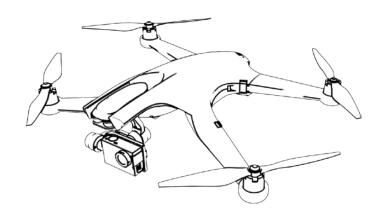
## HALO DRONE

# USER MANUAL & SAFETY GUIDELINES



## **Notice**

All instructions and other documents are subject to change. For the most up-to-date product information, please visit HaloBoard.com or contact us at support@haloboard.com.

Read the ENTIRE user manual and quick start guide to become familiar with the features of the Halo Drone and Halo Drone Pro before operating. Failure to operate the drone correctly can result in damage to your drone, personal property, and cause serious injury. This is a sophisticated product and should be operated with common sense and caution. It will require some basic mechanical ability. Be responsible, this product is not intended for use by children without direct adult supervision. Do not use with incompatible components, or alter this product in any way. It is essential to read and follow all the instructions and warnings provided to you in the user manual prior to assembly, setup, or use, in order to operate the drone correctly and avoid damage or serious injury.

THIS IS NOT A TOY. NOT RECOMMENDED FOR CHILDREN UNDER THE AGE OF 18.

## Pre Flight Check List

- 1. Check your Halo Drone for any broken pieces or missing parts before you fly.
- Check that the Remote Controller, Flight Battery, and your mobile device are all fully charged.
- 3. Make sure the Arm Lock Clips are tightly locked and in place.
- 4. Make sure all four propellers are tightly secured and do not have any dings.
- 5. Make sure your camera has a Micro SD card in it.
- 6. Make sure the AV Cable isn't loose so as not to risk it getting caught by a prop during flight.
- 7. Check that the Halo Drone App has successfully connected to the drone.
- 8. Check Camera gimbal is working properly and is calibrated to the horizon.
- 9. Check to see if motors start and stop normally.
- 10. Calibrate your Drone and Follow Module compass following the on-screen instructions.
- 11. Ensure you are NOT within a No-Fly Zone and that flight conditions are suitable.
- 12. Be sure to observe all local laws and regulations, and understand the risks.

It is solely your responsibility to comply with all flight regulations.

## Disclaimer:

Halo Board accepts no liability for damage(s), injuries or any legal responsibilities incurred directly or indirectly from the use of this product in the following conditions:

- 1. Damage(s), injuries or any legal responsibilities incurred when users are drunk, taking drugs, under the influence of anesthesia, dizziness, fatigue, nausea, and any other conditions both physical and mental that could impair your ability.
- 2. Damage(s), injuries or any legal responsibilities caused by subjective intentional operations.
- 3. Halo Board takes no responsibility for any misuse due to your failure to follow the Halo Drone Disclaimer, Quick Start Guide, User Manual and warnings found on HaloBoard.com.
- 4. Damage(s), injuries or any legal responsibilities caused by non-Halo Drone accessories and parts.
- Damage(s), injuries or any legal responsibilities caused by using third party products or fake Halo Drone products.
- 6. Damage(s), injuries or any legal responsibilities caused by improper operation or subjective misjudgment.
- 7. Damage(s), injuries or any legal responsibilities caused by mechanical failures due to products aging.
- 8. Damage(s), injuries or any legal responsibilities caused by continued flying after Low Battery Alarm is triggered.
- 9. Damage(s), injuries or any legal responsibilities caused by flying the drone in abnormal conditions (such as when water, oil, sand or other unknown materials are inside the drone, incomplete assembly, the main components have obvious faults, defect and missing accessories).
- 10. Damage(s), injuries or any legal responsibilities caused by flying in the following situations: in magnetic interference areas (such as high voltage lines, power stations, broadcasting towers and mobile base stations), in radio interference areas, and in government regulated no-fly zones.
- 11. Damage(s), injuries or any legal responsibilities caused by using the drone in bad weather, such as rain, heavy wind, snow, hail, lightning, tornadoes and hurricanes.
- 12. Damage(s), injuries or any legal responsibilities caused when drone is in the following situations: collision, fire, explosion, floods, tsunamis, subsidence, ice trapped, avalanche, debris flow, landslide, earthquake, etc.
- 13. Damage(s), injuries or any legal responsibilities caused by the misuse of the battery, protection circuit, Remote Controller module and battery chargers.
- 14. Damage(s), injuries or any legal responsibilities caused by infringement of laws, such as any data, audio or video material recorded by the use of drone.
- 15. Damage(s), injuries or any legal responsibilities caused by insufficient training.
- 16. Damage(s), injuries or any legal responsibilities caused by flying in the areas prohibited by laws, regulations or related entities.
- 17. Other losses that are not covered by the scope of Halo Board liability and warranty.

