

Owner's Manual RMB EV PO Box 458/3362 Fulton Rd Fulton, CA 95439 USA Tel:707-568-3388 Fax:707-526-1409 www.rmbev.com



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## **Technical Information**

Multi-Point AWD

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Model No.	RMB Multi-Point AWD	
Product size	54 L x 29 W x 44 H inch (137	
	x 73 W x 113 cm)	
Type of motor	Perm-magnet brushless DC	
Motor power	Front: 500w 48v hub motor	
	Rear: 500w 48v differential	
Battery type	Standard lithium, optional SLA	
Battery capacity	Li 48v 22Ah / SLA 48v 13.2ah	
Charger	110V-240V, UL approved	
Charging time	4-6 hours	
Max. speed	Up to 16 MPH ( 26 km/h)	
Single charge	Lithium up to 31 miles	
	SLA up to 15 miles	
Max capacity	350 LBS (139kg)	
Net weight	151 LBS (69 kg)	

### **Warning Statement**

Multi-Point AWD



IMPORTANT!

Before you operate your Multi-point , please read carefully:

YOUR EXISTING INSURANCE POLICY MAY NOT PROVIDE COVERAGE FOR ELECTRIC VEHICLES, YOU SHOULD CONTACT YOUR INSURANCE AGENT TO DETERMINE IF COVERAGE IS PROVIDED.



Do not ride this scooter until you read and thoroughly understand the owners manual. It contains information critical to your safety. If you have any questions about the operation of the scooter, you should consult your authorized dealer.



It is extremely important that you follow the safety guidelines contained in this manual in order to ensure maximum safety.



Failure to comply with the standards outlined in this manual could result in fire and/or serious injury.



RMB EV is not liable for any damage or injuries caused by unsafe or faulty repairs. Any repairs made to this product by unauthorized service technicians are the sole responsibility of the owner.



Our products are designed to be ecologically conscious, please dispose of used batteries in compliance is with local laws.

#### **Read Before Riding**

Multi-Point AWD

# WARNING

THE RMB Multi-Point AWD IS NOT A TOY AND SHOULD NOT BE OPERATED BY ANYONE UNDER 12 YEARS OLD.

#### Safety Instructions:

(Please take note of the following before each ride)

- The maximum weight capacity is 350 lbs.
- Only one person at a time should ride.
- Always wear protective gear including knee and elbow pads and an approved safety helmet when riding the Multi-Point AWD.
- Before riding, be sure to check that all pivot points, locking buttons, quick releases, and latches are secured properly.
- The power switch lock must be in the "off" position when the Multi-Point AWD is being charged.
- Do not use the Multi-Point AWD when it is raining.
- Do not place the battery near heat or fire.
- Do not expose the charger to water or any moisture.
- Check if batteries are properly charged and installed.
- Check if all tires are properly inflated.
- Always ride on dry paved surfaces. Be Safe-even though the Multi Point AWD can traverse over rough terrain, gravel, wet, extreme incline, and uneven surfaces may be a hazard.





# **List of Parts**

Multi-Point AWD

- 1 Multi-function Instrument
- 2 Foldable structure
- 3 Basket
- 4 Optional wire basket bracket/lamp bracelet
- 5 Connecting tube
- 6 Seat
- 7 Ring-pull steel pin
- 8 Seat post
- 9 Basket
- 10 Rear motor
- 11 Rear shock absorption
- 12 Rear fender
- 13 Rear wheel
- 14 Battery
- 15 Front frame Kick stand
- 16 Dual-purpose QR lock bolt
- 17 Front fender
- 18 Front motor
- 19 Front wheel
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# **Front Bar**



- 1 Brake lever
- 2 Horn switch
- 3 Lock mechanism switch
- 4 Multi-function Instrument
- 5 Key switch
- 6 USB port
- 7 Forward/reverse switch
- 8 Throttle





- 1 Screwdriver
- 2 Allen wrench (2.5mm)
- 3 Allen wrench (3mm)
- 4 Allen wrench (5mm)
- 5 Allen wrench (6mm)
- 6 Wrench (8 x 10mm)
- 7 Wrench (16 x 18mm)
- 8 Wrench (16 x 18mm)

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9 charger

Assembling The Multi-Point AWD

Multi-Point AWD

1. Unpack the Multi-Point AWD carefully so that you do not misplace any of the parts.



- 2. Place the Multi-Point AWD on a flat, level surface.
- 3. Take out the kickstand and spring. Put the kickstand on the suitable position on front half of the scooter. Fasten the kickstand on front half of the scooter with the provided screws.



