9105 QUADCOPRER WITH CAMERA

Instruction Manual

Please read caregully before use!

Technical Data

Size:	335x335x80mm
Weight:	106g
Recommended Age:	8 years & up
Field of use:	indoor and outdoor
Battery:	3.7v LiPo; 600mAh
Controller:	2.4GHz
Remote Control Distance:	approx.80 meter
Battery Charging Time:	approx.60-80 minutes
Playing Time:	approx.8-10 minutes

Play Features:
Forward / Backward; Up / Down; Left / Right Turn; Left Side / Right Side Move; Hover; Photo / Video; 360˚ Flip; High / Low Speed Control; Light Control

SAFETY ADVICE:

WARNING:

NOTE THE FOLLOWING ADVICE,
TO AVOID DAMAGES AND SHORTCUTS:
ONLY USE RECOMMENDED SPARE PARTS
DO NOT DISSAMBLE THE PRODUCT
INNER PARTS CAN BE REPAIRED BY THE USER.
PLEASE CONTACT QUALIFIED STAFF IF YOU ARE NOT FAMILIAR WITH RC-MODELS.

BATTERY WARNING - LI BATTERY

* Mishandling the battery may cause explosion, fire and smoke including damage to health or goods.It will also reduce battery performance.
* Never charge a damaged LiPo battery pack. Stop charging if the LiPo battery pack is getting deformed.
* Charge and store the LiPo battery pack at a temperature between 0˚C to 40˚C. Avoid a temperature higher than 50˚C when discharging.
* Do not short circuit - risk of explosion and fire!
* The battery must be charged with the charger provided.
* Do not overcharge the battery. Pull out the charger after the battery is fully charged to avoid overheating.
* Pull out the plug immediately if the charger has smell, noise or smoke.
* In case of battery leak, avoid touching the liquid. Wash immediately with soap and wateron skin contact.
* Do not discard LiPo battery in the fire. Keep battery away from liquid, rain or damp places.
* Do not attempt to disassemble, drill or cut up the battery.
* Never attempt to clean the charger with dissolvent, industrial alcohol or other flammable solvent.
* Pull out the batteries before extended storage.

This product uses LiPo batteries. LiPo batteries are recyclable, and a valuable resource. To dispose of the battery, remove it and take it to a resource recovery facility.

PRODUCT CONTENT:

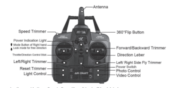
Please check the content before using the product!

1xQuadcopter

For using,you will additionally require 6 AA-batteries

Setup and functions

Controller

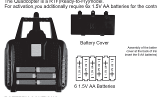


By pressing the reset button, all controller settings (trims) will be deleted.
In order to optimally balance the model in the air, you can adjust the attitude by pressing the trim buttons.

Please note!
Do not fly if there are people, animals or obstacles nearby!
Do not fly at strong wind or bad weather!
Make sure that you are allowed to fly in the selected area!
Always switch on the controller at first and make sure it is always switched on during use. Do not switch off before the model is switched off!

BATTERY INSTALLATION OF CONTROLLER

Read this manual carefully.
The Quadcopter is a RTF(Ready-to-Fly)model.
For activation,you additionally require 6x 1.5V AA batteries for the controller.

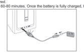


BATTERY CAUTIONS:
* Do not use rechargeable batteries.
* Do not attempt to recharge non-rechargeable batteries.
* Insert batteries as marked and always follow the toy & battery manufacturer's instructions.
* Use only the same or the equivalent type of battery as recommended.
* Do not short-circuit the supply terminal.
* Do not mix old & new batteries. Do not mix different kinds of batteries such as alkaline, standard (carbon-zinc) or rechargeable (nickel-cadium).
* Always remove exhausted or dead batteries from the product.
* Remove batteries from the product before extended storage.

Charging the battery

You can charge the LiPo-battery with the supplied USB cable.

Plug the charger to a USB port / USB-power adaptor.
Connect the LiPo battery to the charger. Check the polarity and also that the plug is firmly connected.
The USB plug lights up in red.
Charging takes around 60-80 minutes. Once the battery is fully charged, the LED will shut down.

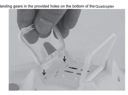


Please only use the original battery, as batteries from another supplier might use another polarity!

Mounting the landing gears and propeller guards

Only a few steps are required to start flying.

