



**BOLZZEN**

E-SCOOTER USER MANUAL

[WWW.BOLZZEN.COM](http://WWW.BOLZZEN.COM)

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# 1 COMPONENTS & TECHNICAL SPECIFICATIONS

## 1.1 ATOM SERIES



- 1) LCD display
- 2) Lever lock for handlebar height adjustment
- 3) Handlebar folding sleeve
- 4) Brake wire
- 5) Front suspension
- 6) Front light
- 7) Front mudguard
- 8) Folding system
- 9) Rear light
- 10) Parking stand
- 11) Brake handle
- 12) Front air tire
- 13) Rear solid tire
- 14) Rear mudguard
- 15) Rear drum brake

## 1.2 Technical Specs Atom Series

Model	ATOM LITE	ATOM PRO
Motor Power	350W	500W
Motor Type	DC brushless motor	
Maximum Load	120kg	
Material	Aluminum alloy	
Speed	25km/h	
Dimensions When Unfolded	980x540x1140mm	1080x540x1140mm
Dimensions When Folded	880x180x360mm	980x180x360mm
Weight	13kg	15.5kg
Distance Range	20-25km	45-50km
Brake	Rear drum brake	
Frame Width	16cm	
Battery Voltage	36V	48V
Battery Capacity	8.0Ah	13.0Ah
Battery Type	Environmental lithium battery	
Input Voltage	AC100-240V	
Output Current	2A	
Charging Time	3-4h	6-7h
Color	Black/White	
Gradeability	15°	
Tires Size	8 inches	
Tire Type	Front air tire, rear solid tire	
Display	Multifunctional color LCD display with USB charging port	
Cruise Control Mode	Available	

## 2 IMPORTANT SAFETY INSTRUCTIONS

Bolzen electric scooters are a personal transport vehicle and are designed for one person use only. Please do not carry a passenger on this electric scooter.

Bolzen electric scooters are is designed for adult use only. **Persons under the age of 16 should not operate without adult supervision** Please wear a safety helmet when riding the electric scooter.

Do not ride the electric scooter on unsafe surface or off road.

Please practice on an open traffic-free space on gear level 1 before riding in bicycle lane.

During riding operations always keep both hands on the handlebar and both feet on the standing board. Please do not jump on the standing board.

Do not turn off the motor power while riding the scooter.

Do not try to ride over a gap of more than 3 cm. This may cause injury to the rider or damage the vehicle.

When riding on rough or bumpy road, please slow down the electric scooter or stop riding the vehicle

Users must adjust the height of the handlebar tube according to their height to ensure a safe, stable and comfortable ride.

Do not ride Bolzen electric scooters on slippery surfaces such as oil or ice.

Do not use Bolzen electric scooters in weather conditions with the temperature below - 5.

Do not leave the product immersed in a water depth of more than 3 cm to avoid damage to the electrical parts of the vehicle.

Avoid riding the Bolzen electric scooter in adverse weather conditions like rain, snow or wind storm to prevent an accident. If riding in these conditions, never exceed the speed of 10 km/h.

If the electric scooter is not used for a period of longer than 30 days, regularly charge it at least every 30 days.

**When unfolding the scooter, please press the folding system handle till it clicks to make sure that it is in place correctly.**

### 3 OPERATIONAL INSTRUCTIONS

#### 3.1 Folding/Unfolding



### 3.2 Display



- 1) On/Off Switch
- 2) Gear switch
- 3) Acceleration handle
- 4) Gear indicator
- 5) Speed indicator
- 6) Multi-indication area/mileage indicator
- 7) Battery charge level indicator
- 8) USB charging port

Model: 882

Working Voltage: DC24V/36Vcompatible, 36V/48V/52V compatible

Communication protocol: UART

#### Wire Connections

1. Red Wire (D+): Positive pole input
2. Black Wire (GND): Negative pole
3. Blue Wire (DS): Controller electric door lock
4. Green Wire (RX): Communication reception
5. White Wire (TX): Communication launch

## The Buttons

Long press the ON/OFF button to turn on the display, short press the ON/OFF to switch between ODO, TRIP, V, A, E, TM in the multi-indicator

