

FCC ID: 2AN75-T006TX
GPS Watch Transmitter
《HT006 Quick Start Guide》

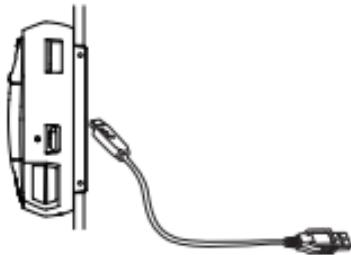
Version 1.0

Product Description

The Hubsan HT006 is a remote-control watch equipped with GPS. It may be paired with a Hubsan aircraft for flight and is suitable for any Hubsan equipped with a 2.4G flight control signal and GPS. Recommended flight distance is 50 meters.

Charging the HT006

Connect the GPS watch with the provided Micro USB charging cable to a 5V adapter or PC terminal to charge. When charging, the LED right above the Micro USB port on the unit stays solidly lit; when charging is complete, the LED will extinguish itself. In the latter case, please disconnect the watch and cable. In general, approximate charging time is 40 minutes.



Basic Flight Operation

Step 1

Place the aircraft on a flat and open floor/surface, with the head facing away from the user.

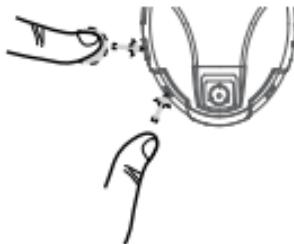
Step 2

Pair the watch with the aircraft.

The watch must be paired with the aircraft for the units to operate properly.

The pairing steps are as follows:

1. Please begin with the watch powered off. Press the power and camera buttons to enter pairing mode. Notice all 5 LEDs on the unit flash simultaneously.



2. Connect the aircraft to its battery; make sure the two are very close to each other. Allow the watch and aircraft to pair; the watch LEDs will stop flashing to indicate a successful pairing.
3. After the pairing is successful, aircraft and watch LEDs should be solidly lit. While in GPS mode, the aircraft and watch LEDs flash slowly.

Step 3

Compass calibration

The compass must be calibrated every time the aircraft is powered on. The compass is susceptible to interference by other electronic equipment, magnetic interference and metal, which can lead to erratic behavior and loss of control. Regular calibration helps keep the compass and its readings accurate.



- If too much time elapses after initialization and the aircraft and watch have not paired, please restart both units.

Calibration steps:

Make sure the aircraft is resting on a flat and level surface. At this point, its 4 LEDs will transition from flashing simultaneously to flashing clockwise. Start compass calibration.

1) Calibrate Compass 1

Slowly rotate the aircraft on the horizontal plane. The LEDs should be flashing clockwise; proceed to step 2 when the LEDs start flashing in vertical pairs, alternately.



Horizontal calibration

2) Calibrate Compass 2

Point the head of the aircraft downwards and rotate the aircraft in place until the LEDs cease to flash and stay solidly lit.



vertical calibration

Manual calibrations:

Horizontal/Gyro calibration:

Simultaneously long press the Camera and Orbit keys for 3 seconds to calibrate the aircraft gyro sensor. Make sure that the aircraft is on a smooth and level surface.

Compass calibration (manual):

Simultaneously long press the Video and Orbit keys for 3 seconds to manually initiate a compass calibration.

- Do not calibrate the compass in areas with strong magnetic interference, magnetic objects or structures, in areas with underground wiring, large pieces of metal or large metal structures.
- Do not carry ferromagnetic materials while calibrating the compass, such as keys, cell phones, etc.



Step 4

Allow the watch and aircraft GPS signals to stabilize; the GPS LED indicators for both the watch and aircraft should be solidly lit. At this point, users may arm the motors for flight.

Step 5

To arm the motors for flight, first long press the arming key and then the Auto Takeoff key. The watch will vibrate once; the aircraft will takeoff and hover at a height of around 3m. The Auto Takeoff key becomes the Return to Home key when the aircraft is in flight.



Note: Refer to the User Manuals for both the HT006 and the aircraft in use for instructions on how to use Follow Me, Orbit and other functions.

Step 6

To end the flight, choose a flat open space and press the Return to Home key. The aircraft will return to where the GPS watch is located and automatically land.



