LuNAR

Model: RK150DTG3

RISCO GROUP

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 SIN1251 E

Approuvé selon C48-435

Ce produit répond aux exigences du référentiel de certification NF324-H58 pour la classification 3 bouciers

U.S. Patent Number:

This product is protected under Patent No. US 7,126,476 B2. Other patents pending.

CE Compliance Section (European and German versions):

Risco Ltd. hereby 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

Clarification

EN50131-1 Grade 3 Class II
EN50131-2-4 Grade 3
EN50130-5 Class II

RK150DTG3 applicable countries (European version):

AT	BE	CY	CZ	DK
EE	FI	FR	DE	GR
HU	IE	IT	LV	LT
LU	MT	NL	PL	PT
SK	SL	ES	SE	GB
BG	RO	IS	CH	NO

RK150DTG3 applicable countries (German Version):

AT, CZ, SL, DE, TR, RU, EE

RK150DTG3 FCC compliance Section (US version):

FCC Part 15 Note:

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 receiver.
• Connect the equipment to an outlet on a circuit different from that to which the receiver is connected.
• Consult the dealer or an experienced radio/TV technician.

FCC Warning:

The manufacturer is not responsible for any radio or TV interference caused by unauthorized modifications to this equipment. Such modifications could void the user's authority to operate the equipment.

FCC ID: JE4CSMDT

ENGLISH

The LuNAR RK150DTG3 detectors are the ultimate ceiling motion detectors for professional installations, incorporating both Anti-Mask and Anti-Cloak™ Technologies (ACT™), adhering to new environmentally friendly guidelines.
LuNAR RK150DTG3 detectors include built-in end-of-line (EOL) resistors to simplify installation.

The detector features 110° wide angle Fresnel lens, covering 360° field of view detection pattern.

Installation / Maintenance

1. Remove the LuNAR front cover using the following procedure: Hold the base of the detector with one hand and twist the cover clockwise with the other hand until it stops (see Figure 1).
2. Using a suitable tool, open the following knockouts on the detector's base (see Figure 2).

Note: If a back tamper is to be used it is mandatory to open the tamper back knockout.

3. Set jumpers (see Jumper Setting section).

Important: On the face of the Microwave, you will find a colored dot, this represents the Microwave channel. When installing two detectors in near locations, it is recommended that these dots (channels) are not of the same color. Example: Two Red should be avoided

Note: Reset the detector after each change made to the settings.

4. Install the front cover back to its place (in a reverse sequence of the installation).
5. Perform a Walk test (see Walk Test section).

Terminal Wiring (see Figure 3)

Terminal	Description
- 12V +	12VDC Input
ALARM	N.C. Relay
TAMPER	N.C. Tamper switch
FAULT/AM	Normally Closed Relay: The FAULT/AM relay opens in the following events: • Detector is masked (Alarm relay is also opened) • Self test failed • Input voltage is lower than 8VDC
LED	LED operation remote control When an "Activation Signal"* is applied to the LED input terminal, all LEDs will be disabled. LEDs are enabled if nothing is connected (unless LED jumper is OFF) or 0V/12V is applied (according to the LED/SET Input Jumper position, 12V or 0V).
SET	Remote SET/UNSET control SET:If an "Activation Signal"* is applied, anti-mask detection is disabled (for Grade 2 configuration). UNSET: If nothing is connected or 0V/12V is applied (according to the LED/SET Input Jumper position, 12V or 0V) anti-mask detection is enabled (see also "Green Line" and "Remote Self Test"

**Activation Signal
If 12VDC is applied, and the LED/SET Input Jumper is on 12v position
- Or -
0V is applied and LED/SET Input Jumper is on 0V position

Jumper Settings

Jumper	Function
SW1-1: LED	Used to determine the operation of the detector's LEDs
ON: (Default)	LEDs are enabled, allowing LED control via the LED input terminal
OFF:	LEDs are disabled
SW1-2: ACT	Used to determine if ACT mode is enabled or disabled
ON	ACT Enabled **Important:** Do not use ACT™ mode if you are expecting that there will be moving objects outside the required protected area, a corridor for example.
OFF (Default)	ACT Disabled.
SW1-3: Green Line	
	The LuNAR RK150DTG3 includes a 'Green Line' feature that follows environmental guidelines by avoiding surplus emission. This feature disables the MW channel when the alarm system is **"Unset"**, thus eliminating surplus MW emission while the premises is occupied.
ON	Green Line feature is enabled: To deactivate the MW module in "UNSET" period, the LEDs must also be remotely disabled by the LED terminal. **Note:** When 'Green Line' is on (Microwave off), the detector will still activate (PIR only)
OFF (Default)	Green Line feature in disabled: MW is constantly in use.
SW1-4: Self Test	Used to test detection technologies.
ON	(Local Self Test): If there is no alarm detection in the PIR channel fora period of one 1 hour, the detector will self-test. If the local self test fails, the FAULT/AM Relay will activate.
OFF (Default)	(Remote Self Test): Remote Self Test is activated when the SET terminal is switched from SET to UNSET mode. For remote self test pass, the Alarm Relay will activate for 5 seconds.

