APR3-PRT3 Printer Module: ASCII Protocol Programming Instructions

Introduction

The APR3-PRT3 Printer Module can be used as an interface between a home automation module and your Digiplex system. When in home automation mode, the Printer Module can receive and send commands to and from the home automation module and the Digiplex control panel, linking your home automation capabilities with your security system.

The Printer Module features 16 onboard virtual inputs. These inputs are not related to any physical input on the module, but operate in the same manner and are programmed in the same way as a traditional zone input. A virtual input can be programmed to trigger a response from the Digiplex control panel based on an event that has occurred within the home automation module. For example, your home automation module may consist of a temperature sensor which you could associate with a virtual input. If the temperature fell to a certain level, the home automation module would send a command to open/close one of the Printer Module's virtual inputs and could trigger a Digiplex zone programmed with a 24-hr. freeze to generate an alarm. Using virtual inputs to trigger events within the Digiplex control panel involves associating the Printer Module's virtual input to a zone or a keyswitch on the control panel. See "Virtual Input Programming" on page 3.

The Printer Module also features 30 virtual PGMs for use with its home automation interface capabilities. These PGMs are not related to any physical output on the module, but operate in the same manner and are programmed in the same way as a traditional PGM. A virtual PGM can be used to trigger a response within the home automation module based on an event that has occurred within Digiplex. For example, when a user uses the Digiplex system to disarm an area, this event could activate a virtual PGM on the Printer Module and trigger a response within the home automation system, such as turning on a specific light on the premises. See "Virtual PGM Programming" on page 5.

In order for the home automation module and the Digiplex control panel to communicate through the Printer Module, the home automation module must be programmed to communicate using the ASCII Protocol. See "ASCII Protocol" on page 11.

For a complete list of the Printer Module's event reporting features, see the Printer Module V1.0 (APR3-PRT3) Instructions.

Technical Specifications

Parallel Port:	Minimum 80 column printer
Serial Port:	1 start bit, 8 data bit, no parity and 1 stop bit (8N1)
Input Voltage:	9 -16 Vdc
Current Consumption:	60mA maximum
Number of outputs:	One 50mA PGM
Onboard Anti-Tamper Input:	Yes
Serial Port Baud Rates:	2400, 9600, 19200 or 57600 bps
Event Buffer:	2048 events
Compatibility:	DGP-848 control panel (V4.11 and up) DGP-NE96 control panel (V1.60 and up)

Installation

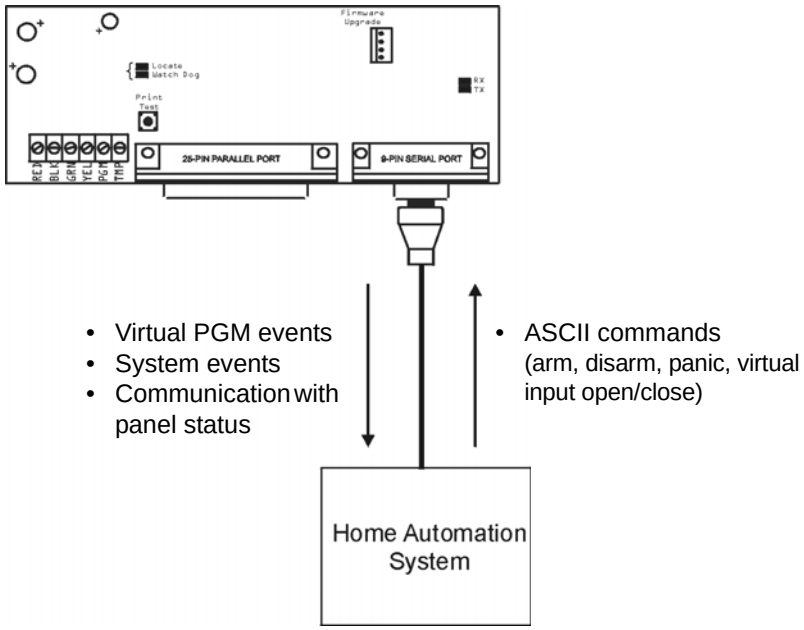
The Printer Module is connected to the control panel's combus. Connect the four terminals labeled red, black, green, and yellow of the module to the corresponding terminals on the control panel as shown in Figure 2 on page 20. See the *Digiplex DGP-848* or *DGP-NE96 Reference & Installation Manual* for the maximum allowable installation distance from the control panel.

The home automation module must be connected directly to the Printer Module's serial port (9 pins/ DB-9 connector). See Figure 2 on page 20 for an overview of the Printer Module's connections, LEDs and connectors.

Overview

The following provides of an overview of how the Printer Module communicates with the home automation system.

Figure 1: Typical ASCII Application



Programming Sections

The following describes the programming sections which must be set when the Printer Module acts as an interface between a Digiplex control panel and a home automation module using the ASCII Protocol.

To access the Printer Module's programming mode:

STEP 1: Press and hold the **[0]** key.
STEP 2: Enter the **[INSTALLER CODE]**.
STEP 3: Enter section **[953]** (DGP-848) / **[4003]** (DGP-NE96).
STEP 4: Enter the Printer Module's 8-digit **[SERIAL NUMBER]**.
STEP 5: Enter the 3-digit **[SECTION]** you want to program.
STEP 6: Enter the required data.

The Printer Module can also be programmed using the WinLoad Security Software (V2.62 or higher) or using the control panel's *Module Broadcast* feature. Refer to the *Digiplex DGP-848* or *DGP-NE96 Reference & Installation Manual* for more details. Please note that the serial number can be located on the Printer Module's PC board.

Serial Port Setup

The following list the serial port programming options which must be set in order for the Printer Module to communicate with the home automation module.

Section [016] - Option [1]
Enable Serial Port

When this option is ON (enabled), you can connect the home automation module directly to the Printer Module's serial port (9 pins). Set option **[4]** to ON when using the Printer Module as an interface between a home automation module and the Digiplex system.

Section [016] - Options [2] & [3]

Baud Settings

Allows you to set the Printer Module's serial port baud rate. Set the Printer Module's baud rate to match that of the home automation module. Refer to the home automation module's documentation to determine what baud to set the Printer Module to.

Baud Rate Settings

[2]	[3]	
OFF	OFF	**2400 Baud** △
ON	OFF	9600 Baud ☐
OFF	ON	19200 Baud ☐
ON	ON	57600 Baud ☐

△ = default setting

Section [016] - Option [4]

Serial Port Usage

Allows you to set the Printer Module's serial port usage to either Event Reporting or Home Automation. Set option **[4]** to ON to set the Printer Module to Home Automation.

Section [016] - Options [5] & [6]

Home Automation Options

This option allows you to select the home automation protocol for the Printer Module. Set options **[5]** and **[6]** to OFF to select the ASCII Protocol.

Home Automation Settings

[5]	[6]	
OFF	OFF	**ASCII Protocol** △
ON	OFF	Clipsal C-Bus Protocol ☐
OFF	ON	N/A
ON	ON	N/A

△ = default setting

For more information on the Clipsal C-Bus Protocol, see the C-Bus Programming Instructions on our website at www.paradox.ca.

Virtual Input Programming

The home automation module can be programmed to open/close the Printer Module's virtual inputs and generate activity within the Digiplex system. The tables below offer an example of the virtual input programming sections which must be set for virtual input 1.

Section [700] : Virtual Input Options

Option		OFF	ON
[1]	Enabling Virtual Input	△ **Disabled**	☐ Enabled
[3] and [4]	Virtual Input Close	Virtual Input Close Option	
[5]	Virtual Input Base Time Selection	△ **Seconds**	☐ Minutes

Virtual Input Close Option

[3]	[4]	
OFF	OFF	**Close Command** △
ON	OFF	Virtual Input Timer ☐
OFF	ON	Close Command or Virtual Input Timer ☐
ON	ON	N/A

Section	Data	Description	Default
[701]	__/__/__ (000 to 255) x Base Time	Virtual Input 1 Timer	005

Refer to the table below for a list of the programming sections for all virtual inputs.

Virtual Input	Section	Virtual Input	Section	Virtual Input	Section	Virtual Input	Section
1	**[700] & [701]**	**5**	**[740] & [741]**	9	**[780] & [781]**	**13**	**[820] & [821]**
2	**[710] & [711]**	**6**	**[750] & [751]**	10	**[790] & [791]**	**14**	**[830] & [831]**
3	**[720] & [721]**	**7**	**[760] & [761]**	11	**[800] & [801]**	**15**	**[840] & [841]**
4	**[730] & [731]**	**8**	**[770] & [771]**	12	**[810] & [811]**	**16**	**[850] & [851]**

The following describes the programming sections and options specific to the Printer Module's virtual inputs. Use the programming tables to document specific settings for all programmed virtual inputs.

Section [700] - Option [1]

Enabling Virtual Input Option

Each virtual input must be individually enabled. Set option **[1]** to ON to enable the virtual input.

