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Developed, designed and manufactured
 with pride in the United Kingdom



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Cleaning

Your POWERbreathe will be exposed to saliva during use and we recommend that you clean it frequently to keep it in good working order.

A few times a week, soak your POWERbreathe EX1 in warm water for about ten minutes and then wipe it with a soft cloth under warm, running water, paying particular attention to the mouthpiece. Shake off excess water and leave on a clean towel to dry.

Once a week perform the same procedure but soak your POWERbreathe EX1 in a mild cleansing or approved cleaning solution instead of water. The cleansing solution used must be intended for use on equipment that comes into contact with the mouth, such as that used for babies' bottles.

POWERbreathe cleansing tablets are available from some POWERbreathe distributors or visit www.powerbreathe.com

To keep your POWERbreathe EX1 in top condition, after cleansing hold it upside down under a running tap so that water can run through the device. Shake off excess water and leave on a clean towel to dry.

- Note:**
- **The POWERbreathe EX1 is not suitable for dishwasher use**
 - **Do not dry on hot surfaces**

Technical Specifications

Mouthpiece material.....	Thermoplastic elastomers (TPE)
Handle cover	Polycarbonate
Soft touch adjuster grip	ABS with Santoprene overmoulding
Flap valve.....	Silicone 60
O-ring.....	Nitrile rubber
All other components.....	ABS (Acrylonitrile Butadiene Styrene)

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Load selection range

Model	Load (cmH ₂ O)										
	Load Setting										
	0	1	2	3	4	5	6	7	8	9	10
EX1-Medic	10	17	24	31	38	45	52	59	66	73	80

Disclaimers

POWERbreathe devices are not toys. This product is designed to be used for breathing exercise only.

Any other use is not recommended. Always seek the advice of your doctor or other health provider with any questions you may have regarding a medical condition. This product is not intended to diagnose, cure or prevent any disease. Individual results may vary. No claims are made or implied in the use or results using the equipment herein.

Always read the user manual before use.

The material in this manual is for information purposes only.

POWERbreathe devices contain small parts and are not suitable for children under 7 years. Note: This product is sealed to maintain hygiene and cannot be returned if the seal is broken.

POWERbreathe International Ltd. makes no representations or warranties with respect to this manual or with respect to the products described herein. POWERbreathe International Ltd. shall not be liable for any damages, direct, indirect or incidental, consequential or special, arising out of or related to the misuse or deviations from the intended use of this material or the products described herein.

POWERbreathe is a patented and design copyright protected product. All rights reserved. Specifications may change without notice due to manufacturer's continuous programme of development.

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All details are correct at time of going to press.

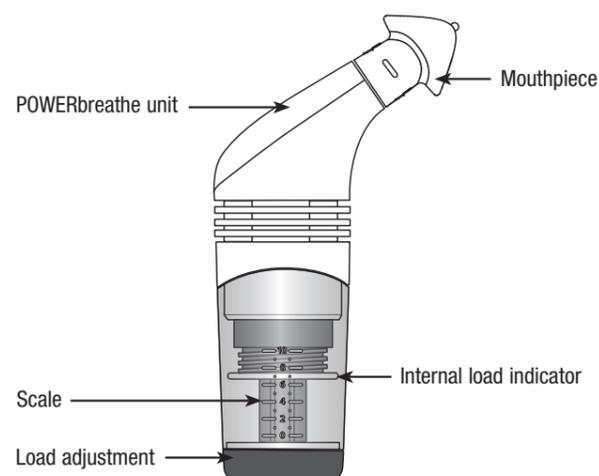
POWERbreathe Holdings Ltd. (E&OE). © 01/2024

POWERbreathe® EX1™-Medic

User Manual



Product Description – Content



Storage pouch



User manual

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Training with EX1

gently until your lungs are completely full. Pause until you feel the urge to breathe out again before exhaling fast and forcefully again.

You will notice that it becomes harder to completely empty your lungs as you continue to breathe during a training session. This is because your breathing muscles are becoming tired. If you can no longer take a satisfying breath out, take a short break before continuing your training. If you find you are unable to complete a breath early in your training session, the load may be set too high. In this case, simply decrease the training load by half a turn, then continue your training session. Note: Training should feel challenging but should not cause discomfort. At the end of the 5 sets of 5 breaths training, you should aim to feel as if you cannot continue further.

If you feel out of breath, light-headed or you need to cough, take a break. Once you have recovered, continue the training session until you have completed the 5 sets of 5 breaths. If you miss a training session, simply empty your lungs as you continue to breathe during a training session. This is because your breathing muscles are becoming tired. If you can no longer take a satisfying breath out, take a short break before continuing your training. If you find you are unable to complete a breath early in your training session, the load may be set too high. In this case, simply decrease the training load by half a turn, then continue your training session. Note: Training should feel challenging but should not cause discomfort. At the end of the 5 sets of 5 breaths training, you should aim to feel as if you cannot continue further.

