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 **DeVilbiss®**  
HEALTHCARE

 **AUTOFOLD**

**AutoFold Powerchair**

Instructions for use



NB. IMAGES CONTAINED IN THIS DOCUMENT ARE FOR ILLUSTRATION AND PARTS IDENTIFICATION PURPOSES ONLY, AND MAY NOT REFLECT FINAL PRODUCT OUTLOOK APPEARANCE.

# CONTENTS

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1. INTRODUCTION	4
2. CONTACT INFORMATION	4
3. PRODUCT DESCRIPTION	5
3.1 Environment	5
3.2 Intended User Group	5
3.3 Intended Use	5
3.4 Indications	5
3.5 Product Overview	6
4. SAFETY	7
4.1 Warnings & Cautions	7
4.2 Risk Assessment	7
4.3 Contraindications	7
4.4 Powerchair Loading	8
4.5 Training	8
4.6 General Warnings	9
5. TRANSPORT & STORAGE	11
6. SYMBOL DEFINITION	12
7. PARTS IDENTIFICATION	14
8. CHARGING & PREPARING FOR USE	15
8.1 Installation	15
8.2 Battery Charging	15
8.3 Folding and unfolding	17
8.4 Checking Before Use	18
9. OPERATION OF THE AUTOFOLD POWERCHAIR	19
9.1 Operational Limits	19
9.2 Control Panel	19
9.3 Driving the Powerchair	21
9.4 Steps, Kerbs & Fixed Obstacles	22
9.5 Inclines	23
9.6 Outdoor Operation & Inclement Weather Precautions	24
9.7 After Use Instructions	24
10. CLEANING	25
11. MAINTENANCE & SERVICING	26
11.1 General Guidelines	26
11.2 Fault Detection	28
11.3 Repair	28
12. DISPOSAL OF PARTS	29
13. ELECTROMAGNETIC COMPATIBILITY (EMC)	30
14. SPECIFICATION	31
15. WARRANTY	32
16. MAINTENANCE SCHEDULE	33
17. QUICK START GUIDE	34

# 1. INTRODUCTION

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Thank you for purchasing this product. These instructions for use should be read carefully and understood before operating the powerchair. Improper use or unfamiliarity with the powerchair may result in harm, injury or traffic accidents. A maintenance schedule has also included at the back. Keep this manual with the powerchair, or in a safe place.

Contact Drive DeVilbiss Healthcare Ltd. or check our website for the latest version of this document. Users with visual, reading or cognitive disabilities should seek advice from a professional care provider for an appropriate format. If this is not viable, users should contact Drive DeVilbiss Healthcare Ltd. If you have any questions concerning the operation or maintenance of the powerchair, contact Drive DeVilbiss Healthcare Ltd.

# 2. CONTACT INFORMATION

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For assistance in setting up, using, maintaining your powerchair, to report unexpected operation or for any service, warranty, sales or customer service information regarding this product, please contact Drive DeVilbiss Healthcare Ltd.



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196 Industry Road, Hengdian Movie Zone, Dongyang, Zhejiang, CN



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Any serious incident that has occurred in relation to the device should be reported to the manufacturer and the MHRA or competent authority of your Member State. Please quote the product serial code on all correspondence, which can be found at the bottom of the frame.

For Service & Support outside the United Kingdom, please contact the local distribution company from where this equipment was purchased. Failure to do so may result in the product warranty becoming void.

## **3. PRODUCT DESCRIPTION**

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### **3.1 Environment**

The AutoFold Powerchair can be used in both indoor and outdoor environments where appropriate. The AutoFold Powerchair can be used on flat, even path surfaces, however the user should avoid grass, gravel, gradients greater than 6° and motorised roads. Additional care should be taken to avoid inclement weather and wet surfaces.

### **3.2 Intended User Group**

The AutoFold Powerchair is intended for a single user of weight up to 150kg (23.6 st). The intended user group for this device is any mobility restricted individual that requires assistance with transport. The patient / occupant is the only intended operator. Users must be both mentally and physically capable of operating the device with minimal risk of injury to themselves and others.

### **3.3 Intended Use**

The intended use of the powerchair is to transport an end user with restricted mobility, as defined in section 3.2.

The powerchair is intended to support a single occupant. A risk assessment must always be performed on the suitability of the user to the powerchair.

### **3.4 Indications**

To provide transport mobility to an end user with restricted mobility.

### **3.5 Product Overview**

The aluminium alloy AutoFold Powerchair has been designed to provide a comfortable and secure solution for users who have mobility restrictions. The product is a class A powerchair (under EN 12184:2014), class I medical device and class 2 invalid carriage (under The Use of Invalid Carriages on Highways Regulations 1988).

The AutoFold Powerchair is designed to be suitable for extended outdoor use, but with indoor use capabilities. For specific guidance with outdoor use, see section 9.6.

This manual is composed from the product design and specifications at the time of publication. As designs change, some illustrations and pictures in the manual may not correspond to the powerchair that you purchased. We reserve the right to make design modifications.

## 4. SAFETY

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### 4.1 Warnings & Cautions



Warning

Warnings in this user manual highlight potential hazards that if disregarded could lead to injury or death.



Caution

Cautions in this user manual highlight potential hazards that if disregarded could lead to equipment damage or failure.

