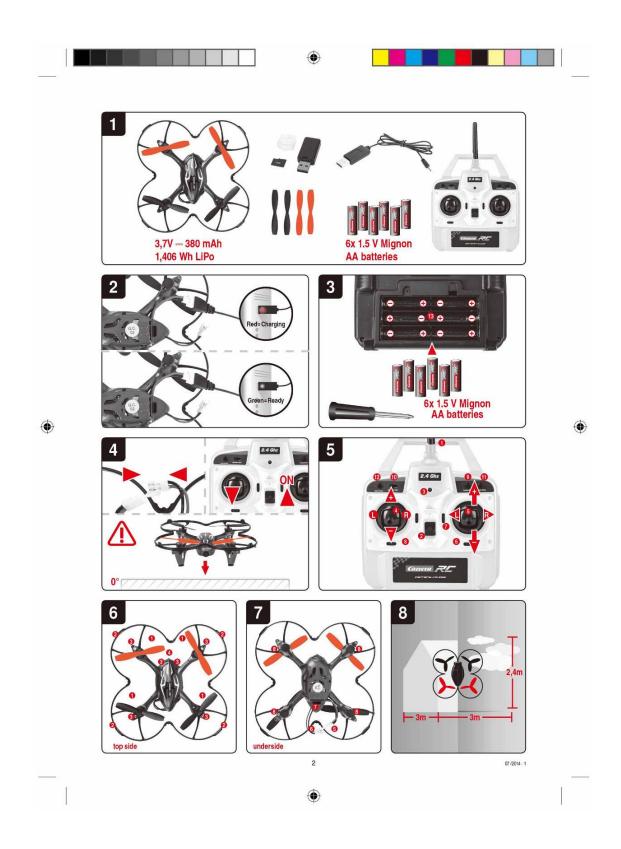


1.6 User Manual

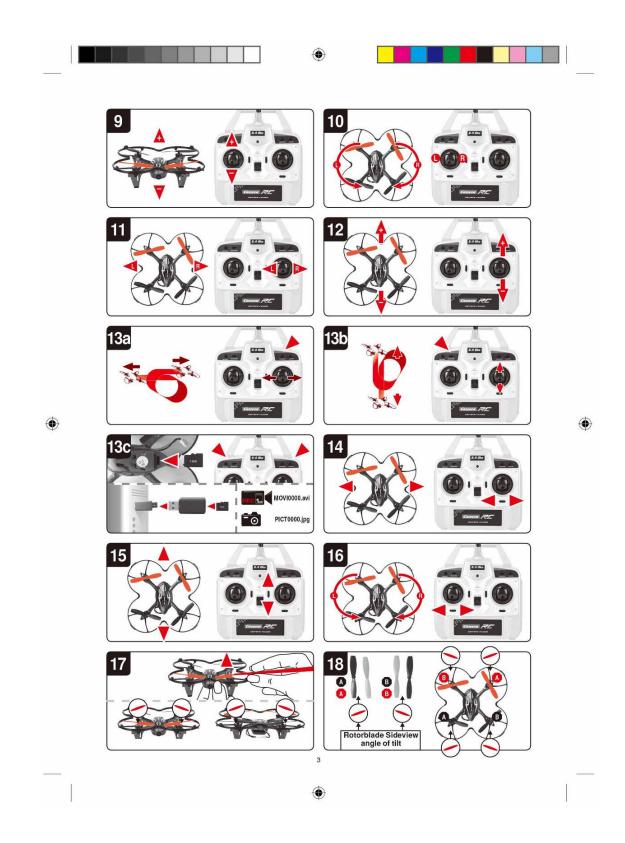


Model 503003 is a RC quadcopter model which consists of a transmitter of model 401011 and receiver of model 503003.













