

Instruction Booklet





Product Code: MS01077

Table of Contents

Introduction	2
Important Precautions	3
Identification of Parts	4
Charging the Batteries	8
Disassembling your Scooter	9
Troubleshooting	10
Caution	11
Safety Information on Electromagnetic Interference (EMI)	12
Specifications	14
Warranty	15

Thank you and congratulations on purchasing your new Abilize Mobility Scooter.

It is designed to provide you with transportation ability indoors and outdoors.

We pride ourselves on providing safe and comfortable products. Our goal is to ensure your complete satisfaction. We sincerely hope you enjoy your Abilize Mobility Scooter.

Please read and observe all warnings and instructions provided in owner's manual before you operate the various functions of this scooter. Also, please retain this booklet for future reference.

IF YOU HAVE ANY QUESTIONS, YOU CAN CONTACT:

UK Authorised Dealer

CareCo UK Ltd Hubert Road Brentwood Essex CM14 4JE

Tel: (+44) 01277 237001

Email: CS@careco.co.uk

Information of European Representation

EMERGO EUROPE Prinsessegracht 20 2514 AP, The Hague The Netherlands

- Only one person at a time can ride the Scooter.
- Maximum load is 181KG / 400 lbs.
- Turn key off before getting on or off.
- Always drive carefully and be aware of others using the same area.
- Always use pedestrian crossings wherever possible. Take extreme care when crossing roads.
- Do not drive on slope exceeding 9 degrees, and take extreme care when turning on a slope.
- Do not use full power when turning on a sharp corner.
- Take great care and drive in a low speed when reversing, riding downhill or on an uneven surface, and climbing curbs.
- Please use the lowest speed when driving through a descending road or uneven terrain. If speed is too fast, leave your hands off the handle bar and let the scooter stop. Make sure you are safe and start again.
- The weight capacity limit can be different depending on ramp degree.
- A slow speed must always be used when ascending, descending or traversing a slope or incline and also on uneven terrain, ramps and soft or loose surfaces, such as gravel or grass.
- To prevent any danger, do not turn around at high speed while ascending or descending a ramp.
- Scooter may not operate well in high humidity.
- Do not leave the powered scooter in a rain storm of any kind.
- Direct exposure to rain or dampness will cause the scooter to malfunction electrically and mechanically; may cause the powered scooter to prematurely rust.
- Never put scooter in neutral when driving on slopes.
- Follow traffic laws when riding outside.
- Do not sit on the scooter if taking on moving transport vehicles such as trains.

Before attempting to drive this scooter on your own, it is important that you familiarise yourself with the controls and how to operate them.



Figure 1 - Front View

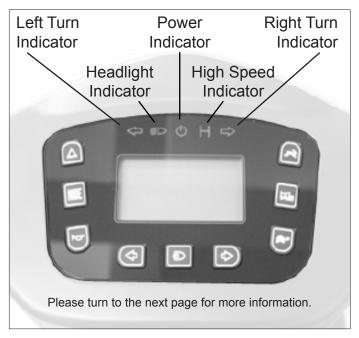


Figure 2 - Top Control Panel



Figure 3 - Back View

Function of parts:

Main key switch (A)

- Turn the key to the right to turn the scooter on.
- Turn the key to the left to turn the scooter off.

CAUTION: Always ensure that the scooter is switched off before getting on or off the scooter and before removing any items from the scooter.

CAUTION: Turning the scooter OFF whilst driving will bring the scooter to an abrupt stop.

Top Control Panel Symbols and meanings:



- Hazard light (B): Switch on by pressing once, and off by pressing a second time. When you press once the right and left lights and parking indicator will start to flash, and warning tones will sound. The hazard lights will continue to flash even of the key is switched off. The only way to stop the lights and sound is to press the hazard button a second time.



- Change mode by pressing once (C):



- Clock

Speedometer



- ODO

. Temperature



- Trip Meter



- Press the horn button (D) once to sound warning tone when necessary.



- 'Left Turn Signal (E): Press the Left Indicator button once to activate the front and rear indicators and warning sounds. Press the button a second time to switch the indicators off.'



