# **User Manual**





### Catalogue

- **★** Brief Introduction
- ★ Security
- **★** Specification
- ★ Usage
- ★ Maintanance
- **★** Warrantee
- **★** Learning
- ★ Bluetooth App connecting with Starl
- ★ Balance Adjust
- **★** Install
- ★ Accessory





### **Brief Introduction**

- ▲ Starl is a new high-tech vehicle of transport, which uses aerospace attitude control theory, fuzzy algorithm,
- ▲ Self-balancing gyroscope system and the inverted pendulum system. The user move the body slightly
- ▲ Forward and backward, to achieve progress, acceleration, deceleration, braking and other driving operations.



## **Security**

#### **Very important:**

- 1. Do not rapid acceleration and deceleration, do not lean forward and backward excessively, speeding is strictly prohibited.
- 2. If falling risk, please always protect the personal safety.

#### Attention:

- 1. Before riding, recommend wear a helmet, gloves, knee pads and other safety supplies
- 2. Do not use Starl on a road with cars running, do not use Starl on the dangerous road.
- 3. Should not use on crowded place;
- 4. Do not rinse with water directly to the body, or use in the rain;
- 5. Do not use in the rough road, not ride on the water surface;
- 6. Do not use in the road more than 30 degree
- 7. It is recommended between 15 to 45 years old people riding;
- 8. Do not turn off the power when running;
- 9. Do not recommend riding in the cold winter;
- 10. When STAR-I parking, please keep distance from children, in order to avoid danger;
- 11. Do not attempt to disassemble the machine by yourself, if fails, go to the distributors for maintenance;
- 13. When the battery alarm, and the pedal lift up automatically, do not use;
- "When riding, you may encounter a lot of unanticipated danger, so need to be careful when driving. If not use according to the user's manual, resulting in personal injury accident, Xiaotu company does not undertake any responsibility."



# **Specification**

Item	Specification	Data	Remark
Function	Highest Speed	25km/h	
	Mileage	28Km (Starl-B), 42Km (Starl-A). 55Km (Starl-S).	According to the rider weight and road conditions and the environment temperature
	Climb Ability	about 20°	
	Battery	264wh (Starl-B), 396wh (Starl-A). 522wh (Starl-S).	
	Usage Temperature	-10°C to 40°C	
	Max Load	100kg	
	Charing Volt	AC 110V- 220V, 50-60Hz	
	Charing Time	2-4 hours	
	Speeding Protection	when faster than 21km/h	the front portion of Starl would lift up, then Starl would be hard to accelerate even more



ltem	Specification	Data	Remark			
Indicator and Beep	Power Indicator	Power Indicator Lamp	70-100% power, 4 light on; 40-70% power, 3 light on; 10-40% power, 3 light on; less than 10% power, 2 light on; when less than 10% power, 1 light on, the front portion of Starl would lift up slowly slowly, at the moment you should stop using Starl and charge Starl ASAP, in order to avoid dangerous.			
	Alarm	Веер	Beep sound when lower Battery level			











# **Usage**

### **Main function parts**

1.On/Off Switch

2. Charging Port

3. Balance Adjust Switch









## **Usage**

#### Start

Put Starl on the ground, press the power switch, Buzzer will issue a "beep" sound, then you can ride.

"In the winter riding, mileage will reduce, because the battery discharge capacity lower down at low temperatures

environment, for example, when -15  $^{\circ}$ C, travel distance is only 50% when room temperature 20  $^{\circ}$ C."

Attention: When speed close to the maximum speed 25km/h, do not lean body forword too much to keep accelerate, to avoid danger



## **Usage**

#### Charging

- 1. After connect charger plug into the charging hole, and then into an AC power source, otherwise the charger will not start, which could avoid the potential risks, charging more secure.
- 2. When fully charged, the charger indicator does not work, and Battery indicator turn green.

#### Waterproof

Starl waterproof rating of IP56, please do not sink into the water, and long time use in the rain.



