



# E-Scooter User Manua

Do not operate the electric vehicle until you have read the user manual carefully and understand the performance of the electric vehicle, and please keep the user manual in a safe place.

#### **USER INSTRUCTION**

# To ensure your safety, please read this manual carefully before riding and make sure you are always following the requirements below:

- Fully understand the information in this manual, including but not limited to the relevant instructions, precautions and warnings.
- 2 Fully understand the operation and contingency measures of CUmini Smart Electric Scooter.
- 3 Be fully aware of warning labels of CUmini Smart Electric Scooter.
- ① Do not disassemble the vehicle or any parts without permission. Please contact customer service department and dealers if you need any replacement or make further purchase.
- 6 Please keep the user manual in a safe place.



All parameters of this vehicle have been permanently set according to the national standard before leaving factory. The company is not responsible, if the original electrical or circuit has changed and caused excess, such as increase the speed.

# SAFETY INSTRUCTION

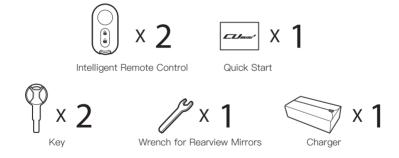
# To ensure the safety of you and others, please make sure to observe the following:

- Don't lend your vehicle to someone who can't operate it to prevent any hurts.
- 2 Juveniles under 16 years old are strictly prohibited to drive electric scootor on the road.
- Please drive in the bicycle lane and the maximum speed should not exceed 15km/h. (Keep to the right if there is no bicycle lane.)
- On not ride on the road after taking medications, drinking alcohol or when you feeling unwell which may affect your riding ability.
- Observe traffic regulations and traffic signs, according to the provisions of laws and regulations to carry man and cargo. Confirm the surrounding road conditions and vechile condition any time to actively avoid danger.

# SAFETY INSTRUCTION

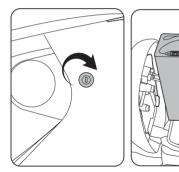
- In rainy and snowy weather, braking distance will be extended, please slow down the vehicle. Avoid travelling in bad weather such as storms and typhoons.
- Wear safety gears, especially helmet. Wear appropriate protective clothing like boots and gloves if necessary.
- To ensure the safety of you and others, please avoid using the high beam under good lighting conditions. The continuous use of high beam will cause visual obstacles to opposite vehicles and pedestrians and affect the safe driving. In the case of dim light, turn on the lights in time.
- Please turn off the power immediately and remove the key after riding. Do not allow children play the vehicle to avoid unnecessary losses.
- 10 Perform a basic check each time before riding.
- 1 Please pay attention to the safe operation of the electric vehicle:
  - a) Do not park the vehicle indoors or in the hallway.
  - b ) Do not charge the battery/vehicle indoors or in the hallway. The battery/vehicle should be kept away from combustible materials when charging, and the charging time should not be too long.
  - c ) Please pay attention to the correct usage of the battery and warning labels. Wasted batteries should not be dismantled without authorization, and should be managed and recycled by the relevant professional departments.
  - d) Please pay attention to the safe usage and the warning labels of the charger. Make sure to use the original charger for the same model
  - e ) Please be aware of the precautions regarding water washing.
- Check before riding, if there is an abnormality, please promptly carry out maintenance or find professionalrepair service:
  - a ) Check the status of power circuit, lighting circuit, etc.
  - b ) Check whether the front and rear brakes work properly.
  - c ) Check whether the handlebars, front and rear wheels are stable.
- d) Check tire pressure.
- e ) Check whether the reflectors are stained.
- f ) When adjusting handlebars or saddles, make sure not to expose the safety line marks (where applicable)

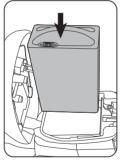
# - 01 ACCESSORIES CHECKLIST

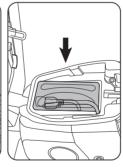


3

-02-INSTALL BATTERY PACK







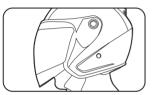


1 Open the cushion/battery 2 Put in the battery pack. 3 Plug in the main compartment.

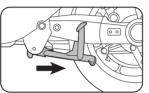
connector.