- 'Right Turn Signal (G): Press the Right Indicator button once to activate the front and rear indicators and warning sounds. Press the button a second time to switch the indicators off.'



- 'Headlight (F): Press headlight button once to switch on and a second time to switch off.'



- 'Acceleration (H): Press acceleration button once to increase speed - option of 5 speeds available.'



- 'Deceleration (J): Press deceleration button once to decrease speed - option of 5 speeds available.'



- 'Hi/Lo Button (I): Press H/L Speed button once and the high/low speed indicator light will come on which means you are driving in high speed mode. Press a second time and the light will go out which means you are driving in low speed mode. (Hi/Lo speed will vary depending on your current speed settings).'





Tiller Storage Compartment (K):

Provides you spacious room for storage.

Hand Brake (L). Hold brake (L), when immediate stop is required.

CAUTION: If you have to brake in an emergency, simply release the Throttle and hold the hand brake which will bring you to a halt!

Wigwag Lever Operation:

Pull the left-hand drive lever (M) carefully to travel forwards.

Pull the right-hand drive lever (N) carefully to travel in reverse.

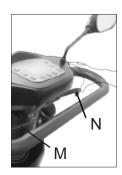
(This can be reversed if required by local dealer.) Releasing both, engages automatic brake. These are also your accelerators - The further you depress them, the faster you go. (Subject to the position of the Rabbit / Turtle control).

CAUTION: Keep LCD display panel and Wigwag Lever dry. If panel and Wigwag Lever get wet, allow to dry out before using.

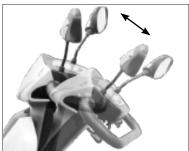
Steering Adjustment:

Press angle adjustment (N) down to achieve a comfortable steering angle.

CAUTION: Do not make adjustments whilst driving. Ensure steering is at optimum angle before and after use.







Seat Adjustment (P):

Pull the Seat Adjustment Lever (Q) to disengage the seat (P). Slide the seat forwards or backwards into the required position. Let go of the lever (Q) again to lock the seat into its required position.

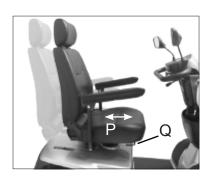
CAUTION: Seat position should be set as far forward as is comfortable to prevent the scooter tipping over.

CAUTION: Once on the scooter, sit firmly on the seat, do not stand on the foot rest as this could cause the scooter to tip over causing damage.

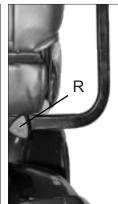
Angle Armrest Adjustment (R):

Pull the lever (S) and adjust the armrest to the required angle.

CAUTION: Pull the armrest up when getting on or off the scooter. Do not hang heavy items on the armrests as this could cause the scooter to tip over. Basket assembling and disassembling:







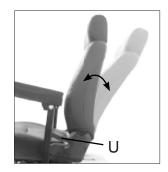
Seat Swivel Adjustment:

Pull the lever (T) upwards to disengage and rotate seat (P) to required angle, Let go of the lever (T) to lock the seat into its required position.

Seat Back Angle Adjustment:

Pull the lever (U) upwards to adjust Pull the lever (U) upwards to adjust backrest's angle, then release the lever when adjusted to required position, then release the lever when adjusted to required position.





CAUTION: For safety reasons the backrest's position must remain vertical before driving.

Seat Height Adjustment:

- 1. Remove seat (P) and rear shroud (Z).
- 2. Remove screw, nut and washer from seat post (V).
- 3. Adjust seat post (V) to desired height, and attached tightly with screw, nut and washers.
- 4. Then assemble the rear shroud (Z), seat (P) back to its original position.

Seat Electrical Lifter (Optional):

1. Press seat lifter button lightly (W) to raise the seat. Press lightly, to lower the seat.

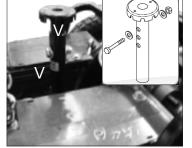
CAUTION:

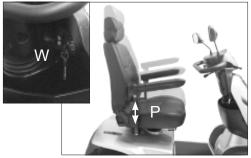
- Do not operate this function on a slope, or in motion or under unstable condition.
- The main purpose of this function is to assist you to reach certain height.
- Seat's position must remain at the lowest before driving.
- Do not set N-D lever at N, before setting the seat at lowest position.

