

Owners Manual



Lifestyle Electric



Wheelchair

OPI13527e Dolphin Controller
12.08.08



Steering Developments Ltd

Unit 5 Eastman Way
Hemel Hempstead
Hertfordshire
HP2 7HF

T 01442 212918

F 01442 240254

E enquiries@steeringdevelopments.co.uk

W www.steeringdevelopments.co.uk

Registered at the above address

Reg. No. 2646099

VAT No. GB 600396959

CONTENTS

Important Safety Information	Page 1 & 2
Warranty & Repairs	Page 3
Cleaning & Service	Page 4
Transferring to & from the Chair	Page 4
Features of the Wheelchair	Page 5
Joystick Controller	Page 6
Drive Program Selection	Page 7
Actuator Control	Page 8
Attendant Controller	Page 9
Battery Charging	Page 10
Changing the Batteries	Page 11
Engaging / Disengaging the Motors	Page 12
Wheelchair Tie Down / Transport in a Vehicle	Page 13
Adjusting the Foot & Armrests	Page 14 & 15
Swing Away Joystick Controller	Page 15
Manual Elevating Legrests	Page 16
Fault Modes	Page 17
Technical Specification	Page 18
Battery Charger	Page 19 & 20
Appendix. BHTA Battery Guidance	

IMPORTANT SAFETY INFORMATION

Please read and understand this Instruction Manual before using the wheelchair for the first time.

The Lifestyle is a Class B (EN1 2184:1999) electrically powered wheelchair, compact and manoeuvrable for use indoors and outdoors and is particularly suited for use with wheelchair accessible vehicles.

It is capable of negotiating some outdoor obstacles up to 1 1/2" (38mm) high.

It is designed for people who are unable to walk or who have a walking impediment. The wheelchair can either be controlled by the occupant or by an able bodied attendant via an optional control.

The maximum intended user weight is 20stone (130kg).

Use on soft ground such as a wet lawn or deep gravel and use on very slippery surfaces such as ice should be avoided.

It will adequately climb and can be used safely (straight up or down) on slopes up to 10 degrees (approximately 1 in 5). Do not attempt to climb or descend slopes greater than this.

Never attempt to traverse a slope at an angle, this will cause the wheelchair to become unstable and increase the risk of it tipping over causing damage and injury.

The drive motors also act as the wheelchair brakes. These motors (and therefore the brakes) can be manually disengaged to allow a carer to manoeuvre the wheelchair by pushing. Pushing the wheelchair on a slope will be extremely dangerous if the brakes are disengaged.

The operator of the wheelchair has a responsibility to ensure it is kept in good safe operating condition.

The joystick controller could cause the wheelchair to come to a sudden stop. In situations where this might affect the safety of the operator, the fitting and wearing of a seatbelt is required.

The controller should always be switched off before getting in and out of the wheelchair.

Do not operate the wheelchair if it behaves erratically, or shows abnormal response, heating, smoke or arcing. Turn the system off at once and consult your service agent.

Before moving off, ensure the batteries are charged enough to complete the round trip.

Do not carry passengers – operator use only.

Do not drive your wheelchair with its seat elevated or backrest reclined.

When moving, do not turn at full speed, especially while travelling downhill.

In the event of the fault indicator flashing while driving, the operator must ensure the system is behaving normally. If not, the system should be turned off and a service agent contacted.

Negotiating Obstacles and Kerbs

Your wheelchair is capable of climbing an obstacle 1 1/2" (38mm) high. Therefore mount and leave pavements via ramps. Approach an obstacle carefully (head on - never at an angle) until the front wheels make contact. Push the joystick forward until both front and rear wheels have cleared the obstacle. This may require you to set the speed control to a higher value. Never take a 'run up' to try to get over obstacles as the jolt could cause the wheelchair to tip over and potentially damage the front wheels.

Stability & Balance

To ensure stability and safe control of your wheelchair you must at all times maintain proper balance. The wheelchair is designed to remain stable and upright during normal use, so long as you do not move your centre of gravity outside the normal seating position.

Before reaching or bending forward, ensure power is off. Do not lean your body further than the length of the armrest. Attempting to pick up anything from the floor is likely to shift your centre of balance sufficiently to make the wheelchair unstable.

Exercise extreme caution or seek assistance.

For the same reason, do not lean backwards, particularly over the top of the backrest.

Do not hang heavy loads from the backrest.



The driving performance of the wheelchair can be influenced by strong magnetic fields such as emitted by portable telephones. It is recommended that the joystick controller is switched off when using this type of equipment. Be aware that the wheelchair itself can disturb electromagnetic fields such as those emitted by alarm systems of shops.



Steering Developments is ISO9001.2000 certified which ensures quality at all stages of the development and production of this wheelchair. This product is manufactured to comply with the Medical Devices Directive 93/42/EEC.

WARRANTY

Steering Developments Ltd warrants your Lifestyle wheelchair for a period of 12 months. This warranty is subject to the following conditions:

- The manufacturer will not accept responsibility for damage caused by misuse or the non-observance of the instructions set out on the Owners Manual.
- During the period of warranty, any parts that have become defective due to faulty workmanship or materials, will be repaired free of charge by Steering Developments.
- The warranty shall be forfeited should any unauthorised alteration be made to the equipment.
- The purchaser's statutory right under the Consumer Protection Act are not affected.

