

CO Detector



User Manual

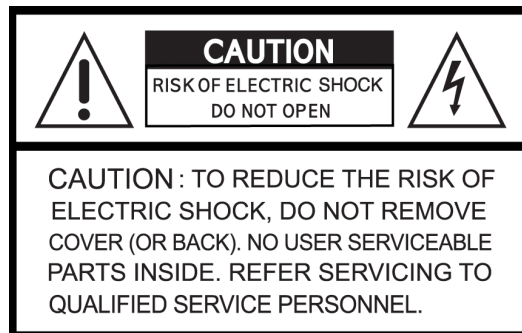
Introduction

Thank you for purchasing the KATHREIN Digital Systems GmbH CO detector. Please take the time to read the following safety and installation information carefully and attentively before using the CO detector. It is imperative to comply with these instructions in order to ensure the safe operation of the device. If you have any further questions, please contact your local retailer or KATHREIN Digital Systems GmbH directly. Your CO detector was developed and built with state-of-the-art technology and complies with European and German standards.

Please keep this manual safe to be able to answer possible questions in the future. The manual is an integral part of the product even in case it is resold to a third party.

Disclaimer

All technical details and descriptions in this manual were compiled with the greatest care. However, KATHREIN Digital Systems GmbH cannot entirely exclude mistakes in this manual. Therefore, we do not assume any legal responsibility or liability resulting from wrong information in this manual. Descriptions, technical illustrations and technical data are subject to change without notice according to technical progress. In addition, KATHREIN Digital Systems GmbH reserves the right to change the product and the manual without prior notice. We do not assume any guarantee with regard to the content of this document. We appreciate any comments on mistakes or inaccuracies which may help us to improve this product and this manual.



This symbol is intended to attract the user's attention to the potential risk of dangerous unprotected voltage inside the housing. This may lead to electric shock.



This symbol is intended to attract the user's attention to user and maintenance instructions in the manual and documents enclosed with the product.

WARNING:

TO MINIMISE THE RISK OF ELECTRIC SHOCK, YOU MUST NOT EXPOSE THIS PRODUCT TO WET AND MOIST CONDITIONS AT ANY TIME.



All KATHREIN Digital Systems GmbH products are lead-free and meet the requirements stated under the European Directive on the Restriction of Hazardous Substances (RoHS). This guarantees that the entire production process and the product itself are free of lead and of all listed hazardous substances.



This product was tested and complies with the regularities for a class of digital devices stated under FCC part 15. These limits were specified to provide reasonable protection against harmful exposure when operating the device in a commercial environment. This product generates, uses and may emit radio energy. It may in addition interfere with other radio communication systems if not installed or used according to this manual. Using the device in residential areas may cause disturbances to be possibly remedied at the user's expense.



Hereby KATHREIN Digital Systems GmbH declares that the CO detector FCM 100 (order number 2220000010, EAN 4021121548871) is in conformity with the relevant provisions of Directive 1999/5/EG.

Conformity:

The declaration of conformity is available at <http://www.kathrein-ds.com> in the download section of the respective product. Alternatively, you can request the declaration of conformity directly from us:

KATHREIN Digital Systems GmbH

Anton-Kathrein-Str. 1-3

83022 Rosenheim, Germany

Important Safety Information



WARNING

The warranty claim will expire in case of damages resulting from the non-observance of this manual.

We do not assume any liability for consequential damages.

We do not assume any liability for damages to persons and/or material whatsoever which result from improper handling or noncompliance with the safety instructions. The warranty claim will expire in such cases!

The CO detector FCM 100 is equipped with a high-quality housing. However, please observe the following safety instructions:

- Do not open the housing of the FCM 100. Opening it is dangerous for you and others and will result in the expiration of any warranty claims.
- Operate the CO detector only with the provided batteries.
- Handle the CO detector with care, heavy vibration or bumps may damage the device.
- Do not expose the CO detector to direct sunlight or strong heat, e.g. heaters.
- Do not install the CO detector close to strong electric power lines or magnetic fields, as this may impair the transmission quality significantly.
- Do not install the CO detector directly on iron or aluminium surfaces, as this may impair the wireless transmission significantly. Use a non-conducting material to insulate the device from the installation surface.
- Do not install the CO detector in moist, very cold or very hot environments. Please observe the maximum humidity and temperature limits (-10 °C to +45 °C (14 °F to 113 °F), maximum 85% relative humidity).
- Persons (including children) with limited physical, sensory or mental abilities and/or lacking experience and/or knowledge must not use this product.
- Keep children away from the product and other connected electrical appliances at all times. The CO detector includes small parts they can swallow. Lay cables expertly so that they are neither bent nor otherwise damaged. Install the CO detector out of children's reach. Do not leave packaging materials unattended, as they may be dangerous for playing children.
- Use a damp cloth to clean the CO detector's surface, then dry it. Cleaning agents will damage the surface.

