FJD Autosteering Kit

Product Introduction 2021

Introduction

FJDynamics Autosteering Kit is the pioneer autonomous driving system in the world, which can be installed onto agri-vehicles to have a straight driving assistance and can be upgraded to autonomous driving.

Control Terminal

Satellite Antenna

Sensor Modules

Electric Steering wheel

Hands free and more productive！

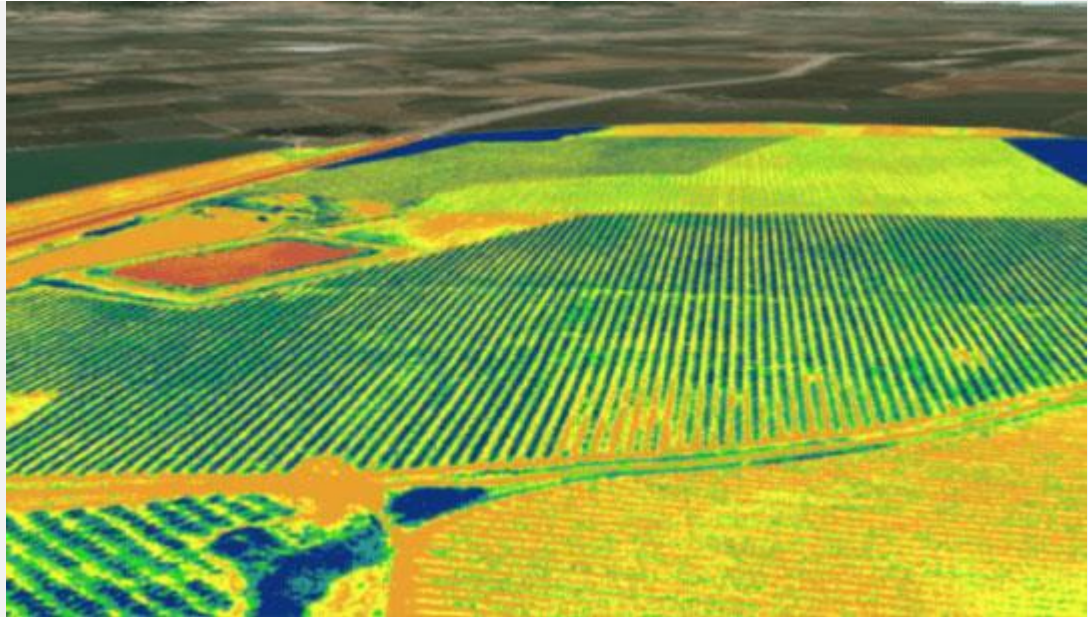|			
ISOBUS Control	**GIS Data Import/Export**	**NMEA Positioning Info Transfer**	**Terrain Compensation**
U-turning Auto-driving	**Vision-based Precision Farming**	**Remote Control & Unmanned Mode**	**Online Support & OTA**