Limitation of Liability

This warranty does not extend to the consequential costs resulting from fault clearance, in particular freight and travel costs, loss of earnings, expenses etc.

Steering Developments shall not be liable for:

- Natural wear and tear.
- Inappropriate or incorrect use.
- Defective assembly or setting up by the purchaser or third parties.
- Defective or neglectful treatment.
- Accidental damage.

REPAIRS

There are no user-serviceable parts in the Lifestyle wheelchair. Please contact Steering Developments if your system develops a fault.

CLEANING, MAINTENANCE & SERVICE

The frame and wheels should be regularly cleaned with a damp cloth. Use a vacuum cleaner from time to time to remove dust and debris from the seat fabric. Any stains should be removed with a proprietary fabric cleaner (automotive type upholstery) – please follow instructions carefully.

Never use a high pressure water hose to clean the wheelchair.

All wheelchair components should be regularly checked for loose, damaged or corroded connectors, terminals or cabling. All cables should be restrained to protect them from damage. Damaged components should be replaced.

All switchable functions on the electronic control system should be regularly tested to ensure they function correctly.

All electronic components should be kept free from dust, dirt and liquids. If necessary, wipe clean with a cloth dampened with warm water. Do not use solvents or abrasive cleaners.

There are no user-serviceable parts in any of the electronic components. Do not attempt to open any case, or undertake any repairs, or the warranty will be voided.

The joystick gaiter should be regularly checked for punctures and wear that might allow ingress of foreign bodies. Damaged gaiters should be replaced. Gaiter replacement should only be performed by an approved service technician.

We strongly recommend that your Lifestyle wheelchair is serviced annually to ensure it remains in good working order. Please contact your dealer for details.

TRANSFERRING TO AND FROM THE CHAIR

Transfers should only be undertaken on flat, level ground. Ensure the drive motors are engaged and that the joystick controller is switched off. Swinging one or both armrests vertically and removing the footrests may be helpful.

When entering or leaving your wheelchair, do not stand on the footrests.

FEATURES OF THE WHEELCHAIR



Standard Features – adjustable

- Recaro car seat
- Seat height (electrical)
- Seat back recline (manual)
- Armrest angle (manual)
- Joystick position – Right of Left hand via swinging arm
- Footrest height and angle (manual)
- Seat squab length
- Puncture proof tyres
- Removable headrest – adjustable in height & angle

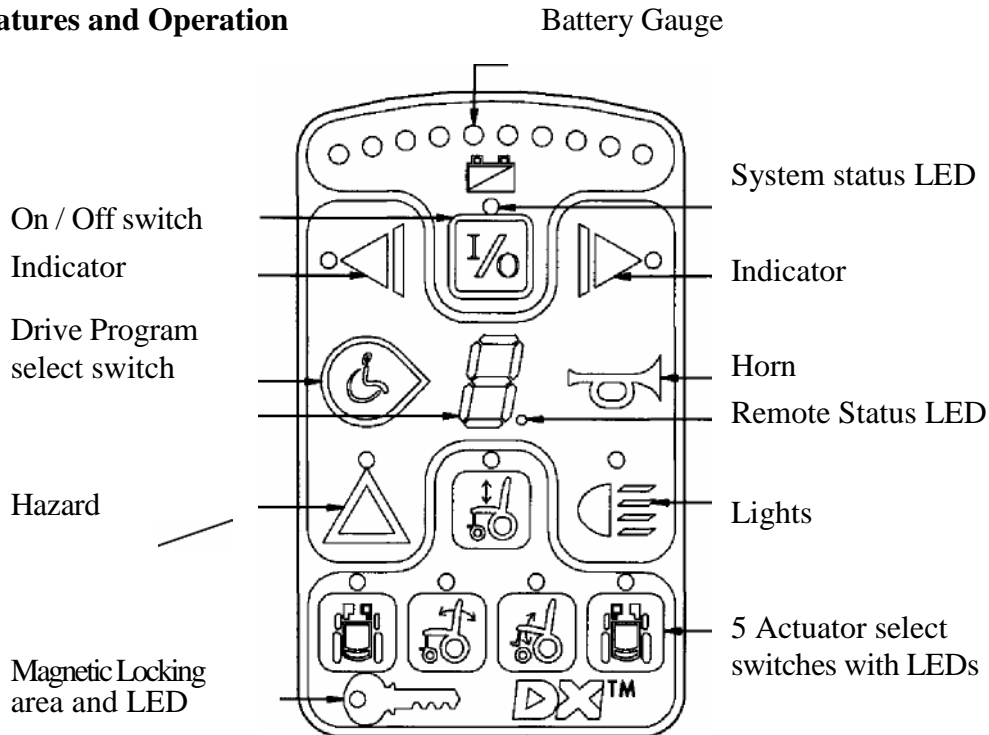
Optional Features

- Attendant Control Joystick
- Seat back recline (electrical)
- Elevating leg rests (manual and electric) complete with calf rests
- Automatic tie down (to floor of vehicle)
- Choice of seat material and style

JOYSTICK CONTROLLER

The Lifestyle wheelchair uses the 'Dynamics DX Dolphin' remote controller. This is used to control the speed and direction of the wheelchair and any of the actuators that have been selected.

