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With Care.

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1 & 2-WAY SMOKE & HEAT DETECTOR

MODEL: RWX34S

INSTALLATION INSTRUCTIONS

GENERAL DESCRIPTION

RISCO Group's RWX34S Wireless Smoke and Heat Detector combines advanced technologies within a compact and streamlined design, the ideal choice for homeowners seeking the highest safety standards.

Smoke is detected employing an advanced photoelectric chamber, while temperature is monitored with two separate heat sensors that measure the rate-of-rise, as well as the absolute temperature. With a choice of selecting either smoke or heat detection or a combination the two, the Smoke and Heat Detector offers a more sensitive and dependable product for early detection of fire hazards in different environments with a reduced risk of false alarms.

The Smoke Detector is EN14604:2005/AC:2008 certified, easy to install, and is compatible with all RISCO Group's 1 and 2-way wireless systems.

Main Features:

- Wireless, combined smoke and heat detection
  - Heat-only mode enables installing in harsh environments, such as kitchens or bathrooms
  - Earlier detection is achieved from fast temperate rate-of-rise before smoke is detected
- Simple battery replacement performed by the customer
- Two heat sensors measuring the fixed temperature and rate-of-rise provide accurate readings and high false-alarm immunity
- Compatible with all RISCO Group's 1 and 2-way wireless systems
- Visual LED indicates alarms, standby mode, and low battery
- Built-in test button activates the self test and alarm-sounding
- 85dB alarm sound
- Powered by two CR123 3V lithium batteries (supplied)
- Cover and wall tampers

WARNINGS:
This smoke and heat detector is designed for use in a single residential unit only, which means that it should be used inside a single family home or apartment. It is not meant to be used in lobbies, hallways, basements, or another apartment in multi-family buildings, unless there are already working detectors in each family unit. Smoke and heat detectors placed in common areas outside of the individual living unit, such as on porches or in hallways, may not provide early warning to residents. In multi-family buildings, each family living unit should set up its own detectors. This detector is not to be used in non-residential buildings. Warehouses, industrial or commercial buildings, and special purpose non-residential buildings require special fire detection and alarm systems. This detector alone is not a suitable substitute for complete fire detection systems for places where many people live or work, such as hotels or motels. The same is true of dormitories, hospitals; nursing homes or group homes of any kind, even if they were once single-family homes. Please refer NFPA 101, the Life Safety Code, NFPA71, 72A, 72B, 72C, 72D, and 72E for smoke and heat detector requirements for fire protection in buildings not defined as "households".

SELECTING A LOCATION

Smoke and heat detectors should be installed in accordance with the NFPA Standard 74 (National Fire Protection Association, Batterymarch Park, Quincy, MA 02169). For complete coverage in residential units, smoke and heat detectors should be installed in all rooms, halls, storage areas, basements, and attics in each family living unit. Minimum coverage is one detector on each floor and one in each sleeping area and attic in each family living unit.

♦ Install a smoke and heat detector in the hallway outside every separate bedroom area, as shown in Figure 1. Two detectors are required in homes with two bedroom areas, as shown in Figure 2.

♦ Install a smoke and heat detector on every floor of a multi-floor home or apartment, as shown in Figure 3.

♦ Install a minimum of two detectors in any household.

♦ Install a smoke and heat detector inside every bedroom.

♦ Install smoke and heat detectors at both ends of a bedroom hallway if the hallway is more than 40 feet (12 meters) long.

♦ Install a smoke and heat detector inside every room where one sleeps with the door partly or completely closed, since smoke could be blocked by the closed door and a hallway alarm may not wake up the sleeper if the door is closed.

♦ Install basement detectors at the bottom of the basement stairwell.

♦ Install second-floor detectors at the top of the first-to-second floor stairwell.

♦ Be sure no door or other obstruction blocks the path of smoke to the detector.

♦ Install additional detectors in your living room, dining room, family room, attic, utility and storage rooms.

