KF-234 PG2
PowerG Wireless 2-Way Keyfob

1. INTRODUCTION

KF-234 PG2 is a miniature PowerG 4-button (6-function) keyfob, designed for use with PowerG control panels. Transmission is initiated by pressing any one of the four recessed pushbuttons. Upon pressing a specific button, the KF-234 PG2 transmits a PowerG message associated with the button that was pressed and identifiable by PowerG control panels.

A red LED lights during transmission. When an identified command is received by the PowerG control panel, it acknowledges the command. Upon acknowledgement, the green LED lights and a happy beep is heard to indicate successful completion of the command or the red LED lights and a sad beep is heard to indicate that the control panel cannot perform the command.

Notes:
- For UL Listed Product, Panic is for Ancillary Use only.
- * Applicable only to control panels that support the voice option.

2. ENROLLMENT AND CONFIGURING THE KEYFOB PARAMETERS

2.1 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.

<table>
<thead>
<tr>
<th>Step 1</th>
<th>Step 2</th>
<th>Step 3</th>
<th>Step 4</th>
<th>Step 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Enter the Installer menu and select &quot;02:ZONES/DEVICES&quot;</td>
<td>Select &quot;ADD NEW DEVICE&quot; Option</td>
<td>Enroll the device or Enter the device ID</td>
<td>Select the desired Zone Number</td>
<td>Configure the Keyfob</td>
</tr>
</tbody>
</table>

02:ZONES/DEVICES ➔ ADD NEW DEVICES ➔ ENROLL NOW or ENTR ID:XXX-XXXX ➔ F05:Keyfob ID No. 300-XXXX ➔

**See Note [2]**

Notes:
- [1] If the keyfob is already enrolled you can configure the keyfob parameters via the “Modify Devices” option – see Step 2.
- [2] Select the "Device Settings" option and refer to section 2.2 to configure the keyfob parameters.

2.2 Configuring the Keypad Parameters

Enter the DEVICE SETTINGS menu and follow the configuration instructions for the KF-234 PG2 keyfob as described in the following table.

<table>
<thead>
<tr>
<th>Option</th>
<th>Configuration Instructions</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUTTON A (*)</td>
<td>Here you select the function of the AUX button on the keyfob device. Status: Control panel displays and announces* the system status. Arm instant: Pressing the AUX button while the exit delay is in progress will cause the system to arm “instant” - the entry delay is canceled. Not Used: No function assigned to the AUX button. Stop Beeps: Pressing the AUX button will cause the control panel and other devices in the system (such as keyfobs, keypads, sirens etc.) to stop beeping (for example during exit or entry delays). Skip exit delay: Pressing the AUX button will immediately stop the exit delay and cause the system to arm instant. PGM: Pressing the AUX button will activate the PGM output. The functions of the PGM output is configured at the corresponding sections of the control panel’s Installer Guide (see &quot;OUTPUTS&quot; menu) and User Guide (see “SCHEDULER” menu).</td>
</tr>
</tbody>
</table>

* Applicable only to control panels that support the voice option.

Note: PGM not to be enabled in UL Listed Product.
3. USING THE KEYFOB

3.1 Arming the system

<table>
<thead>
<tr>
<th>Step</th>
<th>Functions</th>
<th>User Actions</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Arm AWAY</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Arm HOME</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Disarm (OFF)</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>LATCHKEY</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Panic alarm</td>
<td>(= 2 sec.)</td>
</tr>
<tr>
<td>4</td>
<td>AUX</td>
<td></td>
</tr>
</tbody>
</table>

3.2 Panel Response to Keyfob Commands

When executing a command, the keyfob's LED blinks red once to indicate transmission of the command to the control panel. If the operation is successfully completed, the green LED lights momentarily and a "happy tune" is heard. If the operation fails or cannot be completed, for example, when the system is "not ready", the red LED lights steadily and a "sad tune" is heard.

<table>
<thead>
<tr>
<th>Panel Response</th>
<th>Buzzer Indication</th>
<th>LED Indication</th>
</tr>
</thead>
<tbody>
<tr>
<td>Success: Operation is successfully completed</td>
<td>Happy (success) beep</td>
<td>Momentary GREEN</td>
</tr>
<tr>
<td>Fail: Operation failed</td>
<td>Sad (failure) beep</td>
<td>Momentary RED</td>
</tr>
<tr>
<td>No communication: Control panel does not respond.</td>
<td>None</td>
<td>None</td>
</tr>
</tbody>
</table>

4. MAINTENANCE

4.1 Replacing the Battery

A replacement 3V battery, CR-2032, must be used only and is available from hardware and electrical supply stores. Replace the battery as shown in Figure 2. Caution! Battery May Explode If Mistreated. Do Not Recharge, Disassemble Or Dispose Of In Fire. Dispose of used batteries according to the manufacturer’s instructions.

