

Settings

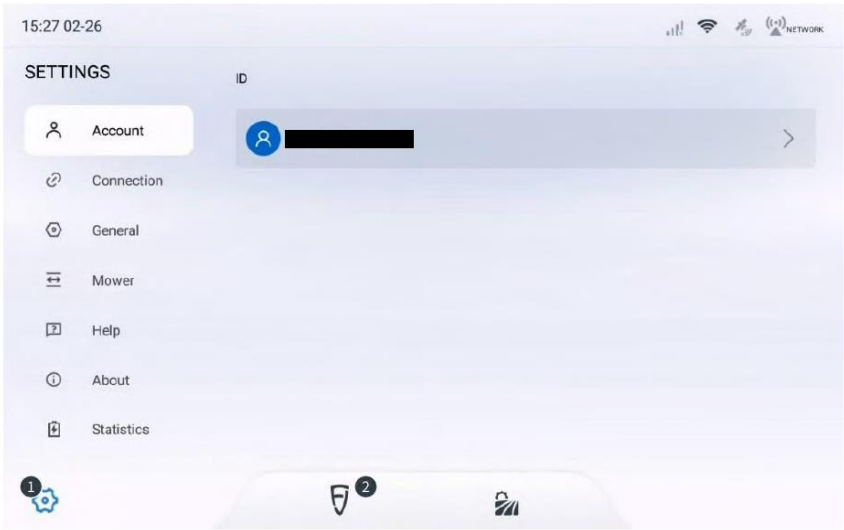


Figure26 Settings

No.	Name	Description
1	Settings	Tap to access the system and operation settings.
2	Home screen	Tap to return to the home screen.

7.4 Auto Operation

When you tap the auto operation button, the system checks whether the mower is ready for an auto operation and displays the auto operation screen if it is ready.

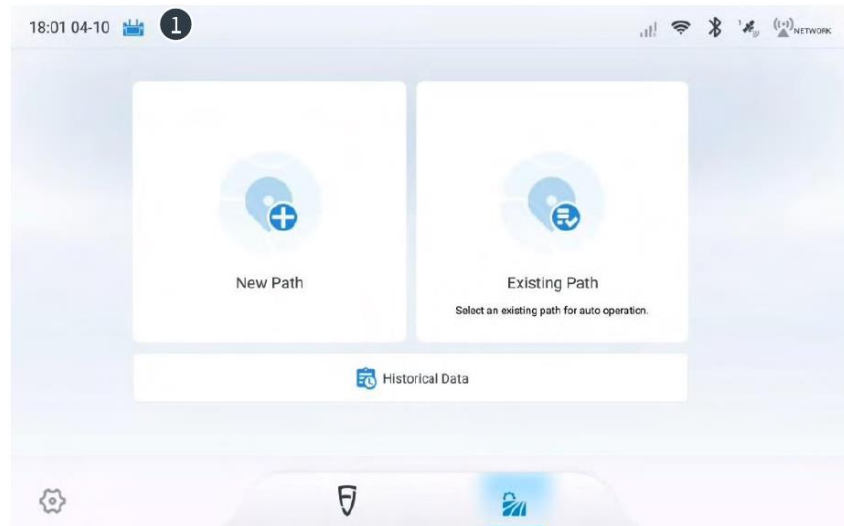


Figure27 Auto operation screen

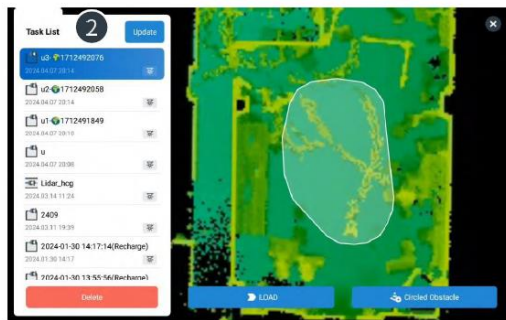


Figure28 Select a path

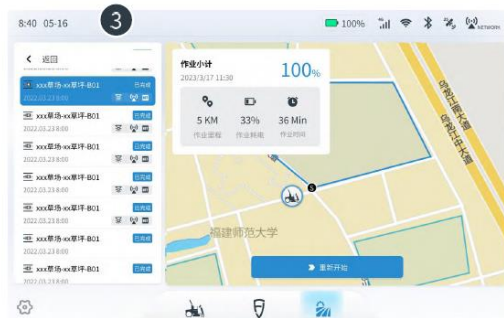


Figure29 Historical operations

No.	Name	Description
1	Create a path	Create a path to start auto operations.
2	select a path	Select an existing path to start auto operations.
3	Historical operations	Historical operation records.