Features and Operation



On/Off and Key Lock system



The On/Off button toggles the system power on or off provided the Dolphin is not locked.



The Key Lock system uses a magnetic key to power the wheelchair down in such a way to prevent subsequent unauthorised power up and driving.

Arming / Disarming the Key Lock

To arm the locking system, hold the magnetic key on or near the key symbol on the Dolphin front panel. The system will beep and power itself down.

To turn the chair back on, press will cause the system to power up but needs to be disarmed before it can be driven – this waiting to be disarmed state is indicated by the flashing key symbol.

To disarm the lock, put the magnetic key on or near the key symbol – this will cause the key to stop flashing and the chair may now be driven normally. If the chair is not disarmed within one minute, the Dolphin will automatically turn itself off.

Controller Time Out

The DX Remote will automatically switch off if it is inactive for 5 minutes. Use the On/Off switch to restart.

Drive Program Selection and Display

The Dolphin can offer up to five different Driving Programs, depending on its configuration. (See Programming section).

Profile Selection



Profiles can be selected using the Drive Program Select switch. Pressing this switch will increment the Drive Program number up to the maximum configured value. A further switch press will return the Dolphin to Profile 1.

Drive Program Display



The current Drive Program number (1 to 5) is displayed on the 7-segment Drive Program Display.

Drive Inhibit Display



A ' ' is displayed on the Drive Program Display whenever the DX System is in the Drive Inhibit state e.g. during battery charging & operation of actuators.

Remote Status Display



The Remote Module status is displayed beside the 7-segment Drive Program display. This LED will flash if there is an internal DX Remote fault, or if an OONAPU fault has occurred (see below).

System Status LED



The System Status LED is displayed above the On/Off switch. This LED is lit if the system is turned on. It also flashes in groups called Flash Codes, to indicate system faults.

Joystick OONAPU

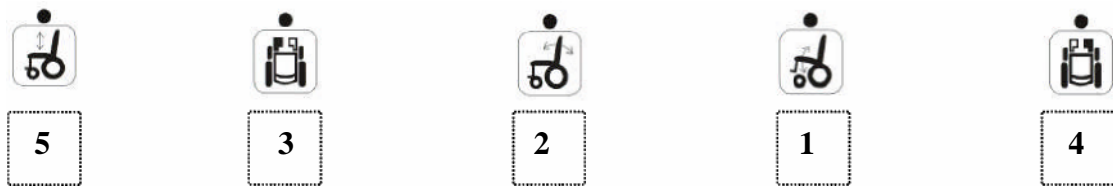
All DX Remotes feature Out Of Neutral At Power Up (OONAPU) detection. If the system is powered up while the joystick is not in the neutral position, or an inhibit condition such as a battery charger is removed, the System Status LED flashes rapidly for either as long as the condition persists or for a maximum of 5 seconds.

If the condition persists, after 5 seconds a DX Module Fault (Flash Code 1) is signalled on the System Status LED, and the Remote Status LED flashes. This is a latching fault and must be cleared by powering the system down and up again (with the joystick in neutral).

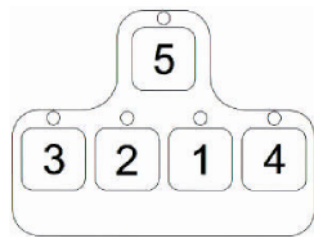
An OONAPU fault is also generated if the joystick source is changed. This occurs when the Attendant / User switch on the DX-ACU is toggled or the Drive Program is changed causing a joystick swap, while the joystick is not in the neutral position. In these situations the fault is non-latching and the system does not need to be powered down to clear the fault.

Actuator Control

The Dolphin has a set of five Actuator Select switches. Pressing an Actuator Select



switch will inhibit driving and select the appropriate actuator output as indicated by the adjacent LED. The actuator order (assigned actuator 1, 2, 3, 4 and 5), is arranged on the Dolphin keypad as follows:



The actuator may then be adjusted up or down with the Joystick, by deflecting the Joystick beyond half travel in the forward or reverse direction.

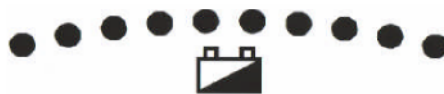
To resume driving, press the current Actuator Select switch again to deselect. Alternatively another actuator may be selected directly.

If the user attempts to change models (e.g. from driving to actuator mode) while the Joystick is deflected, the current mode will be terminated and the Joystick must be returned to neutral position before the newly selected mode will operate.

Lighting Control

Lights and direction indicators are not incorporated in the Lifestyle wheelchair.

Battery Gauge Display



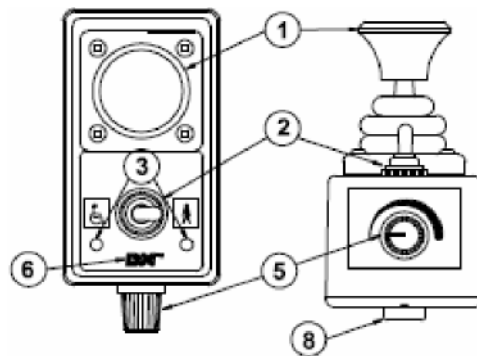
Battery charge level is continuously indicated by a set of ten LEDs. These are arranged in an arc from left to right as three red, four orange and three green.

