FJDynamics

FJD Trion V4E

SMALL IN HAND, BOUNDLESS ON LAND

Contents

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FJD Trion V4E Mini RTK Rover

Standard Pro

01


FJD Trion™ V4E
Mini RTK Receiver
FJDTrion

SMALL SIZE, BIG POWER

Global Constellations
1408 Channels

H≤0.8 cm+1 ppm
V≤1.5 cm+1 ppm

Startup Time
Cold: ≤30s, Hot: ≤5s,
RTK Init: <5s

Pocket-Sized
Only 320g

Centimeter-level Accuracy

Tracks GPS, BDS, GLONASS, Galileo, QZSS, and SBAS. Get a FIX in up to 5s.

Network RTK Rover

Gets corrections from any NTRIP services in RTCM 2.3, RTCM 3.x, and CMR.

Simple and Portable

With just one power button, no addition setup. 320g in weight, making it extremely portable.

BUILT TOUGH FOR ALL-DAY EFFICIENCY

Extra-long battery life

Stay powered up for the entire workday. It can run for over 12 hours and takes less than 3 hours to charge.

Waterproof

With IP67-rated protection against water and dust, and resistance to drops from 1.2 meters, it's built to withstand tough environments.

NO POLE, NO PROBLEM

Built-in IMU

Compensates for tilt angles up to 30° with a built-in IMU, so you don't need to hold it perfectly straight.

Laser Rangefinder

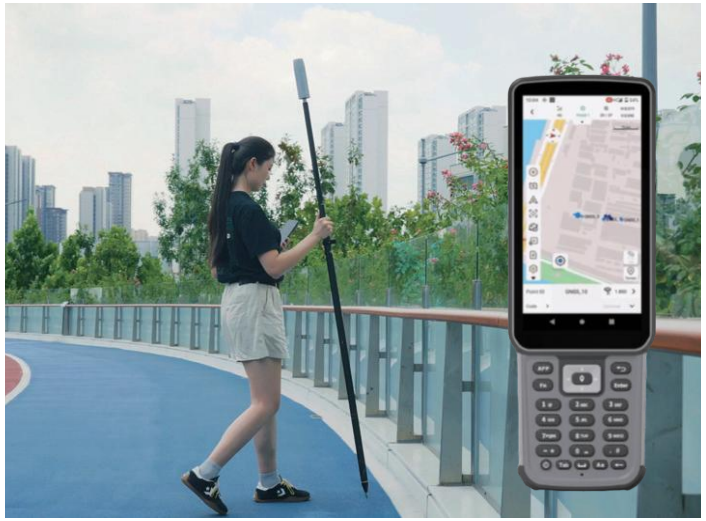
Achieves ±3mm precision at a 10m distance for precise point targeting.

EASIER ACCESS TO FJD TECH ECOSYSTEM

Access the FJD ecosystem quickly for a smooth workflow from field to machine. The GNSS data you collect with the V4E in the field can be directly used by FJD's farming autosteering systems, robotic mowers, and other smart devices for automated tasks. You don't have to convert the data, allowing you to work faster and reduce mistakes.

Farming Autosteering Systems

Robotic Mower



Professional Survey App

Farming Autosteering Systems

Worry-Free Boundary Confirmation for Clear Ownership

- Centimeter accuracy.
- Save a history of data on FieldFusion

Accurate Object Marking for Enhanced Safety

- Mark objects and sync the data instantly to FieldFusion.
- Automatically warn you and guide the vehicle around it.

Easier Creation of Boundaries and Guidance Lines

- Map your field's boundaries at centimeter-level accuracy without a tractor.
- Sync to FieldFusion to create guidance lines for your autosteering kit for quick autonomous aperation.

LandScaping

Robotic Mower Deployment

Previously, setting up operations in a 16,000 m² area took nearly 2 hours. With the FJD Trion V4E, **deployment is completed in just 15 minutes**, plus a quick GM transfer — the entire process takes no more than 20 minutes.

