

SplendoMonitor

User manual

Version: 1.3

Date: 3 December 2025

Table of contents

Table of contents	2
Disclaimer	4
Device Compatibility	5
Download and install	5
Authentication	6
Workspace and environment selection	6
Location-based default workspace	6
Dedicated environments	6
Email and password	6
Reset password	6
Multi-Factor Authentication (MFA)	7
Single Sign-On	7
Selection	8
Select a department	8
Select a program	8
Select a subject	9
Search subjects	9
Select an assessment	9
Sensor setup	10
Power on	10
Set to correct mode	10
Connection	10
Configuration	10
Calibration	10
Placement	11
Assessment	12
Assessment protocol section	12
Interval types	12
Controls	12
Instructions	12
Key metric tabs	12
Pin/unpin	13
Graphs	13
X-axis	13
Y-axis	13
Detail metrics	13
Follow-up questionnaire	13
Appendix: Calibre	14

Disclaimer	14
Preparation before setup and use	14
1. Adequately Charge Before Use	14
2. Perform a Baseline	14
3. Insert Silicone Plug	14
4. Fit the Facepiece Correctly	14
5. Pick Your Environment Wisely	14
Setup	16
Charging	16
Straps	16
Place module	16
Power On	17
Connection	17
Calibration	17
Placement	17
Appendix: VO2 Master Analyzer	18
Setup	18
Battery	18
Power On	18
Connection	18
Configuration	18
Filter	19
Syringe calibration	19
Placement	20
Gas calibration	20
Appendix: Polar Sense	21
Setup	21
Battery	21
Power On	21
Connection	21
Placement	21
Appendix: Train.Red FYER	22
Setup	22
Battery	22
Power On	22
Connection	22
Placement	22

Disclaimer

- **SplendoMonitor is not a medical device.**

It is not intended for diagnosing, treating, or monitoring medical conditions, especially in critical or life-threatening situations. Do not use SplendoMonitor as a substitute for professional medical advice or care.

- **For professional use only.**

SplendoMonitor is designed for use by qualified professionals. Personal or unsupervised use may result in inaccurate assessments and potential health risks.

- **Physical activity advisory.**

SplendoMonitor assessments may involve physical exercise. Before beginning any physical activity, consult with a licensed healthcare provider to confirm that the exercises are safe and suitable for your individual health condition. Only perform assessments that are appropriate for your fitness level and medical status.

- **Health decisions should be guided by professionals.**

Do not rely solely on SplendoMonitor for making health-related decisions. If you have any symptoms, health concerns, or questions about your well-being, seek advice from a licensed medical professional.

- **Use at your own risk.**

The developers and creators of SplendoMonitor are not liable for any injury, harm, or damages resulting from the misuse of the app or failure to follow the instructions provided.

- **Use responsibly and as intended.**

SplendoMonitor is a fitness and metabolism assessment tool intended for general informational purposes only. Always follow the usage guidelines provided in this manual and consult with healthcare professionals as needed.

Device Compatibility

SplendoMonitor is compatible with recent Apple iPads. Please note that the app may not be compatible with older iPad models. To ensure optimal performance, we recommend using SplendoMonitor on iPads capable of running iPadOS 18, which includes the following iPad models:

- iPad - 7th generation (2019) and newer
- iPad Air - 3rd generation (2019) and newer
- iPad Pro - 3rd generation (2018) and newer
- iPad mini - 5th generation (2019) and newer (bigger screen is recommended)

Please ensure your iPad is running the latest iPadOS to ensure compatibility with SplendoMonitor.

If you are experiencing any compatibility issues or have any questions, please refer to the SplendoMonitor support documentation or contact our customer support team.

Download and install

To start using SplendoMonitor, follow these steps to download the app from the App Store:

1. Go to <https://apps.apple.com/tr/app/splendomonitor/id1521668317>
 - or open the App Store on your iPad.
 - Search for "SplendoMonitor" in the search bar
 - Locate the SplendoMonitor app in the search results and tap on it.
2. Tap the "Download" or "Get" button on the app's page.
3. Wait for the download to complete. This may take a few moments, depending on your internet connection.
4. Once the app is downloaded, tap the "Open" button to launch SplendoMonitor. Or find the SplendoMonitor app on the device's Home Screen or App Library



Note: The availability of the SplendoMonitor app may vary depending on your device and App Store (check the 'Device compatibility' section).

