





# **User Manual**



# BEFORE USE YOUR NEW SCOOTER YOU AND / OR YOUR ATTENDANT MUST READ AND FULLY UNDERSTAND THIS MANUAL.

#### General information

You have just purchased a Lifeline Corporation Pte Ltd scooter and we want to thank you for the confidence in our GEM products. The scooter is a quality product.

The policy of **GEM** is to continually improve the quality and reliability of our products. We reserve the right, without prior notification, to alter this guide.

It is important that your guide for the use is read carefully. The manual contains important information about the safe use and maintenance of your scooter. We recommend that you keep this guide and you will find it useful for reference.

The safety instructions in this guide are general guidelines that must be seen as broad guidelines.

Your new scooter require frequent maintenance. Please contact Lifeline for maintenance.

#### Caution!

In this guide you will find informative comments, recommendations and warnings. These are clearly identified by the below symbols and the appearance of the text.

**₹** Tip Information.

# @ Warning:

To avoid personal injury, warnings must be followed.



# **User Manual**

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	1.1 COMPONENTS OF THE SCOOTER



#### 1 GENERAL EXPLANATION CONCERNING YOUR SCOOTER

# 1.1 Components of the scooter



1	Control panel	10	Feet deck
2	Hand grip	11	Rear wheel
3	Tiller	12	Battery pack
4	Basket	13	Seat column tube
5	Tiller adjustment knob	14	Freewheel lever
6	Front bumper	15	Seat
7	Front wheel	16	Armrest
8	Rim	17	Arm pad
9	Front shroud	18	Backrest

Your scooter is equipped with a number of elements and parts. You should know these before using. Designs and specifications may change without prior notice.



#### 1.2 General explanation of the function and possibilities of your scooter

Your GEM (Go Extra Mile) scooter is equipment with multi-functional brakes and stable wheels which roll easy. The scooter is designed to be adjusted for the user. It is important that your guide for the use is read carefully for optimal use of your scooter.

#### 2 SAFETY REGULATIONS

Lifeline Corporation Pte Ltd specifically disclaims responsibility for any body injury or property damage which may occur during any use which does not comply with laws or ordinances. If used correctly, the GEM scooter is a safe and stable product, with instructions for use as described in this manual are followed. However, it is possible when the GEM scooter is not used correctly, dangerous situations may occur.

#### 2.1 General safety regulations

Protect your GEM by checking it regularly. When a part of your GEM scooter is not functioning properly, a dangerous situation may occur.

# Warning:

You must keep your scooter in a good condition for safe usage.

#### 2.2 Warnings for safe use

# Warnings:

- → Failure to follow all the instructions in this manual may result in damage to the scooter or serious injury;
- → Always operate your scooter with thought, care and safety;
- Do not drive into curbs;
- → Never connect anything to the wheels;
- Unauthorized modification and or use of parts not supplied by Lifeline will invalidate the warranty of this scooter and may lead to injury to the user and or damage to the scooter;
- Before using your scooter, always check if the brakes are working perfectly;
- → Do not let children play with or on your scooter;
- → Do not turn your scooter suddenly at full speed;
- → All wheels must be in contact with the floor at all times during use. This will ensure the scooter is properly balanced;
- → Do not use your scooter when it is damaged or has any malfunction;
- → Do not attempt to use your scooter on an escalator. Always use an elevator;



- → Do not carry passengers under any circumstances;
- → Do not mount or dismount your scooter unless the brake is engaged;
- Always make sure that the key switch is set to "Off" before mounting or dismounting your scooter;
- → Do not drive backwards with your scooter on an incline or across an uneven surface:
- → Always make sure the seat is locked forward before operating your scooter;
- → Always come to a full stop before changing direction from forward to reverse or from reverse to forward:
- → Do not climb ramps or curbs that exceed your scooters capacity;
- → Always approach inclines straight on;
- → Always be aware of and careful near mechanical pinch points especially when assembling and disassembling your scooter;
- → Never sit on your scooter when it is being transported;
- → Always fasten down your scooter securely with an approved tie-down system while transporting your scooter;
- Always be cautious when driving on soft or uneven surfaces such as grass/ gravel and on decks where there is no railing;
- → Always cross streets at intersections and use crosswalks or the most direct route, making sure that your path is clear and visible to motor traffic;
- → Never back up or down a step or curb;
- → Never drive your scooter up or down a step or curb that is higher than 3.5 cm;
- → Never drive your scooter over a gap greater than 7.5 cm;
- → Do not drive your scooter in icy or salted conditions;
- → Never drive on the roadway, except when you have to cross the street;
- → Never operate your scooter while you are under the influence of alcohol;
- → Always check with your physician to determine if any of the medications you are taking may affect your judgment and/or your ability to operate your scooter. Also check with your physician concerning your physical ability to operate a scooter.

