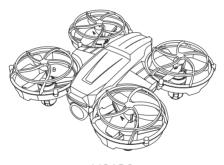


## Instructions For Use

取扱説明書

# Gebrauchsanweisung

V 4.0



HS420



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English	01-31
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### 1.0 DISCLAIMER & WARNING

- 1. Please read this Disclaimer & Warning and Safety Guidelines carefully before using our product. This product is not recommended for people under the age of 14. By using this product, you hereby agree to this disclaimer and signify that you have read it fully. You agree that you are responsible for your own conduct and any damage caused while using this product, and any consequence. You agree to only use this product for it's designed purposes and in accordance with local laws, regulations and all applicable policies and guidelines that HolyStone may provide.
- 2. When using this product, please be sure to strictly abide by the specification requirements and safety guidelines stated in this document. Any personal injury, property damage, legal disputes and all other adverse events caused by the violation of any of the safety instructions or due to any other factor, WILL NOT be HolyStone's responsibility.

### 2.0 SAFETY GUIDELINES

#### 2.1 Check Before Use

- ① This product is a high precision drone that integrates various electronic stability and control mechanisms. Please be sure to configure this drone carefully and correctly to ensure safe, accident-free operation.
- ② Ensure that the batteries of the drone and transmitter are clean, undamaged and fully charged before every use.
- ③ Ensure that all the propellers are undamaged and are installed in the correct orientation.



① Please perform a thorough check of the product before each use. Inspect the integrity of the parts, any signs of cracks and wear off on the propellers, battery power and effectiveness of the indicator, etc. If there is any problem found after checking the drone, please refrain from using it until the problem is resolved.

### 2.2 Flight Environment











Fly in Open Areas

Maintain Line of Sight

Fly Below 98 feet (30 m)













Avoid flying over or near obstacles, crowds, high voltage power lines, trees, airports or bodies of water.

DO NOT fly near strong electromagnetic sources such as power lines and base stations as it may affect the onboard compass.













DO NOT use this drone in adverse weather conditions such as rain, snow, fog, and wind.

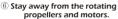


### 2.3 Operation Requirements

- 1 DO NOT use this product to follow any moving vehicles.
- 2 During the flight, turn off the motors only in case of an emergency.
- ③ When the battery runs low, return the drone back to your starting point.
- ① DO NOT use this product if you feel tired, take medicine or feel unwell and drink alcohol.
- (5) Be aware of the volume of noise that the drone produces. Please ensure to keep your distance to avoid ear damage.









⑦ DO NOT fly in any spaces where drones are prohibited. Please respect people's right to privacy by not flying your drone close to others.

### 2.4 Use of Battery

- ① Please ensure batteries are fitted in the correct orientation as shown in the instruction manual.
- ② Avoid short circuits by fitting the batteries correctly, and do not crush or squeeze the batteries as this could cause the risk of a fire or explosion.
- ③ DO NOT mix new and old batteries as this can lead to a poor performance of the product.
- ④ Please dispose of used batteries carefully, do not litter and recycle where ever possible.
- (5) DO NOT expose dead batteries to heat or fire or they may explode.
- (6) If the device is not going to be used for an extended period of time, please remove batteries to prevent potential damage to the drone from battery leakage.



- ① Only use the USB charging cable that comes with the drone to charge the battery.
- ® DO NOT connect the battery directly to wall outlets or car cigarette -lighter sockets as this will damage your battery since they have different voltage.
- (9) DO NOT attempt to disassemble or modify the battery in any way
- ① DO NOT use the battery if it gives off an odor, generates heat, becomes discolored, deformed or appears abnormal in any way. If any of these situations occur while the battery is in use or being charged, remove it from the device or charger immediately and discontinue use.
- ① DO NOT pierce the battery casing with a nail or any other sharp object, break it open with a hammer, or step on it! Dispose or recycle this battery as it may cause personal injury or damage to your drone.
- ② Always charge the batteries on a fireproof surface and away from combustible materials. DO NOT charge on surfaces that can catch fire, which includes: wood, cloth, carpet.
- (3) DO NOT immerse the battery in water or get it wet.
- 4 DO NOT solder battery terminal in any way.
- (5) Keep batteries out of reach of children or pets.
- **(b)** DO NOT short-circuit the battery by connecting wires or any other metal object to the positive(+) and negative(-) terminals.



