

*i***MORE**<sub>2.0</sub>

**Operator's Guide**

# *i*MOVORE 2.0

## **Table of contents**

## **Page**

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1.	Preliminary Note .....	2
2.	Delivery Inclusion .....	2
3.	Installation .....	3
4.	Start-Up .....	4
5.	Starting an Application .....	5
6.	Technical Data .....	6
7.	Warranty .....	6

## 1. Preliminary Note

Congratulations on your purchase of iMORE 2.0 (interactive MOnitoring and REgulation).

It will allow for a more complex functionality of your iMRS System.

With iMORE 2.0 biological relevant data from the user's body can be read during an iMRS application via a photoplethysmographic ear / finger sensor. The iMRS prepares this data and calculates the individual heart rate variability to actively regulate the intensity (flux density) during an iMRS application.

## 2. Delivery Inclusion

Included in the iMORE 2.0-System are:

No.	Description
Standard Equipment	
1	Ear sensor with stabilizer or finger sensor with connector cable
2	Operating Manual
3	Hard Case
4	SD-Card



1 Ear sensor with stabilizer or finger sensor with connector cable



2 Operating Manual



3 Hard Case



4 SD-Card

### 3. Installation

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Please remove individual parts from the hard case. Remove the cable clips from the sensor.



Connect the plug of the ear- / finger sensor with the jack (5) on the back of your iMRS-control unit.

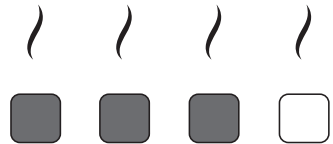
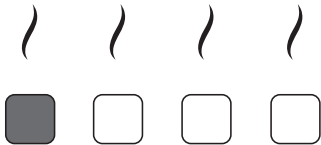
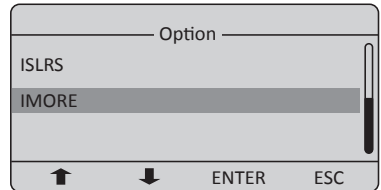
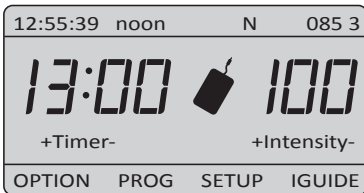


Insert the enclosed SD-card in the SD-card slot (6) to activate the iMORE-option.

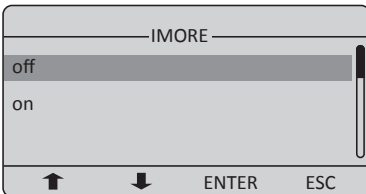
The iMORE-system will only work when the SD-card is inserted! Otherwise the display of your iMRS will show an error message "No SD-card" and your system will not start.

## 4. Start-Up

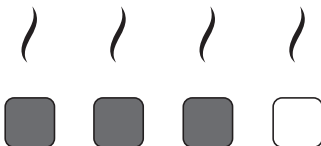
After successful and complete installation please turn on the system by pressing the start button on the membrane keyboard of your iMRS. After you switched on your system and after the display shows the contraindications, you will see the activated iMORE option on your screen (indicated by a check-mark behind the iMORE line). After 2 seconds the system will take you automatically to the start menu.



With the soft key below OPTION you can access the menu for the settings of your iMORE.



Here you can enable or disable the function of your iMORE system via the up and down arrow keys and subsequent confirmation by pressing the ENTER key.



## 5. Starting an Application

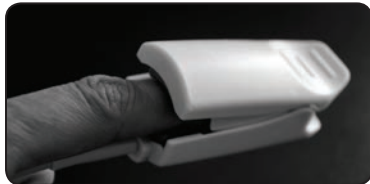
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Tip: The iMORE system only functions with the application of the whole body mat. Select your desired settings for your iMRS (see manual iMRS – whole body application).



### Ear sensor:

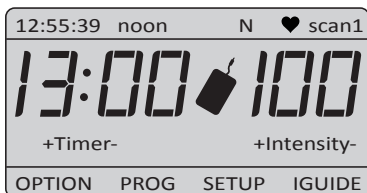
Attach the ear sensor including the stabilizer (see picture) securely to your ear lobe. Make sure that your ear lobe and the sensor are clean and that the attached sensor covers your entire ear lobe. Please rub the ear lobe with 2 fingers for about 2-5 seconds to stimulate blood circulation.