The Battery Gauge provides true, useable battery capacity information and indicates other related battery conditions. Full battery capacity is indicated by all ten LEDs on.

As the battery voltage drops, the number of LEDs lit reduces from right to left.

ATTENDANT CONTROL (WHERE FITTED)

The attendant control will only operate when the chair is connected to the **Dolphin** controller. The controller must also be switched on.



1. Joystick Control.
2. User/Attendant Toggle Switch.
3. Mode Status Indicator
5. Speed Control
6. On/Off Status (will flash if a fault is present).
8. DXBUS Cable Socket

BATTERY CHARGING

With the controller switched off, connect the battery charger (3 pin round plug) into the socket on the front of the Joystick Controller (lift flap to access). The wheelchair is automatically disabled from driving whenever the charger is plugged in. The Drive Program display will show a single horizontal bar indicating the wheelchair is disabled.



Connection of the charger will automatically power the wheelchair if it was powered down at the time of connection. This allows the progress of battery charging to be monitored on the battery gauge. The wheelchair can, if required, be subsequently powered down by pressing the On/Off switch. Charging will still proceed normally.

Depending on the amount of charge left in the battery, it may take up to 8 hours to completely re-charge.

Low Capacity Warning

When the calculated available battery capacity drops below 10% of full capacity, the two left most red LEDs flash.

The wheelchair will drive during this fault condition but it shows that the battery is in the reserve capacity range and capacity will begin to reduce rapidly. The wheelchair performance is automatically reduced to preserve the life of the battery by encouraging the user to re-charge the battery before it becomes harmfully flat.

Battery Lifespan

The life of the battery will depend on usage. In light mobility applications the batteries could deliver up to 3 years lifespan whereas, if used more heavily, the lifespan could be 18 months.

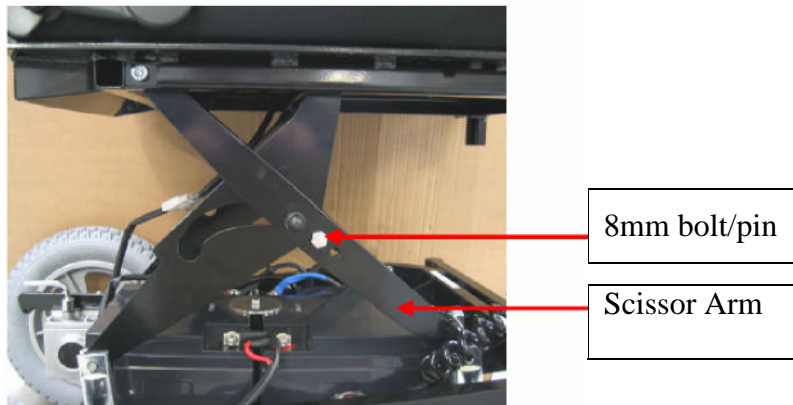
Tips

- Re-charge the batteries every day – this will help to maximise their life.
- Never allow the batteries to run completely flat – this can cause irreparable damage and greatly shorten their lifespan.
- When storing the wheelchair for more than 2 weeks, it is advisable to fully charge the batteries and disconnect them. Check and re-charge the batteries monthly.
- Try to avoid switching off the charger before the charge complete indicator comes on. If personal circumstances make this impossible, a heavy-duty charger may be required. Please contact the manufacturer for further information.
- Never allow the batteries to run completely flat – this can cause irreparable damage and greatly shorten their lifespan.

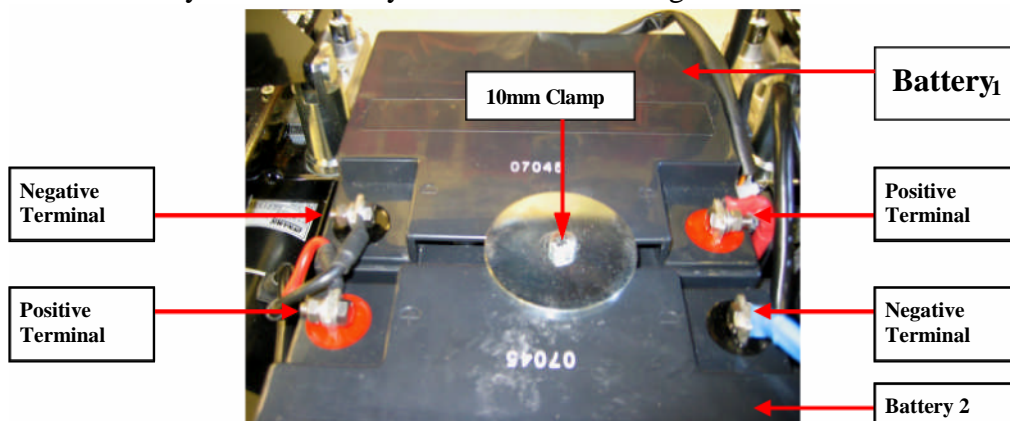
Please also refer to the BHTA Battery Advice leaflet – Appendix 1.

