



PG9974(P)/PG8974(P)/PG4974(P)

Wireless PowerG High-security Mirror Detector with Anti-masking Installation Instructions

Features

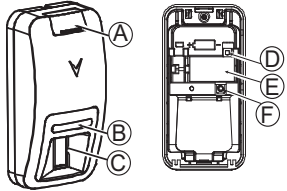
The PGx974(P) (pet-immune) are 2-way, microprocessor-controlled, wireless digital mirror PIR detectors which include the following features:

- Built-in link quality indicators reduce installation time by eliminating the need for the installer to physically approach the control panel.
- Adaptive Active Infra-Red Anti-Masking technology providing the most advanced reliable protection against intentional masking attempts (patent pending).
- Includes a fully supervised PowerG transceiver.
- Incorporates patent pending black mirrors for extremely high white light immunity.
- Advanced elliptical / parabolic mirror technology (patented).
- V-slot® optic technology (patented) for improved robustness, anti-vandalism and for very high reliability.
- Creep zone protection.
- PGx974P can distinguish between human beings and pets weighing up to 40kg (88 lb).
- The advanced True Motion Recognition™ algorithm (patented) distinguishes between true motion of an intruder and other disturbances which may cause false alarms.
- 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.
- Tamper protection for cover opening and removal from wall
- Immunity to magnetic field

Attention: Read the safety information before you install the equipment.

Device Setup

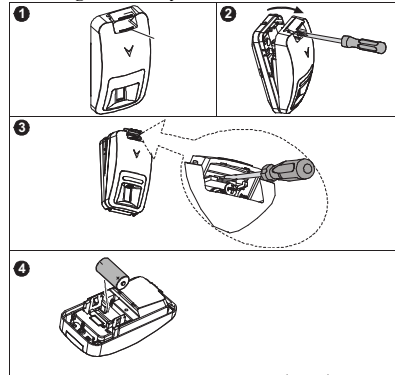
To ensure the continued operation of all wireless devices after performing a system default, a global upload of all wireless programming via DLS is recommended before defaulting the system. After completing the system default, download the wireless programming.



Legend

- A. Screw cover
- B. LED
- C. PIR optical window
- D. Enroll button (use a screwdriver to press the recessed button)
- E. Battery
- F. Tamper switch
- G. Break-away base segment (shaded)
- H. Mounting height
- I. Coverage range
- J. Horizontal view
- K. Vertical view
- X. Lower surface (with downward tilt)
- Y. Upper surface (without downward tilt)

Installing the Battery



Caution! Risk of explosion if battery is replaced by an incorrect type. Dispose of used batteries according to the manufacturer's instructions and according to local rules and regulations. Batteries are to be replaced by service persons only.

- On the indicated location, lift the screw cover upward using your thumb.
 - Release the screw and open the cover in the direction shown by the arrow.
 - Insert a screwdriver into the slot and then push inward to separate the base from the cover.
 - Insert battery while observing polarity.
- Note:** When manually programming wireless devices, if a device has been powered up for more than 48 hours it cannot be enrolled into the system until the device has been tampered and restored. When programming the panel using the Quick Enroll procedure follow the steps detailed in Enroll the Device into the System.

Note: After restoring a low battery trouble the system may take up to 5 minutes to clear the trouble.

Enroll the Device

Refer to the PowerSeries Neo Host Installation Manual or iotega Reference Manual for the enrollment procedure.

Perform a Placement Test

Before permanently mounting any wireless device, temporarily mount the device and perform a Placement test.

- Tamper the device by removing the cover.
- Restore the tamper. The device now enters Placement test mode for 15 minutes.
- Trip the device, the red LED blinks once to identify that a signal is being sent to the receiver and then blinks three times to identify the signal strength. To perform a walk test, walk across the far end of coverage pattern in both directions. The following table indicates the received signal strength.

LED Response	Signal Strength
Green LED blinks	STRONG
Orange LED blinks	GOOD
Red LED blinks	POOR
No blinks	No communication

IMPORTANT! Only GOOD or STRONG signal strengths are acceptable. If you receive a POOR signal from the device, relocate it and re-test until a GOOD or STRONG signal is received.

Note: For UL/ULC installations, only STRONG signal levels are acceptable. After installation verify the product functionality in conjunction with the compatible receivers.