Dear customer

Congratulation! You bought a Carrera RC Quadrocopter 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 of whit respect 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 constitutions are an information and the programment of the pro 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 guarantee null and void. These instructions are to be kept for future reference and in the event that the product is passed

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 operation instructions. All components have been subjected to careful inspection (technical modifications and alterations to the model for the purpose of product improvement are reserved).

ment are reserved). Should any faults nevertheless occur, quarantee is as-Should any tautis nevertheless occur, guarantee is as-sumed within the scope of the following conditions: In accordance with the following provisions, Stadlbauer Mar-keling + Vertrieb GmbH (hereinafter referred to as "manu-racturer) warrants to the endocusmer (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 tomer shall be free from defects in material or workmanship of two years from the date of purchase (guarante 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 tear, (e.g. to batteries, or for blades, calion overing, gear wheels etc.), or damage as a result of improper handling/misuse or unauthorised inference An other customer's claims asserted and inference An other customer's claims asserted and inference An other customer's claims asserted and inference Annual for the customer's claims asserted and inference Annual for the customer's claims asserted and the services of the control of the customer's claims asserted and the services of the customer's claims as a service of the customer's claims as a service and the services of the customer's claims as a service and the services of the customer's claims as a service and the services of interference. Any other customer's claims asserted against the manufacturer, especially action for damages, shall be

excluded.

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 required.

- 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.
- been authorised by the manufacturer,
 whe product has only been operated with accessories authorised by the manufacturer and
 the product is sent in together with the original proof of
 purchase (motios / receipf) and the completely filled in warranty 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 guarantee.
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 sub-mittal 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: CO Directives 2009/48 and 2004/108/EC regarding elector magnetic compatibility and the other relevant regulations o Directive 1999/5/EC (R&TTE).

The original declaration of conformity can be requested from







Warning!

A remote-controlled Quadrocopter is NOT A TOY and is

only suitable for teenagers over the age of 14!

This product is not intended for use by children without supervision of a parent. Inappropriate use may result in severe injuries and/or damage to property. It has to be operated with care and caution and requires both

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 or maintaining and operating the product. It indispensable to read these instructions throughly before the first usage. Only this helps to avoid accidents with injuries and drages. ries and damage.

Only use the Quadrocopter in closed rooms which provide

sufficient space and follow all instructions given in this manual. Make sure that no lose objects, including clothes, or other objects like pens or screwdrivers on become en-tangled in the rotor blades or can get in contact with them. Especially take care that your hands DO NOT get close to the rotor blades!

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 Avoid busy areas. Always make sure that there is enough
- Preferably do not use your model on an open street or in public areas in order not to endanger or hurt anyone. Exactly observe the instructions and warnings for this product and for any possible additional equipment (battery
- product and for any possible additional equipment (pattery) charger, rechargeable batteries etc.) being used by you.

 Should the Quadrocopter come into contact with any living thing or solid 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 sidle!

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

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

Important information concerning Lithium Polymer re-

Important Information concerning Lithium Polymer re-chargeable batteries
Lithium-Polymer (LIPO) rechargeable batteries are sig-milicantly more sensitive than traditional alkali- or MMH-re-chargeable batteries normally used with radio control units. Therefore the instructions and warmings have to be observed in detail, in case of improper use of LIPO rechargeable batteries to the late of the Albert of the March Libert less results betteries. ies there is a danger of fire. Always follow the manufacturers' instructions if you dispose of LiPo rechargeable batteries.

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



This symbol, showing refuse bins with a cross through them, denotes batteries, button cells, rechargeable batteries, button cells, rechargeable 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. Please help to preserve environment and health and talk to your children about the correct disposal of used batteries and disused dectrical equipment. Batteries and disused and disused electrical equipment. Batteries and disused

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 dissimilar battery types or employ new and used batteries together. Empty batteries should be removed from the product. Do not attempt to recharge non-rechargeable hatteries.

batteries. WARNING!

