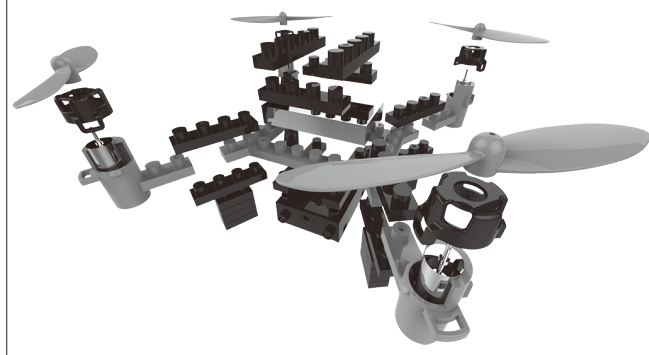


# INSTRUCTION MANUAL

Applicable model: 902 Series products

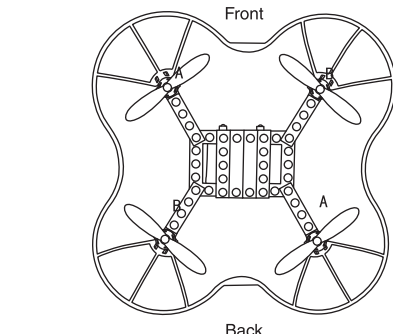
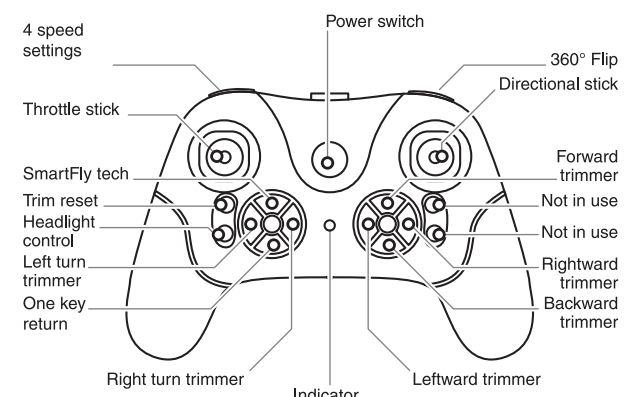


FOR AGES 14+  
We hope you enjoy your purchase of the Build-A-Drone and that this user manual helps build your drone and fly it around your neighborhood.

## Included Contents

- (2.4G) Remote Controller
- Rechargeable 600mAh Li-Po Battery
- USB Charging Cable
- Instruction Manual
- Quickstart Guide
- Construction Guide
- (4x) Replacement Propellers
- Screwdriver
- (44x) Toy Construction Blocks
- Large Velcro strap and 4 Small Velcro straps

## Controls



Replace the blade according to the corresponding location of the propeller AB in the figure.

## Specifications

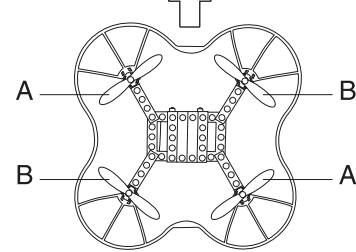
- Charging Time:** About 40-60 minutes  
**Flying Time:** About 5-6 minutes  
**Controlling Distance:** About 30-50 meters  
**Battery for Quadcopter:** 3.7V 600mAh 20c Li-Poly  
**Battery for Transmitter:** 3 AA batteries (not included)

## Flight Preparation

### Drone Assembly

Part of the fun of the Build-A-Drone is building the body of the drone! Build it before you fly it, so please reference the assembly instructions (included in this kit) to see the three different ways you can build your drone.

### Propeller Installation



**Please Note:** The propellers are lightly labeled with the motor arms they should be paired with. For example, propeller A1 will be attached to the front arm. Please see Step 1 in the Construction Guide as a guideline when attaching the propellers.

Please ensure proper installation of the propellers to fly the drone.

**Step 1** Match your propellers to each motor arm by the corresponding letter: A, B.

**Step 2** Place each propeller on the small pin on the corresponding motor arm.

### Charging & Installing the Build-A-Drone Batteries

**Please Note:** The Build-A-Drone comes with a partially charged battery and does not include batteries for the remote controller.

**Warning:** Please check the batteries regularly as potential leakage and/or corrosion of old batteries can damage the drone and/or create a fire hazard.

### Caution:

- Remove the batteries immediately if you sense any small or smoke.
- Do not charge the batteries if they are hot, wait until they cool down.