△ = default setting

Section	Virtual Input	[1] OFF	[1] ON	Section	Virtual Input	[1] OFF	[1] ON
[700]	1	△ **disabled**	☐ enabled	**[780]**	9	△ **disabled**	☐ enabled
[710]	2	△ **disabled**	☐ enabled	**[790]**	10	△ **disabled**	☐ enabled
[720]	3	△ **disabled**	☐ enabled	**[800]**	11	△ **disabled**	☐ enabled
[730]	4	△ **disabled**	☐ enabled	**[810]**	12	△ **disabled**	☐ enabled
[740]	5	△ **disabled**	☐ enabled	**[820]**	13	△ **disabled**	☐ enabled
[750]	6	△ **disabled**	☐ enabled	**[830]**	14	△ **disabled**	☐ enabled
[760]	7	△ **disabled**	☐ enabled	**[840]**	15	△ **disabled**	☐ enabled
[770]	8	△ **disabled**	☐ enabled	**[850]**	16	△ **disabled**	☐ enabled

Section [700] - Options [3] and [4]

Virtual Input Close Option

The virtual input can be closed by either receiving a virtual input close command, after a timer elapses or either. This option determines how the virtual input will close.

Virtual Input Close Option

[3]	[4]	
OFF	OFF	– **Close Command**
ON	OFF	– Virtual Input Timer
OFF	ON	– Close Command or Virtual Input Timer
ON	ON	– N/A

△ = default setting

Section	Virtual Input	[3] OFF / [4] OFF	[3] ON / [4] OFF	[3] OFF / [4] ON
[700]	1	△ **close command**	☐ virtual input timer	☐ close command or virtual input timer
[710]	2	△ **close command**	☐ virtual input timer	☐ close command or virtual input timer
[720]	3	△ **close command**	☐ virtual input timer	☐ close command or virtual input timer
[730]	4	△ **close command**	☐ virtual input timer	☐ close command or virtual input timer
[740]	5	△ **close command**	☐ virtual input timer	☐ close command or virtual input timer
[750]	6	△ **close command**	☐ virtual input timer	☐ close command or virtual input timer
[760]	7	△ **close command**	☐ virtual input timer	☐ close command or virtual input timer
[770]	8	△ **close command**	☐ virtual input timer	☐ close command or virtual input timer
[780]	9	△ **close command**	☐ virtual input timer	☐ close command or virtual input timer
[790]	10	△ **close command**	☐ virtual input timer	☐ close command or virtual input timer
[800]	11	△ **close command**	☐ virtual input timer	☐ close command or virtual input timer
[810]	12	△ **close command**	☐ virtual input timer	☐ close command or virtual input timer
[820]	13	△ **close command**	☐ virtual input timer	☐ close command or virtual input timer

[830]	14	△ **close command**	☐ virtual input timer	☐ close command or virtual input timer
[840]	15	△ **close command**	☐ virtual input timer	☐ close command or virtual input timer
[850]	16	△ **close command**	☐ virtual input timer	☐ close command or virtual input timer

Section [701]

Virtual Input Timers

If the virtual input is set to follow its Virtual Input Timer, the entered value represents the amount of time that the virtual input will remain open. To program the Virtual Input Timer, enter a 3-digit value from **000** to **255**. Depending on the Virtual Input Base Time (see below), the Virtual Input Timer will either be in seconds or minutes.

Section	Virtual Input	Data	Section	Virtual Input	Data
[701]	1	__/__/__ (000 to 255) x Base time	**[781]**	9	__/__/__ (000 to 255) x Base time
[711]	2	__/__/__ (000 to 255) x Base time	**[791]**	10	__/__/__ (000 to 255) x Base time
[721]	3	__/__/__ (000 to 255) x Base time	**[801]**	11	__/__/__ (000 to 255) x Base time
[731]	4	__/__/__ (000 to 255) x Base time	**[811]**	12	__/__/__ (000 to 255) x Base time
[741]	5	__/__/__ (000 to 255) x Base time	**[821]**	13	__/__/__ (000 to 255) x Base time
[751]	6	__/__/__ (000 to 255) x Base time	**[831]**	14	__/__/__ (000 to 255) x Base time
[761]	7	__/__/__ (000 to 255) x Base time	**[841]**	15	__/__/__ (000 to 255) x Base time
[771]	8	__/__/__ (000 to 255) x Base time	**[851]**	16	__/__/__ (000 to 255) x Base time

Section [700] - Option [5]

Virtual Input Base Time Selection

If option **[5]** is OFF, the value programmed for the Virtual Input Timer will be in seconds. If option **[5]** is ON, the Virtual Input Timer will be in minutes. The following table lists the base time sections and their respective virtual inputs.

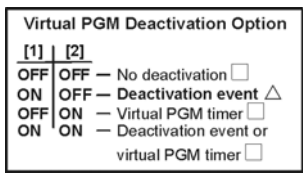
△ = default setting

Section	Virtual Input	[5] OFF	[5] ON	Section	Virtual Input	[5] OFF	[5] ON
[700]	1	△ **seconds**	☐ minutes	**[780]**	9	△ **seconds**	☐ minutes
[710]	2	△ **seconds**	☐ minutes	**[790]**	10	△ **seconds**	☐ minutes
[720]	3	△ **seconds**	☐ minutes	**[800]**	11	△ **seconds**	☐ minutes
[730]	4	△ **seconds**	☐ minutes	**[810]**	12	△ **seconds**	☐ minutes
[740]	5	△ **seconds**	☐ minutes	**[820]**	13	△ **seconds**	☐ minutes
[750]	6	△ **seconds**	☐ minutes	**[830]**	14	△ **seconds**	☐ minutes
[760]	7	△ **seconds**	☐ minutes	**[840]**	15	△ **seconds**	☐ minutes
[770]	8	△ **seconds**	☐ minutes	**[850]**	16	△ **seconds**	☐ minutes

Virtual PGM Programming

The Printer Module supports up to 30 virtual PGMs which are not related to any physical output on the module, but operate in the same manner and are programmed in the same way as a traditional PGM. The tables below offer an example of the virtual PGM programming sections which must be set for virtual PGM 1.

Section [100] : Virtual PGM Options

Option		OFF	ON
[1] and [2]	Virtual PGM Deactivation		
[3]	Virtual PGM Base Time Selection	△ **Seconds**	☐ Minutes
[4]	Virtual PGM Resend	△ **Message not resent**	☐ Message resent

Section	Data	Description	Default
[101]	__/__/__ (000 to 255) x Base Time	Virtual PGM 1 Timer	005

	Event Group	Feature Group	Start #	End #
	Section	Section	Section	Section
Virtual PGM Activation	[102] __/__/__	[103] __/__/__	[104] __/__/__	[105] __/__/__
Virtual PGM Deactivation	[106] __/__/__	[107] __/__/__	[108] __/__/__	[109] __/__/__

Refer to the table below for a list of the programming sections for all virtual PGMs.

Virtual PGM	Section	Virtual PGM	Section	Virtual PGM	Section	Virtual PGM	Section	Virtual PGM	Section
1	[100] - [109]	7	[160] - [169]	13	[220] - [229]	19	[280] - [289]	25	[340] - [349]
2	[110] - [119]	8	[170] - [179]	14	[230] - [239]	20	[290] - [299]	26	[350] - [359]
3	[120] - [129]	9	[180] - [189]	15	[240] - [249]	21	[300] - [309]	27	[360] - [369]
4	[130] - [139]	10	[190] - [199]	16	[250] - [259]	22	[310] - [319]	28	[370] - [379]
5	[140] - [149]	11	[200] - [209]	17	[260] - [269]	23	[320] - [329]	29	[380] - [389]
6	[150] - [159]	12	[210] - [219]	18	[270] - [279]	24	[330] - [339]	30	[390] - [399]

For more information on PGM programming, see "Appendix 1: Programming PGMs" on page 21.

The following describes the programming sections and options specific to the Printer Module's virtual PGMs. Use the programming tables to document specific settings for all programmed virtual PGMs.

Section [100] - Options [1] and [2]

Virtual PGM Deactivation Option

When the Virtual PGM Activation Event occurs, this option determines when the virtual PGM will return to its normal state (deactivate). Depending on the programmed value, the virtual PGM can stay activated indefinitely. It can also deactivate following a virtual deactivation event (see "Virtual PGM Deactivation Event" on page 10) or after the Virtual PGM Timer (see "Virtual PGM Timers" on page 7) has elapsed or either.