1. Remove backside screw and open the cover.
2. Using the screwdriver, push out the battery from its holder and install new battery (polarity “+” as shown).
3. Test the unit by momentarily pressing one of the Transmit buttons – the LED should light. Put back the cover and re-attach it with the screw.

A. Button pad (make sure that it remains in its place).
B. LED indicator.
C. Battery holder.
D. Battery

Figure 2: Battery Replacement

4.2 Cleaning

The keyfob may get dirty if touched with greasy fingers. Clean it only with a soft cloth or sponge moistened lightly with a mixture of water and mild detergent, and wipe it dry immediately.

The use of abrasives of any kind is strictly forbidden. Also never use solvents such as kerosene, acetone or thinner.
5. TESTING A NEW UNIT
Since the KF-234 PG2 is supplied with the battery already installed, the unit is practically ready to be tested.
A. Stand 3 m (10 ft) away from a target control panel (or wireless control panel) and press the ARM AWAY button (see Fig. 1).
Verify that the red LED lights upon transmission and that the green LED lights upon acknowledgement from the control panel.
B. Make sure that the control panel responds as programmed and as stated in the control panel’s instruction manual.

6. 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. Control panels 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.

7. COMPLIANCE WITH STANDARDS
Compliance with Standards

<table>
<thead>
<tr>
<th>Compliance with Standards</th>
<th>Europe: EN 300220, EN 50131-1 Grade 2, Class II and (EN 50134-2 Class II if used for social alarm), EN 501489, EN 50130-4, EN 60950, EN 50131-6</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Certified by Norwegian accredited certification body Applica Test &amp; Certification AS in accordance with EN 50131-3, EN 50131-6, EN 50131-5-3, EN 50130-4, and EN 50130-5.</td>
</tr>
<tr>
<td></td>
<td>Applica T&amp;C has certified only the 868 MHz variant of this product.</td>
</tr>
</tbody>
</table>

EN 50131-1 Security Grade
Class II

EN 50131-1 Environmental Class
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.

FCC Compliance Statement
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.

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 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.

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

W.E.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

<table>
<thead>
<tr>
<th>Specification</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frequency Band (MHz)</td>
<td>Europe and rest of world: 433-434, 868-869 USA: 912-919*</td>
</tr>
<tr>
<td>Communication Protocol</td>
<td>PowerG</td>
</tr>
<tr>
<td>Battery type</td>
<td>3V CR-2032 Lithium battery. (Panasonic, Varta, Sanyo, GP, Maxell)</td>
</tr>
<tr>
<td>Battery Life Expectancy</td>
<td>8 years (for typical use)</td>
</tr>
<tr>
<td>Low Battery Threshold</td>
<td>2.2 V</td>
</tr>
<tr>
<td>Power Supply</td>
<td>Type C</td>
</tr>
<tr>
<td>Transmitted Messages</td>
<td>Arm Away, Arm Home, Arm Latchkey, Disarm, AUX and Panic</td>
</tr>
<tr>
<td>Operating Temperature</td>
<td>0° to 55°C (32° to 131°F)</td>
</tr>
<tr>
<td>Humidity</td>
<td>Average relative humidity of 75% non-condensing. For 30 days per year relative humidity may vary between 85% and 95% non-condensing.</td>
</tr>
<tr>
<td>Dimensions (LxWxD)</td>
<td>60 x 34.5 x 12.5 mm (2-3/8 x 1-3/8 x 1/2 in.)</td>
</tr>
<tr>
<td>Weight (including battery)</td>
<td>25 g (0.9 oz)</td>
</tr>
<tr>
<td>Color</td>
<td>Black</td>
</tr>
</tbody>
</table>

### 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 Manufacturer’s recommended installation and operational instructions. Products which have become defective for any other reason, according to the Manufacturer’s 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 ANY PARTY FOR ANY CONSEQUENTIAL, INCIDENTAL, INDIRECT, OR OTHER DAMAGES 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 OF 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 Manufacturer’s 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, consequential or otherwise, caused by the malfunction of the Product due to products, accessories, or attachments of others, used in conjunction with the Product. This Warranty is exclusive to the original Purchaser and is not assignable.

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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- **This Warranty is absolutely conditional upon the Product having been properly installed, maintained and operated under conditions of normal use in accordance with the Manufacturer’s recommended installation and operational instructions. Products which have become defective for any other reason, according to the Manufacturer’s 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 ANY PARTY FOR ANY CONSEQUENTIAL, INCIDENTAL, INDIRECT, OR OTHER DAMAGES 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 OF 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 Manufacturer’s 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.**
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