



## 32-Zone Wireless Transceiver Security Systems

MG5050 Version 4.75



## 4 to 32-Zone Expandable Security Systems

SP5500 • SP6000

Version 4.99



## Programming Guide

P ▲ R ▲ D O X™

## Warranty

For complete warranty information on this product please refer to the Limited Warranty Statement found on our Web site: [www.paradox.com](http://www.paradox.com). Your use of this Paradox product signifies your acceptance of all warranty terms and conditions.

### Limitations of Alarm Systems

It must be understood that while your Paradox alarm system is highly advanced and secure, it does not offer any guaranteed protection against burglary, fire or other emergency (fire and emergency options are only available on certain Paradox models). This is due to a number of reasons, including but not limited to inadequate or improper installation/positioning, sensor limitations, battery performance, wireless signal interruption, inadequate maintenance or the potential for the system or telephone lines to be compromised or circumvented. As a result, Paradox does not represent that the alarm system will prevent personal injury or property damage, or in all cases provide adequate warning or protection.

Your security system should therefore be considered as one of many tools available to reduce risk and/or damage of burglary, fire or other emergencies, such other tools include but are not limited to insurance coverage, fire prevention and extinguish devices, and sprinkler systems.

We also strongly recommend that you regularly maintain your security systems and stay aware of new and improved Paradox products and developments.

TBR-21: In order to comply with TBR-21, standard force dialing must be enabled.

CAUTION: The user is cautioned that any changes or modifications not expressly approved by Paradox Security Systems could void the user's authority to operate/use the equipment. This device complies with Industry Canada licence-exempt RSS standards). Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.

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

This Class B digital apparatus complies with Canadian ICES-003. Cet appareil numérique de la classe B est conforme à la norme NMB-003 du Canada.

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

### UL And ULC Warnings

This equipment has the capability of being programmed with features not verified for use in UL installations. To stay within UL and ULC standards, the installer should use the following guidelines when configuring the system:

- All components of the system should be UL listed for the intended application.
- If used for fire detection, the installer should refer to NFPA Standards #72, Chapter 2. In addition, once installation is complete, the local fire authority must be notified of the installation.
- **WARNING: This equipment must be installed and maintained by qualified service personnel only**
- This equipment must be verified by a qualified technician once every three years.
- All keypads must use an anti-tamper switch.
- Do not bypass fire zones.
- Maximum allowed entry delay is 45 seconds.
- Maximum allowed exit delay is 60 seconds.
- Minimum 4 minutes for bell cut-off time.
- The following features do not comply with UL requirements: Bypass Recall and Auto Trouble Shutdown.
- Do not connect the primary indicating device to a relay. The installer must use the bell output.
- To comply with UL985, the auxiliary power output should not exceed 200mA.
- Do not connect the zone ground terminal with UL Listed products.
- The metallic enclosure must be grounded to the cold water pipe.
- All outputs are Class 2 or power-limited, except for the battery terminal. The Class 2 and power-limited fire alarm circuits shall be installed using CL3, CL3R, CL3P, or substitute cable permitted by the National Electrical Code, ANSI/NFPA 70.
- EOL resistor part #2011002000
- **For UL Installations:** Universal UB1640W 16.5 Vac min **40 VA**
- All outputs are rated from 11.3 Vdc to 12.7 Vdc
- 12 Vdc 4 Ah rechargeable acid/lead or gel cell backup battery (YUASA model #NP7-12 recommended) for residential use. Use a 7 Ah battery to comply with fire requirements.
- Wheelock 46T-12 siren


## Things You Need to Know

### About this Programming Guide

Use this programming guide to record programmed settings for your Magellan or Spectra SP control panel. This programming guide should be used along with the Magellan and Spectra SP Reference & Installation Manual (available online), whenever installing or programming your Magellan or Spectra SP system.

### Conventions

The following typographical conventions are used throughout this guide:

Default Settings: Values which appear in bold typeface signify the default value: e.g., Access code length: <input type="checkbox"/> 6 digits <input checked="" type="checkbox"/> <b>4 digits</b> ( <i>4 digits is the default value</i> )	 : Installer Quick Menu (indicates that information on the topic can also be found in the Installer Quick Menu on page 7)
Section numbers and keypad keys also appear in bold typeface, enclosed by brackets: e.g., Section <b>[706]</b> must be enabled...	<b>WARNING: Important information</b>
Throughout this guide, Magellan (MG) and Spectra (SP) will be referred to as MG/SP	<b>NOTE: Suggestion or reminder</b>

### Installer Code

The default installer code is **0000** or **000000**. This code allows you to enter programming mode, where you can program all features, options, and commands of the control panel, except for user codes. To change this code, see *System Codes* on page 30.

### Maintenance Code

Similar to the installer code, the maintenance code allows you to enter programming mode and program all sections, except for user codes and communication settings (sections **[395]**, **[397]**, **[398]**, **[815]**, **[816]**, **[817]**, **[910]**, **[911]**, **[970]**, **[918]**, **[919]**, **[920]** to **[927]**, **[929]** to **[935]**, **[936]** to **[942]**, **[943]** to **[949]**, and **[975]**) – these sections can only be accessed using the installer code. Since there is no default code, see *System Codes* on page 30 to set a default.

### System Master Code

The default system master code is **1234** or **123456**. The system master code allows you to utilize any arming method, as well as program user codes. To change the default code, see *System Codes* on page 30.

### Panel Reset

Performing a panel reset will reset all panel settings to their preset, default values.

#### SP4000 / SP65 panels

To perform a panel reset for a SP4000 or SP65 control panel, proceed as follows:

1. Verify that the installer lock is disabled.
2. Remove the battery and AC power from the control panel.
3. Remove all connected wires and devices from the PG1 and zone 1 terminals.
4. Using a wire, short the PG1 and zone 1 terminals.
5. Reconnect the AC and battery power to the panel. Once connected, the following will occur: 1) **STATUS** LED flashes; 2) **STATUS** LED remains illuminated, indicating a reset is in progress; 3) **STATUS** LED flashes, indicating the reset is complete.
6. Remove the jumper wire.

#### All other MG/SP panels

To perform a panel reset for all other MG/SP panels:

1. Press and hold the panel's **RESET** button until the **STATUS** LED flashes (5 seconds).
2. Release the **RESET** button, and then push it once more, within two seconds.

To reset the panel to its default settings using section programming, see section **[950]** in *Usability Sections*, on page 53.

### Entering Programming Mode

To enter programming mode, proceed as follows:

1. Press **ENTER**.
2. Enter your installer or maintenance code. Upon entering your code, the **ARM** and **STAY** LEDs will flash. To modify codes, see *System Codes* on page 30.
3. Enter the three-digit section you wish to program. The **ARM** and **STAY** LEDs remain illuminated.
4. Enter required data.

**WARNING: To enter programming mode, all zones must be disarmed and StayD mode deactivated. To deactivate StayD, press OFF, enter your master or user code, and then press OFF.**

## Data Entry and Display

To access the data display mode, access the desired section and press **ENTER** before entering any data. Depending on the keypad(s) configured to your system, specific LEDs or icons will flash, thus indicating that you are in data display mode. Each time **ENTER** is pressed, the keypad will display the next digit in the current section, and will continue to do so through all the remaining sections, one digit at a time, without changing the programmed values; this is not available for sections using the *multiple feature select method*. Press **CLEAR** at any time, to exit data display mode.

There are two methods that can be used to enter data when in programming mode: *single digit data entry* and *feature select programming*.

### Single Digit Data Entry Method

After entering programming mode, some sections will require you to enter decimal values from 000 to 255. Other sections will require that you enter hexadecimal values from 0 to F. The required data will be clearly indicated in this guide. When entering the final digit in a section, the panel will automatically save and advance to the next section. See *Decimal and Hexadecimal Programming* for details on the various keys, and their equivalent decimal and hexadecimal values.

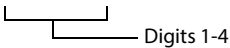
### Feature Select Programming Method

After entering certain sections, eight options will be displayed. In these instances, each option (from 1 to 8) represent a specific feature. To turn enable the option, press the key corresponding to the desired option. Press the key again to remove the digit, thereby, disabling the option. Press **SLEEP** to disable all eight options. When the options are set, press **ENTER** to save your settings and advance to the next section.

## Viewing Version Numbers

Table 1: Viewing panel and keypad version numbers



Step	Action	Details	When Viewing Keypad Version
1	Enter viewing mode: <ul style="list-style-type: none"> <li>For panel version, enter section <b>[980]</b></li> <li>For keypad version, enter installer programming, then press and hold <b>ARM</b></li> </ul>	The first digit is displayed (usually 0)	Digit 1: <b>ARM</b> is illuminated
2	Press <b>ENTER</b>	The second digit is displayed	Digit 2: <b>SLEEP</b> is illuminated
3	Press <b>ENTER</b>	The third digit is displayed	Digit 3: <b>STAY</b> is illuminated
4	Press <b>ENTER</b>	The fourth digit is displayed	Digit 4: <b>OFF</b> is illuminated

Example: Version **01.42**  

 Digits 1-4

**NOTE:** For keypads K10V/H and K636, the keypad version numbers cannot be viewed.

## Decimal and Hexadecimal Programming

Table 2: Decimal and hexadecimal values for 10 and 32-Zone LED keypads

Value or Action	Key	Result	
		32-Zone LED	10-Zone LED
Value 0/replace current digit with 0	<b>SLEEP</b>	Erase digit and remain in section	Erase digit and remain in section
Values 1 to 9	<b>1 to 9</b>	Zone 1 to 9	Keys <b>1 to 9</b>
A (hex only)	<b>0</b>	Zone 10	Key <b>0</b> (10)
B (hex only)	<b>OFF</b>	Zone 11	<b>OFF</b>
C (hex only)	<b>BYP</b>	Zone 12	<b>BYP</b>
D (hex only)	<b>MEM</b>	Zone 13	<b>MEM</b>
E (hex only)	<b>TBL</b>	Zone 14	<b>TBL</b>
F (hex only)		Zone 15	
Exit without saving	<b>CLEAR</b>	Arm and Stay LEDs flash	Arm and Stay LEDs flash
Save data (hex only)	<b>ENTER</b>	Advances to next section	Advances to next section

# Contents

<b>Installer Quick Menu</b> .....	<b>7</b>
Zones .....	7
Delays .....	7
Time and Date .....	7
Walk Test Mode .....	7
Installer and Maintenance Codes .....	7
WinLoad/BabyWare .....	7
Monitoring Phone Number .....	7
Communicator .....	8
Cancel Communication .....	8
Keypad Programming .....	8
PGMs .....	8
<b>System Planning</b> .....	<b>9</b>
Bus Module Planning .....	9
Wireless Keypad Planning .....	10
Wireless Siren Planning .....	10
Programmable Output (PGM) Planning .....	11
Wireless Repeater Planning .....	11
Zone Planning .....	11
<b>Zone Recognition</b> .....	<b>13</b>
MG Series .....	13
SP Series .....	14
<b>Zone Definitions</b> .....	<b>16</b>
Custom Zone Definitions .....	18
<b>Zone Timers</b> .....	<b>18</b>
MG Series .....	18
SP Series .....	18
<b>Wireless Zone Assignment</b> .....	<b>19</b>
Wireless Transmitter Signal Strength .....	19
<b>Zone Report Codes and Labels</b> .....	<b>19</b>
Zone Report Codes .....	19
Zone Labels .....	20
<b>Programmable Output Programming</b> .....	<b>20</b>
Programmable Output Recognition .....	20
Description of MG/SP Events .....	21
PGM Activation/Deactivation Events .....	27
PGM Options .....	28
PGM Delays .....	29
PGM Serial Numbers .....	29
Wireless PGM Signal Strength .....	29
PGM Labels .....	29
<b>User Programming</b> .....	<b>30</b>
System Codes .....	30
User Code Options .....	30
User Report Codes .....	31
User Labels .....	31
<b>Wireless Repeater Programming (RPT1)</b> .....	<b>31</b>
Wireless Repeater Assignment .....	31
Wireless Repeater Signal Strength .....	32
Wireless Repeater Options .....	32
Wireless Repeater Labels .....	33
<b>Wireless Keypad Programming</b> .....	<b>33</b>
Automatic Wireless Keypad Assignment .....	33
Compatibility Check (K37 only) .....	33
Standard Wireless Keypad Assignment .....	33
Wireless Keypad, Repeater, and Siren Options .....	33
Wireless Keypad Signal Strength .....	34
Wireless Keypad Labels .....	34
<b>Remote Control Programming</b> .....	<b>34</b>
Remote Control Button Assignment .....	34
User Assignment for Remote Controls .....	36
<b>Wireless Siren Programming</b> .....	<b>36</b>
Wireless Siren Assignment .....	36
Wireless Siren Signal Strength .....	36
Wireless Siren Labels .....	36
Cancelling the Tamper Supervision for Wireless Sirens .....	37
<b>Description of Sections [700] to [704]</b> .....	<b>37</b>
<b>Zone Options</b> .....	<b>38</b>
ATZ Options .....	38
General Zone Options .....	38
Miscellaneous System Options .....	39
<b>System Timers</b> .....	<b>39</b>
<b>Keypad Lockout</b> .....	<b>39</b>
<b>Programming the Daylight Savings Feature</b> .....	<b>39</b>
Country Codes .....	40
Customized Daylight Savings Features .....	40
<b>Partition Programming</b> .....	<b>40</b>
Partition Options .....	40
Partition Timers .....	41
Partition Labels .....	41
<b>SMS and Bus Module Programming</b> .....	<b>41</b>
SMS Site Name .....	41
Bus Module Labels .....	41
<b>Communication Programming</b> .....	<b>42</b>
Dialer Options .....	42
Event Call Direction Options .....	43
GSM Options .....	43
IP/GPRS Options .....	43
Report Codes and Partition Accounts .....	44
Landline and GSM Communication .....	44
Timers .....	44
VDMP3 Options .....	44
Test Report and Report Delays .....	45
GSM Settings .....	45
<b>System and Communication Report Codes</b> .....	<b>45</b>
Entering Report Codes .....	45
Special Arming and Disarming Report Codes .....	45
Special Alarm Report Codes .....	45
System Trouble Report Codes .....	46
System Trouble Restore Codes .....	46
System Special Report Codes .....	46
Installer Function Keys .....	46
Contact ID Report Codes .....	47
Automatic Report Codes .....	49
Communication Report Codes .....	51
Communication Restore Report Codes .....	51
<b>Software Options and Additional Timers</b> .....	<b>51</b>
Additional Communication Timers .....	51
WinLoad/BabyWare Options .....	52
<b>IP and Software Configurations</b> .....	<b>52</b>
IP Account Numbers .....	52
Software and PCS Connection Settings .....	52
IP Receiver Configurations .....	52
<b>Usability Sections</b> .....	<b>53</b>
Description of Sections [950], [955], and [960] .....	53
Description of Section [965] .....	53
Description of Sections [966] and [967] .....	54
Description of Sections [970], [975], and [980] .....	54
<b>Label Programming with LCD Keypads</b> .....	<b>54</b>
Function keys .....	54
Catalogues of Special Characters .....	55
Keypad Letter Assignments .....	56
<b>Trouble Display</b> .....	<b>56</b>
<b>Product Compatibility Chart</b> .....	<b>58</b>
<b>Hardware Connections</b> .....	<b>59</b>
Single Zone Inputs .....	59
Advanced Technology Zone (ATZ) Connections .....	59
Connecting Fire Circuits .....	60
Alarm Relay and PGM Connections .....	60
AC Power & Backup Battery Connections .....	60
Demonstration or Emergency System Power-up without an AC Source .....	60

**PCB Layouts/Wiring Diagrams ..... 61**

MG5000 ..... 61  
 MG5050 ..... 62  
 SP4000 ..... 63  
 SP5500 ..... 64  
 SP6000 ..... 65  
 SP65 ..... 66  
 SP7000 ..... 67

**Appendix A ..... 68**

EN 50131 Programming ..... 68  
 ATZ Options ..... 68  
 General Zone Options ..... 69  
 Miscellaneous System Options ..... 69  
 System Timers ..... 69  
 Keypad Lockout ..... 70  
 Dialer Options ..... 70  
 Timers ..... 70  
 Special notes for MG5050 ..... 70

