## **WELCOME**

Congratulations on the purchase of your new power wheelchair. We believe that you have chosen a product that will enhance your quality of life by allowing you the freedom to go places you have always wanted to go.

The unique and user-friendly power chair is designed for maximum maneuverability even in narrow and tight spaces. With your power chair, you will enjoy the freedom to move around your home, visit with your friends and neighbors or just enjoy the outdoors.

Happy motoring and welcome to the family!

## **Table of Contents**

	PAGE
Safety Instructions	1
Electromagnetic Interference (EMI)	- 2
Environmental Conditions	4
Assembly and Disassembly	5
Adjustment for Seating Comfort	9
Operatiog your power wheelchair	11
Battery Sytem and Charger	23
Maintenance and Repair	24
Specifications	25
lec Symbols	26
Warranty	27

.

Your power chair is a battery-operated personal mobility vehicle. Therefore, it is required to exercise caution and consideration when operating it to ensure your own personal safety and that of others around you.

The following are the rules for safe operation of your power chair

- Make sure that the power is off before getting in or out of it. This will eliminate
  the possibility of accidentally activating the joystick and causing injury to
  yourself or others.
- 2. Always use a seat-belt if you have one and keep your arms on or inside the armrests and feet on the footrest at all times.
- 3. Set the speed control knob according to your driving ability and the environment in which you are going to operate it. We recommend that you keep the speed at the slowest position until you are familiar with the driving characteristics of this vehicle. We also recommend that you do so when using your powerchair indoors.
- 4. Always climb or descend grades perpendicular to the slope. Never drive across the slope.
- 5. Do not attempt to climb or descend grades greater than 12 degrees.
- 6. Do not carry any passengers under any circumstance. Otherwise, your powerchair will become unstable and may result in personal injury.
- 7. Never drive on the roadway.
- 8. Always cross street intersections via the most direct route making sure that you are visible to motor traffic.
- 9. Leave and join curb-cuts perpendicular to the road.
- 10. Use caution when driving over soft, uneven or unprotected surfaces such as grass, gravel and decks.
- 11. Never occupy your power chair when transporting it in a motor vehicle. Make sure that it is securely strapped with an approved tie-down system.
- 12. Do not operate your vehicle if it isn't functioning properly.
- 13. Do not connect, or allow someone else to connect, any electrical or mechanical device to the vehicle. Failure to do this may result in injury and will void the warranty.

- 14. Never use electronic radio transmitters such as CB's, walkie-talkies, portable computers or cellular phones while using the vehicle without first turning the vehicle off.
- 15. Check with your physician if you are taking any medication that may affect your judgement and ability to operate your powerchair.

#### **Electromagnetic Interference (EMI) from Radio Wave Sources**

The rapid development of electronics, especially in the area of communications, has saturated our environment with electromagnetic (radio) waves that are emitted by television, radio and communication signals. These EM waves are invisible and their strength increases as one approaches the source. All electrical conductors act as antennas to the EM signals and, to varying degrees, all power wheelchairs and scooters are susceptible to electromagnetic interference (EMI). This interference could result in abnormal, unintentional movement and/or erratic control of the vehicle. The United States Food and Drug Administration (FDA) suggests that the following statement be incorporated to the user's manual for all power wheelchairs.

Powered wheelchairs and motorized scooters (in this text, both will be referred to as powered wheelchairs) may be susceptible to electromagnetic interference (EMI), which is interfering electromagnetic energy emitted from sources such as radio stations, TV stations, amateur radio (HAM) transmitters, two-way radios and cellular phones. The interference (from radio wave sources) can cause the powered wheelchair to release its brakes, move by itself or move in unintended directions. It can also permanently damage the powered wheelchair's control system. The intensity of the EM energy can be measured in volts per meter (V/m). Each powered wheelchair can resist EMI up to a certain intensity. This is called the "immunity level." The higher the immunity level, the greater the protection. At this time, current technology is capable of providing at least 20V/m of immunity level, which would provide useful protection against common sources of radiated EMI.

Following the warnings listed below should reduce the chance of unintended brake release or powered wheelchair movement that could result in serious injury:

1) Do not turn on hand-held personal communication devices such as citizens band (CB) radios and cellular phones while the powered wheelchair is turned on.

