# **Negislink**

# Wireless Interlinked Combination Smoke and Carbon Monoxide Alarm USER MANUAL

Model: SC-RF200/SC-RF220









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# English

This user manual contains important information regarding the installation and operation of your AEGISLINK combination smoke and carbon monoxide alarm. Please take a few minutes to thoroughly read this manual which should be saved for future reference. If you are installing this smoke and carbon monoxide alarm for use by others, you must leave this manual—or a copy of it—with the end user.

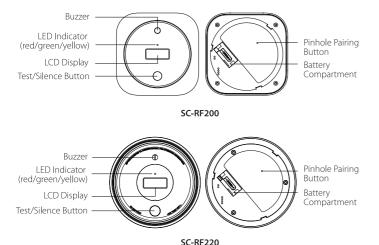
# Introduction

This AEGISLINK combination smoke and carbon monoxide alarm conforms with UL 217 and UL 2034 Standards and is designed to detect both smoke and carbon monoxide.

# **Package Contents**

- 1 × Alarm Unit
- $1 \times Mounting Bracket$
- 2 × Screws 2 × Anchor Plugs
- 1 × Pin
- 1 × User Manual

# **Product Profile**



# **Basic Safety Information**

### **△ IMPORTANT**

- DANGERS, WARNINGS, AND CAUTIONS ALERT YOU TO IMPORTANT OPERATING INSTRUCTIONS OR TO POTENTIALLY HAZARDOUS SITUATIONS. PAY SPECIAL ATTENTION TO THESE SITUATIONS.
- 2. THIS COMBINATION SMOKE & CARBON MONOXIDE ALARM IS ONLY APPROVED FOR HOME USE.
- 3. THIS CARBON MONOXIDE ALARM IS DESIGNED TO DETECT CARBON MONOXIDE FROM ANY SOURCE OF COMBUSTION.
- 4. CONSTANT EXPOSURES TO HIGH OR LOW HUMIDITY MAY REDUCE BATTERY LIFE.
- SMOKE ALARMS ARE NOT TO BE USED WITH DETECTOR GUARDS UNLESS THE COMBINATION HAS BEEN EVALUATED AND FOUND SUITABLE FOR THAT PURPOSE.

### **△** CAUTION

THIS SMOKE & CARBON MONOXIDE ALARM HAS TWO SEPARATE ALARMS WHICH WORK INDEPENDENTLY. THE CARBON MONOXIDE ALARM IS NOT DESIGNED TO DETECT FIRE OR ANY OTHER GAS. IT WILL ONLY INDICATE THE PRESENCE OF CARBON MONOXIDE GAS AT THE SENSOR. CARBON MONOXIDE GAS MAY BE PRESENT IN OTHER AREAS. THE SMOKE ALARM WILL ONLY INDICATE THE PRESENCE OF SMOKE THAT REACHES THE SENSOR. THE SMOKE ALARM IS NOT DESIGNED TO DETECT GAS, HEAT OR FLAMES.