Note: For detailed Placement instructions refer to the control panel Reference Guide.
Note: Perform a walk test of the coverage area at least once a year to ensure that the detector is working correctly.

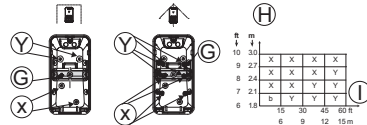
Mounting

Note: Mount the detector so that its orientation is perpendicular to the expected intrusion path. For the desired detector's range and height, use mounting holes x or y, as specified in the table below.

Note: To be installed by service persons in non-hazardous locations only.

Use the following as a guide for locating a suitable mounting location:

- Keep away from heat sources.
- Do not expose to air drafts.
- Do not install outdoors.
- Avoid direct sunshine.
- Keep wiring away from power cables.
- Do not install behind partitions.
- Mount on solid stable surface.



Caution! The back tamper switch will not protect the unit unless the break-away base segment is secured to the wall with at least one screw.

Configuration

The following programmable option is available:

Alarm LED - Default [ON]

Enables the devices LED to activate when an alarm event occurs.

Supervision - Default [ON]

Enables supervision of the device.

Selections

Hightraffic Shutdown - Default [01]

Activating this feature helps conserve battery power when the system is disarmed by configuring a reporting timer. When motion is detected, the device transmits an alarm to the receiver and will not report any further events until the timer expires. Any motion detected during the configured period will be reported once the timer expires. No Delay causes the device to report an alarm each time the detector is tripped.

[01] Detector Disabled (while disarmed)	[02] No Delay	[03] 5 second delay
[04] 15 second delay	[05] 30 second delay	[06] 1m delay
[07] 5m delay	[08] 10m delay	[09] 20m delay
[10] 60m delay		

Event counter - Default [002]

Alarm activates after a configured number of events have been detected.

Key in activities 001-255

Event Indications

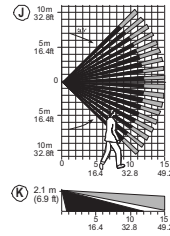
LED Indications	Event
Red LED blinks	Stabilization (warm-up 120 s)
Red LED ON 0.2 sec.	Tamper open / close
Red on 2 sec.	Intruder alarm
Yellow LED on	AM detection – Diagnostic mode
Yellow LED blinks slowly (0.2 sec. ON, 30 sec. OFF)	AM detection – Normal mode
Yellow and red LED blink simultaneously (0.2 sec. ON [both], 0.2 sec. OFF)	Self-test failure – Diagnostic mode
Yellow and red LED blink simultaneously slowly (0.2 sec. ON [both], 30 sec. OFF)	Self-test failure – Normal mode

Specifications

GENERAL

Detector Type: Dual element low-noise pyroelectric sensor
Lens Data

No. of Beam Elements:18x3=54 far parabolic mirror segments



Max. Coverage: 15 m (49 ft) / 90°25 m (82 ft) x 2.5 m
Pet Immunity (only): Up to 38 kg (85 lb)

ELECTRICAL

Internal Battery: 3 V Lithium CR2032 type battery, Varta. 230 mAh Panasonic 230 mAh type battery

Note: For UL installations use Gold Peak (GP) or Panasonic CR123A batteries only.

Nominal Battery Capacity: 1450 mA/h (2400mA/h for optional CR17450)

Low Battery Threshold: 2.45 V

Battery Life (for typical use): 7 years (not tested by UL/ULC)

FUNCTIONAL

True Motion Event Verification: 2 remote selections - 1 (OFF) or 2 (ON) motion events

Alarm Period: 2 seconds

WIRELESS

Frequency Band (MHz): CE Listed PG4974: 433MHz; CE/EN listed PG8974: 868MHz; FCC/IC/UL/ULC listed PG9974: 912-919MHz

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 – 3.0 m (6 - 10 ft).

Installation Options: Surface or corner

ACCESSORIES

PGBRACKET-1: Surface mounted swivel bracket, adjustable 30° down and 45° left/45° right.

PGBRACKET-2: PGBRACKET-1 with a corner adapter

PGBRACKET-3: PGBRACKET-1 with a ceiling adapter

Note: UL did not evaluate the product with the use of brackets.

