

Installation Instructions iWISE DT With ACT™ & Green Line 10m/15m/25m



PD6662, EN50131-1, TS50131-2-4
Grade 2, Class II

iWISE DT With ACT™ & Green Line 10m/15m/25m

Dual Technology Wall Mount

The iWISE DT With ACT™ & Green Line detectors are the ultimate motion detectors for professional installations, incorporating Anti-Cloak™ Technology (ACT™), adhering to new environmentally friendly guidelines and complying with requirements of PD6662, EN50131-1 and TS50131-2-4 Grade 2. iWISE DT With ACT™ & Green Line detectors are available in 10m, 15m and 25m models, and include built-in end-of-line (EOL) resistors to simplify installation.

Main Features

- Dual MW & PIR technologies
- “Green Line” setting - for disabling the MW when the premises are occupied
- Anti-Cloak™ Technology (Patent Pending) for detecting cloaked burglars
- Opto-relays for low current consumption and long life
- Jumper Selectable EOL (End of Line) Resistors
- Remote LEDs disable input
- LED control polarity Jumper
- 30V/m RF immunity
- Anti-fluorescent interference signal processing
- Flexible installation height up to 2.7 m (8'10")
- Coverage 10m x 10m (33ft x 33ft) / 15m x 15m (50ft x 50ft) / 25m x 25m (82ft x 82ft)
- Creep Zone
- Cover tamper
- Wall/corner or ceiling swivel (optional)
- Wall tamper-proof swivel (optional)
- Corridor and curtain lens (optional)

Installation Considerations

- Before installing, study the area to be protected and select the location of the unit for the best possible coverage.
- Corner installations are recommended. The Detector should be installed so that the beam patterns are at 45° (optimal) to the intruder's expected path.
- Never install the iWISE in an environment that causes an alarm condition in one technology.
- Avoid installations where machines (e.g. fans) are normally in operation within the coverage pattern.
- Do not mount the detector in direct sunlight or near heat sources.
- Point the unit away from glass exposed to the outdoors and objects that may change temperature rapidly.
- The installation surface should be solid, smooth and vibration free.

Installation/Maintenance

- To open the front cover:
 - Turn the front cover locking screw counter-clockwise.
 - Insert a screwdriver through the dedicated slot/s to open the detector's front cover.
- Loosen the PCB holding screw, located on the right hand side of the PCB and slide the PCB up until the screw reaches the widened opening. Lift the PCB up to remove.
- Mounting - The iWISE DT With ACT™ & Green Line can be mounted either on a flat surface or on a wall corner (corner mounting).
 - Using a suitable tool, open the following knockouts on the detector's base (see Figure 1).
 - A1, A2 and A3: External cables knockouts (open out at least one wiring knockout)
 - A4, A6, A9, A12, and A15: Wall mounting knockouts
 - When using a swivel adapter use the A4, A6, and A15 openings to connect the detector to the swivel adapter.
 - A5 and A10: Right corner mounting knockouts
 - A11 and A14: Left corner mounting knockouts

Note:

The A7, A8 and A13 knockouts are not to be used in this configuration.

- Use the base as a template for marking the installation holes (mark through the mounting holes).
- Put the base in a safe place, drill the required holes in the surface or in the corner, and insert anchors (if necessary).
- Insert external cables through the cable hole/holes.
- Mount the rear cover in its final location.
- Seal the remaining holes with a sealant compound.
- Reinstall the PCB into its desired position.
- Wire terminal (see Terminal Wiring section).

16. Changing Lenses - A lens is attached to the inside of the front plastic cover using a sensor protective sleeve (see Figure 3).

- Remove the sensor protecting sleeve by pushing up the clip that holds the top part of the sleeve to the front cover.
- Disconnect the lens from the sleeve by gently lifting it from the holding pins that secure it to the sides of the sleeve.
- Select the desired lens and make sure that the cut corners are pointing upwards.
- Place the two pins, which are located on the top and bottom of the lens, into the matching holes on the sleeve.
- Place the holes on either side of the lens into their matching holding pins located on the sides of the sleeve.
- Insert the protective sleeve back into place on the front cover facing upwards.

