HOLY STONE®

ITEM NO.F181

14+ AGES

F+SERIES

2.4GHZ

Indoor/Outdoor Quadcopter with Headless Mode

Instruction Manual

WWW.HOLYSTONE.COM

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HIGHLIGHTS

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- Take 10%-30% off your next Holy Stone order.(PM us for the coupon)
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Important Statement

(1)This product is not a toy but a piece of complicated equipment which is integrated with professional knowledge by mechanic, electronic, air mechanics, high-frequency emission etc. It should be installed and adjusted correctly to avoid accidents. The user must always operate in a safe manner. We understake no liability for human injury or property damage caused by improper operation, as we have no control over setup, use and operation of this drone.

(2)This drone is suitable for experienced RC drone users aged 14 years or above. Not safe for users under the age of 14 to use.

(3) The flying field must be legally approved by your local government.

(4) Holy Stone has entrusted the distributor to provide technical support and after-sale service.

(5) If you have any questions about use, operation, repair etc., please contact Holy Stone at: usa@holystone.com

Safety Precautions

Improper assembly, broken main drone, defective electronic equipment, or unskilled operation may cause unpredictable accidents such as drone damage or human injury. Please pay special attention to the following safety procedures:

(1) ***Flying Area***

The flying field must be legally approved by your local government. Do not fly the drone near the airport. Keep far away from the airport more than 3.10 miles when flying a RC drone. Flying field must be spacious enough and we suggest at least 26.24ft(length)*26.24ft(width)*16.40ft(height).

(2) ***Keep away from humid environment***

The drone is made of precise electronic components. Humidity or water vapor may damage electronic components causing accidents.

(3) ***Safe operation***

Please operate the RC drone in accordance with your flying skills. User fatigue, listlessness, and improper operation may increase the rate of accidents.

(4) ***Keep away from rotating parts***

Rotating parts can cause serious injury and damage. Keep face and body away from rotating motors.

(5) ***Keep away from heat***

The RC drone is made of metal, fiber, plastic, electronic components etc. Keep away from heat and direct sunshine to avoid distortion and damage.

(6) ***Please do not touch the hot motor to avoid being burnt.***

Pre-Flight Note

To Make your experience with this drone as straightforward and convenient as possible, please read this instruction manual carefully before operation. Keep it safe for further reference to ensure continued, safe and enjoyable use of your drone.

Maintenance

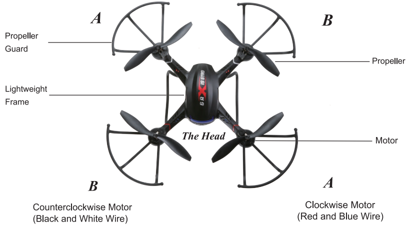
(1) Avoid prolonged exposure to direct sunlight and avoid heat buildup in the drone.

(2) This device is not waterproof and must not be submerged in water under any circumstances. Failure of the unit will result from water contamination.

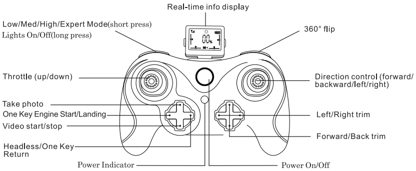
(3) Check the charging plug and other accessories for signs of damage frequently. If any part of the device is damaged, refrain from flying until maintenance can be carried out.

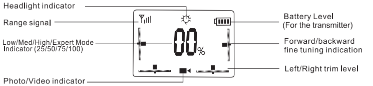
(4) Regarding any other maintenance issue, please contact the Customer Support Team at: usa@holystone.com

Parts


A
B
Propeller Guard
Propeller
Lightweight Frame
The Head
Motor
B
A
Counterclockwise Motor (Black and White Wire)
Clockwise Motor (Red and Blue Wire)

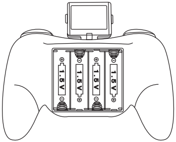
Please Note: letter A or B is printed on each propeller; Make sure all propellers are assembled in the right orientation according to the image above.




Headlight indicator
Range signal
Low/Med/High/Expert Mode Indicator (25/50/75/100)
Photo/Video indicator
Battery Level (For the transmitter)
Forward/backward fine tuning indication
Left/Right trim level
00%

Setting Up the Controller

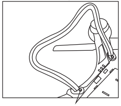
Remove the back battery cover from the contr
according to the diagram below. Use new batt
batteries.



