

TESLICA



***TESLICA Spirit eTrike T1S***  
***MANUAL***



*Please read this manual before operating your new bike*

# CONGRATULATIONS!

Congratulations on the purchase of your new TESLICA Spirit eTrike T1S, and welcome to the ever-growing electric bike family! You are now part of a worldwide community of riders seeking adventure and excitement on two wheels. We sincerely thank you for helping support our dream of bringing affordable and one- of-a-kind e-bikes to the world — for any rider, any situation, and any journey. Whether it's a trip up the mountain, across the beach or down the coast, let us help you get there in style.

Please read this manual from beginning to end prior to taking your new TESLICA Spirit eTrike T1S for a ride. Our safety warnings are especially key!

Happy riding!

# FRAME NUMBER

Please take a moment to record your TESLICA Spirit eTrike T1S frame number located on the head tube on the frame above the forks. The regular format is, AB1234567

Write down this number here in the manual in case your TESLICA Spirit eTrike T1S is lost or stolen.

In addition, it is wise to register these numbers with your insurance company and your local police station in the event of theft or loss. Hold onto your sales receipt/invoice for further proof of ownership.

Owner's name \_\_\_\_\_

Frame number \_\_\_\_\_

Color \_\_\_\_\_

Date of purchase \_\_\_\_\_

Key Number \_\_\_\_\_

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# Component Diagram



- |                     |                                |
|---------------------|--------------------------------|
| 1. Battery          | 10. Chainring with crank arm   |
| 2. Motor            | 11. Chain                      |
| 3. Control Buttons  | 12. Fork                       |
| 4. Charging Port    | 13. Disc Brake                 |
| 5. Brake Lever(s)   | 14. Tires (inner tubes inside) |
| 6. Derailleur Lever | 15. Rack/Carrier               |
| 7. Pedals           | 16. Front Light                |
| 8. Seat             | 17. Rear Light                 |
| 9. Seatpost         | 18. Fenders                    |
|                     | 19. Rear Derailleur            |

## SAFETY FIRST

If you are unfamiliar with any aspect of this manual, it is advised that you take your TESLICA Spirit eTrike T1S and this manual to a local bike shop for inspection, assembly, and instructions.

- It is extremely important that you follow the safety guidelines contained in this manual to ensure maximum safety for you as well as maximum durability of your TESLICA Spirit eTrike T1S.
- Before you ride your TESLICA Spirit eTrike T1S for the first time, please be certain that it has been correctly assembled. You will find step-by-step instructions in this manual. If for any reason you are uncertain about your bike's assembly, please bring it to your nearest bike shop.
- Key assembly steps that must be completed with absolute certainty (including secure fastening) are pedals, saddle height, handlebars (both rotation and height) and wheels.
- Please ensure all safety latches, including quick releases and rings, are locked in place and snug without any movement.
- Please ensure all bolts (including the front/rear wheels, saddle bolt and brake rotors) are properly tightened. Certain components must be tightened to exact specifications using a torque wrench for safety assurance. Fixed front wheel axle nut: 28-32Nm, Fixed rear wheel axle nut: 30-35Nm, Handlebar bolts: 6-8Nm, Handlebar stem bolt: 13-15Nm, Bar end bolts: 4-5Nm, Saddle bolt: 22Nm.
- Test your brakes prior to using the TESLICA Spirit eTrike T1S every time. In wet or icy conditions, use extra caution.
- Check your tire pressures frequently. They should be pumped to 1.4 bar (20 psi). Low tire pressures could result in damage to the tires and rims.
- Always wear a helmet when riding any bike or e-bike.
- Please observe all traffic regulations and other applicable laws.
- Don't drink and ride. Even a small amount of alcohol can impair your judgment and lower your ability to remain safe.
- TESLICA Spirit eTrike T1S are not toys. All riders must be at least 16 years old.
- The TESLICA Spirit eTrike T1S is meant to be ridden by a single person. The total recommended weight of a rider, including all items such as a backpack, is 150 kg (330 lbs).

- Your TESLICA Spirit eTrike T1S is intended for riding on both street and light off-road. Be extra careful if you decide to use it on other surfaces.
- It is advisable to be extremely cautious when riding in traffic. Cars are not used to the speed at which a TESLICA Spirit eTrike T1S can travel, as compared to a regular bike.
- Since it is impossible to anticipate every situation or condition which can occur while on the TESLICA Spirit eTrike T1S, this makes no representation about the safe use of the TESLICA Spirit eTrike T1S under all conditions. There are risks associated with the use of any transportation vehicle like a TESLICA Spirit eTrike T1S. These risks cannot be predicted or avoided; hence they remain the sole responsibility of the rider.
- When you need to replace the battery, please either dispose of it properly or send it back to us or your local bike shop to ensure that it is properly recycled.
- Warning: Do NOT take apart OR repair parts by yourself. Please send our service team an email at [ebiker@teslica.com](mailto:ebiker@teslica.com), or give us a call for assistance!

## **INSIDE THE TESLICA Spirit eTrike T1S BOX**

Before opening the packaging, please check to see if the box has been compromised in any way that could impact the contents.