Figure 1. Back Cover – Knockouts

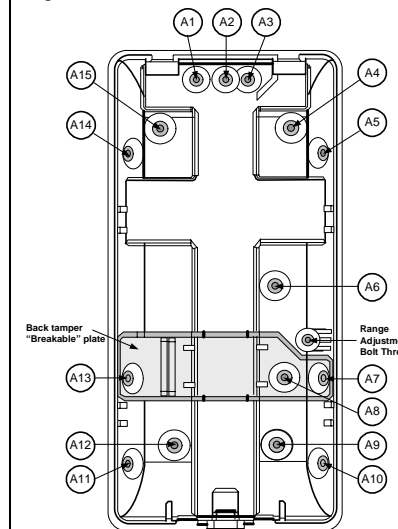


Figure 2. PCB

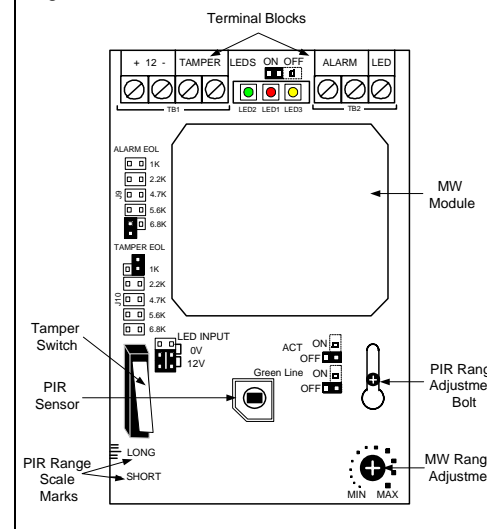


Figure 3. Lens Replacement

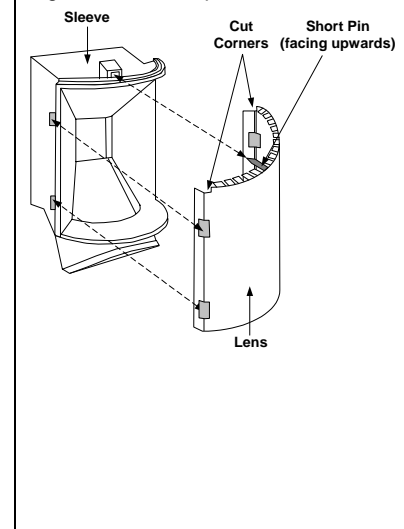


Figure 4. iWISE DT With ACT™ & Green Line 10m/15m/25m Lenses and Microwave Range

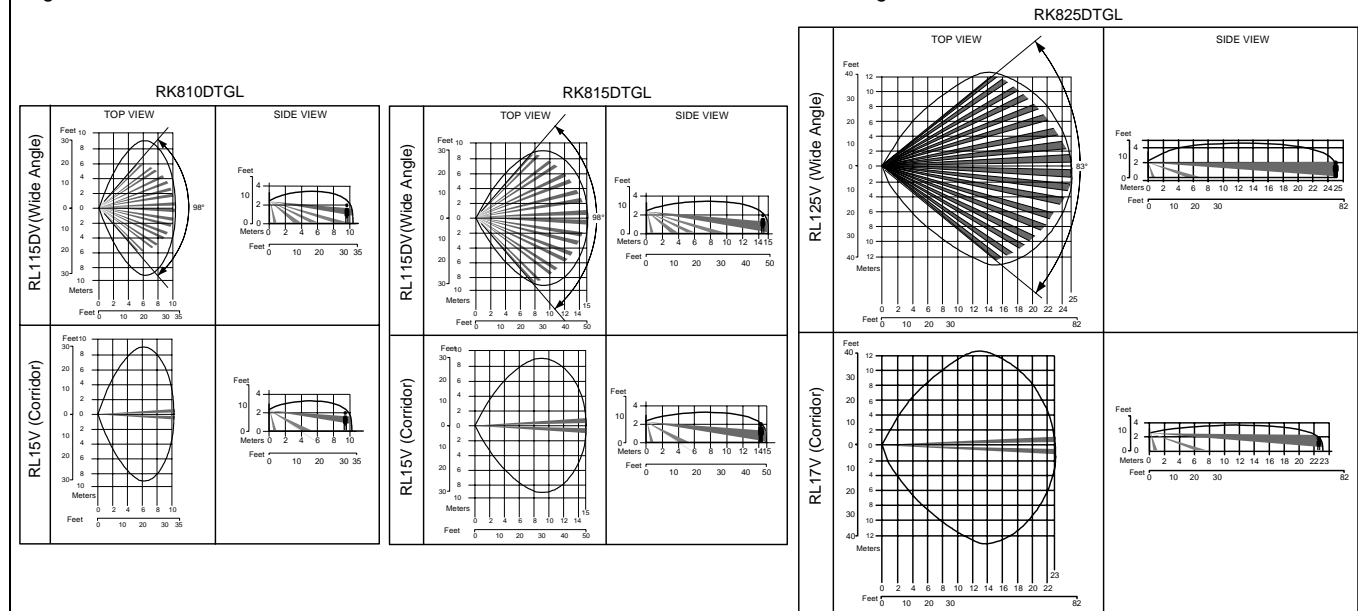


Figure 5. MW Range Adjustment

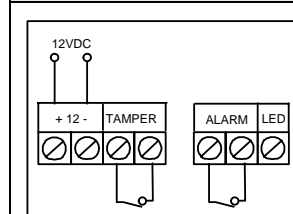


