# G2 RF Portal

## Installation Instructions

## Introduction

The G2 RF Portal is a wireless receiver for the Honeywell V2 Domonial transmitter range. The G2 RF Portal allows the control panel to receive signals from wire-free detectors and radio keyfobs. One RF Portal will allow the control panel to assign wire-free detectors to any or all detection zones. However, two RF Portals can be used to increase coverage.

A maximum of two RF Portals can be connected to the RS485 (AB) line to support up to 44 zones.

## PCB Layout

The following diagram shows the layout of the PCB.

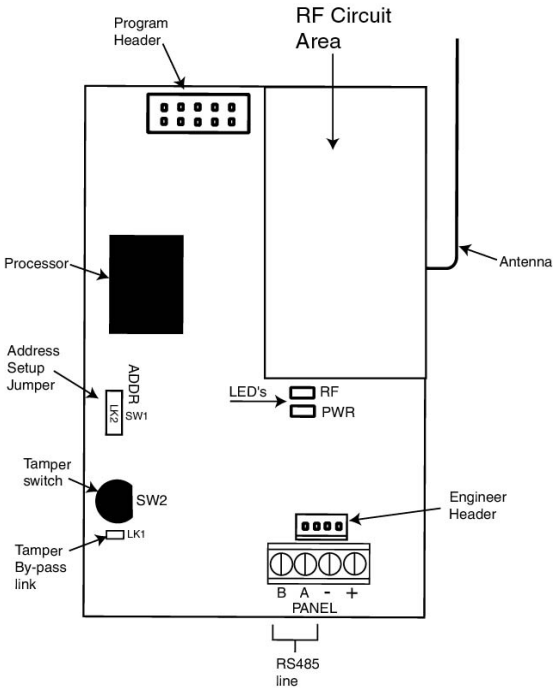


**Figure 1. G2 RF Portal**

## Program Header

The Program Header allows field upgrades of flash software on the processor.

## Tamper By-pass Link

The Tamper By-pass Link (LK1) must be removed to allow the lid tamper to function through the operation of switch SW2.

## LED's

The **RF** LED will blink upon reception of decodeable signals. If a jam condition occurs (continuous interference), the LED will come on constantly. It will switch off again only when the jam condition clears.

The **PWR** LED gives power and communication status of the RF Portal (see **Table 1 - Power LED Flash Rates** for information on the meaning of the various flash rates).

| FLASH RATE | MEANING |
|---|---|
| 0.1 on/0.9 off | Normal communications |
| off | No d.c. supply |
| 1.5 on/1.5 off | Receiver has not been configured into system |
| 0.2 on/0.2 off | Receiver has lost communication with system |
| 0.9 on/0.1 off | Very poor communications |

**Table 1. Power LED Flash Rates**

# Mounting the Plastic Base

Before mounting the base it is recommended that a survey is carried out to determine the suitability of the site for RF installation. Refer to **Galaxy RF Survey Kit, Operation Instructions (II1-0011).**

**NOTES:**

- The plastic base must be mounted so that when the PCB is installed, the antenna will point vertically (see **Figure 2, Plastic Base with PCB Installed**)
- The plastic base is mounted using three screws that are not provided with the installation kit.
- The plastic base must be mounted **before** attaching the PCB or else access to the top left-hand mounting hole will be severely restricted.

1. Either remove one of the knockouts in the side of the plastic base or, if fitting into an electrical box, remove the knockout in the centre of the base (**see Enclosure knockout Removal Procedure, II1-0220).**
2. Fit the two plastic supports for the PCB from the underside of the plastic base.
3. Using three screws, attach the plastic base loosely to a wall or electrical mounting box.
4. Bring in the cable from the control panel through the relevant knockout hole.
5. Firmly secure the plastic base with the three mounting hole screws.