#### 3 INSTRUCTIONS FOR USE

Your GEM scooter is a battery-operated personal mobility vehicle. Please exercise caution and consideration when you are operating it. Driving your scooter carefully and thoughtfully will help ensure your personal safety and the safety of other people.



#### 3.1 Control panel



#### Battery indicator

The battery indicator shows the voltage of the batteries:

- → Green; the batteries are fully charged;
- → Yellow: the batteries are half loaded:
- Red; the batteries should be charged.

#### Speed adjustment dial

- With the speed adjustment dial you can adjust the minimum and maximum speed of your scooter;
- → Turn the dial counterclockwise to operate your scooter at the lowest speed level:
- → Turn the dial clockwise to increase the operational speed of your scooter;
- → We recommend that you select a speed setting at which you feel comfortable, safe, and in control of your scooter.

#### Key Switch

This switch turns the power on and off to your scooter.

- → Insert the key into the key switch.
- → Turn the key 90 degrees clockwise to turn on your scooter's power. Your scooter will beep once, the DC Voltage Meter will light up, and the needle will move to indicate that power is on.
- → Turn the key back to the vertical position to turn off your scooter's power.

#### Horn

Press this button to horn.

# Lever forward and backwards

- → Push the right lever to drive forwards / pull the left lever;
- → Push the left lever to drive backwards / pull against the right lever.



#### Brakes and throttle lever

When the throttle lever is in neutral position the electromagnetic brake will automatically release and your scooter will move. When the throttle lever is released it will return to the neutral position and the scooter will decelerate and come to a complete stop. The parking brake will prevent any further movement of your scooter.

#### 3.2 Getting on and off your scooter

#### Warning:

Always keep your weight in the middle of the deck. Positioning most or all of your weight on the edge of the deck may cause an unstable condition!

#### Before getting on your scooter

- → Check to be certain that the power is turned off. This will eliminate the possibility of accidentally activating the paddle controls and causing injury to yourself or to others;
- → Check to be certain that your scooter's brake handle is in the engaged position;
- → Flip up the armrests.

#### Getting on your scooter:

- Position the seat for safe and easy mounting;
- → Return tiller to full upright position;
- → Carefully place one foot on the approximate center of the deck and seat yourself comfortably and securely on the seat;
- → Fasten the seatbelt, if your scooter is equipped with one;
- → Flip down the armrests.

#### Getting off your scooter:

- → Make certain that the power is turned off and the key is removed;
- → Return tiller to full upright position;
- Flip up the armrests;
- Unfasten the seatbelt;
- Carefully place one foot on the ground, transfer your weight to that leg, and slowly come to a standing position;
- → Step away from the scooter.

# 3.3 Charging batteries

# Warning:

Before using new batteries for the first time you should charge them for 12 hours.



#### Batteries and charging

Your scooter is equipped with two lead acid batteries. These batteries require no maintenance other than ensuring they are properly charged.

Because your batteries may only have a partial charge when you first receive your scooter, you may not experience full riding time until you have fully charged them about 12 hours. Your scooter is equipped with an off-board charger. Charge your batteries of your scooter for 6-8 hours to extend the maximum life of your batteries:

- → We advise you to charge your batteries 6-8 hours after every use of your scooter to guarantee a longer life; provided your batteries left with about 30% of the full charge
- → Turn off the power of the scooter;
- → Slide away the cover of the battery socket at the driving position of the tiller and insert the battery charger in the socket, see photo below;
- → Put the charger into the outlet;
- → Do not switch on the battery charger until all the plugs are in position;
- → The led light of the battery will be amber while charging;
- → The led light will turn green when the batteries are fully charged;
- → If you are not going to use the scooter for more than a week, fully charge the batteries and then disconnect them from the scooter.