 Please keep the center of gravity of the scooter in the middle, to prevent the scooter tipping over.

N-D Lever Adjustment:

When scooter has stopped or is experiencing problems, press the unlocking knob on the N-D lever (X). Push the N-D lever forwards this will allow you to push the scooter by hand.





CAUTION: Freewheel operation is only recommended on flat surfaces, never on slopes.

Never leave your scooter on a slope with its engine switched off. Always switch the engine on immediately after pushing the scooter.

CAUTION: The scooter won't operate if it is set at (N) position, to restore to it's normal status, you must switch the power off and adjust to (D) position, then switch the power on.

Proportion Speed Reduction:

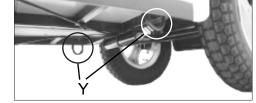
- 1. The scooter is equipped with proportional speed reduction. It will automatically reduce speed when encountering a corner, reducing speed corresponding to the angle of turn.
- 2. For safety reasons, when pushing the scooter by hand, if the pre-determined speed is exceeded, the controller automatically switches on and brakes the scooter.

CAUTION: Avoid shifting your center of gravity as well as abrupt changes of direction when the scooter is in motion.

CAUTION: Reduce speed before negotiating corners! Only accelerate when you have finished turning the corner!

Tie-Down Hook:

To enable you to transport your scooter safely and securely there are 2 additional tie down hooks located on the underside of the scooter.

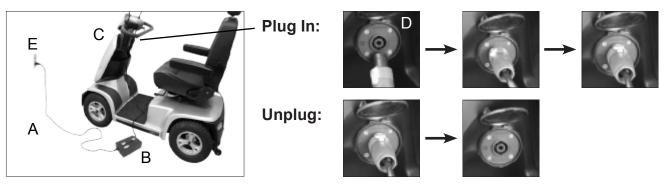


CAUTION: When fixed on a transportation system, N-D lever (X) must located at D position. The scooter must not be occupied or used as a seat on a moving vehicle whilst being transported.

Charging the Battieries:

Batteries must be charged before using the scooter for the first time and should be recharged after each days use.

CAUTION: Each country may supply different charger. The charging procedure may be different from below. If you require more details, please contact your authorized dealer. Be sure the scooter key is in the OFF position before charging.



Operating Instruction:

- 1. Always ensure the battery charger output voltage is the same as the connecting battery.
- 2. Plug in the power cord.
- 3. Connect the battery charger to the battery.
- 4. Start charging refer to charge levels indicated below.

Indicator:

1. Green Flash: Power On

2. Orange Flash: Pre-Charge

3. Orange: Charging

4. Green & Orange Flash: Charged 80%

5. Green: Full Charge

6. Red Flash: Defect

Troubleshooting:

- 1. If green indicator is off:
 - Check AC input. If it works normally, the battery charger may be defective.
- 2. If green indicator keeps flashing, and won't give charging indication:
 - · Check if the battery is connected correctly.
 - Check if the output connection is short or open.
 - If the battery connection is correct, the battery charger may be defective.
- 3. If red indicator keeps flashing:
 - Check if the battery connection is reversed.
 - Check if the output connection is short or open.
 - Check if the environment temperature is too low (0oC)
 - If the red indicator still keeps flashing, the battery charger may be defective.
- 4. Charging indicator (orange) can't turn to green:
 - The battery may be defective please stop charging and have the battery replaced.
- 5. If the charging indicator (orange) turns green (fully charged) immediately:
 - The battery may be in fully charged condition.
 - If the battery is not fully charged, the battery may be defective.

CAUTION: The time required to recharge will vary depending on the depletion of the batteries (75ah Battery Approx. 12 hours). Charging for longer than necessary will not harm the batteries. They can not be overcharged.

CAUTION:

- 1. Before using the battery charger, read all instructions and cautionary markings.
- 2. Use the battery charger in a well-ventilated area.
- 3. To avoid the risk of injury, charge only lead-acid or gel cell type rechargeable batteries.
- 4. Please turn off the power after charging.