♦ Install smoke and heat detectors as close to the center of the ceiling as possible. If this is not practical, put the detector on the ceiling, no closer than 4 inches (10 cm) from any wall or corner, as shown in Figure 4.
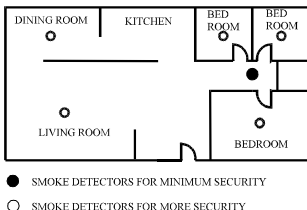

● SMOKE DETECTORS FOR MINIMUM SECURITY

○ SMOKE DETECTORS FOR MORE SECURITY

Figure 1: Locations for placing smoke detectors for single residence with only one sleeping area
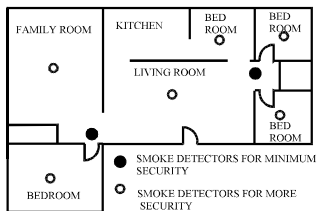

Figure 2: Locations for placing smoke and heat detectors for single-floor residence with more than one sleeping area

- ♦ If ceiling mounting is not possible and wall mounting is permitted by your local and state codes, put wall-mounted detectors between 4 and 6 inches (10 ~ 15 cm) from the ceiling, also see
- ♦ Figure 4.
- ♦ If some of your rooms have sloped, peaked, or gabled ceilings, try to mount detectors 3 feet (0.9 meter) measured horizontally from the highest point of the ceiling as shown in Figure 5.
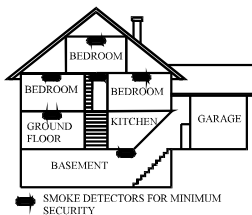

SMOKE DETECTORS FOR MINIMUM SECURITY

Figure 3: Location for placing smoke and heat detectors for a multi-floor residence

CAUTION:
(As required by the California State Fire Marshall)

"Early warning fire detection is best achieved by the installation of fire detection equipment in all rooms and areas of the household as follows: (1) A smoke and heat detector installed in each separate sleeping area (in the vicinity, but outside of the bedrooms), and (2) Heat or smoke and heat detectors in the living rooms, dining rooms, bedrooms, kitchens, hallways, attics, furnace rooms, closets, utility and, storage rooms, basements and attached garages." For your information, NFPA Standard 74, Section 2-4 reads as follows:

"2-4.1.1 Smoke and heat detectors shall be installed outside of each separate sleeping area in the immediate vicinity of the bedrooms and on each additional story of the family living unit including basements and excluding crawl spaces and unfinished attics."

The provisions of 2-4.1.1 represent the minimum number of detectors required by this standard. It is recommended that the householder consider the use of additional smoke and heat detectors for increased protection for those areas separated by a door from the areas protected by the required smoke and heat detectors under 2-4.1.1 above. The recommended additional areas are living room, dining room, bedroom(s), kitchen, attic (finished or unfinished), furnace rooms, utility room, basement, integral or attached garage, and hallways not included in 2-4.1.1 above. However, the use of additional detectors remains the option of the householder." We recommend complete coverage and use of additional smoke and heat detectors.
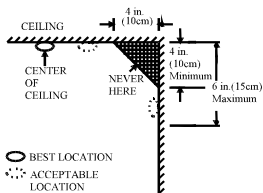

CEILING
CENTER OF CEILING
NEVER HERE
4 in. (10cm)
4 in. (10cm) Minimum
6 in.(15cm) Maximum

⬭ BEST LOCATION
⋰ ACCEPTABLE LOCATION

Figure 4: Recommended best and acceptable locations to mount smoke and heat detectors
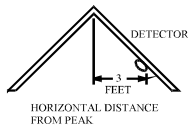

DETECTOR
3 FEET
HORIZONTAL DISTANCE FROM PEAK

Figure 5: Recommended location to mount smoke and heat detectors in rooms with sloped, gabled, or peaked ceiling

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WHERE NOT TO INSTALL YOUR SMOKE AND HEAT DETECTORS

False alarms occur when smoke and heat detectors are installed where they will not work properly. To avoid false alarms, **do not** install smoke and heat detectors as follows:

♦ In the path of fresh air intake. The in-and-out flow of fresh air can drive smoke away from the smoke and heat detector; thus reducing its efficiency. Figure 6 indicates the correct and incorrect locations concerning this problem.

♦ Near paint thinner fumes.

♦ In close proximity to an automobile exhaust pipe, as this will damage the detector.

♦ In very cold or very hot areas, including unheated buildings or outdoor rooms. If the temperature goes above or below the detection range of the smoke and heat detector, it will not work properly. This detection range is 40°F to 100°F (4°C to 38°C).

♦ Near fresh air vents or very drafty areas like air conditioners, heaters or fans. Fresh air vents and drafts can drive smoke away from smoke and heat detectors.

♦ Dead-air spaces, which are often at the top of a peaked roof, or in the corners between ceilings and walls. Dead air may prevent smoke from reaching a detector. See Figures 8 and 9 for recommended mounting locations

Figure 6: Recommended smoke and heat detector locations

♦ In insect-infested areas. If insects enter a detector's sensing chamber, they may cause a false alarm. Where bugs are a problem, get rid of them before putting up a detector.

