

VOLTEVIA

HYTRON · Airport Electric Towing Vehicle

Airport Electric Towing Vehicle with Wireless Remote Control — User Guide & Service Manual

Model HY-JCC01

Manufacturer Changzhou Huayi Environmental Protection Technology Co., Ltd.

Global Distribution VOLTEVIA — Official Worldwide Distributor of HUAYI

Contact export@voltevia.com · voltevia.com

Technical and content information in this manual is subject to update without prior notice.

Contents

Preface

01. Summary

02. Specifications

03. Controls & Switches

04. Precautions

05. Emergency Measures

06. Maintenance & Care

07. Warranty Service

08. Customer Record

Preface

For safe operation, please read the following carefully before driving.

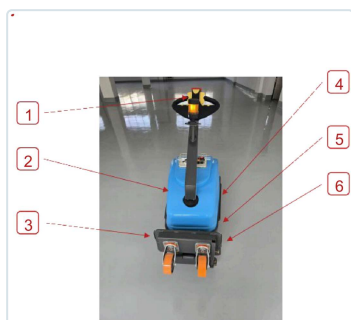
- This vehicle must be operated in accordance with applicable regulations. Driving by minors or persons without full legal capacity is prohibited.
- Comply with national and local traffic regulations and drive only within designated areas.
- Maximum range is measured on flat paved roads with a new battery, no load, no wind, ambient temperature 25 °C, and a constant speed of 3–5 km/h. Actual range varies with usage time, driving mode, ambient temperature, and road conditions.
- Do not modify vehicle specifications or electrical wiring without authorization. We are not liable for quality or safety issues caused by unauthorized modifications.
- The rated capacity is one person (the driver). Do not overload the vehicle for your safety.

01. Summary

Developing cost-effective, practical traction solutions is a core mission of vehicle manufacturing. This electric tractor is meticulously designed with extensive user input, built around the principles of being environmentally friendly and labor-saving.

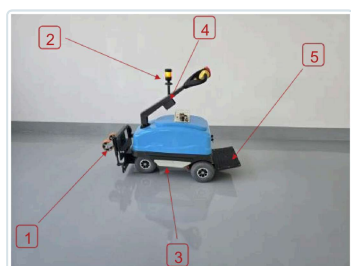
It combines practicality, flexibility, safety, energy efficiency, eco-friendliness, and versatility, making it suitable for short-distance transport and daily operation. Powered by electricity for low operating cost, it uses a high-efficiency brushless DC motor and an intelligent electronic control system with a rear-mounted motor and rear-wheel drive for quiet, comfortable operation.

The fully metal-stamped and welded body ensures durability and impact resistance, while the independently developed chassis and electromagnetic brake system deliver strong braking performance, reliable safety, and excellent load capacity.



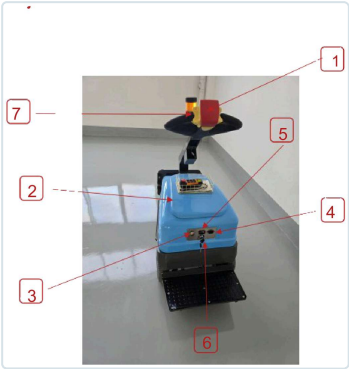
Front View

1. Control Handle
2. Locomotive Shell
3. Traction Bracket
4. Brand Logo
5. Vehicle Chassis
6. 10" Solid Seamless Tire



Side View

1. Traction Bracket
2. Music Warning Light
3. Side Vane
4. Wireless Remote Control Storage Box
5. Foot Plate



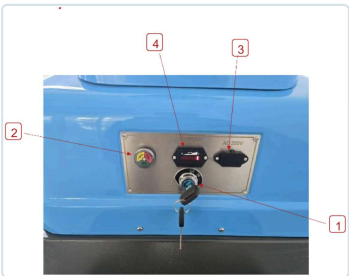
Rear View

- 1. Emergency Brake Switch
- 2. Outer Cover of Housing
- 3. Charge Lamp
- 4. Charging Port
- 5. Coulomb Meter
- 6. Key Power Switch
- 7. RND Position Switch



Center Console

- 1. Acceleration Knob — turn forward to advance / backward to reverse
- 2. Lampshade
- 3. Emergency Brake Switch
- 4. Manual Operation Mode
- 5. Remote Control Transition Mode



Switch Overview

- 1. Power Ignition Switch
- 2. Charge Lamp
- 3. Charging Port
- 4. Battery Gauge

02. Specifications

Essential Parameters

Item	Specification
Vehicle Model	HY-JCC01
Dimensions (mm)	1,800 × 500 × 1,100
Traction Bracket (mm)	480 × 215 × 300
Wheelbase (mm)	400
Vehicle Weight (kg)	249
Traction Mass (kg)	500 (standard / heavy-duty customizable)
Passengers	1 (driver)

Performance

Item	Specification
Max Speed (km/h)	8
Range (km)	100
Max Gradeability	10 %
Min Ground Clearance (mm)	200
Min Turning Radius (m)	≤ 3
Charging Time (h)	6

Powertrain

Item	Specification
Battery Type	Lithium iron phosphate (LFP)
Battery Spec	24V / 108Ah
Motor Type	DC brushed motor
Rated Power (kW)	0.8

Chassis

Item	Specification
Pedal Type	Non-foldable
Brake	Electromagnetic brake
Tyre Size	10 inches
Drive	Rear motor · rear-wheel drive

※ Range measured under no load, ambient 25 °C, flat road, constant 5 km/h. Standard payload is 500 kg; heavy-duty is customizable.