Disassembling your Scooter

Seat (P) Disassembling:

Pull the lever (T) upwards to disengage the seat (P), hold the seat (P) firmly by the backrest and front edge and remove it upwards from the scooter.

CAUTION: If the seat is difficult to remove, hold seat swivel lever (R), and then rotate the seat to reduce resistance then pull up. Proceed with caution, if you need assistance, please have some one to help you.

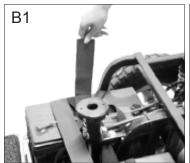
Rear Shroud (Z) and Batteries (C1) Disassembling:

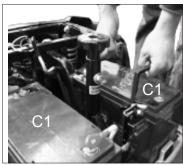
- 1. Remove rear shroud (Z) upwards.
- 2. Unplug one battery connector (A1).
- 3. Release Velcro (B1).
- 4. Remove two batteries (C1).





CAUTION: Take into account the heavy weight of the batteries (C1) please consider your physical condition before disassembling. DO NOT short-circuit battery connector (C1). The red wire on the battery connects to the red positive location, and the black wire to the black negative location. For safety, please wash your hands after disassembly.





Resetting the Circuit Breaker:

You may need to reset the circuit breaker if the scooter does not turn on. The circuit breaker will trip if the scooter's circuit is overloaded.

- 1. To reset, press the circuit breaker button (D1) upwards.
- 2. Reassemble the rear shroud (Z).
- Reassemble the seat.

CAUTION: If the circuit breaker trips repeatedly, IMMEDIATELY unplug charger and contact dealer or a qualified technician.

CAUTION: NEVER defeat or bypass the circuit breaker. ONLY replace with a circuit breaker of the same rating.

Obstacle climbing:

- Your scooter can climb obstacles and curbs of up to 60mm / 2.3" in height. Never attempt to overcome an obstacle when on an uphill or downhill gradient!
- Always approach obstacles straight on! Ensure that the front wheels and rear wheels move over the obstacle in one stroke, do not stop halfway!
- The maximum gap the scooter can drive over is 220mm / 8.6".
- When driving scooter on a ramp, adjust body centre of gravity accordingly.

Other information:

- In the unlikely event of panel display error, you will need to re-set the display system by turning the on/off main switch. The display circuit is separate from the motor control system. A display console error does not effect the scooter speed control.
- Charge the batteries after each trip. If the scooter is not used for some time, batteries may lose their charge. Batteries should be charged at least once a month.
- Check the battery gauge before driving to prevent power depletion.
- Do not disassemble the battery or open sealed parts by yourself to prevent electric shock and burns from acid leakage.
- Adjust speed to a slow setting when starting off to prevent sudden acceleration.
- Never attempt to drive downhill backwards.
- Try not to drive scooter at night or in rain or bad weather.
- If storing your scooter for a long time (1 month or more), make sure that batteries are fully charged, then disconnect the plugs, and store the scooter in a dry location.





Function Buttons and Indicators:

1. Control Buttons - Hazard Light, Horn, Right Indicator, Headlight, Left Indicator, Turtle(decelerate), H/L Speed, Rabbit(accelerate).

2. LED Indicators - Status Indicator (Green), Headlight Indicator (Green), Left / Right Indicators (Green), High/Low Speed Indicator (Green).

O D O H

~

HT.

SPD ODO TRIP

HOLE

3. Connector - 20PIN.

4. LCD Back Light - Blue LEDs illuminate while key on.

Function Descriptions:

- 5. Full Lighting Control Headlight, Tail light, Left/Right Indicator, Hazard Light, Brake Light.
- 6. Speedometer 7 Segment display (2 1/2 digits + 1 decimal) "km/h" and "mph" symbol.
- 7. Digital High / Low Speed Control Low (L) Speed: 1 5 Rate, High (H) Speed: 1 5 Rate.
- **8. Power Indicator** Battery charging indicator (6 segments).
- 9. Malfunction Messages Error code: 1-7 (1 digit) + LED Indicator.
- 10. Key On Display LCD full segments display.

11. Warning Tone Setup - Volume adjustment for tones of Left/Right Indicator, Parking light, Low voltage warning and horn.