Malfunctions and Defects

If you notice any kind of defect, remove the batteries from the CO detector FCM 100 and contact your retailer or KATHREIN Digital Systems GmbH directly. Any further usage of the system may lead to fire or electric shock!

Intended Use

The KATHREIN Digital Systems GmbH CO detector detects the highly toxic carbon monoxide gas. Install the CO detector FCM 100 indoors only. Any other use than that described in this manual is not permitted and will void any warranty or guarantee as well as liability claims. The same applies if the device is modified or retrofitted.

Disposal



Do not dispose of the device with domestic waste!

This product complies with the EU Directive on waste electrical and electronic equipment (WEEE) and therefore must not be disposed of with domestic waste. Dispose of the device via your local collection point for waste electronic equipment!

This product contains software programs subject to the GPL free software license.

This product contains software that was developed by third parties and/or software subject to the GNU General Public License (GPL) and/or the GNU Lesser General Public License (LGPL). We will send you the source code of these programs on request. The GPL and/or LGPL code used and offered in this product is EXCLUSIVE OF ANY GUARANTEE WHATSOEVER and is subject to the copyright of one or several authors. For further details, please refer to the GPL and/or LGPL code of this product and to the terms of use of GPL and LGPL.

You can read the complete license text at <http://www.gnu.org/licenses/gpl-2.0.html>.
For an unofficial German translation, please go to
<http://www.gnu.de/documents/gpl.de.html>.

CO Detector FCM 100

Product description:

The CO detector is a sensor that detects the highly toxic carbon monoxide gas and reports reliably and promptly to the alarm panel whenever the natural level is exceeded, which triggers the alarm accordingly. The CO detector is battery-operated and communicates wirelessly with the alarm panel. Cables for signal transmission or power supply are NOT required.

Sensor data:

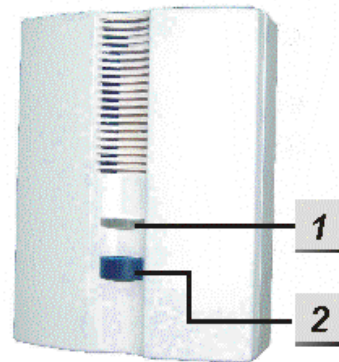
Dimension:	130 x 100 x 41 mm (5.11 x 3.93 x 1.61 in)
Weight:	280 g (0.51 lbs)
Place of installation:	Only indoors
Operating temperatures:	-10 °C to +45 °C (14 °F to 113 °F)
Humidity:	Maximum 85% (non-condensing)
Radio frequency:	868.6375 MHz
Certification:	DIN EN50291
Detection method:	Electromechanical CO detector
Internal siren:	85 dB / 1 m distance

1. Two colour LED

- Flashes yellow: low battery
- 2 x red + 2 beeps: transmission
- Flashes red: Alarm

2. Learn button

- Activates the learn and range mode
- Deactivates alarm



Battery:

The CO detector requires three 1.5 V AA batteries. The average battery life is two years. The CO detector will inform the alarm panel when the batteries are running low (about two months before they are empty).

Connecting the CO detector and putting it into operation

1. Insert the supplied batteries.
2. After their insertion, the CO detector emits two short beeps and the LED lights up once in red.
3. Close the housing.
4. Open the configuration page of the alarm panel, open the menu "Sensors" → "Add", and press "Start".
5. Press the Learn button of the CO detector for about one second.
6. The configuration page of the alarm panel should list the CO detector.
7. Add the CO detector.

Range test:

To test the signal strength at the desired installation location, perform a range test.

1. Open the alarm panel menu "Sensors" → "Range" and press "Start".
2. Press the Learn button of the CO detector.
3. The sensor and the signal strength should be indicated. The higher the indicated number the better the reception (1 – 9).
4. Click "Stop" to end the test.

Please note:

If there is no signal at the installation location or the signal strength is below 4 or frequently falls below this level (signal fluctuations of 2 to 3 are normal), we recommend using a repeater to improve the signal.

Notes:

- The CO detector reports exclusively an unnatural concentration of carbon monoxide.
- We recommend installing the CO detector at a height of approx. 1.5 meters (4.92 feet), as carbon monoxide weighs about as much as air and is evenly distributed in the room.
- You can test the CO detector e.g. by means of cigarette smoke.
- The CO detector has a limited service life due to the electromechanical detection method and should be replaced by a new model every five years.

