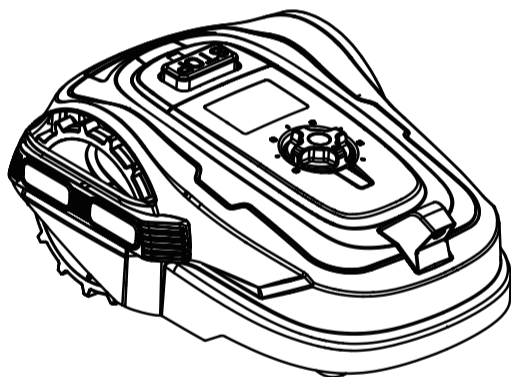




ROBOTIC LAWNMOWER

Original Instruction



Model No: TLM-V1000

⚠ WARNING

Read the User Manual carefully before use.
Make sure you understand all the instructions and safety warnings.

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About This Product

Thank you for choosing the TLM-S600 lawnmower.

This product independently mows the lawn in a random pattern before returning to its charging station to charge the battery by navigating along the boundary wire.

The product is lightweight, and works on the lawn without damaging the lawn. Collection of grass is not necessary because the fine grass clippings can serve as a natural fertilizer.

Any other improper use can cause danger even personal injury.

WARNING! Any other improper use can cause danger even personal injury.

Safety Warnings

GB

IMPORTANT!

READ CAREFULLY BEFORE USE. KEEP FOR FUTURE REFERENCE.

- Be sure to install and operate the mower according to the instructions.
- The mower has many built-in safety sensors, but safety risks still exist. Inform your family and neighbors about the risks for accidents or hazards.

When using the mower on a public lawn, or when your lawn is open to your neighbor or street, protect or fence the lawn, or put up a warning sign around the working area that says:

WARNING! Automatic lawnmower! Keep away from the machine! Supervise children!

.DO NOT repair the mower by yourself. Repair may interfere with the mower operations, resulting in serious injury and damage.

Please contact a qualified specialist and use the approved parts and accessories.

WARNING

Never allow children, persons with reduced physical, sensory or mental capabilities or lack of experience and knowledge or people unfamiliar with these instructions to use the machine. Local regulations may restrict the age of the operator.

Before Mowing:

- Before each mowing session, check that all parts of the mower can function normally.
- For the best mowing results, it is recommended to mow in dry weather. Mowing in the rain can make the grass stick on the product and the mower may slip. DO NOT mow in bad weather, such as heavy rain, thunderstorm or snow.
- Periodically inspect the area where the machine is to be used and remove all stones, sticks, wires, bones, and other foreign objects. The Limited Warranty does not cover damages caused by objects left on the lawn.
- To avoid possible damage, keep the operating mower at least 1 m (3 feet) away from sprinkler heads. The mower and the sprinkler should NOT work simultaneously. Time the mower so that it works at a different time from the sprinkler.
- NEVER allow children to touch the power supply unit, charging station, blades, the battery compartment, or any parts with gaps such as the wheels.
- Keep away from the rotating blades! DO NOT put hands or feet under or near the rotating blades.
- Watch out for throwing objects! Keep a safe distance from the mower when operating.
- DO NOT leave the machine to operate unattended if you know that there are pets, children or people in the vicinity.
- DO NOT overreach. Keep your balance at all times and always be sure of the footing on slopes. Walk, never run while operating the machine or its peripherals.
- Instructions on when, where, and how to inspect the machine and its peripherals, connecting cords, and extension cords for signs of damage or aging and, if permitted, how to make repairs.
- A note not to connect or touch a damaged connection line to the power supply before it is disconnected from the power supply, because damaged connection lines can lead to contact with active parts.
- Connect the machine and/or its peripheral devices only to supply circuits protected by a residual current device with a tripping current of not more than 30 mA
- The device must not be used at altitudes higher than 2000 m.
- A note not to lean forward when operating the machine and its peripherals, and always to maintain balance and a firm footing on slopes; and always to walk and not to run.

WARNING! If the mower makes an abnormal sound, abnormally vibrates, or signals an alarm, press the STOP button immediately.

WARNING! DO NOT touch moving dangerous parts before the mower is powered off.

Warning! Do not touch moving dangerous parts before they have come to a complete standstill.