03. Controls & Switches



Battery Power Switch

On first use, open the front hood and turn on the battery start switch. To start, insert the key into the lock slot and turn it clockwise to the "ON" position. Two keys are supplied.

◆ NOTE

The battery automatically cuts output after 120 continuous hours of zero current. Switch the battery power back on before reuse.

With the power switch "ON", the battery meter powers up and shows charge level and voltage.



Front Cover Plate

The front engine cover lifts upward to open (external closing mechanism). To close, simply lower it.

◆ NOTE

When opening the cover, keep the area clear so the cover cannot fall quickly and cause a hazard.



Wireless Remote

The wireless remote operates within 100 m and performs: high-speed forward, low-speed forward, reverse (R), remote mode, manual mode, and reserve. To power on, turn the red knob clockwise (ON); to power off, press it downward (OFF).

⚠ WARNING

Do not hand the wireless remote switch to others alone, to avoid potential hazards.

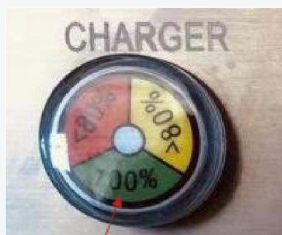


Instrument Information

When the key is first turned on, the display shows the voltage (current battery level); after 1 second it shows the range value, alternating on the LCD. ① Electricity Meter Display ② Charging Percentage Display.

◆ NOTE

When the level shows 2–3 bars, the battery is depleted and needs immediate charging. The red light illuminates while charging; when full, the level shows full bars and the indicator turns green.



Charge Indicator Colors

- Red : Charging < 80%
- Yellow : Charge > 80%
- Green : 100% complete



Caution Light

On power-up, the device emits a yellow beacon and a pleasant musical tone to alert surrounding people to the vehicle's operation.



Traction Bracket

Place the airport luggage cart into the groove of the traction bracket.

⚠ WARNING

The luggage vehicle must be secured in the traction bracket groove to prevent loosening or slipping during transport.



Folding Foot Pedal

Unfold and stand on the pedal for immediate operation; fold it away when not in use to save space.

◆ NOTE

Ensure the pedal always releases smoothly and stays fixed within the foot space. Do not place other pads or carpets on it, and keep objects out of the footwell during operation.



Forward / Reverse Switch

The knob has two positions. "Forward": turn forward to advance; "Reverse": turn backward to reverse.

⚠ WARNING

Control speed using gentle acceleration and deceleration.



Electromagnetic Parking Brake

Pull the lever forward to engage parking; the vehicle stays immobile when operated manually. Pull it backward to release, then push manually to move. With the electromagnetic function on, auto hill-hold anti-slip engages on 10% slopes. The lever is on the right of the driver's seat, facing downward.

⚠ WARNING

Do not use when the electromagnetic brake is not engaged, or while climbing uphill.



Control Handle

① Horn indicators emit an alarm when pressed to alert nearby people. ② The yellow triangular knob accelerates when turned forward and reverses when turned backward.



Emergency Brake Switch

Located on the control handle, it controls the whole vehicle's power. Turning it on cuts vehicle power; turning it off restores power.

◆ NOTE

Turn on the emergency brake switch while charging the vehicle.



Glove Compartment

The storage box holds the wireless remote and other small items.

04. Precautions

Pre-Driving Inspection

- Check that the body surface is clean.

- Check that the battery level is sufficient.
- Check the tyres for exterior abnormalities.
- Check braking performance.
- Inspect and adjust the folding pedal, and confirm all warning indicators work.

Starting

1. First confirm the motor's electromagnetic brake is engaged.
2. Turn the key clockwise to start; the display lights up showing battery level and voltage. Set the gear switch to forward.
3. Gently turn the handle to activate the rotation button and move off smoothly.

Driving Precautions

- Maintain a stable speed where traffic permits to conserve battery.
- Heavier loads increase consumption, so avoid overloading.
- Avoid sudden starts/acceleration, which waste power and can reduce range or cause abnormal motor wear.
- Avoid emergency braking where possible, as it wastes power and reduces range.
- Aged tyres raise rolling resistance and consumption, so maintain proper tyre condition.
- Low temperatures, frequent rapid accel/decel, uneven roads, uphill and high loads affect range.

⚠ WARNING

The vehicle's water submergence depth must not exceed 170 mm; otherwise water may enter the motor and cause damage.
Do not use or store below -15°C when the battery is not fully charged, as electrolyte freezing may damage the battery.



Vehicle Charging

Open the charging port cover upward and plug the charging cable into the port.