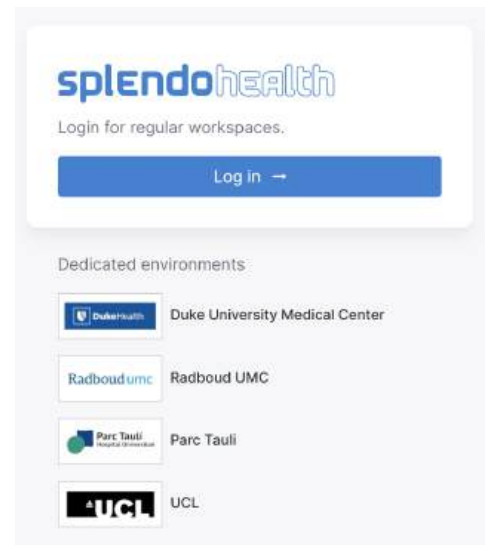
Authentication

Workspace and environment selection

Before logging in, specify which workspace you would like to log in to. The default workspace is accessed by tapping the blue 'Log in' button.

Location-based default workspace

The default workspace (Splendo-EU or Splendo-US) is selected based on your IP address. If the selected default workspace is incorrect, use the link below the Log In button to switch.



Dedicated environments

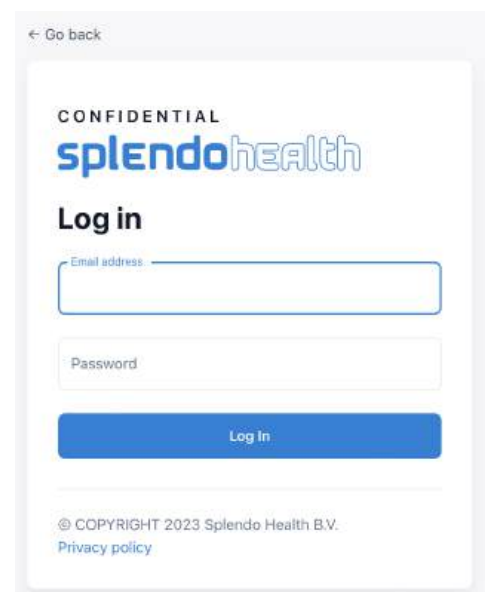
If your organization opted for a dedicated environment, this can be selected in the list below the 'Log in' button.

Email and password

To log in to SplendoMonitor using your email and password, follow these steps:

1. Open the SplendoMonitor app and follow the environment selection steps described above.
2. On the login screen, enter your registered email address in the email field.
3. Enter your password in the password field. Passwords are case-sensitive.
4. Click on the "Log in" button to proceed.

If the entered email and password are correct, you will be successfully logged in and directed to the main dashboard.



Reset password

If you forgot your password, open your environment's portal in any internet browser.

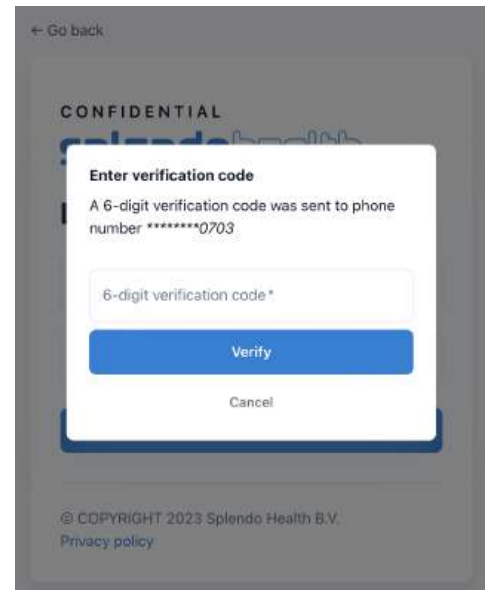
1. Click on the "Forgot Password" link on the login screen.
2. Enter your email address

Return to the monitor app to log in with your new password.

