BLAUPUNKT

User Manual

CONVENTIONAL CO DETECTOR
BP-FD-CCO125

Enjoy it.

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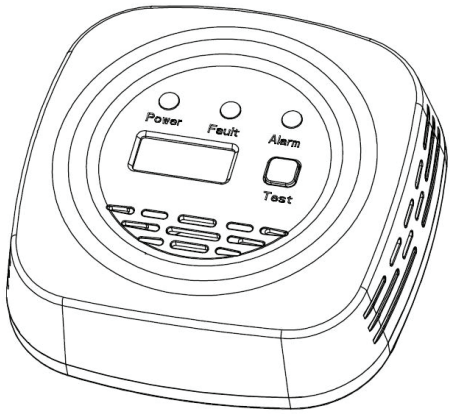
Conventional Co Detector
BP-FD-CCO125
User's Guide



ATTENTION: Please take a few minutes to thoroughly read this manual, which should be saved for future reference and passed on to any subsequent owner.

IMPORTANT! READ ALL INSTRUCTIONS BEFORE INSTALLATION AND KEEP THIS MANUAL NEAR THE DETECTOR FOR FUTURE REFERENCE.

1. DESCRIPTION

The gas detector is designed for providing open area protection without wiring, and it is easy to install and construct. the design and color make it ideal for use in the home and small commercial properties. It is intended to detect leakage of carbon monoxide. The unit is designed for battery applications. It is equipped with a sturdy metal mounting bracket for quick, easy, and secure installation.

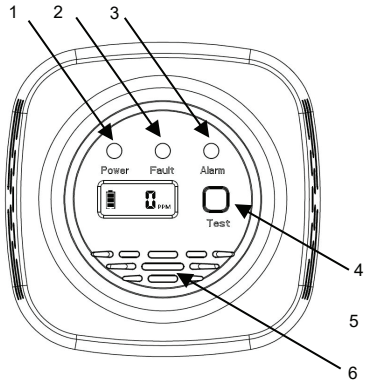
2. FEATURES

- Detect carbon monoxide.
- Easy to install, mounting bracket included.
- LCD display.
- Loud 85dB alarm and LED warning light.
- Low Battery detected.
- High quality durable sensor.
- Self-diagnostic function by MCU intelligent software.
- Excellent reliability & High stability.
- Ideal for all kitchens.

3. TECHNICAL SPECIFICATIONS

Unit Dimensions: 104mm (H) x 104 mm (W) x 39.2mm (D)
Color: Ceiling White
Operating Temperature: -10°C to +40°C
Ambient Humidity: ≤95% RH
Alarm Horn: 85dB @ 3m
Operating Voltage: DC 20-28V
Working Current :
≤5mA (Standby), ≤50mA (Alarm) @ 24V relay normally open
≤15mA (Standby), ≤40mA (Alarm) @ 24V relay normally on
Alarm Time (CO Gas):
60~90 minutes @ 50ppm
10~40 minutes @ 100ppm
Within 3 minutes @ 300ppm
Alarm: Red LED with 85dB alarm
Warm Up Time: 120 seconds
Lifetime of Sensor : 10 years

4. THE COVER OF CO DETECTOR



1. Power Indicator (Green)
2. Fault Indicator (Yellow)
3. Alarm Indicator (Red)
4. Test/Mute Button
5. LCD display
6. (Behind the Cover) Alarm Horn: 85dB audible alarm for test, alarm, and unit malfunction warning.

5. INSTALLATION OF DETECTOR

The CO detector can be mounted on the wall. First find the suitable place to fix the bracket on the wall. Then plug the detector into the bracket, detector will be powered on. Please see figure 1.

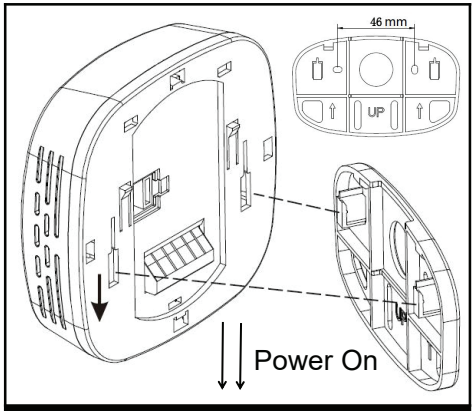


FIGURE 1 INSTALLATION BRACKET

6. TERMINAL WIRING OF DETECTOR

1. The DC20V~DC28V power supply module uses terminal "Loop in" or terminal "Loop out" as power input.
2. Relay output module. Voltage output module relay output is capable for load of 1A, if the current is exceeding the limitation, one intermediate relay should be used.
3. There is a wire jumper which controls the status of relay. When Jumper is on "Off", relay will be normal open. When Jumper is on "On", relay will be normal on.

