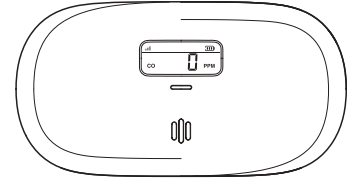
Scan the QR code to view the product model.

X-Sense Electronics Co., Ltd.
Email: support@x-sense.com

X-SENSE | Link+ Pro



XC0C-MR

Carbon Monoxide Alarm

Replaceable Battery

User Manual

F800004000146 V1.0

Contents

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

1 Introduction

This device is a battery-powered Link+ Pro CO (carbon monoxide) alarm with an advanced electrochemical sensor for domestic use.
Please note that this carbon monoxide alarm is designed to detect carbon monoxide gas from any combustion source. This device does not detect smoke, heat, flames or any hazardous gas other than carbon monoxide even though carbon monoxide can be generated by fire. For this reason you must install smoke alarms to provide early warning of fire and to protect you and your family from fire and its related hazards.

⚠ WARNING

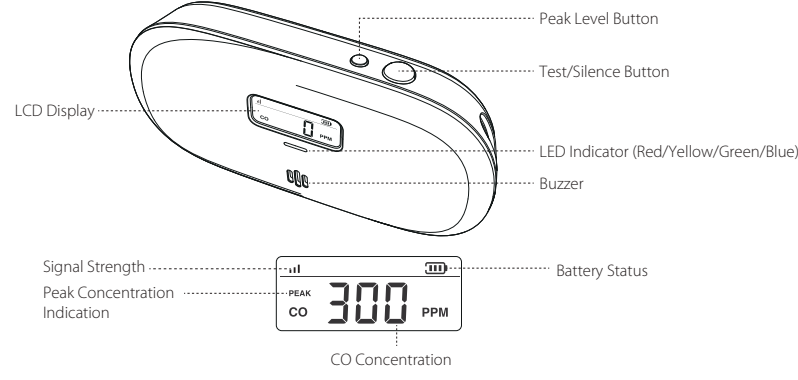
1. CAUTION: READ THE INSTRUCTIONS CAREFULLY BEFORE OPERATING OR SERVICING.
2. THE INSTALLATION OF THE APPARATUS SHOULD NOT BE USED AS A SUBSTITUTE FOR PROPER INSTALLATION, USE AND MAINTENANCE OF FUEL-BURNING APPLIANCES INCLUDING APPROPRIATE VENTILATION AND EXHAUST SYSTEMS.

3. THIS APPARATUS SHOULD BE INSTALLED BY QUALIFIED PERSONNEL.
4. IT IS NOT TESTED FOR USE IN A CARAVAN OR BOAT.
5. THIS PRODUCT IS INTENDED FOR USE IN ORDINARY INDOOR LOCATIONS OF FAMILY LIVING UNITS. IT IS NOT DESIGNED TO MEASURE COMPLIANCE WITH OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA) COMMERCIAL OR INDUSTRIAL STANDARDS.

CAUTION

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

1.1 Product Overview



1.2 Technical Specifications

Power Supply	3 V (⎓) CR123A lithium battery × 1 (replaceable)
Battery Life	5 years (Test once a week)
Maximum Service Life	10 years
Sensor Type	CO: Electrochemical
CO Alarm Response Time	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 Noise Level	≥ 85 dB at 10 ft (3 m) @ 3.2 ± 0.3 kHz pulsing alarm
Silence Duration	≤ 9 minutes
Band	902–928 MHz
Maximum Interconnectable Units	24 wireless units (only compatible with X-Sense Link$^+$ Pro and Link$^+$ wireless alarms).
Maximum Number of Allowed Units	One base station can add up to 50 alarms.
Transmission Range	Over 1,640 ft (500 m) in open air

1.3 Package Contents

CO Alarm

Drill Hole Spacing Indicator Label

CR123A Battery (Pre-installed)

User Manual

Anchor Plugs

Screws

Warranty Card

1.4 CO Concentration and Symptoms

The following symptoms are related to **CARBON MONOXIDE POISONING** and are to be discussed with **ALL** members of the household:

Levels of Exposure	Symptoms
Mild Exposure	Slight headache, nausea, vomiting, fatigue (often described as "flu-like" symptoms).
Medium Exposure	Severe throbbing headache, drowsiness, confusion, fast heart rate.
Extreme Exposure	Unconsciousness, convulsions, cardio-respiratory failure, death.