Multi-Factor Authentication (MFA)

If you have previously set up multi-factor authentication via text message for your SplendoHealth account, you can follow these steps to log in using this method:

1. Go to the SplendoMonitor login page and enter your email address and password.
2. After entering your credentials, you will be prompted for a verification code.
3. Open your messaging app and locate the text message containing the verification code.
4. Enter the verification code into the designated field on the login page.
5. Click the "Verify" button to complete the authentication process.
6. If the code is correct, you will be successfully logged into SplendoMonitor.



Please note that multi-factor authentication via text message adds an extra layer of security to your account by requiring both your password and a verification code sent to your mobile device. Ensure that you have a reliable mobile network connection to receive the verification code promptly.

Single Sign-On

For dedicated environments, we provide the flexibility to utilize your organization's Single Sign-On (SSO) provider. This means that if SSO has been configured for your environment, you will have the convenience of accessing SplendoMonitor through the familiar SSO authentication screen. You will be guided through the standard authentication process to securely log into SplendoMonitor and access its features and functionalities.

Selection

In the selection process, you specify the department, the program, and then the subject for whom you would like to do an assessment. The hierarchy is as follows:

Department			
Program		Program	
- Assessment A	- Subject 1	- Assessment A	- Subject 4
- Assessment B	- Subject 2	- Assessment B	- Subject 5
- Assessment C	- Subject 3	- Assessment Z	- Subject 6

The sidebar on the left of the screen shows your current selection and allows you to navigate to the departments, programs, subjects, and assessments lists.

Select a department

The departments you have access to are listed in the departments view. By default, you will see a single department linked to your organization.

If your organization opted for a dedicated environment, your environment administrator can create additional departments to compartmentalize the environment. Departments can be used to create individual workspaces for locations, teams, or any other structure. Every user in your environment can get permission to access one or more departments. Contact your environment administrator if you do not see the department you are looking for.

After selecting a department, you will be navigated to the list of programs.

Select a program

Programs can be used for individual projects, groups of subjects, or any other structure.

Programs contain a specific set of assessments and a list of subjects and their data.

After selecting a program, you will be navigated to the list of subjects.

You can remove your selection by tapping the 'X' icon in the sidebar.

Select a subject

Programs contain a list of subjects and their data.

1. Tap the subject you would like to assess from the list of subjects.
 - If the subject is not in the list, make sure you have a stable internet connection.
 - To add a new subject to the program, go to the SplendoHealth portal.
2. Review the subject details in the pop-up window to ensure the correct subject was selected.
3. Tap 'Select subject' in the bottom right-hand corner to confirm your selection

The screenshot shows a pop-up window titled 'Eric Castro'. It contains a table with the following data:

Participant ID	87573455	Program subject ID	643842
First Name	Eric	Last Name	Castro
Height	190,0 cm	Weight	94,0 kg
Gender	Male	Date of Birth	3 Feb 1973

At the bottom right, there are two buttons: 'Close' and 'Select subject' (with a plus icon).

Search subjects

Use the search field in the top right to search for a subject's first name, last name, or ID.

1. Enter your search query in the search field.
2. Find the subject you are looking for
3. Tap 'X' to remove your query.
4. Tap 'cancel' to close the search results.

The screenshot shows a search bar with the text 'Eric' and a magnifying glass icon. To the right of the search bar is a close button (X) and a 'Cancel' button. Below the search bar, the results show 'Eric Castro' with the ID '87573455'.

Select an assessment

Programs contain a specific set of assessments.

1. Tap the assessment you would like to do from the list of assessments.
2. Review the assessment details in the pop-up window to ensure the correct assessment was selected.
3. For each sensor category, choose the sensor model you would like to use, or select 'None'.
4. Tap 'Select assessment' in the bottom right-hand corner to confirm your selection

The screenshot shows a pop-up window titled 'Open assessment'. It contains a section for 'Information' with a link 'More information about this assessment and CRF metrics'. Below this is a 'Sensors' section with two columns:

VO2 Master	Polar
VO2 Master Analyzer	Sense
Train.Red	
Train.Red FYER	

At the bottom right, there are two buttons: 'Close' and 'Select assessment' (with a plus icon).

