

Dual Technology Industrial Detector



Model: RK325DT

Installation Instructions - Relay & BUS Modes















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Introduction

RISCO Group's Dual Technology Grade 3 Industrial detector, WatchIN, is a unique detector with signal processing based on two Passive Infrared (PIR) channels and two Microwave (MW) channels. The detector can operate as a regular relay detector connected to any control panel, or as a BUS accessory when connected to RISCO Group's ProSYS control panel via the RS485 BUS, thus having unique remote control and diagnostic capabilities.

The instructions describe herein, describe the WatchIN in Relay & BUS mode. For detailed information regarding BUS mode installation, refer to BUS Mode installation chapter, page 15.

Mounting

Mounting Considerations



Note:

The installation knockouts numbering are marked on the back plate.

- 1. Open WatchIN front cover (unlock C1, Figure 1).
- 2. Release internal base (unlock I1, Figure 2).
- 3. Select mounting installation as follows:

Flat Mounting:

Open knockouts on external base (Figure 3).

- B1 B4: Wall mounting knockouts
- T1: Back tamper knockout
- W2 / W3: Wires entry knockouts

45° angle Mounting (Left side mounting):

- a. Open knockouts on external base (Figure 3)
 - L1, L2: Left mounting knockouts
 - T3: Left tamper knockout
 - W5 / W6: Wire entry knockouts
- b. Remove tamper spring
- c. Replace tamper bracket (Item 1) with supplied flat tamper bracket (Item 2). Item 1 Item 2



- d. Insert Tamper lever B onto T5 and T3 and secure screw A (Figure 3)
- Insert external wires through external base W2, W3 (Flat Mounting) or W5, W6 (Left side mounting) (Figure 3).
- 5. Secure external base to the wall.
- 6. Insert external wires and tamper wires through internal base (Figure 4).
- 7. Secure internal base to external base (lock I1, Figure 2).
- 8. Close the front cover (Lock C1, Figure 1) after wiring and setting DIP switches.
- 9. Walk test the detector.



Note:					
For 45° right side installation use the equivalent units on the external base as follows:					
Knockouts Description	Left	Right			
Mounting Knockouts	L1, L2	R1, R2			
Tamper spring knockouts	T1, T3	T2, T4			
Tamper screw anchor	T5	Т6			
Wiring Knockouts	W5, W6	W7, W8			

Changing Back Tamper position

The back tamper is by default secured on the right side of the internal base (Rear view). If you wish to move it to the left side (rear view), do the following (Figure 5):

- 1. Remove tamper screw 1 in order to release the tamper from position 7.
- 2. Ensure tamper spring 2 rests over tamper wire base 4.
- 3. Ensure plastic tamper bracket 3 rests over both 2 and 4.
- 4. Secure tamper screw 1 into 3 over position 6.



Notes:

- 1. Verify that you hear a "Click" when attaching the tamper spring to the wall.
- 2. For pole installation, the tamper can be moved to the bottom right-hand side of the internal base.

Terminal Wiring



Failure: AM relay is momentary opened

SET/ UNSET	This input enables to control Anti-masking and LEDs operation in accordance to the system status, Set (Arm) / Unset (Disarm). While the system is armed, this feature prevents an intruder from gaining knowledge of the detector's status and disables Anti-masking detection.				
	System Status	Input Status	AM Relay	LEDs	
	Set (Arm) 0V Off Off				
	Unset (Disarm) 12V or no connection On* On**				
	* DIP 7 is ON (Anti masking enabled)				
	** DIP 1 is ON (LEDs (+12V OR no termination)	s enabled) and LEDs ENAI al connection)	BLE input termin	al is enabled	

DIP Switch Settings

1	ON										
			\square								Factory
											Dofault
Ľ	1	2	3	4	5	6	7	8	9	10	Delault

DIP 1: LEDs operation On: LEDs Enabled Off: LEDs Disabled DIP 2-3: Detection Sensitivity

Sensitivity	DIP2	DIP3
Low	Off	Off
Mid	Off	On
Normal (Default)	On	Off
ACT(Anti-Cloak™ Technology)	On	On

Alarm condition On: PIR or MW
Off: PIR + MW
Detector's optics
On: Barrier
Off: Wide angle
Red LED /3 LED
Off: 3 EDs
Anti masking operation
On: Enabled
Off: Disabled
Vibration detection (applicable to versions
with Vibration sensor installed)
On: Enabled
Sway recognition Enable/Disable
On Enabled
Off: Disabled
): Green line
On: MW Off during Disarm (unset)
Off: MW On during Disarm (unset)
:

Green line is valid when connecting wire from the panel output (arm follow) to the detector set/unset input.

