

## Installation Instructions iWISE™ QUAD AM Grade 3



PD6662, EN50131-1, TS50131-2-2  
Grade 3, Class II

### iWISE™ QUAD AM Grade 3 QUAD PIR Wall Mount with Anti-Mask

iWISE™ QUAD AM Grade 3 uses two separate dual element sensors to reduce false alarms and improve catch performance.

iWISE™ QUAD AM Grade 3 detectors are the ultimate motion detectors for professional installations, incorporating Anti-Mask and complying with requirements of PD6662, EN50131-1 and TS50131-2-2 Grade 3.

iWISE™ QUAD AM Grade 3 detectors are available in 15m model, and include built-in end-of-line (EOL) resistors to simplify installation.

#### Main Features

- Quad PIR technologies
- Active IR Anti-Masking for meeting TS50131-2-2 requirements
- Wall and cover tamper for meeting TS50131-2-2 requirements
- Opto-relays for low current consumption and long life
- Jumper Selectable EOL (End of Line) Resistors
- Local & remote Self Test
- Remote LEDs disable input
- Remote Set/Unset control input
- LED/SET control polarity jumper
- 30 V/m RF immunity
- Flexible installation height up to 2.7 m (8'10")
- Coverage 15m x 15m (50ft x 50ft)
- Creep Zone
- Wall/corner or ceiling swivel (optional)
- Wall tamper-proof swivel (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.
- 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

##### 1. 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.

##### Note:

If a back tamper is to be used it is mandatory to screw the tamper back plate to the wall (or wall corner).

##### 2. Loosen the PCB holding screw, located on the right hand side of the PCB and slide the PCB down until the screw reaches the widened opening. Lift the PCB up to remove.

4. Use the base as a template for marking the installation holes (mark through the mounting holes).
5. 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.

##### 3. Mounting - The iWISE™ QUAD AM Grade 3 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.
- A8 (optional): Tamper Plate - wall mounting knockout
- A5 and A10: Right corner mounting knockouts
- A7 (optional): Tamper Plate - Right corner mounting knockouts
- A11 and, A14: Left corner mounting knockouts
- A13 (optional): Tamper Plate - Left corner mounting knockout.

6. Mount the rear cover in its final location.
7. The detector's mounting height should be 2.1m-2.7m (6'11"-8'10").
8. Seal the remaining holes with a sealant compound.
9. Reinstall the PCB into its desired position.
10. Wire terminal (see Terminal Wiring section).
11. Set jumpers (see Jumper Setting section).

##### Note:

Reset the detector after each change made to the settings.

##### 14. 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 2. Back Cover - Knockouts

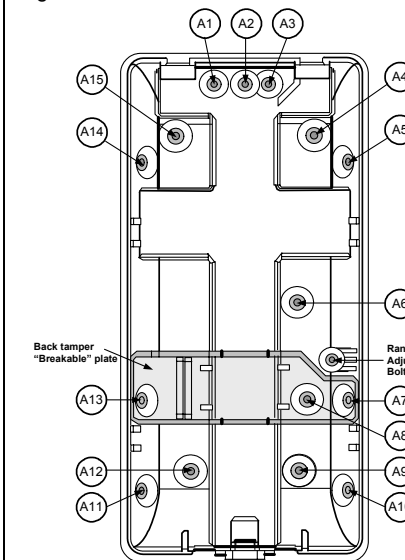


Figure 3. PCB

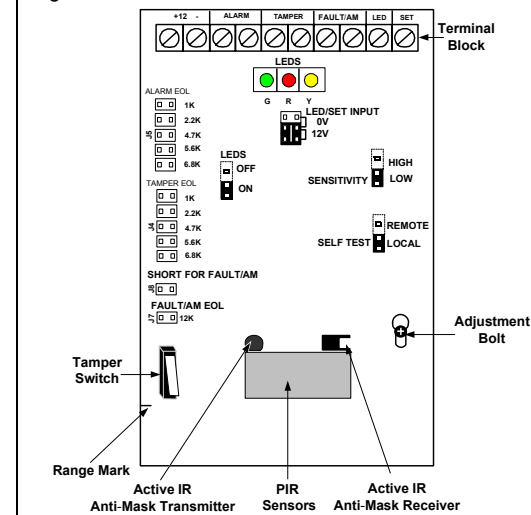


Figure 4. Lens Replacement

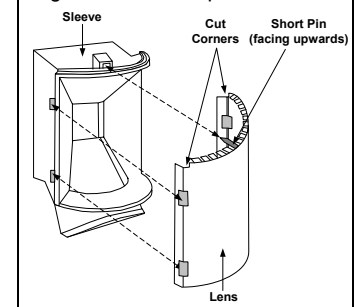
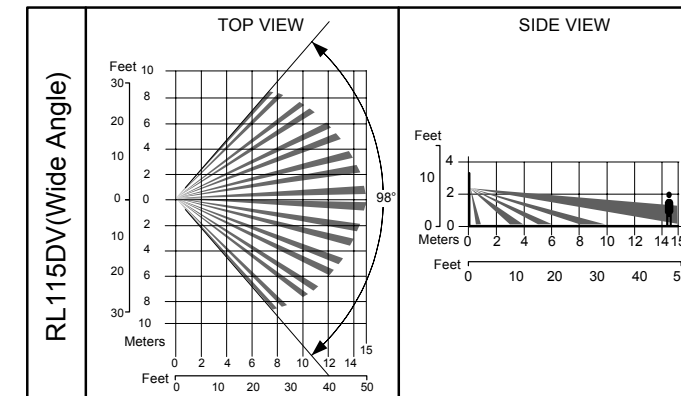
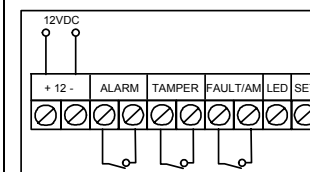


