

RP-600 PG2

Wireless Repeater for PowerG Systems



Visonic

A Tyco International Company

Installation Instructions

1. INTRODUCTION

The RP-600 PG2 is a range extender designed to relay digital data between wireless PowerG control panel devices and a PowerG control panel. Repeater links are required when the control panel is beyond the range of at least some of the devices and is therefore incapable of receiving transmissions directly (see Figure 3).

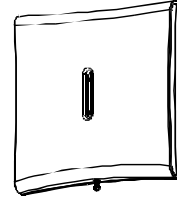


Figure 1. External View

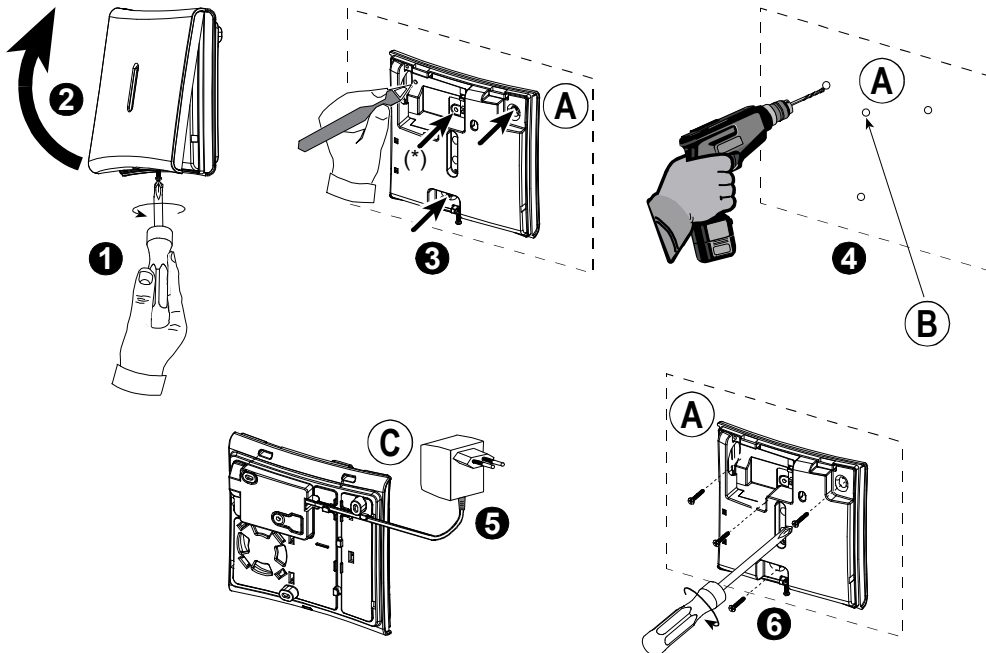
2. INSTALLATION

2.1 Repeater's Location Selection

A. In a repeater setup, install the repeater where good communication is assured with the target receiver and with the transmitters deployed in the repeater's coverage area.

B. Mount the repeater as high as possible above the floor and well away from metal chimneys, large metal cabinets, metal doors and reinforced concrete walls, all of which may reduce the communication range.

C. Make sure that the location you have selected is near an electrical outlet.



A. Mounting surface.

B. For back tamper screw.

C. AC to AC adaptor.

Attention! For Europe, the transformer has to be CE compliant and power limited.

Note: The manufacturer of the transformer is ORIENTAL HERO, model no. OH-35048AT rated 8.6VAC 0.33A. For UL installations (UL) the plug-in transformer must have restraining means. For Canada (CUL), it cannot have restraining means.

Figure 2: Installation

2.2 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
Enter the Installer menu and select "02:ZONES/DEVICES"	Select "ADD NEW DEVICE" Option	Enroll the device or enter the device ID	Select the desired Zone Number
02.ZONES/DEVICES	ADD NEW DEVICES ↓ MODIFY DEVICES	ENROLL NOW or ENTR ID:XXX-XXXX	RP04:Repeater ID No. 430-XXXX
⇒ means scroll → and select OK			

3. CONFIGURATION AND OPERATION

Service Messages

Five kinds of event codes are automatically included in a service transmission in addition to the repeater's:

- AC fail
- Low Battery
- End of life
- Tamper
- Supervision.

Upon power failure, recharging stops and the backup battery takes over. It is therefore correct to assume that without power input the battery is gradually weakening and may be reported as "low".

Power / battery restore is reported only in the following test report.

End of life is reported when battery power is depleted and device is about to shut down.

Tamper restore is reported immediately upon occurrence.

If the **tamper** or **power failure** condition persists long enough, respective alerts will be sent out again with each test report.

