HD818

Auto Steering System

User Manual



VECTOR AGR

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Ⅰ. Disclaimer

1. Disclaimer

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2. Technology and Services

If the content you need cannot be found in this operation manual, please contact the relevant project installation technicians.

Users can also contact us by calling Huida's national customer service hotline: 400-888-0787, and we will serve you wholeheartedly.

The current interface function display is a test version. Please refer to the actual interface functions for the real situation.

Ⅱ. Product Usage Instructions

1. Product Usage Instructions

- Carefully read all user materials provided with this product before use to understand the product's usage methods and precautions.
- Do not disassemble the equipment without permission to avoid safety hazards. If needed, contact professionals. When professionals disassemble the equipment, turn off the power in advance and never disassemble it while powered on.
- Do not connect this equipment unless strictly following the requirements in the manual. Avoid equipment damage and potential safety hazards caused by incorrect connections.
- When supplying power to this product (auto driving system), pay attention to the equipment's power supply requirements (power supply voltage must be between 9~35V).
- Check each wire harness of the product. If there is damage, replace it in time to avoid affecting the usage effect or causing potential safety hazards.
- Do not disassemble the shell of all components of this product by yourself; otherwise, repairs will not be provided.
- This product does not have an active obstacle avoidance function. Therefore, personnel must be present when the auto driving system is operating to monitor surrounding safety in real time.
- The auto driving system cannot control the vehicle's speed. Operators must manually adjust the vehicle speed within a safe and reasonable range.
- When the auto driving system is testing or calibrating, it will take over control of the vehicle's steering system. The vehicle's steering wheel, wheels, or other body parts may move unpredictably. When starting the

vehicle or activating the auto driving system, ensure surrounding safety to prevent personal injury or property damage.

- Vehicles equipped with our company's auto driving system are not allowed to activate auto driving on public roads or in public places.

- Before each use, check whether all components on the equipment are damaged or abnormal. Only when all parts of the equipment are in good working condition can you continue to use this product. If abnormalities or damaged parts are found during inspection, handle them in time or contact after-sales personnel.

- Vehicle accidents caused by illegal operations during auto driving operations have no relation to Heilongjiang Huida Technology Co., Ltd.

2. Safety Tips

	When the equipment's auto driving function is activated, the driver is strictly prohibited from leaving the cab.
	The auto driving system is strictly forbidden to be used during non-operating hours or in non-operating areas.
	Please use the equipment strictly in accordance with the instruction manual, and random modification of software parameters is prohibited.
	When the equipment is not used for a long time, disconnect the power cord to prevent battery power loss.
	When using the equipment, take care to keep the devices in the cab waterproof. Protective measures for the equipment must be taken when cleaning the vehicle, etc.
	The auto driving system cannot control the vehicle speed, so the operator must manually adjust the vehicle speed to ensure safe driving.
	Unauthorized disassembly of the equipment is strictly prohibited; otherwise, warranty service will not be provided.

Ⅲ. Product Introduction

1. Product Overview

The Auto Steering **System** is a core system for intelligent agricultural equipment independently developed and manufactured by **Huida Technology**, leveraging the company's proprietary core technologies.
HD818 Auto Steering System with Navigation is an autopilot system independently developed and produced by Huida Tech, and a large torque motor is used to control steering wheel. It is suitable for tractors, transplanters, pesticide spraying machines, crawler tractors and other agricultural machinery.

Validated through extensive practical applications, the system provides a complete set of supporting components, making it fully compatible with all steering-wheel-type agricultural machinery.
In its design, the specific characteristics of agricultural production and operating environments have been fully considered, effectively solving real-world problems encountered during agricultural operations.

- Effectively improves operation accuracy, meets standardized agricultural requirements, and enhances the quality of agricultural products.
- Transforms manual operation from "less overlap and no omission" to automated "no overlap and precise operation," significantly improving operational efficiency.
- Extends the working time of agricultural machinery—machines can continue operating while operators take breaks, and fieldwork can also be performed at night.
- Simple operation reduces driver workload and lowers the skill requirements for operators.

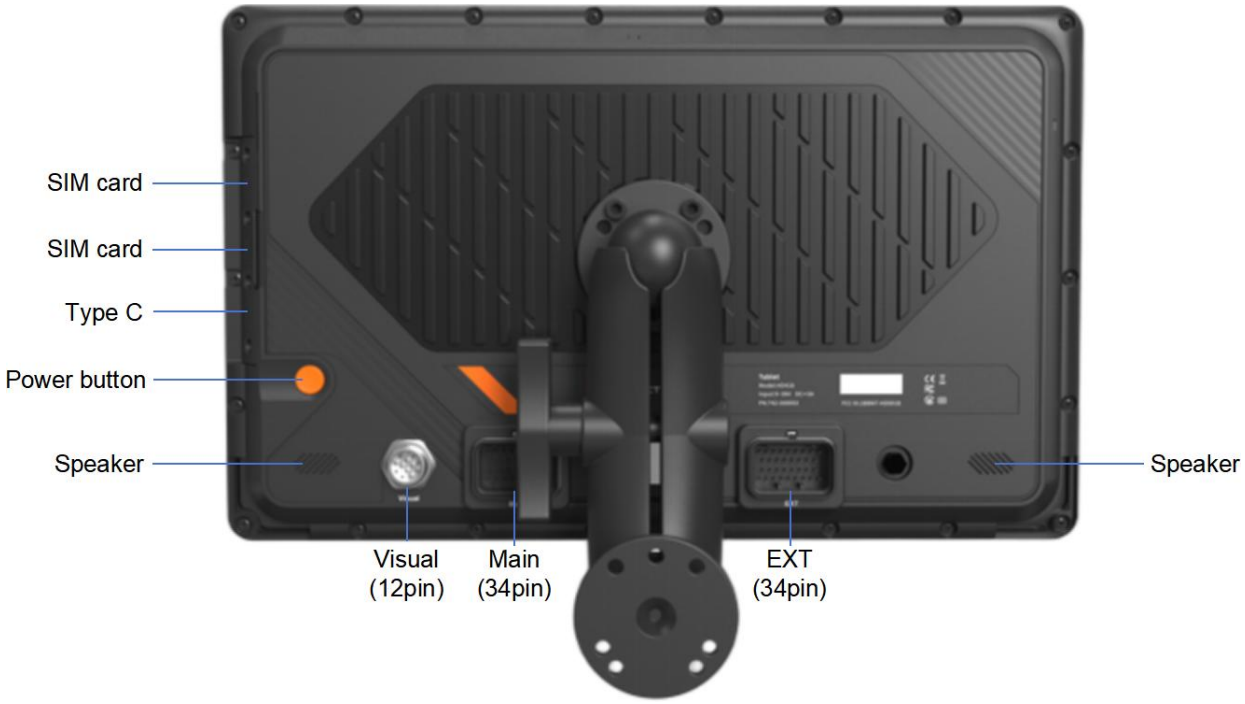
2. Main Components Introduction

Device Name	Picture
GNSS Antenna	
Display Terminal	
Electronic Steering Motor	
Gyroscope	

Ⅳ. Product Usage

1. Display Terminal

The interface illustration is as follows:



2. Power On/Off

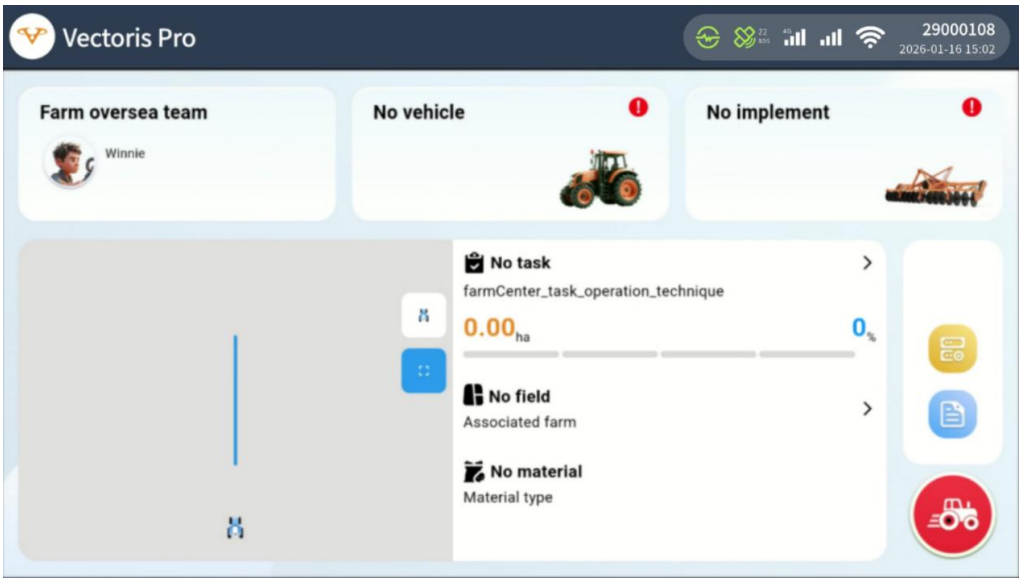


Long press the power button on the display terminal for 3 seconds to turn on the navigation system.

3. Account Login

Log in to your account to use **Vectoris Pro**.
The system manages operator information and production data through individual user accounts and provides platform-level data services.

When not logged in, all production-related cards on the main screen are displayed in gray. Tap the **Login Card** in the upper-left corner of the main screen to access your account.



Two login methods are available:

QR Code Login — Scan the QR code with the Huida Ag App, suitable for **personal or regular members**.



Please scan the QR code with HD Ag APP to log in

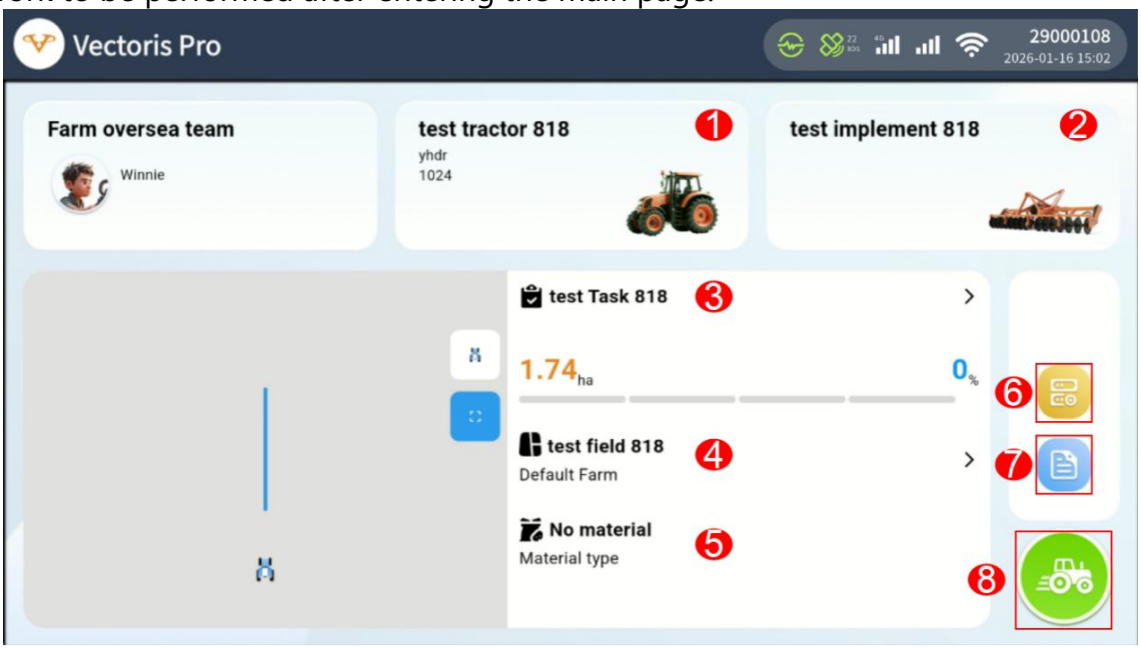
Authorization Code Login — Enter the authorization code issued by the organization platform, suitable for **temporary members**.



Please enter authorization code to log in

4. Production Cards

Production cards include **vehicles**, **implements**, **tasks**, **fields**, and **agricultural material. They** allow you to clearly view the current configuration of production resources and understand the work to be performed after entering the main page.



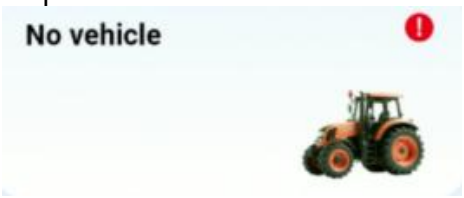
1. Vehicle Card:

In the normal state, this card displays the basic identification information of the current vehicle selected in the system.

Tap the card to enter the **Vehicle Management List**.

If the current vehicle is not configured, the card will display a "❗" prompt.

In this case, you cannot proceed to the **Workbench**, because a corresponding vehicle is required.

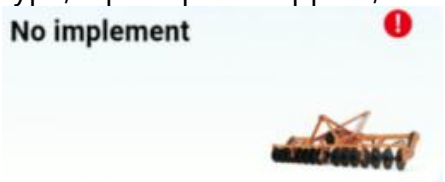


2. Implement Card:

In the normal state, this card displays the basic identification information of the current implement selected in the system.

Tap the card to enter the **Implement Management List**.

If the implement is not configured or the selected implement type does not match the task type, a prompt will appear, and you will not be able to access the **Workbench**.



3. Task Card:

In the normal state, this card displays a summary of the current ongoing task.

Tap the card to open the **Task Management List**.

A task must be specified as a prerequisite to enter the **Workbench**; if no task is set, you cannot proceed.

4. Field Card:

In the normal state, this card displays the field associated with the current task.
Tap the card to open the **Field Management List**.
When creating a task in **Vectoris Pro**, a field must be assigned to the task.
The left side of the Field Card shows a satellite view of the field.

5. Agricultural Material Card:

In the normal state, this card displays the agricultural material configuration linked to the current implement.
Agricultural material does not require mandatory configuration, but you can tap the card to open the **Agricultural Material Management List**.

6. Version Management Icon:

Tap the button to enter the version management interface.
You can view the version numbers of all connected devices and select the version upgrade method you wish to perform.

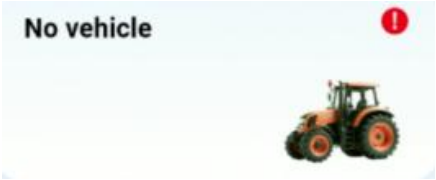
7. Data Transmission Icon:

Tap the icon to enter the data manager interface, which covers the data exchange methods provided for different scenarios between other terminals or external storage devices.

