

# OWNER'S MANUAL LYNX





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# 1) General information

Thank you for your purchase of your new LYNX electric scooter!

We welcome you to the world of the ZRide Ltd electric vehicles. ZRide electric scooters not only provide a new experience in riding, but are respectful of the environment and nature.

The LYNX model is the result of an intense 3 year's effort to develop a new reliable and powerful ecological urban scooter. We are sure you will appreciate the experience of driving this new quiet, nonpolluting and high-performance electric vehicle.

The Owner's Manual contains instruction on the operation of the LYNX, safety information and details on the maintenance of the LYNX scooter. In order to properly operate and benefit from all the exciting opportunities when driving your Zride Tiger scooter, you will need to carefully and attentively read this manual.

We wish you a great pleasure and maximum safety when driving, both which should be at the heart of every good motorcyclist!

It is possible that some parts of this manual may not include recent changes to the function of the TIGEWR 100 which may have been necessary to adapt new technology or comply with legal requirements. ZRide Ltd make severy effortto build and continuously improve its vehicles.

If you have any questions in relation to your vehicle or the maintenance of your vehicle please contact us or the shop where you purchased yourLYNX.

This Owner's manual is an integral part of the scooter and should be provided to any new owner of this vehicle.

**Specification: LYNX** 

Max weight: 2 people, max 150kg

Vehicle weight: 146kg

Operating temperature: -10°C to 40°C

Never leave the scooter/batteries in direct sunlight to avoid overheating!

Never leave in rain or humid/corrosive environments!

Never immerse the scooter in water!

Charging: Internal 10A 220VAC, External 3A 220VAC

Type of driving license required: minimum CBT and above.

## 1.1. Important symbols that are used in this Manual



When you see this symbol you should absolutely read the text next to it. These sections contain indispensable information for your safety and for avoiding accidents or injuries.

Never underestimate the danger to life or property that can occur if ignoring these instructions.

#### 1.2. Safety Information and precautions before driving the vehicle

This manual contains important safety instructions. Please take the responsibility to review this information and make sure you understand all cautions, warnings and safety topics. Always check and obey laws and regulations that are effective in the locations where the scooter is used. Failure to use common sense and respect safety warnings increases the risk of injury. Use with appropriate caution.



To maintain your LYNX in good working condition please follow the rules and recommendations outlined below:

- You should at all time carry your driving license and insurance certificate with you.
- Wear approved safety equipment including a helmet. Long-sleeve jacket, long pants, gloves and appropriate footwear are recommended. Be aware that even these precautions may not be a sufficient protection in the event of an accident.
- Before travel you should check the tires (pressure and profile depth), the brakes (brakefluid level, brake pads and general working condition) and the battery charger (TIGER R).
- Familiarize yourself with all the scooter's features, including the proper use of the brakes, lights and horn.
- When driving, obey road traffic rules.
- Do not weave between lanes or change lanes suddenly. When you need to change lanes, always check your mirrors, use turn signals to tell other drivers your intentions and then give a quick over the shoulder as a final safety check.
- Watch out for potential obstacles that could enter your path and result in you lossof control
  of the vehicle.
- Never use your cell phone or headphones while driving.
- Never drive under the influence of alcohol or medications that may affect your driving skills and reaction time.
- Drive according to weather conditions, take extra care on wet or icy road. Remember that on slippery surface your braking distance increases 4 times.

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- Keep comfortable distance from other vehicles and objects.
- At night, make sure that lights are on as per manufacturer setup; wear light reflective clothing.

#### • Secure the scooter:

Choose a place to leave yourLYNX scooter parked with caution. If you are leaving it at a public place, look for security cameras and leave the scooter in the line of site or in a well-lit area. Make sure the scooter is locked.



CAUTION: Modification is illegal. Vehicle modification will affect its structure or performance, which will result in shortening the life of the vehicle. Modified vehicles will not be covered by the manufacturer's warranty. It is necessary to buy original spare parts from authorized dealers, unless not required under local law and regulation. No guarantee can be provided either for the quality or durability of non-OEM spare parts.