Selecting the type of the new path

Select the path type after you choose to create a new path

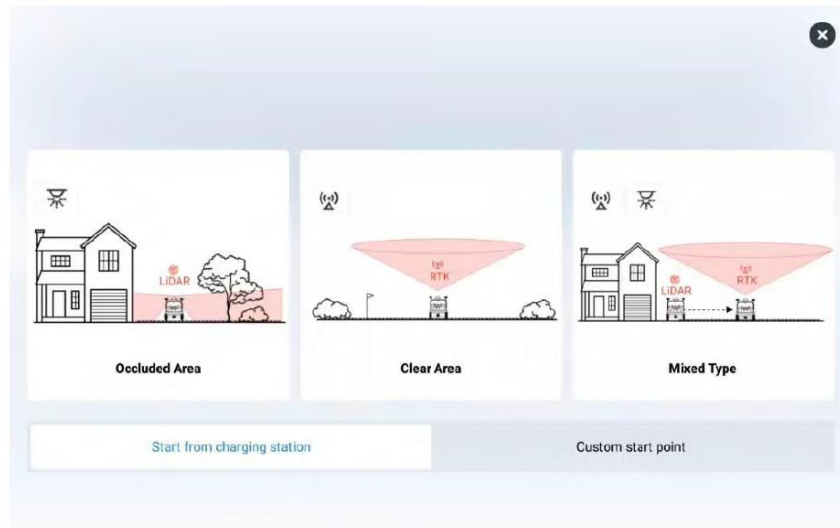


Figure30 Select the path type

No.	Name	Description
1	Occluded Area	To work in areas where the RTK signal is not available due to overhead obstructions, you can create high-accuracy LiDAR maps for the areas and create LiDAR paths based on these maps, so that the mower can perform auto operations without RTK signals.
2	Clear Area	In areas with no obstructions or other environmental constraints, you can operate or create maps with the support of RTK.
3	Mixed Type	--
4	Start from charging station	--
5	Custom start point	--

8 Operation via Remote Control

8.1 Remote Controller

1. Connect to the mower Wi-Fi.

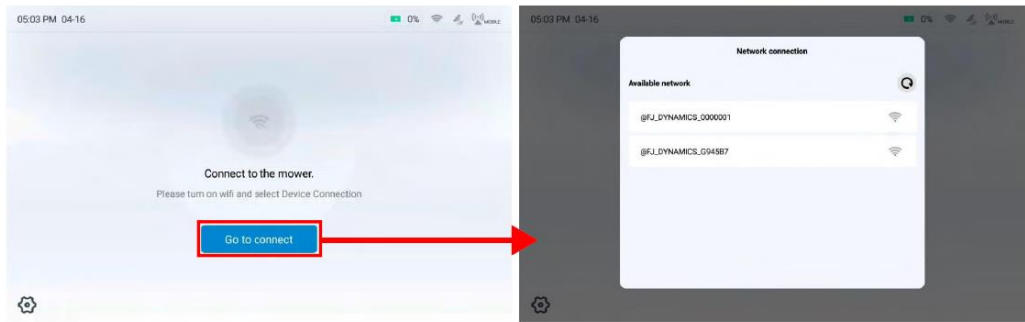
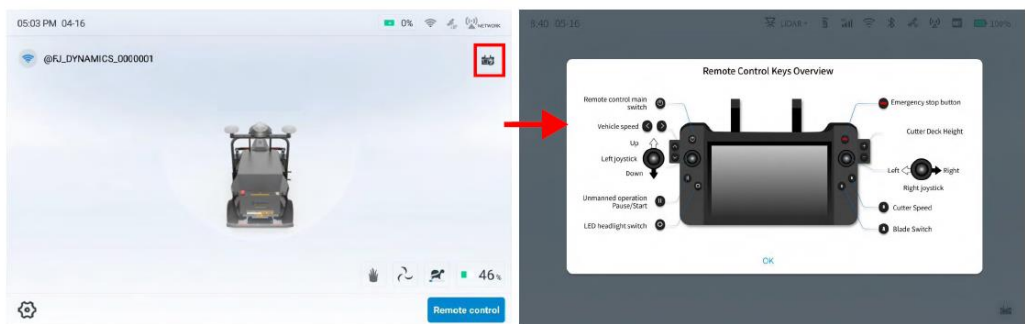