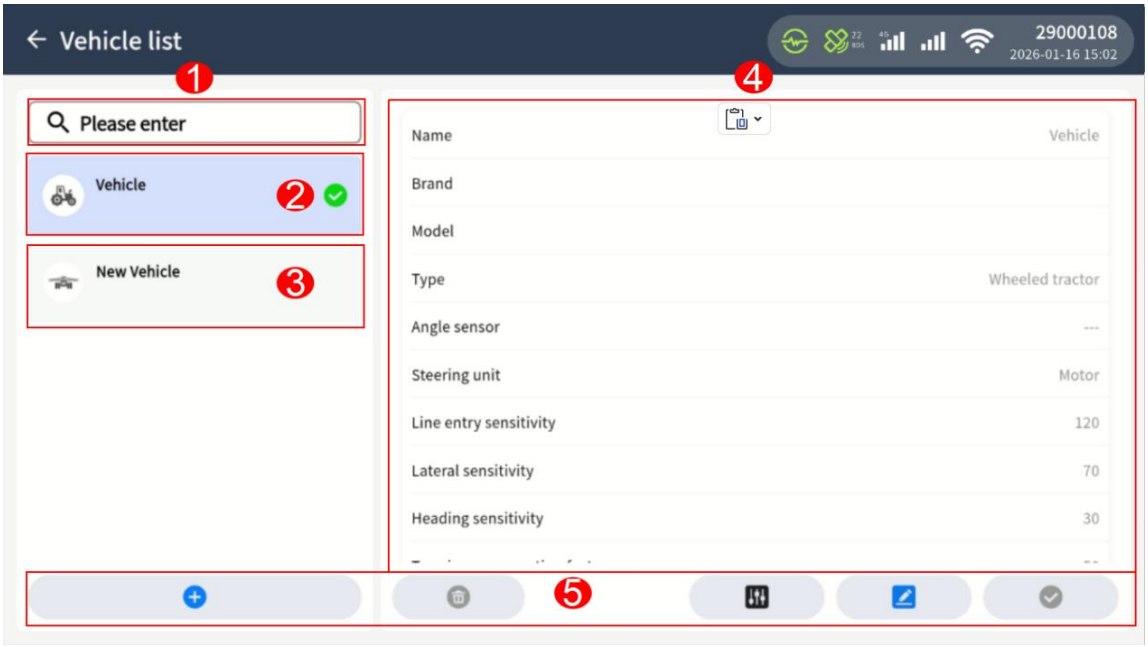
8. Workbench Icon:

On the premise of having configured the homepage interface correctly, tap the "**Workbench**" icon to enter the workbench interface.

5. Vehicle List



Select the Vehicle Card to open the Vehicle Selection interface.



1. Quickly search for **vehicles** by entering keywords.

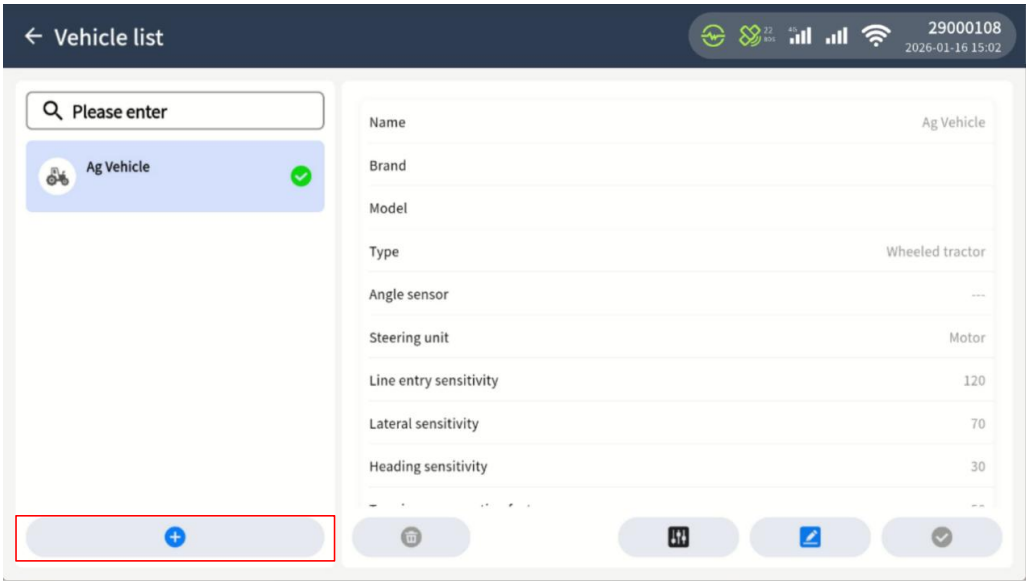
2. This icon indicates **the vehicle currently activated by the system**.

3. Select the **vehicle** to be operated. Tap an item in the list to select the desired vehicle.

4. Displays a summary of the selected **vehicle information**. Scroll down to view more details.

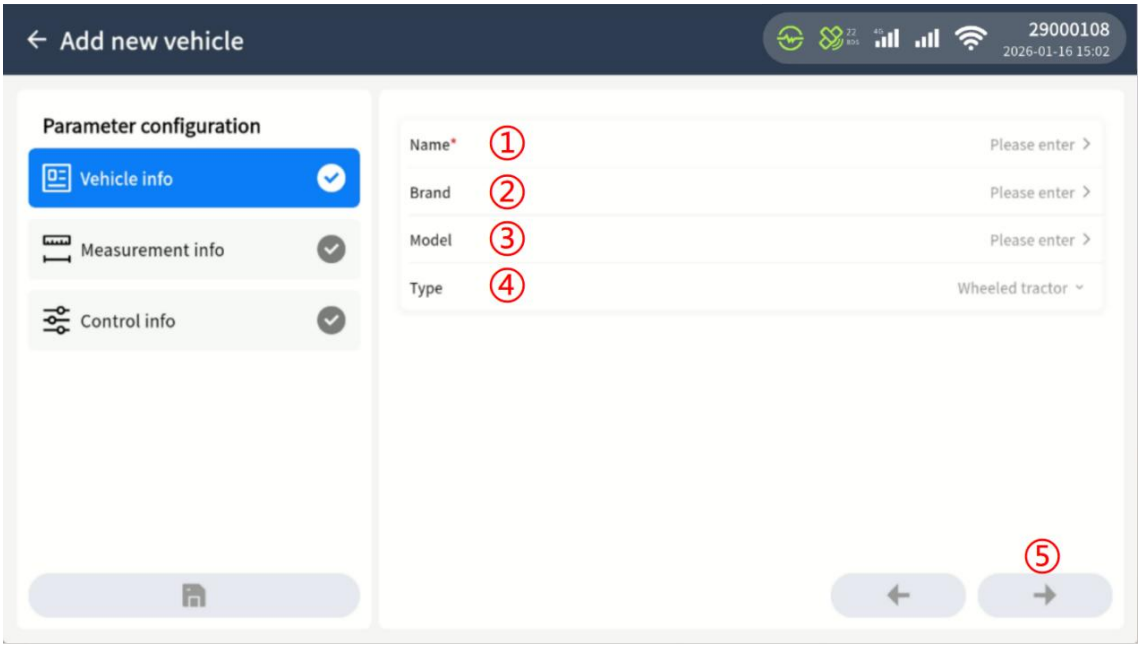
5. Manage the selected **vehicle** by creating, deleting, editing, activating, or calibrating it.

5.1 Add New Vehicle



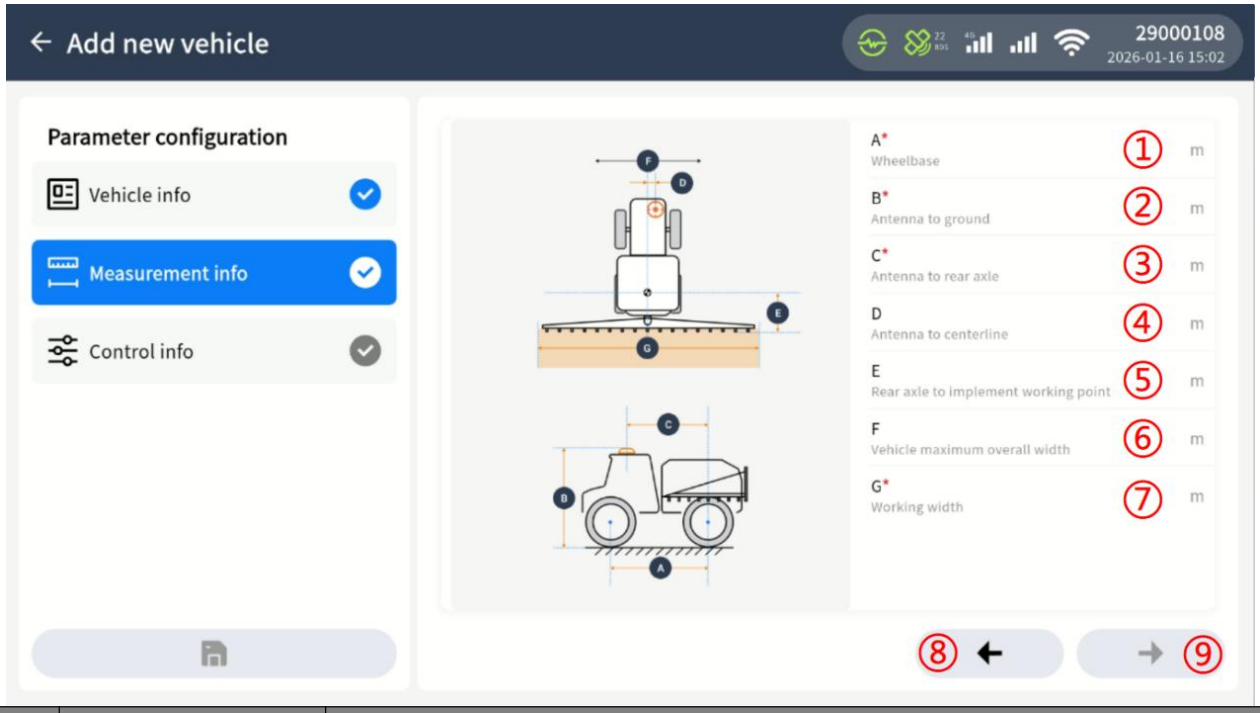
Tap the ""button to add a new Vehicle.

5.1.1 Vehicle information



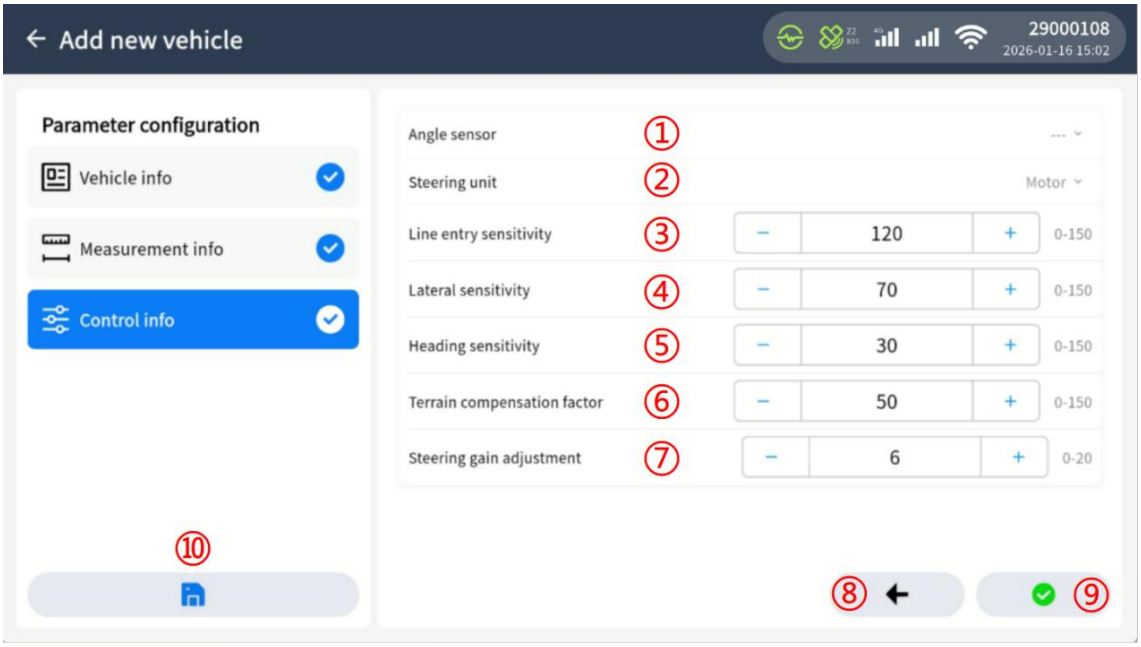
No.	Function Point	Description
1	Name	Enter the name of the vehicle according to its type. (Required)
2	Brand	Enter the brand of the vehicle according to its type.
3	Model	Enter the model of the vehicle according to its type.
4	Type	Select the vehicle type: Wheeled tractor\Tracked tractor\Articulated tractor\Rice transplanter\Harvester\Self-propelled sprayer
5	→	Operation button. Tap to jump to "**Measurement info.**"

5.1.2 Measurement information



No.	Function Point	Description
1	Wheelbase	Straight-line distance between front and rear wheel centers, **unit: m** (Required)
2	Antenna to ground	Straight-line distance from the top of antenna to the ground, **unit: m** (Required)
3	Antenna to rear axle	Vertical distance from antenna to the rear axle, **unit: m** (Required)
4	Antenna to centerline	Distance from antenna to the centerline, **unit: m**
5	Rear axle to implement working point	Distance from rear axle to the three-point hitch, **unit: m**
6	Vehicle maximum overall width	Distance from Rear axle to drawbar point, **unit: m**
7	Working width	Distance between the leftmost and rightmost operation points of the implement's working trajectory, **unit: m** (Required)
8	←	Operation button. Tap to Jump back to "**Vehicle information**"
9	→	Operation button. Tap to jump to "**Control information**"

5.1.3 Control information



1	Angle sensor	Select the angle sensor type: ... \ Label side-up \ Label side-down
2	Steering unit	Select the steering unit type: Motor \ Hydraulic value \ Steer Ready Can
3	Line entry sensitivity	Responsiveness during the lane entry phase
4	Lateral sensitivity	Timing of steering wheel corrections
5	Heading sensitivity	Steering wheel oscillation angle
6	Terrain compensation factor	Weight of system compensation adjustment when dealing with significant terrain changes
7	Steering gain adjustment	Frequency of steering wheel oscillations
8	←	Operation button. Tap to jump back to "measurement information"
9	√	Operation button. Tap to activate this vehicle and start calibration.
10	Save	Operation button. Tap to save current configuration.