Clock:

- 1. Timekeeping error per day + 2 seconds.
- 2. Initial Display Hour, Minute, Mode: AM 12:00.
- Time Format (12 hours AM/PM) Press 'Mode' button and switch to clock mode. Display range: AM12:00 - PM11:59.
 HH display: The "0 of ten's digit is invisible from 1 0'clock to 9 o'clock.
- 4. Setup Mode (Time Adjustment) Press + together for 3 seconds to enter setup mode.

While 'HH' is flashing, press to increase digits and to decrease digits. Press 'Mode' to enter 'MM' setup mode when finished. (The same rule applies if 'MM' is flashing).

Press () once to increase (decrease) one digit. The digits can increase (decrease) accumulating when you press the buttons for more than 2 seconds. The display is cycling. It takes 2 seconds to increase from 0 to 9 for each position.

- 5. Quit Setup Mode The user could quit the setup mode with the following conditions.
 - (1) Leave ≉ or w buttons alone for 15 seconds.
 - (2) Press any button of Parking light, Horn, Indicator or Headlight, the definitive settings will be stored and return to normal clock mode.

Thermometer:

- **1. Operation Feature** Use thermistor (NTC) to detect the signal and transfers to related temperature.
- 2. Display Errors + 2°C

Operational Mode of Thermometer -

Press 'Mode' button and switch to thermometer mode. Display range: Centigrade -20 - 50°C or Fahrenheit -4 - 122°F.



- 3. Setup Mode (Unit Change) Press → + ★ together for 3 seconds to enter setup mode. While '°C' / '°F' is flashing, press → or ★ to switch to '°F' / '°C'.
- 4. Quit Setup Mode The user could quit the setup mode with the following conditions.
 - (1) Leave → or ► buttons alone for 15 seconds.
 - (2) Press any button of Parking light, Horn, Indicator or Headlight, the definitive settings will be stored and return to normal thermometer mode.

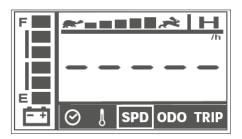
Speedometer:

- **1. Operation Feature** Use optical coupler to detect the signal and transfer to related speed. Speed displays 60km/h while it's on 1500 rpm.
- 2. **Display Errors -** +15~20%.
- 3. Display Range / Operational Mode of Speedometer 0.0 ~ 30.0, display resolution: 0.5
 Press 'Mode' button and switch to speedometer.

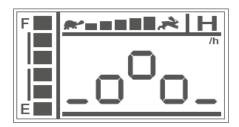


When "km/h" is displayed, speed will be indicated in km per hour. When "MPH" is displayed, speed will be indicated in miles per hour. When "/h" is displayed, the function of speedometer will be disable. (This display will be applied to the model that is not equipped with optical coupler) And the display will be replaced to WIP (accelerator) operation indicator as follows:

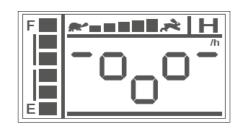
Standby Indication



Forward Indication



Backward Indication



4. Setup Mode (Unit Change) - Press → + ★ together for 3 seconds to enter setup mode. While 'km/h' / 'MPH' is flashing, press → or ★ to switch to 'MPH' / 'km/h'.

The user could quit the setup mode with the following conditions.

- (1) Leave → or ► buttons alone for 15 seconds.
- (2) Press any button of Parking light, Horn, Indicator or Headlight, the definitive settings will be stored and return to normal speedometer mode.

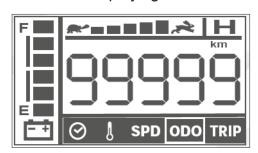
Odometer:

- 1. Operation Feature Use optical coupler to detect the signal and transfer to related distances.
- **2. Unit Switch -** When speedometer was set as 'km/h', the odometer displays as kilometer. 'mph', the odometer displays as mile. '/h', means the odometer is displaying as travel hours.
- 3. ODO Mode -

Press 'Mode' button and switch to ODO mode. Display range: 0~99999
When the total distance goes to 99999km or 62149mile (99999÷1.609mile), the digits will be reset to zero "0".