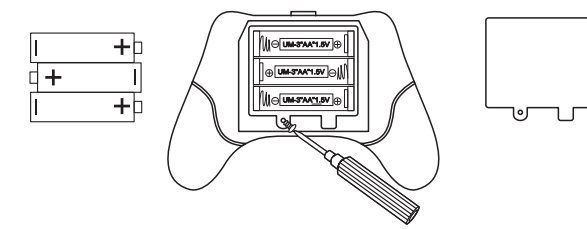
Do not charge the batteries next to flammable sources or on a conductive surface.

Do not overcharge the battery, once the charging light turns off disconnect the battery.

For safety and best practice, unplug the battery connection from the power source inside the drone when not in operation.

**Please Note:** The Build-A-Drone's Remote Control does not come with batteries. Please use 3 AA batteries.

### Remote Control Battery Installation

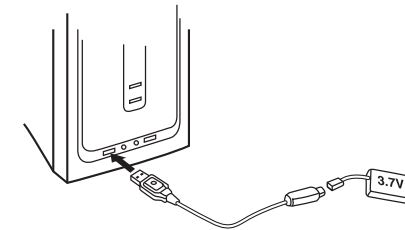


**Step 1** Using the included screwdriver, unscrew the screw from the back of the remote control battery pack and remove the battery lid.

**Step 2** Insert your 3 AA batteries making sure to line up the (+) and (-) signs.

**Step 3** Reattach the battery lid by screwing it into place.

### Drone Battery and Charging



**IMPORTANT:** The battery does not need to be removed and replaced each time you need to charge your drone. This is because the drone is built around the battery and has been designed to charge without taking the drone apart.

\*Please refer to the building manual to learn how to build the drone around the battery.

**Step 1** Insert the white connector of the battery into the provided USB charging cable.

**Step 2** Insert the USB charging cable into a computer. The charging cable indicating light bulb with turn on to indicate charging has begun.

**Please Note:** Not all charging units will provide enough power to charge the lithium battery. A computer is typically the best source to power your drone.

**Step 3** The charge is complete when the red indicating light bulb extinguishes. Remove the USB charging cable from your computer and the battery from the cable.

## Let's Fly – Flying the Build-A Drone

### Pairing

**Please Note:** Before every flight, the drone will have to be paired to the remote controller.

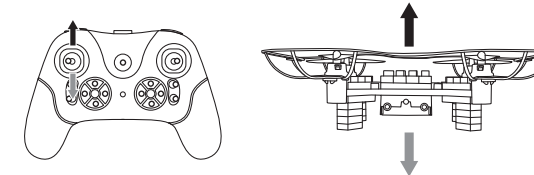
**Step 1** Connect the male end of the battery charging cable to the female end of the drone charging cable. Then place the drone on a flat stable surface.

**Please Note:** the drone must be turned on before the remote control to successful pair the two.

**Step 2** In the center of the remote control is the red power button, press it once to turn ON. The control's LED will blink twice then turn a solid red. The drone's lights will be blinking continuously as well.

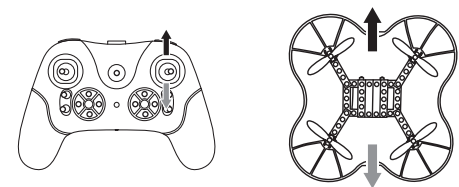
**Step 3** Move the left stick on the controller, the throttle stick, UP and then DOWN. When the drones LED lights go from blinking to solid, your remote has paired with the drone.

### Ascending – Descending

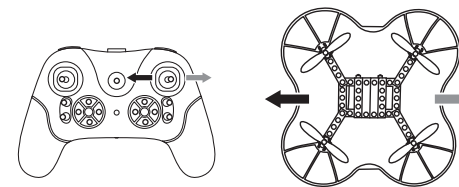


Ease the left throttle stick upwards to make the Build-A-Drone go higher in altitude. Ease the left throttle stick downwards to lower the Build-A-Drone. Please note: The build a drone is equipped with strong motors and will ascend quickly, so make sure to ease into upward flight.

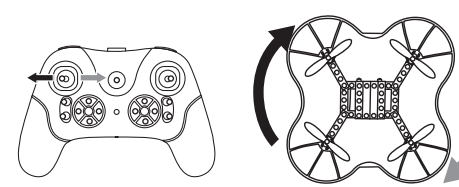
## Flying – Directions – Turning



Ease the right throttle stick (Directional Stick) up and down to make the Build-A-Drone go forward and backward.



Push the right directional stick left or right to turn the Build-A-Drone in a specific direction.



Press and hold the left throttle stick left or right and the Build-A-Drone will rotate in that direction.

### 360° Flips

The Build-A-Drone can flip to the left or the right. Please note that if the Build-A-Drone does not flip mid-flight, it is likely due to a low battery.