### **Maintanance**

#### deposite:

Do not place your Star-I in damp places when not in use for a long time. Recommended to charge the Battery two months a time, in order to maintain the vitality of the battery.

#### Pump the tire:

Knock down the Right Side Cover, the Pump Valve will be visable, usually no need to use extention to pump the Tire by normal bicycle Pump

#### Note:

After the maintenance is complete, may occur instant ignition when connecting the power terminals, this is a normal phenomenon without panic.



### Warrantee

#### **3 Month Warrantee**

For Tire and Tube

#### 1 year Warratee

Digital Board, Motor, Samsung Battery, Chassis, Plastic Covers, Footrest, Lamps.

#### 6 month warrantee

Seat, Handle Bar.

#### Note: The following conditions are not within the scope of warranty:

- 1. The user is not in accordance with the ""User's Guide" requirement, maintenance and adjustment caused by the failure.
- 2.User-modified, damage caused by the overhaul, as well as failure caused by does not comply with the prescribed.
- 3. Users Improper storage or accident caused by the failure.
- 4. The appearance of damage is not covered under warranty after using .
- 5.Self dismantle damaged pieces outside of a predetermined range of user manual.
- 6. The damage caused by long ride in the rain and soaked in water.



## Learning

Find a big open ground first, do not learn it in the room.

A: let the tire to go of half of the air press, make the tire to be soft. The Valve is on the right side, just knock down the Right Side Outer Cover, you would see it.

B: In learning period, it is important to keep a proper speed, too fast or too slow speed is not helpful for you to keep balance. The proper speed is 5-6km/h, it is the FAST WALKING speed. When master it well, then you can run slower or faster.

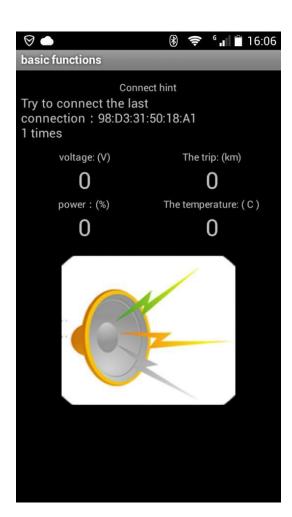
C: When driving, your feet should not just PUT on the Footrest, you should give a little strength to PRESS on the Footrest, but not STAND on the Footrest.

D: When learning period, Starl surely will swing left and right, and your foot always easily touch the ground, in this period, your waist should swing left and right flexibly together with the Seat.



#### Bluetooth App connecting with Starl

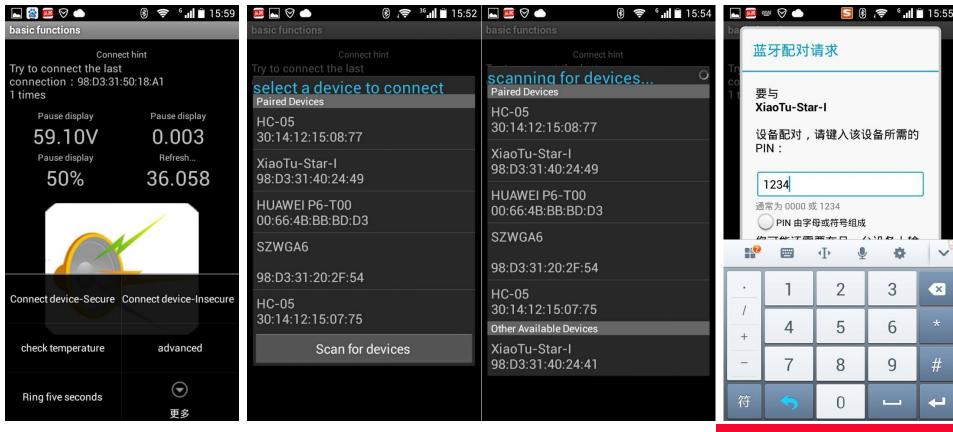
- 1, Install the Xiaotu Starl App to your Android cellphone.
- 2, open the Cellphone Bluetooth function, then run the App.