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#### **△ WARNING**

- NEVER IGNORE ANY ALARM. FAILURE TO RESPOND CAN RESULT IN SERIOUS INJURY OR DEATH.
- 2. THE SILENCE FEATURE IS ONLY FOR YOUR CONVENIENCE AND WILL NOT CORRECT A PROBLEM. ALWAYS CHECK YOUR HOME FOR A POTENTIAL PROBLEM AFTER ANY ALARM. FAILURE TO DO SO CAN RESULT IN INJURY OR DEATH.
- 3. TEST THIS SMOKE/CO ALARM ONCE A WEEK. IF THE ALARM EVER FAILS TO TEST CORRECTLY, REPLACE IT IMMEDIATELY! IF THE ALARM CANNOT WORK PROPERLY, IT WILL NOT ALERT YOU TO A PROBLEM.
- 4. THIS PRODUCT IS INTENDED FOR USE IN ORDINARY INDOOR LOCATIONS OF FAMILY LIVING UNITS. IT IS NOT DESIGNED TO MEASURE CO LEVELS IN COMPLIANCE WITH OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA) COMMERCIAL OR INDUSTRIAL STANDARDS. INDIVIDUALS WITH MEDICAL CONDITIONS THAT MAY MAKE THEM MORE SENSITIVE TO CARBON MONOXIDE MAY CONSIDER USING WARNING DEVICES WHICH PROVIDE AUDIBLE AND VISUAL SIGNALS FOR CARBON MONOXIDE CONCENTRATIONS UNDER 30 PPM. FOR ADDITIONAL INFORMATION ON CARBON MONOXIDE AND YOUR MEDICAL CONDITION CONTACT YOUR PHYSICIAN.
- 5. THE REPLACEMENT DATE THAT APPEARS ON THE DEVICE IS THE DATE BEYOND WHICH THE DEVICE MAY NO LONGER DETECT CARBON MONOXIDE ACCURATELY AND SHOULD BE IMMEDIATELY REPLACED.
- 6. THIS DEVICE IS DESIGNED TO PROTECT INDIVIDUALS FROM THE ACUTE EFFECTS OF CARBON MONOXIDE EXPOSURE. IT MAY NOT FULLY SAFEGUARD INDIVIDUALS WITH SPECIFIC MEDICAL CONDITIONS. IF IN DOUBT, CONSULT A MEDICAL PRACTITIONER.

# **How to Set Up and Interconnect Wireless Alarms**

All AEGISLINK wireless interlinked alarms contain a built-in RF module that enables you to wirelessly connect 2 or more interlinked alarms and create an interlinked network. When one unit is triggered, all interconnected alarms will sound. The AEGISLINK series contain wireless interlinked smoke alarms, wireless interlinked carbon monoxide alarms, and wireless interlinked combination smoke and carbon monoxide alarms. This model is designed to be wirelessly interlinked with other AEGISLINK alarms, but is not designed to communicate with wireless interlinked alarms from other manufacturers.

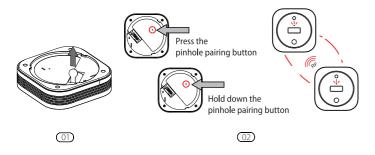
The wireless interlinked alarms in one multi-pack have already been interconnected to each other, so the alarms in each multi-pack have their own independent interlinked network. If you have more than one multi-pack, you will need to connect them all to the same network, but you do not have to disconnect each alarm individually. Choose one multi-pack as your base network and connect the other multi-packs to it.

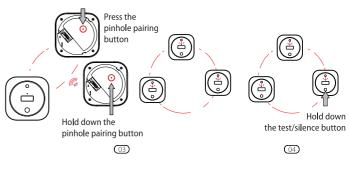
NOTE! The following instructions regarding wireless interconnection are applicable to AEGISLINK wireless interlinked alarms only.

#### How to Interconnect

- 1. Make sure you only work with 2 units at a time, and that they are both activated to ensure successful connection.
- NOTE: To activate your alarm, remove the back cover from the device and pull out the battery insulating film from the battery compartment. To learn how to turn on different models of wireless interlinked alarms, please refer to their specific user manuals for more details
- 2. Press the pinhole pairing button on the back of one of the 2 units using the included pin. It will beep once and the LED will flash red slowly, indicating it has entered pairing mode and is waiting for a new unit to be added. Hold down the pinhole pairing button on the other unit until it beeps once and its LED flashes red rapidly as it is searching for a unit to connect to

- 3. After the search is successful and an interconnected group is created, both units will beep once and automatically exit the interconnection mode. At this point, both units will only flash once every 60 seconds, indicating they are in normal standby mode.
- 4. If you want to connect a third alarm to this group, first activate the new device according to its operating instructions. Press the pinhole pairing button on either of the 2 previously interconnected units using the included pin, it will beep once and the LED will flash red slowly, indicating it has entered pairing mode and is waiting for a new unit to be added. Hold down the pinhole pairing button on the new unit until it beeps once and its LED flashes red rapidly as it searches for a network to which it can connect. After the third unit successfully joins the interconnected network, both units will beep once and automatically exit the interconnection mode.
- 5. If you want to connect more units, simply repeat step 4. Up to 24 alarms can be interconnected this way. To ensure that all alarms enter the same interlinked network, make sure you only work with 2 units at a time—one unit enters the pairing mode and the other unit enters the searching mode.
- 6. Test the alarms according to the steps in the section "Alarm Test".