Warning! Ensure that you always wear sturdy shoes and long trousers when operating the machine.

Warning! Cut off the power:

Before blocking it;

Before the machine is tested, cleaned or processed;

Before cleaning foreign objects in the machine

When the machine starts to shake violently, please stop the machine immediately for inspection

Symbols and Decals

Please study the symbols on the product and labels carefully and understand their meaning:



⚠ WARNING-Read instruction manual before operating the machine.



⚠ WARNING-Do not touch rotating blade.



⚠ WARNING-Keep a safe distance from the machine when operating.



⚠ WARNING-Do not ride on the machine.



⚠ Remove (or operate) the disabling device before working on or lifting the machine*.
*Make sure the mower is locked by the PIN code before lifting or operating.



⚠ WARNING-It is not permitted to dispose of this product as normal household waste. Ensure that the product is recycled in accordance with local legal requirements.



This product conforms to the applicable EC Directives.

RoHS

This product conforms to the regulations of Restriction of Hazardous Substances.



Before charging, read the instructions.



Class II appliance



SMPS incorporating a short-circuit-proof safety isolating transformer (inherently or non-inherently)



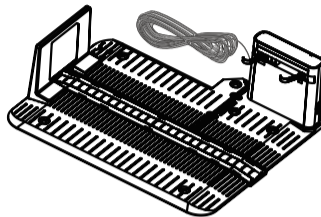
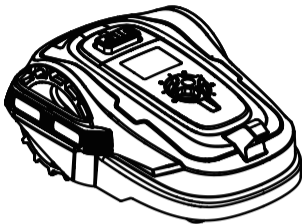
SMPS (Switch mode power supply unit)



Direct current



Alternating current



Power Adapter



Charging Station
Fixing Screw



Hex Key



Instruction Manual



Blade



M4*10
Screws forblade

Mower	1	Instruction Manual	1
Charging Station	1	Blade	3
Power Adapter	1	M4*10 Screws forblade	3
Charging Station Fixing Screw	5	Hex Key	1

