

## **cogvisAI Installation Guide**

October 2020



# cogvisAI

## Welcome!

cogvisAI is your contactless 3D smart-sensor, which detects critical events - thanks to behavior and motion analysis - and alarms nursing staff to ensure quick help. This way, you can reduce routine and administrative tasks and - at the same time - raise the quality of care and safety. The software platform allows you to activate different modules to specifically select the functions and settings for each sensor in each room.

cogvisAI is designed for indoor use and compatible with existing alarm and emergency call systems. Installation and commissioning are easy - in the following installation instructions we will guide you step by step until the sensor is ready for use.

Do you have any further questions? Please contact us at +43 1 236 05 80 14 or [support@cogvis.at](mailto:support@cogvis.at).

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# 1. General Information

cogvisAI consists of two system components: the 3D smart-sensor and the cogvisAI platform. The sensor processes 3D data directly and in real time. In case of an incident, alarms are forwarded to the platform or the nurse call system.

The cogvisAI platform performs the following tasks:

- Automatic monitoring of all systems
- User administration
- Alarm forwarding (except for radio modules or the use of fearless API)

You can access the platform at <https://platform.cogvis.ai>. For further information regarding the use of the platform, please see the cogvisAI platform manual. The manual is available on the web platform or at <http://manual.cogvis.ai>.

**Important:**

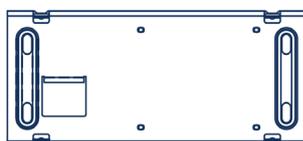
- Keep your login data for the cogvisAI platform ready and make sure a smartphone, tablet or laptop is available.
- Do not operate unmounted sensors.
- If you use sensors with WiFi connection, please also note the following:
  - Make sure that you have good WiFi coverage in the room before installation.
  - Make sure that your WiFi connection can be established directly by entering the WiFi name and password and that no login via an additional login form is required.
  - cogvisAI supports the following WLAN standards: WPA, WPA2, WPA2-Enterprise (PEAP, PEAP-MSCHAPv2 user and password based and EAP-TLS certificate-based).

## 2. Package content and preparation

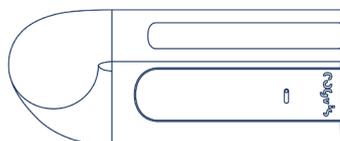
Package contents for the cogvisAI system for on-site installation:

- USB power supply and 5m connection cable
- cogvisAI sensor
- 4 dowels and 4 screws

The cogvisAI sensor consists of 2 parts: the metal base part with the already mounted board (evaluation unit) and the white plastic sensor housing:



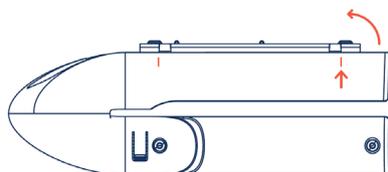
metal base part



plastic sensor housing

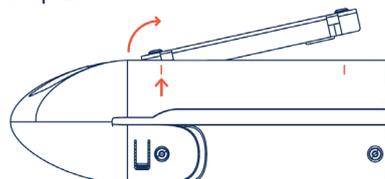
The sensor housing is connected to the base unit through 4 clamps. Both parts can be released from each other by slight pressure from the outside (along the lower edge of the sensor unit in the area of the clamps). Please note the following illustrations:

Step 1:



*Press on both sides of the outer edge of the unit in the area of the clamps. Gently push the base out on one side.*

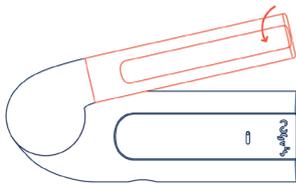
Step 2:



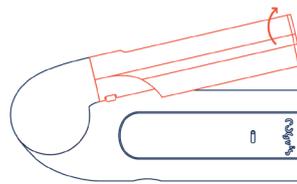
*As soon as the first side is released, apply the same principle to the second side and remove the base completely from the housing.*

### 3. Positioning of the system

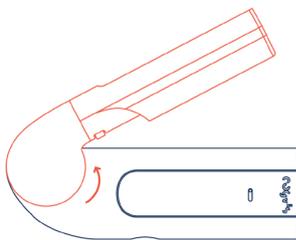
At the beginning of the installation, you need to find the correct position for your 3D smart-sensor. The sensor can easily be adjusted in both directions by turning it carefully:



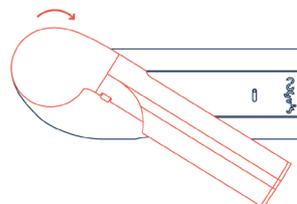
The sensor can be adjusted by carefully turning the front panel.