Microwave Adjustment

Adjust Microwave coverage area by using the trimmer on the PCB.

Walk test

Two minutes after applying power, walk test the protected area to verify proper operation.

For installations on uneven surfaces slide the PCB inside the internal base to the appropriate setting according to the desired height (2.4m, 3.0m, 3.7m) as printed on the bottom left corner of the PCB or use the standard swivel accessory.

For reducing the detection range, slide the PCB <u>up</u> or tilt the swivel <u>down</u>.



LEDs Display

LED	State	Description
YELLOW	Steady	Indicates PIR detection
	Flashing	Indicates AM (Anti mask) detection
GREEN	Steady	Indicates MW detection
RED	Steady	Indicates ALARM
	Flashing	Indicates malfunctioned communication with ProSYS (BUS
		mode only)
All LEDs	Flashing (One after	Unit initialization on power up
	another)	

Notes:

1. DIP-Switch 1 should be in ON position to enable LED indications.

Only one LED is active at any one time. For example, in the case of both PIR and MW detection, either the steady YELLOW LED or the steady GREEN LED is displayed (the first to detect), followed by the Alarm RED LED.

Relay Mode / BUS Mode Jumper	Relay Mode	BUS Mode
J-BUS jumper (located on the PCB between the red and green LEDs) is used to define the detector's mode of operation as follows:	0 0 0 0 0 0 0 0 0	0 0 0

TRIPLE EOL Jumpers



Standard Swivel Installation

The WatchIN detector package contains a standard swivel for flexible installation. Please follow the instructions below for mounting the detector with the Standard Swivel:

- 1. Open WatchIN front cover (Unlock C1, Figure1).
- 2. Release internal base (Unlock I1, Figure2).
- 3. Open knockouts on external base (Figure 7, Detail B)
 - W1: Wires knockout
 - S1,S2: Knockouts for securing external base to Standard Swivel
 - S3: External base locking screw knockout
- 4. On the swivel accessory remove the required swivel cable wiring knockout S2, S7 or S9 (Figure 7, Detail A).
- 5. Remove back tamper from the internal base (see "Changing Back Tamper Position" paragraph) and connect it to S5 (Figure 7, Detail A) on the Standard Swivel.

Note:

Ensure that you see the engraved UP mark on the upper front face of the swivel.

6. Select the mounting installation type as follows:

Wall Mounting

a. Insert external cable wiring through knockouts S2, S7 or S9 and extract them (including the tamper wires) through the Swivel Wires Passage (Figure 7, Detail B).

b. Secure swivel to the wall through holes S1, S3, S6 and S8.

Note:

The CSMA is required when wall external wiring is used and protection pipe is required. The CSMA should be ordered separately - P/N RA300SC0000A.

Swivel Conduit Mounting (using optional Conduit Metal Swivel Adaptor – CSMA, Figure 7, Detail A)



Figure 7

- a. Choose the direction upon which to mount the CSMA according to the required diameter: 16mm (0.63 inches) or 21mm (0.83 inches).
- b. Insert conduit to the CSMA.
- c. Secure CSMA to the wall through points (M1, M4).
- d. Insert external cables and tamper wires from the conduit through the swivel wires passage of the swivel (Figure 7, Detail A).
- e. Secure swivel to the wall through holes S1, S3, S6 and S8.

Note:

- 7. Insert tamper wires and external cable wiring from Standard Swivel through knockout W1 on the external base (Figure 7, Detail B).
- 8. Connect the external base to the swivel using the dedicated snaps (Figure 8).



NOTE:

- Do not open or close the Swivel Assy Screw since it is used for connecting the swivel parts only.
- 9. Secure external base to swivel with two screws fastened to knockouts S1 and S2 (Figure 8).
- Insert the supplied angle locking screw from the external base through the angle locking screw knockout S3 on the external base to the standard swivel (Figure 8).
- 11. Tilt and Rotate the Standard Swivel to the desired position. Once the Standard Swivel is in the desired position, secure the angle locking screw.
- 12. Line up the internal base onto the external base. Insert all wiring cables through the internal base.
- 13. Secure internal base to external base (Lock I1, Figure 2).
- 14. To readjust the Standard Swivel when the PCB is installed (Figure 9):
 - Bend down the black foam located below the RED LED on the PCB (enough to reach the Swivel locking screw).
 - b. Use a Philips screwdriver to release the locking screw (see Figure 9).
 - c. Tilt and/or Rotate the Standard Swivel to the desired position.
 - d. Secure the angle locking screw.

