D-302413

English

NEXT PG2 / NEXT K9-85 PG2

PowerG, Wireless, PIR /Pet Tolerant Motion Detector

≋ Visonic

Installation Instructions

1. INTRODUCTION

The Next PG2 and Next K9-85 PG2 are 2-way, microprocessor-controlled, wireless digital PIR detectors.
The detectors features are as follows:

- For use with all PowerMaster® control panels (version 10 and higher).
- Combined Fresnel and cylindrical optics, up to 15 meters (49 ft).
- The Next PG2 includes wall creep zone protection.
- In Next PG2 and Next K9-85 PG2, Target Specific Imaging™ (TSI) technology is used for distinction between human beings and pets weighing up to 38 kg (85lb).
- Includes a fully supervised PowerG transceiver.
- The advanced True Motion Recognition™ algorithm (patented) allows distinguishing between the true motion of an intruder and any other disturbances which may cause false alarms.
- Sophisticated frequency domain digital signal processing.
- Built-in link quality indicators; no need for the installer to physically approach the control panel thus making installation faster and easier.
- No vertical adjustment is needed.
- Motion event counter determines whether 1 or 2 consecutive motion events will trigger an alarm.
- Automatic termination of walk-test after 15 minutes.
- Microprocessor-controlled temperature compensation.
- Sealed chamber protects the optical system.
- Front cover and back tamper switches, for improved tamper protection.
- White light protection.
- ***Notes:*** *1. The pet immunity feature was not evaluated by UL.*
    2. For CE installations, the pet immunity was not evaluated by DNV.
    3. The pet immunity feature is not evaluated and certified by Applica Test & Certification AS.
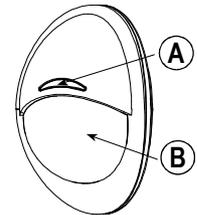
A. LED
B. Lens
Figure 1: External View

2. INSTALLATION

2.1 General Guidance (see Fig. 2)

1. Keep away from heat sources.
2. Do not expose to air drafts.
3. Do not install outdoors.
4. Avoid direct sunshine.
5. Keep wiring away from power cables.
6. Do not install behind partitions.
7. Mount on solid stable surface.
8. Installed in accordance with NEC, NFPA 70.
9. Installed in accordance with UL 681, Standard for Installations and Classifications of burglar and Holdup Alarm Systems.
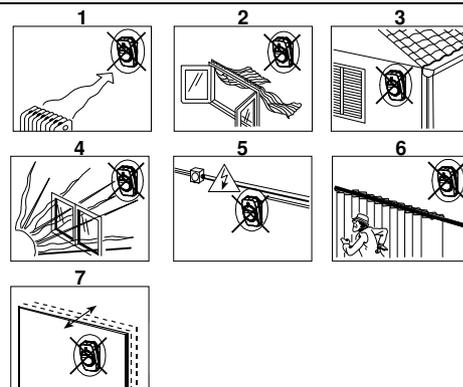
Figure 2. General Guidelines

Important! The Next K9-85 PG2 detector is tolerant to 38 kg (85 lb) animals moving on the floor or climbing on furniture as long as the activity takes place below 1 m (3 ft). Above the 1 m (3 ft) height limit, the detector is tolerant to 19 kg (42 lb) pets, but the pet immunity will decrease as the pet gets closer to the detector. It is therefore recommended to select a mounting location that minimizes potential close proximity of animals.

