

U2

Electric Bike



The manufacturer reserves the right to make changes to the product,
and update this manual at any time.
support@ebikelab.eu

USER MANUAL

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NEED HELP??

Please contact us:
Email: support@ebikelab.eu



1. Product Overview



2. In the Box



1x Bike Frame + Rear Wheel



1x Stem



1x Front wheel



1x Quick Release



1x Front fender



2x Pedals



1x Seat with Seatpost



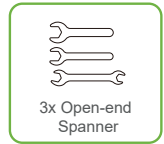
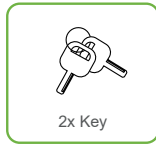
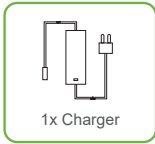
1x Rear Rack with Rear Light



1x Kickstand



1x Pump



Check the parts and accessories carefully. If there are missing or damaged parts/accessories, please contact online customer service support.



3. Assembly Instructions

Before Assembly

- Please read this manual thoroughly and follow its instructions.
- Make sure all parts are intact.
- Do not install the battery or start the computer until the bike is fully assembled.
- If you have any questions or can't find the information you need in the manual, please contact us via email at support@ebikelab.eu



3.1 Install the kickstand



- Loosen and remove the screws using an appropriate hex key.



- Align the screw holes of the kickstand to the kickstand mounting holes on the bike frame. Put back on the 2 screws with the screw heads facing outside with an appropriate hex key.



3.2 Install the front wheel

- Find the front wheel.
- Remove the QR skewer from the fork.
- Loosen the thumb nut of the QR skewer and remove it. Make sure the small ends of the two cone springs face inwards.
- Lower the fork onto the front wheel. Make sure the brake rotor is between the brake pads of the brake caliper and the axle passes through the fork dropouts.
- Keep the QR skewer in line with the axle and tighten the thumb nut until the QR skewer is parallel to the floor.
- Close the QR lever completely with your palm, keeping the lever not touching the brake rotor.



Warning

- The disc brake rotor is located on the left side of the bike.
- Make sure the front wheel hub is completely engaged in the fork dropouts.
- Tighten the thumb nut and close the QR lever. The recommended torque is 30~40 N.m.



3.3 Install the front fender and light



- Find the fender, and remove the bolts and spacers on the fork arch and the bolts at the bottom of the fork legs.



- Pass the fender through the fork's lower legs and then tighten the bolts holding the lower part of the fender.



- Hold the fender and front light mount and align the screw hole on the upper of the fender and the screw hole of the front light mount to the arch screw hole.



- Tighten the screw that holds the fender and front light with an appropriate hex key.



3.4 Install the stem and handlebar



- Place the stem into the steerer tube, adjust the stem to the desired height, and then tighten the bolt holding the stem to the steerer tube. Make sure the marker on the stem lower part is fully inserted with the marker line under the locknut. Align the valve stem to the front tyre and tighten the stem bolt.



- Use an appropriate hex spanner to gently unscrew the top cap that holds the stem to the handlebar.



- Place the handlebar correctly on the stem. Trace the front brake cable directly from the front brake caliper to the left handlebar and make sure the cables and wires are not twisted.



- With the handlebar in the middle, tighten the 4 bolts holding the handlebar evenly. Loosen the Allen bolts on the side and at the bottom of the stem to adjust the stem angle if needed.



3.5 Install the seat



- Fully open the QR lever.



- Inset the seat post into the seat tube. Must keep the safety line below the upper end of the seat tube.



- Adjust the seat so that the seat is parallel to the top tube. Close the QR lever to lock the seat with your palm or fingers.



3.6 Install the pedals

- Identify the correct sides by locating the 'R' and 'L' marks on the pedals.
- Tighten the pedals with hands at first. Spin the right pedal clockwise and the left pedal counterclockwise.
- Then tighten the pedals with the provided open-end spanner.



3.7 Install the rear fender, rear rack and light

- Remove the screws and nuts pre-installed on the seat stays and the 2 screws on the bottom ends of the seat stays.





- Find the rack and put it over the rear fender. Find the screw holes and tighten the screws and nuts on the seat stays. Pass the screws through the holes of the rack bottom eyelets and the fender brace eyelets in sequence, and tighten the screws on both sides.

- Connect the light cable's male connector to the cable's female connector from the controller.



3.8 Inflate the front and rear tyres



- Find the pump from the box to inflate the tyres. Inflate 280-450 kPa (40-65 psi / 2.8-4.5 bar) air.

Note: Do not over inflate tyres to prevent flat tyres. You can check the tyre pressure by squeezing the tyres by hand.



3.9 Remove and install the battery

For your convenience, the battery of U2 is designed to be removable.



- Find the flip lever and flip up the seat.



- Push and spin the key to the unlocked position.



- Pull out the battery carefully and lift it from the bike frame.