Virtual PGM Deactivation Option

[1]	[2]	
OFF	OFF	— No deactivation
ON	OFF	— **Deactivation event**
OFF	ON	— Virtual PGM timer
ON	ON	— Deactivation event or virtual PGM timer

△ = default setting

Section	Virtual PGM	[1] OFF / [2] OFF	[1] ON / [2] OFF	[1] OFF / [2] ON	[1] ON / [2] ON
[100]	1	☐ no deactivation	△ **deactivation event**	☐ virtual PGM timer	☐ deactivation event or virtual PGM timer
[110]	2	☐ no deactivation	△ **deactivation event**	☐ virtual PGM timer	☐ deactivation event or virtual PGM timer
[120]	3	☐ no deactivation	△ **deactivation event**	☐ virtual PGM timer	☐ deactivation event or virtual PGM timer
[130]	4	☐ no deactivation	△ **deactivation event**	☐ virtual PGM timer	☐ deactivation event or virtual PGM timer
[140]	5	☐ no deactivation	△ **deactivation event**	☐ virtual PGM timer	☐ deactivation event or virtual PGM timer
[150]	6	☐ no deactivation	△ **deactivation event**	☐ virtual PGM timer	☐ deactivation event or virtual PGM timer
[160]	7	☐ no deactivation	△ **deactivation event**	☐ virtual PGM timer	☐ deactivation event or virtual PGM timer
[170]	8	☐ no deactivation	△ **deactivation event**	☐ virtual PGM timer	☐ deactivation event or virtual PGM timer

[180]	9	☐ no deactivation	△ **deactivation event**	☐ virtual PGM timer	☐ deactivation event or virtual PGM timer
[190]	10	☐ no deactivation	△ **deactivation event**	☐ virtual PGM timer	☐ deactivation event or virtual PGM timer
[200]	11	☐ no deactivation	△ **deactivation event**	☐ virtual PGM timer	☐ deactivation event or virtual PGM timer
[210]	12	☐ no deactivation	△ **deactivation event**	☐ virtual PGM timer	☐ deactivation event or virtual PGM timer
[220]	13	☐ no deactivation	△ **deactivation event**	☐ virtual PGM timer	☐ deactivation event or virtual PGM timer
[230]	14	☐ no deactivation	△ **deactivation event**	☐ virtual PGM timer	☐ deactivation event or virtual PGM timer
[240]	15	☐ no deactivation	△ **deactivation event**	☐ virtual PGM timer	☐ deactivation event or virtual PGM timer
[250]	16	☐ no deactivation	△ **deactivation event**	☐ virtual PGM timer	☐ deactivation event or virtual PGM timer
[260]	17	☐ no deactivation	△ **deactivation event**	☐ virtual PGM timer	☐ deactivation event or virtual PGM timer
[270]	18	☐ no deactivation	△ **deactivation event**	☐ virtual PGM timer	☐ deactivation event or virtual PGM timer
[280]	19	☐ no deactivation	△ **deactivation event**	☐ virtual PGM timer	☐ deactivation event or virtual PGM timer
[290]	20	☐ no deactivation	△ **deactivation event**	☐ virtual PGM timer	☐ deactivation event or virtual PGM timer
[300]	21	☐ no deactivation	△ **deactivation event**	☐ virtual PGM timer	☐ deactivation event or virtual PGM timer
[310]	22	☐ no deactivation	△ **deactivation event**	☐ virtual PGM timer	☐ deactivation event or virtual PGM timer
[320]	23	☐ no deactivation	△ **deactivation event**	☐ virtual PGM timer	☐ deactivation event or virtual PGM timer
[330]	24	☐ no deactivation	△ **deactivation event**	☐ virtual PGM timer	☐ deactivation event or virtual PGM timer
[340]	25	☐ no deactivation	△ **deactivation event**	☐ virtual PGM timer	☐ deactivation event or virtual PGM timer
[350]	26	☐ no deactivation	△ **deactivation event**	☐ virtual PGM timer	☐ deactivation event or virtual PGM timer
[360]	27	☐ no deactivation	△ **deactivation event**	☐ virtual PGM timer	☐ deactivation event or virtual PGM timer
[370]	28	☐ no deactivation	△ **deactivation event**	☐ virtual PGM timer	☐ deactivation event or virtual PGM timer
[380]	29	☐ no deactivation	△ **deactivation event**	☐ virtual PGM timer	☐ deactivation event or virtual PGM timer
[390]	30	☐ no deactivation	△ **deactivation event**	☐ virtual PGM timer	☐ deactivation event or virtual PGM timer

Section [101]

Virtual PGM Timers

If the virtual PGM is set to follow its Virtual PGM Timer (see “Virtual PGM Deactivation Option” on page 6), the entered value represents the amount of time that the virtual PGM will remain activated. To program the Virtual PGM Timer, enter a 3-digit value from **000** to **255**. Depending on the Virtual PGM Base Time (see below), the Virtual PGM Timer will either be in seconds or minutes.

Section	Virtual PGM	Data	Section	Virtual PGM	Data
[101]	1	__/__/__ (000 to 255) x Base time	**[251]**	16	__/__/__ (000 to 255) x Base time
[111]	2	__/__/__ (000 to 255) x Base time	**[261]**	17	__/__/__ (000 to 255) x Base time
[121]	3	__/__/__ (000 to 255) x Base time	**[271]**	18	__/__/__ (000 to 255) x Base time
[131]	4	__/__/__ (000 to 255) x Base time	**[281]**	19	__/__/__ (000 to 255) x Base time

[141]	5	__/__/__ (000 to 255) x Base time	**[291]**	20	__/__/__ (000 to 255) x Base time
[151]	6	__/__/__ (000 to 255) x Base time	**[301]**	21	__/__/__ (000 to 255) x Base time
[161]	7	__/__/__ (000 to 255) x Base time	**[311]**	22	__/__/__ (000 to 255) x Base time
[171]	8	__/__/__ (000 to 255) x Base time	**[321]**	23	__/__/__ (000 to 255) x Base time
[181]	9	__/__/__ (000 to 255) x Base time	**[331]**	24	__/__/__ (000 to 255) x Base time
[191]	10	__/__/__ (000 to 255) x Base time	**[341]**	25	__/__/__ (000 to 255) x Base time
[201]	11	__/__/__ (000 to 255) x Base time	**[351]**	26	__/__/__ (000 to 255) x Base time
[211]	12	__/__/__ (000 to 255) x Base time	**[361]**	27	__/__/__ (000 to 255) x Base time
[221]	13	__/__/__ (000 to 255) x Base time	**[371]**	28	__/__/__ (000 to 255) x Base time
[231]	14	__/__/__ (000 to 255) x Base time	**[381]**	29	__/__/__ (000 to 255) x Base time
[241]	15	__/__/__ (000 to 255) x Base time	**[391]**	30	__/__/__ (000 to 255) x Base time

Section [100] - Option [3]

Virtual PGM Base Time Selection

If option **[3]** is OFF, the value programmed for the Virtual PGM Timer will be in seconds. If option **[3]** is ON, the Virtual PGM Timer will be in minutes. See the “Virtual PGM Deactivation Option” on page 6 table for relevant timer sections.

△ = default setting

Section	Virtual PGM	[5] OFF	[5] ON	Section	Virtual PGM	[5] OFF	[5] ON
[100]	1	△ **seconds**	☐ minutes	**[250]**	16	△ **seconds**	☐ minutes
[110]	2	△ **seconds**	☐ minutes	**[260]**	17	△ **seconds**	☐ minutes
[120]	3	△ **seconds**	☐ minutes	**[270]**	18	△ **seconds**	☐ minutes
[130]	4	△ **seconds**	☐ minutes	**[280]**	19	△ **seconds**	☐ minutes
[140]	5	△ **seconds**	☐ minutes	**[290]**	20	△ **seconds**	☐ minutes
[150]	6	△ **seconds**	☐ minutes	**[300]**	21	△ **seconds**	☐ minutes
[160]	7	△ **seconds**	☐ minutes	**[310]**	22	△ **seconds**	☐ minutes
[170]	8	△ **seconds**	☐ minutes	**[320]**	23	△ **seconds**	☐ minutes
[180]	9	△ **seconds**	☐ minutes	**[330]**	24	△ **seconds**	☐ minutes
[190]	10	△ **seconds**	☐ minutes	**[340]**	25	△ **seconds**	☐ minutes
[200]	11	△ **seconds**	☐ minutes	**[350]**	26	△ **seconds**	☐ minutes
[210]	12	△ **seconds**	☐ minutes	**[360]**	27	△ **seconds**	☐ minutes
[220]	13	△ **seconds**	☐ minutes	**[370]**	28	△ **seconds**	☐ minutes
[230]	14	△ **seconds**	☐ minutes	**[380]**	29	△ **seconds**	☐ minutes
[240]	15	△ **seconds**	☐ minutes	**[390]**	30	△ **seconds**	☐ minutes

Section [100] - Option [4]

Virtual PGM Resend Option

If option **[4]** is ON and a virtual PGM’s activation event reoccurs while the virtual PGM is ON, the associated message sent to the home automation system will be resent. If option **[4]** is ON and a Virtual PGM’s deactivation event reoccurs while the virtual PGM is OFF, the associated message sent to the home automation system will be resent. See the “Virtual PGM Deactivation Option” on page 6 table for relevant sections.