Quadcopter Assembling

1. Be prepared with a screw driver, the two landi
2. Insert the two landing gears into the bracket h
   lock the four screw tightly.(pic.1)
3. Insert all the four propeller guards into the hol
   the screws tightly.(pic.2)

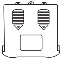
(pic.1)



Charging the quadcopter battery

Insert the USB charger wire(included in the box) i
The red indicator light will turn on. Then, connect
charger plug at the bottom of the quadcopter(mar
will turn off, indicating that the quadcopter is cha
once the battery is fully charged. It takes around 1

oller and install 4 AA batteries
eries and do not mix new and old



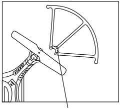
Battery cover

4 AA batteries

ng gears, and the four propeller guards.
oles at the bottom of the quadcopter, then

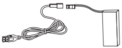
les which locate on the motor houses, lock

(pic.2)

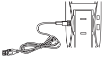


Screw position

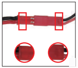
into the USB port(5V/0.5-1A).
the USB wire to the battery or the
ked as "CHA"). The charger indicator
rging. The indicator will turn on again
00 minutes to fully charge the battery.



Insert the USB charger wire into the battery plug



Insert the USB charger into the charging plug which is at the bottom of the quadcopter

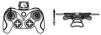
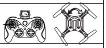
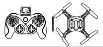
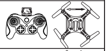
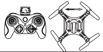
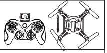
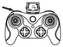


To avoid short circuit,please plug in the battery as the picture above.

Fly the quadcopter ⚠

1. Fly the quadcopter in a spacious indoors area, or an outdoors area free of obstacles, rain, snow, animals, and people. When flying outdoors, please fly in a windless environment.
2. Insert the battery into the quadcopter and connect it. The lights on the quadcopter will begin to flash. Place the quadcopter on a level surface for takeoff.
3. Turn on the remote control, then quickly shift the left stick up and down. If done correctly, the transmitter sound will beep, and the LED indicators will turn solid. When flashing lights are become solid,it indicate this drone is ready to fly.
4. Press the one key start button to start the drone. Then push the throttle stick to fly it.

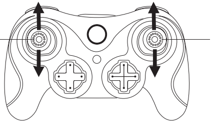
Flight Control (Take Mode 2 for Example)

Up/Down	Move the left stick up/down during the flight, the drone will ascend/descend.	
Turning	Move the left throttle stick left or right to rotate the drone.	
Forward/ Backward	Move the right direction stick up or down to move forward or backward accordingly.	
Left/Right	Move the right direction stick to the left or right to fly left or right, accordingly.	
Fine Tuning Left/Right	When the quadcopter is hovering in a still altitude, and if it drifts to the left or right, press the left/right trim button to the opposite direction until the quadcopter is balanced.	
Fine Tuning Forward/ Backward	When the quadcopter is hovering in a still altitude, and if it drifts forward or backward, press the forward/backward trim button to the opposite direction until the drone is balanced.	
Speed Mode/ Lights On/Off	Quickly press down the button on the upper left corner of the remote control to switch the speed modes: Low(25%), Medium(50%),High(75%),Expert(100%). Long press down the button on the upper left corner of the remote control to turn on/off the lights of the drone.	

Remote Control Operation Mode

Considering different pilots have different preferences over the controls, we design two different modes to meet the preferences of different pilots.

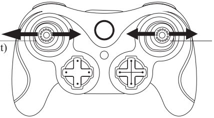
1. Turn on the transmitter, Left hand throttle MODE 2 will be default setting. (Recommended!)



