone Size	140x140x43.5mm	Flying Distance/Radius	50m
Weight of drone	63g	Charging time of drone battery	~80 mins
Flight time	6~7 mins		
Drone battery	3.7V x 500mAh	Frequency	2.4Ghz

## Exploded View



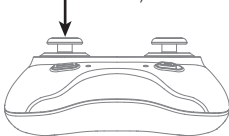
NO.	Name	NO.	Name
1	Drone cover	8	Back cover of light
2	Propeller A	9	Front cover of light
3	Propeller B	10	Light Board
4	Clockwise Motor	11	Light Organic Board
5	Battery	12	Receiver Board
6	Drone body	13	Inner box of battery
7	Buckle	14	Counterclockwise Motor

## Transmitter





Trimmer Mode button  
(Press down the left stick)

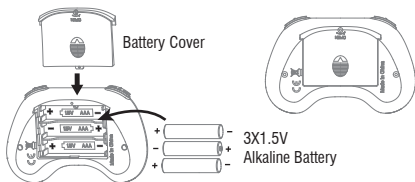


## Brief Introduction for Button Functions

<b>Left Stick</b>	Move the Stick forward / backward / left / right to fly the drone to up / down / turn left / turn right.
<b>Right Stick</b>	Move the Stick forward / backward / left / right to fly the drone to forward / backward / left / right.
<b>Power Switch</b>	Pull right the power switch key to power on the transmitter, power off when returns.
<b>Headless Mode</b>	Press the key to enter the headless mode; Press again to exist.
<b>High / Medium / Low Speed Button</b>	Press the key to switch to High /Medium/ Low Speed.
<b>Take Off / Landing /Emergency Stop Button</b>	After frequency pairing, press once and the drone will take off automatically. Press again and the drone will land automatically. Press and hold the button for more than 1 second for an emergency landing. The drone propellers will stop and land.
<b>Trimmer Mode Button</b>	Press this button and move the right stick to the required trimmer direction, then it will adjust the direction accordingly. Release the stick to end trimmer mode.

## Transmitter Battery installation

Open the battery cover of the transmitter, insert 3 AAA batteries following the polarity indicators ( Picture below, battery is not included) and then close it.



### Notice:

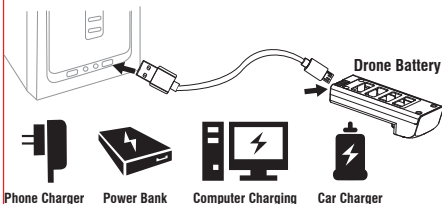
1. Make sure the electrodes are correct.
2. Do not mix new with old batteries.
3. Do not mix different kinds of batteries.
4. Do not charge the non rechargeable battery.

# Parts installation

## Charging Instruction for Drone Battery

1. Connect the drone battery with USB cable first and then choose one of the method as below picture shown to connect with USB plug.
2. The indicator light on drone battery will become red and it will turn green when fully charged.

**\* For faster charging, it is recommended to use an adapter with 5V 2A output**



### Li-Po Battery Disposal & Recycling



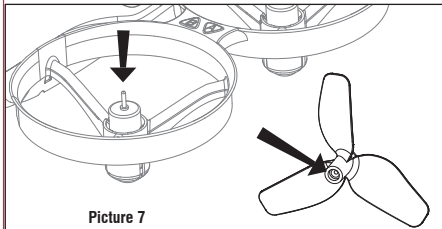
Wasted Lithium-Polymer batteries must not be placed with household trash. Please contact local environmental or waste agency or the supplier of your model or your nearest Li-Po battery recycling center.



## Assemble/Disassemble the Propellers

To disassemble, press the motor and gently pull the propeller upward with another hand.

To install the propeller, align and snap on the propeller blade to the motor.