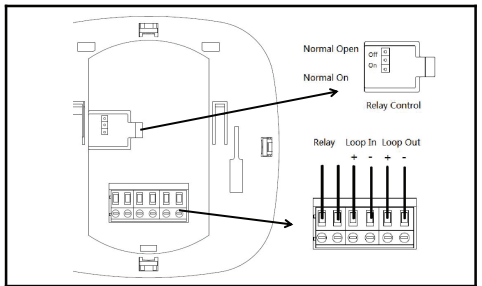


FIGURE 2 WIRING

7. INSTALLATION INSTRUCTIONS

The CO detector is intended to detect leakage of carbon monoxide. It is intended for installation in the home.

- Installation shall only be undertaken by technicians holding a certificate issued by an authorized distributor.
- For detecting CO gas, the detector should be installed within 30 centimeters below the ceiling and 50cm above the oven and the maximum distance away from the furnace or gas appliances is 4 meters.
- The detector should not be located close to any obstacles preventing natural air circulation. It should also not be located in a draft or close to a cooker (cooking smells and other fumes can have a bad influence on gas detection).

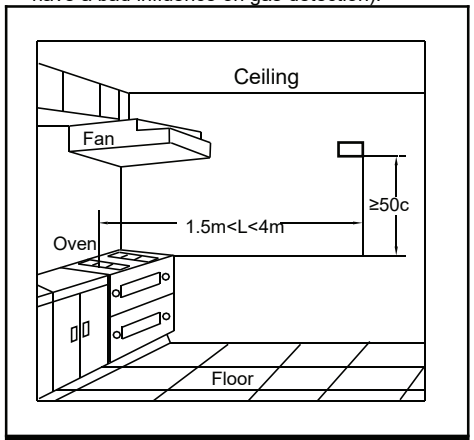


FIGURE 3 WHERE TO INSTALLATION

If your bedroom hallway is longer than 40 feet, install a CO Alarm at BOTH ends of the hallway.

In a Single-level Home:

- Install at least one CO Alarm near or within each separate sleeping area.
- For additional protection, install an additional CO Alarm at least 20 feet (6 meters) away from the furnace or fuel burning heat source.

In a Multi-level Home:

- Install at least one CO Alarm near or within each separate sleeping area.
- For additional protection, install at least one CO Alarm on each level of the home. If you have a basement, install CO Alarm at the top of the basement stairs.
- For additional protection, install an additional CO Alarm at least 20 feet (6 meters) away from the furnace or fuel burning heat source.

WHERE CO ALARMS SHOULD NOT BE INSTALLED
DO NOT LOCATE THIS CO ALARM:

- Any extremely dusty, dirty or greasy areas.
- Closer than 20 feet from a furnace or other fuel burning heat source, or fuel burning appliances like a water heater.
- Within 5 feet of any cooking appliance.

- In extremely humid areas. This alarm should be at least 10 feet from a bath or shower, sauna, humidifier, vaporizer, dishwasher, laundry room, utility room or other source of high humidity.
- In areas where temperature is colder than 14°F (-10°C) or hotter than 122°F (50°C). These areas include unconditioned crawl spaces, unfinished attics, uninsulated or poorly insulated ceilings, porches, and garages.
- In turbulent air, like near ceiling fans, heat vents, air conditioners, fresh air returns, or open windows. Blowing air may prevent CO from reaching the sensors.
- In direct sunlight.
- In outlets covered by curtains or other obstruction.

WARNING!

This CO Alarm is designed for use inside a single-family home or apartment. It is not meant to be used in common lobbies, hallways, or basements of multi-family buildings unless working CO Alarms are also installed in each family living unit. CO Alarms in common areas may not be heard from inside individual family living units.

WARNING!

This CO Alarm alone is not a suitable substitute for complete detection systems in places which house many people, like hotels or dormitories, unless a CO Alarm is also placed in each unit.

WARNING!

DO NOT use this CO Alarm in warehouses, industrial or commercial buildings, special-purpose non-residential buildings, RVs, boats, or airplanes. This CO Alarm is specifically designed for residential use, and may not provide adequate protection in non-residential applications.

8. OPERATION AND TESTING

Check and test co detector after installation. It should be tested weekly and check after re-occupation following a holiday.

