Cine Gears 4 × 4 VR Gimbal Car

MANUAL BOOK

Statement of Conditions

In the interest of improving internal design, operational function, and/or reliability, Cine Gears Inc. reserves the right to make changes to the products described in this document without notice.
Cine Gears Inc. does not assume any liability that may occur due to the use or application of the product(s) or circuit layout(s) described herein.

FCC Compliance Notice: Radio Frequency Notice

The device has met the FCC 15.247 requirement. In order to comply with the FCC RF exposure requirement, the user must keep 20cm away from the antenna.
This device 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 device 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 device 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.

Information to the user

The user’s manual or instruction manual for an intentional or unintentional radiator shall caution the user that changes or modifications not expressly approved by the party responsible for compliance could void the user’s authority to operate the equipment. In cases where the manual is provided only in a form other than paper, such as on a computer disk or over the Internet, the information required by this section may be included in the manual in that alternative form, provided the user can reasonably be expected to have the capability to access information in that form.

Instructions

The car configuration:

1 x Car Frame
1 x VR bracket (Auto lifting & rotating stabilizer)
1 x12 channel Remote control
2 x 12 channel receiver

The car accessories: as below pic

3 x Charger for the batteries
1 x Fixed adapter screw for the panoramic camera
1 x Multiple Spare screws for car
1 x Multi - function wrench
1 x Hexagon screwdriver
1 x Tire sleeve

Radio Panel Instruction

Boot sequence: 1. Remote control power switch → 2. Drive power switch → 3. Steering power switch → 4.VR bracket power switch.

Shutdown sequence: 1. VR bracket power switch → 2. Steering power switch → 3. Drive power switch → 4. Remote control power switch.

Radio Panel Instruction
Pic.1

Operation instruction

First, The remote control, receiver, power switch order（the basic principle is to turn on the remote control first, but turn off the remote control last）:

1. Turn on remote control power supply.
2. Turn on the car drive power switch(green plastic big button), power display will show the remaining capacity.
3. Turn on the steering power switch(silver metal small button)
4. Turn on VR Auto lifting & rotating stabilizer power switch, power display will show the remaining capacity.

Above is the turn on sequence.

Shutdown is the reverse order. Turn off Auto lifting & rotating stabilizer power switch, then turn off the car power switch, then turn off receiver power switch. Last, turn off remote control power.

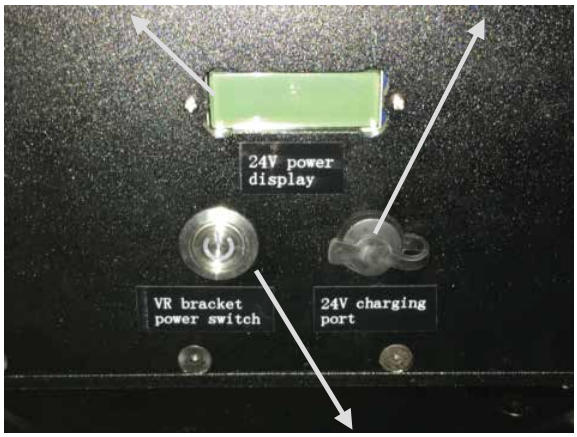
Power display

Car power switch

Steering power switch

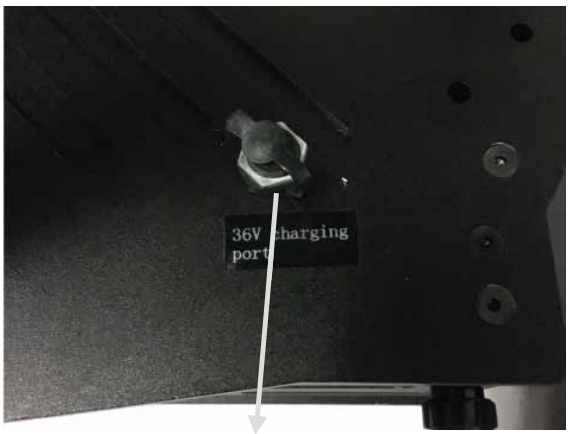
POWER DISPLAY

VR Bracket charging port



receiver power switch

12V output Transmission power



36V battery charger

36V battery chargerSecond, functions and remote control Operating Lever presentation:
As shown below:

1. The left side of the Operating-lever is to control the direction of the car and VR bracket Auto lifting function, the specific operation is as below:
1） Parallel the Operating-lever to the left toggle, the car turn left; parallel to the right toggle, the car turn right. The Operating-lever will automatically return.
2) The Operating-lever is pushed forward, the VR bracket is raised; pulled backward, the VR bracket descends. The size of the push-pull of the Operating-lever determines the speed of the VR bracket lifting. The Operating-lever will automatically return.
CAUTION: When using the LIFT function, release the operating lever immediately it reaches the limit, in order to avoid damage to the circuit.

