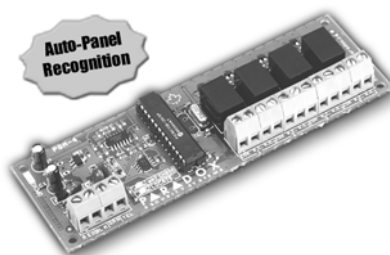


4-PGM Expansion Module



APR3-PGM4

△ = Default setting

SECTION [001] : General Options

Option	OFF	ON
[1] <i>Future Use</i>	☐ N/A	☐ N/A
[2] <i>Pulse Output for Fire Alarms</i>	△ Disabled	☐ Enabled
[3] <i>Future Use</i>	☐ N/A	☐ N/A
[4] <i>Future Use</i>	☐ N/A	☐ N/A
[5] <i>Future Use</i>	☐ N/A	☐ N/A
[6] <i>Future Use</i>	☐ N/A	☐ N/A
[7] <i>Future Use</i>	☐ N/A	☐ N/A
[8] <i>Future Use</i>	☐ N/A	☐ N/A

SECTION [002] : PGM Options

Option	OFF	ON
[1] <i>PGM1 Deactivation After</i>	△ Deactivation Event	☐ PGM Timer
[2] <i>PGM1 Base Time</i>	△ 1 second	☐ 1 minute
[3] <i>PGM2 Deactivation After</i>	△ Deactivation Event	☐ PGM Timer
[4] <i>PGM2 Base Time</i>	△ 1 second	☐ 1 minute
[5] <i>PGM3 Deactivation After</i>	△ Deactivation Event	☐ PGM Timer
[6] <i>PGM3 Base Time</i>	△ 1 second	☐ 1 minute
[7] <i>PGM4 Deactivation After</i>	△ Deactivation Event	☐ PGM Timer
[8] <i>PGM4 Base Time</i>	△ 1 second	☐ 1 minute

Section	Data	Description	Default
[003]	__/_/__(000 to 255; see option [2] in section [002])	PGM1 Timer	005
[012]	__/_/__(000 to 255; see option [4] in section [002])	PGM2 Timer	005
[021]	__/_/__(000 to 255; see option [6] in section [002])	PGM3 Timer	005
[030]	__/_/__(000 to 255; see option [8] in section [002])	PGM4 Timer	005

		Event Group	Feature Group	Start #	End #
		Section	Section	Section	Section
PGM Activation	PGM1	[004] __/_/	[005] __/_/	[006] __/_/	[007] __/_/
	PGM2	[013] __/_/	[014] __/_/	[015] __/_/	[016] __/_/
	PGM3	[022] __/_/	[023] __/_/	[024] __/_/	[025] __/_/
	PGM4	[031] __/_/	[032] __/_/	[033] __/_/	[034] __/_/
PGM Deactivation	PGM1	[008] __/_/	[009] __/_/	[010] __/_/	[011] __/_/
	PGM2	[017] __/_/	[018] __/_/	[019] __/_/	[020] __/_/
	PGM3	[026] __/_/	[027] __/_/	[028] __/_/	[029] __/_/
	PGM4	[035] __/_/	[036] __/_/	[037] __/_/	[038] __/_/



Refer to "Appendix 1: Programming PGMs" on page 39 for the PGM Table. All the Event Groups can be used to program the module's PGM(s).