Figure61 Connect to the mower Wi-Fi

2. View the button functions.



Figurefigure62 Button functions

3. Now you can use the remote controller to control the mower.

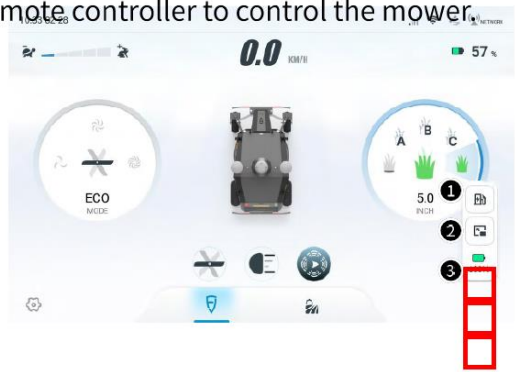


Figure63 Remote controller in use

No.	Function
1	Power on the charging pile.
2	Exit remote control.
3	Battery level.

8.2 App

8.2.1 Registration and Login

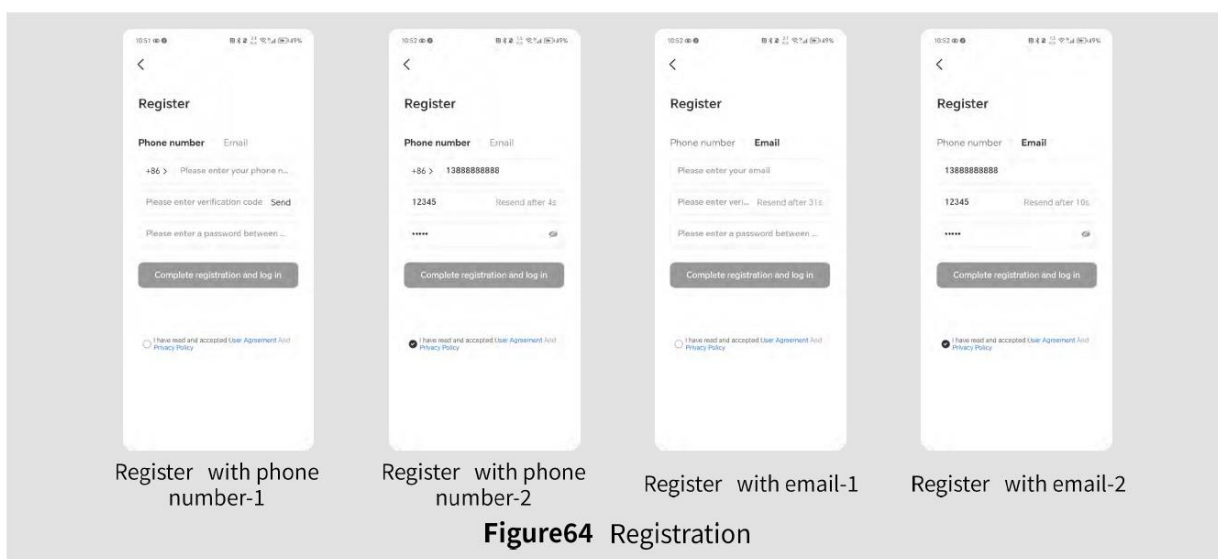


Figure64 Registration

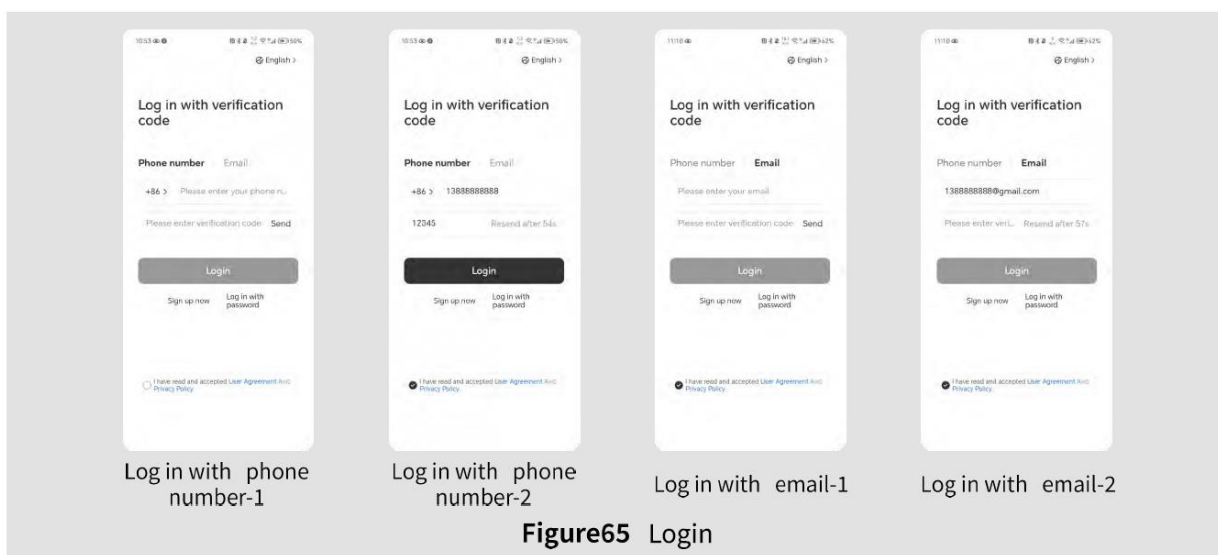


Figure65 Login

8.2.2 Adding a Device

Tap Add device.

Select RM21.

Enter the SN and device name.

Or scan the code to obtain the SN.