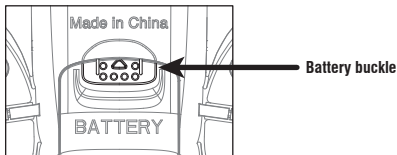
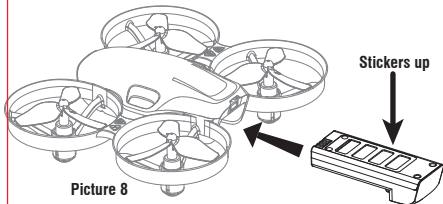


Picture 7

**Note:** Align propeller A with the motor marked A, and align propeller B with the motor marked B.

## Drone battery installation

When installing, insert the battery into the drone as per diagram (on picture 8) and the battery sticker should be facing upward. When removing, pull up the drone buckle and pull out the battery buckle (Picture 9).



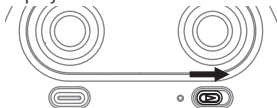
## **Precautions before flying**

1. Make sure the transmitter and the battery of the drone are fully charged.
2. Before starting, please confirm that the left stick of the transmitter is in the middle position.
3. Please follow the correct steps to turn on the drone/transmitter. Before flight, turn on transmitter and then the the drone. After flight, turn off the drone and then transmitter. Turning ON/OFF incorrectly may cause the drone to lose control.
4. Make sure to correctly install the battery, motor, etc.
5. Check the rotation direction of the propellers. The left front & right rear propeller A should rotate clockwise. The left rear & right front should rotate counterclockwise.
6. Improper operation may cause drone crash, which may cause a motor defect, prevent you from flying, and other issues. Please go to the local distributor to buy new parts for replacement so that the drone will return to its best

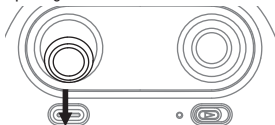
# Flying steps

## Syncing Frequencies

Turn on the transmitter and the power indicator light on it flashes rapidly.



Pull the left stick to the lowest position and then release. The power indicator on transmitter will flash slowly and the controller is ready for pairing.



Turn on the drone. The drone body lights will stop flashing and turn a solid color, indicating successful frequency pairing and then enter the remote control mode.

**It must be placed on a surface !**



## Take off

After calibration successfully, press this button, the drone will fly up and keep flying at an altitude of approximately 1.2 meters automatically.

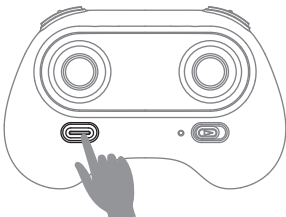
## Landing

Press it to land the drone automatically. (In this mode, DO NOT touch the left stick, otherwise it might not work).

## Emergency Landing

In an emergency situation, such as if it is about to hit people or obstacles, press the Taking Off/ Landing / Emergency Stop Button and hold it for more than 1 second. The propellers will stop immediately and the drone will fall.

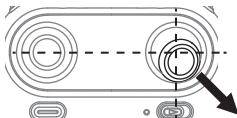
**Note: Do not activate this function unless in emergency situation. Because the drone will fall when the motors stop working.**





## **Calibration** (This action is operated when flying abnormally)

Push the right stick as picture shown after successful frequency pairing. Please loose it when the drone body light flash quickly , indicating that gyro calibration is completed.



**Tips:** Crashing the drone may cause the connection to fail, making the drone hard to control. If this occurs, try to repair and recalibrate . It must be placed on a surface !

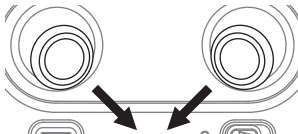
## **Unlocking/locking the motor**

### **Unlock the motor:**

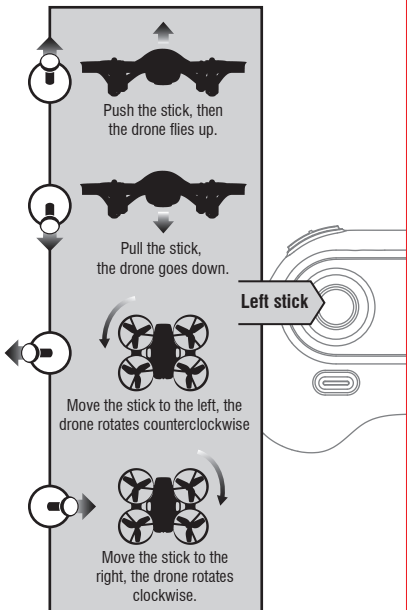
Move the left stick and right stick at the same time 45 degrees inward.