Charging Port 1



Charging Port 2

#### 3.4 Before driving

#### **₹** Tip

For your first driving session, make certain that your scooter starts out on a level surface and that you will continue driving on a level surface.



#### Turning your scooter on and off

- → Make sure that your scooter is in the drive position:
- → Make sure your scooter is turned off when getting off from your scooter or disassemble your scooter, see photo 2;
- → Turn the key to the right when you want to use your scooter. This will engage the power of the scooter (photo 3).



Photo 2

Photo 3

#### To get on your scooter:

- → Stand behind your scooter;
- → Make sure that the scooter is in the drive position, photo 4;
- → Make certain that the seat is positioned for safe and easy use;
- → Seat yourself on the seat;
- → Use the seat rotate lever to position the seat fully forwards and to lock the seat:
- → Fasten your seat belt, if your scooter is equipped with one;
- → Place the key into the key switch;
- → Rotate the key 90° to the right to the on position (photo 3).

#### Warning:

- → Pushing the scooter too quickly into the freewheel position (photo 4) will cause the motor to act as a generator causing the scooter to become difficult to push;
- → Never set your scooter in freewheel mode when it is on an incline;
- Never disengage the park brake while you are operating your scooter;
- → Always make certain that your scooter park brake is engaged before inserting the key into the key switch and turning it to the on position.



#### Freewheel mode

Your scooter is equipped with a freewheel mode, see photo 4.



Photo 4

# **₹** Tip

On the decal next to the freewheel lever (photo 4) the Drive position is indicated by "D" and the freewheel mode is indicated by "N".

#### Freewheel mode

→ Push the lever upwards into the freewheel mode (photo 4).

#### **Drive** position

→ Pull the freewheel lever downwards to the Drive position to activate the electromagnetic brakes of your scooter. You can now drive with your scooter and the scooter cannot be pushed (photo 4).



#### 3.5 Basic driving

- → Make certain that you are seated safely and properly on your scooter;
- → Turn the speed control knob fully counter clockwise to the slowest setting:
- → Insert the key into the key switch;
- → Turn the key counter clockwise to the "On" position;
- → Place your hands on the handgrips:
  - o Driving forward; Push the right lever / pull the left lever;
  - o Driving backwards; Push the left lever / pull the right lever;
- → Pull the throttle control lever to gently accelerate your scooter;
- → Release the throttle control lever to allow your scooter to stop gradually;
- Practice these two basic functions until you feel that you have control of your scooter.

#### 3.6 Steering

- → Place both hands on the handgrips of the tiller, turn the tiller to the right to travel right;
- → Turn the tiller to the left to travel left;
- → Make certain to maintain sufficient clearance when turning your scooter so that the rear wheels will be clear of any obstacles.

# Warning:

Turning your scooter too sharply at a high speed, can result the rear wheels to be off the ground which will cause the scooter to tip over. Avoid this at all times by decelerating and making a large curve around corners and obstacles.

# Steering in a tight spot

If you must steer in a tight spot, such as entering or leaving a doorway;

- → Bring your scooter to a full stop;
- Set speed at the lowest setting;
- → Turn the tiller to the direction in which you wish to drive.

# Steering in reverse

Please be extra careful when you are driving in reverse.

- → Push the left lever / pull the right lever;
- Turn the tiller to the left to drive left;
- → Turn the tiller to the right to drive right.



#### 3.7 Control through tight spots

Your scooter is developed to increase your mobility but you will undoubtedly encounter some obstacles that will require practice to manoeuvre smoothly and safely. Below are some common obstacles that you may encounter during the daily use of your scooter. Below are also driving tips which will help you conquer those obstacles. Study and follow these tips so that you will be in control of your scooter as you manoeuvre it through doors, up and down ramps, up and over curbs, through grass and gravel, and up and down inclines.

