

TYPHOON **WIZARD**

USER MANUAL

V2.21

INTRODUCTION

The TYPHOON Wizard™ is a mini GPS tracking device that gives you full one-handed flight control over the TYPHOON aircraft. Features such as 'Follow Me' and 'Watch Me' ensure that you are in frame in every shot. The 'point to fly' function allows you to point and click to reposition your TYPHOON in a very intuitive way.

SPECIFICATIONS

Dimensions: 5.47 X 1.46 X 0.98 in (139 X 37 X 25 mm)

Weight (with LiPo Battery): 2.52 oz (71.5 g)

Compatible Aircraft: TYPHOON series

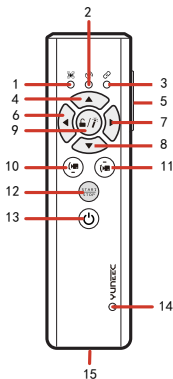
Water Resistant: Yes

Working Hours: 3.5 h

Built-In LiPo Battery Voltage / Capacity: 3.7V 500mAh

OVERVIEW

1. Aircraft Mode LED
2. Wizard™ GPS LED
3. Aircraft Status LED
4. Ascend / Forward Button
5. Mode Switch
6. Turn / Fly to the Left Side Button
7. Turn / Fly to the Right Side Button
8. Descend / Backward Button
9. Magic Button
10. Pitch Control Button-down
11. Pitch Control Button-up
12. Start / Stop Motors Button
13. Wizard™ Power Button
14. Wizard™ Power LED
15. Micro USB Port



CALIBRATION

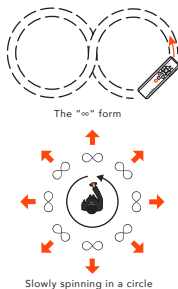
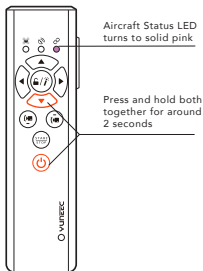
When the 'Point to fly' function does not work properly, please calibrate the TYPHOON Wizard as follows:

STEP 1) Entering the TYPHOON Wizard calibration mode
Press and hold both the Descend/ Backward Button and the Power Button at the same time for around 2 seconds till the top right Aircraft Status LED is solid pink. After that you can release both buttons. If entering the calibration mode fails, turn off the TYPHOON Wizard and try again.

STEP 2) Wizard Calibration

Immediately move the TYPHOON Wizard in the "∞" form while slowly spinning in a circle. When the calibration is done, Wizard will turn off automatically. The process will take around 30 seconds.

IMPORTANT NOTE: If calibration fails, the top left Aircraft Mode LED will be solid red and the power LED will blink red rapidly. You should turn off the Wizard and repeat the process from Step1.



TIPS: Keep distance from magnetic interference during the calibration. We recommend calibrating Wizard outdoors. You can find the TYPHOON Wizard calibration tutorial video at www.yunee.com/wiz-info.html

NOTICES AND WARNINGS

1. The Wizard™ CAN'T replace the Personal Ground Station/Remote Controller because it has no Wifi.
 2. The Wizard™ is water resistant but NOT waterproof, Do not submerge the Wizard™ in water even if it is in the waterproof carrying pouch. This will cause the aircraft to lose signal.
 3. Do not use Home Mode when flying near bodies of water.
 4. Be sure to turn off the Wizard™ when you do not use it.
 5. Be sure to operate the Wizard™ in open areas that are free from people, vehicles and other obstructions. Never fly near or above crowds, airports or buildings.
 6. When swimming or diving with the waterproof carrying strap, to keep the stability of the aircraft, pilots MUST press and hold the Ascend / Forward Button and the Descend / Backward Button at the same time to turn off the height following function. The TYPHOON Wizard will vibrate once and the Aircraft Mode LED will blink the current color. Otherwise the aircraft may crash!
- When getting out of water, press the Ascend / Forward Button and the Descend / Backward Button at the same time. The TYPHOON Wizard will vibrate twice and the Aircraft Mode LED will be solid again.

