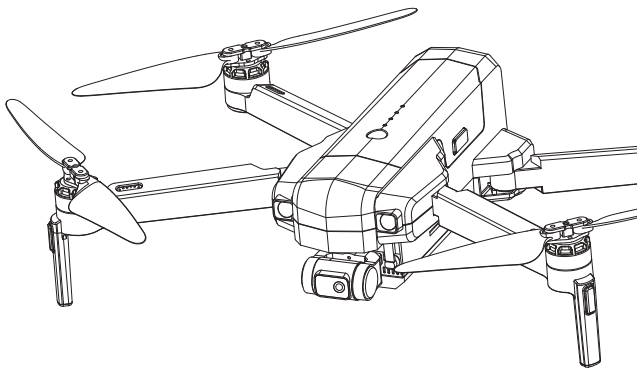


Tofect

Saturn T60A

User Manual

V 1.0



+1 (888) 885-5229

support@tofect.com

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Appendix

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Reading Guidance

Icon

“” essential precautions.

“” tips for operation and usage.

Recommended Steps

Our product offers both tutorial videos and the following resources:

- Quick Start Guide
- User Manual
- Disclaimer and Safety Guidelines

For a smooth start, we suggest watching the tutorial videos and reviewing the “Disclaimer and Safety Guidelines” first. Then, familiarize yourself with the basics through the “Quick Start Guide”. For a comprehensive understanding, delve into the “User Manual”.

Access Tutorial Videos

To ensure you're using the product safely and correctly, scan the QR code below to view our tutorial videos.



We are committed to continuously improving user experience and reserve the right to update products. This manual may be revised without prior notice. Scan the QR code to access the latest version. In case of discrepancies between digital and printed editions, the electronic version shall prevail.

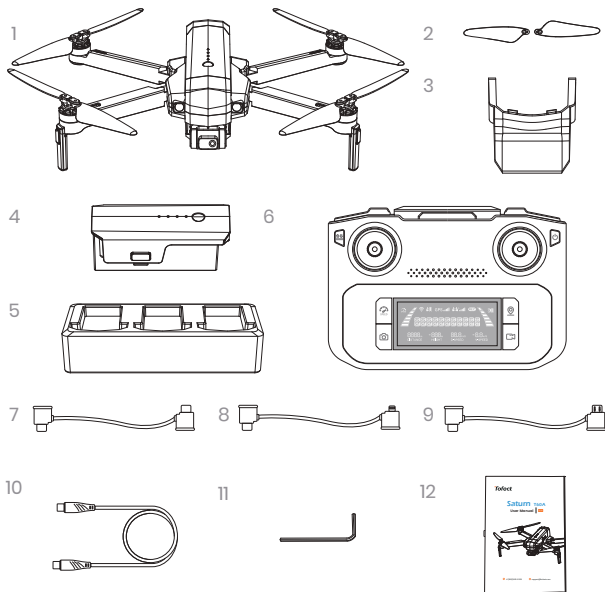
Download the Tofect FLY App

Simply scan the QR code below.



The interface and functions of Tofect FLY may vary as the software version is updated. Actual user experience is based on the software version used.

1.1 Package Contents >>



1 Drone

2 Propellers

3 Gimbal Cover

4 Drone Battery

5 Battery Charging Hub

6 Transmitter

7 Connection Cable
(type-c)8 Connection Cable
(lightning)9 Connection Cable
(micro-USB)

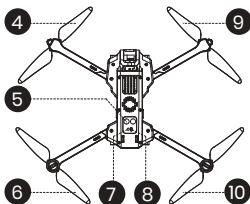
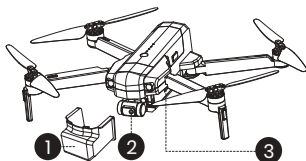
10 Charging Cable

11 Screwdriver

12 User Manual

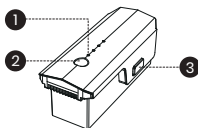
1.2 Diagram of the Drone >>

Drone



- 1 Gimbal Cover
- 2 Gimbal and Camera
- 3 TF Card Slot
- 4 Propeller B
- 5 Fill Light
- 6 Propeller A
- 7 Optical Flow Lens
- 8 TOF Module
- 9 Propeller A
- 10 Propeller B

Battery of the Drone



- 1 Battery Level Indicators
- 2 Power Button
- 3 Battery Extraction Button

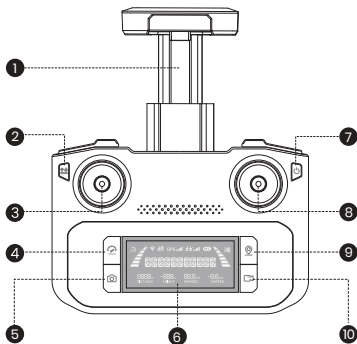


On/Off: Turn the battery on/off by **pressing the power button for 3 seconds**. When the battery is on, the battery level indicators will display the current battery status. When the battery is powered off, all the indicators are out.

1.3 Diagram of the Transmitter >>

Transmitter

● Front:



1 Cellphone Holder

3 Left Joystick

5 Take Photo

7 Check Battery Level: Short Press
Power Button: Short press, then hold9 Return to Home: Short Press
GPS Switch on/off: Long Press2 Takeoff/Landing: Short Press
Emergency Stop: Long Press4 Speed Switch: Short Press
Cruise Control: Long Press

6 LCD Screen

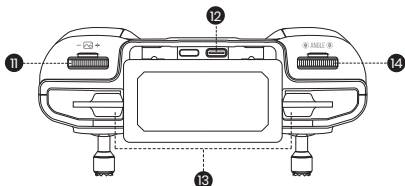
8 Right Joystick

10 Record Video

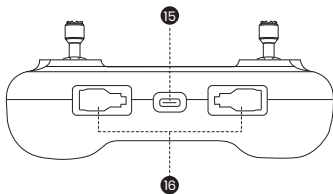
1.3 Diagram of the Transmitter >>

Transmitter

• Top:



• Bottom:



11 Zoom Dial

12 Connection Port

13 Cellphone Slot

14 Camera Adjustment Dial

15 Charging Port

16 Storage Slots for Joysticks

1.3 Diagram of the Transmitter >>

LCD Screen



- | | |
|---------------------------|-------------------------------|
| 1 Transmitter WiFi Signal | 2 Transmitter Battery Level |
| 3 GPS Signal Strength | 4 Transmitter Signal Strength |
| 5 Camera Status | 6 Flight Speed |
| 7 Drone Status | 8 Drone Battery Level |
| 9 Flight Distance | 10 Flight Height |
| 11 Horizontal Speed | 12 Vertical Speed |



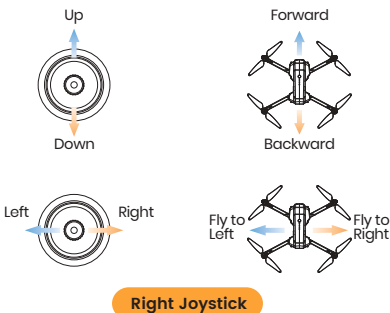
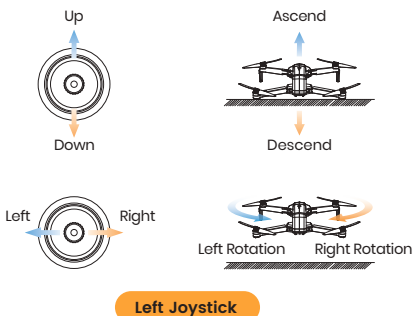
When the battery level of the transmitter is low, its icon () will start to flash. When this happens, please bring the drone down to the ground immediately and charge the transmitter.

Unit Switching: Press and hold the () button while simultaneously pressing the power button twice. The units "m" and "ft" on the LCD screen can be toggled between each other. The last toggled unit will be the default unit upon restarting.

1.3 Diagram of the Transmitter >>

Joystick Mode

- **Mode 2:** (Left joystick as the throttle joystick)

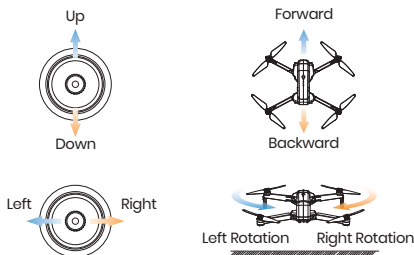


1.3 Diagram of the Transmitter >>

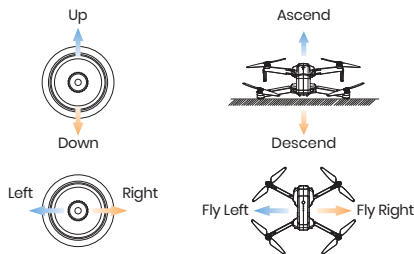
Joystick Mode

- Mode 1:** (Right joystick as the throttle joystick)

Hold the () button, short press the () button of the transmitter once, then hold the latter until the transmitter quickly beeps 3 times. You will see "R HAND MODE" displayed on the LCD screen, which means the transmitter is now in Mode 1.



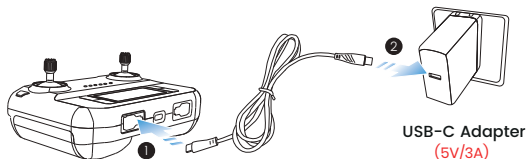
Left Joystick



Right Joystick

2.1 Battery Preparation >>

• Charging of the Transmitter:

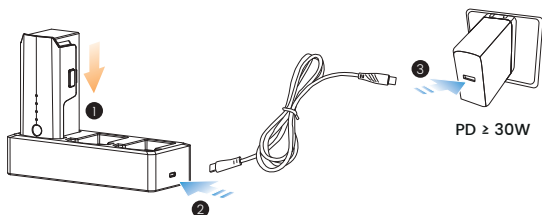


- 1 Insert the USB-C plug of the charging cable into the transmitter's USB-C port.
- 2 Plug the other end of the cable into a USB-C adapter (5V/3A) or power bank to start charging.
- 3 When charging, the cells in the battery level bar will light up in turn. The LCD screen displays **"CHARGING"**. When the charging is done, all 3 cells will light up () and the LCD screen displays **"CHARGE DONE"**.
- 4 It takes about 2 hours to fully charge the transmitter. A fully charged transmitter offers about 2.5 hours of usage time.

- ! The transmitter cannot be turned on while it is charging.
- Before charging, please read the instructions in the "Battery Safety" section of the "Disclaimer and Safety Guidelines" carefully!
- Please use the original charging cable to charge the transmitter.

2.1 Battery Preparation >>

• Charging of the Drone Battery:



- 1 Insert the battery into the charging hub, and connect the hub to a USB-C cable.
- 2 Plug the other end of the cable into a USB-C adapter (**30W or above**) to start charging.
- 3 During charging, the lights on the hub will flash blue; when fully charged, they will turn solid blue.
- 4 Using a 60W adapter, it takes about 80 minutes to fully charge the drone battery.

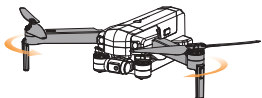
- ⚠ · Before charging, please read the instructions in the "Battery Safety" section of the "Disclaimer and Safety Guidelines" carefully!
- DO NOT charge a battery immediately after a flight as the temperature may be too high. Please wait until it cools down to room temperature before charging again.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

2.2 Pre-Flight Preparations >>

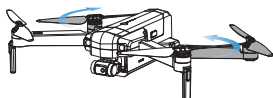
Arms

All arms of the drone are folded when it is packaged at the factory.

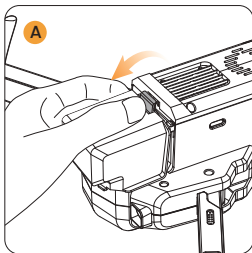
1 Unfold the **front** arms.



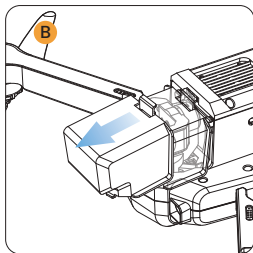
2 Unfold the **rear** arms.



Gimbal Cover



Loosen the buckle on the gimbal cover.



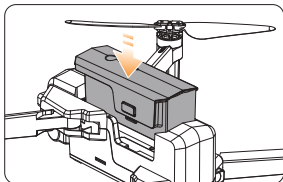
Gently pull the cover toward the front of the drone.