ENVIRONMENTAL

RFI Protection: >20 V/m up to 2000 MHz, excluding inband frequencies

Temperature range: -10°C to +55°C (UL/ULC only verified the range 0°C-49°C)

Relative Humidity: up to max. 93%RH, non-condensing

PHYSICAL

Size (H x W x D): 115 x 60 x 48mm (4-1/2 x 2-5/16 x 1-15/16")

Weight (with battery): 90 g (3 oz).

Color: White

COMPATIBLE RECEIVERS

This device can be used with DSC panels and receivers that use PowerG technology.

For UL/ULC installations use these devices only in conjunction with compatible DSC wireless receivers: WS900-19, WS900-29, HSM2HOST9, HS2LCDRF(P)9, HS2ICNRF(P)9 and PG9920.

After installation verify the product functionality in conjunction with the compatible receiver used.

Note: Only devices operating in band 912-919MHz are UL/ULC listed.

UL/ULC Notes

The PG9974 has been listed by UL for commercial and residential burglary applications and by ULC for residential burglary applications in accordance with the requirements in the Standards UL 639 and ULC-S306 for Intrusion Detection Units.

Europe: Model PG8974 certified by Applica C&T to the following standards: EN50131-2-2, EN50131-1 GRADE 2, CLASS II, EN50131-6

Type C. According to EN 50131-1, this equipment can be applied in installed systems up to and including Security Grade 2, Environmental Class II. UK: The PG8974 is suitable for use in systems installed to conform to PD6662 at Grade 2 and environmental class 2.

SIMPLIFIED EU DECLARATION OF CONFORMITY

Hereby, Tyco Safety Products Canada Ltd declares that the radio equipment type is in compliance with Directive 2014/53/EU. The full text of the EU declarations of conformity for the models mentioned below are available at the following internet addresses:

PG4974(P) - <http://dsc.com/pdf/1401019>

PG8974(P) - <http://dsc.com/pdf/1401042>

Frequency Band / Maximum Power

g1 433.04MHz – 434.79MHz/10mW

h1.4 868.0MHz – 868.6MHz/10mW

h1.5 868.7MHz – 869.2MHz/10mW

European single point of contact: Tyco Safety Products, Voltaweg 20,

6101 XK Echt, Netherlands

FCC COMPLIANCE STATEMENT

WARNING! Changes or modifications to this unit not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

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.

This equipment complies with FCC and IC RF radiation exposure limits set forth for an uncontrolled environment.

This device complies with FCC Rules Part 15 and with Industry Canada licence-exempt RSS standard(s). Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference that may be received or that may cause undesired operation.

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes: (1) l'appareil ne doit pas produire de brouillage, et (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

Safety

Important: This equipment must be installed by a skilled person only. A skilled person is an installer with appropriate technical training. The installer must be aware of potential hazards during installation and measures available to minimize risks to the installer and other people.

- Install the equipment indoors in a non-hazardous environment where the following conditions are met:
- Pollution degree - Maximum 2
- Over voltages - Category II
- Instruct the user that there are no user serviceable parts in this equipment. All equipment must be serviced by a skilled person.

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Instructions d'installation du détecteur à miroir sans fil de haute sécurité PowerG avec fonction anti-masque

Caractéristiques

Les PGx974(P) (insensible aux animaux) sont des détecteurs numériques IPR à miroir, sans fil, commandés par microprocesseur, bidirectionnels qui incluent les fonctions suivantes :

- Les indicateurs de qualité de liaison intégrés réduisent les temps d'installation en supprimant la nécessité de l'installateur d'être physiquement à proximité de la centrale.
- La technologie anti-masque à infrarouge actif adaptative qui fournit une protection sûre et évoluée contre les tentatives de masquage intentionnel (Brevet en instance).
- Il contient un émetteur-récepteur entièrement supervisé PowerG.
- Des miroirs noirs intégrés en attente de brevet pour une immunité contre un éclairage blanc extrêmement intense.
- Une technologie à miroir elliptique/parabolique avancée (brevétée).
- La technologie optique V-slot® (brevétée) contre le vandalisme pour une robustesse améliorée et une très haute fiabilité.
- Protection au ras du mur.

