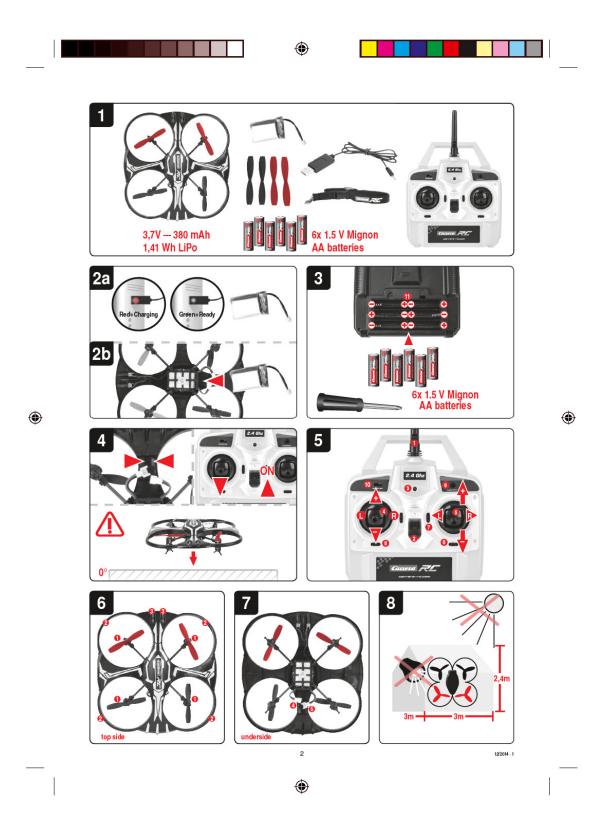


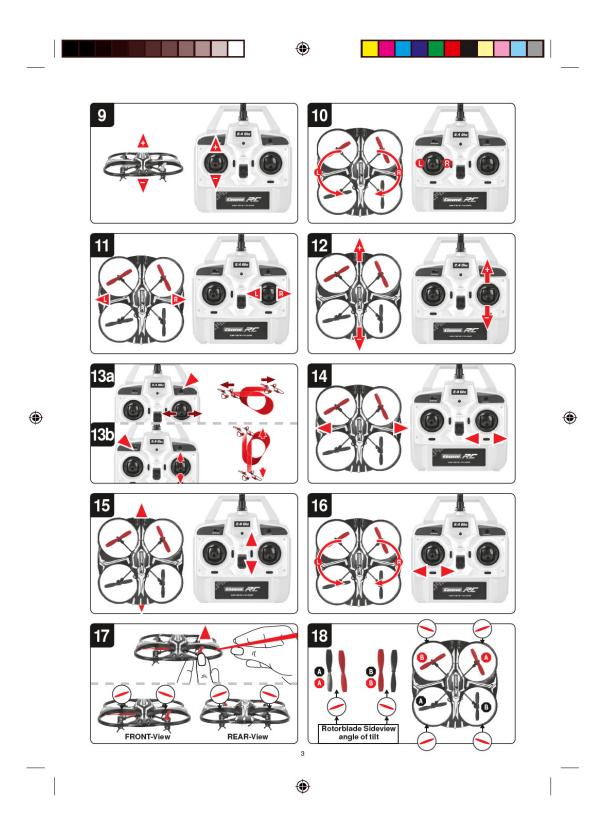
# 1.6 User Manual















#### Dear customer

Congratulation! You bought a Carrera RC Quadrocopter which has been manufactured according to today's state-of-the-art technology. As it is our constant endeavour to develop and improve our products, we reserve the right to make modifications, either of a technical nature or with to make modifications, elutier of a technical nature of winnerspect to features, materials and design, at any time, and without prior notice. For this reason, no claims will be accepted for any slight deviations in your product from the data and illustrations contained in these instructions. These operating and assembly instructions are an integral part of the product. Non-observance of these operating instructions and the safety instructions they contain will render the guar-antee null and void. These instructions are to be kept for future reference and in the event that the product is pass on to a third party.