♦ Near fluorescent lights, as electrical "noise" from fluorescent lights may cause false alarms. Install smoke and heat detectors at least 5 feet (1.5 meters) from such lights.
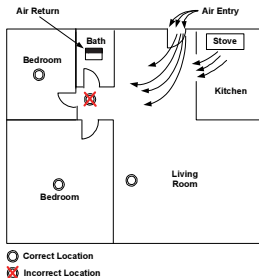
WHERE HEAT-ONLY MODE CAN BE USED

Combustion particles are by-products of something burning. To avoid false alarms, you can install your detectors in heat-only mode in or near areas where non-dangerous combustion particles are typically present but do not pose a fire hazard, such as kitchens with few windows and poor ventilation. If the distance from the detector to places where combustion particles are normally present is less than 20 feet (6 meters) – such as in kitchens or mobile homes, install only the heat detector as far away from the combustion particles as possible, preferably on the wall. To prevent false alarms, provide good ventilation in such places.

♦ In damp or very humid areas or near bathrooms with showers. Moisture in humid air can enter the sensing chamber, and then turns into droplets upon cooling, which can cause false smoke alarms.
♦ In very dusty or dirty areas, dirt and dust can build up on the detector's sensing chamber, to make it overly sensitive.
♦ Additionally, dust or dirt can block openings to the sensing chamber and keep the detector from sensing smoke.

INSTALLATION

The smoke and heat detector is to be mounted on the ceiling or on the wall, if necessary. Since the smoke and heat detector is a single-station type, it cannot be linked to other detectors.

Read the "Where to install your smoke and heat detector" and "Where not to install your smoke and heat detectors" sections in this manual before installing.

To install the detector (see *Figures 7 & 8*)

1. Select the installation location.
2. Remove the locking pin securing the mounting bracket to the unit (see Figure 7).
3. Remove the mounting bracket from the unit by rotating it counterclockwise.
4. Use the bracket as a template for marking the mounting holes.
5. Using an appropriate drill, drill two holes at the marks and insert anchors.
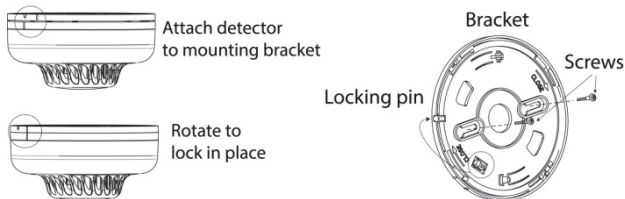6. Using screws (supplied) attach the bracket to the wall as shown in Figure 7.

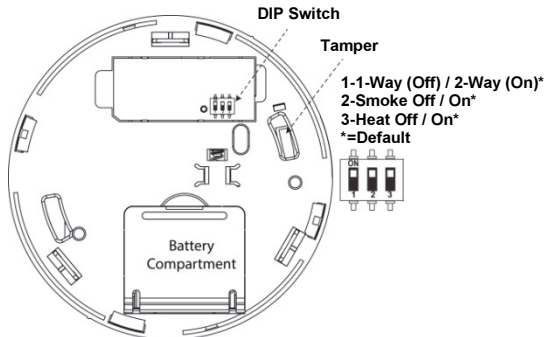*Figure 7: Smoke and heat detector installation*

Figure 8: Unit backside: batteries compartment, tamper and DIP switch

To configure the DIP switch:

NOTE:

* = DIP Switch default settings.

1. [For one-way operating mode]: Set the DIP switch 1 to 1-way, and configure either smoke (2), heat (3) or smoke and heat.
2. [For two-way operating mode]: Set the DIP switch 1 to 2-way, and configure activation of the Smoke and Heat detectors from the system panel. (In this mode, the DIP switch 2 & 3 settings are irrelevant.)
3. Open the battery compartment cover (see Figure 8).
4. Observing proper polarity, insert two CR123 3V lithium batteries (supplied) into the batteries compartment, and then close the compartment cover.
5. For the Smoke and Heat Detector to identify itself to the system's receiver, perform the registration either by entering the Smoke and Heat Detector's 11-digit serial code number or by the following RF allocation steps:
   a. Set the alarm system to learn mode.
   b. Remove the battery from the insulation material and reinsert it into the transmitter, paying attention to the polarity.
   c. Send a write message by pressing the tamper switch for at least 3 (or closing the bracket) seconds until panel recognition is displayed.