### 4.2 Risk Assessment

Before using the powerchair, a risk assessment must be performed by a competent individual to ensure the safe use of the powerchair on a user-by-user basis. It is the responsibility of users and carers to determine that they are both mentally and physically capable of operating the powerchair with minimal risk of injury to themselves or others.

The risk assessment should include, but not be limited to:

- Entrapment
- Falling out of the powerchair
- Small adults (and children)
- Individuals who lack capacity
- Users with visual, reading or cognitive disabilities
- Very active occupants
- Unauthorised people with access to the powerchair

### 4.3 Contraindications

- The end user exceeds maximum weight capacity indicated in section 4.4,
- The end user has postural support needs that are not addressed by the AutoFold Powerchair,
- Inability to safely guide a power mobility device.

Other contraindications may be relevant which are specific to an individual and / or care environment.

## 4.4 Powerchair Loading

The maximum user weight of the AutoFold Powerchair is: 150 kg (23.6 st)

Maximum user weight is the sum of the user mass and the mass of any ancillary attachments or accessories. Exceeding the maximum weight capacity will void your warranty. Drive DeVilbiss Healthcare Ltd. will not be held responsible for injury and / or damages resulting from failure to observe weight capacities.



Warning

- The maximum load is for the powerchair to be occupied by one person only. Additional weight could damage components or destabilise the powerchair, potentially causing injury.
- The powerchair may only be used to transport one person at a time. It should not be used for climbing. The backrest is not designed to support an entire person's body weight, and the armrests are not designed to support other individuals sitting / leaning — risk of collapse, entrapment.
- The powerchair is not a toy. Children should not be allowed to play near or operate the powerchair, as they are at risk of harm.

## 4.5 Training

All individuals operating the AutoFold Powerchair are to be suitably familiar with the functionality and limitations prior to use. It is the responsibility of the user to ensure they are suitably trained to use the powerchair and any associated parts safely and correctly. Every effort should be made to resolve deficiencies and should include consideration of retraining, falls prevention and equipment alterations and modifications.

If these instructions for use are not deemed sufficient and the need for training is required, please contact Drive DeVilbiss Healthcare Ltd. (see section 2) who can discuss training options with you.



## 4.6 General Warnings



Warning

- Do not use a damaged or badly worn powerchair — risk of harm.
- Check the functionality of the powerchair before every use. Ensure the joystick and control system is responsive and free from unintended movement. Check the current fastest speed setting is appropriate. (It is recommended to use a slower speed setting at the beginning of every use, gradually increasing the speed setting as appropriate.) Ensure your lap belt is secured before operating the powerchair.
- Do not use the powerchair in rain or snow conditions — risk of electric shock.
- Do not drive on grass, motorised roads or in muddy or icy conditions.
- Reduced speed and care should be taken when navigating obstacles.
- Do not attempt to navigate on slopes greater than 6°.
- If unintended movement of the powerchair occurs, release the joystick to automatically stop the powerchair. If this fails, cut off power to the powerchair.
- Under no circumstances should the powerchair be used as a seat in a motor vehicle
- The powerchair is designed for occupants who weigh less than 150 kg; overloading may put the user at risk of falling or entrapment.
- Do not touch any exposed contacts or connectors while using the product or while in contact with other individuals.
- Misused electrical equipment can be hazardous.
- Do not operate the powerchair while under the influence of alcohol or when excessively tired.
- Do not operate the powerchair at night near motorized roads or in situations without a clear line of sight.
- Only approved parts, specified for the AutoFold Powerchair, should be used. Accessories that have not been approved or designed for use with the powerchair are not to be used — a hazard could be introduced due to product combination incompatibility. If in doubt, contact your local distributor.



Warning

- Modification of the AutoFold Powerchair, its parts or features is not allowed without the permission of Drive DeVilbiss Healthcare Ltd. — a hazard could be introduced.
- The powerchair is electrically operated, so should not be used in oxygen-rich environments, in the presence of flammable gases, sources of heat or naked flames — risk of explosion / fire. Damaged or worn upholstery increases the risk of fire hazard and should be replaced immediately.
- Individuals unable to drive the powerchair without assistance or supervision must not use the powerchair without such supervision. Unsupervised use of the powerchair must be avoided if there is any doubt about the ability of an individual to operate it safely.
- Do not step on the foot pedal while loading or unloading from the powerchair. Risk of instability.
- If children, adults with learning difficulties or pets pose a potential risk of tampering with the powerchair, its suitability for use is to be considered during the initial user / product risk assessment.
- Do not use the AutoFold Powerchair unattended while in manual mode. Always seek assistance if manual mode is used. Do not use the powerchair in manual mode when on any slope.
- Only use the approved battery charger supplied with the AutoFold Powerchair to charge the Lithium (Lithium-ion) battery pack supplied with the AutoFold Powerchair.

## 5. TRANSPORT & STORAGE

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Environmental conditions for transport and storage:

Ambient temperature: 0°C to +50°C

Humidity: <80% RH

Follow these conditions when transporting or storing the powerchair:

- Store the powerchair fully folded, on a flat, level floor (see section 8.3).
- Always fully charge, then remove the battery prior to long-term storage.
- The powerchair should be stored in clean and dry conditions. Cover to protect from fluid ingress, dirt, dust etc.
- Powerchairs should not be stored on their side, on their backs, or stacked.
- When transporting powerchairs by vehicle, they should be securely stowed in the back of a van, truck, or boot of a car. Adjustable parts should be removed or properly secured during transport.
- Keep the instructions for use with the powerchair or in a safe place.

