Feel free to enjoy life!

MERCURY

SCOOTER RANGE

Medicare Technology Limited
Ainleys Industrial Estate, Elland, West Yorkshire,HX5 9JP
Tel: +44 (0) 1422 314488 / Fax +44 (0) 1422 314489
Email: enquiries@medicaretechnology.com
Web: www.medicaretechnology.com
Part No. Z40960

MERCURY

Rio Range

OWNERS MANUAL

CE

The team at Medicare Technology develops its products to give our customers the freedom to live independently. This encompasses their daily home life and provides them with the opportunity to enjoy an outing with family and friends. Our goal is to develop a range that will provide individuals with a chance to enjoy every day life..

medicaretechnology LIMITED

The

RIO ELECTRIC MOBILITY SCOOTER

CE

OWNER'S MANUAL

TABLE OF CONTENTS

1. PREFACE AND INTRODUCTION

Please carefully read this owner's manual before using the vehicle. Improper use of the vehicle could result in harm, injury or traffic accidents. To ensure that you get the most from your scooter, please read this owners manual before using.

- This owner's manual includes operation instructions for every aspect of the vehicle, assembly instructions, as well as instructions for how to deal with possible incidents.
- The symbols used in this manual are explained overleaf:

☠ Warning	Improper usage could result in serious injury
☞ Attention	improper usage could lead to injury and/or damage to your scooter.
🕮 Suggestion	follow these instructions to keep your vehicle in a good operating order.

- This manual includes a repair and maintenance record chart and warranty information. Please keep it in a safe place or with the scooter.
- If someone else uses the scooter make sure that you provide him or her with this owner's handbook for his or her consideration.
- As designs change some illustrations and pictures in the manual may not correspond to the vehicle that you purchased. We reserve the right to make design modifications.

The Rio range of scooters are part of the Mercury range, and have been designed and manufactured to provide a comfortable and secure yet affordable solution for some mobility requirements. They are manoeuravble and are suitable for indoor and some outdoor applications. There are three models in the Rio range and a number of colours:

- Rio Lite – A lightweight three-wheel version, designed for simplicity and efficiency
- Rio 3+ – A three-wheel scooter which can be folded and dismantled and has a rotating seat
- Rio 4+ – A four-wheel version of the Rio 3+

2. SAFETY NOTICE

2.1 BEFORE DRIVING

The user needs to be familiar with the usage and operation of this vehicle before driving. Therefore, please follow the recommendations in this safety notice.

- **The same traffic rules apply to the user of this vehicle as apply to pedestrians.**
- For your safety, please follow and adhere to the same traffic laws as pedestrians.
- Ride on the pavement and pedestrian areas only. Never ride on motorways or dual carriageways. Only use roads to cross to the other side of the pavement.
- Be aware of traffic when crossing or using roads.
- Be extremely cautious when driving your scooter in busy areas or in shopping malls.
- Please do not drive your scooter after consuming alcohol or when you are tired.
- Please be careful when driving your scooter in low light. It has not been designed for use at night.

- **Practice operating your vehicle**

  Before using the scooter in busy or potentially dangerous areas, familiarize yourself with the operation of your scooter. Practice in a wide and open area like a park. In order to avoid accidents with your scooter whilst driving, please bear in mind driving motions, such as accelerating, stopping, turning, reversing, and gradients.

  - Please turn the speed dial to the minimum value for your initial practice.

- Be sure someone accompanies you for safety when driving for the first time.
- Only use higher speed setting when you are confident that you can easily operate and control your scooter.

The scooter is only to be used by one person at a time

Do not carry passengers on your scooter (including children)

Do not use this vehicle to carry or haul goods

- The maximum weight that can be carried is 115kg (including occupant and any goods). Refer to "MAX LOAD WEIGHT" in "9. SPECIFICATION"
- Maximum loading weight for basket is 3kg (7lb).

2.2 WHILST DRIVING

Do not use your vehicle under the circumstances below.

- On surfaces that are muddy, gravelly, bumpy, narrow, snowed over, icy, or towpaths very near to canals which not guarded by any fence or hedge. Keep away from places where you might get the wheels stuck.
- Do not drive at night or when it is raining, snowing, misty, or windy.
- Do not drive your vehicle in an "S" pattern or make erratic turnings.
- Do not take the scooter onto escalators.
- UNDER NO CIRCUMSTANCES SHOULD THE SCOOTER BE USED AS A SEAT IN A MOTOR VEHICLE (E.G. CARS, BUSES, TRAINS, ETC).

About Mobile Phones and other electrical equipment

- Do not use a mobile phone or other wireless communication devices whilst driving.
- Always switch off the scooter and remove the ignition key before using a mobile phone.
- Do not charge the mobile phone or any other electrical devices from your scooter's battery.

Automatic Power Shut Down

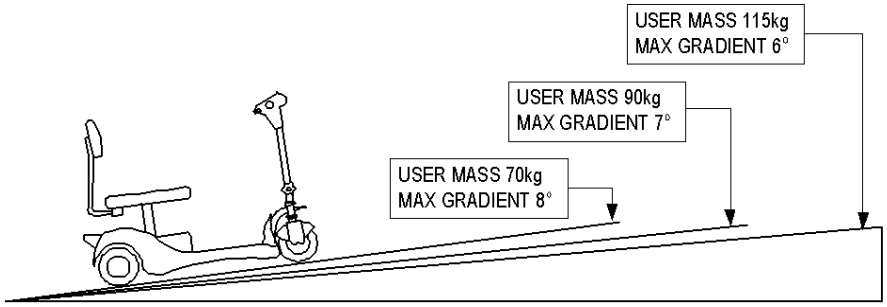
In order to avoid accidental battery run down, your scooter is equipped with an automatic power shut down facility. If the scooter is switched on, but remains undisturbed for a period of thirty minutes it will automatically turn off. Should this occur, simply switch your scooter off and back on and it will be ready to use once again.

