

## 10-year Smoke/CO Combination Alarm User Guide Sealed-in battery that lasts the life of the alarm



EN50291-1:2010



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#### 1. INTRODUCTION

Thank you for purchasing the Kidde Combination Photoelectric Smoke and Carbon Monoxide alarm with a 10-year sealed-in battery.

Please take a few minutes to thoroughly read this user guide which should be saved for future reference. Teach children how to respond to the alarms, and ensure that they don't ever play with this unit.

**IMPORTANT:** Additional markings on back of the unit.

Your alarm was designed to detect both smoke and carbon monoxide from any source of combustion in a residential environment. It is not tested for use in a caravan or boat.

This apparatus is NOT a substitute for maintenance of fuel burning appliances and venting /exhaust systems.

If you have any questions about the operation or installation of your alarm, please call our Freephone Consumer Hotline on 0800 917 0722- between 9am - 5pm Mon - Fri.

This apparatus is to be installed by a competent person.

#### 2. SMOKE ALARM BEST PRACTISE

A smoke alarm pattern is 3 long beeps, repeated every 1.5 seconds.

At all times and before installing your smoke alarm you must;

- Have an escape plan with alternate exits
- Train your family in this escape plan and practise it regularly
- · Ensure your family know what the alarm sounds like

If the alarm sounds, check for fires first of all, and if one is discovered then;

- DO Alert small children
- DO Exit the home according to your escape plan
- DO Crawl if the smoke is dense, using a damp cloth to breathe through
- DO Call the fire brigade from a neighbour's home
- DO Ensure that everyone is awake, and assistance is given to those who require it
- DON'T stop to dress or retrieve valuables
- DON'T open doors that are warm, or through which smoke is seeping

NOTE – Situations where a smoke alarm might not be effective;

- Smoking in bed
- · Leaving children unattended
- Cleaning with flammable liquids resulting in explosive vapour.

#### 3. IMPORTANT SMOKE ALARM INFORMATION

- Before temporarily silencing the alarm with the Hush button, identify the source of the smoke.
- Smoke alarms need to be tested regularly
- Smoke alarms cannot provide an alarm if smoke cannot reach them
- Fires in chimneys, walls, roofs, different levels or behind closed doors might not be detected
- For the physically or mentally impaired, or very young, escape may be difficult and so alternative escape strategies should be adopted
- The smoke alarm may not wake heavy sleepers or those impaired by the use of drugs or alcohol. In this case an alarm should be fitted in each sleeping area
- Smoke alarms can save lives, but they are not an alternative for an adequate insurance policy to protect lives and property

Leading authorities recommend that both ionisation and photoelectric smoke alarms be installed to help insure maximum detection of the various types of fires that can occur within the home. Ionisation sensing alarms may detect invisible fire particles (associated with fast flaming fires) sooner than photoelectric alarms. Photoelectric sensing alarms may detect visible fire particles (associated with slow smoldering fires) sooner than ionisation alarms.

## 4. CARBON MONOXIDE (CO) ALARM BEST PRACTISE

A CO alarm pattern is 4 quick beeps, repeated every 5 seconds.

**WARNING:** Carbon monoxide alarm activation indicates the presence of CO at high concentrations which can kill you. NOTE: If you recognise any of the symptoms on page 8 consult your Doctor immediately.

NOTE: Young children, elderly and pets are more susceptible to the dangers of CO.

NOTE: This alarm is designed to detect CO gas. It is not designed to detect other gases such as natural gas.

NOTE: This alarm is intended for use in ordinary family homes. It is not designed to measure compliance with occupational safety and the HSE.

NOTE: Individuals with certain specific medical conditions may need an alarm that operates below 30ppm. If this applies consult your Doctor.

IMPORTANT: Ensure that all family members are familiar with the symptoms of CO poisoning and how your alarm works.