Note: This vehicle is suitable for land and air transport, but contact your carrier in advance to determine their specific requirements. The lithium battery pack may require special packaging and storage provisions in line with IATA or UN Guidelines. To remove the battery, press the release button and then pull forward on the handle.

If your powerchair is stored for a prolonged period, flat spots may develop in the wheels, causing an uneven sensation when driving. This should work itself out over time. Drive DeVilbiss Healthcare Ltd. suggests placing a sturdy platform under the frame to lift the wheels off the ground and take weight off the wheels during storage. If you notice flat spots after continued use, replace the powerchair wheels immediately.



Caution

- Always lift your powerchair by the frame. Do not attempt to lift by any removable parts (e.g. seat or armrests).
- Infrequently charged batteries, or batteries stored without a full charge are susceptible to permanent damage, causing unreliable performance from your powerchair.
- Avoid placing the powerchair in direct sunlight — this could damage the electrical system and / or cause label fading.
- Clean the powerchair in line with section 10 prior to storage.














Warning

- Improper storage of your powerchair may result in permanent damage to the frame and / or electronics.
- Do not sit in the powerchair while in a moving vehicle.

## 6. SYMBOL DEFINITION

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The following symbols are found on the AutoFold Powerchair:

Symbol	Description
	Warning Beware of potential hazard
	Caution Beware of potential product damage
	Refer to instructions for use - Recommended Failure to read the instructions for use could introduce a hazard
	Refer to instructions for use - Mandatory Failure to read the instructions for use could introduce a hazard
	Medical Device
	Safe working load
	Do not create a stack of more than two boxes.
	Fragile, handle with care
	Use no hooks
	No heavy load
	This device must not be used as a seat in a motor vehicle.

Symbol

Description



Serial number



Product code



Model Number



Quantity



Authorised EU Representative



UK Responsible Person



Manufacturer



Date of manufacture



Importer



W.E.E.E (Waste Electrical and Electronic Equipment)  
Refer to section 12



Keep away from rain



This way up



Beware of trapping points

# 7. PARTS IDENTIFICATION

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## 8. CHARGING & PREPARING FOR USE

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### 8.1 Installation



Warning

- Before preparing the powerchair, ensure these instructions have been read and fully understood.
- Prepare the powerchair in a dry, indoor environment. Risk of electric shock if prepared in a damp area.
- Only competent persons are to prepare the powerchair for use. If in doubt, contact Drive DeVilbiss Healthcare Ltd.
- Ensure a risk assessment in line with local health and safety policy is undertaken to ensure that staff are not put at risk when performing assembly activities.

Refer to the Quick Start Guide for installation instructions (see section 17)

### 8.2 Battery Charging



Warning

- Do not open the battery.
- Do not connect an extension cord to the battery charger.
- Keep metal objects away from the battery terminals; electric shock may occur.
- Ensure the charging cable is not under excessive tension to avoid cable damage — damaged cables can create an electrocution / fire risk.
- Ensure the battery is not exposed to direct sunlight or a secondary heat source — direct heating of the battery via an external source could pose a fire risk or cause an explosion.
- Do not drive the powerchair while the charging cable is attached or connected.
- **Only charge the AutoFold Powerchair with the approved charger. Never charge the powerchair using a different charger.**



Caution

- Charge fully before each use.

The AutoFold Powerchair's batteries should be fully charged (approximately 5-8 hours) before its initial use. This initial charge will allow the battery to perform at about 90% of its optimal performance. Following the initial use, it is recommended to perform another 5-8 hour charge to improve the battery's performance. After the first few uses and charges of the battery, it should be operating at optimal performance and will extend the lifespan of the battery. Repeat this process when the battery is replaced. Ensure the powerchair is switched off and is in 'Electric' mode prior to connecting the charger (see figure 1).

The battery can be charged on-board (when the battery is installed on the powerchair) or off-board (when the battery is removed).



Figure 1 – Electric / Manual mode switch

To charge while the battery is removed, connect the 3-pin output to the socket on the battery. Connect the outlet plug into a nearby standard wall socket. To charge while the battery is attached, connect the 3-pin output of the battery charger into the socket on the underside of the controller.

The LED on the charger will appear blue while charging. When charging is complete, the LED will change to green. It is recommended to charge for 5-8 hours on each charge. After charging is complete, remove the charger from the powerchair/battery and the plug from the wall socket. Store the charger in a safe location.

The AutoFold Powerchair has an overload protector built into the battery box. In the event the battery or motor is overloaded, the overload protector will trip and cut off the power. This will reset after 1-2 minutes and allow use of the powerchair.

If you use your powerchair on a daily basis, charge the batteries as soon as you are finished with the day's activities, and leave it on the charge until you are ready to use the following day.

If there is a longer period of no use, it is recommended to charge the battery every two months, and use it for more than 20 minutes. This may help preserve / extend the life of the battery.






### 8.3 Folding and Unfolding




Following the initial battery charge, the powerchair can be unfolded. Place the powerchair with the rear wheels and folded front wheels on an even surface and ensure the charger is disconnected. The powerchair can be unfolded by using either of the following two methods.

#### Remote control

The AutoFold powerchair is provided with a 4-button remote control for folding and unfolding the powerchair.