- 2) Be aware of nearby transmitters such as radio or TV stations and try to avoid coming close to them.
- 3) If unintended movement or brake release occurs, turn the powered wheelchair off as soon as it is safe.
- 4) Be aware that adding accessories or components, or modifying the powered wheelchair, may make it more susceptible to interference from radio wave sources. (Note: there is no easy way to evaluate their effect on the overall immunity of the powered wheelchair).
- 5) Report all incidents of unintended movement or brake release to the powered wheelchair retailer, and note whether there is a radio wave source nearby.

# TURN OFF YOUR POWER CHAIR AS SOON AS POSSIBLE WHEN EXPERIENCING THE FOLLOWING:

- 1. Unintentional motions.
- 2. Unintended or uncontrollable direction.
- 3. Unexpected brake release.

The FDA has written to the manufacturers of power wheelchairs, asking them to test their new products to be sure they provide a reasonable degree of immunity against EMI. The letter says that powered wheelchairs should have an immunity level of at least 20 V/m, which provides a reasonable degree of protection against the more common sources of EMI. The higher the level, the greater the protection.

Your powerchair has an immunity level of 20 V/m which should protect against EMI.

The environmental conditions may affect the safety and performance of your powerchair. Water and extreme temperatures are the main elements that can cause damage and affect the performance.

### A). Rain, Sleet and Snow

If exposed to moisture, your power chair is susceptible to damage to electronic or mechanical components. Water will cause electronic malfunction or promote premature corrosion of electrical components and frame.

#### B). Temperature

Some of the parts of power chair are susceptible to change in temperature.

At extremely low temperatures, the batteries may freeze, and your power chair may not be able to operate. In extremely high temperatures, it may operate at slower speeds due to the controller's safety feature to prevent damage to the motors and other electrical components.

Your power chairs shipped partially dissambled to maximize its protection during shipping. Please follow the steps described below to assemble it for immediate use:

#### **Components:**

- 1. Frame
- 2. Shroud
- 3. Seat assembly
- 4. Integral controller/bracket
- 5. Battery terminals

#### Assembly:

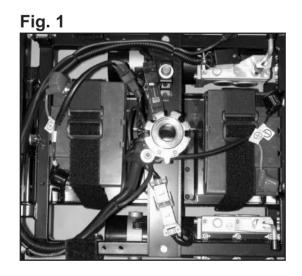
Only four components are needed for assembly in the following order.

## A) Install Battery Terminals

1. Place the batteries in your powerchair. Be sure to place the positive(+) contact of each battery adjacent to the Negative (-) of the other battery, as shown in (Fig. 1).

**Notes:** Please seek help if you cannot lift the battery by yourself.

- 2. Connect Positive (+) battery terminals, red, one at a time using screws, washers and nuts provided.
- 3. Connect Negative (-) battery terminals, black, one at a time.



- 4. Plug the color-coordinated connectors (batteries and motors).
- 5. Cover battery posts with caps.

#### B). Install the shroud

- 1. Slide the shroud through the seat pedestal and main (controller) cable.
- 2. Shroud should also slide through motor free-wheeling levers which should be positioned in engaged mode.
- 3. Secure shroud to frame.

Fig. 2



Fig. 2-1



## C) Install the Seat:

- 1. Pull the swivel lever up (Fig 2-1).
- 2. Lift the seat and slide the seat post stem (bottom of the seat) into the seat pedestal. (Fig. 3)
- 3. Be sure to swivel the seat and push down on the seat until it locks in place.

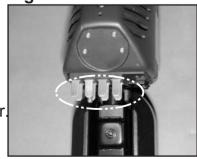
Fig. 3



### D) Install the controller:

- 1. Locate the controller to the controller's bracket. (Fig. 4)
- 2. Tighten the controller with an allen wrench. (Fig. 4)
- 3. Place the connected main socket to the controller

Fig. 4



#### Disassembly:

The disassembly is the reversal of assembly.

#### A) Unplug the controller

- 1. Turn off the power
- 2. Make sure that the motors are engaged (**not** in free-wheel mode).
- 3. Disconnect main cable from controller.

#### **B) Seat Removal**

- 1. Pull the swivel lever up to unlock it and rotate the seat a little bit to the position where you can feel the seat rotate freely. (Fig. 7)
- 2. Pull seat upward.