#### Guarantee conditions

Carrera products are technically advanced products (NO TOYS) which should be handled with care. It is Important to follow the directions given in the operating instructions. All components have been subjected to careful inspection (technical modifications and alterations to the model for the purpose of product improvement are reserved). Should any faults nevertheless occur, guarantee is as-

smould any ration invertineess occur, guarantee is as-sumed within the scope of the following conditions: In accordance with the following provisions, Stadlbauer Mar-keting + Vertrieb GmbH (hereinafter referred to as "manufacturer") warrants to the endconsumer (hereinafter referred to as "customer") that the Carrera RC-model-Quadrocopter (hereinafter referred to as "product") delivered to the customer shall be free from defects in material or workmanship for two years from the date of purchase (guarantee period) not wo years from the date of purchase (guarantee period). Such defects will, at the manufacturer's option, either be repaired by the manufacturer or fixed by delivering new or refurbished parts free of charge. The warranty does not cover failure due to normal wear and lear, (e.g. to batteries, rotor blades, cabin covering, gear wheels etc.), or damage as a result of improper handling/misuse or unauthorised interference. Any other customer's claims asserted against the manufacturer, especially action for damages, shall be exclude d

excused. The contractual and statutory rights of the customer against the seller (supplementary performance, rescission of the contract, abatement, compensation) which exist with the product not having been free from defects at the time of the passing of risk, shall remain unaffected by this warranty.

Claims from this special warranty shall only be valid if: the defect reported has not arisen by damage caused by unintended use or misuse as specified in the instruction

- manual,

   the failure of the product is not due to normal wear and tear the product does not show any signs resulting from repairs or other interferences carried out by workshops not having
- been authorised by the manufacturer the product has only been operated with accessories au-thorised by the manufacturer and
- the product is sent in together with the original proof of purchase (invoice / receipt) and the completely filled in war-ranty card which has not been altered in any way. Guarantee cards cannot be replaced.

Note for EU countries: Reference is hereby made to the seller's statutory guarantee obligation, to the extent that this guarantee obligation is not restricted by the product guar-

The manufacturer shall bear the costs for sending in and returning the product. This warranty shall be valid to the extent aforementioned and

under the above-named circumstances (including the submittal of the original proof of purchase also in case of resale) for any future owner of the product.

### Declaration of conformity

Stadlbauer Marketing + Vertrieb GmbH hereby declares that this model including the controller conforms with the fundamental requirements of the following EC directives: EC Directives 2009/48 and 2004/108/EC regarding electro-magnetic compatibility and the other relevant regulations of Directive 1999/5/EC (R&TTE).

The original declaration of conformity can be requested from





WARNING! This toy contains small parts which can be swallowed and is therefore not suitable for children under 3 years of age.

suitable for children under 3 years of age.

WARNINGI Danger of pinching during operation! Remove all packaging materials and wire fastenings before handing the toy over to the child. For information and to answer any questions, please retain packaging, address and instructions in a safe place for future reference. Adult supervisors note: please check that the toy has been assembled in accordance with the instructions, embly should be carried out under the supervision

Only sultable for children over the age of 8!
This product is not inlended for use by children without supervision of a parent. Flying the Quadrocopter requires skill and children must be trained under the direct supervision of an adult. Read the user's information together with sort of an adult. Plead the user's minormation together with your child Before the first use. Inappropriate use may result in severe injuries and/or damage to property. It has to be operated with care and caution and requires both mechanical and mental skills. The operating instructions

contain notes on safety and technical regulations as well as information on maintaining and operating the product. It is indispensable to read these instructions thoroughly before the first usage. Only this helps to avoid accidents with inju-ries and damage.

ries and damage.
Only use the Quadrocopter in closed rooms which provide sufficient space and follow all instructions given in this manual. Hands, hair and loose clothing, including other objects such as pens and screwdrivers must be kept away from the propeller (rotor). Do not touch the rotating ro tor. Especially take care that your hands DO NOT get close to the rotor blades!

