



PRODUCT MANUAL

DUALTRON

FOREVER

ZHEJIANG DUALTRON ESCOOTER CO., LTD

No. 111, Dengsheng Road, Lanjiang Subdistrict, Lanxi City, Jinhua, Zhejiang, China



Digital User Manual



Specifications

Item	Parameter
Product	Model Dualtron Forever Ltd
Battery	Battery Capacity 60V27Ah (CN)
	Range (Speed 25km/h,Weight 75kg, Non-stop) Around 96km
	Charging Ambient Temperature 0 to 40°C (When the battery temperature exceeds 55°C, the BMS protection program will be activated.)
	Battery Management System Over-heating, short circuit, over-current, over-discharge and over-charge protection
	Max. load 120kg
Rider	Recommended Age 14-60 years old (Riding age may vary depending on local regulations.)
	Required Height 3'11"-6'6"(120-200 cm)
Display	Type EY4 LCD bluetooth display (Ability to connect to Minimotors APP)
Motor	Motor Type BLDC hub motor
	Nominal Power 900Wx2
Machine	Net Weight Around 27Kg
	Max. Slope Around 36.4%[20°]
	Drive System Dual motor drive
	Speed 25km/h
	Length × Width × Height 1220mm×620mmx1250mm
	Folded: Length × Width × Height 1220mm×620mmx525mm
	Wheelbase Approx.920mm
	Ground Clearance Approx.170mm
	Traversable Terrain Asphalt/flat pavement; obstacles < 5 cm; gaps < 5 cm
	Operating Temperature -5 to 45°C
Brake	Storage Temperature -20 to 50°C
	Machine Brake Hydraulic brake
Charger	Electric Brake ABS&EBS (Disabled when battery temperature exceeds 55°C and BMS protection is activated.)
	Input Voltage 100-120V/200-240V~
Tire	Max. Output Voltage 66.4V1.75A
	Type 10 inch tube tire
Suspension	Tire Pressure 50 psi
	Material Rubber
	Type F&R rubber suspension cartridge (replaceable)
	Optional (Default) Softest Medium soft Medium Medium hard Hardest

Disclaimer: This is not legal opinion or legal advice. The information provided herein (including content in the App) is for reference and informational purposes only. It is not intended to cover all applicable laws and regulations relevant to this product.

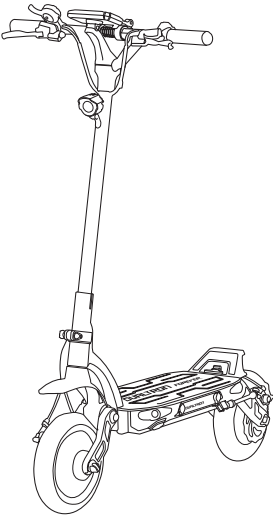
Minimotors Dualtron hereby expressly disclaims all warranties and representations, whether express or implied, concerning the completeness, accuracy and timeliness of such information. Minimotors Dualtron reserves the right (but not the obligation) to revise, implement or update the aforementioned information. You use this information entirely at your own risk. It is your sole responsibility to learn and comply with all applicable laws, regulatory requirements, prohibitions, restrictions and limitations set forth by competent government authorities, courts and relevant third parties governing your use of this product.

* Theoretical Range: Tested under conditions: full battery, 75 kg payload, ambient temperature of 25°C, average cruising speed of 25 km/h on paved road. (Actual range is affected by multiple factors including travel speed, start-stop frequency and ambient temperature.)

* Max. Speed: Tested under conditions: full battery, 75 kg payload, ambient temperature of 25°C, flat straight road with zero wind.

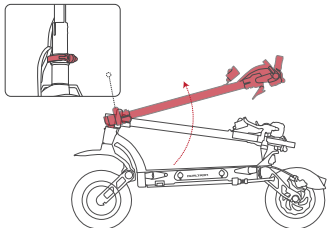
(Actual top speed may vary due to environmental factors such as uneven/curved pavement, ambient temperature and wind conditions.)

Diagram and Functions

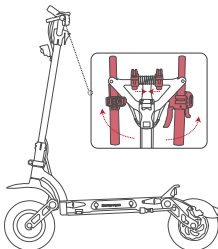


Name	Function	Operation method
Headlight button	Turn headlight on/off	Press the light button to turn on/off the headlight.
Turn signal button	Turn the left/right turn signal on/off	Press the left/right side of the turn signal button, and the left/right turn signal will keep blinking.
Horn button	Sound the horn	Press the horn button to make the scooter beep once.
Accelerator	Speed up	Pull the throttle to accelerate.