Maintaining your breathing:

After 5 weeks your breathing muscles should have improved substantially and you should feel an improvement in your breathing. At this stage you will not need to use your POWERbreathe EX1 every day to maintain your improved breathing. Training with your POWERbreathe EX1 just 3 days a week should be sufficient to continue to maintain improvements.

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Getting Started with POWERbreathe EX1

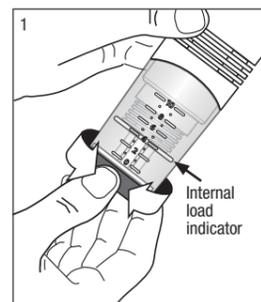


Diagram 1: Adjusting the POWERbreathe EX1

Remove the POWERbreathe EX1 from the packaging. Holding the POWERbreathe EX1 upright, practise adjusting the training load: Rotate the load adjustment knob clockwise to increase the training load; rotate the load adjustment knob anticlockwise to reduce the training load. Notice that a numbered scale is visible on the side of the POWERbreathe EX1. As the load adjustment knob is rotated, the internal white indicator band will move up or down, indicating your current training load on this scale. See page 7: Finding your correct training load to set the correct resistance for you to train at.

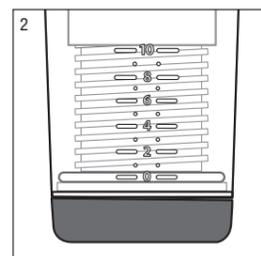
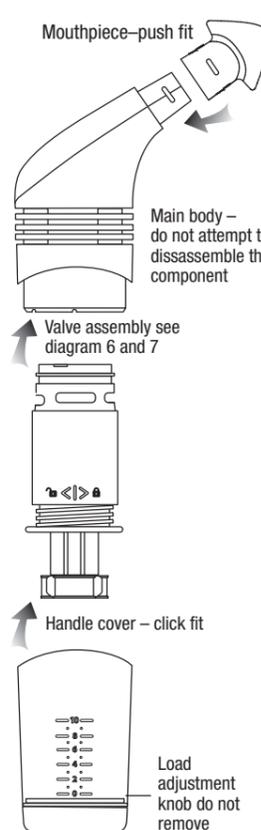


Diagram 2: Load 0

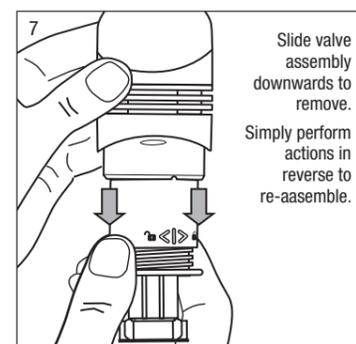
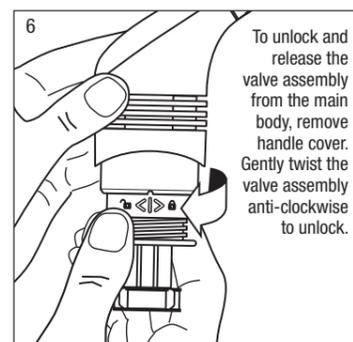
Now set the POWERbreathe EX1 to load 0. At this load the base of the internal white band should be aligned with the lowest number on the scale, as shown in the diagram. **Note: Do not attempt to reduce the load below 0 as this may damage the adjustment thread.**

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POWERbreathe EX1 Assembly



Note: the POWERbreathe EX1 may be disassembled further into its component parts (with the exception of the valve assembly). This is not recommended as small parts can easily be misplaced.



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Getting Started with POWERbreathe EX1

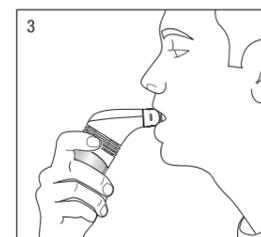


Diagram 3: Placing the POWERbreathe EX1 in your mouth

Make sure you are sitting or standing upright and feel relaxed. Holding the POWERbreathe EX1 by the handle, place the mouthpiece in your mouth so that your lips cover the outer shield to make a seal, and the mouthpiece bite blocks are gripped between your upper and lower teeth.

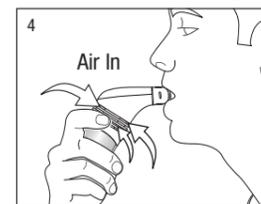


Diagram 4: Inhaling through the POWERbreathe EX1.

Firstly, breathe in slowly and passively, as far as you can, filling your lungs with as much air as possible. Hold for 1 second.

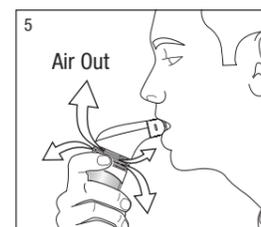


Diagram 5: Exhaling through the POWERbreathe EX1.

Take a fast, forceful breath out through the mouthpiece, breathing out as much air you can.

Note: do not pant – if you start to feel light-headed, slow down and pause at the end of your breath out.

