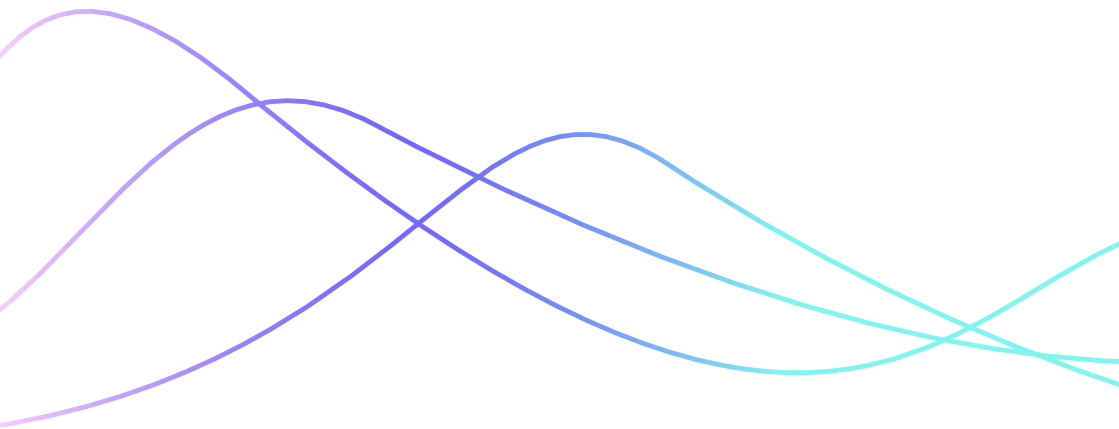
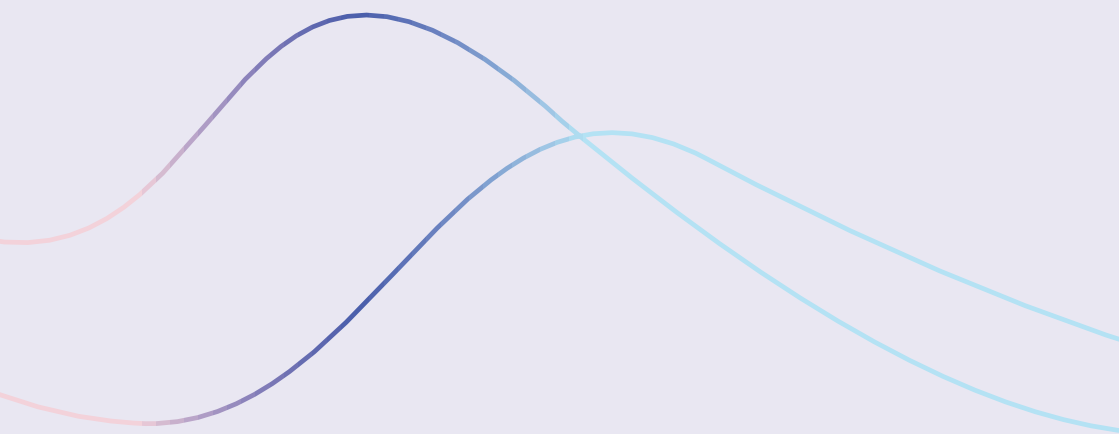




# WheelAir

Slingback V2  
Instructions for Use





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# Hello!

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Thank you for choosing WheelAir®. We hope you will enjoy the effects of full temperature and relative humidity control. Please read and understand this user manual before using the product and save it for future reference.

Product name: WheelAir Slingback

The WheelAir Slingback is a back-supporting cushion for use with a wheelchair. The device is designed to improve user comfort and reduce temperature and relative humidity by blowing air onto the user.

## Mission

At WheelAir our mission is to use the power of airflow to prevent heat and moisture related issues for wheelchair users, while contributing to the conversation and education around the topics of heat, moisture and relative humidity in seating.

This manual contains important information to install, use and care for your WheelAir Slingback V2.

## Important Product Information



Read carefully before use, store safely for future reference.

