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GEMC-WL-CO

SUPERVISED WIRELESS CARBON MONOXIDE DETECTOR INSTALLATION INSTRUCTIONS

LEAVE THESE INSTRUCTIONS WITH THE SYSTEM OPERATOR

WI2118 04/15

OVERVIEW

The GEMC-WL-CO is a high-quality UL 2075 carbon monoxide (CO) detector with built-in supervised digitally-coded radio transmitter. It is compatible with Napco's GEM-RECV and GEMC-RECV Series supervised receivers that monitor alarms, restores, low battery, tamper and status. **Note:** See Control Unit installation instructions for compatibility.

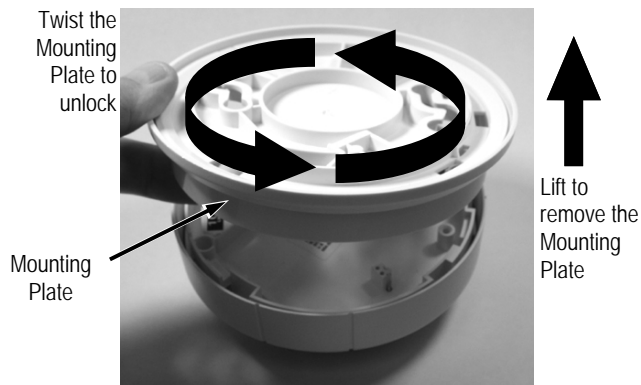
During normal operation, when unit is in standby mode and is within proper sensitivity limits, the green LED on the GEMC-WL-CO flashes once every 10 seconds. When CO is detected, the GEMC-WL-CO sounds a local alarm and the transmitter sends an alarm signal to the supervised receiver. The alarm signal is repeated as long as CO is still present. A restore report is sent when the CO detection chamber clears. Supervision status reports are sent from the GEMC-WL-CO every minute.

Note: Coding switches are not required or used in the GEMC-WL-CO; each transmitter is assigned a unique identification code number at the factory.

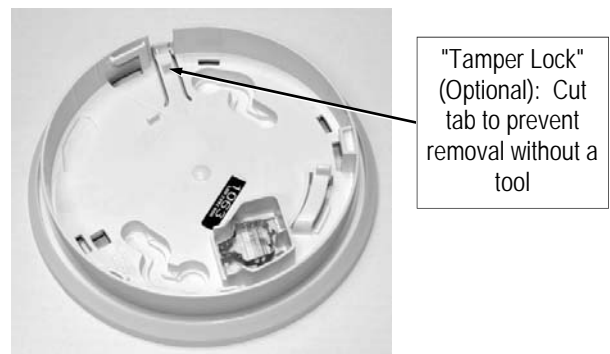
The GEMC-WL-CO must be installed in accordance with the National Fire Protection Association (NFPA) Standard 720.

INSTALLATION STEPS

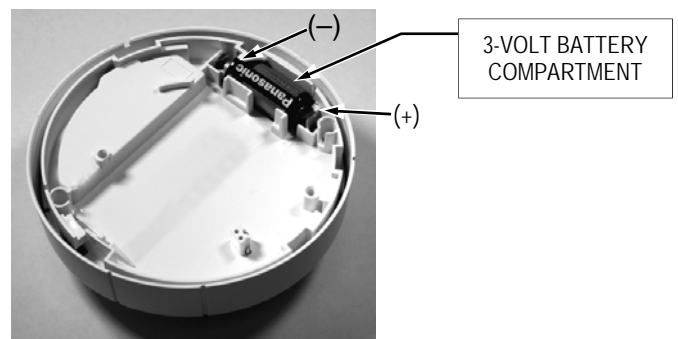
1. Remove the Mounting Plate. Remove the GEMC-WL-CO Mounting Plate by turning the Plate counter-clockwise and pulling it up.