△ = default setting

Section	Virtual PGM	[4] OFF	[4] ON	Section	Virtual PGM	[4] OFF	[4] ON
[100]	1	△ **message not resent**	☐ message resent	**[250]**	16	△ **message not resent**	☐ message resent
[110]	2	△ **message not resent**	☐ message resent	**[260]**	17	△ **message not resent**	☐ message resent
[120]	3	△ **message not resent**	☐ message resent	**[270]**	18	△ **message not resent**	☐ message resent
[130]	4	△ **message not resent**	☐ message resent	**[280]**	19	△ **message not resent**	☐ message resent

[140]	5	△ **message not resent**	☐ message resent	**[290]**	20	△ **message not resent**	☐ message resent
[150]	6	△ **message not resent**	☐ message resent	**[300]**	21	△ **message not resent**	☐ message resent
[160]	7	△ **message not resent**	☐ message resent	**[310]**	22	△ **message not resent**	☐ message resent
[170]	8	△ **message not resent**	☐ message resent	**[320]**	23	△ **message not resent**	☐ message resent
[180]	9	△ **message not resent**	☐ message resent	**[330]**	24	△ **message not resent**	☐ message resent
[190]	10	△ **message not resent**	☐ message resent	**[340]**	25	△ **message not resent**	☐ message resent
[200]	11	△ **message not resent**	☐ message resent	**[350]**	26	△ **message not resent**	☐ message resent
[210]	12	△ **message not resent**	☐ message resent	**[360]**	27	△ **message not resent**	☐ message resent
[220]	13	△ **message not resent**	☐ message resent	**[370]**	28	△ **message not resent**	☐ message resent
[230]	14	△ **message not resent**	☐ message resent	**[380]**	29	△ **message not resent**	☐ message resent
[240]	15	△ **message not resent**	☐ message resent	**[390]**	30	△ **message not resent**	☐ message resent

Sections [102] to [105]

Virtual PGM Activation Event

The Virtual PGM Activation Event determines which event will activate the Printer Module's virtual PGM output(s). The Event Group specifies the event, the Feature Group identifies the source, and the Start # and End # set the range within the Feature Group. Note that Event Groups **[064]** to **[067]** may be selected when programming virtual PGMs (see "Appendix 1: Programming PGMs" on page 21).

	Event Group		**Feature Group**		**Start #**		**End #**	
	Section		**Section**		**Section**		**Section**	
Virtual PGM1	**[102]**	__/__/__	**[103]**	__/__/__	**[104]**	__/__/__	**[105]**	__/__/__
Virtual PGM2	**[112]**	__/__/__	**[113]**	__/__/__	**[114]**	__/__/__	**[115]**	__/__/__
Virtual PGM3	**[122]**	__/__/__	**[123]**	__/__/__	**[124]**	__/__/__	**[125]**	__/__/__
Virtual PGM4	**[132]**	__/__/__	**[133]**	__/__/__	**[134]**	__/__/__	**[135]**	__/__/__
Virtual PGM5	**[142]**	__/__/__	**[143]**	__/__/__	**[144]**	__/__/__	**[145]**	__/__/__
Virtual PGM6	**[152]**	__/__/__	**[153]**	__/__/__	**[154]**	__/__/__	**[155]**	__/__/__
Virtual PGM7	**[162]**	__/__/__	**[163]**	__/__/__	**[164]**	__/__/__	**[165]**	__/__/__
Virtual PGM8	**[172]**	__/__/__	**[173]**	__/__/__	**[174]**	__/__/__	**[175]**	__/__/__
Virtual PGM9	**[182]**	__/__/__	**[183]**	__/__/__	**[184]**	__/__/__	**[185]**	__/__/__
Virtual PGM10	**[192]**	__/__/__	**[193]**	__/__/__	**[194]**	__/__/__	**[195]**	__/__/__
Virtual PGM11	**[202]**	__/__/__	**[203]**	__/__/__	**[204]**	__/__/__	**[205]**	__/__/__
Virtual PGM12	**[212]**	__/__/__	**[213]**	__/__/__	**[214]**	__/__/__	**[215]**	__/__/__
Virtual PGM13	**[222]**	__/__/__	**[223]**	__/__/__	**[224]**	__/__/__	**[225]**	__/__/__
Virtual PGM14	**[232]**	__/__/__	**[233]**	__/__/__	**[234]**	__/__/__	**[235]**	__/__/__
Virtual PGM15	**[242]**	__/__/__	**[243]**	__/__/__	**[244]**	__/__/__	**[245]**	__/__/__
Virtual PGM16	**[252]**	__/__/__	**[253]**	__/__/__	**[254]**	__/__/__	**[255]**	__/__/__
Virtual PGM17	**[262]**	__/__/__	**[263]**	__/__/__	**[264]**	__/__/__	**[265]**	__/__/__
Virtual PGM18	**[272]**	__/__/__	**[273]**	__/__/__	**[274]**	__/__/__	**[275]**	__/__/__
Virtual PGM19	**[282]**	__/__/__	**[283]**	__/__/__	**[284]**	__/__/__	**[285]**	__/__/__
Virtual PGM20	**[292]**	__/__/__	**[293]**	__/__/__	**[294]**	__/__/__	**[295]**	__/__/__
Virtual PGM21	**[302]**	__/__/__	**[303]**	__/__/__	**[304]**	__/__/__	**[305]**	__/__/__
Virtual PGM22	**[312]**	__/__/__	**[313]**	__/__/__	**[314]**	__/__/__	**[315]**	__/__/__

Virtual PGM23	**[322]**	__/__/__	**[323]**	__/__/__	**[324]**	__/__/__	**[325]**	__/__/__
Virtual PGM24	**[332]**	__/__/__	**[333]**	__/__/__	**[334]**	__/__/__	**[335]**	__/__/__
Virtual PGM25	**[342]**	__/__/__	**[343]**	__/__/__	**[344]**	__/__/__	**[345]**	__/__/__
Virtual PGM26	**[352]**	__/__/__	**[353]**	__/__/__	**[354]**	__/__/__	**[355]**	__/__/__
Virtual PGM27	**[362]**	__/__/__	**[363]**	__/__/__	**[364]**	__/__/__	**[365]**	__/__/__
Virtual PGM28	**[372]**	__/__/__	**[373]**	__/__/__	**[374]**	__/__/__	**[375]**	__/__/__
Virtual PGM29	**[382]**	__/__/__	**[383]**	__/__/__	**[384]**	__/__/__	**[385]**	__/__/__
Virtual PGM30	**[392]**	__/__/__	**[393]**	__/__/__	**[394]**	__/__/__	**[395]**	__/__/__

Sections [106] to [109]

Virtual PGM Deactivation Event

If the Virtual PGM Deactivation Option is set to follow the Virtual PGM Deactivation Event (see “Virtual PGM Deactivation Option” on page 6), the virtual PGM will return to its normal state when the event programmed occurs (see table below). The Event Group specifies the event, the Feature Group identifies the source, and the Start # and End # set the range within the Feature Group.

Enter the sections that correspond to the Event Group, Feature Group, Start # and End # of the PGM.