Caution

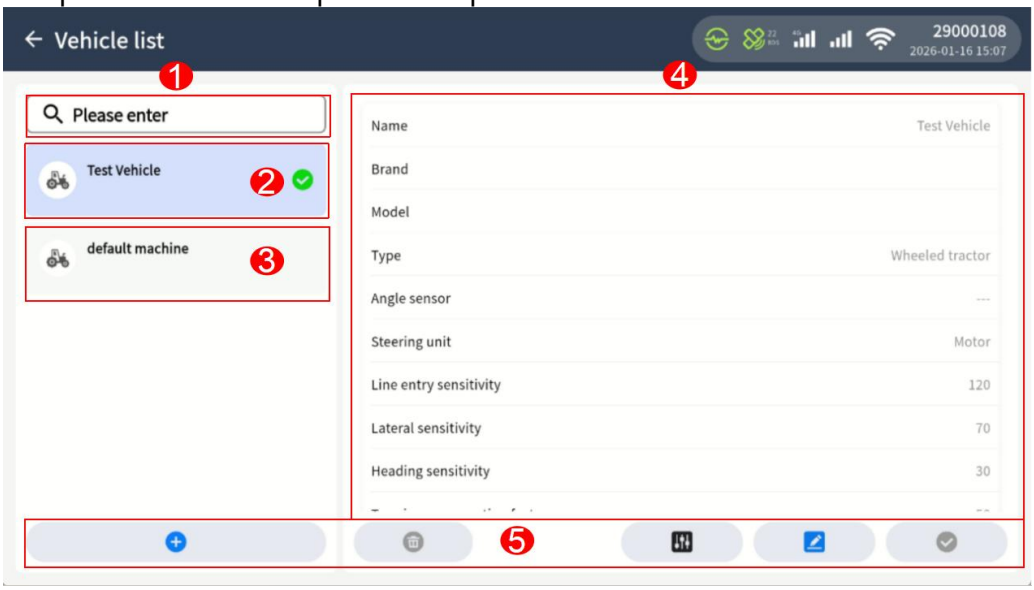
You can temporarily skip the calibration process to complete the creation of the vehicle before fully prepared. However, Vectoris Pro prohibits activating vehicles that are not in a calibrated state into the workbench.

When you later select the corresponding vehicle option from the list, you will be prompted again whether to perform calibration, and the activation will be executed only after calibration is completed.

6. Implements List

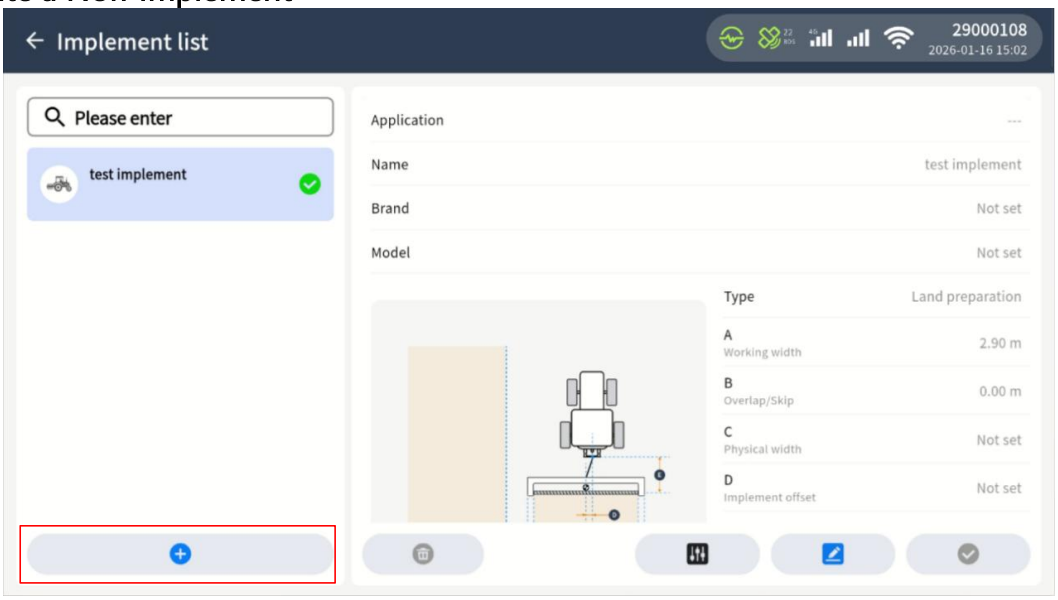


Select the Implement Card to open the Implement List interface.



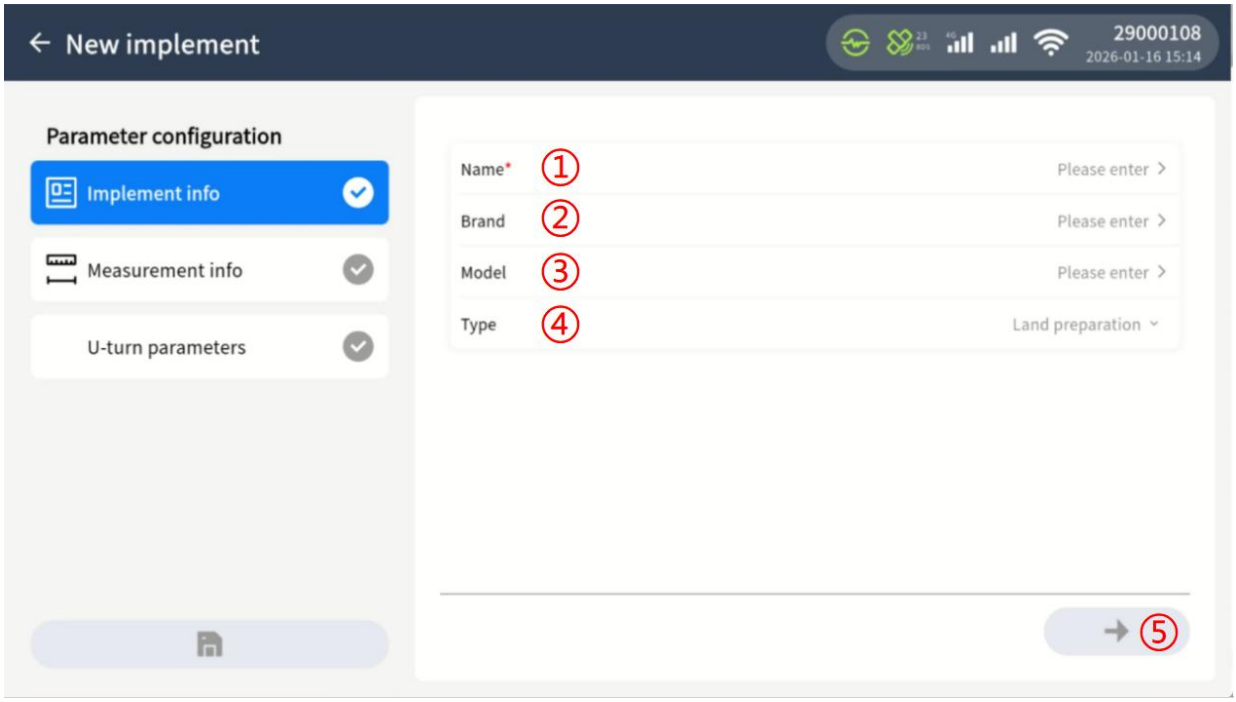
1. Quickly search for **implements** by entering keywords.
2. This icon indicates **the implement currently activated by the system**.
3. Select the **implement** to be used. Tap an item in the list to select the desired implement.
4. Displays a summary of the selected **implement information**. Scroll down to view more details.
5. Manage the selected **implement** by creating, deleting, editing, or activating it.

6.1 Create a New Implement



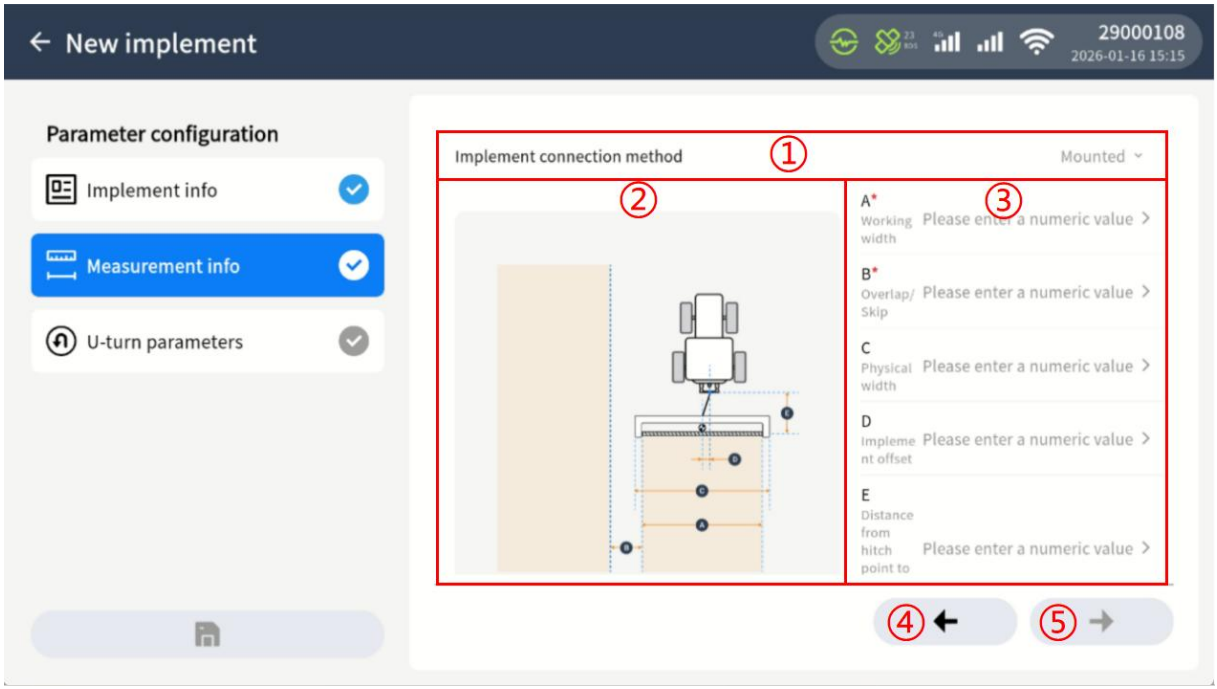
Tap the " " button to enter implement information and measurement Information for the operation.

6.1.1 Implement Information



No.	Function	Description
1	Name	Enter the name of the implement according to its type.
2	Brand	Enter the brand of the implement according to its type.
3	Model	Enter the model of the implement according to its type.
4	Type	Select the implement type: Land preparation \ Seeding \ Intertillage \ Crop protection \ Fertilization \ Harvesting \ Vegetable transplanting \ Irrigation \ Transportation \ Land leveler \ Other.
5	→	Operation button. Tap to jump to "**Measurement information.**"

6.1.2 Measurement Information

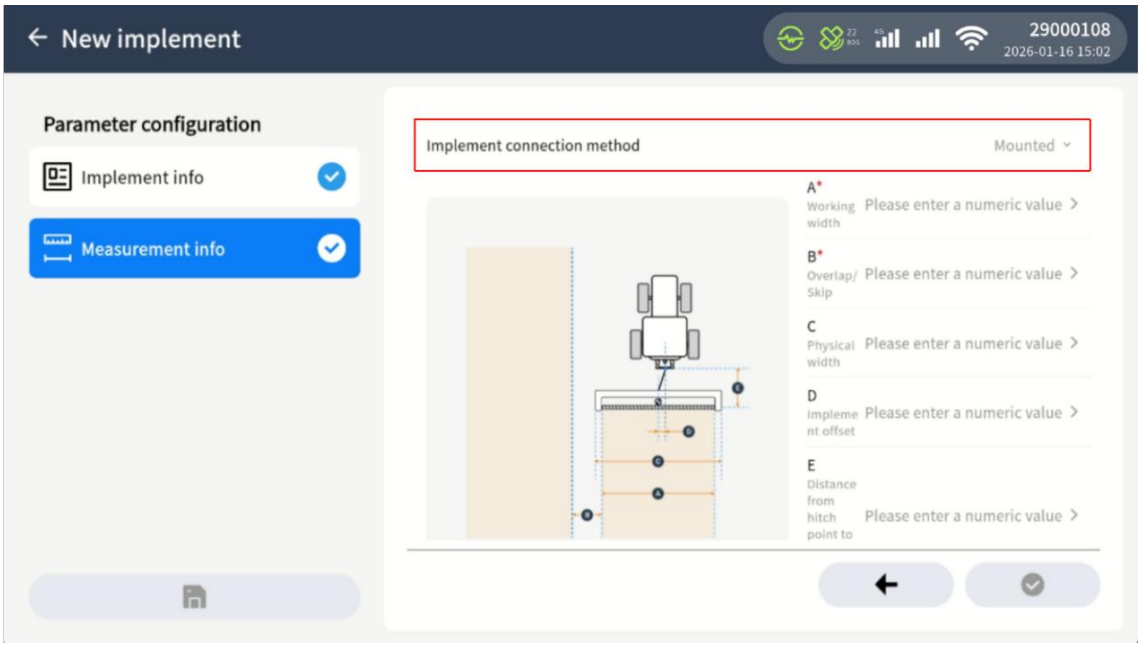


Select the appropriate **connection method** based on the vehicle type, and enter the following parameters according to actual measurements:
operation width, **overlap**, **leakage**, **offset**, **physical width**, and **distance from the connecting pin to the operation point**.

No.	Function	Description
1	Connection Method	Select according to the connection type of the vehicle: Towed / Mounted.
2	Implement Parameter Diagram	Diagram showing implement parameters for accurate measurement.
3	Implement Parameter Items	Required: A Working Width, B Overlap / Skip C Physical Width, D Implement Offset, E Distance from hitch point to work point. Units follow the selected measurement system (m by default).
4	←	Operation button. Tap to return to "**Implement Information.**"
5	→	Operation button. Tap to jump to "**U-turn parameters**"

6.1.2.1 Connection Method

Select according to the vehicle's connection type: **Towed / Mounted.**



6.1.2.2 Implement Width Setting

As shown in the figure, measure the actual operation width of the implement before operation.
Take the distance between the leftmost and rightmost operation points of the implement's working trajectory.
Calculate the average value after multiple measurements and ensure data accuracy—otherwise, it will affect the accuracy of pass-to-pass line width.
Enter the measured implement width.