The additional buttons have been provided to reduce the risk of accidental engagement of the folding mechanism.

To unfold, press , then , then press and hold  until motion has finished.

To fold, press , then , then press and hold  until motion has finished.

To unfold powerchair



To fold powerchair



## Backrest folding switch

The powerchair can be folded using a set of switches attached to the back of the powerchair frame.

To supply power to the folding/unfolding mechanism, set the right hand switch to position 'I'.

To unfold the powerchair: On the left hand switch, continually press the side marked 'II', until the powerchair is fully unfolded and stable.

To fold the powerchair: On the left hand switch, continually press the side marked 'I', until the powerchair is fully folded.

Return the right hand power switch to 'O' after folding/unfolding.



Warning

- Do not begin folding of the powerchair while the user is sat in on the device.
- If your powerchair moves accidentally, immediately release the joystick to stop movement.
- Stand behind the powerchair when folding/unfolding and at least 30cm clear. The powerchair may shift as the front wheels fold.
- Keep the folding mechanism power switch in the 'O' position during normal use to avoid accidental activation.

## 8.4 Checking Before Use

It is important to check the functionality of the powerchair before the initial use to ensure its safe operation.

- With both of the motor lock levers set to manual, the powerchair should move freely when pushed by hand. With both of the motor lock levers set to electric, it should not be possible to move the powerchair by hand.
- Switch on powerchair and wait 5 seconds for the joystick to initialise.
- Gently press the joystick in any direction then check the battery indicator and powerchair speeds lights are illuminated on the joystick controller.
- Gently rotate the joystick in all directions and ensure the front wheels rotate freely.
- Release the joystick after moving in any direction. The joystick should immediately return to the middle position.

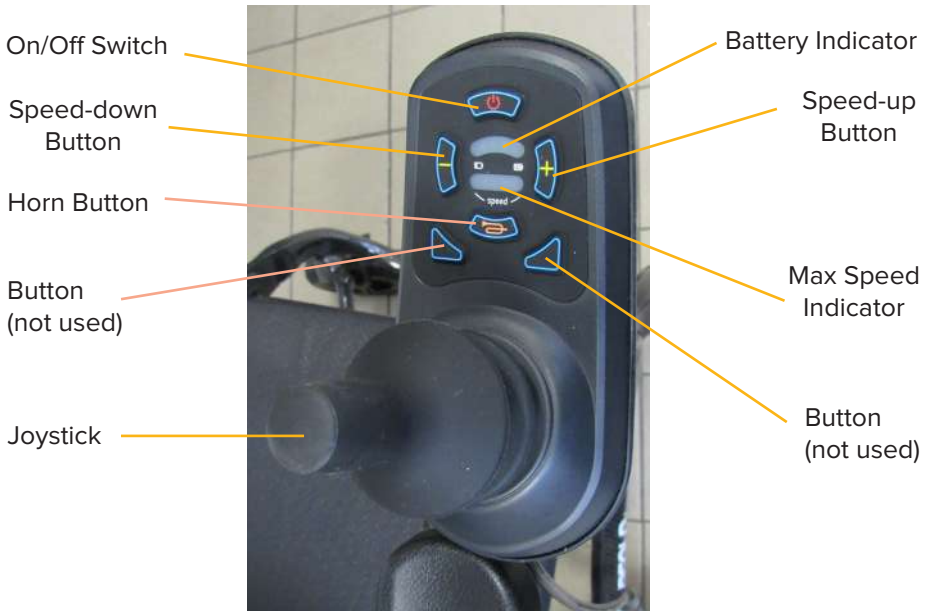
# 9. OPERATION OF THE AUTOFOLD POWERCHAIR

## 9.1 Operational Limits

Ambient temperature: 0°C to +40°C  
Operating humidity: 20% to 85% RH

## 9.2 Control Panel

Please refer to the diagram below to identify your AutoFold Powerchair control panel and its functions. Familiarise yourself with the terminology to better understand references throughout these instructions.



Caution

Make sure the powerchair functions work correctly before operating, using the checklist in section 8.4 for guidance.

## On/Off Switch

Pressing the on/off switch controls the power supply for the control unit from the battery pack. Power is directed from the control unit to the motor on each wheel. Only use the on/off switch to stop the powerchair in emergency situations. Frequent and repeated emergency stopping may shorten powerchair components lifespan.

## Joystick

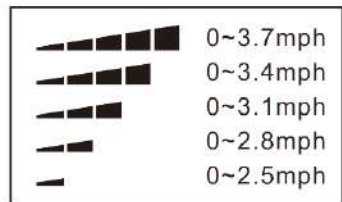
The joystick is used to control the speed and directional movement of the powerchair. The joystick has 360° of movement and moves the powerchair in a combination of forwards, backwards, left and right. The further the joystick is pushed from the central position, the faster the powerchair will move. When the joystick is released, it automatically returns to the central position and engages the powerchair brake.

## Horn Button

The horn will sound when this button is pressed.

## Speed-up / Speed-down buttons

These buttons control the maximum speed setting of the powerchair. After the powerchair is switched on, the display will show the current maximum speed setting. This setting can be adjusted using these buttons.



## Charger Socket

This socket is the connection for the 3-pin power outlet of the battery charger.



Caution

Only use this socket for charging the AutoFold Powerchair. Use of the socket to supply power to other electrical equipment may damage the powerchair's control system and EMC performance.