Note:

When marks on the two movable parts are aligned (Figure 8), the Standard Swivel is in 0° vertical /horizontal position. Each click from this position represents shifting of 5° in vertical / horizontal position.

15. Close the front cover (Lock C1, Figure 1) and walk test the detector.

Note:

The screw has to pass through External Base and locked to the swivel.





Replacing Lenses

- 1. Unlock the six screws that hold the lens holding sleeve from the back of the front cover.
- 2. To release the protective sleeve, gently push the lens from the external side of the front cover.
- 3. Disconnect the lens from the sleeve by gently pushing the lens clips that secure it to the sleeve.
- 4. Replace the lens. Place the 4 clips of the lens into the matching holes on the sleeve.
- 5. Insert the protective sleeve back into place on the front cover. Pay attention to place the sleeve over the sealing rubber.
- 6. Secure the 6 holding screws back to their place.



Lens Types



Wide angle lens (RL325): Top view



Barrier lens (RL327B): Side view



Note:

All detection patterns are assured and approved according to EN50131 in Normal sensitivity settings (factory default).

If you change the sensitivity setting, the actual detection pattern must be assured during installation.

Technical Specification

Electrical	
Current consumption (Relay Mode)	45mA at 12 VDC (Stand by)
	60mA at 12 VDC (MAX with LED ON)
Current consumption (BUS Mode)	30mA at 12 VDC (Stand by),
	45mA at 12 VDC (MAX with LED ON)
Voltage requirements	9-16 VDC**
Alarm contacts	30 VDC, 1A
AM contacts	24 VDC, 0.1A
Physical	
Size:	215 x 95 x 85mm
LxWxD	
Weight	0.632 Kg
Environmental	
RF immunity	40V/m (30MHz to 2GHz)
Operating/Storage temperature	0°C to 49°C

* PIR technology is limited in rough environmental conditions.

** Use a 5A max power supply, using safety-approved wires with a minimum gauge of 20AWG.

Ordering Information

Standard Units

Part Number	Description
RK325DT	WatchIN DT + Swivel
The detector contains a standard swivel an	d a replacement barrier lens (P/N engraved on the Lens -RL327B)

Accessories

Part Number	Description	Weight
RA300B	Barrier Swivel Kit	0.1 Kg (0.23 lb)
RA300P	Pole Adaptor Kit	0.25 Kg (0.55 lb)
RA300C	Conduit Adaptor Kit	0.6 Kg (1.27 lb)
RA300SC	Swivel Metal Conduit Adaptor	1Kg (2.2 lb)
RA300HS	WatchIN Demo	

Camera Accessories

Part Number	Description
WatchOUT VC1	Camera Cover Adaptor 1
WatchOUT VC017	NTSC / PAL Narrow Camera For WatchIN
WatchOUT VC053	NTSC / PAL Wide Camera For WatchIN
WatchOUT VCPS	220V / 120V PAL Camera Power supply

UL Compliance Section

To comply with UL standards, note the following:

- When the detector is connected to the BUS of the ProSYS panel, the detectors are to be powered from either the ProSYS panel (V7.55) or a listed compatible burglar alarm power supply that has an output voltage range that does not exceed 9-16 VDC, has a minimum of 4 hours of standby power, and is suitable for mercantile use.
- A dead zone of 2 ft should be considered during installation.
- The camera option is not UL listed.
- 0.6 power factor inductive load can be used on the relays.
- Only RK325DT version 10.525GHz is UL approved.
- The vibration option is not incorporated on UL listed products.
- The maximum range was tested and evaluated by UL with the trimmer set to maximum MW and ACT settings for PIR.
- On power up the detector is not operational for the first 20 seconds.
- The detector should be tested by the installer at least once a year.



Introduction

The information in this section relates to WatchIN DT installation in BUS Mode only. Up to 32 BUS detectors can be installed on the ProSYS RS485 BUS, saving cabling time and enabling remote control and diagnostics.