3, Turn on the Starl by press the Switch on Starl, hold the Starl stand stable, then click the "search for Devices" on the Cellphone screen, you may fail a few times, keep trying till it request you to put the password, the password is "1234", then your cellphone successfully connect with Starl.

PS. You could put your cellphone at Cellphone holder on the Handle Bar





#### Balance Adjust

Each Starl has been adjusted the balance position before dispatch from the plant, but we still recommend you to adjust the balance again before you use it. When you turn on the Starl, you shall see the Seat was lean back around 5 degree, this is a very important "proper balance position"

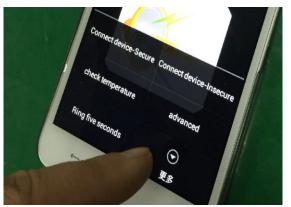
1. Turn on the Starl, then Starl are supposed to be standing on the "proper balance position", hold the Starl and make it stand still.

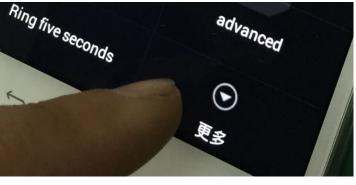
2, connect the Starl with your Android cellphone by the App.





3, Click the " on the cellphone screen, you will feel the Starl lose the power, but manage to hold the Starl standing on the above mentioned "proper balance position", then turn off the Starl, then turn on the Starl again, and you will feel the Starl still do not have power, but please hold the Starl stand still on the "proper balance position" for 5 second, (on this 5 second period, the Balance adjustment is ongoing, the 4 pcs Lamp will turn on one bye one ), then you turn off the Starl.







4, then turn on the Starl again, you will feel the Starl have power again, and the balance position has been changed. at this moment, the balance position has been adjusted successfully.



PS. You could also adjust the balance position very much lean forward or backward, but from our experience, if the Starl is not on the above mentioned "proper balance position", but as you adjusted more forward or backward, it is like this, if the Balance poistion is more forward, then the Handle Bar will be lower, but the problem is, when you are riding turning around, the Handle Bar will lift up. And if the Balance position is too much backward, the Handle Bar will be higher, but when you are turning around, the handle bar will lower down. All in all, the riding experience would not be good if it is not on the "proper balance position"

When riding, the "proper balance position" is very important to affect the riding experience, first of all, the whole Starl balance position should be adjusted to the "proper balance position", backward 5 degree. And because the Balance position might has been get unstable in the long shipping time, so we recommend you to adjust it for 1 time before you use it.

When already adjusted the balance position by the Cellphone App, you sit on the Starl, and stand still, the Starl should also just stand still, it should not lean back or accelerate, otherwise it is uncomfortable, and not helpful for you to master the skill.

At the moment, strongly recommend you to use the 13mm Spanner to adjust the Seat position, if the Starl lean back, then just adjust the Seat forward. If the Starl accelerate, then adjust the Seat backward a little bit. All in all, use the tools to adjust the Starl to be comfortable for you, then go out to learn it, do not forget the Bag, just put the tools there, it is very convenient.



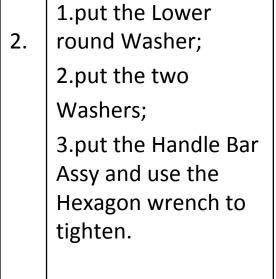






## Install

1.	Insert the pin; Then use the needle to fasten the pin	











4. put the Top
Decoration Cover
and tighten it.







Accessory





















## Welcome to order starl!

### **Contact:**

Address: Ventos g. 49 (ingris.lt), LT89141, Mazeikiai, Lithuania

Phone number: +370-692-99001

Email: ingriui@gmail.com

Skype: gsxr\_ingris

Paypal: info@ingris.lt

web: www.star-i.net