2. Identify components. Examine the GEMC-WL-CO to identify the component locations. Take note of the "Tamper Lock" tab located on the inside of the Mounting Plate (see image below). Optionally, cut this "Tamper Lock" tab to prevent the removal of the GEMC-WL-CO from the Mounting Plate without using a tool (such as a screwdriver).



3. Install battery. Place one 3-volt lithium *Duracell*, *Panasonic*, *Varta* or *Sanyo* type "123A" battery in its compartment, observing correct polarity. Enroll the GEMC-WL-CO into the control panel before mounting. During power up and status initialization, both the green and red LED's blink four times every 10 seconds in unison. Then look for the "standby" indication where the green LED blinks once every 10 seconds.



Low Battery Warning

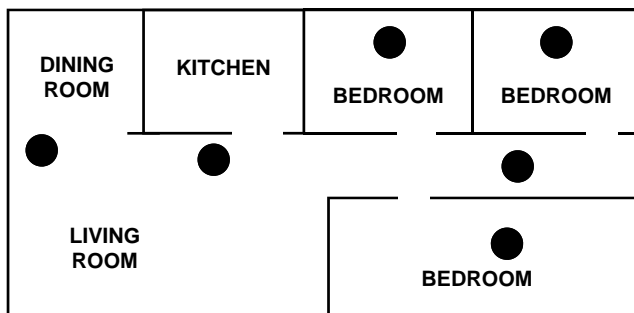
The CO detector and transmitter are powered by one 3-volt lithium battery (supplied) that can power

the unit for at least one year. If battery voltage drops below normal, the red LED will flash every 45 seconds and a low battery report will be sent to the control panel. If the voltage is still below normal after 7 days, the detector sounder will chirp. The battery should be replaced immediately. Operation of the detector cannot be assured after an additional 7 days of low-battery indication. A low-battery report is sent to the receiver with any status transmission.

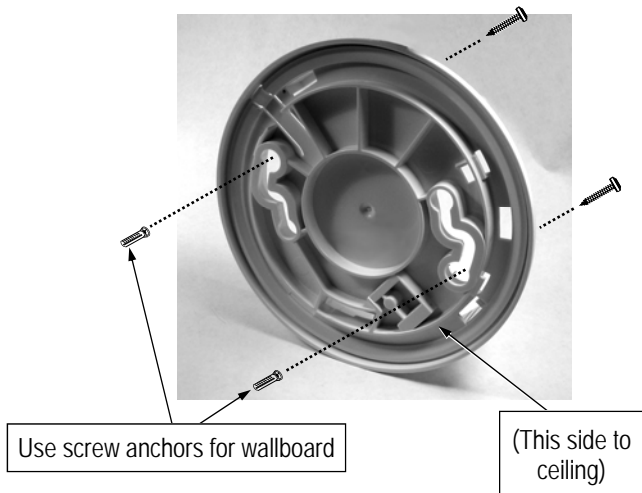
NOTE: Temperature and humidity extremes may reduce the life of the battery.
Use Only Battery Specified In Marking. Use of A Different Battery May Have A Detrimental Effect On Detector Operation.

4. Pick CO-detector location. The GEMC-WL-CO must be installed in accordance with the National Fire Protection Association (NFPA) Standard 720. Refer to figures in "**Recommended Installation Locations**" (on page 3) and all text on pages 3 and 4.

Note: *Mounting the GEMC-WL-CO on foil-backed wallpaper is NOT recommended because the radio range will be reduced.*



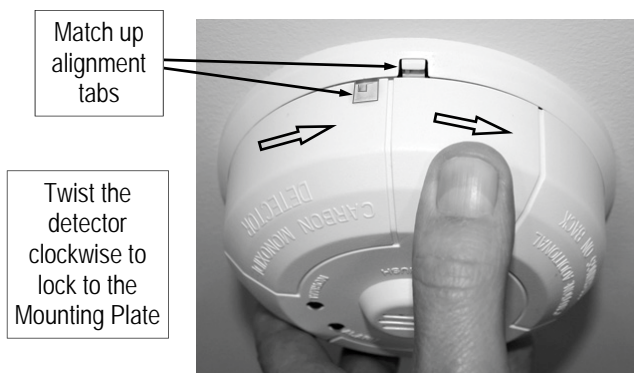
5. Install mounting plate. Use two screws and hardware appropriate for the mounting surface to secure the mounting plate to the wall or ceiling.
NOTE: Do not install on removable surfaces such as ceiling tiles.