Assembly

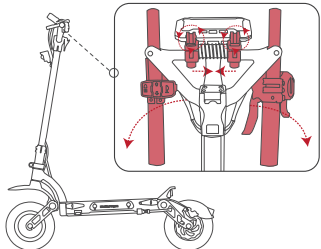


- Release the QR lever, raise the locking slider upward, lift the steering tube, and then lower the locking slider.
- Tighten the adjustment screw properly and close the QR lever to secure the locking slider firmly in place. Check regularly to ensure that no looseness develops during use.

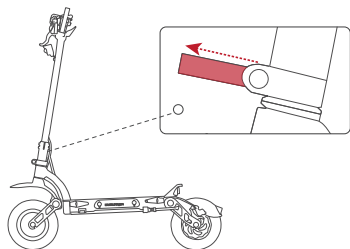


- Loosen the QR lever, pull the locking slider inward, and raise the handlebar. Then close the QR lever and tighten the adjustment screw.
- Align the locking slider with the safety line and secure it with the QR lever. Ensure that it is firmly locked in place and check regularly for looseness during use.

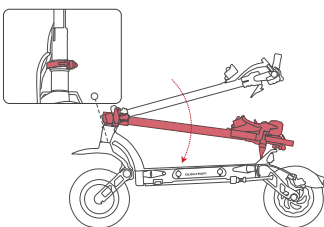
Folding



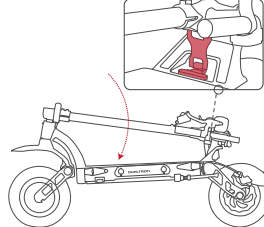
- Loosen the QR lever, push the locking slider inward, and fold the handlebars down.



- Loosen the QR lever and move the locking slider upward. Hold the steering tube firmly to prevent it from falling and causing damage or injury.



- Raise the locking slider and lower the steering tube.



- Secure the handlebar hook to the folding bracket. Make sure the handlebar is securely locked before lifting the scooter.

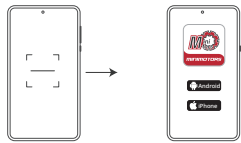
How to Ride

- Power on the scooter and select your preferred speed mode.* Always set the speed mode prior to riding; speed settings can also be adjusted via the Minimotors APP.
 - Place one foot on the footboard and push off the ground with the other foot to start gliding.
 - Deactivate SAFE Mode before use: SAFE Mode is configured in the Minimotors APP and can be disabled by squeezing the brake lever.
 - Put both feet on the footboard and stand stably. Pull the throttle to speed up.
 - Slow down by releasing the throttle and squeezing brake levers.
 - To turn, shift your body and turn the handlebar slightly. * Please watch out for road conditions; sufficient turning space is required.
- When hard braking, serious danger or injury may occur. Maintain a moderate speed and look out for potential hazards.

Bluetooth Connection

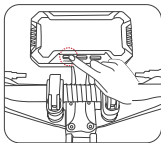
APP Download Guide

Method 1

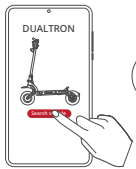


- Scan the QR code to download the APP.
- Choose the mobile phone system that suits you, install it, and register or log in.

Pair the Bluetooth on the APP

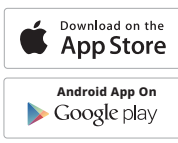


Power on the scooter.



Click "Search vehicle" and pair with your scooter.
* The scooter is connected to the Minimotors app when the Bluetooth symbol lights up.

Method 2

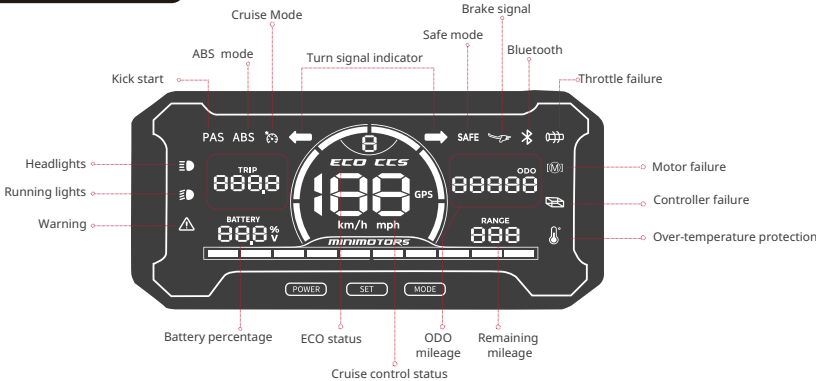


- Search for "Minimotors" in the app store and download it, then register or log in.