Terminal Wiring

+,-	Used for the connection of 12VDC power supply. Connect the (+) terminal to the AUX RED and the (–) terminal to the COM BLK of the ProSYS terminals
YELLOW	Used for data communication with the ProSYS. Connect to the terminal to the BUS YEL of the ProSYS
GREEN	Used for data communication with the ProSYS. Connect to the terminal to the BUS GRN of the ProSYS
TAMPER	Used for the wiring for tamper detection, see below
LED ENABLE	Used for the wiring for tamper detection, see below
Note:	
All the termina	als not mentioned in the table above are unused.

Cover and Back Tamper

Cover Tamper Only



Cover Tamper to Zone Input



WatchIN Installation Manual

DIP Switch Settings

	v
DIP Switch	Description
Number	
1 - 5	Used to set the detector ID number. Set the ID number in the same way as for
	any other ProSYS accessory (Refer to the table below).
6 - 10	Not used

WatchIN ID: DIP Switches 1 - 5

ID	1	2	3	4	5	ID	1
01	OFF	OFF	OFF	OFF	OFF	17	OFF
02	ON	OFF	OFF	OFF	OFF	18	ON
03	OFF	ON	OFF	OFF	OFF	19	OFF
04	ON	ON	OFF	OFF	OFF	20	ON
05	OFF	OFF	ON	OFF	OFF	21	OFF
06	ON	OFF	ON	OFF	OFF	22	ON
07	OFF	ON	ON	OFF	OFF	23	OFF
08	ON	ON	ON	OFF	OFF	24	ON
09	OFF	OFF	OFF	ON	OFF	25	OFF
10	ON	OFF	OFF	ON	OFF	26	ON
11	OFF	ON	OFF	ON	OFF	27	OFF
12	ON	ON	OFF	ON	OFF	28	ON
13	OFF	OFF	ON	ON	OFF	29	OFF
14	ON	OFF	ON	ON	OFF	30	ON
15	OFF	ON	ON	ON	OFF	31	OFF
16	ON	ON	ON	ON	OFF	32	ON

ID	1	2	3	4	5
17	OFF	OFF	OFF	OFF	ON
18	ON	OFF	OFF	OFF	ON
19	OFF	ON	OFF	OFF	ON
20	ON	ON	OFF	OFF	ON
21	OFF	OFF	ON	OFF	ON
22	ON	OFF	ON	OFF	ON
23	OFF	ON	ON	OFF	ON
24	ON	ON	ON	OFF	ON
25	OFF	OFF	OFF	ON	ON
26	ON	OFF	OFF	ON	ON
27	OFF	ON	OFF	ON	ON
28	ON	ON	OFF	ON	ON
29	OFF	OFF	ON	ON	ON
30	ON	OFF	ON	ON	ON
31	OFF	ON	ON	ON	ON
32	ON	ON	ON	ON	ON

ProSYS Programming (from ProSYS software version 7.xx and above)

The following section describes the additional software programming options, added to the ProSYS software, that concern the settings of the WatcIN DT as a BUS detector. Up to 32 BUS detectors can be added to the system (16 in ProSYS 16) and each of them comes at the expense of a zone in the system.

It is recommended to read and fully understand the ProSYS Installation Manual (P/N: 5IN1383) and User Manual (P/N: 5IN1382), before programming the WatchIN.

Notes:

The WatchIN is compatible with the ProSYS software Version 7.xx and above.

The WatchIN can be programmed via the U/D Software supporting ProSYS software Version 7.xx and above.

For maximum operation stability, it is best NOT to exceed a total of 300 meters (1000 feet) of wiring when connecting the WatchIN to the BUS.

Adding / Deleting the WatchIN DT

The WatchIN is part of an accessory category, BUS zones. Therefore, Adding/Deleting the WatchIN is identical to any other accessory with the following exception: *Each BUS Zone Detector should be assigned to a Regular Zone.*

Any BUS detector can be assigned to a physical wired zone or to a virtual zone.

- Physical zone: Any zone on the ProSYS PCB (zones 1-8) or on a wired zone expander (ZE08, ZE16).
- Virtual zone: Any zone on a BUS zone expander defined as BZ08 or BZ16.



Notes:

Virtual BUS zones are cost effective. They enable to expand your system zones without adding physical zone expanders.

The virtual BUS zone expander can be used only for BUS zone detectors.

To add a BUS zone expander select type BZ08 or BZ16 when adding a zone expander (Quick key [7][1][2]).