6.1.2.3 Pass-to-Pass Line Width

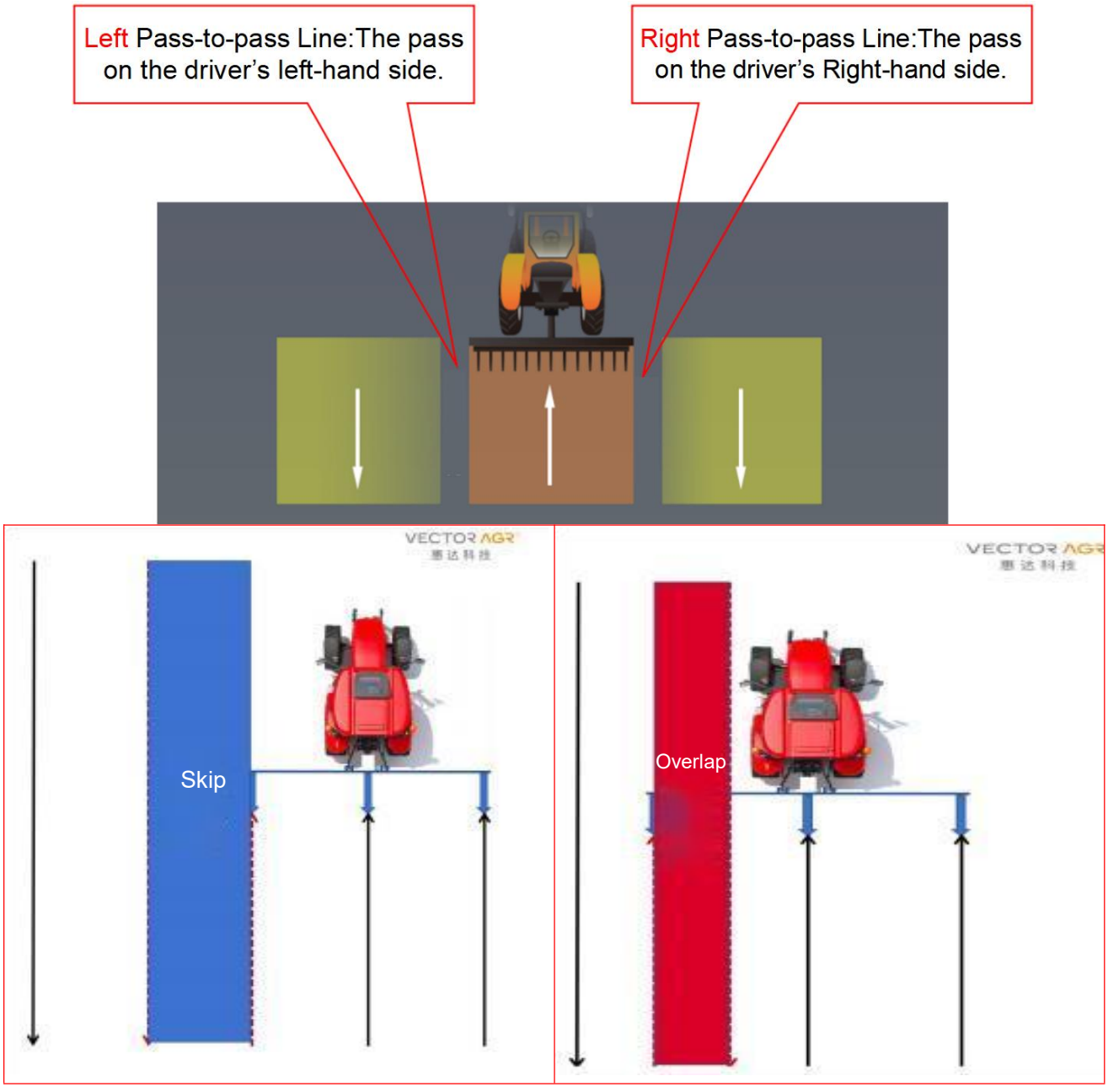
Definition: The distance between two adjacent working passes of the vehicle.

Left Pass-to-pass Line: The pass on the driver's left-hand side.

Right Pass-to-pass Line: The pass on the driver's right-hand side.

Overlap: The overlapping area between working paths.

Skip: The unworked area between passes.



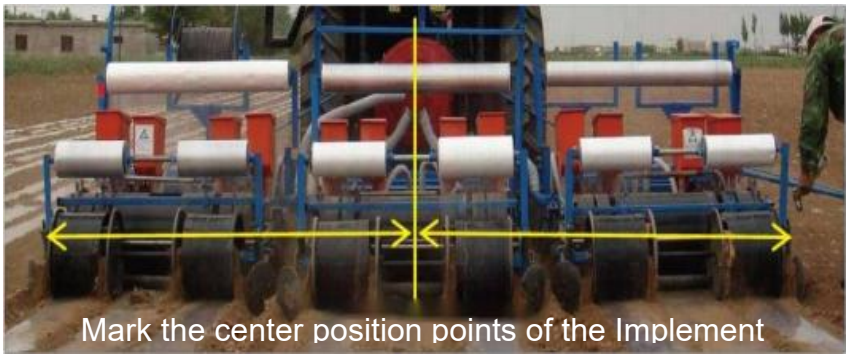
6.1.2.4 Physical Width

Physical width refers to the straight-line distance between the leftmost and rightmost sides of the implement.



6.1.2.5 Implement Offset

Implement offset is the distance between the center point of the vehicle and the center point of the implement.
When both centers coincide, the offset value is **0**.
Mark the center points of both the vehicle and implement when measuring.

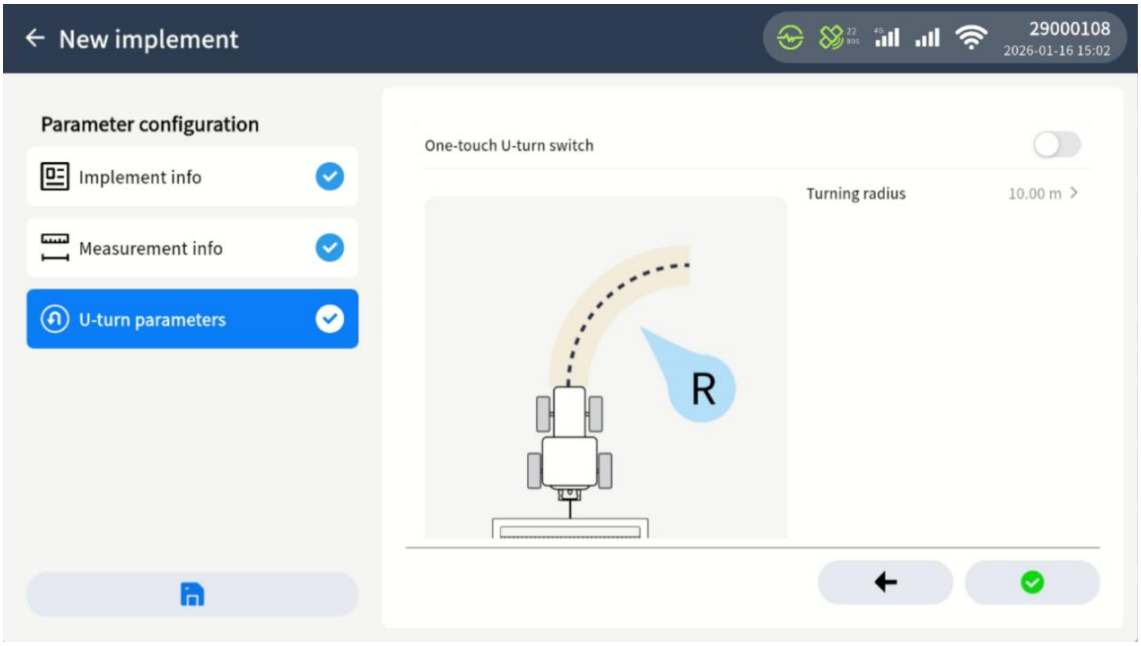


6.1.2.6 Distance from hitch point to work point

This refers to the straight-line distance between the **connection point (hitch point)** of the vehicle and implement, and the work point of the implement.



6.1.3 U-turn Parameters

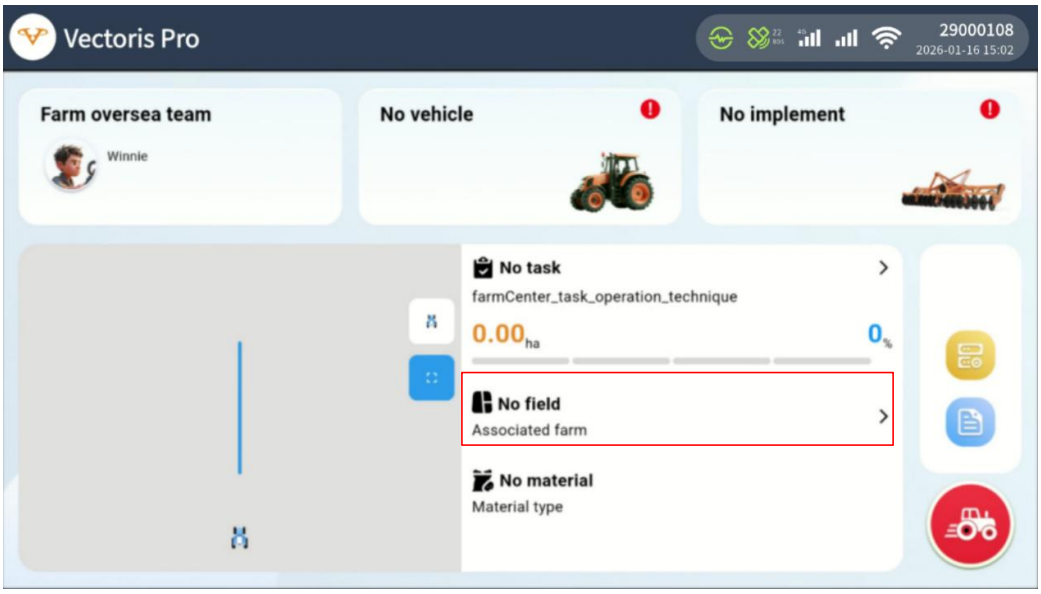


No.	Function Point	Description
1	One-touch U-turn switch	Turn on or off the one-touch U-turn button as needed
2	Turning radius	Adjust the minimum turning radius of the vehicle when performing one-touch U-turn operation
4	←	Operation button. Tap to return to "**Measurement Information.**"
5	√	Operation button, tap to call and save this farming tool.
6	Save	Operation button. Tap to save current configuration.

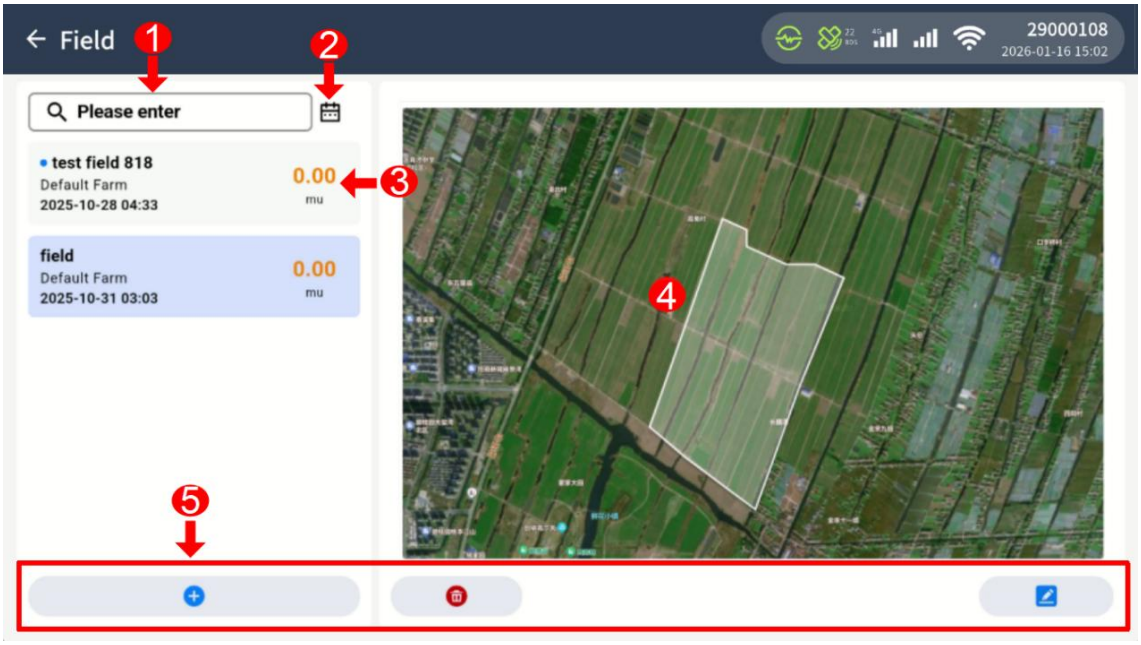
7. Field Management

Quickly browse current field information and satellite views from the main page.

Tap the **Field Card** to open the field list, where you can create, delete, or edit a field.



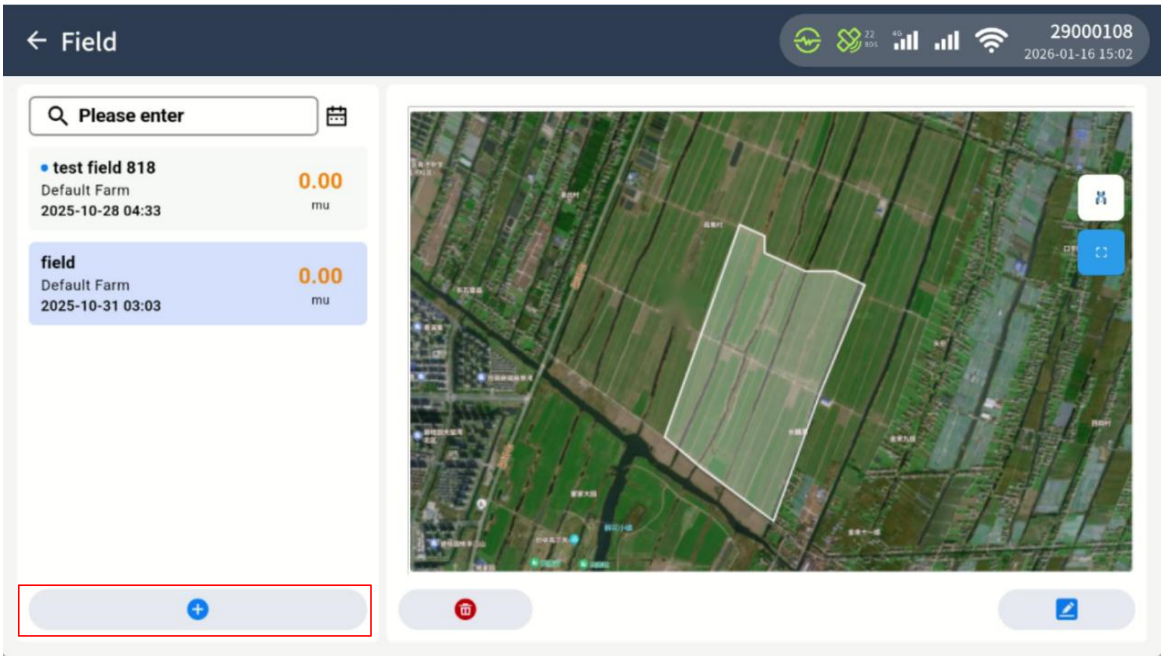
7.1 Field List



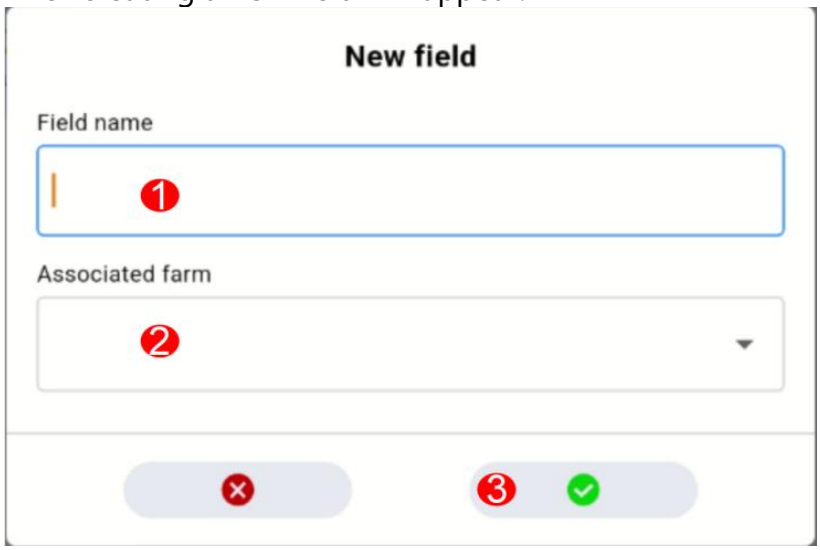
① Quickly search for fields by entering keywords.
② Switch between two sorting methods: **Sort by Distance / Sort by Time**.
③ mark the field specified by the current task.
④ View the satellite image of the selected field.
⑤ Create, delete, or modify field information.