WARNING: Risk of eye injuries. Do not fly near your face

to avoid injuries.

As user of this product you are solely responsible for handling it safely in order to ensure that neither you nor other persons or their property suffer damages or are

- Never use your model with weak remote control batteries.
- · This toy is only designed to be used in a home environ-
- Avoid busy areas. Always make sure that there is enough
- space.

  Do not use your model on an open street or in public areas.
- in order not to endanger or hurt anyone.

  WARNING: Do not start up and fly when pe animals or any obstructions are within the flying range
- of the Quadrocopter.
  Exactly observe the instructions and warnings for this product and for any possible additional equipment (battery charger, excharged be tattiers etc.) being used by you.
  Should the Quadrocopter come Into contact with any living fining or soll object, immediately return the gas control to zero, in other words the left-hand joystick
- must be at the stop at the bottom of the slide!

  Make sure that all chemicals, small parts and electrical components are out of childrens' reach.

  • Avoid any moisture as this might do damage to the elec-
- tronics.

   There is a risk to suffer severe injury or even death if you put parts of your model into your mouth or lick them.

   WARNING: there is danger of strangulation if you hang the larryard around your neck!
- Do not change or modify anything on the Quadrocopter.

If you do not agree to these terms please immediately return the complete Quadrocopter model in new and unused condi-tion to the retailer.

#### Important Information concerning Lithium Polymer rechargeable batteries

Lithium-Polymer (LiPo) rechargeable batteries are sig-nificantly more sensitive than traditional alkali- or NiMH-reniticatily more sensitive than traditional aikal- or NMH-re-chargeable batheries normally used with radio control units. Therefore the instructions and warnings have to be observed in detail. In case of improper use of LIP or echargeable batter-ies there is a danger of the. Always follow the manufacturers' instructions if you dispose of LIP or echargeable batteries.

#### Regulations on disposal for waste electrical and electronic equipment (WEEE)

tronic equipment (WEEE)

This symbol, showing refuse bins with a cross through them, denotes that empty batteries, recharge able battery packs, equipment batteries, disused electrical

equipment, etc. should not be disposed of in domestic refuse, as they are harmful to the environment and health. tiles, as they are namful to the environment and health and talk to your children about the correct disposal of used batheries and disused electrical equipment. Batteries and disused electrical equipment should be handed in to the usual collec-tion points where they can be properly recycled. Do not mix disamilar battery types or employ new and used batteries together. Empty batteries should be removed from

the product. Do not attempt to recharge non-rechargeable

WARNING!

The charger unit and the USB cable may be used by children eight (8) years and upwards and by persons with with restricted physical, sensory or mental faculties, inexperience or tack of knowledge provided they are supervised or have been a dequalely trained in the sale use of the unit and have a proper understanding of the dangers (1996s. Children must not be allowed to treat the charger or the USB cable as a toy. Cleaning and user maintenance may only be carried out by children they are over eight years old and supervised. Children under eight years old must be kept away from the charger and the connecting cable. Never leave the battery unattended while it is charging. Exhauset obtainers are to be removed from the toy. Rechargeable batteries should be removed from the product before charging. Supply terminal are not to be short-circuited. Only use the batteries recommended or equivalent types.

If in regular use the charger must be examined for damage

menced or equivalent types. If in regular use the charger must be examined for damage to the cord, plug, covers and all other parts. If any signs of damage are found the charger may only be used again after repair work has been completed.

## FCC statement

authority to operate the equipment.

This device complies with Part 15 of the FCC Rules.

This device complies with Part 1s of the F-CC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful inherbrence, and (2) this device must accept any inherbrence received, in-cluding interference that may cause undesired operation. Changes or modifications not expressly approved by the party responsible for compliance could void the user's

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Guidelines and warnings for the use of LIPo rechargeable batterie

- able batteries

  You have to charge the attached 3.7 V == 380 mAh/1,41 Wh
  LiPo rechargeable battery in a safe place and at a safe
  distance to flammable material.

