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 TOKNAV



TR10Pro

TR10



Marking Robot

TR10 series

Intelligent Marking Robot

TR10 series Line Marking Robot

The TR10 series Line Marking Robot is an auxiliary work robot capable of automatically measuring, marking, and drawing lines. It is equipped with an adjustable-width nozzle, making it suitable for various application scenarios such as sports fields, highways, municipal roads, airport runways, and more. The software comes with a variety of built-in templates, including sports field designs, icons, arrows, and numbers, while also supporting user-defined editing or template importing. This significantly improves the efficiency of road marking, pre-marking, and spray printing, while reducing labor pressure and costs.

CHARACTERISTIC

Linux Intelligent System

The TR10 series supports full constellation and full-band frequency signal tracking with 1408 channels. Its antenna can simultaneously receive signals from BDS, GPS, GLONASS, GALILEO, SBAS, and QZSS satellites, enabling full constellation positioning. The robot also supports Real-Time Kinematic (RTK) differential positioning and can access the Beidou ground-based augmentation system for high-precision positioning. By combining high-precision positioning with robotic operations, it achieves reliable and repeatable centimeter-level line marking accuracy.

Long Battery Life and High Speed

The TR10 is equipped with a built-in 48V/15Ah lithium battery, providing a range of 15km and a top speed of 1m/s. Additionally, it supports customization for different battery capacities, offering a maximum range of up to 30km.

Multi-functional

The TR10 series can accommodate different sizes of spraying devices and can achieve different types of markings, such as dots, lines, curves, numbers, letters, and patterns. It has built-in models of various sports fields, such as soccer and tennis courts. It supports custom editing of sports field models and is easy to use.

High Adaptability

The TR10 series is compact and equipped with two 400W hub motors, enabling it to perform operations smoothly on rough surfaces like grass and gravel roads, with the ability to make sharp turns and climb slopes up to 20 degrees.

Supports Multiple File Formats

The app supports various file formats, including dxf, csv etc., enabling the robot to follow designed construction plans for seamless implementation.

TR10series Marking Robot

Intelligent Marking Robot

Reliable and repeatable
Centimeter-level marking accuracy

5cm-15cm
Adjustable side nozzle

3 times faster than manual work
Operating day and night

Lithium 48V/15Ah
Over 8 Hours

Speed 1m/s
Faster and more efficient

0° Turn in place
Flexible and adaptable

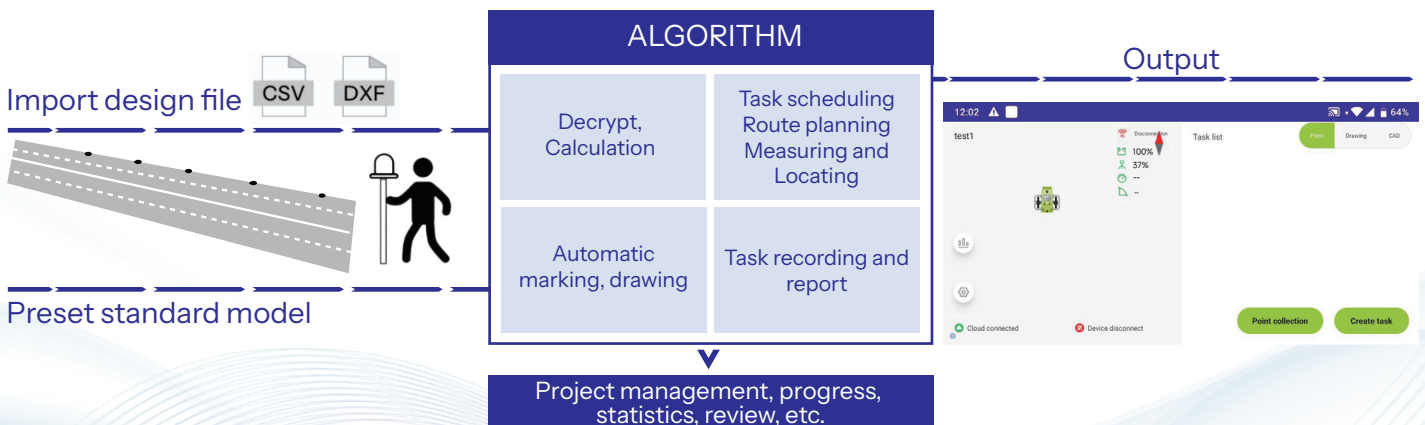
TR10Pro



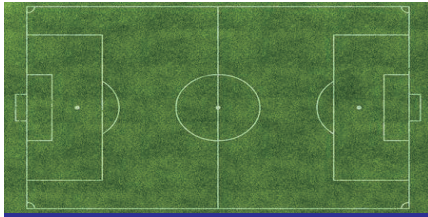
TR10



System Architecture



APPLICATION



Sport fields



Measurement guidance



Highway

SPECIFICATION

PHYSICAL

Dimensions L*W*H	TR10Pro: 525*746*527mm (Removable side scribing mechanism with a width of 243mm) TR10: 558*610*527mm
Wheelbase	400mm
Wheel Track	465mm
Weight	TR10: 36kg TR10Pro: 39.3kg

BATTERY

Battery Type	TR10: Lithium 48V/15Ah TR10Pro: Lithium 48V/7.5Ah
Battery Life	8 hours
Endurance	30km

ENVIRONMENT

Communication	CAN
Temperature	Operating: -10°C~60°C Storage: -10°C~45°C
IP Rating	IP3X

MOBILITY

Motor Specification	400W*2
Maximum Speed	1m/s
Maximum Climbing Ability	20°
Minimum Turning Radius	0°(Turn in place)

PRE-MARKING

Speed	2.6 km/h
Material	Latex paint/Titanium white slurry
Accuracy	≤1.5cm
Hopper Capacity	10L
Line Types	Dots, lines, curves, numbers, letters, patterns

FIELD MARKING

Speed	1m/s
Hopper Capacity	10L
Sports Field Type	Running track, tennis court, soccer field, football field, lacrosse court, baseball field
Drawing Width	5cm~15cm adjustable side nozzle

CONTROLLER

Controller	Android tablet
Controller Software	Built-in models for various types of sports fields; It supports custom editing of sports fields; User-friendly and easy to operate.

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Manufacturers may update parameters at any time, please refer to the latest product information.



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