## Flight Environment Notices

- 1. During your first few flights, ensure there are no obstacles within 50 meters of the Take-Off position and your flight area. Keep drone in 'Beginner Mode' during initial flight.
- 2. Activate Auto Take-off and Auto Land on level ground that is clear of obstacles.
- 3. Fly in open areas. Buildings and large metal structures (parking lots) may affect the accuracy of the compass and GPS system.
- 4. Avoid flying near or over people, near trees, rivers, and high voltage power lines.
- 5. Large amounts of dust or fine sand will affect the motors.
- 6. Avoid flying in areas with high levels of electromagnetism, including base stations and radio transmission towers.
- 7. P-Mode cannot be activated within the polar regions. Use A-Mode instead.
- 8. Be familiar with your national (or international), domestic, and local airspace laws and regulations before flying your Halo Drone. Halo Board is not responsible or held reliable should you break these laws or regulations.
- DO NOT KEEP BATTERIES FULLY CHARGED IF YOU DO NOT INTEND TO USE THEM OVER THE NEXT 10 DAYS. Discharge them to the halfway point.

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## In the Box | Halo Drone

Please check and make sure all the following items are included in your package. If any item is missing, please contact Halo Board or your local retailer.

### Halo Drone & Halo Drone Pro:



Halo Drone x 1 (With Standard Camera or Pro Camera)



Remote Controller x 1



High Performance Flight Battery x 1



Battery Charger x 1



Propeller Pair x 3



USB Cable x 1



Manuals: User Manual Quick Start Guide



Accessory Box: Extra Arm Lock Clips Alan Wrench

## Halo Drone Pro Only:



Remote Control Watch x 1



Follow Module x 1



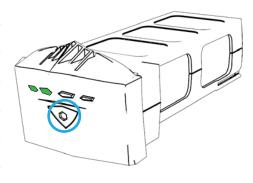
Charging Clip x 1

## Battery Indicators | Charging

## 1. High Performance Flight Battery

Press the power button once to check the battery level shown on the 4 LED indicator lights. Press twice and hold to power on/off.

LED 1	LED 2	LED 3	LED 4	Power Level
0				0 - 12.5%
				12.5 - 25%
	0			25 - 37.5%
				37.5 - 50%
		0		50 - 62.5%
				62.5 - 75%
			0	75 - 87.5%
				87.5 - 100%



Charge Time = 2 hours Flight Time = 22 minutes

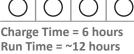


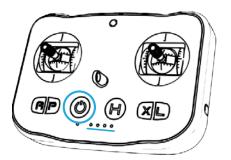
Power off the flight battery before plugging in to charge. Your flight battery will be warm directly after a flight. Please allow it to cool to room temperature before you plug it in to charge.

## 2. Remote Controller Battery

Press the power button once to check the battery level shown on the 4 LED indicator lights. Press twice and hold to power on/off.

LED 1	LED 2	LED 3	LED 4	Power Level
0				0 - 25%
0	0			25 - 50%
0	0	0		50 - 75%
0	0	0	0	75 - 100%

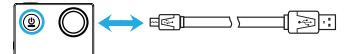




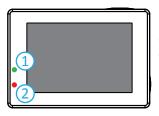
## Battery Indicators | Charging

### 3. Camera Battery

Press and hold the power button to power on/off.



Plug the USB into your computer or a 1A - 5A charger.



- 1. GREEN LED Power indicator. It will be solid when the camera is powered on, and flashing when there is no Micro SD card inserted.
- 2. **RED LED** Charge indicator. It will be on while charging, and off when fully charged (while plugged into charger).

## 4. Follow Module Battery | Halo Drone Pro Only

Press the power button once to check the battery level. Press twice and hold to power on/off.

Red 'Power' Indicator LED	Power Level
Blinks one time	0 - 25%
Blinks two times	25 - 50%
Blinks three times	50 - 75%
Blinks four times	75 - 100%



Charge Time = 1.5 hours Runtime = 2.5 hours



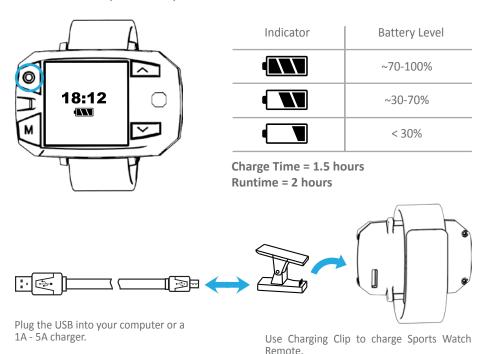
Plug the USB into your computer or a 1A - 5A charger.