GENERAL SAFETY PRECAUTIONS AND WARNINGS

- Failure to use this product in the intended manner as described in instruction manual can result in damage to the product, property and/or cause serious injury. This product is not a toy! If misused it can cause serious body harm and damage to property.
- As the user of this product you are solely and wholly responsible for operating it in a manner that does not endanger yourself and others or result in damage to the product or the property of others.
- Do not attempt to operate your equipment in areas with potential magnetic and/or radio interference including areas nearby broadcast towers, power transmission stations, high voltage power lines, etc.

WIZARD™ LED STATUS:

Aircraft Mode LED

- Smart Mode: LED solid green
- Watch Me Function: LED solid green
- Follow Me Function: LED solid yellow
- Angle Mode: LED solid purple
- Home Mode: LED solid red
- 'Point To Fly' Function Activated: LED solid blue
- Obs. Avoidance On: LED blink white

Wizard™ GPS LED

- GPS Locked: LED solid green.
- Video Recording: LED blinking green

Aircraft Status LED

- The Communication Mal-function Between the Wizard™ and the Aircraft : LED solid red
- GPS Loss of Aircraft: LED off
- Aircraft in No-Fly Zone: LED blinking red, green and blue alternately
- Battery full: LED solid green
- Battery 50%: LED blinking green twice every 2 seconds
- Battery 25%: LED blinking green once every 2 seconds
Low Voltage Warning of the Aircraft:
- LED blinking red quickly, the Wizard™ vibrating for 2 seconds once continuously

Wizard™ Power LED:

- Powered On: LED solid green
- During Charging: LED solid red
- Charging Completed: Red LED off
Low Voltage Warning of the Wizard™:
- Battery 50% --- LED blinking green twice every 2 seconds
- Battery 25%--- LED blinking green once every 2 seconds
- Power Cut-off---LED blinking red quickly, the Wizard™ vibrating for 2 seconds once continuously.

BATTERY WARNINGS AND USAGE GUIDELINES

WARNING: Lithium Polymer (LiPo) batteries are significantly more volatile than alkaline, NiCd or NiMH batteries. All instructions and warnings must be followed exactly to prevent property damage and/or serious injury as the mishandling of LiPo batteries can result in fire. By handling, charging or using the included LiPo battery you assume all risks associated with LiPo batteries. If you do not agree with these conditions please return the complete product in new, unused condition to the place of purchase immediately.

- You must always charge the LiPo battery in a safe, well-ventilated area away from flammable materials.
- Never charge the LiPo battery unattended at any time. When charging the battery you must always remain in constant observation to monitor the charging process and react immediately to any potential problems that may occur.
- After flying/discharging the LiPo battery you must allow it to cool to ambient/room temperature before recharging.
- To charge the LiPo battery you must use a suitable compatible LiPo battery charger. Failure to do so may result in a fire causing property damage and/or serious injury.

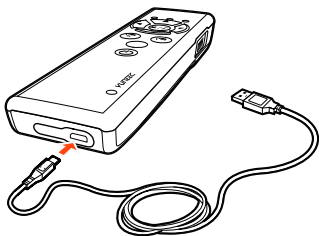
- Store the LiPo battery at room temperature and in a dry area for best results.
- When charging, transporting or temporarily storing the LiPo battery the temperature range should be from approximately 40–120° F (5–49°C). Do not store the battery or aircraft in a hot garage, car or direct sunlight. If stored in a hot garage or car the battery can be damaged or even catch fire.
- Never leave batteries, chargers and power supplies unattended during use.
- Never attempt to charge low voltage, ballooned/swollen, damaged or wet batteries.
- Never allow children under 14 years of age to charge batteries.
- Never drop batteries, chargers or power supplies.
- Always inspect the battery, charger and power supply before charging.

- Always ensure correct polarity before connecting batteries, chargers and power supplies.
- Always disconnect the battery after charging.
- Always terminate all processes if the battery, charger or power supply malfunctions.