WARNING! *To comply with FCC and IC RF exposure compliance requirements, the PIR detector should be located at a distance of at least 20 cm from all persons during normal operation. The antennas used for this product must not be co-located or operated in conjunction with any other antenna or transmitter*

2.2 Mounting (see Fig. 3)

Notes:
1. Mount the detector so that its orientation is perpendicular to the expected intrusion path.
2. For installations of detector at 2m high, Dead zone is 2ft at 0m high and 0.5ft at 1.5m high.
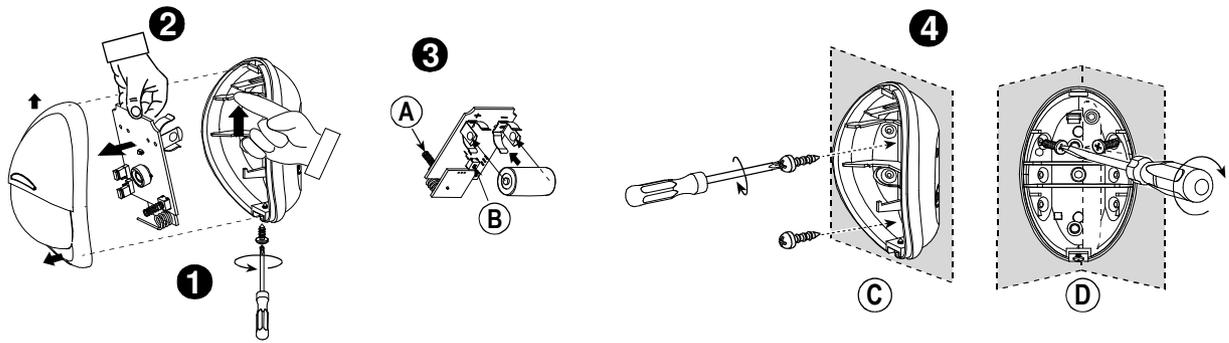
1. Release screw and remove cover.
2. Push catch and remove board.
3. Insert battery.
4. Mounting

A. Front Tamper switch
B. Back Tamper switch.
C. On surface
D. In corner

Caution!

Risk of explosion if battery is replaced by an incorrect type. Dispose of used battery according to manufacturer's instructions.

*Note: Back Tamper must be enabled for UL installations.***Figure 3. Mounting**

2.3. Enrollment

Refer to the PowerMaster panel's Installer Guide and follow the procedure under the **"02:ZONES/DEVICES"** option of the Installer Menu. A general description of the procedure is provided in the following flow chart.

Step 1	Step 2	Step 3	Step 4	Step 5	Step 6
Enter the Installer menu and select "02:ZONES/DEVICES"	Select "ADD NEW DEVICE" Option See Note [1]	Enroll the device or Enter the device ID	Select the desired Zone Number	Configure Location, Zone Type & Chime Parameters	Configure the Detector
02.ZONES/DEVICES ⇨	ADD NEW DEVICES ⋮ MODIFY DEVICES	⇨ ENROLL NOW or ENTR ID:XXX-XXXX	⇨ Z14:Motion Sens ID No. 120-XXXX	⇨ Z14.LOCATION Z14.ZONE TYPE Z14.SET CHIME Z14.DEV SETTINGS	See Note [2]

⇨ means scroll ▶▶ and select **OK**

Notes:

[1] If the detector is already enrolled you can configure the detector parameters via the "Modify Devices" option – see Step 2.

[2] Select the "Device Settings" option and refer to section 2.4 to configure the detector parameters.

2.4. Configuring the Detector Parameters

Enter the DEVICE SETTINGS menu and follow the configuration instructions for the Next PG2 / Next K9-85 PG2 PIR detector as described in the following table.

Option	Configuration Instructions
Alarm LED	Here you determine whether or not the alarm LED indication will be activated.
	Optional settings: LED ON (default) and LED OFF.
Event Counter	Here you determine whether an alarm will be activated upon continued motion (low sensitivity) or upon a single alarm event (high sensitivity)..
	Optional settings: LOW sensitive (default) and HIGH sensitive**.**
DISARM Activity	Here you determine whether or not to set the activity time during disarm.
	Optional settings: NOT Active (default), YES – no delay, YES + 5s delay, YES + 15s delay, YES + 30s delay, YES + 1m delay, YES + 2m delay, YES + 5m delay, YES + 10m delay, YES + 20m delay and YES + 60m delay.

