

Breathing Coach

APP- Enabled

INSTRUCTIONS FOR USE

Parts delivered:

- Measuring head with a cable (Fig.1 and Fig.4) with a micro-USB to USB C converter.
- Different connectors for nasal and/or oral breathing (Fig.2) – a face mask, a nasal mask and a plastic mouthpiece.
- 4-pack of sensors (sensor to be attached to the Measuring head) (Fig.1)



Fig 1

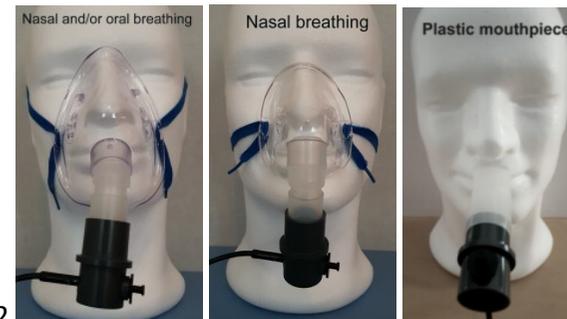


Fig 2

Set your device to allow download from unknown source.

Scan the Qr code below for downloading the Breathing Coach App.



NOTICE:

Simultaneous use of a sampling CO₂ analyzer may adversely affect the readings of the Breathing Coach

Disclaimer: This device is **not** intended for diagnosis and/or treatment of disease or medical purposes of any kind.

To get started:

Download the **Breathing Coach** APP from Google Play



or use the Qr code on the last page

1. Attach the Measuring head cable (USB C or micro USB contact) to your Android unit. (Fig 4)
2. Open the 4-pack of sensors and pick up one sensor. Remove and discard its protecting foil cover. **Make sure that you do not touch, damage or in other ways contaminate the blue sensing area.** (Fig 1) (If the sensor is damaged or inserted in a wrong way it will not be approved, see # 5 below)
3. Push the sensor firmly to stop into the hole opposing the cable in the Measuring head. (Fig 1)
4. Start up the Breathing Coach APP on your Android compatible display unit. Set a suitable sound level.
5. You will be prompted to "OK" that the USB port can connect to the HD camera. Then you may be asked to declare that "sensor changed" and this should produce the response "sensor valid" if the sensor is OK. See further the section replacement of a sensor.
6. Place the Display unit for convenient viewing.

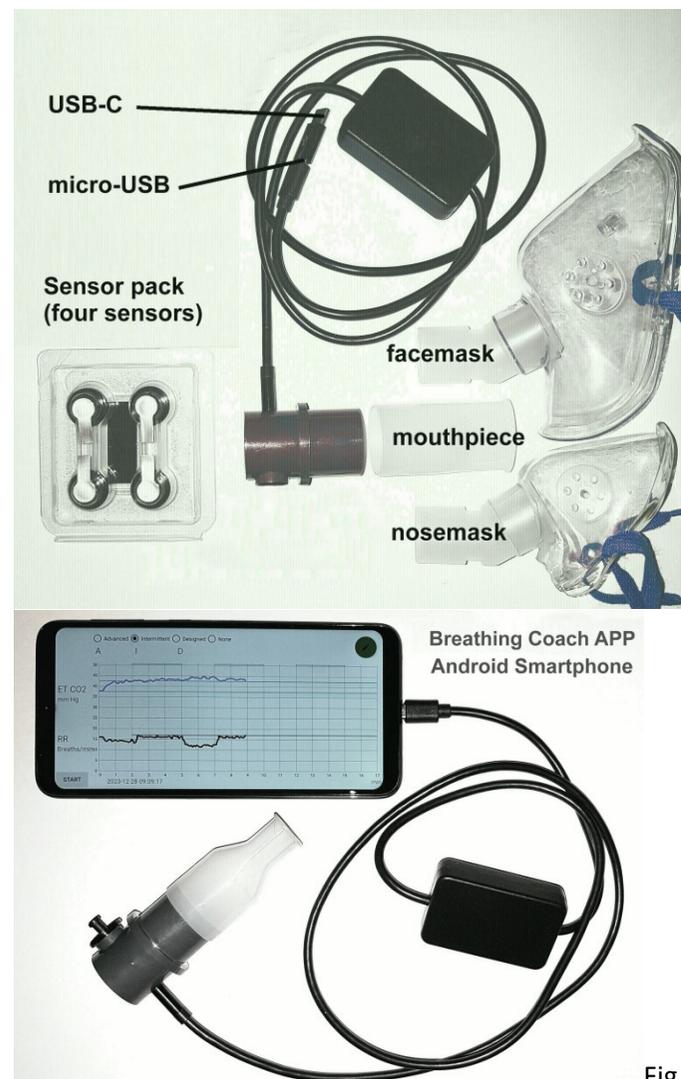


Fig 4

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Fig 3:

- The blue graph shows the End-Tidal CO₂ value breath by breath. A typical range of CO₂ is indicated by the two parallel blue lines.
- The brown graph shows the rate of breathing RR, calculated as an average over three breaths. The targeted breathing rate (if any) is indicated by the horizontal brown line. Coaching sound is generated during the periods indicated by green lines at the top of the graph.
- At the bottom of the graph the user identity is followed by the date and time of the session.
- The user ID is entered by tapping the pen-sign at the top right corner. Initials and date of birth can be entered
- You can exit from the Breathing Coach App back to the starting view by doing the “swipe up” from bottom to top on the display and then push the “back” symbol that appears left at the bottom.

After finishing a session (when 17 minutes have passed or when pushing STOP):

- Leave the sensor in place unless prompted to replace it. (See below).
- You will be asked if you want to save the data of the session. If the data is saved you can later retrieve all information from the “Gallery”.
- As an alternative, you can make a screenshot by simultaneously pressing “Volume down” and “Power” for about 2 seconds. In some cases you hold down the “Power” for a few seconds and then tap “Screenshot”.

Replacement of a sensor:

One week after you have placed a new sensor in the measuring head the display will prompt you to replace it. This is necessary in order to guarantee the specified accuracy. **Once you have replaced the sensor and then confirmed that a new sensor is in place** the unit will check it automatically to verify that the sensor is fresh and is in the correct position. If it is, (“Sensor valid” message) then you can proceed to use the device. Otherwise you get the message “Invalid sensor” and you will have to adjust the sensor position or replace it. The unit will not operate unless you have an approved sensor.

Cleaning

The nasal/oral connectors can be removed and cleaned separately. Before cleaning the Measuring head the sensor must be removed and discarded. We recommend therefore that if needed, the Measuring head is cleaned at the weekly change of sensors. All parts can be rinsed with water or with a disinfectant solution. The cleaned parts and particularly where the sensor sits must be absolutely dry before placing a new sensor into the Measuring head.

Description of the modes of operation A, I and D

A offers 10 minutes of coached breathing followed by 5 minutes of breathing at your own pace. A coached breathing rate is preset for each session.

I offers intermittent personalized coaching, where a training session is made up of three consecutive sequences, each 3 minutes of coached breathing followed by 2 minutes of breathing at your own pace. The targeted RR values is determined by your actual RR and ET-values at the end of the startup phase.

D offers a free choice in designing the format for each training session. You can decide if/when to start/stop coached breathing and also set/change the desired target respiratory rate value at any time (between RR= 5.5 to 17) . You do this by using the two dedicated buttons “Designed” and “None” of the D-mode (Fig.3).

Sensor specifications:

Absolute accuracy: ETCO₂ +/-3.5 mm Hg or 10% of reading whichever is largest

Respiratory rate: 3-30 Breaths/min Accuracy: +/-1 Breath/min

Usage time : 1 week

Shelf life of sensor in protecting package, more than 24 months at 23 degrees C

7. Attach the mask or the mouthpiece of your choice to the open end of the Measuring head. (Fig 2). The smallest mask is intended to cover the nose only for monitoring nasal breathing.
8. The mask should allow as much of the breath to pass through the Measuring head as possible. However, a tight fit to the face is not necessary. You can rotate the connector of the mask to find the most convenient position of the Measuring head and cable.

Starting a session:

- Once a week a pop-up menu will ask you to insert a new sensor. (See “Replacement of sensor” below). In this case you **first replace the sensor with a new one and then you confirm that you have replaced the old sensor**. The unit will then approve the new sensor (“Sensor valid”) and you can proceed with your session.
- Push one of the buttons A, I or D at the top of the display (Fig.3) to choose your preferred mode of operation. You find a description of the different modes of operation below. A simple way to get started is to choose the “I” mode.
- Push the “START” button to start your training session. The “START” will turn into “STOP” allowing you to interrupt the session at any time.

Relax and start breathing. In about 15 seconds the display will start showing your respiratory rate (RR) and End-Tidal CO₂ concentration (ET). If you have chosen “I” as the mode of operation, (See Fig 3 below) then after 2 minutes you will hear a rising and falling sound. You should try to inhale with the rising sound and to exhale with the falling sound. In this way you can maintain the targeted respiratory rate. This is called coached breathing and its duration is indicated with green lines at the top of the graph. (Fig. 3)