

# FLD-550 PG2

PowerG Wireless Flood Detector



**Visonic**

A Tyco International Company

## Installation Instructions

### 1. INTRODUCTION

The FLD-550 PG2 is a fully supervised two-way indoor, PowerG flood detector, used to detect the presence of **water based fluids** at any desired location. The FLD-550 PG2 sends the parameters of the specific alarm to the control panel using PowerG two-way communications protocol.

The FLD-550 PG2 tamper switch is activated when the cover is removed.

A periodic supervision message is transmitted automatically. The control panel is thus informed, at regular intervals, of the unit's active participation in the system.

An LED lights whenever alarm or tamper events are reported. The LED does not light while a supervision message is being transmitted. Operating power is obtained from an on-board 3 V Lithium battery. When the battery voltage is low, a "low battery" message is sent to the receiver.

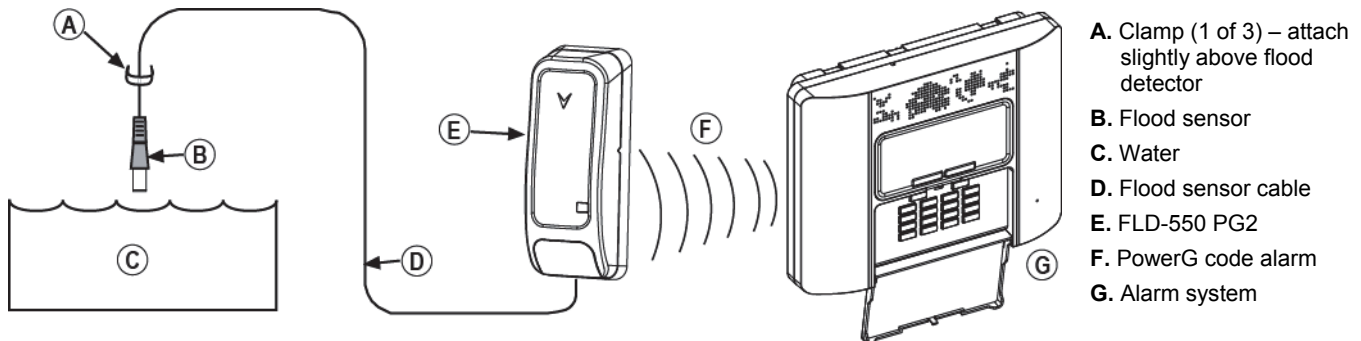


Figure 1. Using the FLD-550 PG2

### 2. INSTALLATION

#### 2.1 Mounting

1. Attach the flood sensor near the floor.
2. Secure the flood sensor and its cable to the wall using the three wire clamps. One clamp should be fastened immediately above the flood sensor. The flood sensor should be installed only in a **vertical position, and facing downward**. The remaining two clamps can be used as required (see Figures 1 and 2).

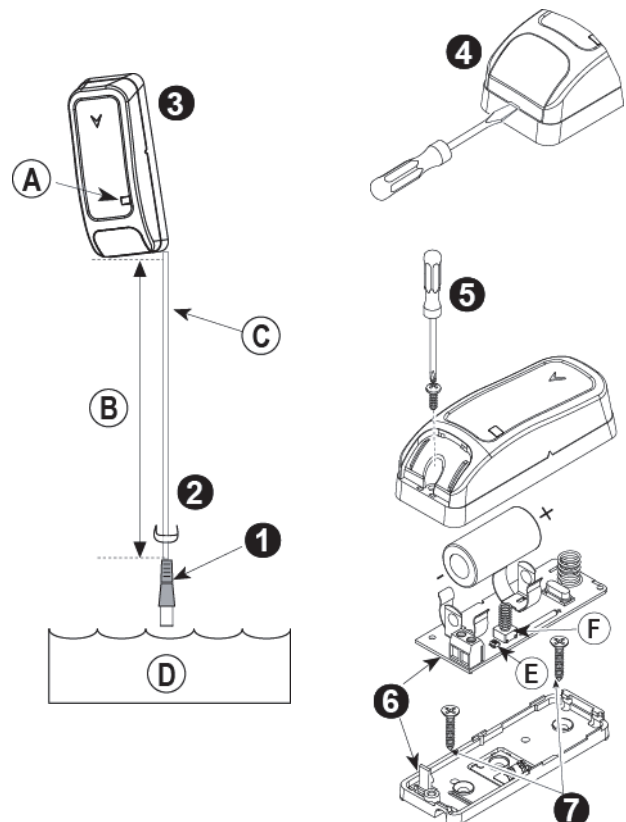
**Note:** To provide better protection against rats, it is recommended that the flood sensor cable be placed inside a metal/plastic pipe.

