FAQ:

How should the CO_2 traffic light be set up?

Plug & Play - The CO_2 traffic light is ready to use and can be connected to a conventional 230 V socket using the power supply unit supplied.
After a three-minute warm-up phase (green LED light element flashes), the CO_2 traffic light is ready for operation and measurement, green LED light element switches to a continuous green light.

How many square metres does a traffic light cover?

As CO_2 is spread quite homogeneously throughout a room, one CO_2 traffic light is generally sufficient for rooms such as a schoolroom. For rooms as large as a sports hall, two to four CO_2 traffic lights should be installed. A further parameter is also the room layout, so that no general statement can be made regarding the number of CO_2 traffic lights to be used. We are pleased to be available for advice.

What is included in the delivery?

Ready-assembled signal tower (green/yellow/red) with CO_2 sensor element as well as mounting material (stand for table installation) and power supply unit with 1.5 m cable length for a conventional 230 V socket.

Can the device remain on for 24 hours in continuous operation or can it be switched on again each time the room is used?

The CO_2 traffic light is suitable for both applications. If it is only switched on when the room is used, a longer service life can be assumed.
Nevertheless, the CO_2 traffic light can also be disconnected from the power supply as required (e.g. in the evening). The warm-up phase (3 min, green LED light element flashes) is started when the system is put into operation again and the power supply is restored.

On which side and at what height must the CO_2 traffic light be mounted?

The CO_2 traffic light should not be installed higher than 2 m above the floor and not directly next to the window. Furthermore, the CO_2 traffic light should not be exposed to direct air draughts.

Why don‘t the lighting elements work or don‘t light up?

Reasons for this may be...

- The CO_2 sensor element is in calibration mode (switch position is set to „CAL“) and calibration is complete.
- The switch has not been moved back to „USE“, however.
- The device is not supplied with voltage (check the mains plug and the connection plug-socket of the CO_2 traffic light).
- Communication with the sensor has failed, the device is damaged.

Does the CO_2 traffic light or CO_2 sensor have to be calibrated manually and if so, how often?

The CO_2 traffic light does not have to be calibrated manually, the CO_2 sensor element calibrates itself automatically every 24h (switch position is set to“USE“). This is based on the assumption that the indoor air is sufficiently aired once every 24h that the CO_2 concentration in the room air has fallen below 400 ppm (~ value of the outside air). The lowest measured value is used for calibration.
Manual calibration can be used if the traffic light shows unclear results.

What to do if the CO_2 traffic light shows unclear results?

Perform manual calibration in a very well aired room.

What does it mean if the CO_2 traffic light is in a running light (red yellow green)?

The CO_2 traffic light is in manual calibration mode (switch position is set to „CAL").
Note: Before and during calibration the CO_2 traffic light must be in a very well ventilated room (400 ppm = value of the outside air).

How can a manual calibration be performed?

Notice:
The CO_2 traffic light should be placed in a very well ventilated room for 30-60 minutes (400 ppm ~ value of the outside air).

1. disconnect the CO_2 traffic light from the power supply.
2. remove the CO_2 sensor element (black element) (no tools required).
3. set the switch position in the CO_2 sensor element to „CAL" (see labeling on the board „CAL" and „USE").
4. put the CO_2 sensor element back on the connection element (observe white mounting markings) and reconnect it to the power supply.
5. after the warm-up phase (flashing green) the calibration follows (running light). When calibration is complete, all LED lighting elements turn off.

How can an automatic calibration be made?

Notice:
The CO_2 traffic light is delivered from in „auto calibration" mode.

1. disconnect the CO_2 traffic light from the power supply.
2. remove the CO_2 sensor element (black element) (no tools required).
3. set the switch position in the CO_2 sensor element to „USE" (see labeling on the board „CAL" and „USE").
4. put the CO_2 sensor element back on the connection element (observe white mounting markings) and reconnect it to the power supply.
5. Normal operation is possible again and the CO_2 traffic light measures the CO_2 concentration in the room.

How often is the CO_2 concentration in the room air measured?

The CO_2 concentration is measured every 4 seconds.

Can the CO_2 traffic light also be fixed to the wall?

Yes, the CO_2 traffic light can also be mounted on the wall using a mounting bracket - article number 975.881.01 *(https://www.werma.com/de/s_c1565i6700/CO2-Ampel/64900010.html#tab_accessories)*.

Which measuring method is used?

The built-in CO_2 sensor uses an optical measuring method with infrared light.

Why does the CO_2 sensor need to be calibrated?

The infrared light source ages during operation, this ageing is compensated by the sensor calibration

What should be done if the power supply is interrupted during calibration?

In this case, reconnect the power supply and start the calibration again.

What should be done if the CO_2 traffic light repeatedly resets itself on contact?

Check the mains plug and the plug/socket connection of the CO_2 traffic light.