2. The right Operating-lever controls the car moving forward, backward and parking.
Specifically:
1） Pushing the operating lever forward will move the car forward; Pulling the operating lever backward will move the car backward; When the operating lever is in the middle position, the car does not move forward or backward.

VR(C) Knob

Left Operating-lever

Right Operating-lever

car front part

car back part

VR(A) Knob: car speed adjustment

3. VR bracket 360 degree rotation function:
As shown below: The VR(C) knob controls the holder 360 degree rotate and stop.
Specifically:
1) When the VR(C) knob indicator mark is in the Neutral position, the bracket is stopped.
2) The VR(C) knob rotates to the left, the VR bracket rotates counterclockwise, the bigger the rotation angle of the knob, the faster the bracket rotates, the smaller the rotation angle of the knob, the slower the bracket rotates.
3) The VR(C) knob rotates to the right, the bracket rotates clockwise, the bigger the rotation angle of the knob, the faster the bracket rotates, the smaller the rotation angle of the knob, the slower the bracket rotates.

CAUTION: To ensure safety, when not using this function, must make sure the VR(C) knob indicator mark is in Neutral Position.

4. Electronic locks -Dual Rate Switch A: also used to start & stop the car.
See Pic.1 Radio panel Instruction:

1. Move the switch lever to the open position (down), the car drive is now on.
2. Move the switch lever to the closed/off position (original position), the car drive is now off.

Note: Caution: Make sure the electronic lock is closed/off (origin position) before and after use to ensure safety.

5. The car speed adjustment knob - VR (A).
This knob adjusts the car driving speed as detailed below:
1) Moving the knob Clockwise increases the car speed.
2) Moving the knob Counterclockwise decreases the car speed.

Note: Caution: Make sure this VR(A) knob is closed/off (Counterclockwise limit position) before and after use to ensure safety.

6. Speed cruise - Dual Rate Switch D:
This switch controls the car at a constant speed.
See Pic.1 Radio panel Instruction:
The switch role is: Moving the switch to the open (down) position uses Gyroscope accelerated sensing to keep the car at a constant speed on both flat and sloping road surfaces.

Note: 1). When using this function, if the car encounters an obstruction, it will automatically accelerate; therefore it we recommend that you DO NOT use this function in a confined space.
2). Caution: Make sure the Dual Rate Switch D is in the closed (original position) before and after use to ensure safety.

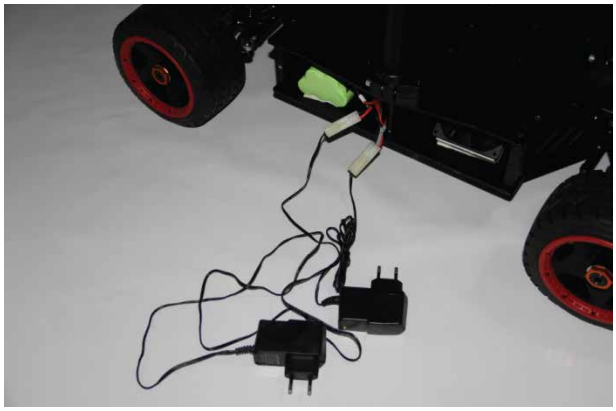
The battery charge

The car has a total of three power supply systems, as follows:
(1) Vehicle power drive power supply system;
(2) Steering power supply system,
(3) VR bracket power supply system.

1) The car power drive power supply system, 36V, 2.6Ah（standard） power lithium battery-powered, brushless motor drive. Charge as shown below: open the white small box, remove the power adapter, connect the power cord, a small black plug into the lithium battery charging port, then access the input power. When the indicator light is red, the battery is charging. When the indicator light is Green, the battery is fully charged.

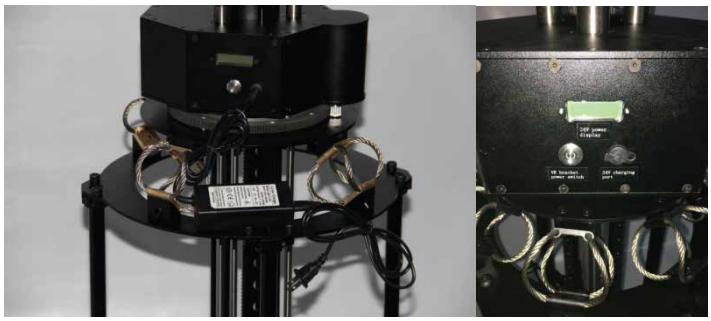
car power battery charging pic.

2) The car steering power supply system. Two 6V 4600 mAh Ni-MH battery powered, two 55kg all-metal steering gear servo drive direction. Charge as shown below: Connect the charger white plug and battery white plug, and then access the input power. When charging for the first 3 times, we suggest you charge approximately 6 hours each time, after the first three charges we suggest you charge for approximately 4-5 hours.