3. Attach the flood detector to the wall. The flood detector should be placed as high up as possible on the wall to improve communication and to prevent the flood detector itself from coming into contact with water in the event of flooding.
4. Insert a flat-edged screwdriver into the slot and push upward to remove cover.
5. Remove the screw and separate the cover from the base.
6. Remove the PCB board.
7. Mark and drill 2 holes in the mounting surface and fasten the base with 2 countersunk screws.

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

**Note:** 868 MHz device is illustrated in the above example. The same mounting procedure should be performed for 433 MHz and 915 MHz devices.

- A.** Transmission LED  
**B.** 2 -3 m (recommended length)  
**C.** Flood Sensor Cable  
**D.** Water  
**E.** Enroll button  
**F.** Tamper switch

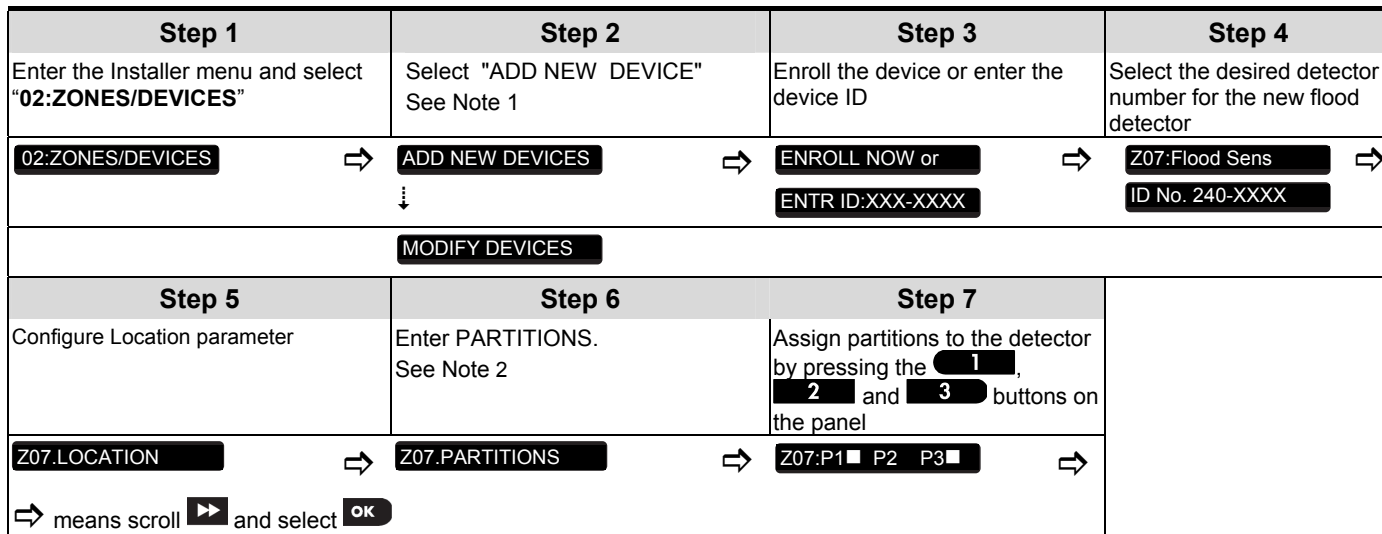


**Note:** Flood sensor height according to required flood detection. Recommended 0-3 cm from floor.

Figure 2. Correct Mounting of the Flood Detector

## 2.2. Enrollment

Refer to the PowerMaster panel's Installer's 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.



### Notes:

1. If the detector is already enrolled, you can configure the detector location parameter and assign partitions via the "Modify Devices" option – see Step 2.
2. PARTITIONS will appear only if PARTITIONING was previously enabled in a panel that supports the Partitioning feature (for further details, see "Partitioning" in the PowerMaster Installer Guide).

## 3. LOCAL DIAGNOSTICS TEST

Before testing, separate the base from the cover (see Figure 2).

