

# Airflo 12

## User Instructions



English

# Quick Start Guide



This Quick Start Guide is not intended to replace the full user instructions. Please read the full user instructions before using the Airflo 12.



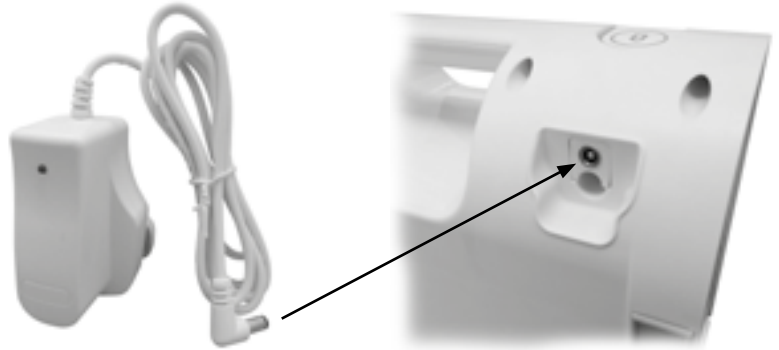
## Before Use

**WARNING:** THE AIRFLO MUST BE PUT ON CHARGE FOR 16 HOURS BEFORE FIRST USE.

To calibrate the battery and battery indicator, it is essential before the first use to charge for 16 hours and then disconnect from the charger and leave for 90 minutes to allow the battery management software to correctly calibrate. Failure to do this could lead to incorrect battery charging and battery ladder indication.

1

Fit the appropriate mains adaptor to the charger (see “Battery Charging” page 6). Connect the battery charger to a mains power socket and the Airflo 12 charging socket.