Ramps, gradients and drops

- Do not drive onto steep ramps greater than the specified gradient. Refer to the section entitled "CLIMBING ANGLE" in "9. SPECIFICATION"
- Always use a low speed setting when ascending or descending a gradient.
- Do not drive on roads with large drops or potholes. Refer to the section entitled "MAX. GROUND CLEARANCE" in " 9. SPECIFICATION".
- Do not cross water gutters where the width is too big and where there is a risk of getting the

wheels stuck.

- Please slow down when driving on roads with gradients.
- Do not make sudden turns when driving on gravel roads or ramps.
- Always lean forward when climbing a steep gradient
- Do not travel on gradients exceeding those stated on the diagram overleaf:



☠ WARNING!

- Do not set in freewheel mode when driving on a gradient.
- Always re-engage the freewheel device into drive mode before use. Failure to do so may result in injury.
- To protect your safety, the power will automatically cut off and electromagnetic brake system will activate while you are driving down a steep gradient (over 10°). This will limit the speed to a safe level. Turn the power on again to re-start your scooter.
- **Maximum User Weight Limit**
  Refer to section entitled "MAX. LOAD WEIGHT" in "9. SPECIFICATION". Overloading past the weight limit may lead to damage of your scooter or cause it to malfunction and will endanger your safety. The warranty does not cover this type of damage.

2.3 LABELLING

Please carefully read all labels on the scooter before driving it. For future reference, do not remove them.

This portion of the content will provide the user with basic information that describes the problems with EMI, known sources of EMI, protective measures either to lessen the possibility or exposure or to minimize the degree of exposure, and suggested action should unexpected or erratic movement occur.

Attention: It is very important that you read this information regarding the possible effects of electromagnetic interference on your **Rio** scooter.

2.4.1 ELECTROMAGNETIC INTERFERENCE (EMI) FROM RADIO WAVE SOURCES

Powered scooters may be susceptible to electromagnetic interference (EMI), which is interfering electromagnetic energy (EM) emitted from sources such as radio stations, TV stations, amateur radio (HAM) transmitters, two-way radios, and mobile phones. The interference (from radio wave sources) can cause the powered scooter to release its brakes, move by itself, or move in unintended directions. It can also permanently damage the powered scooter's control system. The intensity of the interfering EM energy can be measured in volts per meter (V/m). Each powered scooter can resist EMI up to a certain intensity. This is called its "immunity level". The higher the immunity level, the greater the protection. At this time, current technology is capable of achieving at least a 20 V/m immunity level, which would provide useful protection from the more common sources of radiated EMI. This powered scooter model as shipped, with no further modification, has an immunity level of 20 V/m without any accessories.
There are a number of sources of relatively intense electromagnetic fields in the everyday environment. Some of these sources are obvious and easy to avoid. Others are not apparent and exposure is unavoidable. However, we believe that by following the warning listed below, your risk to EMI will be minimized.
The sources of radiated EMI can be broadly classified into three types:

1. Hand-held portable transceivers (transmitter-receivers with the antenna mounted directly on the transmitting unit). Examples include: citizens band (CB) radios, "walkie talkies", security, fire, and police transceivers, mobile telephones and other personal communication devices.

Attention:
Some mobile telephones and similar devices transmit signals while they are ON, even when not being used.

2. Medium-range mobile transceivers, such as those used in police cars, fire trucks, ambulances and taxis. These usually have the antenna mounted on the outside of the scooter.
3. Long-range transmitters and transceivers, such as commercial broadcast transmitters (radio and TV broadcast antenna towers) and amateur (HAM) radios.

Attention: Other types of hand-held devices, such as cordless phones, laptop computers, AM/FM radios, TV sets, CD player, and cassette players, and small appliances, such as electric shavers and hair dryers, so far as we know, are not likely to cause EMI problems to your powered scooter.

2.4.2 POWERED SCOOTER ELECTROMAGNETIC INTERFERENCE (EMI)

Because EM energy rapidly becomes more intense as one moves closer to the transmitting antenna (source), the EM fields from hand-held radio wave sources (transceivers) are of special concern. It is possible to unintentionally bring high levels of EM energy very close to the control system of the scooter while using these devices. This can affect powered scooter movement and braking. Therefore, the warnings listed below are recommended to prevent possible interference with the control system of the powered scooter.

2.4.3 WARNINGS

Electromagnetic interference (EMI) from sources such as radio and TV stations, amateur radio (HAM) transmitters, two-way radios, and mobile phones can affect powered scooters. Following the warnings listed below should reduce the chance of unintended brake release or powered scooter movement which could result in serious injury.

1. Do not operate hand-held transceivers-receivers, such as citizens band (CB) radios, or turn ON personal communication devices, such as mobile phones, while the powered scooter is turned ON;
2. Be aware of nearby transmitters, such as radio or TV stations, and try to avoid coming close to them;
3. If unintended movement or brake release occurs, turn the powered scooter OFF as soon as it is safe;
4. Be aware that adding accessories or components, or modifying the powered scooter , may make it more susceptible to EMI (Note: There is no easy way to evaluate their effect on the overall immunity of the powered scooter).
5. Report all incidents of unintended movement or brake release to the powered scooter manufacturer, and note whether there is a source of EMI nearby.

2.4.4 IMPORTANT INFORMATION

1. 20 Volts per Metre (V/m) is a generally achievable and useful immunity level against EMI (the higher the level, the greater the protection);