Long press the ON/OFF to turn off the display

Long press the M and ON/OFF at the same time to enter into the parameter settings mode. Short press the ON/OFF button to switch between parameters. Short press M to change the settings. Long press the M and ON/OFF at the same time to save and exit

Long press M to turn on the lights

## Display Functions

Speed indication, power indication, error code indication, lights control, cruise control, gear level switch and gear indicator, total mileage, single mileage, real-time voltage, running time, acceleration control

## Multi-indicator Area

Total mileage ODO, single mileage TRIP, real-time voltage V, running time TIME, error code E

## Error Code Indicator

When the symbol **!** is flashing, short press ON / OFF switch button to enter into the error analysis mode. Each number of the error code corresponds to a specific problem as follows:

ERRO 1: Motor fault

ERRO 2: Throttle fault

ERRO 3: Controller fault

ERRO 4: Brake lever power off

ERRO 5: Under voltage protection

ERRO 6: Communication fault, the display unable to get the output from the controller



ERRO 7: Communication fault, the controller unable to get the output from the display

### Speed Indicator

Unit: MPH, KM/H

Speed signal comes from the motor via controller to the display.  
The indicated speed depends on the motor signal and the wheel diameter.

### Gear Switch

Short press the MODE button to switch the gear: 1 - slow, 2 - medium, 3 - fast. The higher the gear, the faster the speed. Gear 0 means the motor is not powered.

### Light Control

Long press the MODE key to switch on/off the front and rear lights. Rear lights are also lit automatically when braking.

### Cruise Control Function

When riding the scooter, keep the acceleration handle pressed with the same pressure for 5 seconds to activate the cruise control mode. Use the brake handle to deactivate the cruise control mode.

### Start mode selection

For safety purposes all Bolzzzen models are set by default to non-zero start mode which means the motor will not get started until you kick start the scooter first so that the speed is above zero:

NON - Non-zero start mode

ZERO - zero start mode

## USB Charging Indicator

The display is equipped with a USB port for you to be able to charge your electronic devices. When the device is connected, the USB indicator is lit. In case of problem the indicator starts to flash, and a safety mode will be automatically activated.

## Parameter Settings

Long press the M and ON/OFF at the same time to enter into the parameter settings mode. Short press the ON/OFF button to switch between parameters. Short press M to change the settings. Long press the M and ON/OFF at the same time to save and exit

P01: rear light brightness: 1 - the darkest, 3 - the lightest;

P02: mileage unit, 0: km; 1: mile;

P04: sleep mode time: 0 - no sleep mode; 1-60 - sleep mode, minutes;

P06: wheel diameter: unit - inch; precision: 0.1;

P07: number of measuring magnets: range 1-100;

P09: zero start, non-zero start setting: 0 - zero start; 1 - nonzero start;

P12: starting torque: range 0-5, 0 - the weakest, 5 - strongest;

P15: motor drive signal percentage settings: full speed is set to 100

P16: cruise control function: 1 - activated, 0 - deactivated

P17: light settings: the lights are not lit automatically when the vehicle is on, 0 - the lights are lit automatically when the vehicle is on

P99: settings reset (when in P99 settings, press and hold the MODE button for 5-6 seconds to reset all the parameters back to the initial settings)

## 3 OPERATIONAL INSTRUCTIONS

### 3.3 Riding Operations Instructions

#### 3.3.1 Before Riding

Choose a suitable venue for riding.  
Unfold the electric scooter according to the instructions.  
Adjust the height of the handlebar tube according to your height.

#### 3.3.2 Riding

Press the power button to turn on the power. The speed is set by default to gear level 1.  
For safety purposes, Bolzzen electric scooters have a safe start design which means the motor can start only when the speed of the vehicle is above 0. It prevents motor start when the acceleration handle is pressed by mistake. To start the riding operations, put one foot on the standing board and the other foot on the ground and kick scoot it like a classic kick scooter. When the scooter is in motion and its speed is above 0, smoothly use the acceleration handle to start the motor. Once the motor starts, put the other foot on the standing board and continue riding.  
When riding, adjust the gear level from 1 to 3, use lights and horn according to the road conditions and according to the situation.  
Be aware of the cruise control function. Cruise control function is activated when the acceleration handle is pressed with the same pressure for 3 seconds.  
Be aware of the possibility of unpredictable sudden obstacles on your way and control the speed level.

