

FJD RM21

Multi-Functional Robotic Mower



All-in-One Solution for a New Era of Turf Care

The FJD RM21 is a powerful, versatile robot that makes field management simple. Through quick setup with different attachments, it gets more done with one machine, including mowing, line marking, grass collection, and ball picking.

This versatility provides efficient and cost-effective operations across sports fields, golf courses, and sod farms.



LM01 LINE MARKER KIT



GC01 GRASS COLLECTOR KIT



BP01 BALL PICKER KIT



DB01 DEW BRUSH KIT

SMART CONTROL, HASSLE-FREE PERFORMANCE

Intelligent Path Planning

Plan optimal routes automatically within a defined work area, ensuring your turf is perfectly maintained.

Multi-Zone Management

Run a single task across multiple zones—ideal for large golf courses and stadiums.

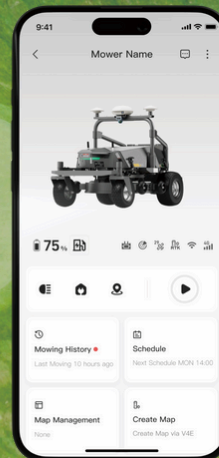
Fleet Management

Assign tasks from the cloud and enable multrirobots to work together, completing large-area jobs with ease.

Up to 93,600 m²
in 3 Days

Remote App Control

Monitor status, create tasks, and manage operations on your phone anytime, anywhere.



WORRY-FREE OPERATION, ALL-DAY SAFETY



No Signal Worries

Utilize RTK and LiDAR fusion to deliver reliable performance, even under trees or in areas with weak signals.



Multi-Layer Safety Protection

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

Specifications

Complete Unit		
Weight		170 kg (375 lb)
Dimensions		1330×853×980 mm / 52.4×33.6×38.6 in.
IP rating		IPX4
Operating temperature		0-45°C
Cutting System		
72-hour max mowing area	Fast charging mode: 108,000m ² (26.7 acres)	
	Standard charging mode: 93,600m ³ (23.1 acres)	
Max mowing area per charge		12,000m ³ / 3 acres
Cutting height		20-127 mm / 0.8-5 in.
Cutting width		635 mm / 25 in.
Max climbing ability		20°
Recommended working slope		15°
Travel speed		0-6 km/h / 0-3.7 mph
Battery & Charging		
Battery capacity		4 kWh
Max working time		5h
Charging time	Standard: 5h	
	Fast charging: 3h	

Notes: 1. Use the lowest setting 20 mm (0.8 inches) only on flat surfaces. For uneven ground, set the height to at least 30 mm (1.2 inches).
2. Working area depends on grass type, soil, cutting height, and slopes.

COMBO 1 – RM21 + LM01 LINE MARKER KIT

Paired with the LM01, the RM21 delivers exceptional line-marking precision and efficiency across sports fields, greatly reducing labor and paint usage.

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, BUILT FOR MULTIPLE FIELDS

Seamless Spray Resume

Whether switching fields or pausing to refill paint, the robot resumes precisely where it left off—no overlapping, no wasted paint.

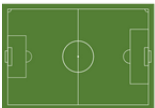


One-Tap Autonomous Operation

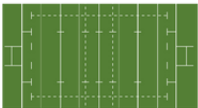
Start the daily line-marking workflow with one tap —no manual intervention required.



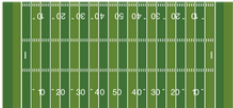
APPLICATION SCENARIOS



Soccer



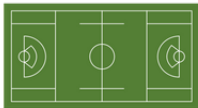
Rugby



American Football



Baseball



Lacrosse



Others

LM01		
Weight		68 kg (150 lb)
Dimensions		1515×853×1051 mm / 59.6×33.6×41.4 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		30–80 mm / 1.2–3.1 in.
Operating temperature		5–35°C
Max marking time per charge		20h

COMBO 2 – RM21 + GC01 GRASS COLLECTOR KIT

Combined with the GC01, the RM21 handles lawn maintenance in a single, fully automated flow: it cuts the lawn, collects the clippings, and dumps the waste or leaves.

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.

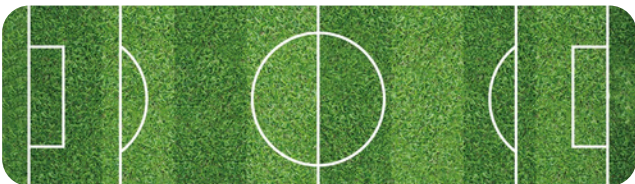


Artificial Turf Cleaning

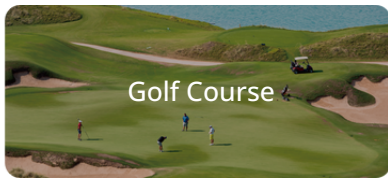
Clear debris from both natural and artificial turf automatically, so you won't have to clean it by hand.

Professional Lawn Striping

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



APPLICATION SCENARIOS



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

COMBO 3 – RM21 + BP01 BALL PICKER KIT

Equipped with the BP01, the RM21 enables fully automated ball collection: it gathers balls across the range, detects a full basket, and returns to the drop-off spot.



Full-Basket Detection & Auto-Return

Detect full-basket status and automatically return to the drop-off spot. This makes the entire operation continuous and hands-free.

Cloud Scheduling for Full-Course Coverage

Monitor each robot's location, battery, and ball capacity live from the cloud. This allows multiple robots to work together smoothly to cover the entire course.

Lower Costs, Higher Efficiency

Enable fully autonomous ball collection to reduce labor needs and boost operational efficiency.

APPLICATION SCENARIOS



BP01	
Weight	70 kg (154 lb)
Dimensions	1480×1120×590 mm / 58.3×44.1×23.2 in.
Picking width	900 mm / 35.4 in.
Basket count	2
Capacity per basket	400 golf balls

COMBO 4 – RM21 + DB01 DEW BRUSH KIT

Combined with the DB01, the RM21 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.



Customizable Brushing Direction

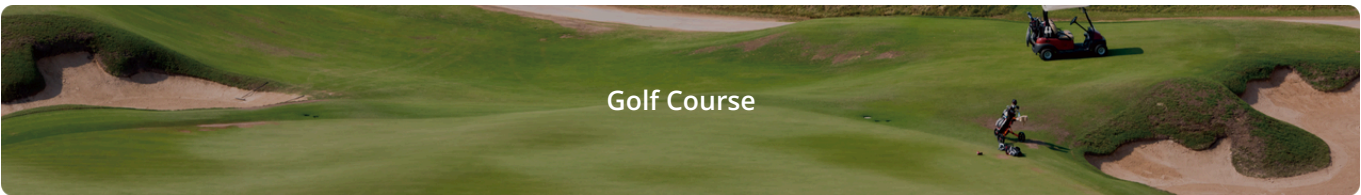
Customize the brush direction for even dew clearing, giving the turf a cleaner, more polished look.

Professional Greens, Ultimate Golf Feel

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



APPLICATION SCENARIOS



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



FJDynamics.com



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