## C) Shroud Removal

After removing the seat, simply lift the shroud straight up, making sure that the motor levers are in the engaged position.

#### D) Battery Removal

#### For Transportation:

After removing the seat and shroud,

- 1. Unplug battery connectors (2, black).
- 2. Lift batteries one at a time using battery straps.

#### For Replacement:

After removing the seat and shroud,

- 1. Unplug battery connectors (2, black) to prevent damage to controller.
- 2. Remove battery post caps.
- 3. Unscrew positive terminals (+) one at a time.
- 4. Unscrew negative terminals (-) one at a time.
- 5. Place battery connectors (wire harnesses), screws, washers and nuts in a safe place.
- 6. Remove batteries one at a time using battery straps.





To maximize seating comfort, you can adjust the seat height, backrest angle, and headrest height, armrest tilt angle, and the footrest height and angle. In addition, you can select your desired controller bracket length.

#### A) Seat Height

### To adjust the seat height

Fig. 8



Fig. 9



- 1. Turn the power off.
- 2. Disconnect the main cable and remove the seat. (Remove the shroud, if it is necessary).
- 3. Using two 17 mm wrenches, remove the bolt securing the inner seat pedestal. (Fig. 8 Fig. 9)
- 4. Slide the inner pedestal to the desired height and reinsert the bolt.
- 5. Tighten the bolt and replace the seat.

## B) Armrest Angle Adjustment

## To adjust the tilt Angle

- 1. Flip up the armrest for easy access.
- 2. Turn the set nut counter-clockwise to raise the armrest and clockwise to lower the front of armrest (Fig. 10).

Fig. 10



## C) Footrest

### To adjust Angle

- 1. Flip-up the footplate for easy access (Fig. 11).
- 2. With an Allen wrench, simply turn the bolt clockwise to increase the angle or counter-clockwise to decrease it (Fig. 12).

Fig. 11



D) Controller

#### To adjust the controller bracket length

- 1. Flip up the armrest for easy access.
- Loosen the bracket set nuts with an Allen key. (Fig. 13).
   Slide the controller bracket in or out to the desired positions.

Fig. 12



To reverse the controller (right/left)

- 1. Disconnect the main cord.
- 2. Loosen the bracket set nut and slide the controller out.
- 3. Install the controller/bracket in the left armrest receptacle and tighten the bracket set nut at the desired length.

Fig. 13

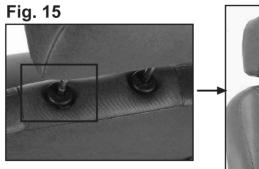
## E) Backrest Angle

- 1. Pull the lever up while leaning on the backrest until you reach the desired comfort position. (Fig. 14)
- 2. To bring the seat to an upright position or to fold it forward, pull the lever up while removing any pressure on it until the desired position or complete fold is reached.

Fig. 14

## F) Headrest Height

Depress then release the clamp on the left of backrest while pulling headrest up or pushing down until you reach the desired comfort position (one of three).





Your power chair is simple to operate. However, we recommend that you carefully read the following instructions to get familiarized with your new vehicle.

A Word of Caution: Before you turn the power on, always be aware of the environment that surrounds you before you select your desired speed. For indoor environments, we recommend that you select the lowest speed setting. For outdoor operation of this vehicle, we ,recommend that you select a speed that is comfortable for you to control it safely.

The following are the steps and the components required to safely operate your vehicle:

#### A. Dynamic Shark Controller Operation:

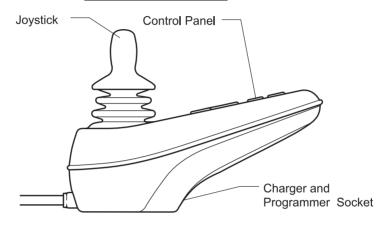
The Commando Series of integral powerchair controllers has been designed specifically for light to medium weight powerchairs. All models can deliver 50 Amps to each motor and include the latest technology and software to give superb performance on all wheelchair types (Front, Mid and Rear Wheel Drive).

Control is smooth, direct and responsive, with improved load compensation to keep the chair on track no matter what obstacles it encounters. The performance of Commando sets new driving and safety standards for the notoriously difficult to control front wheel drive configuration.