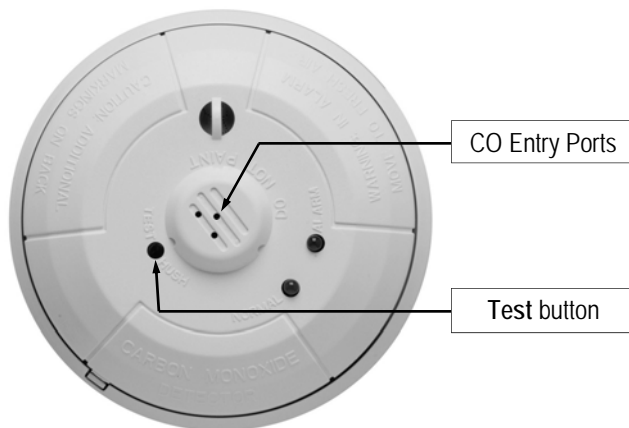
6. Map the GEMC-WL-CO Transmitter. Referring to the installation instructions for the control panel and keypad in use, enter the following:

- the zone to which the transmitter will be mapped
- the 6-digit RF identification number / 1-digit checksum number printed on the transmitter (include all numbers and/or letters and leading zeros, if any)
- the transmitter point number "1"

7. Attach the GEMC-WL-CO to Mounting Plate. Match up alignment tabs on the detector and the Mounting Plate. Turn detector clockwise until it locks into place (see next image).



8. Test system weekly with unit mounted and by pressing the TEST button (shown in next image). Perform the **FUNCTIONAL GAS TEST** annually (if required by the AHJ) as described in the next section.



FUNCTIONAL GAS TEST MODE

Note: Check with local codes and the AHJ to determine if a functional gas test is desired for an installation. If the system is monitored, notify central station

of the impending test.

A canned CO testing agent may be used to verify the ability of the GEMC-WL-CO to sense CO by utilizing the Functional Gas Test Mode. To perform the functional gas test, follow these steps:

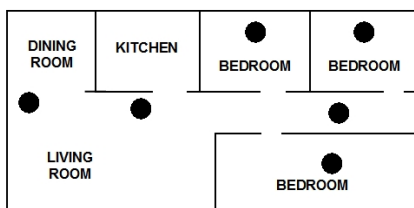
- With a small screwdriver, depress and hold the recessed "TEST" button for approximately 2 seconds. The detector will temporarily go into alarm and the red LED will illuminate.
- Within a few seconds the green LED will start to blink rapidly indicating the detector is in a speed up, functional test mode, awaiting gas entry.
- Spray a very small amount of Solo brand C6 canned CO into one of the 3 small gas entry holes located on the top center of the detector.
- Upon successful gas entry and if functioning properly, the detector will alarm by sounding in a Temporal-4 pattern with the red LED blinking. An alarm signal will be sent to the control panel, providing verification of the alarm signal.
- The alarm condition at the detector will time out in 20 to 60 seconds or when the CO gas has cleared.
- If gas entry is unsuccessful, the test will time out after 27 seconds.