Rechargeable batteries should only be charged under adult rectargeable patterns should only be charged under advantaged under advantaged under advantaged in the top, facchargeable batteries are to be removed from the top, facchargeable batteries should be removed from the product before charging. Supply terminal are not to be short-circuited. Only use the batteries recommended or equivalent benefits.

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.

Guidelines and warnings for the use of LiPo recharge-

- able batteries

 You have to charge the attached 3.7 V === 380 mAh/1,406 Wh LiPo rechargeable battery in a safe place and at a safe distance to flammable material.

- distance to flammable material.

 Never leave the battley unattended while it is charging

 * After a flight, the rechargeable battery has to cool down to
 the ambient air temperature before charging it.

 * You 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
 the battle hid and/or demans to procedy. INIVEIS less a yer. a health risk and/or damage to property. NEVER use any other battery charger.
- other battery charger.

 Should the rechargeable battery swell or deform while discharging or recharging, you have to immediately stop charging or discharging the battery. Nate the battery out as quickly and carefully as possible and place it in a set and open area official early inflammable material and and the interest of the property of the prope 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 battery has to be taken out of operation.

 Store the rechargeable battery at ambient temperature in a
- dry 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 finsure to allow a pause of about zo minutes between this inshing the flight 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 clearcrease it fortificat surfield. In case the battery is broaded
- 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



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- 1x Quadrocopter
- 1x Controller 1x USB charging cable
- 1x USB adapte 1x Micro SD-card
- 1x Set of replacemen 6x 1.5 V Mignon AA b (non-rechargeable)

Recharging the LiPo rechargeable battery

Make sure you only charge the LiPo rechargeable battery supplied with the LiPo charging unit also supplied (USB cable and remote control). If you try to charge the rechargeable battery with a different LiPo battery charger or any other batbattery with a timelent Litro battery in tage or vary other better charge, this might cause senious damage. Please carefully 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 Quadrocopter with its USB charging cable from a USB port on a computer.



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 until is correctly connected to the computer. If you will be in a Quadrocater with a displacement of the properties of the prop plug in a Quadrocopter with a discharged bat plug in a Quadrocopter with a discharged bat-tery, 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 de-signed 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 creen acain.

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 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 when you are not using the Quadrocopter, Failure to ob-

serve this precaution may cause battery damage!

Inserting the batteries in the remote control



Open the battery compartment with a screwdriver and insert the batteries in the remote control. Please keep in mind the correct polarity. After having closed the compartment you can check all functions of the remote control with the help of the power-switch on the front.

power-switch on the irront.
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 ini-tially 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 light up continu-
- Switch on the controller at the power switch. Push the left-hand joystick, i.e. the throttle lever, right to the top, then fully downwards into the
- zero position.

 The LEDs on the quadrocopter now flash rhythmically. The binding has now been successfully established. The LED on the controller now lights continuously.
- 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



- Aerial Power switch (ON / OFF) Control LED Power
 Contro
 Gas

 - Circlina
 - 5. Forwards / backwards

 - right / left banking
 Trimmer for right / left banking
 Trimmer for forwards / backwards
 Trimmer for rotation
 - Looping Button
 - Beginner/Advanced switch (30% / 60% / 100%)
 "Take video"/record video button
 - 12. "Take picture"/take photo button

13. Battery compartment

Description of the Quadrocopter



- 1. Rotor system Rotor protection cage
 LEDs
- Video camera
- 5. Battery cable Quadrocopter connecting plug
 SD-card slot 8. Video LED

Choosing the flight area



When being prepared for the first flight you should choose a closed room which is as should choose a closed room which is as large as possible without any persons or obstacles. Due to its size and controllabil-ity, experienced pilots may be able to thy 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. Please note that in spite of calm conditions near the ground, it can be very windy a little further from the ground. If this instruction is ignored, the Quadrocopter may suffer irreparable damage. Quadrocopter may suffer irreparable damage.

Checklist for flight preparation

This checklist is not a substitute for the contents 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".
 Fit 6 AA batteries in the controller, making sure their polar-
- ity is correct.