MW range adjustment

- 1 Over power
- 2 Under power
- 3 Correct adjustment

A Detector
B Corridor









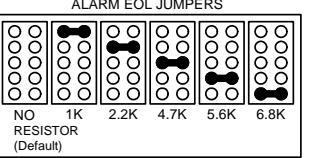
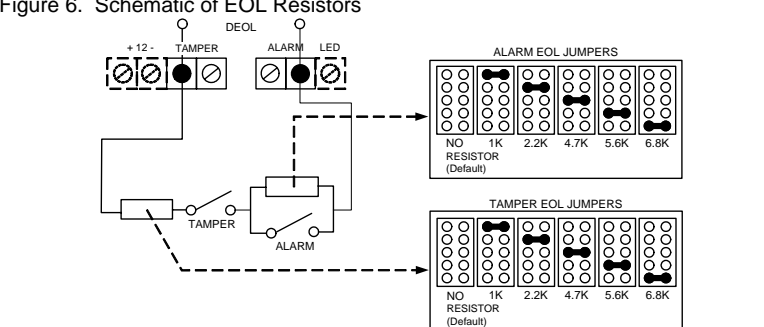
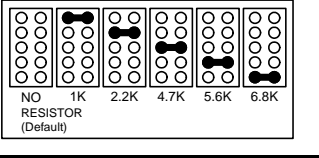

Terminal Wiring





Terminal	Description
- 12 +	12VDC Input
ALARM	N.C. Relay
TAMPER	N.C. Tamper Switch
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 Input Jumper position, 12V or 0V)