Select "Bind as Owner".
(No one else can connect; only people authorized by you are allowed to connect. Authorizations are created in the app.)

Dashboard



Symbol	Name	Meaning	Description
POWER	Power Button	1.Press and hold the Power button to turn on/off the scooter. 2.Press the button to adjust the speed gear.	
SET	Set Button	1.Press and hold the Set button to enter/exit ECO mode. 2.Press the button to switch battery voltage/percent indication.	
MODE	Mode Button	1.Press and hold the Mode button to enter/exit the mode setting,and automatically return to the main interface after 30s. 2.Press the Mode button to switch ODO/time indication.(Time defaults)	
Battery Unit	Battery Unit	The symbol displays the remaining battery power in battery bar.	
Running light	Running light	The symbol indicates that running light turns on.	
Headlight	Headlight	The symbol indicates that the headlight turns on.	
PAS	PAS	In Kick Start mode, the scooter cannot start directly using the throttle.(Default OFF)	Set in P1. When PAS is turned on, The PAS symbol will appear on the LCD screen.
Starting Effect	Starting Effect	Powerful Start / Gentle Start Selection	Set in P2. "0" means the most powerful start,acceleration response is strongest. "1" means 0.5s gentler start, "2" means 1s gentler start, and so on. "5" means the gentlest start. The default setting is 2 (1-second gentler start).
EBS	EBS	EBS strength selection.	Set in P3. Five strength levels (0-5) are available., 0 is the weakest, no EBS function, and 5 is the strongest. The default is 1.
ABS	ABS	ABS function control.	Set in P4. 0 means function off and 1 means function on. The default is 0.
Drive Mode	Drive Mode	Select driving mode according to road conditions.	Set in P5. "Battery Saving" scooter works with 50% of the maximum torque. "Comfort" scooter works with 75% of the maximum torque. "Climbing Mode", scooter works with max torque. Climbing Mode is selected by default. (Note: If you ride continuously for a long time in Climbing Mode, the temperature of the motor will rise quickly and easily trigger ECO.)
Speed Limit	Speed Limit	System speed control.(Percentage of max speed)	Set in P6.The parameter is adjustable from 5% to 100%, and the default is 100%.
Protection (Password)	Protection (Password)	Password protection. (You need to enter the correct password to drive.)	Set in P7. Press SET to turn it ON/OFF, then press POWER to confirm. When switching from OFF to ON, enter the original password. Five security levels (0-5) are available. (Default password: 0000.) Note: If protection is enabled and the app is verified as the owner, the scooter can unlock automatically when the owner approaches.
Change Password	Reset a password.		Set in P8. Press the POWER to change the password. When the display shows 1, enter the initial password, press the POWER to confirm. And when the display shows 2, please enter the new password, and press the POWER to confirm.At this moment, the display will show 3, please enter the new password again and press the POWER. Then the Password is changed successfully. Note:The owner can connect to the APP directly without entering the password to unlock the scooter and reset the password in the APP.
SAFE	Safe Mode	Prevent the scooter from starting when the accelerator is accidentally touched.	Set in P9.When the scooter is turned on and stays in the static state for N seconds (no operation, no speed), it will switch to the safe mode automatically. In SAFE mode, this symbol will appear on the screen. (N seconds ranges from 0 to 300 seconds. 0 seconds means SAFE mode is not enabled.)
CCS	CCS	Drive at a constant speed without operating the throttle or brake.	Set in P10. Turn on/off the cruise control mode. Default OFF. (The scooter maintains a fixed speed for more than 8s ,cruise control is activated automatically)
Prevent BMS CUT	Prevent BMS CUT	When the battery capacity is less than 20%, scooter enters ECO mode automatically.	Set in P11. Turn Prevent BMS CUT mode on or off. The default is off. When the scooter enters ECO mode in this mode, ECO mode cannot be turned off manually; if you want to manually close the ECO in the current mode, you need to close the Prevent BMS CUT mode first.
Auto Power-off	Auto Power-off	Automatic shutdown after a period of inactivity.	Set in P12. The automatic shutdown time can be adjusted from 1 to 30 minutes. The default is 5 mins. Note: When the scooter has no operation and no speed, the timing starts.
LCD Brightness	LCD Brightness	Adjust the LCD backlight brightness.	Set in P13. Adjust from 0 to 5, the default is 5.
Imperial/Metric	Imperial/Metric	Speed unit selection.	Set in P14. "0" means metric,it is km/h; "1" means imperial,it is mph.The default is 0.
Wheel Diameter	Wheel diameter of the scooter.		Set in P15. Different scooters have different default diameters. They are set at the factory. Any modification is forbidden.
Battery Voltage	Voltage of the scooter.		Set in P16. Different scooters have different default voltages. They are set at the factory. Any modification is forbidden.
Pole Pairs	Motor pole pair number of the scooter.		Set in P17. Different scooters have different motor pole-pair numbers. They are set at the factory. Any modification is forbidden.
Remote Control Binding	Bind the remote control to the electric scooter.		Set in P18. When pressed, return to the home page while 'minimotors' flashes; after pressing the remote control, binding is successful and 'minimotors' stops flashing.