CHANGING THE BATTERIES

1. Elevate the seat to its maximum height.
2. With the aid of a second person, support the weight of the seat and carefully remove the bolt securing the rise/fall actuator to the top plate (1 7m spanners required).
3. Insert a 8mm bolt (or similarly sized pin) into one of the scissor arms (see picture). This will maintain the seat in its maximum height position.



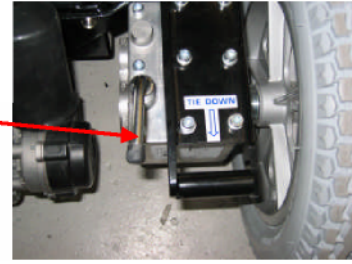
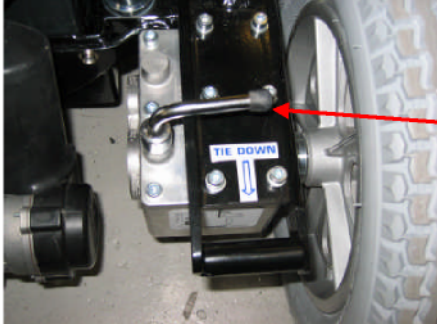
4. Remove the battery cover (secured with press studs) and remove the battery cable plug from the main power unit.
5. Disconnect the battery terminal leads taking care not to short the connections (10mm spanner required).
6. Loosen and remove the 10mm clamp (see picture).
7. Carefully lift each battery from the box ensuring not to short the terminals



on the wheelchair frame.

8. Re-assembly is a reversal of this process. Do not forget to remove the 8mm bolt/pin from the scissor arm before reconnecting the actuator.
9. Ensure battery cables are reconnected as shown.

ENGAGING / DISENGAGING MOTOR DRIVE



Moving the operating lever to this position **disengages** the motor drive so the chair can be pushed manually. Take extreme care when on a slope to avoid chair running away!

USING THE LIFESTYLE AS A SEAT IN A VEHICLE

We recommend that, wherever and whenever possible, wheelchair users transfer to the seats installed in the motor vehicle and use the corresponding vehicle restraint systems, because this is the only way to ensure optimum protection of the user in case of an accident.

The Lifestyle is crash-tested, and has satisfied the requirements of ISO 7176-19. It is possible to use your Lifestyle as a seat in a vehicle, provided that the following is adhered to:

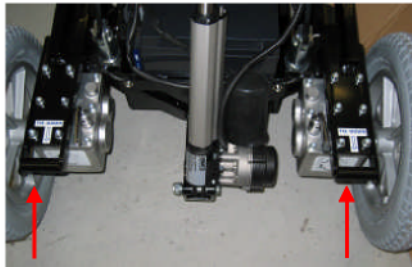
1. The wheelchair is facing forward, the joystick controller is switched off and the motors are engaged.
2. A 4-part tie down restraint system secures the wheelchair (one that conforms to ISO 10542 part 2 and is suitable for a 100kg wheelchair). See below for the location of tie down points.
3. The occupant must be restrained independently of the wheelchair by a lap and diagonal safety belt, conforming to ISO 10542 part 3. Lifestyle lap belts are postural supports only and are not suitable as restraints during transportation.
4. Any detachable accessories or components of the wheelchair must be removed and stored securely in the vehicle luggage compartment during transportation.

The tie down points are clearly marked on the wheelchair frame (see photos). Follow the instructions (provided with the restraint straps) carefully to ensure a safe installation.

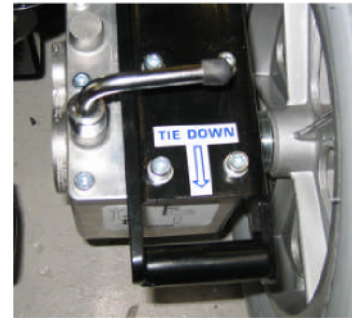
Location of
– one on each



front tie down points
side



Location of rear tie down points



WHEELCHAIR TIE DOWN – ELECTRIC

An automatic tie down facility has been integrated into the design of the wheelchair frame. The kit is available as an optional extra. Refer to EZ Lock instructions supplied with the automatic tie down.

TRANSPORT OF WHEELCHAIRS IN A VEHICLE

When vehicles are in motion, unoccupied wheelchairs should be secured with a 4-point restraint system, suitable for a 100kg wheelchair. An unrestrained wheelchair is a serious risk to vehicle occupants in the event of an accident.

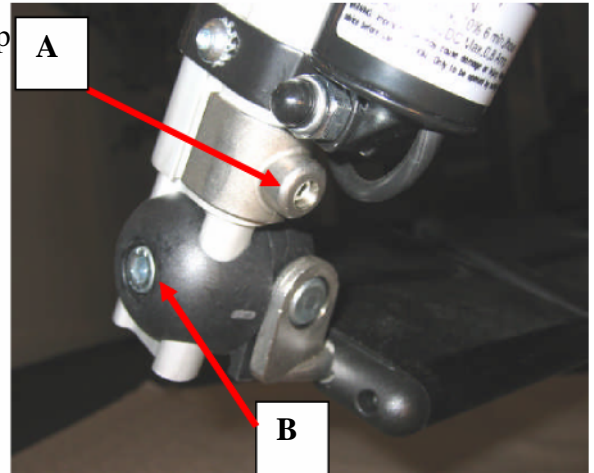
Any detachable accessories or components of the wheelchair must be removed and stored securely in the vehicle luggage compartment during transportation.