Figure66 Add a device

8.2.3 Home Screen

Messages

RTK

Wi-Fi

4G

Satellite

Location

Schedules

Remote controller

Raindrop detection

Battery level

LiDAR

Return to charging pile

Start mowing

Mowing history

Figure67 Home screen

8.2.4 Return to Charging Pile

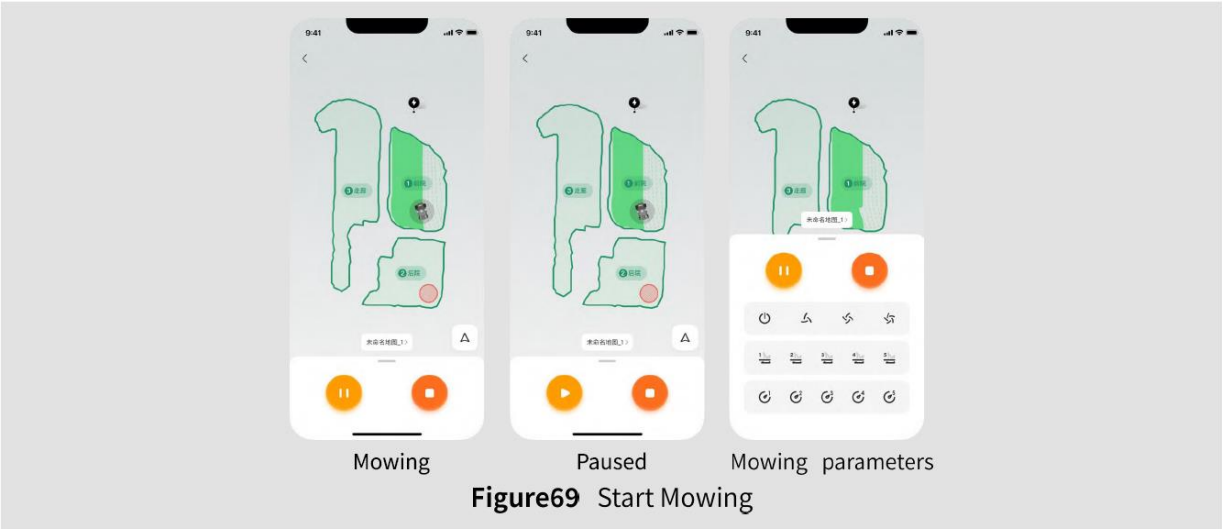
Tap the button

Returning to charging pile

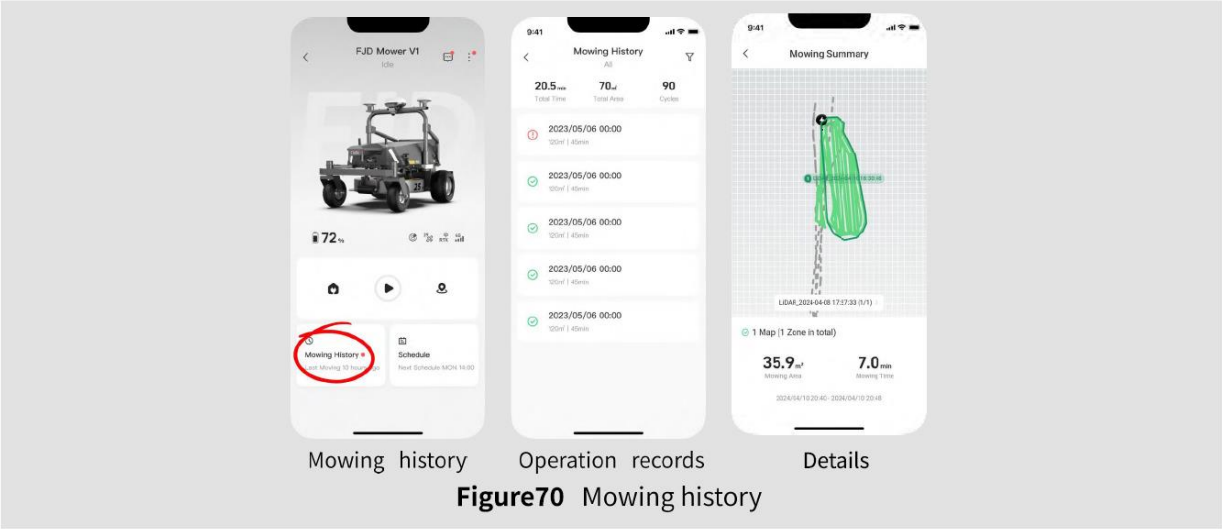
Details

Figure68 Return to charging pile

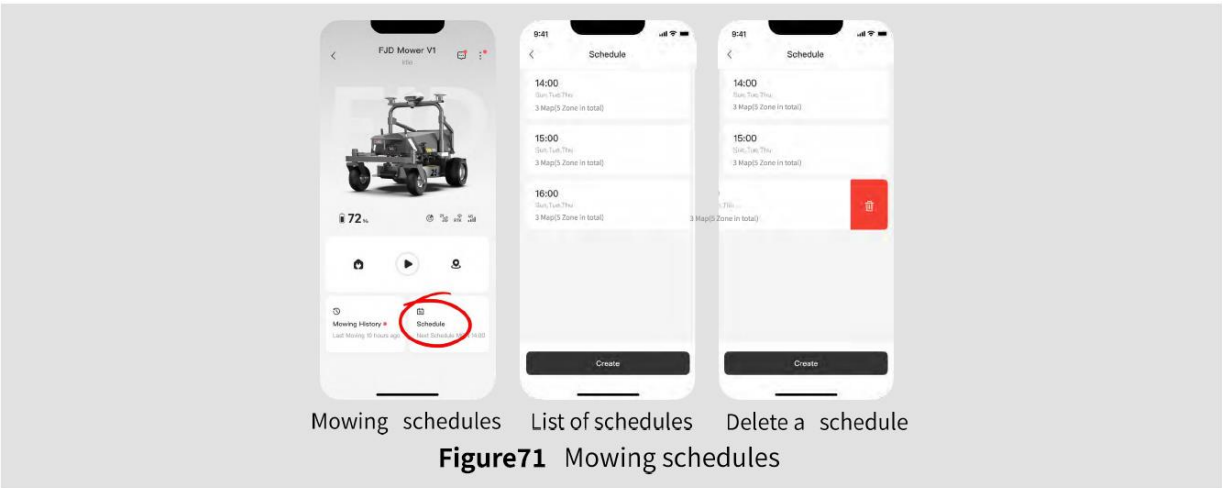
8.2.5 Start Mowing