	Event Group		**Feature Group**		**Start #**		**End #**	
	Section		**Section**		**Section**		**Section**	
Virtual PGM1	**[106]**	__/__/__	**[107]**	__/__/__	**[108]**	__/__/__	**[109]**	__/__/__
Virtual PGM2	**[116]**	__/__/__	**[117]**	__/__/__	**[118]**	__/__/__	**[119]**	__/__/__
Virtual PGM3	**[126]**	__/__/__	**[127]**	__/__/__	**[128]**	__/__/__	**[129]**	__/__/__
Virtual PGM4	**[136]**	__/__/__	**[137]**	__/__/__	**[138]**	__/__/__	**[139]**	__/__/__
Virtual PGM5	**[146]**	__/__/__	**[147]**	__/__/__	**[148]**	__/__/__	**[149]**	__/__/__
Virtual PGM6	**[156]**	__/__/__	**[157]**	__/__/__	**[158]**	__/__/__	**[159]**	__/__/__
Virtual PGM7	**[166]**	__/__/__	**[167]**	__/__/__	**[168]**	__/__/__	**[169]**	__/__/__
Virtual PGM8	**[176]**	__/__/__	**[177]**	__/__/__	**[178]**	__/__/__	**[179]**	__/__/__
Virtual PGM9	**[186]**	__/__/__	**[187]**	__/__/__	**[188]**	__/__/__	**[189]**	__/__/__
Virtual PGM10	**[196]**	__/__/__	**[197]**	__/__/__	**[198]**	__/__/__	**[199]**	__/__/__
Virtual PGM11	**[206]**	__/__/__	**[207]**	__/__/__	**[208]**	__/__/__	**[209]**	__/__/__
Virtual PGM12	**[216]**	__/__/__	**[217]**	__/__/__	**[218]**	__/__/__	**[219]**	__/__/__
Virtual PGM13	**[226]**	__/__/__	**[227]**	__/__/__	**[228]**	__/__/__	**[229]**	__/__/__
Virtual PGM14	**[236]**	__/__/__	**[237]**	__/__/__	**[238]**	__/__/__	**[239]**	__/__/__
Virtual PGM15	**[246]**	__/__/__	**[247]**	__/__/__	**[248]**	__/__/__	**[249]**	__/__/__
Virtual PGM16	**[256]**	__/__/__	**[257]**	__/__/__	**[258]**	__/__/__	**[259]**	__/__/__
Virtual PGM17	**[266]**	__/__/__	**[267]**	__/__/__	**[268]**	__/__/__	**[269]**	__/__/__
Virtual PGM18	**[276]**	__/__/__	**[277]**	__/__/__	**[278]**	__/__/__	**[279]**	__/__/__
Virtual PGM19	**[286]**	__/__/__	**[287]**	__/__/__	**[288]**	__/__/__	**[289]**	__/__/__
Virtual PGM20	**[296]**	__/__/__	**[297]**	__/__/__	**[298]**	__/__/__	**[299]**	__/__/__
Virtual PGM21	**[306]**	__/__/__	**[307]**	__/__/__	**[308]**	__/__/__	**[309]**	__/__/__
Virtual PGM22	**[316]**	__/__/__	**[317]**	__/__/__	**[318]**	__/__/__	**[319]**	__/__/__
Virtual PGM23	**[326]**	__/__/__	**[327]**	__/__/__	**[328]**	__/__/__	**[329]**	__/__/__
Virtual PGM24	**[336]**	__/__/__	**[337]**	__/__/__	**[338]**	__/__/__	**[339]**	__/__/__
Virtual PGM25	**[346]**	__/__/__	**[347]**	__/__/__	**[348]**	__/__/__	**[349]**	__/__/__
Virtual PGM26	**[356]**	__/__/__	**[357]**	__/__/__	**[358]**	__/__/__	**[359]**	__/__/__
Virtual PGM27	**[366]**	__/__/__	**[367]**	__/__/__	**[368]**	__/__/__	**[369]**	__/__/__
Virtual PGM28	**[376]**	__/__/__	**[377]**	__/__/__	**[378]**	__/__/__	**[379]**	__/__/__
Virtual PGM29	**[386]**	__/__/__	**[387]**	__/__/__	**[388]**	__/__/__	**[389]**	__/__/__
Virtual PGM30	**[396]**	__/__/__	**[397]**	__/__/__	**[398]**	__/__/__	**[399]**	__/__/__

ASCII Protocol

The ASCII Protocol is a serial communication protocol which allows your home automation module to communicate with the Digiplex control panel through the APR3-PRT3 Printer Module. The home automation module must be programmed with the ASCII Protocol in order for successful communication to occur.

The ASCII Protocol is a means of communication involving the use of uppercase ASCII characters. All communications between the Printer Module and the home automation module must end with a carriage return (ASCII #13).

When a command is sent from the home automation module to the Printer Module, it is acknowledged with a feedback echo. The Printer Module will send the first five characters of the command back to the home automation module followed by "&OK" for valid commands, "&fail" for invalid commands or with requested information when a valid command involves an information request. If the feedback consists of an exclamation point ("!") followed by a carriage return, this signifies that the command could not be accepted due to the fact that the Printer Module's reception buffer is full.

Printer Module to Digiplex Panel Communication Status

If the Printer Module fails to communicate with the Digiplex panel, the following command is used.

Byte 1	Byte 2	Byte 3	Byte 4	Byte 5	Byte 6	Byte 7	Byte 8	Byte 9	Byte 10
C	O	M	M	&	f	a	i	l	<cr>

The following command is used to signify communication has been restored. This command is also used upon startup to indicate the Printer Module is successfully communicating with the Digiplex control panel.

Byte 1	Byte 2	Byte 3	Byte 4	Byte 5	Byte 6	Byte 7	Byte 8
C	O	M	M	&	o	k	<cr>

Commands sent to the Printer Module from the Home Automation Module

The following lists the ASCII Protocol string codes and their respective commands from the home automation module to the Printer Module.

Virtual Input Open

The following commands set the virtual inputs' status to "open".

	Byte 1	Byte 2	Byte 3	Byte 4	Byte 5	Byte 6
Virtual Input Open 01	V	O	0	0	1	<cr>
Virtual Input Open 02	V	O	0	0	2	<cr>
			↓↓			
Virtual Input Open 16	V	O	0	1	6	<cr>

Virtual Input Closed

The following commands set the virtual inputs' status to "closed".

	Byte 1	Byte 2	Byte 3	Byte 4	Byte 5	Byte 6
Virtual Input Closed 01	V	C	0	0	1	<cr>
Virtual Input Closed 02	V	C	0	0	2	<cr>
			↓↓			
Virtual Input Closed 16	V	C	0	1	6	<cr>

Request Area Status

The following commands request the area status. Areas 05-08 only apply when using the DGP-NE96 control panel.

	Byte 1	Byte 2	Byte 3	Byte 4	Byte 5	Byte 6
Request Area Status 01	R	A	0	0	1	<cr>
Request Area Status 02	R	A	0	0	2	<cr>
			↓↓			
Request Area Status 08	R	A	0	0	8	<cr>

The Request Area Status command involves an information request. When the command is valid, the first five characters of the command are returned followed by the requested information. The following provides an example of the information sent by the Printer Module to the home automation module after having received a Request Area Status 01 command.

Byte 1	Byte 2	Byte 3	Byte 4	Byte 5	Byte 6	Byte 7
R	A	0	0	1	D (Disarmed) A (Armed) F (Force armed) S (Stay armed) I (Instant armed)	M (Zone in memory) O (Ok)

Byte 8	Byte 9	Byte 10	Byte 11	Byte 12	Byte 13
T (Trouble) O (Ok)	N (Not ready) O (Ok)	P (In programming) O (Ok)	A (In alarm) O (Ok)	S (Strobe) O (Ok)	<cr>

Request Zone Status

The following commands request the zone status. Zones 49-96 only apply when using the DGP-NE96 control panel.

	Byte 1	Byte 2	Byte 3	Byte 4	Byte 5	Byte 6
Request Zone Status 01	R	Z	0	0	1	<cr>
Request Zone Status 02	R	Z	0	0	2	<cr>
			↓↓			
Request Zone Status 96	R	Z	0	9	6	<cr>

The Request Zone Status command also involves an information request. When the command is valid, the first five characters of the command are returned followed by the requested information. The following provides an example of the information sent by the Printer Module to the home automation module after having received a Request Zone Status 01 command.

Byte 1	Byte 2	Byte 3	Byte 4	Byte 5	Byte 6
R	Z	0	0	1	C (Closed) O (Open) T (Tampered) F (Fire loop trouble)

Byte 7	Byte 8	Byte 9	Byte 10	Byte 11
A (In alarm) O (Ok)	F (Fire alarm) O (Ok)	S (Supervision lost) O (Ok)	L (Low battery) O (Ok)	<cr>

Request Zone Label

The following commands request the zone label. Zones 49-96 only apply when using the DGP-NE96 control panel.

	Byte 1	Byte 2	Byte 3	Byte 4	Byte 5	Byte 6
Request Zone Label 01	Z	L	0	0	1	<cr>
Request Zone Label 02	Z	L	0	0	2	<cr>
			↓↓			
Request Zone Label 96	Z	L	0	9	6	<cr>

The Request Zone Label command also involves an information request. When the command is valid, the first five characters of the command are returned followed by the requested zone label. All zone labels are 16 characters in length.

Request Area Label

The following commands request the area label. Areas 05-08 only apply when using the DGP-NE96 control panel.

	Byte 1	Byte 2	Byte 3	Byte 4	Byte 5	Byte 6
Request Area Label 01	A	L	0	0	1	<cr>
Request Area Label 02	A	L	0	0	2	<cr>
			↓↓			
Request Area Label 08	A	L	0	0	8	<cr>

The Request Area Label command also involves an information request. When the command is valid, the first five characters of the command are returned followed by the requested area label. All area labels are 16 characters in length.

Request User Label

The following commands request the user label. User labels 97-999 only apply when using the DGP-NE96 control panel.

	Byte 1	Byte 2	Byte 3	Byte 4	Byte 5	Byte 6
Request User Label 01	U	L	0	0	1	<cr>
Request User Label 02	U	L	0	0	2	<cr>
			↓↓			
Request User Label 999	U	L	9	9	9	<cr>

The Request User Label command also involves an information request. When the command is valid, the first five characters of the command are returned followed by the requested user label. All user labels are 16 characters in length.