Sensor setup

The sensor setup will guide you through all the necessary steps to ensure anyone can perform assessments. To ensure high-quality data collection, it is important to set up each sensor correctly. For some sensors, setup is a simple process of turning them on, tapping connect, and placing them in the correct location. However, for other sensors, the setup process may be more complex, requiring configuration or calibration.

The paragraphs below describe the general order of operations. Some sensors may require additional steps or a slightly different order. Refer to the appendix for detailed instructions for individual sensors.

Power on

Most sensor setups start by powering on the device. The instructions and image describe how to power on the sensor. This includes details such as button location, the duration the button should be pressed, and how to confirm the sensor was turned on correctly. Tap 'Next' after following all the steps.

Set to correct mode

Some sensors require an additional step to set the correct mode or enable Bluetooth connection mode. Tap 'Next' after following all the steps.

Connection

When the sensor is turned on and set to the correct mode, it can be connected to the iPad. Typically, a unique ID or serial number is printed on the device. The instructions and image will indicate where to locate the ID for sensor identification.

You can then match the ID with the list of available devices and tap 'Connect'.

Please note that the list will only display sensors of the type you are setting up. If you only have one sensor of that type, the list will only show a single sensor, making the ID less significant.

Configuration

Some sensors require configuration before use. Configuration could include additional subject details required by the firmware, accessories used, or calibration settings. Refer to the appendix for detailed instructions for individual sensors.

Calibration

Some sensors require manual calibration before they can be used. Calibration improves the accuracy of the sensor and adjusts the sensor to the conditions. In some cases, the sensor

needs to be attached before calibration. In that case, the order of steps will be different. Refer to the appendix for detailed instructions for individual sensors.

Placement

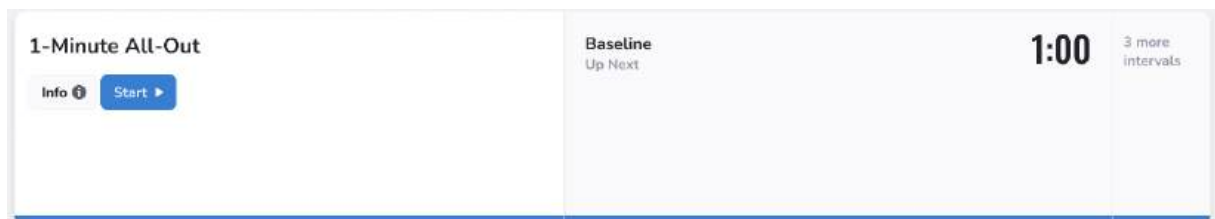
The placement or attachment instructions outline the procedure for the sensor placement on the subject's body. Correct placement is critical to ensure high-quality data is collected. Refer to the appendix for detailed instructions for individual sensors.

Assessment

The assessment page is the core of the SplendoMonitor app. On this page, you will perform the assessments and collect data.

Assessment protocol section

The assessment protocol section shows the steps required for the assessment. In most cases, the protocol includes a baseline, preconditioning, exercise, and recovery interval.



Interval types

There are three types of intervals.

- Fixed: has a predetermined duration and cannot be ended prematurely.
- Flexible: has a predetermined duration and can be ended prematurely.
- Open: does not have a predetermined duration and will continue to run indefinitely. Open intervals have to be ended by the user.

Controls

- Start: When the subjects and sensors are ready, you can start the assessment by tapping 'Start'. The countdown timer will start running for the first interval and automatically continue to the next.
- Jump to [interval]: if the current interval can be ended manually, the 'Jump to' button is enabled. Tapping this will jump to the next or the specified interval, skipping any intervals in between.
- Open: when the last interval is finished, tap 'Open' to navigate to the follow-up questionnaire.