To re-install the battery, align the slots on the bottom of the battery and reinsert the battery into the frame. Turn the key to the locked position. If you want to know the battery level without turning on the computer, press the button on the top of the battery to display the current battery level.



4. Charging Instructions

The battery can be charged either when on the bike or removed from the bike.

- Spin the key to the off position to make sure the battery is in idle state.
- Remove the key from the battery and open the charging port cover.
- Plug the DC connector of the charger into the charging port. Place the charger on a flat and safe surface no matter when the battery is charged on the bike or removed from the bike.
- Insert the AC plug of the charger into the power socket. It will start charging with a red LED indicator light on the charger. Once the battery is fully charged, the indicator light will turn green. After charging, unplug the charger from the power socket first, and then remove the DC output connector from the charging port on the bike.



1



2



3

Battery safety

- Before riding, fully charge the battery (about 6 hours).
- Periodically visually inspect the battery connector and charging cable.
- Always keep the charging environment clean and dry.
- Do not charge the e-bike if the charging port is wet or has liquid on it.
- Avoid charging the e-bike in extremely hot or cold environments to fully utilize the maximum efficiency of the battery. Under no circumstances should the e-bike be used while charging or connected to the charger.
- The charging time is about 6 hours. Prolonged charging may reduce battery life and performance.
- Only use the provided charger comes with U2 bike. If the official charger is lost or damaged, please contact Customer Service to obtain a replacement.
- Before using the e-bike, be sure to lock the battery with the attached battery key.



5. Riding Modes



Speed Modes	Full Throttle	Pedal Assist
0	×	×
1-5	✓	✓
Display OFF	×	×

Thumb throttle

Turn on the E-bike and the smart display and you can switch the speed from 1 to 5 by pressing the thumb throttle .

PAS

Turn on the E-bike and the smart display and you can pedal the E-bike with 1-5 PAS level by pressing the + or - button.

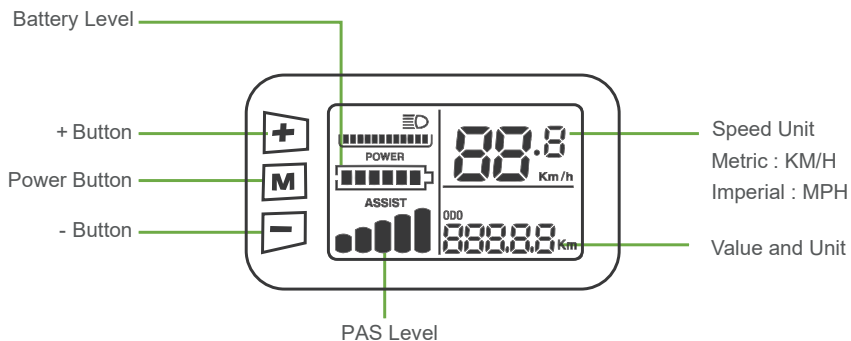
Pedal

Turn off the E-bike and the smart display and you can pedal the E-bike like a normal bike.

- Before riding, fully charge the battery and make sure the battery key is in on position.
- Press and hold the M button for 2 seconds to power on the electric bike.
- The top speed (throttle mode) is 25 km/h (15.6 mph)
- Adjust the PAS levels by pressing + or - button.
- Stop: Release the throttle and squeeze the brake lever to slow the front and rear wheels.






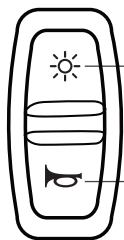
6. Display and Buttons



Buttons

Power/+/- Buttons

-  Press to switch speed mode from 1 to 5
-  Hold for 2 seconds to power on/off
-  Press to switch speed mode from 5 to 1



Front Light

Horn

Front Light & Horn Buttons

- Press to turn on/off front light
- Press or hold to activate horn



Operational instructions

1. OSD information

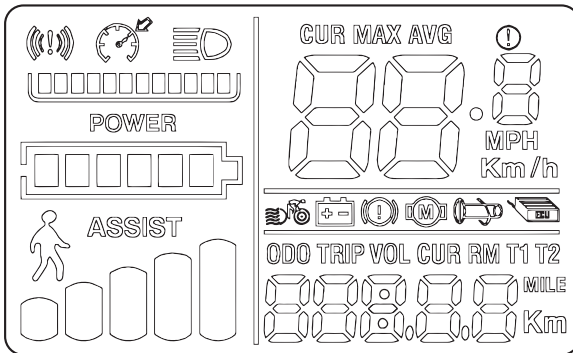
Speedometer, PAS level, battery level, fault codes, odometer, trip odometer, front light icon, trip time.