⚠ WARNING

1. THIS APPARATUS IS DESIGNED TO PROTECT INDIVIDUALS FROM THE ACUTE EFFECTS OF CARBON MONOXIDE EXPOSURE. IT WILL NOT FULLY SAFEGUARD INDIVIDUALS WITH SPECIFIC MEDICAL CONDITIONS. IF IN DOUBT, CONSULT A MEDICAL PRACTITIONER.
2. MANY CASES OF REPORTED CARBON MONOXIDE POISONING INDICATE THAT WHILE VICTIMS ARE AWARE THEY ARE NOT WELL, THEY BECOME SO DISORIENTED THEY ARE UNABLE TO SAVE

THEMSELVES BY EITHER EXITING THE BUILDING OR CALLING FOR ASSISTANCE. YOUNG CHILDREN AND HOUSEHOLD PETS ARE TYPICALLY THE FIRST AFFECTED.

1.5 What to Do When the Alarm Sounds

⚠ WARNING

Actuation of your CO alarm indicates the presence of carbon monoxide (CO) which can KILL YOU. If alarm signal sounds:

1. Operate Test/Silence Button;
2. Call your emergency services (fire department or 911);
3. Immediately move to fresh air—outdoors or by an open door/window. Do a head count to check that all persons are accounted for. Do not reenter the premises nor move away from the open

door/window until the emergency services responders have arrived, the premises have been aired out, and your alarm remains in its normal condition;

4. After following steps 1-3, if your alarm reactivates within 24 hours, repeat steps 1-3 and call a qualified appliance technician to investigate sources of CO from fuel-burning equipment and appliances, and inspect for proper operation of this equipment. If problems are identified during this inspection, have the equipment serviced immediately. Note any combustion equipment not inspected by the technician and consult the manufacturers' instructions, or contact the manufacturers directly, for more information about CO safety and this

equipment. Make sure that motor vehicles are not operating in an attached garage or adjacent to the residence.

1.6 More Detailed Information on Conditions Which Can Result in Transient CO Situations, Such as:

1. Excessive spillage or reverse venting of fuel-burning appliances caused by:
a. Outdoor ambient conditions such as wind direction and/or velocity, including high gusts of wind; heavy air in the vent pipes (cold/humid air with extended periods between cycles).
b. Negative pressure differential resulting from the use of exhaust fans.
c. Simultaneous operation of several fuel-burning appliances competing for limited internal air.
d. Vent pipe connection vibrating loose from clothes dryers, furnaces, or water heaters.
e. Obstructions in unconventional vent pipe designs amplify the above situations.
2. Extended operation of unvented fuel-burning devices (range, oven, fireplace, etc.).
3. Temperature inversions which can trap exhaust gasses near the ground.
4. Car idling in an open or closed attached garage, or near a home.

2 How to Connect

2.1 App Download

Download the X-Sense Home Security App

To download the app, search for "**X-Sense Home Security**" in the Apple App Store or Google Play, or simply scan the QR code. Create an account using a valid email address. If you already have an account, make sure it is updated to the latest version.
NOTE: Make sure your smartphone supports iOS 11 and higher, or Android 8.0 and higher.

2.2 App Features

Device Test: Simply tap the "Device Test" button in the app to test whether the device is functioning properly.
Night Mode: You can use app to activate the night mode and set a specific time period which the LED light will not illuminate periodically to avoid disturbing your sleep.
Device Sharing: You can share the device with your family members and friends. They will receive app push notifications for alarms and have the ability to silence the device, view historical events, etc.