Maintenance and Care

WARNING

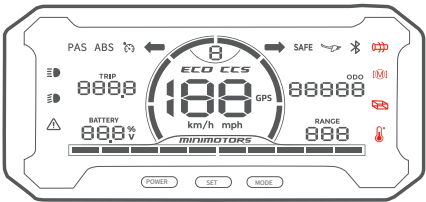
Sun exposure and extreme temperature conditions (overheating and supercooling) will accelerate the aging of plastic parts and may lead to a decrease in battery life.

Recommended Maintenance Schedule

For your riding safety, please be sure to maintain and check your scooter regularly. You are familiar with and understand the frequency, condition and place of use of your scooter, and are responsible for regular inspection of your scooter. If any abnormality is found, please stop using it immediately and go to the authorized outlet for inspection and maintenance in time. The following table is our recommended regular maintenance items and cycles.

Item	Component	Maintenance Method	Every 3 months	Every 6 months or every 310 miles (500 km)	After 1 year or the total mileage>1864 miles (3000 km)
Mainframe Maintenance	Mainframe Parts	Use a soft, wet cloth to wipe the mainframe clean.	✓	✓	✓
	Tire Pressure	Inflate tires to 250 KPA. Note: Remember to screw the valve cap on after inflating!	✓	✓	✓
	Tire Wear	Check if the tires are cracked, deformed, or significantly worn.		✓	✓
	Screws on The Stem Top	Tighten the screws fixed with the handlebar and the stem. The suggested torque is 6-8 N·m.	✓	✓	✓
		Tighten the screw on the throttle. The suggested torque is 4-4.5 N·m. Tighten the screws on the brake levers. The suggested torque is 8.5±0.5 N·m. Tighten the screws on the stem top. The suggested torque is 2.4 N·m.		✓	✓
		Screws on The Folding Mechanism	Tighten the screws for folding mechanism. The suggested torque is 15±1 N·m. If the stem gets shaky when riding, tighten the screws on the folding mechanism when the scooter is in folded state.		✓
	Brake Disc Assembly	Tighten the screws on the brake disc assembly. The suggested torque is 8.5±0.5 N·m.		✓	✓
	3rd-Gen Replaceable Suspension	If the suspensions are not smooth or much stiffer when riding, add lubricant to suspension internal structure parts			✓
Function Inspection	Hub Motor	To accelerate and decelerate, check if the hub motor is stalled or has abnormal sounds.		✓	✓
	Rear Wheel Maintenance	Check if the rear wheel is stalled or gets shaky, or the axis shaft is unbalanced.		✓	✓
	Brake Adjustment	1) Squeeze the brake levers, repeat 5 to 8 times to enable the caliper fitted with brake pads to grab the rotor. 2) Tighten the bolts on the caliper. The suggested torque is 8.5±0.5 N·m. 3) Release the brake levers, spin the wheels. If the brake pads make contact with the rotor, loosen the bolts on the caliper and repeat step 1. 4) The pushrod can be adjusted by a 2 mm wrench if necessary. Rotate the pushrod clockwise to increase the length between the brake lever and the handlebar. Rotate the pushrod counterclockwise to decrease the length.		✓	✓
		Brake Pads	The disc brake has a self-repair function. But when the brake pads are significantly worn, they need to be replaced. If the brake levers feel spongy when you squeeze them and the rotor makes abnormal sounds, please stop riding immediately and replace them with new brake pads.	✓	✓
	Fault Detection	Hydraulic Brake	If you experience poor brake performance, it's recommended to contact the after-sale service or an authorized dealer to replace the brake fluid (Mineral oil model: BK407).		✓
Brake Rotor		Spin the wheels; the caliper should be aligned with the rotor and they shouldn't rub on the brake pads. WARNING: Do not touch the disc brake after riding or braking, because it can get hot.		✓	✓
Taillight		Squeeze the brake levers; the taillight should work normally.		✓	✓
Headlight		Check the headlight and see if it lights brightly.		✓	✓
Dashboard		Power on the scooter and check that the dashboard works properly.		✓	✓
Horn		Press the button to check if the horn sounds loud.		✓	✓
Throttle		Twist the throttle and release it, checking for acceleration and deceleration. Note: Release it, check if the throttle handle returns to the position.		✓	✓
Fault Detection		After connecting with the Minimotors app: 1) Update the firmware to the latest version. 2) Check if the notification of the corresponding error code and possible causes will prompt when the scooter detects an error.		✓	✓
Charging		Charge the scooter: 1) Check the charging indicator on the dashboard. 2) Check the LED indicator on the battery charger. Charging: red, Fully charged: green.		✓	✓
Control Switches		Press or rotate the left/right control switches 3 times without failure.		✓	✓
Turning		Test with left turns and right turns. No resistance or lag when turning.		✓	✓
Important Parts	Battery Assembly	The battery needs to be replaced after 500 charge/discharge cycles or the total mileage is more than 6213 miles (10000 km). Note: It is recommended to charge once every 60 days for long-term storage.			
	Controller				
	Hub Motor				
Functional Parts	Rear Wheel Assembly	It is required that original parts be used for repairs and replacements.			✓
	Throttle & Brake Levers				
	Front Fork Assembly				
	Folding Mechanism				
	Brake Rotor				
	Disc Brake Assembly				
	Dashboard				