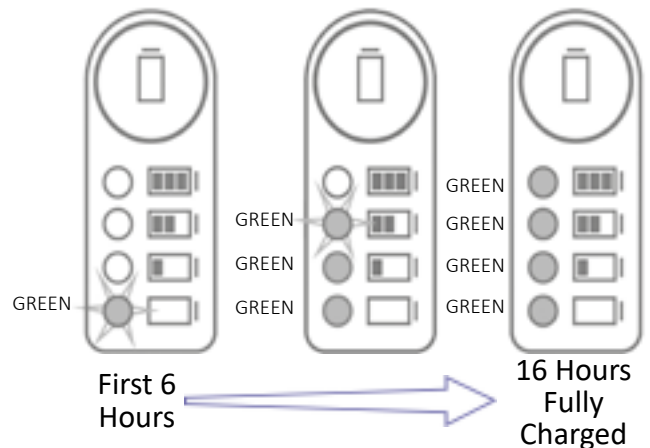


2

**CHARGE THE BATTERY FOR 16 HOURS BEFORE USE.**

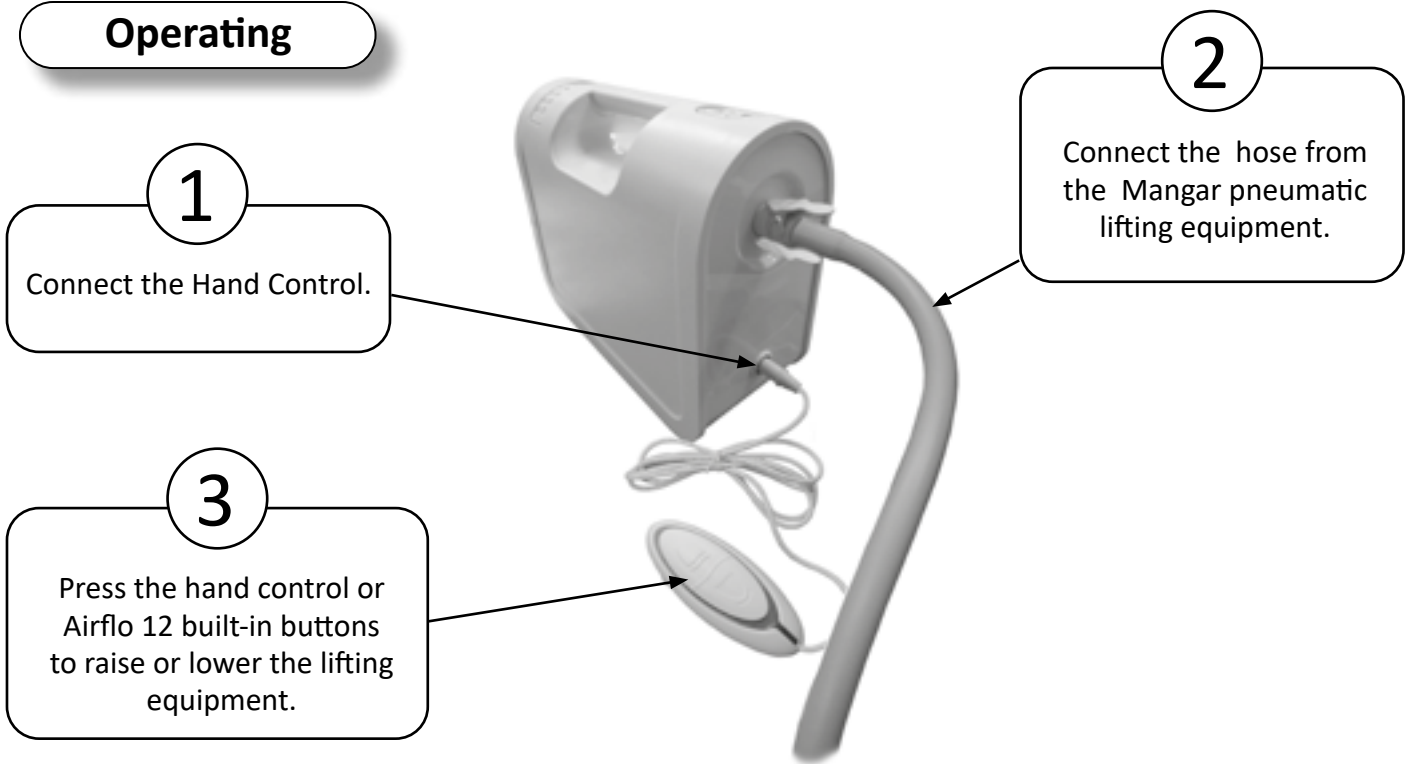
To calibrate the battery and battery indicator, it is essential before the first use to charge for 16 hours and then disconnect from the charger and leave for 90 minutes to allow the battery management software to correctly calibrate.

For the first 6 hours, the bottom light will flash green. After 6 hours the first light will become a steady green and the second light will start flashing. Charging cycle continues until lights are lit. Then after 16 hours the charge is complete with the top light flashing and other 3 will be off.



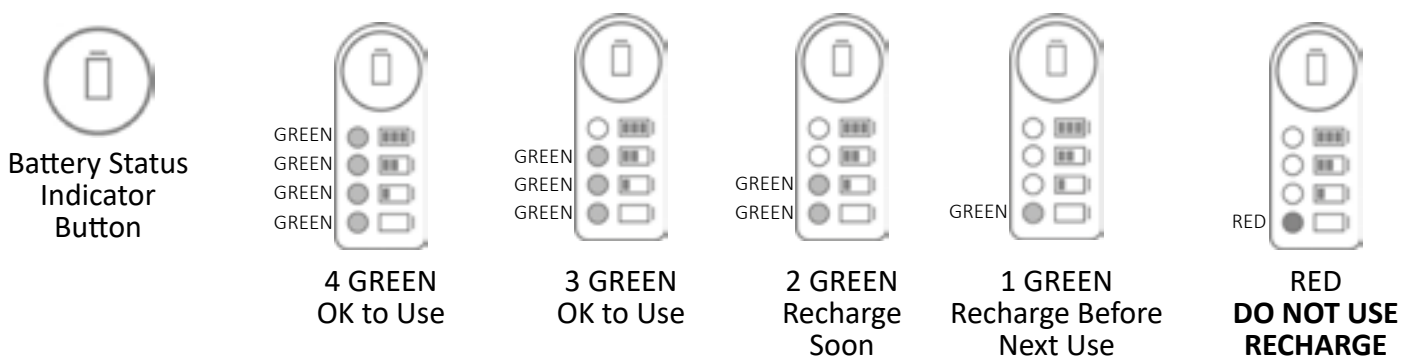
Once a red LED and Deflate Lock has been activated during discharge (see page 3), a 2 hour plus charge is required to reset the Deflate Lock.

**Operating**



**IMPORTANT:** The Airflo 12 is designed not to deflate if there is insufficient battery voltage to fully inflate the lifting product. This safety feature stops an inflatable bathing product from being lowered to the bottom of a bath if there is insufficient battery voltage to raise it again.