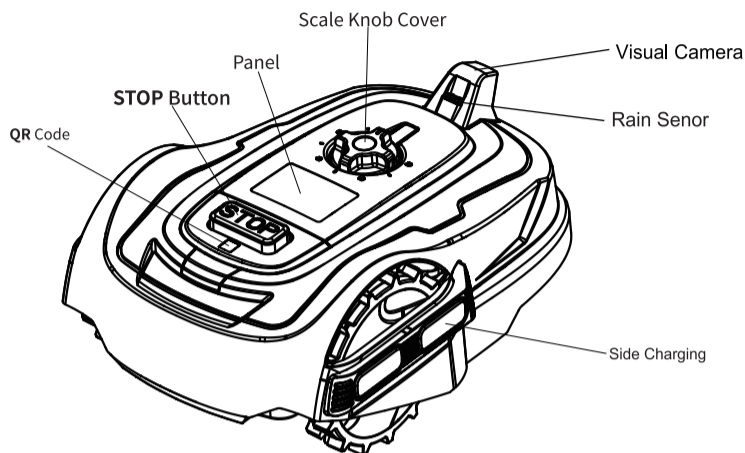


Fig.1

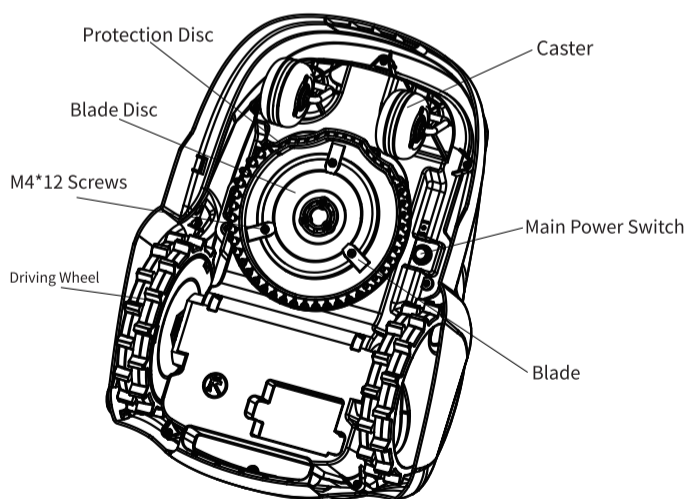
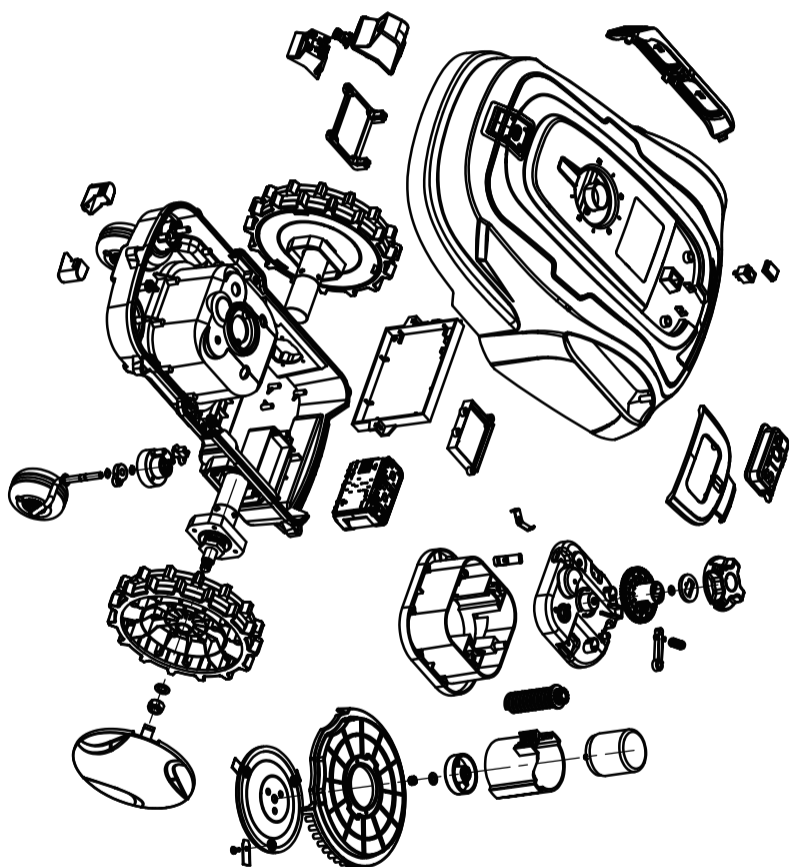


Fig. 2

Exploded view



Installation

Read the whole section before starting the installation. Plan the installation carefully as inappropriate installation may affect the performance of the mower.

The main tasks of the installation process are as follows:

1.Planning and Preparation

Ensure that the following conditions are met in the working area of the mower:

- The height of grass is no more than 60mm.
 - NOTE: If the original grass is higher than 60mm, please use a manual mower to cut your lawn in advance.
 - No stones, loose pieces of wood, wires, live cables and other foreign objects.
 - Level and flat working area, no ditch or trench, slope less than 30% (Fig.3-1)
- The following tools are required for the installation process:
- Hammer (to drive pegs into the ground to fix the boundarylines).
 - Hex key (to fasten the charging station).
 - Set of pliers (to cut and set aside the boundarylines).

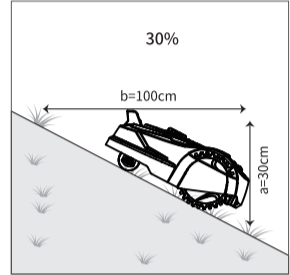


Fig.3-1

2.Select the Proper Location and Fix the Charging Station

The location of the charging station is as follows (Fig.3-2-1):

- A relatively flat and even area of the lawn.
 - Near the border of the lawn.
 - Close to the power socket on the wall.
- (low-voltage cable length of 10m, a cool and dry place for adapter, and no direct sunlight).
- At least 2m in front of the charging station should be unobstructed
 - It is recommended to place the charging station in a dry and sheltered location.
 - The power adapter is 30cm above the ground.

Fix the charging station to the ground using 6 Fixing screws (using hex key to fasten) (Fig.3-2-2).

NOTE: DO NOT tread or walk on the plate of the charging station.

NOTE: DO NOT make new holes in the plate of the charging station. Only use the existing holes in the charging station to secure it to the ground.