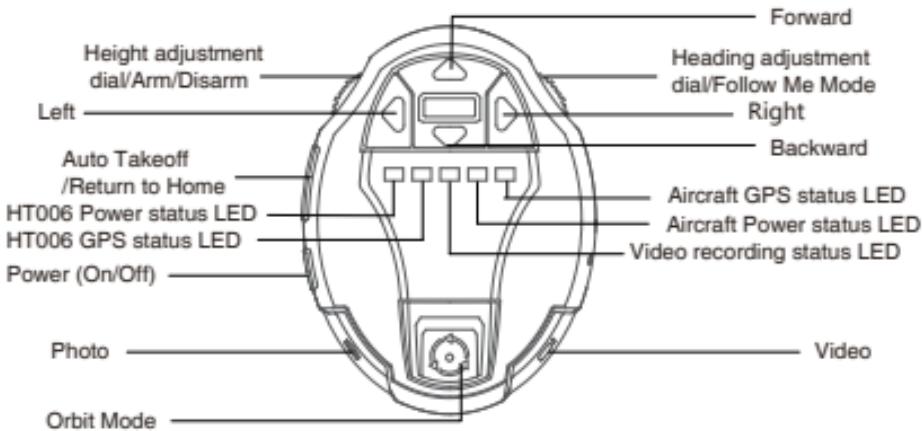
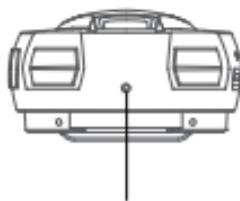
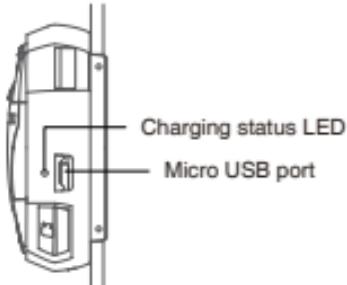
The Failsafe: The aircraft will Return to Home automatically under the following circumstances.

- (1) When the aircraft is too far away from the watch or the flight control signal between the drone and watch is lost, the aircraft will initiate a Return to Home.
- (2) If the watch shuts off due to low voltage, or suffers damage that causes it to lose connection with the aircraft, the aircraft will initiate a Return to Home. If the aircraft re-connects with the watch during the Return to Home, users may continue to use the watch to control the aircraft.

Step 7

When the motors have disarmed themselves/stopped, power off the aircraft and watch.

HT006 GPS Watch Components and Functions



1. Height Adjustment Dial

When the dial is turned completely upwards (the dial will stop), the aircraft will rise. When the dial is turned completely downwards (the dial will stop), the aircraft will descend. When the dial is in a neutral position, the aircraft will hover without rising or falling.



- When the dial is in descent position for more than 4 seconds, aircraft descent speed will increase.

2. Arming/Disarming motors

Arming the Aircraft Motors

Method 1: Long press the Height Adjustment Dial for 1.5 seconds to arm and start up the aircraft motors.



- Make sure that the GPS status LEDs for both the aircraft and watch are solidly lit (the GPS signals are stable and strong) before arming the motors. If they are not, the motors will not arm.

Method 1



Method 2



After the motors are armed and spinning, there are two ways of stopping/disarming them.

Method 1:

When the aircraft has made a full landing, turn the Height Adjustment Dial to its most downward position and hold it there. The motors will stop after 5 seconds.

Method 2:

Turn both the Height Adjustment Dial and the Heading Adjustment Dial completely downwards (at the same time). Release both dials when the motors stop.



- The aircraft is programmed to only allow a Method 2 disarm in the case of a serious aircraft failure. Disarming the motors in mid-flight will most likely cause the aircraft to crash.

3. Auto Takeoff

Long press the Auto Takeoff button for 1.5 seconds. The watch will vibrate and the aircraft will take off. The Auto Takeoff key becomes the Return to Home key when the aircraft is in flight.



- Make sure that compass calibration is successfully completed and that aircraft + watch GPS signals are stable.

4. Return to Home

Long press the Auto Takeoff key for 1.5 seconds. The watch will vibrate and the aircraft will Return to Home.



- If the aircraft is at a height of less than 10 meters, it will ascend to 10 meters for the RTH. If the aircraft is at a height of more than 10 meters, the aircraft will start to rotate for the RTH. It will directly return to the GPS watch's current location, perform a descent and land. Please ensure that the aircraft and watch GPS signals are stable, or the aircraft will not be able to perform the RTH. To terminate the RTH, long press the RTH button, or any of the forward, backward, left, right directional arrows.

5. Power (On/Off) button

Long press the Power button.

6. Photo button

Press the Photo button once to take a photo. The watch will vibrate once in response. Please make sure the press is short and firm.