IMPORTANT NOTE: It's safer and better for the longevity of the battery to store it only partially charged for any length of time. Storing the battery approximately 50% charged is typically best, be sure to not store the battery fully charged whenever possible. In fact, as long as the battery will be stored at approximately room temperature and for no more than a few weeks before the next use, it may be best to store the battery in the discharged state after the last flight (as long as the battery was not over-discharged on the last flight).



CHARGING THE BATTERIES

You can charge the LiPo battery in the TYPHOON Wizard™ by using supplied USB cable and inserting it into the USB port on your computer. Make sure the TYPHOON Wizard™ is OFF and connect cable into open USB port on your computer. The Power LED will show solid RED while battery is charging, when charging is completed the red LED light will turn off. It will take approximately 2 hours to charge a fully discharged battery. A fully charged battery will give an operating time of 3.5 hours per charge.



WARNING: Do not take out the LiPo battery installed in the TYPHOON Wizard™, otherwise the TYPHOON Wizard™ may be damaged.

POWERING ON/OFF:

Press and hold the Power Button . When all LEDs blink once and the TYPHOON Wizard™ vibrates once, release the Power button . The Power LED glows solid green, and the Aircraft Mode LED is on, then the TYPHOON Wizard™ is powered on successfully.

NOTICE: IMU Mal-function: If the TYPHOON Wizard™ keeps vibrating when powering on and fails to power on, please return it to the service center for maintenance.

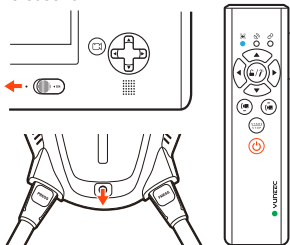
BINDING TYPHOON WIZARD™ TO TYPHOON H

STEP 1) Switch on the ST16 Ground Station first, and then power on Typhoon H. Do not touch it until the initialization completes. Wait a few seconds for the camera to align.

STEP 2) Tap the settings icon [⚙] on the ST16 and then switch from single mode to team mode.

STEP 3) When the Typhoon H Main LED Status Indicator starts to blink orange, the aircraft enters binding mode.

STEP 4) Press and hold the Power Button of the Wizard until the Aircraft Mode LED glows solid blue. Do not release the Power Button until hearing two beeps from the aircraft, then release it.



NOTICE: When Typhoon H is in team mode (Wizard and ST16), the Wizard must be bound to the aircraft and the ST16 Ground Station must be bound to the camera.

IF YOU NEED TO SWITCH BACK TO SINGLE MODE, THE OPERATION STEPS ARE AS FOLLOWS:

STEP 1: Tap the settings icon [⚙] on the ST16 and then switch from team mode to single mode.

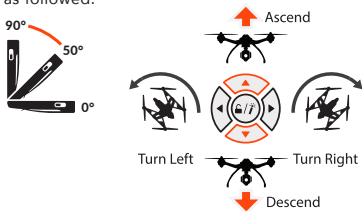
STEP 2: When the Typhoon H Main LED Status Indicator starts to blink, the aircraft enters binding mode.

STEP 3: Wait for a few seconds, as the remote control will automatically bind to the camera and aircraft. You will hear two beeps from the aircraft when the binding is successful.

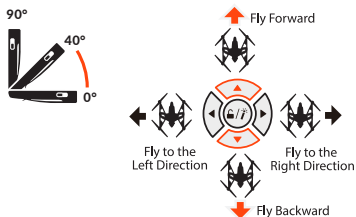
FLIGHT CONTROLS

NOTICE: The safe distance between the TYPHOON Wizard™ and the aircraft is 39 ft (12m). The TYPHOON Wizard™ can be controlled in different positions. Direction Control Buttons function differently according to the positions of the Wizard™.

1) When the TYPHOON Wizard™ is tilted upwards between 50° and 90°, the functions of the Direction Control Buttons are as followed:



2) When the TYPHOON Wizard™ is tilted upwards between 0° and 40°, the functions of the Direction Control Buttons are as followed:



NOTICE: When the aircraft flies to the left or right side, the nose of aircraft doesn't change its direction when the TYPHOON Wizard™ is tilted upwards between 0° and 40°.