  Never leave the battery unattended while it is charging
- . After a flight, the rechargeable battery has to cool down to the ambient air temperature before charging it.
- Vou must always use the corresponding LIPo charging unit (USB cable / remote control). In case of non-compliance with these directions there is a danger of fire resulting in a health risk and/or damage to property. NEVER use any
- the battery charger.
   Should the rechargeable battery swell or deform while discharging or recharging, you have to immediately stop-charging or discharging the latery. Take the battery out as quickly and carefully as possible and place it in a safe as quickly and carefully as possible and place it in a safe and open area offsice any inflammable material and watch it for at least 15 minutes. In case you continue charging or discharging a battery which has already started to swell or deform there is a danger of fire Even in case of slight deforming or ballooning the rechargeable battlery has to be taken out of operation.
- Store the rechargeable battery at ambient temperature in a
- dy place.

  Always recharge the battery Immediately after use to prevent its becoming deep discharged. Please make sure to allow a pause of about 20 minutes between finishing the fillight and recharging the battery. Recharge the battery occasionally (suggested every 2-3 months). Failure to treat the battery as described above can lead to its becoming defective.
- When transporting or temporarily storing the rechargeable battery the temperature should be between 5-50°C. If pos-sible, do not store the battery or the model in a car and do not expose it to direct sunlight. In case the battery is broiled. it can be damaged or catch fire.

Note: If the battery voltage/output is low you will recognise that a considerable trim and/or controlling is necessary to avoid that the Quadrocopter starts trundling. This usually occurs before reaching a battery voltage of 3 V and it is a good moment to end the flight.

## Contents of package



- 1x Quadrocopter 1x Controller
- 1x USB charging cable
  1x Rechargeable Battery
  1x Lanyard
  1x Set of replacement parts

- 6x 1.5 V Mignon AA batteries
- (non-rechargeable)

# Recharging the LiPo rechargeable

Make sure you only charge the LiPo rechargeable battery supplied with the LiPo charging unit also supplied (USB ca-ble and remote control). If you try to charge the rechargeable tie and remote control, in you my to charge the rechargeable batery with a different LIPO battery charger or any other bat-tery charger, this might cause serious damage. Please care-fully read the previous chapter with warnings and guidelines on the usage of rechargeable batteries before proceeding. Supply terminals are not to be short-circuited.

You can charge the rechargeable battery fitted in the Quad-rocopter with its USB charging cable from a USB port on a



Charging via computer:

• Rechargeable batteries are to be removed from the model before being charged.

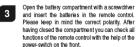
• Connect the USB charging cable with the USB port of a computer. The LED on the USB charger cable lights green indicating that the charger unit is correctly connected to the computer. If you plug in a Quadrocopter with a discharged batbry, the LED on the USB charging cable lights up red and shows that the Quadrocopter battery is being charged. The USB charging cable and the charging socket on the Quadrocopter are designed to make incorrect connection impossible

 It takes about 60 minutes to recharge a dis-charged battery (but NOT a deep-discharged one). When the battery is fully charged, the LED display on the USB charger cable lights up green again.

Note: when supplied, the lipo-battery is already partially charged. So the first charging cycle may well take less

It is essential to follow the connection sequence given above! If you have the charger cable only connected to the quadrocopter, and not to a source of electricity, a green LED display indicates that there is still power in the battery. The green LED display does not necessarily indicate the battery is still adequately charged. Undo the plugged connection on the Quadrocopter Alliure to observe this precaution may cause battery damage!

# Inserting the batteries in the remote control



With the power switch turned ON and functioning correctly, the top centre LED on the remote control will light up red.
When the control LED flashes rapidly, the batter

ies in the controller must be changed.

# Frequency bind between model and remote control



The Carrera RC Quadrocopter and the remote control are frequency bound at purchase. If initially there are any problems with communication between the Carrera RC Quadrocopter and the remote control, please carry out a new frequency bind.

- Connect the battery in the model.
   The LEDs on the quadrocopter now flash rhyth-

- mically.

  Switch on the controller at the power switch.