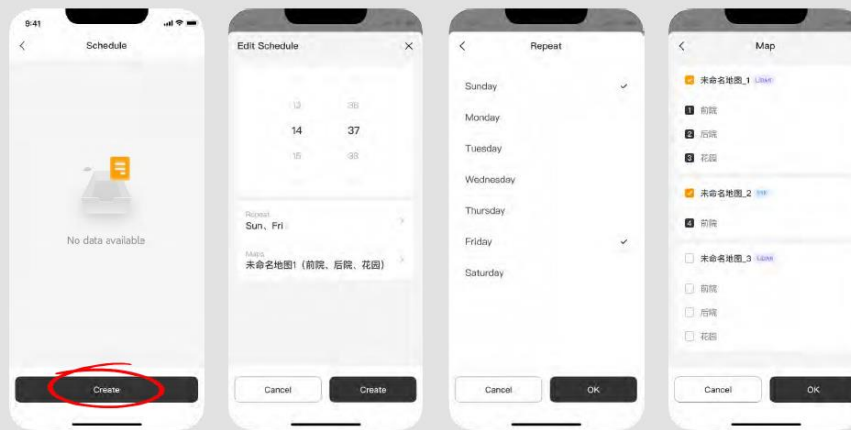


8.2.6 Mowing History



8.2.7 Schedules





Tap Create.

Select the time.

Select the days.

Select the map.

Figure72 Create a schedule

9 Using the Cutting Deck

9.1 Precautions

1. During the first use, mow the grass slowly on level ground.
2. The mowing method depends on the size and shape of the site, as well as obstacles including trees, fences, and buildings.
3. To ensure a better mowing effect, mow the grass in the afternoon or evening when the humidity is relatively low.