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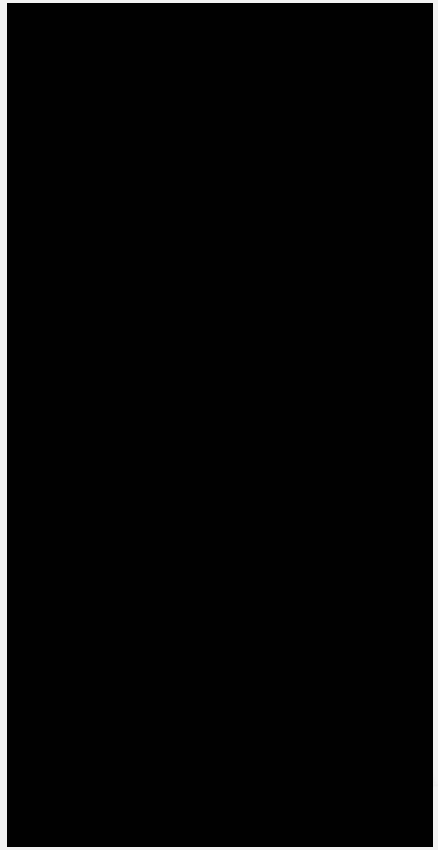
FJD Trion V4E Survey Kit

02

V4E + Survey App = V4E Survey Kit

Trion Survey is a modular GNSS survey software developed for Android systems.

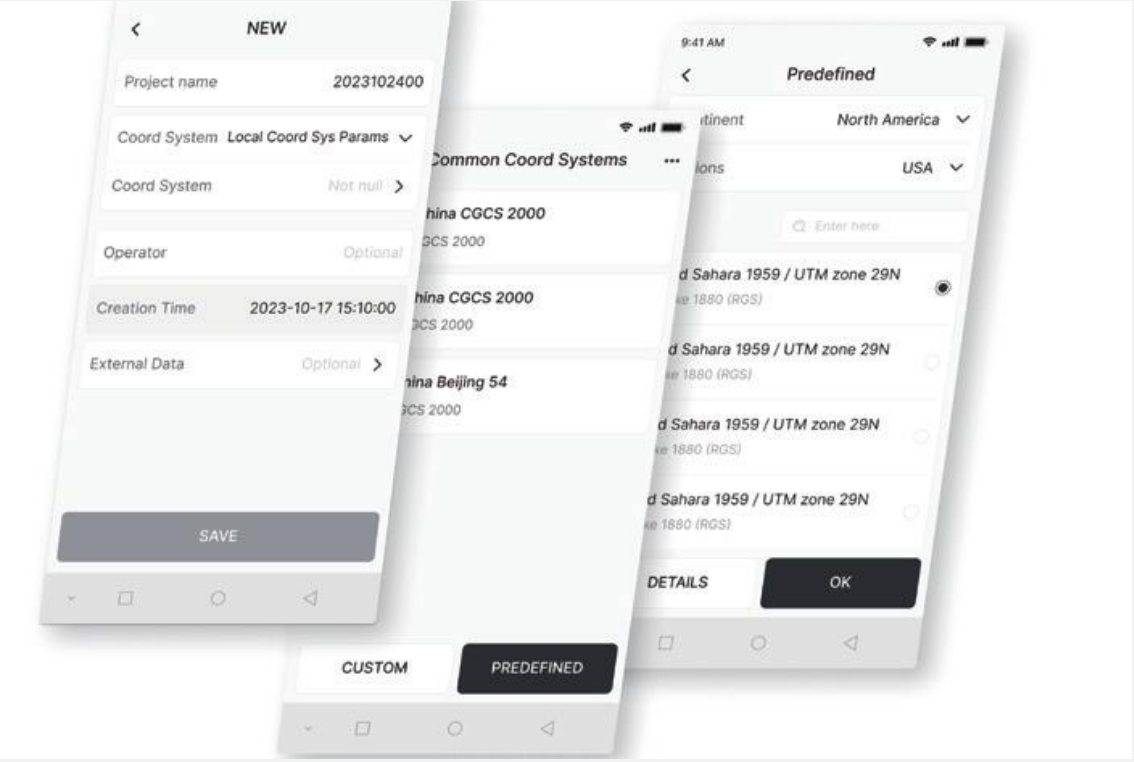
- Data collection and stakeout
- Measure&Draw
- Stake CAD
- Stake Road
- PPK Calc
- Volume
- COGO tools
- ...