WARNING:

This detector is not suitable for installation in a hazardous location, as defined in the national electrical code. Do not use detector in an outlet controlled by a wall switch.

6. Line up the side slot of the bracket and the detector. Push the detector onto the mounting bracket and turn it clockwise to secure it into place.
   Insert the locking pin in order to secure the mounting bracket to the detector (see Figure 7).
7. Pull the detector outward to make sure it is securely attached to the mounting bracket.

RED INDICATOR

When the red LED indicator (see *Figure 9*) flashes once in 30 seconds, it indicates the detector is operating normally. When the red LED is illuminated continuously, and simultaneously an audible alarm sounds, this indicates the detector is responding to an alarm trigger.

TESTING YOUR SMOKE AND HEAT DETECTOR

To be sure that detector is working correctly, test the detector weekly by performing the following procedure:

1. Use your finger to firmly press the test button. If the detector is functioning correctly, the alarm horn sounds and an alarm message is sent to the panel.
2. To stop the alarm horn, press the test button again.

Figure 9: Smoke and heat detector Cover

If the detector fails to test properly, have it repaired or replaced immediately.

If the alarm horn begins to beep once every 35 seconds, it means that the detector's batteries are weak. Replace the batteries immediately. Keep fresh batteries on hand for this purpose.
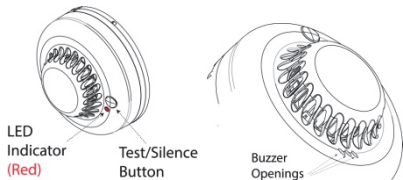
NOTE:

Cooking smoke or a dusty furnace (sometimes called "friendly fires") can cause the alarm to sound. If this happens, open a window or fan the air to remove the smoke or dust. The alarm will turn off as soon as the air is completely clear. If, however, the smoke alarm continues, activate the heat-only mode. Do not disconnect the batteries from the detector. This will cancel your protection from fire.

SMOKE AND HEAT DETECTOR MAINTENANCE

To keep your detector in good working condition, you must test the detector weekly, according to the "Testing Your Smoke and Heat Detector" section.

CLEANING THE SMOKE AND HEAT DETECTOR

Clean the detector housing with a dry or damp cloth to remove dust and dirt. If necessary, open the smoke chamber and clean the interior of the detector.

To clean the detector:

1. Remove the detector from the detector base.
2. Remove the batteries.
3. Use a fine paintbrush to remove dirt from the chamber.
4. After cleaning, close the smoke chamber, secure the housing and re-mount the detector on the ceiling.

DO NOT FORGET TO REPLACE THE BATTERIES!

BATTERY REPLACEMENT

Replace the detector batteries once a year, or immediately whenever the low battery "beep" signal sounds once every 35 seconds. The low-battery "beep" should last at least 30 days before the batteries die out completely.

NOTE:
If false alarms keep coming from the detector, you should check whether the detector's location is adequate. Refer to section "Where To Install Smoke and Heat Detectors." Have your detector moved if it is not located properly. Clean the detector as described above.

WARNING! LIMITATIONS OF SMOKE ALARMS

Wireless smoke alarms are very reliable, but may not work under all conditions. No fire alarm provides total protection of life or property. Smoke alarms are not a substitute for life insurance. Smoke alarms require a source of power to work.

This smoke alarm will not operate and the alarm will not sound if batteries are dead or not installed properly.

Smoke alarms may not be heard. A sound sleeper or someone who has taken drugs or alcohol may not awaken if the alarm is installed outside a bedroom. Closed or partially closed doors and distance can block sound. This alarm is not designed for the hearing impaired.

Smoke alarms may not always activate and provide warning early enough. Smoke alarms only activate when enough smoke reaches the alarm. If a fire starts in a chimney, wall, roof, on the other side of closed doors, or on a different level of the property, enough smoke may not reach the detector for it to sound its alarm.

Smoke alarms are a significant help in reducing loss, injury and even death. However, no matter how good a detection device is, nothing works perfectly under every circumstance and we must warn you that you cannot expect a smoke alarm to ensure that you will never suffer any damage or injury.