# Contacts

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## Manufacturer

WheelAir International B.V.  
318C 's-Gravenweg, 2911 BK  
Netherlands

Telephone: +31 (0) 180 23 40 93  
E-Mail: [info@wheelair.co.uk](mailto:info@wheelair.co.uk) / [info@wheelair.eu](mailto:info@wheelair.eu)  
Website: [wheelair.co.uk](http://wheelair.co.uk) / [wheelair.eu](http://wheelair.eu)

## Distributor



Latest product information and updates may  
be found at [wheelair.co.uk](http://wheelair.co.uk) / [wheelair.eu](http://wheelair.eu)

# Description

The WheelAir Slingback is a wheelchair product designed to replace an existing back support. The system is designed to improve user comfort by lowering temperature and relative humidity. This is achieved by channeling inducted air over the user's seat surface using WheelAir's patented Fluid Flow Channel technology. Airflow can be varied using a wireless multispeed Controller giving six options of airspeed. Up to 27 hours of continuous use can be achieved from a single battery charge (dependent upon fan speed settings).

Fanbox and Controller are charged via a USB-C connection. Typical charge time is approximately 2 hours to 80% capacity.

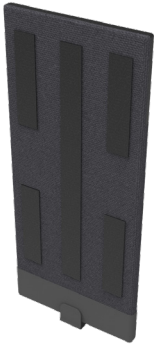
The WheelAir Slingback V2 is suitable for all wheelchair users.



The level of cooling achieved is at the discretion of the User. Where the User is impaired and unable to control the Device, responsibility for control and levels of cooling will be with the designated Carer.

| Key Components |                              |
|----------------|------------------------------|
| 01             | Outer Cover x 1              |
| 02             | Inner Cover x 1              |
| 03             | Foam Cushion x 1             |
| 04             | Channels x 2                 |
| 05             | Fanbox x 1                   |
| 06             | Controller x 1               |
| 07             | Controller Velcro® Patch x 1 |
| 08             | Fanbox Charger x 1           |
| 09             | Remote Charger Cable x 1     |

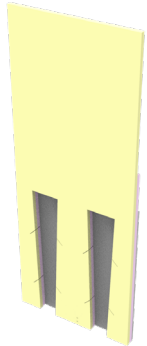
01



02



03



04



05



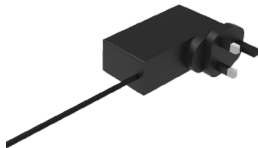
06



07



08



09



# Specification

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|                             |  |
|-----------------------------|--|
| Available Widths            | 290mm, 330mm, 360mm, 400mm, 420mm, 440mm   |
| Backrest Length             | 730mm, 840mm   |
| Fanbox Size                 | 265mm x 105mm x 39mm   |
| Weight                      | Backrest 1000g; Fanbox 560g  |
| Power                       | Fanbox Lithium-Ion 3.7V 8000mAh<br>Controller Lithium-Ion 3.7V 259mAh  |
| Charge Time                 | Typical 2 hours to 80%   |
| Charger                     | Medical Grade 18W USB-C  |
| Run Time                    | Up to 27 hours dependent on fan speed setting  |
| Fan Speed Settings          | 6  |
| Fan Lifetime                | >70,000 hours  |
| Max User Weight             | 136kg  |
| Materials                   | Outer Cover: Faux Leather – 50% PU + 50% Cotton, spacer mesh with the FRESH finish – 100% polyester, canvas 100% polyester<br>Inner Cover: Mesh - 100% polyester, stretch panel - 85% polyester, 15% PU<br>Cushion: foam + synthetic rubber channels<br>Fanbox: ABS/PC |
| EMC Certification           | IEC60601-1-2   |
| Fire Testing                | EN 1021-2-2014   |
| Air Travel & Battery Safety | UN38.3: Fanbox and Controller may be transported as hand luggage on commercial airlines  |



# Operating Environmental Conditions

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## Environment - Operation

---

|             |                       |
|-------------|-----------------------|
| Temperature | 5 – 40°C / 41 – 104°F |
|-------------|-----------------------|

---

|                                    |           |
|------------------------------------|-----------|
| Relative Humidity (non-condensing) | 30 – 80 % |
|------------------------------------|-----------|

---

|              |                |
|--------------|----------------|
| Air Pressure | 700 – 1060 hPa |
|--------------|----------------|

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## Environment – Transport & Storage

---

|             |                         |
|-------------|-------------------------|
| Temperature | -10 – 65°C / 32 – 149°F |
|-------------|-------------------------|

---

|                                    |          |
|------------------------------------|----------|
| Relative Humidity (non-condensing) | 30 – 95% |
|------------------------------------|----------|

---

|              |                |
|--------------|----------------|
| Air Pressure | 700 – 1060 hPa |
|--------------|----------------|

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# Sustainability and Disposal

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Sustainability and quality are two of our core values, which is reflected in the materials we use.