4 Put back the cushion.

# - 03 -STARTING VEHICLE



1 Put on the helmet.



2 Get on your CUmini, retract the side stand.



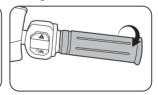
3 Press "Unlock" button on the intelligent remote control.



4 Press the "Parking" button.



5 The vehicle enters READY state.



**6** Gently twist the throttle to ride on the road.

# - 04 -

# DOWNLOAD APP

CU mini Smart Electric Scooter supports wireless communication, GPS, etc., which can connect the vehicle with your smart phone. You can manage and query your vehicle through SOCO App on your smart phone.

Available on iOS and Android platforms, please check your smart phone operating system before installation.

iOS platform:  $\mbox{\sc App}$  requires iOS 9.0 or later.

Android platform: App requires Android 4.4 or later.

Download and install SOCO App by scanning the QR code in the last page of this manual.



SOCO APP

Since the date of purchase, you will be presented with 1 year's free data of SIM card to use SOCO APP function. Make sure to recharge it before the free period expires. For those who fail to recharge within the time limit, the operator will close the recharge interface, and the recharge function of data cannot be restored, in which case SOCO APP cannot be used normally.

# **PARAMETER TABLE**

Main Specifications and Performance Index for CUmini.

		Configeration1	Configeration2
	LxWxH(mm)	1655×695×1083	1655×695×1083
	Wheelbase(mm)	1169	1169
Main	Total Weight of the Vehicle(kg)	54.5	53.5
Specifications	Max Speed(km/h)	25	25
	Full Charge Endurance(km)	60	50
	Energy consumption per 100km(KWh)	≤1.5	≤1.5
	Load(kg)	75	75
	Туре	Lithium Battery	Lithium Battery
Battery Main Specifications	Total Capacity(Ah)	20	16
	Total Voltage(V)	48	48
	Motor Type	Permanent Magnet	Permanent Magnet
Motor Main	Rated Power(W)	350	350
Specifications	Rated Rotating Speed (r/min)	290	290
	Rated Voltage(V)	48	48
Controller Main	Undervoltage Protection Value (V)	42±1	42±1
Specifications	Overcurrent Protection Value(A)	21±1	21±1

Configuration 1

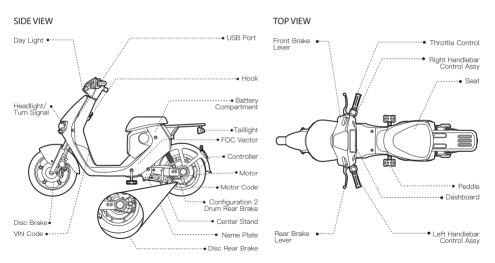
Configuration

# **CONTENTS**

Description of Components and Parts	9
Operation Guide	1
Riding Guide	14
Battery use Instructions	1
App Instructions	2
Maintenance	22
Common problems and Troubleshooting methods	23

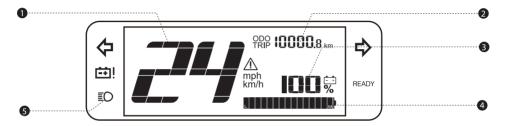
# **DESCRIPTION OF COMPONENTS AND PARTS**

# a. Schematic diagram of vehicle parts



# **DESCRIPTION OF COMPONENTS AND PARTS**

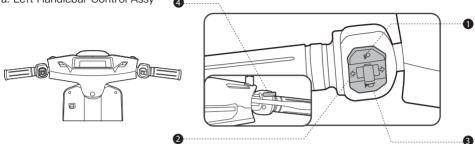
#### b. Dash Overview



- Speedometer/Error Codes Display current speed of the vehicle. When the error indicator illuminates. it displays error code.
- Total Mileage/Mileage Per Trip Display total mileage and mileage per trip.
- 3 State of Charge (SoC) Display the SoC in percentage.
  - 5 State of Headlight Display the on/off state of headlight.
- Power Display Bar Display current amount of energy
  - ♠ Error Indicator Display error with error code
- EI! Battery Error Indicator Flicker when electric quantity is ≤10%.