'POINT TO FLY' FUNCTION

Press and hold the Magic Button on the TYPHOON Wizard™, and the aircraft will fly in the direction the TYPHOON Wizard™ is pointed to in the sky.

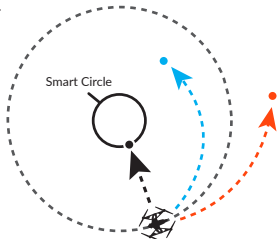
To Enter 'Point To Fly' Function

When the aircraft is flying, point the TYPHOON Wizard™ to a direction, press and hold the Magic Button. Release the Magic Button when Aircraft Mode LED glows solid blue and TYPHOON Wizard™ vibrates once. Then the aircraft will fly to the direction the TYPHOON Wizard™ points. The closer the TYPHOON Wizard™ is tilted towards 0°, the further the aircraft will fly away from the pilot. The closer the TYPHOON Wizard™ is tilted towards 90°, the further the aircraft will fly away from the pilot (refer to the orange flight track below). The closer the TYPHOON Wizard™ is tilted towards 0°, the further the aircraft will fly away from the pilot (refer to the blue flight track below). When the Wizard™ is tilted at 90°, the aircraft will fly close to you straightly and stop at a safe distance (refer to the black flight track below).

NOTICE: The recommended flying height is 33-66 ft (10-20 m). The operating distance range of the TYPHOON Wizard™ is 33-164 ft (10-50 m).



Wizard™ Pointing Direction



To Exit 'Point To Fly' Function

When in the 'Point To Fly' Function, press any Direction Control Button to exit this function. The aircraft will stop moving and automatically hold its position (with a suitable GPS signal/lock) and maintain a level attitude then.

WIZARD BUTTON COMBINATION FUNCTIONS

*All vibrate once when any of the combination function is activated.

*For the last four functions, press the orange marked button first, and then the green one. Release both buttons at the same time after the function is activated.



Turn off/on altitude follow function

PRESS - Short press
LED ✖ - Blink slowly: Turn off



Switch between Watch Me/ Follow Me function

PRESS - Short press
LED ✖ - ● Watch Me ● Follow Me



Landing gear up/down

PRESS - Short press



Activate point-to-fly function

PRESS - Long press
LED ✖ - Solid blue



Activate compass calibration

PRESS - Long press
*Turn off WIZARD before pressing this combination buttons.
LED φ - Solid pink



Enter into binding mode

PRESS - Long press
*Turn off WIZARD before pressing this button.
LED ✖ - Solid blue



Turn on Obstacle Avoidance function

-Turn off by default
PRESS - Short press
LED ✖ - Blink white



Turn off Obstacle Avoidance function

PRESS - Short press



Take still photos

PRESS - Short press



Start/stop video record

PRESS - Short press
LED φ - Blink-record start

FLIGHT MODES

SMART MODE

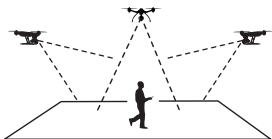
When the Flight Mode Selection Switch is in the top position, the aircraft will be in the Smart Mode. The Aircraft Mode LED will glow solid green.

1) Watch Me Function Under Smart Mode

Watch Me function enables the camera to keep tracking the TYPHOON Wizard™ no matter where and how it moves as the camera can automatically tilt its angle according to the controller. It is "watch me" mode if both the LEDs for Aircraft Mode and Wizard™ GPS are green.

Usually, the default function under the Smart Mode is Watch Me.

The Turn Left and Turn Right are disabled in this mode (Fly to the Left Direction and Fly to the Right Direction can be controlled). The pilot will always be kept in the frame wherever he/she moves.



NOTICE: In the Smart Mode, the geo-fence will keep the aircraft from traveling further than 295 ft (90 m). The geo-fence is a virtual 'barrier'.

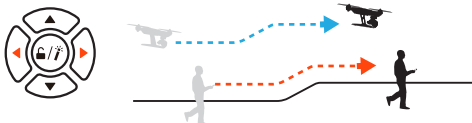
CAUTION: You can operate the camera on mobile APPs. The APP can be downloaded from Google Play Store or APP Store. You also can use the Wizard™ to take photos or record videos.