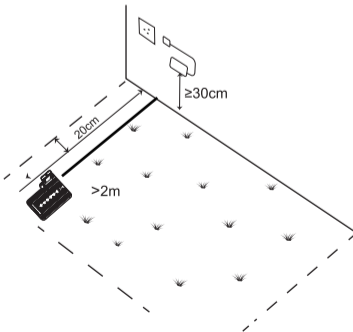


Fig.3-2-1

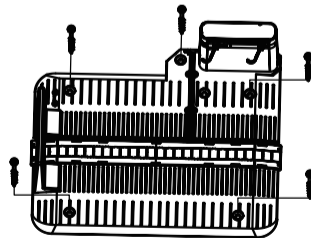


Fig.3-2-2

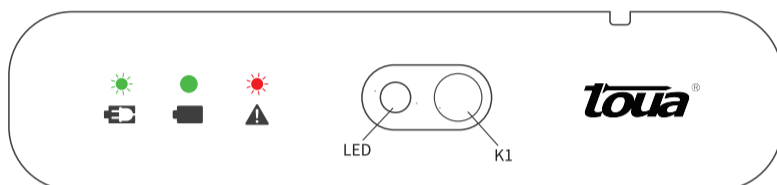
3.Initial Power-up of the Charging Station

1.Connect the power plug to a 100-240V wall outlet.

2. Check the LED status on the charging station:

- Green, continuous: Successful connection (currently not charged or fully charged)
- Green, flashing: The mower is charging.
- Red, flashing: The common fault is "Boundary wire disconnection" (refer to page 13)
- Off: The common fault is "No 100-240V power supply" or "Failure of connection to the power supply"

NOTE: When the battery is too low to turn on, try to activate the battery pack with a long press on the K1 button (operate under the guidance of a qualified specialist).



Operation

1.Switch On/Off the Main Power (Fig.4-1)

- 1.Turn the switch to "O" position to turn off the main power.
2. Turn the switch to "I" position to turn on the main power.

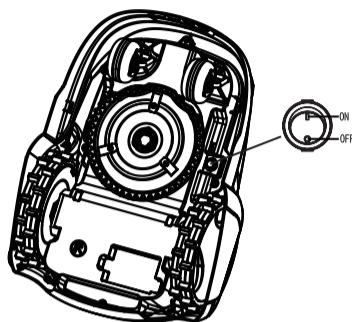


Fig. 4-1

2.Start/Stop the Mower

Start:


- 1.Turn on the main power.
2. Open the panel, long press the power button  to start.

Note:When starting, do not shake the mower to avoid start-up failure. If it fails (all indicators are on solid), please start again.

Stop:

Press the "STOP" button on the mower.

3.Turn off the Mower

First press the "STOP" button to stop the mower, long press the power button  to stop, then turn off the main power.

4.Adjust the Cutting Height

Before mowing for the first time, first set the mowing height to 60mm, and then adjust it to the desired height when the whole lawn is relatively flat.

- Clockwise rotation to increase the cutting height; counterclockwise to decrease the cutting height (Fig 4-4)
- The cutting height of the mower can be adjusted from MIN (20 mm) to MAX (60 mm).

5.Carry the Mower

Under the mower, a lifting handle is reserved for easy one-handed handling of the mower (Fig.4-5).

