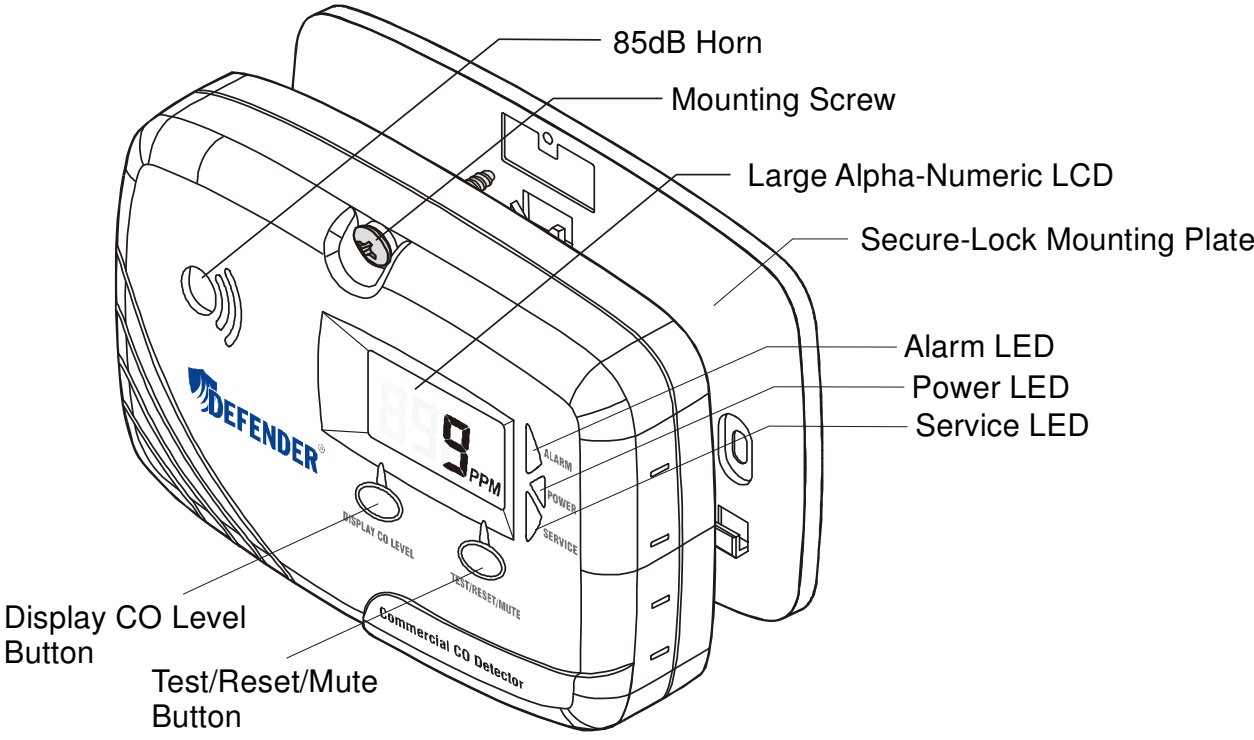




CD8180 Commercial CO Detector

QUICK START GUIDE



The Defender CD8180 Commercial Carbon Monoxide Detector is Underwriters Laboratories Listed to ANSI/UL 2075, and designed to help measure compliance with the U.S. Occupational Safety and Health Administration (OSHA) workplace exposure limits. The CD8180 does not comply with ACGIH, Cal/OSHA or NIOSH, which recommend lower exposure limits than OSHA. Consult with your local authority about the exposure limits permitted for your workplace.