Module Connection Drawings

MODULE CONNECTION OVERVIEW

Figure 1: Connecting the Combustion

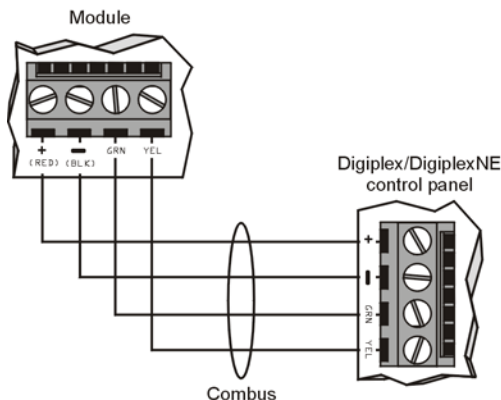


Figure 3: Connecting a 50mA PGM Output

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

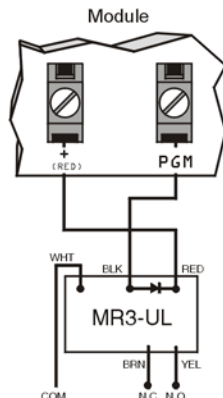
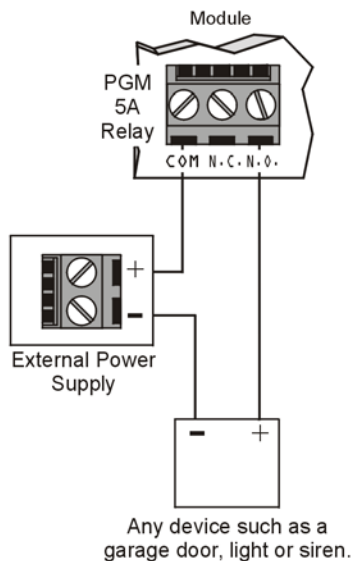


Figure 2: Connecting a 5A PGM Output

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.



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 ▲



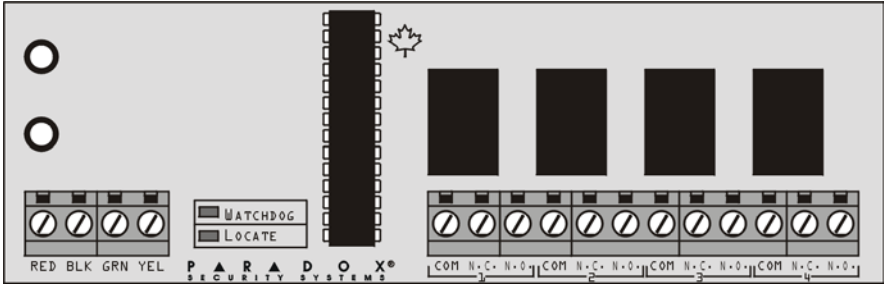
Remove AC and battery power from the control panel before connecting the module to the combust.



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

4-PGM EXPANSION MODULE (APR3-PGM4)

Refer to Module Connection Overview on page 29 for information on how to connect the 4-PGM Output Module to the combus (Figure 1) and how to connect its PGM outputs (Figure 2). Before commencing with the connections, please read the General Warnings listed on page 29.



For information on the 4-PGM Output Module's LEDs, refer to Module LED Indications on page 29.

Appendix 1: Programming PGMs

A PGM is a programmable output that toggles to its opposite state (i.e. a normally open PGM will close) when a specific event occurs in the system. *For example, a PGM can be used to reset smoke detectors, activate strobe lights, open/close garage doors and much more.* When a PGM closes, the module supplies a ground to the PGM (transistor PGM), or the link between N.C. and COM is established (Relay PGM), which activates any device or relay connected to it. When a PGM opens, the circuit opens from ground (transistor PGM), or the link between N.O. and COM is established, therefore no power is provided to the devices connected to it.

PGM ACTIVATION EVENT

The PGM Activation Event determines which event from what source will activate the PGM. The Event Group specifies the event, the Feature Group identifies the source, and the Start # and End # sets the range within the Feature Group (see PGM Programming Table below).

For example, the APR3-PGM4 (See “4-PGM Expansion Module” on page 15) can activate PGM1 when the partition is armed by User Access Codes 256 to 260. Therefore:

Event Group section [004] = 010 “Arming with User Code”
 Feature Group section [005] = 001 “User Codes 256 to 511”
 Start # section [006] = 000 (representing user code 256)
 End # section [007] = 004 (representing user code 260)

Enter the sections that correspond to the Event Group, Feature Group, Start # and End # of the desired PGM and enter the data as required.

PGM DEACTIVATION OPTION

Once the PGMs are activated, they can deactivate when another event occurs or after a period of time. The PGM Deactivation Option determines which method is used, the PGM Deactivation Event or the PGM Timer. Enter the section that corresponds to the desired PGM and enable or disable the option.

PGM DEACTIVATION EVENT

When the PGM Deactivation Option (see above) is disabled, the PGM Deactivation Event determines which event from what source will return the PGM to its original state. The Event Group specifies the event, the Feature Group identifies the source, and the Start # and End # determine the range within the Feature Group. The complete PGM Programming Table appears below.