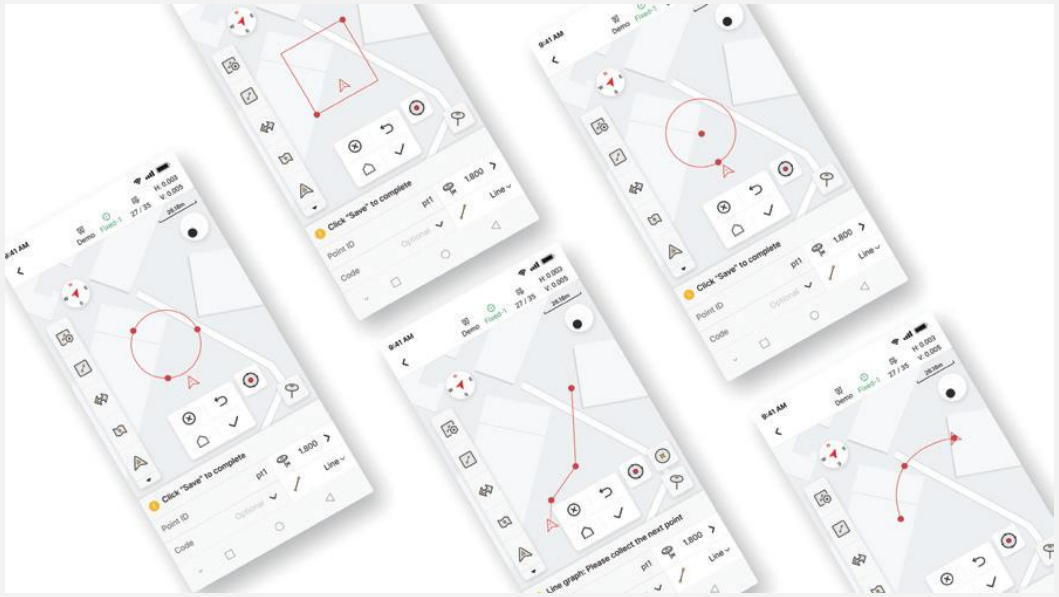
Draw, Measure, Stakeout: FJD Combo for Field-Ready CAD!

COORDINATE TRANSFORMATION

Create various plane and elevation models with over 8,000 coordinate systems, 70 ellipsoids, and 30 projections. You can also handle geoid corrections to meet your regional needs.