TRIP Mode:

1. Operation Feature - Press 'Mode' button and switch to 'TRIP' mode. Display range: 0.0~999.9 When the distance goes to 999.9, the counter will stop.





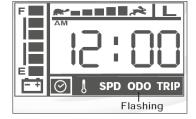
- 2. Reset Mode (Rest TRIP to Zero) Press → + ★ together for 3 seconds to enter setup mode. While 'TRIP' is flashing, press 'Mode' for 3 seconds to reset to zero '0.0'.
- 3. Quit Setup Mode The user could quit the setup mode with the following conditions.
 - (1) Leave → or ► buttons alone for 15 seconds.
 - (2) Press any button of Parking light, Horn, Indicator or Headlight, the definitive settings will be stored and return to normal TRIP mode.

Notice to Routine Maintenance for certain mileage

1. Display I for Routine Maintenance - The initial mileage of routine maintenance is 5000km Display: When it reaches the mileage for routine maintenance, ODO symbol will start to flash for 1 minute.

Time to display:

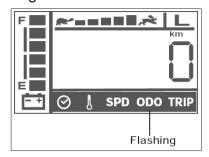
During flashing, the mobility vehicle could be driven normally and the control panel could be operated without any delay.



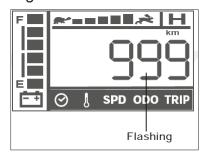
- **2. Display II for Routine Maintenance -** After the routine maintenance is finished, the user could setup the mileage for next maintenance. (Count down setting) Setup steps:
 - 1. Press 'Mode' button and switch to ODO mode.
 - 2. Key off to shut down the controller.
 - 3. Press 'Mode' and 'H/L' buttons together.
 - 4. Key on to start the controller.
 - 5. The display will enter setup mode in 2 seconds, the mileage will be flashing. (Note 1)
 - 6. Press → or → button to adjust to the mileage for next maintenance. (Note 2)
 - 7. After setup is finished, press any button of the Parking light, Horn, Indicator or Headlight, the definitive settings will be stored and return to normal working mode.
 - 8. The display will quit to normal working mode if the user does not press the button within 10 seconds.

Note 1: Setup mode.

The mileage counts down to 0km.



The mileage does not count down to 0km.



Note 2:

Press representation of adjust to the mileage for next maintenance.

Press \Rightarrow to increase the mileage:

1000 - 2000 - 3000 - 4000 - 5000 - OFF - 1000. (Displays in cycling).

Press ****** to decrease the mileage:

OFF - 5000 - 4000 - 3000 - 2000 - 1000 - OFF. (Displays in cycling).

Digital High/Low Speed Control

- 1. Operation Failure Press 'H/L Speed' button to switch High/Low speed. Press → or ► to fine tune in 5 speeds.
- Control Mode Press 'H/L Speed' button once, the High/Low Speed Indicator (labelled H) will light on. Press again, the indicator light will turn off.

Press button to increase the speed.

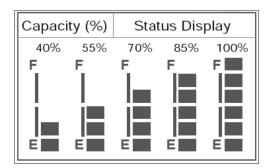
Press button to decrease the speed.

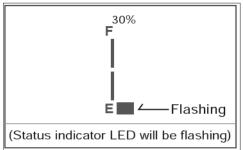
3. Usage Condition - While (1) controller shut down (2) in charging-mode, the function will be disabled.

Speed Display		H [%] (Max)	
*= *		20	10
*== *	ř	40	20
*=== *		60	30
*==== *		80	40
~====A		100	50

Power Indicator

1. Discharge Capacity:

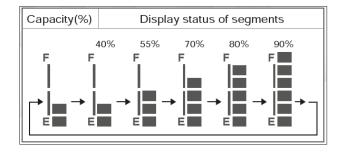


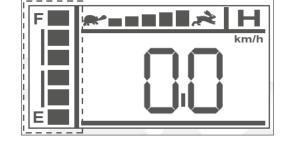


- 2. Operation Characters The segments will not increase, only decrease.
- **3.** Low Voltage Warning Tone When the battery capacity is lower than 30%, the warning tone will sound with 3 short double beeps.
- **4. Flicker Frequency -** Once per two seconds.
- **5. Usage Condition -** While (1) controller shut down (2) is in charging-mode, the function will be disabled.