The front part can be turned in both directions.



To rotate the entire sensor part, gently pull it out of its anchorage, turn it to the correct position and release it again until it clicks into place.

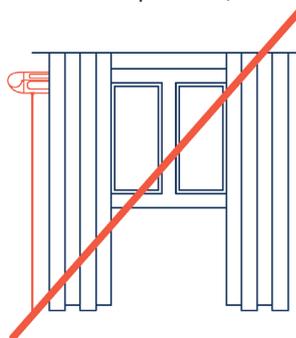


The entire sensor part can also be turned in both directions.

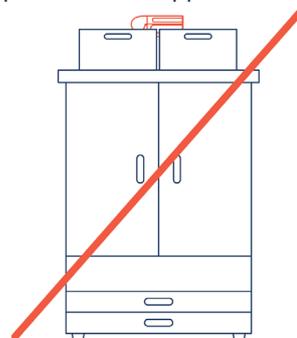
Identify the main area that should be covered by your sensor. This area will be monitored for the activated module – for example, the open area with the highest risk of falling. The sensor can be mounted either on the wall or ceiling. We recommend mounting the sensor on the ceiling, as it allows a more flexible sensor adjustment.



Please make sure that the sensor is not covered by any objects (e.g. curtains, lampshades, boxes in front of the bed etc.) and has a maximum range of approx. 7 meters. If possible, the sensor should be placed on the opposite side of windows.

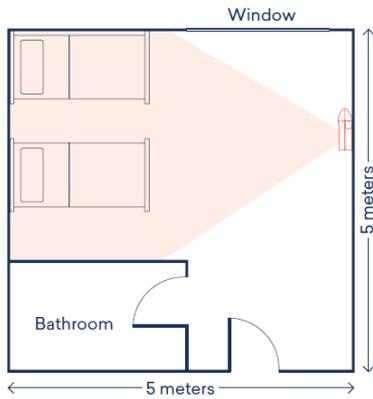


Make sure that you do NOT cover the 3D smart-sensor with the curtain.

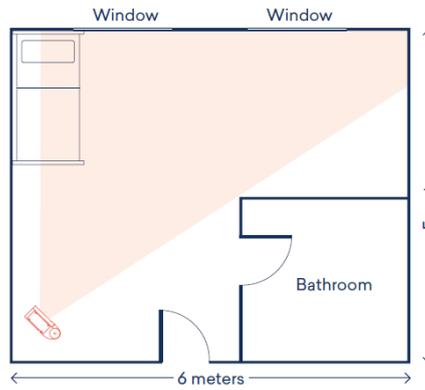


Make sure that you do NOT mount the 3D smart-sensor above the wardrobe or in a way that restricts the visibility of the sensor.

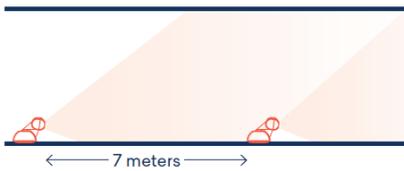
Examples for sensor positioning: The following illustrations will help you find the best position for your sensor. The colored areas represent the areas covered by the sensor.



*This illustration shows a room where wall or ceiling mounting is possible. The sensor is adjusted in way that allows both beds and the surrounding areas to be in sight.*



*The second illustration shows a room in which ceiling mounting is preferred. This way, the best possible coverage is guaranteed.*

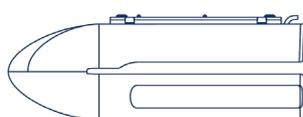


*Illustration 3 shows an elongated room (e.g. such as a corridor). In this case, is recommended to mount the sensor vertically on the wall.*

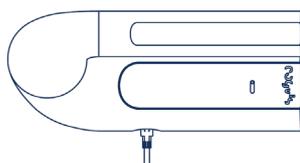
## 4. Mounting

Make sure the sensor is not covered by curtains, plants, lampshades, boxes, etc. For wall mounting, the sensor has to be positioned and aligned horizontally to enable automatic calibration.