Figure 5. iWISE™ QUAD AM Grade 3 Lens









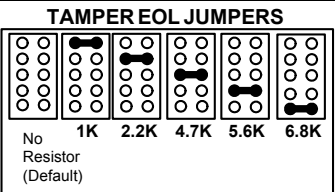
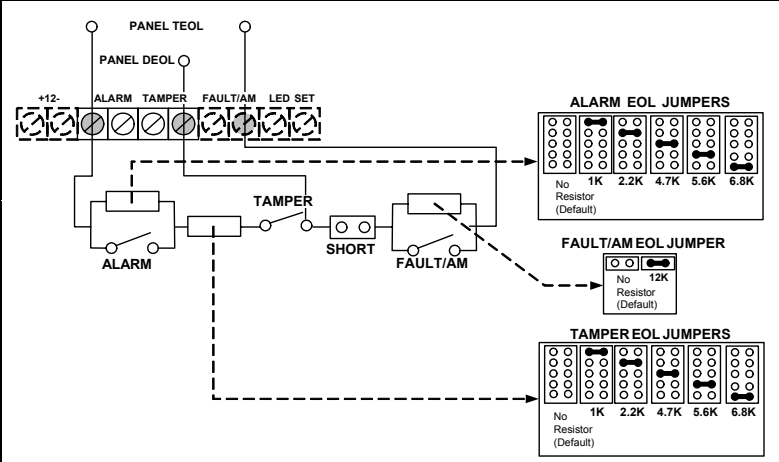
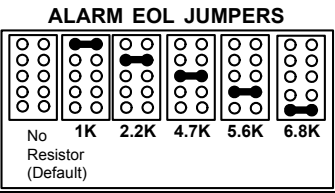
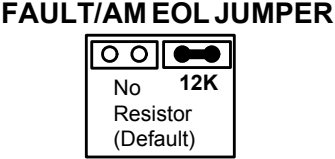


#### Terminal Wiring



Terminal	Description
- 12 +	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: <ul style="list-style-type: none"> <li>• Detector is masked (Alarm relay is also opened)</li> <li>• Self test failed</li> <li>• Input voltage is lower than 8VDC</li> </ul>
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 "Remote Self Test" in Jumper Settings table).

\*\*\*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	Position	Function
SENSITIVITY	Used to determine the sensitivity of the PIR detector	
		<b>High:</b> High Sensitivity selection (Default)
		<b>Low:</b> Low Sensitivity selection
LED/SET INPUT	Used to determine the polarity of the external input	
		See Terminal Wiring section, LED and SET Terminals (Default)
		See Terminal Wiring section, LED and SET Terminals
LEDS	Used to determine the operation of the detector's LEDs	
		<b>ON:</b> LEDs are enabled, allowing LED control via the LED input Terminal (Default)
		<b>OFF:</b> LEDs are disabled
Self Test	Used to test the PIR channels	
		<b>LO (Local Self Test):</b> If there is no alarm detection in one of the PIR channels for a period of one 1 hour, the detector will self-test. If the local self test fails, the FAULT/AM Relay will activate. (Default)
		<b>RE (Remote Self Test):</b> 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. For remote self-test fail, the FAULT/AM Relay will activate.
TRIPLE EOL Jumpers	Jumpers J4 and J5 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). Jumpers J7 allows the selection of 12K for FAULT/AM. Follow the terminal block connection diagram in Figure 6 when connecting the detector to a Double/Triple End Of Line (DEOL/TEOL) Zone.	
TAMPER EOL (J4)		 <p>Figure 6. Schematic of EOL Resistors</p>
ALARM EOL (J5)		
FAULT/AM EOL (J7)		
Short (J8)	Enables internal connection when triple EOL used	

LED	State	Description
Yellow	On	Left PIR channel detection
	Flashing	Trouble in left PIR channel
Green	On	Right PIR channel detection
	Flashing	Trouble in right PIR channel
Red	On	ALARM
	Flashing	Fault / Anti-Masking detection <b>Notes:</b> Anti Masking detection is operational in "Unset" mode only (see Terminal Wiring section, SET terminal).
All LEDs	Flashing (consecutively)	At power-up (front cover closed), 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. <b>The detector cover MUST be securely fitted before applying power.</b>

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

Technical Specification		Ordering Information	
<b>Electrical</b>		<b>Part Number</b>	<b>Description</b>
Current consumption	12mA at 12VDC (Typical) 36.5mA at 12VDC (max.)	RK800Q0G300A	iWISE QUAD AM Grade 3
Voltage requirements	9 - 16VDC		
Alarm contacts	24VDC, 0.1A		
Tamper contacts	24VDC, 0.1A		
FAULT/AM contacts	24VDC, 0.1A		
<b>Environmental</b>			
RF immunity	30V/m (From 10MHz to 1GHz):		
Operating temperature	-20°C to 55°C (-4°F to 131°F)		
Storage temperature	-20°C to 60°C (-4°F to 140°F)		
<b>Optical</b>			
Filtering	White Light Protection		
<b>Physical</b>			
Size	127.6 x 64.2 x 46.6 mm (5 x 2.5 x 1.84 in.)		
Weight	115 gr. (4 oz)		

**RISCO Group Warranty**


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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. Buyer understands that a properly installed and maintained alarm may only reduce the risk of burglary, robbery or fire without warning, but is not assurance or a guarantee 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, 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.

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