USB Port

Charging Socket

### 9.3 Driving the Powerchair

You must exercise awareness, caution, care, and common sense when operating your powerchair. Always keep in mind your own limitations and substance use.

Users may encounter difficult manoeuvring situations such as narrow doorways, travelling up and down ramps, cornering, and travelling on uneven terrain. Be sure to lower the speed, take your time, and carefully manoeuvre the powerchair.

For your safety, fasten the safety belt before you drive the powerchair.



Warning

- Never use your powerchair while tired, smoking, under the influence of alcohol or other mind-altering substances. Be aware of precautions, warnings, and safety issues when taking prescribed or over-the-counter drugs before driving.
- If there is a history of active seizures in the last 6 months, clearance should be obtained from a neurologist that the patient's seizures do not prohibit safe use of a motorised device.
- When operating the powerchair, the occupant is expected to be positioned appropriately in the seat, with their feet inboard of the footplate at all times, and limbs clear of moving parts to prevent entrapment. Never reach, lean or bend when driving the powerchair.
- Always make sure the power is off, with the powerchair and backrest fully unfolded before getting on / off the powerchair.
- Carers should keep clear once the powerchair is powered on. Do not operate the controls while anyone is entering or leaving the powerchair – a hazard may be introduced.
- Do not let children play near or operate the powerchair.
- Keep your feet on the foot board at all times during operation. Do not stand on the foot board.
- Keep your hands and feet away from moving parts while driving. Be aware of loose-fitting clothes that can become caught in the drive wheels.
- Always reduce your speed and maintain a stable centre of gravity when turning corners.



Caution

Always check the AutoFold Powerchair is free of obstructions before use.

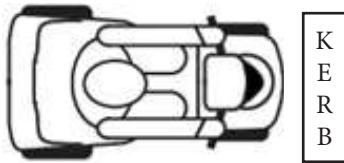
## 9.4 Steps, Kerbs & Fixed Obstacles

Use extreme caution when operating your powerchair near kerbs, porches, stairs, escalators, drop-offs, unprotected ledges, and raised areas. Approach slowly, and make sure the front of the powerchair is perpendicular to the obstacle.

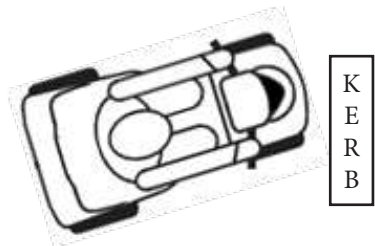
To manoeuvre up a fixed obstacle – Increase the forward speed until the powerchair has cleared the obstacle, and then you may reduce the speed or return the joystick to neutral.

To manoeuvre down a fixed obstacle – Reduce the forward speed just before the front wheels come in contact with the obstacle and remain at the reduced speed until powerchair has cleared the obstacle, then you may increase the forward speed.

### Correct Approach:



### Incorrect Approach:



Warning

- Never attempt to navigate your powerchair over a kerb or other fixed obstacle taller than the maximum ground clearance. Refer to section 14 for this information.
- Never attempt to navigate your powerchair backwards over an obstacle. Make sure that there are no steps, kerbs or other obstacles behind you while reversing – tipping / falling risk.
- Never attempt to operate your powerchair on steps or escalators.

## 9.5 Inclines

Use caution when approaching inclines or declines. If necessary, lower the speed before travelling on a slope.

When travelling up an incline, try to keep the powerchair moving forward. If you must come to a stop, use caution and slowly accelerate the powerchair forward. When travelling down an incline, lower the speed on your powerchair to the slowest setting, and proceed cautiously.

If the powerchair is travelling down the incline faster than you expected, slowly return the joystick to the centre to come to a stop, then slightly push the joystick forward again to continue safely down the incline.



Warning

- Drive your powerchair straight up or down an incline, never backwards. Erratic movements, or back and forth patterns may increase the chance of tipping.
- Be careful when driving on inclines. Inclines vary and doing so may decrease stability.
- Do not, under any circumstances, travel on a slope greater than the maximum stability angle for this powerchair. Refer to section 14 for this information. Exceeding the stability angle may cause unstable conditions.

## 9.6 Outdoor Operation & Inclement Weather Precautions

Exposure to inclement weather should always be avoided. Monitor weather forecasts before starting a journey to reduce risks. If you find yourself caught in inclement weather while operating your powerchair, proceed to the closest shelter immediately. Completely dry your powerchair before operating, charging, or storing.



Warning

- Do not take your powerchair on roads or highways.
- Be cautious when driving your powerchair in busy areas, such as shopping malls.
- If you get caught outside in the rain, seek shelter immediately and dry the powerchair with a cloth.
- Do not drive your powerchair at night without proper lighting.
- Avoid exposure to moisture, standing water, rain, snow, ice or salt when possible. Operating in rain, snow, salt, mist and on icy or slippery surfaces may have an adverse effect on the electrical system.
- At extreme temperatures, the batteries may freeze, and your powerchair may not be able to operate. In extreme high temperatures, it may operate at slower speeds due to a safety feature of the controller that prevents damage to the motors and other electrical components. Operational limits stated in section 9.1 must be observed.



Caution

If you are unsure of a surface, such as gravel, it is recommended to avoid it and locate an alternative route.