#### Ramps

#### When driving up a ramp, curb, or incline:

→ Lean forward to move the centre of gravity of the scooter forwards for maximum stability and safety.

#### When a ramp has a turn:

- → Make sure that the front wheels make a large curve;
- → This will make sure that the rear wheels follow in a large curve and will be free of obstacles.

#### When you will have to stop while driving up a ramp:

- → While starting up again you should pull the lever gently and steady;
- → Accelerate slowly after stopping on any incline.

# Driving down a ramp

- → Make sure that the speed setting of your scooter is the slowest speed setting;
- → When you come to a stop release the lever slowly and carefully.

#### Curbs

- → Always use curbs;
- → Do not go up or down a curb that is higher than 4 cm;
- → Always be cautious when descending a curb;
- → Approach the curb so that both back wheels of your scooter go over the curb at the same time;
- → Never go down on curbs by traversing them. Doing this will cause the scooter to tip over;
- → Go down a curb slowly to avoid a jarring bump. Use as little power as possible.

#### **Grass and Gravel**

Your scooter performs admirably on grass, gravel and hills but you must follow the operational parameters presented in this manual. If you are unsure about any situation avoid it.

- → Feel free to use your scooter on lawns or in park areas;
- Avoid long or high grass, which may wrap around your scooter's axles;
- → Avoid loose gravel.



#### 3.8 Going up an incline / down a decline

#### **Driving on inclines**

- → For maximum stability lean forward;
- Drive with caution when attempting to drive up to any incline handicap access ramps, etc...;
- → Always climb or descend an incline by driving straight up or straight down the face of the slope;
- → Do not traverse or drive across the face of an incline in any direction;
- Do not attempt to descend an incline that is covered with snow, ice, cut or wet grass, leaves, of any other potentially hazardous material;
- → Do not back down of an incline:
- Try to keep your scooter moving when climbing on an incline. If you have to stop, restart and accelerate slowly and carefully;
- → Do not try to descend or climb a slope which gradient is higher than recommended. The recommended incline gradient is 6°.

# Warning:

While you are driving down a slope and your scooter starts to move faster than you feel is safe, release the throttle control lever slowly. It will allow your scooter to decelerate. Keep the lever in the same position when you feel that you are in the control of your scooter again.

# Driving down a decline

- → Lower the speed of your scooter;
- → When it's safe to descend, drive down the decline.

# **₹** Tip

When using either of the following procedures to back down a slope, strongly advises that you have the assistance of another person.

Not recommend that you drive your scooter in reverse down any incline, ramp, curb, or low rise. Backing down any slope may create a very hazardous situation. If it is necessary to back down a slope follow one of the procedure shown.



#### Procedure 1: Under power

- → Set the key switch to the "Off position";
- → Get off of your scooter;
- → Set the key switch to the "On position";
- → While standing next to your scooter, carefully operate the controls at the lowest speed setting;
- → Slowly and carefully back your scooter down the incline;
- Step on your scooter and resume normal operation.

#### Procedure 2: Emergency (No power)

- → Set the key switch to the "Off position";
- → Get off of your scooter;
- → Put the scooter into the freewheel position;
- → While standing next to the scooter, carefully maneuver it down the slope.
- → When you have reached a level surface at the bottom of the slope, engage the scooter into the drive position;

#### Warning:

When your scooter is in freewheel mode, the park brake is released. The weight of the scooter on a slope may cause you to lose control of the scooter. If you do not feel capable of manually controlling your scooter down the slope, do not attempt to use this procedure.

#### 3.9 EMI / RFI

The rapid development of electronics, especially in the area of communications, has saturated our environment with electromagnetic (radio) waves that are emitted by television transmitters, cellular phones, citizen's band radios (CBs), amateur radios (ham radios), wireless computer left, microwave transmitters, paging transmitters, etc. These electromagnetic (EM) waves are invisible and increase in strength the closer one gets to the source of transmission. When these energy waves act upon electrical devices and cause them to malfunction or to function in an erratic or uncontrolled manner, they are referred to as Electromagnetic Interference (EMI) of Radio Frequency Interference (RFI).