#### 3.3.3 Braking

Use the rear brakes handle for braking under normal circumstances.

The greater pressure you put, the greater braking force will be applied. Be aware that hard braking may result in an accident due to slipping of the wheels, loss of balance and you may fall off the scooter. Hard braking might also cause damage to the tire.

## 4 MAINTENANCE

### 4.1 Tyres

Bolzen electric scooters use rubber tyres. When the tyres are worn out or have a puncture, they need to be replaced timely.

Contact the official distributor to replace the original tyres.

Inspect your scooter and its tyres every month, check if the screws are tightened enough. If they are loose, tighten them.

### 4.3 Battery

Bolzen electric scooters are equipped with a lithium polymer battery. The average lifespan of the battery is 1000 cycles. Under normal use and maintenance, the battery lifespan can generally reach more than 1000 cycles.

Before using the scooter for the first time, please charge the battery to full charge.

Avoid totally depleting your scooter's battery before charging. Always make sure it is minimum 10 % charged. For satisfactory vehicle performance, the battery has to be charged minimum 50 %

Do not leave your electric scooter with a significantly discharged battery for a few hours. Charge it promptly.

When storing the electric scooter for a long period, make sure the battery is at least 40-50 % charged. It is advisable to charge your scooter minimum once per 30 days.

Always use only the original Bolzen charger that corresponds to the model of the scooter.

Do not leave your electric scooter in cold temperature below 0 or under the direct sun. Keep the battery dry. Negative environmental conditions can damage the battery.

Polymer lithium batteries have to be treated with extreme caution. Inappropriate charging, damage or overheating can result in a fire. Do not leave your electric scooter to charge without supervision. Do not leave the electric scooter to charge overnight. Always supervise the electric scooter while it is charging and avoid battery over-charge. Do not use, charge or leave a damaged battery unattended and follow the disposal protocols immediately.

### 4.4 Charger

The dedicated charger provided by Bolzen has a charging protection timing function.

## Charging instructions

Open the charging port cover on the electric scooter and insert the charger output connector into the charging port.

Insert the charger input power plug into the power socket (AC110V-220V)

Charger light is red to indicate that charging is in progress; when the charger light turns green, it indicates that the battery is fully charged.

When charging the battery, place it in a dry, ventilated environment.

## 5 WARRANTY POLICY

### 5.1 Warranty Scope

This limited warranty covers any defects in the new Bolzzen devices accompanied by this limited warranty statement for a period of 12 months or 2000kms after the first retail purchase (whichever comes first) under **normal installation, use, service and maintenance.**

Only consumers purchasing this device from an authorized Bolzzen retailer or reseller may obtain coverage under this limited warranty.

This warranty extends to the original purchaser only and is non-transferable.

### 5.2 Warranty Limitations

This limited warranty does not cover any problem that is caused by:

Commercial use, accident, abuse, neglect, shock, heat or humidity beyond product specifications, improper installation, operation, maintenance or modification

Any misuse contrary to the instructions in the User Manual

Malfunctions caused by other equipment

This limited warranty is void if a product is returned with removed, damaged or tampered labels of any alterations (including the unauthorized removal of any component or external cover)

Bolzen does not cover the cost of national/international warranty shipping at any time

### 5.3 Warranty Application Process

Bolzen will not provide any warranty coverage unless your claim is in compliance with all terms of this limited warranty statement and you follow the proper return procedure.

To request warranty service, you may contact us or contact an authorized Bolzen distributor.

## 6 CONTACT US

BOLZZEN PTY LTD

### **Email**

info@bolzzen.com

### **Technical Support**

Please contact the official Bolzzen distributor where you purchased your electric scooter

### **Website**

<https://www.bolzzen.com>