Steering battery charging

2) VR bracket power supply system. 24V, 4Ah power lithium battery-powered, brush motor drive. Charge as shown below: Remove the power adapter, connect the power cord, plug the small black plug into the lithium battery charging port on the panel, then access the input power adapter. When the indicator light is red, the battery is charging. When the indicator light is Green, the battery is fully charged.



VR Bracket battery charging pic.

Panoramic camera installation

Remove the accessory kit and remove the connecting screw. One end of the screw is a 1/4 inch thread and the other end is a 3/8 inch thread. Select the appropriate screw head and screw it into the screw hole in the center of the mounting plate. Then mount the other side of the screw into your own panoramic camera or VR three-axis stabilizer. As shown below two installation.

connecting screw 1

connecting screw 2

The maintenance guide

Problem	Reason	How to solve
The car does not start or does not turn	1. Remote control and car power battery and receiving battery power is low or has been damaged 2. The remote control and the receiver code does not match or failure 3. The line is not connected or a short circuit 4. ESC or motor failure. 5. Steering servo failure	1. Charge or replace the battery 2. Re-code or repair (replacement) remote control or receiver 3. Reconnect or repair the line 4. Repair or replace the ESC or motor 5. Repair or replace the steering servo
VR Bracket does not lift or rotate normally	1. The remote control and VR bracket power supply battery is not enough. 2. The remote control and the receiver code is not matched. 3. The line is not connected or there is a short circuit 4. The ESC or motor to control the lift of the electrical is failure or not. 5. The servo to control the rotation is failure or not.	1. Charge or replace the battery 2. Re-code or repair (replacement) remote control or receiver 3. Reconnect or repair the line 4. Repair or replace the ESC or motor 5. Repair or replace the rotary steering servo

Safety precautions

1. Follow the correct on / off sequence Strictly, and control the car as instructed.
2. Avoid sudden or too frequently changing the direction the car is traveling.
3. Do not use the car in the deep-water terrain as this could lead to a short circuit, resulting in serious damage to the car.
4. Be sure keep the car within sight to ensure safe operating and control.

WARNING: To avoid accidents and personal injury, make sure to do the following:
1. Do not put the battery into the fire! There is a risk of explosion!
2. Do not put your fingers or other objects into moving or rotating parts!
3. Do not touch the car motor after use as the motor will be hot and could result in burns!
4. Store the car in a cool, dry place out of the reach of children!

Disclaimers

FCC Statement

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-Reorient or relocate the receiving antenna.
Increase the separation between the equipment and receiver.
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Consult the dealer or an experienced radio/TV technician for help.
To assure continued compliance, any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment. (Example use only shielded interface cables when connecting to computer or peripheral devices).

FCC Radiation Exposure Statement

This equipment complies with FCC RF radiation exposure limits set forth for an uncontrolled environment.
This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.
This equipment complies with part 15 of the FCC Rules.
Operation is subject to the following two conditions:
(1) This device may not cause harmful interference.
(2) This device must accept any interference received, including interference that may cause undesired operation.

Cautions

The manufacturer is not responsible for any radio or TV interference caused by unauthorized modifications to this equipment. Such modifications could void the user authority to operate the equipment.

Disclaimers

Terms and Conditions

Congratulations on purchasing your new CINEGEARS product. Please read this manual carefully before using the product. By using this product, you hereby agree to this disclaimer and signify that you have read it in full. You agree that you are responsible for your own conduct and any content created while using CINEGEARS products, and for any consequence thereof. You agree to use this product only for purposes that are proper and in accordance with local regulations, terms and any applicable polices and guidelines.

By reading this disclaimer, you also agree:

1. Any part of this disclaimer is subject to change without prior notice. Refer to WWW.CINEGEARS.COM for the latest version.

2. CINEGEARS reserves the right of final interpretation of this disclaimer.

About Cinegears

Cine Gears Inc. is an industry leading company that designs and manufactures digital wireless follow focus systems, lens control systems, camera motion control systems and accessories for film and broadcast industry. As a big believer in the power of creativity and ideas, we designed the Pegasus cablecam, the wireless motor drive that integrated a built in wireless transmitter, and the wireless finger wheel controller. The Cine Gears Inc. wireless lens control system has the international CE certification on all its equipment. Cine Gears lens control system can achieve the finest minutia of focus pulling, with extreme accuracy and control. This very same technology is what drives the Pegasus for ultra-smooth, highly controlled, programmed movement.

We have been working from Vancouver, B.C. for five years and our equipment has been used on hundreds of movies. Filmmakers of all experience levels will benefit greatly from a simple, professional, and well rounded follow focus system. The Single Axis and Multi Axis models provide greater ease, with less crew, and less wires. You can achieve professional film quality scenes on a shoestring budget. Camera operators, assistant camera operators, and jib operators can use the wireless follow focus to attain that perfect shot.

Customer Support

If you encounter any issues with any of our products please contact us directly via the details provided below. DO NOT CONTACT THE RETAIL STORE.

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