2. This product has an immunity level of 20 V/m without any accessories connected to it.

3. PARTS INTRODUCTION

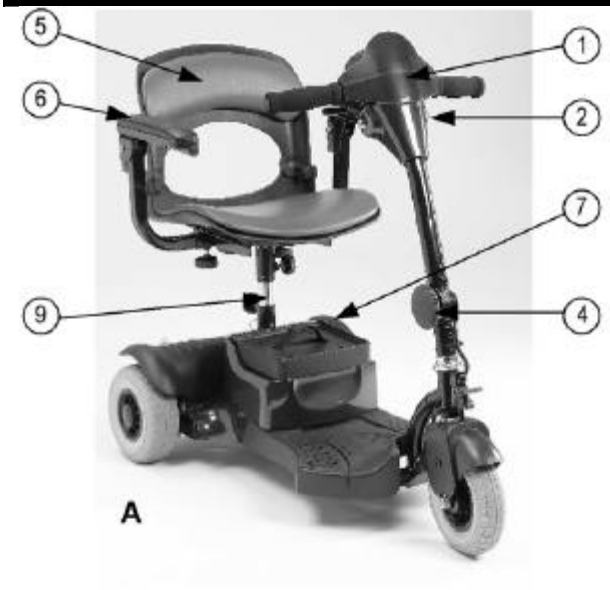
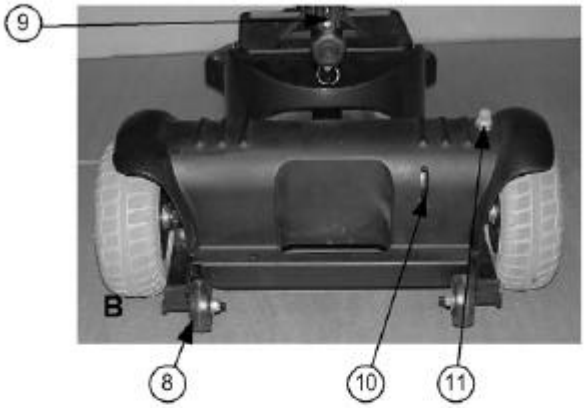
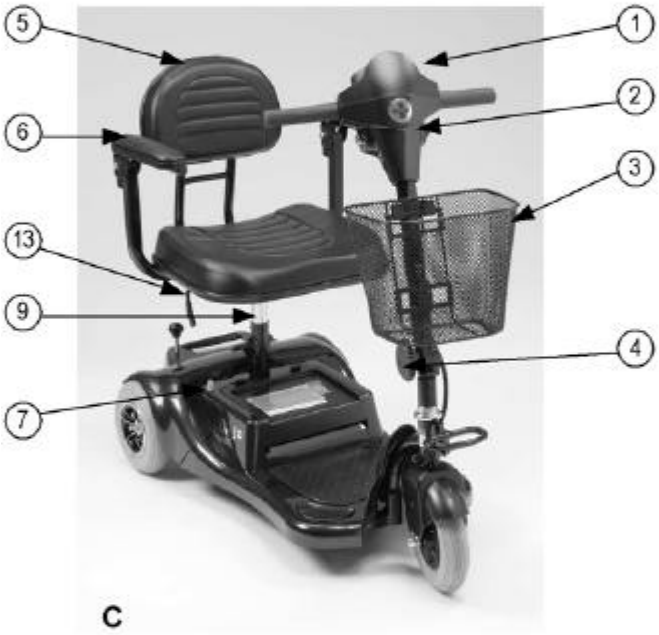
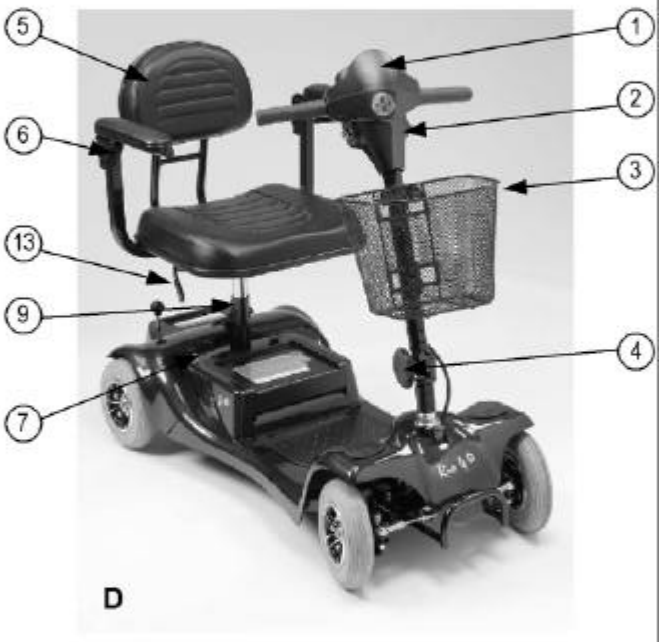


Fig A: Rio Lite (front), fig B: Rio Lite (back), fig C: Rio 3 ✚(front), fig D: Rio 4 ✚(front), fig E: Rio 3/4 ✚ (back)







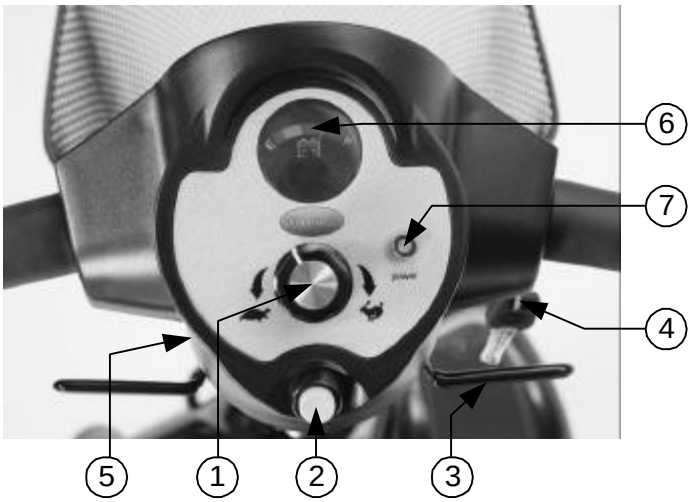
Parts Description:

1. Control Panel
2. Charger Socket
3. Basket (not shown on Rio Lite)
4. Tiller Adjustment Knob
5. Seat
6. Armrest
7. Battery Compartment
8. Anti-tip Wheel
9. Seat Post
10. Freewheel Lever
11. Circuit Breaker
12. Seat Post Pull Handle (not Rio Lite)
13. Seat Rotation Lever

4. OPERATION

4.1 CONTROL PANEL

Please see the diagram on the right.