VISIBLE & AUDIBLE INDICATIONS

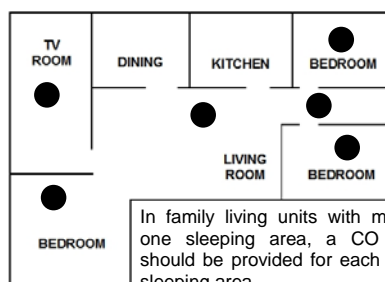
(In priority order, starting with highest priority)

- Red and green LED blink every 10 seconds for a total of 4 times (no sound produced) = "Power On Reset" condition.
- Sounder and red LED on once a second = **Carbon Monoxide Alarm!** The control panel produces the standard CO Alarm repeating cadence of "4 beeps, 5-second pause, 4 beeps", repeatedly, until the CO condition is cleared. **To Temporarily Silence:** Press and hold the recessed **TEST / HUSH** button for 10 seconds to temporarily silence the unit for 5 minutes.
- Red LED blinks once every 5 seconds; sounder chirp every 45 seconds = **CO Trouble / Calibration.** (Note: Transmits a trouble to the control panel).
- Green LED blinks once every 10 seconds = **Tamper condition.** (Note: Transmits a trouble to the control panel).
- Red LED blinks once every 10 seconds; sounder chirp every 45 seconds = **End of Life Warning.** The unit has reached the end of its operational life and will no longer detect the presence of carbon monoxide. The unit can NOT be made operational and therefore MUST be replaced. (Note: Transmits

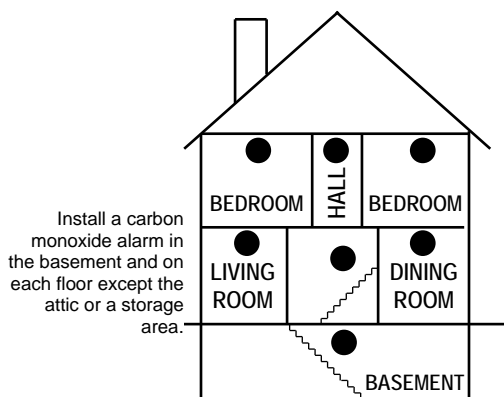
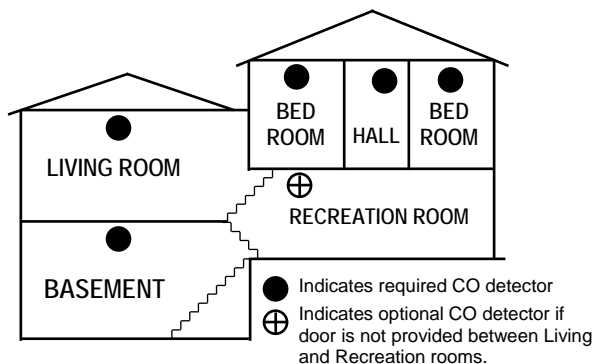
RECOMMENDED INSTALLATION LOCATIONS



A CO detector should be located in every sleeping area, in each of the other family living units, but just outside the kitchen.



In family living units with more than one sleeping area, a CO detector should be provided for each separate sleeping area.



Install a carbon monoxide alarm in the basement and on each floor except the attic or a storage area.

a trouble to the control panel).

- Red LED blinks once every 45 seconds; chirps after 7 days = Low Battery. Chirp Silence: Press recessed **TEST / HUSH** button to temporarily disable the Low Battery Chirp ("sleep") for 12 hours.
- Green LED blinks every 10 seconds (sounder is silent) = **Normal** standby operation.

CO ALARM PROCEDURE

When a carbon monoxide alarm occurs:

1. Immediately evacuate the premises and move to fresh air, either outdoors or by an open door or window.
2. Call emergency services (Fire Department or 911)
3. Ensure that all persons previously within the premises are accounted for. **Do not re-enter the premises until authorized by emergency service responders.**
4. If the CO alarm reactivates, repeat steps 1-3 and call a qualified service technician to investigate all possible sources of carbon monoxide, such as from fuel burning appliances and other equipment, and repair all problems found immediately. Note any equipment not inspected and refer to the equipment manufacturer's documentation, or contact the manufacturer's directly for more information about how the equipment can leak carbon monoxide into the premises. Ensure all motor vehicles are not, and have not been, operating in an attached garage, operating adjacent to the premises, or operating next to ventilation fresh air intake vents. Never restart the source of a CO problem until it has been corrected.
5. If the CO condition that caused the alarm continues, the alarm will reactivate. Never ignore the sound of the alarm! If the CO alarm resounds, the detector is sensing levels of CO that can quickly become a dangerous situation. **EVACUATE IMMEDIATELY** (repeat steps 1-4).