Charge Status

- **1. Charge Status -** The charging status displays with cycling segments.
- 2. Charging Indicating:





displays with 6 segments

- 3. Increasing Ratio 0.5 sound.
- 4. Operation Feature -
 - (1) The segments will only increase, not decrease.
 - (2) Take PIN3 (CH3) of charger as determinant signal. Whether the key is switched on or not, the charging mode will be activated once CH3 is connected to Ground (L).
 - (3) The LCD back light will be ON while any button is pressed. It will light off automatically in 5 seconds if no button has been pressed.
- **5. Remarks** Displayed segments are for reference only. Please refer to indicator of charger for more accurate charging status.

Malfunction Messages

- **1. Operation Feature -** Take the connector pin (KEY) of controller as determinant signal, then converts it into digital codes.
- 2. Usage Condition When the controller sends out an error message, () (LED) starts flashing and will display the 'Error message code' as follows:

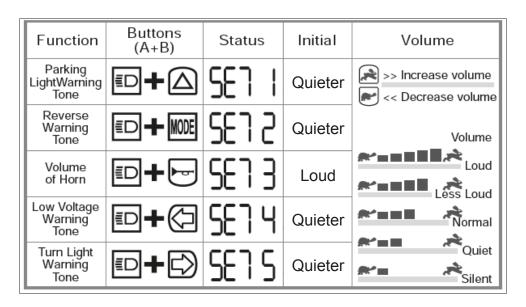
() flashing	LCD code	Status	
1	Err 1	Battery needs charging soon.	
2	Err 2	Low voltage, needs charging now	
3	Err 3	Over voltage	
4	Err 4	Over current	
5	Err S	Park Brake is lost or faulty	
6	Err 6	Accelerator Others	
7	Err 7	Accelerator is broken or faulty	
8	Err 8	Motor is broken or faulty	
9	Err 9	Others	

Key On Display

1. Intial Status - When scooter power is on, the back light and all LCD segments will be tuned on for 3 seconds, then switch to the default working mode automatically.

Warning Tone Setup

 Operation Feature - The volume of warning tones of Parking light, Reverse, Horn, Low voltage and Indicator could be adjusted or turned off. (except you cannot turn off the Horn)



Flash	Description	Meaning
1	Battery low or low battery fault	The batteries are running low. Recharge the batteries for a minimum of 12 hours.
2	High battery fault	 Battery voltage is too high. This may occur if overcharged &/or travelling down a long slope. If travelling down a slope, reduce your speed to minimise the amount of regenerative charging. Check the battery and associated connections and wiring.
3	Current limit time-out	 The motor has been exceeding its maximum current rating for too long. This may be due to a faulty motor. Check the motor and associated connections and wiring. Turn the controller off, leave for a few minutes and turn back on again.
4	Park brake fluid	 Either a park brake release switch is active or the park brake is faulty. Check the park brake and associated connections and wiring. Ensure any associated switches are in their correct positions.
5	Throttle OONAPU	 The throttle is out of neutral when turning the controller on. Ensure the throttle is in neutral when turning the controller on. The throttle may require re-calibration.
6	Speed pot fault	 The throttle, speed limit pot or their associated wiring may be faulty. Check the throttle and speed pot and associated connections and wiring.
7	Motor voltage fault	 The motor or its associated wiring is faulty. Check the motor and associated connections and wiring.
8	Other error	The controller may have an internal fault. • Check all connections & wiring.

Further issues:

If the above troubleshooting does not help to resolve the issue please contact the authorised dealer (page 2). Please have your serial no. to hand to provide to the authorised dealer, which can be found on the battery pack.



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

Powered wheelchairs and motorised scooters may be susceptible to electromagnetic interference (EMI), which is interfering electromagnetic energy (EM) emitted from sources such a radio stations, TV stations, amateur radio (HAM) transmitters, two-way radios, and mobile phones. The interference (from radio wave sources) can cause the motorised scooter to release its brakes, move by itself, or move in unintended directions. It can also permanently damage the motorised scooter control system. The intensity of the interfering EM energy can be measured in volts per meter (V/m). Each motorised scooter can resist EMI up to 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 immunity level of this motorised scooter model is 20 V/m.