Use Charging Clip to charge Follow Module.

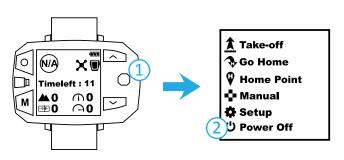
## Battery Indicators | Charging

## 5. Sports Watch Remote | Halo Drone Pro Only

Press the power button once to check the battery level. Press twice and hold to power on. To power off, toggle right on the Joystick and select 'Power Off' from the menu (see below).



### **How To Power Off Sports Watch**



- 1. Toggle right on the Navigation Joystick to enter Options menu.
- 2. Select 'Power Off' from the list.

## **Binding and Connection Procedures**



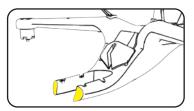
Halo Drone Pro users, you can only bind to either the Remote Controller **OR** the Sports Watch Remote at any given time. You cannot be connected to both at the same time.

Follow these procedures to pair the Halo Drone, Remote Controller, Sports Watch Remote, and Follow Module together.

### 1. Halo Drone Binding Mode

In order to pair the Halo Drone with your Remote Controller (or Sports Watch Remote), you must activate 'Binding Mode' on your drone.

#### **ACTIVATE BINDING MODE ON HALO DRONE**



- 1. Insert your High Performance Flight Battery into the Halo Drone.
- 2. Flip the Halo Drone onto its back (preferrably on your lap).
- 3. Power on the Halo Drone.

The Yellow indicator lights on its front should blink in intervals of 3. 'Binding Mode' is active.



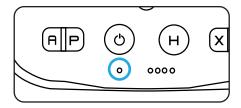


Flip the Halo Drone right-side-up again to disable 'Binding Mode'.

### 2. Remote Controller

When you power on the Halo Drone and the Remote Controller (RC), the Status Indicator LED on the RC will turn GREEN if it is paired, or will remain RED if it needs to bind to the drone.

- Green LED = Paired to Halo Drone
- Red LED = Not paired to Halo Drone
- Blinking Red LED = Binding Mode active



## **Binding and Connection Procedures**

## 2. Remote Controller (Continued)

### **Binding Procedure:**

To pair the Remote Controller to the Halo Drone, be sure the Halo Drone is already in 'Binding Mode'.

#### **ACTIVATE BINDING MODE ON REMOTE CONTROLLER**

- 1. Hold down the Return-to-Home button (H) and power on the RC (press power twice and hold).
- 2. The Status LED on the Remote Controller will start to blink Red. Binding Mode is active.
- 3. Binding procedure will begin automatically. Once paired (5-10 seconds), Status LED on RC will turn green.



If Status LED on RC continues to blink red, pairing failed. Power down the RC and Drone and repeat the Binding Procedure.

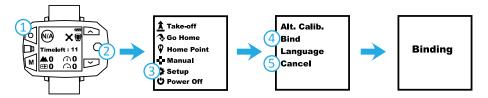
## 3. Sports Watch Remote | Halo Drone Pro Only

When you power on the Halo Drone and Sports Watch, the drone icon in the top right corner will turn solid white if it is paired, or remain an outline if it needs to bind to the drone.

Flashing drone icon means there is weak or no GPS signal, or interference.

### **Binding Procedure:**

To pair the Sports Watch Remote to the Halo Drone, be sure the Halo Drone is already in 'Binding Mode' (pg 9).



- 1. Power on the Sports Watch Remote
- 2. Toggle right on the Joystick to enter the Options menu
- 3. Select 'Setup' from the list.
- 4. Select 'Bind' from the list.
  - •The Sports Watch is now in 'Binding Mode' and will automatically pair with the Halo Drone.
- Once completed, it will go back to the last screen. Select cancel to exit the 'Setup' menu.



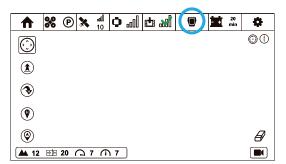
If the Sports Watch Remote remains on the 'Binding' screen, pairing failed. Power off the Sports Watch and the Halo Drone and repeat the binding procedure.

## **Binding and Connection Procedures**

### 4. Follow Module | Halo Drone Pro Only

When you start up the Halo Drone App or power on the Sports Watch Remote, the module icon will turn solid white if it is paired, or remain an outline if it still needs to be binded.

Flashing Module icon means there is weak or no GPS signal, or interference.







The Follow Module can be paired with either the Remote Controller or the Sports Watch Remote. Be sure to pair either remote to the drone first, and then pair the Follow Module.