Common Failures and Solutions



Error Symbol	Possible Causes	Solution
	Throttle failure	Please contact after-sales service or an authorized dealer.
	Motor failure	Please contact after-sales service or an authorized dealer.
	Controller failure	Please contact after-sales service or an authorized dealer.
	Over-temperature protection	Please try to apply heat dissipation for the scooter.

Charging

The location of the charging port varies depending on the model, so please refer to the actual product.

1.Open the charging port cap, connect it to the charger's connector, then plug the charger into a household outlet.
2.Charging status indicator: (Red) Charging; (Green) Charging complete.
3.Be sure to close the charging port cap when driving or storing the vehicle, except when charging.
4.When connecting the connector to the charging port, small metallic sparks may occur due to a voltage difference; this is normal.
*Never leave the charger plugged into a household outlet/socket when not in use.
If the charger is connected to the power socket but not to the scooter for more than 1 minute, the overcharge protection function will activate. The charger's indicator stays green with no power output.
Unplug all the charger connectors and leave the unit disconnected for over 3 minutes to reset the protection mode.
* A malfunction of the charger or abnormal operating conditions may result in electric shock or fire. Follow proper operating instructions to prevent safety hazards.

Basic Charging Method

1.Manufacturers and sellers are not responsible for any problems arising from disassembly, modification, or mixing with other chargers.

2.The charger must not be used in places with high humidity, high heat, flammable materials, confined spaces, or unventilated areas such as inside a car.

4.Children and pets must not be allowed near the charger, as accidental contact may lead to electric shock.

5.Immediately discontinue use and contact the service center if the charger's indicator fails to light, the unit is dropped, subjected to severe impact, left charging excessively long, or has damaged cable insulation.

3.The charger is not waterproof. Take precautions to prevent moisture from entering the charger.

6. Unplug the charger when you are away from the home for long periods.

7.Only use an original genuine charger.
8.Avoid touching the plug within 10 seconds after disconnecting the charger; residual instantaneous discharge can lead to electric shock.
9.Never disconnect the terminal mid-charging, as this can damage the charger's internal circuits and result in faults.
10.Do not operate the device while charging is in progress.
11.Charging terminals must maintain solid contact during charging; cease usage immediately if terminals show corrosion or damage.
12.To safely detach the charger from the unit, grip the terminal body instead of pulling the power cord.
13. Unplug the charger from the product upon full charge completion. If the charger will sit idle for several days, disconnect it entirely to prevent overcharging beyond the rated charging time listed in product specifications.

NO INDOOR CHARGING!
Lithium battery risk: Overheat & Fire Hazard.
Charge only in WELL-VENTILATED AREAS.

General Safety and Legal Compliance

1.Before using this product, the rider must carefully read and fully understand this manual, especially all warnings, cautions, operating instructions and safety information. Do not allow any other person to use the scooter unless they have read and understood this manual.

2.This scooter is a powerful electric personal mobility device. Improper use, lack of riding experience, failure to follow this manual or failure to comply with local laws may result in loss of control, collision, fall, serious injury, death, fire, electric shock or property damage.