Left Stick
(Throttle: Ascending/
Descending)

Right Stick
(Direction: Forward/
Backward)

(MODE 2)

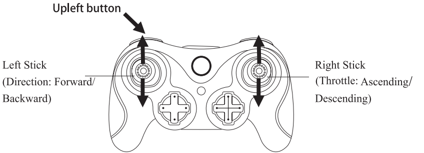


Left Stick
(Turn Left/Turn Right)

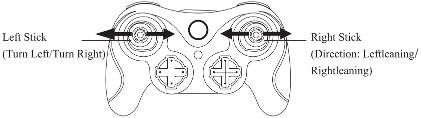
Right Stick
(Direction: Leftleaning/
Rightleaning)

(MODE 2)

2. Turning on the transmitter while holding the Upleft button to enter into MODE1 . (Please do not release the upleft button until the transmitter is powered on)

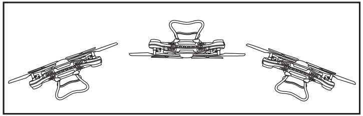


(MODE 1)



(MODE 1)

360° Flips



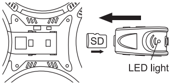
While the quadcopter is flying, press the 3D button on the upper right of the controller. Quickly move the right direction stick to whichever direction you want the quadcopter to flip. You will lose some altitude during the flips, so make sure that you are flying the quadcopter at least 3 M above the ground.

Take Photo/Video ⚠

1. Insert a blank micro SD card into the card slot on the rear of the camera underneath the the quadcopter. Turn on and connect the controller to the quadcopter. If the SD card is installed correctly, you will see a blue light on the camera.

2. ***Photo:*** Press the Take Photo button on the remote control. The camera light will flash in red for once, it indicates that a photo is taken.
Video: Press the Take Video button on the remote control to start recording. The camera light will turn to be solid red, press the button again to stop recording, the red light will turn off.

3. Remove the micro SD card from the quadcopter and insert it into a computer with the included card reader. The videos will appear in My Computer on Windows or on the desktop on a Mac. Double click a video to play.



TIPS:
1. If the micro SD card is installed incorrectly or it's out of space, the camera light will flash in red.
2. Do remember to press the Take Video button again to stop recording the video.
3. Make sure that the media player supports AVI videos.

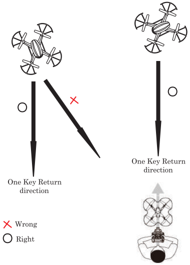
About Headless Mode

Headless Mode makes it easier to control the steering of the quadcopter. When headless mode is off, the direction that the head of the quadcopter faces would be forward direction. In headless mode, the direction the pilot faces would be forward direction.

Headless Mode & One Key Return

1. Place the quadcopter on a flat, level surface, the head of
and the tail facing towards the pilot.
2. Quickly shift the left stick up and down to bind the rem
3. Press down the Headless Mode button, the lights of the
and the quad sounds will beep constantly.Then, the qua
directly. This is the One Key Return function.
4. Move the right stick to any direction to operate the quad
the quadcopter will exit the One Key Return function.
5. Press down the Headless Mode button again to exit the

Tips: (Important!) ⚠
1. When pairing the remote to the quadcopter, make sure
facing forward, and the tail of the quadcopter is facing tow
remote).
2. When flying in headless mode/One Key Return, the flye
This is because the quadcopter will fly relative to the poin
remote), not relative to where the remote is.
3. That said, we suggest pilots to stay stationary and face
he set the head of the quadcopter to face when binding th



(pic.3)

the quadcopter facing forward

ote control to the quadcopter.
quadcopter will start flashing
dcopter will fly to the pilot

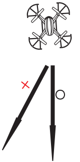
dcopter in headless mode and

Headless Mode.

the head of the quadcopter is
vards the flyer (and the

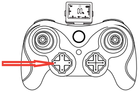
er should not move around.
t where it is bound (to the

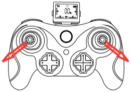
the same direction in which
e remote.

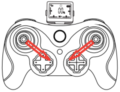


One Key Engine Start/One Key Landing

Press down the One Key Engine Start/Landing button(pic.4),the blades begin to spin automatically. Throttle up the left stick slowly to take off. Press down the One Key Engine Start/ Landing button again to land, until the blades stop rotating.


(pic.4)

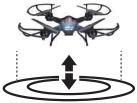

(pic.5)


(pic.6)

Tips:
Once the drone takes off, you could use the throttle stick and forward/backward stick to control the flight.
To avoid any injury or accident caused, we suggest that the beginners read through the Instruction Manual before using the A KeyTake Off function.
Urgent Stop: If the pilot would like to stop the flight in an urgent situation, hold the left stick to the bottom left corner and the right stick to the bottom right at the same time(pic.5).The engine will stop, and the drone will drop from the current altitude. (Another option for urgent stop: Hold the left stick to the bottom right corner and the right stick to the bottom left.)(pic.6) Because the drone will be easily damaged when urgent stop, the use of this functionality is generally not recommended！ ！

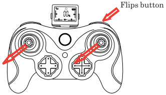
Altitude-Hold Function

The model is designed with altitude-hold function so the quadcopter can maintain its altitude after you release the throttle stick.