Area Arm

The following commands arm areas. Areas 05-08 only apply when using the DGP-NE96 control panel.

	Byte 1	Byte 2	Byte 3	Byte 4	Byte 5	Byte 6	Bytes 7-12	Byte 13
Arm Area 01	A	A	0	0	1	A (Regular arm) F (Force arm) S (stay arm) I (Instant arm)	xxxxxx*	<cr>
Arm Area 02	A	A	0	0	2	“	“	<cr>
				↓↓				
Arm Area 08	A	A	0	0	8	“	“	<cr>

* xxxxxx represents the code used to arm the system. If the code is shorter than six digits, enter only the appropriate amount of digits.

⚠ ***If an invalid user code is entered, the command will be returned followed by “&fail”.***

Area Quick Arm

The following commands quick arm areas. Areas 05-08 only apply when using the DGP-NE96 control panel.

	Byte 1	Byte 2	Byte 3	Byte 4	Byte 5	Byte 6	Byte 7
Quick Arm Area 01	A	Q	0	0	1	A (Regular arm) F (Force arm) S (stay arm) I (Instant arm)	<cr>
Quick Arm Area 02	A	Q	0	0	2	A (Regular arm) F (Force arm) S (stay arm) I (Instant arm	<cr>
			↓↓				
Quick Arm Area 08	A	Q	0	0	8	A (Regular arm) F (Force arm) S (stay arm) I (Instant arm	<cr>

The One-Touch feature must be enabled in the Digiplex control panel to use this feature. See the appropriate Digiplex control panel's Reference and Installation Manual for more information.

Area Disarm

The following commands disarm areas. Areas 05-08 only apply when using the DGP-NE96 control panel.

	Byte 1	Byte 2	Byte 3	Byte 4	Byte 5	Bytes 6-11	Byte 12
Disarm Area 01	A	D	0	0	1	xxxxxx*	<cr>
Disarm Area 02	A	D	0	0	2	"	<cr>
			↓↓				
Disarm Area 08	A	D	0	0	8	"	<cr>

* xxxxxx represents the code used to arm the system. If the code is shorter than six digits, enter only the appropriate amount of digits.

If an invalid user code is entered, the command will be returned followed by "&fail".

Emergency Panic

The following commands are used for emergency panic alarms in up to eight areas. Areas 05-08 only apply when using the DGP-NE96 control panel.

	Byte 1	Byte 2	Byte 3	Byte 4	Byte 5	Byte 6
Panic 1 - Emergency Area 01	P	E	0	0	1	<cr>
Panic 1 - Emergency Area 02	P	E	0	0	2	<cr>
			↓↓			
Panic 1 - Emergency Area 08	P	E	0	0	8	<cr>

Panic alarms must be individually enabled. See the appropriate Digiplex control panel's Reference and Installation Manual for more information.

Medical Panic

The following commands are used for medical panic alarms in up to eight areas. Areas 05-08 only apply when using the DGP-NE96 control panel.

	Byte 1	Byte 2	Byte 3	Byte 4	Byte 5	Byte 6
Panic 2 - Medical Area 01	P	M	0	0	1	<cr>
Panic 2 - Medical Area 02	P	M	0	0	2	<cr>
			↓↓			
Panic 2 - Medical Area 08	P	M	0	0	8	<cr>

Panic alarms must be individually enabled. See the appropriate Digiplex control panel's Reference and Installation Manual for more information.

Fire Panic

The following commands are used for fire panic alarms in up to eight areas. Areas 05-08 only apply when using the DGP-NE96 control panel.

	Byte 1	Byte 2	Byte 3	Byte 4	Byte 5	Byte 6
Panic 3 - Fire Area 01	P	F	0	0	1	<cr>
Panic 3 - Fire Area 02	P	F	0	0	2	<cr>
			↓↓			
Panic 3 - Fire Area 08	P	F	0	0	8	<cr>

Panic alarms must be individually enabled. See the appropriate Digiplex Control Panel Reference and Installation Manual for more information.

Smoke Reset

The following commands are used for smoke detector resets in up to eight areas. Areas 05-08 only apply when using the DGP-NE96 control panel.

	Byte 1	Byte 2	Byte 3	Byte 4	Byte 5	Byte 6
Smoke reset - Area 01	S	R	0	0	1	<cr>
Smoke reset - Area 02	S	R	0	0	2	<cr>
			↓↓			
Smoke reset - Area 08	S	R	0	0	8	<cr>

Utility Key

The following commands are used for the utility keys (up to 251).

	Byte 1	Byte 2	Byte 3	Byte 4	Byte 5	Byte 6
Utility key 01	U	K	0	0	1	<cr>
Utility key 02	U	K	0	0	2	<cr>
			↓↓			
Utility key 251	U	K	2	5	1	<cr>

Commands sent from the Printer Module to the Home Automation Module

The following lists the ASCII Protocol string codes and their respective commands from the Printer Module to the home automation module.

Virtual PGM Events

When a virtual PGM is activated within the Printer Module, the following commands are sent to the home automation module.

	Byte 1	Byte 2	Byte 3	Byte 4	Byte 5	Byte 6
Virtual PGM 01 ON	P	G	M	0	1	O
Virtual PGM 02 ON	P	G	M	0	2	O
			↓↓			
Virtual PGM 30 ON	P	G	M	3	0	O

When a virtual PGM is deactivated within the Printer Module, the following commands are sent to the home automation module.

	Byte 1	Byte 2	Byte 3	Byte 4	Byte 5	Byte 6	Byte 7	Byte 8	Byte 9
Virtual PGM 01 OFF	P	G	M	0	1	O	F	F	<cr>
Virtual PGM 02 OFF	P	G	M	0	2	O	F	F	<cr>
				↓↓					
Virtual PGM 30 OFF	P	G	M	3	0	O	F	F	<cr>

System Events

All Digiplex system events are sent through the Printer Module to the home automation module using the following format.

	Byte 1	Bytes 2-4	Byte 5	Bytes 6-8	Byte 9	Bytes 10-12
System Event	G	xxx*	N	yyy**	A	zzz***

** xxx represents the 3-digit event group (G).*
*** yyy represents the 3-digit event number (N).*
**** zzz represents the 3-digit area number (A). Area number 000 signifies that the event has occurred in all enabled areas or is a global event independent of area assignment.*

As shown above, system events involve a 3-digit event group (Gxxx), a 3-digit event number (Nyyy) and a 3-digit area number (Azzz). The following table lists the event group and event number descriptors that can be used to read the system event format. For example, G001N005A006 means zone 5 in area 6 has been opened. (Event group 001= Zone open, Event number 005= zone 5, Area 006= area 6).

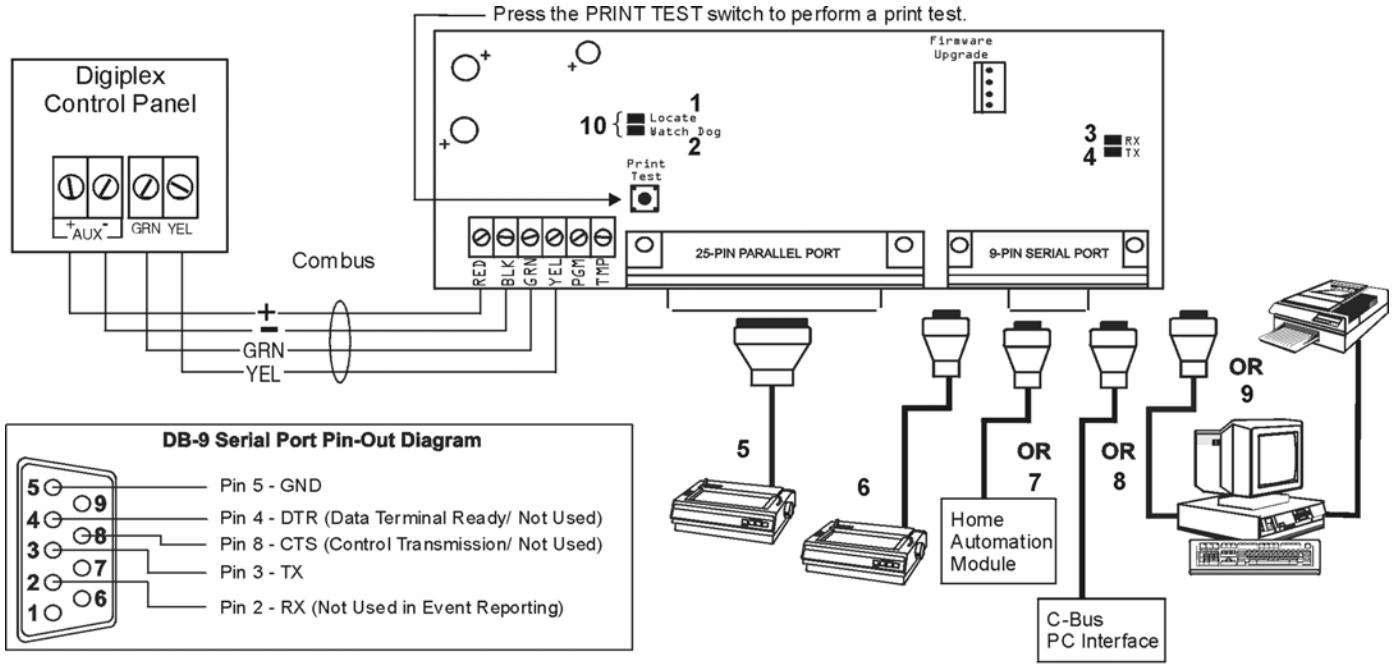
Event Group (G)	Event Group Description	Event Number (N)	Event Number Description	Area Number (A)
000	Zone is OK	**001-096**	Zone Numbers	**001-008**
001	Zone is Open			
002	Zone is Tampered			
003	Zone is in Fire Loop Trouble			
004	Non-reportable Event	**000**	TLM Trouble	**000-008**
		001	Smoke detector reset	
		002	Arm with no entry delay	
		003	Arm in Stay mode	
		004	Arm in Away mode	
		005	Full arm when in Stay mode	
		006	Voice module access	
		007	Remote control access	
		008	PC Fail to communicate	

