

SENSE

User manual





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We value your privacy

We're committed to being transparent and straightforward about how we use data. We will always ask permission before sharing personal information. Go to www.renson.eu/privacy to find out more about our privacy policy.

WHY THE RENSON SENSE?

What does indoor air quality mean?

Indoor air quality means the air quality in a house, school, office or other closed building. Several studies show that there is a connection between indoor air quality and the health of people and buildings. Since we spend about 90% of our time indoors, a good and healthy indoor climate is extremely important to ensure a healthy living and working environment, resulting in a reduction in sickness absence and health complaints.

There are a number of environmental factors (CO₂, voc, humidity, temperature, etc.) indoors that affect our health, comfort and human performance (productivity). Unlike outdoor air, indoor air is continuously circulated, causing harmful substances to build up and linger in the room. It is therefore important to continuously monitor the indoor air quality and improve where necessary.

*“Healthy Indoor Air,
Makes Sense!”*

WHAT IS THE RENSON SENSE?

The Renson Sense is an objective measuring device for indoor air quality and comfort.

As human beings, we are not able to perceive gradual increases in CO₂. That is why we do not immediately link headaches, nausea and concentration problems to CO₂ and do not have the reflex to take immediate action. To take preventive action and to ventilate (or air out) in time, you need a reliable device that measures objectively the indoor air quality.

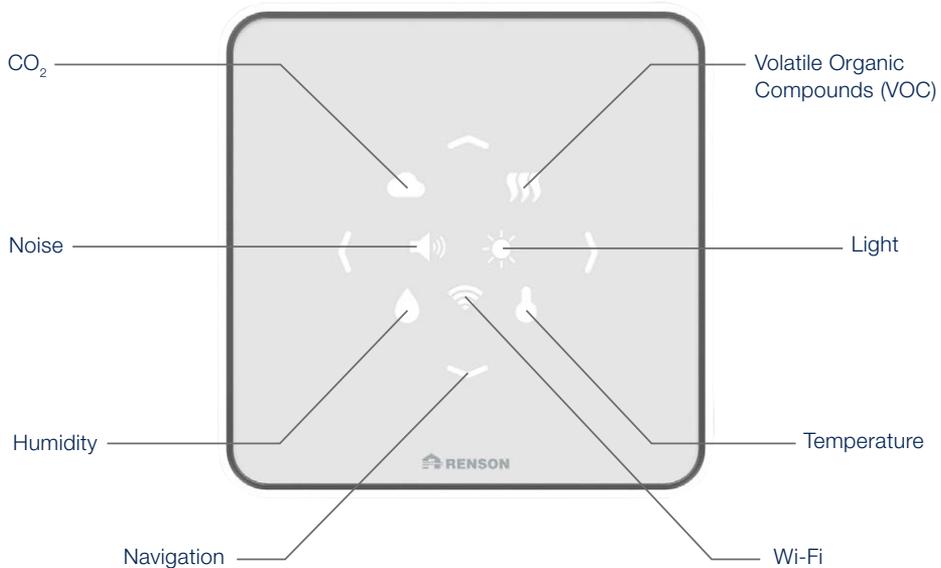
Renson has therefore developed the SENSE, a monitor device that measures the CO₂ content (and more!) 24 hours a day. A large LED feedback indicates in a simple manner the state of the indoor air quality and when action needs to be taken:

- Blue: the air quality and/or comfort = good, no action required
- Orange: the air quality and/or comfort = average, take care
- Red: the air quality and/or comfort = bad, take action and ventilate the room



What is measured?

SENSE is more than a visual CO₂ meter. The device also maps other parameters that contribute to a healthy and comfortable indoor climate, such as the amount of harmful substances (VOC), the temperature, humidity, noise and amount of light. Moreover, you can follow all the parameters in real time via the corresponding app on your smartphone and consult the history. This way, you can find out if your house has other structural problems that need to be addressed urgently.





Comfort Index

This is a general calculation of various measurements of the sensors, every 30 seconds. These work according to certain classes, and if a class exceeds its limit values it will result in a different colour. However, the three fixed colours remain: blue, orange and red.



Light

These aspects affects a person's well-being, but their use in the environment is also important. The right lightning is needed to carry out work tasks, to motivate us and, at the same time, to create a positive/creative atmosphere.

Too much light intensity can also lead to eye fatigue and migraines, which in turn hinder our productivity and focus.



Noise

The intensity of sound and noise pollution affects our daily life and happiness. The sensor determines the sound level (in dB), which is not always audible to the human ear. In this way, acoustic comfort is guaranteed.



Temperature

Temperature affects more than just your comfort. It can also affect your performance, the quality of your sleep and the proper functioning of your immune system to fight off pathogens.



Relative humidity

The Relative Humidity is the ratio of moisture in the air. The RH can be both too low or too high. RH can affect the occurrence of respiratory infections and allergies, as well as the moisture content in the vicinity of thermal bridges (building).



VOC (Volatile Organic Compounds)

Volatile organic compounds are organic compounds that easily become vapours or gases. This can have adverse health effects, such as headaches, loss of concentration, drowsiness and low energy consumption. VOC concentrations are consistently higher indoors than outdoors. Some VOCs produce a certain odour while others do not, which is why it is important to measure them and ventilate properly.