**TO DETERMINE THE BATTERY CHARGE STATE, YOU MUST DISCONNECT THE CHARGING LEAD AND THEN PRESS THE 'BATTERY STATUS INDICATOR' BUTTON TO ACTIVATE THE BATTERY STATUS INDICATOR LIGHTS:**



**WARNING:** The battery must be put on charge immediately as soon as the red indicator light appears. Running the Airflo 12 on RED until the battery is exhausted will damage the battery.

## Contents

Intended Use	Pg 4
Warnings	Pg 4
Standard Package Contents	Pg 5
Battery Status Indicator	Pg 5
Battery Charging	Pg 6
Mains Power Adaptor (optional)	Pg 7
Operation	Pg 7
Cleaning & Storage	Pg 8
Maintenance	Pg 8
Trouble shooting guide	Pg 9
Specifications	Pg 9
Symbols used on Airflo 12 and Charger	Pg 10
Symbols used on packaging	Pg 11
Warranty	Pg 11
Declaration of Conformity	Pg 42

## Intended Use

The Airflo 12 by Mangar Health is a low pressure air compressor, which has been designed to inflate a range of Mangar Health pneumatic lifting equipment.

Applied Parts (Accessories) for the Airflo 12:

- Bathing Cushion
- Handy Pillow Lift
- Sit-u-Up Pillow Lift
- Leglifter
- Surfer Bather
- Raiser

The Mangar Airflo 12 compressor along with the correct selection of inflatable device as listed above can be used by:

- A person with sufficient upper body strength who requires assistance in moving or support, to do so on their own.
- A person who is assisting the user to move or be supported.
- No special skills or training are required to operate the Airflo 12 and its accessories.

Further guidance on operation can be found in the individual accessory User Instructions.

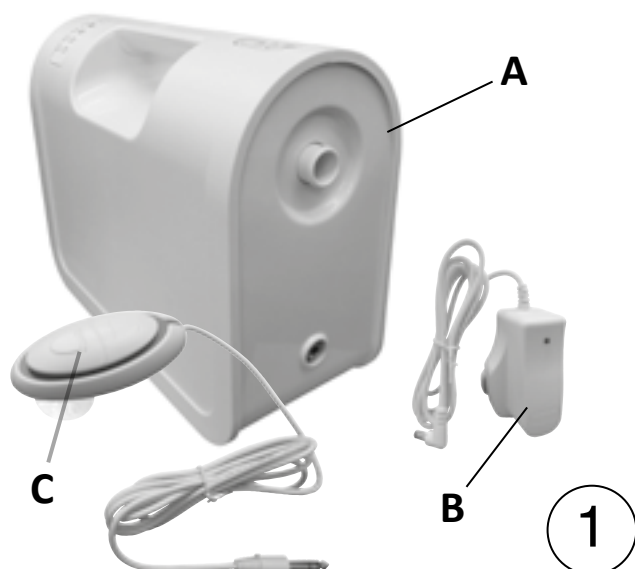
The Airflo compressor and applied parts are intended for continual re-use as required and no special actions or operations are needed to achieve this.



## WARNINGS

- Be sure that you have read and understood these instructions and those provided with any other Mangar Health product, before operating the equipment.
- To avoid the risk of electric shock, NEVER recharge the battery in the bathroom, outdoors or in a damp environment.
- Always disconnect from the battery charger before cleaning.
- Use only the supplied battery charger.
- Do not operate the Airflo 12 compressor in the presence of flammable anaesthetic mixtures with air, oxygen or nitrous oxide, as these mixtures can create a combustible environment leading to the potential for fire or even an explosion in the presence of a spark.
- Ensure that when in use, the Airflo 12 and its connected hose and hand control lead are laid out in such a way as to avoid any risk of tripping or strangulation.
- Ensure that children and pets do not interfere with the safe operation of the Airflo 12 and inflatable product.
- Keep the Airflo 12 and inflatable product away from sources of heat.
- Disconnect the Airflo 12 compressor from the inflatable product before transporting so as to avoid accidental inflation.
- The Airflo 12 should only be used for its stated purpose and should not be modified in any way.
- The optional mains power adaptor is specific to the Airflo 12 and is the only approved unit to be used for this purpose.
- Do not operate the compressor outside of the specified duty cycle of 20% 'Operating Time' and 80% 'Non-Operating Time'. Maximum continuous operating time = 5 minutes.