1. Speed Dial
2. Horn Button
3. Wigwag Paddle
4. Key Ignition
5. Charger Socket
6. Battery Indicator
7. Power Eye

4.2 HOW TO OPERATE YOUR SCOOTER

- **Key Ignition**
- The key ignition acts as the power switch for the scooter. To switch the power on, turn the key clockwise in the ignition. The power eye should illuminate.
- To switch the power off, turn the key anticlockwise. The power eye should switch off and the key can be removed if required.

- **Speed Dial**
- Turn the speed dial to determine the maximum speed of the scooter. Turn the dial clockwise to increase the speed setting and turn the dial anticlockwise to decrease the speed setting.

- **Moving and Braking**
- Push the right-hand side of the wigwag paddle forwards with your right thumb and the scooter will move forward.
- Push the left-hand side of the wigwag paddle forward with your left thumb and the scooter will move backward, emitting an audible reversing alarm.
- To brake, release the wigwag paddle which will return to neutral and activate the electromagnetic brake automatically. This will bring the scooter to a prompt stop.
- The wigwag paddle allows you to control the speed of the scooter up to a maximum speed determined by the Speed Dial. The further the wigwag paddle is deflected, the faster the scooter will go up to its maximum speed of 4mph.

- **Horn Button**
- Press the horn button to sound the horn. Release the button to stop the horn

- **Braking**
- Electromagnetic brake: Release the wigwag paddle completely, and the electromagnetic brake will be activated automatically, and the scooter will stop.

☠ Warning

When on a gradient NEVER set the vehicle to the freewheel mode. The electromagnetic brakes will not be applied. This may result in injury.

- **Seat (All except Rio Lite)**
- The seat can be rotated and locked in position at 45° intervals.
- Push the seat adjustment lever forward and swivel the seat.
- Release the lever, and then continue swivelling the seat until it locks in position.

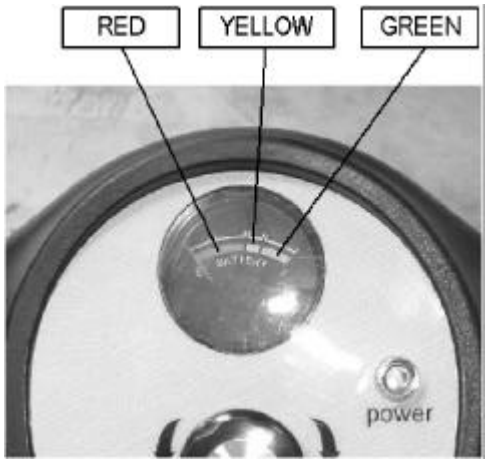
☞ Attention

Return the seat to the forward position before driving.

- **Adjusting the Seat Height**

1. Remove the seat from your scooter
2. Using suitable tools, remove the nut and bolt securing the seat post (shown by arrows)
3. Adjust the upper seat post to the desired height.
4. Move the upper seat post so that there is a hole to insert the bolt.
5. Secure the bolt by attaching the nut.
6. Replace the seat.

- **Battery Indicator**
- The battery indicator on the tiller console uses a colour code to indicate the approximate remaining power of your batteries. Green indicates (40-100%) capacity, yellow a draining charge (10-30%), and red indicates that an immediate recharge is necessary.
- The remaining power indicated by the battery indicator will vary by the actual driving time incurred and how you drive. Repeated starting, stopping, climbing will consume the power more quickly.



📖 **Suggestion**

1. You should recharge the batteries after each time the vehicle is used to ensure maximum range. The batteries should be charged up at least once a week even if the scooter is not used.
2. After charging or replacing a new battery, drive the vehicle for 2-3 minutes to make sure the battery capacity is sufficient.
3. In wintertime or in cold conditions, the battery may respond more slowly and the battery range may be reduced.
4. When driving on a gradient, the battery indicator gauge might move up and down. This is a normal phenomenon so please do not worry.
5. Even if the battery is used properly, it is natural for the battery's capacity to reduce with time, which results in reduced battery range compared to a brand new battery. Therefore, when you find the battery's range is about only 50% of the range when the batteries were new, it is time to replace the batteries. Please see your dealer about replacement batteries. If you continue to use the old battery when it should be replaced, it could lead to a rapid decline in performance.
6. The battery range will be reduced when driving frequently on a gradient or rough terrain, as this leads to greater consumption of power.
7. The batteries have a twelve-month warranty covering manufacturing defects. This warranty does not cover faults due to incorrect battery recharging.

4.3 HOW TO SET FREEWHEEL MODE

Note: Although the Rio Lite has a different style of freewheel lever, the operation is the same.

Engaged Mode:

Push the lever down completely and the scooter can be driven by the motor. (See photo left)

Freewheel Mode:

Pull the lever up and the scooter can be moved manually. (See photo left)

☠ **Warning**

Never operate the freewheel lever while seated on the scooter or on an incline.

- **Tiller Adjustment**
- The tiller can be adjusted in to many different positions to suit each driver.
- The tiller can be adjusted by following the steps below.

Step 1:

- Loosen the knob (as being performed in the photo by the lower hand) so the tiller can move.

Step 2:

- Using the other hand, reposition the tiller as required. Then retighten the knob to secure.

5. DRIVING ON THE ROAD

- **Starting and Driving**

1. Make sure the seat is installed properly.
2. Make sure the tiller has been secured properly.
3. Fold down the armrests so you can rest your arms on them.
4. Turn the power switch to “ON”.
5. Check battery indicator to see whether there is enough power for your journey. If you have any doubt about the remaining power, recharge the batteries before departure.
6. Set the speed dial to a position you feel safe and comfortable with.
7. Check the forward/reverse speed lever works correctly.
8. Make sure the electromagnetic brake works correctly.
9. Before driving, ensure it is safe to do so in the environment around you.