3. LOCAL DIAGNOSTICS TEST

NOTE: Run a diagnostic test at least once a year to ensure that the detector is working correctly.

A. Separate the base from the cover (see Fig. 3).

B. Put back the cover to return the tamper switch to its normal (undisturbed) position, and then secure the front cover to the base with the case closure screw.

C. The Next PG2 / Next K9-85 PG2 will enter a 2 min. stability period. During this time the red LED blinks.

D. Walk-test the coverage area - see Fig. 5. Walk across the far end of coverage pattern in both directions, The red LED lights each time your motion is detected followed by 3 LED blinks.

The following table indicates received signal strength indication.

LED response	Reception
Green LED blinks	Strong
Orange LED blinks	Good
Red LED blinks	Poor
No blinks	No communication

IMPORTANT! Reliable reception must be assured. Therefore, "poor" signal strength is not acceptable. If you receive a "poor" signal from the detector, re-locate it and re-test until a "good" or "strong" signal strength is received (in regions requiring UL-compliant installation, only "strong" signal strength is permitted).
Notes:
1. For detailed Diagnostics Test instructions refer to the control panel Installer Guide.
2. For UL/CUL installations, the test result must be "Strong".
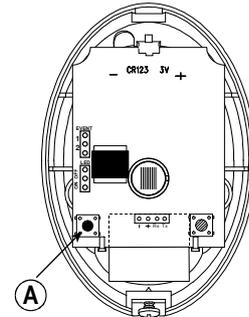
A. ENROLL button

Figure 4. Device enroll button

4. SPECIAL COMMENTS

Even the most sophisticated detectors can sometimes be defeated or may fail to warn due to: DC power failure / improper connection, malicious masking of the lens, tampering with the optical system, decreased sensitivity in ambient temperatures close to that of the human body and unexpected failure of a component part.

The above list includes the most common reasons for failure to detect intrusion, but is by no means comprehensive. It is therefore recommended that the detector and the entire alarm system be checked weekly, to ensure proper performance.

An alarm system should not be regarded as a substitute for insurance. Home and property owners or renters should be prudent enough to continue insuring their lives and property, even though they are protected by an alarm system.

5. COMPLIANCE WITH STANDARDS

Compliance with Standards

Europe: EN 300220, EN 50131-1 Grade 2, Class II. EN 301489, EN 50130-4, EN 60950, EN 50131-2-2, EN 50131-6 Environmental IP55.

The NEXT PG2 and NEXT K9-85 PG2 are compatible with the RTTE requirements - Directive 1999/5/EC of the European Parliament and of the Council of 9 March 1999 and EN50131-1 Grade 2 Class II.

Certified by Norwegian accredited certification body Applica Test & Certification AS in accordance with EN 50131-2-2, EN 50131-6, EN 50131-5-3, EN 50130-4, and EN 50130-5.

Applica T&C has certified only the 868 MHz variant of this product.

Also complies to **USA:** CFR47 Part 15; **Canada:** RSS 210;

UK: This product is suitable for use in systems installed to conform to PD6662:2010 at Grade 2 and environmental class 2. DD243 and BS8243.

The Power G peripheral devices have two- way communication functionality, providing additional benefits as described in the technical brochure. This functionality has not been tested to comply with the respective technical requirements and should therefore be considered outside the scope of the product's certification.

EN 50131-1 Security Grade

According to EN 50131-1:2006 and A1:2009, this equipment can be applied in installed systems up to and including Security Grade 2.

EN 50131-1 Environmental Class Class II

Visonic Ltd.
M/N: RFD
FCC ID: WP3RFD
IC: 1467-RFD

This device 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 residential installations. 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 and television reception.

However, there is no guarantee that interference will not occur in a particular installation. If this device does cause such interference, which can be verified by turning the device off and on, the user is encouraged to eliminate the interference by one or more of the following measures:

– Re-orient or re-locate the receiving antenna.