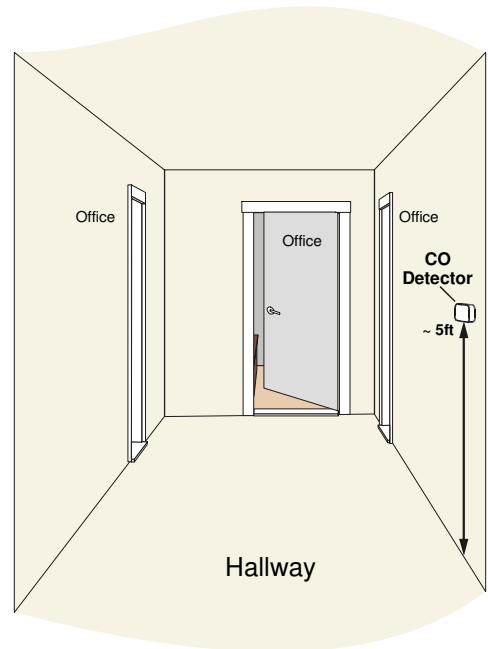
1. RECOMMENDED LOCATION OF DETECTORS

CO poisoning can happen anywhere in the building. A CO detector should be installed on every floor, and inside or near every area or room that may be occupied.

Carbon monoxide at room temperature (68°F) is slightly lighter than air (density of CO 0.96716 compared to air). CO detectors should be mounted five feet off floor, around eye level, for best operation and to easily test detector and view the display.

Install a Commercial CO Detector:

1. On every floor, at least one CO detector for every 1000 square feet of vertically unobstructed space.
2. Inside any room that is occupied by someone who may be hypersensitive to CO, such as older adults, young children, pregnant women, or persons with medical conditions.
3. Near each exit from the building and any maintenance room that contains combustion equipment, such that an alarm signal will be heard before anyone enters the building or maintenance room.

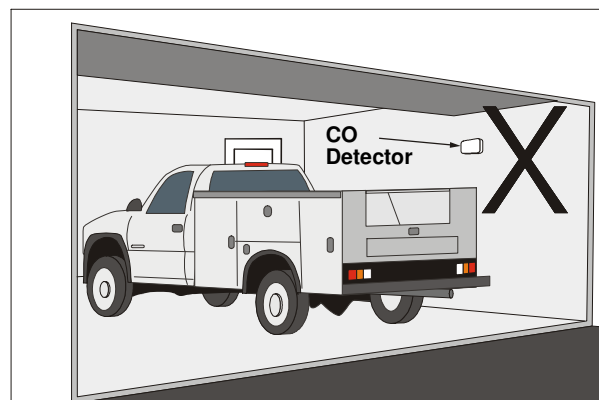


For residential areas within a commercial building, carbon monoxide alarms that are listed to the UL 2034 residential standard, like the Defender CA6150, should be installed inside or near every sleeping area or room, according to the manufacturer's instructions.

2. LOCATIONS TO AVOID

Do not install a CO detector:

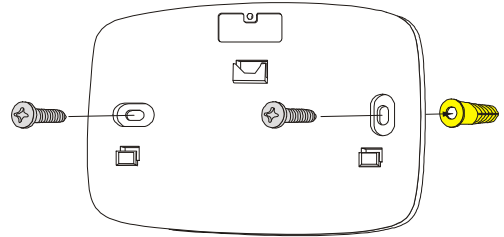
1. Inside of a garage, cleaning supply room, bath room, dusty area or unconditioned space. The detector's operation temperature range is 40°F to 100°F.
2. Within five feet of a combustion or cooking appliance including a furnace, boiler, water heater, space heater, oven or range.
3. Within five feet of a window or exterior door.
4. Within three feet of a room with a bathtub, shower, spa or washer/dryer.
5. Within one foot of a wireless device.
6. Where the alarm would be obstructed by furniture, drapes, etc.
7. Within a hazardous area, as defined in the National Electrical Code.



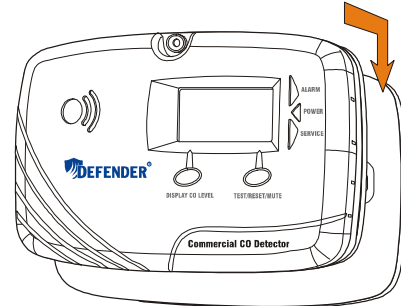
3. INSTALLATION INSTRUCTIONS

Follow these steps in this order to install the CO detector:

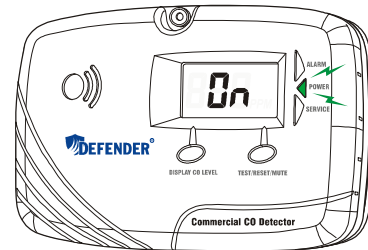
1. Fasten the mounting plate to the wall at eye level, about 5' off the floor.