## 9.7 After Use Instructions

Turn off the power after use of the powerchair. Store the powerchair in a location that cannot be interfered with by children, meets the storage temperatures listed in section 5 and is free from excess moisture.

Clean the powerchair with a soft cloth and ensure it is dry (see section 10). Do not use chemicals to clean the powerchair. If the seat cover requires cleaning, remove it to be washed and allow to dry before placing back on the powerchair.

If the powerchair is to be stored for a long period of time, we recommend fully charging and then removing the battery to prevent battery drain.



## 10. CLEANING

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Warning

- Never use direct contact with water to clean the powerchair. This could cause damage to the electrical components and put the user at risk. Only a damp cloth should be used.
- Always disconnect the AutoFold Powerchair from the mains supply prior to cleaning.
- Never use any neat bleach or similar chemicals on the seat or armrests, as this may cause the seat to dry out and crack.
- PPE must be worn during manual decontamination to prevent the risk of infection.
- Deviating from the specified cleaning instructions could cause a biological hazard, especially in multi-user environments, and adversely affect the life and efficiency of the product.



Caution

Regular cleaning can help prolong the lifespan of the powerchair.

The surface of the powerchair frame has been treated with a protective coating to allow for easy removal of dirt. Use a damp cloth with a mild soap to clean the frame and then dry thoroughly.

## 11. MAINTENANCE & SERVICING

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Warning

- Always disconnect the powerchair from the main power supply and remove the battery prior to performing any maintenance procedures (where viable).
- Never attempt to deconstruct the enclosures, re-wire any components or replace internal battery components. Modification of the powerchair is not allowed without the permission of the manufacturer and electrical system components are only to be replaced by authorised service personnel.
- No maintenance or servicing should be conducted while the device is in use – risk of electric shock, entrapment, loose parts, etc. If not possible due to the occupant's mobility, a risk assessment should be carried out, and if deemed safe to proceed, care should be taken to avoid contact with the occupant when working on electrical items.
- Failure to carry out the following checks at the stated frequencies could negatively influence the essential performance of the powerchair and as a result put individuals at risk.
- Allow all components to cool before performing maintenance. Parts of the motor system can generate heat while driving.



Caution

All maintenance should be conducted by a competent person. Disassembling the controller, motor, or charger by anyone other than an approved service engineer is prohibited and voids any applicable warranty. For any maintenance concerns, contact Drive DeVilbiss Healthcare Ltd.

### 11.1 General Guidelines

Routine maintenance is required to ensure the maximum use of your powerchair. While some of the maintenance can be done by yourself, you may need assistance from an authorised service engineer. If you have any doubts, contact Drive DeVilbiss Healthcare Ltd.

If there are any signs of damage, or the powerchair is not performing as it should, withdraw it from service until the powerchair has been repaired and is fit for use.

Preventative maintenance is key to keeping the AutoFold Powerchair in prime operating condition. Follow the Maintenance Schedule at the end of this manual to periodically inspect the AutoFold Powerchair for serviceable items.

- Avoid abuse to the joystick and control functions
- Avoid prolonged exposure to extreme heat or cold
- Keep the powerchair clean and free from moisture
- Never use a conditioner on the tread of the wheels
- If only red LEDs appear on the battery gauge, the batteries are nearly out of charge and should be recharged as soon as possible
- Check for the presence of flat spots on the tyres
- Check all cable connections, ensuring they are fastened and not corroded
- Check the frame and all components for loose fasteners and tighten where appropriate

The following conditions may indicate a serious problem with your powerchair. Contact Drive DeVilbiss Healthcare Ltd. if one of the following conditions occurs:

- Motor or gearbox noise
- Frayed electrical harnesses
- Cracked or broken connections
- Uneven wear on the tyres
- Veering to one side when steering straight
- Bent or broken wheel assemblies
- Will not power on
- Loose seat or seat components

If in doubt about the correct replacement of a component, contact Drive DeVilbiss Healthcare Ltd.

## 11.2 Fault Detection

This AutoFold Powerchair has an automatic fault detection system that will alert you to any issues. When a fault occurs, you will hear a series of audible beeps. The issue can be identified using the table below. If the fault does not appear on the table below, do not use the powerchair, turn off the power and contact Drive DeVilbiss Healthcare Ltd.

<b>Beep Code</b>	<b>Fault Diagnosis</b>	<b>Resolution</b>
BEEP 2 + 1	Poor connection of joystick and controller	Check the communication connection cable between joystick and controller.
BEEP 2 + 2	Right motor error or plug connection poor	Check right motor and wiring harness
BEEP 2 + 3	Right brake error or cable connection poor	Check if the brake lever is in place & if the brake is damaged
BEEP 2 + 4	Left motor error or plug connection poor	Check left motor and wiring harness
BEEP 2 + 5	Left brake error or cable connection poor	Check if the brake lever is in place & if the brake is damaged
BEEP 2 + 6	Controller overcurrent or motor short circuit and overloaded	Check if the brake is released or wheels are locked, or motor damaged
BEEP 2 + 7	Failure of joystick lever	Check if the joystick lever is in the central position or poor connection. Release the joystick and restart the powerchair.
BEEP 2 + 8	Failure of controller itself	Controller fault, contact an authorised dealer.
BEEP 2 + 9	Battery undervoltage or battery failure	Please charge the battery, if receive this error after recharging, replace with new battery.