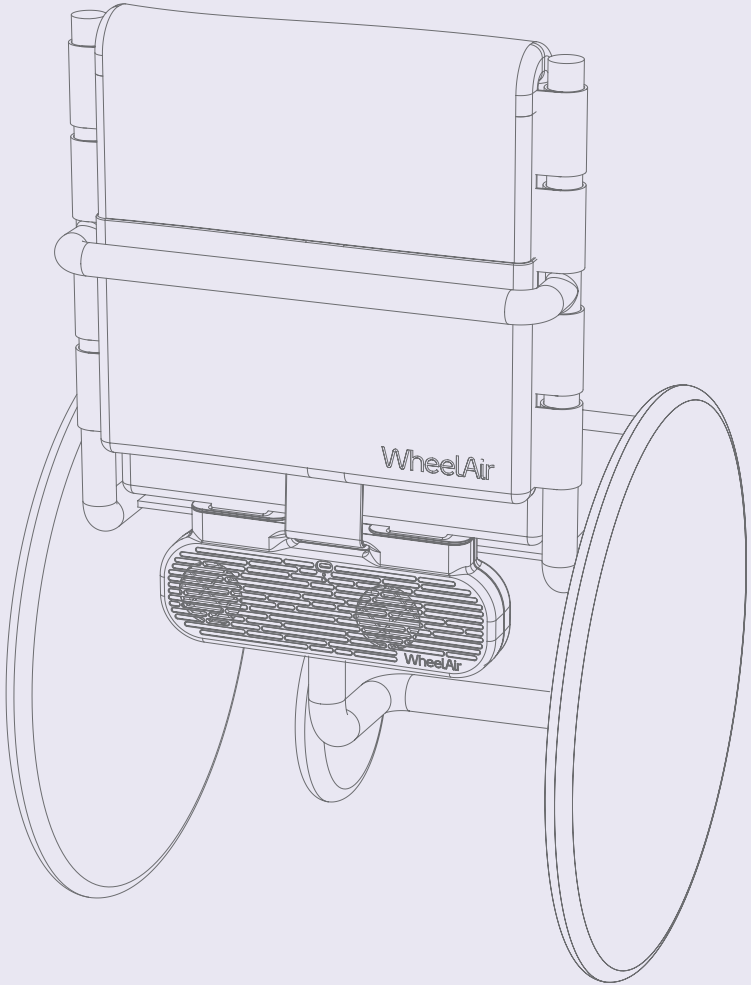


This Device contains no natural rubber, is latex free, and has no animal leather.



WheelAir International B.V. and its distributors comply with the EU WEEE and Battery directives so this device may not be disposed of as part of normal household waste. Please contact your distributor for details when you wish to dispose of this product so that it can be recycled correctly.

WheelAir parts may be replaced individually – please contact your Distributor for details.

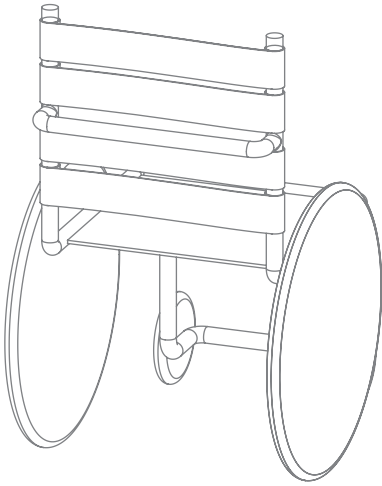


# Installation

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The Slingback is designed to fit wheelchairs with tension adjustable straps, with a minimum frame height of 300mm and frame width of 320mm – 500mm.