Specifications

Smoke Detection	Photoelectric chamber
Heat Detection	Dual-sensor with fixed temperature and rate-of-rise
Certification	EN14604:2005/AC:2008
Operating Modes	• Smoke + Heat (OR logic) • Smoke only • Heat only
Wireless RF Modes	Selectable 1-way or 2-way
Alarm Sound Level	Exceeds 85dB at 3m (10')
Typical Average Standby Current:	0.02mA typical
Typical Alarm Current:	100mA
Typical Battery Life:	Typically 3 years
Battery Type:	Two CR123 3V lithium batteries
Low Battery Threshold:	2.5 V
Low Battery Beep rate:	One beep every 30 seconds
Low Battery Life:	30 days from warning signal
Operating Temperature:	14°F - 104°F (-10°C to 40°C)
Operating Humidity:	10% to 85% RH, no condensation or icing
Color:	White
Dimensions:	Diameter: 4.25 in (108 mm) Height: 2 in (53 mm)

Transmitter Characteristics:

Nominal Center Frequency	Smoke & Heat Detector, 1 & 2 way 433.92 MHz Smoke & Heat Detector, 1 & 2 way 868.65 MHz
Supervision Time	15 min. for 868.65 MHz / 65 min. for 433.92 MHz

In order to continue improving the product, RISCO Group reserves the right to change specifications and/or designs without prior notice.

Certifications:
EN14604:2005/AC:2008
1134-CPR-126

Ordering Information

Model	Description
RWX34S	Smoke & Heat Detector, 1 & 2 Way

RTTE Compliance Statement

Hereby, RISCO Group declares that this equipment is in compliance with the essential requirements and other relevant provisions of Directive 1999/5/EC. For the CE Declaration of Conformity please refer to our website: www.riscogroup.com.

CE CPR Approval

The wireless smoke and heat detector, RWX34S86800A, designed by RISCO Ltd in Israel, assembled in China, has been tested and approved according to the CPR directive 305/2001/EU, standard EN 14604:2005/AC:2008 by ANPI, BELGIUM number 1134-CPR-126

Standard Limited Product Warranty

RISCO Ltd., its subsidiaries and affiliates ("Risco") guarantee Risco's hardware products to be free from defects in materials and workmanship when used and stored under normal conditions and in accordance with the instructions for use supplied by Risco, for a period of (i) 24 months from the date of connection to the Risco Cloud (for cloud connected products) or (ii) 24 months from production (for other products which are non-cloud connected), as the case may be (each, the "Product Warranty Period" respectively). Contact with customers only. This Product Warranty is solely for the benefit of the customer who purchased the product directly from Risco, or from any authorized distributor of Risco. Nothing in this Warranty obligates Risco to accept product returns directly from end users that purchased the products for their own use from Risco's customer or from any installer of Risco, or otherwise provide warranty or other services to any such end user. Risco customer shall handle all interactions with its end users in connection with the Warranty, inter alia regarding the Warranty. Risco's customer shall make no warranties, representations, guarantees or statements to its customers or other third parties that suggest that Risco has any warranty or service obligation to, or any contractual privy with, any recipient of a product.

Return Material Authorization. In the event that a material defect in a product shall be discovered and reported during the Product Warranty Period, Risco shall, at its option, and at customer's expense, either: (i) accept return of the defective Product and repair or have repaired the defective Product, or (ii) accept return of the defective Product and provide a replacement product to the customer. The customer must obtain a Return Material Authorization ("RMA") number from Risco prior to returning any Product to Risco. The returned product must be accompanied with a detailed description of the defect discovered ("Defect Description") and must otherwise follow Risco's then-current RMA procedure in connection with any such return. If Risco determines in its reasonable discretion that any Product returned by customer conforms to the applicable warranty ("Non-Defective Products"), Risco will notify the customer of such determination and will return the applicable Product to customer at customer's expense. In addition, Risco may propose and assess customer a charge for testing and examination of Non-Defective Products.

Entire Liability. The repair or replacement of products in accordance with this warranty shall be Risco's entire liability and customer's sole and exclusive remedy in case a material defect in a product shall be discovered and reported as required herein. Risco's obligation and the Warranty are contingent upon the full payment by customer for such Product and upon a proven weekly testing and examination of the product functionality.

Limitations. The Product Warranty is the only warranty made by Risco with respect to the Products. The warranty is not transferable to any third party. To the maximum extent permitted by applicable law, the Product Warranty does not apply and will be void if: (i) the conditions set forth above are not met (including, but not limited to, full payment by customer for the product and a proven weekly testing and examination of the product functionality); (ii) if the Products or any part or component thereof: (a) have been subjected to improper operation or installation; (b) have been subject to neglect, abuse, willful damage, abnormal working conditions, failure to follow Risco's instructions (whether oral or in writing); (c) have been misused, altered, modified or repaired without Risco's written approval or combined with, or installed on products, or equipment of the customer or of any third party; (d) have been damaged by any factor beyond Risco's reasonable control such as, but not limited to, power failure, electric power surges, or unsuitable third party components and the interaction of software therewith or (e) any delay or other failure in performance of the product attributable to any means of communications, provided by any

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third party service provider (including, but not limited to) GSM interruptions, lack of or internet outage and/or telephony failure.