Push Notifications: You can choose to receive app push notifications when any change is made to your system. It is highly recommended that you limit push notifications, as too many notifications can become redundant and load your phone, which can quickly become a nuisance. Furthermore, the more push notifications you allow, the more power your CO alarm will consume, which will reduce battery life.
Record History: To access data or check device status, tap the "History" button on the bottom.
Offline Notifications: Offline notifications are used to notify you if the alarm disconnects from the base station. Note that this notification may not be sent instantly, as the alarm reports to the cloud service center at set intervals.
CO Alarm Precaution: Dangerous CO concentration is detected but has not reached the alarm status. The app will show a "CO Alarm Precaution" message, and an app push notification will be sent to your smartphone. Potentially dangerous CO conditions exist.

2.3 Preparations

Before connecting devices, make sure that:

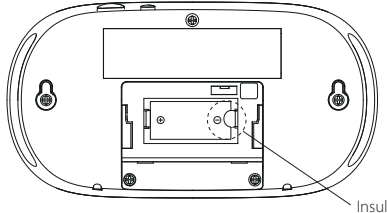
1. You know your Wi-Fi network name and password.
2. You are connecting your device using a 2.4 GHz Wi-Fi network (incompatible with a 5 GHz Wi-Fi network).
3. Make sure the Bluetooth on your phone is turned on.

NOTE: When the device is configured via Wi-Fi, make sure your mobile phone and devices are as close to the router as possible, which can speed up device configuration.

2.4 Power-On Instruction

To Activate the Device

Before use, pull out the insulating film from the battery compartment to power on the device. After the device is turned on, the buzzer will beep once, the LCD backlight will light up, and the LED indicator will flash through 2 cycles (red/yellow/green/blue). The device will then enter standby mode.



2.5 Network Setup Steps

Connect the Link$^+$ Pro Carbon Monoxide Alarm to the Base Station

The Link$^+$ Pro carbon monoxide alarm can be connected to the base station through the wireless network. When the alarm is connected to the base station, you can receive push notifications wherever you are to stay informed of the device status, and to silence an alarm from your smartphone.

NOTE: Before adding devices to the system, make sure the base station has been successfully added to the app.

1. Tap "⊕", select "Carbon Monoxide Alarms", and then select "Link$^+$ Pro CO Alarms (working with SBS50 Base Station)" in the product list. Then select "XC0C-MR".
2. Follow the prompts on the page by pressing the Test/Silence Button twice on the carbon monoxide alarm. The device will beep once and the LED will flash blue rapidly, indicating that the device is waiting to connect to the Wi-Fi.

3. Tap "Next" to add the device. You will hear "Ready to add the device".
4. After successfully connected, the device will beep once and the "Device added" page will appear. Then you can find the carbon monoxide alarm in the device list.
5. If you want to add multiple devices to the system, please repeat the above steps.

NOTE: If you fail to add the carbon monoxide alarm to the network within 60 seconds, it will automatically exit the network configuration. To re-enter the network configuration, you need to repeat the above steps.

Interconnect the Alarms Without Adding to the Base Station

If you don't want to add the carbon monoxide alarms to the base station, you can connect the carbon monoxide alarms using RF technology to create an interconnected alarm system. However, you will no longer be able to receive push notifications on your phone from the X-Sense Home Security app.

NOTE: The XC0C-MR carbon monoxide alarm can be connected to the X-Sense Link$^+$ Pro and Link$^+$ alarms using wireless interconnection without being connected to the base station.

How to Set Up and Interconnect Wireless Alarms

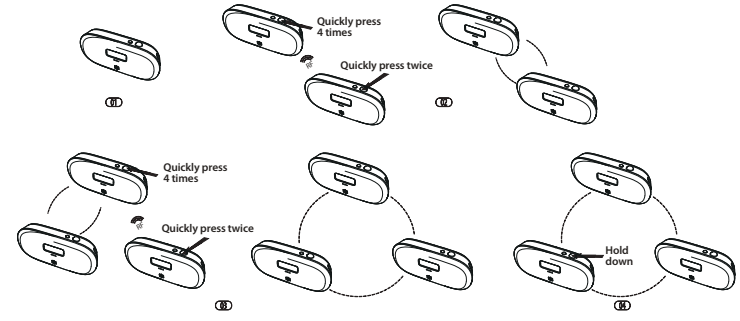
All X-Sense wireless interlinked alarms contain a built-in RF module that enables you to wirelessly connect 2 or more interlinked alarms and create an interlinked network. When one unit is triggered, all interconnected alarms will sound. The X-Sense wireless interconnected alarms contain wireless interlinked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