- !** Please remove the gimbal cover before you turn on the drone.
- Put the gimbal cover back in place when the drone is not in use.

2.2 Pre-Flight Preparations >>

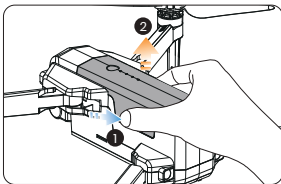
Drone Battery

● Installation:



Insert the battery into the battery compartment of the drone. Make sure it is installed securely and that the battery buckles are clicked into place.

● Removal:



Press the battery buckles on the sides of the battery to remove the battery from the compartment.

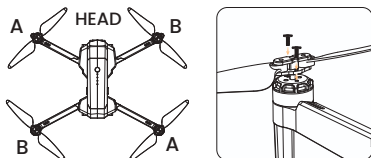


- Before installing the battery, please check if it has a detachable insulation pad/band. If yes, remove it.
- Please make sure that the battery is firmly installed. Otherwise, the flight safety of your drone may be affected. The drone may crash due to a power-cut during the flight.
- Only install/remove the battery when it is powered off.

2.2 Pre-Flight Preparations >>

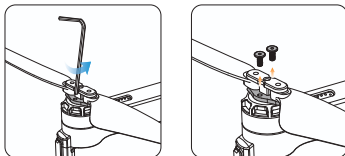
Propellers

• Installation:



Install the marked propellers to the marked motor shafts. Use the screwdriver to tighten the two screws in place. Install then the unmarked propellers to the unmarked motor shafts.

• Removal:

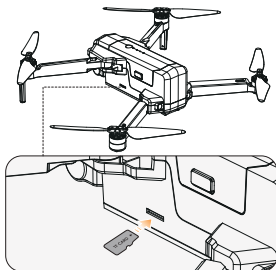


Use the screwdriver to turn the screws anti-clockwise to remove them. Then pull the propellers up.

- ⚠ · The marked propellers have a different spin direction than the unmarked ones. So please ensure that they are installed to the right motor shafts.
- Before each flight, check if the propellers are secure and tight.
- If the propellers become deformed or damaged, please replace them before flying again.

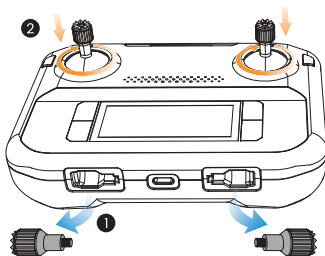
2.2 Pre-Flight Preparations >>

TF Card



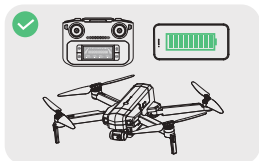
Insert a TF card (**not included**) into the TF card slot before turning on the drone. This drone supports TF card with a max storage of 256 GB.

Joysticks

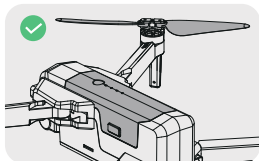


Take the joysticks out of the storage slot and mount them onto the transmitter.

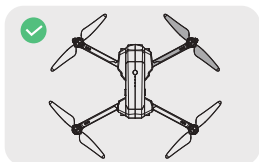
2.3 Pre-Flight Checklist >>



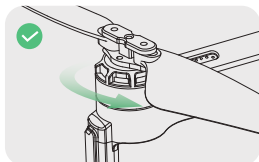
Make sure the transmitter, the mobile phone and the drone battery are fully charged.



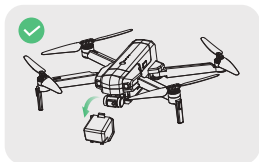
Make sure the drone battery and the propellers are installed securely.



Make sure the drone arms and propellers are fully expanded



Make sure that there is nothing obstructing the motors.



Make sure the camera cover is removed.



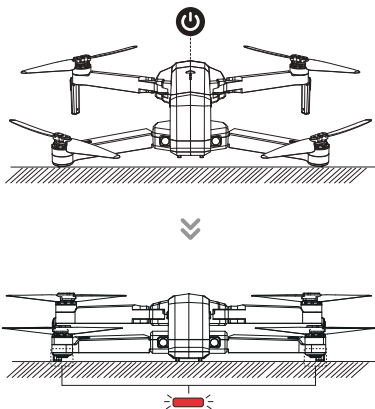
Make sure you use accessories provided by our company.

2.4 Flight >>

Pairing



- All operations in this manual are demonstrated using MODE 2 controls.
- Make sure that you go outdoor to an open area to operate the drone.

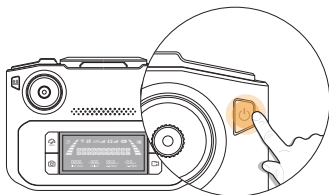


1 Turning on the drone

Press and hold the power button () for 3 seconds to turn on the drone. **Place it on a level surface with its head pointing forward.** The drone status indicator starts to blink red. The drone is now waiting to be paired.

2.4 Flight >>

Pairing

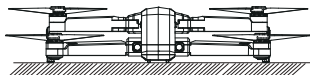


2 Turning on the transmitter

Short press the power button (⏻) once, then press and hold for 3 seconds to turn it on.



Short pressing the button once will only display the battery level.



↑↓ 40S



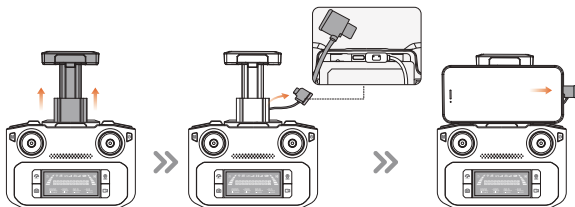
3 Pairing

It takes about 40 seconds to pair the transmitter with the drone. During the pairing, the transmitter will continue to beep. Finally, it will long beep once and the transmitter signal strength (📶) on the LCD screen is full and glowing, indicating that the pairing is complete.

2.4 Flight >>

App Connection

- 1 Cellphone connection:** Pull out the phone holder. Select the appropriate connection cable (Type-C, Micro-USB, or Lightning) from the package. Connect the end marked with a transmitter icon () to the transmitter and plug the other end into your cellphone.