IMPORTANT NOTE: The 'Point To Fly' Function can only be activated in Smart Mode.

2) Follow Me Function Under Smart Mode

The Follow Me function allows the aircraft to follow the pilot, adjusting its location to the location of the TYPHOON Wizard™. All buttons are controllable in this mode. When in Follow Me function, the aircraft will follow the movement of the TYPHOON Wizard™ if there is no extra operation on the TYPHOON Wizard™.

Follow Me function can be switched to by the following steps:
When in Watch Me Mode, press the [◀] and [▶] once at the same time, it is "follow me" model if Aircraft Mode LED is yellow and Wizard™ GPS LED is green



WARNING: When swimming or diving with the waterproof carrying strap, to keep the stability of the aircraft, pilots MUST press and hold the Ascend / Forward Button and the Descend / Backward Button at the same time to turn off the height following function. The TYPHOON Wizard will vibrate once and the Aircraft Mode LED will blink the current color. Otherwise the aircraft may crash!

IMPORTANT NOTE: Crash is NOT covered under warranty.

ANGLE MODE

When the Flight Mode Selection Switch is in the middle position the aircraft will be in Angle Mode. The Aircraft Mode LED will be solid purple.

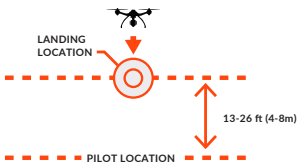
In this mode, the aircraft will move in the direction the TYPHOON Wizard™ is controlled relative to the front/nose of the aircraft. The aircraft has no function of Follow Me or Watch Me.

NOTICE: In this mode, the 'Point To Fly' Function can't be activated.

IMPORTANT NOTICE: In the Angle mode, the aircraft is not suggested travelling further than 656 ft (200 m). The Wizard™ will keep vibrating when the aircraft travels further than 656 ft (200 m).

HOME MODE

When the Flight Mode Selection Switch is in the bottom position, the aircraft will be in the Home Mode. The Aircraft Mode LED will be solid red. To exit the Home Mode, switch the Mode Switch to Angle/Smart Mode, then the aircraft will stop moving and automatically hold its position (with a suitable GPS signal/lock) and maintain a level attitude then. In Home Mode the aircraft will fly in a straight line in the direction of the pilots' current location, and automatically land within 13-26 ft (4-8 m) of the pilot.



NOTICE: In this mode, the 'Point To Fly' Function can't be activated.
CAUTION: Don't switch to Home Mode when you are near bodies of water.

CAMERA CONTROLS

Any camera control including photo taking or video recording either be operated on Wizard or on Mobile Apps, which can be downloaded from Google Play Store or APP Store. The detailed information can be referred to relevant User Manuals on the official website: www.yuneec.com

NOTICE: The control radius range of camera control is within 295 ft (90 m).

CAUTION: When using the Wizard™, if it keeps vibrating continuously, it indicates the hardware in the Wizard™ malfunction. Please send it to the official service center for maintenance.



FCC STATEMENT:

This equipment has been tested and found to comply with the limits for Part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications.

However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment to an outlet on a circuit different from that to which the receiver is connected.

This device complies with part 15 of the FCC rules. Operation is subject to the following two conditions:

(1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

NOTE: 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.

CAUTION: Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

IC RADIATION EXPOSURE STATEMENT FOR CANADA

This device complies with Industry Canada 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.

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.

This equipment complies with IC RSS-102 radiation exposure limit set forth for an uncontrolled environment.

Cet équipement respecte les limites d'exposition aux rayonnements IC définies pour un environnement non contrôlé

When the Aircraft Status LED is solid yellow or blinking yellow frequently, it indicates calibration is needed. The operation can be referred to the video of calibration from our official website: www.yuneec.com

If there is no proper calibration, the Point to Fly function won't work even when pressing the magic button, the Wizard™ will vibrate twice as a warning signal(it only vibrates once in the normal condition).

Any information above might be changed due to the software update. For the latest documents, please check the official website

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.