BATTERIES ARE EXPLICITLY EXCLUDED FROM THE WARRANTY AND RISCO SHALL NOT BE HELD RESPONSIBLE OR LIABLE IN RELATION THERETO, AND THE ONLY WARRANTY APPLICABLE THERETO, IF ANY, IS THE BATTERY MANUFACTURER'S WARRANTY.

Risco makes no other warranty, expressed or implied, and makes no warranty of merchantability or of fitness for any particular purpose. For the sake of good order and avoidance of any doubt:

DISCLAIMER. EXCEPT FOR THE WARRANTIES SET FORTH HEREIN, RISCO AND ITS LICENSORS HEREBY DISCLAIM ALL EXPRESS, IMPLIED OR STATUTORY, REPRESENTATIONS, WARRANTIES, GUARANTEES, AND CONDITIONS WITH REGARD TO THE PRODUCTS, INCLUDING BUT NOT LIMITED TO ANY REPRESENTATIONS, WARRANTIES, GUARANTEES, AND CONDITIONS OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, TITLE AND LOSS OF DATA. WITHOUT LIMITING THE GENERALITY OF THE FOREGOING, RISCO AND ITS LICENSORS DO NOT REPRESENT OR WARRANT THAT: (I) THE OPERATION OR USE OF THE PRODUCT WILL BE TIMELY, SECURE, UNINTERRUPTED OR ERROR-FREE; (ii) THAT ANY FILES, CONTENT OR INFORMATION OF ANY KIND THAT MAY BE ACCESSED THROUGH THE PRODUCT BY CUSTOMER OR END USER SHALL REMAIN SECURED OR NON DAMAGED. CUSTOMER ACKNOWLEDGES THAT NEITHER RISCO NOR ITS LICENSORS CONTROL THE TRANSFER OF DATA OVER COMMUNICATIONS FACILITIES, INCLUDING THE INTERNET, GSM OR OTHER MEANS OF COMMUNICATIONS AND THAT RISCO'S PRODUCTS, MAY BE SUBJECT TO LIMITATIONS, DELAYS, AND OTHER PROBLEMS INHERENT IN THE USE OF SUCH MEANS OF COMMUNICATIONS. RISCO IS NOT RESPONSIBLE FOR ANY DELAYS, DELIVERY FAILURES, OR OTHER DAMAGE RESULTING FROM SUCH PROBLEMS.

RISCO WARRANTS THAT ITS PRODUCTS DO NOT, TO THE BEST OF ITS KNOWLEDGE, INFRINGE UPON ANY PATENT, COPYRIGHT, TRADEMARK, TRADE SECRET OR OTHER INTELLECTUAL PROPERTY RIGHT

IN ANY EVENT RISCO SHALL NOT BE LIABLE FOR ANY AMOUNTS REPRESENTING LOST REVENUES OR PROFITS, PUNITIVE DAMAGES, OR FOR ANY OTHER INDIRECT, SPECIAL, INCIDENTAL, OR CONSEQUENTIAL DAMAGES, EVEN IF THEY WERE FORESEEABLE OR RISCO HAS BEEN INFORMED OF THEIR POTENTIAL.

Risco does not install or integrate the product in the end user security system and is therefore not responsible for and cannot guarantee the performance of the end user security system which uses the product.

Risco does not guarantee that the product will prevent any personal injury or property loss by burglary, robbery, fire or otherwise; or that the product will in all cases provide adequate warning or protection.

Customer understands that a correctly installed and maintained alarm may only reduce the risk of burglary, robbery or fire without warning, but is not an assurance or a guarantee that such an event will not occur or that there will be no personal injury or property loss as a result thereof. Consequently Risco shall have no liability for any personal injury, property damage or loss based on a claim that the product fails to give warning.

No employee or representative of Risco is authorized to change this warranty in any way or grant any other warranty.

Contacting RISCO Group

RISCO Group is committed to customer service and product support. You can contact us through our website (www.riscogroup.com) or at the following telephone and fax numbers:

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