3.Following the instructions and warnings in this manual can reduce risks, but cannot eliminate all risks. Even when used correctly, residual risks remain, including loss of control, collision, fall, brake overheating, tire slip, mechanical failure, electrical failure, fire, electric shock and injury.

4.This product is intended for personal use by one rider only. Do not carry passengers.

5.This product is not a toy. Children must not play with the scooter. Riders under the age of legal adulthood must use this product only under adult supervision and only where permitted by local laws and regulations. Cleaning and user maintenance must not be carried out by children without supervision.

6.Always comply with all applicable local laws and regulations, including rules regarding permitted riding areas, speed limits, age restrictions, helmet use, license requirements, insurance requirements and road traffic rules.

7.Do not ride in areas where the use of electric scooters is prohibited. Where applicable under local law, do not ride on sidewalks or pedestrian-only areas. Use cycle lanes where required.

8.This product is not designed for use on motor vehicle roads unless expressly permitted by local law. The user is solely responsible for learning, understanding and complying with all applicable laws, regulations, requirements, prohibitions and restrictions related to the use of this product.

9.Only use parts and accessories specified or approved by the manufacturer. Do not modify, disassemble or repair the scooter without authorization. Unauthorized modification may affect safety, cause serious damage and invalidate the warranty.

10.Keep plastic covers, bags and packaging materials away from children to avoid suffocation hazards.

Inspection, Maintenance and Emergency Safety

1.Before each ride, check that the wheels, tires, brakes, screws, folding mechanism, handlebar, stem, deck, lights and display are properly installed, securely fastened and free from looseness, damage, deformation, cracks, abnormal noise or missing parts.

2.Do not ride if any part appears damaged, loose, abnormal or unsafe. Contact after-sales service or an authorized dealer for inspection.

3.Make sure the kickstand is fully retracted before starting to ride. Riding with the kickstand down may cause loss of control or damage to the scooter.

4.Make sure the folding mechanism is securely locked before riding. The safety button, locking handle and folding latch must be correctly positioned.

5.When folding or unfolding the scooter, keep hands, fingers, clothing and accessories away from folding joints and moving parts. Hold the steering tube securely to prevent it from falling.

6.Do not lift the scooter by the handlebar grips alone. To lift the scooter safely, hold the deck with one hand and the handlebar or steering tube with the other hand. Use proper posture to avoid back injury.

7.Before transporting the scooter, make sure it is powered off, folded correctly and securely held. Refer to the product specifications for the weight of the scooter before lifting, carrying or transporting it.

8.Always stop the scooter completely and turn off the power after use and before inspection, cleaning, adjustment or maintenance. Do not perform maintenance while the scooter is powered on.

9.The motor and brake components may become very hot after riding or braking. Do not touch the motor, brake disc, caliper or other brake components immediately after use.

10.If sharp edges, cracks, deformation, loose parts or abnormal wear appear during use, stop using the scooter and contact after-sales service or an authorized dealer.

11.Use only original or manufacturer-approved replacement parts for safety-related repairs and replacements.

12.Do not use a damaged charger, plug or cable. If the external flexible cable of the charger is damaged, stop using the charger immediately and replace the entire charger with an original or manufacturer-approved charger.

13.If the scooter shows an error symbol, abnormal noise, abnormal vibration, abnormal heat, loss of power, brake failure, throttle failure, motor failure or controller failure, stop riding immediately.

14.Turn off the scooter and move it to a safe location away from traffic and pedestrians. Do not continue riding if the scooter is damaged or if any safety-related function does not operate normally.

15.If a blockage occurs in the wheel, brake or folding mechanism, turn off the power before attempting to remove the blockage. Keep hands and fingers away from moving parts. If the blockage cannot be safely removed, contact after-sales service or an authorized dealer.

16.In the event of an accident, impact, fall, collision or suspected battery impact, stop using the scooter and have it inspected by after-sales service or an authorized dealer before further use.

17.Riding this scooter generates vibration, which may be transmitted to the rider's whole body. Long or continuous use may increase fatigue. Take breaks as needed and stop riding if you feel discomfort, numbness or loss of control.

18.The scooter may emit slight airborne noise during normal operation. Stop using the scooter and contact after-sales service or an authorized dealer if you notice abnormal, excessive or unusual noise.