**List of Worksheets**

Worksheet 1: Planning Bus Modules ..... 9  
 Worksheet 2: Planning Wireless Keypads ..... 10  
 Worksheet 3: Planning Wireless Sirens ..... 10  
 Worksheet 4: Planning Programmable Outputs ..... 11  
 Worksheet 5: Planning Wireless Repeaters ..... 11  
 Worksheet 6: Planning Zones ..... 11  
 Worksheet 7: Zone Definitions ..... 17  
 Worksheet 8: Custom Zone Definitions ..... 18  
 Worksheet 9: Zone Timers for the MG Series ..... 18  
 Worksheet 10: Zone Timers for the SP Series ..... 18  
 Worksheet 11: Wireless Zones ..... 19  
 Worksheet 12: Zone Report Codes ..... 19  
 Worksheet 13: Zone Labels ..... 20  
 Worksheet 14: PGM Activation/Deactivation Events ..... 27  
 Worksheet 15: PGM Delays ..... 29  
 Worksheet 16: PGM Serial Numbers ..... 29  
 Worksheet 17: PGM Labels ..... 29  
 Worksheet 18: User System Codes ..... 30  
 Worksheet 19: User Code Options ..... 30  
 Worksheet 20: User Report Codes ..... 31  
 Worksheet 21: User Labels ..... 31  
 Worksheet 22: Wireless Repeater Assignment ..... 31  
 Worksheet 23: Wireless Repeater Labels ..... 33  
 Worksheet 24: Wireless Keypad Assignment ..... 33  
 Worksheet 25: Wireless Keypad Labels ..... 34  
 Worksheet 26: Programming Remote Controls ..... 35  
 Worksheet 27: Wireless Siren Assignment ..... 36  
 Worksheet 28: Wireless Siren Labels ..... 36  
 Worksheet 29: System Timers ..... 39  
 Worksheet 30: Keypad Lockout ..... 39  
 Worksheet 31: Daylight Savings Time ..... 40  
 Worksheet 32: Partition Timers ..... 41  
 Worksheet 33: Partition Labels ..... 41  
 Worksheet 34: SMS Site Name ..... 41  
 Worksheet 35: Bus Module Labels ..... 41  
 Worksheet 36: Report Codes and Partition Accounts ..... 44  
 Worksheet 37: Landline and GSM Communication Settings ..... 44  
 Worksheet 38: Communication Timers ..... 44  
 Worksheet 39: VDMP3 Maximum Attempts ..... 44  
 Worksheet 40: Test Report and Report Delays ..... 45  
 Worksheet 41: GSM Settings (PCS series) ..... 45  
 Worksheet 42: Special Arming and Disarming Report Codes ..... 45  
 Worksheet 43: Special Alarm Report Codes ..... 45  
 Worksheet 44: Special Trouble Report Codes ..... 46  
 Worksheet 45: System Trouble Restore Codes ..... 46  
 Worksheet 46: System Special Report Codes ..... 46  
 Worksheet 47: Communication Report Codes ..... 51  
 Worksheet 48: Communication Restore Report Codes ..... 51  
 Worksheet 49: Additional Communication Timers ..... 51  
 Worksheet 50: WinLoad/BabyWare Options ..... 52  
 Worksheet 51: IP Account Numbers ..... 52  
 Worksheet 52: Software and PCS Connection Settings ..... 52  
 Worksheet 53: IP Receiver 1 Configuration ..... 53  
 Worksheet 54: IP Receiver 2 Configuration ..... 53  
 Worksheet 55: IP Receiver Backup Configuration ..... 53  
 Worksheet 56: System Timers ..... 69  
 Worksheet 57: Keypad Lockout ..... 70  
 Worksheet 58: Communication Timers ..... 70



## Installer Quick Menu

### Zones

Step	Action	Details
1	⏻ + installer code	⏻ = flash; programmed zones are lit (buttons or LED, depending on keypad); maintenance code may also be used
2	Zone number	Two digits: <b>01 to 32</b>
3	Enroll or erase zone	Wireless zone: open/close cover or press <b>LEARN/TAMPER</b> switch; hardwired zone: press <b>ENTER</b> ; to erase a programmed zone, press and hold <b>SLEEP</b> for three seconds
4	Zone type	See <i>Zone Definitions</i> on page 16, for the zone type
5	Assign partition (1 and/or 2 + <b>ENTER</b> )	If applicable, assign the zone to one or both partitions, and then press <b>ENTER</b> ; by default, all zones are assigned to partition 1

**NOTE:** If applicable, partition 2 status LEDs display signal strength of selected wireless zone (4 LEDs = best signal; 1 LED = weak signal; no LEDs = hardwired panel/keypad zone).

### Delays

Step	Action	Details
1	⏻ + installer code	⏻ = flash; maintenance code may also be used
2	TBL	-
3	1 = entry delay 1	Default: 045 sec.
	2 = entry delay 2	Default: 045 sec.
	3 = exit delay	Default: 060 sec.
	4 = bell cut-off	Default: 004 min.
4	000 to 255	Entry/exit delay = seconds; bell cut-off = minutes

### Time and Date

Step	Action	Details
1	⏻ + installer code	⏻ = flash; maintenance code may also be used
2	TBL + 5	-
3	Time (HH:MM)	If <b>HH</b> = 13 or more, go to step 5
4	Time format	1 = 24 hr. format, 2 = AM, 3 = PM
5	Date (YYYY/MM/DD)	Enter the year/month/day

**NOTE:** For SP4000 and SP65 systems, the time format must be entered in 24 hr. format, therefore, omit step 4.

### Walk Test Mode

Step	Action	Details
1	⏻ + installer code	⏻ = flash; maintenance code may also be used
2	TBL	-
3	6	Activates or deactivates walk test mode

### Installer and Maintenance Codes

Step	Action	Details
1	⏻ + installer code	⏻ = flash
2	TBL	-
3	<ul style="list-style-type: none"> <li>• 7 for installer code</li> <li>• 8 for maintenance code</li> </ul>	-
4	Code	Enter a four or six-digit code
5	Confirm code	Re-enter the four or six-digit code, to confirm

**NOTE:** To erase a code, press and hold **SLEEP** for three seconds.

### WinLoad/BabyWare

Step	Action	Details
1	⏻ + installer code	⏻ = flash
2	TBL	-
3	9	-
4	Phone # + <b>ENTER</b>	Enter PC phone number (up to 32 digits), and then press <b>ENTER</b>
5	Panel ID	Enter four-digit panel ID
6	PC password	Enter four-digit PC password

**NOTE:** To erase the WinLoad/BabyWare phone number, panel ID, and PC password, press and hold **SLEEP** for three seconds.

### Monitoring Phone Number

Step	Action	Details
1	⏻ + installer code	⏻ = flash
2	MEM	-
3	1	-
4	Phone # + <b>ENTER</b>	Enter monitoring station phone number (up to 32 digits), and then press <b>ENTER</b>
5	Partition 1 account #	-
6	<ul style="list-style-type: none"> <li>• 1 for CID</li> <li>• 2 for SIA</li> </ul>	SIA is not supported with GPRS/IP reporting
7	Partition 2 account #	-

**NOTE:** To erase monitoring phone number, reporting format, and account numbers, press and hold **SLEEP** for three seconds.

## Communicator

Step	Action	Details
1	+ installer code	= flash; maintenance code may also be used
2		-
3	2 = backup phone #	-
	3 = personal phone #1	
	4 = personal phone #2	
	5 = personal phone #3	
	6 = personal phone #4	
	7 = personal phone #5	
8 = pager #		
4	Phone # + <b>ENTER</b>	Enter phone number (up to 32 digits), and then press <b>ENTER</b> to proceed to the next phone number, or go to step 5 if option <b>8</b> was selected
5	Message + <b>ENTER</b>	Enter pager message, and then press <b>ENTER</b> ; this step applies only to the pager number

**NOTE:** To erase a phone number pager message, press and hold **SLEEP** for three seconds.

## Cancel Communication

Step	Action	Details
1	+ installer code	= flash; maintenance code may also be used
2		-
3	<b>9</b>	Cancels all communication with WinLoad, BabyWare, and GSM module

## Keypad Programming

### Assigning Keypad Zone Numbers

Step	Action	Details
1	<b>ENTER</b> + installer code	<b>ARM + STAY</b> = flash; maintenance code may also be used
2	Press and hold  for three seconds	<b>ARM + STAY</b> = ON
3	Zone number + <b>ENTER</b>	K35, K32, K32LCD, K32LX = two digits: <b>01</b> to <b>32</b> ; K636, K10V/H = one digit: <b>1</b> to <b>0</b> (10)

**NOTE:** To erase a keypad zone number, press **CLEAR**, and then **ENTER**.

### Entry Point Zone Assignment (StayD)

Step	Action	Details
1	<b>ENTER</b> + installer code	<b>ARM + STAY</b> = flash
2	Press and hold <b>OFF</b> for three seconds	<b>ARM + STAY</b> = ON
3	Zone number	K35, K32RF, K37, K32LCD, K32LX = two digits: <b>01</b> to <b>32</b> ; K636, K10V/H = one digit: <b>1</b> to <b>0</b> (10; maximum ten zones); the first zone programmed will be the designated entry point and will flash; up to three more path zones can be added – these zones will light up and remain lit
4	<b>ENTER</b>	Press <b>ENTER</b> to save and exit

## Keypad Input/Output Configuration (K636 V2.0 and higher)

Step	Action	Details
1	<b>ENTER</b> + installer code	<b>ARM + STAY</b> = flash
2	Press and hold <b>ENTER</b> for three seconds	<b>ARM + STAY</b> = ON
3	Option <b>1</b>	ON = output switches to ground following system arming (blue wire, maximum 150 mA) <b>OFF</b> = input (keypad zone input)
4	Option <b>2</b>	ON = output N.C. <b>OFF</b> = output N.O.

**NOTE:** When configuring as an output, clear the assigned keypad zone first.

## PGMs

Step	Action	Details
1	+ installer code	= flash; maintenance code may also be used
2		-
3	PGM number	Two digits: <b>01</b> to <b>16</b>
4	Enroll or erase PGM	Wireless PGM = open/close cover; hardwired PGM = press <b>ENTER</b>
5	PGM type	1 = Follow button  or •
		2 = Follow button  or
		3 = Follow zone
		4 = Follow alarm
		5 = Follow bell
		6 = Follow arm
		7 = Follow Stay arm
		8 = Follow Sleep arm
6	If PGM type is <b>1, 2, 3,</b> or <b>4,</b> enter activation delay	1 = Follow
		2 = 1 sec.
		3 = 5 sec.
		4 = 15 sec.
		5 = 30 sec.
		6 = 1 min.
		7 = 5 min.
		8 = 15 min.
		9 = 30 min.
6	If PGM type is <b>5,</b> proceed to the next available PGM	-
	If PGM type is <b>6, 7,</b> or <b>8,</b> enter <b>1</b> and/or <b>2</b> + <b>ENTER</b>	If system is partitioned, select partition(s), and then press <b>ENTER</b> to proceed to the next available PGM
7	If PGM type is <b>1</b> or <b>2,</b> enter two-digit remote control #	01 to 32 (00 = all remote controls); the control panel proceeds to the next available PGM
	If PGM type is <b>3,</b> enter two-digit zone #	01 to 32 (00 = all zones); the control panel proceeds to the next available PGM
	If PGM type is <b>4,</b> enter <b>1</b> and/or <b>2</b> + <b>ENTER</b>	If system is partitioned, select partition(s), and then press <b>ENTER</b> to proceed to the next available PGM

**NOTE:** To erase a PGM, press and hold **SLEEP** for three seconds.



## System Planning

### Bus Module Planning

#### Worksheet 1: Planning Bus Modules

<i>Serial # Sticker</i>	<i>Description</i>	<i>Path Zone (Entry Point)</i>	<i>Path Zone</i>	<i>Path Zone</i>	<i>Path Zone</i>
Bus Module 1					
Bus Module 2					
Bus Module 3					
Bus Module 4					
Bus Module 5					
Bus Module 6					
Bus Module 7					
Bus Module 8					
Bus Module 9					
Bus Module 10					
Bus Module 11					
Bus Module 12					
Bus Module 13					
Bus Module 14					
Bus Module 15					

**NOTE:** Paths are only applicable when StayD is enabled.

## Wireless Keypad Planning

### Worksheet 2: Planning Wireless Keypads

Serial # Sticker	Description	Path Zone (Entry Point)	Path Zone	Path Zone	Path Zone
Wireless Keypad 1					
Wireless Keypad 2					
Wireless Keypad 3					
Wireless Keypad 4					
Wireless Keypad 5					
Wireless Keypad 6					
Wireless Keypad 7					
Wireless Keypad 8					

**NOTE:** When deleting a wireless keypad (K32RF/K37) from the system, the corresponding StayD path zones will also be deleted.

## Wireless Siren Planning

### Worksheet 3: Planning Wireless Sirens

Serial # Sticker	Description
Siren 1	
Siren 2	

Serial # Sticker	Description
Siren 3	
Siren 4	

## Programmable Output (PGM) Planning

### Worksheet 4: Planning Programmable Outputs

Serial # Sticker	Description
PGM 1	
PGM 2	
PGM 3	
PGM 4	
PGM 5	
PGM 6	
PGM 7	
PGM 8	

Serial # Sticker	Description
PGM 9	
PGM 10	
PGM 11	
PGM 12	
PGM 13	
PGM 14	
PGM 15	
PGM 16	

## Wireless Repeater Planning

### Worksheet 5: Planning Wireless Repeaters

Serial # Sticker	Description
Repeater 1	

Serial # Sticker	Description
Repeater 2	

## Zone Planning

### Worksheet 6: Planning Zones

Serial # Sticker	Zone #	Zone Description	Arming Method		
			Stay	Sleep	Full
Zone			1	1	1
Zone			1	1	1

Serial # Sticker	Zone #	Zone Description	Arming Method		
			Stay	Sleep	Full
Zone			1	1	1
Zone			1	1	1

**Worksheet 6: Planning Zones (Continued)**

Serial # Sticker	Zone #	Zone Description	Arming Method			Serial # Sticker	Zone #	Zone Description	Arming Method		
			Stay	Sleep	Full				Stay	Sleep	Full
Zone			1	1	1	Zone			1	1	1
Zone			1	1	1	Zone			1	1	1
Zone			1	1	1	Zone			1	1	1
Zone			1	1	1	Zone			1	1	1
Zone			1	1	1	Zone			1	1	1
Zone			1	1	1	Zone			1	1	1
Zone			1	1	1	Zone			1	1	1
Zone			1	1	1	Zone			1	1	1
Zone			1	1	1	Zone			1	1	1
Zone			1	1	1	Zone			1	1	1
Zone			1	1	1	Zone			1	1	1
Zone			1	1	1	Zone			1	1	1
Zone			1	1	1	Zone			1	1	1
Zone			1	1	1	Zone			1	1	1
Zone			1	1	1	Zone			1	1	1
Zone			1	1	1	Zone			1	1	1
Zone			1	1	1	Zone			1	1	1
Zone			1	1	1	Zone			1	1	1
Zone			1	1	1	Zone			1	1	1
Zone			1	1	1	Zone			1	1	1
Zone			1	1	1	Zone			1	1	1

## Zone Recognition

**NOTE:** For keypad zone programming, see *Keypad Programming* on page 8.

### MG Series

When expanding zones via ZX8, up to three ZX8 modules can be added to the system, and they are identified by the ZX8 three-position jumpers: +1, +9, and +17. Table 3 displays zone recognition information for MG control panels.

**Table 3: Zone recognition information for the MG series**

MG5000 (without ATZ)			MG5000 (with ATZ)			MG5050 (without ATZ)			MG5050 (with ATZ)		
Type	Zone	Description	Type	Zone	Description	Type	Zone	Description	Type	Zone	Description
Panel	1	Panel input 1	Panel	1	Panel input 1A	Panel	1	Panel input 1	Panel	1	Panel input 1A
	2	Panel input 2		2	Panel input 2A		2	Panel input 2		2	Panel input 2A
ZX8 Jumper Panel + 1	3	Input 1		3	Panel input 1B		3	Panel input 3		3	Panel input 3A
	4	Input 2		4	Panel input 2B		4	Panel input 4		4	Panel input 4A
	5	Input 3	ZX8 Jumper Panel + 1	5	Input 1		5	Panel input 5		5	Panel input 5A
	6	Input 4		6	Input 2	6	Input 1	6		Panel input 1B	
	7	Input 5		7	Input 3	7	Input 2	7		Panel input 2B	
	8	Input 6		8	Input 4	8	Input 3	8		Panel input 3B	
	9	Input 7		9	Input 5	9	Input 4	9		Panel input 4B	
	10	Input 8		10	Input 6	10	Input 5	10		Panel input 5B	
ZX8 Jumper Panel + 9	11	Input 1		11	Input 7	11	Input 6	ZX8 Jumper Panel + 1	11	Input 1	
	12	Input 2		12	Input 8	12	Input 7		12	Input 2	
	13	Input 3	ZX8 Jumper Panel + 9	13	Input 1	13	Input 8		13	Input 3	
	14	Input 4		14	Input 2	14	Input 1		14	Input 4	
	15	Input 5		15	Input 3	15	Input 2		15	Input 5	
	16	Input 6		16	Input 4	16	Input 3		16	Input 6	
	17	Input 7		17	Input 5	17	Input 4		17	Input 7	
	18	Input 8		18	Input 6	18	Input 5		18	Input 8	
ZX8 Jumper Panel + 17	19	Input 1		19	Input 7	19	Input 6	ZX8 Jumper Panel + 9	19	Input 1	
	20	Input 2		20	Input 8	20	Input 7		20	Input 2	
	21	Input 3	ZX8 Jumper Panel + 17	21	Input 1	21	Input 8		21	Input 3	
	22	Input 4		22	Input 2	22	Input 1		22	Input 4	
	23	Input 5		23	Input 3	23	Input 2		23	Input 5	
	24	Input 6		24	Input 4	24	Input 3		24	Input 6	
	25	Input 7		25	Input 5	25	Input 4		25	Input 7	
	26	Input 8		26	Input 6	26	Input 5		26	Input 8	
-	27	-		27	Input 7	27	Input 6	ZX8 Jumper Panel + 17	27	Input 1	
	28	-		28	Input 8	28	Input 7		28	Input 2	
	29	-	-	29	-	29	Input 8		29	Input 3	
	30	-		30	-	30	-		30	Input 4	
	31	-		31	-	31	-		31	Input 5	
	32	-		32	-	32	-		32	Input 6	

**NOTE:** If a device is assigned to a zone which is already programmed, a wireless zone will overwrite a keypad/hardwire zone and a keypad zone will overwrite a hardwire zone.

