

# ardoo Caresafe 140

## User Manual



# User Manual



## Always Think Safety First!

For your safety and the safety of others please ensure that you carefully read this User Manual before using the equipment, paying particular attention to the safety precautions and warnings.

The Ardoo Caresafe 140 Hoist will not operate while plugged in for charging or when the emergency stop button is pressed.



**Please pay special care when folding or erecting the hoist. When the mast locking pin is removed you must support the weight of the mast ensuring it does not fall down and cause damage or injury.**

# User Manual



## Ardoo Caresafe 140 Hoist

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This confirms that Ardoo Caresafe Ltd owns the intellectual property rights of the contents of this manual.

## Introduction

Please read this User Manual carefully before you attempt to operate your Ardoo Caresafe 140 Hoist. The User Manual is your guide to safe operation and maintenance.

The Ardoo Caresafe 140 Hoist is an electrical operated patient lifting hoist, suitable for multi-patient usage, with a maximum safe working load of 140kg. This hoist is primarily designed for patient transfer only from a seated position but can be used to transfer from a supine position. This hoist may be used for a range of transfers including from a wheelchair, toileting chair or shower chair and can also enable patient transfer from a wheelchair into the seat of a suitable motor vehicle comfortably and safely. All the aforementioned transfers are only possible following a thorough risk assessment by a competent person. When not in use the lightweight hoist can be easily folded and placed in the boot of a motor vehicle, under your stairs, etc.

The Ardoo Caresafe 140 Hoist, is load tested at point of manufacture, and shipped to the Customer. Accompanying the product is a copy of the User Manual and a Test Certificate.

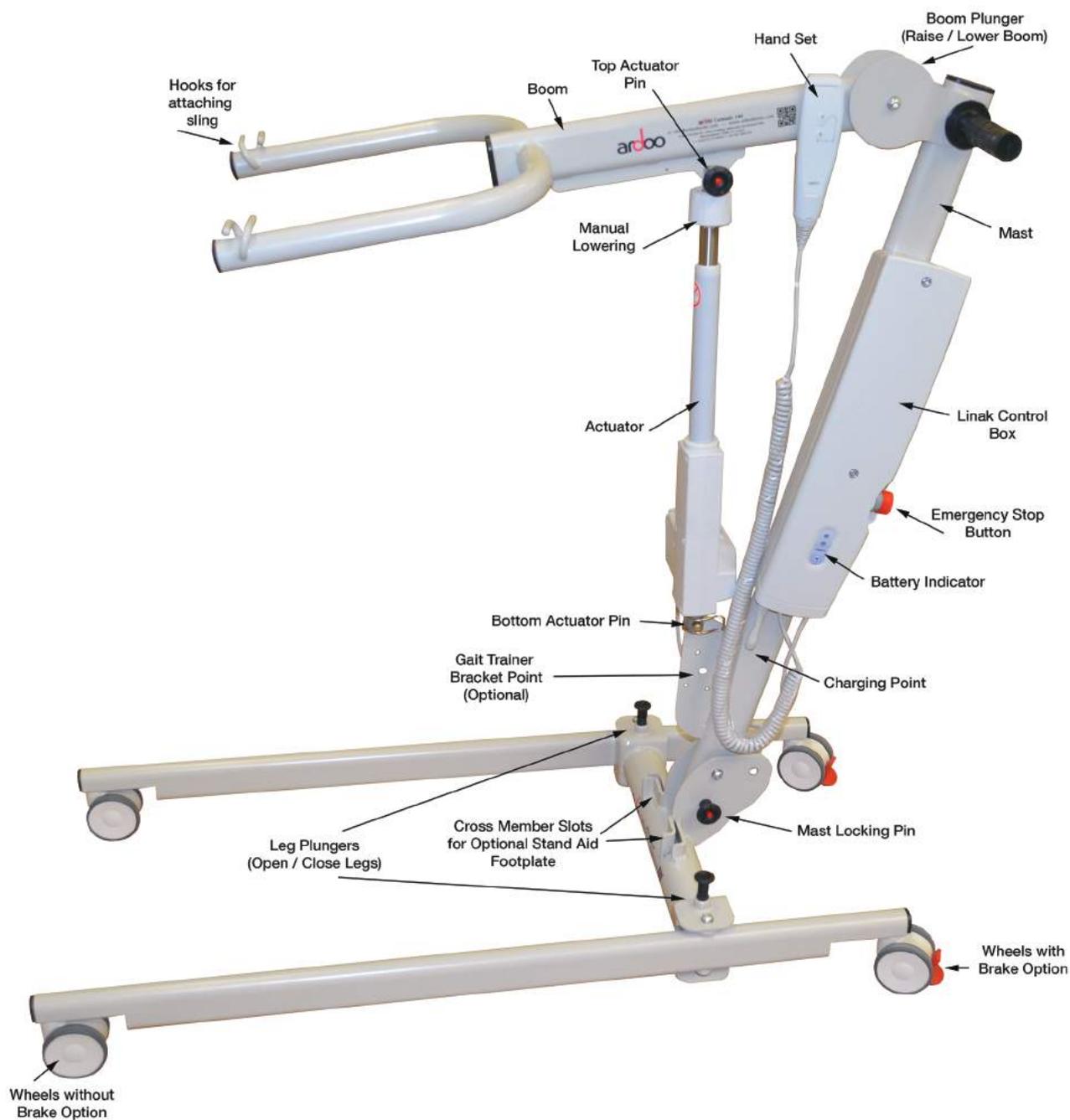
The test certificate is valid for 6 months and upon it's expiry the Ardoo Caresafe 140 Hoist should be inspected and serviced periodically (see service/ maintenance section). Ardoo recommends that Ardoo Caresafe 140 Hoist is serviced every 6 months.