### **Binding Procedure:**

To pair the Follow Module to the Remote Controller or to the Sports Watch, the Halo Drone and all accessories must first be powered off.

#### **ACTIVATE BINDING MODE ON FOLLOW MODULE:**

- 1. Make sure Halo Drone and all other accessories are powered off.
- 2. Power on the Follow Module by pushing the power button twice and holding (pg. 7).
- 3. Once the Module is powered on, push the power button 6 times to initiate 'Binding Mode'. Blue Status LED light on Module will blink in intervals of 3.



POWER ON AND ACTIVATE BINDING MODE ON REMOTE CONTROLLER (see pg 9).\*

The only difference here will be that the red blinking status LED on the RC will just go from blinking red (pairing) to solid red (paired). The status LED on the RC only turns green if it is connected to the drone.

OR

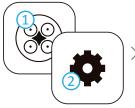
POWER ON AND ACTIVATE BINDING MODE ON SPORTS WATCH REMOTE (see pg 10).

4. Once paired, the Blue Status LED on the Follow Module will be solid.

## Calibration

### 1. Halo Drone Compass and Accelerometer Calibration

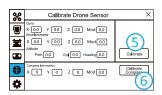
It is recommended you calibrate your Halo Drone compass every time you power it on to ensure that you have a safe flight, and that the RTH features work properly. You need to be connected to your mobile device to access calibration settings (see Quick Start Guide).



- 1. Tap the Drone icon to enter Flight View.
- 2. Tap Settings icon in the top right corner.



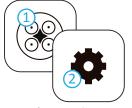
- 3. Select the Calibration Tab.
- 4. Tap 'Calibrate Drone Sensor'.



- 5. Calibrate the Accelerometer\* 6. Calibrate the Compass\*
- \*Follow the on-screen instructions.

## 2. Follow Module Compass and Accelerometer Calibration | Halo Drone Pro Only

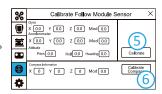
It is recommended you calibrate your Follow Module compass and accelerometer before each use to ensure accurate and proper flight patterns when using the follow features. Failure to do so may result in a crash.



- 1. Tap the Drone icon to enter Flight View.
- 2. Tap Settings icon in the top right corner.



- 3. Select the Calibration Tab.
- 4. Tap 'Calibrate Follow Module Sensor'.



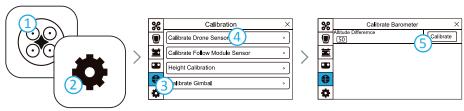
- 5. Calibrate the Accelerometer\* 6. Calibrate the Compass\*
- \*Follow the on-screen instructions.

## Calibration

## 3. Follow Module Altitude Calibration | Halo Drone Pro Only

It is recommended you calibrate the altitude of your Follow Module with your Halo Drone to ensure your follow features work as they were intended. Failure to do so may result in a crash.

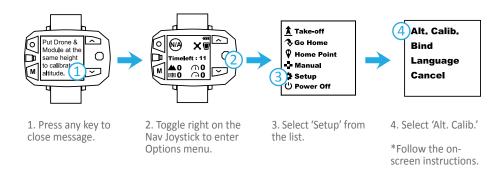
#### USING THE HALO DRONE APP



- 1. Tap the Drone icon to enter Flight View.
- 2. Tap Settings icon in the top right corner.
- 3. Select the Calibration Tab.
- 4. Tap 'Height Calibration'.
- 5. Calibrate the Barometer\*
- \*Follow the on-screen instructions.

#### **USING THE SPORTS WATCH REMOTE**

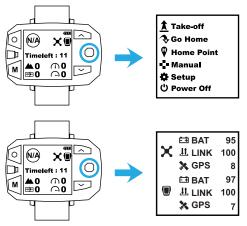
When you pair the follow module to the Sports Watch, you will get a checklist notice to calibrate the altitude.



## Sports Watch Remote | Halo Drone Pro

### **How to Use the Sports Watch Remote**

Learn your way around the Sports Watch Remote. Toggle the Navigation Joystick to move around the menu and press down on the Joystick button to make selections.

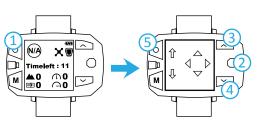


**TOGGLE RIGHT** on the Navigation Joystick to enter the Options menu. Here you can Auto Take-Off, Auto Land, initiate Return-to-Home, set your 'Home Point' enter Manual Flight mode, access the 'Settings' menu, and Power Off your Sports Watch.