1. To Add / Delete the WatchIN DT

- 1. From the installer menu enter the Add/Delete menu: Quick Key [7][1][9][5] for BUS Zones detectors.
- 2. Use the Status / represent the BUS Zone ID number for which you want to assign (or delete) a detector.

Note:

Make sure that the detector's physical ID number is identical to the ID number you select during programming.

- Place the cursor on the TYPE field and use the start (key to select IDT25 for the WatchIN DT detector.
- 4. Press Disarm / #/6 to confirm.
- 5. Repeat the process for the other BUS detectors.

2. Assigning the WatchIN DT to a Zone

- 1. From the main installer menu enter Zones: One by One option (Quick key [2][1])
- 2. Select the zone number that you want to assign the BUS detector.

Note:

If you have defined a BUS Zone Expander, select a zone number from the virtual zones (defined by the BUS zone expander).

- 3. Define Partitions, Groups, Zone Type and Zone Sound.
- In the Termination category select [5] BUS Zone followed by *the following display appears:* (#/6)
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- 5. Select the BUS zone number to assign to the programmed zone. The type field will be updated automatically when selecting the zone.
- Press (). The loop response category is not applicable to a BUS zone and the following display appears:

Z:001	RESPONSE :
N/A-BUS	ZONE

7. Press (#/b), assign label and press (#/b)

Configuring the WatchIN DT Parameters

1. To access the WatchIN settings option press [2][0][3] from the main installer menu. The following display appears:



2. Select the zone that the BUS zone was assigned to and press ();*/(). You can now program the WatchIN parameters as follows:

Zones Miscellaneous: BUS Zone

Quick Keys	Parameter			Default
[2][0][3][zzz]	LEDS			3 LEDS
[1]	Defines the LEDS operation mode			
[2][0][3][zzz]	Off			
[1][1]	Disables the LEDS operation			
[2][0][3][zzz]	Red Only			
[1][2]	Only the Red led	will operate.	This option is high	ly recommended to avoid
	the possibility th	at the intruder	will "Learn" the de	etector behavior.
[2][0][3][zzz]	3 LEDS			
[1][3]	All 3 LEDs will o	perate.		
[2][0][3][zzz]	Detection Sens	itivity		Normal
[2]	Defines the sense	sitivity of the de	etector(MW + PIR)
[2][0][3][zzz]	Sensitivity Opti	ons		
[2][1][4]	1) Low	Normal		
	2) Medium	4) ACT (Ant	i-Cloak™ Techno	logy)
[2][0][3][zzz]	MW Range			Trimmer
[3]	Defines the micr	owave channe	el range (maximun	n range - 27m)
[2][0][3][zzz]	MW Range opti	ons		
[3][1][7]	1) Minimum	3) 40%	5) 80%	7) Trimmer (MW is
	2) 20%	4) 60%	6) Maximum	defined by the trimmer
				setting on the PCB)
[2][0][3][zzz]	Alarm Logic			PIR and Microwave
[4]	Determine the d	etector's logic	of defining an ala	rm.
[2][0][3][zzz]	PIR and Microwave			
[4][1]	Alarm is activated when both PIR and MW channels detect an alarm			
1011011011	(AND Logic)			
	PIR or Microwa	ve		and a data at an alarma (OD
[4][2]	An alarm is activ	ated when eitr	her PIR of WWW ch	annels detect an alarm (OR
[2][0][3][777]				Wide Angle
[5]	Defines the actu	al Lens of the	detector	Wide Angle
[2][0][3][777]	Lens Type Onti	ons		
[5][1][2]	1) Wide Angle	2) Barrier		
[2][0][3][777]	Anti-Mask			Fnable
[6]	Defines the oper	ation of Anti M	lasking detection	Lindbio
[2][0][3][777]	Anti-Mask Opti	ons	laoning actocion	
[6][1][2]	1) Disable 2) F	nable (Default))	
Quick Keys	Parameter		/	Default
[2][0][3][zzz]	Arm/Disarm			No
[7]	Defines the oper	ation of the LF	Ds and the anti n	nasking detections while the
1.1	detector is arme	d		
[2][0][3][zzz]	No	-		
[7][1]	AM (Anti masking) is enabled			
	LEDs behave ac	cording to the	LEDs parameter	definition
[2][0][3][zzz]	Yes	<u> </u>		
[7][2]	AM (anti maskin	g) is disabled		
	LEDs are disable	ed		
[2][0][3][zzz]	Green line			Yes
[8]	The WatchIN inc	ludes a Green	Line feature that	follows environmental