Put the two landing gears in the provided holes on the bottom of the Quadcopter



To mount the propeller guards, please follow these steps:
-Turn out the screw from the bottom of each arm
-Now place the rotor protection
-Turn in the screw again

Inserting the battery

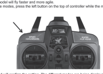
Switch on the controller. The LED starts flashing. Pull down the gas stick (left lever).

Once the battery is fully charged, insert it into the case on the bottom of the model.
Check the polarity before you connect the battery!
Close the case.
Always switch on the controller before you connect the battery!

The On/Off switch is located between the rear rotors.

Beginner and Professional mode

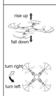
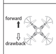
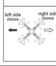
You can choose between beginner and professional mode in 4 steps. The model flies with lower speed in beginner mode. This helps you to carefully check all controls. When choosing the 3 additional modes, the model will fly faster and more agile.
To change the modes, press the left button on the top of controller while the model is already **activated**.



A beep- sound will confirm the setting. The different modes are being displayed by various sounds.

1 - Beginner
2 - Beginner plus
3 - Advanced
4 - Professional

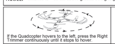
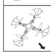
Operation Method

	FIGURE 1 1. Turn the Controller to "ON" position. 2. Place the Quadcopter on flat ground & switch it on. 3. Push the throttle control stick to downward position. 4. The Controller will automatically align frequency with the Quadcopter.	
	FIGURE 2 1. Push the throttle stick upward, the main blade will speed up rotating & the Quadcopter will fly up. 2. Push the throttle stick downward, the main blade will slow down & the Quadcopter will descend. 3. Push the throttle stick to the left, the head of the Quadcopter will turn left. 4. Push the throttle stick to the right, the head of the Quadcopter will turn right.	
	FIGURE 3 1. Push the Direction Lever upwards, the Quadcopter will fly straight forward. 2. Push the Direction Lever downards, the Quadcopter will fly backward.	
	FIGURE 4 1. Push the Direction Lever to the right, the Quadcopter will continue flying to the right. 2. Push the Direction Lever to the left, the Quadcopter will continue flying to the left.	

OPERATION GUIDES

Tips: While the Quadcopter is flying or hovering in different directions, push the throttle control stick slowly and press the trimming button at the same time to adjust the flying angles.

Notice: It is normal that the Quadcopter will become unstable when the flying distance is ~ 30 cm above ground owing to gravity.

 If the Quadcopter hovers to the left, press the Right Trimmer continuously until it stops to hover.	
If the Quadcopter hovers to the right, press the Left Trimmer continuously until it stops to hover.	
If the Quadcopter tilts to the left, press the Right Side Fly Trimmer continuously until it becomes stable.	
If the Quadcopter tilts to the right, press the Left Side Fly Trimmer continuously until it becomes stable.	
If the Quadcopter hovers backward, press the Forward Trimmer continuously until it becomes stable.	
 If the Quadcopter hovers forward, press the Backward Trimmer continuously until it becomes stable.	

OPERATION GUIDES

The default operation setting of the Controller is left hand mode.If right hand mode is required, simply push the Right Hand Mode Button upward. The operation functions of Part 1 and Part 2 will swap automatically.To reset, press the Right Hand Mode Button one more time.	
Headless Mode Button: this is the default operation setting.When this button is pushed down, rapid light flashes will replace steady flash.The Quadcopter will now fly according to the default setting, e.g. if East side is the default forward direction, it will fly East when the Forward button is pressed,or fly West when the Backward button is pressed, regardless of the current angle of the Quadcopter. If the 'headless' command is not functioning properly, press the Reset Trimmer button continuously for 3 seconds until you hear a "click" sound. The default forward direction will once again be set. Headless operation will cease when the Headless Mode Button is pressed one more time. Rapid light flashes will change back to steady flash. Special Hints: headless mode is particularly useful to call back the Quadcopter during long distance flights, when it is difficult to recognise direction.	
4 Speed Levels to accommodate various players. Each press will accompany by a beep sound to confirm the setting. Level 1 - Beginner Level 2 - Beginner Plus Level 3 - Advanced Level 4 - Professional	
360˚ Flip Button Push up - forward flip Push down - backward flip Push left - left side flip Push right - right side flip	
Reset Trimmer - press for 3 seconds, all current settings will be deleted and resume to default setting Light Control - select according to your desired operation Camera Control - control photo taking Video Control - press to take video; one more press stops recording	

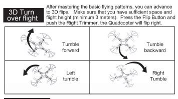
SURROUNDINGS BEFORE FLIGHT

1. INDOOR FLIGHT: please play in spacious room without any obstacle,animal or human nearby.
2. OUTDOOR FLIGHT: please play in warm, sunny and windless weather.