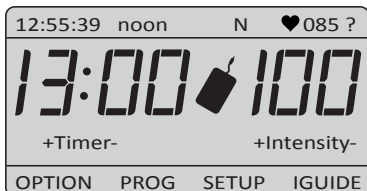
### Finger sensor:

Attach the finger sensor to your fore- / middle-finger (right or left hand). Make sure that your finger and the sensor are clean. If possible use the same finger for every measurement.

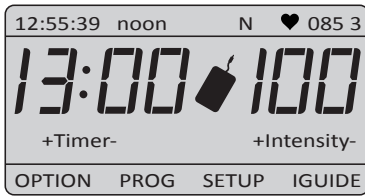
Please make sure that the sensor is not exposed to direct light as this distorts and hinders the measuring procedure. Now start your application by pressing the START/STOP key on your iMRS and ensure that you are in a relaxed and quiet lying position.



At the top right corner of your iMRS display you will find the display parameters for iMORE. "SCAN" means the system is active but has not received a signal yet. If the sensor is attached, depending on the ambient light, it may take 10-20 seconds until the sensor picks up the signal and measurement begins. This is indicated by the display of the heart rate and the pulsating heart symbol.



A question mark "?" indicates that the measurement is in progress, HRV = heart rate variability is not determined yet. Note: the more relaxed the user is and the more dim the ambient light is, the faster and more accurate the HRV calculation will be!

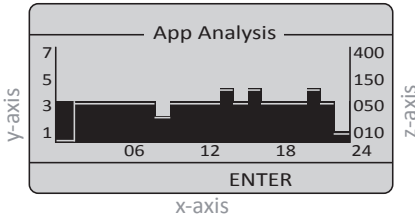


Once the HRV has been determined a number (1-7) will appear in the display instead of the question mark:

- 1 = HRV lower than 5 Beats/min
- 2 = HRV lower than 7 Beats/min
- 3 = HRV lower than 9 Beats/min
- 4 = HRV lower than 11 Beats/min
- 5 = HRV lower than 13 Beats/min
- 6 = HRV lower than 15 Beats/min
- 7 = HRV higher than 15 Beats/min

The iMORE 2.0 system calculates the HRV dynamically during a whole body application in 1-2 minute intervals (the time depends on environmental factors). If the HRV is elevated during an interval, the iMRS automatically increases the intensity (flux density), if the HRV remains constant, the intensity does too and if the HRV drops, the intensity will also be reduced. The result is a dynamic adjustment of the intensity (flux density) during the entire application period.

The minimum value of a patient's physiological signal should be at least 40 beats /min., any values below will not produce accurate results.



At the end of each iMORE 2.0 application the display of the control automatically displays a graphic.

The fine line (y-axis) describes the course of each established HRV (1-7), the bar graph (z-axis) describes the intensity (sens. – 400) regulated by the system. The x-axis denotes the duration of the selected application (in this case 24 minutes). The graph is simply intended as a visible control to check whether the dynamic measurement of HRV as well as a parallel adaptation of this intensity was carried out by the system.

The graph is not intended as a visible control to check whether the dynamic measurement of HRV as well as a parallel adaptation of this intensity was carried out by the system.

The graph is not intended to draw any conclusions about any potential medical conditions nor is it intended to evaluate the health status of the user. The graphic disappears automatically after approximately 4 minutes or can be eliminated by pressing the „Enter“ soft key.

## 6. Technical Data

No.	Description	Size / Unit / Type / Version
<b>iMORE System</b>		
1	Sensor Type	AMD-RS-AE0226-L ear clip AMD-RS-AC0227-L finger clip
2	Cable Length	3m
3	Material	TPU
4	Transmitter	LED 660/905
5	Detector	090PD silicon wafer
6	Connector	Compatible lemo connector

## 7. Warranty

Swiss Bionic Solutions assumes the warranty for a period of 6 months for parts and labor effective from the date of purchase.

The warranty is only valid if the product has been used according to instructions outlined. Please pay close attention to the instructions in this operating manual! Swiss Bionic Solutions is not responsible for defects, damages and their consequential damage resulting from improper use or handling of this equipment.

To make claims under this warranty you must produce the receipt of purchase of this equipment.

**Repairs and services are exclusively provided by the manufacturer, our Swiss Bionic Solutions offices in each country (for contact info please see our website: [www.swissbionic.com](http://www.swissbionic.com)) or from your consulting Health Technician.**

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