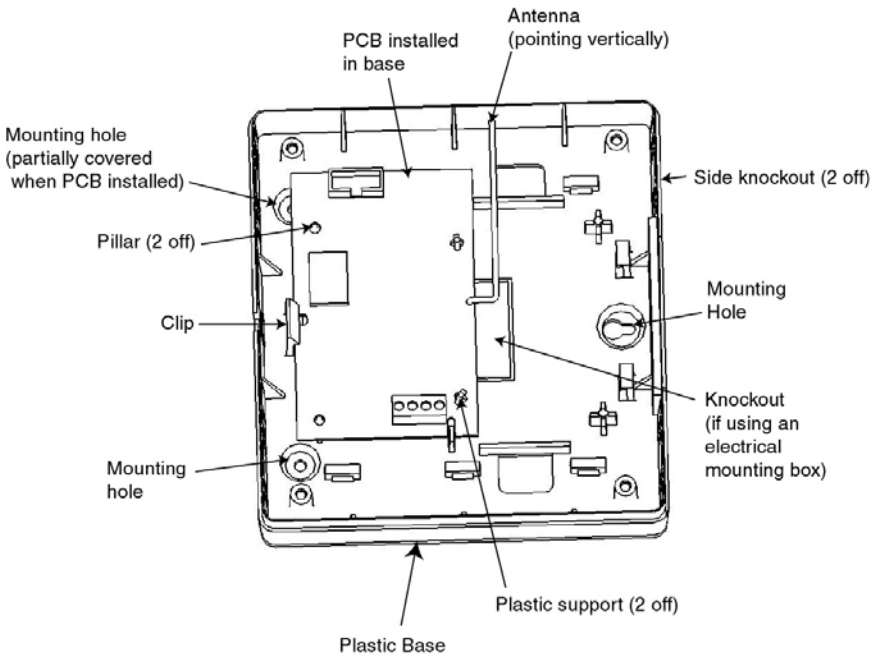


**Figure 2. Plastic Base with PCB Installed**

# Attaching the PCB

1. Place the PCB over the two plastic supports and the two pillars.
2. Pull back the clip then press the PCB firmly into place.
3. To allow the lid tamper switch (SW2) to function, remove the by-pass link (LK1).
4. Attach the lid tamper spring over the lid tamper switch (SW2).

# Addressing the G2 RF Portal

The RF Portal must be given a unique address **before** it is connected to the power supply. This address is selected via the Address Setup Jumper and can be 4 or 5.
To set the address as 4, fit the jumper to one pin only (open) of Address Setup Jumper LK2.
To set the address as 5, fit the jumper across the two pins (shorted) of Address Setup Jumper LK2.

# Connecting the G2 RF Portal

The RS485 (**AB**) line of the RF Portal **must** be wired in parallel (daisy-chain configuration) with the RS485 (**AB**) line of any keypads connected to the system. The RF Portal requires 12 Vd.c. (range 9.0 V to 14.0 V) and 55 mA. This can be supplied from the control panel power supply or from a remote power supply if the distance causes a large voltage drop on the cable.

# Configuring the G2 RF Portal

The added RF Portal is configured into the system on exiting from engineer mode. If the message **XX Mod Added [<],[>] To View** is displayed, the system has recognised that a new module is present. Press the **A** or **B** keys to confirm that the Receiver has been added. If this message is not displayed or the Receiver is not on the list of added modules, then the Receiver is not communicating with the control panel or has been set to the same address as the Receiver already connected to the system.

# Attaching the Plastic Box Lid

Place the lid over the plastic base then firmly attach with the four self-tapping screws provided.

# Specifications

## Physical

| | |
|---|---|
| PCB | Width: 104.5 mm<br>Height: 68 mm<br>Weight: 42 g |
| PCB with antenna | Width: 125 mm<br>Height: 76 mm |
| PCB in Plastic Box | Weight: 245 g |

## Electrical

| | |
|---|---|
| Quiescent Current | 55.0 mA |
| Operating Voltage | 12.0 V nominal, +16%/-25% (9 V to 14 V) |
| Operating Temperature | -10 deg.C to +40 deg.C |

# EN50131 Compliance

This product is suitable for use in systems designed to comply with prEN50131-1:2004.

Security Grade – 2
Environmental Class – II

**II1-0035 Rev 1.0**