Instructions

Each active interval displays instructions and, in some cases, intensity parameters like resistance, speed, or BPM. Adhere to the instructions for repeatable assessments suitable for comparison.

Key metric tabs

The key metrics are shown in tabs below the protocol section. A key metric tab can be tapped to show its corresponding graph and detail metrics below.

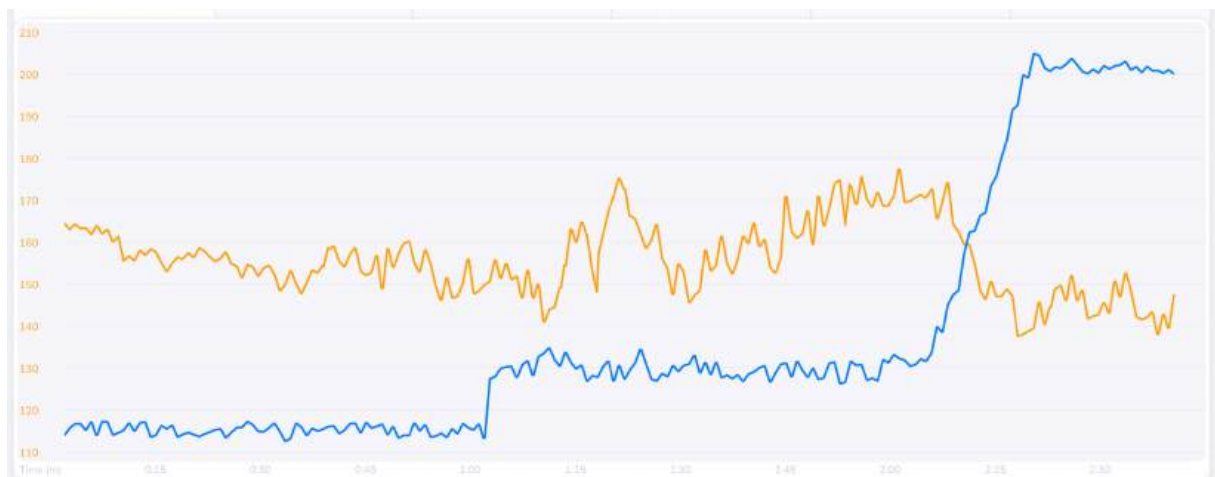


Pin/unpin

Press and hold a key metric tile to 'pin' its graph. When pinned, the graph will remain visible, even if a different tab is selected. This allows you to compare to overlay multiple graphs. Please note that the Y-axis scale matches the selected key metric tab.

Graphs

The graph view displays sensor output of the selected and pinned key metrics.



X-axis

The X-axis always represents time in minutes and seconds.

Y-axis

The Y-axis is dynamic and adjusts to match the data in the graph. The Y-axis always matches the selected key metric tab. In the images above, the orange key metric is selected, so the orange Y-axis is shown. The blue graph is shown because the blue key metric is pinned.

Detail metrics

Selecting a key metric shows its graph and related detail metrics.

Metric #.1	Metric #.2	Metric #.3	Metric #.4	Metric #.5	Metric #.6
Value	Value	Value	Value	Value	Value
Unit	Unit	Unit	Unit	Unit	Unit

Follow-up questionnaire

After finishing the assessment and tapping 'Open', the app navigates to the follow-up questionnaire screen. The follow-up questionnaire includes questions related to the exercise protocol. Use these questions to save details about the assessment in the data set.

Appendix: Calibre

Disclaimer

Breath analyzers are notoriously difficult devices to get consistently accurate readings from. Even the latest hardware must operate within certain limitations and physical variables, such as air and device humidity, gas mixing, and temperature changes, which affect the accuracy of the measurement. If you skip steps or rush setup, your data may be inaccurate.

Preparation before setup and use

1. Adequately Charge Before Use

- Use the USB-C cable provided with your Calibre.
- Plug directly into a standard wall outlet (avoid charging through laptops or external devices).
- Charge until the white light is solid (2–3 hours).
- Skipping this can lead to battery damage or unresponsiveness.