◆ NOTE

Use the original charging cable; standard household 220 V is sufficient.
Turn on the main power switch to charge (-10°C to 41°C). In summer, charge in a shaded area.

⚠ WARNING

Do not charge in humid environments or during thunderstorms.



Tyre

The vehicle uses 260×85 tyres compatible with the chassis (compliant with FF tyre testing standards; test: load 100–130 kg, 3.6 km/h, 200,000 rpm passed). Proper tyre condition improves comfort and safety and extends tyre life.

◆ NOTE

Regularly inspect tread depth and damage. Replace with the same model/pattern in pairs on the same axle, and drive slowly in adverse conditions (ice, snow).

⚠ WARNING

Do not leave idle for long periods. Use 2–3 times per week; otherwise the solid tyre contact surface may deform unevenly.

05. Emergency Measures

Changing the Tyre

1. Move the vehicle to a safe location and park on a level, hard surface.
2. Turn off the key switch and engage the automatic parking brake.
3. Loosen the hub bolt counterclockwise by half a turn with a wheel wrench, but do not remove it before the wheel leaves the ground. Place the jack vertically under the frame near the wheel and lift until the wheel is off the ground.
4. Remove the wheel bolts and take out the wheel.
5. Install the new tyre and tighten the bolts diagonally with the wheel wrench.
6. Turn the jack handle counterclockwise to lower the vehicle.

⚠ WARNING

Passengers must leave the vehicle and all cargo must be unloaded before changing wheels.

Do not go under a jacked vehicle, and do not grease wheel bolts. Place the jack against load-bearing areas such as crossbeams or frames.

◆ NOTE

When changing tyres or parking, place a triangular warning sign 50 m behind the vehicle.

Trailer / Towing

If the vehicle must be towed to a repair facility, contact your nearest dealer or service center and follow the recommended towing procedure.

◆ NOTE

Before towing, ensure the key switch is off, the gear is neutral, and the parking brake is engaged. When towing with wheels on the ground, a driver must operate steering and braking on the towed vehicle.

06. Maintenance & Care

Lithium Iron Phosphate (LFP) Battery

Battery performance depends on driving conditions, mode, and climate. Charge idle vehicles regularly to prevent over-discharge. After 120 continuous idle hours, output cuts off automatically, so switch the battery power back on. Regularly check battery mounting, cables, and terminals.

◆ NOTE

Perform maintenance only with the vehicle powered off.

⚠ WARNING

Do not use a fast charger while charging.

Motor

Inspect the motor regularly (every six months recommended; shorten under harsh conditions). Clean the surface for heat dissipation and confirm wiring is secure. Tighten or replace loose/damaged connections to prevent arcing, overheating, and burnout.

◆ NOTE

Disconnect power during motor maintenance.

Car Cleaning

Clean when stains appear; clean the front tyres and warning-light surfaces immediately for safety. Remove corrosive stains (e.g. bird droppings) promptly to protect paint, and dry the vehicle or let it air-dry in a ventilated area after washing.

◆ NOTE

Keep cleaning solution out of the battery. Fog inside headlights after washing is normal and clears in sunlight. Wet brakes may increase braking distance if you drive immediately after washing.

07. Warranty Service

Guarantee

The warranty begins on the date the customer purchases the vehicle and the dealer issues the receipt.

- Vehicle warranty (including battery): 12 months, no mileage limit
- Consumable parts warranty: 3 months (brake discs, tyres, etc.)

Valid documents are this manual plus the purchase invoice/receipt. On delivery the dealer must complete and stamp the customer registration form and return the manufacturer's copy. Failures from material or manufacturing defects within the warranty are repaired or replaced free of charge by authorized dealers.

Warranty Exclusions

1. Normal wear or consumption.
2. Wear-prone/consumable and routine-replacement parts (gear oil, brake discs, tyres, etc.).
3. Failures from improper maintenance, misuse, or overload (accidents, flooding, over-discharge, overload).

4. Failures from natural/external factors (lightning, pollution, oxidative corrosion, debris impact, mechanical abrasion).
5. Failures from non-original parts or unauthorized modifications deviating from original specs.
6. Consequential damage from failure to rectify a fault promptly.

Also excluded: time loss or work interruption during warranty repair, and costs of using other tools.

Maintenance Service

Partner dealers are happy to assist with any questions. Keep the purchase invoice/receipt and maintenance records with this manual. When contacting us, please provide your name, address, phone, VIN, and purchase date/dealer.

Maintenance Record

Date	Service Life	Maintenance	Replaced Parts	Technician Signature

08. Customer Information Record

On delivery, the dealer completes and stamps the information below.

Owner / Company		VIN	
ID / Company Code		Vehicle Model	
Mobile		Color	
Email		Purchase Date	
Address		Dealer Name	

This vehicle has passed pre-delivery inspection.

Dealer Signature / Stamp : _____ Date : _____

User Signature : _____ Date : _____

VOLTEVIA · Official Worldwide Distributor of HUAYI

export@voltevia.com · voltevia.com