Provided the Ardoo Caresafe 140 is used in accordance with the user manual the warranty will apply.

The Ardoo Caresafe 140 Hoist has a warranty on all parts for 24 months from date of purchase excluding the battery which has a warranty of 12 months from date of purchase, subject to the recommended servicing maintenance, daily checks and country specific load test requirements being carried out. The lifecycle of the Ardoo Caresafe 140 Hoist is 5 years minimum, provided that the equipment is operated in accordance with the User Manual.

The Ardoo Caresafe 140 Hoist is CE marked to the Medical Device Directive 93/42/EEC and also meets the requirements of the EMC Directive 89/336/ EEC and Low Voltage Directive 73/23/EEC.

# arboo Caresafe 140



# Erecting Procedure for the Ardoo Caresafe 140 Hoist



## Step 1:

Please ensure you have fully read the User Manual before proceeding. Place the folded hoist on a level floor and apply the brakes by pushing the red brake down on both back wheels.

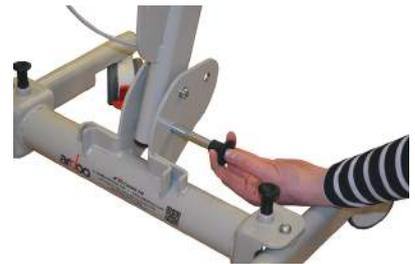


## Step 2:

Remove the mast locking pin - Take the weight of the mast by placing one hand under the mast and raise slightly (until the pin feels loose) while using your other hand to remove the mast locking pin (as shown). To remove the mast locking pin press in the red button on the pin and keep it pressed until the pin is fully withdrawn.

## Step 3:

Carefully raise the mast with one hand and when aligned with lower hole use your other hand to insert the mast locking pin by pressing the red button until fully inserted.



## Step 4:

Taking the weight of the boom in one hand, pull the boom plunger outwards and raise boom (as shown). The boom plunger should spring back into position.

## Step 5:

Raise the boom and align lug on boom with top of the actuator (as shown). Fully press in the red button on the actuator pin when removing/inserting it. Once the holes are aligned insert the top actuator pin fully; the actuator should now be securely attached to the boom.



## Step 6:

The Ardoo Caresafe 140 Hoist is now ready for use. If you need to open & close the hoist legs pull up the black leg plungers. The legs will move in & out once the leg plunger is lifted. Ensure the black leg plunger is in the locked down position before operating the Ardoo Caresafe 140 Hoist.

# Folding Procedure for the Ardoo Caresafe 140 Hoist



## Step 1:

Please ensure you have fully read the User Manual provided before operating the Ardoo Caresafe 140 Hoist. Apply the brakes by pushing the red brake down on both back wheels. Close the hoist legs by pulling up the black legs plungers and move the legs in. Ensure the actuator is fully down by using the hand control.