2. Perform a Baseline

- Press & hold button 10 seconds (yellow flashes x3).
- Let sit for 2 minutes
- Place on charger for 30+ minutes to warm the oxygen sensor.
- Skipping baseline altogether and/or the 30-minute charge can lead to inaccurate data.

3. Insert Silicone Plug

- Insert the silicone plug into the charging port before use to protect against moisture.
- Skipping this can lead to water damage.

4. Fit the Facepiece Correctly

- Do NOT insert the module yet – any residual breath inside the module before calibration can affect accuracy.
- Choose your preferred strap for a secure fit.
- The facepiece should rest just beneath your nostrils — don't push your nose inside.
- Snug but comfortable seal — no excessive compression.
- Poor fit can lead to inaccurate data.

5. Pick Your Environment Wisely

- Use indoors only — no wind or direct fans.

- Keep temperature between 50–122°F (10–50°C).
- Avoid humid environments.
- Improper environment = noisy or inaccurate data.

6. Update Firmware

- Make sure you are running the latest version of the Calibre firmware

7. Calibrate in the Right Conditions

- Do NOT breathe into the device for 30 minutes prior to calibration.
- Place the module on a stable, draft-free surface.
- Follow in-app calibration instructions.
- Improper calibration = drift in data

8. Follow Our Session Duration Limits

- When not using our protocols, strictly follow the session limits below to ensure accurate data and protect your device:
 - High intensity (> 60 L/min): Max 25 minutes total (incl. warmup & cool-down).
 - Moderate intensity ($\leq$ 60 L/min): Up to 90 minutes.
 - Back-to-back sessions: allow at least 1 hour between sessions.
- Exceeding these limits may result in irreversible sensor damage and will void your warranty.

Setup

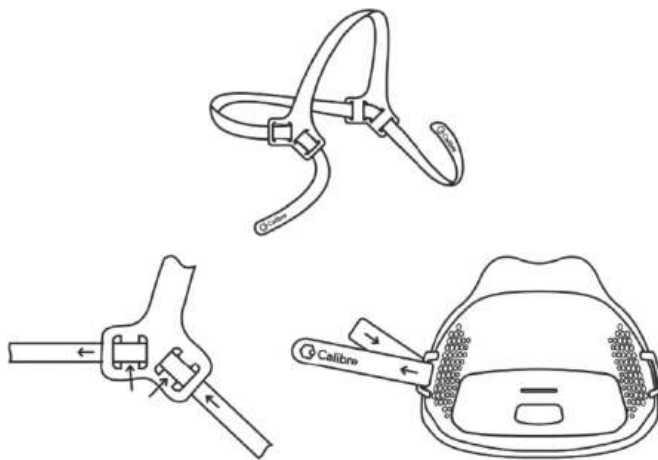
Always clean the mask and sensor before and after use.

Charging

Charge the Calibre device with the supplied USB-C cable. The LED on the front will pulse slowly while the device is charging (see steps above for details).

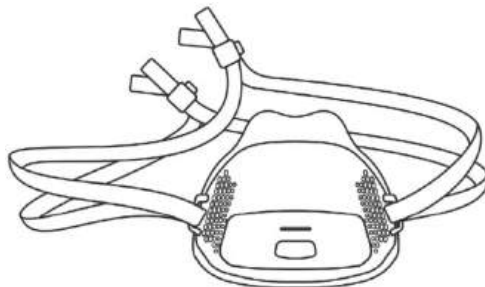
Straps

Attach one of two strap types.



Strap style A

Thread each end of the cloth strip through the end of the Fold each of the cloth strap tips back on itself, securing the Velcro



Strap style B

Thread the silicone straps through the loops on the mask. Secure the strap tips using the two black connector clamps.

Place module

Press the module into the mask until you hear a click. Confirm the device is attached securely.



Power On

1. To turn on the device, long-press the power button located on the front of the device
2. After turning on the Calibre, place the device on a flat surface while completing the remaining steps.
3. When the status LED is flashing pale blue, the device is ready to connect.
4. Tap 'Next' to proceed to the connect page.