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ISOBUS Control

ISOBUS control solution is a compatible application control that allows software, vehicles and implements to communicate with each other. Real-time status is provided, such as seed storage in equipment, giving you a greater control of inputs for making better investment decisions!
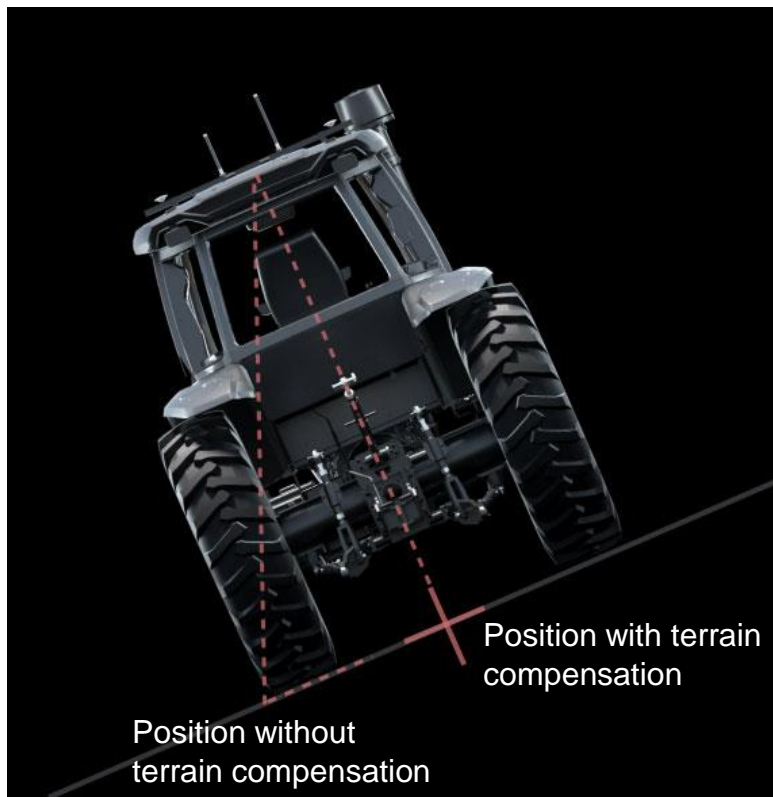
GIS Data Import/Export

Field information can be edited and imported into FJD devices, and the historical operation data from other devices can be imported using the data transfer function.

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Terrain Compensation

Position with terrain compensation

Position without terrain compensation

Terrain compensation calculates the difference between the GPS antenna's location and the actual desired position of the vehicle's center point on the ground, no matter what slope the vehicle is on. Autosteering Kit uses an IMU sensor to calculate the actual position of the vehicle to help minimize skips and overlaps in areas with rolling terrain, slopes, and rough ground.
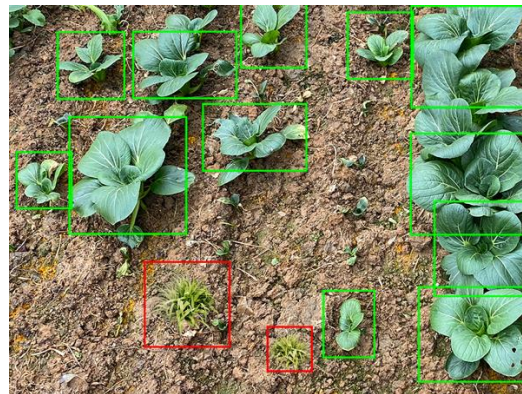
U-turn Auto-driving

Under low speed U-turn auto-driving mode, the operator only needs to step on the brake when reaching a turning point, then the vehicle is able to automatically turn around without any manual operation.

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AI Vision-based Precision Farming

Powered by in-house developed AI cameras, vehicles can recognize every single plant in the field and apply corresponding measures to it.

*This feature is only available to selected customers.