☞ **Attention**

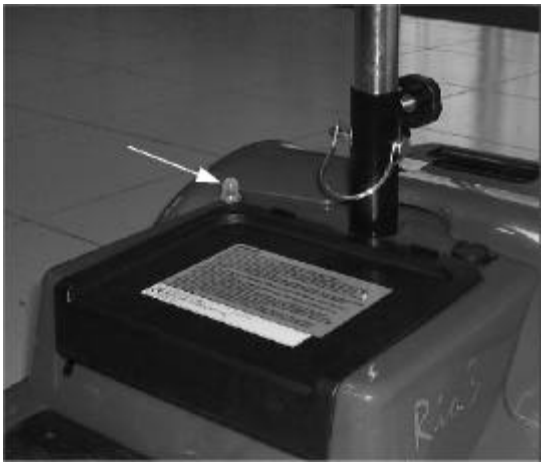
1. Do not push both RH & LH sides of the wigwag paddle simultaneously. This might leave you unable to control your scooter.
2. Do not turn the power switch to OFF whilst driving as this will lead to an emergency stop and possible risk of accident and injury.
3. Do not set to the highest speeds whilst driving indoors.
4. Do not adjust the speed dial whilst driving, a sudden change in speed may cause danger to you and others, and may cause damage to your scooter.
5. Do not place magnetic devices near the scooter controller as this could affect the safe operation of your scooter. The scooter controller is located under the footwell.
6. Do be careful whilst driving in heavy traffic or crowded areas.
7. Whilst reversing the vehicle, beware of people or objects behind you.

- **Stopping**

1. Release the wigwag paddle completely. The vehicle will naturally brake and stop.
2. Turn the scooter off at the key ignition. Then pull out the key.

☞ **Attention**

- The stopping distance will vary with your forward / reverse speed. Therefore please begin braking as early as you can.
- When parking your scooter, be sure to park on flat ground and then turn the power to “OFF” before you dismount.



- **Main Circuit Breaker (Reset Button)**

  When the voltage in your scooter's batteries becomes low or the scooter is heavily strained because of excessive loads or steep inclines, the main circuit breaker may trip to protect the motor and electronics from damage.

  The arrow shows the location of the circuit breaker on the photograph (left).

  Under normal operating conditions the circuit breaker button will be protruding 2mm – 3mm. If the circuit breaker has tripped, the button will be protruding by 7mm. To reset the circuit breaker, push the button in and the scooter should function as normal.

6. BATTERY CHARGING AND CARE

6.1 CHARGING THE BATTERY

There are two methods which can be used to charge the battery pack on the Rio:

Method 1: On-board Charging (see photograph overleaf)

Follow the procedure below step by step:

1. Turn the power switch to (OFF)
2. Plug the charger's power cord into the mains.
3. Open the charging socket cap on the scooter's tiller head. Then connect the charger's round plug to the charging socket
4. Switch on the plug socket.
5. The chargers LED will illuminate orange to indicate the batteries are charging. The charging duration is about 8 hours. To ensure optimum performance a 12-hour charge is recommended.
6. The orange LED will turn green when charging is complete.
7. Turn off the charger, disconnect the power cord and the round plug from charger socket on the scooter.

Method 2: Off-Board Charging (see photograph overleaf)

Follow the procedure below step by step:

1. Turn the power switch to (OFF)
2. Remove the battery pack by opening the battery compartment and lifting out the battery pack by the handle.
3. Plug the charger's power cord into the mains.
4. Plug the charger's round plug into the charging socket of the battery pack
5. Switch on the plug socket.
6. The chargers LED will illuminate orange to indicate the batteries are charging. The charging duration is about 8 hours. To ensure optimum performance a 12-hour charge is recommended.
7. The orange LED will turn green when charging is complete.
8. Turn off the charger, disconnect the power cord and the round plug from charger socket on the scooter.

Above: On Board Charging

Above: Off Board Charging

Suggestion

1. Do not disconnect the charger cord if charging is not completed. The battery life will be seriously shortened or decayed if the battery is repeatedly used without being fully charged. Therefore be sure to charge the battery fully every time.
2. Always complete the charging until the LED light turns green. NEVER stop charging before it is complete.
3. When fully charged, the battery charger will still trickle charge the battery to ensure optimum range.
4. If you do not use your scooter for a long time, it should be charged at least every week to keep the battery in a fully usable condition.
5. The ambient temperature will affect charging time. Charging time will be longer in the winter.
6. After charging, do not leave the charger socket plugged in to the scooter, as this will cause a power drain on the scooter and temporarily reduce its range.
7. The batteries carry a twelve-month manufacturer's warranty. This warranty only covers issues relating to manufacturing faults, and not faults relating to failure to recharge the batteries as instructed above.

Attention: Please follow the rules below to avoid accidents while charging.

1. Please use the Mercury charger only, and recharge the battery to its full capacity every time. You may damage the battery and scooter if you use a charger which is not to the correct specification.
2. Never disassemble or modify the charger.
3. Please charge in a well-ventilated space where it is not directly exposed to the sunlight. Do not charge in surroundings where it is humid or under rainfall and morning dews.
4. Do not charge in temperatures less than -10 ° C or higher than +50°C as the charger may not work well and the batteries may become damaged.

Warning

1. Keep away from flammable objects while charging as it may lead to fire or explosion of battery.
2. Do not smoke while charging as the battery may release hydrogen gas. Always charge your battery in a well-ventilated space.
3. Never connect or disconnect the plug or cord with wet hands whilst charging. Do not connect or disconnect the plug or cord when they are wet, it may lead to electric shock.

6.2 CHARGER

The charger supplied with the Rio has an LED which changes colour depending on its status:

- If the LED is lit ORANGE then the charger is switched on and charging
- If the LED is lit GREEN then the charger is switched on and has finished the bulk of its charging and the batteries can be used. However, we recommend that you leave the charger charging for a couple of hours after the green LED has lit. This will maintain and probably increase the capacity of your batteries.
- The LED will also illuminate GREEN if the charger is switched on but not connected to the batteries.

☠ Warning

♦ If the charger LED does not illuminate the charger is faulty, please contact your dealer.

6.3 BATTERY

♦ Do not expose the battery to temperatures below - 10°C or above 50°C when charging or storing the vehicle. Being out of the above temperature range can cause the battery either to freeze or over heat. This will damage the batteries and shorten their life.

♦ These batteries are maintenance free and there is no need to inspect the battery liquid or refill with water.