#### 5. WHAT TO DO IF YOUR CO ALARM SOUNDS

Carbon Monoxide Alarm Procedure

▲ WARNING! When this alarm sounds it indicates the presence of CO which can kill you. Based on recommendations from EN 50292, follow these steps if alarm sounds (4 loud audible pulses followed by a pausefor 5 seconds):

- Keep calm and open all doors and windows. Turn off all fuel-burning appliances if possible.
   Note: it is possible that outdoor conditions could influence domestic CO alarms (bad traffic pollution in cold weather, for example). In these circumstances, the level of indoor CO might actually increase when doors and windows are opened.
- 2) If the alarm continues to sound, even after being reset (where appropriate), then evacuate the premises, alerting other occupants to the risk. Leave doors and windows open. Do not re-enter the premises.
- Get medical help for anyone suffering the effects of CO poisoning, and advise that CO inhalation is suspected.
- Call Gas Emergency Services: 0800 111 999, or your local Gas Safe Registered Engineer: Engineer.

#### PHONE NUMBER:

Never restart the source of a CO problem until it has been corrected. Never ignore the sound of the alarm! Pressing the test/reset button will silence the alarm. If the CO condition that caused the alert continues, the alarm will reactivate. If the unit alarms again within six minutes, it is sensing high levels of CO which can quickly become a dangerous situation.

#### 6. WHAT IS CARBON MONOXIDE?

Carbon monoxide (CO) is a highly poisonous gas with no taste, colour or smell.

#### Potential Sources of CO

- · Wood-burning stoves
- Gas boilers and fires
- Gas Hobs
- Oil and coal burning appliances
- Portable gas heaters
- Blocked flues and chimneys
- Fumes from integral garages
- Barbecues
- High concentrations of tobacco smoke

This CO alarm is not a substitute for the correct maintenance of your appliances.

Carbon monoxide can be produced from poorly burning appliances or from blocked flues and chimneys.

If your alarm has sounded and you have ventilated the room the CO may have dispersed before help arrives. It is crucial that the source of CO is determined and appropriate maintenance carried out.

Carbon monoxide is a cumulative poison. This alarm is time-weighted – the higher the level of CO, the sooner it will alarm.

NOTE: The apparatus may respond to brief exhaust gas emissions, for example during the initial start-up of an appliance. Also, hydrogen acts as an interferent and can arise from some battery charging activities and the curing of concrete or cement under certain circumstances. Volatile Organic Compounds (VOCs), e.g. alcohols, which may eventually activate the alarm, can be generated from use of damp-proofing materials or other coatings containing alkylalkoxysilanes.

#### 7. IMPORTANT CARBON MONOXIDE SAFETY INFORMATION

The table below shows the response times at which your CO alarm will sound; (Alarm levels as defined by EN50291-1:2010)

Parts per Million (PPM) of CO	Time until Alarm
50	60 – 90 minutes
100	10 – 40 minutes
300	Must alarm in less than 3 minutes

#### **CO Advice and Information**

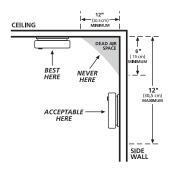
The table below shows the effects of different levels of CO poisoning on the body;

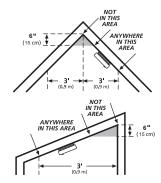
Parts per Million (PPM)	Effects on Adults
100	Slight headache, nausea, fatigue (flu-like symptoms)
200	Dizziness and headache within 2 – 3 hours
400	Nausea, frontal headache, drowsiness, confusion and rapid heart rate. Risk to life after over 3 hours of exposure
800	Severe headaches, convulsions, vital organ failures. Death possible within 2 – 3 hours

**A** Warning: The device cannot prevent against the chronic effects of exposure to carbon monoxide or protect individuals who are at specific risk.

#### 8. RECOMMENDED LOCATIONS FOR THIS ALARM

- Locate in each sleeping area / bedroom, particularly if the room has a fuel burning appliance. Locate 1 to 3 metres from the appliance.
- If installing in the kitchen, locate 1 to 3 metres away from direct cooking areas.
- CO alarms in rooms with sloped ceilings should be located on the high side of the room.
- If there is a partition in the room, locate the alarm on the same side of the partition as the potential source.