## SP Series

When expanding zones via ZX8, up to three ZX8 modules can be added to the system, and they are identified by the ZX8 three-position jumpers: +1, +9, and +17. Table 4 displays zone recognition information for SP control panels.

Table 4: Zone recognition information for the SP series

SP4000 (without ATZ)			SP4000 (with ATZ)			SP5500 (without ATZ)			SP5500 (with ATZ)			SP6000 (without ATZ)			SP6000 (with ATZ)		
Type	Zone	Description	Type	Zone	Description	Type	Zone	Description	Type	Zone	Description	Type	Zone	Description	Type	Zone	Description
Panel	1	Panel input 1	Panel	1	Panel input 1A	Panel	1	Panel input 1	Panel	1	Panel input 1A	Panel	1	Panel input 1	Panel	1	Panel input 1A
	2	Panel input 2		2	Panel input 2A		2	Panel input 2		2	Panel input 2A		2	Panel input 2		2	Panel input 2A
	3	Panel input 3		3	Panel input 3A		3	Panel input 3		3	Panel input 3A		3	Panel input 3		3	Panel input 3A
	4	Panel input 4		4	Panel input 4A		4	Panel input 4		4	Panel input 4A		4	Panel input 4		4	Panel input 4A
ZX8 Jumper Panel + 1	5	Input 1	ZX8 Jumper Panel + 1	5	Panel input 1B	ZX8 Jumper Panel + 1	5	Panel input 5	ZX8 Jumper Panel + 1	5	Panel input 5A	ZX8 Jumper Panel + 1	5	Panel input 5	ZX8 Jumper Panel + 1	5	Panel input 5A
	6	Input 2		6	Panel input 2B		6	Input 1		6	Panel input 1B		6	Panel input 6		6	Panel input 6A
	7	Input 3		7	Panel input 3B		7	Input 2		7	Panel input 2B		7	Panel input 7		7	Panel input 7A
	8	Input 4		8	Panel input 4B		8	Input 3		8	Panel input 3B		8	Panel input 8		8	Panel input 8A
ZX8 Jumper Panel + 9	9	Input 5	ZX8 Jumper Panel + 9	9	Input 1	ZX8 Jumper Panel + 9	9	Input 4	ZX8 Jumper Panel + 9	9	Panel input 4B	ZX8 Jumper Panel + 9	9	Input 1	ZX8 Jumper Panel + 9	9	Panel input 1B
	10	Input 6		10	Input 2		10	Input 5		10	Panel input 5B		10	Input 2		10	Panel input 2B
	11	Input 7		11	Input 3		11	Input 6		11	Input 1		11	Input 3		11	Panel input 3B
	12	Input 8		12	Input 4		12	Input 7		12	Input 2		12	Input 4		12	Panel input 4B
ZX8 Jumper Panel + 9	13	Input 1	ZX8 Jumper Panel + 9	13	Input 5	ZX8 Jumper Panel + 9	13	Input 8	ZX8 Jumper Panel + 9	13	Input 3	ZX8 Jumper Panel + 9	13	Input 5	ZX8 Jumper Panel + 9	13	Panel input 5B
	14	Input 2		14	Input 6		14	Input 1		14	Input 4		14	Input 6		14	Panel input 6B
	15	Input 3		15	Input 7		15	Input 2		15	Input 5		15	Input 7		15	Panel input 7B
	16	Input 4		16	Input 8		16	Input 3		16	Input 6		16	Input 8		16	Panel input 8B
ZX8 Jumper Panel + 17	17	Input 5	ZX8 Jumper Panel + 17	17	Input 1	ZX8 Jumper Panel + 17	17	Input 4	ZX8 Jumper Panel + 17	17	Input 7	ZX8 Jumper Panel + 17	17	Input 1	ZX8 Jumper Panel + 17	17	Input 1
	18	Input 6		18	Input 2		18	Input 5		18	Input 8		18	Input 2		18	Input 2
	19	Input 7		19	Input 3		19	Input 6		19	Input 1		19	Input 3		19	Input 3
	20	Input 8		20	Input 4		20	Input 7		20	Input 2		20	Input 4		20	Input 4
ZX8 Jumper Panel + 17	21	Input 1	ZX8 Jumper Panel + 17	21	Input 5	ZX8 Jumper Panel + 17	21	Input 8	ZX8 Jumper Panel + 17	21	Input 3	ZX8 Jumper Panel + 17	21	Input 5	ZX8 Jumper Panel + 17	21	Input 5
	22	Input 2		22	Input 6		22	Input 1		22	Input 4		22	Input 6		22	Input 6
	23	Input 3		23	Input 7		23	Input 2		23	Input 5		23	Input 7		23	Input 7
	24	Input 4		24	Input 8		24	Input 3		24	Input 6		24	Input 8		24	Input 8
-	25	Input 5	ZX8 Jumper Panel + 17	25	Input 1	ZX8 Jumper Panel + 17	25	Input 4	ZX8 Jumper Panel + 17	25	Input 7	ZX8 Jumper Panel + 17	25	Input 1	ZX8 Jumper Panel + 17	25	Input 1
	26	Input 6		26	Input 2		26	Input 5		26	Input 8		26	Input 2		26	Input 2
	27	Input 7		27	Input 3		27	Input 6		27	Input 1		27	Input 3		27	Input 3
	28	Input 8		28	Input 4		28	Input 7		28	Input 2		28	Input 4		28	Input 4
-	29	-	ZX8 Jumper Panel + 17	29	Input 5	-	29	Input 8	ZX8 Jumper Panel + 17	29	Input 3	ZX8 Jumper Panel + 17	29	Input 5	ZX8 Jumper Panel + 17	29	Input 5
	30	-		30	Input 6		30	-		30	Input 4		30	Input 6		30	Input 6
	31	-		31	Input 7		31	-		31	Input 5		31	Input 7		31	Input 7
	32	-		32	Input 8		32	-		32	Input 6		32	Input 8		32	Input 8

**Table 4: Zone recognition information for the SP series (Continued)**

SP65 (without ATZ)			SP65 (with ATZ)			SP7000 (without ATZ)			SP7000 (with ATZ)			
Type	Zone	Description	Type	Zone	Description	Type	Zone	Description	Type	Zone	Description	
Panel	1	Panel input 1	Panel	1	Panel input 1A	Panel	1	Panel input 1	Panel	1	Panel input 1A	
	2	Panel input 2		2	Panel input 2A		2	Panel input 2		2	Panel input 2A	
	3	Panel input 3		3	Panel input 3A		3	Panel input 3		3	Panel input 3A	
	4	Panel input 4		4	Panel input 4A		4	Panel input 4		4	Panel input 4A	
	5	Panel input 5		5	Panel input 5A		5	Panel input 5		5	Panel input 5A	
	6	Panel input 6		6	Panel input 6A		6	Panel input 6		6	Panel input 6A	
	7	Panel input 7		7	Panel input 7A		7	Panel input 7		7	Panel input 7A	
	8	Panel input 8		8	Panel input 8A		8	Panel input 8		8	Panel input 8A	
	9	Panel input 9		9	Panel input 9A		9	Panel input 9		9	Panel input 9A	
ZX8 Jumper Panel + 1	10	Input 1	Panel	10	Panel input 1B	Panel	10	Panel input 10	Panel	10	Panel input 10A	
	11	Input 2		11	Panel input 2B		11	Panel input 11		11	Panel input 11A	
	12	Input 3		12	Panel input 3B		12	Panel input 12		12	Panel input 12A	
	13	Input 4		13	Panel input 4B		13	Panel input 13		13	Panel input 13A	
	14	Input 5		14	Panel input 5B		14	Panel input 14		14	Panel input 14A	
	15	Input 6		15	Panel input 6B		15	Panel input 15		15	Panel input 15A	
	16	Input 7		16	Panel input 7B		16	Panel input 16		16	Panel input 16A	
	17	Input 8		17	Panel input 8B		ZX8 Jumper Panel + 1	17		Input 1	17	Panel input 1B
ZX8 Jumper Panel + 9	18	Input 1	ZX8 Jumper Panel + 1	18	Panel input 9B	ZX8 Jumper Panel + 1		18	Input 2	Panel	18	Panel input 2B
	19	Input 2		19	Input 1			19	Input 3		19	Panel input 3B
	20	Input 3		20	Input 2			20	Input 4		20	Panel input 4B
	21	Input 4		21	Input 3			21	Input 5		21	Panel input 5B
	22	Input 5		22	Input 4			22	Input 6		22	Panel input 6B
	23	Input 6		23	Input 5			23	Input 7		23	Panel input 7B
	24	Input 7		24	Input 6			24	Input 8		24	Panel input 8B
	25	Input 8		25	Input 7		ZX8 Jumper Panel + 9	25	Input 1		25	Panel input 9B
ZX8 Jumper Panel + 17	26	Input 1	ZX8 Jumper Panel + 9	26	Input 8	ZX8 Jumper Panel + 9		26	Input 2	Panel	26	Panel input 10B
	27	Input 2		27	Input 1			27	Input 3		27	Panel input 11B
	28	Input 3		28	Input 2			28	Input 4		28	Panel input 12B
	29	Input 4		29	Input 3			29	Input 5		29	Panel input 13B
	30	Input 5		30	Input 4			30	Input 6		30	Panel input 14B
	31	Input 6		31	Input 5			31	Input 7		31	Panel input 15B
	32	Input 7		32	Input 6			32	Input 8		32	Panel input 16B

**NOTE:** If a device is assigned to a zone which is already programmed, a wireless zone will overwrite a keypad/hardwire zone and a keypad zone will overwrite a hardwire zone.

## Zone Definitions

**NOTE:** If a device is assigned to a zone which is already programmed, a wireless zone will overwrite a keypad/hardwire zone and a keypad zone will overwrite a hardwire zone.

To define zones on your MG/SP control panel:

1. Press **ENTER**, and then enter your installer code (maintenance code may also be used). The **ARM** and **STAY** functions will flash.
2. Enter the three-digit zone number you wish to program (e.g., **001** to **032**). The **ARM** and **STAY** functions will remain illuminated.
3. Enter a two-digit zone definition, by referring to table 5.
4. Assign a partition, by referring to table 6. By default, all zones are assigned to partition 1.
5. Select or deselect zone options, using buttons **1** to **8** (see tables 7 and 8).
6. Press **ENTER** to save and proceed to the next zone.
7. Repeat steps 3 to 6 for all remaining zones.

**Table 5: Zone definitions for MG/SP panels**

Input Value	Description	Arming Type		
		Stay Arm	Sleep Arm	Fully Arm
00	Disabled (default)	-	-	-
01	Entry delay 1	Entry delay 1	Entry delay 1	Entry delay 1
02	Entry delay 2	Entry delay 2	Entry delay 2	Entry delay 2
03	Entry delay 1 (Full Arm)	Not armed	Not armed	Entry delay 1
04	Entry delay 2 (Full Arm)	Not armed	Not armed	Entry delay 2
05	Follow	Follow*	Follow*	Follow
06	Follow (sleep/full arm)	Not armed	Follow*	Follow
07	Follow (full arm)	Not armed	Not armed	Follow
08	Instant	Instant*	Instant*	Instant
09	Instant (sleep/full arm)	Not armed	Instant*	Instant
10	Instant (full arm)	Not armed	Not armed	Instant
11	Instant fire†	-	-	-
12	Delayed fire†	-	-	-
13	Instant fire silent†	-	-	-
14	Delayed fire silent†	-	-	-
15	24 hr. buzzer	-	-	-
16	24 hr. burglary	-	-	-
17	24 hr. hold-up	-	-	-
18	24 hr. gas	-	-	-
19	24 hr. heat	-	-	-
20	24 hr. water	-	-	-
21	24 hr. freeze	-	-	-
22	24 hr. panic‡	-	-	-
23	Follow no pre-alarm	-	-	-
24	Instant no pre-alarm	-	-	-
25	Keyswitch maintain**	-	-	-
26	Keyswitch momentary**	-	-	-
33	Instant no pre-alarm (stay/sleep)	Instant	Instant	Not armed
34	Instant no pre-alarm (sleep)	Not armed	Instant	Not armed
35	Entry delay 1 (stay/full)/instant	Entry delay 1	Instant	Entry delay 1
36	Entry delay 1 (full arm)/instant	Instant	Instant	Entry delay 1

\* Flex-instant: zone will follow the delay at section [720] (default is 15 seconds/0 = instant zone).

\*\* On-board, hardwire, control panel zones only.

† ZX8 inputs do not support fire zones. For two-wire smoke installations (not supported by SP4000/SP5500/SP65), these definitions apply to zone 1 input only. Section [706], option 3, must be enabled. For four-wire smoke installations, use any panel, on-board zone input.

‡ This alarm will follow the panic 1 option (section [702], option 1).

**Table 6: Partition assignment for MG/SP panels**

Input Value	Description
1	Assign to partition 1
2	Assign to partition 2
3	Assign to both partitions

**NOTE:** When using the K636 keypad, only partition 1 is available.

**Table 7: Zone options for MG/SP panels**

Input Value	Description	
1	Auto zone shutdown	
2	Bypassable zone	
3	RF zone supervision	
6	Intellizone	
7	Delay alarm transmission	
8	Force zone	
Input Value	Zone Alarm Type	
4	5	
OFF	OFF	Audible alarm
OFF	ON	Pulsed alarm
ON	OFF	Silent alarm
ON	ON	Report only

**NOTE:** For additional zone options, see *Zone Options* on page 38.

**Table 8: Keyswitch options for MG/SP panels**

Input Value	Description
1	-
2	-
3	-
4	OFF = Disarm; ON = Disarm only if Stay/Sleep armed
5	Arm only
6	Stay arming*
7	Sleep arming*
8	-

\* Select only one. If all are OFF, keyswitch will regular arm.



**Table 9: Permitted zone definitions for MG/SP panels**

Input Value	Description	Arming Type			
		Disarm	Stay Arm	Sleep Arm	Fully Arm
00	Zone disabled	✓	✓	✓	✓
01	Entry delay 1	-	✓	✓	✓
02	Entry delay 2	-	✓	✓	✓
03	Entry delay 1 (Full Arm)	-	-	-	✓
04	Entry delay 2 (Full Arm)	-	-	-	✓
05	Follow	-	✓	✓	✓
06	Follow (sleep/full arm)	-	-	✓	✓
07	Follow (full arm)	-	-	-	✓
08	Instant	-	✓	✓	✓
09	Instant (sleep/full arm)	-	-	✓	✓
10	Instant (full arm)	-	-	-	✓
11	Instant fire	✓	✓	✓	✓
12	Delayed fire	✓	✓	✓	✓
13	Instant fire silent	✓	✓	✓	✓
14	Delayed fire silent	✓	✓	✓	✓
15	24 hr. buzzer	✓	✓	✓	✓

Input Value	Description	Arming Type			
		Disarm	Stay Arm	Sleep Arm	Fully Arm
16	24 hr. burglary	✓	✓	✓	✓
17	24 hr. hold-up	✓	✓	✓	✓
18	24 hr. gas	✓	✓	✓	✓
19	24 hr. heat	✓	✓	✓	✓
20	24 hr. water	✓	✓	✓	✓
21	24 hr. freeze	✓	✓	✓	✓
22	24 hr. panic	✓	✓	✓	✓
23	Follow no pre-alarm	-	✓	✓	✓
24	Instant no pre-alarm	-	✓	✓	✓
25	Keyswitch maintain	✓	✓	✓	✓
26	Keyswitch momentary	✓	✓	✓	✓
33	Instant no pre-alarm (stay/sleep)	-	✓	✓	-
34	Instant no pre-alarm (sleep)	-	-	✓	-
35	Entry delay 1 (stay/full)/instant	-	✓	✓	✓
36	Entry delay 1 (full arm)/instant	-	✓	✓	✓

**Worksheet 7: Zone Definitions**

Section	Zone	Description (see tables 3 and 4)	Zone Definition	Partition	Zone Options	Section	Zone	Description (see tables 3 and 4)	Zone Definition	Partition	Zone Options
[001]	1	_____	01	1	1 2 3 4 5 6 7 8	[017]	17	_____	___/___	_____	1 2 3 4 5 6 7 8
[002]	2	_____	06	1	1 2 3 4 5 6 7 8	[018]	18	_____	___/___	_____	1 2 3 4 5 6 7 8
[003]	3	_____	09	1	1 2 3 4 5 6 7 8	[019]	19	_____	___/___	_____	1 2 3 4 5 6 7 8
[004]	4	_____	09	1	1 2 3 4 5 6 7 8	[020]	20	_____	___/___	_____	1 2 3 4 5 6 7 8
[005]	5	_____	09	1	1 2 3 4 5 6 7 8	[021]	21	_____	___/___	_____	1 2 3 4 5 6 7 8
[006]	6	_____	09	1	1 2 3 4 5 6 7 8	[022]	22	_____	___/___	_____	1 2 3 4 5 6 7 8
[007]	7	_____	09	1	1 2 3 4 5 6 7 8	[023]	23	_____	___/___	_____	1 2 3 4 5 6 7 8
[008]	8	_____	09	1	1 2 3 4 5 6 7 8	[024]	24	_____	___/___	_____	1 2 3 4 5 6 7 8
[009]	9	_____	___/___	_____	1 2 3 4 5 6 7 8	[025]	25	_____	___/___	_____	1 2 3 4 5 6 7 8
[010]	10	_____	___/___	_____	1 2 3 4 5 6 7 8	[026]	26	_____	___/___	_____	1 2 3 4 5 6 7 8
[011]	11	_____	___/___	_____	1 2 3 4 5 6 7 8	[027]	27	_____	___/___	_____	1 2 3 4 5 6 7 8
[012]	12	_____	___/___	_____	1 2 3 4 5 6 7 8	[028]	28	_____	___/___	_____	1 2 3 4 5 6 7 8
[013]	13	_____	___/___	_____	1 2 3 4 5 6 7 8	[029]	29	_____	___/___	_____	1 2 3 4 5 6 7 8
[014]	14	_____	___/___	_____	1 2 3 4 5 6 7 8	[030]	30	_____	___/___	_____	1 2 3 4 5 6 7 8
[015]	15	_____	___/___	_____	1 2 3 4 5 6 7 8	[031]	31	_____	___/___	_____	1 2 3 4 5 6 7 8
[016]	16	_____	___/___	_____	1 2 3 4 5 6 7 8	[032]	32	_____	___/___	_____	1 2 3 4 5 6 7 8

**NOTE:** See worksheet 11 on page 19, for assigning wireless zones to your MG/SP control panel.

## Custom Zone Definitions

With MG/SP control panels you can create up to four custom zone definition templates (use worksheet 8). Custom zone definition templates (sections [033] to [036]) will overwrite zone definitions 33 to 36 in table 5 on page 16. Modifications can be made in accordance with table 9 (*Permitted zone definitions for MG/SP panels*), on page 17.