*This product and associated packaging does not contain latex.*



### Standard Package Contents - fig. ①

- 1 x Airflo 12 compressor (A) fitted with a 12v - 2200mAh Ni-MH battery pack.
- 1 x Battery charger (with adaptors) (B).
- 1 x 2-Way hand control (C).
- 1 x User Instructions.
- 1 x Mains Power Adaptor (Optional).

### Getting Started

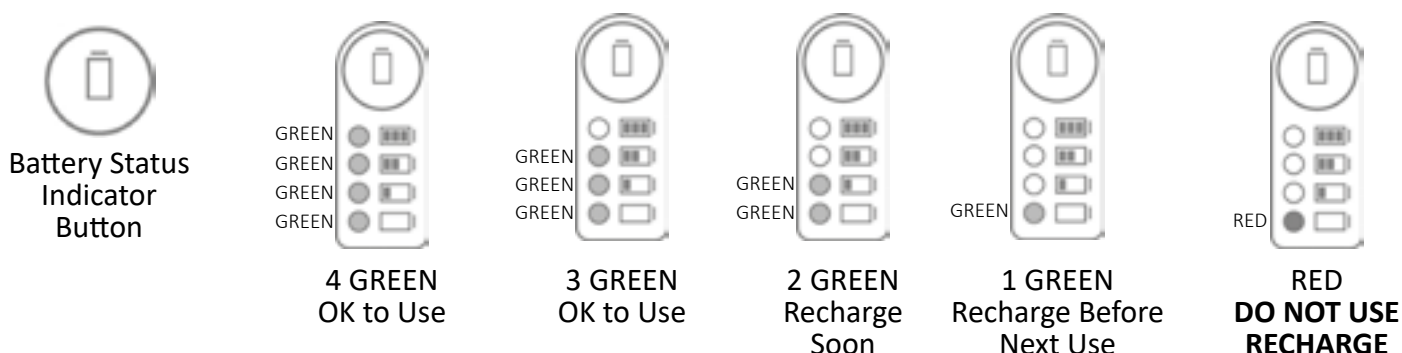
The Airflo 12 does not have an 'on/off' switch. To operate the compressor, press the 'Up' button on the Airflo or on the hand control.



### Battery Status Indicator

To determine the battery charge state before use, press the 'Battery Status Indicator' button to activate the battery status indicator lights:

**NOTE: DO NOT PRESS THE 'BATTERY STATUS INDICATOR' BUTTON WHILST THE BATTERY CHARGER LEAD IS CONNECTED.**



**WARNING:** The battery must be put on charge immediately as soon as the red indicator light appears. Running the Airflo 12 on RED until the battery is exhausted will damage the battery.

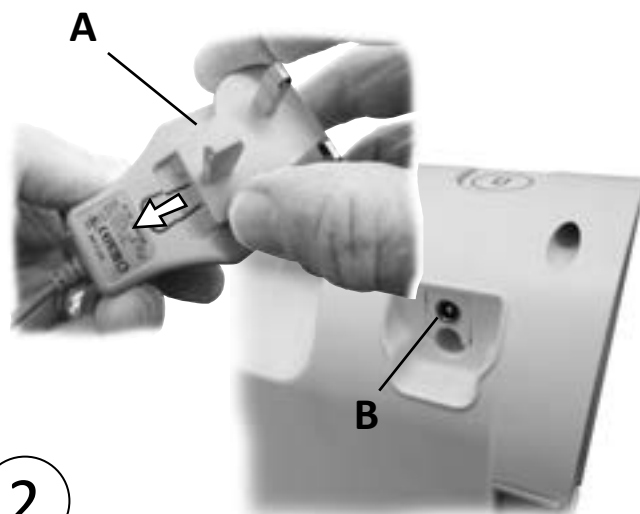
When the compressor is running, the battery status indicator lights will only indicate the state of battery charge as it was at the start of the lift. When the compressor stops running, the battery status indicator lights will go off. To determine the true battery state following a lift, press the 'Battery Status Indicator' button and the lights will indicate the battery charge state.