## Step 2:

Taking the weight of the boom in one hand, with the other hand press in the red button on the actuator pin and keep it pressed until the pin is fully withdrawn. Rest the actuator against the mast and replace the actuator pin to avoid misplacing it.

## Step 3:

Pull on the boom plunger (as shown) and carefully lower the boom until it is parallel with the mast. Then fully release the plunger ensuring the boom is securely locked in position.



## Step 4:

Firmly hold the mast in one hand and with your other hand remove the mast locking pin. To remove the mast locking pin press in the red button on the pin and keep it pressed until the pin is fully withdrawn.

## Step 5:

Lower the mast gently to the floor. Raise slightly until holes are aligned and insert the mast locking pin by pressing the red button back and keep it pressed until fully inserted.



## Step 6:

The Ardoo Caresafe 140 Hoist is now ready for storage or travel as shown.

## Safety Precautions

Prior to and during use the following safety precautions must be adhered to:-

- Always plan any lifting operations prior to commencing the lift.
- Always carry out the daily Checklist before use.
- Always familiarize yourself with the operating controls and functionality of the Ardoo Caresafe 140 Hoist prior to use.
- Always carry out any lifting operation in line with the recommendations within this User Manual.
- Do not lift a patient unless you have been trained and are competent to do so.
- Do not attempt to lift a patient on a slope exceeding 5 degrees.
- Do not attempt to manoeuvre the Ardoo Caresafe 140 Hoist across a slope greater than 5 degrees.
- Always manoeuvre the Ardoo Caresafe 140 Hoist by the handle provided and never by the mast, boom or patient.
- Do not attempt to push or pull a loaded Ardoo Caresafe 140 Hoist over any uneven or rough undulating terrain.
- Do not attempt to push a loaded Ardoo Caresafe 140 Hoist over any obstruction or obstacle that the castors cannot accommodate without reducing the Ardoo Caresafe 140 Hoist's stability.
- Do not use a sling with the Ardoo Caresafe 140 Hoist unless it is clearly specified and identified for use by a patient, by a risk assessment, undertaken by a competent person.
- Never use a sling that shows any sign of adverse wear or damage particularly fraying or thinning material.
- Always ensure that any sling, identified as compatible with the Ardoo Caresafe 140 Hoist, is of the correct size and is suitable for the patient.
- Always lower the patient to the lowest suitable position when carrying out a transfer.
- Never carry out a patient transfer with the brakes of the hoist in a locked position.
- Do not interfere with the actuator, handset or battery. Should a fault occur then cease using the hoist and contact an Ardoo Caresafe 140 Hoist approved agent.
- Never force any of the hoist controls. They are designed for ease of use and excessive force may damage the product and affect functionality.
- Do not use this hoist in a wet environment outdoors.
- Do not charge the hoist in a wet or humid environment.
- This hoist is designed for a single patient transfer only within the recommendations identified and it is not suitable for any other type of lifting operations.
- When erecting or folding the hoist, always support the weight of the mast while the mast locking pin is removed. Ensure the mast does not fall down and cause damage or injury.
- When operating the boom and leg plungers take care not to pinch your fingers.

### NOTE:

Ardoo Caresafe 140 Hoist is designed to be operated by a suitably qualified attendant and should not be operated by the Patient unless such attendant is present.

## Operating Instructions

### Actuator Orientation

The actuator is normally fitted as shown in the labelled photo. It is possible to turn the actuator 'upside down' – some users with limited leg movement find this more comfortable as it reduces leg contact with the actuator. This results in restricted access to the Emergency Lower function. Therefore Ardoo Caresafe 140 Hoist recommend, wherever possible, to have the actuator as per the labelled photo.



### Controls

Check the hand control for correct functioning in both directions. The handset works on a 'push to run' basis whereby it only operates when a directional arrow is pressed and stops when released. Check the fit of the hand control plug and socket.

### Raising & Lowering of the Boom

Raising and lowering of the boom movement is a function of the actuator. The raising and lowering is controlled by the operation of the buttons on the handset. The handset connects directly into the controller. The actuator has a built in stop that activates once its maximum limit of travel is reached.