2. Control and settings

Power on/off control, front light on/off control, 6km/h inching control, wheel diameter setting, top speed setting, standby auto sleep time setting, backlight brightness setting, voltage level setting

3. UART Communication protocol: UART

Full display information within 1 sec after power on



1.  front light
2.  battery level

3. ODO TRIP VOL CUR RM T1 T2 Multifunction display area


ODO odometer, TRIP trip odometer, Error fault codes, WATT power, Maintain; DST TO GO

4. POWER bike mode




POWER: turbo mode speed area
MAX maximum speed, AVG average speed
unit MPH, KM/H

5. The meter calculates the true speed based on the wheel diameter and signal data

6.  MILE
Km

bike status area

bike status icons and meanings :

- VOL voltage  brake prompt  motor fault  communication fault
 throttle fault  controller fault



Fault codes

fault code (decimal)	fault name	note
0	normal status	
1	retain	
2	brake	
3	PAS sensor fault (riding icon)	Not implemented here
4	6km/h cruise control	
5	real-time cruise control	
6	battery undervoltage	
7	motor fault	
8	throttle fault	
9	control fault	
10	communication receiving fault	
11	communication transmitting fault	
12	BMS communication fault	
13	front light fault	



Customize settings

In the power-on state, when the speed is 0 on the display

Hold and for over 2 seconds to enter the selection interface of parameter setting items;

Press or hold to switch the setting items and then press or to adjust parameters;

Hold and for at least 2 seconds to save the setting and quit the selection interface of parameter setting items

Customizable parameters are as follows:

P01: odometer unit (0 is kilometre; 1 is mile)

P02: /

P03: backlight brightness (1 is the weakest and 3 is the brightest)

P04: odometer resetting (press and hold "+" button to reset the odometer)

P05: unlock the speed limit (press "+" or "-" button to unlock the top speed to 32 km/h)



7. For Your Safety

For safe riding, please read the following information carefully. Before riding, be sure to check that your brakes are working normally.

Before Your First Ride

- Check whether the quick-release screws and seat are firm and whether the brakes are effective.
- Check the seat, gears, and tire pressure. Proper tyre pressure can avoid flat tyres and improve performance, including distance traveled per inflation.
- Check the handlebar and screws at least once a week.
- Performing the above routine checks before and after each ride can help you keep your bike at peak performance and spot potential problems before they become safety hazards.

Bike Mechanic Check Every Six Months

- Bikes require regular maintenance. Take your bike to your local bike shop twice a year for tuning. Critical components should be inspected frequently and be repaired and adjusted by an experienced mechanic.

Notice

- Wear an approved helmet and other protective equipment to reduce any possible injury.
- Helmets can reduce serious head injuries by 85%.
- Elbow pads can reduce elbow injuries by 82%.
- Knee pads can reduce knee injuries by 32%.

Warning

- To avoid accidental movement while waiting at a traffic light, set the speed mode to zero, or apply brakes.
- When riding, make sure your feet are always on the pedals and your hands on the handlebars. It is dangerous to take your feet off the pedals in riding.
- Never ride the electric bike for dangerous actions. Failure to exercise good judgment or heed the above warning increases the risk of serious injury and, in rare cases, death.
- Make sure the battery is fully charged, especially for long trips.

- For your own safety and the safety of others, obey the speed limit, ride at a speed you are comfortable with, and be prepared to stop at any time.
- Keep a safe distance from other riders to avoid collisions.
- Be aware of your surroundings and avoid obstacles and unsafe surfaces.
- Ride in the open and flat. Try to avoid slopes or places with many pedestrians.
- Do not ride at high speeds, on uneven terrains, in bad weather or in other unsafe conditions.
- Never use the electric bike for anything that could cause personal injury or property damage.
- Do not attempt to carry passengers or heavy objects. This bike can only hold the weight of one person at a time. Do not exceed the weight limit.
- Ride e-bikes only where permitted. You must obey local laws and be courteous to pedestrians.



8. Battery Maintenance

A well-maintained battery performs well even after high mileage. Charge the battery after each ride to prevent the battery from draining from a full charge. Batteries perform best when used at room temperature (70°F [22°C]). However, using it at temperatures below 32°F (0°C) will degrade performance. In general, at -4°F (-20°C), battery performance drops to half of that at 70°F (22°C). When the temperature rises, battery life will resume.

Refer to local laws and regulations regarding battery recycling and/or disposal.

Under normal circumstances, a fully charged battery can hold power for 90 days in standby mode. Remember to charge the battery after each use. Draining the battery may cause permanent damage to the battery. Electronics inside the battery record the charge and discharge of the battery. Damages due to over-discharge or over-discharge are not covered by the warranty.

Notice

- Do not perform any maintenance while the e-bike is powered on or charged.
- Store or charge the battery within the temperature range of 20°C-25°C / 68°F-77°F. Do not pierce the battery.
- Do not attempt to disassemble the battery to avoid fire.
- When the ambient temperature exceeds the maximum operating temperature (see instruction manual), do not ride the bike.
- Temperature will limit maximum power/torque. Otherwise, personal injury or property damage may occur.