♦ You are required to recharge the batteries on a regular basis. Even if the scooter is stood idle, you should charge the batteries at least once a week.

☠ Warning

Do not open the battery-sealed cap at any time.

- **Batteries**
- The Rio is powered by 12V 12ah batteries.
- They are sealed lead acid type, and are maintenance free and non-spillable.
- They are supplied with spade terminals.
- The batteries supplied as standard with Rio Lite, Rio 3+ and Rio 4+ are classified as safe to transport under IATA special provision A67. (Please note that some batteries supplied with the older Rio 3 and Rio 4 models do not have this classification. For more information please consult your dealer).

☠ Warning

Do not remove the battery pack whilst the scooter is switched (ON). This will cause the scooter to stop and may damage the scooter. If, whilst the scooter is switched on, the battery pack is accidentally removed or loses contact as the result of jolt, switch the scooter (OFF). Then reinsert the battery pack and switch the scooter (ON).

- **Charging the Batteries**
- Using the charger supplied with the scooter, the charging duration is about 8 hours.
- However, to ensure optimum performance we recommend a 12-hour charge.
- We also recommend that the batteries are not charged for more than 24 hours.

- **Cleaning the battery**
- If water, battery acid, dust or other substances contaminate the batteries, they will discharge quickly. The batteries supplied with the Rio scooter are sealed and as such are maintenance free with no risk of battery leakage. Please follow the steps below to clean the battery.

1. Turn the scooter power switch to OFF.
2. Follow the procedure in the next section "Replacing the Batteries"
3. Use a clean cloth to wipe off the soiled area.
4. Take out the battery.
5. Clean the battery with a clean cloth. If the terminal is covered by white powder, please wipe it clean using warm water.

🕮 **Suggestions** If necessary, ask for help from your dealer for advice about maintaining and replacing the battery.
🕮 **Suggestions** 1. Make sure the terminals are installed properly and put the cover back on. 2. Do not use the battery to charge telecom equipment or other items. 3. Battery efficiency will vary with outside conditions, the driving distances will be shorter in the winter. If the vehicle is not used for a long time, please charge the battery at least every week. 4. Replace both batteries together.

6.4 REPLACING THE BATTERIES

Follow the procedure below step by step to replace the batteries:

		
1. Remove the battery pack from the scooter.	2. Open the battery pack then disconnect the cables from the four battery terminals	3. Remove the batteries from the battery pack

		
4. Place new batteries inside the pack.	5. Connect the red cable to the positive (+) battery terminal and black cable to the negative terminal (-) on the other battery	6. Connect up the fused cable between the two batteries and close the battery pack

7. INSPECTION AND MAINTENANCE

7.1 DAILY CHECKING

Check the following items before driving. If you find anything abnormal, contact your Medicare Technology dealer for further inspection or advice before using the scooter.

Item	Inspection Content
Tiller	♦ Is there any looseness? ♦ Can it turn left and right smoothly ?
Speed Control Dial	♦ Can it be adjusted freely and does it function well?
Speed Control Lever	♦ Does the scooter move when the lever pressed down? ♦ Does the scooter stop when the lever is released completely?
Motor	♦ Is there an abnormal noise from the motor? ♦ Do the electromagnetic brakes work properly?
Freewheel Mode	♦ Does the freewheel mode lever work properly?
Battery Indicator	♦ Is the light on when the power is switched on? ♦ Is the remaining power enough for your trip?
Horn	♦ Does the horn work?
Seat	♦ Can the seat swivel smoothly?
Tyres	♦ Are there any cracks or other damage to the tyres? ♦ Check the tyre tread depth.
Other	♦ Are there any abnormal noises? ♦ Is there oil leakage from the transmission box?

☞ **Attention**

Go to your dealer for inspection and maintenance if you find anything wrong.

7.2 REGULAR CHECKING RECORD

To make sure your scooter is correctly serviced, take it to your Medicare Technology dealer for regular maintenance checks. This should be at six monthly intervals after an initial inspection after one month. Your dealer may charge a fee for this. The checking record is shown overleaf.

🕮 **Suggestion**

Even if you don't use the vehicle for a long time it should still be regularly maintained.

YEAR	1	2	3	4	5	YEAR	1	2	3	4	5
Service Dates						Service Dates					
Controller						Upholstery					
On/off switch						Seat					
Control Lever						Back					
Braking						Armrests					
Recharge point						Electrics					
Batteries						Connections condition					
Levels						Lights					
Connections						Test run					
Discharge test						Forwards					
Wheels and Tyres						Reverse					
Wear						Emergency stop					
Pressure						Left turn					
Bearings						Right turn					
Wheel nuts						Slope test					
Motors						Over obstacles					
Wiring						List Items repaired					
Noise											
Connections											
Brake											
Brushes											
Chassis											
Condition											
Steering											

7.3 BATTERY, FUSE AND TYRE

- **Battery**
- Refer to the section entitled "6.3 BATTERY" in "6. BATTERY CHARGING AND CARE".

- **Fuse**
- If the battery charger is turned on and the LED is not lit, check the fuse.

🕮 **Suggestion**

Ask for help from your dealer to inspect or replace the fuse, since the tiller shroud has to be removed first before you can replace the fuse.

- **Tyres**
- The condition of the tyres depends on how you drive and use your scooter.
- Please check the tread depth regularly.
- Replace the tyres when the tread depth is less than 0.5mm

☞ **Attention**

1. When tread depth is below 0.5mm it can easily lead to vehicle slippage, making braking distances longer. Therefore replace the tyres as early as possible when they are found to have insufficient tread depth.

2. The Rio scooter comes with solid tyres so there is no need to check tyre pressure.

7.4 MAINTENANCE

You must maintain the scooter frequently if you tend to drive on grass, sand, and gravel or in other adverse environments.

Do not use, water, oil or other chemical solution to clean your scooter. Be sure NOT to spray the scooter with a hose or tap as this may cause damage to electronic componentry and the scooter controller.

Please take the scooter to authorised dealers for repairs and adjustments. Improper adjustments could lead to an accident or scooter malfunction.