#### EMI / RFI and your scooter

All electrically powered vehicles, including scooters are susceptible to Electromagnetic Interference / Radio Frequency Interference (EMI / RFI). This interference could result in abnormal, unintended movement of your scooter.



#### Warning:

Unintended movement or brake release could cause an accident or injury.

The FDA has determined that each make and model of scooter can resist EMI/ RFI to a certain level. The higher the lever of resistance, the greater the degree of protection from EMI/ RFI - measured in volts per meter (V/m). The FDA has also determined that current technology is capable of providing 20 V/m of resistance to EMI/ RFI, which would provide useful protection against common sources of interference. This product has been tested and has passed an immunity lever of 20 V/m.

#### EMI / RFI recommendations

- → Do not turn on or use hand-held personal electronic communication devices such as cellular phones, walkie-talkies, and CB radios while your scooter is turned on;
- → Be aware of any nearby transmitters (radio, television, microwave, etc.) on your intended route and avoid operating your scooter close to any of those transmitters;
- → Turn off the power if your scooter is going to be in a stationary position for any length of time;
- → Be aware that adding accessories or components or modifying your scooter may make it more susceptible to EMI/ RFI;

# Warning:

Turn off your scooter as soon as it is safely possible if unintended or uncontrollable motion occurs or if unintended park brake release occurs.



# MAKING ADJUSTMENTS TO YOUR SCOOTER CAN CAUSE BIG RISKS FOR YOUR SAFETY AND THE FUNCTION OF YOUR SCOOTER. ADJUSTMENTS MADE BY YOURSELF ARE STRONGLY ADVISED AGAINST AND CARRIED OUT AT YOUR OWN RISK.

#### 4 INSTRUCTIONS FOR USE AND MOUNTING OPTIONS

#### 4.1 Technical information

Weight Capacity	300lbs(136kg)
Drive Wheels	rear
Maximum Speed	5mph (8kph)
Operating Range	9/15miles (15/25k
Ground Clearance to Center Deck	3"
Ground Clearance to Transaxle/Motor	1.7"
Turning Radius	54"
Climbing Angle	6 degree
Type Batteries	2-12ah / 2-21ah
Freewheel Mode	Yes
Electronic Speed Control	Yes
Electro-Mechanical Brakes	Yes
Charger	2A,off board
Controller	45Amp
Dimensions:	
Length	40"
Width	20"
Number of seat Height Positions	3
Size of Increments	1"
Tires:	Solid, low profile
Front	7.5" x 2"
Rear	8.5" X 3"
Casters	N/A
Rear Anti-tippers	2''
Standard Seat:	Stadium Style
Width x Depth	17''×16''
Floor to Seat Height	19" - 21"
Color	Black / Grey
Total Weight of Scooter	105 lbs (47.5kg)
Weight of Seat	17 lbs (7.7 kg)
Weight of Heaviest Part	40 lbs (18 kg)

<sup>\*</sup> Note: operating range is measured under ideal conditions. Weather conditions, surfaces, battery type and user weight can affect the operating range.



# 4.2 Armrest adjustments

#### Armrest width adjustment

To adjust the armrest width:

- → Loosen the adjustment knob at the back of the seat (photo 5);
- → Slide the armrest in or out to the desired width;
- → Tighten the adjustment knob.



Photo 5

# Flip-up the armrest

Place your hand on the end of the armrest and pull it upwards (photo 6) to flip it up for easy transfer.



Photo 6



# 4.3 Seat adjustments

#### Seat rotation lever

The seat turning lever (at the bottom of the seat) allows the seat to rotate from  $45^{\circ}$  till  $360^{\circ}$ .

- Pull the seat rotation lever upward (photo 7) and rotate the seat to the desired position;
- → Release the handle to lock the seat.



Photo 7

#### 4.4 Tiller

#### Adjusting the position of the tiller

You can adjust the position of the tiller:

- → Hold the tiller with one hand. Loosen the knob with the other hand, photo 8;
- → Place the tiller in the desired position;
- → Retighten the knob to lock the tiller in this position;
- Check if the tiller is correctly locked by moving it back and forward. If it doesn't move, it is correctly locked.