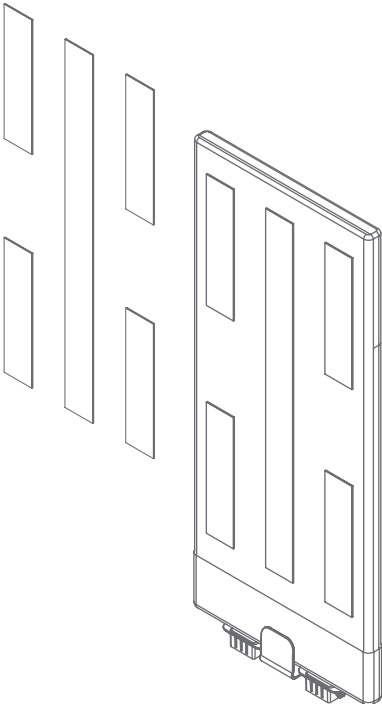
The Slingback is available in widths 290mm, 330mm, 360mm, 400mm, 420mm, 440mm, and lengths 730mm and 840mm to accommodate different frame sizes.



1.

---

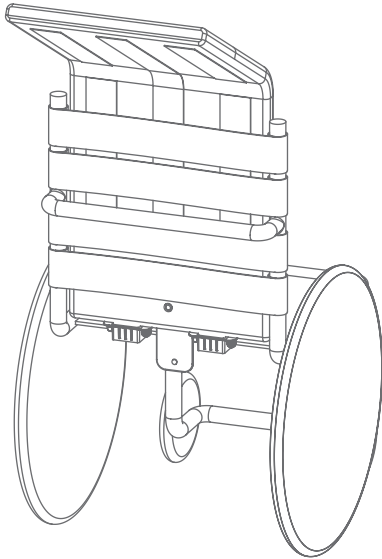
Remove existing backrest from wheelchair, leaving support tension adjustable hook-and-loop fastener straps in place.



2.

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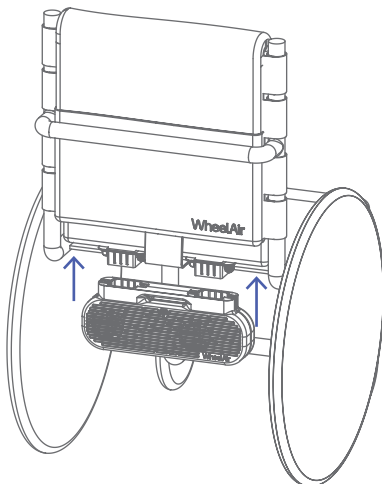
Determine whether the hook-and-loop fastener straps are of the “hook” type or “loop” type. The Slingback has both types fitted as standard. The type which is not desired can be peeled off.



3.

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Attach the front of the Slingback with the Velcro® to the wheelchair's tension adjustable straps and fold the Device over the back so that the WheelAir logo is facing outwards on the back of the wheelchair.



4.

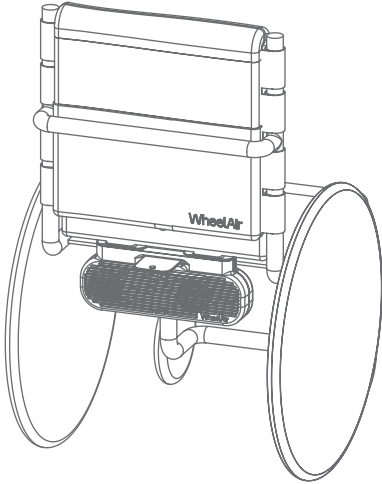
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Attach Fanbox to Slingback adapters using the magnets.

5.

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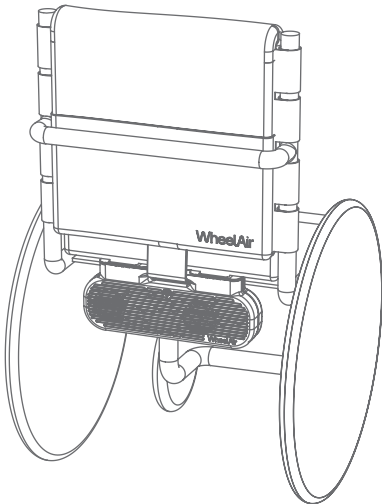
Secure Fanbox using the magnetic strap.



6.

---

You are now ready to use your Slingback.