For example, the APR3-PGM4 (See “4-PGM Expansion Module” on page 15) can deactivate PGM1 when zone 3 opens. Therefore:

Event Group section [008] = 001 “Zone is Open”
 Feature Group section [009] = 000 “Zone Numbers”
 Start # section [010] = 003
 End # section [011] = 003

Enter the sections that correspond to the Event Group, Feature Group, Start # and End # of the desired PGM and enter the data as required.

PGM PROGRAMMING TABLE

		Event Group	Feature Group	Start #	End #
PGM Activation Event	PGM	___/___/___	___/___/___	___/___/___	___/___/___
PGM Deactivation Event	PGM	___/___/___	___/___/___	___/___/___	___/___/___

Event Group	Event	Feature Group	Feature	Start #	End #
000	Zone is OK	000 255 = any Zone #	Zone Numbers	001 to 096	001 to 096
001	Zone is Open			001 to 096	001 to 096
002	Zone is Tampered			001 to 096	001 to 096
003	Zone is in Fire Loop Trouble			001 to 096	001 to 096
004	Non-reportable Event	000	TLM Trouble (see NOTE 3 on page 45)	000	000
			Smoke detector reset	001	001
			Arm with no entry delay	002	002
			Arm in Stay mode	003	003
			Arm in Away mode	004	004
			Full arm when in Stay mode	005	005
			Voice module access	006	006
			Remote control access	007	007
			PC Fail to communicate	008	008
			Midnight	009	009

Event Group	Event	Feature Group	Feature	Start #	End #
004 (cont'd)	Non-reportable Event	000	NEware User Login	010	010
			NEware User Logout	011	011
			User Initiated Callup	012	012
			Force Answer	013	013
			Force Hangup	014	014
		255	Any non-reportable event	Not Used	Not Used
005	User Code entered on Keypad	000	User Codes 000 to 255	000 to 255	000 to 255
		001	User Codes 256 to 511	000 to 255	000 to 255
		002	User Codes 512 to 767	000 to 255	000 to 255
		003	User Codes 768 to 999	000 to 231	000 to 231
		255	Any User Code	Not Used	Not Used
006	User/Card Access on door	000	Door Numbers	001 to 032	001 to 032
		255	Any door number	Not Used	Not Used
007	Bypass Programming Access	000	One-touch Bypass Programming	000	000
		000	User Codes 001 to 255	001 to 255	001 to 255
		001	User Codes 256 to 511	000 to 255	000 to 255
		002	User Codes 512 to 767	000 to 255	000 to 255
		003	User Codes 768 to 999	000 to 231	000 to 231
		255	Any User Code	Not Used	Not Used
008	TX Delay Zone Alarm	000	Zone Numbers	001 to 096	001 to 096
		255	Any zone number	Not Used	Not Used
009	Arming with Master	000	User Codes 001 to 255	001 to 255	001 to 255
		001	User Codes 256 to 511	000 to 255	000 to 255
		002	User Codes 512 to 767	000 to 255	000 to 255
		003	User Codes 768 to 999	000 to 231	000 to 231
		255	Any User Code	Not Used	Not Used
010	Arming with User Code	000	User Codes 001 to 255	001 to 255	001 to 255
		001	User Codes 256 to 511	000 to 255	000 to 255
		002	User Codes 512 to 767	000 to 255	000 to 255
		003	User Codes 768 to 999	000 to 231	000 to 231
		255	Any User Code	Not Used	Not Used
011	Arming with Keyswitch	000	Keyswitch numbers	001 to 032	001 to 032
		255	Any keyswitch number	Not Used	Not Used
012	Special Arming	000	Auto Arming	000	000
			Arming by WinLoad	001	001
			Late to Close	002	002
			No Movement Arming	003	003
			Partial Arming	004	004
			One-touch Arming	005	005
			Future Use	006	006
			Future Use	007	007
			(InTouch) Voice Module Arming	008	008
		255	Any special arming event	Not Used	Not Used
013	Disarm with Master	000	User Codes 001 to 255	001 to 255	001 to 255
		001	User Codes 256 to 511	000 to 255	000 to 255
		002	User Codes 512 to 767	000 to 255	000 to 255
		003	User Codes 768 to 999	000 to 231	000 to 231
		255	Any User Code	Not Used	Not Used
014	Disarm with User Code	000	User Codes 001 to 255	001 to 255	001 to 255
		001	User Codes 256 to 511	000 to 255	000 to 255
		002	User Codes 512 to 767	000 to 255	000 to 255
		003	User Codes 768 to 999	000 to 231	000 to 231
		255	Any User Code	Not Used	Not Used