 Look for a suitable environment for flying.

 Fit the Micro SD-card in the quadrocopter as bescribed in

WARNING! Immediately after switching it on, place the Quadrocopter on a flat and level surface. The gyrosystem will then set itself automatically.

- system will then set itself automatically.

 *The LEDs on the quadrocopter flash red.

 *Switch on the controller at the ON/OFF switch. Be sure to check the Beginner-Advanced switch (165). Push the eith-hand joystok, i.e. the throtile lever, right to the top, then fully downwards into the zero position.

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

- 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 system.

 Make yourself familiar with the control system.

 Tim the Quadrocopter as necessary as described under [3] [5] [5] so that when hovering it no longer moves from the spot without a command from the control system. 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

- Figure Guardeopter displays no functions, binding procedure.
 Fly the model.
 Land the model.
 Disconnect the battery plug connection.
- Always switch off the remote control last.

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 control commands!

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 (12 15 16).



+/- Gas (up / down)

9 +/- 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.



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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













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 re you have ample room on all sides (about 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 183.

60 %= medium mode
The quadrocopter reacts more sensitively than
in 30 % mode. Signal sounds twice on switching
over. 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 switching over.

Video & photo function



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Fit the 1GB Micro SD-card underneath at the rear in the SD card slot in the quadrocopter. Make sure the metal contacts on the SD-card are facing in the right direction (see figure). WARNING! Be certain to fit the SD-card in the

quadrocopter before connecting the battery!

Recording a video: Press the "Take video" button to begin video-recording. Press the button again to stop recording. While recording, the LED on the right next to the SD-card slot on the Quadrocopter fla-shes red. No sound is recorded.

Taking a photo:

Press the "Take picture" button on the left, and the camera takes a photo. The LED on the right next to the SD-card slot on the Quadrocopter flashes red once after each photo is taken. If the SD-card is full, the LED will flash red / green. In this case, delete videos or photos from the SD-card.

Playing back the videos/looking at photos:

Plug the Micro-SD-card into the USB adapter and connect this Fig. In wide-Schadt in the Oss adapter and corriect inside to a computer, You will find the video files e.g., "MoVIDOO. "A" or the data carrier in the file "Video" The videos are AVI-files. This video format is supported by many video players as standard, You will find the photo files, e.g., "PicTDOOLOgo" in the file folder "Photo". The photos are JPG files — a standard from the others. If you should visiteationally delete althe format for photos. If you should unintentionally delete either file "Video" or "Photo", it will be recreated on the next application in the Quadrocopter.

Trimming the Quadrocopter



When hovering, if the Quadrocopter flies to the left or right without you moving the lever for left / right movement, please proceed as follows:

movement, please proceed as follows: If the Quadroopler moves on its own fast or slow sideways to the left, press the lower right trimmer for right / left till in sleps to the right. If the Quad-rocopler moves right, press the trimmer for right / left till in sleps to the left.



When hovering, if the Quadrocopter files forwards or backwards without you moving the lever for forwards or backwards movement, please proceed as follows:

as follows:
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 its own axis, press the trimmer for rotation below left in steps to the right. If the quadrocopter rotates to the right ress the trimmer for rotation is better. 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 roose a shloutination object to help draw that you draw the rotor blade with great care vertically upwards, and hold the motor from below to stabilise it.



WARNING!

Be sure to note the marking and colour, also the tilt 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 inserted.

Cause: The batteries do not have enough power.

Solution: Insert new batteries.

Problem: The Quadrocopter cannot be controlled with the remote control Cause:

The power switch on the reomote control is turned "OFF" First turn the power switch on the remote control "ON".

The remote control is possibly not correctly frequency bound with the receiver on the Quadrocopter Please carry out the binding procedure as descri-bed 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 roof blades / replace rotor blades as described in 17 13.

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

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.

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

This device complies with Industry Canada's 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.

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