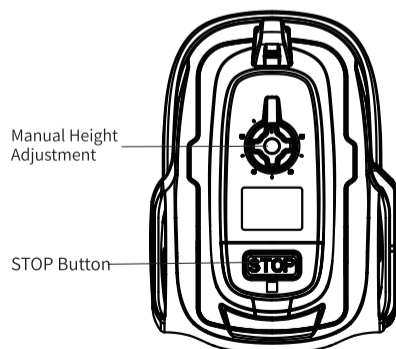


Fig.4-4

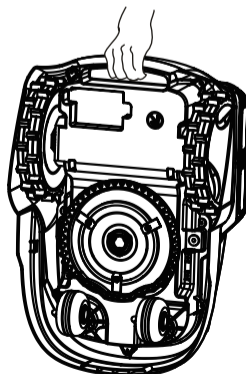
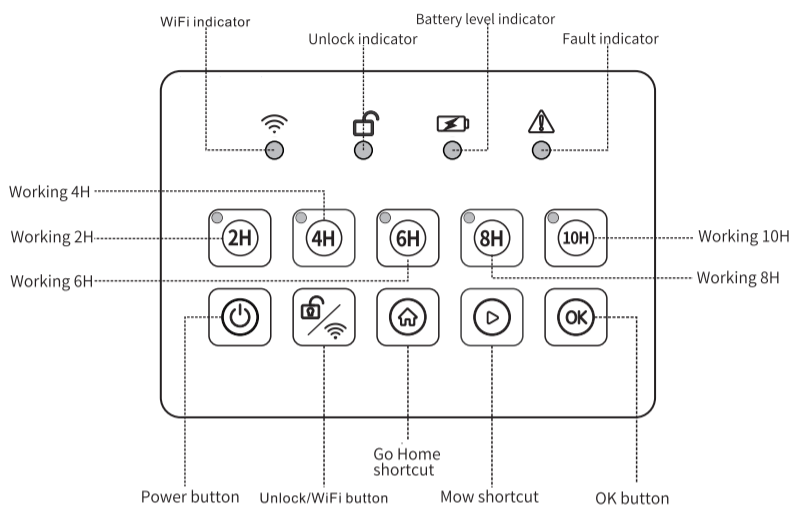


Fig.4-5

6. Operate the Mower

1. Introduction of Control Panel



2. Panel Indicator

Wi-Fi Button: Long press 3-5 sec resets Wi-Fi settings – Enables EZ mode or AZ Mode

If already connected to the app, long pressing the Wi-Fi button releases the connection.

If not connected before, long pressing the Wi-Fi button, the device should go to either EZ/AZ mode

Wi-Fi LED: to indicate the Wi-Fi connectivity status

If connected: Stays solid and ON

If blinking twice per sec: ready for connection (EZ)

If blinking once per sec: ready for connection (AZ)

If Off: the Wi-Fi module is idle

Unlock indicator: Continuous green light - Unlocked

Green light flashing - Locked

Battery level indicator (at charging station): Continuous green light - Full charged

Green light flashing - In charge

(Not at charging station): Continuous green light - Battery capacity 25%

Continuous red light - Battery capacity <25% (when capacity is below 20%, charge at home autonomously.)

Fault indicator: The number of times the red and green light flashes indicates the error code, as follows.

Number of red lights * 8 + Number of green lights = Error code

(Please see the section Troubleshooting for the definition and solution of the error code of the wrong light.)

Working hours indicator: 2H, 4H, 6H, 8H, and 10H, indicating the daily working hours (initial default 6H).

Continuous green light - Indicate current daily working hours (range 2H to 10H)






3. Unlock

Note: Power-on password 4H+6H+8H+10H

Note: Green light flashing of the Unlock indicator, indicating that it is not unlocked

Continuous green light of the Unlock indicator, indicating that it is unlocked

The unlocking operation is as follows:

1. Press the password in turn:  +  +  + 
2. Then press 






Note: If the input is incorrect, you need to try again.

4. Set the daily working hours



Note: Initial default 6H

Note: Working hours include mowing time and charging time.

The modifications are as follows:

1. Unlocked
2. Press  or  or  or  or  (The corresponding working hours indicator is always on, indicating time settings are completed.)

5. Mow






1. Unlocked
2. Press 
3. Then Press  (Starting working hours per day afterwards)

6. Go Home

1. Unlocked
2. Press 
3. Then press 

Note: If there is a work task in the current time period, the mower will still go out and continue to work after it goes home and is fully charged.

7. Gear to adjust

1. Unlocked
2. Long press the unlock button until the working hours indicator flashes
3. Press  or  or  or  or  (10H Max, 2H Min)
4. Then press the OK button to confirm, that is to complete the setting

7 .Mobile APP

APP Download

Go to the Google Play Store (Android) or the Apple App Store (iOS) and search " toua".

After installing the app,please register and log in.

See APP operation:



APP Download QR Code for IOS



APP Download QR Code for Android

Maintenance

WARNING! Always switch the mower off before cleaning and maintaining the mower.

WARNING! Unplug the power supply before cleaning and maintaining the charging station

WARNING! Always wear protective, heavy gloves when changing the blades and cleaning the underside of the mower

- Regularly check screws and nuts for proper tightness. Maintain or replace defective parts to ensure safety.
- Regular inspect the blades to ensure free rotation.

NOTE: When turning the mower over, place it on the lawn or a softer surface to avoid wearing and scratching the cover.