#### Li-Po Battery Disposal & Recycling

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





### 3.0 MAINTENANCE

- Clean the drone after each use with a clean, soft cloth.
- ② Avoid prolonged exposure to direct sunlight and avoid buildup of heat on the drone or batteries.
- 3 This device is not waterproof and must not be submerged or subjected to water under any circumstance. Failure to keep the device completely dry will result in the failure and permanent damage to the unit. Be aware that although it might be dry where you are, droplets of rain or mist from a river or waterfall could damage your drone where it is flying.
- ① Frequently check the charging plug and other accessories for signs of damage. If any part of the device or cables are damaged, avoid use or charging until the damaged parts is replaced.

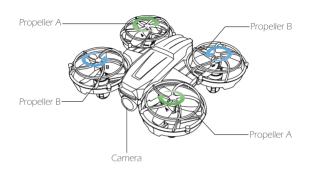


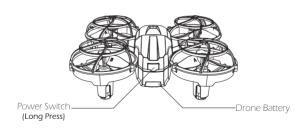
## **4.0 PACKAGE CONTENTS**

Drone	Transmitter	Drone Battery
USB Charging Cable	Propellers	Propeller Spanner
	Commence of the commence of th	
Screwdriver	Instructions For Use	



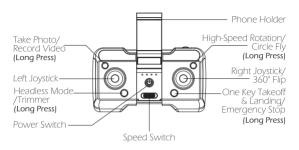
### **5.0 DRONE DETAILS**

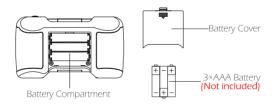






### 6.0 TRANSMITTER DETAILS





Open the battery cover on the back of the transmitter, insert the three AAA batteries (Not included) into the battery compartment, and close the battery cover to complete the installation.

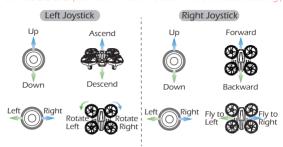
#### A

- · When installing the batteries, please pay attention to the positive and negative polarity of the battery to ensure the correct installation of the batteries
- · Do not mix old and new batteries.



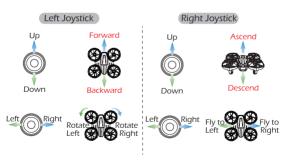
### 7.0 JOYSTICK MODE

### 7.1 MODE 2 (Left hand throttle MODE 2 will be the default setting.)



#### 7.2 MODE 1

To enter Mode 1, turn on the transmitter while holding the Trimmer button. (Please do not release the Trimmer button until the transmitter is powered on.)



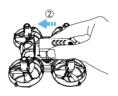


### 8.0 INSTALLATION

### 8.1 Drone Battery

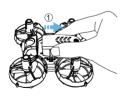
#### Installation:

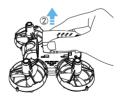




As shown in the figure above, install the battery to the buckle on the back of the drone and push it forward. When you hear a click, the battery is installed. Please make sure the battery is securely installed.

#### Removal:





As shown in the figure above, hold down the two sides of the battery and pull it back, then remove the battery upwards.



### 8.2 Phone Holder



As the shown above, open the phone holder completely (Pic.1). Adjust the mobile phone holder upward and downward according the size of your mobile phone. (Pic.2)

### 9.0 LOW BATTERY WARNING

- ① When the drone battery runs low, the indicator lights on the drone will blink continuously, and the transmitter will send out beeps continuously.
- When the transmitter batteries run low, the power indicator lights of transmitter will blink continuously, and the transmitter will send out beeps. When this happens, the pilot should replace the batteries for the transmitter.



### 10.0 CHARGING



- 1) Connect the battery with the USB charging cable.
- 2) Plug the USB charging cable into a USB charging port on the power bank or USB adapter (5V/1A).
- 3) When the battery is charging, the indicator light on the USB charging cable is red.

When the battery is fully charged, the indicator light on the charging cable turns green.

4) The charging time is about 60 minutes.



- · Before charging, please read the instructions in the "Use of Battery" section of the "Safety Guidelines" carefully!
- DO NOT charge a battery immediately after a flight as the temperature may be too high. Please wait until it cools down to room temperature before charging again.