Connection

1. Wait for a few seconds while the app scans for Bluetooth devices. The list will be updated with all the Calibre devices in range.
2. Match the ID in the list with the ID of your Calibre device.
 - Note: You can find the Calibre device ID on the print on the bottom of the device, just visible after pressing into the mask.
3. Tap 'Connect' in the row next to the device ID.
4. The app will navigate to the connection status screen.
 - You can abort the connection process by tapping 'X' in the top left-hand corner.

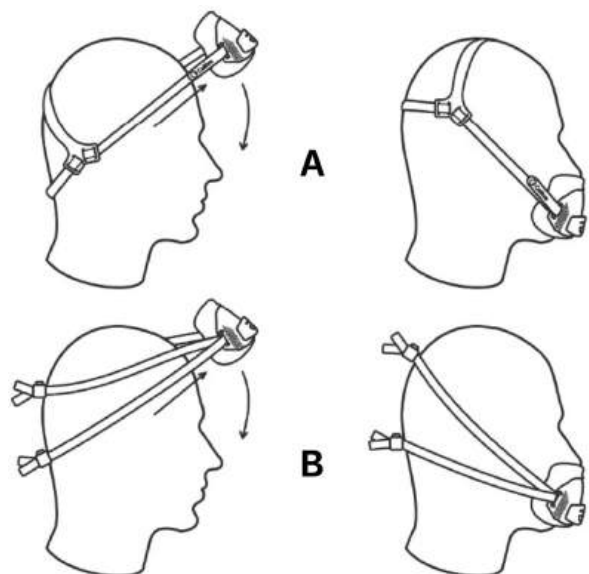
Calibration

Note: Do not breathe into the device for at least 30 minutes prior to calibration. The Calibre device should be at ambient temperature, humidity, O₂, and CO₂ levels. Refer to the 'Preparation before setup and use' chapter.

1. If the device was recently calibrated (or was used less than 30 minutes ago), tap 'Skip Calibration'.
2. Place the device on a flat surface and tap 'Calibrate'.

Placement

1. Position the mask over the subject's mouth and below the nose.
2. Place the straps behind the subject's head and tighten slightly.
3. Verify with the subject that they can breathe comfortably through their nose and mouth without any obstruction.



Appendix: VO2 Master Analyzer

Setup

Always clean the mask and sensor before and after use. Replace the filter before every assessment.

Battery

Ensure that the AAA battery in the device is either new or fully charged. It is recommended to avoid replacing the battery during an assessment as it will reset all configuration, calibration, and data.

The battery cap is located on the inside of the device next to the mouthpiece. To open the battery door, unscrew the mouth/user piece.

Power On

5. To turn on the device, press the power button located at the end of the black caps on either end of the device.
 - Note: In a hardware update, the location of the power button was changed. For older models, the power button is located on the opposite side.
6. After turning on the VO2 Master Analyzer, place the device on a flat surface while it zero-calibrates (indicated by a dark blue status LED).
7. When the status LED turns pale blue, the device is ready to connect.
8. Tap 'Next' to proceed to the connect page.

Connection

5. Wait for a few seconds while the app scans for Bluetooth devices. The list will be updated with all the VO2 Master Analyzers in range.
6. Match the ID in the list with the ID of your VO2 Master Analyzer.
 - Note: You can find the VO2 Master Analyzer ID on the card that came with the device. It is recommended to transfer the ID to a sticker on the device if you have multiple analyzers.
7. Tap 'Connect' in the row next to the device ID.
8. The app will navigate to the connection status screen.
 - You can abort the connection process by tapping 'X' in the top left hand corner.

Configuration

Mask Size

Ensure that the blue mask fits the subject's face properly.

- A mask that is too small might restrict breathing, which could affect performance.
- A mask that is too big might not seal correctly, which could affect the accuracy of measurements.

User Piece Size

The user piece determines the amount of air that can flow through the device.

- Using a user piece that is too small for the volume of air may restrict airflow, leading to performance issues.
- Using a user piece that is too large for the volume of air may result in insufficient pressure, causing inaccurate values.