Once you've confirmed that your TESLICA Spirit eTrike T1S box is in good condition, then it's time to open it. Inside you will find the following items:

- |                             |                          |
|-----------------------------|--------------------------|
| -Suspension bike frame/fork | -Rear wheel              |
| -Front wheel/stem/handlebar | -Gears/chain             |
| -Brakes                     | -Seat (saddle)/seat post |
| -Left/right pedals          | -Battery                 |
| -Battery keys               | -Battery charger         |
| -Wheel reflectors           | -Front bike reflector    |
| -Rear bike reflector        |                          |

### **Assembly Tools**

- |                  |                |
|------------------|----------------|
| 1. 3mm Allen key | 5. 15mm wrench |
| 2. 4mm Allen key | 6. 10mm wrench |
| 3. 5mm Allen key |                |
| 4. 6mm Allen key |                |

**Please contact us right away if something is missing or appears to be damaged.**

# ASSEMBLING YOUR TESLICA Spirit eTrike T1S FOR THE FIRST TIME



## Front Wheel Assembly

1. Remove the fixed axle by unscrewing the nut on both sides and removing the axle from the wheel. If it is tight, it can be loosened with a 15mm crescent wrench.
2. Lift the frame/fork and place the front wheel in the bike's fork.
3. Make sure that the disc brake is well placed in the middle of the brake caliper.
4. Screw the nuts back onto both sides and very securely tighten the wheel using an 15mm crescent wrench. Using a torque wrench, tighten to 28-32Nm. Be sure to also tighten the fixed rear wheel axle nut to 30-35Nm.

If something appears to be wrongly assembled – even if you have followed the instructions, please contact us before riding your TESLICA Spirit eTrike T1S.

**IMPORTANT:** Attach the wheel securely. A loose or detached wheel can cause you to lose control of your TESLICA Spirit eTrike T1S fall, and lead to a serious injury.



## Handlebar Assembly

1. Straighten the handlebar until it is perpendicular to the ground and lock the handlebar stem safety locking mechanism in place.
2. Insert the loose handlebar into the handlebar stem with the brakes facing outward and push down. You may raise and lower the handlebar as you wish until you find a height comfortable for riding. This means that you can easily reach the brakes for safe control of the TESLICA Spirit eTrike T1S. When this is complete, simply pull the handlebar rotation quick release backward to secure the handlebars in place. Please ensure the lever is snug and there is no movement.
3. For safety assurance, tighten the handlebar bolts using a torque wrench to 6-8Nm, handlebar stem bolt to 13-15Nm and end bolts to 4-5Nm.

**IMPORTANT:** Make sure the handlebar fits tightly into the handlebar rotation quick release, and that the handlebar height quick release and handlebar stem locking mechanism are securely fastened. Failure to do so could result in loss of control of your TESLICA Spirit eTrike T1S and could cause you serious injury.

## Saddle (seat) and Seat Post Assembly



1. Remove the seat post wrapping.
2. Loosen the seat post quick release.
3. Insert the seat post to the desired height before securing it in place with the quick release.
4. For safety assurance, tighten the saddle bolt to 22Nm with a torque wrench before you ride.

**IMPORTANT:** Do not raise the seat post above the “minimum insert” line clearly printed on the backside of the seat post. Raising the seat post above the minimum insert line can cause the seat post to fall, which could in turn result in loss of control of your TESLICA Spirit eTrike T1S and could cause you serious injury.

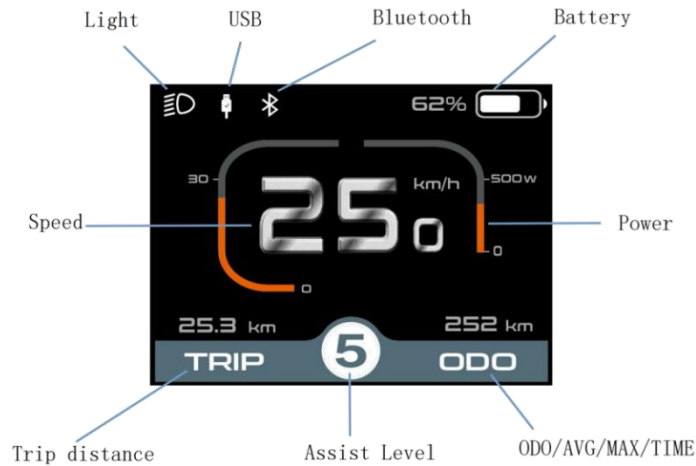
## Assembling the Pedals



Each pedal has an “L” sticker or “R” sticker to indicate left or right side of the TESLICA Spirit eTrike T1S. Otherwise, please check the external edge of the pedal body or inside of the pedal axle where the pedal inserts into the crank arm for the imprinted “L” or “R”.

**IMPORTANT:** *If the pedal does not turn smoothly into the crank, do not force it. Take it back out and try again until it goes in smoothly.* In addition, make sure the pedals are tightly attached to each crank arm. Failure to tightly attach the pedals could result in the pedals becoming loose while riding. A loose or detached pedal can cause you to lose control of your TESLICA Spirit eTrike T1S fall, and lead to a serious injury.