#### 9. WHERE NOT TO INSTALL THIS ALARM

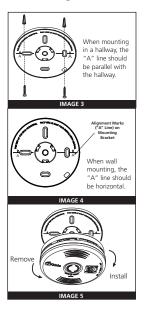
- Within 1 metres of cooking appliances or other fuel burning appliances.
- Areas of extreme temperature (below 0°C and above 40°C)
- Do not install where the ventilation openings in the unit could be impeded by items such as newspapers, table-cloths, curtains, etc.
- Dusty, dirty, greasy, or insect infested areas such as garages or workshops.
- Humid areas (greater than 90% RH)
- Avoid locating next to draughts, such as doors, windows, extractor fans, air vents or other similar ventilation openings.
- Within 1 metre of a fluorescent light
- Bathrooms (or within 1 metre of the bathroom, or sinks)
- This alarm is intended for domestic use only it is not tested for leisure boats, camper vans or caravans. It is not suitable for large passenger boats.

**CAUTION:** This alarm will only indicate the presence of carbon monoxide at the sensor. Carbon monoxide may be present in other areas.

**WARNING:** This product is intended for use in ordinary indoor locations of family living units. It is not designed to measure compliance with commercial or industrial standards.

#### 10. INSTALLATION INSTRUCTIONS

#### **Attaching And Activating The Alarm**



To obtain aesthetic alignment of the alarm with the hallway or wall, the "A" line on the mounting bracket should be parallel with the hallway when ceiling mounting or horizontal when wall mounting.

After selecting the proper smoke alarm location as described in Section 8, attach the mounting bracket to the ceiling as shown in Image 3 For wall mounting see Image 4. Place the mounting plate on the wall; be sure the "A" line is horizontal (parallel to the floor). Use the screws and anchors provided to secure the mounting bracket. Use a 5mm drill bit for anchors if mounting in plasterboard or similar surface. Anchors are not required for mounting on hard surfaces such as wood.

#### 11. ACTIVATING THE ALARM

This alarm is automatically activated when it is attached to the mounting plate for the first time. Once activated, the battery will power the alarm for its 10-year life under normal conditions.

Align the alarm with the mounting bracket and rotate clockwise approximately 45 degrees until the unit stops rotating and clicks into place. If the unit needs to be re-aligned rotate the alarm anti-clockwise, remove and rotate to the desired alignment. NOTE: This alarm will mount to the plate in 3 positions (every 120 degrees).

The alarm briefly chirps to indicate that power has been received. The unit will remain on until it is disabled by the user or at the end of the alarm's life.

The alarm is now activated! Now test the alarm as described in this user guide.

#### 12. KEY FEATURES OF YOUR ALARM

This is a combination alarm, and is designed to detect dangerous levels of smoke and carbon monoxide.

This alarm gives an audible (85 decibel alarm) warning as well as visual LED notification when dangerous levels of either smoke or CO are detected, but where both are detected simultaneously, priority is given to the smoke warning.

This alarm has an end-of-life signal, designed to alert you when the alarm sensor is no longer operational (after 10-years).

This alarm has a 'Hush' feature which allows nuisance alarms to be temporarily silenced.

### 13. OPERATING YOUR ALARM

Feature	Audible	LED	Comment	
Smoke alarming	3 repeated long beeps	3 flashes, synchronised with audible alarm	Follow appropriate emergency	
CO alarming	4 repeated shorter beeps	4 flashes, synchronised with audible alarm	procedures	
Test mode	3 long beeps repeated twice, followed by 4 short beeps repeated twice	Flashes synchronised with audible beeps		
Low Battery	Chirp every 60 seconds	Flashes every 30 seconds	Remove alarm, discharge, dispose of unit, replace with new alarm. (sealed-in battery cannot be replaced)	
Smoke Hush	None	Flashes every 10 seconds	Lasts for up to 10 minutes	
Cancel Hush mode	NA	NA	Within the 10 minutes, the user can cancel Hush by re-pressing Hush button	
Normal operation	None	Flashes every 10 minutes	For 10 minutes after initial power-up, the LED flashes every 60 seconds, followed by the flash every 10 minutes.	
Fault Mode	Chirp every 30 secs	Fault code (2 - 12 flashes every 30 seconds)	Call consumer hotline; UK (0800 917 0722) Ireland (1 800 818 601)	
End of Life*	2 chirps every 30 seconds	2 flashes every 30 seconds	Remove, discharge unit, dispose, replace with new alarm. Use End of Life hush feature temporarily.	

