

DSC PG Series Wireless PowerG High Security Mirror Detector Installation Guide

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DSC PG Series Wireless PowerG High Security Mirror Detector



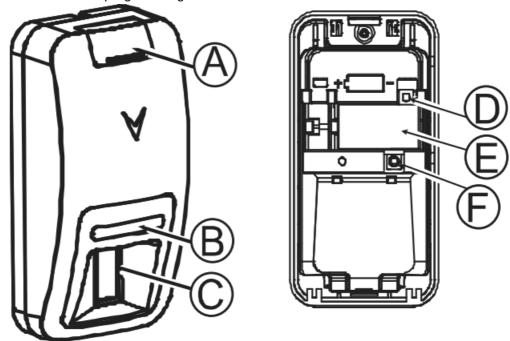
Features

The PGx974(P) (pet-immune) are 2-way, microprocessor-controlled, wireless digital following feature:

- 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 18 kg (40 lb).
- The advanced True Motion Recognition[™] algorithm
 (patented) distinguishes between the true motion of an intruder and any 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 alann.
- Automatic termination of walk-test after 15 minutes.
- Microprocessor-controlled temperature compensation.
- Sealed chamber protects the optical system.
- Front and back tamper protection.
- Self-test.

Device Setup

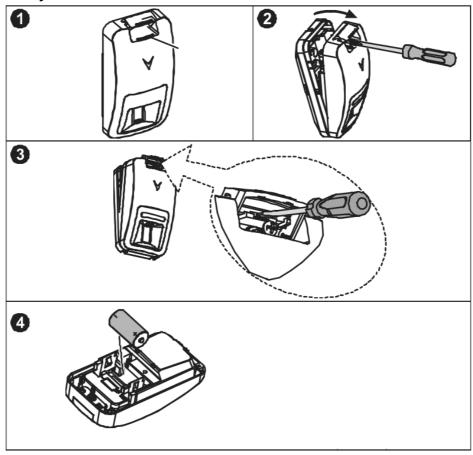
Note: To ensure the continued operation of all wireless devices after performing a system default, a global upload of all wireless programming via DLS is recommended before defaulting the system. After completing the system default, download the wireless programming.



Legend

- A. Screw cover
- **B.** LED
- C. PTR optical window
- **D.** Enroll button (use a screwdriver to press the recessed but-ton)
- 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.

- 1. On the indicated location, lift the screw cover upward using your thumb.
- 2. Release the screw and open the cover in the direction shown by the arrow.
- 3. Insert a screwdriver into the slot and then push inward to sep-arate the base from the cover.
- 4. 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 into the System

To quick enroll:

- 1. On a keypad press [*] [8] [Installer Code] [804] [000].
- 2. Press and hold the device enroll button until the LED lights steady and then release the enroll button while the LED is still lit. A confirmation message then appears on the keypad.
- 3. Press [*] key to confirm ID.
- 4. Enter [3 digit zone #].
- 5. Enter [3 digit zone type].

- 6. Enter [1 digit partition #] for all desired partitions and press [#]. If using an LCD keypad you can scroll to the desired partitions and press [*] to toggle the partition.
- 7. On an LCD keypad enter the label by using word library.

To pre-enroll:

- 1. Remotely configure the unique ID number into the system. For more information see the HSM2HOST manual.
- 2. When on-site, press the device enroll button.

Note: If the wireless device has been powered for more than 48 hours without being enrolled, tamper and restore the device to enroll it.

Perform a Placement Test

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

- 1. Tamper the device by removing the cover.
- 2. Restore the tamper. The device now enters Placement test mode for 15 minutes.
- 3. Trip the device and 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 indication.

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 HSM2HOST9, HS2LCDRF(P)9, HS21CNRF(P)9 and PG9920.

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.

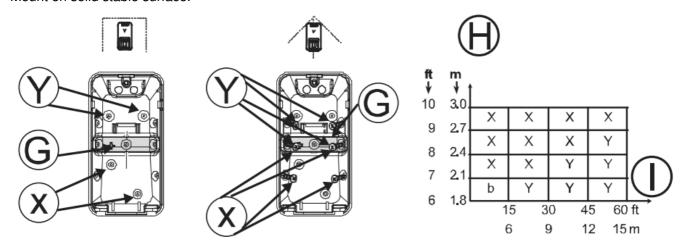
Mounting

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 wtless the break-away base segment is secured to the wall with at least one screw.

Configuration

To enter the wireless configuration section enter [804][000].

Device Toggles

[001][01] Alarm LED -Default [Y]

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

[001][04] Supervision – Default [Y]

Enables supervision of the device.