#### **B. PG VR2 Controller Operation:**

The VR2 control system has two versions of the front control panel - with and without actuator control. Most of the controls are common to both versions, however, the actuator buttons are only included on VR2 control systems with seat actuator control. Each of the controls is explained within this section.

#### **VR2 USER CONTROLS**



Front Control Panel Details

No Actuators 000000 0



With Actuators



#### **VR2 CONTROL BUTTONS**



**Battery Gauge** 



On/Off Button



Maximum Speed / Profile Indicator



Speed / Profile Decrease Button



Speed / Profile Increase Button



Horn Button





**Actuator Buttons** 

On/Off Button and Battery Gauge

The on/off button applies power to the control system electronics, which in turn supply power to the wheelchair's motors. Do not use the on/off button to stop the wheelchair unless there is an emergency. (If you do, you may shorten the life of the wheelchair drive components).

The battery gauge shows you that the wheelchair is switched on. It also indicates the operating status of the wheelchair. Details are given in section 1.

#### 1 Control System Status indication

The battery gauge and maximum speed / profile indicator show the status of the control system.

> A number of supposedly defective control systems returned to us are subsequently found to operate correctly. This indicates that many reported faults are due to wheelchair problems rather than the control system.

#### 1.1 Battery Gauge is Steady

This indicates that all is well.

#### 1,2 Battery Gauge Flashes Slowly

The control system is functioning correctly, but you should charge the battery as soon as possible.

#### 1.3 Battery Gauge steps Up

The wheelchair batteries are being charged. You will not be able to drive the wheelchair until the charger is disconnected and you have switched the control system off and on again.

#### 1.4 Battery Gauge Flashes Rapidly (even with the joystick released)

The control system safety circuits have operated and the control system has been prevented from moving the wheelchair.

This indicates a system trip, i.e. the VR2 has detected a problem somewhere in the wheelchair's electrical system. Please follow this procedure.

- Switch off the control system.
- Make sure that all connectors on the wheelchair and the control system are mated securely.
- Check the condition of the battery.
- If you can't find the problem, try using the self-help guide given in section 1.6.
- Switch on the control system again and try to drive the wheelchair. If the safety circuits operate again, switch off and do not try to use the wheelchair.

Contact your service agent.

#### 1.5 Self-Help Guide

If a system trip occurs, you can find out what has happened by counting the number of bars on the battery gauge that are flashing.

Below is a list of self-help actions. Try to use this list before you contact your service agent. Go to the number in the list which matches the number of flashing bars and follow the instructions.

If the problem persists after you made the checks described above contact your service agent.

\* If the programmable parameter, Motor Swap has been enabled, then left and right hand references in this table will need transposing.

1 Bar

The battery needs charging or there is a bad connection to the battery. Check the connections to the battery. If the connections are good, try charging the battery.

2 Bar

The left hand motor\* has a bad connection. Check the connections to the left hand motor.

3 Bar

The left hand motor\* has a short circuit to a battery connection. Contact your service agent.



The right hand motor\* has a bad connection. Check the connections to the right hand module.



The right hand motor\* has a short circuit to a battery connection. Contact your service agent.



The wheelchair is being prevented from driving by an external signal. The exact cause will depend on the type of wheelchair you have, one possibility is the battery charger is connected.



A joystick fault is indicated. Make sure that the joystick is in the center position before switching on the control system.



A control system fault is indicated. Make sure that all connections are secure.



The parking bakes have a bad connection. Check the parking brake and motor connections. Make sure the control system connections are secure.



An excessive voltage has been applied to the control system. This is usually caused by a poor battery connection. Check the battery connections.



A comunication fault is indicated. Make sure that joystick cable is securely connected and not damaged.



An Actuator trip is indicated. If more than one actuator is fitted, check which actuator is not working correctly. Check the actuator wiring.

1/

#### 1.6 Slow or slugginsh movement

If the wheelchair does not travel at full speed or does not respond quickly enough, and the battery condition is good, check the maximum speed setting. If adjusting the speed setting does not remedy the problem then there may be a non-hazardous fault.

Contact your service agent

#### 1.7 Maximum Speed / Profile Indicator is Steady

The display will vary slightly depending on whether the control system is programmed to operate with drive profiles.