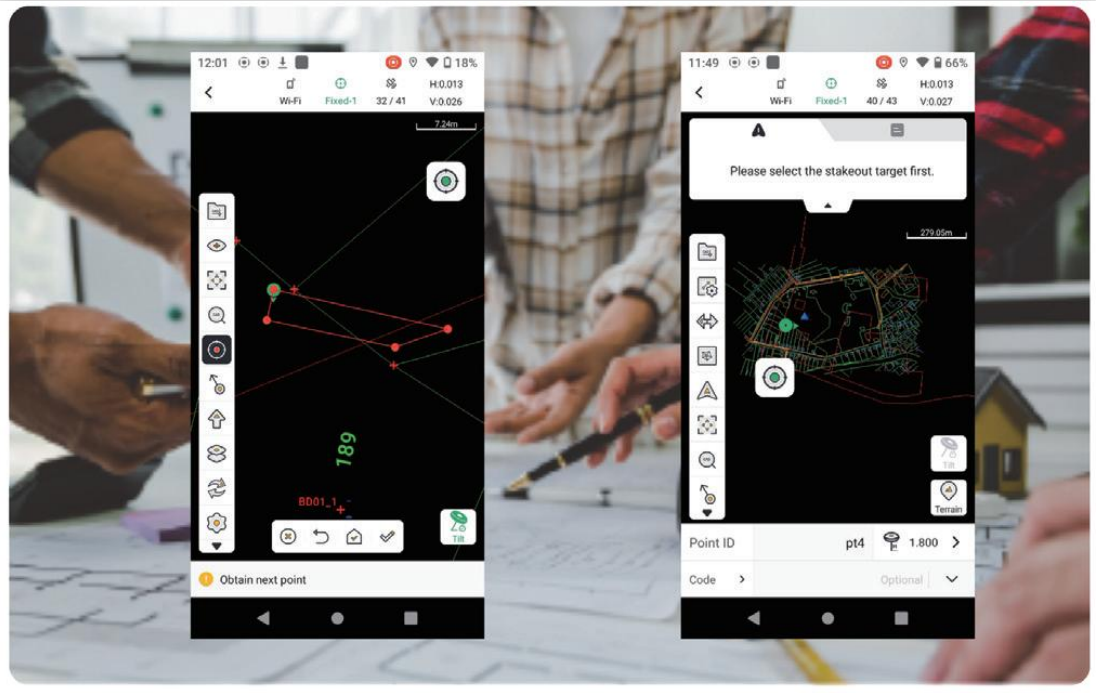


MEASURE & DRAW



Get accurate positioning data and measure/draw 10 common shapes (including polylines, circles, and rectangles). You can also make code-based measurements with clear graphic categories to speed up post-survey mapping.

EFFICIENT STAKING &SMOOTH COORDINATION



After you process data in the Survey App, you can add custom labels and quickly export it into common CAD files for fast field staking.

You can also use the app to view road details like station equations, alignments, cross-sections, and slopes. Once you've confirmed the staking information is correct, you can export it as a LandXML road file for fast sharing and smooth coordination.

ADAPTABLE FOR GLOBAL USE

By supporting 16 languages, the Trion Survey App lets you process terrain data collected from V4E in your preferred language. Plus, you can freely switch between landscape and portrait modes for better data display and viewing on the 8-inch UA80 and 10-inch D10. This simplifies your workflow from field to processing, quickly getting your data ready for the next project.

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FJD Trion V4E Scan Kit

03

V4E + Scan App = V4E Scan Kit

Turn your Iphone into a scanner by simply connecting the FJD Trion Scan App

- 5cm accuracy
- 5m range
- Georeferenced point cloud
- Plug and play, 60s set up
- Realtime data, no post-processing

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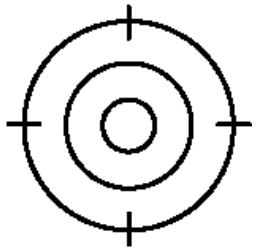
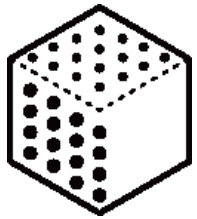
FJD Trion V4E LiDAR Kit