### Emergency Lower Function

At the top of the actuator is a collar. In the event of power loss you can lower the boom of the Ardoo Caresafe 140 Hoist by simply rotating the collar at the top of the actuator in the direction the arrow is pointing.



### Emergency Stop Function

Emergency Stop Button is a red button located at the side of the battery/control box and should be pressed in an emergency. This will stop any raising or lowering operation immediately. Raising or lowering of the boom can commence once the button has been rotated clockwise and returns to its original position.

Ensure that the Emergency Stop Button is in the out Position before operating the Ardoo Caresafe 140 Hoist.

## Charging the Battery

When the battery requires charging insert the mains lead into the bottom of the control box and ensure the Emergency Stop Button is pulled out.

The Ardoo Caresafe 140 Hoist will not operate while charging.

Allow to charge for approximately 8 hours to obtain maximum lifting capacity. A fully charged battery, in good condition, should allow 20 full lift cycles depending upon range of lift, ambient temperature and weight of patient.

- Wherever possible ensure that the battery is fully charged before use. The battery cannot overcharge so the Ardoo Caresafe 140 Hoist can be placed on charge when not in use.
- Never allow the battery to remain in an uncharged condition.
- It is best if the battery is not allowed to be completely run dry. The battery cannot be overcharged as it runs on a trickle system. If the battery is left permanently plugged in it will only take sufficient charge to keep it topped up. As the battery runs low you will hear a continuous beep when the handset is pressed. At this point the battery should be charged. The light on the charger will show yellow indicating that the battery is low and is charging. When the battery is fully charged the light will show green.



- The battery should never be accessed by unauthorised personnel, always seek guidance from an Ardoo approved agent.
- Ensure the mains charger is switched off before connecting to, or disconnecting from the battery.
- Do not leave charger switched on with the battery disconnected.
- Never leave a battery connected with the mains power switched off.

## Mains Adaptor

The mains adaptor for the Ardoo Caresafe 140 Hoist charger is a standard UK 3 pin plug. European, American, Australian or any other plugs are available.



## Wheels and Brakes

Two of the wheels have brakes on Ardoo Caresafe 140 Hoist. Prior to commencing and during a lifting operation it is normally best to not apply the brakes to enable the hoist to find its own centre of gravity. If the brakes are locked during a lift this may drag the patient and may cause discomfort.

## Leg Adjustment

The Ardoo Caresafe 140 Hoist is fitted with a manual leg adjustment to assist with the lifting operation. Leg adjustment is carried out by releasing the leg plungers. Leg adjustment should only be carried out prior to the lift commencing or when lifting is completed. For optimum stability it is recommended to keep the legs in a closed position. When manoeuvring the unladen hoist through doorways or around obstacles it is recommended that the legs are closed to the narrowest position. Ensure that the legs do not come into contact with fixed obstacles when adjustment is carried out as this may damage the legs and have an adverse effect on the hoist.



## Slings

The Ardoo Caresafe 140 Hoist can be used with a number of slings of varying size and type. Prior to sling selection a full risk assessment must be undertaken of both the client and environment in which the Ardoo Caresafe 140 Hoist is to be used.

## Daily Checks

Ardoo Caresafe recommend that a number of daily checks should be undertaken prior to using the Ardoo Caresafe 140 Hoist. The following is a list that should be undertaken daily to reduce the risk of product failure and patient injury:-

- ✓ Ensure the Ardoo Caresafe 140 Hoist legs open and close correctly and are free from distortion or damage. Ensure that the handset operates correctly and the boom raises and lowers accordingly.
- ✓ Ensure the Ardoo Caresafe 140 Hoist legs open and close correctly and are free from distortion or damage. Ensure that the handset operates correctly and the boom raises and lowers accordingly.
- ✓ Check the battery has sufficient charge to carry out any required operation. If not, place on charge and allow to charge accordingly.
- ✓ Ensure the Ardoo Caresafe 140 Hoist can move freely on the wheels and braked wheels have a functional lock and unlock mechanism.
- ✓ Ensure the hooks on the boom are free from damage prior to attaching any sling.
- ✓ Ensure that all components of the Ardoo Caresafe 140 Hoist are correctly assembled, positioned correctly and all fasteners are securely fastened.
- ✓ Visually inspect any slings to be used.
- ✓ Do not use a sling that exhibits any sign of wear or frayed edges.