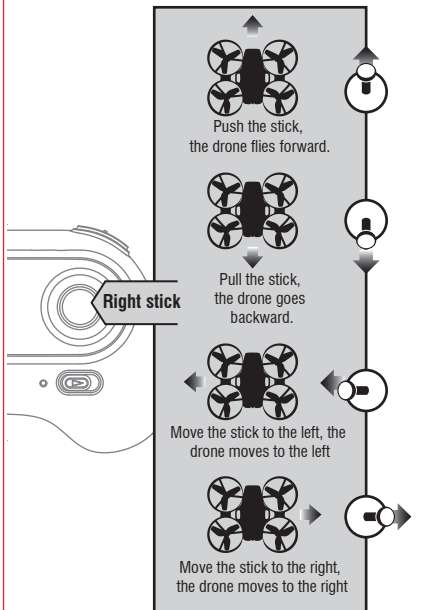
### **Lock the motor:**

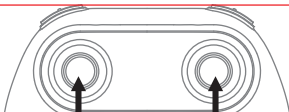
When the motor is working, it could be used to stop the motor urgently(Move the left stick and right stick at the same time 45 degrees inward).



## Flight Control







### **Forward/Backward Trimmer**

When flying, if the drone tilts forward , press the trimmer button, and push the right stick backward. Otherwise push forward.

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### **Left/Right Tilts Trimmer**

When flying, if the drone tilts to the left, press the trimmer button, and push the right stick to the right. Otherwise push to the left.

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### **Left/Right Rotates Trimmer**

When flying, if the drone head rotates to the left, press the trimmer button, and push left stick to right. Otherwise push to the left.

## **Functions Instruction**

### **Altitude Hold Mode**

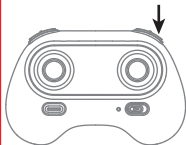
Intelligent flight control system calculates the Altitude Hold Mode, makes it easier for beginners to control. Release the stick, the drone will keep hovering.

**Note:** If there's propeller or motor is damaged, the constant height function will not work. Due to atmospheric pressure instability or unsuitable weather, the high altitude hold function will not work either.

## High / Medium/Low Speed Mode Switch

Press down on the key, it will beep, this indicates the low speed mode "L"; Press down again, it will beep twice, for the middle speed mode "M"; Press down again, it'll beep three times, for the high speed mode "H".

High / Medium/  
Low Speed Mode



### Low Speed Mode "L"

It's suitable for the beginners to operate in calm weather, with no breeze.

### Medium speed Mode "M"

It's suitable for those practicing (hobbyists) to operate, with or without breeze.

### High Speed Mode "H"

It's suitable for the professionals in most outdoor wind conditions.

**Note:** The default setting is Medium Speed.

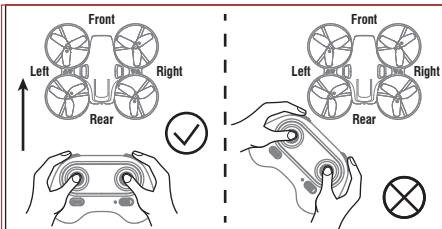
## Headless Mode

**The default setting is NOT Headless Mode.**

Under headless mode, the users can operate the drone without worrying about the orientation (left is left and right is right all the time, regardless of where your drone is pointing at)

You can activate the headless mode function before taking off or in flight. Flying under headless mode, your drone direction should be aligned with you. DO NOT change the direction of your transmitter, keep it flying in front of you at all the times. (See below picture).