7. The forward, backward, left and right arrow key

Use these directional arrow buttons to fly the aircraft forward, backward, left and right. Make sure the head of the aircraft faces directly away from you. Long press a specific arrow key and the aircraft will fly in the indicated direction.

8. Heading Adjustment Dial

When the dial is turned completely upwards (the dial will stop), the aircraft will rotate counterclockwise. When the dial is turned completely downwards (the dial will stop), the aircraft will rotate clockwise. When the dial is in a neutral position, the aircraft will hover without turning.

9. Follow Me mode

Long press the Follow Me button/Heading Adjustment Dial; the watch will vibrate once. While maintaining a consistent hover and distance, the aircraft will rotate to face and follow the GPS watch. To terminate Follow Me, long press the Follow Me button/Heading Adjustment Dial again.



- Please make sure that the aircraft is cruising at an altitude higher than nearby obstacles (including but not limited to humans and inanimate objects). Follow Me will not function if the unit is less than 5 meters high and 5 meters away.

10. Video button

Press the Video button once to begin recording video. The watch will vibrate once in response and the Video recording LED will flash blue to indicate that the recording is in progress. Press the Video button once again to stop the recording. Please make sure the presses are short and firm.

11. Orbit mode

Press the Orbit button; the watch will vibrate once. While maintaining a consistent hover and distance, the aircraft will begin to orbit the GPS watch. To terminate Orbit mode, press the Orbit mode button or any of the forward, backward, left, right directional arrows.



- Please make sure that the aircraft is cruising at an altitude higher than nearby obstacles (including but not limited to humans and inanimate objects). We recommend distance be set at 10m or more. Orbit mode will not function if the unit is less than 5 meters high and 5 meters away.

12. Micro USB port

The Micro USB port is used to charge the watch and to upgrade the unit's firmware. If the unit is functioning normally, we strongly recommend that users leave the firmware alone.

13. Reset button

When the watch appears to glitch or crash, pilots may insert a pin into the cavity housing the Reset button to reset the watch.

14. LED status indications

Charging indicator: During the charging process, charging status LED is green. When charging is complete, the LED goes out.

HT006 Power status LED: The HT006 battery is full when the green light is solid. When the low power warning is triggered, the power status LED flashes green; the watch vibrates three times in succession and then vibrates once every minute.

HT006 GPS status LED: When the LED flashes red, the unit does not have sufficient GPS satellites for flight. Only when the LED is a solid red is the aircraft GPS signal strong enough for the aircraft to safely take off and fly.

Aircraft Power status LED: The aircraft battery is full when the green light is solid. When the low power warning is triggered, the power status LED flashes green; the watch vibrates three times in succession.

Aircraft GPS status LED: When the LED flashes red, the unit does not have sufficient GPS satellites for flight. Only when the LED is a solid red is the aircraft GPS signal strong enough for the aircraft to safely take off and fly.

Video recording status LED: The LED flashes blue when recording is in progress.

Pairing status: When the aircraft and watch are pairing, the watch's red, blue and green LEDs will flash simultaneously. The LEDs will cease flashing if the pairing is successful.

Upgrade status: In upgrade mode, the watch's red, blue and green LEDs will be solidly lit. When the upgrade is in process, the LEDs will flash.

2-1. Battery

HUBSAN has designed a 3.7V, 200mAh battery for the HT006 GPS watch. The unit is equipped with overcharge, over discharge and low voltage protections.

Specifications

Type	LiPo	Capacity
Voltage	3.7V	Consumption 7.4Wh
Ambient temperature for charging 0°C~40°C		
Ambient temperature for use -10°C~40°C		



- Make sure the battery is fully charged before use.

Please read the operating instructions carefully before use!



- Never leave units unattended when charging
- Unplug the charging cable immediately after charging
- Propellers may cause injury
- This product is not a toy
- Not suitable for children under 14 years of age

Product Model: HT006

Product standard code: Q/HBS001-2017

Vendor: Shenzhen Hubsan Technology Co., Ltd

Address: 13th Floor, Block C, Shenzhen Software Industrial Base,
Xuefu Road, Nanshan District, Shenzhen, Guangdong Province, China

Manufacturer: Dongguan Teng Sheng Industrial Co., Ltd.

Address: A22# Luyi Street, Tianxin Village,
Tangxia Town, Dongguan, China

Telephone: 0769-82776166 (China)

Download the manual from

WWW.HUBSAN.COM

FCC Warning:

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

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.

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.

This modular complies with FCC RF radiation exposure limits set forth for an uncontrolled environment. This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.