# THE COMPUTER DISPLAY



## General Operations

### ◆ Switching the E-bike System On/Off

To switch on the E-bike system and provide the power supply to the controller, hold the On/Off button for 3s.

To switch off E-bike system, hold the On/Off button for 2s. The E-bike system no longer uses the battery power.

When E-bike system is switched off, the leakage current is less than 1  $\mu$ A.

▮ **When the E-bike is parked for approx. 10 minutes, the E-bike system switches off automatically.**



## ◆ Display Interface


After switching on the E-bike system, the display shows Current Speed, Trip Distance, ODO, Power output and Battery SOC by default.

Press the “**ON/OFF**” button to switch between indication functions below:

Max. Speed (Km/h) → Avg. Speed (Km/h) → Trip Time (Min.) → ODO (km) → Max. Speed (Km/h).

\*It cycles back to Max. Speed again.


## ◆ Switching Push-assistance mode ON/OFF

To activate the push-assistance function, press and hold the “-” button. After 2 seconds, E-bike is activated to go at a uniform speed of 6 Km/h while the screen displays 

The push-assistance function will be switched off as soon as you release the “-” button.

**! Push-assistance function may only be used when pushing the E-bike. Be aware of danger of injury when bike wheels do not have ground contact while using the push-assistance function.**

## ◆ Switching the Lighting On/Off

To switch on E-bike lights, press the “+” button for 2s. The display backlight brightness is automatically reduced while the screen displays .

Likewise, press the “+” button for 2s again, the bike lights can be switched off and display backlight recover its brightness.

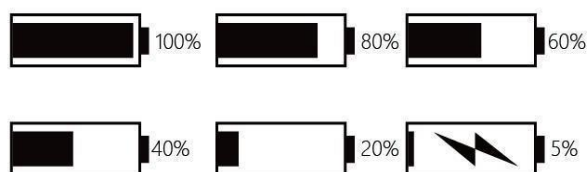
\*If E-bike front light or rear light is independent of “+” button, the “+” button can only be used to switch on/off the display backlight.

## ◆ Assist Level Options

Press “+” or “-” button to change the E-bike system assist level and change the motor output power. The default assist level ranges from level “OFF” to level “SPORT”, The output power is zero on Level “OFF”. Level “ECO” is the minimum output power. Level “SPORT” is the maximum output power. When you reach “SPORT”, press the “+” button again, the interface still shows “SPORT”, and blinks at “SPORT” to indicate the power maximum. When you are in level “OFF”, press the “-” button again, the interface still shows “OFF” and blinks at “OFF” to indicate the power minimum. The default value is level “ECO”.

## ◆ Battery Power Indicator

The battery percentage info-graphic indicates battery SOC. The battery frame is full of blue color when the battery is in high voltage. When the battery is in low voltage, battery frame will flash at the frequency of 1HZ to give a notice that the battery needs to be recharged immediately.



**Flash low voltage**

◆ **Motor Power Indicator**

The power of the motor can be read via interface beside "W":

◆ **Error Code Indication**

The components of the E-bike system are continuously and automatically monitored.

When an error is detected, the respective error code is indicated in text indication area.

Refer to detailed definition of the error codes in Attached list 1.



Error Code Indication

Error Code	Definition
21	Current Abnormality
22	Throttle Abnormality
23	Motor Phase Abnormality
24	Motor Hall Signal Abnormality
25	Brake Abnormality
30	Communication Abnormality
31	Display MOSFET short circuited
32	<b>on/off</b> button is stuck
33	- button is stuck
34	Over voltage

■ **Have the display inspected and repaired when an error code appears. Or else, you will not be able to ride the bike normally. Please always refer to an authorized bicycle dealer.**

**Display Setting**

Press the **ON/OFF** button to switch on the display.

To access Display Setting, hold both the "+" button and the "-" button simultaneously for 2s.



Setting interface

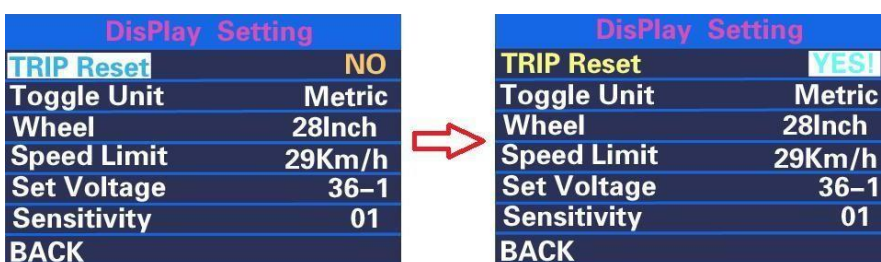
■ **All the Settings are operated in the case of a parked E-bike.**

◆ **Trip Distance Clearance**

**Trip Reset** represents trip distance clearance setting.

To clear trip distance, press "+" button or "-" button to select Yes or No. Yes represents clearing a single ride distance. No represents not clearing a single ride distance.

To store a changed setting, press "ON/OFF" button.



Trip Distance Clearance Settings Interface

#### ◆ **Toggle Unit km/mile**

Toggle Unit represents unit settings. The default value is "Metric (km)".