**IMPORTANT:** To maximize the life and lifting performance of the battery, fully recharge the battery for 16 hours.

**Fully charge the battery for a minimum of 16 hours before using the Airflo 12 for the first time; and when a new battery has been fitted. Then disconnect from the charger and leave for 90 minutes to allow the battery management software to correctly calibrate. Failure to do this could lead to incorrect battery charging and battery ladder indication.**

## Battery Charging - figs. ②

- Check the battery charger casing and lead for signs of damage and if damaged DO NOT USE.
- Fit the appropriate mains plug adaptor to the battery charger (A).
- Plug the battery charger into a mains power socket and connect the charger output lead to the Airflo 12 charging socket (B).

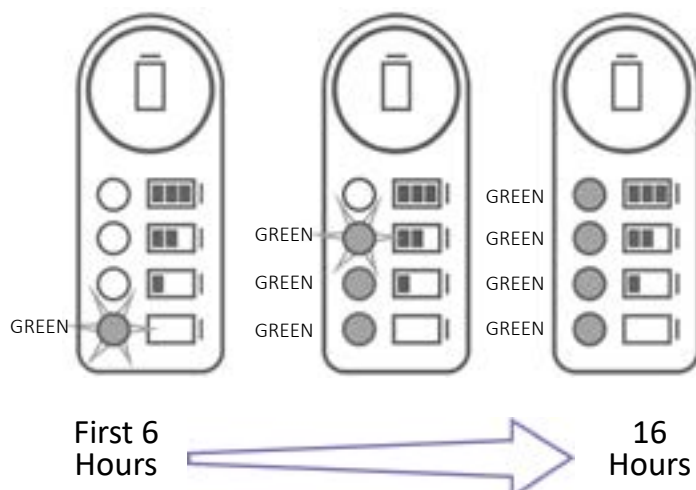


②

**NOTE:** When first fitting a battery they must be charged for a minimum of 16 hours to achieve full capacity. On subsequent charges the Airflo calculates the charging period based on usage and will not necessarily start at the bottom light flashing.

### When the battery is being charged:

- For the first 6 hours, the bottom light will flash green. After 6 hours the first light will become a steady green and the second light will start flashing. Charging cycle continues until all lights are lit.
- After 16 hours the charge will be complete and the compressor will move into an energy saving mode with the top LED flashing every 6 seconds and the other 3 will be off.



**NOTE:** If charging is momentarily interrupted (a power cut, switching the power socket off or disconnecting the charging lead), on re-connection, the charging process will resume at the same charge sequence point.

To maintain battery condition, it is recommended that the Airflo 12 is left continuously on charge when not in use. The batteries cannot be overcharged using this charger.

**WARNING:** DO NOT recharge the batteries in a bathroom or in a damp environment.



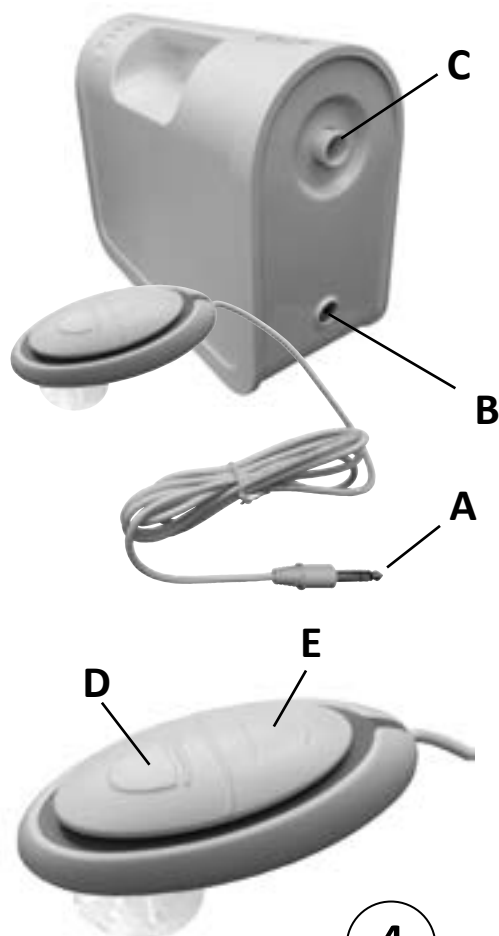
3

### Mains Power Adaptor (optional)

An optional mains power adaptor is available to power the Airflo 12 directly from a mains power socket. The adaptor is specific to the Airflo 12 and is the only approved unit to be used for this purpose. Connect the adaptor between a mains power socket and the adaptor inlet socket on the end of the Airflo 12 (Fig. 3).