### Worksheet 8: Custom Zone Definitions

Section	Description	Disarm	Stay Arm	Sleep Arm	Full Arm
[033]	Zone definition template 1	00	24	24	00
[034]	Zone definition template 2	00	00	24	00
[035]	Zone definition template 3	00	01	24	01
[036]	Zone definition template 4	00	24	24	01

## Zone Timers

Use the following section to program zone timers for your MG/SP control panel. Use worksheets 9 and 10 to record your settings.

**NOTE:** When both ATZ and EOL are enabled, the zone speed should not be set below 300 msec.

### MG Series

#### Worksheet 9: Zone Timers for the MG Series

Section	Zone	MG5000	MG5050	Data	Description (default: 060)
[041]	1	(Z1)	(Z1)	060	(000 to 255) x 10 msec. Speed of hardwire zone 1
[042]	2	(Z2)	(Z2)	060	(000 to 255) x 10 msec. Speed of hardwire zone 2
[043]	3	(Z1 ATZ)	(Z3)	060	(000 to 255) x 10 msec. Speed of hardwire zone 3
[044]	4	(Z2 ATZ)	(Z4)	060	(000 to 255) x 10 msec. Speed of hardwire zone 4
[045]	5		(Z5)	060	(000 to 255) x 10 msec. Speed of hardwire zone 5
[046]	6		(Z1 ATZ)	060	(000 to 255) x 10 msec. Speed of hardwire zone 6
[047]	7		(Z2 ATZ)	060	(000 to 255) x 10 msec. Speed of hardwire zone 7
[048]	8		(Z3 ATZ)	060	(000 to 255) x 10 msec. Speed of hardwire zone 8
[049]	9		(Z4 ATZ)	060	(000 to 255) x 10 msec. Speed of hardwire zone 9
[050]	10		(Z5 ATZ)	060	(000 to 255) x 10 msec. Speed of hardwire zone 10
[051]	11			060	(000 to 255) x 10 msec. Speed of hardwire zone 11
[052]	12			060	(000 to 255) x 10 msec. Speed of hardwire zone 12
[053]	13			060	(000 to 255) x 10 msec. Speed of hardwire zone 13
[054]	14			060	(000 to 255) x 10 msec. Speed of hardwire zone 14
[055]	15			060	(000 to 255) x 10 msec. Speed of hardwire zone 15
[056]	16			060	(000 to 255) x 10 msec. Speed of hardwire zone 16

### SP Series

#### Worksheet 10: Zone Timers for the SP Series

Section	Zone	SP4000	SP5500	SP6000	SP65*	SP7000**	Data	Description (default: 060)
[041]	1	(Z1)	(Z1)	(Z1)	(Z1)	(Z1)	060	(000 to 255) x 10 msec. Speed of hardwire zone 1
[042]	2	(Z2)	(Z2)	(Z2)	(Z2)	(Z2)	060	(000 to 255) x 10 msec. Speed of hardwire zone 2
[043]	3	(Z3)	(Z3)	(Z3)	(Z3)	(Z3)	060	(000 to 255) x 10 msec. Speed of hardwire zone 3
[044]	4	(Z4)	(Z4)	(Z4)	(Z4)	(Z4)	060	(000 to 255) x 10 msec. Speed of hardwire zone 4
[045]	5	(Z1 ATZ)	(Z5)	(Z5)	(Z5)	(Z5)	060	(000 to 255) x 10 msec. Speed of hardwire zone 5
[046]	6	(Z2 ATZ)	(Z1 ATZ)	(Z6)	(Z6)	(Z6)	060	(000 to 255) x 10 msec. Speed of hardwire zone 6
[047]	7	(Z3 ATZ)	(Z2 ATZ)	(Z7)	(Z7)	(Z7)	060	(000 to 255) x 10 msec. Speed of hardwire zone 7
[048]	8	(Z4 ATZ)	(Z3 ATZ)	(Z8)	(Z8)	(Z8)	060	(000 to 255) x 10 msec. Speed of hardwire zone 8
[049]	9		(Z4 ATZ)	(Z1 ATZ)	(Z9)	(Z9)	060	(000 to 255) x 10 msec. Speed of hardwire zone 9
[050]	10		(Z5 ATZ)	(Z2 ATZ)	(Z1 ATZ)	(Z10)	060	(000 to 255) x 10 msec. Speed of hardwire zone 10
[051]	11			(Z3 ATZ)	(Z2 ATZ)	(Z11)	060	(000 to 255) x 10 msec. Speed of hardwire zone 11
[052]	12			(Z4 ATZ)	(Z3 ATZ)	(Z12)	060	(000 to 255) x 10 msec. Speed of hardwire zone 12
[053]	13			(Z5 ATZ)	(Z4 ATZ)	(Z13)	060	(000 to 255) x 10 msec. Speed of hardwire zone 13
[054]	14			(Z6 ATZ)	(Z5 ATZ)	(Z14)	060	(000 to 255) x 10 msec. Speed of hardwire zone 14
[055]	15			(Z7 ATZ)	(Z6 ATZ)	(Z15)	060	(000 to 255) x 10 msec. Speed of hardwire zone 15
[056]	16			(Z8 ATZ)	(Z7 ATZ)	(Z16)	060	(000 to 255) x 10 msec. Speed of hardwire zone 16

\* For zones 17-18 (ATZ), the zone timer is set to 600 msec.

\*\* For zones 17-32 (ATZ), the zone timer is set to 600 msec.

## Wireless Zone Serial Numbers

Use the following section to program the wireless zones on your MG/SP control panel. Use worksheet 11 to record your settings.

### Worksheet 11: Wireless Zones

Section	Zone	Wireless Zone (Serial #)	Section	Zone	Wireless Zone (Serial #)	Section	Zone	Wireless Zone (Serial #)
[061]	1	___/___/___/___/___	[072]	12	___/___/___/___/___	[083]	23	___/___/___/___/___
[062]	2	___/___/___/___/___	[073]	13	___/___/___/___/___	[084]	24	___/___/___/___/___
[063]	3	___/___/___/___/___	[074]	14	___/___/___/___/___	[085]	25	___/___/___/___/___
[064]	4	___/___/___/___/___	[075]	15	___/___/___/___/___	[086]	26	___/___/___/___/___
[065]	5	___/___/___/___/___	[076]	16	___/___/___/___/___	[087]	27	___/___/___/___/___
[066]	6	___/___/___/___/___	[077]	17	___/___/___/___/___	[088]	28	___/___/___/___/___
[067]	7	___/___/___/___/___	[078]	18	___/___/___/___/___	[089]	29	___/___/___/___/___
[068]	8	___/___/___/___/___	[079]	19	___/___/___/___/___	[090]	30	___/___/___/___/___
[069]	9	___/___/___/___/___	[080]	20	___/___/___/___/___	[091]	31	___/___/___/___/___
[070]	10	___/___/___/___/___	[081]	21	___/___/___/___/___	[092]	32	___/___/___/___/___
[071]	11	___/___/___/___/___	[082]	22	___/___/___/___/___			

**NOTE:** When assigning wireless zones, either enter the serial number or press **TAMPER/LEARN**. To delete the serial number, enter **000000**.

### Wireless Transmitter Signal Strength

The signal strength test for wireless transmitters is performed in sections [101] to [132]; these sections represent zones 1 to 32, respectively. To test the wireless transmitter strength of your various wireless devices, proceed as follows:

1. Enter the zone's respective section (e.g., for zone 1, enter section [101]).
2. Press the transmitter's anti-tamper switch and note the number of beeps which are emitted. As shown in table 10, the number of beeps correspond to a preset signal strength range.

Table 10: Signal strength indicator for wireless transmitters

Number of Beeps	Signal Strength	Result
3	8 to 10	Strong signal
2	5 to 7	Average signal
1	1 to 4	Weak signal (relocate)

**NOTE:** The visual representation of a transmitter's signal strength is dependent on the type of keypad. For LED keypads, zones 1 through 10 will illuminate, depending on the signal strength. For instance, a signal strength of 8 will result in zones 1 through 8 to illuminate. For LCD keypads, a ten-level progress bar composed of arrows will appear, followed by the numeric value. For a signal strength of 8, eight arrows will appear, followed by the number 8.

### Zone Report Codes and Labels

Use the following section to program zone report codes and labels on your MG/SP control panel.

#### Zone Report Codes

Use worksheet 12 to record your settings when programming zone report codes.

#### Worksheet 12: Zone Report Codes

Section	Zone	Alarm Report Codes	Alarm Restore Report Codes	Tamper Report Codes	Tamper Restore Report Codes	Section	Zone	Alarm Report Codes	Alarm Restore Report Codes	Tamper Report Codes	Tamper Restore Report Codes
[141]	1	FF	FF	FF	FF	[157]	17	FF	FF	FF	FF
[142]	2	FF	FF	FF	FF	[158]	18	FF	FF	FF	FF
[143]	3	FF	FF	FF	FF	[159]	19	FF	FF	FF	FF
[144]	4	FF	FF	FF	FF	[160]	20	FF	FF	FF	FF
[145]	5	FF	FF	FF	FF	[161]	21	FF	FF	FF	FF
[146]	6	FF	FF	FF	FF	[162]	22	FF	FF	FF	FF
[147]	7	FF	FF	FF	FF	[163]	23	FF	FF	FF	FF
[148]	8	FF	FF	FF	FF	[164]	24	FF	FF	FF	FF
[149]	9	FF	FF	FF	FF	[165]	25	FF	FF	FF	FF
[150]	10	FF	FF	FF	FF	[166]	26	FF	FF	FF	FF
[151]	11	FF	FF	FF	FF	[167]	27	FF	FF	FF	FF
[152]	12	FF	FF	FF	FF	[168]	28	FF	FF	FF	FF
[153]	13	FF	FF	FF	FF	[169]	29	FF	FF	FF	FF
[154]	14	FF	FF	FF	FF	[170]	30	FF	FF	FF	FF
[155]	15	FF	FF	FF	FF	[171]	31	FF	FF	FF	FF
[156]	16	FF	FF	FF	FF	[172]	32	FF	FF	FF	FF

## Zone Labels

Use worksheet 13 to record your settings when programming zone labels.

### Worksheet 13: Zone Labels

Section	Zone	Zone Label	Section	Zone	Zone Label
[181]	1	_____	[197]	17	_____
[182]	2	_____	[198]	18	_____
[183]	3	_____	[199]	19	_____
[184]	4	_____	[200]	20	_____
[185]	5	_____	[201]	21	_____
[186]	6	_____	[202]	22	_____
[187]	7	_____	[203]	23	_____
[188]	8	_____	[204]	24	_____
[189]	9	_____	[205]	25	_____
[190]	10	_____	[206]	26	_____
[191]	11	_____	[207]	27	_____
[192]	12	_____	[208]	28	_____
[193]	13	_____	[209]	29	_____
[194]	14	_____	[210]	30	_____
[195]	15	_____	[211]	31	_____
[196]	16	_____	[212]	32	_____

## Programmable Output Programming

Use the following section to program programmable outputs (PGMs) on your MG/SP control panel.

### Programmable Output Recognition

Table 11: Programmable outputs for MG/SP panels

PGM	PGM Output	Control Panel						
		MG5000	MG5050	SP4000	SP5500	SP6000	SP65	SP7000
1	Control panel output 1	✓	✓	✓	✓	✓	✓	✓
2	Control panel output 2	✓	✓	-	✓	✓	✓	✓
3	Control panel output 3	-	✓	-	-	✓	✓	✓
4	Control panel output 4	-	✓	-	-	✓	-	✓
5	Control panel relay	-	-	-	-	✓	-	✓
6	ZX8 ID = 1 output	✓	✓	✓	✓	✓	✓	✓
7	ZX8 ID = 2 output	✓	✓	✓	✓	✓	✓	✓
8	ZX8 ID = 3 output	✓	✓	✓	✓	✓	✓	-
9	PGM4 relay 1	✓	✓	✓	✓	✓	✓	✓
10	PGM4 relay 2	✓	✓	✓	✓	✓	✓	✓
11	PGM4 relay 3	✓	✓	✓	✓	✓	✓	✓
12	PGM4 relay 4	✓	✓	✓	✓	✓	✓	✓
13	RTX3/RX1 output 1	-	-	✓	✓	✓	✓	✓
14	RTX3/RX1 output 2	-	-	✓	✓	✓	✓	✓
15	RTX3 output 3 (relay)	-	-	✓	✓	✓	✓	✓
16	RTX3 output 4 (relay)	Optional	Optional	Optional	Optional	Optional	Optional	Optional

**NOTE:** A wireless PGM module can be assigned to any PGM. These modules will work in parallel with the control panel output (not applicable to the SP4000).

### Programmable Output on the K32LCD/K32LX

The on-board PGM of the K32LCD and K32LX (not programmable) will follow the arm status of any partition, via any arming method, including StayD. This only applies to versions 5.10 and higher, with an ECO number of J014.