9.2 Adjusting the Height of the Cutting Deck



Do not adjust the blade after the mower is powered on. The mower blade is invisible from the outside and is located very close to the deck housing. Fingers and toes can be cut off instantly when touching the blade.

The cutting deck is adjustable in the height range of 20 to 127 mm (0.8 to 5 inches). Lift the cutting deck properly during mowing to avoid being damaged by tree stumps, rocks, and other objects.

9.3 Cleaning the Cutting Deck



Do not adjust the blade after the mower is powered on. The mower blade is invisible from the outside and is located very close to the deck housing. Fingers and toes can be cut off instantly when touching the blade.

Connect the water pipe to the wash port ❶ of the cutting deck, and turn on the water tap and the blade. Clean the cutting deck after each use.

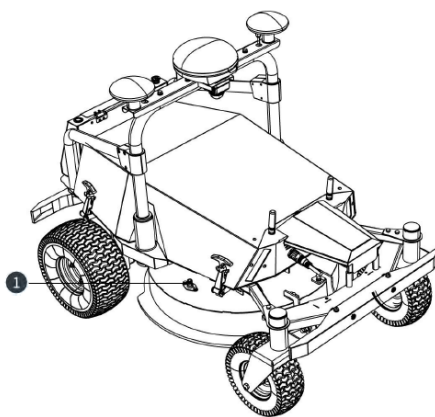


Figure73 Wash port

9.4 Installing the Cutting Deck



Power off the mower before removing the cutting deck.
Park the mower on firm and level ground and engage the brake before removing the cutting deck.

1. Put the cutting deck to the right of the mower, and slide it under the mower chassis as shown below. Ensure that the front wheels are turned by 90 degrees.

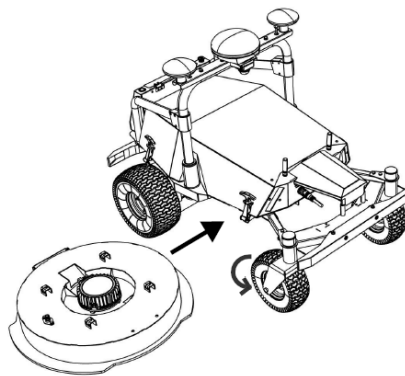


Figure74 Slide the cutting deck under the mower chassis

2. Mount the cutting deck to the four threaded rods as shown below, and tighten them with hexagon nuts.

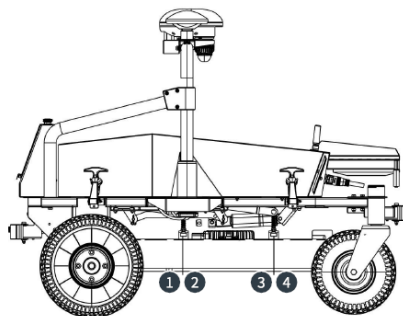


Figure75 Mount the cutting deck

3. Fix the anti-scalp wheel bracket with M8 bolts.
4. Mount the anti-scalp wheel and shaft sleeve, and fix them with M12 bolts and nuts.

9.5 Adjusting the Levelness and Height of the Cutting Deck

After installing the cutting deck, check its levelness and height, and adjust them when necessary. When the cutting deck is not parallel to the ground, adjust the height adjustment fork. Ensure that the blade edge is 20 mm (0.8 inches) above the ground when the cutting deck is in its lowest position.



Note: Before checking the cutting deck height, ensure that the tire pressure is at the specified level. If the tire pressure is abnormal, the deck cannot be adjusted to the correct cutting height.

9.6 Removing the Cutting Deck

To remove the cutting deck, reverse the foregoing steps.



WARNING

The cutting deck needs to be installed or removed by professionals with special devices.

9.7 Operation on Slopes



Use the machine only on slopes not steeper than 20 degrees. Slopes are a major factor related to loss of control and rollover that could result in serious injury or death. Use extreme caution when operating on slopes.

- Use extreme caution when operating on slopes.
- Exercise extreme caution when changing directions on slopes.
- Drive and turn slowly on slopes.
- Do not mow at places that can cause slip or tip-over.
- To maximize the traction, drive forward to go uphill.
- Slow down and turn around slowly to go downhill.
- Watch for holes, ruts, bumps, rocks, and other hidden objects that can cause rollover.
- Be extremely careful in tall grass areas where obstacles may be hidden.
- Remove all obstacles such as rocks and twigs.
- Drive slowly and gradually on slopes. Do not make sudden changes in speed or direction.
- Do not start or stop the mower on slopes. If the tires lose traction, turn off the blade motor and drive slowly and carefully.
- During mowing, keep a safe distance from ditches, retaining walls, or embankments that can cause the machine to fall or get mired. This reduces the risk of rollover and avoids serious injury or death.