How to calibrate the Gyro

If the drone constantly drifts to one specific side, indicating that the Gyro is now confused, please recalibrate the Gyro:
1.Place the quad on a flat and level surface.
2.Quickly shift the left stick up and down to bind the quadcopter to the remote as usual.
3. Hold down the 360° flips button on the upper right side of the remote control, it starts beeping.
4. Hold both the left and right control sticks to the bottom left, until the LED lights of the drone start flashing and then turn solid(pic.7)
5. The Gyro should now be reset.



(pic.7)

Spare Parts

1 Upper Cover

2 Lower Cover

3 CW Blades

4 CCW Blades

5 CW Motors

6 CCW Motors

7 Battery

8 Circuit Board

9 USB Charger

10 Camera (Black)

11 Gear Assembly

12 Propeller Guard

13 Landing Gear

14 LED Light

15 Screw Driver

Trouble shooting

Problem	***Reason***	***Solution***
The lights on the quad are flashing and the quad is not responding.	1.Insufficient battery power 2.Controller is not connected to the quad 3.Unbalanced landing position 4.Can't pair due to the quad powered on for a long time	1.Recharging the battery 2.Turn off the quad and controller. Reconnect them by turning on again. 3.Put it on the horizontal surface 4.Reopen the quad and pair again quickly
The propeller spin but the quad can't fly.	1.Insufficient battery power 2.Wrong sequence of propellers 3.Damaged propellers 4.Something wrapped or gears broken	1.Recharging the battery 2.Check the letters "A" "B" on the propellers 3.Replace new propellers 4.Make sure gears run normally
The quad can't fly properly after a crash.	1.Wrong sequency of propellers 2.Damaged propellers 3.The gyro is confused 4.Gears broken or blades hit the propeller guard . 5.Wire or cuicuit board broken 6.Motors burnt out	1.Check the propeller order 2.Replace new propellers 3.Press trim buttons to fine tuning the direction.Reset the gyroscope 4.Make sure gears or blades run. 5.Replace motors or cuicuit board 6.Here is a YouTube link of replacing motors: https://youtu.be/ozjYirNbN5Q
One Key return button doesn't work normally.	1.Player change directions after controller is connected to the quad. 2.Transmitter button doesn't function 3.Weak power in battery	1.Adjust the correct direction facing the quad head at the beginning. 2.Change another transmitter 3.Fully charge or use new battery
It can't take photo or video	1.Insufficient battery power 2.SD card is full in memory 3.The broken button of transmitter or broken camera 4.The wire of camera is disconnected.	1.Fully charge or use new battery 2.Change a new sd card or phone card 3.Change a new transmitter or camera 4.Check the plug of camera
Image can't be displayed on computer	1.Media player does not support the file format 2.Video is not successfully recorded	1.Try a new media player 2.Press video button again after taking videos

Please Note:
When one propeller does not spin while the others do, or this propeller spins in different speed rate, the motor of this propeller might be burnt up. The motors and circuit board will heat up with use. Take a 10 minute cool down break between flights to ensure your parts last as long as possible.

In case that the quadcopter might descend on a further or insecure zone due to the insufficent battery power when flying outdoor, the quadcopter is specially designed with the function of secure warning. When the battery power is insufficent, the LED light would turn from constant on to flashing. Then the pilot may have time to fly back the quadcopter and change the battery or recharge for the next flight.

LiPo Battery Care Instructions

Temperature

- Heat is a known factor. If a battery is pushed beyond 60°C during discharging or charging, problems could occur due to metallic lithium generation, which damages the cell.
- After a flight, you may find your batteries are warm to touch. Cool down the battery a little bit before recharging.

Storage

- Please store batteries at normal room temperature and avoid direct exposure to sunlight or heat. When storing LiPo battery for any length of time, they should ideally be stored at a temperature of between 5°C and 7°C.
- If you have a battery pack sitting on the shelf, fully charged, never try topping it up till it has been partially or fully discharged!