Open the spring with the screwdriver or other tool and then connect the spring to kickstand.

#### Assembling The Multi-Point AWD

Multi-Point AWD



4. Flip the spring-loaded kickstand down to form a tripod. Stand the front half of the scooter upright (be sure to lock hand brake after handlebars are attached).



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### Assembling The Multi-Point AWD

Multi-Point AWD

5. Slide the handlebar assembly into the top of the folding structure and then insert the male end (bottom) of folding structure into the steering tube.



6. Ensure that the handlebar is facing front, the brake on the left and the throttle on the right, tighten using the enclosed 5mm wrench.





Lift lever to tighten and then twist lock ring.

### Assembling The Multi-Point AWD

Multi-Point AWD

\*Note: The lever is intentionally off center to allow handlebars to fold to the side. Be sure that the pivot hinge is facing the throttle side. Handlebar will fold to the right of scooter.

7. Firmly connect wire harness to junction box then slightly loosen junction box mounting brackets and twist the junction box to the right until it faces the rider. Re-tighten clamps. Front half of scooter is now assembled



**NOTE:** Loosen clamp to adjust handlebars, then retighten clamp after desired height is achieved.

# Assembling The Multi-Point AWD

Multi-Point AWD

8. Place the Multi-Point AWD on a flat, level surface. Extend the kick stand. Remove the bolt from the female part (B). Insert the male part (A) into the female part (B), and then tighten the bolt provided.



9. Prior to assembling or disassembling the Multi-Point AWD, place Multi-Point AWD on a flat surface, flip down the kickstand and ensure it is supporting the weight of the scooter.



10. With key in the off position, make sure you

# Assembling The Multi-Point AWD

Multi-Point AWD

connect the power line to the battery after assembly and likewise, be sure to disconnect the power line from the battery prior to disassembly.



11. The power connector wires are fitted with male to female plugs that have an alignment notch. Take note when plugging in.



### Assembling The Multi-Point AWD

Multi-Point AWD

12. Plug the power connecting wires into the corresponding socket on the battery box.



# Disassembling The Multi-Point AWD

Multi-Point AWD

1. Turn off power.

 Unplug the power/control wires that connect the front half of the scooter to the rear half.
 Reverse assembly steps and gently separate.

**NOTE:** In the rare instance the Quick Release Mechanism becomes too tight to release easily, turn the special screw upside down and screw in using the outer threads. This will apply pressure to release the mechanism. If you live in a high moisture climate, apply a thin grease to the Quick release mechanism to protect it from corrosion.

# Extraction



### **Charging The Batteries**

Multi-Point AWD

•Before you ride the Multi-Point AWD for the first time you must charge the batteries for 4-6 hours or until the charger light turns green using only the supplied charger.

•To charge the batteries, plug the charger into the charger socket located on the front left side of the floor deck. Then plug the charger into a wall outlet. Red light on charger indicates charging, green light indicates charged.

Warning: Never charge scooter longer than 10 hours. If the charger does not turn green by 10 hours or you smell a Sulphur odor after a long charge there is a problem and contact the dealer for instructions.



### **Riding The Multi-Point AWD**

Multi-Point AWD

•Once you have completed the initial charge you are ready to ride. Remember, this is not a toy. The Multi-Point AWD can reach speeds up to 16 mph depending on the terrain and the weight of the rider. You must wear a helmet and protective pads. Be aware of all local laws and ordinances that govern and/or restrict the use of powered scooters. The laws and ordinances vary greatly from municipality to municipality. It is your responsibility to know and abide by your local restrictions.