- A. Verify that the FLD-550 transmits (the LED lights briefly) and that a tamper message was received by the panel.
- B. When you are satisfied that tamper alerts are transmitted properly, put the cover on to return the tamper switch to its normal (undisturbed) position and then secure the front cover to the base with the screw.
- C. Clean the sensor thoroughly with a rag, removing any oil and dirt.
- D. Bring the flood sensor into contact with water. Wait a few seconds and verify that the transmitter LED lights, indicating that transmission is in progress. It is recommended to perform this test every month.
- E. After 2 seconds the LED blinks 3 times.

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 device, re-locate it and re-test until a "good" or "strong" signal strength is received.

- F. Dry the flood sensor using either blotting paper or a rag, thus restoring it to the undisturbed state, and then observe the LED.

**Note:** For detailed Diagnostics Test instructions refer to the control panel Installer's Guide.

## 4. MISCELLANEOUS COMMENTS

Visonic Ltd. wireless systems are very reliable and are tested to high standards. However, due to low transmitting power and limited range (required by FCC and other regulatory authorities), there are some limitations to be considered:

- A. Receivers may be blocked by radio signals occurring on or near their operating frequencies, regardless of the digital code used.
- B. A receiver responds only to one transmitted signal at a time.
- C. Wireless devices should be tested regularly to determine whether there are sources of interference and to protect against faults.

## 5. COMPLIANCE WITH STANDARDS

### Compliance with Standards



**Europe (433, 868 MHz):** EN 300220, EN 301489, EN 60950, EN50131-1 Grade 2 Class II

The FLD-550 PG2 is compatible with the RTTE requirements - Directive 1999/5/EC of the European Parliament and of the Council of 9 March 1999.

Certified by the Dutch testing and certification body *Telefication BV*.

**USA (915 MHz):** CFR 47 part 15 (FCC)

**Canada (915 MHz):** RSS 210

*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**

Grade 2

**EN 50131-1 Environmental Class**

Class 2

### FCC Compliance Statement

The digital circuit of 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 a residential installation. 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 communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

### WARNING!

To comply with FCC and IC RF exposure compliance requirements, the device 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.

This device complies with Part 15 of the FCC Rules and RSS-210 of Industry and Science Canada. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference 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.

### WARNING!

Changes or modifications to this equipment not expressly approved by Visonic Ltd. could void the user's authority to operate the equipment.

The technical documentation as required by the European Conformity Assessment procedure is kept at:  
UNIT 6 MADINGLEY COURT CHIPPENHAM DRIVE KINGSTON MILTON KEYNES MK10 0BZ. TEL.: +44(0)845 0755800 FAX: +44(0)845 0755801



### W.E.E. Product Recycling Declaration

For information regarding the recycling of this product you must contact the company from which you originally purchased it. If you are discarding this product and not returning it for repair then you must ensure that it is returned as identified by your supplier. This product is not to be thrown away with everyday waste.  
Directive 2002/96/EC Waste Electrical and Electronic Equipment.

## APPENDIX: SPECIFICATIONS

<b>Frequency Band (MHz)</b>	<b>Europe and rest of world:</b> 433-434, 868-869 <b>USA:</b> 912-919
<b>Communication Protocol</b>	PowerG
<b>Alarm Input</b>	External flood probe
<b>Supervision</b>	Signaling at 4-min. intervals
<b>Tamper Alert</b>	Reported when a tamper event occurs
<b>Power Supply</b>	Type C
<b>Battery type</b>	3 V Lithium CR-123 type battery, Panasonic, Sanyo or GP only.
<b>Battery Life Expectancy</b>	8 years (for typical use)
<b>Low Battery Threshold</b>	2.2 V
<b>Battery Supervision</b>	Automatic transmission of battery condition data as part of periodic status report and immediately upon low battery condition detection
<b>Operating Temperature</b>	0°C to 49°C (32°F to 120°F)
<b>Humidity</b>	Average relative humidity of approximate 75% non-condensing. For 30 days per year relative humidity may vary between 85 % and 95 % non-condensing
<b>Dimensions (LxWxD)</b>	81 x 34 x 25 mm (3-3/16 x 1-1/4 x 1 in.)
<b>Weight (including battery)</b>	53g (1.9 oz)

## WARRANTY

Visonic Limited (the "Manufacturer") warrants this product only (the "Product") to the original purchaser only (the "Purchaser") against defective workmanship and materials under normal use of the Product for a period of twelve (12) months from the date of shipment by the Manufacturer.

This Warranty is absolutely conditional upon the Product having been properly installed, maintained and operated under conditions of normal use in accordance with the Manufacturers recommended installation and operation instructions. Products which have become defective for any other reason, according to the Manufacturers discretion, such as improper installation, failure to follow recommended installation and operational instructions, neglect, willful damage, misuse or vandalism, accidental damage, alteration or tampering, or repair by anyone other than the manufacturer, are not covered by this Warranty.