– Increase the distance between the device and the receiver.

– Connect the device to an outlet on a circuit different from the one that supplies power to the receiver.

– Consult the dealer or an experienced radio/TV technician.

APPENDIX: SPECIFICATIONS

GENERAL

Detector Type	Dual element low-noise pyroelectric sensor
Lens Data	**No. of Curtain Beams / curtains:**
	Next PG2: 18 far, 18 mid, 10 close
	Next K9-85 PG2: 18 far, 18 mid, 18 close
	Note: Lens – Reflex II PIR, Fresnel type lens With Optical attenuation in the lower part of the lens. Lens material is High Density Polyethylene (HDPE). Part of Enclosure Cover (Item 1) and snapped to the Enclosure Base (Item 2) by two tabs and one screw.
Max. Coverage	15 x 15 m, (49 x 49 ft) / 90°
	A. HORIZONTAL VIEW
	B. VERTICAL VIEW
	C. Next PG2: 0.5-4m, Next K9-85 PG2: 2-4m
Pet Immunity (Next K9-85 PG2 only)	Up to 38 kg (85 lb)

Fig. 5. Coverage Pattern & Walk-test

ELECTRICAL

Power Supply	Type C
Internal Battery	3V Lithium battery, type CR-123A or equivalent

Notes:
1. Use only the above battery type.
2. For UL installations use Gold Peak (GP) CR123A only.

Nominal Battery Capacity	1450 mA/h
Battery Life (for typical use)	6 to 8 years
Low Battery Threshold	2.5 V

FUNCTIONAL

True Motion Event Verification	2 remote selections at panel - LOW, HIGH
Alarm Period	2 seconds

WIRELESS

Frequency Band (MHz)	**Europe and rest of world:** 433-434, 868-869 **USA:** 912-919
Communication Protocol	PowerG
Supervision	Signaling at 4-min. intervals
Tamper Alert	Reported when a tamper event occurs and in any subsequent message, until the tamper switch is restored

MOUNTING

Height	1.8 - 2.4 m (6 - 8 ft). For Next PG2, the recommended height is up to 2.1 m (7 ft)
Installation Options	Surface or corner
ACCESSORIES	**BR-1:** Surface mounted swivel bracket, adjustable 30° down and 45° left/45° right.
	BR-2: BR-1 with a corner adapter
	BR-3: BR-1 with a ceiling adapter
	Note: UL did not evaluate the product with the use of the BR brackets

ENVIRONMENTAL

RFI Protection	>20 V/m up to 2000 MHz, excluding inband frequencies
Operating Temperatures	-10℃ to 50℃ (14℉ to 122℉) indoor
	Note: UL tested 0℃ to 49℃
Storage Temperatures	-20℃ to 60℃ (-4℉ to 140℉)
Humidity	Average relative humidity of up to approximately 75% non-condensing. For 30 days per year the relative humidity may vary between 85 % and 95 % non-condensing
	Note: For UL installations, relative humidity is 85%.

PHYSICAL

Size (H x W x D)	94.5 x 63.5 x 53.0 mm (3-11/16 x 2-1/2 x 2-1/16")
Weight (with battery)	70 g (2.5 oz).
Color	White

PATENTS	U.S. Patents 5,693,943 ● 6,211,522 ● D445,709 (another patent pending)

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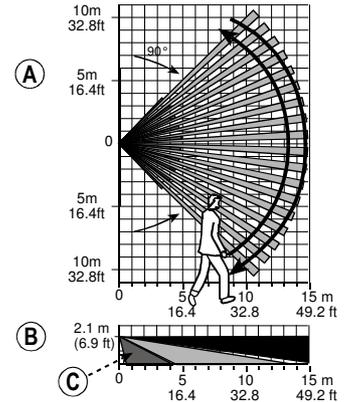
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