# **OPERATION GUIDE**

a. Left Handlebar Control Assy



- 1 Headlight Switch Tap to switch on/off.
- 2 Turn Signal Switch

Turn to left, left turn signal on; Turn to right, right turn signal on, keep in middle, turn signal off. 3 Horn Button

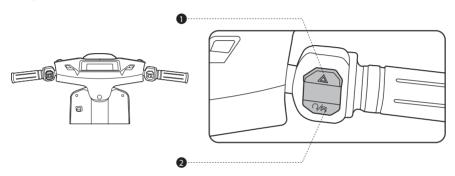
Press, horn on; Release, horn off.

4 One-Click Fix

Turn on the power switch, then press the "One–Click Fix", you can start the self–check operation. If there is a failure such as Hall fault and handle fault, the vehicle can keep driving normally at a low speed.

# **OPERATION GUIDE**

#### b. Right Handlebar Control Assy



# Warning Button

Press the triangle warning button as shown in the picture to turn on the emergency flasher.

# 2 Parking Button

When the vehicle is unlocked, tap the button to enter the "READY" state, and gently turn the handle to start the vehicle; When the vehicle is stationary, tap the button to enter the locked state.

# **OPERATION GUIDE**

# c. Intelligent Remote Control Operation

CUmini is equipped with second generation SOCO Intelligent Remote Control, with a press of the button, you can lock or unlock the vehicle within effective distance.

# Keyless Start

When the vehicle is unlocked, tap the button to enter the power-on state. After the "READY" light is on, turn the handle lightly to start the vehicle. When the vehicle is powered on and stationary, tap it again to power off the vehicle.

#### 2 Unlock Button ----

Press "Unlock" button, the vehicle enters unlocked state.

# 3 Lock Button -----

When the vehicle is in a stationary state, press "Lock" button, the vehicle enters locked state.

### d. Open Battery Compartment

Insert the key and turn it clockwise to open the battery compartment





# **RIDING GUIDE**

#### a. Pre-ride Checklist

Before operating your CUmini Smart Electric Scooter, check the following to ensure your own safety:

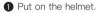
- 1 Check whether the handlebar is stable and flexible when turning.
- 2 Check whether the left and right handlebar controls work properly.
- 3 Check whether the throttle control works properly.
- Make sure the tire pressure is within normal range. The suggested tire pressure is 175–200 kPa for the front tire, and 200–225 kPa for the rear tire (maximum tire pressure 280Kpa).
- 6 Make sure that there are no cracks, damage, wear, foreign object puncture or adhesion on the tire surface.
- 6 Check trend depth of both tires is enough. If the tire is worn to the black shaded mark on the diagram, it needs to be replaced.
- Theck if any error warning sign illuminates on the dash when power on.
- 8 Check whether the battery capacity is sufficient for your trip.
- Oheck whether all lights function properly.
- Oheck whether horn function properly.
- Oheck whether rearview mirrors are clean and adjust them to appropriate angle.
- Check whether the handlebar and brake system function properly.

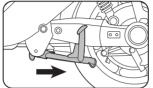
If you have any questions, please contact SOCO Customer Service.

# **RIDING GUIDE**

#### b. Start the vehicle







2 Get on your CUmini, retract the side stand



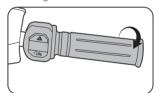
3 Press "Unlock" button on the intelligent remote control.



4 Press the "Parking" button



5 The vehicle enters READY state. 6 Gently twist the throttle to ride



on the road.

#### TIPS:

- Before riding, make sure the center stand is retracted.
- You can only start the vehicle when it's in the stationary state. If an error occurs while riding, please slide or push the vehicle to a safe area.
   Do not attempt to restart the vehicle while riding or in the driving lane to avoid danger.

#### RIDING GUIDE

# c. Tips for Riding

- When the vehicle is starting, you should slowly accelerate in order to avoid excessive starting current caused by instantaneous rapid acceleration and increased energy consumption.
- Under the premise of ensuring safety, try to maintain a constant speed, reduce frequent start, brake, instant acceleration, etc. to avoid increased energy consumption.
- 3 The maximum load for CUmini is 75KG. Overloading is strictly prohibited.
- When pushing the vehicle, please press the "Parking" button or switch to Forward Mode to prevent accidents caused by sudden start of the vehicle due to unintentional turning of the throttle control.
- S Please hold up the center stand while parking, and press the "lock button" of the intelligent remote control.