To avoid rollover, it is suggested to use a push mower or handheld mower to mow on slopes, or near ditches, retaining walls, or embankments.

Do not mow on wet grass. Wet grass can reduce traction, resulting in slip or loss of steering control.

When the tires lose traction while operating on a slope, power off the mower, and seek help.

Do not start, stop, or make turns suddenly, especially when on slopes.

The mower can mow horizontally on a moderate slope. Mowing a slope of 15 degrees or above may cause the drive tires to lose traction, leading to loss of control.

Do not mow slopes steeper than 20 degrees.

Drive the machine off the slope using extreme caution when you detect signs of traction loss, and try operating on the slope again after the problem is solved. Terrain conditions can affect traction, resulting in possible loss of control of the machine. Some of the conditions to be aware of are:

Wet surfaces

Depressions such as holes, ruts, and eroded areas

Mounds

Soil type, such as sand, loose soil, gravel, and clay

Grass type, density, and height

Extreme dry conditions

Tire pressure

The above only lists several examples that requires caution when operating on slopes. There are many other possibilities too numerous to mention, so use extreme caution when operating on slopes.

9.8 Slope Reference

You can make a drawing like the following to determine the slope before mowing.

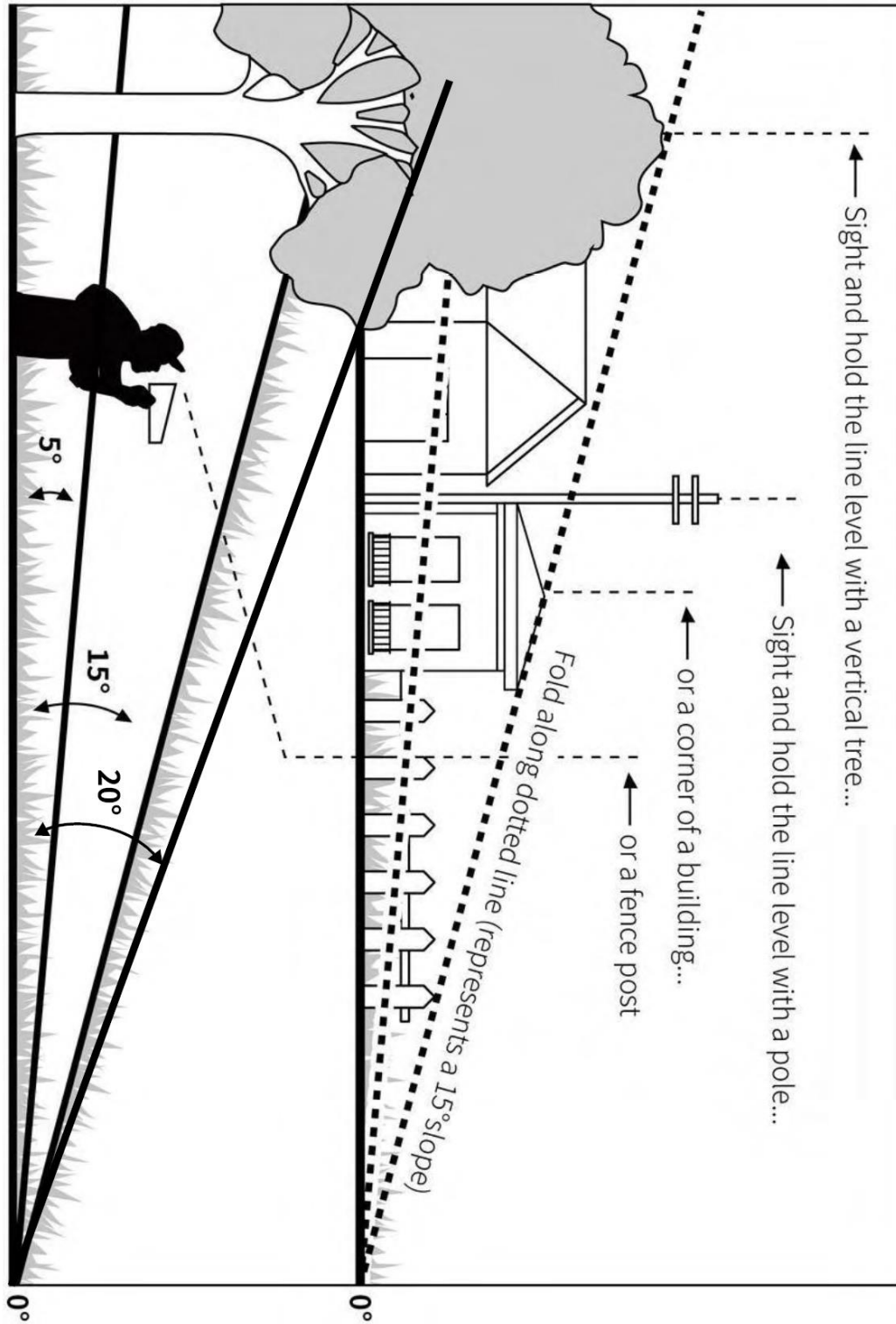


Figure76 Slope reference

10 Electrical System Safety

- Before working on the electrical system, power off the mower and disconnect the battery cables. Read the user manual before adjusting or repairing any components.
- Before transporting the mower, power off the mower and disconnect the battery cables.
- Keep the power unit free of grass clippings, leaves, and other debris. Do not clean the power unit with water.
- Wear protective eyewear and equipment, and use insulated tools when working around the batteries.
- Do not use solvents, hard cleaners, or abrasives to clean dirt or debris off the battery compartment, power unit, and cutting deck.
- Keep bystanders away before starting or stopping the blade.

10.1 Charging Pile

The mower is provided with the charging pile approved by FJD. Plug the charging pile into a 110 V/20 A or 220 V/10 A power socket. Do not charge the batteries with chargers not designed for this product.

The charging pile indicator may show the following status during charging:

Color	Meaning	Solution
Solid green	Charging in progress or completed. Check the battery level on the home screen.	No solution required.
Solid red	An exception such as OTP, OVP, short circuit, reverse polarity, and charging timeout occurs.	Contact the local dealer to solve the problem.
Blinking red	Battery overheating.	Let the batteries cool down and continue the charging.

	Note: Place the charging pile in a dry place to avoid water ingress.
---	--

Charging instructions:

- The battery includes a battery management system (BMS), and therefore, does not need to be fully discharged before recharging.