#### 1.7.1 Maximum Speed Indication

The number of LEDs illuminated shows the maximum speed setting. For example, if the setting is speed level 4, then the four left hand LEDs will be illuminated.

#### 1.7.2 Profile Indication

The LED illuminated shows the selected drive profile. For example, if drive profile 4 is selected, then the fourth LED from the left will be illuminated.

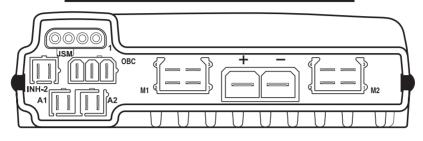
#### 1.8 Maximum Speed / Profile Indicator Ripples Up and Down

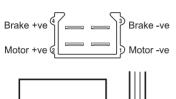
This indicates the control system is locked.

#### 1.9 Maximum Speed / Profile Indicator Flashes

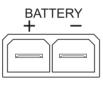
This indicates the speed of the wheelchair is being limited for safety reasons. The exact reason will depend on the type of wheelchair, however, the most common cause is that the seat is in the elevated position.

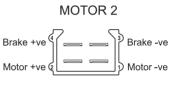
## **VR2 POWER MODULE CONNECTIONS**

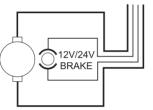


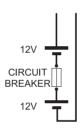


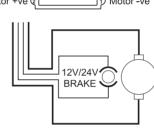
MOTOR 1





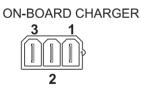




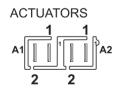




INH-2	Function
1	0V
2	Inhibit 2



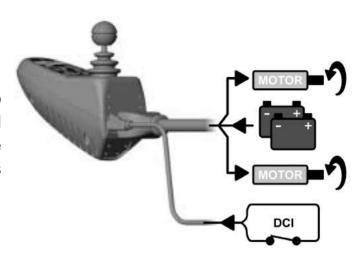
OBC	Function
1	Battery +ve
2	Inhibit 3
3	0V



Joystick Movement	Pin 1	Pin 2	Actuator Movement
Forward	+ve	-ve	Channel Up
Backward	-ve	+ve	Channel Down

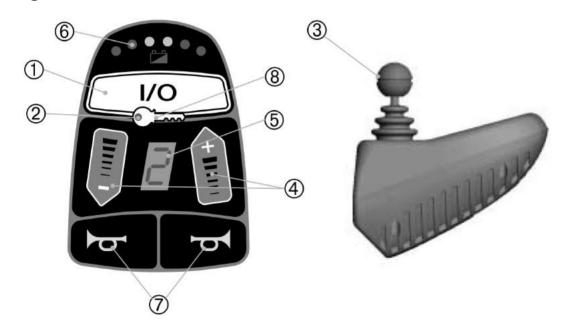
#### Commando S

Has a "Drive Control Input" (DCI) to provide interlocks between driving and other functions, such as vary the function of the chair when the seat is turned to the front (or to the rear).



#### **Commando S Controller Introduction**

### **Using Commando**



#### 1. On / Off Button

Turns the system On and Off.

#### 2. Status Indicator

**ON** steady - Commando is ON and the entire control system is normal.

**Flashing** - Commando is ON but an off-normal condition has been detected

somewhere in the control system.

**Pulsing** - Commando is ON but locked.

#### Note:

**Flashing** = bursts of 1 or more flashes, separated by a pause of 1 second. **Pulsing** = a quick single flash, repeated every 5 seconds. This will stop after 1 minute and Commando will power down automatically.

#### 3. Joystick

Controls speed and direction. The further you push, the faster you go in that direction.

#### 4. "Speed Up" and "Speed Down" Buttons

Increases or decreases the Top Speed of the chair between Speed 1 (slowest) and Speed 5 (Fastest).

#### 5. Top Speed Indicator

This indicator displays the currently selected Top Speed, ranging from 1 through to 5. "1" means the chair will drive slowly with the joystick fully deflected, through to "5" which gives the highest speed with the joystick fully deflected.

A "-" is displayed whenever Commando is in Drive Inhibit state, for example during battery charging, or when a seat is reclined or raised.

## 6. Battery Gauge

Shows how much battery charge is remaining. When battery charge has dropped to a single red LED, that LED will begin flashing indicating an "Empty" battery warning. This display will also flash if Commando senses a battery over-voltage or under-voltage condition.