03

Features



3cm
Post-Processing
Accuracy



154,600
Points per Second

50m Range
@ 90% Reflectivity

Georeferenced
Point Cloud

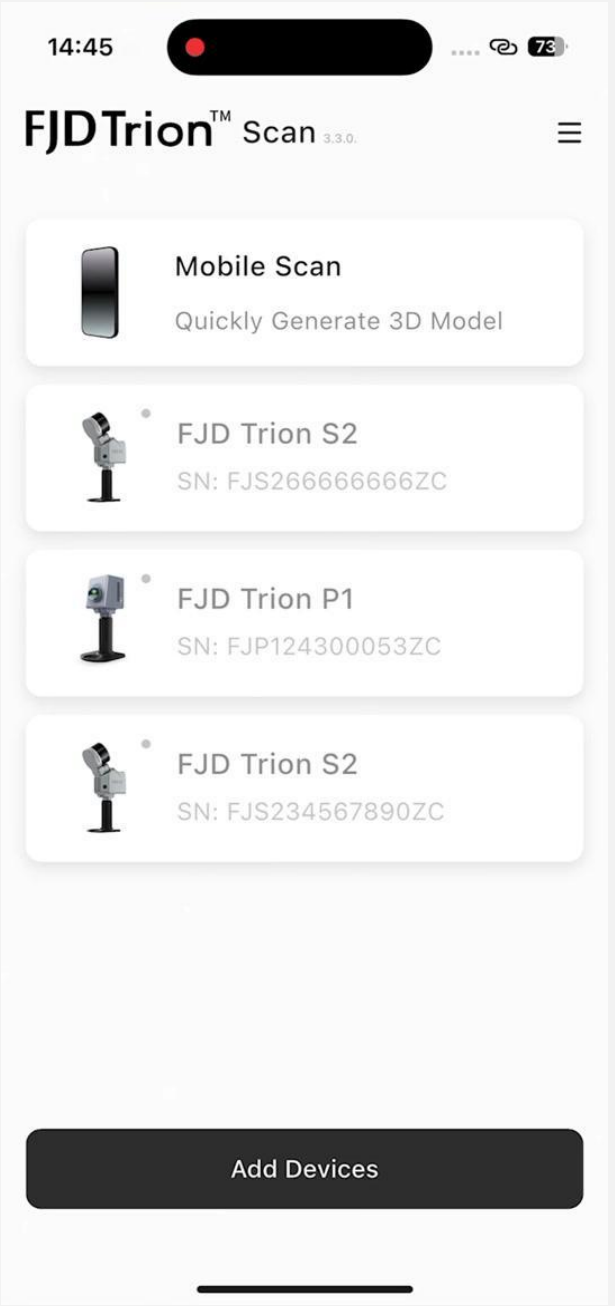
5-Hour
Runtime

Indoor & Outdoor
Scanning

All-in-One Seamless Workflow

Step 1： Scan & Preview

Walk around while capturing dense point clouds. You can monitor your progress in real time with the Scan App, ensuring complete coverage through real-time point cloud visualization.