## 11.3 Repair

Contact your provider to discuss the replacement of components on the powerchair. Some spare parts may be replaced by the user under instruction from service personnel, however other components will require installation by a service engineer.

## 12. DISPOSAL OF PARTS

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When the powerchair, the electrical system or any associated packaging and accessories have come to the end of their useful life, follow W.E.E.E. (Waste Electrical and Electronic Equipment) policies, local and national regulations for recycling and disposal.

Individual parts can be separated and disposed according to the type of material. The electrical components of the powerchair should not be disposed in municipal waste. Some of these electrical components could be harmful to the environment and where viable, can be recovered and reused / recycled.

When the powerchair is unpacked for the first time, the cardboard box, and plastic packaging used can be recycled at recycling centres that offer suitable cardboard and polymer recycling programmes respectively.

For further information about disposal, contact your local waste agency, recycling centre, or provider. If in doubt, contact Drive DeVilbiss Healthcare Ltd.



Warning

The AutoFold Powerchair and any associated parts are to be decontaminated before disposal to avoid the risk of cross-contamination.

## 13. ELECTROMAGNETIC COMPATIBILITY (EMC)

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Electromagnetic interference (EMI) tests have shown to produce adverse effects on the performance and control of electrically powered mobility devices. EMI can be produced from different sources, such as cellular phones, amateur radio transmitters (HAM), microwave signals and emergency vehicle transceivers. The EMI produced from hand-held radios are of special concern.

The EMI waves can cause unintentional movement of the powerchair, or damage to the controller. Every electrically powered mobility device has a resistance to EMI. The higher the resistance level the greater the protection. The intensity of the interference can be measured in volts per meter, V/m.

If the powerchair or any alternative equipment is found to be operating abnormally, turn off the piece of equipment that is believed to be causing the interference (if possible, as soon as it is safe) to identify the source of the RF energy. Once identified, mitigation measures are to be taken, such as the separation distances being increased and / or the device(s) being re-orientated. If the powerchair continues to operate abnormally, turn off at the mains supply and contact Drive DeVilbiss Healthcare Ltd.

The warnings listed below are recommended to prevent possible interference with the control system of your powerchair. Your powerchair, with no modifications, has an immunity level of 20 V/m. For specific emissions and immunity information relating to the powerchair, contact Drive DeVilbiss Healthcare Ltd. Report EMI incidents to Drive DeVilbiss Healthcare Ltd. using the details provided in section 2.



Warning

- Do not operate hand-held transceivers or turn on personal communication devices while the powerchair is powered on. Avoid use adjacent to or stacked with other equipment where possible. If adjacent use is necessary, the powerchair should be observed to verify normal electrical operation in the configuration in which it is to be used.
- Use of accessories and cables other than those specified or provided by Drive DeVilbiss Healthcare Ltd. could result in increased electromagnetic emissions or decreased electromagnetic immunity of the powerchair and result in improper operation or driving performance.
- Portable RF communications should be used no closer than 30 cm to any part of the powerchair (including its cables), otherwise a degradation in performance could result.
- Avoid use around radio transmission systems, such as radio or television stations.

## 14. SPECIFICATION

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Product name: AutoFold Powerchair  
Model Number: AFPC17BLK

Top Speed\* 3.7 mph (6 kph)  
Maximum Range\* 7.5 miles (12 km)  
Rated Slope 6°  
Maximum Stability Angle 9° (static) 6° (dynamic)  
Ground Clearance 6.5cm (2.6")  
Minimum Turning Radius 100 cm (39")  
Braking Distance <120cm (47.2")

### Powerchair Dimensions:

Unfolded (L x W x H) (cm / in) 101 × 63 × 98 cm / 39.8" × 24.8" × 38.6"  
Folded (L x W x H) (cm / in) 76 × 63 × 42 cm / 30" × 24.8" × 16.5"  
Seat Height 51 cm / 20"  
Seat Width x Depth 44 cm (17.3") x 44 cm (17.3")  
Armrest Height 22cm (8.7")  
Backrest Height 48 -58cm (18.8"-22.8")

### Wheels:

Front Wheels 20 x 5 cm (7.9" x 2")  
Rear Wheels 30 x 5.7 cm (11.8" x 2.24")  
Anti-Tip Wheels 5 x 1.5 cm (2" x 0.5")  
Wheel Type Solid, PU

**Maximum user weight: 150 kg (23.6 stone)**

Product weight: 26.2 kg (57.8 lb) excluding battery  
Battery weight: 1.7 kg (3.8 lb)

Motor Type: 24 V / 250 W (DC Brushless)

Battery Supplied: 24 V, 10 Ah, Lithium  
The battery charger is considered a detachable part of the powerchair equipment.

Max Controller Output: 35 A

Max Charger Output: 2 A

Application environment: See section 3.1

Liquid ingress protection: IPX4 – Protection from water splashes

\* The driving distance is based on a 120 kg user weight and will be reduced if used frequently on slopes, rough ground or to climb kerbs. Speed and range may also vary depending upon user weight, battery charge and condition, incline, weather conditions and driving behaviour.

## 15. WARRANTY

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Drive DeVilbiss Healthcare Ltd. guarantees this product is free from defects in material and workmanship under normal use for 2 years (1 year for batteries and tyres, 1 further year for other parts only) from the date of purchase from Drive DeVilbiss Healthcare Ltd. and its subsidiary companies or its authorised dealers. All implied warranties, including but not limited to those implied warranties of fitness and merchantability, are limited in the total duration of 2 years from date of purchase.