# Operation

## Turning the Fanbox on from Flight Mode

When not in use, storing or travelling, the Fanbox should be kept in Flight Mode. To put the Fanbox in or out of Flight Mode, hold down Fanbox button for 5 seconds. The Controller will not communicate with the Fanbox when the Fanbox is in Flight Mode. The Flight Mode setting preserves the battery and deactivates the Bluetooth®.

## Turning the Fanbox on from Standby

The Fanbox is turned on by pushing the Controller Standby button. The indicator light strip will flash blue to show Bluetooth® is searching for connection and turn green when connection is made with the Fanbox.

## Controller Operation



The Controller buttons function with mid (c. 3 seconds) and short (instantaneous) presses.

|            | Short Press         | Mid Press               |
|------------|---------------------|-------------------------|
| Standby    | Connect             | Standby Mode            |
| Up Arrow   | Fan +1              | Fan Maximum             |
| Down Arrow | Fan -1              | Fan Minimum             |
| Battery    | Fanbox Charge State | Controller Charge State |





Don't run the fans on Max speed when the Fanbox battery indicator flashes red.



When no LED's are flashing on Fanbox, the Fanbox is in Flight Mode or out of battery.



The fans will not react if the Fanbox button is held down accidentally for longer than 10 seconds.



Using the Fanbox button will override the Controller. Press the Controller Standby button to regain control. Fans will turn off.

## LED Indicator



## Fanbox

The Fanbox can also be controlled with the Fanbox button.

|                     |  |
|---------------------|--|
| Short               | Fan +1 (up to max and then cycles from min.) |
| Long (c. 5 Seconds) | Standby Mode / Flight Mode                   |

## Typical Runtimes

|             |              |
|-------------|--------------|
| Fan Speed 1 | c. 27 hours  |
| Fan Speed 2 | c. 22 hours  |
| Fan Speed 3 | c. 17 hours  |
| Fan Speed 4 | c. 15 hours  |
| Fan Speed 5 | c. 12 hours  |
| Max         | c. 4.5 hours |





# Charging

The Fanbox can be charged whether removed or attached to the wheelchair.

Connect Charger to the Fanbox and connect the Controller with the Controller Charging Cable as per the diagram below, or charge separately.

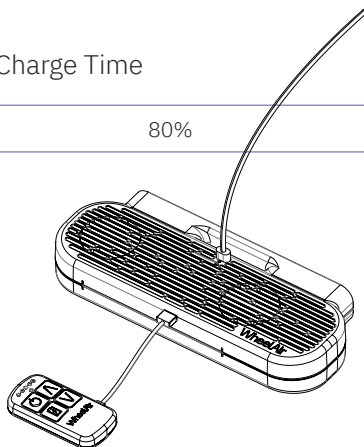
Fanbox LED and single controller LED will show charging state.

|                |               |
|----------------|---------------|
| Pulsing Red    | Low charge    |
| Pulsing Orange | 50% charged   |
| Solid Green    | Fully charged |

-  Charge Controller separate if Fanbox is completely out of battery. Alternatively, charge Fanbox first before connecting Controller if both are low on battery.
-  Controller won't take charge from Fanbox if Fanbox is in flight mode.
-  Fanbox charge LED lights up when plugging in the charger. If completely out of battery, charge LED can take up to 1h to appear.
-  Make sure charger is pressed deep enough into Fanbox. Fanbox and Controller will become warm when charging.

## Typical Charge Time

2 Hours                      80%



# Care and Maintenance

---

## Cleaning

Light cleaning: wipe surfaces with a damp cloth.

Dusty fans: Detach Fanbox and clean fan inlets. We recommend the use of a compressed air can.

The Slingback inner and outer cover can be machine washed. See Slingback cushion care labels for washing instructions.



Do not immerse Fanbox in water.

## Usage in Rain

The Fanbox is splashproof and is not likely to be damaged when used in light to moderate rain. The electronics are separated from the fan inlets and drain holes were added to the bottom of the Fanbox. The product is not fully waterproof.

## Service and Repair

If your device needs service or repair, contact your Distributor.



This product must only be repaired by WheelAir approved personnel and with WheelAir approved parts.



Only WheelAir parts and service providers may be used in order to maintain safety and essential performance with regard to electromagnetic emissions and disturbances.

