

FJDynamics Autosteering Kit



FJDynamics

Industry Status



High labor costs

High labor costs, manual operation requires a high degree of concentration of the driver.



Poor quality of farming

Low operating quality and irregular operating curve will reduce the efficiency of land use.



Unable to work at night

The operating season is short, manual driving can only support work during the day.



Low input-output ratio

Unable to systematically plan the purchase of seeds, pesticides and other materials

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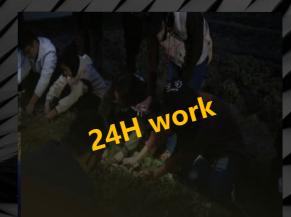
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Our current service









Free hands, reduce labor

No need for manual controlling of the steering wheel, only one person is needed.

Straight and Efficient

Keep driving on a straight line, make most of land efficiency.

Autosteering, work at night

Ensure perfect driving performance at night





E

Core Components

Control Terminal



Displays real-time working path, vehicle position and RTK status;

Displays task history and saved guidance lines; Sends out control signals to the steering wheel motor to realize driving in the target direction.

GNSS Antenna

Dual GNSS antennas receive info of positioning and orientation for a better control of the autonomous driving.

Electric Steering Wheel

High-torque electric wheel;
Max torque: 30 N M, capable even in demanding scenarios;
Inter-changeable between self-driving and manual control.





Angle Sensor

Installed on the steering axle to sense and turn the steering angle into voltages that are recognizable by sensors, which determines if the vehicle is driving straightly.

Installed horizontally in the cab to measure the vehicle's pitch angle and roll angle etc. to correct and assist autonomous straight-line driving.



Extended accessories





Base Station Provide RTK signal



Wi-Fi Camera

Image monitor Night vision



Reasons for choosing FJDynamics





Easy to install and grasp

FJDynamics

- 1. Log-in
- 2. Input Information
- 3. RTK Settings
- 4. Vehicles Parameters Measurement
- 5. Calibration of Antenna
- 6. Calibration of Angle Sensor
- 7. Calibration of Implements

Good quality - 2.5cm precision



RTK – Real Time Kinematic

Correct for common errors in current satellite navigation (GNSS) systems by introducing a fixed base station, that wirelessly sends out correctional data to a moving receiver.

Base Station



4G Ntrip Service





Good quality - 2.5cm precision



Guidance line

After the guidance line is introduced, it can perform highprecision automatic navigation operations within 2.5cm accuracy. It is suitable for straight and curved operation modes with an average speed of 18km/h.

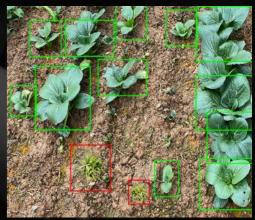




Al Camera (in progress)

Accurately distinguish crops, weeds and obstacles, achieve accurate pesticide spraying and intelligent obstacle avoidance.





Parts









FJDynamics

Terrain Compensation

Accurately calculating the real-time position of agricultural machinery through IMU sensors can effectively reduce repeated farming and missed farming under special operating environments such as undulating terrain, slopes and rugged ground.



Continue to work 20min when lost RTK signal



20min work without RTK signal

In some areas, the RTK signal is temporarily blocked and the autosteering kit would get disconnected from the base station for a short time, automatic driving can still continue for 20 minutes

Work 24 Hours



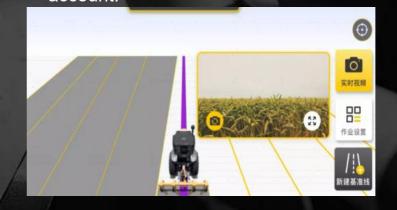
1. FAE Support

Our FAE team is very professional and dedicated, and will work late in order to provide timely online service in our DingTalk groups.



2.WIFI Camera

Split-screen viewing of the real and virtual images of the job, providing a complete perspective so that uses can take both into account.



SAAS system - Data analysis & management





Coming soon

- 1. Field, Account & Implement Management
- 2. Linked to SAAS (software as a service)
 - 1. Data analyzing and sharing
 - 2. Prescription generation
 - 3. Future planning
 - 4.

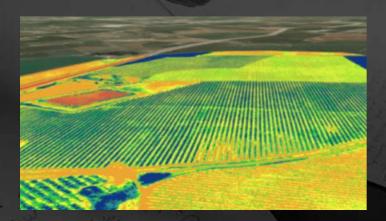
Other Functions



1. GIS

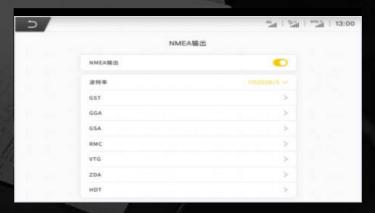
Graphic files such as guidance lines can be imported and exported for the use on other auto steering devices.

You can also export the task map to a data management system to assist in future task planning.



2. NMEA

The positioning information can be transmitted to other machinery and implements to achieve dynamic accuracy calibration during operation.



3. ISOBUS

Based on the ISO11783 protocol, it simulates a virtual instrument panel that provide real-time viewing and controlling of implements.









Other Functions



Uturn - Coming soon

Also called Auto-dturn, including path planning and automatic U-turn.

There is no need to touch the steering wheel during the whole process, reducing nearly half of the field space required for turning around, so it is easier and more efficient.



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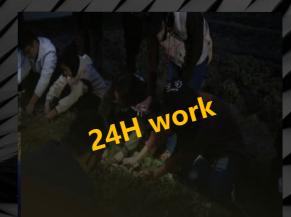
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Cases











意大利 - Landini