When transporting the Lifestyle in a vehicle, ensure the joystick controller is switched off and the motors and that the motors are engaged.

ADJUSTING THE FOOTRESTS & ARMRESTS

Adjusting the Footplate Length (height)

To adjust the length of each footrest, loosen the clamp screw **A** (4mm Hex Wrench) and slide the inner tube in or out of the housing tube. Tighten the clamp screw making sure the inner tube is securely locked.



Adjusting the Footplate Angle

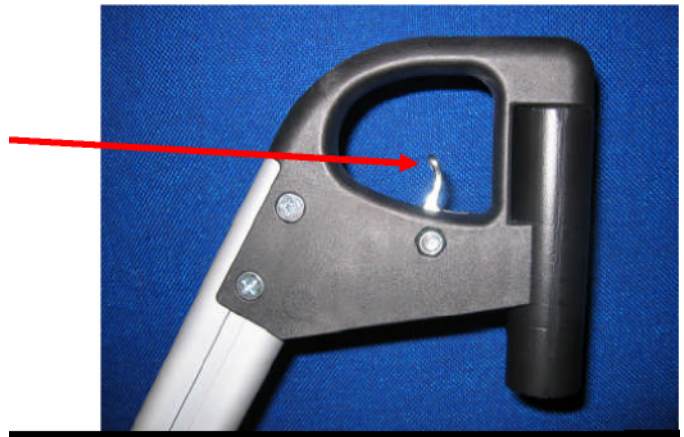
Loosen clamp screw **B** (6mm Hex Wrench).

The footplate can now be rotated to the desired angle. Tighten the screw.

The footplate can also be folded up to help getting in and out of the wheelchair.

Folding/Removing the Legrest

To fold or remove the legrest, release the latch lever by pushing it backwards and at the same time rotating the legrest outwards. The legrest can now be lifted out of its socket. To replace, fit the legrest back in its socket and rotate back into position.



Armrest Angle Adjustment

To adjust the armrest angle, rotate the knob either way to attain the desired angle.



Sideways Adjustment of the Footrests



Tighten the clamping screws.

Joystick Controller – Swing-away Mounting Bracket

The joystick can be swung to the side in order to allow the user to move closer to a desk or table.

Rotating the catch (located underneath the controller) releases the mechanism.

Make sure the catch is re-engaged before driving to avoid accidental movement of the joystick that could cause the user to lose control.



Release
Catch



Manual Elevating Legrests



Elevating legrests enable the user to vary the leg angle from vertical to horizontal. Each legrest is fitted with a padded calf support to comfortably locate the leg.

Users should be aware that the stability/balance of the wheelchair will be affected when the legrests are in an elevated position. Take extra care.

It is recommended that the legrests are returned to the non elevated position when encountering obstacles, ramps or any changes in slope.

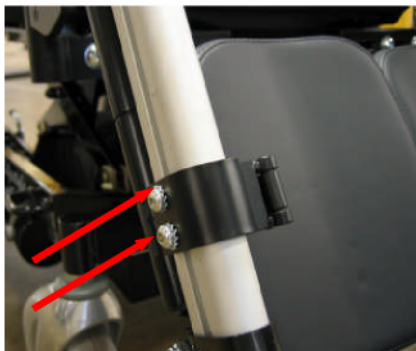
Angle Adjustment

Push the release lever forward to activate the gas strut. This allows the legrest to rise against its own weight. Some assistance will be required to raise the weight of the users leg. Pushing the lever back will lock the legrest in position.

To lower the legrest, push the release lever forward again and press down on the legrest. Return the lever to the locked position.



Calf Support Height Adjustment



Loosen the two socket head screws (4mm Allen Key), slide the calf support up or down to the desired position and tighten the screws.

Calf Support Hinge

The calf support bracket is hinged so that the support can be swung away to aid getting into the wheelchair.



FAULT MODES

Flash Code

Any fault condition on the DX system will cause the System Status LED to flash. Flashing occurs in bursts of flashes separated by a two second pause. The number of flashes in each burst is referred to as the Flash Code and indicates the nature of the fault. Please contact your dealer for further advice.

Limp Mode

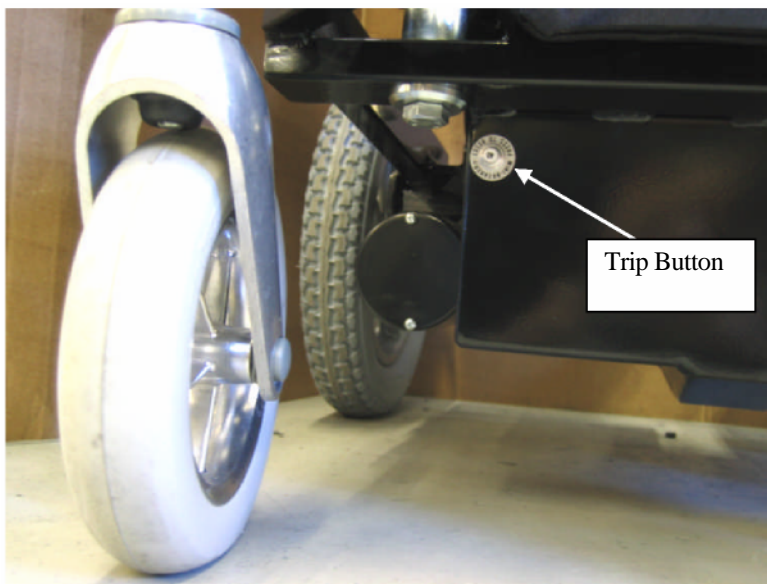
If the DX system detects some faults, it will revert to Limp Mode. This is a reduced speed mode which recognises problems, but allows the wheelchair user to limp home, where the problem can be assessed.