#### 7. Horn Buttons

Press either button to sound the horn.

### 8. Magnetic Key Lock

An optional feature that locks the chair to prevent unauthorised use.

#### Note:

This feature is disabled by default and, if required, must be enabled by programming.

Locking the chair

- Swipe the magnetic key over the key symbol. Commando will beep and turn off into a locked state.

**Unlocking the chair** - Press the On/Off Button and swipe the magnetic key across the key symbol. Commando will turn on into an unlocked state and will be able to be driven normally.

> If the On/Off button is pressed but the key is not swiped, the LED in the key symbol will pulse every 5 seconds to indicate Commando is turned on, but locked. If, within 1 minute of turning the power on the lock is not disarmed, Commando will automatically turn itself off.

## **Introducing Diagnostics and Fault Finding**

A flashing "System Status Indicator" (the LED in the Key symbol) indicates Commando has detected an "abnormal" condition somewhere in the control system.



The nature of the condition is indicated by the number of flashes in each burst, referred to as the "Flash Code". It is important to realise that most of these flash codes relate to problems with components other than Commando - the batteries, motors and brakes - so a flashing LED normally has nothing to do with Commando at all.

Commando reacts differently to each possible "abnormal" condition depending on its severity and impact on safety. It may...

- 1. Simply give a "Flash Code" as a warning and let driving continue as usual.
- 2. Let the chair drive but at a reduced speed. This is known as "Limp Mode" and is used for intermediate level conditions in which maintaining some degree of driving is the preferred and safest option. Limp Mode should only be used with caution and to get back to a point wher the fault can be diagnosed and remedied.
- 3. Automatically stop the chair and indicate the "condition" by giving a Flash Code. Conditions of a transient nature, for example Stall Time Out, may be cleared simply by powering down and up again. Conditions of a permanent nature, for example Park Brake Fault, will prevent the chair from driving until the fault is physically removed.

Overview of Commando Flash Codes		
Flash Code	Probable Condition	
Bursts of 1 flash	Commando may be faulty	
Bursts of 2 flash	Accessory fault (fault related to seating or lighting)	
Bursts of 3 flash	Left Motor Fault	
Bursts of 4 flash	Right Motor Fault	
Bursts of 5 flash	One of the Park Brakes is open circuit	
Bursts of 6 flash	unused	
Bursts of 7 flash	Battery dangerously low	
Bursts of 8 flash	Battery voltage is to high. Refer Battery Charging section.	
Bursts of 9 flash	Internal Comms Fault 1 (CANL)	
Bursts of 10 flash	Internal Comms Fault 2 (CANH / Wakeup)	
Bursts of 11 flash	Stall time out	
Quick pulse every 5 seconds	Commando is powered up but locked	
Rapid flashing	"Out Of Neutral At Power Up" (OONAPU) fault	
Tapia nashing	Commando powered up with the joystick deflected	

#### B. Freewheeling:

Because the motors are designed to engage the electromagnetic brakes when the vehicle is not in use or when the power is OFF, they also have a manual feature that allows them to "free-wheel." Free-wheeling is accomplished by turning the free-wheeling levers to the free-wheeling position as shown. (Fig 17)

Fig 16



**Engaged Mode** 

**Fig 17** 



Free-wheel

#### C. Seat Rotation

Your seat can be swivelled at 45 increments up to 90° each side (Fig. 19-1,2,3). The swivel lever will lock the seat rotation in one of five positions. To swivel your seat, simply pull up on swivel lever forward to unlock it and then release it while rotating the seat until it locks in place (Fig. 19).

Fig. 19

Fig. 19-1



Fig. 19-2



Fig. 19-3



## Recommendation

To ensure a dependable battery charge, we recommend charging the batteries overnight. It will not only spare you unpleasant situations on route, but will prolong the batteries' service life as well.

**Note:** Only use the charger that is supplied with the power chair. Use of any other charging unit voids the warranty and could result in severe damage to the batteries and the power chair, or may cause hazard. Depending on the use, terrain and driving conditions, the batteries will provide a range of 15 - 25 miles. However, we recommend that the batteries are charged periodically.