#### NOTES

- 1. The alarm will enter the searching mode or the pairing mode for 60 seconds with the LED flashing red. After 60 seconds, repeat step 2 to connect the alarms. If needed, press the pinhole pairing button once while the alarm is in the searching mode or the pairing mode, and the LED will stop flashing red and the alarm will quit the pairing mode to enter normal status.
- 2. Test all wireless alarms to ensure they are interconnected before installation.
- 3. A maximum of 24 wireless alarms can be interconnected on the same network.
- The model can only be interconnected with other AEGISLINK wireless interlinked alarms.

### **How to Disconnect**

Press the pinhole pairing button 4 times using the pin and the unit will beep once. Then, hold down the pairing button until the unit beeps once more to disconnect. After disconnecting, it can be reconnected to the same network, or added to a new network.

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### **Alarm Test**

Be sure to test your alarms when you turn them on for the first time, or when the group configuration has changed. In addition to the weekly tests you should perform, it is recommended to test the alarm after returning from a long trip or vacation.

If your AEGISLINK SC-RF200/SC-RF220 is interconnected to other wireless alarms, we recommend that every individual alarm is tested during the weekly test.

	Test a Single Alarm	Test All Interconnected Alarms
Action	Press the test/silence button.	Hold down the test/silence button.
Indication	The alarm will emit 2 sets of 3 long beeps followed by 2 sets of 4 quick beeps.  The LED will flash red during the audible signal.  After testing, the alarm will automatically enter standby mode.	The initiating unit will beep continuously with the LED flashing red.  Other interconnected units in the network will receive the signal after 5 seconds, then they will beep continuously with the LED flashing red and green successively. Release the test/silence button and all the units will stop testing.  The testing of the units should be completed within 3 minutes.  After testing, the units will automatically enter standby mode.

NOTE: The test function accurately tests the alarm's circuits without the need to test with smoke and CO. If your alarm fails to give an audible test signal, please immediately refer to the troubleshooting guide at the end of this manual. Never use an open flame to test this device.

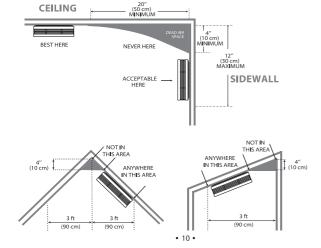
# **Installation Positioning**

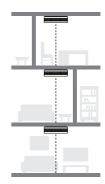


NOTE: If an alarm is installed in a kitchen, ensure it has an accessible silence button, and install it as far away from the stove and sink as possible to avoid false alarms.

- 1. Prioritize the installation of an alarm in the bedroom and walkways, and make sure you can hear the alarm from all sleeping areas. In a home with several bedrooms, install an alarm in every bedroom. If you install only one smoke alarm in your home, install the alarm near to all bedrooms where possible, and not in a basement or furnace room.
- 2. Install an alarm above the stairway and on every floor of the house.
- 3. Smoke, heat and anything burning will spread horizontally after rising to the ceiling, so install the alarm in the middle of the ceiling where possible. Ensure that the alarm is installed at the minimum distance away from corner.
- 4. If an alarm cannot be installed in the middle of a ceiling, install it at a distance of 20 in (50 cm) away from the corners of the room.

- 5. If an alarm is installed onto a wall, a distance of 4–12 in (10–30 cm) should be kept below the ceiling.
- 6. If the length of a room or hall is beyond 30 ft (900 cm), several alarms should be installed in the same room.
- 7. When the wall or ceiling is angled, the alarm needs to be installed within 3 ft (90 cm) of the highest wall or ceiling point (measured horizontally) in the room.
- 8. In multi-level houses or apartments, install at least one wireless alarm on each level and keep them installed in a straight vertical line (see diagram) with as few obstacles between each of the interconnected alarms as possible to ensure optimal signal transmission.





#### Locations to Avoid:

- 1. Near large metal surfaces and/or bundles of wire.
- 2. Near fluorescent lights, amateur radios, electrical equipment, or other devices that may transmit an RF signal, as electronic "noise" may cause nuisance alarms.