  Push the left hand joystick, i.e. the throttle left hand joystick is the power switch. right to the top, then fully downwards into the
- The binding has now been successfully estab-lished. The LED on the controller now lights con-
- WARNING! Immediately after switching it on, place the Quadrocopter on a flat and level surface. The gyro-system will then set itself

# Range of functions of the remote control



- Power switch (ON / OFF)
   Control LED
- Gas
- Circling 5. Forwards / backwards
- right / left banking
  6. Trimmer for right / left banking
  7. Trimmer for forwards / backwards
  8. Trimmer for rotation
- 9. Looping Button

#### 10. Beginner/Advanced switch (30% / 60% / 100%) 11. Battery compartment 3

### Description of the Quadrocopter



- 1. Rotor system
- Rotor protection cage
   LEDs



4. Battery cable
 5. Quadrocopter connecting plug

### Choosing the flight area



When being prepared for the first flight you should choose a closed room which is as large as possible without any persons or obstacles. Due to its size and controllability, experienced pilots may be able to fly the Quadrocopter in relatively small rooms. For your first flights we strongly recommend you choose a room with a minimum floor space of 3 x 3 metres and 2.40 metres in height. After having trimmed your Quadrocopter for flight and made yourself familiar with the control-ler and its functions you may start flying in smaller and less open environments.

The Quadrocopter has been developed exclusively for use in enclosed rooms without direct sunlight or any strong spotlighting. There must be no persons or objects such as pillars between the controller and the Quadrocopter to obstruct direct connection.

#### Checklist for flight preparation

This checklist is not a substitute for the contents of the open This checkists is not a substitute for the coments of the operating instructions. Although it can be used as a quick-start-guide, we strongly recommend you first to read the operating instructions in detail before you proceed.

- Check the contents of the package.
   Connect the charging unit to the source of power.
   Charge the lipo-battery as described in the section "Recharging the LiPo rechargeable battery".
   FIR 6 A batteries in the controller, making sure their polar-liks correct.
- It is A batteries in the controller, making sure their polarity is correct.

   Look for a suitable environment for flying.

   Slide the battery into the battery bay on the bottom of the Cuadrocopter. [23]

   Connect the battery in the model.

- WARNING! Immediately after switching it on, place the Quadrocopter on a flat and level surface. The gyro-
- Quadrocopter on a flat and level surface. The gyro-system will then set Itself automatically.

   The LEDs on the quadrocopter flash red.

   Switch on the controller at the ONOFF switch. Be sure to check the Beginner-Advanced switch (ED). Push the left-hand joystick, i.e. the throttle lever, right to the top, then
- servicing bysics, i.e. or include sever, injoin one op, user intilly downwards into the zero position.

  \*Allow the Quadrocopter a few moments until the system is correctly initiated and is ready for operation. The LED in the Quadrocopter now lights continuously. The LED on the controller now lights continuously.

  \*\*Repeat the above points as required, if you wish to fly more Quadrocopters at the same time.

  \*\*Check the control existem.\*\*

- Check the control system.
   Make yourself familiar with the control system.
- Manay outside national ratin the octional system of the first the Quadrocopter as necessary as described under [3] [13] [6] so that when hovering it no longer moves from the spot without a command from the controller.

   The Quadrocopter is now ready to be flown.

   If the Quadrocopter displays no functions, retry the above binding procedure.

   Fy the model.

- Land the model.
- Disconnect the battery plug connection.
   Always switch off the remote control last.



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### Flying the 4-channel Quadrocopter

Take care particularly in the first few flights to move the lever on the controller very gently and not over-hurriedly. As a rule, only very small movements of the respective levers are necessary to carry out the desired

If you notice that the Quadrocopter moves forwards or to the side without your touching the respective lever, please adjust the trim of the Quadrocopter as described in (14 15 16).



+/ Gas (up / down)
 To start or to fly higher, push the gas lever on the left cautiously forwards. To land or fly lower, push the gas lever on the left cautiously backwards.