To toggle the unit, press the "+" button or the "-" button to choose the desired setting item.

To store a changed setting, press the "ON/OFF" button.

#### ◆ **SOC view**

Press +/- to select SOC View and press **on/off** button to enter the setting. Press +/- to change between Voltage values and percentage of Battery. The default view method is percentage. Press **on/off** to store the data and exit SOC view settings.

Hold "on/off" button to return to home page or press **BACK** to return to home page.

#### ◆ **AL Sensitivity**

**AL Sensitivity** means light sensor sensitivity. Press +/- button to change the sensitivity value, the optional value is 01 to 05. press **on/off** button to confirm and store a changed setting.

Hold "on/off" button to return to home page or press **BACK** to return to home page.

#### ◆ **Wheel Diameter Settings**

Wheel represents wheel diameter settings. The default value is 20 inch.

To change basic settings, press the "+" or the "-" button to increase or decrease until the desired value is displayed.

To store a changed setting, press the "ON/OFF" button.

#### ◆ **Speed-limit Settings**

Speed Limit represents the limit speed settings. When the current speed is faster than speed limit, the E-bike system will be switched off automatically. Speed limit range is 11Km/h to 40Km/h. The default value is 25Km/h.

To change basic settings, press the "+" or the "-" button to increase or decrease until the desired value is displayed. Press the "ON/OFF" button to save a changed setting.

#### ◆ **Battery Power Bar Settings**

**Set Voltage** represents battery voltage settings. Short press + or - button to switch between different battery voltages: 36V and 48V and then press ON/OFF button to enter the corresponding voltage bar value settings. For example, VOL 1 is first bar voltage value. The default value is 41V.

To set battery power bar, press the "+" or the "-" button to increase or decrease the number. To store a changed setting and access the second bar, press "ON/OFF" button.

In the same manner, after 5 bars voltage values are entered, hold the "ON/OFF" button for 2s to confirm and save the settings and then return to the previous menu.

#### ◆ **PAS Sensitivity Settings**

**Sensitivity** represents PAS sensitivity settings. The sensitivity value ranges from "2" to "9". "2" is the strongest, "9" is the weakest. The default value is "2".

Press the +/- button to choose sensitivity value to change the PAS sensitivity settings.

To store a changed setting, press the ON/OFF button

### **Advanced Settings**

After Display Setting is done, Press Back to return Setting page.

Press + or - button to choose Advanced Settings and press "**ON/OFF**" button to enter Advanced Settings page.

#### ◆ **PAS level Settings**

##### ***PAS Level Mode Options***

**Power Set** represents power assist level settings. In assist level settings, there are 4 modes for your choice: OFF, ECO, NOR, SPORT. The default value is ECO.

To change the mode of assist level, press "+" or "-" button to choose the desired mode and press the "**ON/OFF**" button to confirm and access PAS level ratio settings automatically.

### **PAS Level Ratio Settings (Power Set)**

To change the ratio of a certain assist level, press the "+" button or "-" button to choose the desired ratio, and press the "ON/OFF" button to confirm.

For example, the ratio range is "45-55 percent" for level "1"; percentage can be changed and the default ratio value is 50 percent.

To store a changed ratio setting, press the "ON/OFF" button and move to the next level ratio setting.

After ratios of all assist levels are input, press the "ON/OFF" button to confirm.

<b>Assist Level</b>	<b>Level</b>	<b>ECO</b>	<b>NOR</b>	<b>SPORT</b>	
	0-3/1-3	30%	65%	99%	
<b>Ratio</b>	0-5/ 1-5	—	—	—	<b>Defaults</b>
	0-7/ 1-7	—	—	—	
	0-9/ 1-9	—	—	—	

#### ◆ **Controller Over-current Cut Settings**

Current Limit represents controller over-current cut settings. The current value can be changed from 7A to 22A.

To change basic settings, press the "+" or the "-" button to increase or decrease the value of the current.

To store a changed setting, hold the "ON/OFF" button.

#### ◆ **Power Assistant Sensor Settings**

**Assistant Num** represents PAS magnet quantity settings. The setting value is 4-9,12,24,32 which refers to the number of magnets on PAS disk. The default value is 12.

To change the magnet quantity of PAS sensor, press the "+" or the "-" button to choose the desired number of PAS magnets.

To store a changed setting, press the "ON/OFF" button.

#### ◆ **Torque Sensor**

The Spirit eTrike T1S is equipped with a torque sensor bottom bracket. Do not make any adjustments to your Bottom Bracket Cups. Do not tighten them or loosen them.

The torque sensor is located inside of the bottom bracket. Adjusting the cups without taking proper steps could damage the torque sensor permanently.

#### ◆ **Slow Start up Settings**

**Slow start** represents slowly start up settings. The range is "1-4", "4" is the slowest. The default value is "1".

To change slowly start up settings, press the +/- button to choose the desired value.

To store a changed setting, press the **ON/OFF** button.

#### ◆ **Backlight Brightness Settings**

**LCD Luminance** represents backlight brightness. 100% is the highest brightness. The less the percentage, the lower the backlight brightness.

To change the backlight brightness, press the "+" button or the "-" button to choose the desired percentage.