7.2 Create a New Field

Tap the " + " button on the screen



A pop-up window for creating a new field will appear.

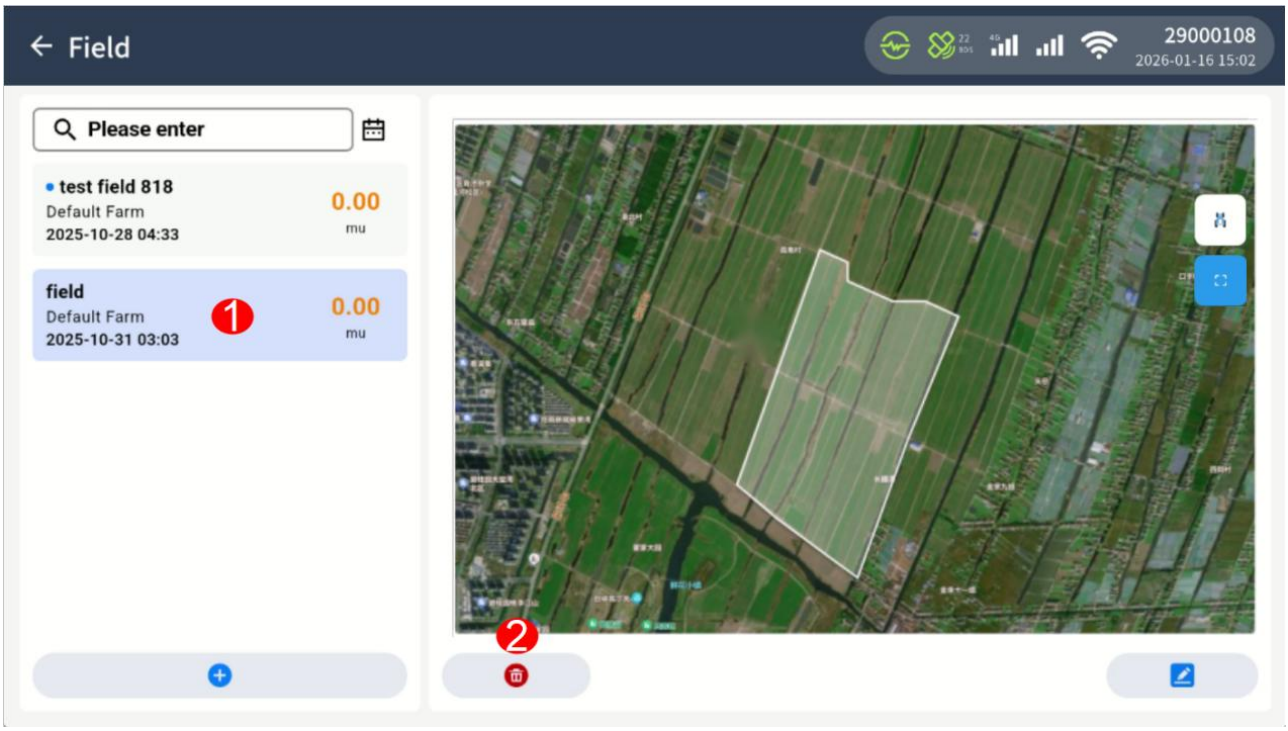


1. Enter a unique **field name**.
2. Select the **associated farm**.
   The selection list is synchronized with the platform, and farms can also be added via the mobile terminal.
3. Tap "  " to complete field creation.

The newly created field will be automatically added to and selected in the field list.

4. Tap "  " to exit field creation.

7.3 Delete Field



Select the field to be deleted from the field list.

After selecting the field, tap the **Delete** button.

In the confirmation pop-up window, tap "" to complete the deletion.

After deletion, the field list will be automatically updated.

Notes:

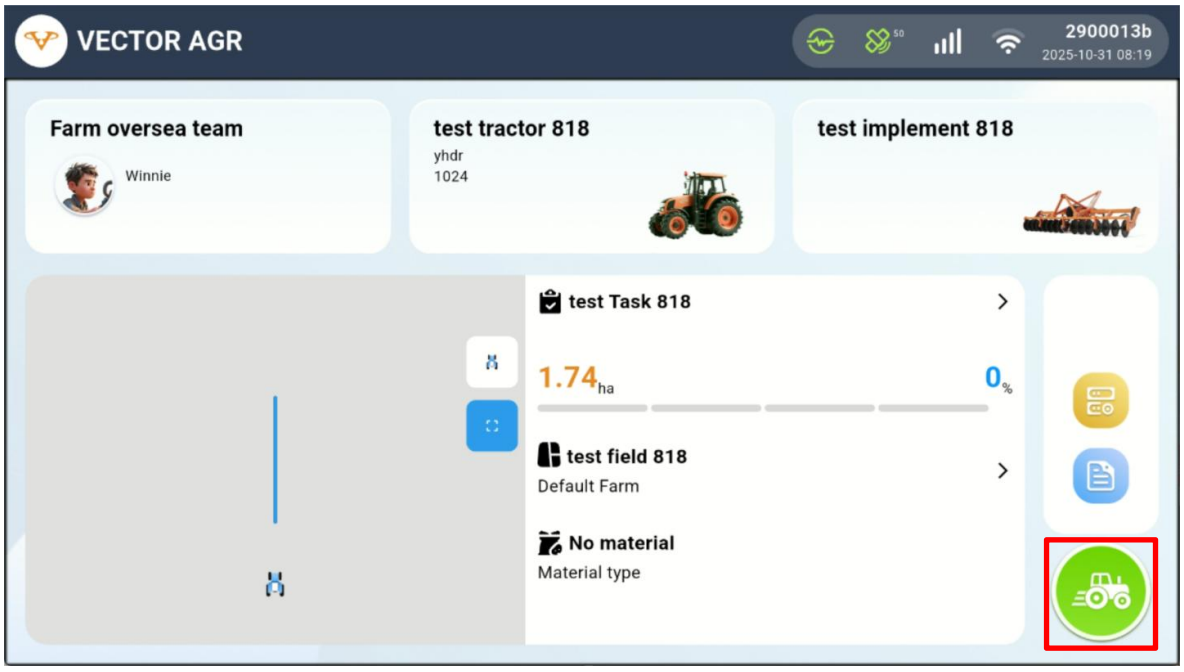
When a field is deleted, all tasks associated with it will also be deleted.

If there are still pending tasks in the field, operate with caution.

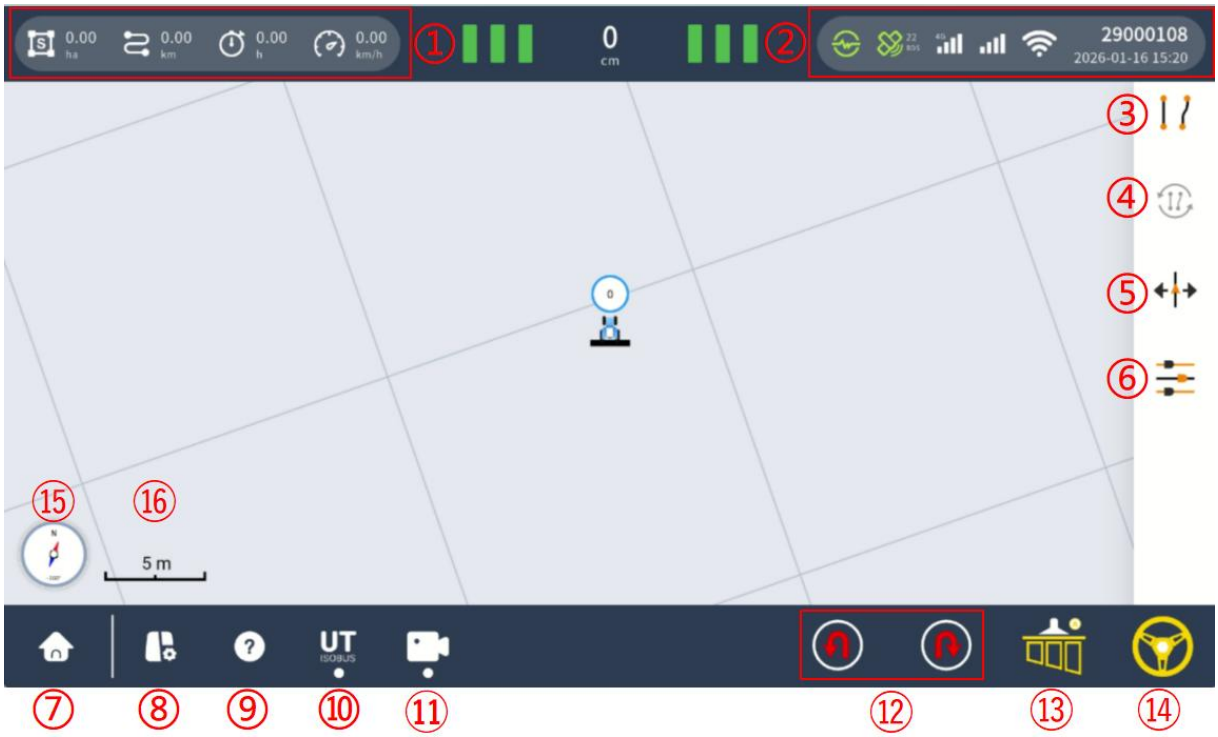
The field currently specified by a task cannot be deleted. When this field is selected, the **Delete** button will be grayed out and unavailable.

8. Workbench

When the account is in a logged-in state, the vehicle is created and calibrated successfully, the implement is created successfully and the task creation being completed. Tap the **Workbench** icon.



The screen will then enter the **Workbench interface**.



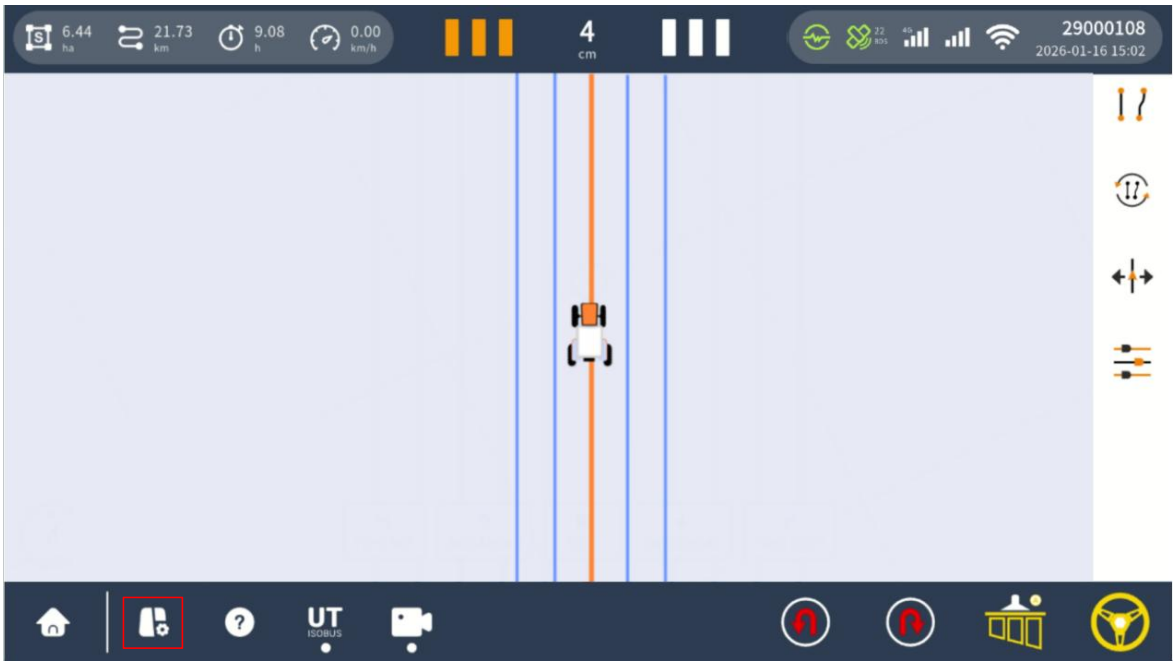
1) **Operation Status Bar:** Shows the current operation status, including operation area, driving mileage, execution hours, and average speed. Tap the icon group in the upper-

left corner on any interface to open the quick task mode pop-up. Tap the icon again or anywhere on the screen to close it.