# Transportation and Storage

---

## Aircraft Transportation

The Slingback is designed to be allowed to be taken on commercial airlines. For traveling, remove the Fanbox and put it in Flight Mode. Store together with the Controller in hand luggage.

## Long Term Storage

If your Slingback is not going to be used for an extended period (more than 2 months), your Fanbox and Controller should be fully charged before storage and thereafter should be fully charged again at least once every 2 months. Never store your Fanbox and Controller in conditions of extreme heat or cold. Always place your Fanbox in Flight Mode when storing.



Incorrect storage of your Fanbox will diminish the life of the battery.

# Troubleshooting

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## Magnetic Connection

Make sure magnetic adapter is flush with Fanbox before securing the magnetic strap. If the magnet adapter is not flush, readjust the channel or flexible tube position to flatten.

## Secure Strap

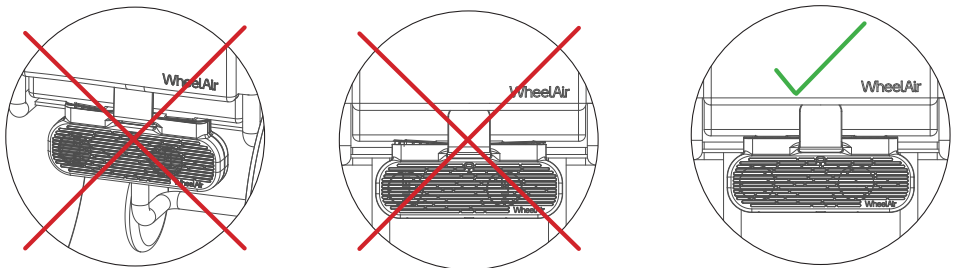
If not using the Fanbox bracket to secure the device to the wheelchair, please produce a safety strap to secure the Fanbox to the wheelchair (upholstery).

## Reconnect Controller

Hold down the the Standby button and Up Arrow on the Contoller until the LED's on the Controller flash orange. Then click Fanbox button and the new/old Controller will be connected.

## Fanbox not Charging

Make sure the USB-C charger end is plugged deep enough into the Fanbox charging point. If the Fanbox battery has been out of charge for a long period of time, it can take a few hours before the Fanbox charge LED lights up. Leave the Fanbox to charge overnight.



# Warnings, precautions and safety instructions

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The WheelAir Slingback may only be used as a wheelchair backrest. The use of this product in any other way is considered to be misuse. WheelAir International B.V. or Stael Design LTD cannot be held responsible for damage caused by misuse, improper use or negligence.



This Device is designed for use in a Home Healthcare Environment and must not be used in Emergency Medical Services Environments.

---



Use only WheelAir approved accessories. Failure to do so will compromise EMC safety and may affect the performance of the device or other devices in the vicinity.

---



Do not operate the WheelAir without first reading this manual and retain for future reference. If the instructions or warnings are unclear contact your Distributor.

---



Ensure fan inlets are uncovered when fans are running.

---



Do not use the WheelAir with any other backrest cushion product.

---



Only use this Device as instructed in this instruction manual.

---



The device uses ambient air so regulate the setting accordingly. If you or the user starts showing signs of hypothermia, seek medical attention immediately.

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Only the Manufacturer's supplied external power supply may be used.

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# Symbols

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## Product Symbols

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See User Manual



Battery Symbol



Latex free



CE Mark



Class II. Double Insulated



Manufacturer



Product Reference



Manufacture date (where  
XXXX is year manufactured)



Product Serial Number



Bluetooth Communication



AC Current



Standby



DC Current



Party included in recycling  
compliance scheme

## Packaging Symbols

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Fragile, handle with care

---



Temperature limits

---



This side up

---



Recyclable Material

---



Keep away from rain

---

## Symbols Used in this Manual

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Warning Symbol: Warning of a possible hazard may result in serious personal injury and / or damage to the product if instructions are not followed.

---



Caution symbol: Warning of a possible hazard may result in minor personal injury and / or damage to the product if instructions are not followed.

---



Information Symbol:  
Recommendations to follow.