WARNING: Once you have completed the initial charge you are ready to ride. You must be aware of all local laws and ordinances that govern and/or restrict the use of a motorcycle or scooter. Laws and ordinances vary greatly in different countries. It is your responsibility to know and abide by your local restrictions.

# 1.3. Vehicle identification number (VIN)

The Vehicle Identification Number (VIN) can be found etched under the seat at the rear of the scooter adjacent the seat lock mechanism.



On this label you find the name of the factory, the homologation number and the VIN number which is specific to each scooter (like a serial number).



These numbers are also mentioned on the LYNX vehicle registration authorization. The EC Certificate of Conformity for the LYNX was issued in September 2020 certifying that the LYNX is in full compliance with all current regulations.

# 1.4. General information about this vehicle

- 1) Windshield
- 2) Rearview mirror
- 3) Headlight low beam
- 4) Turn signal (left direction)
- 5) Front shock absorber
- 6) Front round reflector

- 7) Front wheel
- 8) Saddle (seat)
- 9) Side stand (Kick stand)
- 10) Center stand (mid stand)
- 11) Swing arm Fender
- 12) License plate



- 1) High/low beam switch
- 2) Turn signal
- 3) Horn
- 4) Kill Switch
- 5) 3 speed selector
- 6) Reverse switch
- 7) Ignition
- 8) Passenger left footpeg

- 9) Side stand
- 10) Hubmotor
- 11) Rear Shock
- 12) Side reflector
- 13) Rear reflector
- 14) Tail light
- 15) Rear Carrier
- 16) DC/DC 12V converter location



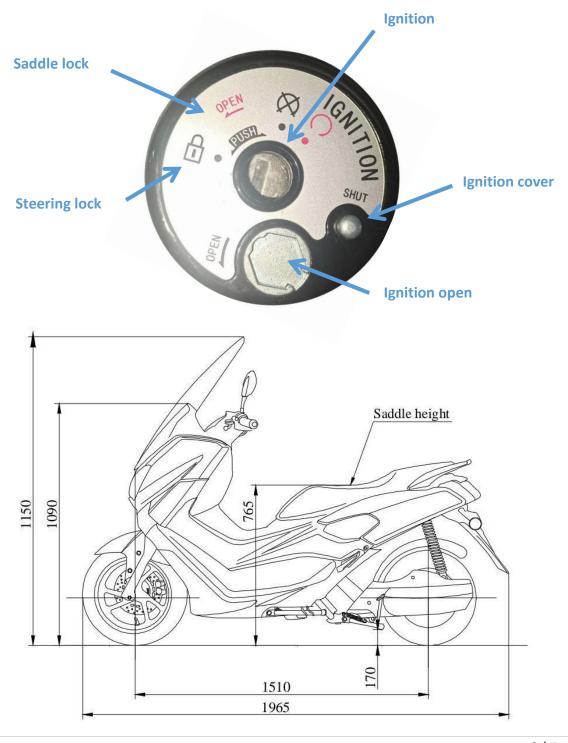
# 2) Instruments

#### 2.1 5V USB Port

This scooter has a USB port to power a smart phone or other 5V devices.

# 2.2 Main Switch/Steering lock

The LYNXis delivered with 2 keys to operate the main switch



# 2.3 Multi-function display



The instrument panel include 3 important information displays.

On the left side there is the multifunctional blue screen to show the level of range still available, the total miles travelled, the partial miles since the last reset and the battery voltage.

In the middle, the speed in mph and the high beam indicator are displayed.

To the right there is the screen to indicate if the batteries are working and voltage is available to the motor.

# 2.4. Handlebar switches

# Left handlebar



# Headlight

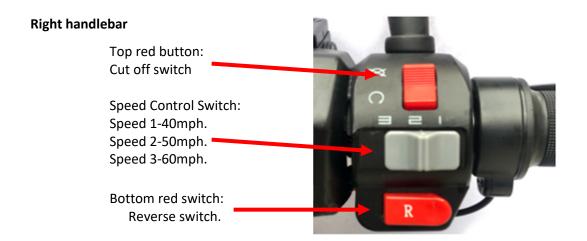
- high/low beam,
- Turn the high beam switch on/off 5 times consecutively to reset the speedometer