Photo 8



#### 4.5 Disassemble

#### Warning:

Remove the key from the key switch before you disassemble your scooter!

#### Remove the seat

You can disassemble the seat of the scooter.

- First remove the armrests of the seat to decrease the weight of the seat; →
- → Fold down the backrest, photo 9:
- **→** Stand behind the scooter and pull the seat swivel level upward direction then grab the seat with both hands;
- **→** Pull the seat straight up from the scooter, photo 10.



Photo 9



Photo 10

#### Disassemble the battery pack

You should remove the battery pack when you have to charge the batteries or when you won't use the scooter for more than a week;

Grab the handle on top of the battery pack and pull the battery pack upwards, photo 11.

# Removing the basket

- Stand in front of your scooter;
- Grab the basket with both hands, photo 12;
- Move the basket upwards towards yourself.







#### Folding down the tiller

- → Loosen the knob of the tiller;
- → Fold the tiller completely down;
- → Retighten the knob to lock the tiller.

#### Separating the front frame from the rear frame

- → Pull the lever upward that will disassemble the front and rear frame (photo 13);
- → Pull the front frame upwards to disassemble it from the rear frame (photo 14).





13 Photo 14

#### 4.6 Assembly

# Warning:

Make sure while assembling, that body parts won't get stuck between parts of your scooter!

# Replace the seat

Make sure that the seat is straight above the seat post when you replace the seat of your scooter. If the seat isn't straight on the seat post, you can't lock the seat correctly.

# Warning:

Always make sure the seat is correctly locked before you sit on it!

# Replacing the battery pack

- → Grab the handle on top of the battery pack;
- → Replace the battery pack on your scooter.



#### Replacing the basket

- Stand in front of your scooter;
- → Grab the basket with both hands;
- → Place the basket into the receiving brackets.

#### Putting the tiller back up

- → Loosen the knob of the tiller;
- → Move the tiller in to the desired position;
- → Retighten the knob to lock the tiller.

#### 5 TRANSPORTING YOUR SCOOTER

You can transport your GEM scooter in every car with an approved transport system.

- → Disassemble the seat and fold down the tiller (this depends on the loading area of the vehicle which is used for transporting your scooter).
- → Do not lift your scooter by its plastic body parts or dashboard. Breakage of these parts is not covered by the warranty.
- → Do not lift the tires to lift the rear frame. The tires may rotate and cause injury or damage.

#### Warning:

Never sit on your scooter when it is being transported.

#### 6 CARE AND MAINTAINANCE

#### Routine maintenance

The GEM scooter is practically maintenance free. All of the bearings on your scooter are permanently lubricated and sealed. No additional lubrication is required however there are several things that you can do to help keep up the appearance and maintain the performance of your scooter.

#### Cleaning your scooter

#### Tires

Clean the tires with ordinary kitchen-type cleaners and a damp cloth. Do not use solvents on the tires. Solvents can cause the tire material to break down or become too soft.

#### Body

- Clean the body of your scooter with a damp cloth. Do not hose down your scooter! Dry with a clean soft cloth;
- → Use cool water mixed with a mild soap to remove dirt and oils;
- → Clean by hand with a soft cloth.



#### Vinyl seat

Clean with a mild soap or mild detergent and a damp cloth. A vinyl cleaner may also be used.

# Warning:

Using new batteries for the first time you should charge them for 12 hours.

Your batteries may only have a partial charge when you first receive your scooter, you may not experience full riding time until you have fully charged them. Your scooter is equipped with either an off-board charger. To ensure maximum life charge your batteries as described below:

- → Turn off the power of the scooter;
- Slide away the cover of the battery socket at the driving position of the tiller and insert the battery charger in the socket;
- → Put the charger into the outlet;
- → Do not switch on the battery charger until all the plugs are in position;
- → The led light of the battery will be amber while charging;
- → The led light will turn green when the batteries are fully charged;
- → When you are not using the scooter for more than a week, fully charge the batteries and then disconnect them from the scooter.