MAINTENANCE

To keep your detector in functioning correctly, you must:

- Test the unit once a week by pressing the Test/Hush button (insert a non-conductive pointed object, such as a toothpick)
- Carefully vacuum the unit cover once a month to remove accumulated dust
- Never use detergents or solvents to clean the unit. Chemicals can permanently damage or temporarily contaminate the sensor
- Do not spray air fresheners, hair spray, paint or other aerosols near the unit

- Do not paint the unit, as paint will seal the vents and interfere with proper sensor operation

Move the CO detector to a safe and remote location to prevent damage or contamination prior to performing any of the following:

- Staining or stripping floors or furniture, painting or wall-papering
- Using aerosols or adhesives

Note: A Tamper / Trouble signal will be sent to the control panel when the detector is removed from the base. **IMPORTANT:** Reinstall the CO detector as soon as possible to assure continuous protection.

The following lists possible substances that at some levels can damage the sensor or cause false alarms:

- Ethylene, ethanol, alcohol, iso-propanol, benzene, toluene, ethyl acetate, hydrogen, hydrogen sulfide and sulfur dioxide
- Most aerosol sprays, alcohol based products, paint, thinners, solvents, adhesives, hair spray, after shave, perfume, auto exhaust, cleaning agents, etc.

LOCATIONS TO AVOID

IMPORTANT: Improper mounting locations can damage the electronic components within the detector. To avoid damage, to provide optimum performance and to avoid false alarms, proceed as follows:

- Do NOT install in kitchens, garages, furnace rooms or in areas that may expose the sensor to substances that could damage or contaminate it
- Do NOT install in areas where the temperature is colder than 32°F (0°C) or hotter than 122°F (49°C) such as crawl spaces, attics, porches and garages
- Do NOT install within 5 feet of heating or cooking appliances. (we recommend 15 feet to prevent false alarms)
- Do NOT install near vents, flues, chimneys or any forced/unforced air ventilation openings
- Do NOT install near ceiling fans, doors, windows or areas directly exposed to the weather
- Do NOT install in dead air spaces, such as peaks of vaulted ceilings or gabled roofs, where CO may not reach the sensor in time to provide early warning
- Do NOT install this unit near deep-cell large batteries, as these batteries may have emissions that can cause the detector to perform at less than optimum performance
- Do NOT obstruct the vents located on the unit
- Do not mount the unit where drapes, furniture or other objects can block the flow of air to the detector

GENERAL WARNINGS

- Read these installation instructions in their entirety before installing the GEMC-WL-CO detector. Leave these instructions with the owner/user of the detector.
- The GEMC-WL-CO is intended for use in indoor locations only
- Failure to properly install, test and/or maintain the GEMC-WL-CO may cause it to fail, potentially resulting in loss of life
- Installation of this detector is not a substitute for proper installation, use, and maintenance of fossil fuel-burning appliances, including appropriate ventilation and exhaust systems
- To reduce the risk of carbon monoxide poisoning, test detector operation weekly
- Do not paint the detector

Carbon monoxide detectors are NOT smoke detectors. A carbon monoxide detector is NOT a substitute for smoke detectors. This carbon monoxide detector is specifically designed to detect the presence of carbon monoxide gas and is NOT designed nor intended to detect smoke, fire or any other gas. In addition, this detector will only indicate the presence of carbon monoxide *at the sensor*; carbon monoxide gas may be present within other areas of the premises.