- 2** Run the "Tofect FLY" app and open up the live-feed interface.



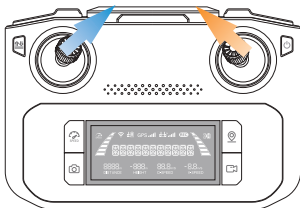
Tofect FLY App



When using an Android phone, please choose "charge only" when the cellphone asks you to choose a connection mode. Other options may cause the connection to fail.

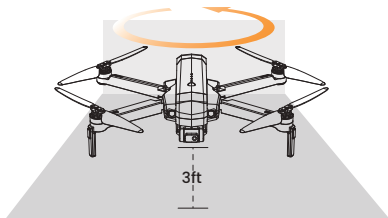
2.4 Flight >>

Compass Calibration



● STEP 1

Push both joysticks **towards the inner, upper corners** simultaneously to start the compass calibration.

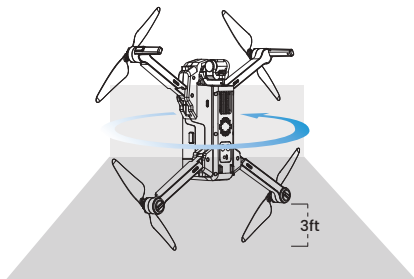


● STEP 2

Rotate the drone horizontally (**keeping it parallel to the floor**) until the transmitter beeps once.

2.4 Flight >>

Compass Calibration



● STEP 3

Point the head of the drone **upward and rotate it** till the transmitter beeps again. The compass calibration is complete.

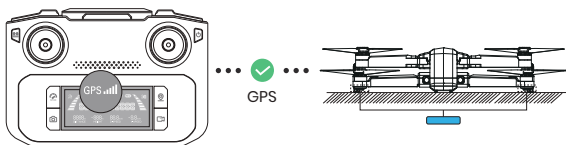
- ⚠ · To ensure a stable flight, we recommend that pilots perform a compass calibration before each flight.
- We recommend that the pilot hold the drone approximately 3 ft above the ground while performing the compass calibration.
- DO NOT calibrate the compass in locations where magnetic interference may occur, such as close to magnetite deposits or large metallic structures such as parking structures, steel reinforced basements, bridges, cars, or scaffolding.
- DO NOT carry objects (such as mobile phones) that contain ferromagnetic materials near the drone during calibration.

2.4 Flight >>

GPS Signal Search



Please don't use the GPS mode when you are indoors.



After calibrating the compass, put the drone on a flat surface. Make sure there are no external sources of signal interference around.

The drone will automatically perform a search for GPS signals. The drone has successfully located the GPS signal when its rear indicator turns **solid blue**. The GPS signal strength (GPS.📶) will be at its maximum when the LCD screen is full and glowing.

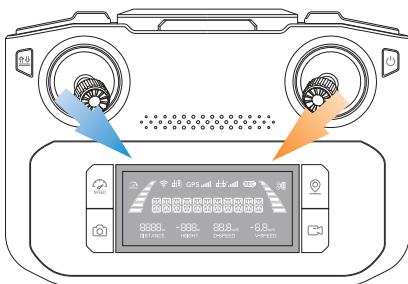


When the drone's rear light **flashes blue**, it indicates that the drone is searching for a GPS signal.

Exit GPS Mode: If the GPS signal is weak, or if you plan to fly the drone indoors, press and hold the (📍) button on the transmitter for 2 seconds to exit GPS mode for a proper takeoff. The LCD screen will then display "ATTI MODE", indicating that the drone has entered Attitude Mode. In this mode, the drone can take off, but please be aware that all GPS-related functions will be unavailable.

2.4 Flight >>

Unlocking the Motors



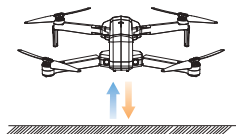
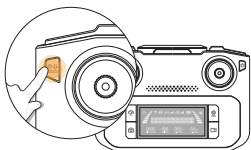
Push both of the joysticks simultaneously toward the inner, lower corners. The motors start to spin, the drone is unlocked.



Locking: If no command is given, the motors will lock themselves automatically 15s after the they are unlocked. You can also push both of the joysticks to the inner corners to manually lock them.

2.4 Flight >>

Takeoff/Landing



Takeoff

Short press the () button, the drone will take off automatically and hover at 5 ft. Now you can control the drone by using the joysticks.



Landing

When the drone is in the air, short press the () button. The drone slowly descends to the ground.

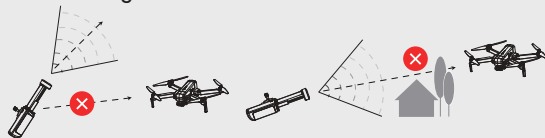


When operating the drone, it's important to periodically adjust the orientation and distance between the transmitter and the drone to ensure that the drone always remains within the optimal communication range.

Optimal Reception Range:

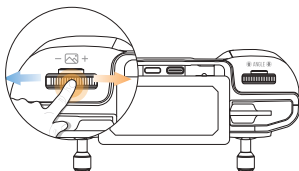


Weaker Signal:



3.1 Flight Functions >>

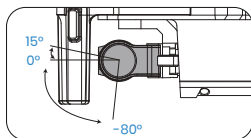
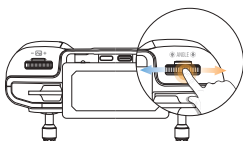
Zoom



To zoom in, scroll the zoom dial (-📷+) to the right. The LCD screen displays **"ZOOM IN."**

To zoom out, scroll the zoom dial (-📷+) to the left. The LCD screen displays **"ZOOM OUT."**

Gimbal Dial



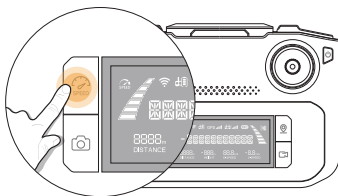
The 3-axis gimbal stabilizes the camera, allowing you to capture clear, stable images and video. The control tilt range is -80° to 15° . Use the gimbal dial (📷 ANGLE 📷) to control the tilt of the camera.



To enable or disable the gimbal upward-tilt function, go to Flight Settings (⚙️) > Parameter in the app.