#### **Charging Instructions:**

The power chair charging system is designed for your safety and convenience. To recharge the batteries, follow the Steps below:

- 1. Place your power chair close to a standard electrical wall outlet.
- 2. Turn the controller power off.
- 3. Plug the charger plug into the controller's charger socket. (Fig. 22) located in the back of the controller.
- 4. Plug the charger power cord into a standard wall outlet.
- 5. Disconnect the Charger power cord from the wall outlet when the batteries are fully charged.

Fig. 22



**Charger Socket** 

The batteries will be fully charged in 4 - 6 hours. This will be indicated when the green light in the battery charger side panel turns on.

Your power chair is designed for minimal maintenance. However, we recommend that you periodically check the following:

Tire pressure: Be sure to maintain the pressure of the tires

between 30-37 psi. (If tire is pneumatic tire)

**Tire tread:** Visually inspect the tire tread. If less than 1/32",

please have your tires replaced by your local dealer.

Motor brushes: Have your local dealer inspect the motor

brushes every six months.

Joystick/controller: Make sure to keep the controller from the

elements. Moisture will damage the

controller and void the warranty.

**Battery terminal connections:** Inspect the state of the battery

terminals. Make sure that they

are not corroded.

Clean your power chair cover only with a damp cloth:

The ABS shroud (cover) has a clear coat that is very easy to clean. Please do not use water to clean your power chair.

**Note:** If you experience any technical problems, check with your local dealer before attempting to trouble shoot on your own.

## P312 / MP-3U

Specification	English	Metric	
Weight			
Base	93.5 lbs	42.5 kg	
Seat	40 lbs	18 kg	
Overall Dimensions			
Length	37.5 in	96 cm	
Width	24 in	61 cm	
Seat height	18 in	40 cm	
Top speed	5 mph	8 km/h	
Load capacity	300 lbs	136 kg	
Turning radius	21 in	53 cm	
Wheel Sizes			
Drive Wheels	10 in (Foam filled tire)	260 x 85	
Casters	8 in (Foam filled tire)	200 x 50	
Seat Dimensions			
Width (adjustable)	18 - 21 in	46 - 53 cm	
Backrest Height (adjustable)	16.5 - 21 in	42 - 53 cm	
Depth	16 in	41 cm	
Footrest			
Height adjustable	2.5 -6 in	6 - 15 cm	
Controller	Integral, Dynamic DL, fully programmable / PG VR2 50A		
Charger			
Battery Type (recommended)	12V - 33 Ah (2) SLA		

IEC SY	IEC SYMBOLS		
$\triangle$	Caution, attention or consult accompanying documents.		
$\sim$	Alternating Current		
<b>*</b>	Type BF Equipment		
	Double Insulation		
	No Smoking or Naked Flames		

Degree of protection against ingress of water is rated as IPx0.

## **▶** Warranty **◄**

## **Limited Warranty**

Corporation warrants to the original pruchaser of this wheelchair product that it is free of defect in material and workmanship and that, when operated within the guidelines and restrictions of this manual, will remain so free of defect in material and workmanship for a period of One (1) year from the original date of purchase.

Excluded from this warranty is failure due to negligence, abuse, accident, operation outside of rated limits, commercial or institutional use, damage / wear to upholstery or tires and improper maintenance or storage. The batteries for this wheelchair product are not supplied by Corporation; contact the battery manufacturer / supplier if warranty replacement is requested.

This wheelchair product must not be modified in any way without the express written consent of Corporation. Any such unauthorized modification could cause unreliable and / or unsafe operation and will void this warranty.

Where a failure occurs within the 1- year warranty period that is not excluded above, the failed components will be replaced with similar new or reconditioned components at sole option. Corporation will not be responsible for labor and / or shipping charges.

The foregoing warranty is exclusive and in lieu of all other warranties expressed or implied including, but not limited to, the implied warranty of merchantability and fitness for a particular purpose. Corporation will not be liable for any consequential or incidental damages whatsoever.

## ► Warranty Registration ◀

## **WARRANTY REGISTRATION**

MODEL NO		
SERIAL NO		
DATE PURCHASED ——		
NAME		
ADDRESS		
CITY	STATE_	ZIP
DEALER NAME		
		STAMP
RETURN ADDRESS		

We wish you a safe and comfortable riding experience!

