

# GS250 Gpower Wireless Multi-axis Detector V1.0 Installation Guide



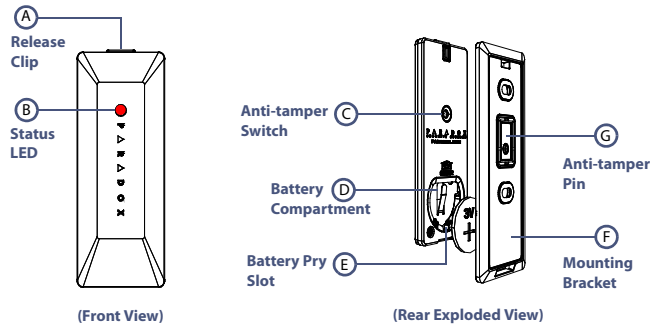
GS250-E100

## Introduction

Congratulations for choosing the Gpower GS250 as your security device. The GS250 is a fully-supervised, wireless device based on a three-axis accelerometer device. In order to conserve battery life, the unit is in sleep mode most of the time and will wake-up periodically, under different conditions. As a result, movement detection can take anywhere from two to five seconds (alarm transmitted, red). This analysis period depends on the type of movement and the GS250's settings. A pre-alarm movement detection will be indicated by short green flashes. After two consecutive detections within a five-minute span, the GS250 will go into sleep mode with no RF transmitting, for three minutes. In this mode, movement detection will be indicated by short red flashes. Zone restore will be sent ten seconds after no movement has been detected. A grace period feature in the GS250, allows objects to be moved for up to four seconds, before initiating signal process for sending alarms. An alarm will occur within five to seven seconds of movement, when the grace period feature is enabled.

## Overview

Figure 1: Front and rear views of the GS250.



## Mounting the GS250

1. Press the release clip (A) and separate the mounting bracket (F) from the unit.

Figure 2: Removing the mounting bracket.



2. Attach the mounting bracket (F) to the protected object, by using three screws or adhesive tape. When using tape, separate the anti-tamper pin (G) from the mounting bracket (F), by breaking the knock-outs. Make sure to glue the pin (G) back in its original position (tamper pin facing the top/release clip).

Figure 3: Removing the anti-tamper pin.



3. Insert the battery in the battery compartment (D).

## Test Mode

Each time the battery is inserted (power-up), or when the tamper is opened, the GS250 will enter test mode. The unit will exit test mode after 15 minutes, or after a period of five minutes with no movement.

Table 1: Test mode flash sequence on the GS250

| Condition           | Flash Sequence             | LED   |
|---------------------|----------------------------|-------|
| Power-up            | 3 x 8 fast flash           | Red   |
| Test mode           | 1 x flash, every 5 seconds | Amber |
| Movement            | 1 fast flash               | Green |
| Tamper open         | 8 x fast flash             | Red   |
| Tamper closed       |                            |       |
| Zone closed/restore |                            |       |
| Alarm (zone open)   | ON for 3 seconds           | Red   |

**NOTE:** In test mode, the zone will close and the module's position will be reset after three seconds. In normal mode, this occurs after ten seconds with no movement.

## Power Saving Mode

If two consecutive alarms occur within a five-minute period, the unit switches to power saving mode for a period of three minutes. If a movement is detected while in power saving mode, the LED emits one red flash. Alarms will not be transmitted.

## Low Battery Supervision

The GS250 includes a low battery supervision feature. A low battery trouble will be sent to the control panel, when the voltage drops below 2.3V over a 48-hour period.

## Wireless Transmitter Check-in Supervision

Through panel programming, the check-in supervision can be set at intervals of 80 minutes or 24 hours (default setting).

## Programming Mode

The GS250 offers sensitivity settings, which include a high or standard security. High security requires less movement, before an alarm is triggered. To enter sensitivity programming mode, proceed as follows:

1. Use a pen to press and hold the anti-tamper switch (C), and keep it pressed while inserting the battery.
2. After three seconds, release the anti-tamper switch (C). The unit enters sensitivity programming mode. The LED flashes, displaying the unit's current setting (see table 2).
3. To scroll through the four settings, press and release the anti-tamper switch (C) for less than one second.
4. To exit programming mode, press the anti-tamper switch (C) for more than five seconds. If not, the unit will exit programming mode after 60 seconds have elapsed.

**Table 2: Sensitivity settings on the GS250**

| Setting | Flash Sequence                  | Description  |
|---------|---------------------------------|--|
| 1       | 1 red flash every 2 seconds     | Standard security; no partial movement                   |
| 2       | 2 red flashes every 2 seconds   | High security; no partial movement                       |
| 3       | 1 green flash every 2 seconds   | Standard security; three-second partial movement allowed |
| 4       | 2 green flashes every 2 seconds | High security; three-second partial movement allowed     |

## Technical Specifications

**Table 3: Technical Specifications of the GS250**

|                        |  |
|------------------------|--|
| Sensor Type            | Three-axis accelerometer, with software algorithm for safe detection   |
| Battery                | One 3V lithium battery CR2032/DL2032 (included); battery life is approximately two years, based on two detections per week |
| Range                  | Approximately 100 m (328 ft.) in line of sight   |
| RF Frequency           | 433 or 868 MHz (transceiver)   |
| Operating Temperature  | 0°C to 50°C (32°F to 122°F)  |
| Dimensions (L x W x D) | 7.5 x 2.7 x 0.64 cm (3 x 1.1 x 0.25 in.)   |

## Compatibility

The GS250 is compatible with the following Paradox products:

- Magellan All-in-One Wireless Consoles (MG6130, MG6160, MG-6030, and MG-6060)
- MG series control panels (MG5050 and MG5000)
- Magellan Wireless Expansion Module (RTX3)
- Wireless Receiver (RX1)

For support, please contact your local distributor, or dial 1-800-791-1919 (in North America) or +1-450-491-7444 (outside North America), Monday to Friday, from 8:00 a.m. to 8:00 p.m. EST.

You may also e-mail us at [support@paradox.com](mailto:support@paradox.com).  
Additional information can be found at [PARADOX.COM](http://PARADOX.COM)

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