# Indicator switch:

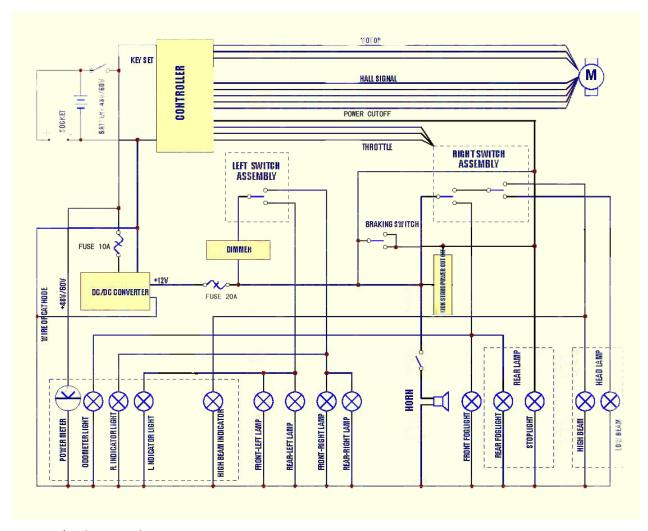
- left turn signal
- hazard lights on/off
- right turn signal

Horn

passing light



# 2.5. Electrical system and wiring diagram



\* subject to change

# 2.6. Other important components

- 1) Rear hand hold
- 2) Rear rack
- 3) Rear brake signal
- 4) Left turn signal
- 5) Right turn signal
- 6) License plate light
- 7) Reflector



# 2.7. Storage Spaces

Under the seat storage space.

LYNX includes an additional Luggage Box installed on Rear Rack.

# 3 How to use the vehicle

#### 3.1 Controls to conduct before driving

- Check the tire condition for any areas of wear or damage and check the tire pressure
- Check that all nuts and screws are well tightened
- Check if the brake cable is undamaged and that brake functions in smooth condition
- Charge the battery when the scooter is not driven regularly.
- To prolong the battery life, charging should be carried every 2 weeks.
- Check all moving parts frequently, such as the handlebar, lubricate when needed
- Switch on circuit breaker under the seat
- Turn Ignition ON, see READY flash on dashboard
- Check the headlight, brake light and turn signals for proper operation.

#### 3.2 Maximum loading capacity

150kgs

# 3.3 How to start the vehicle

Fold up the kickstand and hold onto the handlebar with both hands. Assume a well-balanced position on the scooter and push off with your foot. Turn power on,grip throttle lightly and start to ride.

# 3.4 Driving the vehicle

Your right hand will control the accelerator. Twist the accelerator slowly to avoid a sudden rush of speed forward. The speed of the bike will increase as you twist the accelerator further. You will control the speed of the scooter by using both the accelerator and the brakes.

## 3.5 Brake system and parking the vehicle

The LYNX has a **EABS** braking system in compliance with L3e vehicle regulation.

Use of the center stand is recommended for greater stability and security when parked.

# 3.6 Charging and Maintenance of the battery

The battery does not require maintenance.

#### IMPORTANT CHARGING INSTRUCTION:

The Power Switch Lock must be in the off position when the LYNX electric scooter is being charged.

Do not place the battery near a heat source or fire. Do not immerse the charger to water. Air flow is needed to allow optimal charger operation.

Do not cover the charger with anything while charging.

Please use the authorized onboard or external charger to charge the battery. Using a third-party charger may damage the battery and void the warranty. Please follow the charging instructions above.

On dual-battery scooters, the battery packs must be charged and discharged at the same time.

# 4 General Maintenance and Minor Repair

#### 4.1 Braking system (brake pads, brake oil)

Every 6000km, EABS system extends the life of brake pads

#### 4.2 Changing the brake rotors, lines and brake oil

Routine inspection by licensed garage. Change as advised.

#### 4.3 Changing the light bulbs and headlight adjustment

Licensed garage can change burnt bulbs and adjust as necessary

# 4.4 Changing the tires

#### Tires should only be changed by a licensed and trained garage.

Front tire – no different from any standard motorcycle or scooter.