CO₂

CO₂ is a substance that we exhale and that is used as a measure of air exchange indoors. The CO₂ content can quickly rise to unhealthy levels and can cause headaches, fatigue and difficulty concentrating.

*“You can't see air,
but you can see data.”*

HOW TO INSTALL?

SENSE device can be placed in your home in 2 ways:

1. Freestanding on a table, cabinet and/or desk

- Place the device as centrally as possible in the monitored area.
- Place the device in the “breathing zone” for the most accurate measurements:
 - Between 70 centimetres and 1.8 metres from the ground*.
 - For wall mounting, a height of 1.5 metres from the ground is ideal.
- Do not put the device in the full sun
- Do not place the device on an outside wall; this wall is always colder. If the outside wall is the only place for your Sense device, then place a wooden plank behind the device.
- Do not place the device in hot or cold airflows.



1,5 m



Min.
70 cm

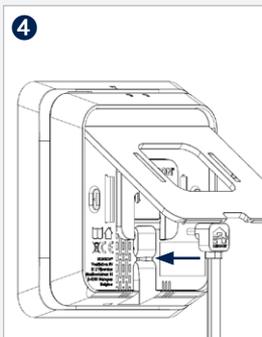
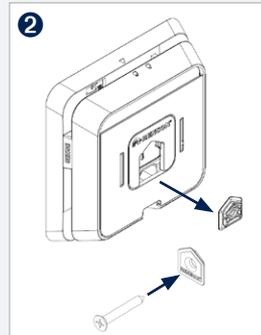
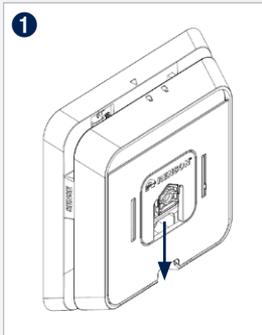


** If the device is placed at a height of less than 70 cm (such as a coffee table), the values will deviate slightly. Keep this in mind.*

2. Wall mounting

Follow the steps below to mount your Sense device on your inside wall:

- **Step 1:** On the back of your device you will find a small 'house' in the middle. Slide the housing downwards.
- **Step 2:** Remove the housing from the casing. Then use a wall tab, suitable for your wall type.
- **Step 3:** Attach the little house to the wall with the wall tab and a screw.
Attention! The Renson logo must be fixed horizontally to the wall.
- **Step 4:** Open the back flap and plug in the USB-C cable. Then close the flap.
- **Step 5:** Bring your device to the mount on the wall and click your device from bottom to top for mounting.
 Your Sense device is now mounted on the wall and ready to use.



WHAT'S IN THE BOX?



SENSE



**Accessories
(USB-C cable & Adaptor)**

INSTALLATION MANUAL

Is the LED feedback on the device itself enough for you to take action on the spot? Then just plug in the Sense device and you're ready to go!

Do you want to have more insight in the data? Then follow the instructions below to connect the device to the application. By means of weekly graphs in the app, you can learn about the air quality in different rooms and buildings. To measure is to know, and to know is to improve.

There are 2 options to connect Sense devices:

- A. Via the application
- B. Via the WPS button

A. Via the application

1. Download the app Renson SENSE

Download the application in the App Store or Google Play.



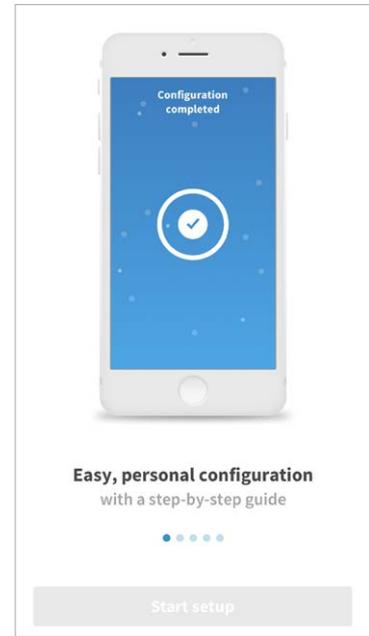
Or scan this QR code with the camera of your smartphone.



After installation and opening the app, you will see the following screen appear:



Next, you will get some tips and explanations on the following screens:



2. Create an account by registering

Attention: When you create an account, click on the correct profile:

- **End user** profile: choose this profile if you are an end user of the device and if you want to continue to see the data after installation.
- **Professional installer** profile: choose this profile if you no longer wish to view the data after installation and you only install the device for someone else (external installation company).

The registration process consists of three main steps shown in the screenshots:

- Step 1: Login/Register Screen**
 - Header: Renson logo, "Creating healthy spaces", and navigation links: Log in, Register, Demo.
 - Fields: Email address, Password (with visibility toggle).
 - Link: [Forgot your password?](#)
 - Button: Log in
- Step 2: Define user role**
 - Header: Renson logo, "Creating healthy spaces", and navigation links: Log in, Register, Demo.
 - Text: Define user role, I want to register as:
 - Buttons: End-user (selected), Professional
 - Fields: First name, Last name, Email address, Password, Repeat password (all with visibility toggles).
 - Text: *Must contain at least 8 characters: including a number, a symbol and a capital.*
 - Text: I have read and agree with the following
 - Checkboxes: Terms and conditions, Privacy policy
 - Button: Register
- Step 3: Account and Personal Details**
 - Header: Renson logo, "Creating healthy spaces", and navigation links: Log in, Register, Demo.
 - Text: Define user role, I want to register as
 - Buttons: End-user, Professional (selected)
 - Section: Account info
 - Fields: Email address*, Password*, Repeat password* (all with visibility toggles).
 - Text: *Must contain at least 8 characters: including a number, a symbol and a capital.*
 - Section: Personal details
 - Fields: First name*, Last name*
 - Section: Company details
 - Fields: Company name*, Company email address*