Riding Safety and Prohibited Use

- 1.Before riding, practice in a safe, open and flat area until you are familiar with starting, accelerating, turning, braking and stopping. New riders should start at a low and stable speed.
- 2.This scooter is suitable for flat, hard and stable road surfaces. Do not ride on roads with obstacles, protrusions, deep gaps, loose gravel, sand, mud, ice or other unstable surfaces.
- 3.Do not ride in snow, rain, wet, muddy or icy conditions. Do not ride through puddles, flooded areas or standing water.
- 4.This scooter has limited resistance to water exposure, but it is not waterproof. Do not immerse the scooter, battery, display, controller, motor or charger in water. Water ingress may cause functional damage, battery damage, fire, electric shock or explosion and is not covered under warranty.
- 5.Riding on wet roads significantly increases braking distance. Braking distance may become up to twice as long on wet surfaces. Avoid riding in wet conditions and reduce speed when road conditions are uncertain.
- 6.Always keep both hands on the handlebar and both feet on the deck while riding. Do not ride with one hand, without holding the handlebar, or with only one foot on the deck.
- 7.Do not accelerate, decelerate, brake or turn suddenly. Sudden operation may cause loss of control, collision or fall.
- 8.Maintain a moderate speed, keep a safe distance from pedestrians, cyclists, vehicles and obstacles, and always be prepared to stop.
- 9.Use the horn or bell when approaching pedestrians or cyclists who may not have seen or heard the scooter.
- 10.Do not use a mobile phone, camera, headphones, earphones, or perform any activity unrelated to riding while operating the scooter.
- 11.Do not ride under the influence of alcohol, drugs, medication, fatigue, illness or any condition that may affect balance, judgment or reaction time.
- 12.Use extra caution on slippery surfaces, in areas with heavy traffic, near intersections, on sudden slopes and on poor road surfaces.
- 13.Do not approach speed bumps, curbs, steps or similar obstacles at high speed. Reduce speed to below 5 km/h when approaching speed bumps and slightly bend your knees to maintain balance.
- 14.Avoid obstacles whenever possible. Be careful near curbs, steps, road edges and uneven pavement.
- 15.Before riding in dark or low-light conditions, check that all lights are working properly. Reduced visibility may delay your reaction to hazards. Keep your speed under control and ride with extra caution.
- 16.Sudden or excessive braking may cause the scooter to overturn. Slow down gradually whenever possible and do not apply extreme force to the brake levers unless necessary to avoid an immediate hazard.
- 17.Do not attempt to brake or slow down by placing your foot on the ground or against the wheel. This may cause loss of balance, injury or damage.
- 18.Accelerating downhill is extremely dangerous. Reduce speed before and during downhill riding. During long downhill rides, stop periodically to allow the brakes to cool.
- 19.Acceptable climbing performance varies depending on rider weight, battery level, road surface and ambient temperature. Do not ride continuously on long or excessively steep uphill roads, as this may cause overheating, over-current protection, voltage drop or permanent damage.
- 20.Always wear appropriate protective equipment, including a certified bicycle or scooter helmet, knee pads, elbow pads and wrist guards. Make sure the helmet strap is securely fastened under the chin.
- 21.Always wear suitable closed-toe footwear. Do not ride barefoot or with high heels, slippers, sandals, open-toe shoes or footwear that may reduce grip, stability or control.
- 22.Tie up long hair and keep loose clothing, bags, shoelaces, straps and other accessories away from wheels, brakes and the folding mechanism.
- 23.This product is not designed for jumps, stunts, tricks, acrobatics, racing, off-road riding or aggressive riding. Damage or malfunction caused by such misuse is not covered under warranty and may result in serious injury.
- 24.Do not ride with more than one person. Do not place or hang heavy objects on the handlebar or grips, as extra loads may affect steering stability.
- 25.Do not press the throttle when walking beside, pushing or handling the scooter. Accidental acceleration may cause injury or damage.

Trademark and Copyrights

Dualtron is a trademark of Zhejiang Dualtron Escooter Co. Ltd. ; Android is the trademark of Google Inc., App Store is a service mark of Apple Inc. The respective owners reserve the rights of their trademarks and copyrights, etc. referred to in this manual.

We have attempted to include descriptions and instructions for all the functions of the scooter at the time of printing.

However, due to constant improvement of product features and changes of design, your scooter may differ slightly from the one shown in this document. Scan the QR Code on the cover of this manual, or visit www.minimotors.com to download the latest electronic version. Please note that there are multiple models with different functions, and some of the functions mentioned herein may not be applicable to your unit. The manufacturer reserves the right to change the design and functionality of the scooter product and document without prior notice.