## Description of MG/SP Events

Table 12: List of events for MG/SP control panels


Event Group	Event Group Description	Sub-group	Sub-group Description		
00	Zone OK	01 to 32	Zone number		
01	Zone open	99	Any zone number		
02	Partition status	00 to 01	-		
		02	Silent alarm		
		03	Buzzer alarm		
		04	Steady alarm		
		05	Pulsed alarm		
		06	Strobe		
		07	Alarm stopped		
		08	Squawk ON (partition 1 only)		
		09	Squawk OFF (partition 1 only)		
		10	Ground start (partition 1 only)		
		11	Disarm partition		
		12	Arm partition		
		13	Entry delay started		
		14	Exit delay started		
		15	Pre-alarm delay		
		16	Report confirmation		
		99	Any partition status event		
		03	Bell status (partition 1 only)	00	Bell OFF
				01	Bell ON
02	Bell squawk arm				
03	Bell squawk disarm				
99	Any bell status event				
06	Non-reportable event	00	Telephone line trouble		
		01	<b>CLEAR + ENTER</b> , or  was pressed for 3 secs. (partition 1 only)		
		02	-		
		03	Arm in Stay mode		
		04	Arm in Sleep mode		
		05	Arm in Force mode		
		06	Full arm when armed in Stay mode		
		07	PC fail to communicate (partition 1 only)		
		08	Utility key 1 pressed (keys <b>1</b> and <b>2</b> ; partition 1 only)		
		09	Utility key 2 pressed (keys <b>4</b> and <b>5</b> ; partition 1 only)		
		10	Utility key 3 pressed (keys <b>7</b> and <b>8</b> ; partition 1 only)		
		11	Utility key 4 pressed (keys <b>2</b> and <b>3</b> ; partition 1 only)		
		12	Utility key 5 pressed (keys <b>5</b> and <b>6</b> ; partition 1 only)		
		13	Utility key 6 pressed (keys <b>8</b> and <b>9</b> ; partition 1 only)		
		14	Tamper generated alarm		
		15	Supervision loss generated alarm		
		16	-		
		17	-		
		18	-		
		19	-		
		20	Full arm when armed in Sleep mode		
		21	Firmware upgrade (partition 1 only; non-PGM event)		
		22	-		
		23	StayD mode activated		
24	StayD mode deactivated				

Table 12: List of events for MG/SP control panels (Continued)

Event Group	Event Group Description	Sub-group	Sub-group Description
06 (Cont.)	Non-reportable event (Cont.)	25	IP registration status change
		26	GPRS registration status change
		27	Armed with trouble(s)
		28	Supervision alert
		29	Supervision alert restore
		30	Armed with remote with low battery
		99	Any non-reportable event
08	Button pressed on remote (see <i>Default Data B</i> , in worksheet 26 on page 35)	01 to 32	Remote control number
		99	Any remote control number
09	Button pressed on remote (see <i>Default Data C</i> , in worksheet 26 on page 35)	01 to 32	Remote control number
		99	Any remote control number
10	Button pressed on remote (see <i>Default Data D</i> , in worksheet 26 on page 35)	01 to 32	Remote control number
		99	Any remote control number
11	Button pressed on remote (see <i>Default Data E</i> , in worksheet 26 on page 35)	01 to 32	Remote control number
		99	Any remote control number
12	Cold start wireless zone	01 to 32	Zone number
		99	Any zone number
13	Cold start wireless module (partition 1 only)	01 to 16	Output number
		17 to 18	Wireless repeater
		19 to 26	Wireless keypad
		27 to 30	Wireless siren
		99	Any output number
14	Bypass programming	01 to 32	User number
		99	Any user number
15	User code activated output (partition 1 only)	01 to 32	User number
		99	Any user number
16	Wireless smoke maintenance signal	01 to 32	Zone number
		99	Any zone number
17	Delay zone alarm transmission	01 to 32	Zone number
		99	Any zone number
18	Zone signal strength weak 1 (partition 1 only)	01 to 32	Zone number
		99	Any zone number
19	Zone signal strength weak 2 (partition 1 only)	01 to 32	Zone number
		99	Any zone number
20	Zone signal strength weak 3 (partition 1 only)	01 to 32	Zone number
		99	Any zone number
21	Zone signal strength weak 4 (partition 1 only)	01 to 32	Zone number
		99	Any zone number
22	Button pressed on remote (see option 5, in table 21 on page 34)	01 to 32	Remote control number
		99	Any remote control number
23	Button pressed on remote (see option 6, in table 21 on page 34)	01 to 32	Remote control number
		99	Any remote control number
24	Fire delay started	01 to 32	Zone number
		99	Any zone number

Table 12: List of events for MG/SP control panels (Continued)

Event Group	Event Group Description	Sub-group	Sub-group Description
25	-	-	-
26	Software access (VDMP3, IP100, WinLoad, BabyWare)	00	Non-valid source ID
		01	WinLoad/BabyWare direct
		02	WinLoad/BabyWare through IP module
		03	WinLoad/BabyWare through GSM module
		04	WinLoad/BabyWare through modem
		09	IP100 direct
		10	VDMP3 direct
		11	Voice through GSM module
		12	Remote access
		13	SMS through GSM module
		99	Any software access
27	Bus module event	00	A bus module was added
		01	A bus module was removed
		02	2-way RF module communication failure
		03	2-way RF module communication restored
		99	Any bus module event
28	StayD pass acknowledged	01 to 32	Zone number
		99	Any zone number
29	Arming with user	01 to 32	User number
		99	Any user number
30	Special arming	00	Auto-arming (on-time/no movement)
		01	Late to close
		02	No movement arming
		03	Partial arming
		04	Quick arming
		05	Arming through WinLoad/BabyWare
		06	Arming with keyswitch
		99	Any special arming
31	Disarming with user	01 to 32	User number
		99	Any user number
32	Disarming after an alarm with user	01 to 32	User number
		99	Any user number
33	Alarm cancelled with user	01 to 32	User number
		99	Any user number
34	Special disarming	00	Auto-arm cancelled (on-time/no movement)
		01	Disarming through WinLoad/BabyWare
		02	Disarming through WinLoad/BabyWare after alarm
		03	Alarm cancelled through WinLoad/BabyWare
		04	Paramedical alarm cancelled
		05	Disarm with keyswitch
		06	Disarm with keyswitch after an alarm
		07	Alarm cancelled with keyswitch
99	Any special disarming		
35	Zone bypassed	01 to 32	Zone number
		99	Any zone number
36	Zone in alarm	01 to 32	Zone number
		99	Any zone number
37	Fire alarm	01 to 32	Zone number
		99	Any zone number

Table 12: List of events for MG/SP control panels (Continued)

<i>Event Group</i>	<i>Event Group Description</i>	<i>Sub-group</i>	<i>Sub-group Description</i>
38	Zone alarm restore	01 to 32	Zone number
		99	Any zone number
39	Fire alarm restore	01 to 32	Zone number
		99	Any zone number
40	Special alarm	00	Panic non-medical emergency
		01	Panic medical (this panic alarm in not UL approved)
		02	Panic fire
		03	Recent closing
		04	Global shutdown
		05	Duress alarm
		06	Keypad lockout (partition 1 only)
99	Any special alarm event		
41	Zone shutdown	01 to 32	Zone number
		99	Any zone number
42	Zone tampered	01 to 32	Zone number
		99	Any zone number
43	Zone tamper restore	01 to 32	Zone number
		99	Any zone number



Table 12: List of events for MG/SP control panels (Continued)

Event Group	Event Group Description	Sub-group	Sub-group Description
44	New trouble (partition 1 only, except sub-group 07, which is for both partitions)	00	-
		01	AC failure
		02	Battery failure
		03	Auxiliary current overload
		04	Bell current overload
		05	Bell disconnected
		06	Clock loss
		07	Fire loop trouble
		08	Fail to communicate with monitoring station telephone # 1
		09	Fail to communicate with monitoring station telephone # 2
		11	Fail to communicate with voice report
		12	RF jamming
		13	GSM RF jamming
		14	GSM no service
		15	GSM supervision lost
		16	Fail to communicate IP receiver 1 (GPRS)
		17	Fail to communicate IP receiver 2 (GPRS)
		18	IP module no service
		19	IP module supervision loss
		20	Fail to communicate IP receiver 1 (IP)
		21	Fail to communicate IP receiver 2 (IP)
		22	GSM/GPRS module tamper trouble
99	Any new trouble event		
45	Trouble restored	00	Telephone line restored
		01	AC failure restore
		02	Battery failure restore
		03	Auxiliary current overload
		04	Bell current overload restore
		05	Bell disconnected restore
		06	Clock loss restore
		07	Fire loop trouble restore
		08	Fail to communicate with monitoring station tel. # 1 restore
		09	Fail to communicate with monitoring station tel. # 2 restore
		11	Fail to communicate with voice report restore
		12	RF jamming restore
		13	GMS RF jamming restore
		14	GSM no service restore
		15	GSM supervision lost restore
		16	Fail to communicate restore IP receiver 1 (GPRS)
		17	Fail to communicate restore IP receiver 2 (GPRS)
		18	IP module no service restore
		19	IP module supervision loss restore
		20	Fail to communicate restore IP receiver 1 (IP)
		21	Fail to communicate restore IP receiver 2 (IP)
		22	GSM/GPRS module tamper trouble restore
99	Any new trouble restored event		

Table 12: List of events for MG/SP control panels (Continued)

Event Group	Event Group Description	Sub-group	Sub-group Description
46	Bus/EBus/wireless module new trouble (partition 1 only)	00	Bus/EBus/wireless module communication fault
		01	Tamper trouble
		02	Power fail
		03	Battery failure
		99	Any bus module new trouble event
47	Bus/EBus/wireless module trouble restored (partition 1 only)	00	Bus/EBus/wireless module communication fault restore
		01	Tamper trouble restore
		02	Power fail restore
		03	Battery failure restore
		99	Any bus module new trouble restored event
48	Special (partition1 only)	00	System power up
		01	Reporting test
		02	Software log on
		03	Software log off
		04	Installer in programming mode
		05	Installer exited programming mode
		06	Maintenance in programming mode
		07	Maintenance exited programming mode
		08	Closing delinquency delay elapsed
		13	Failed to arm
		99	Any special event
49	Low battery on zone	01 to 32	Zone number
		99	Any zone number
50	Low battery on zone restore	01 to 32	Zone number
		99	Any zone number
51	Zone supervision trouble	01 to 32	Zone number
		99	Any zone number
52	Zone supervision restore	01 to 32	Zone number
		99	Any zone number
53	Wireless module supervision trouble (partition 1 only)	01 to 16	Output
		17 to 18	Wireless repeater
		19 to 22	Wireless keypad
		27 to 30	Wireless siren
		99	Any output number
54	Wireless module supervision restore (partition 1 only)	01 to 16	Output
		17 to 18	Wireless repeater
		19 to 22	Wireless keypad
		27 to 30	Wireless siren
		99	Any output number
55	Wireless module tamper trouble (partition 1 only)	01 to 16	Output
		17 to 18	Wireless repeater
		19 to 22	Wireless keypad
		27 to 30	Wireless siren
		99	Any output number
56	Wireless module tamper restore (partition 1 only)	01 to 16	Output
		17 to 18	Wireless repeater
		19 to 22	Wireless keypad
		27 to 30	Wireless siren
		99	Any output number

**Table 12: List of events for MG/SP control panels (Continued)**

Event Group	Event Group Description	Sub-group	Sub-group Description
57	Non-medical alarm (paramedic)	01 to 32	User number
		99	Any user number
58	Zone forced	01 to 32	Zone number
		99	Any zone number
59	Zone included	01 to 32	Zone number
	Zone included (Cont.)	99	Any zone number
60	Remote low battery	01 to 32	User number
		99	Any user number
61	Remote low battery restore	01 to 32	User number
		99	Any user number
64	System status (on-board PGMs only)	00	Follow <b>ARM</b> LED status*: PGM pulse fast in alarm PGM pulse fast in exit delay, below 10 sec. PGM pulse slow in exit delay, over 10 sec. PGM steady ON, if armed PGM OFF, if disarmed * This event can be assigned to partition 1 or 2. If assigned to both partitions, the PGM event will follow the list order above, with number 1 being the highest priority.

**PGM Activation/Deactivation Events**

Use worksheet 14 to record your settings for the MG/SP PGM events. See table 12 on page 21, for a list of these events.

**Worksheet 14: PGM Activation/Deactivation Events**

Section	PGM	Event	Event Group	Sub-group	Partition (99 for both)	Default
[220]	PGM 1	Activation	___/___	___/___	___/___	<b>02/06/99</b>
[221]		Deactivation	___/___	___/___	___/___	<b>02/11/99</b>
[222]	PGM 2	Activation	___/___	___/___	___/___	<b>03/01/01</b>
[223]		Deactivation	___/___	___/___	___/___	<b>03/00/01</b>
[224]	PGM 3	Activation	___/___	___/___	___/___	<b>06/01/01</b>
[225]		Deactivation	___/___	___/___	___/___	<b>00/00/00</b>
[226]	PGM 4	Activation	___/___	___/___	___/___	<b>09/99/99</b>
[227]		Deactivation	___/___	___/___	___/___	<b>00/00/00</b>
[228]	PGM 5	Activation	___/___	___/___	___/___	<b>09/99/99</b>
[229]		Deactivation	___/___	___/___	___/___	<b>00/00/00</b>
[230]	PGM 6	Activation	___/___	___/___	___/___	<b>00/00/00</b>
[231]		Deactivation	___/___	___/___	___/___	<b>00/00/00</b>
[232]	PGM 7	Activation	___/___	___/___	___/___	<b>00/00/00</b>
[233]		Deactivation	___/___	___/___	___/___	<b>00/00/00</b>
[234]	PGM 8	Activation	___/___	___/___	___/___	<b>00/00/00</b>
[235]		Deactivation	___/___	___/___	___/___	<b>00/00/00</b>
[236]	PGM 9	Activation	___/___	___/___	___/___	<b>00/00/00</b>
[237]		Deactivation	___/___	___/___	___/___	<b>00/00/00</b>
[238]	PGM 10	Activation	___/___	___/___	___/___	<b>00/00/00</b>
[239]		Deactivation	___/___	___/___	___/___	<b>00/00/00</b>
[240]	PGM 11	Activation	___/___	___/___	___/___	<b>00/00/00</b>
[241]		Deactivation	___/___	___/___	___/___	<b>00/00/00</b>
[242]	PGM 12	Activation	___/___	___/___	___/___	<b>00/00/00</b>
[243]		Deactivation	___/___	___/___	___/___	<b>00/00/00</b>
[244]	PGM 13	Activation	___/___	___/___	___/___	<b>09/99/99</b>
[245]		Deactivation	___/___	___/___	___/___	<b>00/00/00</b>
[246]	PGM 14	Activation	___/___	___/___	___/___	<b>00/00/00</b>
[247]		Deactivation	___/___	___/___	___/___	<b>00/00/00</b>
[248]	PGM 15	Activation	___/___	___/___	___/___	<b>09/99/99</b>
[249]		Deactivation	___/___	___/___	___/___	<b>00/00/00</b>
[250]	PGM 16	Activation	___/___	___/___	___/___	<b>00/00/00</b>
[251]		Deactivation	___/___	___/___	___/___	<b>00/00/00</b>

## PGM Options

**Table 13: Description of PGM options**

Option	Description	PGM 1 [261]		PGM 2 [262]		PGM 3 [263]		PGM 4 [264]		PGM 5 [265]		PGM 6 [266]		PGM 7 [267]		PGM 8 [268]	
		OFF	ON	OFF	ON	OFF	ON	OFF	ON	OFF	ON	OFF	ON	OFF	ON	OFF	ON
1	PGM base time (OFF = sec., ON = min.)	▲		▲		▲		▲		▲		▲		▲		▲	
2	PGM state (OFF = N.O.; ON = N.C.)	▲		▲			▲	▲		▲		▲		▲		▲	
3	PGM supervision (not applicable to SP4000)		▲		▲		▲		▲		▲		▲		▲		▲
4	PGM activation mode (OFF = steady; ON = pulse)	▲		▲		▲		▲		▲		▲		▲		▲	
5	PGM pulse once every 30 seconds, if armed	▲		▲		▲		▲		▲		▲		▲		▲	
6	PGM pulse on any alarm	▲		▲		▲		▲		▲		▲		▲		▲	
7	PGM pulse on any alarm (OFF = partition 1; ON = partition 2)	▲		▲		▲		▲		▲		▲		▲		▲	
8	Flexible PGM deactivation option (OFF <sup>1</sup> = PGM delay only, two activation events; ON = PGM delay or deactivation event, whichever comes first)		▲		▲		▲		▲		▲		▲		▲		▲
Option	Description	PGM 9 [269]		PGM 10 [270]		PGM 11 [271]		PGM 12 [272]		PGM 13 [273]		PGM 14 [274]		PGM 15 [275]		PGM 16 [276]	
		OFF	ON	OFF	ON	OFF	ON	OFF	ON	OFF	ON	OFF	ON	OFF	ON	OFF	ON
1	PGM base time (OFF = sec., ON = min.)	▲		▲		▲		▲		▲		▲		▲		▲	
2	PGM state (OFF = N.O.; ON = N.C.)	▲		▲		▲		▲		▲		▲		▲		▲	
3	PGM supervision (not applicable to SP4000)		▲		▲		▲		▲		▲		▲		▲		▲
4	PGM activation mode (OFF = steady; ON = pulse)	▲		▲		▲		▲		▲		▲		▲		▲	
5	PGM pulse once every 30 seconds, if armed	▲		▲		▲		▲		▲		▲		▲		▲	
6	PGM pulse on any alarm	▲		▲		▲		▲		▲		▲		▲		▲	
7	PGM pulse on any alarm (OFF = partition 1; ON = partition 2)	▲		▲		▲		▲		▲		▲		▲		▲	
8	Flexible PGM deactivation option (OFF <sup>1</sup> = PGM delay only, two activation events; ON = PGM delay or deactivation event, whichever comes first)		▲		▲		▲		▲		▲		▲		▲		▲

▲ = Default Setting

<sup>1</sup> If a PGM delay is programmed (OFF option), the deactivation event can be used as a second activation event.

## PGM Timers

Use worksheet 15 to record your settings for the MG/SP PGM delays.