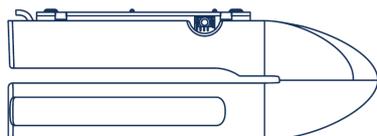
The following wall mounting positions are possible:



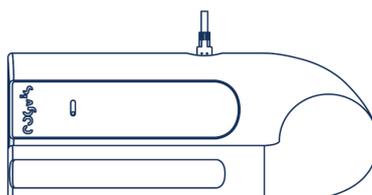
*Standard ceiling mounting*



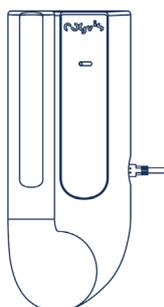
*Standard wall mounting*



*Ceiling mounting 180-degree rotation (if necessary)*



*Wall mounting 180-degree rotation (if necessary)  
Please note that you have adjust the image "Initialization started" on the platform accordingly! Otherwise there will be problems during calibration.*



*90-degree rotation (if necessary)  
Please note that you have to adjust image "Initialization started" on the platform accordingly!*

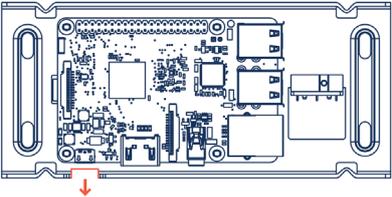
The sensor should be mounted at a height of approx. 2.5 meters (wall mounting) in the middle of the wall. Ceiling mounting is recommended for room heights up to approx. 3 meters. The sensor can be positioned either in the middle or corner of the room. It should point to the area in front of the bed. Ideally, the sensor is located vis-à-vis the window. Please note that the sensor has a max. range of 7 meters.

**Important:** When mounting, please use the dowels and screws included. Never touch the main board, only the metal plate:

Never touch the electronic parts!

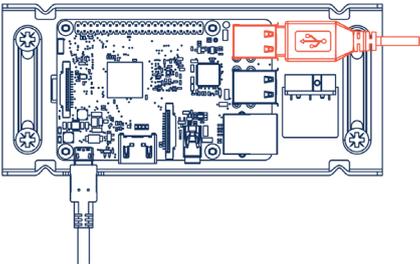
Only touch the metal plate!

Make sure that the cut-out for power supply (Micro-USB) is positioned towards the power socket (mostly downwards).



Cut-out for socket outlet

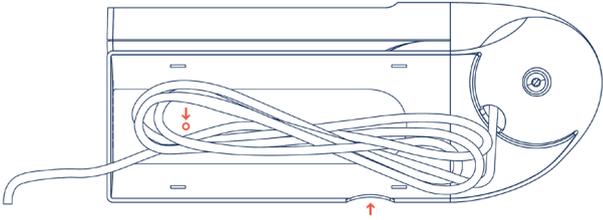
Once you have mounted the metal plate on the wall, plug the USB cable into one of the two exposed USB openings on the board.



Exposed USB ports

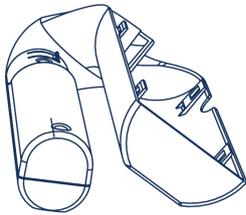
Now stow the cable carefully into the housing. Make sure that the push-button (on the inside of the housing) is free (not covered by the black cable).

When closing the housing, make sure the power connection of the board is at the corresponding opening of the housing.



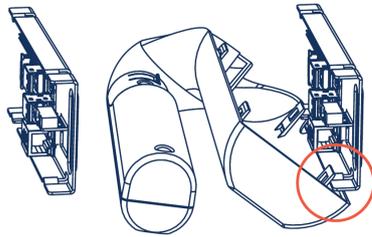
Now mount the housing onto the metal plate as follows:

Step 1:



*Place the housing from bottom to top. The metal plate has to be outside the clamp of the housing.*

Step 2:



*Hook the clamps from the housing into the metal plate. Press the housing together to connect it to the metal plate at the top edge.*

Step 3:



*Now press the housing onto the metal plate until it clicks into place.*

## 5. Initial software setup

After mounting your cogvisAI sensor in the appropriate position and aligning it accordingly, start the device by plugging in the power cable and connecting it to the power outlet with by using the power supply unit.