Event Group (G)	Event Group Description	Event Number (N)	Event Number Description	Area Number (A)
004 (cont'd)	Non-reportable Event (cont'd)	009	Midnight	000-008
		010	NEware User Login	
		011	NEware User Logout	
		012	User Initiated Callup	
		013	Force Answer	
		014	Force Hangup	
005	User Code entered on Keypad	000-999	User Codes	000-008
006	User/Card Access on door	001-032	Door Numbers	000-008
007	Bypass Programming Access	000	One-touch Bypass Programming	001-008
		001-999	User Code	
008	TX Delay Zone Alarm	001-096	Zone Numbers	001-008
009	Arming with Master	001-999	User Codes	001-008
010	Arming with User Code	001-999	User Codes	001-008
011	Arming with Keyswitch	001-032	Keyswitch numbers	001-008
012	Special Arming	000	Auto Arming	001-008
		001	Arming by WinLoad	
		002	Late to Close	
		003	No Movement Arming	
		004	Partial Arming	
		005	One-touch Arming	
		006	Future Use	
		007	Future Use	
		008	(InTouch) Voice Module Arming	
013	Disarm with Master	001-999	User Codes	001-008
014	Disarm with User Code	001-999	User Codes	001-008
015	Disarm with Keyswitch	001-032	Keyswitch numbers	001-008
016	Disarm after alarm with Master	001-999	User Codes	001-008
017	Disarm after alarm with User Code	001-999	User Codes	001-008
018	Disarm after alarm with Keyswitch	001-032	Keyswitch numbers	001-008
019	Alarm Cancelled with Master	001-999	User Codes	001-008
020	Alarm Cancelled with User Code	001-999	User Codes	001-008
021	Alarm Cancelled with Keyswitch	001-032	Keyswitch numbers	001-008
022	Special Disarm Events	000	Auto Arm Cancelled	001-008
		001	One-touch Stay/Instant Disarm	
		002	Disarming with WinLoad	
		003	Disarming with WinLoad after alarm	
		004	WinLoad cancelled alarm	
		005	Future Use	
		006	Future Use	
		007	Future Use	
		008	(InTouch) Voice Module Disarming	
023	Zone Bypassed	001-096	Zone Numbers	001-008

Event Group (G)	Event Group Description	Event Number (N)	Event Number Description	Area Number (A)
024	Zone in Alarm	**001-096**	Zone Numbers	**001-008**
025	Fire Alarm	**001-096**	Zone Numbers	**001-008**
026	Zone Alarm Restore	**001-096**	Zone Numbers	**001-008**
027	Fire Alarm Restore	**001-096**	Zone Numbers	**001-008**
028	Early to Disarm by User	**001-999**	User Codes	**001-008**
029	Late to Disarm by User	**001-999**	User Codes	**001-008**
030	Special Alarm	**000**	Emergency Panic (Keys 1 & 3)	**001-008**
		001	Medical Panic (Keys 4 & 6)	
		002	Fire Panic (Keys 7 & 9)	
		003	Recent Closing	
		004	Police Code	
		005	Global Shutdown	
031	Duress Alarm by User	**0-999**	User Codes	**001-008**
032	Zone Shutdown	**0-096**	Zone Numbers	**001-008**
033	Zone Tamper	**0-096**	Zone Numbers	**001-008**
034	Zone Tamper Restore	**0-096**	Zone Numbers	**001-008**
035	Special Tamper	**000**	Keypad Lockout	**001-008**
036	Trouble Event	**000**	TLM Trouble	**000-008**
		001	AC Failure	
		002	Battery Failure	
		003	Auxiliary Current Limit	
		004	Bell Current Limit	
		005	Bell Absent	
		006	Clock Trouble	
		007	Global Fire Loop	
037	Trouble Restore	**000**	TLM Trouble	**000-008**
		001	AC Failure	
		002	Battery Failure	
		003	Auxiliary Current Limit	
		004	Bell Current Limit	
		005	Bell Absent	
		006	Clock Trouble	
		007	Global Fire Loop	
038	Module Trouble	**000**	Combus Fault	**000-008**
		001	Module Tamper	
		002	ROM/RAM error	
		003	TLM Trouble	
		004	Fail to Communicate	
		005	Printer Fault	
		006	AC Failure	
		007	Battery Failure	
		008	Auxiliary Failure	

Event Group (G)	Event Group Description	Event Number (N)	Event Number Description	Area Number (A)
039	Module Trouble Restore	**000**	Combus Fault	**000-008**
		001	Module Tamper	
		002	ROM/RAM error	
		003	TLM Trouble	
		004	Fail to Communicate	
		005	Printer Fault	
		006	AC Failure	
		007	Battery Failure	
		008	Auxiliary Failure	
040	Fail to Communicate on telephone Number	**001-004**	Telephone Number	**000-008**
041	Low Battery on Zone	**001-096**	Zone Numbers	**001-008**
042	Zone Supervision Trouble	**001-096**	Zone Numbers	**001-008**
043	Low Battery on Zone Restored	**001-096**	Zone Numbers	**001-008**
044	Zone Supervision Trouble Restored	**001-096**	Zone Numbers	**001-008**
045	Special Events	**000**	Power up after total power down	**000-008**
		001	Software reset (Watchdog)	
		002	Test Report	
		003	Future Use	
		004	WinLoad In (connected)	
		005	WinLoad Out (disconnected)	
		006	Installer in programming	
		007	Installer out of programming	
046	Early to Arm by User	**001-999**	User Codes	**001-008**
047	Late to Arm by User	**001-999**	User Codes	**001-008**
048	Utility Key	**001-251**	Utility Key	**000-008**
049	Request for Exit	**001-032**	Door Numbers	**000-008**
050	Access Denied	**001-032**	Door Numbers	**000-008**
051	Door Left Open Alarm	**001-032**	Door Numbers	**000-008**
052	Door Forced Alarm	**001-032**	Door Numbers	**000-008**
053	Door Left Open Restore	**001-032**	Door Numbers	**000-008**
054	Door Forced Open Restore	**001-032**	Door Numbers	**000-008**
055	Intellizone Triggered	**001-096**	Zone Numbers	**000-008**
056 to 061	Future Use	Future Use	Future Use	Future Use
062	Access Granted to User	**000-999**	User Codes	**000-008**
063	Access Denied to User	**000-999**	User Codes	**000-008**

Figure 2: .APR3-PRT3 Connection



1 **Green "Locate" LED:** Remains illuminated during power up.

Locate: If it flashes fast during normal operation, it is receiving a "LOCATE" request from the control panel. Press the PRINT TEST switch to stop the locate function.

2 **Red "Watchdog" LED:** Flashes to indicate proper operation.

3 **Green "RX" LED:** Flashes when the Printer Module is receiving data through the serial port only.

4 **Red "TX" LED:** Flashes when the Printer Module is transmitting data through the serial port only.

5 **25-Pin Parallel Port:** Connect the Printer Module's 25-pin parallel port to any dot matrix printer. **Note: The dot matrix printer must support a minimum of 80 columns.**

6 **9-Pin Serial Port:** Connect the Printer Module's 9-Pin serial port to a dot matrix printer. **Note: The dot matrix printer must support a minimum of 80 columns.**

7 **9-Pin Serial Port:** Connect the Printer Module's 9-pin serial port to a home automation module.

8 **9-Pin Serial Port:** Connect C-Bus to the Printer Module using ***a null modem cable***.

9 **9-Pin Serial Port:** Connect the Printer Module's 9-pin serial port to a computer's COM port to view the control panel's events on the computer's monitor. The events displayed on the monitor can then be printed through the printer connected to the computer.