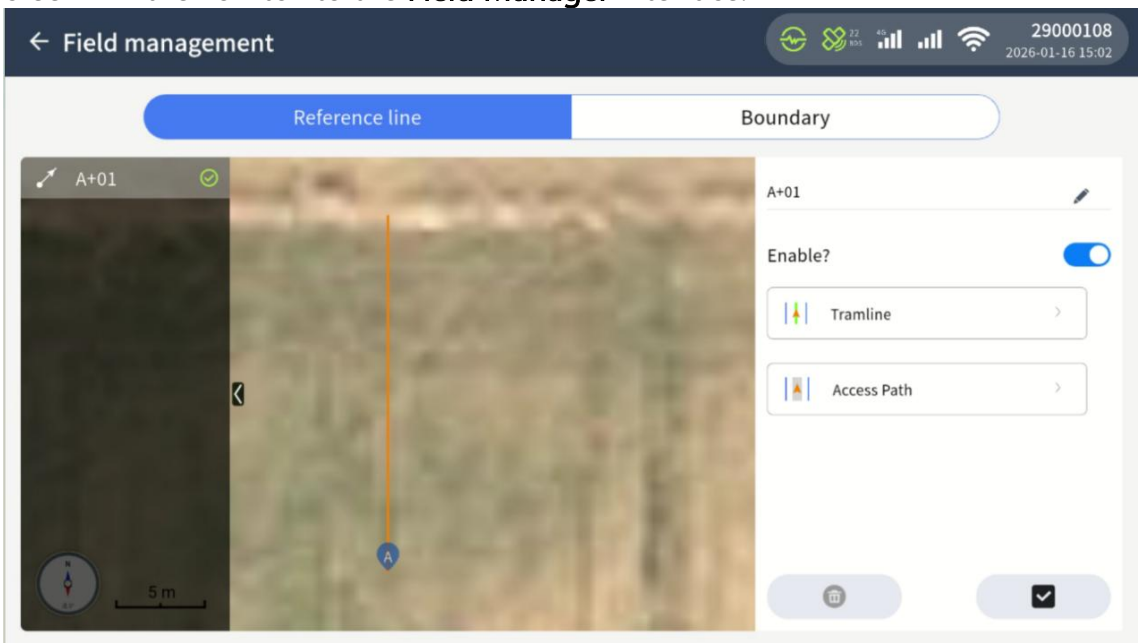
2) **Settings:** Shows current system information such as settings, satellite status, SIM status, device ID, and current time. On any interface, tap the icon group in the upper-right corner to open the settings window; tap the same area again to close it.
3) **Reference Line:** Create a new navigation line .
4) **Reference Line Switching:** Switch to another reference line.
5) **Nudge:** Fine-tune the position of the navigation line.
6) **Control Parameters:** Adjust the vehicle's steering and navigation control parameters.
7) **U-turn parameters: Turn** the one-touch U-turn switch on or off.
8) **Home Switch:**Turn back to Home screen.
9) **Field Manager:** View the detailed information of the current field and modify various elements of this plot.
10) **Help:** Includes remote assistance, AI voice assistant, download materials and tutorial videos.
11) **ISOBUS Setting:** Adjust the ISOBUS parameters.
12) **Camera Switch:** Turn the camera on or off.
13) **One-touch U-turn Switch:** Make a U-turn to left or right.
14) **Track Switch:** Toggle the display of operation tracks.
15) **Auto Drive Switch:** Enable or disable automatic driving.
16) **Compass:** Displays the current heading direction.
17) **Scale:** Scale.

9. Field Manager

At the bottom of the workbench interface, tap the **Field Management** icon.



The screen will then switch to the **Field Manager** interface.



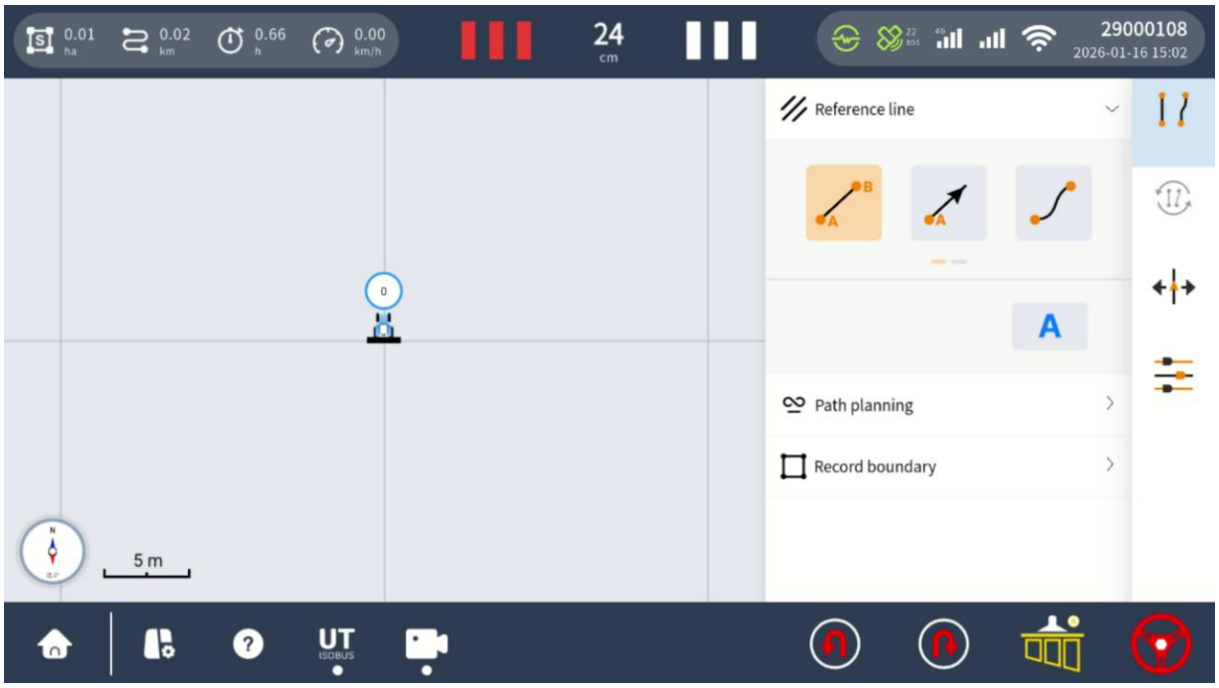
Tap the top menu to view detailed information about the current field and modify its various elements.

Reference line: You can rename, enable/disable, delete, call, set Tramline or Access Path.

Boundary: Add **headlands** to the boundaries of the current field.

10. Work Mode

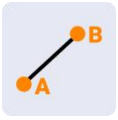
Tap the **Navigation Tool** button, select the desired baseline, and then choose the required work mode. Tap " " to proceed.



Available work modes include: **AB Straight Line**, **A+ Line**, **Curve**, among others.

10.1 AB Line

1. Select the **AB Line** work mode.



2. Drive the vehicle to the field head, face the operating direction, and tap the **A Point** button on the screen to set point **A**.



3. Manually drive the vehicle to the field end, tap the **B Point** button to set point **B**, and complete the drawing of the AB line. The shortest distance between A and B point is 5m.



4. Tap the **Confirm** button (green √ symbol) to finish creation. You can also tap the **Cancel** button (red × symbol) at any stage to cancel the process.



Caution

When setting the AB Straight Line, the vehicle should not perform any operations and must make an empty run.

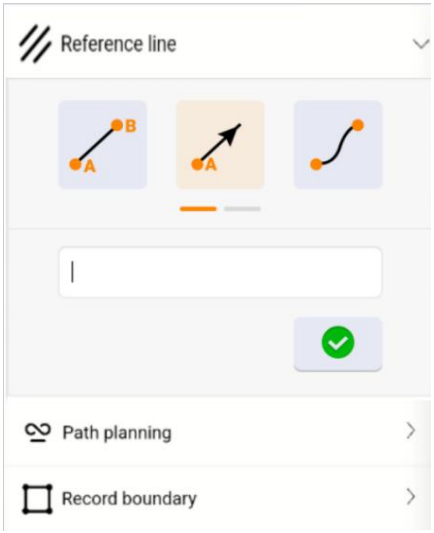
Each time you change the working field, the AB line must be reset.
If the work is not completed on the same day, you can load the previous field and continue the work the next day.

10.2 A+ Line

1. Tap to select the A+ Line mode icon.



2. Enter a degree value representing the heading in the input box.
Each time you switch to A+ Line mode, the system automatically detects the current vehicle heading and uses it as the default value, allowing quick setup based on the current heading.



Reference for headings:

True North = 0°

True East = 90°

True South = 180°

True West = 270°

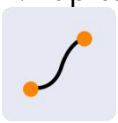
3. Tap the Confirm button to complete creation.

10.3 Curve Mode

In **Curve Mode**, you can record a route that includes both curve and straight segments. **Vectoris Pro** will use this recorded route as a baseline and automatically generate parallel navigation lines on both sides at intervals equal to the current implement width.

Curve Creation Process:

1. Tap to select the **Curve mode** icon.



2. Drive the vehicle to the starting position where you want to begin recording the curve.

3. Tap the **Record** button to start recording.



4. The device will mark the starting point on the virtual map and display the actual driving trajectory from the starting point to the current vehicle position as a dotted line.

·To add a straight segment, tap the **Pause Recording** button (the path traveled during the pause will be recorded as a straight line).



·To continue curve recording, tap the **Resume Recording** button.



5. When the vehicle reaches the endpoint of the curve route, tap the **Confirm** button to complete creation.

You can tap **Cancel** at any stage to stop and discard the process.

10.4 Circle

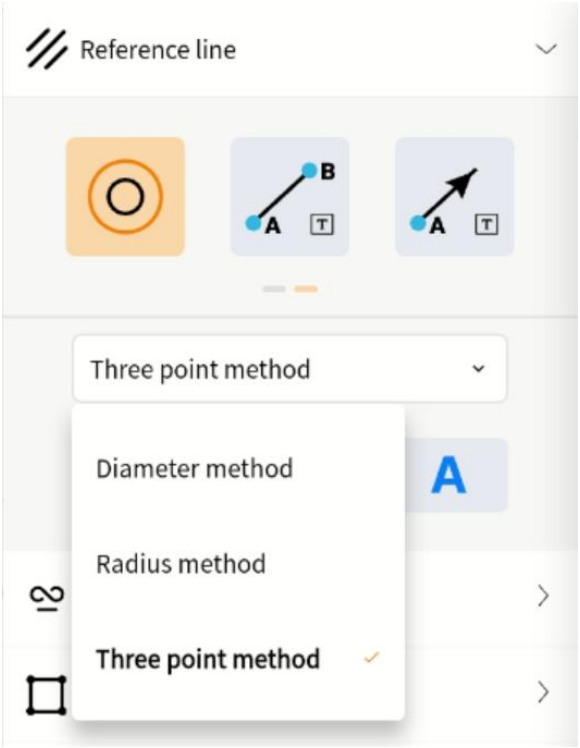
In **Circle** mode， **Vectoris Pro** offers three methods to help you select the optimal one based on on-site conditions to define a circle.

Circle Creation Process

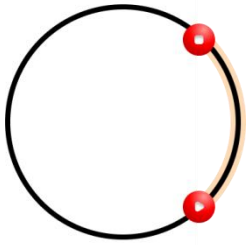
1. Tap to select the **Circle mode** icon



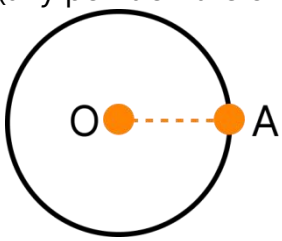
2. Tap the **Circle Creation Method Selection Box**, then switch to the corresponding method in the drop-down list to complete the reference circle setup.



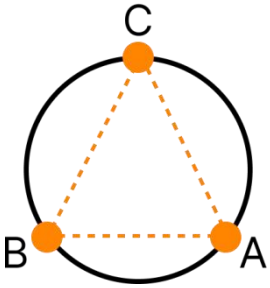
Diameter method: Define a circle by recording an diameter path with a length of no less than 15m.



Radius method: Define a circle by setting the position of Point O (center point) and Point A (any point on the circle’s circumference).



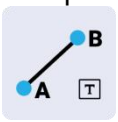
Three point: Define a circle by setting the positions of three distinct points (Point A, Point B, Point C) on the circle’s circumference.



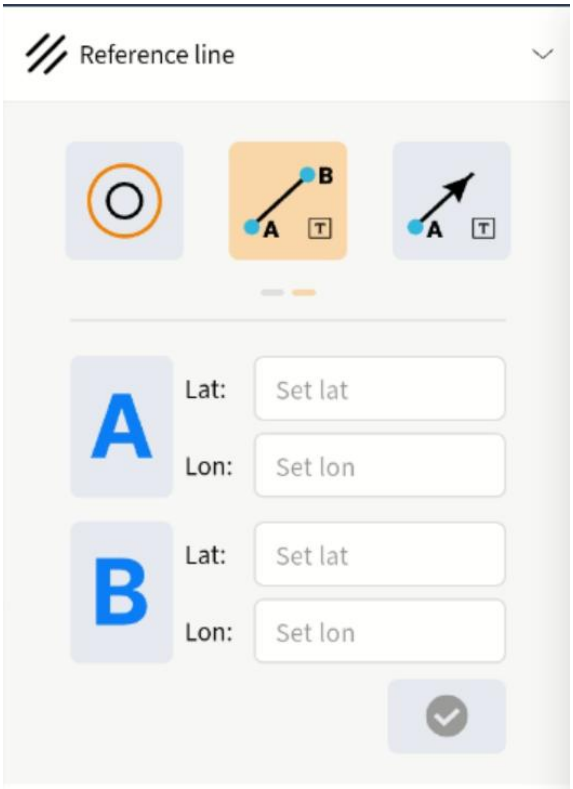
10.5 AB Line (Coordinate Input)

In some cases, you may already have the coordinate data for points **A** and **B**.
You can create an **AB Line** directly by entering these coordinates.

1. Tap to select the **AB Line (Coordinate Input)** icon.



2. Enter the latitude and longitude for point **A** and point **B** respectively, then tap  to complete AB Line creation.



Caution

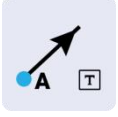
Latitude and longitude should use the Decimal Degrees (DD) format, supporting up to 7 decimal places.