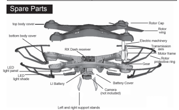
NOTE:
A. Do not play at extreme temperature: too hot or too cold weather will affect flight performance or damage the product.
B. Do not play under strong wind: it will affect flight control; the Quadcopter might get damaged or even disappear.

3D Turn over flight

After mastering the basic flying patterns, you can advance to 3D flips. Make sure that you have sufficient space and flight height (minimum 3 meters). Press the Flip Button and push the Right Trimmer, the Quadcopter will flip right.

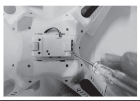


Spare Parts



CAMERA

Video- and photo recording
1. Insert a memory card (max.32GB) into the micro SD slot. Make sure that it is properly engaged.
2. Press the camera button (photo or video) on the controller to start recording. In video mode, you can stop the recording by pressing the button again.
3. Switch off the Quadcopter. Remove the memory card and insert it into the USB card reader. Open the device that is recognized by your computer. Before you playback the recording, you should copy it on your hard drive.



Camera Specifications:

30W
a. Can choose MIC to take photo and video
b. Format of photo image: 1280 x 960, JPG
Video resolution: 640 x 480; frame rate: 60 fps, AVI
Video data will be stored in the TF card (SD card - 2GB supplied).
Card memory maximum 32GB
Please read data with the card reader provided.
c. Camera: with FPC soft welding, 30W pixel chip & minimal illumination
1 Lux size: 8 x 8 MM; visual sight: 70˚±5˚

200W
d. 200W pixel photo image: 1280 x 720 / JPG / 30 FPS chip 1/4 inch HD color CMOS
Lens 4p 68˚; image area: 3864UM x 2184UM
Working voltage: DC 2.5 - 5V; effect 220MA±10%(3.7V)
Temperature: -5˚C - 55˚C RH95% max.; storage temperature: -40˚C - 85˚C RH95% max.

The power supply and the input of transmitter signal

a.Power on: turn on the power supply, the green light is on. When the red lights flash at 6 times, it will turn off, which means that it can't found the TF card(SD card) or the card is full.
b.Standby: the green light is on.
c.Video: the control line of Video in low-level can start video function and the red light will flash, while it is in low-level again, it will close the video function and store the data, then come back to stand by.
d.Photo: the control line of photo in low-level can start photo function. the red light flash, it takes three photos and in storage, then back to stand by.
e.Input voltage：3.7V～5.0V Standby mA: ≈130mA Working mA: ≈200～250mA

Troubleshooting

Error	Source	Solution
The model does not react on the commands	Controller batteries are not inserted correctly.	Check the battery
	Batteries are empty	Replace the batteries
	Model battery is empty	Charge the battery
The model makes strange sounds	Blades/ Gears are damaged	Check these and replace them if needed
The controller has no connection to the model	Weak battery	Charge the battery
	Controller batteries are empty	Replace the batteries
	Battery damaged	Replace the battery
	The model is out of range	
The model shows a weak performance	The motor is worn out	Check all motors and replace it if needed

SPECIAL NOTE:

1. The remote control distance may be affected if the Controller or Quadcopter has weak battery power.
2. The Quadcopter will be difficult to fly high in case of weak battery power.
3. If the Quadcopter is damaged or deformed, please fix it immediately. If any of the propellers is broken, do not attempt to fly.
4. Please remove batteries from the Controller before extended storage.
5. Please avoid crashing or colliding the Quadcopter during flight to avoid damages.

WARNINGS:
FCC ID: 2AEJP-SYN-2015-QDT

Changes or modifications to this unit not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.
NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 16 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 on and off, the user is encouraged to try to correct the interference by one or more of the following measures:
* Reorient or relocate the receiving antenna.
* Increase the separation between the equipment and receiver.
* Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
* Consult the dealer or an experienced radio/TV technician for help.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.
We, Synergistic Industrial Ltd, hereby declares that this R/C Quadcopter is in compliance with the essential requirements and other relevant provisions of Directive 1999/5/EC.