### 11.0 USING THE APP

#### 11.1 Download APP





iOS

Android APP on Google play

Scan the QR code, connect to the App Store<sup>m</sup> or Google<sup>m</sup> Play and download the "HolyStone-FPV" application for free.

Required Operating Systems: iOS 9.0 or later/Android 5.0 or later.

#### 11.2 Connect to Wi-Fi

Connect your phone to the Wi-Fi network created by the drone. You can check the drone's status on the "HolyStone-FPV" App.

① Make sure to turn off Bluetooth, Mobile Data, and VPN. Enter your phone's Wi-Fi settings and click Wi-Fi to search for the Wi-Fi of the drone.

(Make sure to turn on the drone before going to the Wi-Fi settings on vour phone)

- 2) Select the Wi-Fi network: HolyStoneFPV-\*\*\*\*\*.
- Wait for a couple of seconds for your phone to connect to the drone's Wi-Fi
- 4 Enter the "HolyStone-FPV" application.
- > The connection between your phone and the drone is established automatically.

Attention: The Wi-Fi network created by the drone does not access the Internet.



### 12.0 OPERATION GUIDE

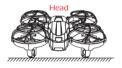
All of the following operations on this manual uses MODE 2.

### 12.1 Pairing

① Long press the Power Switch to turn on the drone, the indicator light of the drone will keep flashing.



② Place the drone on a flat and level surface with the head forward and the tail towards the pilot.



③ Long press the Power Switch to turn on the transmitter, and you will hear the "DiDi" sound, then the indicator lights keep flashing.



 Push the left joystick up then down to pair the drone with the transmitter. The indicator lights on the drone will turn solid if the drone is paired successfully.





12.2 Calibrate the Gyro



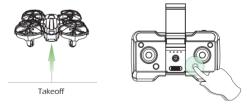
Simultaneously push the left joystick and the right joystick to the bottom right corner to calibrate the gyro. The indicator lights on the drone will blink quickly, then turn solid, which indicates that the calibration is completed.

**Tip:** To ensure a stable flight, we suggest that the pilot calibrates the gyro every time after pairing the drone and after a crash.

#### 12 3 Auto Takeoff

There are two methods to take off the drone.

#### Method1:



After pairing/calibration, short press the One Key Takeoff/Landing button, the drone will take off automatically and hover at 5 feet. At this time, you can control this drone by using the joysticks.

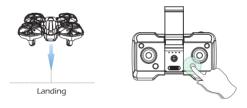


#### Method 2:



After pairing/calibration, pick up the drone and lay it flat on your palm. Gently toss the drone into air, and it will hover in place.

### 12.4 One Key Landing



During the flight, short press the One Key Takeoff/Landing button, the drone will land on the ground automatically.



### 13.0 FUNCTIONS DETAILS

#### 13.1 Trimmer



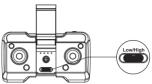
F/B Sideward Fly Trim: If the drone tends to drift forward, press down the Trimmer button and do not release it while pushing the right joystick down to balance the drone. If the drone tends to drift backward, press down the Trimmer button and do not release it while pushing the right joystick up to balance the drone.

Long Press

**L/R Sideward Fly Trim:** If the drone tends to drift left, press down the Trimmer button and do not release it while pushing the right joystick right to balance the drone. If the drone tends to drift right, press down the Trimmer button and do not release it while pushing the right joystick left to balance the drone.



### 13.2 Speed Switch



This drone comes with 2 speed modes (Low/High). As shown above, push the Speed Switch button to the left, the transmitter sends out "Di" sound, indicating Low Speed. Push the Speed Switch button to the right, the transmitter sends out "DiDi" sound, indicating High Speed.

### 13.3 Emergency Stop

**A** The Emergency Stop function should only be used in an emergency during the flight to avoid any damage or injury.



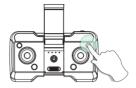
Long press the One Key Takeoff/Landing button, the motors will stop immediately. The drone will fall down immediately.

Attention: Be aware that you risk breakage of the drone if it falls a large distance or hits anything at a high rate of speed.



### 13.4 High-Speed Rotation

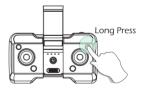




During the flight, short press the High-Speed Rotation button, the transmitter will make a "Di" sound, which indicates that the drone enters the High-Speed Rotation. The drone will exit the High-Speed Rotation function automatically after 10 seconds, or you can also push the right joystick in any direction to stop the rotation.