**TOGGLE LEFT** on the Navigation Joystick to enter the 'Status' screen. Here you will get detailed information about Drone and Follow Module battery life, signal strength, and satellite connections.

## Flight Mode

To manually control the Halo Drone using the Sports Watch, enter the Manual Flight Interface mode.



- 1. Press and hold the Power/Stop button to enter 'Manual' mode.
- 2. Use the Navigation Joystick to fly Left, Right, Forwards, or Backwards.
- 3. Press the Up button to increase altitude.
- 4. Press the Down button to decrease altitude.
- 5. Press the Power/Stop button to exit 'Manual' mode.



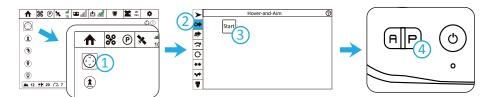
To initiate Emergency Shut Off, press the Power Button (1) and the Down button (4) together. Note that this will imediately power off the motors. If you are mid-flight, your drone will crash.

## Follow Modes | Halo Drone Pro

### How to Initiate Follow Mode

You can Start and Stop the follow modes using either the Halo Drone App or the Sports Watch Remote.

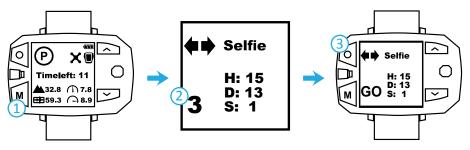
#### START AND STOP FOLLOW MODE WITH THE HALO DRONE APP



- 1. Tap on the Follow Mode icon.
- 2. Select on of the follow modes.3. Change settings and select
- Start or Send to upload settings to Halo Drone.
- 4. Tap the P-Mode button on the Remote Controller to stop Follow Mode. Drone will hover and wait for next command.

#### START AND STOP FOLLOW MODE WITH THE SPORTS WATCH REMOTE

The Sports Watch Remote will use the last settings options that were set from the Halo Drone App for each follow mode. To ensure you have the correct settings you want, check on the App.



- 1. Press the Follow Mode button 'M' to activate Follow Mode. Push again to change to next follow option.
- 2. A timer will automatically begin counting down once you have pressed the 'M' button.
  The Drone will start Follow Mode once counter ends.
- 3. Press the Power/Stop Button to stop Follow Mode. Drone will enter Hover mode and wait for next command.

## Follow Modes | Halo Drone Pro

## The 7 Follow Mode Options

Paired with the Follow Module, the Halo Drone Pro has 7 Follow Mode options to work with.



### Simple Follow

The Halo Drone will lock its current position and altitude from the Follow Module and auto target the module as it moves around.



### **Hover and Aim**

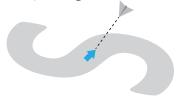
The Halo Drone will hover at its current position and its nose and camera will follow and aim towards the Follow Module.



### Follow-Shadow

Just like the Simple Follow option, but now you can set the relative Altitude, Distance, and Angle (based on Earth's compass) of the Halo Drone to the Follow Module. After activating, the Drone will follow based on the set Altitude, Distance, and Angle.



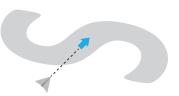




### Follow-Track

You can set the relative Altitude, Distance, and Angle (based on Follow Module's compass) of the Halo Drone to the Follow Module. In this mode, the drone will follow both the speed AND the angle/direction of the Follow Module.





## Follow Modes | Halo Drone Pro

## The 8 Follow Mode Options (continued)



You can set the relative Altitude, Distance, and the Velocity of the drone to orbit the Follow Module. Positive velocity values cause the Drone to orbit in a clockwise manner and negative values will make it orbit in a counter-clockwise manner.



You can set the Distance change, Altitude change, and Velocity of the Halo Drone from its current position. The Drone will fly out to the set distance and altitude, then return to it's original location all while the camera faces the Follow Module. This is great for panning shots, or zoom in/out shots.



### Follow-Line

Only available on the Halo Drone App. You can set a pre-marked path on the map for the Halo Drone to fly. You can set Altitude and Velocity for each point. The drone will fly along the path and aim the camera towards the Follow Module. Once path end has been reached, the drone will hover and wait for the next command.



### Freeze

This feature is not a Follow Mode and does not take into account the location of Follow Module. When Freeze mode is activated, the Halo Drone will hover at its current location and point the camera (gimbal) straight down to give an eagle-eye shot from above.

## **Trouble Shooting Guide**

For the most up-to-date trouble shooting guide, please visit the FAQ section under Support Page on HaloBoard.com.

The most up-to-date User Manual will also be available there as a downloadable PDF.

Feel free to contact our support team at support@haloboard.com with any questions or concerns.