CARBON MONOXIDE POISONING

The following are some of the possible carbon monoxide poisoning symptoms that should be presented to and discussed with all occupants of the protected premises:

- **Mild exposure:** "Flu-like" symptoms, including but not limited to slight headache, nausea, vomiting, fatigue, runny nose and sore eyes
- **Medium exposure:** Severe throbbing headache, dizziness, drowsiness, confusion, fast heart rate
- **Extreme exposure:** Loss of consciousness, brain damage, convulsions, cardio-respiratory failure, death

Often cases of reported CO poisoning indicate that while victims are aware they are unwell, they become so disorientated that they are unable to save themselves by either exiting the building or calling for assistance. Young children and pets may be the first affected.

SOURCES OF CARBON MONOXIDE

Potential carbon monoxide sources include fuel-fired appliances (space heaters, furnaces, water heaters, ranges, ovens, clothes dryers); other sources (kerosene-burning stove or heater, or gas log fireplace); or internal combustion engines. In addition, excessive exhaust spillage or reverse venting of fuel-burning appliances can produce dangerous transient levels of CO. This can be caused by external conditions, such as:

- Wind direction, velocity, or a combination of both, including high gusts of wind or insufficient draft in vent pipes
- Temperature inversions that can trap exhaust gases near the ground
- Negative pressure differential resulting from the use of exhaust fans
- Simultaneous operation of several fuel-burning appliances competing for limited internal air
- Vent pipe connections vibrating loose from dryers, furnaces, or water heaters
- Obstructions in vent pipes or unconventional vent pipe designs that can amplify the above situations
- Poorly designed or maintained chimneys and/or vents
- Extended operation of unvented fossil fuel-burning devices (range, oven, fireplace, etc.)
- Idling cars in an open or closed attached garage, or near the premises

GENERAL LIMITATIONS OF CARBON MONOXIDE DETECTORS

This detector is designed to protect individuals from the severe effects of CO exposure. It will not fully safeguard individuals with specific medical conditions. If in doubt, consult a medical practitioner.

If the unit is in trouble or has arrived at the end of its life, it may not sense CO and cannot be relied upon to monitor CO levels. Replace the CO detector by the date specified on the unit or when the detector indicates an end of life condition, whichever comes first. CO detectors are not a substitute for designated life safety devices. Napco does not warrant or imply in any way that a CO detector will protect lives from CO poisoning. These detectors should only be considered as an integral part of a comprehensive safety program.

SPECIFICATIONS

Electrical Ratings

Input Power: Powered by a 3-volt lithium battery. Use one 3-volt lithium Duracell DL123A, Varta CR123A, Panasonic CR123A or Sanyo CR123A.

Dimensions (WxLxD) 5-3/8 x 5-3/8 x 2-1/8" (13.7 x 13.7 x 5.4cm)

Operating Environment

Temperature 32°F to 122°F (0°C to 49°C)

Relative humidity 15% - 95% RH

Regulatory Information

Manufacturer: Napco Security Technologies, Inc. 333 Bayview Avenue, Amityville, NY 11701

UL rating This detector has been evaluated to the CO detector sensitivity limits of UL 2075 / UL 2034.

Environmental class Indoor, in accordance with the Operating Environment specifications.

NOTES

NAPCO LIMITED WARRANTY

NAPCO SECURITY SYSTEMS, INC. (NAPCO) warrants its products to be free from manufacturing defects in materials and workmanship for thirty-six months following the date of manufacture. NAPCO will, within said period, at its option, repair or replace any product failing to operate correctly without charge to the original purchaser or user.

This warranty shall not apply to any equipment, or any part thereof, which has been repaired by others, improperly installed, improperly used, abused, altered, damaged, subjected to acts of God, or on which any serial numbers have been altered, defaced or removed. Seller will not be responsible for any dismantling or reinstallation charges.