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(®Search "Minimotors" to connect scooters with built-in Bluetooth)

Safety precautions for Lithium battery

1. Care Lithium batteries should be protected from direct exposure to children and pets.
2. Performance
 - 1) A lithium battery is affected by external temperature. In the winter, when the temperatures are low, the performance of the battery may be temporarily deteriorated and the mileage and power output are reduced.
 - 2)Lithium batteries typically experience more than 15% capacity degradation after 300 charge/discharge cycles. If usage time is shortened due to long usage, it should be replaced with a genuine one through the nearest point.
3. Charging
 - 1) The lithium battery should be used only with the genuine battery and charger supplied by the manufacturer. Any problems caused by the use of a battery not supplied by the manufacturer, mixed use, or using a non-genuine charger are not covered by the manufacturer.
 - 2) Charging the lithium battery with a non-genuine charger may cause malfunction or fire.
 - 3) The lithium battery should be charged in a well-ventilated, dry place and around the charger in a place where there is no flammable material.
 - 4) The lithium battery should be charged at 0 ~ 45°C and discharged within -10 ~ 60°C . The sub-battery must be charged at 0 to 50°C and discharged within -20 to 75°C. Charging or discharging at a temperature outside this range may cause malfunction, fire or explosion.
 - 5) In case of moving from cold outside to warm indoor, please charge it after 1 ~ 2 hours. This is to prevent condensation from occurring inside the product due to the temperature difference.
4. Storage
 - 1) Lithium batteries should be kept away from snow, rain and direct sunlight. Do not store or charge them in a trunk or hot room. Select a dry place and store at room temperature (10 ~ 20°C).
 - 2) When storing for more than 3 months, charge the remaining battery level to 70~80% (do not store full charge).
5. Trouble symptom, safety
 - 1) Lithium battery should be discontinued immediately if it is damaged or there is leakage of battery, sour odor, appearance deformation, etc. Please contact the place of purchase to get technical support and service.
 - 2) If overheating, smoke, or ignition is detected in a product with a lithium battery, immediately stop charging and use, move the product outdoors as soon as possible, and then use a fire extinguisher to extinguish flames. Do not spray water or immerse the product in any situation, which can lead to more danger.
 - 3) A lithium battery pack has very high energy density, so if you charge the battery for a long time and there is a case of a short circuit, leakage, a bad battery, etc., it can lead to ignition. Therefore, you should avoid charging for a long time without a person being present to avoid the risk of unexpected fire.
 - 6. Misuse If the lithium battery is short-circuited, the polarity is changed, or if the battery is impacted, malfunction or fire may result. If you think that the battery has been impacted, you should stop charging and using it and visit the nearest service center for inspection.
 - 7. Water inflow Prevent water from entering the lithium battery. There is a risk of fire or electric shock if the charger is connected while moisture is present.
 - 8. Caution Disconnect the battery from the main unit except when recharging and reinstalling. Do not use for any other purpose.
 - 9. Disposal When disposing of the lithium battery, the battery should be removed from the product and disposed of through an authorized service center or recycling facility, and the charge and discharge terminals are not short-circuited. Dispose of it as industrial waste.

DANGER

Battery disassembly prohibited
Battery disassembly, modification, and repair are not covered under warranty.

Legal Statement

IMPORTANT: All users are required to thoroughly read and fully comprehend the complete User Manual (with particular attention to warnings, precautions, operational guidelines and safety provisions), and comply with all listed instructions before using the scooter. End users shall exercise reasonable common sense and prudent judgment during product use. Owners shall not authorize or enable any third-party usage unless the user has received full warning disclosure and formally agrees to adhere to all stipulated terms.

1. All riders must read this manual prior to use to guarantee proper operation. Anyone unable to fully follow manual instructions shall refrain from riding the scooter.
2. We recommend purchasing valid insurance after purchase to mitigate operational risks.
3. It is the user's responsibility to learn and observe all local statutes and policies related to electric scooter riding. Riding is prohibited in legally restricted zones. For jurisdictions without official e-scooter regulatory standards, users must adhere to all rider safety rules defined within this manual. Minimotors Dualtron shall not be held liable for any property loss, personal injury, fatalities, accidents or legal claims stemming from improper use contrary to the manual's safety advice.
4. Inspect the scooter and all accessories immediately upon delivery for completeness and physical integrity. Strictly assemble all parts following provided instructions; faulty installation poses risks of uncontrolled movement, crashes and falls.
5. The use of non-OEM batteries and accessories is not permitted. Unauthorized disassembly, destructive tampering or modification of the product and its constituent parts is forbidden. All consequent damages and associated costs shall be the sole responsibility of the user.
6. Product specifications and technical parameters differ across models and may be revised without advance notification.
7. Thank you for your purchase and confidence in our product.