

# Outdoor High-Security Digital Motion Detector Modules

**digigard™**  
**DG85**



**DG85**

## OPERATIONAL MODE

Digigard DG85 can function in two operational modes (see Table 4 below): DGP2 Mode or Relay Mode. When set to Relay Mode, DG85 functions as would any standard motion detector by communicating its alarm and tamper signals via relays. When set to DGP2 Mode, DG85 functions like a DGP2 motion detector module by communicating alarm signals, tamper signals, data and detector settings via the combus. In DGP2 Mode, both section programming and manual programming can be used to program the settings. In Relay Mode, only manual programming can be used to program the settings (see Table 4 below). Refer to DG85's connection drawing on page 33 for the location of the DIP switches.

**DIP Switch 1: OFF** = Relay Mode (default)  
**ON** = DGP2 Mode

## SETTINGS

Refer to DG85's connection drawing on page 33 for the location of the DIP switches and Trimpot.

**Table 4: DG85 Settings**

Feature	Setting	Programming	
		Section Programming <sup>1</sup>	Manual Settings <sup>2</sup>
<b>Signal Processing Mode</b>	Single	[001]→[1] = OFF	DIP switch 2 = OFF
	Dual △	[001]→[1] = ON	DIP switch 2 = ON
<b>LED</b>	Disabled	[001]→[2] = OFF	DIP switch 3 = OFF
	Enabled △	[001]→[2] = ON	DIP switch 3 = ON
<b>Movement Signal Indication</b>	Disabled	[001]→[3] = OFF	Enabled when DIP switch 3 = ON
	Enabled △	[001]→[3] = ON	
<b>Tamper Recognition<sup>3</sup></b>	Disabled △	[001]→[5] = OFF	N/A
	Enabled	[001]→[5] = ON	N/A
<b>Sensitivity</b>	△ = 10 seconds	[002]→001-010	Trimpot→0-10 <sup>4</sup>

△ Default Setting

<sup>1</sup> When in DGP2 Mode only (see Operational Mode above).

<sup>2</sup> When in DGP2 Mode or Relay Mode (see Operational Mode above).

<sup>3</sup> This feature is always enabled in Relay Mode.

<sup>4</sup> To set the sensitivity manually, remove the front cover and, using a screwdriver, turn the trimpot clockwise to increase the detector's sensitivity or counter-clockwise to decrease it. You can turn the trimpot 360° in both directions. To determine the sensitivity setting, remove the cover and view how many times the LED flashes. The number of times the LED flashes corresponds to the sensitivity setting. Thus if the sensitivity is set to 6, the LED will flash 6 times.

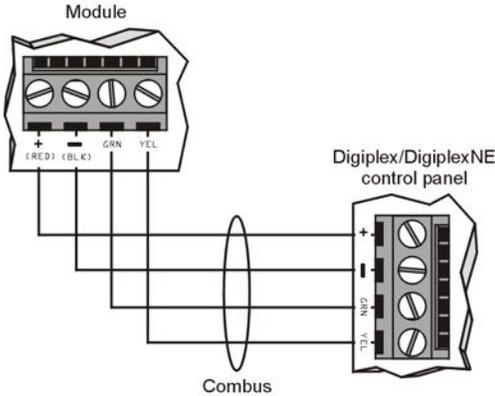


**In instances where a particular setting can be set either manually or through section programming, a discrepancy may exist between the setting of the DIP switches and the setting in the appropriate sections. In such cases, the last change that is made will dictate the setting. For example, if you disable the LED from within section programming, the DIP switch will still show that it is enabled, however the LED is actually disabled.**

# Module Connection Drawings

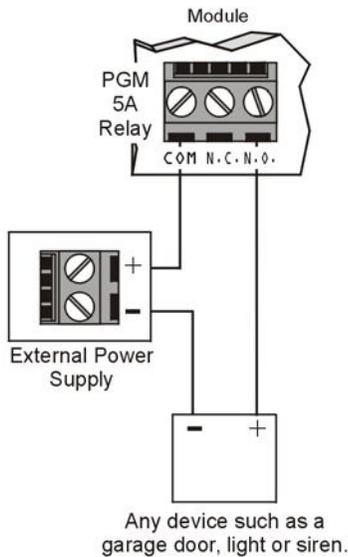
## MODULE CONNECTION OVERVIEW

**Figure 1: Connecting the Combustion**



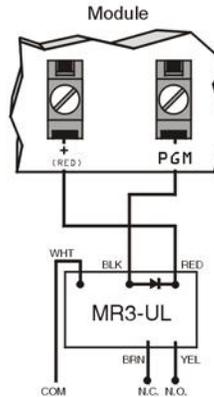
**Figure 2: Connecting a 5A PGM Output**

Some modules' PGM output(s) comprises of one or more 5A relays. Connect the PGM output as shown below. For the external power supply, we recommend the DGP2-PS17 Power Supply Module.