3.1 Flight Functions >>

Speed Switch



Short press the () button once to switch speed.



The normal mode is the default setting.

• Low:



The transmitter beeps once. The LCD screen displays "**CAMERA MODE**" ().

• Middle:



The transmitter beeps twice. The LCD screen displays "**NORMAL MODE**" ().

• High:



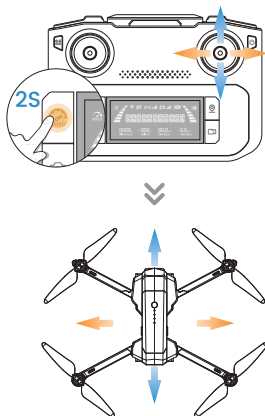
The transmitter beeps 3 times. The LCD screen displays "**SPORT MODE**" ().

3.1 Flight Functions >>

Cruise Control

The cruise control function locks the current joystick input, allowing the drone to maintain a constant speed and direction.

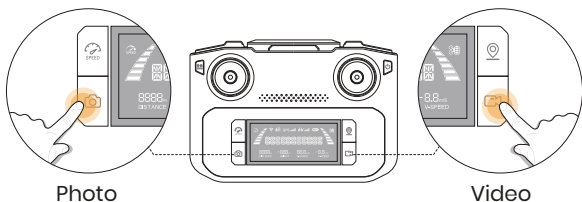
- 1 ACTIVATING:** During flight, push the right joystick in the desired direction and then press and hold the () button. The drone will automatically continue flying at the current speed and direction, and you may release the joystick.
- 2 DEACTIVATING:** To exit cruise control, press the () button again—either a short or long press will work.



Cruise control can only be activated when the flight altitude exceeds 50 ft.

3.1 Flight Functions >>

Photo/Video

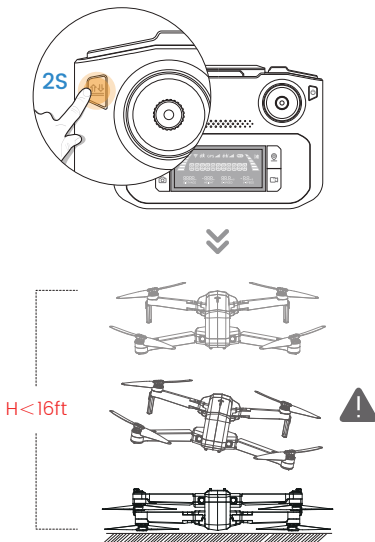


- 1 Short press the () button on the transmitter. The (**REC**) on the LCD screen flashes once, which means that you have successfully taken a photo.
- 2 Short press the () button on the transmitter. The (**REC**) on the LCD screen starts to blink, which means the camera is recording. Short press the button again will stop video recording.

 During the recording, the "Take Photo" function is disabled.

3.1 Flight Functions >>

Emergency Stop



Hold the () button for 2 seconds to use Emergency Stop. This function only works when the drone's altitude is lower than 16 ft.

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

3.1 Flight Functions >>

Return to Home

- The Return to Home (RTH) function brings the drone back to the recorded Home Point. This function can only be triggered when the drone is in GPS mode.
- The drone's default home point is the location where it first receives a strong GPS signal (When this occurs, the GPS signal strength (GPS ) will be on the LCD screen is full and glowing). The drone will record its takeoff position at that moment as the home point. During flight, if the drone lands at a new location, the position of the next takeoff will become the newly recorded home point.

*** RA: the Return Altitude set in the app setting.
(The default RA is 65 ft.)**

1 Smart RTH:

Short press the () button to activate Smart RTH. The drone will fly back to the last recorded Home Point. During Smart RTH, the transmitter will keep on beeping. Short press the () button again to exit Smart RTH.

2 Failsafe RTH:

The Failsafe RTH will be activated when:

1. The drone receives a strong GPS signal; and
2. There is a pre-recorded Home Point; and
3. The connection between the transmitter and the drone is lost; and
4. The compass has no interference.

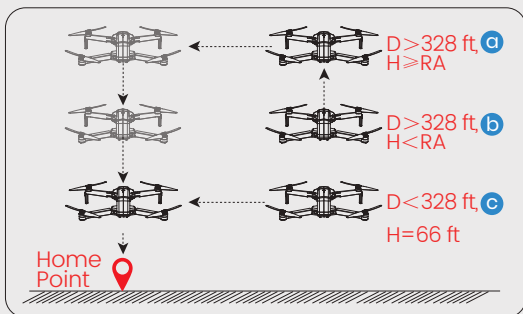
Once the Failsafe RTH is activated, the drone will start to fly back to the pre-recorded Home Point automatically. If the connection between the drone and the transmitter is re-established during the Failsafe RTH procedure, the pilot can manually end the RTH procedure by pressing the () button again, thus regaining control of the drone.

3.1 Flight Functions >>

Return to Home



The following are three possible returning procedures for Smart RTH and Failsafe RTH:



1 Flight distance $> 328 \text{ ft}$

(a) Flight altitude $\geq RA$: When the drone's current altitude is higher than or equal to RA, the drone will maintain its current altitude, fly back above the Home Point, then descend to the ground.

(b) Flight altitude $< RA$: When the drone's current altitude is lower than RA, the drone will first ascend to RA, fly back above the Home Point, then descend to the ground.

2 Flight distance $< 328 \text{ ft}$

(c) When the flight distance is less than 328 ft, the drone will be at a minimum height of 66 ft, fly back above the Home Point, then descend to the ground.

3.1 Flight Functions >>

Return to Home

3 Low Voltage RTH:

When the flight battery is too low or there is not enough power to return home, the pilot should land the drone as soon as possible to avoid damage to the drone or other hazards.

To prevent unnecessary risks due to insufficient battery power, the low voltage RTH function will be automatically triggered when the drone battery is low. According to the remaining power, there are two scenarios:

The First Stage of Low Voltage RTH: The drone will automatically return to the Home Point and land. While the drone is returning, the transmitter emits a continuous beep. The LCD screen displays "GOING HOME."

After the first low battery, you can take the initiative to cancel the return and continue the flight. This operation may cause the loss of the drone, please operate with caution.