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# Warranty

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Apart from general wear and tear, we warrant the WheelAir against specific defects for a one year period from the date of the original user's purchase, unless the country specific rules state otherwise. To qualify for warranty, the WheelAir must have its original serial number tag (located on the Fanbox) and you must have proof of purchase. We will send you a prepaid packaging slip to return your WheelAir to us.

Warranties are not transferable.

We do not warrant damage caused by poor treatment, accident, misuse or from improper installation or any exterior modification. We do not warrant if the Fanbox has been opened by the user or dropped/smashed. We do not warrant use in commercial activities, hire, reward or rental. We do not warrant if you simply change your mind after a 14 day return period.

However, we do service our products for a fee if there has been wear and tear or it has passed the warranty period. Claims can be made using the contact information provided in this manual. We do not pay for postage in this instance.

Only express warranties will be accepted – other warranties including implied warranties of merchantability and warranties of fitness for a particular purpose are not accepted. The only express warranties that are accepted are to repair or for replacement of the goods. No damages for breach of any warranty include any consequential damages or exceed the cost of non-conforming goods sold.

# Declaration of Conformance

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This product is CE marked, and has been designed and tested according to the WEEE directive 2012/19/EU, Battery directive 2013/56/EU, General Product Safety Directive 2001/95/EC, RoHS Directive 2011/65/EC, Packaging and Packaging Waste Directive 94/62/EC and EMC Directive 2014/30/EU. This device is tested to IEC60601-1-2.

## **Emissions Tested**

EN55011:2009 +A1: 2010

Radiated emissions tested only in normal (battery powered) mode. Class B.

## **Immunity Tested**

EN61000-4-2:2009

Tested only in normal (battery powered) mode. Tested at +/- 4kV & +/- 8kV contact, +/- 8kV & +/- 15kV air, Home Healthcare Environment.

EN61000-4-3:2006 + A1:2008 + ISI:2009 + A2:2010

Tested only in normal (battery powered) mode. Tested at 3V/m, 80-6000MHz & 10V/m, 80-2700Mhz plus proximity fields, Home Healthcare Environment.

## **Radio Tested**

EN301 489-17

Tested only in normal (battery powered) mode.

EN55032: 2015

Tested only in normal (battery powered) mode. Class B.

## **Fire Tested**

Tested to EN 1021-1:2014.

# Effects of electromagnetic interference on the product and on the user

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**CAUTION** Use of mobile devices with electromagnetic emissions (e.g., mobile phones) should be limited to no closer than 30cm (12 inches) to any part of the Device, including cables specified and supplied by WheelAir.

Unpredictable operation of Device and controlling fan speeds due to interference with the control signals:

Turn off all mobile devices if unpredictable operation of Controller is experienced since the communications may be affected by electromagnetic fields.

Turn the Slingback off when not in use, since the product may generate electromagnetic fields that can cause interference with other devices. The product has been tested according to EMC regulations.

Notwithstanding compliance with all applicable EMC directives and standards, the product can be affected by interference from other electric devices (e.g., department store EAS systems) or cause interference with such devices. If this occurs, move your product outside the interference range. • The Device may be susceptible to electromagnetic interference (EMI), which is interfering electromagnetic energy (EM) 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 inconsistent operation of the Device when changing fan speeds • Because EM energy rapidly becomes more intense as one move closer to the transmitting antenna (source), the EM fields from hand-held radio wave sources (transceivers) are of special concern. It is possible to unintentionally bring high levels of EM energy very close to the Device's control system while using these devices. • Other types of hand-held devices, such as cordless phones, laptop computers, AM/FM radios, TV sets, CD players, and cassette players, and small appliances, such as electric shavers and hair dryers, so far as we know, are not likely to cause EMI problems to your Device.

Thank you for choosing WheelAir! We strive to provide high quality and functional products that never compromise on style.

WheelAir International B.V.,  
318C 's-Gravenweg,  
Nieuwerkerk a/d IJssel, 2911 BK  
[www.wheelair.eu](http://www.wheelair.eu) / [www.wheelair.co.uk](http://www.wheelair.co.uk)

2021 - Version 3  
Designed and manufactured in Scotland

WheelAir International B.V. has a policy of continual product improvement and may use their right to amend this document at any time. A current version of this document is available at [www.wheelair.co.uk](http://www.wheelair.co.uk).