## Cleaning

The hoist should be cleaned in accordance with Hoists usage. Where possible all powder coated painted surfaces should be cleaned with a damp cloth and mild cleaning soap solution.

Do not use abrasive cleaning products. Ensure that no liquids are allowed to access the control system, battery, handset and actuator.

After use in a bathroom wipe all surfaces with a clean dry cloth.

## Maintenance

Ardoo Caresafe 140 Hoists recommend that the hoist is inspected biannually by a competent and qualified person. This inspection and test should include the hoist accessories and any slings. Ardoo Caresafe 140 Hoist recommendations are in line with the UK inspection guidelines as detailed in The Lifting Operations and Lifting Equipment regulations 1988.

For use outside the UK please check local country specific guidelines.

## Maintenance Guidelines

- Sling Attachment Hooks - inspect for excessive wear.
- Boom - check the attachment of the boom to the mast. Ensure that any sideways movement is minimal. Check the actuator mounting point.
- Mast - check the operation of the mast locking device. Check bottom actuator mounting point.
- Control System - Check hand control function. Check all connections.
- Leg Adjustment - Check both legs are working, free from damage and operate smoothly.
- Leg Plungers - Ensure plungers are free from any build-up of dirt or foreign bodies. Remove and lubricate with a light grease where necessary to maintain smooth operation.
- Wheels - Check that all wheels are securely attached, free from any damage and any dirt or foreign bodies. Check braked wheels operate correctly. Lubricate with a light grease where necessary.
- Actuator - the actuator should be maintenance free. Cycle from highest point to lowest to determine smooth operation. If excessive noise is present replace actuator. Check for correct operation and ensure no fluid leakage is evident.
- Emergency Lower - check function with maximum user weight applied.

**Battery:** Requires no inspection as it is maintenance free.

**Cleaning:** The Ardoo Caresafe 140 Hoist should be cleaned with a damp cloth using only a mild detergent. Chemical and abrasives can damage the hoist and should be avoided to prolong the lifespan of the hoist.

**Slings:** Check as part of visual check or load test.  
Identify any wear or frayed edges.

**Load Test:** Testing to be carried out in accordance with UK LOLER1988 guidelines.

## **Inspection & Servicing**

### **Boom**

- Check the boom/mast pivot is fully tightened.
- Make sure there is only minimal side movement of the boom and it is aligned with the centreline of Ardoo Caresafe 140 Hoist.
- Check for wear on the actuator unit mounting.
- Check the security of the actuator unit fixing to the boom.
- Maintenance - lubricate boom/mast pivot and actuator unit mounting.
- Inspect for excessive wear on the sling hooks.

### **Mast**

- Ensure the mast fully engages in the mast position.
- Check the security of the fixings.
- Check the operation of the mast locking device.
- Check for wear on the actuator unit mounting.
- Check the security of the actuator unit fixing to the mast.
- Confirm any cables coming from the mast are adequately protected from chaffing.
- Maintenance - lubricate the actuator unit mounting.

### **Electric Controls, Plugs & Sockets**

- Check the hand control for correct functioning in both directions.
- Check the fit of the hand control plug and socket.
- Inspect the charging socket for damage.
- Check the main fuse for correct rating.
- Check fuse holder for firm fitting and possible damage.
- Check the function of the emergency lower.

## Electric Actuator

- Check for smooth operation in both directions.
- Confirm power cut-out at the ends of travel.
- Listen for unusual noise which may indicate future break down.

## Batteries Control System Unit

- Check the fit of the charger plug to the Ardoo Caresafe 140 Hoist charging socket.
- Confirm the charger unit is charging the Ardoo Caresafe 140 Hoist.
- Check the charger unit is fitted with the correct rated fuse. (When fitted).
- Check mains plug is fitted with the correct rated fuse.
- Check the safety of the input and output lead wiring.

## Leg Adjustment

- Check both legs are working, free from damage and operate smoothly and there is no excessive play.
- Make sure the legs are parallel to each other and the centre-line of the hoist.
- Ensure plungers are free from any build-up of dirt or foreign bodies. Remove and lubricate with a light grease where necessary to maintain smooth operation.