### Step 1: Check status

Now please check the status of your device by logging on to <https://platform.cogvis.ai>. You should see the sensor with the serial number (located on the bottom of the package) in the system.

#### Meaning of the sensor status on the platform:

- Active: Sensor is operating.
- Inactive: Operation was stopped / fall detection was paused.
- Offline: Device is not connected to the internet or unplugged.

Is your sensor inactive?

- Make sure the sensor is aligned correctly and is able to sense the floor.
- Make sure the sensor is not covered by objects, curtains or furniture.

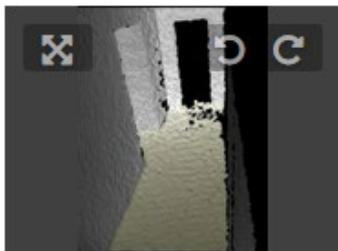
Is your sensor offline?

- Check if the red light on the device is on.
- Check if the device is powered.
- Unplug the device and plug it back in. Wait a few minutes.

If your sensor is inactive for a longer period of time or still offline 15 minutes after plugging it in and out, please contact our support team at +43 1 236 0580 14 or [support@cogvis.at](mailto:support@cogvis.at).

### Step 2: Automatic sensor calibration

Calibration, i.e. the adjustment of the sensor to the room structure, is carried out automatically. The floor is colored yellow. If problems occur, check the position of the sensor. Realign if necessary and click on "restart" on the platform. Now check the image view.



Calibration visualisation

If you want to activate additional modules, please follow the instructions in our cogvisAI user manual. You can find it on the web platform at <https://platform.cogvis.ai>.

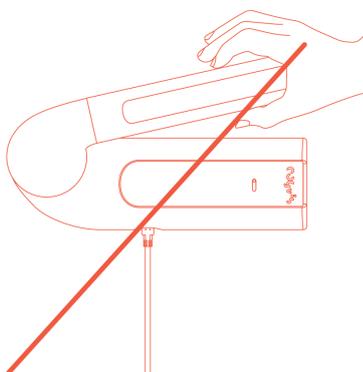
● sensor

|        |               |  |              |
|--------|---------------|--|--------------|
| status | active        | restart  | test alert ▾ |
| S/N    | 97-77-82-32   |  |              |
| name   | Support       |  |              |
| unit   | CogVis GmbH ▾ |  |              |
| area   | living room ▾ |  |              |
|        |               | 22.07.2020 16:03:30  |              |

Change the sensor image on the platform. (if necessary)

### Step 3: Operation

If setup and calibration were successful, do NOT change the position of the sensor. In case a change is necessary, realign the sensor, then click “restart” on the platform and check the calibration/image view according to step 2.



## 6. Connection to existing call systems

This step is particularly interesting for you, if you wish to connect your device to an existing alarm or emergency call system. Call system integration is simple:

### Pairing with Eldat-Receivers

cogvisAI works with a radio-based solution provided by Eldat. The transmitter has already been integrated in the cogvisAI system. The RCL07 module is required as receiver. For further information please visit the [Eldat website](#) directly.

If you already have receivers in use, cogvisAI can be connected directly to them. If you require appropriate modules and connection cables, feel free to order them from us directly.

To connect the system to the existing call system, please follow the following instructions:

- First unscrew and open the receiver.
- Press the programming button “R” twice. Now, the LED flashes at intervals of 2 (2x/pause/2x).
- Go to <https://platform.cogvis.ai> and click on the "pair" button under the tab "alerting nursecall". As soon as the red LED on the receiver lights up continuously, your sensor is paired with the receiver.

alerting nursecall ▼

pair receiver pair 

alert on fall detection ▼

from/to 00:00 24:00 + add

*Pairing via platform*

Pairing with Schrack call systems (Variorec receivers)

If you use a Schrack call system with Variorec receivers, you will find the instructions for pairing on the **manufacturer's website**.



