



Product Specification

Product Name: Electric motor power system

Model No.: MODEL Q

REF NO: WI-03-PS-48706-01
REV: 00

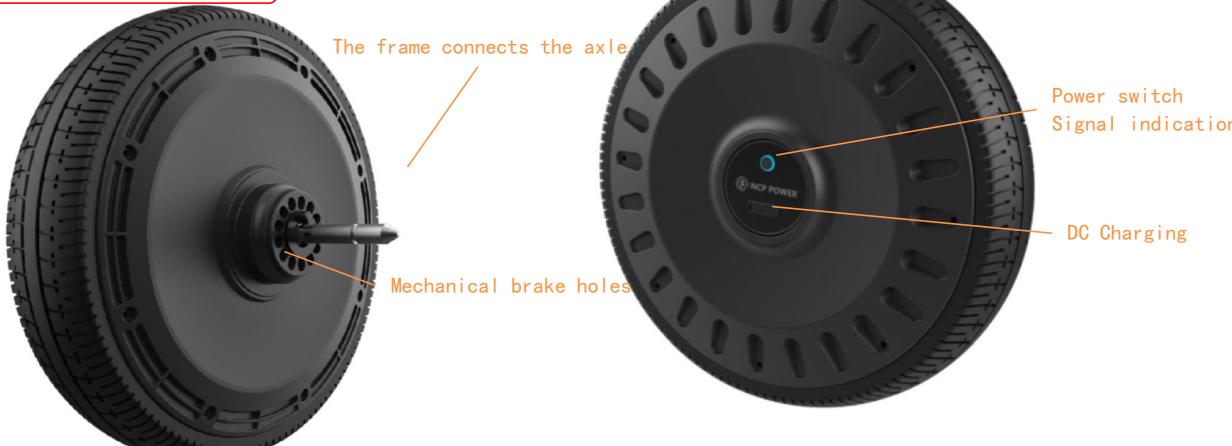
Company name: New Century Products Co., Ltd.

Product Function Description:

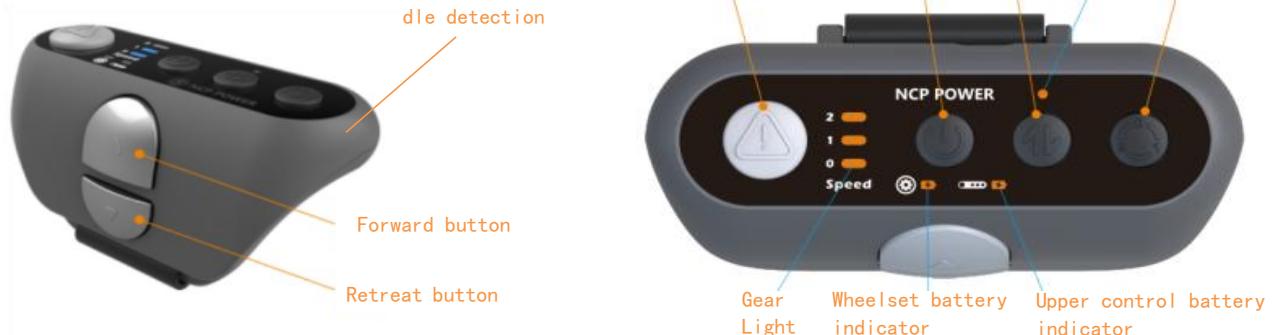
1	This product is an electric drive wheelset - quick-release design, which can be quickly switched to a power function wheel set without damaging the original structure of the original non-electric ordinary model.
2	The wheel set is a three-in-one design, with the motor, battery, and drive control parts all built into the wheels, and are controlled by radio.
3	The two wheel sets are independent individuals, independent wireless signal control, no need to distinguish between left and right wheel installations, and the wheel direction can be corrected through the upper control.
4	The upper control establishes a signal connection with the lower control wheelset through wireless 2.4G, and performs functions such as driving forward and backward, electric braking, and swaying of the cart through the upper control system.
5	The product is designed to be IP55 dustproof and waterproof

一、 Product appearance

Electric drive wheelset



The upper control is controlled



二、 Product features

Wheelset function description:

1	Power switch: Long press for 2 seconds to turn on or off.
2	Automatic power on/off: Push the wheel to rotate at least half a turn to automatically turn on, the wheel stops for 5 minutes without turning, and automatically enters the shutdown state and the light goes off.
3	Low battery indication: When the battery is less than 30%, the white light flashes.
4	Charging interface: 42V / 1.5A charging DC input, connect to the charger to start normal charging, the charger will light up red, and the light will be green for a long time after fully charged.
5	Signal indication: The upper control signal is offline or the reception timeout is greater than 1 second, and the white light flashes to indicate that the signal is disconnected and the motor enters and releases the brake state, if the signal is disconnected for more than 5 seconds, then the brake is released, and the wheels can rotate freely, becoming an ordinary car without electric assistance.