## Wheels

- Check all wheels for firm attachment to the legs.
- Check for free rotation of the wheels.
- Remove any build-up of threads, hair or fluff.
- Check correct operation of the brakes.

## Slings & Accessories

- Confirm sling is a compatible sling.
- Check the load bearing straps for wear or fraying.
- Check the straps are securely stitched.
- Check the body of the sling for wear or cuts in the fabric.
- Check any side suspenders for wear on the hooks or central suspension point.



## Thorough Examination Report

Patient lifting devices and lifting accessories should receive a thorough six-monthly inspection and test. Lifting Operations and Lifting Equipment Regulations 1998 (LOLER). LOLER requires certain information to be included in a periodic report given to a customer after a thorough examination. The information can be found in Schedule 1 (page 56) in the LOLER L113 publication. Lifting Operations and Lifting Equipment Regulations 1998 (LOLER).

## Load Test

The load test should be carried out in accordance with the manufacturer's test procedures. It is strongly recommended an authorized service dealer carry out the testing.

## Certification

An authorized service dealer will issue a test certificate after satisfactory completion of the load test.

**NOTE:** The certificate may be incorporated into the Examination Report.



## Technical Specification for the Ardoo Caresafe 140 Hoist

<b>Weights</b>	
Safe Working Load	140kg (22 stone) (308lbs)
Assembled Hoist Including Battery	23kg (3.6 stone) (51lbs)
<b>Dimensions</b>	
Overall Length	1070mm (42")
Height when folded	267mm (10.5")
Maximum Boom Height ( boom lifting hooks)	1650 (65")
Minimum Boom Height (boom lifting hooks)	1135mm (45")
Turning Radius	1066mm (42")
Internal Width (when legs closed)	420mm (17")
External Width (when legs closed)	480mm (19")
Internal Width (when legs open)	970mm (38")
External Width (when legs open)	1030mm (40.5")
Overall Height of Legs	115mm (4.5")
Height of Wheels	77mm (3")
<b>Folded Dimensions</b>	1143mm(L) X 482mm(W) X 267mm(H) (45"(L) X 19"(W) X 10.5"(H)
<b>Hoist Frame</b>	Manufactured from Mild Steel
<b>Electrical Specifications</b>	
Battery	12v re-chargeable sealed lead acid battery
Capacity	2.0AH 24VDC Charger Rated Input... 220-240V AC 50Hz - 36 VA Charger Rated Output 29V 1.1A
<b>Environmental Conditions</b>	
Operating Temperature	+5° - +40°C
Storage Temperature	-20° - +60°C
<b>IP RATINGS</b>	
Actuator & Controls	IPX4
<b>Actuator Duty Cycles</b>	10% (2min/18min) Charger Approx. 4 hours
Approvals Ardoo Caresafe 140 Hoist meets with:	IEC60601 - 2005 3 <sup>rd</sup> Edition ANSI/AAMI ES60601:1 2005 3 <sup>rd</sup> Edition

# EC Declaration of Conformity

## Ardoo Caresafe Ltd

Hitech Building,  
Ballycoolin IDA Business Park, Blanchardstown, Dublin 15, Ireland.

This is to certify that:

### Ardoo Caresafe 140 Hoist

Serial No.: \_\_\_\_\_

Conform to the Requirements of Council Directive 93 / 42 / EEC relating to Medical Devices Class 1 Products, BS EN12182 for Technical Aids for Persons with a Disability — General Requirements & Test Methods, BS EN ISO 10535 Hoist For The Disabled Persons — Requirements & Test Methods and EN 14971 Application Of Risk Management For Medical Devices.

Manager :

Issue Date:





Ardoo Caresafe Limited,  
Hitech Building, Ballycoolin IDA Business Park, Blanchardstown, Dublin 15, Ireland.

# Certification of Inspection & Test

This is to certify that the hoist identified below  
has been inspected and tested  
to the relevant requirements of

ISO 10535 —  
Hoists For The Transfer Of Disabled Persons

Ardoo Caresafe 140

.....  
Hoist Model

.....  
Serial Number

140kg  
.....  
Safe Working Load

.....  
Date

.....  
Authorised Examining Engineer

Ardoo Caresafe Limited  
Hitech Building  
Ballycoolin IDA Business Park  
Blanchardstown  
Dublin 15, Ireland

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