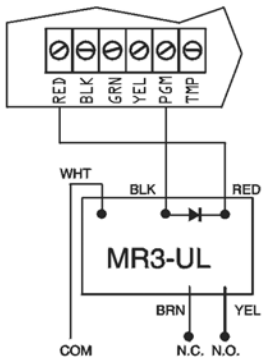
10 If both the "LOCATE" and the "WATCHDOG" LEDs are flashing alternately, a communication failure between the Printer Module and the control panel has occurred.

Remove AC power and battery before adding a module to the system. Refer to the *Digiplex DGP-848* or *DGP-NE96 Reference & Installation Manual* for the maximum allowable installation distance from the control panel.

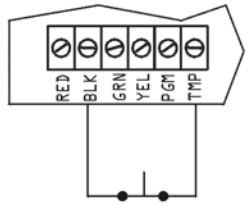
When using the Printer Module as an interface between a home automation system and the Digiplex control panel, note that the home automation modules, Printer Module and any connected printer must be installed in the same room.

For information on using the Printer Module as an interface with C-Bus, see the *C-Bus Programming Instructions*. For information on the Printer Module's event reporting features, see the *Printer Module V1.0 (APR3-PRT3) Instructions*.

Connecting the PGM Output



Connecting a Tamper Switch



External Tamper Switch (N.C.)

If you wish to use the tamper input, enable option **[5]** in section [017].

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.*

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-PRT3 can activate PGM1 when the area 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

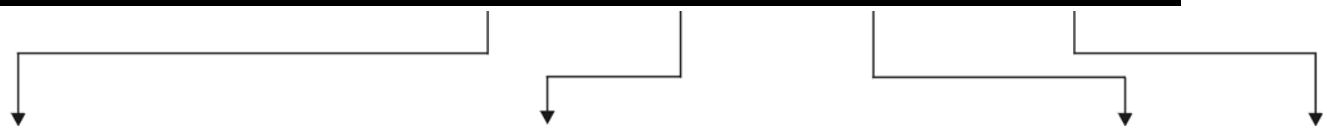
When the PGM Deactivation Option (see above) is disabled, the PGM Deactivation Event determines which event from what source will return the PGM to its original state. The Event Group specifies the event, the Feature Group identifies the source, and the Start # and End # determine the range within the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

For example, the APR3-PRT3 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

Event Group	Event	Feature Group	Feature	Start #	End #
004	Non-reportable Event	**000**	TLM Trouble (see NOTE 3 on page 27)	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
			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

Event Group	Event	Feature Group	Feature	Start #	End #
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
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

Event Group	Event	Feature Group	Feature	Start #	End #
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
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

Event Group	Event	Feature Group	Feature	Start #	End #
036	Trouble Event	**000**	TLM Trouble (see NOTE 2 on page 27)	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
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

Event Group	Event	Feature Group	Feature	Start #	End #
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	Utility Key	**000**	Utility Key 001 to 064†*	001 to 064	001 to 064
		255	Any Utility Key†*	Not Used	Not Used
049	Request for Exit	**000 255 = any Door Number**	Door Numbers	001 to 032	001 to 032
050	Access Denied			001 to 032	001 to 032
051	Door Left Open Alarm			001 to 032	001 to 032
052	Door Forced Alarm			001 to 032	001 to 032
053	Door Left Open Restore			001 to 032	001 to 032
054	Door Forced Open Restore			001 to 032	001 to 032
055	Intellizone Triggered	**000**	Zone Numbers	001 to 096	001 to 096
		255	Any zone number	Not Used	Not Used
056 to 061	Future Use	**Future Use**	Future Use	Future Use	Future Use
062	Access Granted to 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
063	Access Denied to 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

†: see page 27

⋆: see page 27

Event Group	Event	Feature Group	Feature	Start #	End #
064	Status 1	See **Note 1 on page 27**	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	Status 2	See **Note 1 on page 27**	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	Status 3	See **Note 1 on page 27**	Intellizone Delay Engaged (see Note 4 on page 27)	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
067	Future Use	**Future Use**	Future Use	Future Use	Future Use

NOTE 1: ***000*** *= Occurs in all areas enabled in the system (refer to the appropriate control panel Programming Guide).*
001 *= Area 1* ***003*** *= Area 3* ***005*** *= Area 5 (DGP-NE96 only)* ***007*** *= Area 7 (DGP-NE96 only)*
002 *= Area 2* ***004*** *= Area 4* ***006*** *= Area 6 (DGP-NE96 only)* ***008*** *= Area 8 (DGP-NE96 only)*
255 *= Occurs in at least one area enabled in the system.*

NOTE 2: *This TLM trouble event can only be used with DGP-NE96 control panels that have two diallers.*

NOTE 3: *This TLM trouble event can only be used with DGP-848 control panels or DGP-NE96 control panels that have one dialer.*

NOTE 4: *This event cannot be used for a module's PGM programming.*

**: If a Keyswitch Input is used, the input must be defined as "Generates a Utility Key Event on Open" or "Generates a Utility Key Event on Open and Close". If a remote control is used, the remote control button must be defined as a Utility Key button.*

†: Actions that Activate a Utility Key Event:

Utility Key Event	Actions			
	Keypad Utility Keys	Keyswitch Inputs (definition = [3])	Keyswitch Inputs (definition = [4])	Remote Control
Utility Key Event 1	[1] & [2]	KS** Input 1 opens	KS** Input 1 opens	Utility Key 1 RC button‡
Utility Key Event 2	[4] & [5]	KS** Input 2 opens	KS** Input 1 closes	Utility Key 2 RC button‡
Utility Key Event 3	[7] & [8]	KS** Input 3 opens	KS** Input 2 opens	Utility Key 3 RC button‡
Utility Key Event 4	[CLEAR] & [0] or [*] & [0]	KS** Input 4 opens	KS** Input 2 closes	Utility Key 4 RC button‡

Utility Key Event 5	[2] & [3]	KS** Input 5 opens	KS** Input 3 opens	Utility Key 5 RC button‡
Utility Key Event 6	[5] & [6]	KS** Input 6 opens	KS** Input 3 closes	N/A
Utility Key Event 7	[8] & [9]	KS** Input 7 opens	KS** Input 4 opens	N/A
Utility Key Event 8	[0] & [ENTER] or [0] & [#]	KS** Input 8 opens	KS** Input 4 closes	N/A
Utility Key Event 9	N/A	KS** Input 9 opens	KS** Input 5 opens	N/A
Utility Key Event 10	N/A	KS** Input 10 opens	KS** Input 5 closes	N/A
Utility Key Event 11	N/A	KS** Input 11 opens	KS** Input 6 opens	N/A
Utility Key Event 12	N/A	KS** Input 12 opens	KS** Input 6 closes	N/A
Utility Key Event	Actions			
	Keypad Utility Keys	Keyswitch Inputs (definition = [3])	Keyswitch Inputs (definition = [4])	Remote Control
Utility Key Event 13	N/A	KS** Input 13 opens	KS** Input 7 opens	N/A
Utility Key Event 14	N/A	KS** Input 14 opens	KS** Input 7 closes	N/A
Utility Key Event 15	N/A	KS** Input 15 opens	KS** Input 8 opens	N/A
Utility Key Event 16	N/A	KS** Input 16 opens	KS** Input 8 closes	N/A
Utility Key Event 17	N/A	KS** Input 17 opens	KS** Input 9 opens	N/A
Utility Key Event 18	N/A	KS** Input 18 opens	KS** Input 9 closes	N/A
i	N/A	i	i	N/A
Utility Key Event 31	N/A	KS** Input 31 opens	KS** Input 16 opens	N/A
Utility Key Event 32	N/A	KS** Input 32 opens	KS** Input 16 closes	N/A
Utility Key Event 33	N/A	N/A	KS** Input 17 opens	N/A
Utility Key Event 34	N/A	N/A	KS** Input 17 closes	N/A
i	N/A	N/A	i	N/A
Utility Key Event 63	N/A	N/A	KS** Input 32 opens	N/A
Utility Key Event 64	N/A	N/A	KS** Input 32 closes	N/A

*** Keyswitch*

‡ Refer to the Magellan™ Reference and Installation Manual for remote control button programming instructions.

For technical support in Canada or the U.S., call 1-800-791-1919 for English or 1-866-912-0600 for French, Monday to Friday from 8:00 a.m. to 8:00 p.m. EST. For technical support outside Canada and the U.S., call 00-1-450-491-7444, Monday to Friday from 8:00 a.m. to 8:00 p.m. EST. Please feel free to visit our website at www.paradox.ca.

PARADOX®
SECURITY SYSTEMS
780 boul. Industriel, St-Eustache, Québec, J7R 5V3 CANADA
Tel: (450) 491-7444 Fax: (450) 491-2313
www.paradox.ca
APR3PRT3_ASCII-EP00 Printed in Canada 07/2005