VT8000 Room Controllers

CO2 & TRH Sensor Integration Guide Wireless CO2, Temperature and Humidity Sensor Pairing with Room Controllers



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Commissioning

During the commissioning the wireless CO2 & TRH (Temperature and Relative Humidity) sensor will automatically find and pair with the nearest compatible Zigbee Green Power VT8000 Room Controller opened for commissioning. Zigbee parameters (e.g. operational channel, source ID, security level and key) are exchanged between the sensor and the VT8000 in order to establish a reliable and secure link. A maximum of 20 sensors can be commissioned per VT8000.

	Part Number	Description
	SED-CO2-G-5045	Wireless CO2 sensor with room temperature and humidity
-	SED-TRH-G-5045	Wireless sensor with room temperature and humidity

The commissioning procedure can be triggered by a long push of the button, only from decommissioned or hibernation modes.

To pair the CO2 & TRH sensor with an VT8000 Room Controller follow the steps below:

1. Touch and hold screen for 3 seconds to enter the Setup menu.



- 2. Select Network.
- 3. Press on the right arrow to enter the Zigbee Network page.
- 4. Use the up and down arrows to select the correct options:
 - Note Type: Coordinator (Coord.)
 - **PAN ID**: Must be set within a valid range between 1 and 65535
 - **Channel**: Using channels 15, 20, and 25 is recommended. Channel 25 is considered as being the best one because it is furthest from the Wi-Fi channels.
 - · Security:
 - Low (default value) is fully backwards compatible with Zigbee Home Automation 1.2 devices, and therefore compatible with all of our sensors.
 - Normal (needs to be selected by user) is only compatible with Green Power and Zigbee 3.0 (Leedarson sensors).
 If the Normal Security Level is selected with old NYCE or Centralite sensors, they will be removed from the network.

Important! Selecting the Normal Security option will result in the removal of legacy sensors from the network.

1/2 ZigBee Network			
Node type	Coord.		
PAN ID	1		
Channel	25		
Security	Low		
Network Status	No NWK		
Permit join	Off		

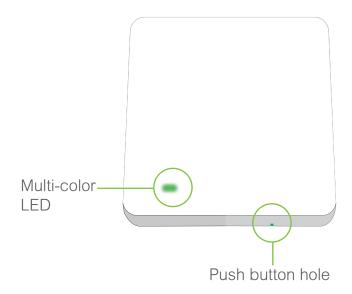
5. Next, go back to the Setup menu. Select Wireless and then tap on Ecosystem.

7	Once you have entered this screen the permit join function is automatically turned or
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Ecosystem Settings				
Network status	Online			
Permit join	On			
Permit timeout	180 min			
Paired devices	0			

6. On the wireless CO2 & TRH sensor, use a pin to do a short push and start the commissioning procedure. The sensor then automatically scans all Zigbee channels (channel 11-26) in order to find the nearest VT8000 in commissioning mode and initiates the pairing.

Each recorded button press is signaled by 2 yellow LED flashes.



Wait approximately 10s – during this time the sensor automatically proceeds the commissioning while the LED is not flashing during this period (even if you push button again).

7. Commissioning success is indicated by 3 green LED pulses. You can check measured data reported from the sensor to the Room Controller.

If the commissioning fails (indicated by 3 red LED pulses) reset the device to factory defaults by one long push.

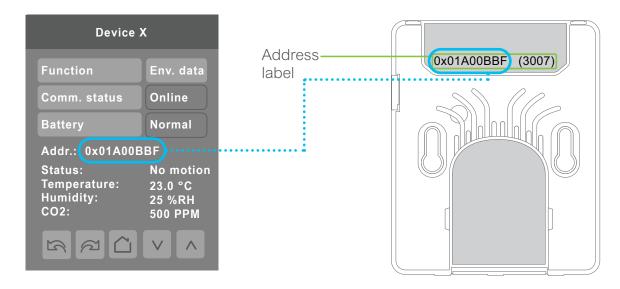
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8. Go back to the Room Controller and in the Ecosystem Settings you will now see the number of Paired devices is now 1.

Ecosystem Settings				
Network status	Online			
Permit join	On			
Permit timeout	176 min			
Paired devices	1			
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9. Use the right arrow to navigate through paired sensors, where you will see all the available details for each sensor.

The address label on the CO2 & TRH device matches the digits in the Address field of the Device screen on the VT8000 Room Controller.



Function options:

- None: No status reported to Room Controller
- Window: Window sensor installed
- Door: Door sensor installed
- Motion: Device set to detect motion
- Env. data: Temperature, Humidity, CO2 sensor installed
- **Remove**: Removes device from Device list
- Water: Water leak sensor installed
- **Refrig.**: Refrigerator temperature sensor installed
- Freezer: Freezer temperature sensor installed