



FJDynamics

# FJD Rough Ranger

Versatile Robotic Mower



Built for turf. Ready for more.

## Stable Mowing. More Value from One Machine.

FJD Rough Ranger is a robotic mower designed for smoother operation, higher machine utilization, and more flexible turf care. Its front suspension chassis helps maintain stable mowing on uneven ground, while interchangeable kits expand one machine across golf courses, sports fields, driving ranges, and sod farms.



**BPO2 Ball Picker Kit**



**LM03 Line Marker Kit**



**GC01 Grass Collector Kit**



**DB01 Dew Brush Kit**



# Smarter Control for Complex Mowing

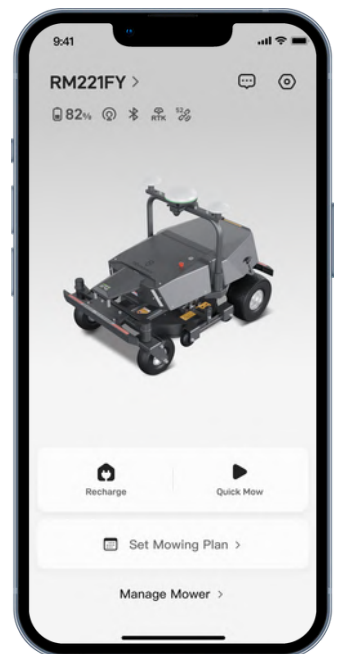
## No signal worries

Uses RTK fused with LiDAR to build a 3D terrain map, enabling smooth mowing in challenging areas such as under trees or around obstacles.



## Multi-zone management

Plan, manage, and monitor multiple zones in the app, and complete mowing across different areas in a single task to save time and simplify turf management.



## Smart path planning

Automatically plans efficient mowing routes with built-in precision algorithms, reducing manual effort for routine mowing tasks.



## Multi-layer safety protection

Combines real-time 360° LiDAR obstacle detection with front and rear physical bumpers, ensuring safer autonomous operation.



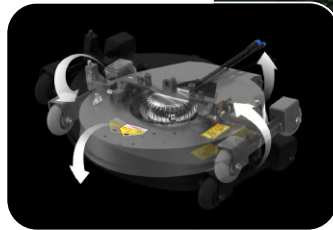
# Built for Uneven Turf

## Front suspension chassis for stable operation

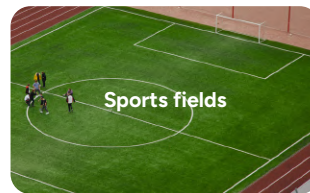
Ensures stable operation on uneven terrain, providing a smooth mowing experience.

## Floating cutting deck for consistent cutting

Automatically follows ground contours on uneven surfaces for a cleaner, more consistent cut with less turf scalping.



## Application Scenarios



## Specifications

Complete Unit	
Weight	170 kg (375 lb)
Dimensions	1345 × 855 × 970 mm (53 × 34 × 38 in.)
IP rating	IPX4
Operating temperature	0–45°C
Cutting System	
72-hour max mowing area*	Fast charging mode: 108,000m <sup>2</sup> (26.7 acres) Standard charging mode: 93,600m <sup>2</sup> (23.1 acres)
Max mowing area per charge*	12,000m <sup>2</sup> (3 acres)
Cutting height	20–120 mm (0.8–4.72 in.)
Cutting width	635 mm (25 in.)
Max working slope*	20°
Recommended working slope	15°
Travel speed	0–6 km/h (0–3.7 mph)
Battery & Charging	
Battery capacity	4 kWh
Fast battery swap	○
Mowing time per charge	5h
Charging time	Standard: 5h Fast charging: 3 h

\*Mowing area is a theoretical value under standard test conditions. Actual efficiency may vary with terrain and grass conditions.

\*Working slope depends on site conditions. On slopes, routes should be planned primarily uphill/downhill. Cross-slope mowing should be avoided or used with caution.

# Rough Ranger + BP02 Ball Picker Kit

The BP02 Ball Picker Kit turns Rough Ranger into an autonomous ball-picking solution for golf driving ranges, while preserving mowing capability on the same platform.

## Keep Range Balls Moving Automatically

### Collect across the range

Collects up to 3,000 balls per hour and up to 63,000 balls per day for high-volume driving range operations.

### Return when full

Rough Ranger automatically returns to the unloading area when the basket is full, reducing manual handling.



### Unload automatically at the station

Collected balls are unloaded at the station, keeping the workflow moving with less operator intervention.



## Specifications

BP02	
Weight	120 kg (264.6 lb)
Dimensions	1860 × 1275 × 610 mm (73.2 × 50.2 × 24 in.)
Picking Width	900 mm (35.4 in.)
Max Picking Capacity per Hour	3,000 balls
Max Daily Picking Capacity	Up to 63,000 balls (based on 21 operating hours)
Max Picking Time per Charge	12 h
Max Picking Capacity per Charge	36,000 balls
Basket Count	1
Capacity per Basket	1,000 golf balls

# Rough Ranger + LM03 Line Marker Kit

Paired with the LM03, the Rough Ranger delivers exceptional line-marking precision and efficiency while reducing labor and paint usage, and also supports custom field logos.