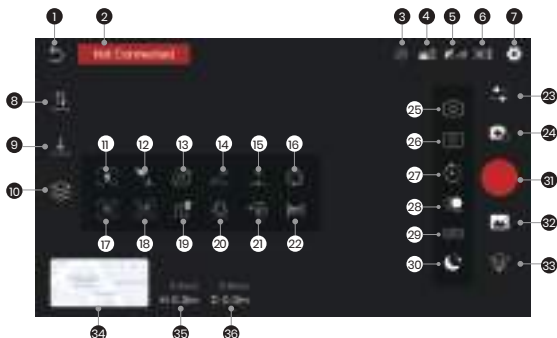
The Second Stage of Low Voltage RTH: The drone will land in place, please adjust the drone to a safe position to land.



- During the RTH procedure, the drone can NOT avoid obstacles.
- If the GPS signal is weak or unavailable, the RTH cannot be activated.
- Always keep the transmitter ON during flights. Turning it off will trigger the Failsafe RTH due to a lost connection.

3.2 APP Functions >>

The Interface



- 1  **Homepage** : Tap this icon to return to the main menu.
- 2  **System Status** : Displays the flight status and various warning messages.
- 3  **Interference Index of Compass** : Displays the current level of electromagnetic interference. "0" means no interference, "1000" means max. interference.
- 4  **Transmitter Battery Level** : Real-time display of the current battery level of the transmitter.
- 5  **GPS Signal** : Displays current GPS signal strength.
- 6  **Drone Battery Level** : Real-time display of the current battery level of the drone.
- 7  **Settings** : Tap to enter the setting interface. Alter settings for flight height/distance, return altitude, etc.
- 8  **Takeoff/Landing** : Tap the icon, follow the instructions in the prompt box to takeoff/land.

3.2 APP Functions >>

The Interface

- 9  **Return to Home** : The drone returns to the last recorded Home Point.
- 10  **Multi-functions**
- 11  **Preset Flight** : When activated, the drone will automatically adjust its orientation and flight behaviour according to preset parameters. For best results, avoid rapid motion during operation.
- 12  **GPS Follow** : The drone stays at a distance from the operator and follows the GPS position of the paired mobile phone.
- 13  **Point of Interest** : The drone flies around a point.
- 14  **Catapult** : The drone moves backward and ascends along a preset path. A recording is captured during the maneuver.
- 15  **One-key Ascension** : The drone performs a vertical ascent along a preset trajectory. A recording is captured during the maneuver.
- 16  **Portrait** : The shooting mode will turn from landscape to portrait.
- 17  **Auto Capture** : In this mode, the drone will take photos automatically when the trigger condition is met.
- 18  **Auto Recording** : In this mode, the drone will start recording automatically when the trigger condition is met.
- 19  **TapFly** : The drone flies along the flight path you draw on the screen of the mobile phone.
- 20  **Camera Filter**
- 21  **Spiral Up** : The drone ascends following a spiral trajectory. A recording is captured during the maneuver.

3.2 APP Functions >>

The Interface

- 22  **Weightless Shuttle** : The drone flies forward for a certain distance, the camera view rotates, and a video is recorded.
- 23  **Camera Settings** : Tap to access and configure camera parameters.
- 24  **Shooting Mode**
- 25  **Take Photo** : Tap to use the photo function.
- 26  **Record Video** : Tap to use the record function.
- 27  **Time-lapse** : Videos captured using this feature will be played back at a faster speed. You can select the playback rate as needed.
- 28  **Slow Motion** : Videos captured using this feature will be played back at a slower speed. You can select the playback rate as needed.
- 29  **Panorama** : Tap to use the Panorama function.
- 30  **AI Night** : Tap to use the AI Night function.
- 31  **Shutter**
- 32  **Album** : Tap to preview photos and videos taken by the drone camera.
- 33  **Voice Recording** : Record sounds and voices with your mobile phone while shooting videos.
- 34  **Map** : Tap the Mini Map to switch between Camera View and Map View.
- 35  **0.0m/s
H 0.0m** Displays the relative altitude between the HOME point and the drone, and the vertical flight speed.
- 36  **0.0m/s
D 0.0m** Displays the horizontal distance between the HOME point and the drone, and the horizontal flight speed.

3.2 APP Functions >>

Beginner Mode

The beginner mode is the default operating mode. When in the Beginner mode:

- 1 The flight distance can not exceed 98 ft.
- 2 The flight altitude can not exceed 98 ft.
- 3 The return altitude during RTH is 66 ft.

If you want to alter the above-mentioned parameters, please first turn off the beginner mode. You can go to the "Settings" to modify these parameters.



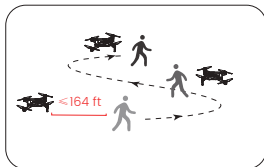
Flight Settings On APP



3.2 APP Functions >>

GPS Follow

When the GPS Follow function is enabled, the drone will track your movement by following the GPS signal on your cell-phone. (Please make sure that the connection between the drone and the transmitter is strong and stable.)



- 1 Make sure that the drone's flight distance is within 164 ft. Tap the () icon first, then select the () icon.
- 2 Follow the prompt box to enter the GPS Follow function — the drone will now follow your cellphone's coordinates.
- 3 To exit GPS Follow function, simply tap the () icon on the app interface again.

- ⚠ · The GPS Follow function can only be used if the flight distance is within 164 ft.
- Follow Me function may be difficult to activate if the mobile phone's GPS signal is too weak. This could be caused by signal interference from surrounding buildings, trees, mobile network congestion etc.
- Please use this function in an open area and be mindful of your surroundings. The drone is NOT equipped with obstacle avoidance.

3.2 APP Functions >>

Point of Interest

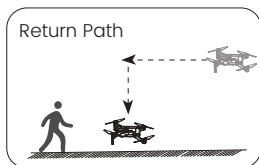
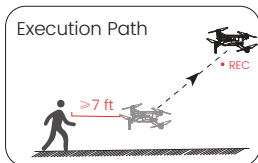


- 1 Tap the () icon first, then select the () icon, and follow the prompt box to activate the Point of Interest function.
- 2 Tap the () icon again, or push the right joystick to exit this function.