•To ride, insert the key into the key switch and turn the key in clockwise direction till the first click. The battery gauge will be illuminated indicating that the battery is in operation. Turn the key to the second click in clockwise direction for headlight.



• Hold onto the front bar with both hands. Your

## **Riding The Multi-Point AWD**

Multi-Point AWD

left fingers will control the front brakes and your Right foot will control the rear brakes. Your right hand will control the throttle. As you twist the throttle towards yourself, the speed will increase. Release the throttle and apply the brake to stop. You will control the speed of the scooter by using both the throttle and the brake. **When the brakes are used, the power to the throttle is cut off.** 

**NOTE 1**: WARNING: Never try stunts. Always maintain a safe speed.

**NOTE 2**: When scooter is parked, please remove the key, this will avoid anyone from accidentally turning the throttle causing the scooter to speed forward. Failure to do this could lead to an accident.

**NOTE 3**: If you need to stop in an emergency or kill power quickly, you can turn the key off.

**NOTE 4**: When you use reverse, the scooter must be stopped, and then push the "F-R" switch to "R", the horn will send out a noise, then <u>GENTLY</u> turn the throttle to back up. Warning, do not twist throttle to full power when in reverse. When finishing reverse, push the switch back to "F".

#### **Riding The Multi-Point AWD**

Multi-Point AWD

(forward/reverse switch)



**NOTE 5**: The Maximum output of dual port USB is 5V, 2A which will charge all phones and tablets.



#### **Riding The Multi-Point AWD**

Multi-Point AWD

**NOTE 6**: The Multi-Point AWD provides the driver the flexibility to drive in 3 different modes; Front wheel drive, Rear wheel drive, or All Wheel Drive. (1) Front wheel drive- Press the "DD" (fig. 2) button so that it is in the "OUT" position and press "FD" (fig.1) button on the left side of the handlebar. (this is the most economical mode to drive in)

(2) Rear Wheel Drive- Press the "DD" (fig. 2) button so that it is in the "OUT" position and press "RD" (fig. 1) button on the left side of the handlebar.

(3) All Wheel Drive- Press the "DD" (fig. 2) button so that it is in the "IN" position. (it does not matter what position the "FD" or "RD" buttons are in when in AWD mode.

Note: If the "FD  $\bullet$  RD" button is on " $\bullet$ " position, the Multi Point AWD is not connected to any motors and will not operate.



# Folding The Multi-Point AWD

Multi-Point AWD

- 1. Turn off the key switch
- 2. Unlock the clamp safety ring by twisting to the left.



3. Pull clamp lever down to release.



# Folding The Multi-Point AWD

Multi-Point AWD

4. Tilt the handlebar in the direction of its hinge. (which is also attached to the handlebar tube).



5. Carefully lower the handlebar tube.



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#### Maintenance

Multi-Point AWD

**Battery:** (for professional use only)

The RMB Multi-Point AWD is powered by 48v 22ah lithium battery. We also offer a 48v 13.2ah SLA battery for those who need to take their Multi-Point AWD on planes, ships etc. that forbid lithium. The chargers for Lithium and SLA are different but have the same charge ends for convenience to swap battery types. You must be sure to use the proper charger for the type of batteries you have installed or you may destroy your batteries! Other than recharging, these batteries need no maintenance. Our lithium batteries are protected with a BMS (battery management system) built into the battery pack to protect it from overcharging and undercharging. For best practice, keep the batteries away from heat and try to keep your charge between 30-90% during use. Lithium can form a memory

#### Maintenance

Multi-Point AWD

so approximately once a month, you can drain the battery to almost fully discharged and then fully recharge. For extended storage, leave the pack between 40-50% charged. For SLA batteries there is no memory and it is best to keep them fully charged whenever possible and charge the battery after each use. For SLA, you must also charge your Multi-Point AWD if it has not been used for 30 days or more. If you need to replace the battery pack, it is located inside the battery compartment under the footboard. To remove the batteries, disconnect the connectors between the battery pack and the scooter. Remove 4 hand screws under floor mat and open the hinged battery door. Replace the battery pack, reconnect the connector, and charge the new battery pack as previously described.