The X-Sense wireless interlinked alarms in one multi-pack have already been interconnected, and 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. 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 the X-Sense Link⁺ Pro and Link⁺ wireless interlinked alarms only.

How to Interconnect

1. Make sure you only work with 2 units at a time, and make sure that they are both turned on to ensure successful connection.
2. Quickly press the Test/Silence Button on one of the 2 units 4 times. The device will beep once and the LED will flash blue slowly, indicating it has entered pairing mode. Quickly press the Test/Silence Button on the other unit twice. The device will beep once and the LED will flash blue rapidly, indicating it is searching for a device to connect to.
3. After the search is successful, and an interconnected group is created, both units will beep once and automatically exit the pairing mode.
4. If you want to connect a third alarm to this group, quickly press the Test/Silence Button on either of the 2 previously interconnected units 4 times. Then quickly press the Test/Silence Button twice on the third device.
5. To add more units, repeat step 4. Please note that simply press the Test/Silence Button 4 times on any device in the network and twice on the device you want to add. However, for the XH02-M, you should press its Pairing Button located on the back, not the Test/Silence Button on the front.
6. Test the alarms according to the steps in the section "**Alarm Testing After Installation**".



NOTES:

1. The alarm will enter the searching mode or the pairing mode for 60 seconds with the LED flashing blue. After 60 seconds, repeat step 2 to connect the alarms. If necessary, press the Test/Silence Button once while the alarm is in either the searching or pairing mode. This action will stop the LED from flashing blue, the alarm will exit the pairing mode and return to normal operation.

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.

4. The model can only be interconnected with the same model and other X-Sense Link⁺ Pro and Link⁺ wireless interlinked alarms.

2.6 How to Disconnect

Quickly press the Test Button 4 times, and the device will emit a beep and the LED will flash blue slowly. Then, press and hold the Test Button, and the device will emit another beep and the LED will flash blue once quickly. At this point, the device will exit the network and become a standalone device. Afterward, reconnect to the same or a new network.

3 How to Install

3.1 Where to Install

Ideally, a carbon monoxide alarm should be installed in every room containing a fuel-burning appliance, and one in every bedroom. However, if the number of carbon monoxide alarms available is limited, the following guidelines should be considered when choosing the best places to install an alarm(s):

1. If there is a fuel-burning appliance in a bedroom, a CO monitor should be installed.
2. Install an alarm in rooms containing a flueless or open-flued appliance.
3. Install an alarm where residents spend most of their time.
4. In a studio apartment, a CO alarm should be placed as far away from the cooking appliances as possible, but close to where the person sleeps.
5. If the appliance is in a room not normally used (such as a boiler room), the CO alarm should be placed just outside of this room so that the alarm can be heard more easily.

3.2 Improper Locations for Installation

Improper location can affect the sensitive electronic components in this alarm. To avoid causing damage to the unit, to provide optimum performance and to prevent unnecessary nuisance alarms, **do not locate CO alarms** in the following areas:

1. In garages or in any extremely dusty, dirty or greasy areas.
2. Where there is the possibility of smoke or fumes under normal operating circumstances.