Event Group	Event	Feature Group	Feature	Start #	End #
015	Disarm with Keyswitch	000	Keyswitch numbers	001 to 032	001 to 032
		255	Any keyswitch	Not Used	Not Used
016	Disarm after alarm with Master	000	User Codes 001 to 255	001 to 255	001 to 255
		001	User Codes 256 to 511	000 to 255	000 to 255
		002	User Codes 512 to 767	000 to 255	000 to 255
		003	User Codes 768 to 999	000 to 231	000 to 231
		255	Any User Code	Not Used	Not Used
017	Disarm after alarm with User Code	000	User Codes 001 to 255	001 to 255	001 to 255
		001	User Codes 256 to 511	000 to 255	000 to 255
		002	User Codes 512 to 767	000 to 255	000 to 255
		003	User Codes 768 to 999	000 to 231	000 to 231
		255	Any User Code	Not Used	Not Used
018	Disarm after alarm with Keyswitch	000	Keyswitch numbers	001 to 032	001 to 032
		255	Any keyswitch	Not Used	Not Used
019	Alarm Cancelled with Master	000	User Codes 001 to 255	001 to 255	001 to 255
		001	User Codes 256 to 511	000 to 255	000 to 255
		002	User Codes 512 to 767	000 to 255	000 to 255
		003	User Codes 768 to 999	000 to 231	000 to 231
		255	Any User Code	Not Used	Not Used
020	Alarm Cancelled with User Code	000	User Codes 001 to 255	001 to 255	001 to 255
		001	User Codes 256 to 511	000 to 255	000 to 255
		002	User Codes 512 to 767	000 to 255	000 to 255
		003	User Codes 768 to 999	000 to 231	000 to 231
		255	Any User Code	Not Used	Not Used
021	Alarm Cancelled with Keyswitch	000	Keyswitch numbers	001 to 032	001 to 032
		255	Any keyswitch	Not Used	Not Used
022	Special Disarm Events	000	Auto Arm Cancelled	000	000
			One-touch Stay/Instant Disarm	001	001
			Disarming with WinLoad	002	002
			Disarming with WinLoad after alarm	003	003
			WinLoad cancelled alarm	004	004
			Future Use	005	005
			Future Use	006	006
			Future Use	007	007
			(InTouch) Voice Module Disarming	008	008
		255	Any special disarm event	Not Used	Not Used
023	Zone Bypassed	000 255 = any zone #	Zone Numbers	001 to 096	001 to 096
024	Zone in Alarm			001 to 096	001 to 096
025	Fire Alarm			001 to 096	001 to 096
026	Zone Alarm Restore			001 to 096	001 to 096
027	Fire Alarm Restore			001 to 096	001 to 096
028	Early to Disarm by User	000	User Codes 001 to 255	001 to 255	001 to 255
		001	User Codes 256 to 511	000 to 255	000 to 255
		002	User Codes 512 to 767	000 to 255	000 to 255
		003	User Codes 768 to 999	000 to 231	000 to 231
		255	Any User Code	Not Used	Not Used
029	Late to Disarm by User	000	User Codes 001 to 255	001 to 255	001 to 255
		001	User Codes 256 to 511	000 to 255	000 to 255
		002	User Codes 512 to 767	000 to 255	000 to 255
		003	User Codes 768 to 999	000 to 231	000 to 231
		255	Any User Code	Not Used	Not Used