Drive DeVilbiss Healthcare Ltd. makes no other warranties, express or implied, and all implied warranties of merchantability, non-infringement and fitness for a particular purpose are hereby disclaimed. In no event will Drive DeVilbiss Healthcare Ltd. be liable for punitive, special or consequential damages, or for an amount in excess of the purchase price of the defective Drive DeVilbiss Healthcare Ltd. product or products.

Proof of purchase must be presented with any claim. Except as provided herein, this warranty will not apply to any Drive DeVilbiss Healthcare Ltd. products that have been (a) damaged by lightning, water, or power surges, (b) neglected, altered, abused, or used for a purpose other than the purpose for which they were designed, (c) repaired by you or any other party without Drive DeVilbiss Healthcare Ltd. prior written authorisation, (d) used in conjunction with a third party product or products not approved in advance by Drive DeVilbiss Healthcare Ltd. (e) damaged or failed by or attributes to acts of God, (f) damaged, caused by failure to follow instructions, or (g) otherwise used in a manner inconsistent with any instructions provided by Drive DeVilbiss Healthcare Ltd. The warranty explicitly exempts consumable items.

This warranty contains the entire agreement between you and Drive DeVilbiss Healthcare Ltd. with respect to any warranty matters, and supersedes any and all other written or oral statements, representations or agreements relating to the subject matter of this warranty.

In the event of a product defect during the warranty period you should contact your supplier, whether it be Drive DeVilbiss Healthcare Ltd., its subsidiary companies, authorised dealers or international distributors who will at their option unless otherwise provided by law; a) correct the defect by product repair within the terms of the warranty b) replace the product with one of the same or similar design or c) refund the purchase price. All replaced parts and products on which a refund is made become the property of Drive DeVilbiss Healthcare Ltd. Repaired or replaced parts and products are warranted for the remainder of the original warranty period. You will be charged for repair or replacement of the product made after the expiration of the warranty period.

Drive DeVilbiss Healthcare Ltd. cannot be held responsible for any injury or incident which relates to the use of this powerchair in conjunction with accessories manufactured by companies other than Drive DeVilbiss Healthcare Ltd.

Drive DeVilbiss Healthcare Ltd. has a policy of continual product improvement and reserves the right to amend specifications covered in this document.

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## 16. MAINTENANCE SCHEDULE

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Inspect your powerchair routinely for service issue or wearable items.

Inspection	AT ANY TIME	WEEKLY	MONTHLY	SIX MONTHLY
Joystick returns to centre when released and is free from damage	✓	✓		
Exposed electrical cables have not been damaged	✓	✓		
Check tyres are in good condition and free from flat spots	✓	✓		
Seat, armrests and footrests have not experienced damage	✓	✓		
Batteries (and surrounding area) are free from corrosion			✓	
Electrical junction to control unit is secure			✓	
Check brake functionality by pressing the joystick in any direction and releasing. The joystick should return to centre and the powerchair should immediately slow down.			✓	
Check the tyres have sufficient tread				✓
Check the full rotation of the front castors and ensure they align with the rear wheels when driving straight				✓
Check all fasteners are tight and all components are secure.				✓
Ensure the powerchair is clean of dirt and built-up residue				✓

**SUGGESTION** – Once a year, take your powerchair to a Drive DeVilbiss Healthcare Ltd. service engineer for inspection and maintenance who are authorised on behalf of Drive DeVilbiss Healthcare Ltd.

## 17. QUICK START GUIDE

1. Unpack powerchair and stand on its legs so it is standing in an upright folded position (A). Cut the nylon tie from the battery (B). Remove the rubber block from the battery (C) then firmly push the battery backwards until it locks in position with an audible click.



2. Install joystick by choosing the preferred side, then turn the securement knob to loosen and then insert the joystick tubing. When the required position is reached, tighten the knob to secure. Connect the 2 terminals ensuring that the ends are locked in place.



3. Add the cable clips to the frame.



4. Lay the powerchair down, so that the four wheels are touching the floor.



5. Unfold the powerchair. At the rear of the chair, set the right hand switch to 'I'. On the left hand switch, continually press the side marked 'II', until the powerchair is fully unfolded. Return the right hand switch to 'O'.



6. Install battery in remote fob (CR2032). Open the battery compartment. Insert the CR2032 battery and then press together the plastic housing to lock. (Note: for some markets, the battery may already be installed).



7. Put freewheel levers into 'Electric' mode by pushing the levers forward. Repeat for both motors.



8. Drop down armrests and pull-down footrest.



9. Install the seat and back cushions which attach with Velcro (if necessary).



10. Charge battery. The battery can be charged via the powerchair by inserting the charger into the socket on the underside of the joystick. The battery can also be charged directly when removed from the powerchair. (See section 8.2 of the Instructions for use for more details).



Charging socket

11. Switch the powerchair on. Ensure the charger is removed before operation.

12. Using the remote fob after initial set up.

To unfold the powerchair:

- Press 
- Press 
- Press and hold  until motion has finished.

To fold the powerchair:

- Press 
- Press 
- Press and hold  until motion has finished.

(See section 8.3 of the Instructions for use for more details).



To unfold powerchair



To fold powerchair





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Drive DeVilbiss Healthcare Ltd. provide these instructions for use.

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