10.6 A+ Line (Coordinate Input)

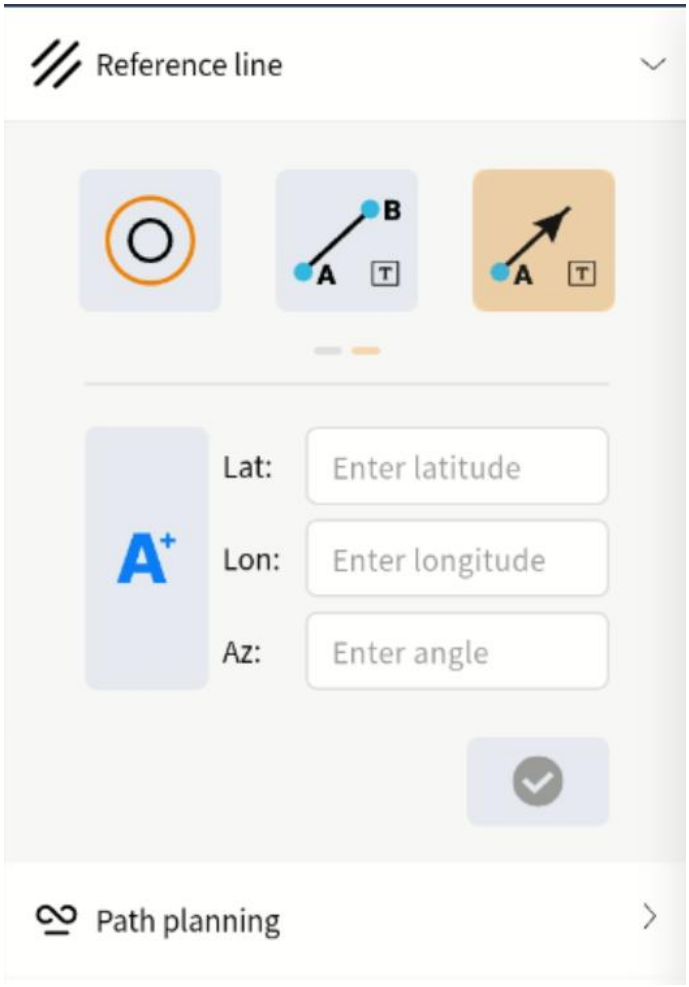
Similar to AB Line coordinate input, **Vectoris Pro** also supports creating an **A+ Line** by entering coordinate information.

A+ Line Coordinate Input Process:

1. Tap to select the **A+ Line (Coordinate Input)** icon.



2. Enter the latitude and longitude for point **A** and the target heading degree, then tap **Confirm** to complete creation.

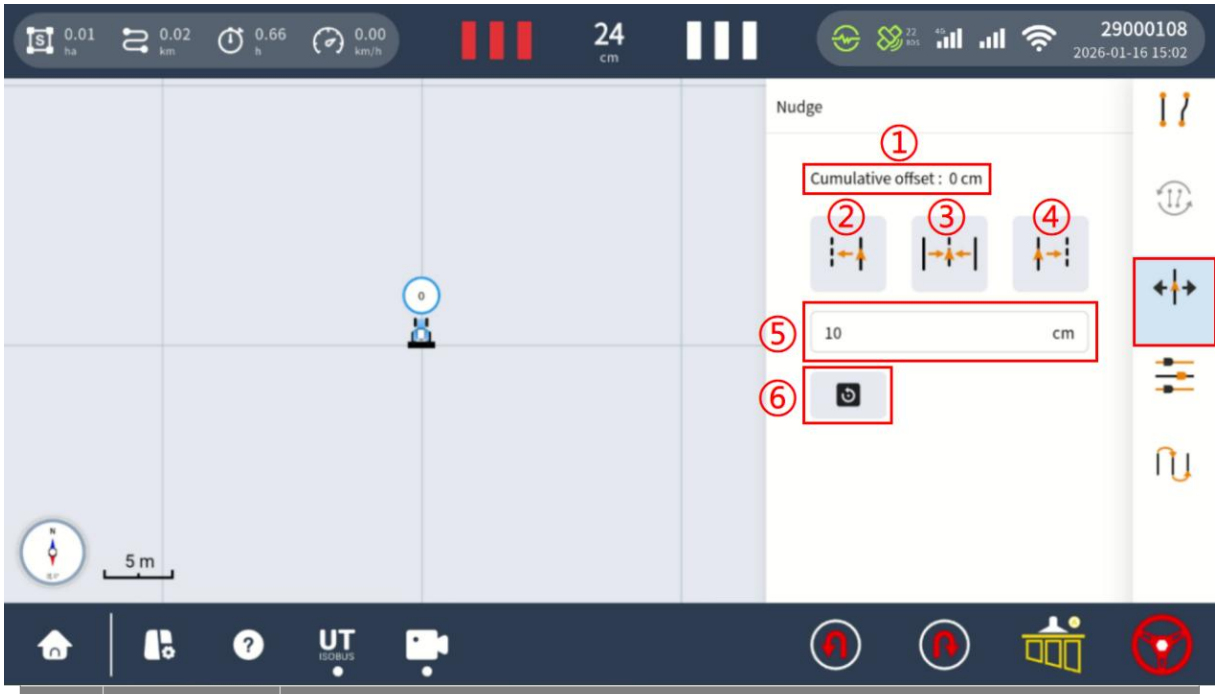


11. Auto Driving

Icon	Indicated Status	Function
 Orange	System is ready for auto driving	Tap to start auto driving
 Green	System is performing auto driving	Tap to stop auto driving
 Red	System cannot start auto driving	Cannot start auto driving; check for faults

12. Nudging

When you need to fine-tune the position of the navigation line, tap the Nudge on the right side of the workbench.



No.	Name	Description
1	Cumulative Offset	Shows the total offset distance relative to the initial navigation line (0). "–" indicates a leftward offset; "+" indicates a rightward offset.
2	Nudge Left	Tap to shift the navigation line to the left.
3	Nudge to Here	Aligns the navigation line to the vehicle's current position.
4	Nudge Right	Tap to shift the navigation line to the right.
5	Value Input Box	Enter the desired nudge value (unit: cm).
6	Reset Navigation Line	Tap to reset the navigation line to its original position.

Caution

When entering the workbench with a new task, all navigation line nudging operations will be automatically reset.

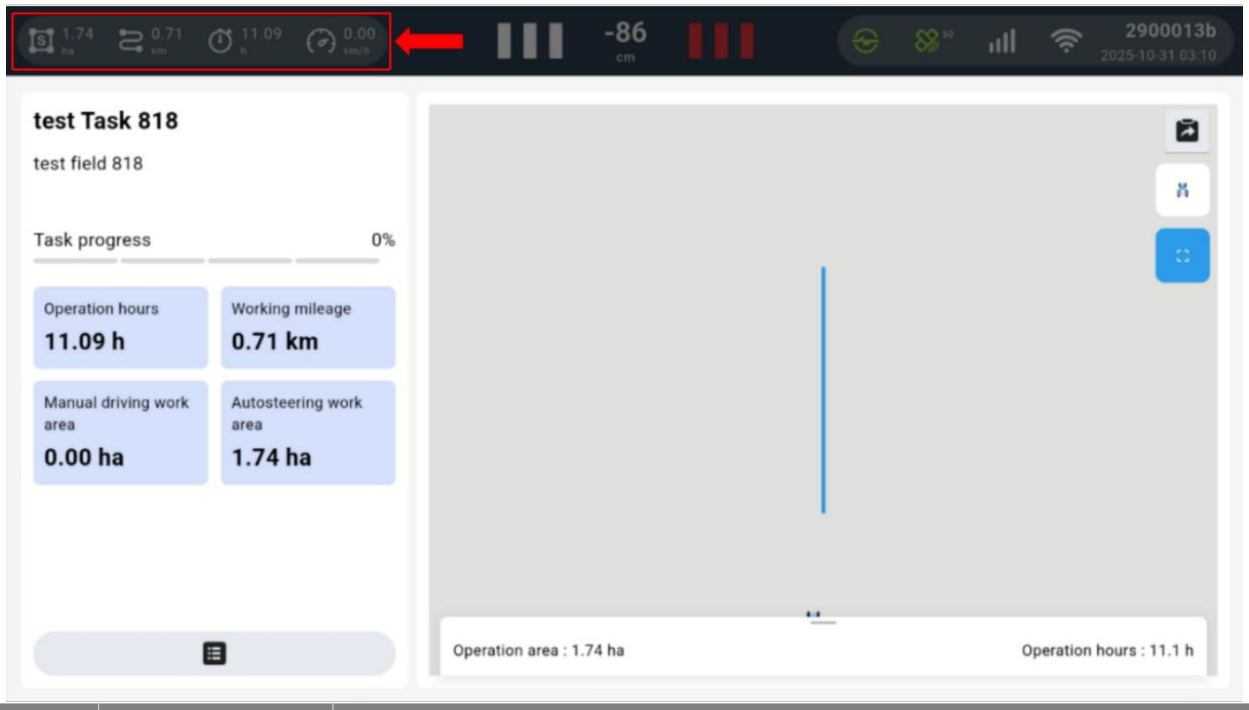
13. Common Functions

13.1 Operation Status Bar

Displays real-time operation data.

During operation (whether Auto Driving is enabled or not), tap the top function area in the upper-left corner to open a pop-up window.

tap this area again or any non-functional area to close the pop-up window.

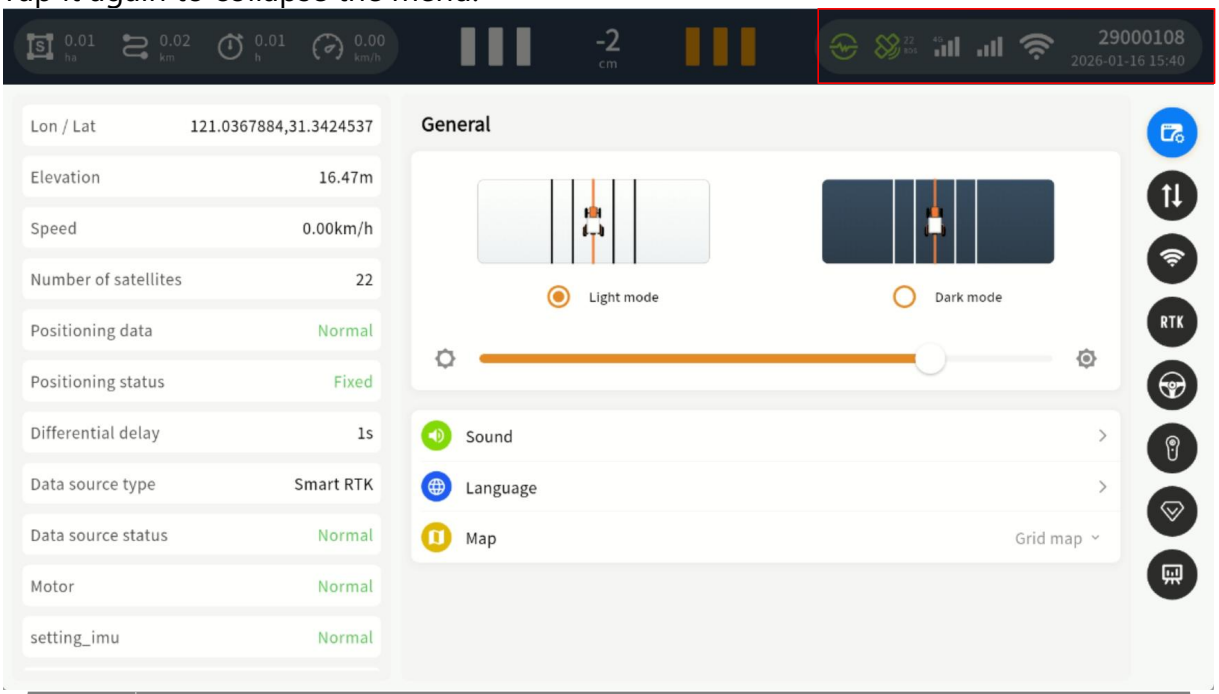


No.	Data Name	Data Description
1	Task Name	The name of the current operation task.
2	Execution Hours	Cumulative auto-driving time. The calculation pauses when auto driving is turned off. If the trajectory recording mode is manual, the manual driving time is included.
3	Work Mileage	Cumulative auto-driving mileage. The calculation pauses when auto driving is turned off. If the trajectory recording mode is manual, the manual driving mileage is included.
4	Manual Driving Area	The total area completed under manual driving.
5	Auto Driving Area	The total area completed under automatic driving.
6	Task List	

13.2 Setting

Tap the **status icon area** in the upper-right corner of any interface to expand the **Settings** dropdown.

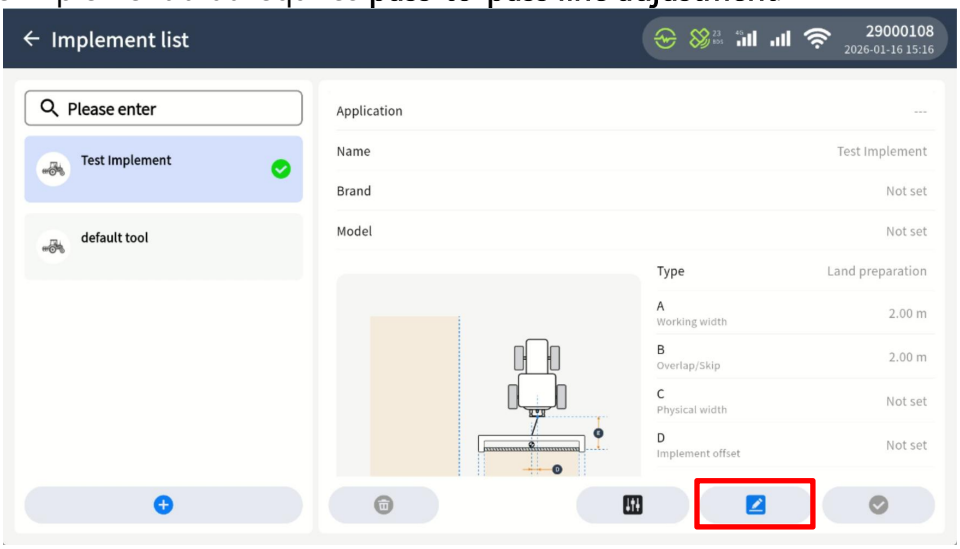
Tap it again to collapse the menu.



