



Zehnder CO₂ Sensor

9821-00

Quick Start Installer and User Instructions



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Foreword



Refer to the full manual for detailed information and the applicable safety and installation regulations.



Questions

For all questions and the latest full manuals, you can contact your Zehnder branch. Contact details are provided at the back of these quick start installer and user instructions.

These manuals, other product information and instructional videos can also be accessed by scanning the QR code.






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This installation manual has been compiled with the utmost care. However, the publisher cannot be held responsible for any damage caused by failure to follow safety or operating instructions. In the event of disputes, the Dutch text prevails.

Reading guide

The following symbols are used in this installation manual to draw the reader's attention to safety aspects and important information:

Symbol	Meaning
	Point of attention
	Risk of compromised performance or damage to the ventilation system
	Risk of personal injury

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1. Features and benefits

The CO₂ Sensor measures the amount of CO₂ in the air of the room in which this sensor is installed. The device sends the results to the ventilation system. If the CO₂ level is too high, the system regulates the ventilation based on the maximum CO₂ values.

In this way, healthy air quality in the room is maintained.

Reducing high CO₂ values in the home is conducive to concentration, good sleep quality, and helps prevent headaches.

2. Safety



The CO₂ Sensor may only be used in the manner described in the user manual.






Always follow local safety regulations when using this device.




The device may only be used if it has been properly installed according to the instructions and guidelines found in the installation manual.



The device may be used by: children of 8 years and older; persons with reduced physical capabilities; persons with reduced sensory capabilities; persons with reduced mental capabilities and persons with lack of experience and knowledge as long as they are under supervision or have received instruction for safe use.

-  The device may only be installed and maintained by a qualified professional.
-  The responsibility for the correct use of the device lies with the end user. The manufacturer cannot be held responsible for any (consequential) damage caused by inexpert, incorrect, or inadvisable use.
-  Do not get the device wet. Do not install it in a damp place.

2.1 Safety regarding assembly and installation

-  The CO₂ Sensor may only be installed as described in the corresponding installation manual. The sensor is connected to 120V power. All electrical work should be done by a qualified professional and follow local code and regulations.

2.2 Safety regarding use



The CO₂ Sensor may only be used as described in the corresponding used manual.

2.3 intended use of the device



The CO₂ Sensor measures the amount of CO₂ in the air of the room in which this sensor is installed. The device sends the results to the ventilation system.

2.4 Inexpert use of the device



Do not open the casing. The installer makes sure that all parts that can cause personal injury are behind the casing.



Children must not play with the device.



Children must not clean and maintain the device unsupervised.



Changes or modifications not expressly approved by Zehnder America could void the user's authority to operate the equipment.

3. Disassembly and disposal

If the CO₂ Sensor is disassembled, the waste disposal regulations applicable on-site and at the time of the disassembly must be observed.

Dispose of the CO₂ Sensor in an environmentally friendly way. Do not dispose of the unit together with household waste. The CO₂ Sensor can be handed in at a collection point for electronic waste.



It is the responsibility of the owner of the CO₂ Sensor to dispose of the unit responsibly.