Select the appropriate user piece based on your intended exercise intensity:

- Rest (R): For breath analysis at rest.
- Medium (M): For breath analysis during exercise.
- Large (L): For breath analysis during very intense exercise.

Syringe Calibration

Syringe calibration enhances the accuracy of the VO2 Master device by a few percentage points. You have the option to choose the size of the syringe to be used for calibration, or skip syringe calibration altogether.

Filter

Insert a new filter before each assessment.

Syringe calibration

Syringe calibration, also known as volume calibration, is essential for calibrating the air volume sensors in the VO2 Master Analyzer. This calibration process enhances the accuracy of the VO2 Master device by a few percentage points. During the initial configuration, you have the option to select the desired syringe size for calibration or choose to skip this step. If you choose to skip syringe calibration, you can proceed to the next steps directly.



To perform syringe calibration, follow these steps:

1. Attach the silicone spacer to the device.
2. Screw the hose adapter to the user piece securely.
3. Connect the hose to both the adapter and the syringe.
4. Place the device on a flat surface, preferably upside down to ensure the air outlet is unobstructed.
5. Tap 'Next' on the device to proceed to the syringe calibration page.
6. Push the syringe handle in and out at the same pace as the animated bar displayed on the screen.
7. Continue this movement until the progress bar reaches 100%.
8. Once the calibration is complete, carefully remove the syringe, adapter, and silicone spacer.

Placement

4. Attach the sensor to the mask, ensuring that the opening faces towards the chin-side of the mask.
5. Secure the mask by screwing on the locking ring.
6. Position the mask over the subject's nose and mouth.
7. Wrap the straps around the subject's head and click them into the slots on the clear plastic tabs.
8. Verify with the subject that they can breathe comfortably through their nose and mouth without any obstruction.

Gas calibration

Gas calibration, also known as breath calibration, is essential for calibrating the air content sensors in the VO2 Master Analyzer. This calibration process is required before use of the sensor.

To perform gas calibration, follow these steps:

1. Attach the VO2 Master sensor to the mask.
2. Place the mask on the subject's face and attach the straps.
3. Tap 'Next' on the device to proceed to the gas calibration page.
4. Breathe in and out continually.
5. Continue this until the progress bar reaches 100%.
6. Once the calibration is complete tap 'Next'.

Appendix: Polar Sense

Setup

Battery

Make sure the battery is fully charged before use. Put the sensor in the USB charging holder.

Power On

1. Press and hold the button on the side of the device to power on. The lights will show a short animation while booting up. Afterwards a single button will light up indicating the current mode.
2. Press the button again to move the light to the heart rate monitor mode (heart icon)

Connection

3. Wait for a few seconds while the app scans for Bluetooth devices. The list will be updated with all the Polar Sense devices in range.
4. Match the ID in the list with the ID on the side of the Polar Sense device.
5. Tap 'Connect' in the row next to the device ID.
6. The app will navigate to the connection status screen.
 - a. You can abort the connection process by tapping 'X' in the top left hand corner.

Placement

1. Press the sensor into the bracelet with the light facing the inside.
2. Place the bracelet around the subject's arm and adjust the tension.

Appendix: Train.Red FYER

Setup

Battery

Make sure the battery is fully charged before use.

Power On

1. Press and hold the button on the side of the device to power on. The lights will show a short animation while booting up. Afterwards a single button will light up indicating the current mode.
2. Press the button again to move the light to the heart rate monitor mode (heart icon)

Connection

1. Wait for a few seconds while the app scans for Bluetooth devices. The list will be updated with all the Polar Sense devices in range.
2. Match the ID in the list with the ID on the side of the Polar Sense device.
3. Tap 'Connect' in the row next to the device ID.
4. The app will navigate to the connection status screen.
 - a. You can abort the connection process by tapping 'X' in the top left hand corner.

Placement

1. Loop the strap through the slots. Make sure the light is on the inside of the loop.
2. Place the bracelet around the subject's upper arm or upper leg.
3. Make sure the sensor is on the belly of the muscle.