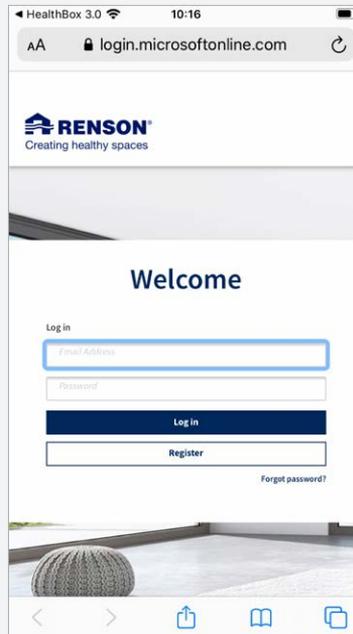
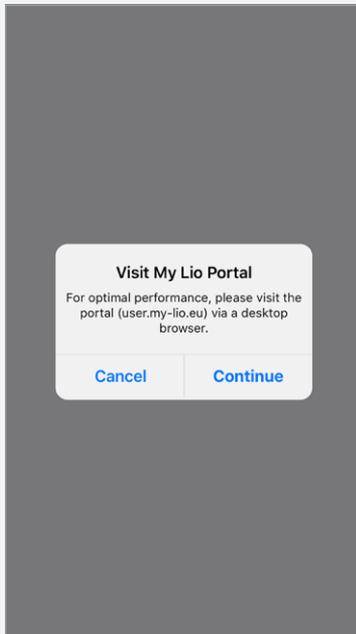
Choose the right profile (end user or professional installer) and fill in the data. Fields marked with * are mandatory. Then click on 'Register'.

2. Create an account by registering

You will receive an e-mail to activate your Renson account. Make sure to check your **spam** folder. If you still have not received an e-mail, please contact service@renson.be. Always give the e-mail address with which you try to register.

After activation you will be directed to our web portal 'My-Lio' (<https://user.my-lio.eu/>). In this portal, you can do the following **after connecting the devices**:

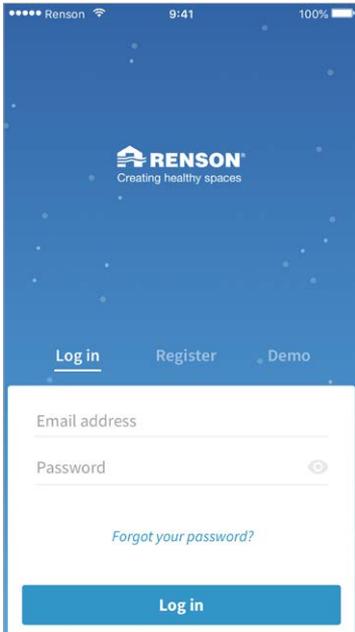
1. 'My devices': here you get an overview of the devices you have connected and their status:
 - green tick: device is online, data is being sent to the app/dashboard.
 - red cross: device is offline, no data is being sent to the app/dashboard.
2. 'My Healthy Spaces'
3. Support
4. What's New?
5. Dashboard



3. Log in with your account

Return to the Sense application and sign in with your account.

Enter the e-mail address and password and click on login.



4. Connect the app to the Sense

STEP 1 - Product selection

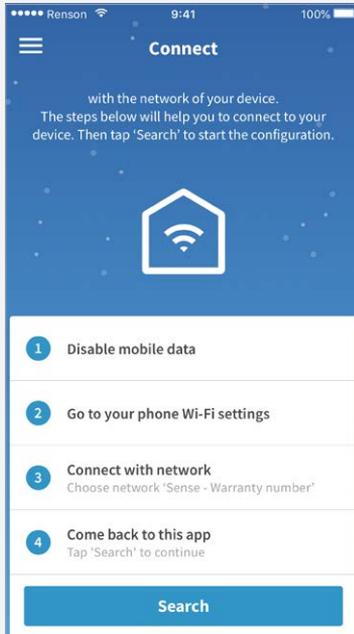
Choose the product you want to connect: SENSE. Press 'SENSE'.



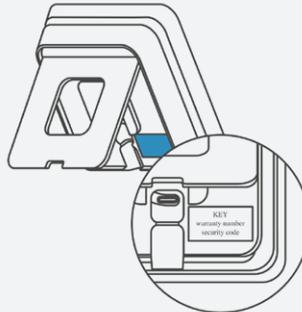
4. Connect the app to the Sense

STEP 2 - Connect to the Sense

You will get the screen below, follow the next steps closely:

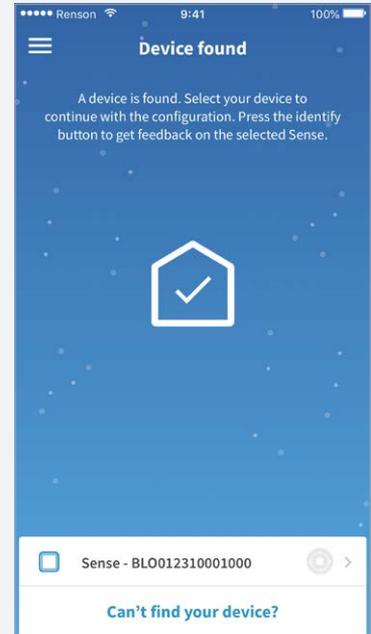


1. Switch off your mobile data.
2. Go to your Wi-Fi settings in the smartphone (settings -> Wi-Fi settings -> available networks).
3. Connect to the Wi-Fi of your SENSE device (network name is SENSE + the guarantee number). This number can be found on the leaflet as well as on the device itself:



After the connection you will get the following message: "connected, without Internet".