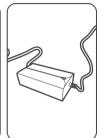
# Battery Charging 1







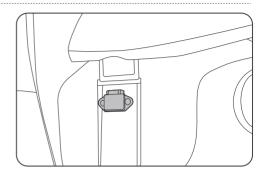




- 1 Open the battery compartment.
- 2 Disconnect the battery pack main plug.
- 3 Take the battery pack out of the battery compartment.
- Put the main plug of the charger into the battery charging port, and then connect the plug to a power supply.
- The indicator illuminates red while the battery pack is being charged normally, and it turns gree when fully charged.

# Battery Charging 2

- 1 Take out the charger.
- 2 Connect the main plug of the charger with the socket under the seat of the vehicle.
- The indicator illuminates red while the battery pack is being charged normally, and it turns green when fully charged.



#### Warning:

Battery is strictly prohibited to get wet, flushed,or even submerged in water. Vehicle wading height should not exceed the bottom of the battery compartment, or it will cause the water inflow, short circuit, resulting in permanent battery failure. Under such circumstances, it is strictly forbidden to charge the vehicle or the battery again, otherwise it will cause the danger of internal fire, combustion and explosion. Please immediately transfer the battery to the service center for maintenance. This car is not equipped with air circuit—breaker, perform power—off protection when it is disconnected.

#### TIPS:

- ① Charging temperatures:  $0-40^{\circ}$ C, discharging temperature:  $-15-45^{\circ}$ C.
- 2 Charge the battery pack after using, if you plan on not riding the vehicle for a long time, please take the battery pack out of the vehicle.
- 3 Forbidden to short-circuit the battery pack.
- 4 Please prevent children from touching the battery pack and forbidden to throw it into the fire.
- 5 Forbidden to impact or press strongly on the battery pack.
- Only charge the battery pack with the designated special charger. Do not use unapproved chargers to charge the battery pack.
- The battery pack and charger have been strictly inspected before leaving the factory, forbidden to disassemble the battery pack without authorization.
- On not park the vehicle indoors or in the hallway. Do not charge the vehicle indoors or in the hallway. The battery/vehicle should be kept away from combustible materials when charging.
- Onn't charge in a closed space, under the hot sun, or at high temperature, and the charging is not allowed to perform in the saddle or tailbox;
- If the indicator is abnormal, odor occurs or the charger shell is overheated in the charging process, stop charging immediately, and overhaul or replace the charger.
- Used batteries shall not be disassembled without authorization, but shall be collected by relevant departments.

### Storage, Maintenance and Transportation

- If the vehicle is not used for a long time (such as winter, summer or other special circumstances), the battery must be removed and stored separately, and regularly maintained and charged. Otherwise, the battery can be completely drained, causing irreversible damage. Battery failure in such case will not be covered by warranty.
- In case you plan on storing your battery pack for a long period of time, please disconnect the battery from the vehicle to prevent it from over-discharging. Keep the battery in a dry, ventilated place and fully charge it with the charger once every month.
- The battery pack and charger should be stored in a clean, dry and well-ventilated place and avoid contact with corrosive substances, and be kept away from power, fire and heat sources.
- Battery pack storage conditions: ambient temperature 0-25℃, ambient humidity ≤65%RH
- On't park the vehicle, or charge the battery/vehicle indoors, and avoid combustible materials when charging.

#### **APP INSTRUCTIONS**

**CUmini** Smart Electric Motorcycle sup ports wireless communication, **GPS**, etc., which can connect the vehicle withyour smart phone.

You can manage and check your vehicle using your smart phone through the SOCO App.

Available on iOS and Android platforms, please check your smart phone operating system before installation.



iOS platform: App requires iOS 9.0 or later.



Android platform: App requires Android 4.4 or later.

#### APP main features:



# On-Board Diagnostics:

When the vehicle is ready to start, you can access the condition of the vehicle by performing a one-button examination.



#### Anti-theft System:

The vehicle will sound the alarm when an unauthorized movement of the vehicle occurs. The app will notify the owner and track tracking the position of the vehicle.