THERE ARE NO WARRANTIES, EXPRESS OR IMPLIED, WHICH EXTEND BEYOND THE DESCRIPTION ON THE FACE HEREOF. THERE IS NO EXPRESS OR IMPLIED WARRANTY OF MERCHANTABILITY OR A WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE. ADDITIONALLY, THIS WARRANTY IS IN LIEU OF ALL OTHER OBLIGATIONS OR LIABILITIES ON THE PART OF NAPCO.

Any action for breach of warranty, including but not limited to any implied warranty of merchantability, must be brought within the six months following the end of the warranty period.

IN NO CASE SHALL NAPCO BE LIABLE TO ANYONE FOR ANY CONSEQUENTIAL OR INCIDENTAL DAMAGES FOR BREACH OF THIS OR ANY OTHER WARRANTY, EXPRESS OR IMPLIED, EVEN IF THE LOSS OR DAMAGE IS CAUSED BY THE SELLER'S OWN NEGLIGENCE OR FAULT.

In case of defect, contact the security professional who installed and maintains your security system. In order to exercise the warranty, the product must be returned by the security professional, shipping costs prepaid and insured to NAPCO. After repair or replacement, NAPCO assumes the cost of returning products under warranty. NAPCO shall have no obligation under this warranty, or otherwise, if the product has been repaired by others, improperly installed, improperly used, abused, altered, damaged, subjected to accident, nuisance, flood, fire or acts of God, or on which any serial numbers have been altered, defaced or removed. NAPCO will not be responsible for any dismantling, reassembly or reinstallation charges.

This warranty contains the entire warranty. It is the sole warranty and any prior agreements or representations, whether oral or written, are either merged herein or are expressly canceled. NAPCO neither

assumes, nor authorizes any other person purporting to act on its behalf to modify, to change, or to assume for it, any other warranty or liability concerning its products.

In no event shall NAPCO be liable for an amount in excess of NAPCO's original selling price of the product, for any loss or damage, whether direct, indirect, incidental, consequential, or otherwise arising out of any failure of the product. Seller's warranty, as hereinabove set forth, shall not be enlarged, diminished or affected by and no obligation or liability shall arise or grow out of Seller's rendering of technical advice or service in connection with Buyer's order of the goods furnished hereunder.

NAPCO RECOMMENDS THAT THE ENTIRE SYSTEM BE COMPLETELY TESTED WEEKLY.

Warning: Despite frequent testing, and due to, but not limited to, any or all of the following; criminal tampering, electrical or communications disruption, it is possible for the system to fail to perform as expected. NAPCO does not represent that the product/system may not be compromised or circumvented; or that the product or system will prevent any personal injury or property loss by burglary, robbery, fire or otherwise; nor that the product or system will in all cases provide adequate warning or protection. A properly installed and maintained alarm may only reduce risk of burglary, robbery, fire or otherwise but it is not insurance or a guarantee that these events will not occur. CONSEQUENTLY, SELLER SHALL HAVE NO LIABILITY FOR ANY PERSONAL INJURY, PROPERTY DAMAGE, OR OTHER LOSS BASED ON A CLAIM THE PRODUCT FAILED TO GIVE WARNING. Therefore, the installer should in turn advise the consumer to take any and all precautions for his or her safety including, but not limited to, fleeing the premises and calling police or fire department, in order to mitigate the possibilities of harm and/or damage.

NAPCO is not an insurer of either the property or safety of the user's family or employees, and limits its liability for any loss or damage including incidental or consequential damages to NAPCO's original selling price of the product regardless of the cause of such loss or damage.

Some states do not allow limitations on how long an implied warranty lasts or do not allow the exclusion or limitation of incidental or consequential damages, or differentiate in their treatment of limitations of liability for ordinary or gross negligence, so the above limitations or exclusions may not apply to you. This Warranty gives you specific legal rights and you may also have other rights which vary from state to state.

RADIO AND TELEVISION INTERFERENCE

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and the receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Changes and Modifications not expressly approved by Napco can void your authority to operate this equipment under Federal Communications Commissions rules.

NAPCO SECURITY TECHNOLOGIES, INC.

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