**Step 1** While hovering in mid-air press the top right button.

**Step 2** Choose the direction of the 360° flip by pressing the right throttle stick forward or backward.

**Step 3** Observe the Build-A-Drone conduct a 360° flip.

## Speed Adjustment

**Note:** There are four different speed levels on the Build-A-Drone which can be determined by pushing the Speed Button, top left red button on the top of the remote controller.

### To Change the Speed

Push the Speed button before flight or mid-flight to

change the speed level.

- 1 Beep - Speed level one
- 2 Beeps - Speed level two
- 3 Beeps - Speed level three
- 4 Beeps - Speed level four

## Trim

If the Build-A-Drone veers in any direction when not ordered to do so, then an adjustment to the trim needs to be made. The adjustment will be made through the remote controller.

The following are the four adjustments that you can make to the flight characteristics:

**Please Note:** To adjust the trim you will use the secondary set of buttons below the left and right directional and throttle sticks. These buttons are in a circular formation.

### Yaw

#### Left Turning and Right Turning Trim:

If the Build-A-Drone is spinning in circles or drifting in a rotation, trim accordingly.

To trim right, press the Right Turn Trimmer button under the left throttle stick and to trim left press the Left Turn Trimmer button under the left throttle stick.

### Pitch

#### Backward and Forward Trim:

If the Build-A-Drone drifts backward or forward, trim accordingly. To trim forward press the (up) Forward Trimmer button under the right directional stick and to trim backwards press the (down) Backward Trimmer button under the right directional stick.

### Roll

#### Leftward and Rightward Trim:

If the Build-A-Drone drifts left or right, trim accordingly. To adjust the left drift press the Leftward Trim button located under the right directional stick and to adjust the right drift press the Rightward Trim button located under the right directional stick.

## Automatic Trim Command

To reset the drone to its normal settings, press the Trim Reset button located under the left throttle stick. This is the top circular button

## Flying in SmartFly Tech mode and using One-Key Return

The Build-A-Drone features SmartFly Tech and a One-Key Return feature. Generally when you are flying a drone, your front and back usually change position as you rotate and fly in different directions. This can make it difficult to tell which direction the drone is flying in. Therefore, SmartFly Tech helps you take control over the drone's directions as forward will always be facing the way that you are facing.

### SmartFly Tech Mode

In this mode, you do not need to worry about the orientation of the drone. Whatever position the drone's front is in before taking off will be your front

IF you initiate the SmartFly Tech mode. This is useful if you would like to have to the drone return to your general direction (i.e. One-Key Return).

### One-Key Return

In this mode, the drone will return back to your general direction automatically. However, the drone will return back to you IF, and ONLY IF, you are looking towards the BACK of the drone. This means that if you are facing the backside of the drone and you hit the One-Key Return button, the drone will fly backwards towards your general direction.

### Initiating SmartFly Tech & One-Key Return

**Step 1** Before taking off, place the drone on a flat surface

**Step 2** Press the SmartFly Tech button, which is the up button located below the left throttle stick.

**Step 3** Take flight and fly the drone. When you are ready to return home ensure that the back of the drone is facing you.

**Step 4** Press the One-Key Return button, which is the down button located below the left throttle stick.

## Care & Maintenance

- Do not submerge the unit in any liquids.
- Keep the unit dry.
- Disconnect the unit and monitor from USB power sources when not in use.
- Do not place the unit near powerful, un-shielded magnets.
- Do not expose the unit to extreme hot or cold temperatures.
- Do not hit, drop, or smash the unit with extreme force.
- Do not disassemble the unit for any reason.

### NOT FOLLOWING THESE PRECAUTIONS WILL VOID YOUR WARRANTY.

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 interference received, including interference that may cause undesired operation.

## Cautions & Warnings

- Suitable for ages 14 and up. Adult supervision is always recommended.
- This product contains small parts which are a choking hazard. Keep away from small children.
- Keep Quadcopter at least 10 feet away during use.
- Accurately assemble the quadcopter and fly it under the guidelines of this manual. Small parts should be installed by an adult.
- Manufacturers and dealers disclaim all responsibility for damage caused by misuse.
- Keep hands, hair and loose clothing away from rotors when powered on to prevent damage to the vehicle or serious injury to oneself or others around.
- The quadcopter should never be flown in high winds in excess of 5 MPH or near a pool.
- Never leave the device unattended when being charged.

### FCC Statement:

This equipment has been tested and found to comply with the limits for 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 to an outlet on a circuit different from that to which the receiver is connected.

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 interference received, including interference that may cause undesired operation.

Note: Modifications to this product will void the user's authority to operate this equipment.