### Worksheet 15: PGM Delays

Section	PGM	PGM Delay Value	Default	Section	PGM	PGM Delay Value	Default
[281]	PGM 1	___/___/___ (001 to 255 x 1 sec./min.)	000	[289]	PGM 9	___/___/___ (001 to 255 x 1 sec./min.)	000
[282]	PGM 2	___/___/___ (001 to 255 x 1 sec./min.)	000	[290]	PGM 10	___/___/___ (001 to 255 x 1 sec./min.)	000
[283]	PGM 3	___/___/___ (001 to 255 x 1 sec./min.)	005	[291]	PGM 11	___/___/___ (001 to 255 x 1 sec./min.)	000
[284]	PGM 4	___/___/___ (001 to 255 x 1 sec./min.)	002	[292]	PGM 12	___/___/___ (001 to 255 x 1 sec./min.)	000
[285]	PGM 5	___/___/___ (001 to 255 x 1 sec./min.)	002	[293]	PGM 13	___/___/___ (001 to 255 x 1 sec./min.)	002
[286]	PGM 6	___/___/___ (001 to 255 x 1 sec./min.)	000	[294]	PGM 14	___/___/___ (001 to 255 x 1 sec./min.)	000
[287]	PGM 7	___/___/___ (001 to 255 x 1 sec./min.)	000	[295]	PGM 15	___/___/___ (001 to 255 x 1 sec./min.)	002
[288]	PGM 8	___/___/___ (001 to 255 x 1 sec./min.)	000	[296]	PGM 16	___/___/___ (001 to 255 x 1 sec./min.)	000

**NOTE:** To change the base time (minutes or seconds), see *PGM Options* on page 28.

## Wireless PGM Serial Numbers

Use worksheet 16 to record your settings for the MG/SP PGM serial numbers. To delete a wireless PGM, enter **000000**, while in the PGM's respective section. For automatic assignment, press the PGM's anti-tamper switch, while in the PGM's respective section.

### Worksheet 16: PGM Serial Numbers

Section	PGM	Wireless PGM Serial Number	Section	PGM	Wireless PGM Serial Number
[301]	PGM 1	___/___/___/___/___	[309]	PGM 9	___/___/___/___/___
[302]	PGM 2	___/___/___/___/___	[310]	PGM 10	___/___/___/___/___
[303]	PGM 3	___/___/___/___/___	[311]	PGM 11	___/___/___/___/___
[304]	PGM 4	___/___/___/___/___	[312]	PGM 12	___/___/___/___/___
[305]	PGM 5	___/___/___/___/___	[313]	PGM 13	___/___/___/___/___
[306]	PGM 6	___/___/___/___/___	[314]	PGM 14	___/___/___/___/___
[307]	PGM 7	___/___/___/___/___	[315]	PGM 15	___/___/___/___/___
[308]	PGM 8	___/___/___/___/___	[316]	PGM 16	___/___/___/___/___

**NOTE:** To view a PGM's serial number, see section [960] in *Description of Sections [950], [955], and [960]* on page 53.

## Wireless PGM Signal Strength

The signal strength for wireless PGMs is visible in sections [321] to [336]; these sections represent PGMs 1 to 16, respectively. To view the signal strength, proceed as follows:

1. Enter the wireless PGM's respective section (e.g., for PGM1, enter section [321]).
2. Press the PGM's anti-tamper switch. As shown in table 14, the number of beeps correspond to a preset signal strength range.

**Table 14: Signal strength indicator for wireless PGMs**

Number of Beeps	Signal Strength	Result
3	8 to 10	Strong signal
2	5 to 7	Average signal
1	1 to 4	Weak signal (relocate)

**NOTE:** The visual representation of a PGM's signal strength is dependent on the type of keypad. For LED keypads, zones 1 through 10 will illuminate, depending on the signal strength. For instance, a signal strength of 8 will result in zones 1 through 8 to illuminate. For LCD keypads, a ten-level progress bar composed of arrows will appear, followed by the numeric value. For a signal strength of 8, eight arrows will appear, followed by the number 8.

## PGM Labels

Use worksheet 17 to record your settings for the MG/SP PGM labels. To reset these labels, see *Description of Section [965]* on page 53.

### Worksheet 17: PGM Labels

Section	PGM	PGM Label	Section	PGM	PGM Label
[341]	PGM 1	___/___/___/___/___/___/___/___/___/___/___/___/___/___/___/___	[349]	PGM 9	___/___/___/___/___/___/___/___/___/___/___/___/___/___/___/___
[342]	PGM 2	___/___/___/___/___/___/___/___/___/___/___/___/___/___/___/___	[350]	PGM 10	___/___/___/___/___/___/___/___/___/___/___/___/___/___/___/___
[343]	PGM 3	___/___/___/___/___/___/___/___/___/___/___/___/___/___/___/___	[351]	PGM 11	___/___/___/___/___/___/___/___/___/___/___/___/___/___/___/___
[344]	PGM 4	___/___/___/___/___/___/___/___/___/___/___/___/___/___/___/___	[352]	PGM 12	___/___/___/___/___/___/___/___/___/___/___/___/___/___/___/___
[345]	PGM 5	___/___/___/___/___/___/___/___/___/___/___/___/___/___/___/___	[353]	PGM 13	___/___/___/___/___/___/___/___/___/___/___/___/___/___/___/___
[346]	PGM 6	___/___/___/___/___/___/___/___/___/___/___/___/___/___/___/___	[354]	PGM 14	___/___/___/___/___/___/___/___/___/___/___/___/___/___/___/___
[347]	PGM 7	___/___/___/___/___/___/___/___/___/___/___/___/___/___/___/___	[355]	PGM 15	___/___/___/___/___/___/___/___/___/___/___/___/___/___/___/___
[348]	PGM 8	___/___/___/___/___/___/___/___/___/___/___/___/___/___/___/___	[356]	PGM 16	___/___/___/___/___/___/___/___/___/___/___/___/___/___/___/___

**NOTE:** For special characters and keypad letter assignments, see *Label Programming with LCD Keypads* on page 54.

## User Programming

Use the following section to program the various user features on your MG/SP control panel.

### System Codes

Use worksheet 18 to record your settings for the MG/SP system codes. For access options, see section [701], in table 24 on page 37.

**NOTE:** The maintenance code cannot access the following sections: [395] (Installer code lock); [397] (Installer code); [398] (Maintenance code); [815] (Monitoring station telephone number 1); [816] (Monitoring station telephone number 2); [817] (Backup monitoring station telephone); [910] (Panel ID); [911] (PC password); [970] (Download memory key into panel); [975] (Upload panel into the memory key).

#### Worksheet 18: User System Codes

Section	Data	Description	Default Setting
[395]	__/__/__	Installer code lock*	000
[397]	__/__/__/__/__/__	Installer code	0000
[398]	__/__/__/__/__/__	Maintenance code	-
[399]	__/__/__/__/__/__	System master code	1234

\* Enter 147 to lock entire control panel. Once locked, enter any other three-digit combination to unlock.

**WARNING: The installer and system master codes may consist of four or six digits (see option 1 of section [701], in table 24 on page 37). The control panel automatically removes the last two digits of these codes, if the length is changed from six digits to four. However, if the access code length is changed from four digits to six, the control panel adds the code's first two digits to the end of the code.**

### User Code Options

Use worksheet 19 to record your settings for the MG/SP user code options. See table 15 for details on these options.

Table 15: User code options for MG/SP control panels

Option	Description
1	<b>Partition 1 access</b>
2	Partition 2 access
3	<b>Bypass programming</b>
4	<b>Stay/Sleep arming</b>
5	<b>Force arming</b>
6	Arm only
7	PGM activation only
8	Duress

**WARNING: When section [400] is accessed, the control panel will copy the saved value of that section to all user option sections (sections [404] to [432]).**

#### Worksheet 19: User Code Options

Section	User	Options	Section	User	Options
[400]	Default option	1 2 3 4 5 6 7 8	[417]	User 17	1 2 3 4 5 6 7 8
[401]	System master	① ② ③ ④ ⑤ 6 7 8	[418]	User 18	1 2 3 4 5 6 7 8
[402]	Master 1	① 2 ③ ④ ⑤ 6 7 8	[419]	User 19	1 2 3 4 5 6 7 8
[403]	Master 2	1 ② ③ ④ ⑤ 6 7 8	[420]	User 20	1 2 3 4 5 6 7 8
[404]	User 4	1 2 3 4 5 6 7 8	[421]	User 21	1 2 3 4 5 6 7 8
[405]	User 5	1 2 3 4 5 6 7 8	[422]	User 22	1 2 3 4 5 6 7 8
[406]	User 6	1 2 3 4 5 6 7 8	[423]	User 23	1 2 3 4 5 6 7 8
[407]	User 7	1 2 3 4 5 6 7 8	[424]	User 24	1 2 3 4 5 6 7 8
[408]	User 8	1 2 3 4 5 6 7 8	[425]	User 25	1 2 3 4 5 6 7 8
[409]	User 9	1 2 3 4 5 6 7 8	[426]	User 26	1 2 3 4 5 6 7 8
[410]	User 10	1 2 3 4 5 6 7 8	[427]	User 27	1 2 3 4 5 6 7 8
[411]	User 11	1 2 3 4 5 6 7 8	[428]	User 28	1 2 3 4 5 6 7 8
[412]	User 12	1 2 3 4 5 6 7 8	[429]	User 29	1 2 3 4 5 6 7 8
[413]	User 13	1 2 3 4 5 6 7 8	[430]	User 30	1 2 3 4 5 6 7 8
[414]	User 14	1 2 3 4 5 6 7 8	[431]	User 31	1 2 3 4 5 6 7 8
[415]	User 15	1 2 3 4 5 6 7 8	[432]	User 32	1 2 3 4 5 6 7 8
[416]	User 16	1 2 3 4 5 6 7 8			

**NOTE:** The system master, master 1, and master 2 user code options cannot be modified. However, if partitioning is not enabled, the user code options for master 2 will match those of master 1.

## User Report Codes

Use worksheet 20 to record your settings for the MG/SP user report codes (the default code is **00/FF**). To clear and reset these codes, see *Description of Sections [966] and [967]* on page 54.

### Worksheet 20: User Report Codes

Section	User	Arming	Disarming/Cancel Alarm
[471]	System master	00	FF
[472]	Master 1	00	FF
[473]	Master 2	00	FF
[474]	User 4	00	FF
[475]	User 5	00	FF
[476]	User 6	00	FF
[477]	User 7	00	FF
[478]	User 8	00	FF
[479]	User 9	00	FF
[480]	User 10	00	FF
[481]	User 11	00	FF
[482]	User 12	00	FF
[483]	User 13	00	FF
[484]	User 14	00	FF
[485]	User 15	00	FF
[486]	User 16	00	FF

Section	User	Arming	Disarming/Cancel Alarm
[487]	User 17	00	FF
[488]	User 18	00	FF
[489]	User 19	00	FF
[490]	User 20	00	FF
[491]	User 21	00	FF
[492]	User 22	00	FF
[493]	User 23	00	FF
[494]	User 24	00	FF
[495]	User 25	00	FF
[496]	User 26	00	FF
[497]	User 27	00	FF
[498]	User 28	00	FF
[499]	User 29	00	FF
[500]	User 30	00	FF
[501]	User 31	00	FF
[502]	User 32	00	FF

**NOTE:** For instructions on formatting report codes, see *Entering Report Codes* on page 45.

## User Labels

Use worksheet 21 to record your settings for the MG/SP user labels. To reset these labels, see *Description of Section [965]* on page 53.

### Worksheet 21: User Labels

Section	User	User Label
[511]	1	_____
[512]	2	_____
[513]	3	_____
[514]	4	_____
[515]	5	_____
[516]	6	_____
[517]	7	_____
[518]	8	_____
[519]	9	_____
[520]	10	_____
[521]	11	_____
[522]	12	_____
[523]	13	_____
[524]	14	_____
[525]	15	_____
[526]	16	_____

Section	User	User Label
[527]	17	_____
[528]	18	_____
[529]	19	_____
[530]	20	_____
[531]	21	_____
[532]	22	_____
[533]	23	_____
[534]	24	_____
[535]	25	_____
[536]	26	_____
[537]	27	_____
[538]	28	_____
[539]	29	_____
[540]	30	_____
[541]	31	_____
[542]	32	_____

**NOTE:** For special characters and keypad letter assignments, see *Label Programming with LCD Keypads* on page 54.

## Wireless Repeater Programming (RPT1)

Use the following section to program the wireless repeaters on your MG/SP control panel.

### Wireless Repeater Serial Numbers

Use worksheet 22 to record your settings when assigning wireless repeaters to your MG/SP control panel. To reset wireless repeaters, see *Description of Section [965]* on page 53.

### Worksheet 22: Wireless Repeater Assignment

Section	Description	Wireless Repeater Serial Number
[545]	Repeater 1	_____
[546]	Repeater 2	_____

**NOTE:** For automatic assignment, press the wireless repeater's anti-tamper switch, while in the repeater's respective section.

## Wireless Repeater Signal Strength

The signal strength for wireless repeaters is visible in sections [548] and [549]; these sections represent repeaters 1 and 2, respectively. To view the signal strength, proceed as follows:

1. Enter the wireless repeater's respective section (e.g., for repeater 1, enter section [548]).
2. Press the repeater's anti-tamper switch. As shown in table 16, the number of beeps correspond to a preset signal strength range.

Table 16: Signal strength indicator for wireless repeaters

Number of Beeps	Signal Strength	Result
3	8 to 10	Strong signal
2	5 to 7	Average signal
1	1 to 4	Weak signal (relocate)

**NOTE:** The visual representation of a repeater's signal strength is dependent on the type of keypad. For LED keypads, zones 1 through 10 will illuminate, depending on the signal strength. For instance, a signal strength of 8 will result in zones 1 through 8 to illuminate. For LCD keypads, a ten-level progress bar composed of arrows will appear, followed by the numeric value. For a signal strength of 8, eight arrows will appear, followed by the number 8.

## Wireless Repeater Options

Table 17: Description of the wireless repeater options

Option	Description	RPT1 [551]		RPT2 [561]	
		OFF	ON	OFF	ON
1	Repeat wireless keypad 1 signals	▲		▲	
2	Repeat wireless keypad 2 signals	▲		▲	
3	Repeat wireless keypad 3 signals	▲		▲	
4	Repeat wireless keypad 4 signals	▲		▲	
5	Repeat wireless keypad 5 signals	▲		▲	
6	Repeat wireless keypad 6 signals	▲		▲	
7	Repeat wireless keypad 7 signals	▲		▲	
8	Repeat wireless keypad 8 signals	▲		▲	
Option	Description	RPT1 [552]		RPT2 [562]	
		OFF	ON	OFF	ON
1	Repeat wireless zone 1 signals	▲		▲	
2	Repeat wireless zone 2 signals	▲		▲	
3	Repeat wireless zone 3 signals	▲		▲	
4	Repeat wireless zone 4 signals	▲		▲	
5	Repeat wireless zone 5 signals	▲		▲	
6	Repeat wireless zone 6 signals	▲		▲	
7	Repeat wireless zone 7 signals	▲		▲	
8	Repeat wireless zone 8 signals	▲		▲	
Option	Description	RPT1 [553]		RPT2 [563]	
		OFF	ON	OFF	ON
1	Repeat wireless zone 9 signals	▲		▲	
2	Repeat wireless zone 10 signals	▲		▲	
3	Repeat wireless zone 11 signals	▲		▲	
4	Repeat wireless zone 12 signals	▲		▲	
5	Repeat wireless zone 13 signals	▲		▲	
6	Repeat wireless zone 14 signals	▲		▲	
7	Repeat wireless zone 15 signals	▲		▲	
8	Repeat wireless zone 16 signals	▲		▲	

Option	Description	RPT1 [554]		RPT2 [564]	
		OFF	ON	OFF	ON
1	Repeat wireless zone 17 signals	▲		▲	
2	Repeat wireless zone 18 signals	▲		▲	
3	Repeat wireless zone 19 signals	▲		▲	
4	Repeat wireless zone 20 signals	▲		▲	
5	Repeat wireless zone 21 signals	▲		▲	
6	Repeat wireless zone 22 signals	▲		▲	
7	Repeat wireless zone 23 signals	▲		▲	
8	Repeat wireless zone 24 signals	▲		▲	
Option	Description	RPT1 [555]		RPT2 [565]	
		OFF	ON	OFF	ON
1	Repeat wireless zone 25 signals	▲			
2	Repeat wireless zone 26 signals	▲			
3	Repeat wireless zone 27 signals	▲			
4	Repeat wireless zone 28 signals	▲			
5	Repeat wireless zone 29 signals	▲			
6	Repeat wireless zone 30 signals	▲			
7	Repeat wireless zone 31 signals	▲			
8	Repeat wireless zone 32 signals	▲		▲	1
Option	Description	RPT1 [556]		RPT2 [566]	
		OFF	ON	OFF	ON
1	Repeat wireless two-way PGM 1 signals	▲		▲	
2	Repeat wireless two-way PGM 2 signals	▲		▲	
3	Repeat wireless two-way PGM 3 signals	▲		▲	
4	Repeat wireless two-way PGM 4 signals	▲		▲	
5	Repeat wireless two-way PGM 5 signals	▲		▲	
6	Repeat wireless two-way PGM 6 signals	▲		▲	
7	Repeat wireless two-way PGM 7 signals	▲		▲	
8	Repeat wireless two-way PGM 8 signals	▲		▲	

Option	Description	RPT1 [557]		RPT2 [567]	
		OFF	ON	OFF	ON
1	Repeat wireless two-way PGM 9 signals	▲		▲	
2	Repeat wireless two-way PGM 10 signals	▲		▲	
3	Repeat wireless two-way PGM 11 signals	▲		▲	
4	Repeat wireless two-way PGM 12 signals	▲		▲	
5	Repeat wireless two-way PGM 13 signals	▲		▲	
6	Repeat wireless two-way PGM 14 signals	▲		▲	
7	Repeat wireless two-way PGM 15 signals	▲		▲	
8	Repeat wireless two-way PGM 16 signals	▲		▲	

▲ = Default Setting



## Wireless Repeater Labels

Use worksheet 23 to record your settings for wireless repeater labels. To reset these labels, see *Description of Section [965]* on page 53.