**NOTE:** This adaptor, has a non-standard output connector and powers the Airflo 12 directly, it will not charge the battery. The only way to charge the battery is to use the charger which was supplied with the Airflo 12. With the power adaptor connected, the Airflo 12 behaves in the same way as if it was running on the battery, the only functional difference is that the battery indicator light will show bottom LED orange. With the adaptor connected, the Airflo 12 will also run if there is no battery fitted.

**WARNING:** DO NOT use the mains power adaptor in a bathroom or in a damp environment.



4

### Operation - fig. ④

When used with Bathing accessory disconnect the Airflo 12 from the battery charger and place it in a safe and convenient position.

- Connect the Hand Control plug (A) to the Airflo 12 hand control socket (B).
- Connect the hose from the Mangar pneumatic lifting equipment to the Airflo 12 air outlet socket (C). The connector will 'click' into place when firmly pushed onto the socket.
- Press the 'Up' button (D) to raise.
- Press the 'Down' button (E) to lower.
- Alternatively press the Airflo 12 built in buttons to raise or lower the equipment.

**NOTE:** When either the 'Up' or 'Down' buttons are pressed, a battery voltage check is carried out and if the voltage becomes too low, the 'Down' button will not work. This feature will always ensure that the seat of a Mangar Health bathing product cannot be lowered into a bath if there is insufficient battery power to raise it again.

## Cleaning

- Unless contamination is suspected, periodic cleaning is all that is recommended. The Airflo 12 should be cleaned/disinfected as follows:
- Unplug the Airflo 12 from the battery charger. Clean the external surfaces using a non abrasive damp cloth with warm water. Wipe dry thoroughly with a dry towel before reconnecting to the battery charger. Do not allow moisture to enter any part of the compressor.
- Do not use solvent-based products.

## Disinfecting

- Pre-clean using a damp cloth and then disinfect using a hard surface alcohol impregnated wipe.

## Storage

- When not in use, store in a dry place together with these instructions. To maintain the batteries, when being stored for long periods, put the Airflo 12 on charge for 16 hours every 3 months.  
**NOTE:** Ensure that the batteries are fully charged before storing the Airflo 12 for long periods.

## Maintenance - fig. ⑤

The Airflo 12 has been designed to be maintenance free and apart from replacing the battery, the Airflo 12 contains no other user serviceable parts

### **Battery replacement:**

- Turn the Airflo 12 onto its end containing the air outlet socket, remove the screw (A) and slide the end panel (B) away from the housing.
- Disconnect the wire from the battery pack and remove the battery pack from the battery compartment leaving the foam block in place.
- Fit the replacement battery pack, ensuring that the connector is secure, refit the end panel and secure the screw (A).



When it becomes apparent that the Airflo 12 is producing fewer than expected lifting cycles, the battery is probably reaching the end of its working life and should be replaced.

If a fault should develop or if you require assistance in setting up using or maintaining the equipment, please contact our Customer Service Department on **Freephone 0800 2800 485** (UK only. Outside of the UK please contact your supplier).

## Disposal

When the Airflo 12 has reached the end of its working life, remove the battery for safe disposal in accordance with local regulations, and dispose of the Airflo 12 at your local household waste recycling centre (civic amenity site).



Trouble shooting guide	
Problem	Remedy
<ul style="list-style-type: none"> <li>Compressor does not run when 'up' is selected.</li> </ul>	<ul style="list-style-type: none"> <li>Ensure that the air hose from the product being inflated is connected to the Airflo.</li> <li>Check that there are no kinks in the air hose.</li> </ul>
<ul style="list-style-type: none"> <li>Compressor keeps stopping when trying to inflate the lifting aid.</li> </ul>	<ul style="list-style-type: none"> <li>Check that there are no kinks in the air hose.</li> </ul>
<ul style="list-style-type: none"> <li>Bottom Battery Status Indicator light solid 'Red' and product will not deflate.</li> </ul>	<ul style="list-style-type: none"> <li>Low battery capacity, recharge for a minimum of 2 hours.</li> </ul>
<ul style="list-style-type: none"> <li>Bottom Battery Status Indicator flashing red every 2 seconds.</li> </ul>	<ul style="list-style-type: none"> <li>Internal pump temperature too high - allow a cool down period of 60-90 minutes.</li> </ul>
<ul style="list-style-type: none"> <li>Bottom Battery status indicator flashing Red every ½ second.</li> </ul>	<ul style="list-style-type: none"> <li>Current overload. Check there are no kinks in the air hose.</li> </ul>
<ul style="list-style-type: none"> <li>Compressor causes electrical interference with another piece of electrical equipment.</li> </ul>	<ul style="list-style-type: none"> <li>Move either the compressor or other item further away from each other until the interference stops.</li> </ul>