Upper control UI group function description:

1	Power switch: Press and hold for 2 seconds to turn on the blue light, then press and hold for 2 seconds to turn off.
2	Automatic shutdown: Automatically shut down and go to sleep without any button operation within 5 minutes.

3	Gear key: The default is 0 gear when the power is on, and the light rotation order is 0 -> 1 -> 2 -> 0, and the 0 gear is free rotation.
4	Gear indicator: 0 gear/0Km, 1 gear/3Km, 2nd gear/4.2Km, reverse speed, 1st gear/1.5Km, 2nd gear/3Km.
5	Low wheel power indication: When the wheel charge is received less than 20%, the red light flashes 100mS, and turns off when the battery is greater than 20%.
6	Upper control low power indication: When the upper control power is less than 20%, the red light flashes 100mS, and when it is greater than 20%, it will turn off, and the breathing light will flash when charging, and it will be full of constant light.
7	Forward button: non-0 gear, long press to start and move forward, release without brake.
8	Back button: non-0 gear, long press to start and reverse backwards, release without brakes.
9	Sway button: Press the start rock once, the vehicle will sway back and forth, press pause again, the sway indicator light will flash with the sway, and it will automatically stop after 5 minutes.
10	Emergency stop button: Trigger the electronic brake after pressing, you can hover on the slope in the front and rear directions, the panel light flashes slowly 500mS, wait for the wheels to lock, the electronic braking needs to consume a lot of power, generate a lot of heat for a long time, and lose the battery and motor.
11	Handle detection: the upper control leaves the handle, the gear jumps back to 0-gear, all pressed locks can no longer be operated, and the 0-gear indicator flashes 100mS.
12	Wheel direction mode: After turning on, press the sway and gear buttons at the same time 5S, 0 – 2 gears The light is always on, the upper control enters the wheel correction mode, pushes the car forward, at least half a turn or more, once the sample correction is successful, the upper control will automatically return to normal mode, and it can be used normally. If the 30S does not have a correction action, it will automatically exit the direction correction mode.
13	Top control and wheel set pairing: Make sure the two wheels are in the shutdown state, after the upper control is turned on, long press the gear button for about 5 seconds, 0 – 2 gear lights flash slowly, the upper control enters the wireless signal pairing mode, push the car to make the wheels automatically start to complete the pairing, and after the pairing is successful, the upper control will automatically return to normal mode, which can be used normally, such as 30S does not pair and automatically exits the pairing mode.

Basic parameters of the wheel set:

1	Motor: 100W/36V brushless motor; The speed is 1300RPM, and the maximum torque is 1.3/N.M
2	Transmission: The motor output is 12 teeth, through the timing belt, it is transmitted to the 120 teeth of the wheel frame, achieving a reduction ratio of 1:10 and 10 times the torque output
3	Battery: 18650 x 10 (10 pieces per tire) 37V/2600mAh
4	Battery life: 1st gear about 15Km, 2nd gear about 10Km, flat road 45Kg
5	Maximum speed: 4.2Km/h
6	Load: 100Kg/flat road; Max
7	Slope: 3 degrees slope: 50Kg, 7 degrees slope: 45Kg
8	Maximum slope: 7 degrees
9	Communication: The host and controller communicate wirelessly 2.4G connection
10	Charging time: about 4H
11	Blocking overcurrent protection: 3A, turn off the output after 5 seconds

The basic parameters of the upper control part:

1	Battery capacity: Built-in 3.7V/470mA/H, lithium battery
2	Charging current: 250mA
3	Charging time: about 2.5H
4	Service life: Average daily use time of 4 hours, about 10 days
5	Vehicle speed 0 file: 0Km (no braking, manual push)
6	Vehicle speed 1 gear: 3.0Km/h forward and 1.5Km/h in reverse
7	Speed 2nd gear: 4.2Km/h forward, 3.0Km/h in reverse
8	Communication: Communicate with the host and the host wireless 2.4G connection

三、Product testing safety requirements

1	Thrust-related tests
2	Structural anti-loosening test
3	Waterproof tests
4	Main component stability test (motor temperature, battery charge and discharge,)
5	Transmission noise test
6	Wireless connection signal stability test
7	Transport drop test

FCC Warning Statement:

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.

Caution: Any changes or modifications to this device not explicitly approved by manufacturer could void your authority to operate this equipment.

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 device has been evaluated to meet general RF exposure requirement.