To store a changed setting, press the "ON/OFF" button.

#### ◆ **Power-on password settings:**

Press + or - button to choose 'Password' and press ON/OFF to confirm. Meanwhile press +/- button to choose 'Start Password' and press ON/OFF to confirm. Press + or - to shift from 'OFF' to 'ON'.

#### ◆ Power-on password enable/disable

In “Start PassWord” interface, choose ‘ON’ and short press (less than 0.5S) **ON/OFF** to confirm. Meanwhile, display interface prompts for a password. Press + or - button to shift numbers from 0 to 9 and press ON/OFF to confirm and input the next digit. After the input is done, the interface will prompt for entering the password again. If two inputs are consistent, the system prompts that the password is set successfully. If two inputs are inconsistent, the first input is to be repeated and confirm the new password again. The interface will be redirected to original settings page 2 seconds after the password is set successfully. Hold **ON/OFF** button for more than 2 seconds to exit to the main page or by route ‘BACK’ → ‘EXIT’. The operation steps are as follows

#### ◆ Password Reset.

When password is enabled, ‘Reset password’ will add to Password interface. Press (less than 0.5s) +/- button to choose ‘Reset Password’ and press (less than 0.5s) **ON/OFF** to confirm. Meanwhile, the interface prompts for current password input. The display will be powered off automatically when the password is entered incorrectly after 10 inputs. When a correct password is input, the interface prompts for a new password. Then follow the operations of setting a new password. The interface will be redirected to original settings page 2 seconds after the password is reset successfully. Hold **ON/OFF** button for more than 2 seconds to exit to the main page or by route ‘BACK’ → ‘EXIT’. The operation steps are as follows:

#### ◆ Password Disable

In “Start Password” interface, choose ‘OFF’ and short press (less than 0.5S) **ON/OFF** to confirm. Meanwhile, display interface prompts for a password. The display will be powered off automatically when the same password is entered incorrectly after 10 inputs. When a correct password is input, the display will give a prompt of ‘password function disabled’. After 2 seconds, the interface will be redirected to original settings page. Hold **ON/OFF** button for more than 2 seconds to exit to the main page or by route ‘BACK’ → ‘EXIT’. The operation steps are as follows:

■ If there is no operations in one minute; the display will exit the settings state.



# TESLICA Spirit eTrike T1S SPECIFICATIONS

Model Name	TESLICA Spirit eTrike T1S
Motor	500W brushless geared rear-drive
Battery	Battery 48V 15AH
Max Speed	25 km/h /16mph
Battery range (with pedal-assist dependent upon usage, weather, conditions, terrain and rider's total weight)	Up to 60+ km/ 37 +mi
Bike weight without battery	36.5 kg / 80.5 lbs
Bike weight with battery	40 kg /88.2 lbs
Bike dimensions	169cm / 66.5" L x 85cm/ 33.5" W x 111cm / 43.7" H
Front suspension	Lightweight forged alloy. Responsive adjustable spring tension.  30mm travel. Oil pressure lock-out, 1.5 kg
Type-C - port	5V output
Rims	20" x 2.2" 36-hole F, 36-hole R, black
Front hub	173/174mm, 20" 36-hole
Rear hub	173mm, 20" 36-hole
Tires	20" x 2.2" all-terrain or street profile
Crankset	165mm alloy crank arms, 46-tooth chainring
Bottom bracket	BBTS-3PSD 84mm x 166mm, threaded
Sensor	Intelligent Torque Sensor
Rear derailleur	8-speed Shimano
Shifters	8-speed Shimano SIS index shifting
Disc brakes F/R	Hydraulic disc brake
Rider size range	150-215 cm
Max permissible total weight	150 kg/330 lbs
Rider minimum age	16 years old

# BATTERY

The battery is main energy source of your TESLICA Spirit eTrike T1S, so be sure to always treat it with care. We recommend that you recharge it only with the charger provided with your TESLICA Spirit eTrike T1S.

## Battery Functions

1. There are 2 key positions - locked and unlocked.
2. When the key is turned to the **unlocked** position, the battery ready to be removed.
3. In the **locked** position the battery will feel secured and cannot be removed.
4. On the battery is also a **locked & unlocked** position. This will need to also be in the unlocked position to remove battery

**IMPORTANT:** When parking a TESLICA Spirit eTrike T1S, we recommend you lock your battery by setting it on **locked** position and removing the key.

## Inserting the Battery

1. Ensure the battery is in the **unlocked** position.
2. Insert the battery vertically into the battery housing.
3. Insert the key and turn it to the **on** or **locked** position.

## Removing the Battery

1. Turn the key to the **unlocked** position.
2. Turn battery to **unlocked** position.
3. Remove the battery by pulling vertically from the housing.

# CHARGING THE BATTERY

**IMPORTANT:** Do not charge the battery with any chargers other than the one supplied with your TESLICA Spirit eTrike T1S. Failure to do so may result in battery damage and will void the battery warranty. Follow all instructions provided with the charger supplied with your TESLICA Spirit eTrike T1S. Failure to do so could result in damage to your battery or could create a fire hazard that could cause serious injury.