1.Cleaning

WARNING! Turn off the main power switch before cleaning.

- Use a low-pressure washer and a soft brush or towel to clean the front part (Fig.5-1-1, Fig.5-1-2).
- Use a hard brush to clean the grass clippings and debris from the blades, wheels and other parts on bottom.
- Regularly check the rain sensors and wheels for mud or grass clippings and clean them with a brush.

NOTE: DO NOT wash the underside of the mower with water.

NOTE: Clean weeds on the underside of the machine regularly, so as not to affect the efficiency of grass cutting.

NOTE: Clean dust and sundry matter at the camera surface regularly to avoid misjudgment by the machine (Fig. 5-3)

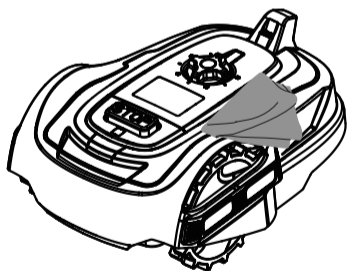


Fig. 5-1-1

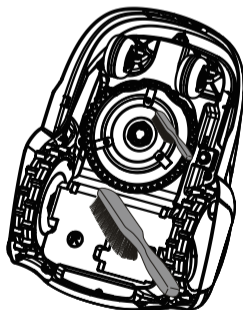


Fig. 5-1-2

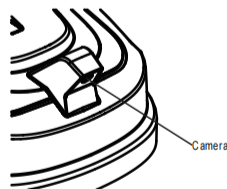


Fig.5-3

2. Replace the Blades

WARNING! Turn off the main power switch and put on protective gloves first.

WARNING! Only use the original and designated blades as approved.

- Replace all three blades and their screws at the same time when replacing (Fig. 5-2)
- Use a screwdriver to loosen or fasten the screws.
- Check if the new blades can pivot freely.

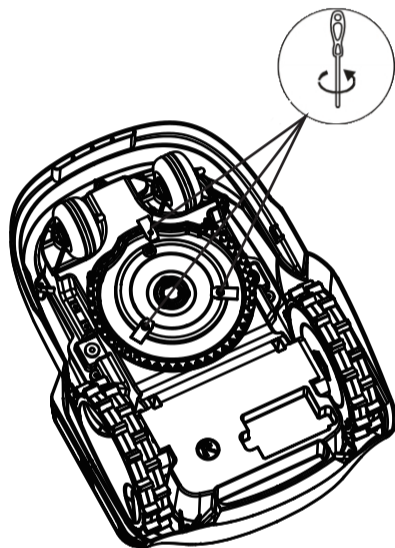


Fig.5-2

Troubleshooting

The following chart offers a guide to help identify an issue.

If possible, repair by yourself. When the problem cannot be solved, consult an authorized dealer or repairer.

WARNING! Please take protective measures.

Issue	Possible Causes	Solutions
The mower has difficulty docking with the charging station.	The charging station is not properly installed.	Refer to Page 6.
Machine runs outside the grass field	The boundary of the grassland is not clearly defined	Establish clear boundaries or install perimeter fencing.
Abnormal vibration or abnormal sound of lawn mower.	The blade is damaged or missing	Replace the blade.
	The knife dish is loose.	Check and repair blade fastening screws.

When there is an abnormality, the number of times the fault indicator flashers indicates the error code (see panel indicators).Below is a list of the error codes:

Error Code	Meaning	Solution
E01	FLASH initialization error	Restart the mower and try again. Contact after-sales service if the problem persists.
E02	Laser sensor initialization error	
E03	WIFI initialization error	
E04	Gyroscope initialization error	
E05	Initialization error	
E06	Panel cover warning	Cheak the panel cover. Whether misplaced and does it correctly.
E07	Power board communication error	Restart the mower and try again. Contact after-sales service if the problem persists.
E08	Slope warning	Press the STOP button and place the mower in the upright position on a flat surface.
E09	Electric height adjustment error	Check if there are any obstacles. Or restart the mower and try again. Contact after-sales service if the problem persists.
E10	Off-ground warning	Press the STOP button and place the mower in the upright position on a flat surface.
E11	ADC channel fault	Restart the mower and try again. Contact after-sales service if the problem persists.
E12	Abnormal signal	Refer to "No boundary wire signal" in the table above.
E13	Stuck warning	Press the STOP button and move the mower on a flat surface.
E14	Software interrupt	Restart the mower and try again. Contact after-sales service if the problem persists.
E20	Continuous failure of left and right wheel motors	Press the STOP button and move the mower on a flat surface. Or check if there are any obstacles. Or restart the mower and try again. Contact after-sales service if the problem persists.
E25	Motor communication error	Restart the mower and try again. Contact after-sales service if the problem persists.
E27	Motor start failure	Increase the height of cut. Or check if there are any obstacles. Or restart the mower and try again. Contact after-sales service if the problem persists.
E29	Motor software error	Restart the mower and try again. Contact after-sales service if the problem persists.
E30	Left wheel motor communication error	
E33	Left wheel motor Hall error	
E34	Left wheel motor software error	
E35	Right wheel motor communication error	
E38	Right wheel motor Hall error	
E39	Right wheel motor software error	

Specifications

GB

Model No.	TLM-V1000
Feature	
Cutting area	1000m²
Appearance & Color	Selectable
Function Settings	LED Keyboard & APP
Cutting Height Settings	Manually
Charging Interface Type	Sideward Charging Interface
Safeguard	Liftoff / Slant / Emergency Stop
Battery Settings	Pluggable Battery
System upgrade	WiFi
Functions	
Intelligent Scheduling	●
Boundary Collision	●
Rain Sensor	●
Rain Sensor Delay	●
Cutting Height	20-60mm
Cutting Diameter	180mm
Hill Capability	Max slope 20 degree
APP Control	IOS or Android
Upgrade Interface	WiFi
Motor Type	BLDC
Error Message Record	●
Multiple Language	●
PIN Settings	●
Time Synchronization	●
Gyroscope	●
Spiral Cut mode	●
Straight Cut mode	●
Emergency STOP Switch	●
Cuts to Edge	●
Self-charging management	●
Intelligent Obstacle avoidance	●
Battery	
Type of battery	Lithium
Rated voltage	20V
Battery capacity	4000mAh
Charging time	140mins
Average working time	100mins
Charge Parameters	
Input	110-240V AC,50/60Hz 48W
Output	20V 2A
Water proofed	IPX4
other parameters	
Certificate	CE&Rohs
Measurement	570x406x264 mm
Weight	8.2Kg

Warranty

This Warranty covers only defects of any material or quality of the Product and components when the Product and components thereof are being used under normal and ordinary conditions. The Limited Warranty Period of two years commences on the date of the original purchase of the Product. This Limited Warranty does not cover and excludes damage to your product or any component thereof caused by:

- The normal deterioration of wear and tear parts
- Improper battery storage or operation of the Product
- Use of any non-original battery
- Service, repair, and maintenance by unauthorized providers
- Others

FCC Statement

Note: This equipment has been tested and found to comply with the limits according to Part 15 of the FCC Rules of a Class B digital device. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications or persons. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, the user is encouraged to try to correct the interference by one or more of the following measures:

- (1) Reorientate or relocate the receiving antenna.
- (2) Increase the separation between the equipment and receiver.
- (3) Plug the equipment into an outlet on a circuit different from that to which the receiver is connected.
- (4) Consult the manufacturer or an experienced radio/TV technician for help.

FCC Radiation Exposure Statement

This equipment complies with FCC RF radiation exposure limits set forth for an uncontrolled environment. This compliance to FCC radiation exposure limits for an uncontrolled environment, and minimum of 20 cm (7.87 inch) separation between antenna and body.

Warning

Changes or modifications of this product are not expressly approved by the party responsible for compliance (YARDCARE), and unauthorized modifications could void the user's authority to operate the equipment.

Compliance Declaration

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

- (1) This device may not cause harmful interference.
- (2) This device must accept any interference received, including interference that may cause undesired operation.

CE DECLARATION OF CONFORMITY

GB

NANJING TOUA ROBOT TECHNOLOGY CO.,LTD.

Add:129#Linqi Road,Dongshan International Enterprise Headquarters park,
Jiangning,Nanjing,China

TEL:(+86)025-52174012 FAX:(+86)025-52174029

CELL:(+86)18913813002 (+86)18913813889

Email:market1@tengya.com limeng@tengya.com info@tengya.com