Event Group	Event	Feature Group	Feature	Start #	End #
030	Special Alarm	000	Emergency Panic (Keys 1 & 3)	000	000
			Medical Panic (Keys 4 & 6)	001	001
			Fire Panic (Keys 7 & 9)	002	002
			Recent Closing	003	003
			Police Code	004	004
			Global Shutdown	005	005
		255	Any special alarm event	Not Used	Not Used
031	Duress Alarm by User	000	User Codes 001 to 255	001 to 255	001 to 255
		001	User Codes 256 to 511	001 to 255	001 to 255
		002	User Codes 512 to 767	001 to 255	001 to 255
		003	User Codes 768 to 999	001 to 231	001 to 231
		255	Any User Code	Not Used	Not Used
032	Zone Shutdown	000 255 = any zone #	Zone Numbers	001 to 096	001 to 096
033	Zone Tamper			001 to 096	001 to 096
034	Zone Tamper Restore			001 to 096	001 to 096
035	Special Tamper	000	Keypad Lockout	000	000
036	Trouble Event	000	TLM Trouble (see NOTE 2 on page 45)	000	000
			AC Failure	001	001
			Battery Failure	002	002
			Auxiliary Current Limit	003	003
			Bell Current Limit	004	004
			Bell Absent	005	005
			Clock Trouble	006	006
			Global Fire Loop	007	007
		255	Any trouble event	Not Used	Not Used
037	Trouble Restore	000	TLM Trouble	000	000
			AC Failure	001	001
			Battery Failure	002	002
			Auxiliary Current Limit	003	003
			Bell Current Limit	004	004
			Bell Absent	005	005
			Clock Trouble	006	006
			Global Fire Loop	007	007
		255	Any trouble restore event	Not Used	Not Used
038	Module Trouble	000	Combus Fault	000	000
			Module Tamper	001	001
			ROM/RAM error	002	002
			TLM Trouble	003	003
			Fail to Communicate	004	004
			Printer Fault	005	005
			AC Failure	006	006
			Battery Failure	007	007
			Auxiliary Failure	008	008
		255	Any module trouble	Not Used	Not Used
039	Module Trouble Restore	000	Combus Fault	000	000
			Module Tamper	001	001
			ROM/RAM error	002	002
			TLM Trouble	003	003
			Fail to Communicate	004	004
			Printer Fault	005	005
			AC Failure	006	006
			Battery Failure	007	007
			Auxiliary Failure	008	008
		255	Any module trouble restore event	Not Used	Not Used

Event Group	Event	Feature Group	Feature	Start #	End #
040	Fail to Communicate on telephone Number	000	Telephone Number	001 to 004	001 to 004
		255	Any telephone number	Not Used	Not Used
041	Low Battery on Zone	000 255 = any Zone #	Zone Numbers	001 to 096	001 to 096
042	Zone Supervision Trouble			001 to 096	001 to 096
043	Low Battery on Zone Restored			001 to 096	001 to 096
044	Zone Supervision Trouble Restored			001 to 096	001 to 096
045	Special Events	000	Power up after total power down	000	000
			Software reset (Watchdog)	001	001
			Test Report	002	002
			Future Use	003	003
			WinLoad In (connected)	004	004
			WinLoad Out (disconnected)	005	005
			Installer in programming	006	006
			Installer out of programming	007	007
		255	Any special event	Not Used	Not Used
046	Early to Arm by User	000	User Codes 001 to 255	001 to 255	001 to 255
		001	User Codes 256 to 511	000 to 255	000 to 255
		002	User Codes 512 to 767	000 to 255	000 to 255
		003	User Codes 768 to 999	000 to 231	000 to 231
		255	Any User Code	Not Used	Not Used
047	Late to Arm by User	000	User Codes 001 to 255	001 to 255	001 to 255
		001	User Codes 256 to 511	000 to 255	000 to 255
		002	User Codes 512 to 767	000 to 255	000 to 255
		003	User Codes 768 to 999	000 to 231	000 to 231
		255	Any User Code	Not Used	Not Used
048	Keyswitch/Utility Key Pressed	000	Utility Key 1† / Keyswitch Input 1*	001	001
			Utility Key 2† / Keyswitch Input 2*	002	002
			Utility Key 3† / Keyswitch Input 3*	003	003
			Utility Key 4† / Keyswitch Input 4*	004	004
			Utility Key 5† / Keyswitch Input 5*	005	005
			Utility Key 6† / Keyswitch Input 6*	006	006
			Utility Key 7† / Keyswitch Input 7*	007	007
			Utility Key 8† / Keyswitch Input 8*	008	008
			Keyswitch Input 9*	009	009
			Keyswitch Input 10*	010	010
			Keyswitch Input 11*	011	011
			Keyswitch Input 12*	012	012
			Keyswitch Input 13*	013	013
			Keyswitch Input 14*	014	014
			Keyswitch Input 15*	015	015
			Keyswitch Input 16*	016	016
			Keyswitch Input 17*	017	017
			Keyswitch Input 18*	018	018
			Keyswitch Input 19*	019	019
			Keyswitch Input 20*	020	020
			Keyswitch Input 21*	021	021
			Keyswitch Input 22*	022	022
			Keyswitch Input 23*	023	023
			Keyswitch Input 24*	024	024
			Keyswitch Input 25*	025	025
			Keyswitch Input 26*	026	026