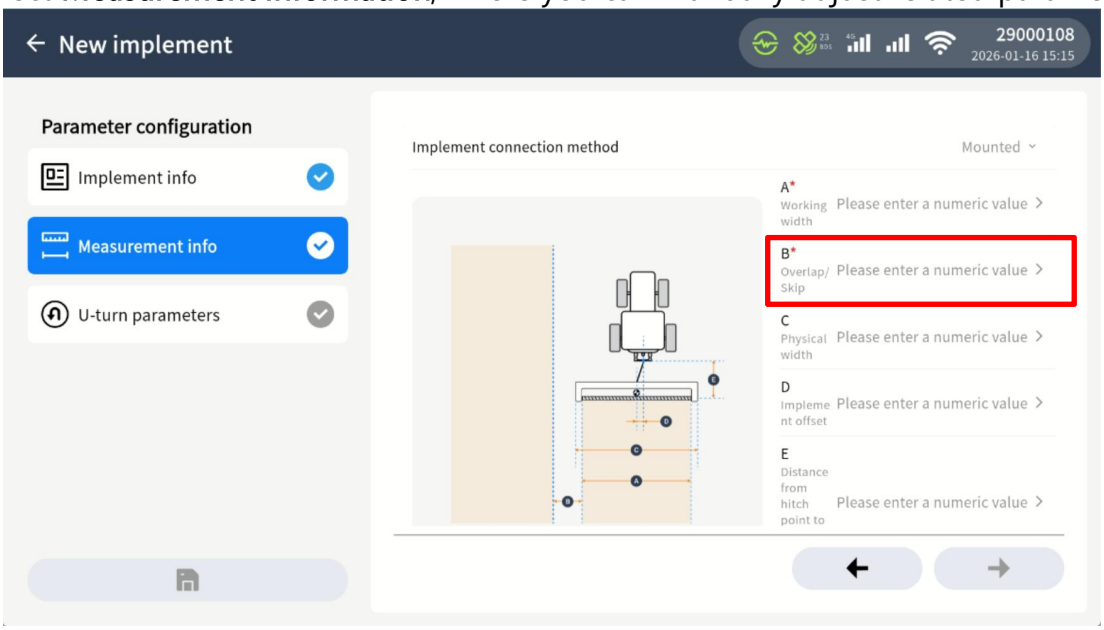
Icon	Description
	General Settings — Theme mode, screen brightness, volume, alarm tone, unit system, and satellite map configuration.
	WLAN Settings — Connect to and configure Wi-Fi networks.
	Mobile Network Settings — View SIM card information and configure mobile network settings.
	RTK Settings — Configure and manage differential signal sources.
	Navigation Settings — Customize navigation mode and parameters.
	External Devices — Configure modes for external accessories such as 360°cameras or wire-controlled joysticks.
	License Management — Manage basic services, SBAS services, and paid software features.
	Demo Mode — Enable/disable and configure demonstration mode.

13.3 Swath Alignment Adjustment

1.On the homepage, tap the **Implement Card** to open the implement list.
Select the implement that requires **pass-to-pass line adjustment**.



2.Select **Measurement Information**, where you can manually adjust related parameters.



3.**Three-pass calibration method:** Drive the tractor to perform three consecutive round trips.
Based on the vehicle's position after the final pass, determine whether the deviation is on the **left** or **right** side.
Enter the measured **pass-to-pass line width** and tap **Confirm**.

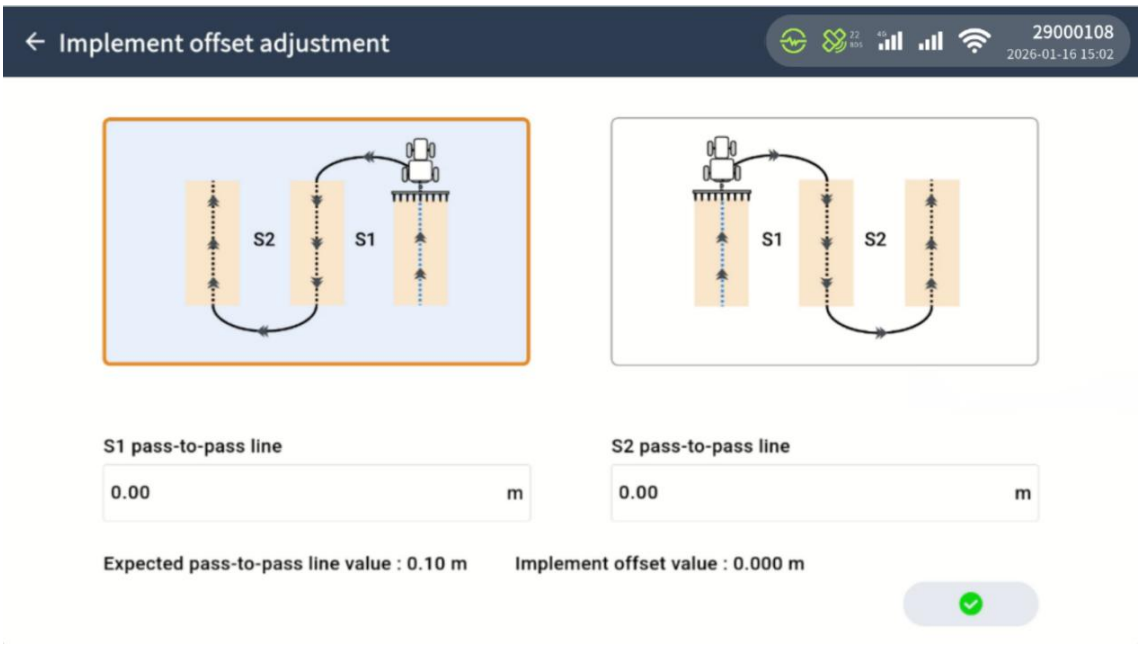
Caution

Before performing calibration, ensure that the implement parameters are accurate.
The sum of the two measured spacing values (left and right) should be equal to **twice the theoretical pass-to-pass line width**.

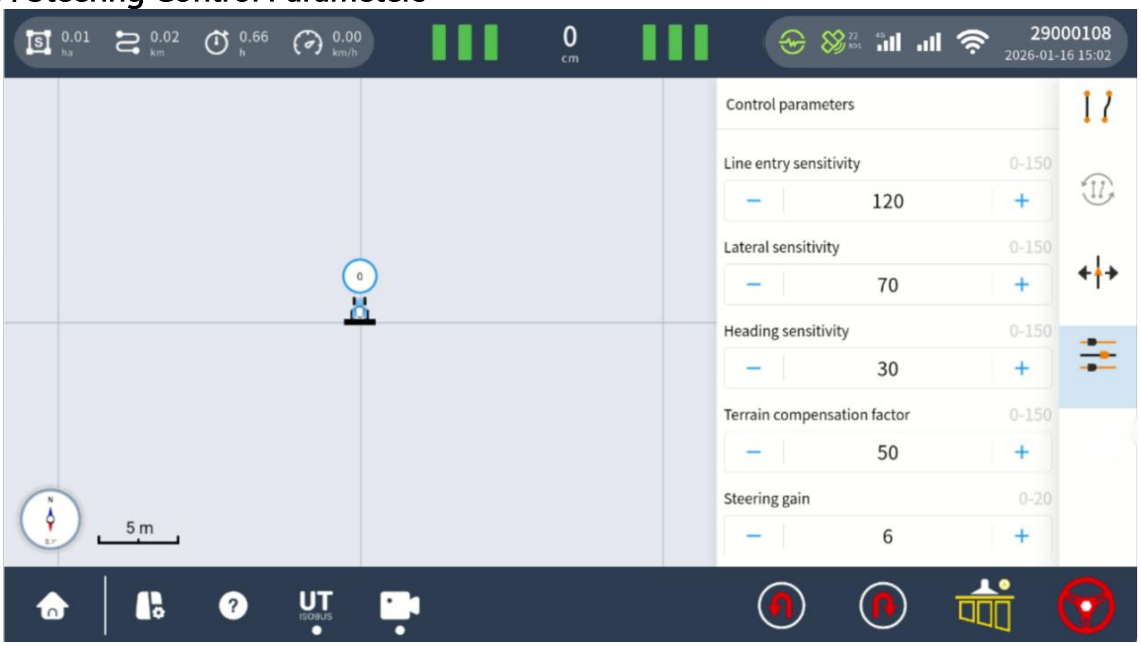
Example:

If the left pass-to-pass line is 62 cm and the right pass-to-pass line is 70 cm, while the theoretical pass-to-pass line is 66 cm,

then 70 + 62 = 66 × 2, which indicates that the implement parameters are correct.



13.4 Steering Control Parameters



Line Entry Sensitivity----Responsiveness of steering corrections while following the line.

Lateral Sensitivity----Timing of steering wheel adjustment.

Heading Sensitivity----Amplitude of steering corrections.

Terrain Compensation Factor----Adjustment weight used by the system for compensating terrain variations.

Steering Gain----Frequency of steering wheel oscillation.

13.5 Version Management

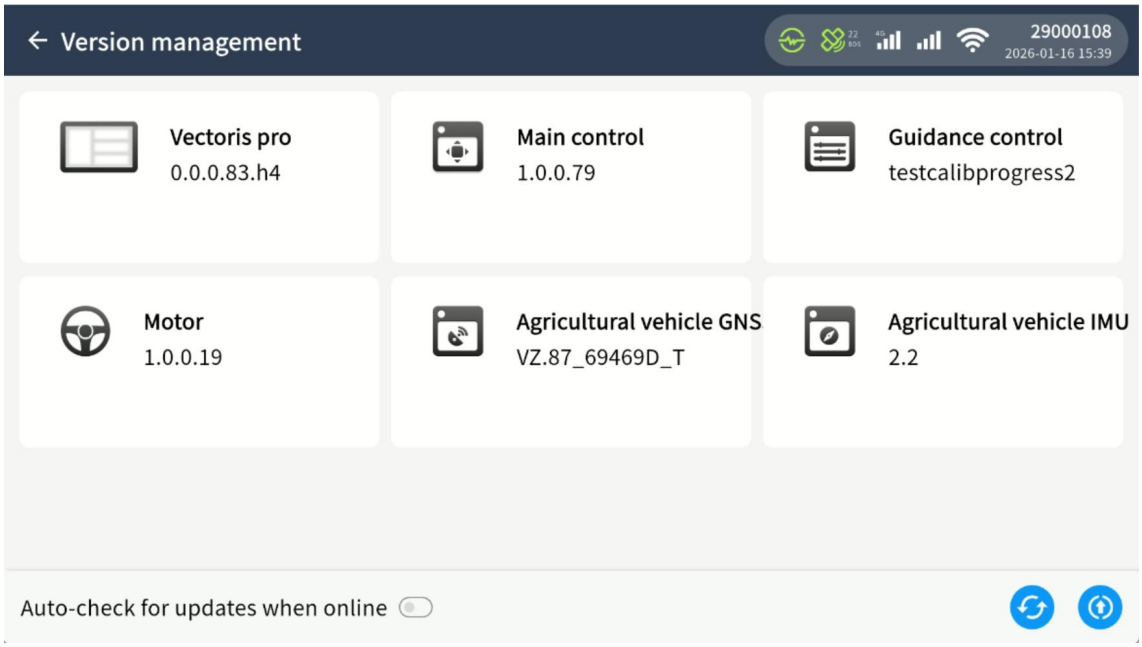
Tap the **Version Management** icon on the homepage.



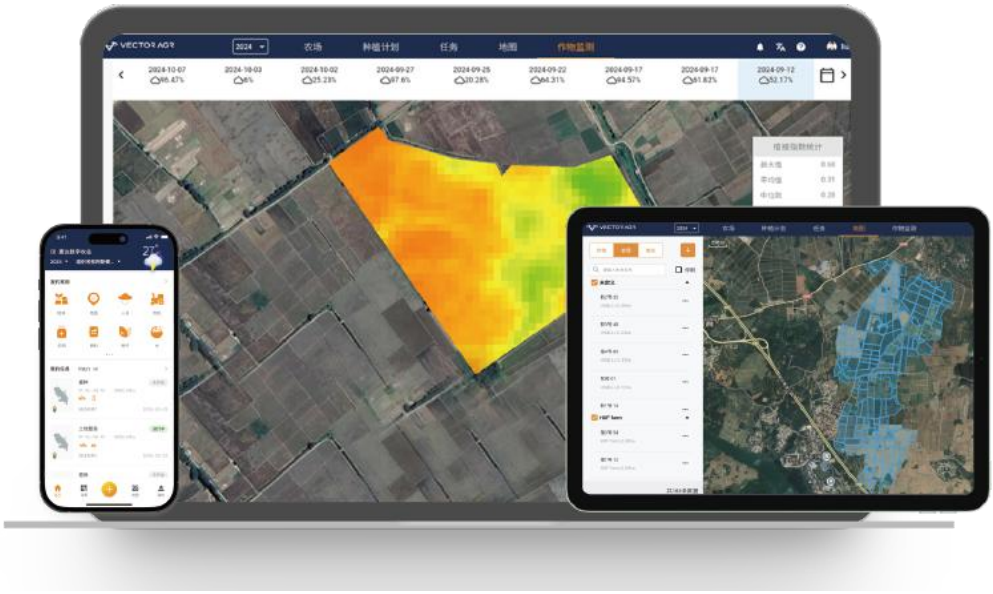
Then select the desired upgrade method in the lower-right corner of the screen:

Local Upgrade: Connect USB flash disk and install the specified version.

Online Upgrade: Perform a network check.
If a new version is available, the system will prompt you to download and install it.



V. HD Digital Ag



Field boundary, implements, materials, prescription maps and tasks can be created on the platform and synchronized with Huida-branded HD auto-steering systems, HD agricultural drone, and HD Ag mobile app, enabling seamless data synchronization across all three platforms.

HD Ag Platform: www.huidaag.com
HD Ag Mobile APP:

VI. Common Problems

1. Equipment Information Fault Analysis

Status Bar	Status Bar Information	Status Bar Analysis
Positioning Status	Fixed	Normal
	Floating	The device receives weak or insufficient satellite signals
	Pseudorange	The base station signal is not received.
	Single Point	Only a single positioning solution is available.
	Invalid	No satellite signals are being received.
WAS	Not connected	Check the connection of the main wiring harness.
	Connected	Normal
Heading Wheel Angel	Uninitialized	Initialization may occur when the vehicle remains stationary for an extended period. Start the vehicle and drive forward at a speed above 1.6 km/h to reinitialize.

2. Common Fault Analysis

Fault Phenomenon	Cause Analysis	Solution
Terminal fails to start	Fuse damaged	Replace the fuse
Taps but no steering movement	Motor failure	Replace the motor
Black screen/Flashing screen	Terminal cause	Replace the terminal
	Terminal wiring harness damaged	Replace the terminal wiring harness
	Receiver main wiring harness unpowered	Replace the main wiring harness
	Battery power loss/loose power wiring harness	Charge the battery or tighten the power connection.
Auto Steering stops unexpectedly	Abnormal wiring harness connection	Check and secure the wiring harness connection.

Ⅶ. Equipment Maintenance

- To ensure the normal operation and service life of the equipment, please maintain and service the system strictly in accordance with the specified requirements.
- Unauthorized disassembly or assembly of the system's main components is strictly prohibited.
  If necessary, please contact authorized after-sales service personnel promptly.
- Please operate the system strictly in accordance with the user manual.
- Regularly inspect all system screws, wiring harnesses, and connectors—such as the fixing screws of the **controller**, **angle sensor**, and **data cable connectors**—on a weekly basis.
  If any looseness, detachment, or damage is found, tighten or repair immediately.

Steering Wheel Maintenance:

- Keep the steering motor clean. Prevent dust, soil, or other debris from accumulating on the motor surface for extended periods.
- Maintain a clean operating environment. Do not wrap the motor with cloth, dust covers, or similar materials during use to ensure proper ventilation and cooling.
- Before each operation season, inspect whether the transmission mechanism operates smoothly, whether the coupling concentricity meets standards, and whether the gear transmission moves freely.
  If any jamming occurs, identify and eliminate the cause before operation.