## Less input, greater output



Reduce paint usage by  
**50%+**

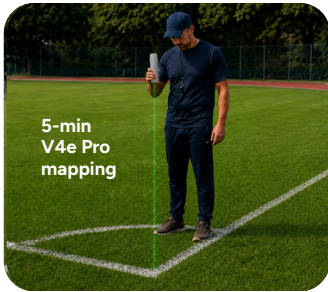


Cut labor costs by up to  
**90%**



Mark up to  
**20** full-size fields  
per charge

## Easy to Use

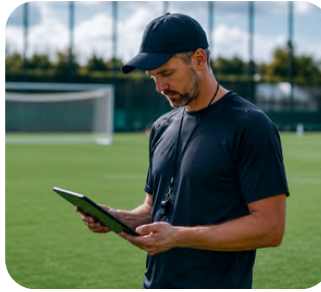


5-min  
V4e Pro  
mapping

Step 1: Map



Step 2: Refill

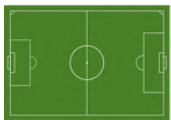


Step 3: Start

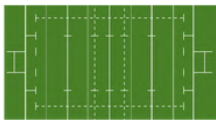


Step 4: Mark

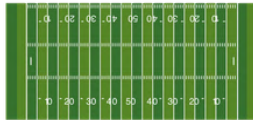
## Application Scenarios



Soccer



Rugby



American football



Baseball



Custom logo



Others

## Specifications

LM03	
Weight	32 kg (70.5 lb)
Dimensions	700 × 600 × 650 mm (27.6 × 23.6 × 25.6 in.)
IP rating	IPX4
Max marking speed	3 km/h (1.9 mph)
Paint tank capacity	25L (5.5 gal)
Line width range	50–170 mm (2–6.7 in.)
Nozzle height	30–120 mm (1.2–4.7 in.)
Operating temperature	5–35°C
Max marking time per charge	20h

# Rough Ranger + GC01 Grass Collector Kit

Attach the GC01 to configure Rough Ranger for automated turf cleanup. It mows, collects clippings, leaves, and light debris, then unloads the material in one smoother workflow.

## Autonomous Turf Cleaning

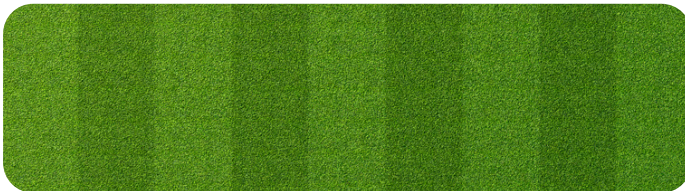
### Automated grass collection & disposal

Collect grass clippings and leaves as it cuts, or run a smart sweep right after mowing—bringing mowing and cleanup in one smooth process.



### Artificial turf cleaning

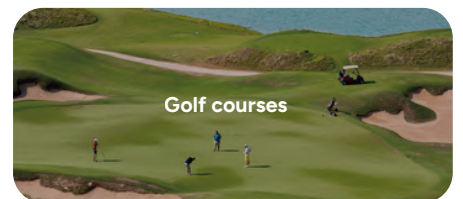
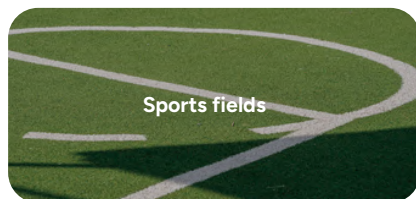
Clear debris from both natural and artificial turf automatically, so you won't have to clean it by hand.



### Professional lawn striping

Create clean light–dark patterns via precise striping control, elevating visual appeal.

## Application Scenarios



## Specifications

GC01	
Weight	100 kg (220 lb)
Dimensions	1260 × 960 × 740 mm (49.6 × 37.8 × 29.1 in.)
Grass collection height	20–50 mm (0.8–2.0 in.)
Collection width	800 mm (31.5 in.)
Max travel speed	3 km/h (1.9 mph)
Max collection volume	150L (33 gal)
Max climbing ability	8°
IP rating	IPX4
Operating temperature	0–45°C

# Rough Ranger + DB01 Dew Brush Kit

Combined with the DB01, the Rough Ranger streamlines morning turf care: it lifts and folds the brush automatically, clears dew evenly, and keeps the turf clean and play-ready.



## Smart lifting & folding

Lift up the brush and fold it automatically during departures, turns, and operations. This avoids hitting obstacles and ensures smooth operation.



## Adjustable brushing direction

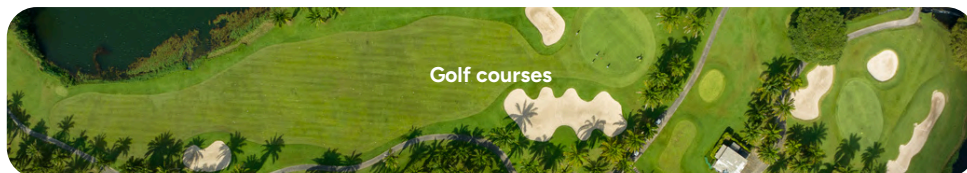
Adjust the brush direction for even dew clearing, giving the turf a cleaner, more polished look.



## Professional greens, ultimate golf feel

Maintain a smooth surface to ensure a fast, consistent ball roll, delivering the best possible golf experience.

## Application Scenarios



## Specifications

DB01	
Weight	28 kg (61.7 lb)
Length	Single section: 1000 mm (39.4 in.)      Three sections: 2930 mm (115.4 in.)
Brush lift	Supported
Brush folding	Supported

Free Quote: [fjdmower@fjdynamics.com](mailto:fjdmower@fjdynamics.com)

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