Circuit Breaker

If the electrical power fails, it may be that the Overload Protection device (circuit breaker) has operated. Press in the trip button to reinstate power.

The trip button is located in the battery box (see picture).

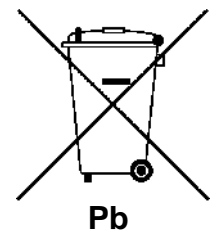
If the circuit breaker is continually tripping out, contact your dealer to rectify the fault.



TECHNICAL SPECIFICATION

Height Ranges (floor to seat base) Or available as an option	380 to 480mm 430 to 585mm	(15" to 19") (17" to 23")
Overall width	620mm	(24 1/2")
Overall length with out footrests	810mm	(32")
Overall length with footrests	1180mm	(46 1/2")
Weight	100kg	(15 1/2 stone)
Lifting capacity	130kg	(20 stone)
Batteries	2 x 12volt 44ah fully sealed lead acid type	
Range on full charge	Up to 15 miles	
Circuit breaker	60amp	
Drive motors	24v 200watt with park brake and clutch release for manual manoeuvring.	
Front wheel – Colson	190mm x 40mm wide profile, solid	
Rear wheel – Dynamic	12 1/2" x 2 1/4" puncture proof	
Joystick controller	Dynamic Shark or Dolphin controller, G90, fully programmable for individual control parameters. Attendant and dual controls available as optional extras.	
Intended use	Indoor & outdoor	
Maximum safe slope	10°	
Obstacle climbing	38mm maximum	(1 1/2")
Speed - variable	6km/hr (3.7mph) max	

Recycle the batteries, charger, electronic components and wheelchair at the end of their useful lives. Check with your local authority for details of nearest recycling facility.



OPI13527e Dolphin Controller
12.08.08

Pro-Lite Battery Charger

The desk top charger is designed to provide fast automatic charging of your wheelchair lead/acid batteries.

Features

Short circuit protection.

Reverse polarity protection.

LED state of charge indication.

Power On connection.

3-stage charger – Constant current, Constant voltage & Float.

Please read these instructions before using the charger for the first time.

Instructions For Use

Make sure the charger is disconnected from the mains supply.

Connect the output plug to the socket at the front of the joystick controller.

Plug the charger into the mains (230v AC) and switch on.

Two red LEDs will illuminate, one to indicate the power is on and the second to indicate the initial bulk charge is taking place.

The yellow LED will be illuminated to indicate that the batteries are now being charged at a constant voltage, and that it is about 80% charged.

The green LED shows when the charger has switched over to float charge and the batteries are ready for use. The batteries should be left connected with the green LED illuminated until they are required for use.

When you are ready to use the wheelchair, disconnect or turn off the mains **first**, then disconnect the charger from the joystick controller.

Troubleshooting

If the charger is not correctly connected to the batteries the red power on LED will stay illuminated, no other LED will illuminate. The batteries are not being charged at this point.

Turn off mains supply and ensure charger is correctly connected and the electrical connections are sound. Reconnect the mains supply. The batteries should now charge.

Never allow the batteries to become **completely** flat as this can cause them to be damaged beyond further use.

Warnings

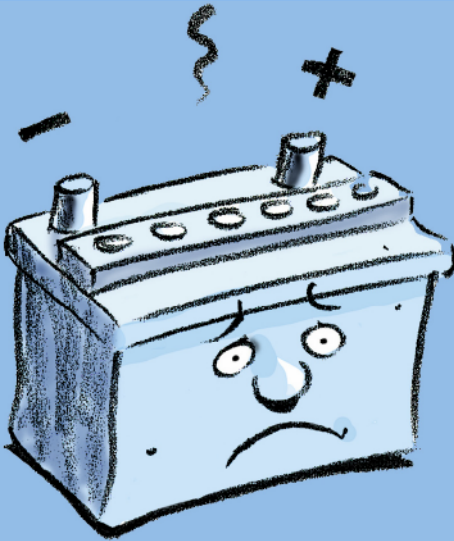
Batteries may emit explosive gas mixture during charging. Charge only in a well ventilated area. Avoid creating sparks or flames.
For indoor use only – do not expose to rain or moisture.

This charger is set for lead acid batteries only.