Selections

[003 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 alann 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 Dis- [02] No Delay abled (while disarmed) [03] 5 second delay [04] 15 second delay

[05] 30 second delay [06] Im delay

[07] 5m delay [08] I Om delay [09] 20m delay [10] 60m delay

[0v6 Event counter – Default [002]

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

Key in activities

001-255

Event Indications

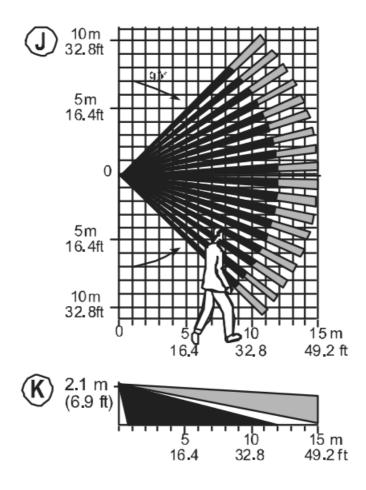
LED Indications	Event
Red LED blinks	Stabilization (warm-up 120 sec)
Red LED ON 0.2 sec.	Tamper open / close
Red on 2 sec.	Intruder alarm
Yellow LED on	AM detection – Diagnostic mode
Yellow LED blinks slowly (0.2 sec. ON, 30 sec. OFF)	AM detection – Normal mode

LED Indications	Event
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:18×3=54 far parabolic mirror segments



• Max. Coverage: 15 m (49 ft) I 90°25 m (82 ft) x 2.5 m

• Pet Immunity (only): Up to 38 kg (85 lb)

ELECTRICAL

• Internal Battery: 3V Lithium battery, type CR-123A (optionally can be used type CR-17450)

Note: For UL installations use Gold Peak (GP) only. Use only the above battery type.

• Nominal Battery Capacity: 1450 mA/h (2400mA/h for optional CR! 7450)

• 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 comer 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 (II x WxD): 115 x 60 x48 mm (4-l/2 x2-5/16 x 1-15/ 16")

• Weight (with battery): 90 g (3 oz).

· Color: White

COMPATIBLE RECEIVERS

• 433MHz Band: HSM2HOST4; HS2LCDRF(P)4;HS21CNRF(P)4; PG4920

• 868MHz Band: HSM2HOST8; HS2LCDRF(P)8; HS21CNRF(P)8;PG8920

• 912-919MHz Band: HSM2HOST9; HS2LCDRF(P)9; HS21CNRF(P)9; PG9920

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

UL/ULC Notes

Only model PG9974 operating in the frequency band 912-919MHz is UL/ULC listed. 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. For UL/ULC installations use these devices only in conjunction with compatible DSC wireless receivers: HSM2HOST9, HS2LCDRF(P)9, HS2lCNRF(P)9 and PG9920. After installation verify the product functionality in conjunction with the compatible receiver used.

C E Europe: The PG8974 and PG4974 are compliant with the RITE DNV (DET NORSKE VERITAS) to the following standards: EN50131-2-2, EN50131-I GRADE 2, CLASS 11, EN50131-6 Type C. DNV (DET NORSKE VERITAS) has certified only the 868 Milz variant of this product. According to EN 50131-1:2006 and Al:2009, this equipment can be applied in installed systems up to and including Security Grade 2, Environmental Class IL UK: The PG8974 is suitable for use in systems installed to conform to PD6662:2010 at Grade 2 and environmental class 2. 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

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 CIs 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 licenceexempt RSS standard(s). Operation is subject to the following two conditions: (I) 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.

Limited Warranty

Digital Security Controls warrants that for a period of 12 months from the date of purchase, the product shall be free of defects in materials and workmanship under nonnal use and that in fulfilment of any breach of such warranty, Digital Security Controls shall, at its option, rep!llr or replace the defective equipment upon return of the equipment to its repair depot. This warranty applies only to defects in parts and workmanship and not to damage incurred in shipping or handling, or damage due to causes beyond the control of Digital Security Controls such ru. lightning, excessive voltage, mechanical shock, water damage, or damage arising out of abuse, alteration or improper application of the equipment.

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In no event shall Digital Security Controls be liable for any direct, indirect or conrequential damages, loss of anticipated profits, loss of time or any other losses incurred by the buyer in connection with the purchase, installation or operation or failure of this product.

Motion detectors can only detect motion within the designated areru. ru. shown in their respective installation instructions. They cannot discriminate between intruders and intended occupants. Motion detectors do not provide volumetric area protection. They have multiple beams of detection and motion can only be detected in unobstructed areas covered by th beams. They cannot detect motion which occurs behind walls, ceilings, floor, closed doors, glass partitions, glass doors or windows. Any type of tampering whether intentional or unintentional such as masking, painting, or spraying of any material on the lenses, mirrors, windows or any other part of the detection system will impair its proper operation. Passive infrared motion detectors operate by sensing changes in temperature. However their effectiveness can be reduced when the ambient temperature rises near or above body temperature or if there are intentional or unintentional sources of heat in or near the detection area. Some of these heat sources could be heaters, radiators, stoves, barbeques, fireplaces, sunlight, steam vents, lighting and so on.

Wtuning: Digital Security Controls recommends that the entire system be ClJmpletely tested on a regular basis.

However, despite frequent testing, and due to, but not limited to, criminal tampering or electrical disruption, it is possible for this product to fail to perform as expected.

Important Information: Changes or modifications not expressly approved by Digital Security Controls could void the user's authority to operate this equipment

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