Rear tire – the LYNX rear hubmotor tire should be changed with tire irons/spoons

- 1) Turn off the LYNX at the main circuit breaker.
- 2) It is not required or recommended to disconnect phase cables from controller.
- 3) Remove rear wheel assembly from swingarm
- 4) Remove zip ties holding hubmotor cable harness along swingarm
- 5) Replace tire adjacent swingarm using tire irons/spoons
- 6) It is advisable to use a lift/box to stabilize the hubmotor during tire change
- 7) Reinstall hubmotor assembly

# 4.5 Cleaning the vehicle

It is IP66 waterproof, you may use all methods except waterjet.

# 4.6 Fuses

Replacement fuses for DC/DC converter maybe included in an emergency tool bag.

# 4.7 Troubleshooting, Diagnostics

Look at OBD signal on controller, its flash pattern can assist in diagnosing a fault.

Num	Fault Name	Remark
1	Mosfet fault	Hardware fault
2	overVolt	Battery over volt fault
3	lackVolt	Battery lack volt fault
4	resvd	This code number is reserved for future additional function
5	mtOverTemp	Motor temperature is higher than set temperature
6	ctOverTemp	controller temperature is higher than set temperature
8	OverCurrent	Phase current is higher than over protected ph current
9	OverLoad	The AC current exceeds the set value
11	Store error	Fault in the set parameters
12	HALL test fault	Motor half fault when matching
13	HALL fault	Motor half fault
18	overSpeed	The tasks of controller are too many to calculate
20	Black protect	The block current
21	unInitEeprom	The eeprom of controller is not initialized
25	Restart	Battery lack volt fault when power on
26	Brake	Controller enter brake mode
27	Anti-theft	Controller enter anti-theft mode
28	Reverse	Controller enter reverse mode
30	Throttle error	The throttle signal is wrong

# 4.8 During periods of non-use or long terms to rage of the vehicle

Before parking the LYNX for longer than a week, remember to charge battery at least 50% and close the main circuit breaker.

# 5 Other Important Information

# 5.1 Warranty

- 1) Battery has a limited 2 years or 30,000km warranty on TIGER R
- 2) There is a limited 2 years warranty or 30,000 km warranty
- 3) Chassis and main parts except for tires, lighting and plastic is covered.
- 4) Further warranty details are available from your dealer or found at www.zride.co.uk

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# 5.2 Technical Data sheet (LYNX example)

Model	LYNX
Motor	QS 13 inch brushless 7000W hub motor
Battery	72V102AH CATL (leading brandLi-ion battery) with 2yr/30,000km warranty
Controller	150A FOC controller with reverse and 3-setting performance selection
Max Speed	105km/h
Range	at 30km/h cruise speed and 70kg rider, max range 200km
Brake	front & rear disc brake plus EABS and EBS regenerative brake
Package	202 x 112 x65 cm (length, height, width)

# **6 Maintenance Book**

# **6.1.** Periodic Maintenance Guide

KI	M	1,000	3,000	6,000	9,000	12,000	15,000	18,000
BATTERY				С		С		С
CHARGER				С		С		С
CONTROLLER		С		С		С		С
TIRE PRESSURE		С	C	С	С	С	С	С
TIRE WEAR				С	С	С	С	С
<b>BRAKE SYSTEM</b>		С		С		С		С
BRAKE PADS		Α	С	С	С	Α	С	С
NUTS AND BOLT	TS	T	Т	Τ	Τ	Т	Т	T

K	M	21,000	24,000	27,000	30,000	33,000	36,000
BATTERY			С		С		С
CHARGER			С		С		С
CONTROLLER			С		С		С
<b>TIRE PRESSURE</b>		С	С	С	С	С	С
TIRE WEAR		С	С	С	С	С	С
<b>BRAKE SYSTEM</b>	1		С		С		С
BRAKE PADS		С	С	С	Α	С	С
<b>NUTS AND BOL</b>	.TS	Т	Т	Т	Т	Т	Т

A = adjust; C = check, refill, repair, or replace; T = tighten



Do you have any questions? Please contact your local dealer.



ZRide Ltd, London

Tel: 0800 228 9996 – Mob: 07713 533 322

info@zride.co.uk, www.zride.co.uk