#### **∧ WARNING**

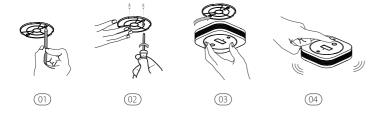
- 1, THIS ALARM SHOULD BE INSTALLED BY A COMPETENT PERSON.
- ALARMS SHOULD NOT BE USED AS A SUBSTITUTE FOR PROPER INSTALLATION, USE AND MAINTENANCE OF FUEL BURNING APPLIANCES INCLUDING APPROPRIATE VENTILATION AND EXHAUST SYSTEMS.
- 3. TO PREVENT INJURY, THIS DEVICE SHOULD BE SECURELY ATTACHED TO THE CEILING OR WALL IN ACCORDANCE WITH THE INSTALLATION INSTRUCTIONS.
- 4. BATTERIES SHOULD NOT BE EXPOSED TO EXCESSIVE HEAT SUCH AS DIRECT SUNLIGHT, FIRE, ETC.

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### Installation Method

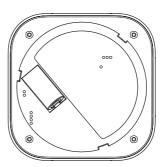
NOTE: Before installation, it is recommended to test the interconnected alarms in the rooms where you intend to install them to ensure that they are within transmission range and that nothing will interfere with their communication.

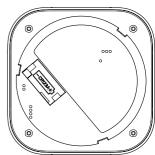
- 1. Use the mounting bracket to mark the screw holes on the ceiling or the wall.
- 2. Drill holes at the 2 marks using an appropriately-sized drill bit. Insert the anchor plugs and screw the mounting bracket using the screws provided.
- 3. Attach the alarm to the mounting bracket and turn clockwise to lock the alarm.
- 4. Test the alarm according to the steps in the section "Alarm Test".



# **Battery Replacement**

- To replace the battery, detach the alarm from the mounting bracket by twisting counterclockwise.
- 2. Pull the battery removal tab to remove the battery, and then install a new battery, matching the correct polarity markings.
- 3. Test the alarm, and then mount the alarm onto the mounting bracket by twisting clockwise to lock the alarm.





### LCD Indicator and Audible Alarm

Mode	LCD Display	LED Indicator	Audible Alarm	Remarks
Powering On		Runs through 8 cycles (yellow/green /red) in sequence.	1 quick beep.	Make sure the battery is installed correctly and the device is turned on.
Standby Mode	со П РРИ	Flashes green once every 60 seconds.	None.	None.

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	Unit detects smoke and initiates an alarm.	-	Flashes red 3 times every 4 seconds.	3 long beeps every 4 seconds.	Dangerous smoke concentration is detected. Open nearby windows and doors, and immediately move to fresh air.
	Unit detects CO and initiates an alarm.	300 00 12 V PPM	A CO concentration ranging from 30 to 999 ppm has been present for a certain time period. The LED indicator flashes red 4 times every 5.8 seconds.	4 quick beeps repeating every 5.8 seconds.	Dangerous CO concentration is detected, and has reached the alarm status. Open nearby windows and doors, and immediately move to fresh air.
Alarm Mode	All other interconnected units in the network.	-	The LED flashes red and green 3 times sequentially every 4 seconds.	3 long beeps every 4 seconds.	Dangerous smoke concentration is detected by the initiating unit in the network. Please find the initiating unit and take action.
		(C) (F) PPU	The LED flashes red 4 times, then the LED flashes green once every 5.8 seconds.	4 quick beeps repeating every 5.8 seconds.	Dangerous CO concentration is detected by the initiating unit, and has reached the alarm status.  Please find the initiating unit and take action.

Unit detects CO (alarm not initiated).	(c) [24] PPU	A CO concentration level ranging from 30 to 999 ppm has been detected, but for less than the allotted detection period. The LED indicator flashes green once every 60 seconds.	None.	Dangerous CO concentration is detected, but has not reached the alarm status. Potentially dangerous CO conditions exist.  Please search for the CO source first. Open nearby windows and doors, and immediately move to fresh air.
Unit detected smoke and initiated an alarm.	1	The LED indicator flashes green once every second for 5 seconds.	None.	Alarm cancellation: when the smoke concentration level drops below the alarm threshold, the alarm signal will stop. Then, the alarm goes back to the standby mode.
Unit detected CO and initiated an alarm.	-	The LED indicator flashes green once every second for 5 seconds.	None.	Alarm cancellation: when the CO concentration level drops below the alarm threshold, the alarm signal will stop. Then, the alarm goes back to the standby mode.