 Make sure there is no obstacles or people in the flight path of the drone. In case of emergency, push the right joystick to exit Point of Interest.

3.2 APP Functions >>

Catapult

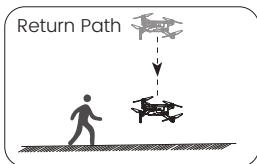
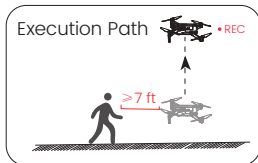


- 1 Tap the () icon, then tap the () icon to activate the Catapult function.
- 2 The drone will automatically start video recording during this function.
- 3 After the Catapult is completed, the drone will automatically return to its starting point.
- 4 You can exit the Catapult function at any time by tapping the () icon again or by moving the right joystick.

! Make sure there is no obstacles or people in the flight path of the drone. In case of emergency, push the right joystick to exit Catapult.

3.2 APP Functions >>

One-key Ascension



- 1 Tap the () icon, then tap the () icon to activate the One-key Ascension function.
- 2 The drone will start recording and climb 49 ft upwards.
- 3 After the One-key Ascension is completed, the drone will automatically return to its starting point.
- 4 You can exit this function at any time by tapping the () icon again or by moving the right joystick.

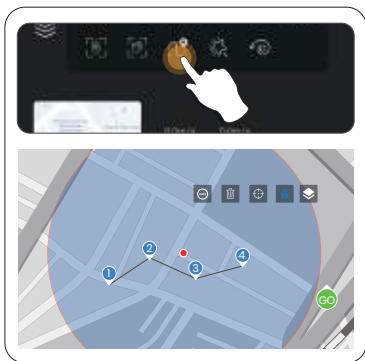


Make sure there is no obstacles or people in the flight path of the drone. In case of emergency, push the right joystick to exit One-key Ascension.

3.2 APP Functions >>

TapFly

When using the TapFly, it is recommended to enlarge the map before drawing the flight path.

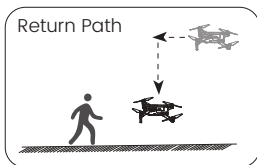
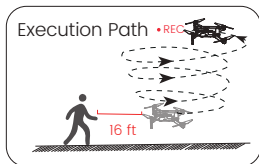


- 1 Tap the () icon, then Tap ().
- 2 You can tap a dozen of times (but no more than 16) on the phone screen to create a flight path. Hit "GO" to submit the route. The drone will then fly along the path created by connecting the points you tap in order.
- 3 You can exit TapFly by tapping the () icon again, or pushing the right joystick in any direction.

- ⚠ DO NOT fly the drone towards people, animals, or small/thin objects (e.g. tree branches and power lines) or transparent objects (e.g. glass or water).
- The actual flight path and the path you draw may not align perfectly.

3.2 APP Functions >>

Spiral Up



- 1 Tap the () icon, then tap the () icon to activate the Spiral Up function.
- 2 The drone will automatically ascend and circle around (max. radius: about 49 ft) and start recording.
- 3 After the Spiral Up is completed, the drone will automatically return to its starting point.
- 4 You can exit this function at any time by tapping the () icon again or by moving the right joystick.

 Make sure there is no obstacles or people in the flight path of the drone. In case of emergency, push the right joystick to exit Spiral Up.

3.2 APP Functions >>

Time-lapse



- 1 Tap the () icon, then tap () to use time-lapse shooting.
- 2 Swipe to choose the video playback speed, tap again to confirm.
- 3 Tap the shutter (), the time-lapse shooting begins.
- 4 Tap the shutter () again to stop recording.

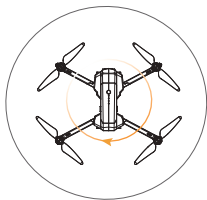
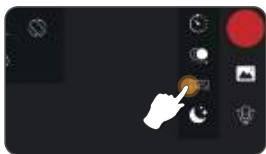
Slow Motion



- 1 Tap the () icon, then tap () to use slow motion shooting.
- 2 Swipe to choose the video playback speed, tap again to confirm.
- 3 Tap the shutter (), the slow motion shooting begins.
- 4 Tap the shutter () again to stop recording.

3.2 APP Functions >>

Panorama



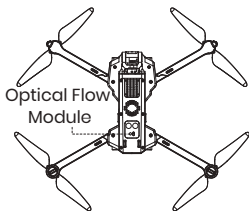
- 1 Tap the () icon, then tap () to use the Panorama function.
- 2 Tap the shutter ().
- 3 The drone will maintain its current position and rotate. A panorama picture is then auto-generated and saved to the album. A prompt box will pop up when this is done.



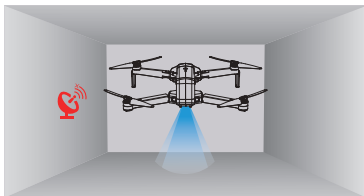
- Use the panorama function in open areas with sufficient light and strong GPS signal.
- Avoid shooting in strong wind, rain, or low-light conditions.
- Keep the drone stable during the panorama process and avoid manual interference.

3.3 Stabilization Function >>

Optical Flow Positioning



The Optical Flow Positioning System consists of a camera module, which acquires the position information of the drone through visual images to ensure precise positioning of the drone.



The Optical Flow Positioning System is typically used in an indoor environment when the GPS signal is weak or unavailable. The optimal usage height for Optical Flow Mode is **1.6–9.8 ft**.

When operating in low-light conditions, long press the () button on the transmitter to activate the fill light, thereby enhancing the image positioning function.

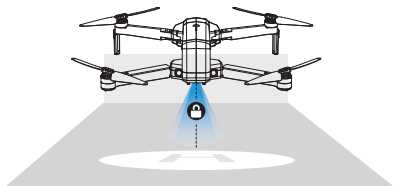
 The precision of the Optical Flow Positioning System is easily affected by the light intensity and features of the surface textures. Once the image sensor is not available, your drone will switch on the altitude-hold function automatically. Please exercise utmost caution when operating the drone under these circumstances:

3.3 Stabilization Function >>

Optical Flow Positioning

- Fly over surfaces without clear patterns or textures.
- Fly over extremely dark or bright surfaces.
- Fly in an area where the lighting changes dramatically and frequently.
- Fly over moving surfaces or objects. (e.g., above crowds, above bushes or grasses swayed by strong winds).
- Fly over water or transparent surfaces.
- Fly over highly light reflective surfaces. (e.g., mirrors).
- Fly over monochrome surfaces (e.g., pure black, red, or green).
- Flying over surfaces with repeating identical patterns or textures (e.g. tiles with the same design).
- Flying speed should be controlled not to be too fast.
- Keep sensors clean at all times.
- DO NOT scratch or tamper with the sensors. DO NOT use the aircraft in dusty or humid environments.
- Make sure that the light is bright enough and the surface is with clear textures so that the Optical Flow Positioning can acquire the movement information through recognizing the ground textures.