There are **TWO** ways to charge the battery:

## Directly from the bike

- Make sure that the key is in the **locked** position when charging directly from the bike.
- Plug the charger directly into the battery first, then directly into the electrical socket.

## Removing the battery to charge

- Simply remove the battery from the bike as explained above and plug the charger first into the battery, then directly into the electrical socket. For further charging instructions, please refer to enclosed spec sheet inside your charge's box.

**NOTE:** For both charging methods, make sure the charger light turns green when plugged into socket, then red when plugged into battery. Once light returns to green, your battery is fully charged. You can then unplug the charger.

# CHARGE TIME (FOR BATTERY)

With the provided battery charger, it takes 6 to 8 hours\* to fully charge 15Ah from empty to full (depending on your current battery usage level, climate conditions and earlier charging cycles).

**IMPORTANT:** If your TESLICA Spirit eTrike T1S will be kept for a long period in extreme temperatures (below 0°C/35°F or above 35°C/95°F), remove the battery and keep it in a place where the temperature is between 4°C/40°F and 32°C/90°F.

Do not charge the battery when the air temperature is below 0°C/32°F or above 40°C/ 104°F. Serious damage to the battery could result.

# BATTERY USAGE

- To reach the furthest distance on one charge, it is recommended to pedal the TESLICA Spirit eTrike T1S while the Pedal Assist System is turned ON. It will help save the battery.
- When battery power is low while riding your TESLICA Spirit eTrike T1S, it is recommended to pedal as much as possible to minimize battery usage so you can get to your destination on the charge that is left on the battery. Charge it as soon as possible if the battery is dead.
- Turn off the power when parking. If you decide to push your TESLICA Spirit eTrike T1S for any reason, make use of the “walk-assist” option.

## TESLICA Spirit eTrike T1S BATTERY: IMPORTANT INFO

Type: Lithium battery.

Voltage: 48V.

Capacity: 15Ah (please check directly on the battery’s label). Battery lifespan: between 600 and 1000 charges.

## **NOTE FOR THROTTLE USAGE:**

- Once the TESLICA Spirit eTrike T1S is powered ON and in any level of pedal-assist higher than “0”, when the rider pushes the throttle, the TESLICA Spirit eTrike T1S will move forward. Do NOT power ON until you are ready to go.
- Squeezing the right/rear hand brake, or releasing the throttle, will automatically cut the power to the motor.
- When walking with the TESLICA Spirit eTrike T1S you can turn it to “walk-assist” by pressing the assist level arrow down for more than 3 seconds so you don’t automatically turn the throttle on and make the TESLICA Spirit eTrike T1S start suddenly.

**WARNING:** Do not take the battery apart. Do not burn, puncture, submerge in water or damage the battery in any way. Do not use the battery if it appears to be damaged. In case of any noise, irregular heat or leakage from the battery, cease all use immediately. Keep the battery stored in a ventilated place and out of direct sunlight. Keep the battery store above 0° C to avoid excess loss of battery power.

# SETTING UP THE TESLICA Spirit eTrike T1S FOR YOUR PERFECT FIT

## Saddle Height

To adjust saddle height, open the seat post quick release lever located on the frame where the seat post enters. Once loose, adjust saddle to desired height, then straighten saddle so that it is centered (parallel to the TESLICA Spirit eTrike T1S frame). When the desired height is set, firmly tighten the quick release so that saddle is securely in place. Try to manually move the saddle from left to right to be sure it is firmly secured.

**IMPORTANT:** Do not raise the seat post above the “minimum insert” line clearly printed on the backside of the seat post. Raising the seat post above the minimum insert line can cause the seat post to fail, which could in turn result in loss of control to your TESLICA Spirit eTrike T1S and could cause serious injury.

## Saddle Position

To move the saddle more forward/backward or adjust the nose of the saddle to point slightly upward/downward, loosen the bolt located under the saddle, at the top of the seat post. You can use one of the allen keys provided. Once loosened, move the saddle to its ideal position. When the desired position is set, firmly tighten the bolt to 22Nm for safety assurance. Try to manually move the saddle up/down as well as forward/ rearward to be sure it is firmly secured.

## Handlebar Height

To adjust height of handlebar to match your comfort and riding style, first loosen the handlebar height quick release located next to the front end of the frame. Adjust the handlebar to the desired height, making sure to center the handlebar so that it is perpendicular to the frame. Securely tighten the quick release. Once tight, try to manually move the handlebar from side to side to make sure it is securely in place.

**CAUTION:** You must slide the handlebar stem connecting the handlebar to the frame in far enough that the series of parallel grooves that mark the minimum insertion level in the tubing are hidden (NOT exposed). DO NOT raise the handlebar higher than this height. If the handlebar stem is not inserted, at minimum, to this line, serious injury can occur to the rider.

## **BRAKES**

TESLICA Spirit eTrike T1S has a hydraulic disc brake system installed on both wheels, front, and rear, to control the breaking of the bicycle. The system has an electrical cut-off function, an important safety feature of all Teslica bikes. It disengages the motor when the brake levers are squeezed. Therefore, it is critical to make sure the brake system works properly.