Usage

- There should be a interval between charging and using battery.
- Please leave about 20% power remaining in the batteries (instead of completely draining them down) as that would prolong battery life and you can enjoy more cycles!
- If the battery is pushed beyond its limits, the battery could get hot and the performance will drop.
- When using the battery for a long time, the quantity of heat of your battery will increase. If it is sealed, the air inside will inflate rapidly causing heating.

Charging

- DO NOT overcharge the battery. It may cause overheating and in turn this overheating could damage the unit.
- Never try charging a pack that has been crashed or is damaged, you run the risk of fire! Cells that are obviously swollen or have physical damage should never be used and careful disposal is required, especially if the cells are swollen.
- If the battery or the charger is defective, you should discard it immediately and process a warranty from our support team(usa@holystone.com). We can arrange to ship you a replacement charger or battery.
- After crashing the quadcopter, please check the battery connector and battery properly.
- Please use genuine factory spare parts replacements from Holy Stone only.

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 of your nearest Li-Po battery recycling center.

CAUTIONS

1)Don’t use or charge a battery if it shows signs of swell
in any way.
2)Risk of explosion if battery is replaced by an incorrect
used batteries according to the instructions.
3)Don’t charge the battery directly after use, allow it tim
and dry area to insure overheating does not occur.
4)Please be away from furniture , carpet or anything flam
recommended for lipo battery charge or storage.
5)Don’t charge the battery above 0.5A. Make sure to rem
charger after charging is complete, never overcharge th
6)Be cautious while removing a battery from the charger
cords that could lead to a fire(and ruin the battery)

Non-rechargeable batteries are not to be recharged;
Rechargeable batteries are only to be charged under adult
batteries or new and used batteries are not to be mixed;
Batteries are to be inserted with the correct polarity;
the supply terminals are not to be short-circuited.
Regular examination of transformer or battery charger for
enclosure and other parts ,and,they must not be used until
(instructions)
The packaging has to be kept since it contains important i
The toy is only to be connected to Class II equipment bea

FCC Information

This equipment has been tested and found to comply with
devide, pursuant to part 15 of the FCC Rules. These limits
reasonable protection against hramful interference in a resi
equipment generates uses and can radiate radio frequency
used in accordance with the instructions, may cause harmfu
communciations. However, there is no guarantee that inter
particular installation. If this equipment does cause harmfu

ing, pierced,or damaged

type. Dispose of

e to cool down in an open

nmable.A fireproof bag is

nove the battery from the
ne battery.
, it’s possible to strip the

supervision different types of

any damage to their cord,plug,
the damage has been repaired

nformation.
ring the symbol ▣

the limits for a Class B digital
are designed to provide
dental installation. This
energy and, if not installed and
ul interference to radio
ference will not occur in a
l 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.

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.

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.

IC Notice:

This device complies with Canada Industry licence-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 exem pts de licence L'exploitation est autorisée aux deux conditions suivantes:
1) I'appareil ne doit pas produire de brouillage; et
2) I'utillsateur de I'appareil doit accepterbrouillage radioélectrique subi meme si le brouillage est susceptible d'encompromettre le fonctionnement. mauvais fonctionnement de I'appareil.

Cet appareil numérique de la classe B est conforme à la norme NMB-003 du Canada.

CAN NMB-3 (B)

RF Exposure

Radiation Exposure Statement:
This equipment complies with IC radiation exposure limits set forth for an uncontrolled environment.

Déclaration d'exposition aux radiations:
Cet équipement est conforme aux limites d'exposition aux rayonnements IC établies pour u
environnement non contrôlé.

Caution

1.The max operating of the EUT is 45°C. and shouldn’t be lower than -10°C.
2.The device complies with RF specifications when the device used at 0mm form your body.
3.Declaration of Conformity .

We, Xiamen Huoshiquan Import & Export CO., LTD
hereby, declare that the essential requirements compliance 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 MODEL/RADIO CONTROLLED HELICOPTER
Model : F181
http://www.holystone.com/Download/CE/F181C_EU_DOC.pdf

This product can be used across EU member states.

MANUFACTURER INFORMATION

Manufactured by:
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Made in China