4. Go back to the Sense App, and press 'search'. You will get the message 'Device found'.



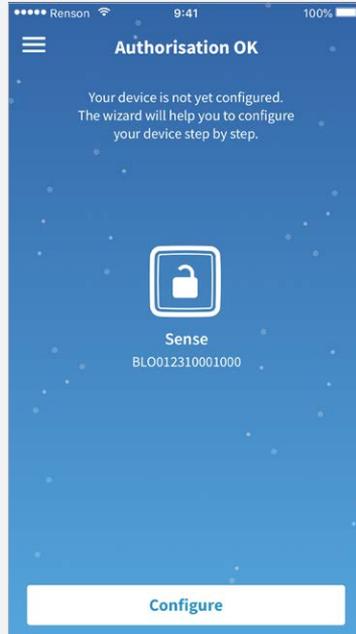
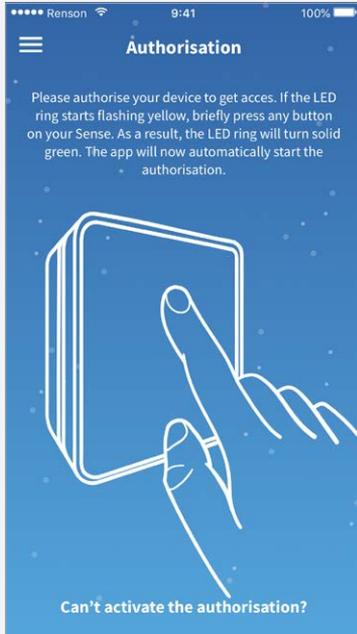
5. Then press your Sense number.

4. Connect the app to the Sense

STEP 3 - Authorise the device

The SENSE display will flash yellow, then briefly press one of the arrows that will light up.

When SENSE turns green, it is connected to your account and therefore to your smartphone. The following screen will appear, informing you that the authorisation was successful:



4. Connect the app to the Sense

STEP 4 - Configuration of the device

Click on 'Configure' and you will have to fill in the following information:

Country selection

Choose the country where the Sense is placed.

United Kingdom

Units

Area

m² ft²

Temperature

°C °F

Clock

AM/PM 24-hour

Continue

Country selection

Choose the country where the Sense is placed.

Belgium

The Netherlands

France

Germany

United Kingdom ✓

Sweden

Other

Clock

AM/PM 24-hour

Continue

Country selection

Choose the country where the Sense is placed.

Belgium

Units

Area

m² ft²

Temperature

°C °F

Clock

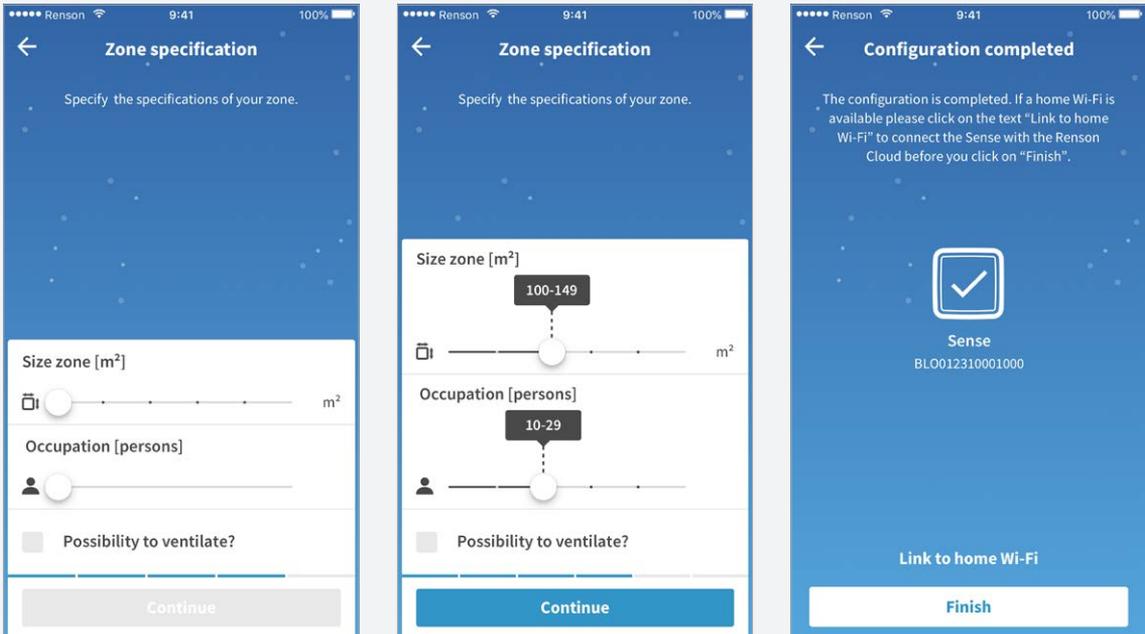
AM/PM 24-hour

Continue

4. Connect the app to the Sense

STEP 4 - Configuration of the device

Next, there are a few more questions that you must fill in (always click on continue).
Once these have been filled in, you will get the following screen:



Please note! Complete the next step to connect the app to your home network. If you do not do this, you will not see any sensor values in the app).