To make the Quadrocopter circle to the left or the right on the spot, move the lever on the left cautiously to the left or the right.



To fly the Quadrocopter to the left or the right, push the lever on the right cautiously to the left or the right. To fly the Quadrocopter forwards or backwards.



push the lever on the right cautiously forwards or backwards.

### Looping function

### WARNING! ONLY FOR EXPERIENCED PILOTS!



When you press the looping button, an audible signal sounds until you move the right-hand joystick either up or down, or right or left. The Quadrocopter then carries out the loop or roll in the respective direction. Before you do this, make sure you have ample room on all sides (about 2.5 m.=8"). 2.5 m - 8°).

## Beginner/Advanced switch

## WARNING! 100 % IS ONLY FOR EXPERIENCED PILOTS!



30 % = beginner mode Signal sounds once on switching over. Looping the loop and rollovers are possible as explained in [83].

60 %= medium mode
The quadrocopter reacts more sensitively than in 30 % mode. Signal sounds twice on switching wer. Looping the loop and rollovers are possible as explained in [33].

## 100 % = advanced mode -> 3D mode.

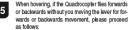
The Quadrocopter reacts very sensitively to joy-stick movements. Signal sounds three times on

## Trimming the Quadrocopter



When hovering, if the Quadrocopter flies to the left

when noveming, in the culcular cooper has so the left or right without you moving the lever for left / right movement, please proceed as follows: If the Cuedrocoper moves on its own last or slow sideways to the left, press the lower right trimmer for right / left tilt in steps to the right. If the Cuedrocopter moves of sight, press the trimmer for right / left tilt in steps to the left.



as rollows:
If the Quadrocopter moves on its own fast or slow forwards, press the upper right trimmer for forwards / backwards in steps downwards. If the Quadrocopter moves backwards, press the trimmer for forwards / backwards in steps upwards.

When hovering and without you moving the lever for circling on the spot, if the quadrocopter rotates to left or right, proceed as follows: If the quadrocopter rotates quickly or slowly to the left around 16 its own axis, press the trimmer for rotation below left in steps to the right. If the quadrocopter rotates to the right, press the trimmer for rotation in steps to the left.

# Changing the rotor blades



Use a smooth narrow object to help draw off a rotor blade if necessary. Make sure that you draw the rotor blade with great care vertically upwards, and hold the motor from below to stabilise it.

# 18

WARNING! Be sure to note the marking and colour, also the tilt angle of the rotor blades! angle of the rotor blades! Front left: red – marking "B" Front right: red – marking "A" Rear right: black – marking "B" Rear left: black - marking "A"

### Troubleshooting

Problem: Remote control does not work. Cause: The ON/OFF-power switch is turned "OFF".

Solution: Turn the ON/OFF-power switch "ON". Cause: The batteries have been wrongly inserted.

Solution: Check if the batteries have been correctly in:

Cause: The batteries do not have enough power.

Solution: Insert new batteries.

remote control Cause: The power switch on the reomote control is turned \*OFF".

Solution: First turn the power switch on the remote control "ON". Cause: The remote control is possibly not correctly frequen-cy bound with the receiver on the Quadrocopter.

Solution: Please carry out the binding procedure as described in "Checklist for flight preparation".

Problem: The Quadrocopter does not lift.

Cause: The rotor blades rotate too slowly.

Solution: Push the throttle up.

Cause: The battery's power is not sufficient. Solution: Charge the battery (see chapter "Charging the battery"),

Problem: During flight, the Quadrocopter loses speed and height without any obvious reason.

Cause: The battery is too weak.

Solution: Charge the battery (see chapter "Charging the bat-

Problem: The quadrocopter only flies in a circle or turns over on starting.

Cause: Rotor blades incorrectly fitted or damaged. Solution: Fit rotor blades / replace rotor blades as de-scribed in 17 18.

For the latest version of these operating instructions and information on replacement and spare parts available, please visit carrera-rc.com in the service area.

Errors and changes excepted
Colours / final design – changes excepted
Technical changes and design related changes excepted





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