- Power Up: Install the detector, the Green Power LED is on, buzzer beep once and the green LED flashes quickly. The unit would take approximately 120 Seconds to warm up. After warm up, green LED stop quick flashing and LCD will display current Carbon monoxide concentration. In the warm up time, the unit doesn't response to any operation until end of the warm up period. It's forbidden to test detector during the warm up period.
- Normal: When the unit is in normal status, LCD will show current Carbon monoxide concentration and battery. It will be in sleep mode in 15 seconds while CO concentration is lower than 30 ppm.
- Fault: When the sensor is in the fault status, yellow LED will be flashed rapidly two times per minute and buzzer will be beeped rapidly twice every minute. When battery is low, yellow LED will be flashed every minute and buzzer will be beeped every minute. When sensor is end of life, yellow LED will be flashed rapidly thrice every minute and buzzer will be beeped rapidly thrice every minute.
- Alarm: While detecting the gas leaking reach the alarm level, the sensor Red Alarm LED would turn on and the buzzer sound.
- Test: In sleep mode, short press test button and the unit will be woken up. Long press test button 2 seconds, LED will be lighted and buzzer will be beeped. To ensure the gas detector is working, test it weekly is recommended.
- Silence: In the alarm status, press Test button, the unit enter the silence status, the sound silenced but red LED still flashes quickly , about 5 minutes late, the unit exit the silence status.

9. TESTING AND MAINTENANCE

WEEKLY TESTING

In sleep mode, short press test button and the unit will be woken up. Long press test button 2 seconds, LED will be lighted and buzzer will be beeped. To ensure the gas detector is working, test it weekly is recommended.

REGULAR MAINTENANCE

To keep the Detector in good working order:

- Test it every week using the Test button.
- Vacuum the detector cover at least twice a year, using the soft brush.

10. GAS SAFETY GUIDE

- If you hear the co detector alarm sound or suspect that there is a gas leakage. You should open all windows and doors to allow the gas to disperse.
- Don't switch on lighting, press door bell, exhausting fan or any kind of electrical appliance to avoid explosion. Check all the gas appliances. Extinguish any naked flames and turn off the gas control off the gas supply.
- Call the Fire department immediately outside your home or premises/ apartment.
- If you are on holiday, turn off appliances switches & the gas control valve.
- Do not place the bed near gas pipes or gas meter.
- Do not change the location of gas pipes by yourself.
- In order to ensure your home safety, please employ registered installers for regular safety inspection of all gas installation & appliances.

ATTENTION:

Keep these things, such as paints, chemicals, alcohol away to make a false alarm.

11. Understand the Effects of Carbon Monoxide Exposure:

Low Levels:
Generally 50 ppm and below.
Mid Levels:
Generally 50 ppm to 100 ppm.
High Levels:
Generally 100 ppm and above if no one is experiencing symptoms.
Dangerous Levels:
Generally 100 ppm and above if someone is experiencing symptoms.

Concentration of CO in Air (ppm=parts per million)	Approximate Inhalation Time and Symptoms Developed
50 ppm	The maximum allowable concentration for continuous exposure for healthy adults in any 8-hour period, according to OSHA*.
200 ppm	Slight headache, fatigue, dizziness, nausea after 2-3 hours.
400 ppm	Frontal headaches within 1-2 hours, life threatening after 3 hours.
800 ppm	Dizziness, nausea and convulsions within 45 minutes. Unconsciousness within 2 hours. Death within 2-3 hours.
1,600 ppm	Headache, dizziness and nausea within 20 minutes. Death within 1 hour.
3,200 ppm	Headache, dizziness and nausea within 5-10 minutes. Death within 25-30 minutes.
6,400 ppm	Headache, dizziness and nausea within 1-2 minutes. Death within 10-15 minutes.
12,800 ppm	Death within 1-3 minutes.
	* Occupational Safety and Health Administration

12. Sensitivity of the sensor to different gases

The figure below shows the sensitivity of the sensor to different gases. The deviation is less than ±5% in the range of 0~1000ppm.

Note: The data are typical values and are not suitable for cross sensitivity verification. The cross sensitivity of different gases may not be linear. Do not use it for measuring CO equivalent concentration. For some gases, if the exposed time is too long, it may cause the filter adsorption layer of the sensor to saturate and be punctured by the gas.

gas		concentr-ation	Equivale-nt concentr-ation of CO
hydrogen		1000 ppm	<350 ppm
Methane	heptane	1000 ppm	<30 ppm
butane	Isopropa-nol		
alcohol	Freon R22		
HMDS (Silicon vapor)	acetone		
methylbenz ene	ammonia		
Trichloroeth-ane	CO_2		
Formaldehy-de	ammonia	200 ppm	
Dimethylben -zene	sulfur dio -xide		
Acetic Acid	ethyl acetate		
NO2	ethylene		
Ethyne		200 ppm	300 ppm