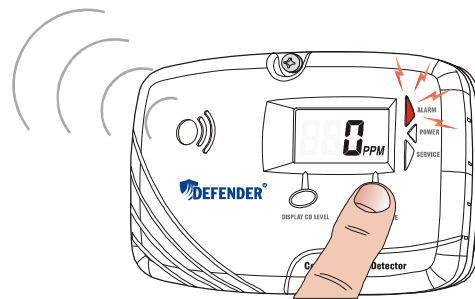
Slide detector down onto mounting plate.



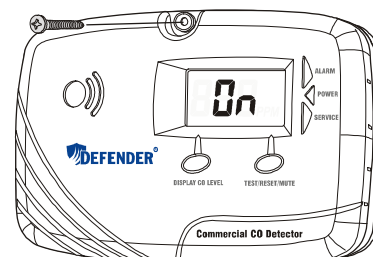
Connection between mounting plate and detector will automatically turn activation switch **ON**.



2. Press and hold test button until detector starts to beep, then release. The detector should beep 4 times, pause, and then beep 4 times again. **ALARM** red LED should flash at the same time.

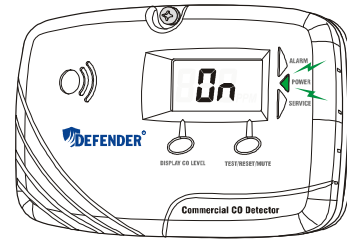


3. Secure detector to mounting plate, with Phillips head screw provided, through the mounting hole on top of detector.

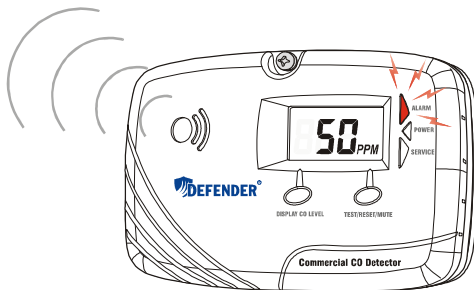


4. CONDENSED OPERATION INSTRUCTONS

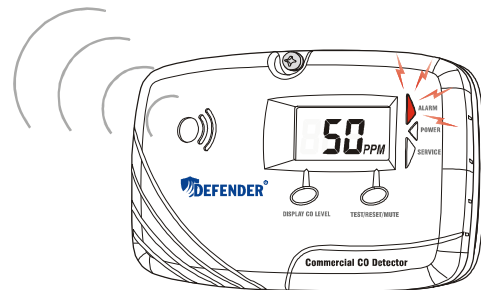
OPERATION: The CO detector is operational once the activation switch is slid to **ON** position. If the detector's power is active, the **POWER** green LED will flash once every 60 seconds, and the LCD readout will continuously display ON, or the current CO level if 30 PPM or more is detected.



ALARM CONDITION: When the batteries are active, and CO gas is detected at a level and duration specified in Section 3 of the Owner's Manual, the horn will sound and **ALARM** red LED will light. The alarm signal will sound 4 short beeps every 6 seconds, and flash the **ALARM** red LED in sync with the beeping sound. The LCD will also display the current CO level detected. After having alarmed for more than 5 minutes, the alarm signal will change to 4 short beeps every 60 seconds. The alarm signal is either manually or automatically reset. See Section 10 of Owner's Manual **WHAT TO DO WHEN THE ALARM SOUNDS**.



**Beeps 4 times every 6 seconds
for first 5 minutes**

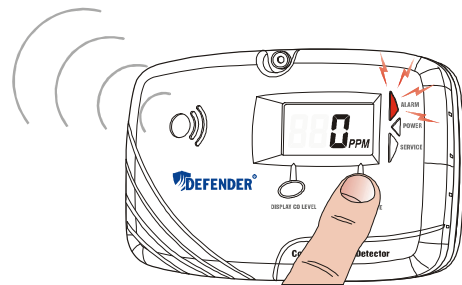


**Beeps 4 times per minute
after 5 minutes**

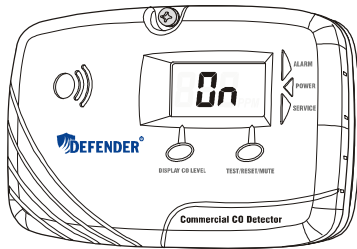
TEST/RESET/MUTE BUTTON:

The **TEST/RESET/MUTE** button is used to check the detector for proper operation, and to temporarily mute horn for 5 minutes when alarm is activated, for 24 hours during the first week of a "Low Battery Voltage" signal (🔋) activation, or for 60 hours during the first month of a sensor "End-of-Life" signal (🔚) activation. The LCD

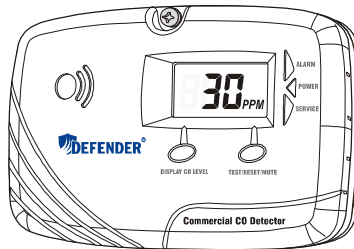
will display the current CO level detected when detector is being tested, or **OFF** when an alarm signal is muted. See Section 9 of Owner's Manual **TEST AND MUTE DETECTOR** for detailed instructions to test the detector and mute the audible horn.



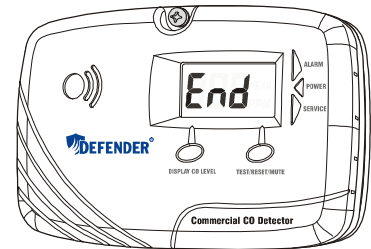
LCD DISPLAY FUNCTION: When detector is operating normally, the LCD will display ON or the current CO level if 30 PPM or more is detected. The LCD will display **End** after five years of operation to alert you that it is time to replace the detector.



Continuously Displays "On"
(below 30 PPM)



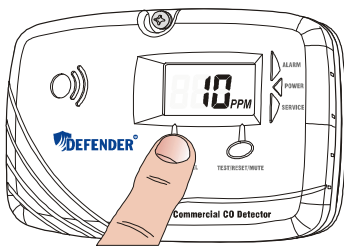
Auto. Displays 30 - 999 PPM
(e.g. 30 PPM detected)



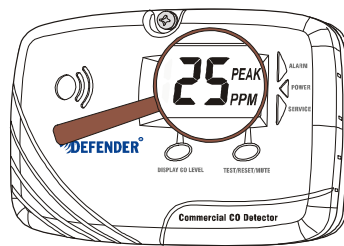
Displays "End" When Expires
(five years after activation)

DISPLAY CO LEVEL BUTTON: To manually display the current and highest CO level detected as low as 9 PPM, press the **DISPLAY CO LEVEL** button once. The LCD will display the recorded data in the following order:

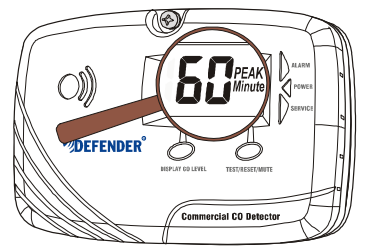
1. The current CO level detected within the last minute from 9 to 999 PPM.
2. The highest CO level detected within last 30 days from 9 to 999 PPM.
3. The total length of time the highest CO level was detected, within 10% of the peak, from 1 to 999 minutes.



Current CO Level
(e.g. 10 PPM detected
within last minute)

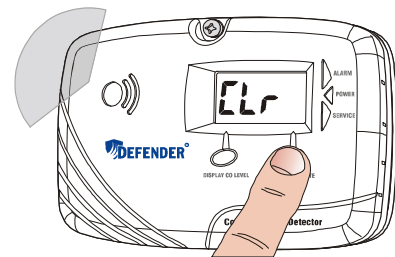


Highest CO Level
(e.g. peak of 25 PPM detected
within last 30 days)



Duration of Peak CO Level
(e.g. peak detected
for 60 minutes)

Each reading will appear for five seconds. To erase the record in memory, press the **Display CO Level** button, and while the readings are being displayed, press the **TEST/RESET/MUTE** button. The detector will burst a long beep, and display **Clr**.



IMPORTANT! Read all instructions of the complete Owner's Manual before installation and operation of this CO detector, including important messages, information about carbon monoxide, detector functions and operation, how to test and mute detector, what to do when alarm sounds, limitations of CO detectors, good safety habits, sensor end-of-life and detector service, description of audible and visual signals, and limited warranty.