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

Jumper Settings		
Jumper	Position	Function
ACT		Used to determine if ACT mode is enabled or disabled. Anti-Cloak™ Technology will cope with any attempt of a burglar using camouflage techniques to conceal his IR radiation. When this situation is identified ACT™ automatically switches the detector to trigger alarms based primarily on detection from the microwave channel for a predefined window of time. ACT™ also overcomes PIR technology's limitation of poor detection sensitivity when the ambient temperature is close to that of the human body. When this occurs the detector switches to single channel microwave triggering of alarms. ON: ACT Enabled Note: The MW range must be adjusted to the minimum needed, using the potentiometer located at the bottom of the PCB, in order to provide full coverage for the entire protected area (see Figure 5). 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.
	 (Default)	OFF: ACT Disabled.
LED INPUT		Used to determine the polarity of the external input. See Terminal Wiring section, LED Terminal
	 (Default)	See Terminal Wiring section, LED Terminal
LEDS		Used to determine the operation of the detector's LEDs ON: LEDs are enabled, allowing LED control via the LED input Terminal
	 (Default)	OFF: LEDs are disabled
Green Line		The iWISE DT With ACT™ & Green Line includes a Green Line feature that follows environmental guidelines by avoiding surplus emission. ON: Green Line feature is enabled: To deactivate the MW module the LEDs must be remotely disabled.
	 (Default)	OFF: Green Line feature in disabled: MW is constantly activated.
DEOL Jumpers	Jumpers J9 and J10 allow the selection of Tamper and Alarm resistance (1K, 2.2K, 4.7K, 5.6K and 6.8K) according to the control panel (see Figure 6 below). Follow the terminal block connection diagram in Figure 6 when connecting the detector to a Double End Of Line (DEOL) Zone.	
ALARM EOL (J9)		Figure 6. Schematic of EOL Resistors 
TAMPER EOL (J10)		
Walk Test		Microwave Adjustment
<ol style="list-style-type: none"> Two minutes after applying power (warm-up period), walk test the Detector over the entire protected area to verify proper operation of the unit. 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 entire protected area. 		Adjust Microwave coverage area by using the trimmer on the PCB 
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
All LEDs	Flashing (consecutively)	At power-up, the LEDs will flash consecutively until the end of the warm-up period (2-3 minutes).

Technical Specification		Ordering Information																															
Electrical		Part Number	Description																														
Current consumption	14mA at 12VDC (Typical) 48.5mA at 12VDC (Max.)	RK810DTGL00A	iWISE DT 10m ACT & Green Line 10.525 GHz																														
Voltage requirements	9 -16VDC	RK815DTGL00A	iWISE DT 15m ACT & Green Line 10.525 GHz																														
Alarm contacts	24VDC, 0.1A	RK825DTGL00A	iWISE DT 25m ACT & Green Line 10.525 GHz																														
Tamper contacts	24VDC, 0.1A	RK810DTGLFRA	iWISE DT 10m ACT & Green Line 9.9 GHz																														
Environmental		RK815DTGLFRA	iWISE DT 15m ACT & Green Line 9.9 GHz																														
RF immunity	30V/m (from 10MHz to 1GHz)	RK825DTGLFRA	iWISE DT 25m ACT & Green Line 9.9 GHz																														
Operating temperature	-20°C to 55°C (-4°F to 131°F)																																
Storage temperature	-20°C to 60°C (-4°F to 140°F)																																
Optical																																	
Filtering	White Light Protection																																
Physical																																	
Size	127.6 x 64.2 x 46.6 mm (5 x 2.5 x 1.84 in.)																																
Weight	120 gr. (4.2 oz)																																
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 		CE Clarification Table for P/N: RK810DTGL00A RK815DTGL00A RK825DTGL00A <table border="1"> <tr><td>AT</td><td>BE</td><td>CY</td><td>CZ</td><td>DK</td></tr> <tr><td>EE</td><td>FI</td><td>FR</td><td>DE</td><td>GR</td></tr> <tr><td>HU</td><td>IE</td><td>IT</td><td>LV</td><td>LT</td></tr> <tr><td>LU</td><td>MT</td><td>NL</td><td>PL</td><td>PT</td></tr> <tr><td>SE</td><td>SL</td><td>ES</td><td>SK</td><td>GB</td></tr> <tr><td>BG</td><td>BQ</td><td></td><td></td><td></td></tr> </table>		AT	BE	CY	CZ	DK	EE	FI	FR	DE	GR	HU	IE	IT	LV	LT	LU	MT	NL	PL	PT	SE	SL	ES	SK	GB	BG	BQ			
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		CE Clarification Part No: RK810DTGLFRA, RK815DTGLFRA, RK825DTGLFRA - can be used only in: AT, CZ,EE, FI, FR, PT																															
RISCO Group Warranty																																	
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