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Test Mode	Test a sing <b>l</b> e unit.	PR5	2 sets of 3 red flashes followed by 2 sets of 4 red flashes.	2 sets of 3 long beeps followed by 2 sets of 4 quick beeps.	Press the test/silence button.
	Test all interconnected units.	CO PPM	The LED indicator flashes red rapidly.	Continuous beeping until you release the test/silence button.	Initiating alarm. Hold down the test/silence button on one unit in the network.
		CO III PPM	The LED flashes red and green sequentially.		Other interconnected alarms in the network.
Silenc	e Mode	-	Flashes red 3 times every 4 seconds.	None.	Smoke silence mode: After 9 minutes, the unit will exit silence mode.
		(c) 124 ppm	Flashes red 4 times every 5.8 seconds.	None.	CO silence mode: After 9 minutes, the unit will exit silence mode.
		CO PPH	Flashes yellow once every 60 seconds.	None.	Silence mode during low battery: After 10 hours, the unit will exit silence mode.

	∞ End PPM	Flashes yellow 3 times every 60 seconds.	None.	Silence mode during the end of cycle: After 22 hours, the unit will exit silence mode.
	-	Flashes green 3 times.	None.	Exiting silence mode.
Low Battery	CO PPM	Flashes yellow once every 60 seconds.	One beep every 60 seconds.	Replace the unit immediately.
Fault	co Err PPM	Flashes yellow 2 times every 60 seconds.	2 beeps every 60 seconds.	Please clean your alarm and see if it is working normally. If "Err" continues to display, the unit has malfunctioned and must be replaced immediately.
End of Life	∞ End PPM	Flashes yellow 3 times every 60 seconds.	3 beeps every 60 seconds.	Replace the unit immediately.

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### **Alarm Mode**

The AEGISLINK wireless interlinked alarms can be interconnected such that any unit that senses danger will cause all other units in the interconnected network to alarm.

### 1. If the Initiating Unit Is Triggered by Smoke:

When one smoke alarm is triggered in the interconnected network, the unit will beep 3 times, paired with the LED that flashes red every 4 seconds. Any other interlinked units will follow suit—they will beep 3 times every 4 seconds, paired with the LED flashing red and green in succession.

# 2. If the Initiating Unit Is Triggered by CO:

When one CO alarm is triggered in the interconnected network, the unit will beep 4 times every 5.8 seconds, paired with the LED flashing red. Any other interlinked units in the network will follow suit—they will beep 4 times every 5.8 seconds, paired with the LED that flashes red 4 times first, followed by the LED that flashes green once with every beep. When the CO concentration level drops below the alarm threshold, the alarm will cease.

#### NOTES

- When one unit is triggered, other interconnected units will sound. If the smoke alarm and CO alarm are triggered in the network at the same time, the alarm signal of the smoke alarm will take priority over that of the CO alarm.
- · This alarm has a relay function that extends the wireless interconnected network for wide detection coverage.

# Silence Mode

**Smoke Silence Mode:** Press the test button during an alarm to have the unit enter silence mode for 9 minutes. If the smoke concentration has reached an alarm level, after the silence time has expired, this unit will continue to alarm until the smoke concentration decreases to a safe, low level. Otherwise, the alarm will enter the normal mode after 9 minutes.

**CO Silence Mode:** Press the test button during an alarm to have the unit enter silence mode. If the CO density still exceeds the alarm threshold, the unit will re-enter alarm state. Otherwise, the unit will exit the silence mode after 9 minutes and resume normal operation.

#### NOTES

- · You can silence all interconnected units by pressing the test/silence button on one of the units. If one unit is still alarming, it is the initiating unit (the unit that detected danger); to silence all interlinked units, you must also press the test/silence button on the initiating unit.
- While interconnected, the initiating unit cannot be triggered again during the 9-minute silence duration. However, all other interconnected units can be triggered again if they detect danger during the silence mode.