3. In poorly ventilated kitchens, garages and furnace rooms. Keep the CO alarms at least 5 feet (1.5 m) from potential smoke or fume sources (e.g. stoves, furnaces, water heaters, space heaters) if possible.
4. In areas where a 5 feet (1.5 m) distance from a potential smoke or fume source is not possible. In modular, mobile or smaller houses, it is recommended the CO alarm be placed as far from any potential smoke or fume sources.
5. Within 5 feet (1.5 m) of any cooking appliance.
6. In extremely humid areas. This alarm should be at least 10 feet (3 m) from a bath or shower, sauna, humidifier, vaporizer, dishwasher, laundry room, utility room or other source of high humidity.
7. In areas where the temperature is colder than 40°F (4.4°C) or hotter than 100°F (37.8°C). For example, non-air-conditioned crawl spaces, unfinished attics, uninsulated or poorly insulated ceilings, porches and garages.
8. Where the air is turbulent, such as near ceiling fans, heat vents, air conditioner vents, fresh air return vents, or open windows. Excessive air flow may prevent any CO from reaching the sensors.
9. In direct sunlight.

3.3 Specific Locations of Installation

Installing a CO alarm in a room with a fuel-burning appliance (see Figure 1):

1. If it is mounted on a wall, it should be installed at a height greater than the height of any door or window, but should still be at least 5.9 inches (150 mm) below the ceiling.
2. The CO alarm should have a horizontal distance between 3.3 feet (1 m) and 10 feet (3 m) from any potential CO source.
3. If there is a partition in the room, the CO alarm should be installed on the same side of the partition as the potential CO source.

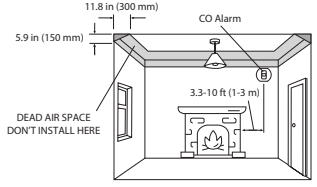


Figure 1: Installation in a room with a fuel-burning appliance

Installing the CO alarm in a bedroom or room without a fuel-burning appliance (see Figure 2):

1. Mount the CO alarm relatively close to the breathing zone of the occupant.
2. Install the alarm such that the LED indicator is viewable when the occupant is near the alarm.

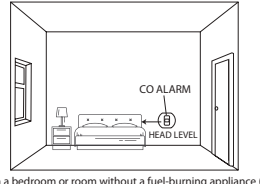


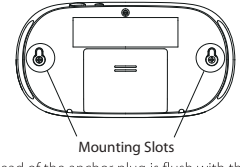
Figure 2: Installation in a bedroom or room without a fuel-burning appliance (installed at head level)

NOTE: Due to the product's unique design and unfixed installation, it is not recommended to install it on a ceiling, as it is prone to falling off and causing injuries to people.

3.4 Installation Instructions

Wall Mounting

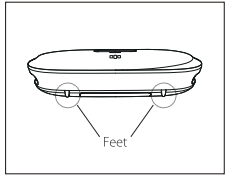
1. Choose a suitable installation location by referring to the "**How to Install**" section.
2. Remove the indication sticker from the packaging and refer to the hole locations on the sticker. Draw two screw holes according to the size and layout of the mounting holes on the back of the product. Drill the screw holes 1.18 inches (30 mm) deep using a Ø1/4 inch (6 mm) drill bit. Note that the distance between the centers of the two holes is 4.4 inches (112 mm).

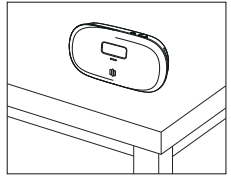


3. Insert the anchor plug into the screw hole and hammer it in until the head of the anchor plug is flush with the wall.
4. Use the two provided screws or 3.5 × 25 mm countersunk screws to screw into the two anchor plugs. Be sure to leave a 1/5 inch (5 mm) gap between the head of the anchor plugs and the screws, which will allow for easy device mounting.
5. Mount and lock the device onto the wall by aligning the two mounting slots on the back of the device with the screws on the wall.
6. Test the device by pushing the Test Button to make sure that the device is functioning properly.

Place on flat surfaces

The base of the detector has two feet built into the design that allow it to stand freely on a flat surface.





*NOTE: When placing on a shelf, please adhere to the recommended placement as described in "**How to Install**".*

3.5 Alarm Testing After Installation

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

	Test a Single Alarm	**Test All Interconnected Alarms**
Action	1. Press the Test/Silence Button. 2. Tap the "Device Test" button in its "Device Settings" page in the app.	Hold down the Test/Silence Button.