Altitude-Hold Function



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

4.1 Specifications >>

• DRONE:

Model: T60A	Weight: 666 g/ 23.5 oz
Max Flight Time (per battery) : 45 minutes (in a windless environment)	
Max Flight Height: 394 ft/ 120 m	Max Wind Speed Resistance: 7.9 m/s
Max Takeoff Altitude: 9842 ft/ 3000 m	
Operating Temperature Range: 32° to 104°F (0° to 40°C)	
Size: 196*110*78 mm (folded)	409*473*78 mm (unfolded)

• DRONE BATTERY:

Model: DS 7544128-3S	Capacity: 3500 mAh
Voltage: 11.1 V	Rated Power: 38.85 Wh
Charging Time: about 80 minutes	
Battery Type: Lithium-ion Polymer Battery	
Charging Temperature Range: 41° to 104°F (5° to 40°C)	

• TRANSMITTER:

Operating Frequency: 5745-5825 MHZ	Charging Time: about 2 hours
Max Flight Distance: 32808 ft/ 10000 m (outdoor and unobstructed)	Usage Time: about 2.5 hours
Operating Temperature Range: 32° to 104°F (0° to 40°C)	
Battery Type: 7.4V 1100mAh Lithium-ion Polymer Battery	

4.1 Specifications >>

• GIMBAL:

Stabilization: 3-axis (tilt, roll, pan)

Controllable Range: about -80° to 15°

Mechanical Range: Tilt -100° to +70° , Roll -35° to +35° , Pan -15° to +15°

• CAMERA:

Operating Frequency: 5745-5825 MHZ

Max Transmission Distance: 32808 ft/ 10000 m (outdoor and unobstructed)

Photo Resolution: 8000×6000P

(when stored in TF card)

3840×2160P

(when stored in cellphone)

Video Resolution: 3840×2160P@30fps

(when stored in TF card)

1280×720P@30fps

(when stored in cellphone)

Photo Formats: JPEG

Video Formats: MP4

Supported TF Cards: Supports a TF Card with capacity of up to 256 GB
(Class 10 or above)

Supported File Systems: FAT32

4.2 Contact Information >>

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



support@toflect.com



+1 (888) 885-5229

4.3 Troubleshooting >>

Issue	Possible Causes	Suggested Solutions
Gimbal cannot be adjusted.	Gimbal protection activated due to not removing the gimbal cover before powering on.	Ensure the gimbal cover is removed before powering on.
	Drone is not in a level position.	Place the drone on a level surface before turning it on and wait for the gimbal to complete its self-check.
	In compass calibration mode.	The gimbal doesn't function during compass calibration. After calibration, place the drone on a level surface and wait for the gimbal to stabilize and re-center.
	Drone placed on uneven surfaces like grass or sand.	Position the drone levelly on a landing pad or switch to another even surface. Ensure there's ample space below the gimbal and avoid obstacles that might affect its stabilization.
Unstable flight or abnormal posture.	GPS signal instability due to flying near buildings or in areas with obstructions.	Operate the drone in open spaces free from obstructions.
	Compass interference	1. Manually land the drone immediately and recalibrate the compass. 2. Try operating in a different location, ensuring you're away from buildings, power lines, and signal towers.
	The propellers are bent or deformed.	Replace with new propellers.
Video lag or limited transmission range	Interference with the video transmission signal.	Operate the drone in open areas away from potential obstructions like buildings, power lines, and towers to minimize interference.
	The transmitter and mobile device are not oriented towards the drone.	Ensure the transmitter and mobile device are facing the drone's direction to optimize signal strength.
	Overly rapid joystick movements during flight control.	Use gentle, steady joystick movements during flight.
	Phone performance issues.	Close any unused apps running in the background to optimize your phone's performance.

4.4 Compliance Information >>

FCC Notice :

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

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

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

https://www.tofect.com/Download/US/T60A_FCC_sDoC.pdf

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.

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

RF Exposure :

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

This equipment complies with FCC/ISED radiation exposure limits set forth for an uncontrolled environment. End user must follow the specific operating instructions for satisfying RF exposure compliance. This transceiver must not be co-located or operating in conjunction with any other antenna or transceiver.

The portable device is designed to meet the requirements for exposure to radio waves established by the FCC/ISED. These requirements set a SAR limit of 1.6 W/kg averaged over one gram of tissue.

4.4 Compliance Information >>

IC Statement :

This device contains licence-exempt transmitter(s)/receiver(s) that comply with Innovation, Science and Economic Development Canada's licence-exempt RSS(s). Operation is subject to the following two conditions:

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

L'émetteur/récepteur exempt de licence contenu dans le présent appareil est conforme aux CNR d'Innovation, Sciences et Développement économique 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;
- (2) L'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

CAN NMB-003 (B) :

RF Exposure

Radiation Exposure Statement:

This equipment complies with IC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with a minimum distance of 20cm between the radiator & your body.

Déclaration d'exposition aux radiations:

Cet équipement est conforme aux limites d'exposition aux rayonnements IC établies pour un environnement non contrôlé. Cet équipement doit être installé et utilisé avec un minimum de 20 cm de distance entre la source de rayonnement et votre corps.

Manufacturer Information :

Manufactured by Zhangzhou Xiangcheng Rongqu Duo Tech Co., Ltd.

Address: Rm 102, Bldg 7, Zhengrong Mansion, No. 6 Xiyuan Rd, Xiangcheng Dist., Zhangzhou, Fujian, China

+1 (888) 885-5229



MADE IN CHINA(CN)

Tofect