†: see page 45

*: see page 45

Event Group	Event	Feature Group	Feature	Start #	End #
048 (cont'd)	<i>Keyswitch/Utility Key Pressed</i>	000	Keyswitch Input 27*	027	027
			Keyswitch Input 28*	028	028
			Keyswitch Input 29*	029	029
			Keyswitch Input 30*	030	030
			Keyswitch Input 31*	031	031
			Keyswitch Input 32*	032	032
		255	Any Utility Key†/ Any Keyswitch Input*	Not Used	Not Used
049	<i>Request for Exit</i>	000 255 = any Door Number	Door Numbers	001 to 032	001 to 032
050	<i>Access Denied</i>			001 to 032	001 to 032
051	<i>Door Left Open Alarm</i>			001 to 032	001 to 032
052	<i>Door Forced Alarm</i>			001 to 032	001 to 032
053	<i>Door Left Open Restore</i>			001 to 032	001 to 032
054	<i>Door Forced Open Restore</i>			001 to 032	001 to 032
055	<i>Intellizone Triggered</i>	000	Zone Numbers	001 to 096	001 to 096
		255	Any zone number	Not Used	Not Used
056 to 061	<i>Future Use</i>	Future Use	Future Use	Future Use	Future Use
062	<i>Access Granted to User</i>	000	User Codes 001 to 255	001 to 255	001 to 255
		001	User Codes 256 to 511	000 to 255	000 to 255
		002	User Codes 512 to 767	000 to 255	000 to 255
		003	User Codes 768 to 999	000 to 231	000 to 231
		255	Any User Code	Not Used	Not Used
063	<i>Access Denied to User</i>	000	User Codes 001 to 255	001 to 255	001 to 255
		001	User Codes 256 to 511	000 to 255	000 to 255
		002	User Codes 512 to 767	000 to 255	000 to 255
		003	User Codes 768 to 999	000 to 231	000 to 231
		255	Any User Code	Not Used	Not Used
064	<i>Status 1</i>	See Note 1 on page 45	Armed	000	000
			Force Armed	001	001
			Stay Armed	002	002
			Instant Armed	003	003
			Strobe Alarm	004	004
			Silent Alarm	005	005
			Audible Alarm	006	006
			Fire Alarm	007	007
065	<i>Status 2</i>	See Note 1 on page 45	Ready	000	000
			Exit Delay	001	001
			Entry Delay	002	002
			System in Trouble	003	003
			Alarm in Memory	004	004
			Zones Bypassed	005	005
			Bypass, Master, Installer Programming	006	006
			Keypad Lockout	007	007
066	<i>Status 3</i>	See Note 1 on page 45	Intellizone Delay Engaged (see Note 4 on page 45)	000	000
			Fire Delay Engaged	001	001
			Auto Arm	002	002
			Arming with Voice Module (set until Exit Delay finishes)	003	003
			Tamper	004	004
			Zone Low Battery	005	005
			Fire Loop Trouble	006	006
			Zone Supervision Trouble	007	007

†: see page 45

*: see page 45

P ▲ R ▲ D O X[®]
S E C U R I T Y S Y S T E M S

780 Industriel Blvd, Saint-Eustache (Quebec), J7R 5V3 CANADA
Tel.: (450) 491-7444 Fax: (450) 491-2313
www.paradox.ca

PRINTED IN CANADA 05/2003

MODULES-EP05