9. Cleaning

Before cleaning, make sure the power is turned off and the charging cable is unplugged. Otherwise, you may damage the electronic components. Proper cleaning of your e-bike can guarantee a longer lifespan and a smoother ride.

- Wipe the outer body of the e-bike with a soft and dry microfiber cloth.
- Check around the wheel to make sure there are no foreign objects. The design of this electric bike makes wheel maintenance easy.
- The e-Bike has IPX4 water resistance, which means it can withstand splashes. However, don't submerge the e-Bike in water.

Note

- ⚠ Do not use alcohol, gasoline, acetone, or other corrosive/volatile solvents to clean the bike. These substances can damage the exterior and the internal structure of the bike.
- ⚠ Do not allow water and liquids to enter the electric parts or the battery of the e-bike.



10. Storage

The bike should be fully charged before storage to prevent the battery from being over-discharged after long-term storage.

If the electric bike is to be stored for more than a month, discharge and charge the battery at least once a month.

Notice

- Do not store the electric bike outdoors for extended periods of time. Exposure to sunlight and extreme temperatures (both hot and cold) accelerates the aging process of plastic parts and can reduce battery life.
- Store in a cool dry place.
- Do not store it in dusty environments as damage may occur over time. Cover the bike to prevent dust.



11. End-of-Life Disposal

- This product cannot be disposed of by incineration, landfilling or mixing with household waste. Improper handling of the battery in this product may cause the battery to heat, rupture, or ignite, which could result in serious injury. The substances inside the battery pose a chemical risk to the environment. The end-of-life disposal recommendation for any CYCROWN product is to dispose of the entire device at an e-waste recycling center or through an e-waste recycling center, project or facility.
- Local regulations and laws related to the recycling and disposal of lithium-ion batteries and/or products containing lithium-ion batteries vary by national, state, and local government. In order to properly dispose of batteries and/or products containing batteries, you must check the laws and regulations that correspond to where you live.
- It is the user's responsibility to properly dispose of waste equipment in accordance with local regulations and laws. For additional information on disposing of batteries and electronics or electronic waste, Please contact your local waste management office or household waste disposal service.



12. Parameters

Item	Parameters
Model Name	U2
Net Weight	27kg / 59.5lb
Product Dimensions	180 x 65 x 115cm / 70.8 x 25.6 x 45.3in
Package Dimensions	144 x 24.5 x 65.5cm / 56.7 x 9.6 x 25.8in
Max. Incline	10° (rider weighs 100kg / 220.4lb)
Max. Capacity	120kg / 264.6lb
Max. Speed	25km/h / 15.6mph
Range	45-75 km
Motor	250W
Battery Voltage	36V 13Ah
Charge Voltage	100-240V/2A
Wheel Size	26 in
Charge Time	6 hours
Water Resistance	IPX4
Storage Temperature	68~77 °F / 20~25 °C
Operating Temperature	-4~140 °F / -20~60 °C

Item	Parameters
Charging Temperature	32~104 °F / 0~40 °C
Warranty	1 Year Limited



13. Warranty

Dear Customers

Thank you for purchasing our lithium battery bicycle! After purchasing our products, please provide correct, complete, and true personal information and fill in the warranty card to ensure that you receive high-quality service. For products that meet the warranty conditions, free maintenance is provided. We make the following commitments:

1. You can receive warranty service with the warranty card. The serial number on the bike body must match the serial number on the warranty card. If you can't provide proof of the repair date, then the factory date or the order date will be the start date of the warranty and we will confirm if it is still within the repair date.
2. From the date of sale to the warranty expiration day, if there is a performance failure caused by non-human damage, once confirmed, our company promises to repair it free of charge. If the performance failure caused by man-made damage, once confirmed, our company will carry out paid maintenance.

Warranty Disclaimer

The following situations are not covered by the warranty service, and you need to pay the relevant service fees. beware:

1. Total riding distance is over 100 kilometres.
2. Any damage caused by not following the instructions for use of the electric bike.
3. Lost or changed electric bike number.
4. Product damage caused by accidental factors or improper use, such as mechanical damage, breakage, and serious impact on the product, oxidation, etc.
5. Overload, over obstacles (Including but not limited to bottom pedals, falls), or damage caused by extreme conditions.
6. Any damage caused by abnormal storage conditions or electrical resistance, such as fire, immersion, high temperature, and earthquake.
7. Loss of wearing parts, such as packaging materials and various technical materials.
8. Other failures or damages not caused by product design, technology, manufacturing, quality, or other issues.



14. Contact Us

If you have problems related to riding, maintenance and safety, or errors/-failures with the U2 electric bike, please contact us.

✉ E-mail Service: ***support@ebikelab.eu***