Ouick Keys	Parameter	Default	
QUICK Neys			
	guidelines by avoiding surplus emission.		
[2][0][3][zzz]	No		
[8][1]	Green Line feature in disabled: MW is constantly	activated	
[2][0][3][zzz]	Yes		
[8][2]	Green Line feature is enabled		
[2][0][3][zzz]	SWAY	Yes	
[9]	This option allows the recognition and immunity o known patern.	of swaing objects in a	
[2][0][3][zzz]	No		
[9][1]	Sway is disabled		
[2][0][3][zzz]	Yes		
[9][2]	Sway is enabled		

System Parameters

System: System Control

Quick Keys	Parameter			
[1][2][36]	AM=Tamper Default: No			
(UK Version)	ti Masking detection amper alarm. d as trouble event.			

[1][2][37]	VBR=Tamper	No
	Used to determine the operation of the vibration versions with Vibration sensor installed)	n detection (applicable to
	Yes: Vibration detection will activate tamper a	arm.
	No: Vibration detection will be regarded as tro	uble event.

Diagnostics

The ProSYS enables you to test parameters that reflect the operation of the detector.

- 1. From the main user menu press * [4] to access the Maintenance menu.
- 2. Enter the Installer code (or sub-installer) and press . (#/6).
- 3. Press [9] [1] to for the BUS Zones diagnostic menu.
- 4. Enter the digit of the zone that you want to test and then press . The system will perform the diagnostics test and a list of test parameters will appear, as indicated in the table below.
- 5. Use the keys Status / Pyposs / Status to view the diagnostics test results.

User Menu: 4) Maintenance \rightarrow 9) Diagnostic \rightarrow 1) BUS Zone

Quick Keys	Parameter
[4][9][1][zzz]	Detector Input Voltage: Display the input voltage of the detector. PIR 1 Level: PIR channel 1 DC level. Range 0.1v - 4v PIR 1 Noise Level: PIR channel 1 AC level. Range 0VAC (No noise) - 4VA
	PIR 2 Level: PIR channel 2 DC level. Range 0.1v - 4v PIR 2 Noise Level: PIR channel 2 AC level. Range 0VAC (No noise) - 4VA
	MW 1 Level: MW channel 1 DC level Range 0.1v - 4v MW 1 Noise Level: MW channel 1 AC level (0VAC (No noise) - 4VAC) MW 2 Level: MW channel 2 DC level Range 0.1v - 4v MW 2 Noise Level: MW channel 2 AC level (0VAC (No noise) - 4VAC

RISCO Group Limited Warranty

RISCO Group and its subsidiaries and affiliates ("Seller") warrants its products to be free from defects in materials and workmanship under normal use for 24 months from the date of production. Because Seller does not install or connect the product and because the product may be used in conjunction with products not manufactured by the Seller, Seller cannot guarantee the performance of the security system which uses this product. Seller's obligation and liability under this warranty is expressly limited to repairing and replacing, at Sellers option, within a reasonable time after the date of delivery, any product not meeting the specifications. Seller makes no other warranty, expressed or implied, and makes no warranty of merchantability or of fitness for any particular purpose.

In no case shall seller be liable for any consequential or incidental damages for breach of this or any other warranty, expressed or implied, or upon any other basis of liability whatsoever. Seller's obligation under this warranty shall not include any transportation charges or costs of installation or any liability for direct, indirect, or consequential damages or delay.

Seller does not represent that its product may not be compromised or circumvented; that the product will prevent any persona; injury or property loss by burglary, robbery, fire or otherwise; or that the product will in all cases provide adequate warning or protection.

Seller, in no event shall be liable for any direct or indirect damages or any other losses occurred due to any type of tampering, whether intentional or unintentional such as masking, painting or spraying on the lenses, mirrors or any other part of the detector.

Buyer understands that a properly installed and maintained alarm may only reduce the risk of burglary, robbery or fire without warning, but is not insurance or a guaranty that such will not occur or that there will be no personal injury or property loss as a result.

Consequently, seller shall have no liability for any personal injury, property damage or loss based on a claim that the product fails to give warning. However, if seller is held liable, whether directly or indirectly, for any loss or damage arising from under this limited warranty or otherwise, regardless of cause or origin, sellers maximum liability shall not exceed the purchase price of the product, which shall be complete and exclusive remedy against seller. No employee or representative of Seller 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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