Once you have found the correct load, aim to complete 5 sets of 5 breaths a day with a minute's rest between sets and do this 5 times a week.

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Warranty

* This warranty gives the purchaser specific legal rights. The purchaser may also have other statutory rights. POWERbreathe International Ltd. hereby warrants to the original purchaser whose name shall be duly registered with it that the product sold by it is free from defects in the material and workmanship. The obligations of POWERbreathe International Ltd. under this warranty are limited to the repair and replacement of such part or parts of the unit as shall be found upon inspection to be defective in material or workmanship. Misuse, abuse or accidents, negligence of the precautions, improper maintenance or commercial use, cracked or broken cases are not covered under this warranty. During the two-year warranty period, the product will be either repaired or replaced (at our option without charge). Warranty does not cover damage or consequential damage caused by service not authorised by POWERbreathe International Ltd. The warranties contained herein are expressly in lieu of any other warranties including implied warranty of merchantability and / or fit for purpose.

To Activate Your Warranty Please ensure that you register the purchase of your POWERbreathe EX1 by visiting www.powerbreathe.com Thank You.

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Training with EX1

Guidance for patients

Please follow the instructions below unless instructed to do otherwise by your doctor. Before commencing the exercises, please ensure that you have read the precautions section on page 2 & 3 of this manual.

Finding your correct training load:

The recommended POWERbreathe EMT routine is 5 sets of 5 breaths a day. In order to get the most from the training, these exercises should be completed at a load that is as hard as possible, without causing discomfort. For the first day of training, set your POWERbreathe EX1 device to load 0 (see Diagrams 1 & 2 - "Getting used to your POWERbreathe EX1"). Some individuals may find the exercises very challenging at this load. If you find you are unable to complete 5 breaths at this load in one go, take a short rest then start again until you have accumulated a total of 5 breaths. Rest for 1 minute and then repeat again aiming for another 5 breaths with rests if needed.

If you found it difficult to complete 5 breaths at load 0 in one go then just work on gradually building up to 5 sets of 5 breaths at this load, taking breaks where needed and resting for at least 1 minute between sets.

If you found you could easily complete 5 sets of 5 breaths at load 0, the next day you should set

your POWERbreathe EX1 to load 1. Complete the exercises again. By this method, continue to increase the training load by 1 setting each day, until you are only just able to complete 5 breaths of training in one attempt. Once you have reached this point, continue to train at this load doing 5 sets of 5 breaths with a 1 minute rest between each set and repeat this 5 times per week.

After one week of training with the POWERbreathe EX1 at the same load, increase the training load by half a turn. Continue to train at this load for a further week. From this point onwards you should aim to increase the load by half a turn each week.

For an example of a typical training diary and to download/print blank diary pages to keep a record of your progress, visit: powerbreathe.com

Achieving good training technique:

When you exhale through your POWERbreathe EX1, you should breathe out through your mouth as fast and forcefully as possible. When you inhale, breathe in slowly and

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Guidance for Healthcare Professionals

Contraindications: Please read the precautions section on page 2 & 3 of this manual in order to assess a patient's suitability for expiratory muscle training (EMT).

Patients should be instructed in the proper use of the POWERbreathe EX1 before commencing training. Please familiarise yourself with the operation of the device prior to assisting a patient in its correct use referring to the sections "Getting used to your POWERbreathe EX1" and "Training with POWERbreathe EX1 - Guidance for Patients".

Note: Some patients may be unable or unwilling to use the mouthpiece. In this case, the POWERbreathe EX1 mouthpiece may be replaced with a facemask attached to an EX1 spacer, to allow training.

Setting the training load:

Based on clinical research in the area of Expiratory Muscle Training (EMT)/ Expiratory Muscle Strength Training (EMST) a training load between 50%-75% of the patients Maximal Expiratory Pressure (MEP), depending on the patients' medical condition, shows as most beneficial.

If you have access to a means of measuring expiratory muscle strength you may set the initial training load to 50%-75% of Maximal Expiratory Pressure (MEP) using the conversion table on page 14.

The patient should train at this load for 1 week. Thereafter, the training load should be increased weekly to maintain the training effect.

Teaching good training technique:

The first few days are the most challenging for the patient who will require careful and sensitive coaching, including the allowance of short breaks.

As the patient's expiratory muscles fatigue, they may find it harder to breath out as fully towards the end of expiration.

Patients should be encouraged to exhale against the load as rapidly as possible in order to maximally recruit their expiratory muscles. Patients may require breaks during a training session in order to cough, or because they feel too breathless. It is important that the duration of these is minimised if possible in order to maintain the training stimulus but this too must be handled sensitively, and supported by an explanation of why it is important to minimise the duration of these enforced 'rest' periods.

Maintenance training:

After 5 weeks of training, the patient's expiratory muscles should have improved substantially. At this stage it is not necessary to train with the POWERbreathe EX1 5 days a week in order to maintain improved breathing. Training with the POWERbreathe EX1 three times a week will be sufficient to maintain the training effects.

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