Please use a soft, wrung dry cloth to keep your scooter tidy and dust-free. Use natural or mild detergent to clean the scooter.

☞ **Attention**

When conducting maintenance of your vehicle, turn the power switch to OFF and remove the charger cords

🕮 **Suggestions**

- ♦ Do not splash water directly to wash your scooter as this could lead to malfunction of the system electrics.
- ♦ Do not use petrol, solvents or vaporizing solution as these may deform or damage the shrouds.
- ♦ Do not use wax.

7.5 STORAGE

- Ensure the scooter is stored under the following conditions:
- Ensure the seat is set in the ‘forward’ position
- Ensure the scooter is switched off
- Ensure the charger is disconnected when not in use

🕮 Suggestion

Please store the scooter in a location where it is out of direct sunlight, rain, or dew. When storing for a long time, charge the battery to full power and then disconnect the battery terminal. For more details contact to your dealer.

7.6 MOVING ABOUT

- Switch off the power with the ignition key before moving. Always dismount from the scooter before moving.
- Lift the scooter by the chassis, and not by the bumpers. Lifting the scooters by the bumper could cause damage or injury.
- For your safety, always ask for help if required. You will need two people when moving or lifting the scooter whole. If you are on your own, please disassemble the scooter before lifting. Refer to the section below.

7.7 DISASSEMBLING THE SCOOTER

Both the Rio 3+ and Rio 4+ can be disassembled in to four pieces. These are the seat (weight 6kg), the front section (Rio 3+ front section weight 14.6kg, Rio 4+ front section weight 19.1kg), the rear section (weight 10.6kg), and battery pack (weight 9.8kg) without any tools. *This section is not applicable to the Rio Lite.*

The procedure for disassembly is the same for both scooters. Please follow the steps and photographs below:

1. Push the Seat Rotate Lever whilst pulling up on the seat to remove.

2. Open the battery compartment lid and lift out the battery pack

3. Loosen the tiller adjustment knob and fold down the tiller and retighten knob.

4. Lock the front wheel and tiller by pulling the wheel lock catch down.

5. Pull up the scooter using the seat post, whilst pulling the red handle behind the seat post.

6. Lift the front section up until the lower pegs are longer in contact with the curved locking brackets on the rear section.

7.8 ASSEMBLING THE SCOOTER

> 🕮 **Suggestions**
> The assembly process is essentially the disassembly process in reverse. First study the text and photographs in the disassembly procedure before re-assembling the scooter.

1. Position the front and rear sections of the Rio.
2. Align the lower curved locking brackets of the front section with the corresponding pegs on the front of the rear section.
3. Holding the lower seat post, slowly pivot the rear section forward until the curved locking brackets are fully connected on to the top rear pegs.
4. Loosen the tiller adjustment knob, raise the tiller to the desired position, and then tighten the tiller adjustment knob. Release the front wheel tiller lock.
5. Reinstall the batteries by lowering it in to place.
6. Replace the seat and rotate it until it locks in to its correct position.

> ☠ **Warning**
> After assembling the Rio, make absolutely certain the tiller adjustment knob is fully tightened.

7.9 DISASSEMBLING / ASSEMBLING THE RIO LITE

This section is only applicable to the Rio Lite. To aid transportation of the Rio Lite, the tiller can be folded down and the seat and battery pack easily removed. The weights of the components are 20.4kg (base), 9.6kg (battery pack) and 6.9kg (seat).

The procedure for disassembly is as described overleaf:

 1. Unscrew the tightening knob securing the seat base to the seat post. Lift up the seat (as shown above) to remove.	 2. Lift up the battery pack using the handle (as shown above)	 3. Loosen the tiller adjustment knob. Lower the tiller and retighten the knob to secure.	 4. Lock the front wheel and tiller by pulling the wheel lock catch down.

📖 **Suggestions**

The assembly process is essentially the disassembly process in reverse. First study the text and photographs in the disassembly procedure before re-assembling the scooter.

To assemble the Rio Lite:

1. Loosen the tiller adjustment knob, raise the tiller to the desired position, and then tighten the tiller adjustment knob. Release the front wheel tiller lock.
2. Reinsert the battery pack in to the scooter using the handle.
3. Replace the seat on the seat post. Screw the tightening knob on the seat base to secure on the seat post.

☠ **Warning**

After assembling the Rio, make absolutely certain the tiller adjustment knob is fully tightened.

8. TROUBLESHOOTING

If you have trouble with your scooter, you can inspect the following before taking your scooter to the dealer:

If you cannot solve the problem, contact your dealer for assistance.

Problem	Symptom	Remedy
Scooter will not switch on	Batteries not connected	Check batteries are connected
	Rear and front sections not connected	Check connection on front-to-rear loom (Not Rio Lite)
	Circuit breaker has tripped	Push circuit breaker button to restart
Scooter will switch on but will not run	Flat batteries	Check battery power
	Charger plugged in	Unplug charger
	Motor in freewheel mode	Re-engage the freewheel lever
Scooter appears slow	Flat batteries	Check battery power and / or recharge
	Speed setting slow	Check the speed dial is not set at low
The seat moves whilst in use	Seat not locked in position	Slowly rotate the seat until it drops in to place and is secure
The tiller appears loose	Tiller adjustment knob loose	Tighten the tiller adjustment knob
Involuntary horn sounds	There is a fault on the scooter	Ensure the wigwag paddle is released and switch the scooter on and off
		Recharge batteries

9. SPECIFICATION

Model Reference	Rio Lite
Dimension (L x W x H)	995 x 550 x 885mm 39¼" x 21¾" x 34½"
Total Weight	36.9kg / 81.2lb
Without battery	27.3kg / 60lb
Propulsion motor	270W / 0.36hp
Battery	12V 12Ah x 2
Charger	24V 2A
Front Tyre	200 x 50 solid
Rear Tyre	200 x 70 solid
Brake System	Electromagnetic brake
Driving System	Direct rear-wheel drive (with differential)