### 13.5 Circle Fly





During the flight, long press the Circle Fly button, the transmitter will make a long "Di" sound, which indicates that the drone enters the Circle Fly. This drone will exit the Circle Fly function automatically after 10 seconds, or you can also push the right joystick in any direction to exit the Circle Fly.

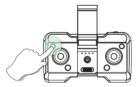


### 13.6 Altitude-hold Function



The drone is designed with an altitude-hold function to maintain its altitude after releasing the left joystick. [The left joystick will automatically spring back to the middle]

### 13.7 Take Photo/Record Video

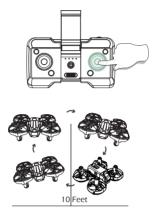


**Take Photo:** Short press the Take Photo/Record Video button, the transmitter sends out "Di" sound, the indicator lights of the drone flashes once, which indicates that the camera has taken one photo successfully.

Record Video: Long press the Take Photo/Record Video button, the transmitter sends out "DiDi" sound, the indicator lights of the drone flashes twice, which indicates that the camera is recording video. Long press the button again to exit the Record Video.



### 13.8 360° Flip



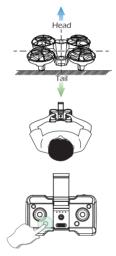
When you get familiar with all the drone's functions, you can try this fantastic flip mode. When you fly the drone at least 10 feet, press down the Right Joystick on the transmitter, then push the right joystick Forward/Backward or Left/Right, and the drone will do a flip towards the corresponding direction.

**Tip:** This function will perform better when the battery is fully charged. If you do not operate after entering the 360° Flip, short press the right joystick again to exit the 360° Flip.



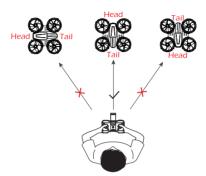
### 13.9 Headless Mode

▲ Please familiarize yourself with the Headless Mode function first before using this mode. Otherwise, it is easy to lose the drone and cause unnecessary loss.



- After pairing/calibration, short press the Headless Mode button on the transmitter. In Headless Mode, the indicator lights of the drone will keep on flashing.
- Short press the Headless Mode button again, and you will hear a beep from the transmitter, which indicates that the drone exits the Headless Mode.





Please make the pilot stays facing the same direction that the drone head faces at takeoff.

While in Headless Mode, pushing the right joystick forward will make it fly in the direction that the head of the drone faces when it takes off. To make sure the pilot can tell the drone's direction during the flight, we recommend that pilot stays facing the same direction that the drone head faces at takeoff. By doing so, it is ensured that when the pilot pushes the right joystick forward/backward, the drone will fly forward/backward toward the pilot. If the pilot pushes the right joystick left/right, the drone will move left/right relative to the pilot.



### 14.0 SPECIFICATIONS

#### DRONE

Model: HS420

Weight: 31g/1.1oz

Max Flight Time: 6 minutes (per battery)

Motor Model: 615

Operating Temperature Range: 32° to 104°F (0° to 40°C)

Size: 84 x 90 x 34 mm

#### DRONE BATTERY

Capacity: 300mAh

Voltage: 3.7 V

Battery Type: Lithium-ion Polymer Battery

Charging Temperature Range: 41° to 104°F (5° to 40°C)

Charging Time: 60 minutes (Depends on charging power and

remaining battery power)

#### TRANSMITTER

Operating Frequency: 2452-2474MHz

Max Flight Distance: 330 feet/100m (Outdoors and unobstructed)

Operating Temperature Range: 32° to 104°F (0° to 40°C)

Battery Type: 3\*1.5V AAA Battery (Not included)



#### CAMERA

Operating Frequency: 2417MHz

Lens Angle: 65°

Manual adjustable range: -90°~0°

Photo Resolution: 1280 x 720P

Video Resolution: 1280 x 720P@20fps

Max Transmission Distance: 98 feet/30 m (Outdoors and unobstruct-

ed)

Photo Formats: JPEG

Video Formats: MP4/AVI

Operating Temperature Range: 32° to 104°F (0° to 40°C)

#### USB CHARGING CABLE

Input: 5 V/1A

Rated Power: ≤5W



### 15.0 CONTACT US

Please do not hesitate to contact us if you need further support.