5. Connect app to your home network

Link SENSE to your home/company network by selecting it from the list that will appear in the app and enter your network password (Wi-Fi password).



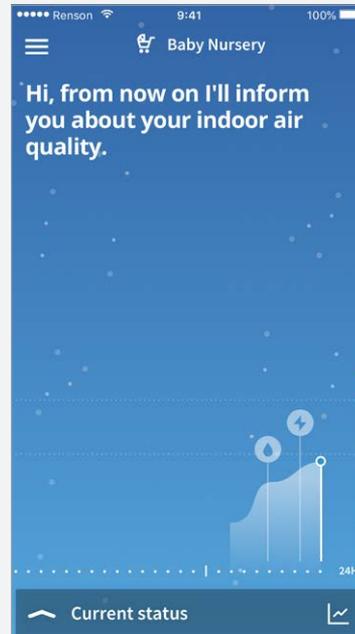
Please note! If this step is skipped, no sensor values will be visible in the app.

Next go to the network settings of your smartphone itself, you will see that you are still connected to the Sense's Wi-Fi. From the list of available networks, choose your home/company network and connect to it. Then return to the app.

6. App is ready for use

After completing these steps, press **'Finish'**.

Now your Sense is connected to your **account** and **network**. Wait for at least 5 minutes before you see the next main screen:



Please note! You may need to close (fully) and open the app again to load all the sensor values and data. This is related to the Renson server and the activation of your personal profile.

B. Via the WPS button

1. Supply power to SENSE

Plug SENSE into the wall socket. It will then broadcast its 'SENSE-network' for 40 minutes.

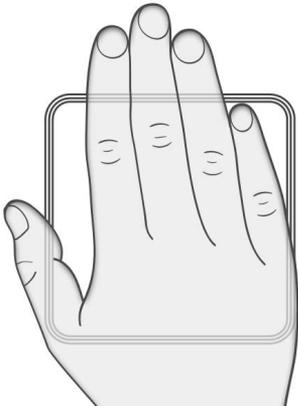


Please note! If the device has been plugged in for longer than 40 minutes, unplug it and plug it back in so that the Wi-Fi network is broadcast again. Wait for about 5 seconds.

2. Activate SENSE

Activate SENSE by touching the device with your whole hand for 1 second (light pressure). This may result in the three possible colours (blue, orange or red) being displayed, combined with one or more icons (see explanation in the user manual).

Press the bottom arrow (1 second) and 4 arrows will light up:



2. Activate SENSE

Press the upper and lower arrows simultaneously for 1 second. This will take you to the Wi-Fi menu.



The LED ring will light up purple. Then press the upper arrow, the LED ring will turn white.



As soon as the LED ring turns white, the WPS is activated and it will contact the router.

Next, go to your Wi-Fi router and press the WPS button.



The SENSE will light up green if it is connected to the WPS of your Internet router. In case the connection was unsuccessful, SENSE will light up red. Try again.

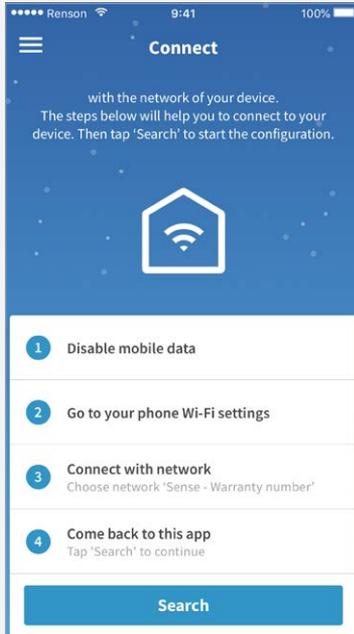
3. Log in with your account

Next, open the Sense application.

If you have not yet created an account, do so first: see point A.2./page 12 above. Log in and choose 'Sense'.

4. Connect the app to the Sense

You will get the following screen, skip these steps and press 'search' immediately.

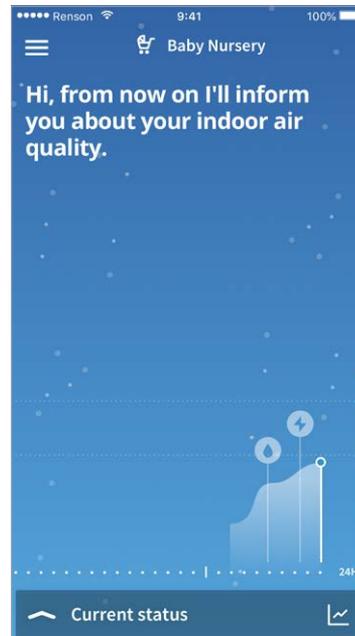


Click on your Sense and then follow the next steps: see point A.4. (from step 3 to 4) pages 16-18 above (step 1 - 2 have already been skipped).

5. App is ready for use

After completing these steps, press '**Finish**'.