Variorec 3



Variorec 6



Variorec 7

After following the corresponding instructions, visit

<https://platform.cogvis.ai> and click on the "pair" button under the tab "alerting nurse-call".

alerting nursecall ▼

pair receiver pair ▼ ←

alert on fall detection ▼

from/to 00:00 ⌵ 24:00 ⌵ + add

*Pairing via platform*

**We wish you much joy with your cogvisAI sensors!**



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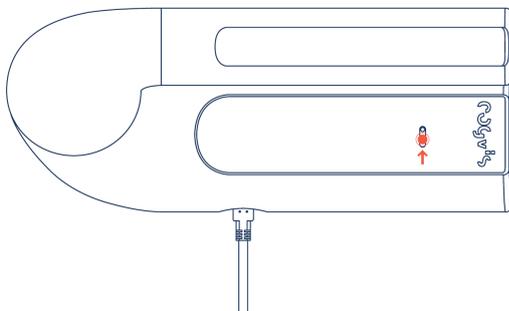
## Annex: Setup of older systems with WiFi-connection

Systems delivered before May 2020

If you received your sensors with WiFi-connection before May 2020, you will find all information regarding the software setup here.

**!** Your system includes all functions and modules of cogvisAI!

After mounting and aligning your device appropriately, start with the software setup. Make sure not to configure more than 1 device at the same time. Also make sure that the housing is already mounted on the wall and the sensor is roughly aligned. Please have the serial number of your device (to be found on the underside of the packaging) ready for further steps. In case problems occur during setup, please press the button on the upper side of the white housing for approx. 5 seconds (see illustration) and restart the setup procedure.



*Setup problems: Press the button for 5 seconds.*

### Step 1: Start setup

Start the device by connecting the power cable to the power outlet.

Now activate the WiFi of your smartphone or laptop and connect it to the corresponding WiFi network: fearlessAP-XXXXXXXX. (Please note, that it can take up to 2 minutes for the corresponding network to be displayed) The last 6 characters differ for each device. The password is: fearless.

The latest versions of Android devices require explicit confirmation that you want to connect to a WiFi without an internet connection. Please confirm in order to keep the network.

### Step 2: WiFi-Setup

Visit the following URL in your web browser (Chrome, Internet Explorer, etc.):

<http://fearless.setup>

If cannot access the web browser, please try connecting to the sensor's WiFi again. Then click on "select network". Select your network and enter the correct WiFi password. Should your wireless network not be visible/selectable, the signal might be too weak to guarantee reliable data transmission. In this case, please use a WiFi amplifier.

Now enter the serial number of your device, which can be found on the bottom of the packaging (S/N: XX-XX-XX-XX-XX). Please wait for 2-3 minutes and check the status of your device.

In case of difficulties, make sure that you have entered your WiFi password correctly and start again with step 1.

**Important:**

To connect your fearless system to a new WLAN, press the button on the housing for 1-3 seconds. Then - as described in step 1 - select for the appropriate wireless network and repeat the following steps.

### Step 3: Check status

Please check the status of your device. To do so, click on "check status" or enter the following address in your web browser: <https://platform.cogvis.ai>

If the device is not "online" after 5 minutes, please set up the device again - starting with step 1.

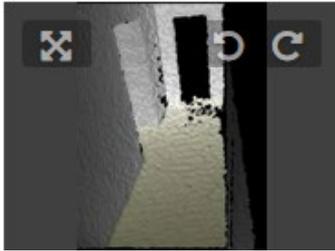
**Meaning of the sensor status on the platform:**

- Active: Sensor is operating.
- Inactive: Operation was stopped / fall detection was paused.
- Offline: Device is not connected to the internet or is unplugged.

If your sensor is inactive for a longer period of time or is still offline 15 minutes after plugging it in and out, please contact our support team at +43 1 236 0580 14 or [support@cogvis.at](mailto:support@cogvis.at).

### Step 4: Alignment and calibration

Calibration is carried out automatically. To display the calibration view, click on the right arrow in the "initialization started" image view. The floor is displayed as a blue area. If problems occur, check the position of the sensor, realign if necessary and click on "restart" on the platform. Now check the image according to step 4.



Calibration visualisation

If you want to activate additional modules, please follow the instructions in the cogvisAI user manual. You can find it on the web platform at <https://platform.cogvis.ai>.

● sensor

status **active** restart test alert ▾

S/N 97-77-82-32

name Support

unit CogVis GmbH ▾

area living room ▾

Change of the sensor image on the platform. (if necessary)

### Step 5: Operation

If setup and calibration were successful, do NOT change the position of the sensor. In case a change is necessary, realign the sensor, then click “restart” on the platform and check the calibration/image view according to step 4.