#### Data Record:

Users can access the vehicle information, battery level, distance travelled, tracking and other information through the APP.



#### Social Networking:

Users can make friends and build the community through the app and enjoy the fun of riding online and offline.

The functions of SOCO APP may vary with version update, function upgrade and different vehicle types .Please refer to the actual content of the latest version.

#### **MAINTENANCE**

Regular maintenance can improve the service life and driving safety of CUmini Smart Electric Scooter. It is suggested that you take care of the vehicle following advices below:

#### a. General cleaning and maintenance

\*Cleaning: Please use clear water and mild detergent to clean the vehicle, and use soft cloths and sponges to clean the surface. Please do not use metal brushes, sandpapers etc. to prevent the parts surface from scratching. After cleaning, dry it with a soft cloth.

\*Storage: Please move the vehicle to a dry and cool indoor place, reduce exposure to sun and rain to avoid rust and corrosion of parts, thereby prolong the service life of your vehicle.

#### b. Warnings

- Please do not use high-pressure washers to flush the vehicle directly, so as to avoid internal electrical parts and lines being exposed to water intrusion and soaking, which may cause vehicle mechanical failure or other potential accidents.
- Before long-term storage, please disconnect the battery from the vehicle and avoid over discharging, and please charge the battery once a month.

# a. FAQ and Troubleshooting

Errors	Causes	Solutions
No power, "start" won't light up.	Battery is poorly connected     The fuse is blown or in poor contact	Please check if the main battery plug is properly connected     Please change the fuse
Twist the throttle, the motor won't start.	1.Low battery 2.Handle lever is not returned 3.Parking button is not switched off 4.Throttle fault 5.Controller connector is loose 6.Controller fault 7.Motor fault	1. Charge the battery 2.Return the handle lever 3.Press the parking button to unpark 4.Replace the throttle 5.Replug the controller connector 6.Replace the controller 7.Replace the motor
Speed is slow or mileage is short.	1.Low battery 2.Flat tire 3.Overloading 4.Poor braking 5.Battery aging or reaching end of life	1.Charge the battery     2.Please inflate the tires to normal pressure before riding     3.Observe load limits     4.Replace brake pads and check the brake system before riding     5.Replace the battery
Battery won't charge	1.The charging plug is poorly connected     2.Did not use the correct charger     3.Battery aging or reaching end of life	1.Please check if the main plug is properly connected     2.Please use SOCO designated charger     3.Replace the battery

# b. Error Codes

Errors	Causes	Solutions
Error 99 on Dash	Controller communication fault	Please contact customer service or dealer
Error 98 on Dash	Controller stops working (possibly overcurrent, locked-rotor, under voltage, overtemperature)	Please stop for a while and then start again
Error 97 on Dash	Controller power transistor fault	Please contact customer service or dealer
Error 96 on Dash	Controller Hall sensor fault	Please contact customer service or dealer
Error 95 on Dash	Controller throttle fault	Please check the throttle wiring or contact customer service or dealer
Error 94 on Dash	Battery communication fault	Please check the charging port connection, or contact customer service or dealer
Error 93 on Dash	Charging overcurrent	Please stop charging, and check the charger
Error 92 on Dash	Charging overvoltage	Please stop charging, and check the charger
Error 91 on Dash	Battery at high temperature	Please stop charging/riding wait until the battery temperature drops before attempting to ride
Error 90 on Dash	Discharging overcurrent	If it keeps showing Error 90, please stop riding and wait for a moment
Error 89 on Dash	Low temperature charging	Please take out the battery and charge it in a warm indoor place
Error 88 on Dash	Low temperature discharging	Please take the vehicle or battery to a warm indoor place, and wait for a moment
Error 87 on Dash	Internet connection fault	Please move the vehicle to an open area, or contact customer service or dealer
Error 87 on Dash	GPS connection fault	Please move the vehicle to an open area, or contact customer service or dealer