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 warnings listed below, your risk to EMI will be minimised.

The sources of radiated EMI can be broadly classified into three types:

 Hand-held portable transceivers (transmitters-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;

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

- 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 vehicle; and
- Long-range transmitters and transceivers such as commercial broadcast transmitters (radio and TV broadcast antenna towers) and amateur (HAM) radios.

CAUTION: Other types of hand-held devices, such as cordless phones, laptop computers, AM/FM radios, TV sets, CD 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 motorised scooter.

Motorised scooter electromagnetic interference:

Because EM energy rapidly becomes more intense as one move 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 motorised scooter control system while using these devices. This can affect motorised scooter movement and braking. Therefore, the warnings listed below are recommended to prevent possible interference with the control system of the motorised scooter.

Warnings:

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

- Do not operate hand-held transceivers (transmitters-receivers), such as citizens band (CB) radios, or turn ON personal communication devices, such as mobile phones, while the motorised scooter is turned ON;
- Be aware of nearby transmitters, such as radio or TV stations, and try to avoid coming close to them;
- If unintended movement or brake release occurs, turn the motorised scooter OFF as soon as it is safe;
- Be aware that adding accessories or components, or modifying the motorised scooter, may
 make it more susceptible to EMI; and

CAUTION: There is no easy way to evaluate their effect on the overall immunity of the motorized scooter.

 Report all incidents of unintended movement or brake release to the distributor listed on the inside front cover of this manual. Note whether there is a source of EMI nearby.

Important information:

- 20 volts per meter (V/m) is a generally achievable and useful immunity level against EMI (as of May 1994). The higher the level, the greater the protection.
- The immunity level of this product is 20 V/m.

Specification		
Overall length	1600 mm / 63"	
Overall width	720 mm / 28.3"	
Overall height	1280 mm / 50"	
Front wheels	380 mm / 15"	
Rear wheels	380 mm / 15"	
Weight w/batteries	157 kg / 346 lbs	
Suspension	Front & Rear	
Max. speed	12.8 kmph / 8 mph	
Weight capacity	181 kg / 400 lbs	
Ground clearance	110 mm / 4.3"	
Grade climbable	9 degrees	
Curb climbable	60 mm / 2.4"	
Turning radius	1860 mm / 73.2"	
Brake	Hand Brake & Electro-mechanical	
Seat type	Swivel Captain Seat With Seat Sliding Mechanism & Back Angle Adjustment	
Seat width	520 mm / 20.5"	
Motor size	800W, 3650 r.p.m.	
Battery size	(2) 12V. 75Ah	
Battery weight	24.4 kg / 53.8 lbs	
Travel range	35 km / 21.7 Miles	
Battery charger	8A Off Board	
Electronics	On / Off Key Switch, Battery Level Indicator, Speed Control Button	

^{*} Information is subject to change without notice.

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 details, please see the warranty conditions below.

Warranty conditions:

- Any work or replacement part installation must be carried out by an authorised service agent.
- To apply to warranty should your scooter require repair, please contact the authorised dealer.
- Should any part of the scooter require repair or full or part replacement, as a result of a manufacturing or material defect within warranty period, the work will be carried out free of charge. Warranty period:
 - 1. Frame: 2 year limited warranty.
 - 2. Electronic parts: 12 months limited warranty.
 - 3. Batteries: 6 month limited warranty.
- Any repaired or replaced parts will be covered by this warranty for the balance of the warranty period on the scooter.
- Parts replaced after the original warranty has expired will be covered by a three months warranty.
- 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.
- The above warranty conditions apply to brand new scooters purchased at the full retail price. If you are unsure whether your scooter is covered, check with the authorised dealer.
- Under normal circumstances, no responsibility will be accepted where the scooter has failed as a direct result of:
 - 1. The scooter part not having been maintained in accordance with the manufacturer's recommendations.
 - 2. Failure to use the manufacturer's specified parts.
 - 3. The scooter or part having been damaged due to neglect, accident or improper use.
 - 4. 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 authorised dealer contact details on page 2. 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 notice, 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.