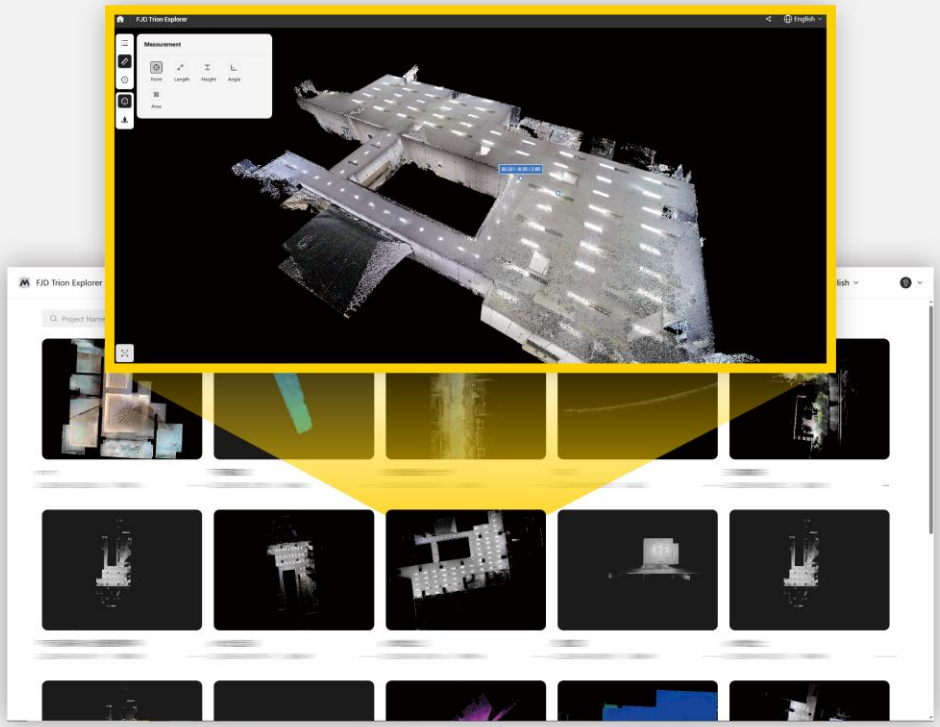


All-in-One Seamless Workflow

Step 2：Data Processing with FJD Trion Model

Import data into FJD Trion Model for advanced processing. You can leverage multi-industry application modules such as construction, utilities, forestry, and BIM—to analyze, model, and generate actionable outputs.

All-in-One Seamless Workflow



Step 3：Share and Collaboration

Upload point clouds to the TPM cloud platform for collaborative editing, data management, and secure sharing. This lets you work seamlessly with your team anytime, anywhere.

Flexible Setups, Multiple Scenarios

1. Smartphone x V4E RTK Receiver x LiDAR Kit

Ideal for: building facades, utility mapping, and outdoor BIM projects.

With RTK providing centimeter-level accuracy and the LiDAR Kit delivering dense point clouds, this setup achieves professional-grade, georeferenced 3D models.

Flexible Setups, Multiple Scenarios

2. Smartphone x LiDAR Kit

Ideal for: facility mapping, warehouses, underground spaces, and industrial plants.

When RTK signals are unavailable indoors, the LiDAR Kit still enables accurate indoor point cloud capture on your smartphone, ensuring precise layouts and reliable documentation.

SPECs

LiDAR

Laser Wavelength	905nm±15n
Eye Safety Rating	CLASS 1 (IEC 60825-1:2014)
Detection Range	0.05-50m(90% reflectivity)
	0.1-25m (10% reflectivity)
Minimum Detection Distance	0.05m
Field of View(FOV)	H: 360°
	V: -10°~60°
Real-Time Point Cloud Accuracy	5cm
Post-Processed Point Cloud Accuracy	3cm
Sampling Rate	≥200kHz
Point Cloud Output	154,600 pts/s @ 70° vertical FOV

Mobile Compatibility

iOS	iPhone 15 and later models

Electrical & Interface specificaions

Charging Specs	5V/2A
Lithium Battery	3.6V/6700mA
Power Consumption	<5W (25℃)
Charging Time	≤3H
Operating Time	≥5H
Data Port	USB 3.0
Charging Port	Charging / USB 2.0
Firmware Upgrade	OTA

Physical Characteristics

Dimensions	137mm*155mm*250mm
Weight	Approx. 860g
Mounting Interface	5/8-inch internal threaded interface
Operating Temperature	-10°C~+60°C
Charging Temperature	0°C~+45°C

V4E LiDAR kit VS P2、S2

	V4E LiDAR KIT	P2	S2
LiDAR range	50m(90% reflectivity) 25m (10% reflectivity)	70m(80% reflectivity) 40m(10% reflectivity)	120m(90% reflectivity) 90m(10% reflectivity)
Points/s	154,600	200,000	320,000
LiDAR FOV	H:360° V:-10°~60°	H:360° V:-2°~57°	360*270
Mobile device	iPhone 15 and later models	IOS, Android	IOS, Android
Realtime accuracy	5cm	3cm	3cm
Post processing accuracy	3cm	1.2cm	1.2cm
Realtime procesing	√	√	√
Built-in camera	×	√	√
Built-in IMU and CPU	×	√	√
Operation time	5H	2H	1.5H

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Create for a Better World