- It takes around 5 hours to fully charge the mower.
- The battery left uncharged will slowly discharge. Ensure that the batteries are fully charged before using the mower from long-term storage.
- During long-term storage, fully charge the batteries every 30 days to maintain the battery lifespan.
- Ensure that the cooling fan inlet and outlet of the charging pile are not blocked during charging.
- Immediate charging required

Immediate charging required

If the battery power is in the range of 5% to 10%, the mower screen shows a low battery prompt, and the mower returns for charging automatically. If the battery power is no higher than 5%, the blade stops and you should remotely control the mower to return.



Reference: Read and understand all the safety warnings and instructions. Failure to follow these instructions may result in electrical shock or serious injury.

10.2 Removing the Batteries

Refer to section 6.2 “Installing the Batteries” . Do not remove the batteries unless for maintenance and other special purposes.



DANGER

Do not open the batteries to expose the inner structure, as it will cause battery damage and personal injury.



WARNING

Before maintaining the mower, power off the mower and disconnect the battery cables.

10.3 Faults

When a fault is detected, the control system takes measures to protect the operator and the mower. Before powering off the mower or a component, the control system displays the fault on the screen. Most faults can be quickly rectified by noting the causes, restarting the mower (pressing the power button), and changing the way the operator uses the mower. Refer to the following table for the faults that may occur during operations. If a fault persists, it needs to be resolved by a trained professional using a more detailed solution.

Faults		
Low charging temperature protection	High charging temperature protection	Discharging overcurrent protection
Undervoltage protection for total voltage	Undervoltage protection for single battery	Charging overcurrent protection
Overvoltage protection for total voltage	Overvoltage protection for single battery	Low discharging temperature protection
High discharging temperature protection	Low temperature protection	Battery voltage sampling fault
High temperature protection for battery module	Battery temperature sampling fault	Low charging temperature alarm
High charging temperature alarm	Discharging overcurrent alarm	Undervoltage alarm for total voltage
Undervoltage alarm for single battery	Charging overcurrent alarm	Overvoltage alarm for total voltage
Overvoltage alarm for single battery	Low discharging temperature alarm	High discharging temperature alarm
Low temperature alarm	High temperature alarm	Battery overtemperature alarm
Low battery alarm	Battery software communication error	Left drive motor and controller mismatch
Overvoltage protection for left drive motor	Undervoltage protection for left drive motor	Left drive motor communication error
Locked-rotor protection for left drive motor	Abnormal left drive motor voltage	Overtemperature protection for left drive motor