**Figure 3: Connecting a 50mA PGM Output**

Some modules' PGM output comprise of one 50mA output. Connect the PGM output as shown below.



### Module LED Indications

**Green "LOCATE" LED (sometimes seen as "LOC" or "LC"):**  
*Power Up:* Remains illuminated during power up.

*Locate:* If the LED flashes fast during normal operation, it is receiving a "locate" request from the control panel. Depending on the module, the "locate" request can be disabled by pressing on the tamper switch or on the "Disable Locate" switch.

**Red "WATCHDOG" LED (sometimes seen as "WDG", "WTDG" or "WD"):**  
*Status:* Flashes to indicate proper operation.

**Communication Failure:**  
 If both the "LOCATE" and "WATCHDOG" LEDs are alternately flashing, the module is experiencing a communication failure with the control panel.

**Green "BATT" LED (DGP2-ACM1P and DGP2-PS17 only):**  
*Charging and battery test LED (every 60 seconds).*

**Green "RX" LED (OMN-RCV3 only):**  
*Flashing:* The wireless receiver module is receiving a signal from a wireless device.

**Red "TX" LED (APR3-PRT1 only):**  
*Flashing:* The printer module is transmitting data through the serial port.

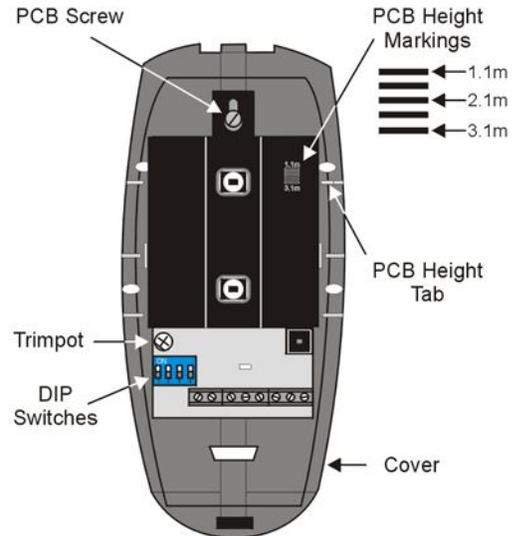
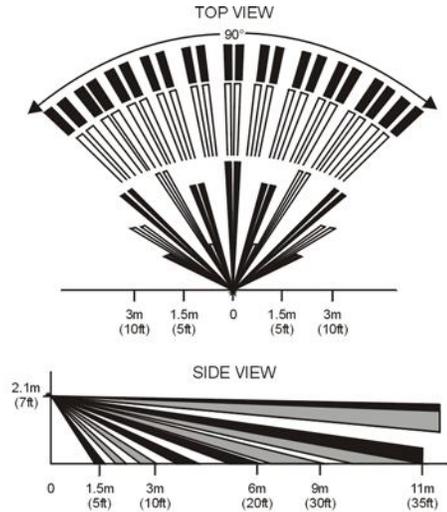
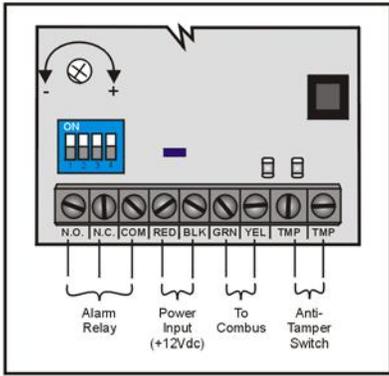
**Green "PULSE" LED (APR3-ADM2 only):**  
 Will illuminate whenever the APR3-ADM2 is using its dialer. The "PULSE" LED will remain illuminated for the whole duration that the dialer is being used.

### ▲ GENERAL WARNINGS ▲

⚠ Remove AC and battery power from the control panel before connecting the module to the combust.

⚠ Refer to the appropriate control panel's *Reference & Installation Manual* for the maximum allowable installation distance from the control panel.

# OUTDOOR HIGH-SECURITY DIGITAL MOTION DETECTOR MODULE (DG85)



## PCB HEIGHT ADJUSTMENT

The DG85 is designed for optimal performance at a height of 2.1m (7ft), but can be installed lower or higher. After you have installed the detector, ensure that the PCB Height Markings match the installation height. The installation height is measured from the ground to the base of DG85's cover. For example, if the motion detector is installed at a height of 2.1m (7ft), the PCB should then be adjusted to 2.1m (7ft). To adjust the PCB height, remove the PCB screw and align the PCB Height Tab with the desired height marking on the PCB.

**WARNING:** Ensure that the unit's front and back cover are tightly joined together, without any spacing around the rim of the unit, before tightening the screw. Otherwise the weatherproof casing may be compromised and moisture may enter the unit.