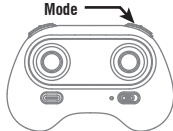
**WARNING: THE DRONE SHOULD BE IN FRONT OF YOUR TRANSMITTER BEFORE ENTERING THIS MODE AND KEEP IT. OR THE DRONE MIGHT LOSE CONTROL OR FLY AWAY.**



\* Press headless mode button to activate the function, at this time the LED light on the rear of drone keeps shiny for three times and stops for 1s;

To exit the Headless Mode, press the button again, at this time the LED light on the rear of drone will turn a solid color.

**Heading Hold Mode**



## Low Battery Alarm

When the transmitter or drone has a low battery, It will beep to remind the user to land the drone and replace the batteries as soon as possible Or it might be out of control.

## Out of Range Alarm







When the drone is out of range or almost at the max remote control distance, it will beep to alert the user to fly back ASAP. Otherwise, the drone might be out of control or fly away.

## Stuck Protection

1. When the propeller is stuck, the LED light of the drone will have quick flash. Then the Stuck Protection will be activated and motors will stop working.
2. Pull down the left stick to the lowest position and then release it, the drone LED will become a solid color and stuck protection will be released and the drone can fly again.

## Assembly Parts List (Sold separately)

There are components for choice below. For your convenient purchase, we list each part for you, you can purchase ones you want from local distributor.

		
Drone cover	Drone body	Propeller A
		
Propeller B	front cover of light	back cover of light



**Buckle**



**Light board**



**Receiver board**



**Clockwise motor**  
(red/black line)



**Counterclockwise motor**  
(blue/white line)



**USB Charger**



**Drone battery**



**Transmitter**

## Statement

Our products are constantly improved, so designs and specifications are ready to change without notice.

All the information on this guidebook is carefully proofread, we make every effort to be accurate. If any wrong printing, our company reserves the right of final interpretation.



# Troubleshooting

No.	Problem	Problem Cause	Solution
1	The transmitter indicator light is off.	1. Low battery.	1. Replace the transmitters battery.
		2. The battery positive pole and negative pole are in reverse order.	2. Install the battery in accordance with the user manual.
		3. Poor Connection.	3. Clean the dirt between the battery and the battery slice.
2	Fail to pair the drone with transmitter	1. Indicator light is off.	1. The same as above 1.2.3.
		2. There is interfering signal nearby.	2. Turn off and turn on the drone and transmitter again.
		3. Mis-operation.	3. Operate the drone step by step in accordance with the user manual.
		4. The electronic component is damaged for frequent crash.	4. To buy spare parts from local seller and replace damaged parts.
3	The drone is under - powered or can not fly.	1. The propeller deformed seriously.	1. Replace the propeller.
		2. Low battery.	2. Recharge the drone battery.
		3. Incorrect installation of propellers.	3. Install the propeller in accordance with the user manual.

4	The drone could not hover and tilts to one side.	1. The propeller deformed seriously.	1. Replace propeller.
		2. The motor holder deformed.	2. Replace the motor holder.
		3. The gyro did not reset after violent crash.	3. Put the drone on the flat ground for about 10s or restart the the drone to calibrate again.
		4. The motor is damaged.	4. Replace motor.
5	The drone indicator light is off.	1. Low battery.	1. Recharge the drone battery.
		2. The battery is expired or over discharge protection.	2. Buy a new battery from local seller to replace the battery or charge the battery in accordance with the use manual.

## FCC 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 interference to 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.

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

## FCC Notice

The equipment may generate or use radio frequency energy. Changes or modifications to this equipment may cause harmful interference unless the modifications are expressly approved in the instruction manual. Modifications not authorized by the manufacturer may void user's authority to operate this device.

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.
- (2) This device must accept any interference received, including interference that may cause undesired operation.



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