### Worksheet 23: Wireless Repeater Labels

Section	Description	Wireless Repeater Label
[568]	Repeater 1	___/___/___/___/___/___/___/___/___/___/___/___/___/___/___/___
[569]	Repeater 2	___/___/___/___/___/___/___/___/___/___/___/___/___/___/___/___

**NOTE:** For special characters and keypad letter assignments, see *Label Programming with LCD Keypads* on page 54.

## Wireless Keypad Programming

### Automatic Wireless Keypad Assignment

After powering-up, the control panel will open a ten-minute window for automatic assignment. To assign a keypad to your MG/SP control panel, press and hold **⏻** and **BYF** for three seconds on the respective keypad. Up to eight wireless keypads can be assigned within this ten-minute period.

### Compatibility Check (K37 only)

If the K37 is not compatible with the current MG/SP control panel version, the following trouble will be displayed: **[TROUBLE: FLASH] [17: ON]**. If this occurs, update your MG/SP control panel to version 3.2 or higher.

### Standard Wireless Keypad Assignment

Use worksheet 24 to record your settings, when assigning wireless keypads to your MG/SP control panel. To assign your wireless keypads, enter the serial number or press and hold **⏻** and **BYF** for three seconds.

### Worksheet 24: Wireless Keypad Serial Numbers

Section	Description	Wireless Keypad Serial Number
[571]	Keypad 1	___/___/___/___/___/___
[572]	Keypad 2	___/___/___/___/___/___
[573]	Keypad 3	___/___/___/___/___/___
[574]	Keypad 4	___/___/___/___/___/___
[575]	Keypad 5	___/___/___/___/___/___
[576]	Keypad 6	___/___/___/___/___/___
[577]	Keypad 7	___/___/___/___/___/___
[578]	Keypad 8	___/___/___/___/___/___

## Wireless Keypad, Repeater, and Siren Options

Table 18: Description of section [587]

Option	Description	[587]		Option	Description	[587]	
		OFF	ON			OFF	ON
1	Repeater 1 supervision		▲	5	Wireless siren 3 supervision		▲
2	Repeater 2 supervision		▲	6	Wireless siren 4 supervision		▲
3	Wireless siren 1 supervision		▲	8	Live display mode		▲
4	Wireless siren 2 supervision		▲				

▲= Default

**NOTE:** To cancel the wireless siren tamper supervision, see *Cancelling the Tamper Supervision for Wireless Sirens* on page 37.

### Wireless Keypad Options

Table 19: Description of section [588]

Option	Description	[588]		Option	Description	[588]	
		OFF	ON			OFF	ON
1	Keypad 1 supervision		▲	5	Keypad 5 supervision		▲
2	Keypad 2 supervision		▲	6	Keypad 6 supervision		▲
3	Keypad 3 supervision		▲	7	Keypad 7 supervision		▲
4	Keypad 4 supervision		▲	8	Keypad 8 supervision		▲

▲= Default

## Wireless Keypad Signal Strength

The signal strength for wireless keypads is visible in sections [591] to [598]; these sections represent keypads 1 through 8, respectively. To view the signal strength, proceed as follows:

1. Enter the wireless keypad's respective section (e.g., for keypad 1, enter section [591]).
2. Press on the keypad. As shown in table 20, the number of beeps correspond to a preset signal strength range.

**Table 20: Signal strength indicator for wireless keypads**

Number of Beeps	Signal Strength	Result
3	8 to 10	Strong signal
2	5 to 7	Average signal
1	1 to 4	Weak signal (relocate)

**NOTE:** The visual representation of a keypad's signal strength is dependent on the type of keypad. For LED keypads, zones 1 through 10 will illuminate, depending on the signal strength. For instance, a signal strength of 8 will result in zones 1 through 8 to illuminate. For LCD keypads, a ten-level progress bar composed of arrows will appear, followed by the numeric value. For a signal strength of 8, eight arrows will appear, followed by the number 8.

## Wireless Keypad Labels

Use worksheet 25 to record your settings for wireless keypad labels. To reset these labels, see *Description of Section [965]* on page 53.

### Worksheet 25: Wireless Keypad Labels

Section	Description	Wireless Keypad Label
[599]	Keypad 1	
[600]	Keypad 2	
[601]	Keypad 3	
[602]	Keypad 4	
[603]	Keypad 5	
[604]	Keypad 6	
[605]	Keypad 7	
[606]	Keypad 8	

**NOTE:** For special characters and keypad letter assignments, see *Label Programming with LCD Keypads* on page 54.

## Remote Control Programming

Use the following section to program remote controls for your MG/SP control panel.

### Remote Control Button Assignment

Use worksheet 26 on page 35 to record your settings when assigning remote controls to your MG/SP control panel. See table 21 for details on button options for these remotes.

**WARNING:** Remote controls which are supported by MG/SP control panels are the following: REM1, REM2, RAC1, RAC2, REM3, and REM15.

**Table 21: Button options for MG/SP remote controls (see *Decimal and Hexadecimal Programming* on page 4)**





Option	Description	Option	Description
Sleep	Empty/button disabled	8	Panic 1
1	Regular/regular force arming	9	Panic 2
2	Stay/stay force arming	A	Panic 3
3	-	B	PGM activation (event group 8)*
4	Sleep/sleep force arming	C	PGM activation (event group 9)*
5	PGM activation (event group 22)*	D	PGM activation (event group 10)*
6	PGM activation (event group 23)*	E	PGM activation (event group 11)*
7	Activate window mode (StayD)	F	Paramedic alarm

\* For descriptions on the event groups, see *Description of MG/SP Events* on page 21.

**NOTE:** The disarm button () cannot be modified.

**Worksheet 26: Programming Remote Controls**

		REM3 Remote Control							
		PGM 1 9	PGM 2 0	PGM 3 x	PGM 4 ✓	PGM 5 ●	PGM 6 ●	PGM 3 & 4 x + ✓	PGM 5 & 6 ● + ●
Default Data		B	C	D	E	5	6	Disabled	Disabled
RC #	Section								
All	[610]	_____	_____	_____	_____	_____	_____	_____	_____
1	[611]	_____	_____	_____	_____	_____	_____	_____	_____
2	[612]	_____	_____	_____	_____	_____	_____	_____	_____
3	[613]	_____	_____	_____	_____	_____	_____	_____	_____
4	[614]	_____	_____	_____	_____	_____	_____	_____	_____
5	[615]	_____	_____	_____	_____	_____	_____	_____	_____
6	[616]	_____	_____	_____	_____	_____	_____	_____	_____
7	[617]	_____	_____	_____	_____	_____	_____	_____	_____
8	[618]	_____	_____	_____	_____	_____	_____	_____	_____
9	[619]	_____	_____	_____	_____	_____	_____	_____	_____
10	[620]	_____	_____	_____	_____	_____	_____	_____	_____
11	[621]	_____	_____	_____	_____	_____	_____	_____	_____
12	[622]	_____	_____	_____	_____	_____	_____	_____	_____
13	[623]	_____	_____	_____	_____	_____	_____	_____	_____
14	[624]	_____	_____	_____	_____	_____	_____	_____	_____
15	[625]	_____	_____	_____	_____	_____	_____	_____	_____
16	[626]	_____	_____	_____	_____	_____	_____	_____	_____
17	[627]	_____	_____	_____	_____	_____	_____	_____	_____
18	[628]	_____	_____	_____	_____	_____	_____	_____	_____
19	[629]	_____	_____	_____	_____	_____	_____	_____	_____
20	[630]	_____	_____	_____	_____	_____	_____	_____	_____
21	[631]	_____	_____	_____	_____	_____	_____	_____	_____
22	[632]	_____	_____	_____	_____	_____	_____	_____	_____
23	[633]	_____	_____	_____	_____	_____	_____	_____	_____
24	[634]	_____	_____	_____	_____	_____	_____	_____	_____
25	[635]	_____	_____	_____	_____	_____	_____	_____	_____
26	[636]	_____	_____	_____	_____	_____	_____	_____	_____
27	[637]	_____	_____	_____	_____	_____	_____	_____	_____
28	[638]	_____	_____	_____	_____	_____	_____	_____	_____
29	[639]	_____	_____	_____	_____	_____	_____	_____	_____
30	[640]	_____	_____	_____	_____	_____	_____	_____	_____
31	[641]	_____	_____	_____	_____	_____	_____	_____	_____
32	[642]	_____	_____	_____	_____	_____	_____	_____	_____

		REM1/REM2/RAC1/RAC2/REM15			
					
Default Data		1	4	C	8
RC #	Section				
All	[610]	_____	_____	_____	_____
1	[611]	_____	_____	_____	_____
2	[612]	_____	_____	_____	_____
3	[613]	_____	_____	_____	_____
4	[614]	_____	_____	_____	_____
5	[615]	_____	_____	_____	_____
6	[616]	_____	_____	_____	_____
7	[617]	_____	_____	_____	_____
8	[618]	_____	_____	_____	_____
9	[619]	_____	_____	_____	_____
10	[620]	_____	_____	_____	_____
11	[621]	_____	_____	_____	_____
12	[622]	_____	_____	_____	_____
13	[623]	_____	_____	_____	_____
14	[624]	_____	_____	_____	_____
15	[625]	_____	_____	_____	_____
16	[626]	_____	_____	_____	_____
17	[627]	_____	_____	_____	_____
18	[628]	_____	_____	_____	_____
19	[629]	_____	_____	_____	_____
20	[630]	_____	_____	_____	_____
21	[631]	_____	_____	_____	_____
22	[632]	_____	_____	_____	_____
23	[633]	_____	_____	_____	_____
24	[634]	_____	_____	_____	_____
25	[635]	_____	_____	_____	_____
26	[636]	_____	_____	_____	_____
27	[637]	_____	_____	_____	_____
28	[638]	_____	_____	_____	_____
29	[639]	_____	_____	_____	_____
30	[640]	_____	_____	_____	_____
31	[641]	_____	_____	_____	_____
32	[642]	_____	_____	_____	_____

**WARNING:** When section [610] is accessed, the control panel will copy the saved value of that section to all remote controls.

**NOTE:** When using an RTX3 with the SP series, the left button on a remote control will, by default, trigger PGM3 onboard the RTX3.

## User Assignment for Remote Controls

Table 22: User assignment per remote control

Section	Description	Section	Description	Section	Description	Section	Description
[651]	RC 1 for user 1	[659]	RC 9 for user 9	[667]	RC 17 for user 17	[675]	RC 25 for user 25
[652]	RC 2 for user 2	[660]	RC 10 for user 10	[668]	RC 18 for user 18	[676]	RC 26 for user 26
[653]	RC 3 for user 3	[661]	RC 11 for user 11	[669]	RC 19 for user 19	[677]	RC 27 for user 27
[654]	RC 4 for user 4	[662]	RC 12 for user 12	[670]	RC 20 for user 20	[678]	RC 28 for user 28
[655]	RC 5 for user 5	[663]	RC 13 for user 13	[671]	RC 21 for user 21	[679]	RC 29 for user 29
[656]	RC 6 for user 6	[664]	RC 14 for user 14	[672]	RC 22 for user 22	[680]	RC 30 for user 30
[657]	RC 7 for user 7	[665]	RC 15 for user 15	[673]	RC 23 for user 23	[681]	RC 31 for user 31
[658]	RC 8 for user 8	[666]	RC 16 for user 16	[674]	RC 24 for user 24	[682]	RC 32 for user 32

### Assigning a Remote Control

1. Enter the remote's respective section (see table 22).
2. Press any button on the designated remote twice, or manually enter the serial number.

### Deleting a Remote Control

1. Enter the remote's respective section (see table 22).
2. Enter **000000**.

**NOTE:** To view a remote control's serial number, see section [960] in *Description of Sections [950], [955], and [960]* on page 53.

## Wireless Siren Serial Numbers

Use the following section to program wireless sirens for your MG/SP control panel.

### Wireless Siren Assignment

Use worksheet 27 to record your settings when assigning wireless sirens.

#### Worksheet 27: Wireless Siren Assignment

Section	Description	Wireless Siren Serial Number	Section	Description	Wireless Siren Serial Number
[683]	Siren 1	___/___/___/___/___/___	[685]	Siren 3	___/___/___/___/___/___
[684]	Siren 2	___/___/___/___/___/___	[686]	Siren 4	___/___/___/___/___/___

### Wireless Siren Signal Strength

The signal strength for wireless siren is visible in sections [687] to [690]; these sections represent sirens 1 through 4, respectively. To view the signal strength:

1. Enter the wireless siren's respective section (e.g., for siren 1, enter section [687]).
2. Note the number of beeps which are emitted. As shown in table 23, the number of beeps correspond to a preset signal strength range.

Table 23: Signal strength indicator for wireless sirens

Number of Beeps	Signal Strength	Result
3	8 to 10	Strong signal
2	5 to 7	Average signal
1	1 to 4	Weak signal (relocate)

**NOTE:** The visual representation of a siren's signal strength is dependent on the type of keypad. For LED keypads, zones 1 through 10 will illuminate, depending on the signal strength. For instance, a signal strength of 8 will result in zones 1 through 8 to illuminate. For LCD keypads, a ten-level progress bar composed of arrows will appear, followed by the numeric value. For a signal strength of 8, eight arrows will appear, followed by the number 8.

### Wireless Siren Labels

Use worksheet 28 to record your settings for wireless siren labels. To reset these labels, see *Description of Section [965]* on page 53.

#### Worksheet 28: Wireless Siren Labels

Section	Description	Wireless Siren Label	Section	Description	Wireless Siren Label
[691]	Siren 1	___/___/___/___/___/___/___/___/___/___/___/___/___/___/___/___	[693]	Siren 3	___/___/___/___/___/___/___/___/___/___/___/___/___/___/___/___
[692]	Siren 2	___/___/___/___/___/___/___/___/___/___/___/___/___/___/___/___	[694]	Siren 4	___/___/___/___/___/___/___/___/___/___/___/___/___/___/___/___

**NOTE:** For special characters and keypad letter assignments, see *Label Programming with LCD Keypads* on page 54.

## Canceling the Tamper Supervision for Wireless Sirens

To cancel tamper supervision, access section [695], and then press **ENTER**. The tamper supervision is disabled until the cover is replaced or after 30 minutes have elapsed.

### Description of Sections [700] to [704]


The following section provides information on sections [700] to [704]. See table 24 for details. For keypad programming instructions, refer to  on page 7.

Table 24: Description of sections [700] to [704]

Option	Option Type	Description	OFF		ON	
1	Partitioning	Partitioning	▲	Disabled		Enabled
2	General system options	Battery charging, 350 mA or 700 mA (not applicable to SP4000 and SP65)	▲	350 mA		700 mA
3		Audible trouble warning (except AC failure)	▲	Disabled		Enabled
4		Audible trouble warning on AC failure	▲	Disabled		Enabled
5	RF jamming supervision	RF jamming supervision	▲	Disabled		Enabled
6	General system options	Exit delay termination	▲	Disabled		Enabled
7		Tamper supervision on the bus module	▲	Disabled		Enabled
8	Future use					
1	Panic options	Panic 1		Disabled	▲	Enabled
2		Panic 2	▲	Disabled		Enabled
3		Panic 3	▲	Disabled		Enabled
4		Panic 1: report only or audible alarm		Report only	▲	Audible
5		Panic 2: report only or audible alarm	▲	Report only		Audible
6		Panic 3: report only or audible alarm	▲	Report only		Audible
7	Future use					
8	Future use					
1	Arming/disarming options	Regular arming switches to force arming		Disabled	▲	Enabled
2		Stay arming switches to stay force arming		Disabled	▲	Enabled
3		Sleep arming switches to sleep force arming		Disabled	▲	Enabled
4		Bell squawk when arm/disarm with remote	▲	Disabled		Enabled
5	Keypad options 3	Bell squawk when arm/disarm with a keypad	▲	Disabled		Enabled
6		Beep on exit delay		Disabled	▲	Enabled
7		No exit delay beeps and no bell squawk, when stay/sleep arm		Disabled	▲	Enabled
8	Arming/disarming options	No exit delay when arm with remote	▲	Disabled		Enabled

Option	Option Type	Description	OFF		ON	
1	Access/master code options	Access code length*		6 digits	▲	4 digits
2		Lock master code	▲	Disabled		Enabled
3	Keypad options 1**	Confidential mode	▲	Disabled		Enabled
4		To exit confidential mode	▲	Enter code		Press a key
5		Confidential mode timer	▲	2 mins.		5 secs.
6	REM2 version number	REM2 version number		V2.00	▲	V2.01 or higher
7	Keypad options 1	Display entry delay on LCD keypad		Disabled	▲	Enabled
8		Display exit delay on LCD keypad		Disabled	▲	Enabled
1	Keypad options 2	One-touch regular arming (also REM3)		Disabled	▲	Enabled
2		One-touch stay arming (also REM3)		Disabled	▲	Enabled
3		One-touch sleep arming (also REM3)		Disabled	▲	Enabled
4		One-touch bypass programming		Disabled	▲	Enabled
5	Arming/disarming options	Restrict arming on battery failure	▲	Disabled		Enabled
6		Restrict arming on tamper failure (zone + bus module + wireless PGM)	▲	Disabled		Enabled
7		Restrict arming on supervision trouble; wireless zones & PGM + bus module	▲	Disabled		Enabled
8	Arm/disarm with VDMP3	Arm/disarm with VDMP3		Disabled	▲	Enabled

▲ = Default

\*All numbers from 000000 to 999999 are valid giving a total of 1,000,000 different possible combinations.