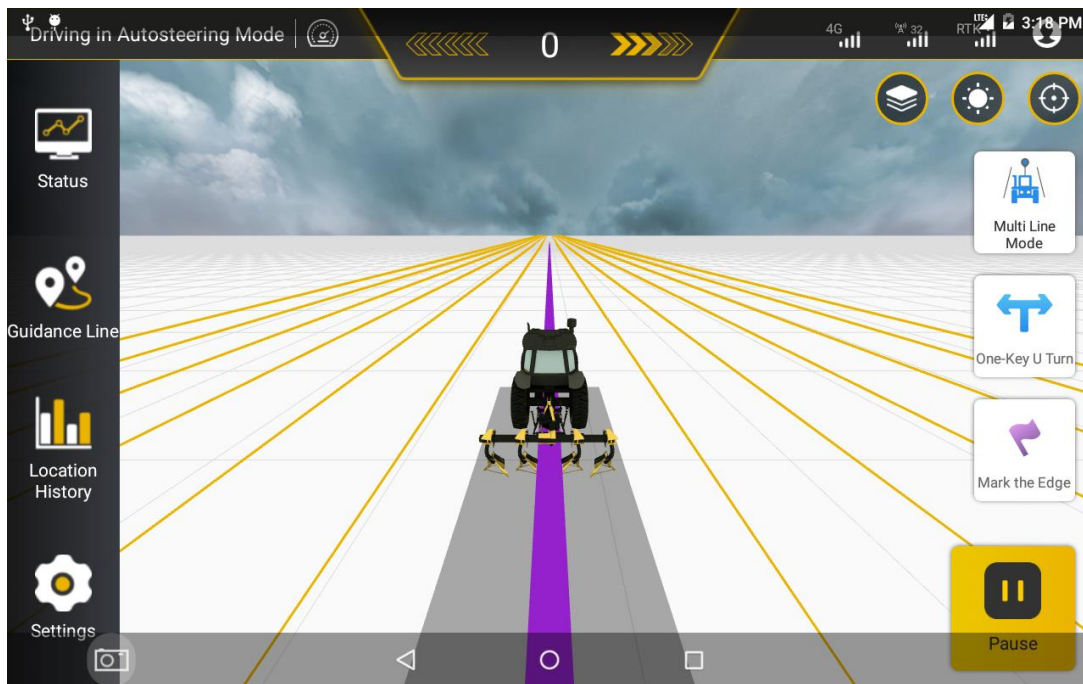FJDynamics

FJD Base Station Service (Optional)

Portable RTK Base Station

- Optional for customers without local NTRIP providers.

- Your own free RTK signal.

- Provides the highest accuracy of up to 2.5 cm.

- Transmits RTK correction via radio and Internet with radius 10km.

- Works with unlimited number of receivers.

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Interface

- Visualized interface.

- High precision parallel line can be achieved.

Advanced Software Base

Easy Online Upgrading

Android System

Adaptive Algorithm

* Software regularly updated over 15 languages.

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Remote Control & Unmanned Mode

Long-distance remote control enables vehicles to be controlled remotely or to enter unmanned mode. Safety comes first, millimeter-wavelength radar is activated to identify obstacles and raise the alarm.

* Upgrade to unmanned mode by purchasing the upgrade package, including sensors and other parts to support obstacle detection and avoidance.

Extensive Adaptability

Suitable for various brands of agri-machines.

Suitable for all fieldwork operations.

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Specifications

Item	Unit	Spec.
Control Terminal	Size	300 × 190 × 43mm
	Screen	10.1-inch LCD screen with LED backlight
	/	1280 × 800 pixels
	Power Supply	10V ~ 30V
	Network Module	4G, compatible with 2G / 3G
	Waterproof and Dustproof	IP65
	Operating Temperature	-30 ℃ ~ + 75 ℃
	Storage Temperature	-40 ℃ ~ + 85 ℃
Angle sensor	Waterproof and Dustproof	IP67
	Operating Temperature	-40 ℃ ~ + 85 ℃
IMU	Power Input	5V
Electric Steering Wheel	Power Input	12/24 VDC
	Operating Temperature	-20 ℃ ~ + 70 ℃
	Storage Temperature	-55 ℃ ~ + 85 ℃
GNSS Antenna	Frequency	GPS L1 / L2, GLONASS L1 / L2, BDS B1 / B2 / B3
	Operating Temperature	-40 ℃ ~ + 85 ℃
	Storage Temperature	-55 ℃ ~ + 85 ℃

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FJDynamics (FJD) is a global robotics company focusing on AI, advanced manufacturing and big data. We aim at providing a full range of autonomous and digital solutions for the industrial automation and the intelligence of agriculture, forestry, animal husbandry, fishery and construction. FJDynamics is committed to promoting the upgrade of traditional industries to digitalization and intelligence in order to ultimately achieve efficiency improvement and cost reduction.

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Thank you!