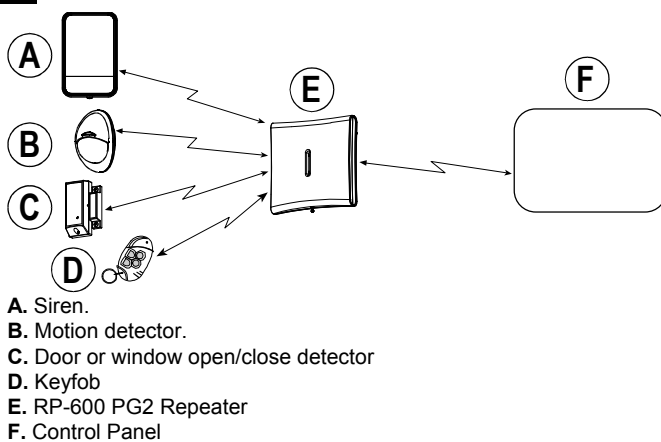


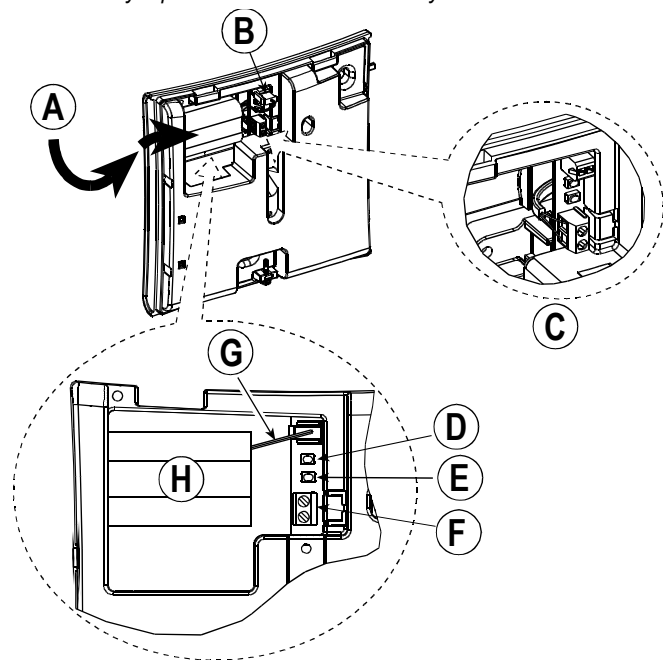
Figure 3: Repeater Configuration

4. MAINTENANCE

CAUTION!

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

Note: Battery replacement should be done by a service man.



- A. Turn & push battery
- B. Battery pack connector
- C. Connect the wires to the terminal block
- D. Self-Test button
- E. Enroll button
- F. AC connector terminal block
- G. Battery cable
- H. Battery

Figure 4 - Battery Pack Insertion

5. LOCAL DIAGNOSTICS TEST

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

- A. Press the self-test button once and release it:
The red LED and then the green LED will switch ON and then OFF in turn to indicate that the repeater is now fully operational.
- B. 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.

1. For detailed Diagnostics Test instructions refer to the control panel Installer Guide.
2. For UL/CUL installations, the test result must be "Strong".

6. COVER CLOSURE

See Figure 5.

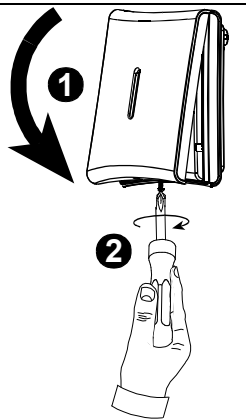


Figure 5:
Cover Closure

7. NOTES AND WARNINGS

7.1 Product Limitations

Visonic Ltd. wireless systems are very reliable and are tested to high standards. However, due to their 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 code selected.
- B. Wireless equipment should be tested regularly to determine whether there are sources of interference and to protect against faults.

8 COMPLIANCE WITH STANDARDS

Compliance with Standards



Europe: EN 50131-1 Grade 2, Class II, EN 50130-5, EN 50131-6, EN 301489, EN 50130-4, EN 300 220

The RP-600 is 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 the Dutch testing and certification body *Telefication BV* to the following standards :

EN 50131-3, EN 50131-6, EN 50131-5-3, EN 50130-4, and EN 50130-5.

Telefication BV has certified only the 868 MHz variant of this product.

USA: (FCC) 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.

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

Class II

EN 50131-1 Security Grade

EN 50131-1 Environmental Class

FCC Compliance Statement

The digital circuitry 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 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 which supplies power to the receiver.
- Consult the dealer or an experienced radio/TV technician.

WARNING! To comply with FCC and IC RF exposure compliance requirements, the repeater should be located in 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.

Interference Prevention

This device complies with FCC Rules Part 15 and with Industry Canada licence-exempt RSS standard(s). Operation is subject to 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.

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.



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

Frequency Band (MHz)	Europe and rest of world: 433-434, 868-869 USA: 912-919*								
Communication Protocol	Note: For UL Listed product, enable this frequency band. PowerG								
AC Power Supply: AC to AC adaptor	120 VAC, 60 Hz / 9 VAC, 0.35 A min. (U.S.A.) 230 VAC, 50 Hz / 9 VAC, 0.35 A min. (Europe) Note: For UL Listed product, 120 VAC, 60 Hz.								
Backup Battery	4.8-Volt 1300 mAh NiMH rechargeable (GP, GP130AAM4YMX)								
Low Battery Threshold	4.8 V								
Power Supply	Type A								
Time to charge	80 % (~ 12 Hrs)								
Low voltage alarm	~ 4.8V								
Nominal Current Drain (when using external AC power)	<table border="1"> <thead> <tr> <th>Frequency (MHz)</th> <th>433</th> <th>868</th> <th>915</th> </tr> </thead> <tbody> <tr> <td></td> <td>100 mA</td> <td>100 mA</td> <td>160 mA</td> </tr> </tbody> </table>	Frequency (MHz)	433	868	915		100 mA	100 mA	160 mA
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	100 mA	100 mA	160 mA						
Battery Backup Duration (with fully charged 1300 mAh battery)	minimum 24 hours 5 minutes								
LED indicator	Green LED lights when AC power on								
Operating Temperature	0°C to 49°C (32°F to 120°F).								
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 Listed product, Relative Humidity is 93%.								
Dimensions (LxWxD)	161x161x50mm (6-7/16 x 6-7/16 x 1-3/4 in)								
Weight (including battery)	470g (16.5 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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