<sup>\*</sup> End of Life hush feature – Silences End of Life chirps for 3 days. Can be used 10 times within 30 days.

## 14. TROUBLESHOOTING

Feature	Audible	LED	Required Action
Low Battery	Chirp every 60 seconds	Flashes every 30 seconds	Alarm needs to be replaced
Alarm Fault	Chirp every 30 secs	Fault code (2-12 flashes every 30 seconds)	Call consumer hotline; UK (0800 917 0722) Ireland (1 800 818 601)
End of Life	2 chirps every 30 seconds	2 flashes every 30 seconds	Discharge and replace unit.

#### 15. PRODUCT SPECIFICATION

Power	Sealed lithium battery	
Sensors	Smoke - Optical CO - Electrochemical	
Operating Temperature Range	0 °C to 40 °C	
Humidity Operating Range	Up to 90%RH (non-condensing)	
Storage and Transport Conditions	-20°C to +65°C, 5-95%RH (non-condensing)	
Alarm Sound	85dB @ 3m after 1 min. , 82dB after 4 min.	
Dimensions	Diameter 5.25"(133.3mm) , Height 1.6"(40.3mm)	
Weight	Weight: 0.173 kg	

**NOTE:** Constant exposures to extreme temperatures and humidities may affect battery life.

## 10. PERMANENTLY DISABLE ALARM / DISCHARGE BATTERY

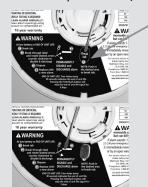
#### **A** WARNING!

- . Discharging the battery is permanent. Once the alarm has been deactivated, it cannot be reactivated!
- . Once discharged, the alarm will NO LONGER DETECT SMOKE or CO.
- . Once the alarm is discharged the battery will be depleted and the alarm will no longer function.
- · Once the alarm has been discharged, it cannot be mounted onto the mounting plate or reactivated.

#### ▲ WARNING!

Failure to discharge alarm as instructed prior to disposal may create potential for lithium battery related fire or hazard.

#### To Permanently Disable Alarm / Discharge Battery:



• Push in the dashed area with a screwdriver to completely break tab.

 After the tab is broken, use the screwdriver to break through the label and turn the slotted arrow counter clockwise to the "PERMANENTLY DISABLE and DISCHARGE alarm" location. This will disable the alarm, stop the low battery or end of unit life "chirps" and render the alarm safe for disposal by draining the battery.

#### 17. MAINTENANCE OF YOUR ALARM

To keep your alarm in good working order:

- Test every week by pushing the Test/Reset button. The unit will emit 3 long beeps repeated
  twice (simulated smoke alarm), followed by 4 short beeps repeated twice (simulated CO
  alarm). NOTE: due to the loudness of the sounder, stand at arm's length when testing.
- NOTE: do not use naked flame sources, such as lighted candles, to test your apparatus.
- At least once a year remove the alarm and use a vacuum cleaner to suck out any dust. Wipe
  the outside of the alarm with a damp cloth. When you replace the alarm remember to test it.
- Keep away from solvents or detergents
- · Avoid spraying air-freshener, hair-spray near the alarm
- Do not paint the alarm. If decorating or using adhesives close to the alarm, remove it temporarily
- Keep away nappy buckets
- Storage and Transport Conditions: -20° C to +60° C, 5-95%RH (non-condensing)

The following substances can affect the sensor and cause false alarms:

Methane, Propane, Iso-butane, Iso-propanol, Ethylene, Benzene, Toluene, Ethyl acetate, Hydrogen Sulphide, Hydrogen, Sulphur Dioxide, alcohol based products, paints, thinners, solvents, adhesives, hair-sprays, aftershaves or perfumes and some cleaning agents.