- Test your brakes every time before using your ebike and remember the E bike will not stop as quickly in wet or icy conditions as you would on a dry road.
- Remember which wheel is controlled by which break. Do not break too strongly or abruptly as it may contribute to a fall. Incline your body backwards to reduce the influence of inertia.
- The brake system requires regular cleaning, maintenance, and adjustments. Have your brakes inspected and serviced regularly by an experienced mechanic every six months to a year. Should be sufficient for the occasional rider.
- The brake system includes brake pads which gradually wear down due to normal use. When the brake pads wear out, replace them as soon as possible.
- With use overtime, brake fluid will become contaminated with dirt and moisture and should be replaced. It is recommended to use mineral oil for brake fluid replacement period for additional information, follow the brakes manufacturer's instructions.
- Do not ride the bike if the brake oil is leaking as a system may suddenly lose braking power.
- The bike should not be stored or turned upside down, as air may enter the brake lines. If the bike has been upside down, allow it to sit several minutes before use, and test the levers by pulling with force.
- Overtime disc brakes lose some of their effectiveness. This leads to longer response times, less efficient braking, and less bite control period if you start experience such issues, hear squeaking noise when braking, lack of stopping power, refrain from using the bike and bring it to a local bike shop for inspection and service.

## DRIVETRAIN AND GEARS

The drivetrain of the electric bikes consists of all parts that you used to push or pull the bike along. The key components are the pedals, cranks, chain, freewheel, gear shifter, and rear derailleur. Gears are there to enable you to maintain a comfortable pedaling speed or cadence regardless of the gradient or terrain, something that single gear is not capable of. TESLICA Spirit eTrike T1S comes equipped with an 8-gear system. By using the “+” or “-” on the shifter which is located on the right side of the handlebars allowing you to change gears while you're riding until you reach your desired gear. The gears are switched by the rear derailleur located on the right side of the rear wheel derailleur moves the chain up or down the freewheel setting it to the desired gear.

- Gear settings are displayed on the manual shifter. The higher the gear, the more resistance you will feel while pedaling.
- The combination of pedaling and gear affects the battery range when riding with pedal assist. If you are running uphill or in the area where it becomes difficult to pedal, shift to a lower gear. If you find that you are moving faster than you can comfortably pedal, try moving to a higher gear. This will help conserve battery power and achieve a more comfortable pedaling pattern.
- It is easier to start riding if the bike is set to a lower gear.
- If you experience “skipping” of gears, rattling noises in the rear bring the bike to an experienced mechanic for adjustments.
- Keep your derailleur, chain, and freewheel clean, lubricated and moving freely will expand their service life and avoid costly repairs.
- If you need to service the pedals, follow instructions as previously explained to remove and reinstall.

## WATER

- Your electric bike is rain and splash resistant. Please, use caution, do not operate your bike, or leave outside in bad weather conditions.
- The electric components, such as LCD, motor, battery, and controller, **MUST NOT** be submerged in water.
- To prevent rust or corrosion, dry off the electric bike and its components after riding and store the bike and the battery in a dry location. Do not turn on the bike after exposure to water. Dry it thoroughly first!
- To avoid electrical shock and damage to your product, do not charge the battery while it is wet or in an area where it could get wet. Do not handle an electric bike, charger, or cords with wet hands while charging.

# MAINTENANCE

## Tire Pressure

Be sure to check twice a month. We suggest keeping it at 1.4 bar (20 psi). Riding with too low pressure can result in:

1. Lowered travel range per battery charge
2. Increased wear on the tires
3. Increased risk of a puncture
4. Compromised steering as fat tires with inadequate pressure tend to oversteer.

## Squeaking Brakes

- The rotor needs to be thoroughly cleaned with a rag dipped in rubbing alcohol to remove any oil or residue.
- Pads need to be filed down, usually glazed over from debris on the road:
  - To remove the pads and pad holder, unscrew the pinch bolt. Gently push out the pads and holder from above, either with a finger or an Allen key. Once out of the caliper, pads can easily be removed from the holder.
  - Carefully and evenly file the surface down with a metal file.
  - Lastly, place pads back into holder and re-insert the holder into the caliper. After re-insertion, pull the cable back into its original place and firmly re-tighten the pinch bolt.
- If pads are worn out and are less than 0.5mm thick, it's time to replace them. Replace them by following the instructions above. If you are not comfortable with doing this work yourself, please take your TESLICA Spirit eTrike T1S to your local bike mechanic.



# PRODUCT REPLACEMENT

It is always recommended to keep spare tires, inner tubes, lube, chains, and brake pads on hand as these items are worn out most quickly.

If a product needs replacement and you are not completely certain how to do this, it is recommended to take it to your local bike dealer. This includes cables/housing, bearing adjustments, brake adjustment and wheel adjustments. Be sure to replace parts with original TESLICA Spirit eTrike T1S components to ensure optimal level of performance.

**WARNING:** As with all mechanical components, the TESLICA Spirit eTrike T1S is subject to wear and high stresses. Different materials and components may react to wear or stress fatigue in different ways.

If the design life of a component has been exceeded, it may suddenly fail, potentially causing injury to the rider. Any form of cracks, scratches, or change of coloring in highly stressed areas indicate that the life of the component has been reached and it should be replaced.