4. CO₂ RF & 0-10V Sensor Legend

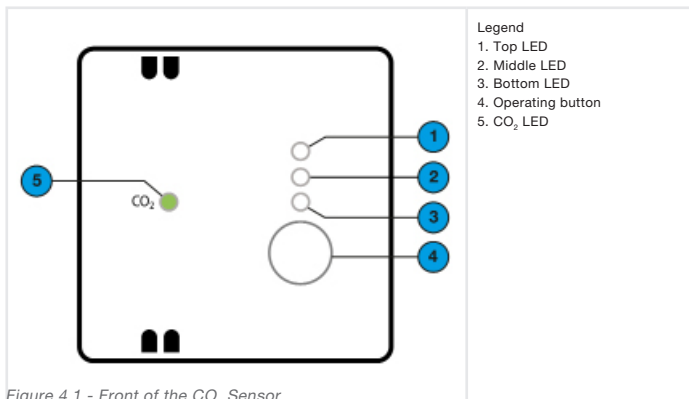





























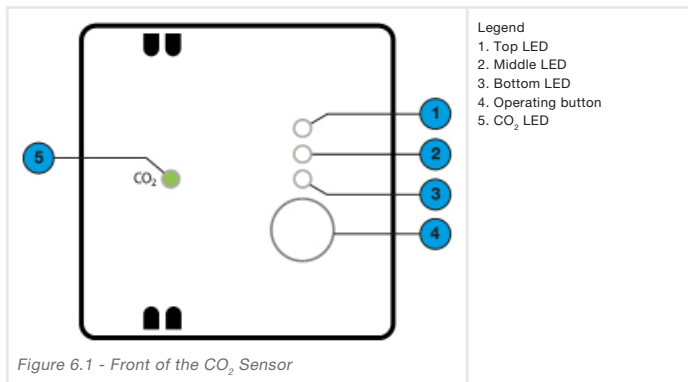
Figure 4.1 - Front of the CO₂ Sensor

5. Commissioning the CO₂ RF Sensor

1. Activate the pairing mode of the ventilation unit.	<p>■ All ventilation units (except the ComfoAir Q): turn off the electrical current from the ventilation unit, wait at least 5 seconds and then switch the current on.</p> <p>■ ComfoAir Q with RF receiver: activate the menu on the ventilation unit via ADVANCED SETTINGS > RF SETTINGS > START RF PAIRING</p>
2. Activate the menu.	 3x  CO ₂  CO ₂  + 
3. Confirm the menu selection to start RF pairing.	 3x 
4. Select the type of RF Pairing.	
Repeat step 3; select the desired pairing.	<div style="display: flex; align-items: center;"> <div style="display: flex; flex-direction: column; align-items: center;"> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> </div> <div style="margin-left: 10px;"> <p>3, Generate a new ventilation unit address</p> <p>2. Connect to an additional ventilation unit</p> <p>1. Standard pairing mode</p> </div> </div> <div style="display: flex; justify-content: space-around; margin-top: 5px;"> 1. 2. 3. </div>

5. Confirm the selected pairing.	
Duration: about 1 minute.	CO_2  + 
	CO_2  + 
	<div> <div> 3x   </div> <div> 3x   </div> </div>
6. Repeat the pairing procedure for the next CO2 Sensor.	 Start at step 1.

6. Status Display








	Operating button
 1. 2. 3.	3. Manual position 3 (high) 2. Manual position 2 (normal) 1. Manual position 1 (low)
CO ₂	The CO ₂ level display is off = the current CO ₂ level
CO ₂	The CO ₂ level is fine ✓
CO ₂	The CO ₂ level has increased
CO ₂	The CO ₂ level is too high ✗ Select automatic ventilation or manual mode 3 (high). Does the CO ₂ LED stay red? For extra ventilation, open windows and/or doors.

7. Advice for manual ventilation modes

The CO₂ Sensor is intended for automatic ventilation. If installed correctly, it will provide sufficient ventilation in the room where it is installed. In certain cases, it is recommended to select a manual ventilation mode:

- Manual mode 2 (normal): for a few people in a living room without a CO₂ Sensor
- Manual mode 3 (high): for many people in rooms without a CO₂ sensor




























8. Setting the ventilation mode

1. Select the manual ventilation mode.				
2. Repeat step 1 for the desired ventilation mode.	 Mode 1 Low	 Mode 2 Normal	 Mode 3 High	 Ventilation based on CO ₂ value



After a maximum of 12 hours, the system automatically returns to control based on the measured CO₂ values.

8. LED brightness setting

1. Activate the menu.	 <div>3x CO₂  +   </div> <div>30 sec CO₂  +  /  RF 0-10V </div>
2. Select the brightness menu.	   
3. Open the brightness menu.	 <div>3x CO₂  +   </div>
4. Select the desired brightness.	
5. Repeat step 4 for the desired brightness.	<div>CO₂  (4x) Bright to dim</div> <div>CO₂  (1x) CO₂ warnings only</div> <div>CO₂  (1x) Off</div>
6. Confirm your choice.	 <div>3x CO₂  +   </div>



925 MHz operational frequency.



FOR USE IN ITU REGION 2 ONLY (Americas)

This device complies with Part 15 of FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications.

However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Changes or modifications not expressly approved by Zehnder could void the user's authority to operate the equipment.

Supplier's Declaration of Conformity 47 CFR §
2.1077 Compliance Information

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