#### Maintenance

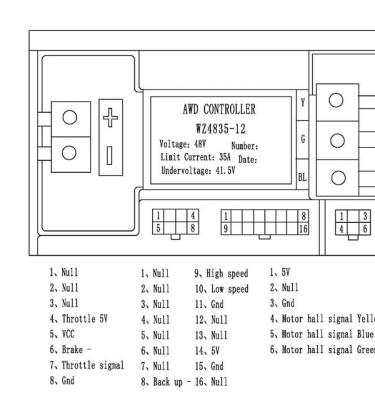
Multi-Point AWD

Chassis: (every 1-3 months)

Depending on use:

- (1) It is recommended to inspect and if necessary, tighten any loose nuts and bolts.
- (2) Inspect electrical connections and for moist climates, apply electrical grease to all electrical connectors and spray all nuts and bolts with a lubrication oil to avoid rust and corrosion.
- (3) Apply thin grease to the male and female mechanism that connects the front half of the scooter to the rear half.
- (4) Check tire pressure (low pressure will affect speed and range)

#### **Wiring Diagram**



# **Trouble Shooting Guide**

Multi-Point AWD

Problem	Cause	Solution
The power light on the instrument does not illuminate when the Multi-Point AWD is on.	<ol> <li>Battery is discharged.</li> <li>Loose connection inside Multi-Point AWD.</li> <li>Fuse is blown.</li> <li>The instrument is defective.</li> </ol>	<ol> <li>Recharge your Multi-Point AWD.</li> <li>Remove the screws that hold the battery compartment cover and raise the cover. Visually inspect all wire connections making sure there are no loose wires, reconnecting those that are.</li> <li>Replace the fuse.</li> <li>Replace the instrument.</li> </ol>
The power indicator on the instrument illuminates but Multi-Point AWD still does not work.	1. The throttle handle is not operating properly.	1. Replace the throttle handle. Call Customer Service or www.rmbev.com to order a new throttle

# **Trouble Shooting Guide**

When the brake lever is squeezed the Multi-Point AWD does not stop.	1. The brakes are not adjusted properly.	1. Adjust the brake by loosening the bo on the rear brake wheel, pull the cable and retighten the bolt. Adjust front brake by tightening the adjusting screw
Scooter is losing speed.	<ol> <li>Low battery</li> <li>Battery is defective.</li> <li>Low tire pressure.</li> </ol>	on the front wheel. 1. Recharge your battery for 4~6 hour 2. Replace battery. Call Customer Service to order a new battery. 3. air tires up to correct pressure.

#### Warranty

Multi-Point AWD

The Limited Warranty does not cover or apply to the following: Normal wear and tear; any damage, failure and/or loss caused by accident, misuse, neglect, abuse and/or failure to follow instructions or warnings as stated on the product or in the applicable owner's manual or other printed materials provided with the product; damage, failure and/or loss caused by the use of the product in any other manner for which such products were not specifically designed.

RMB EV warrants the Multi-Point AWD for six (6) months according to the following terms. Batteries and tires are warranted for three (3) months. This warranty extends to the original retail purchaser only and commences on the date of the original retail purchase. Any part of the RMB EV product manufactured or supplied by RMB EV and found in the reasonable judgment of RMB EV to be defective in material or workmanship will be repaired or replaced by an authorized RMB EV service dealer without charge for parts or labor. RMB EV is responsible for the expense of delivering the warranty replacement parts. However, if the customer chooses not to replace the parts, the expense of

#### Warranty

Multi-Point AWD

delivering the Multi-Point AWD to the factory / authorized service dealer for warranty work or the expense of returning it back to the owner after repair/ replacement will be paid for by the owner. RMB EV's responsibility in respect to claims is limited to making the required repairs or replacements and no claim of breach of warranty shall be cause for cancellation or rescission of the contract of sale of any RMB EV product. Proof of date of purchase will be required by the dealer to substantiate any warranty claim. An authorized RMB EV service dealer must perform all warranty work. The warranty is limited to thirty (30) days from the date of purchase for any RMB EV product that is used for rental demonstration, commercial purposes, or any other income producing purpose. This warranty does not cover any RMB EV product that has been subject to misuse, neglect, negligence, accident, or has been operated in any way contrary to the operating instructions as specified in RMB EV's owner's manual. This warranty does not apply to any damage to RMB EV products that is the result of improper maintenance or to any RMB EV product that has been altered or modified so as to