Failure to repair or replace worn components could reduce your ability to control your TESLICA Spirit eTrike T1S and could cause serious injury.

## GENERAL TIPS

- While our TESLICA bikes are splash-proof, their electrical components should not be submerged in water. Water damage is NOT covered under the manufacturer warranty, so we strongly discourage any use in the rain.
- When washing your bike, use ONLY a damp cloth. Do not spray any water directly on your TESLICA Spirit eTrike T1S as it could result in water damage.
- To prevent corrosion, dry the TESLICA Spirit eTrike T1S and its components after every wet ride. Store bike and battery in a dry location.

**IMPORTANT!** Do not attempt to open the casings of the battery, motor, or controller. This can be dangerous and will void any warranties by doing so. If you experience a problem, please contact our service department or your local bike shop.

# Limited Warranty



## **30DAYS SATISFACTION GUARANTEED RETURN POLICY**

If you are unsatisfied with your purchase, TESLICA return policy allows you to return the product purchased on the authorization channel within 30 days counting from the date of receipt of shipment, and request are fund from the authorization Channel.

**Note: Express shipping cost is non-refundable.**

To be eligible for a return, your item must be in the same condition that you received it, unworn, unused, and the bike must have less than ten (10) miles on the odometer, be free of any wear and tear, dirt, dust, fragrance, or any other signs of use and must include all items that were inside the box (charger, keys, hardware, etc.).

### **Over 30 days:**

- **Return is not acceptable;**
- **Accept exchange new product or partial refund.**

We will deduct the shipping fee or restocking \$150/pc when we are making a refund for non-defective products and non-longer needed products.

For the return request, TESLICA is not responsible for lost packages due to the carrier, or products received that cannot be verified.

Received products that have damage determined to have been caused by the end-user may be subject to denial of the return request.

## **TO QUALIFY FOR ARE FUND,**

### **ALL THE FOLLOWING CONDITIONS MUST BE MET:**

1. A Return Merchandise Authorization (RMA) must be requested from TESLICA within 30 days from the date of receipt of shipment. To request an RMA, contact TESLICA Service

Team at **ebiker@teslica.com**

2. The cost of return shipping will be paid by the customer.

3. For warranty service, please keep your receipt and/or invoice to validate proof of purchase.

4. Returned product must be in good physical condition (not physically broken or damaged).

5. All accessories originally included with your purchase must be included with your return.

6. If you return a product to TESLICA bike, (a) without an RMA from TESLICA (b) without all parts included in the original package, TESLICA retains the right to refuse delivery of such return.

## **LIMITED PRODUCT WARRANTY**

TESLICA warrants the original purchaser that your TESLICA product shall be free from defects in materials and workmanship under normal use for a period aforementioned. TESLICA does not warrant the operation of the product will be uninterrupted or error-free.

- Only the original owner of an e-bike purchased from TESLICA online or physical storefront is covered by this Limited Warranty. The Warranty Period begins upon your receipt of the e-bike and shall end immediately upon the earlier of the end of the Warranty Period or any sale or transfer of the e-bike to another person, and under no circumstances shall the Limited Warranty apply to any subsequent owner or other transfer of the e-bike.

- The Limited Warranty is expressly limited to the replacement of a defective lithium-ion battery (the "Battery"), frame, forks, stem, handlebar, headset, seat post, saddle, b r a k e s, lights, bottom bracket, crank set, pedals, rims, wheel hub, freewheel, cassette, derailleur, shifter, motor, throttle, controller, wiring harness, LCD display, kickstand, reflectors and hardware (each a "Covered Component").

- The Covered Components are warranted to be free of defects in materials and/or workmanship during the Warranty Period.

## **Limited Warranty Does Not Cover:**

- Normal wear and tear of any Covered Component.
- Consumables or normal wear and tear parts (including without limitation tires, tubes, brake pads, cables and housing, grips, chain and spokes).
- Any damage or defects to Covered Components resulting from failure to follow instructions in the e-bike owner's manual, acts of God, accident, misuse, neglect, abuse, commercial use, alterations, modification, improper assembly, installation of parts or accessories not originally intended or compatible with the e-bike as sold, operator error, water damage, extreme riding, stunt riding, or improper follow-up maintenance.
- For the avoidance of doubt, TESLICA will not be liable and/or responsible for any damage, failure or loss caused by any unauthorized service or use of unauthorized parts.
- The Battery is not warranted from damage resulting from power surges, use of an improper charger, improper maintenance or other such misuse, normal wear or water damage.
- Any products sold by TESLICA that is not an e-bike.

**DETERMINING WHETHER DAMAGE OR DEFECT TO AN EBIKE OR COVERED COMPONENT IS PROTECTED BY THIS LIMITED WARRANTY SHALL BE IN THE SOLE DISCRETION OF TESLICA.**



## Contact Us

Contact us if you experience issues relating to riding, maintenance and safety, or errors/faults with your TESLICA.

# TESLICA Inc

613 - 627 - 4285



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**244 Britannia Rd, Ottawa, ON K2B 5x2,  
Canada**

Please read this manual in full prior to operation your new bike

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