Device Response	1. When the LCD lights up, the device runs a sensor self-check. If a fault is detected, the LED will flash yellow twice every 60 seconds accompanied by two beeps, and the LCD will display "E03/E04". If no fault is detected, the LED will flash red 4 times continuously with beeps, repeating for 2 cycles. 2. During this period, the LCD sequentially displays "---", "PAS", then the backlight turns off. The LCD returns to standby mode indicating normal working status. 3. If there is an error during the self-test, the LCD will display corresponding patterns according to the current device status, such as low battery and end of life, displaying "Lb" and "End" respectively. 4. When the test mode is finished and the device is functional, it will beep once with the LED flashing green once.	1. The initially triggered device will beep continuously with the LED flashing red. 2. Other interconnected alarms in the network will receive the test 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. 3. The testing of the units should be completed within 2 minutes. 4. After testing, the units will automatically enter standby mode.

	NOTES: *1. After the device connects to the base station and completes the test, the user's mobile app will receive a notification of test result, such as "Normal Working Status", "Device Malfunction", "Low Battery", or "End-of-Life", along with related push notifications.* *2. If the device has previously triggered an alarm, it will store an alarm memory. After the LED flashes green at the end of the self-test, the LED will stay on red for 2 seconds, and the LCD screen will display the peak CO alarm value.*	

*NOTE: The test function accurately tests the alarm's CO-sensing circuit without the need to test CO. If your CO alarm fails to emit an audible test signal, refer to the "**Troubleshooting**" section at the end of this manual immediately.*

3.6 Battery Replacement

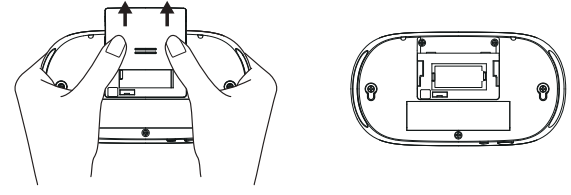
When the LCD displays the "Lb" message, the LED indicator flashes yellow once every 60 seconds and the buzzer beeps, remove the old battery and replace it with a new battery.

After replacing the new battery in the device and ensuring that it is powered on successfully, the device will operate normally. For indications of battery replacement, refer to the "**Audio-Visual Indicators**" section.

NOTE: Rechargeable batteries are not allowed, as others may negatively impact operation.

Follow the process below to open the battery compartment cover:

Hold the alarm with both hands and put your thumbs on both ends of the battery compartment cover. Then, push the cover upwards with some force to remove it.



⚠ WARNING

1. KEEP NEW OR OLD USED BATTERIES OUT OF REACH OF CHILDREN.
2. In the event of a battery leaking, do not allow the liquid to come into contact with the skin or eyes. If contact has been made,

wash the affected area with copious amounts of water and seek medical advice immediately.

3. NEVER charge a battery unless it is a rechargeable battery.
4. Do not mix alkaline, standard (carbon-zinc) or rechargeable (Ni-Cd; Ni-MH) batteries.
5. Different types of batteries or new and used old batteries are not to be mixed. Do not mix batteries of different manufacturers, capacities, or sizes.
6. Batteries must be inserted with the correct polarity. Replacement of a battery with an incorrect type can defeat the safeguard. There will be a risk of fire or explosion if a battery is replaced by an incorrect type.
7. Constant exposure to high or low temperatures or high humidity may reduce battery life.
8. Use only batteries specified in marking. Use of a different battery may have a detrimental effect on alarm operation.
9. Test the alarm for correct operation using the test facility, whenever the battery is replaced.

4 Functions' Overview

4.1 The Test/Silence Button

The Test/Silence Button is used to test the unit's electronics and to silence the unit during an alarm.
Shortly press the Test Button and you will hear a short beep, indicating that the alarm has entered the test mode. A test push notification will be sent to your smartphone by the app. Please refer to the "**Alarm Testing After Installation**" section for further information. The alarm goes back to the standby mode after testing.
NOTE: After a test has begun, the alarm will sound and the LED indicator will flash red. This does not indicate that CO is present. If you press the Test Button during an alarm state, the unit will enter the silence mode.