#### Warranty

Multi-Point AWD

adverselv affect the products operation. performance, or durability, or that has been altered or modified to change its intended use. This warranty does not extend to repairs made necessary by normal wear and or by use of parts that are incompatible with RMB EV products. In addition, this warranty does not cover items that experience normal wear and tear. RMB EV reserves the right to improve the design of the product without assuming any obligations to modify any product previously manufactured. All warranties are limited in duration to the six (6) months warranty period. Any such implied warranties including merchantability, fitness for a particular purpose or otherwise are disclaimed in their entirety after the expiration of the appropriate thirty day warranty period. RMB EV's obligation under this warranty is strictly and exclusively limited to the repair and replacement of defective parts and RMB EV does not assume any other obligation. Some states do not allow limitations on how long an implied warranty lasts, so the above limitation may not apply to you. RMB EV assumes no responsibility for incidental consequential or other damages including but not limited to expense of returning

#### Warranty

Multi-Point AWD

the Multi-Point AWD to an authorized service dealer and expense of delivering it back to the owner, mechanics travel time, telephone charges, rental of a like product during the time the warranty service is being performed, travel loss, or damage to personal property, loss of revenue, loss of time, or inconvenience. Some states do not allow the exclusion or limitation of incidental or consequential damages so the above limitations may not apply to you.

#### WHAT RMB EV WILL DO:

RMB EV will, at its sole option, either repair, replace or refund the purchase price of any unit that does not conform to this limited warranty. RMB EV may choose at its option to use functionally equivalent reconditioned, refurbished, or new units or parts or any units. You are responsible to get the unit back to RMB EV.

#### Warranty

Multi-Point AWD

#### HOW TO GET WARRANTY SERVICE:

To obtain warranty service, please call or fax to the following telephone numbers for RMB EV Customer Service - warranty repair

Tel. 1-707-568-3388 or Fax.1-707-526-1409, Email: info@rmbev.com

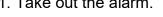
# DO NOT RETURN YOUR PRODUCT TO ANY ADDRESS.

Please call, email, or write for the location of the RMB EV authorized service center nearest you and for the procedures for obtaining warranty claims.

#### **Instructions for optional attachments**

Multi-Point AWD

#### **Instructions on the use of the alarm** 1. Take out the alarm.





2. Connect the battery and install on seat post.



3. The "1" button is the alarm button. When pressing it gently, the horn will ring one loud, after three seconds, the scooter will be on alert. Touching or moving the scooter, activates alarm and horn will ring continuously.

#### Instructions for optional attachments Multi-Point AWD

4. The "2" button is the disarm button. Pressing this button gently, the horn will ring one loud, then the alert is removed.



# Instructions for optional attachments

Multi-Point AWD

#### Instructions on the use of the LED lights

To use undercarriage LED lights, the head light must be turned on, then click the switch to " $\clubsuit$ ", the LED lights will be illuminate. Push switch "•" to turn off the LED.



**Instructions on the use of wireless controller** The remote control for the LED lights has 24 buttons, the function of each button is described on the table below:

Instructions for optional attachments	
Multi-Point AW	D

	1		
Brightness+(	Brightness-(S	Off	On
Speed up)	peed down)		
Static red	Static green	Static blue	Static white
Static orange	Static pea	Static dark	3 color jumpy
	green	blue	change
Static dark	Static cyan	Static	All fade out &
yellow		brown	fade in
Static yellow	Static light	Static pink	7 color fade
	blue		change
Static straw	Static sky	Static	3 base color
yellow	blue	purple	jumpy



NOTE : Before using wireless controller, please remove the plastic sheet(A).