Now your Sense is connected to your **account** and **network**. Wait for at least 5 minutes before you see the next main screen:



Please note! You may need to close (fully) and open the app again to load all the sensor values and data. This is related to the Renson server and the activation of your personal profile.

USER MANUAL

A. How to operate the Sense?

Once the SENSE is installed, it is ready for use. The device always needs to be connected to a power input to be able to measure.

There are few controls on the device itself, this is done through the app.

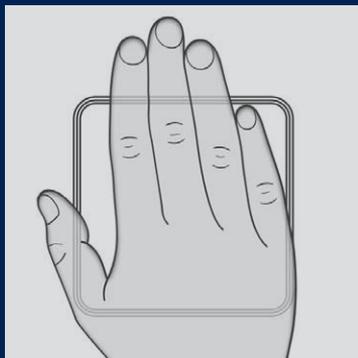
1. Meaning of arrows

The arrows are only to be used during installation (see installation manual) or to activate the Wi-Fi.



2. How to activate Wi-Fi?

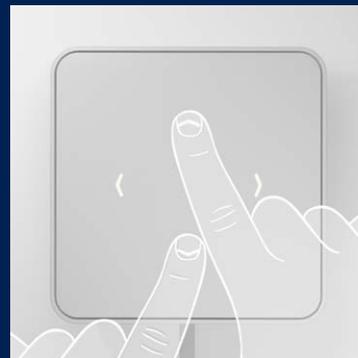
Cover the Sense with your whole hand for 1 sec (light pressure).



Press the bottom arrow.



Then press the lower and upper arrow simultaneously.

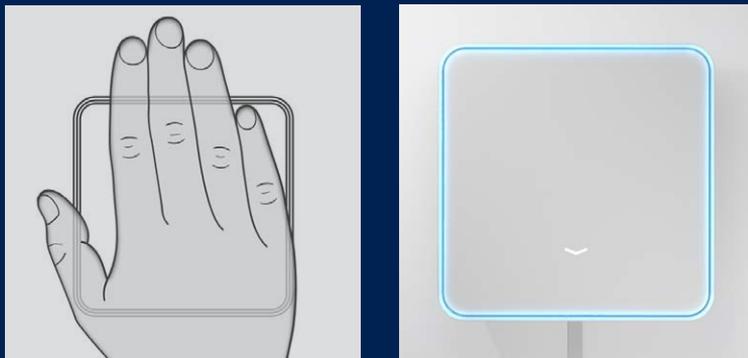


The Sense's Wi-Fi signal is activated for 40 minutes.



3. Manual retrieval of LED feedback

You can manually request LED feedback at any time by covering the SENSE with your whole hand for 1 sec (light pressure).



4. Factory reset

When your Sense device crashes, you can use the factory reset button to restore the settings to the factory defaults (CO₂ limits, preferred sensors, dark mode, ...). It also forgets the Wi-Fi network.

Where to find the factory reset button?

Take the Sense in front of you with the Renson logo on the bottom. The factory reset button is on the left side, at the top. Press it with a sharp object (paper clip) for 5 seconds.

Next, a red flashing LED ring will appear when releasing the factory reset button. When it becomes steady and green, the reset is complete.



B. Changing the display

The Sense can be used visually in two ways: as a CO₂ meter and as a comfort meter. You will already have made a choice when installing the Sense. You can always change this choice in the settings.

1. Sense as a CO₂ meter

When you choose to use the Sense as a CO₂ meter only, this means that the visual feedback on the device itself is only related to the CO₂ values:

- Blue LED feedback: the CO₂ values are good (<800 ppm)
- Orange LED feedback: the CO₂ values are average (800-1200 ppm)
- Red LED feedback: the CO₂ values are bad (>1200 ppm)

The orange and red LED edge will always be accompanied by a cloud symbol. No other icons will be displayed.

Example:



This means that the CO₂ values are above 1200 ppm → ventilation is necessary.

Please note! The other sensors continue to be measured and are still displayed in the app. Only the visual feedback on the Sense itself is related to the CO₂ values (in ppm).

2. Sense as a comfort meter

When you choose to use the Sense as a comfort meter, it means that the visual LED feedback indicates the general comfort based on the 6 sensors present. Thus, an orange or red border will always be accompanied by the symbols that cause the substandard comfort.

Example:



Comfort = good



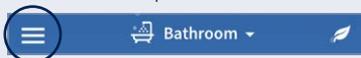
Comfort = average
Humidity and VOCs are the reason
for average comfort



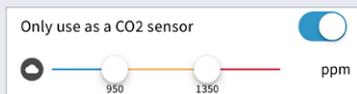
Comfort = poor
Lux and temperature are the reason
for poor comfort

How to set up?

1. Press on the top left of the menu list.



2. Go to settings.
3. Tap on 'My devices'.
4. Select the device which display you want to change.
5. Touch 'Visualisation set-up'.
6. Slide the toggle to on if you only want to use the device as a CO₂ meter or off if you want to use as a comfort meter.
7. If you only want to use it as a co2 meter, you can also adjust the limit values:



Please note! If you want to change this setting, this can only be done if you are in the same network as the SENSE is connected to.



Please note! These limit values and the corresponding LED feedback will only be visible on SENSE. The app will always give colour feedback based on the Comfort Index!