The Manufacturer does not represent that this Product may not be compromised and/or circumvented or that the Product will prevent any death and/or personal injury and/or damage to property resulting from burglary, robbery, fire or otherwise, or that the Product will in all cases provide adequate warning or protection. The Product, properly installed and maintained, only reduces the risk of such events without warning and it is not a guarantee or insurance that such events will not occur.

**THIS WARRANTY IS EXCLUSIVE AND EXPRESSLY IN LIEU OF ALL OTHER WARRANTIES, OBLIGATIONS OR LIABILITIES, WHETHER WRITTEN, ORAL, EXPRESS OR IMPLIED, INCLUDING ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, OR OTHERWISE. IN NO CASE SHALL THE MANUFACTURER BE LIABLE TO ANYONE FOR ANY CONSEQUENTIAL OR INCIDENTAL DAMAGES FOR BREACH OF THIS WARRANTY OR ANY OTHER WARRANTIES WHATSOEVER, AS AFORESAID.**

**THE MANUFACTURER SHALL IN NO EVENT BE LIABLE FOR ANY SPECIAL, INDIRECT, INCIDENTAL, CONSEQUENTIAL OR PUNITIVE DAMAGES OR FOR LOSS, DAMAGE, OR EXPENSE, INCLUDING LOSS OF USE, PROFITS, REVENUE, OR GOODWILL, DIRECTLY OR INDIRECTLY ARISING FROM PURCHASER'S USE OR INABILITY TO USE THE PRODUCT, OR FOR LOSS OR DESTRUCTION OF OTHER PROPERTY OR FROM ANY OTHER CAUSE, EVEN IF MANUFACTURER HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.**

**THE MANUFACTURER SHALL HAVE NO LIABILITY FOR ANY DEATH, PERSONAL AND/OR BODILY INJURY AND/OR DAMAGE TO PROPERTY OR OTHER LOSS WHETHER DIRECT, INDIRECT, INCIDENTAL, CONSEQUENTIAL OR OTHERWISE, BASED ON A CLAIM THAT THE PRODUCT FAILED TO FUNCTION.**

However, if the Manufacturer is held liable, whether directly or indirectly, for any loss or damage arising under this limited warranty, **THE MANUFACTURER'S MAXIMUM LIABILITY (IF ANY) SHALL NOT IN ANY CASE EXCEED THE PURCHASE PRICE OF THE PRODUCT**, which shall be fixed as liquidated damages and not as a penalty, and shall be the complete and exclusive remedy against the Manufacturer.

When accepting the delivery of the Product, the Purchaser agrees to the said conditions of sale and warranty and he recognizes having been informed of.

Some jurisdictions do not allow the exclusion or limitation of incidental or consequential damages, so these limitations may not apply under certain circumstances.

The Manufacturer shall be under no liability whatsoever arising out of the corruption and/or malfunctioning of any telecommunication or electronic equipment or any programs.

The Manufacturers obligations under this Warranty are limited solely to repair and/or replace at the Manufacturer's discretion any Product or part thereof that may prove defective. Any repair and/or replacement shall not extend the original Warranty period. The Manufacturer shall not be responsible for dismantling and/or reinstallation costs. To exercise this Warranty the Product must be returned to the Manufacturer freight pre-paid and insured. All freight and insurance costs are the responsibility of the Purchaser and are not included in this Warranty.

This warranty shall not be modified, varied or extended, and the Manufacturer does not authorize any person to act on its behalf in the modification, variation or extension of this warranty. This warranty shall apply to the Product only. All products, accessories or attachments of others used in conjunction with the Product, including batteries, shall be covered solely by their own warranty, if any. The Manufacturer shall not be liable for any damage or loss whatsoever, whether directly, indirectly, incidentally, consequentially or otherwise, caused by the malfunction of the Product due to products, accessories, or attachments of others, including batteries, used in conjunction with the Products. This Warranty is exclusive to the original Purchaser and is not assignable.

This Warranty is in addition to and does not affect your legal rights. Any provision in this warranty which is contrary to the Law in the state or country where the Product is supplied shall not apply.

**Warning:** The user must follow the Manufacturer's installation and operational instructions including testing the Product and its whole system at least once a week and to take all necessary precautions for his/her safety and the protection of his/her property.

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