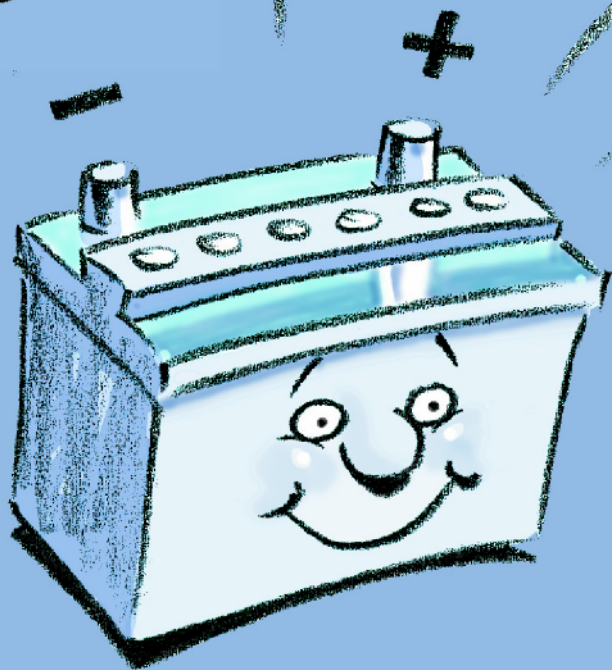
There are no user serviceable parts in this equipment. Do not attempt to open or tamper in any way.

Check the charger and cables before use. Do not use if damage is discovered.

If the fuse fails in the mains plug, it must be replaced with a fuse of the same value (check rating on label).



Get wise -
get more from
your battery



A guide to maximising the performance
and lifespan of batteries for powered
mobility equipment

No vehicle performs to its full potential without an efficient fuel system. Electrically powered wheelchairs and scooters are no exception. The batteries fitted to powered wheelchairs and scooters act as their fuel tanks and should be topped up and well maintained accordingly, for users to enjoy the full freedom and mobility they expect.

COMMON QUESTIONS & ANSWERS

Q. What is the best way to commission / prepare mobility batteries in order to get the most out of them?

A. Even though your mobility supplier should have fully charged the batteries on your equipment prior to delivery, it is always a good idea to charge the batteries before first use. Once you have finished for the day put the batteries on charge and LEAVE them on charge until you next need to use them. The cost of overnight charging is minimal and as long as a suitable automatic charger is being used there is no reason to disconnect the charger until the equipment is next needed for use.

IMPORTANT NOTE

Because mobility batteries are 'Traction' or 'Deep Cycle' type batteries, they start with a very low capacity and over a period of time the capacity (available power) builds up and eventually peaks at its maximum level. This will affect the range of your powered vehicle, from 60% to 100% of the stated range, depending on the number of charge cycles. Therefore in its early life it will appear to have low power (approximately 50% capacity available). After using the batteries between 10 and 15 times (charge / discharge) the battery should achieve approximately 100% of its capacity.

Q. What lifespan can I expect from my batteries?

A. Although BHTA member manufacturers normally offer a 12-month warranty against manufacturing defects on batteries, mobility batteries should deliver an average lifespan of up to 18 months depending on usage. In a light mobility application the battery could deliver up to three years lifespan, in a much heavier application such as powered wheelchairs, the lifespan could be between 12–18 months.

Q. What are the factors that can affect range on powered mobility equipment?

A. Weight of the vehicle or user, ambient temperature, state of battery charge, tyre pressures and terrain can all affect the range of a battery. If the temperature ranges outside of our yearly averages i.e. above 35 degrees Celsius and below freezing, this will affect the range of the battery. If the battery's 'state of charge' is low, then consequently the battery capacity will be low.

Q. Can my batteries be transported by air?

A. Most sealed mobility batteries can be transported by aeroplane, your battery or wheelchair supplier can provide an IATA Certificate to prove this. Alternatively the battery may be marked on top with a sticker explaining it is IATA Approved.

This document has been produced with the cooperation of leading battery manufacturers and leading mobility vehicle manufacturers, to give advice about the best practices that should be employed to achieve the full range and potential from mobility vehicles.

More Battery Tips

- * Never run your batteries completely flat, take care not to leave lights or any other auxiliary equipment on after use.
- * Daily users – Charge after use – For equipment used for mobility outside the home daily.
- * Occasional users – Charge your equipment before an outing and always after use (ideally when the 'fuel gauge' is at approximately 50%).
- * When storing a powered wheelchair or scooter for more than 2 weeks, it is advisable to fully charge the batteries and disconnect them. Check and recharge the batteries monthly.
- * Never switch off the charger before the charge complete indicator comes on.
- * Always unplug the charger from the equipment, as well as at the mains, after charging. (Some chargers can drain batteries if left plugged in while switched off or unplugged from the mains).
- * Always dispose of old batteries through an approved source to prevent improper disposal. Please contact your supplier to find out an appropriate agent.



British Healthcare Trades Association (BHTA),
1 Webbs Court, Buckhurst Avenue,
Sevenoaks, Kents TN13 1LZ
Telephone: 01732 458868 Fax: 01732 459225
[email: bhta@bhta.com](mailto:bhta@bhta.com) [Web: www.bhta.com](http://www.bhta.com)

Part of the *Lifestyle* range of products

Steering Developments Ltd

Unit 5 Eastman Way
Hemel Hempstead
Hertfordshire
HP2 7HF

Tel: (+44) 01442 212918 Fax: (+44) 01442 240254

[Email: enquiries@steeringdevelopments.co.uk](mailto:enquiries@steeringdevelopments.co.uk)

Website: www.steeringdevelopments.co.uk