## Specifications

### Airflo 12

Weight: 3.7Kg (8 lbs)

Output pressure: 0.25 bar (3.75 psi)

Batteries: 1 x 12v - 2200mAh Ni-MH battery pack (CD0315)

Battery Life: Greater than 500 charging cycles (2 - 5 years depending on usage)

Environmental protection:

(Airflo 12 housing) IP41 (Protection from entry by solid objects with a diameter or thickness greater than 1.0mm & dripping water)

(Push-button hand control) IP67 (Protected against immersion upto 30 minutes)

Type BF equipment

This equipment has been tested and meets the requirements of current EMC legislation

**Charger:** Model number - HX1506SR

Input: AC 100v - 240v, 50-60Hz, 0.5A Max

Output: DC 15v, 0.35A

Class II Double insulated equipment.

### Symbols used on Airflo 12 and Charger labels



Warning



Attention consult instructions



Type BF equipment (protection against electric shock)



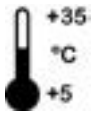
Alternating current (AC)



Fuse (with rating)



Direct current (DC)



Max/Min operating environment temperature



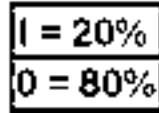
For indoor use only. Do Not connect to mains power in a bathroom or outdoors.



Class II Double Insulated equipment



Dangerous voltage



Duty cycle

I = Operating time

O = Non operating time

(Max continuous operating time = 5 minutes)



Recycle



Do not dispose of in household waste



Date of manufacture



'Up' button













'Down' button



Battery Status Indicator Button

## Symbols used on packaging

	Keep packaging dry		Recycle packaging
	Handle with care		Do not dispose of in household waste
	Max/Min storage temperature		Max/Min humidity when transporting or in storage
	Net & gross weights		Max/Min pressure when transporting or in storage
	Stack no more than five high		Max/Min temperature when transporting or in storage

## Warranty

The warranty is given against defects in material and workmanship and comprises piece, parts and labour. The warranty is not valid in the case of fair wear and tear, wilful damage, common neglect, misuse or unauthorised alteration or repair by unqualified persons.

The following statements do not affect the consumer's statutory rights. This product is sold on the understanding that in the event of any defect of manufacture or material appearing within the warranty period, the defect will be rectified free of charge providing that:

- (a) Reasonable evidence is provided (e.g. purchase invoice, delivery note) that the claim is being made within the warranty period.
- (b) The defect is not attributable to accidental damage (either in transit or otherwise), misuse or unauthorised repair.

Airflo 12 serial number: .....  
 Date of purchase: .....  
 Invoice/Delivery note number: .....

**DECLARATION OF CONFORMITY**

This is to certify that :-

The  
Airflo 12 Compressor -

complies with:-

*The requirements for Class 1 devices according to Annex VII of the Medical Devices Directive 93/42/EEC as amended by 2007/47/EC*

*IEC 60601-1*

*Medical Electrical Equipment - General requirements for basic safety and essential performance*

*IEC 60601-1-11*

*Medical Electrical Equipment - Requirements for use in the home care environment*

*IEC 60601-1-2*

*Medical Electrical Equipment - Electromagnetic compatibility*

Signed:



Date: April 2017

C. Butcher (Finance Director)

Mangar International Ltd  
Tredegar, Newry, Wales, UK. LD8 2UP  
tel: +44 (0)1544 267674  
fax: +44 (0)1544 260287  
headoffice@mangarhealth.com  
www.mangarhealth.com

**Mangar**  
HEALTH





*Healthcare solutions designed for life*



**Mangar**  
HEALTH

**Mangar International Ltd**

Presteigne, Powys, Wales, LD8 2UF  
United Kingdom

Tel: +44 (0)1544 267674

Fax: +44 (0)1544 260287

E-mail: [sales@mangarhealth.com](mailto:sales@mangarhealth.com)

[www.mangarhealth.com](http://www.mangarhealth.com)

MI0353 issue 6  
(08/20)