Model Reference	Rio Lite (continued)
Control Method	Wigwag paddle
Top Speed (Forward)	6.4kph / 4.0mph
Reverse	4.0kph / 2.5mph
Climbing angle	6° - 8°
Cruising range (see note)	16km / 10 miles
Min. turning radius	1200mm / 47¼"
Ground clearance	44mm / 1¾ "
Kerb climbing ability	25mm / 1"
Obstacle climbing ability	25mm / 1"
Max. load weight (including goods)	115kg / 18 stone

Model Reference	Rio 3+
Dimension (L x W x H)	950 x 470 x 870mm 37½ x 18½" x 34¼ "
Total Weight Without battery	42.3kg / 93lb 32.5kg / 71.5lb
Propulsion motor	270W / 0.36hp
Battery	12V 12Ah x 2
Charger	24V 2A
Front Tyre	200 x 50 solid
Rear Tyre	200 x 50 solid
Brake System	Electromagnetic brake
Driving System	Direct rear-wheel drive (with differential)

Model Reference	Rio 3+ (continued)
Control Method	Wigwag paddle
Top Speed (Forward)	6.4kph / 4.0mph
Reverse	4.0kph / 2.5mph
Climbing angle	6° - 8°
Cruising range (see note)	16km / 10 miles
Min. turning radius	1200mm / 47¼"
Ground clearance	44mm / 1¾"
Kerb climbing ability	25mm / 1"
Obstacle climbing ability	25mm / 1"
Max. load weight (including goods)	115kg / 18 stone

Model Reference	Rio 4+
Dimension (L x W x H)	1040 x 480 x 880mm 41" x 19" x 34½"
Total Weight Without battery	46.8kg / 103lb 37kg / 81.4lb
Propulsion motor	270W / 0.36hp
Battery	12V 12Ah x 2
Charger	24V 2A
Front Tyre	200 x 50 solid
Rear Tyre	200 x 50 solid
Brake System	Electromagnetic brake
Driving System	Direct rear-wheel drive (with differential)

Model Reference	Rio 4+ (continued)
Control Method	Wigwag paddle
Top Speed (Forward)	6.4kph / 4.0mph
Reverse	4.0kph / 2.5mph
Climbing angle	6° - 8°
Cruising range (see note)	16km / 10 miles
Min. turning radius	858mm / 33¾"
Ground clearance	44mm / 1¾"
Kerb climbing ability	25mm / 1"
Obstacle climbing ability	25mm / 1"
Max. load weight (including goods)	115kg / 18 stone

Remark: The manufacturer reserves the right to modify the specification if necessary. The final specification is subject to the individual scooter you purchase from your dealer.

Note:

Maximum driving distance is based on an ambient temperature of 20°C, a 75kg driver and a brand new fully charged battery by a constant driving speed at 6 km/h with 70% battery power discharged.

The scooter is classed as a type A vehicle as defined by EN 12184.

10. WARRANTY

10.1 VIN (SCOOTER INDENTIFICATION NUMBER)

Model	Rio Lite / Rio 3+ / Rio 4+

To ensure the correct after sales service and warranty service support, please write down the scooter serial number. The serial number is located on the CE label on battery compartment lid on the Rio 3+ and 4+. On the Rio Lite it is located on the chassis, in front of the left-hand-side rear wheel. Note down the contact details of your local Medicare service agent in the box below.

VIN			
Motor serial #		Controller #	

Medicare Technology Authorized Service Agent Details:
Name
Address
Tel
Postcode

10.2 WARRANTY CONDITIONS

There is a comprehensive twelve-month warranty from the date on which your new scooter is delivered. The warranty covers the scooter for repairs or replacement during this period. For more detail, please see the Warranty Conditions below.

Warranty Conditions:

1. Any work or replacement part installation must be carried out by an authorized Medicare Technology dealer / service agent.
2. To apply the warranty should your scooter require attention please contact the designated service agent listed below.
3. Should any part of the scooter require repair or full or part replacement, as a result of a manufacturing or material defect within twelve months of receiving the scooter, replacement parts will be supplied free of charge.
   Note: This guarantee is not transferable
4. Any repaired or replaced parts will be covered by this warranty for the balance of the warranty period on the scooter.
5. Parts replaced after the original warranty has expired will by covered by a three months warranty.
6. Consumable items supplied will not generally be covered during the normal warranty period unless such items require repair or replacement clearly as a direct result of a manufacturing or material defect.
   Such items include (among others): upholstery, tyres and batteries.
7. The above warranty conditions apply to brand new scooter purchased at the full retail price. If you are unsure whether your power chair is covered, check with the service agent.
8. Under normal circumstances, no responsibility will be accepted where the scooter has failed as a direct result of:
   a) The scooter part not having been maintained in accordance with the manufacturer's recommendations.
   b) Failure to use the manufacturer's specified parts
   c) The scooter or part having been damaged due to neglect, accident or improper use
   d) The scooter or part having been altered from the manufacturer's specifications or repairs having been attempted before the service agent is notified

Please note your local service agent's contact details in the box above. In the event of your scooter requiring attention, contact them and give all relevant details so they can act quickly.

The manufacturer reserves the right to alter without notices any weights, measurements or other technical data shown in this manual. All figures, measurements and capacities shown in this manual are approximate and do not constitute specifications.

11. ABOUT MEDICARE TECHNOLOGY

A wide range of accessories are available for the Rio range

Batteries, Scooter capes, and Scooter Alarms

As well as the above, there are a number of larger scooters and general scooter accessories available from your Medicare Technology dealer

Your Rio scooter is a **Mercury** branded product. Mercury is a brand of Medicare Technology Ltd.

Medicare Technology is a high quality ISO 9001 and EN46001 certified Medical Device Manufacturer. All Medicare Technology medical devices are CE marked.

Other products in the Medicare Technology range include **wheelchairs, powerchairs, walking aids, bathlifts, rise recline armchairs and other daily living aids.**

For more information contact:

Medicare Technology
Ainley's Industrial Estate,
Elland, West Yorkshire HX5 9JP
Tel: +44 1422 314488
Fax: +44 1422 314489
Email: enquiries@medicaretechnology.com
Web: www.medicaretechnology.co.uk








NOTES AND ADDITIONS