Jumper	Function
J1 - Tamper EOL **J2 - Alarm EOL** **J3 - FAULT/ AM EOL**	Jumpers J1 and J2 allow the selection of Tamper and Alarm resistance (1K, 2.2K, 4.7K, 5.6K, 6.8K) according to the control panel (see Figure 4). Jumper J3 allows the selection of 12K for Fault/Anti-Mask. Follow the terminal block connection diagram in Figure 4 when connecting the detector to a Double/Triple End Of Line (DEOL/TEOL) Zone.
J4 - SET/LED INPUT	Used to determine the polarity of the external input.
	See Terminal Wiring section, LED and SET Terminals
	See Terminal Wiring section, LED and SET Terminals

Walk Test

Important: The detector cover MUST be securely fitted before applying power.

2. Two minutes after applying power (warm-up period), walk test the Detector over the entire protected area to verify proper operation of the unit (see Figure 5).
3. The MW range can be adjusted by using the potentiometer located on the PCB. It is important to set the potentiometer to the lowest possible setting that will still provide enough coverage for the inner boundary protected area.

LEDs Display

LED	State	Description
Yellow	On	PIR detection
	Flashing	Trouble in PIR channel
Green	On	MW detection
	Flashing	Trouble in MW channel
Red	On	ALARM
	Flashing	Fault / Anti-Masking detection **Note:** Anti Masking detection is operational in "Unset" mode only (see Terminal Wiring section, SET terminal).
All LEDs	Flashing (consecutively)	At power-up, the LEDs will flash consecutively until the end of the warm-up period (2-3 minutes). At the end of the warm-up period the RED LED will continue to flash until the end of AM initiation.

Note: AM and Trouble indications continue until masking is removed or trouble is corrected.

Technical Specification

Electrical	
Current consumption	16mA at 12VDC (Typical) 41mA at 12VDC (max.)
Voltage requirements	9 -16VDC*
Alarm contacts	24VDC, 0.1A
Tamper contacts	24VDC, 0.1A
FAULT/AM contacts	24VDC, 0.1A
Environmental	
RF immunity	According to EN50130-4
Operating temperature	-20°C to 55°C (-4F to 131F)
Storage temperature	-20°C to 60°C (-4F to 140F)
Optical	
Filtering	White Light Protection
Physical	
Size	Ø 135 x 27 mm (Ø 5.3 x 1 in)
Weight	200 gr. (7 oz.)

*Power to be supplied by 5A max. power source using safety approved wires, with a min Gauge of 20AWG.

Figure 1.
Installation - Front cover removal

Figure 2.
General view - Back cover, Knockouts

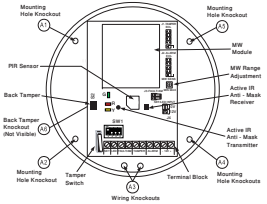


Figure 3.
Terminal Wiring

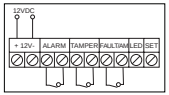


Figure 4.
Schematic of EOL resistors

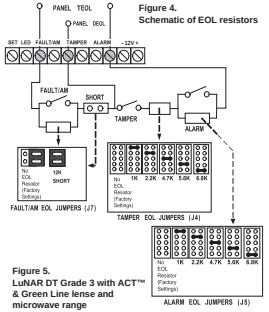
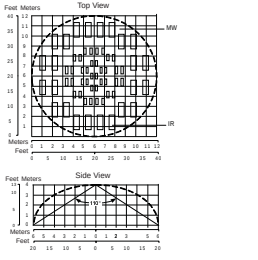


Figure 5.
LuNAR DT Grade 3 with ACT™ & Green Line lense and microwave range



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 Seller's 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 personal injury or property loss by burglary, robbery, fire or otherwise; or that the product will in all cases provide adequate warning or protection. 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 event will not occur or that there will be no personal injury or property loss as a result thereof.
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 under this limited warranty or otherwise, regardless of cause or origin, seller's 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.

WARNING: This product should be tested at least once a week.

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