(L) 4:00 PM ~ 7:00 AM (PST)



usa@holystone.com (America) ca@holystone.com (Canada) eu@holystone.com (Europe) jp@holystone.com (Japan)



+1(855) 888-6699





For online support, please scan this code with Live Chat



### 16.0 GENERAL INFORMATION

#### **FCC Notice:**

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.

The Supplier's Declaration of Conformity is available at the following address:

https://www.holystone.com/Download/US/HS420 FCC sDoC.pdf

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.
- Consult the dealer or an experienced radio/TV technician for help.



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

### RF Exposure

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

RF warning for Portable device: The device has been evaluated to meet general RF exposure requirement. The device can be used in portable exposure condition without restriction. This part belongs to the transmitter.

#### IC Notice:

This device complies with Industry Canada license-exempt RSS standard (s). Operation is subject to the following two conditions:

- (1) this device may not cause interference, and
- (2) this device must accept any interference, including interference that may cause undesired operation of the device.

### CAN ICES-3 (B)

Avis d'Industrie Canada

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes :

(1) l'appareil ne doit pas produire de brouillage, et



(2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

### CAN NMB-3 (B)

RF Exposure

Radiation Exposure Statement:

The device is compliance with RF exposure guidelines, users can obtain Canadian information on RF exposure and compliance. The minimum distance from body to use the device is 20cm.

### Le présent appareil est conforme

Après examen de ce matériel aux conformité ou aux limites d'intensité de champ RF, les utilisateurs peuvent sur l'exposition aux radiofréquences et compliance d'acquérir les informations correspondantes. La distance minimale du corps à utiliser le dispositif est de 20cm.

#### BATTERY WARNING:



- Failure to follow all the instructions may result in serious injury, irreparable damage to the battery may cause a fire, smoke or explosion as well.
- 2. Always check the battery's condition before charging or using it.
- 3. Replace the battery if it has been dropped, or any odour, overheating, discolouration, deformation or leakage happens.
- 4. Never use anything other than the approval LiPo charger the battery. Always use a balancing charger for LiPo cells or a LiPo cell balancer. It is recommended that you use the one provided with the product.



- 5. The battery temperature must never exceed 60°C(140°F) otherwise the battery could be damaged or ignited.
- Never charge the battery on a flammable surface, near flammable products or inside a vehicle(preferably place the battery on a non-flammable and non conductive surface).
- 7. Never leave the battery unattended during the charging process. Never disassemble or modify the housing's wiring, or puncture the cells. Always ensure that the charger output voltage corresponds to the voltage of the battery. Do not short circuit the batteries.
- 8. Never expose the Li-Po battery to moisture or direct sunlight, or store it in a place where temperatures could exceed 60°C(car in the sun, for example).
- 9. Always keep it out of reach of children.
- 10. Improper battery use may result in a fire, explosion or other hazards.
- Non-rechargeable batteries are not allowed to be recharged.
  Rechargeable batteries should be charged under adults' supervision.
- 12. DO NOT mix different types of batteries including the new and used ones
- 13. Batteries MUST be inserted with the correct polarity.
- 14. The supply terminals MUST not to be short-circuited. Regular examination of transformer or battery charger for any damage to their cords, plugs, enclosures and other parts MUST be done. If there is damage, they must not be used until the damage has been repaired.
- 15. The packaging has to be kept since it contains important informa-
- 16. This toy should only be connected to the equipment with symbol Class II.  $\Box$



EU RF Power(EIRP): <10 dBm (2452-2474MHz)

#### Caution

- 1. The max operating of the EUT is  $45^{\circ}$ C. and shouldn't be lower than - $10^{\circ}$ C.
- 2.The device complies with RF specifications when the device used at 0mm from your body.
- 3.Declaration of Conformity.

We, Xiamen Huoshiquan Import & Export CO.,LTD

hereby, declare that the compliance of the essential requirements with the Directive 2014/53/EU, the RoHS Directive 2011/65/EU and Safety Directive 2009/48/EC have been fully fulfilled on our product with indication below:

Product Name: Remote control four axis series

Model/Mark: HS420/HOLYSTONE

The Statement of compliance is available at the following address: http://www.holystone.com/Download/CE/HS420\_EU\_DOC.pdf

This product can be used among EU member states.

#### MANUFACTURER INFORMATION

Manufactured by

Xiamen Huoshiguan Import & Export CO.,LTD.

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