### **CO Alarm Levels**

This combination smoke & carbon monoxide alarm is programmed to sound an alarm at the following CO concentrations within the time periods listed:

70 ppm for 60–240 minutes, 150 ppm for 10–50 minutes, and 400 ppm for 4–15 minutes.

### **CO Concentration and Symptoms**

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.

▲ WARNING: THIS DEVICE IS DESIGNED TO PROTECT INDIVIDUALS FROM ACUTE EFFECTS OF CARBON MONOXIDE EXPOSURE. IT MAY NOT FULLY SAFEGUARD INDIVIDUALS WITH SPECIFIC MEDICAL CONDITIONS. IF IN DOUBT, CONSULT A MEDICAL PRACTITIONER.

# **Technical Specifications**

Power Supply	Replaceable 3 V CR123A lithium battery
Operating Life	10 years
Battery Life	5 years
Sensor Type	Smoke: Photoelectric
	CO: Electrochemical
Safety Standards	UL 217 and UL 2034
CO Sensitivity	70 ppm: 60–240 minutes
	150 ppm: 10–50 minutes
	400 ppm: 4–15 minutes.
Operating Temperature	40–100°F (4.4–37.8°C)
Operating Relative Humidity	10%–85% RH (non-condensing)
Alarm Loudness	$\geq$ 85 dB at 10 ft (3 m) @ 3.2 $\pm$ 0.3 kHz pulsing alarm
Silence Duration	About 9 minutes
Operating Frequency	915 MHz
Maximum Number of Interconnected Units	24 wireless units (only compatible with AEGISLINK wireless alarms)
Transmission Range	Over 820 ft (250 m) in open air

#### NOTES

- · Battery life is calculated on the current ratings in the standby mode with weekly testings. If its operation mode changes to an alarming condition, the battery life will be decreased accordingly.
- The alarm functions between 40 and 100°F (4.4 and 37.8°C). Prolonged exposure to temperatures outside of this range can reduce battery life and affect accuracy. We do not recommend operating the device outside of this range.

### **Maintenance**

To keep your smoke/CO alarm in good working order, follow these simple steps:

- 1. Verify the unit's alarm sound and indicator are working properly by testing the unit once a week
- As a minimum your alarm should be cleaned once every 3 months: Remove the unit from the ceiling and clean the alarm cover and vents with your vacuum cleaner fitted with the soft brush attachment to remove dust and dirt.
- 3. Never use detergents or other solvents to clean the unit.
- 4. Avoid spraying air fresheners, hair spray or other aerosols near the alarm.
- 5. Do not paint the unit. Paint will seal the vents and interfere with the sensor's ability to detect fire or CO.
- 6. Never attempt to disassemble the unit or clean inside. Doing so will void your warranty.
- 7. When removed, place the alarm back in its proper location as soon as possible, to assure continuous protection from fire.
- 8. When household cleaning supplies or similar contaminants are used, the area should be ventilated.

# **Troubleshooting**

PROBLEM	SOLUTION
Your combination smoke and carbon monoxide does not sound during testing.	Please ensure the battery is properly installed in the alarm.  Make sure you push the test/silence button firmly.  Check the installation positioning. The wireless signal might be blocked or out of range.
False alarms triggered intermittently or when residents are cooking, taking showers, etc.	Check the location of your alarm (see "Installation Positioning").     Clean the alarm (see "Maintenance").
LED flashes yellow and the alarm sounds 1 beep every 60 seconds.	The battery is low. <b>Replace the battery immediately.</b>
LED flashes yellow 2 times every 60 seconds with 2 beeps.	The alarm is malfunctioning. Please clean your alarm or push the test/hush button once to attempt to reset the unit. If the problem still occurs, replace the alarm immediately.
LED flashes yellow 3 times every 60 seconds with 3 beeps.	The maximum lifetime (10 years) is reached. Push the test/hush button once to silence for 22 hours. <b>Replace</b> the alarm immediately.

# **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.



# **Manufacturer and Service Information**

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