NOTE: there could be other compounds occurring within a particular household which could cause similar effects.

**A** Warning: Do not tamper with the apparatus, as there is a risk of electric shock or malfunction.

#### 18. SERVICE AND WARRANTY

If after reviewing this user guide you feel that your alarm is defective in any way, do not tamper with it. Return for servicing to:Kidde Safety Europe Ltd, Ash House, Littleton Road, Ashford, TW15 1TZ, UK 0800-917-0722 (See below for in-warranty returns)

#### LIMITED WARRANTY

Kidde Safety warrants to the original purchaser that the enclosed alarm will be free from defects in material and workmanship or design under normal use and service for a period of 10 (Ten) years from the date of purchase. The obligation of Kidde Safety Europe Limited under this warranty is limited to repairing or replacing the alarm or any part which we find to be defective in material, workmanship or design, free of charge to the customer, upon sending the smoke alarm with proof of date of purchase, postage and return postage prepaid, to Warranty Service Department, Kidde Safety Europe Ltd, Ash House, Littleton Road, Ashford, TW15 1TZ, UK

This warranty shall not apply to the alarm if it has been damaged, modified, abused or altered after the date of purchase or if it fails to operate due to improper maintenance.

THE LIABILITY OF KSE LTD OR ANY OF ITS PARENT OR SUBSIDIARY CORPORATIONS ARISING FROM THE SALE OF THIS ALARM OR UNDER THE TERMS OF THIS LIMITED WARRANTY SHALL NOT IN ANY CASE EXCEED THE COST OF REPLACEMENT OF ALARM AND, IN NO CASE, SHALL KSE LTD OR ANY OF ITS PARENT OR SUBSIDIARY CORPORATIONS BE LIABLE FOR CONSEQUENTIAL LOSS OR DAMAGES RESULTING SMOKE ALARM OR FOR BREACH OF THIS OR ANY OTHER WARRANTY, EXPRESS OR IMPLIED, EVEN IF THE LOSS OR DAMAGE IS CAUSED BY THE COMPANY'S NEGLIGENCE OR FAULT.

This warranty does not affect your statutory rights.

### 19. USEFUL CONTACT INFORMATION

Kidde Helpline For CO Emergencies (UK) 0800 917 0722 / (Ireland) 1 800 818 601

Gas Emergency Services
HETAS (Solid Fuel Emergency)

0800 111 999 0845 634 5626

Oftec (oil)

0845 658 5080

#### **ENVIRONMENTAL PROTECTION**

Waste electrical products should not be disposed of with household waste. Please recycle where facilities exist. Check with Local Authority or retailer for recycling advice



## Construction Product: Smoke alarms. Intended use: Fire safety

Essential characteristics	EN14604:2005 Clause	Performance
Nominal activation conditions/Sensitivity. Response delay (response time) and Performance under fire condition	4.12, 5.2, 5.3, 5.4, 5.5, 5.15, 5.17, 5.18, 5.20	PASS
Operational reliability	4.1, 4.2, 4.5, 4.6, 4.7, 4.8, 4.9, 4.10, 4.15, 4.16, 4.17, 4.19, 5.11 5.16, 5.22, 5.23, 5.24	PASS
Tolerance to supply voltage	5.21	PASS
Durability of operational reliability and response delay, temperature resistance	5.6, 5.7, 5.8	PASS
Durability of operational reliability, vibration resistance	5.12, 5.13	PASS
Durability of operational reliability, humidity resistance	5.9	PASS
Durability of operational reliability, corrosion resistance	5.10	PASS
Durability of operational reliability, electrical stability	5.14	PASS
Accomodation Vehicles (LAVs)	Annex L	NPD

# QUESTIONS OR FOR MORE INFORMATION Call our Consumer Hotline at 0800 917 0722 or contact us at our website at www.kiddesafetyeurope.co.uk



Kidde Safety Europe Ltd Ash House, Littleton Road, Ashford, TW15 1TZ, UK

Made in China

P/N: 2534-7222-01