3. How do I change the name of my device?

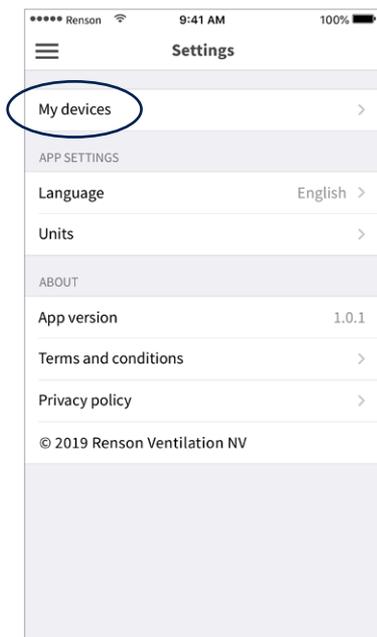
During the installation, you can already assign a name to the device. You can change this at any time in the settings.

Please note! If you want to change the name of the device, this can only be done if you are in the same network to which the SENSE is connected.

1. Press on the left top corner on the menu list.
2. Tap on 'My devices' and then on the device which name you want to change.
3. Press 'Installation details' and the following screen will appear:
4. Press on the name and you can start changing it.



Next you will see the screen below:



4. How do I change the LED settings?

1. Press on the top left of the menu list.



2. Go to settings.
3. Tap on 'My devices'.
4. Select the device which display you want to change.
5. Touch 'Visualisation set-up'.

Changing the intensity of the LEDs

Slide the slider under 'LED feedback'. The more you move to the right, the brighter the LED feedback.

Changing the LED frequency

By default, the LED ring lights up automatically every 30 minutes. Do you think this is too slow? No problem, you can change this in the settings under 'Repeat LED feedback'.

Setting the 'Dark mode'

Slide the toggle to on (turns blue). Then set a time interval (dark mode time) for which you want the LED to turn off or become less bright (LED feedback).

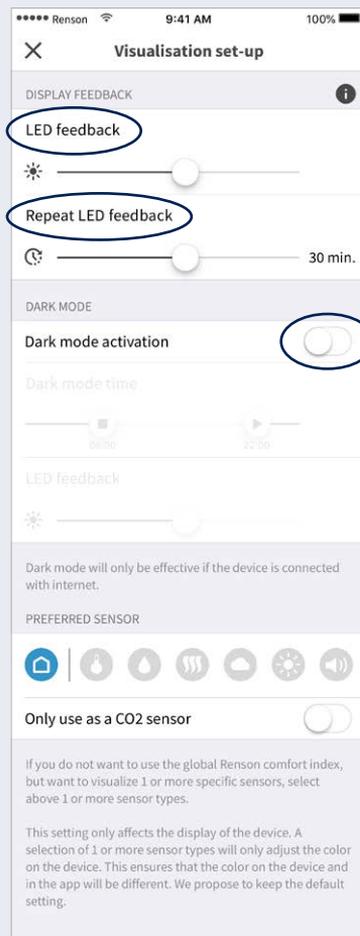
Setting the desired sensors

If you do not want to use the global Renson comfort index, but only want to visualise one or more specific sensors on your devices, then this is also possible.

Click on the desired sensors. They will colour blue when selected.



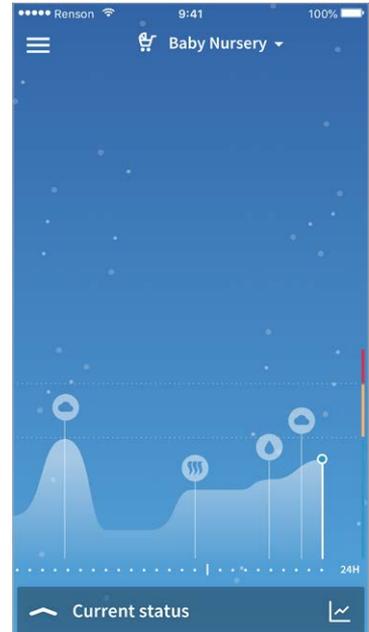
Please note! This setting will only be imported on the LED feedback of the device itself. Therefore the colour of the device and the application will be different.



5. Using the app

Home

When you open the app, the first thing you will see is a first indication of the air quality/comfort by means of a colour screen:



Please note! The app has a delay of 5 minutes, so there can be a difference in colour between the app and the Sense itself because of this delay.

If you have several devices installed, you can click on the down arrow next to the name of the first device. This will bring up a dropdown list of the different devices. Tap on the device whose data you want to see.

5. Using the app

Menu

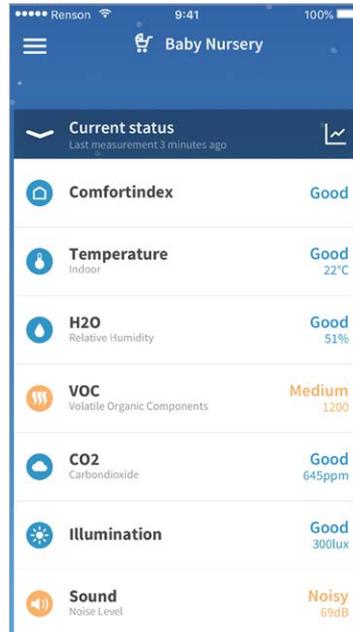
Via the symbol in the top left corner you can navigate to:

- The main screen
- The settings
- Support

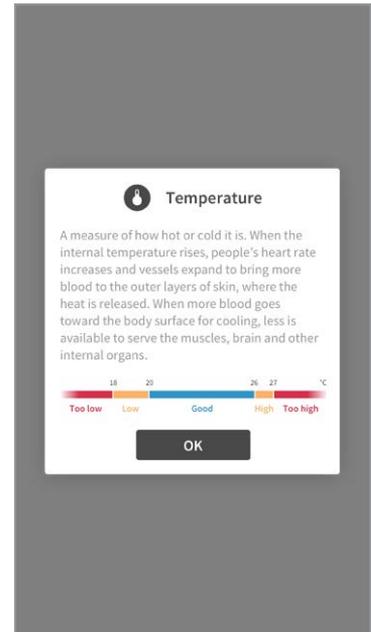


Current status

When you click on the arrow upwards next to 'Current status', you will see the current (5 minute delay) measured values per sensor:



When you click on the logo, you will get more information about what is measured, the effect on your health and the set limit values:

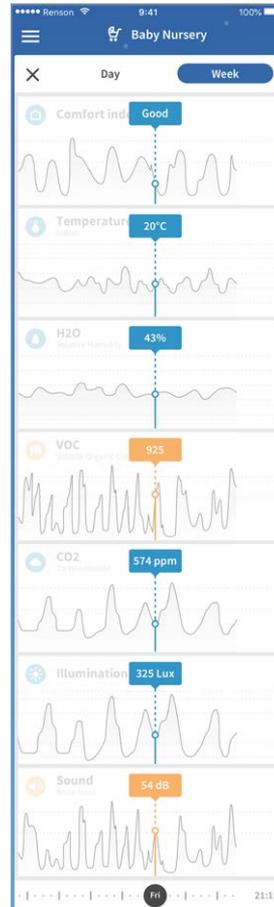
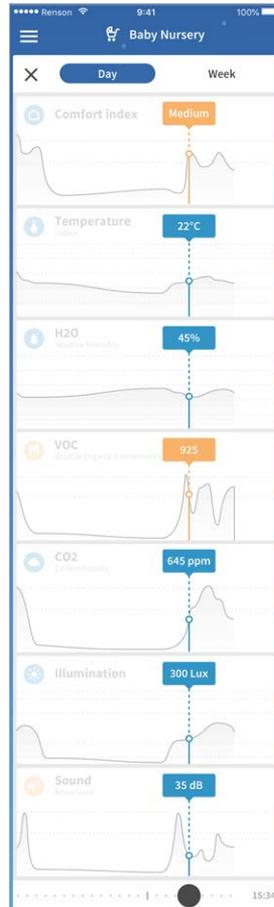
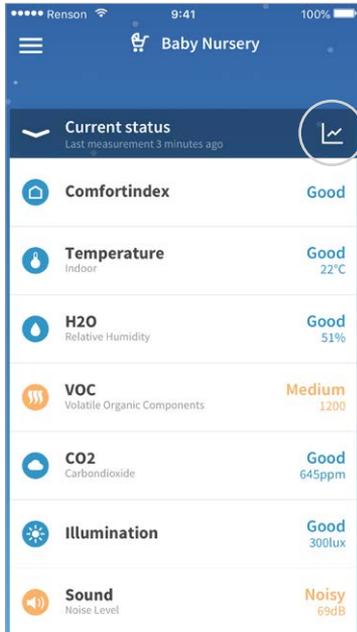


5. Using the app

Data

When you get more insight in the course of the measurement values, you can click on the graph symbol.

In the app, data from the past day or week can be viewed:



Using the slider at the bottom, you can read this per time and day.

TECHNICAL SPECIFICATIONS

Sense maintenance

We designed Sense to be as maintenance friendly as possible. Although we would like to develop a dust-free version, unfortunately we cannot prevent dust from accumulating between the slot of Sense.

To ensure Sense continues to function properly, you should clean it regularly.

To clean sense

- Turn off the power
- Wipe your Sense with a clean, slightly moistened cloth (if necessary).

Note: Take extra care with the cloth. Do not use detergents or solvents to clean Sense, as well as air fresheners, hair spray, or other aerosols near the device.

Safety

Please follow all safety warnings in this user guide. Renson® cannot be held responsible if the safety instructions are not followed.

The installation of Sense must be carried out in accordance with the general and locally applicable regu-

lations regarding construction, safety and installation requirements of the municipal, urban and/or other authorities.

Important safety instructions

- For indoor use only
- Do not part the product
- If any part is damaged, do not use this product
- Do not immerse in water
- Don't place the Sense above 2m
- Use of this product happens only with the attached adaptor
- Use a damp cloth for cleaning, never a strong detergent
- Keep these instruments for further use
- To disconnect the power, unplug the power cord
- This product includes a smart app

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Requirements

- Wi-Fi router and internet access
- Public hotspots are not applicable
- Power: 5V/2,4A max.
- Wi-Fi: 802.11 b/g/n @2.4GHz
- Security: WPA, WPA/WPA2, WPA2, WPA Enterprise
- Humidity: 10 tot 90 %
- Temperature: 5°C to 45°C

Available sensors

- CO₂ Sensor
- Sound Level
- Temperature Sensor
- VOC Sensor
- Humidity Sensor
- Light Sensor

Free app

- No subscription fees
- App available on App Store and Google Play

Other functions

- Light indicator – light feedback

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