# c. Battery Troubleshooting

Status	Errors	Causes	Solutions
Before using	The battery has no power, no response when starting the vehicle	Low battery	Charge the battery.
In use	When riding with low power, power off occurs when battery level drops below 10%	Low battery, low voltage protection, normal phenomenon	Charge the battery.
In use	Error 88 on Dash	Low temperature discharging	Please move the vehicle to a warm indoor place, and wait for a moment
In use	Error 90 on Dash	Discharging overcurrent	If it keeps showing Error 90, please stop riding and wait for a moment
In use	Error 91 on Dash	High discharge temperature	Please stop riding, switch off the air circuit–breaker and wait for a moment
In use	Error 94 on Dash	Battery communication fault	Please check the charging port connection or contact customer service or dealer
In use	Overnight or next day, the dash shows a drop in power	ECU, controller, alarm electrical components will drain the battery. Normal phenomenon	Operate as normal

Status	Errors	Causes	Solutions
In use	The mileage is different from official data	Official Mileage is the one in a special environment and condition, and is related to road conditions, weather, temperature, wind resistance, load capacity and other factors	If you have any questions, please contact customer service or dealer
Storage	Start the vehicle, "Power" not on	Battery has been stored for too long, power is used up	Charge the battery. If it can't be charged, please contact customer service or dealer
Charging	Error 89 on Dash	Low temperature charging	Take out the battery and charge it in a warm indoor place
Charging	Error 92 on Dash	Charging overvoltage	Please stop charging, and check the charge
Charging	The charger heats up during charging	Charging process of the charger internal current is high and will generate a lot of heat, the metal housing can effectively dissipate heat, which will lead to a higher temperature of the housing	Operate as normal, and use the charger in a dry, ventilated place
Battery flooded water	The battery does not work properly and the vehicle cannot be started	The vehicle is rained on, soaked in water, waded too deep in water, causing battery flooded water	Stop using. Please contact customer service or dealer
Battery shell broken	The battery has been s impacted or dropped, causing the shell to break or crack	Battery shell damage caused by the use of the vehicle	Stop using. Please contact customer service or dealer



#### SOCO Smart Electric scooter

Download App

Bind your vehicle







 $\label{eq:available} \textbf{Available on iOS} \ \text{and} \ \textbf{Android} \ \text{platforms, please check your smart phone operating system before installation.}$ 

iOS platform: App requires iOS 9.0 or later.

 $\label{eq:Android} \textbf{Android} \ \textbf{platform: App requires Android 4.4} \ \textbf{or later}.$ 

CHECK LIST RANGE	1000 KM	2500 KM	5000 KM	7500 KM	10000 KM	12500 KM	15000 KM	17500 KM	20000 KM	Torque
Brake fluid	0		0				0			
Tire pressure and wear	0	0	0	0		0	0	0		
Front and rear brake shoes wear		0	0	0		0	0	0		
Front and rear brake discs wear			0				0			
Front axle nut fastening	0		0				0			59N.m
Rear flat fork nut fastening	0		0				0			59N.m
Motor nut and retainer bolt fastening	0		0				0			80N.m
Front and rear shock bolt fastening	0		0		•		0			F.30N.m/ R.39N.m
Steering column locking nut										60N.m
Front disc brake bracket fastening (with threadlocker)	0		0				0			26N.m
Front brake disc fastening (with threadlocker)	0		0				0			42N.m
Rear disc brake bracket fastening (with threadlocker)	0		0				0			26N.m
Rear brake disc fastening (with threadlocker)	0		0				0			42N.m
Battery	0	0	0	0		0	0	0		

MAINTENANCE RECORD
Content:

Date:

MAINTENANCE RECORD:
Content:

Conteni

MAINTENANCE RECORD
Content:

Date:

MAINTENANCE RECORD:
Content:

Conteni

MAINTENANCE RECORD
Content:

Date:

MAINTENANCE RECORD:
Content:

Conteni

Manufacturer.Yanaka (Xuzhou) New Energy Locomotive Co., Ltd. Address: Accessories Park, Hi-tech Industrial Development Zone, Changdian Town, Fengxian County Xuzhou City, Jiangsu Province, China

Assembly plant: Changzhou Kwang Yang Motor Co.,Ltd.

Address: No.10 Lytang Road, New North District Changzhou City, Jianggu Brovings, Ch

The Market New York to the second area of the Court that a second area

We reserve the rights to modify drawings and products to improve quality and performance without prior notice