\*\*Automatic timed operation that will make indications inaccessible to users without a valid access code.

## Zone Options

Use the following section to program zone options for your MG/SP control panel.

### ATZ Options

Table 25: Description of section [705]

Option	Description	OFF		ON	
Section [705]	1	ATZ zone doubling	▲	Disabled	Enabled
	2	ATZ wiring options		Series	▲ Parallel
	3	Tamper recognition	▲		
	4		▲		
	5	Generate tamper on bypassed zone	▲		
	6	Supervision options	▲		
	7				▲
	8	Generate supervision on bypassed zone	▲		

▲ = Default

Table 26: Description of options 3 & 4 and 6 & 7, in section [705]

Option		Description	
3	4	RF Zone/Hardwired Zone Tamper Recognition Options	Keypad/Bus Module Tamper Recognition Options*
<b>OFF</b>	<b>OFF</b>	Disabled	Disabled
OFF	ON	Trouble only	Trouble only
ON	OFF	When disarmed: trouble only; when armed: follow zone's alarm type	Trouble only
ON	ON	When disarmed: audible alarm; when armed: follow zone's alarm type	Audible alarm
6	7	RF Zone Supervision Options	Keypad/Bus Module Supervision Options
OFF	OFF	Disabled	Disabled
<b>OFF</b>	<b>ON</b>	Trouble only	Trouble only
ON	OFF	When disarmed: trouble only; when armed: follow zone's alarm type	Trouble only
ON	ON	When disarmed: audible alarm; when armed: follow zone's alarm type	Audible alarm

\* Tamper recognition of keypad/bus module, only if section [700], option 7, is enabled.

### General Zone Options

Table 27: Description of section [706]

Option	Description	OFF		ON	
Section [706]	1	Check-in supervision time	▲	24 hours	80 minutes
	2	EOL resistors (applies to all hardwired zones – panel, keypad, ZX8)		Disabled	▲ Enabled
	3	Zone input 1 becomes a two-wire smoke input (except SP4000, SP5500, and SP65)	▲	Disabled	Enabled
	4	ZX8 ID A (panel + 1) input 1	▲	Zone input	Tamper input
	5	ZX8 ID B (panel + 9) input 1	▲	Zone input	Tamper input
	6	ZX8 ID C (panel + 17) input 1	▲	Zone input	Tamper input

▲ = Default

## Miscellaneous System Options

Table 28: Description of section [708]

Section	Data	Description	OFF	ON
[708]	000	000 to 255 seconds	▲	

▲= Default

## System Timers

Use the following section to program system timers on your MG/SP control panel. Use worksheet 29 to record your settings.

Worksheet 29: System Timers

Section	Data	Description	Section	Data	Description
[710]	030	000 to 255 seconds Entry delay 1	[718]	000	000 to 255 seconds Remote panic disarm lock delay
[711]	030	000 to 255 seconds Entry delay 2	[719]	000	000 to 255 days Closing delinquency delay
[712]	001	000 to 015 Auto-zone shutdown counter	[720]	015	000 to 255 seconds Flex-instant delay
[713]	048	000 to 255 seconds Intellizone delay	[721]	005	000 to 255 seconds For StayD: re-arm delay
[714]	000	000 to 255 minutes Recycle alarm delay	[722]	000	000 to 255 times Auto trouble shutdown
[715]	000	000 to 255 Recycle alarm counter	[723]	000	000 to 255 seconds Panic shutdown

## Keypad Lockout

Use the following section to program keypad lockout settings for your MG/SP control panel. Use worksheet 30 to record your settings.

Worksheet 30: Keypad Lockout

Section	Data	Description	Default
[716]	___/___/___	000 to 255 minutes Keypad lockout delay	000
[717]	___/___/___	000 to 255 attempts before locking Keypad lockout counter	000

NOTE:

## Programming the Daylight Savings Feature

Use the following section to program Daylight Savings Time on your MG/SP control panel. Use worksheet 31 to record your settings.

Table 29: Description of section [730]

Section	Option	Description	OFF	ON
[730]	1	Daylight savings	▲ Disabled	Enabled

▲= Default

## Country Codes

Table 30 lists countries and their respective codes. This information is required when programming section [731] (see worksheet 31 for details).

Table 30: Country codes for MG/SP control panels

Input Value	Country	Input Value	Country
00	Mexico; St. Johns; Bahamas; Turks and Caicos	10	Chatham
01	Cuba	11	Tonga
02	Brazil	12	Iraq; Syria
03	Chile	13	Israel
04	Falkland Islands	14	Lebanon; Kyrgyzstan
05	Paraguay	15	Palestine
06	European Union; United Kingdom; Greenland	16	Egypt
07	Russia and surrounding countries	17	Namibia
08	South Australia; Victoria; Australian Capital Territory; New South Wales	18	Canada; United States
09	Tasmania; Lord Howe Island	19	New Zealand

## Customized Daylight Savings Features

In addition to using the default Daylight Saving Time (DST) settings in section [731], you can also set a customized DST. In sections [732] and [733], you can program DST starting and ending periods, respectively. Both these sections recognize five different entries, consisting of two digits each.

All entries must be made in the following order:

1. **Month:** 01 to 12, where 01 represents January
2. **Date:** 01 to 31, where 01 represents the first day of the month
3. **Day:** 00 to 07, where 00 is the default setting and 01 represents Sunday
4. **Hours:** 00 to 23, where 00 represents 12:00 AM
5. **Minutes:** 00 only, where 00 represents the top of the hour (e.g., 12:00 AM)

**NOTE:** If the *Day* value is set to 00, it is ignored and the DST change will only respect the *Date* value. If the *Day* setting is set to a value other than 00 (e.g., 03 for Tuesday), the DST time change will occur on the first Tuesday following the programmed *Date* value.

### Worksheet 31: Daylight Savings Time

Section	Data	Description
[731]	08	00 to 99 Country code
[732]	1001010200	Month-date-day-hours-minutes DST starting period
[733]	0401010300	Month-date-day-hours-minutes DST ending period

**NOTE:** If sections [732] and [733] have been modified, but you want to revert to a standard DST code, change all settings in sections [732] and [733] to 00.

## Partition Programming

Use the following section to program partitions on your MG/SP control panel.

### Partition Options

Table 31: Description of partition 1 options (section [741])

Option	Description	OFF		ON	
		3	4	3	4
Section [741]	1	Auto-arm on time	▲	Disabled	Enabled
	2	Auto-arm on no movement	▲	Disabled	Enabled
	3 & 4	Auto-arm arming mode		See options 3 & 4, on right	See options 3 & 4, on right
	5	Switch to stay arming, if no entry zone is opened	▲	Disabled	Enabled
	6	Follow zones become entry delay 2, when delay zone is bypassed		Disabled	▲
		3	4	Description	
		OFF	OFF	Regular (default)	
		OFF	ON	Sleep	
		ON	OFF	Stay	

▲ = Default



**Table 32: Description of partition 2 options (section [742])**

Option	Description	OFF		ON	
		3	4	Description	
1	Auto-arm on time	▲	Disabled		Enabled
2	Auto-arm on no movement	▲	Disabled		Enabled
3 & 4	Auto-arm arming mode		See options 3 & 4, on right		See options 3 & 4, on right
5	Switch to stay arming, if no entry zone is opened	▲	Disabled		Enabled
6	Follow zones become entry delay 2, when delay zone is bypassed		Disabled	▲	Enabled

▲= Default

## Partition Timers

Use worksheet 32 to record your settings for partition timers.

### Worksheet 32: Partition Timers

Section	Data	Description	Default
[745]	___/___/___ 000 to 255 seconds	Partition 1 exit delay	<b>045</b>
[746]	___/___/___ 000 to 255 seconds	Partition 2 exit delay	<b>045</b>
[747]	___/___/___ 000 to 255 minutes	Partition 1 bell cut-off	<b>004</b>
[748]	___/___/___ 000 to 255 minutes	Partition 2 bell cut-off	<b>004</b>
[749]	___/___/___ 000 to 255 x 15 minutes	Partition 1 no movement	<b>000</b>
[750]	___/___/___ 000 to 255 x 15 minutes	Partition 2 no movement	<b>000</b>
[761]	___/___ : ___/___ HH:MM	Auto-arm on time partition 1	<b>00:00</b>
[762]	___/___ : ___/___ HH:MM	Auto-arm on time partition 2	<b>00:00</b>

## Partition Labels

Use worksheet 33 to record your settings for partition labels. To reset these labels, see *Description of Section [965]* on page 53.

### Worksheet 33: Partition Labels

Section	Description	Partition Label
[771]	Partition 1	___/___/___/___/___/___/___/___/___/___/___/___/___/___/___/___
[772]	Partition 2	___/___/___/___/___/___/___/___/___/___/___/___/___/___/___/___

**NOTE:** For special characters and keypad letter assignments, see *Label Programming with LCD Keypads* on page 54.

## SMS and Bus Module Programming

Use the following section to program SMS site name and bus module labels on your MG/SP control panel.

### SMS Site Name

Use worksheet 34 to record your SMS site name. See worksheet 52 on page 52, for additional communication settings.

#### Worksheet 34: SMS Site Name

Section	Description	Name
[780]	SMS site name	___/___/___/___/___/___/___/___/___/___/___/___/___/___/___/___

### Bus Module Labels

Use worksheet 35 to record your settings for bus module labels. To reset these labels, see *Description of Section [965]* on page 53.

#### Worksheet 35: Bus Module Labels

Section	Description	Bus Module Label	Section	Description	Bus Module Label
[781]	Bus 1	___/___/___/___/___/___/___/___/___/___/___/___/___/___/___/___	[789]	Bus 9	___/___/___/___/___/___/___/___/___/___/___/___/___/___/___/___
[782]	Bus 2	___/___/___/___/___/___/___/___/___/___/___/___/___/___/___/___	[790]	Bus 10	___/___/___/___/___/___/___/___/___/___/___/___/___/___/___/___
[783]	Bus 3	___/___/___/___/___/___/___/___/___/___/___/___/___/___/___/___	[791]	Bus 11	___/___/___/___/___/___/___/___/___/___/___/___/___/___/___/___
[784]	Bus 4	___/___/___/___/___/___/___/___/___/___/___/___/___/___/___/___	[792]	Bus 12	___/___/___/___/___/___/___/___/___/___/___/___/___/___/___/___
[785]	Bus 5	___/___/___/___/___/___/___/___/___/___/___/___/___/___/___/___	[793]	Bus 13	___/___/___/___/___/___/___/___/___/___/___/___/___/___/___/___
[786]	Bus 6	___/___/___/___/___/___/___/___/___/___/___/___/___/___/___/___	[794]	Bus 14	___/___/___/___/___/___/___/___/___/___/___/___/___/___/___/___
[787]	Bus 7	___/___/___/___/___/___/___/___/___/___/___/___/___/___/___/___	[795]	Bus 15	___/___/___/___/___/___/___/___/___/___/___/___/___/___/___/___
[788]	Bus 8	___/___/___/___/___/___/___/___/___/___/___/___/___/___/___/___			

**NOTE:** For special characters and keypad letter assignments, see *Label Programming with LCD Keypads* on page 54.

## Communication Programming

Use the following section to program various communication features on your MG/SP control panel. Table 33 lists features available for each MG/SP control panel. Prioritization of signals and messages are based on a “first in, first out” scheme. Systems meet EN 50136 ATS2 or ATS3 requirements when configured as depicted.

**NOTE:** For increased security, it is suggested that redundant communication methods be installed.

**Table 33: Communication features for MG/SP panels**

Communication Feature	Control Panel						
	MG5000	MG5050	SP4000	SP5500	SP6000	SP65	SP7000
GPRS reporting (PCS series)	✓	✓	✓	✓	✓	✓	✓
GSM reporting and SMS (PCS series)	✓	✓	✓	✓	✓	✓	✓
IP reporting (IP100)	✓	✓	✓	✓	✓	✓	✓
E-mail/monitoring (IP100)	✓	✓	✓	✓	✓	✓	✓
Patented dialer	✓	✓	✓	✓	✓	-	✓
Supports VDMP3	✓	✓	✓	✓	✓	✓	✓

## Dialer Options

**Table 34: Description of dialer options for landline communication (section [800])**

Option	Description	OFF		ON		Option	Description
1 & 2	Telephone line monitoring		See options 1 & 2, on right		See options 1 & 2, on right	1	2
3	Switch to pulse on fifth attempt	▲	Disabled		Enabled	OFF	OFF
4	Alternate dial	▲	Disabled		Enabled	OFF	ON
5	Force dial (must be enabled to comply with TBR-21)		Disabled	▲	Enabled	ON	OFF
6	DTMF dialing		Disabled	▲	Enabled	ON	ON
7	Pulse ratio		1:2	▲	1:1.5		
8	Reporting*	▲	Dialer activated		No dialer		

▲ = Default

\* This option also applies to both landline and GSM communication (see *Landline and GSM Communication* on page 44).

**Table 35: Description of general communication dialer options (section [801])**

Option	Description	OFF		ON	
1	Report system disarming		Always	▲	After alarm
2	Report zone restore		Bell cutoff	▲	Zone closure
3 & 4	Auto-test report transmission		See table 36 on page 42		See table 36 on page 42
5	Contact ID override		▲	Disabled	CID defaults/slow format custom
6	Bell squawk upon alarm report confirmation (SP4000 and SP65 only)	▲	Disabled		Enabled
7	Bell squawk upon arming report confirmation (SP4000 and SP65 only)	▲	Disabled		Enabled
8	Keypad beeps upon arming report confirmation (SP4000 and SP65 only)	▲	Disabled		Enabled

▲ = Default

**Table 36: Auto-test report transmission options (section [801])**

Option	Option		Description
	3	4	
1	OFF	OFF	Transmit the test report code when the days programmed in section [840] have elapsed, at the time programmed in section [850] (default).
2	OFF	ON	When disarmed: transmit test report code when the time programmed in section [852] has elapsed. When armed: transmit test report code when the time programmed in section [851] has elapsed.
3	ON	OFF	The control panel will transmit the test report code every hour, on the minute value programmed in section [850] (the last two digits); the first two digits of section [850] will be ignored. For example, if 10:25 was programmed into section [850], the test report code would be transmitted at the 25th minute of every hour, i.e., 11:25, 12:25, etc.

**Table 36: Auto-test report transmission options (section [801])**

4	ON	ON	The test report code will be transmitted when the conditions in entries 2 or 3 above (option 3 = OFF and option 4 = ON; option 3 = ON and option 4 = OFF), are met.
---	----	----	---

### Event Call Direction Options

**Table 37: Description of event call direction options (sections [802] to [804])**

	Option	Description	OFF	ON
Section [802] Event Call Direction Options 1	1	Call tel. #1/monitoring rcvr. #1 for arm/disarm report codes	Disabled	▲ Enabled
	2	Call tel. #2/monitoring rcvr. #2 for arm/disarm report codes	Disabled	▲ Enabled
	3	Call pager for arm/disarm report codes	▲ Disabled	Enabled
	5	Call tel. #1/monitoring rcvr. #1 for alarm/restore report codes	Disabled	▲ Enabled
	6	Call tel. #2/monitoring rcvr. #2 for alarm/restore report codes	Disabled	▲ Enabled
	7	Call pager for alarm/restore report codes	▲ Disabled	Enabled
	Section [804] Event Call Direction Options 3	1	Call tel. #1/monitoring rcvr. #1 for special report codes	Disabled
2		Call tel. #2/monitoring rcvr. #2 for special report codes	Disabled	▲ Enabled
3		Call pager for special report codes	▲ Disabled	Enabled
5		Call personal tel. # on zone alarm (burglary/fire)	Disabled	▲ Enabled
6		Call personal tel. # on panic alarms	Disabled	▲ Enabled
7		Call personal tel. # on paramedic alarms	Disabled	▲ Enabled
8		Call personal tel. # on panel power trouble	▲ Disabled	Enabled

	Option	Description	OFF	ON
Section [803] Event Call Direction Options 2	1	Call tel. #1/monitoring rcvr. #1 for tamper/restore report codes	Disabled	▲ Enabled
	2	Call tel. #2/monitoring rcvr. #2 for tamper/restore report codes	Disabled	▲ Enabled
	3	Call pager for tamper/restore report codes	▲ Disabled	Enabled
	5	Call tel. #1/monitoring rcvr. #1 for trouble/restore report codes	Disabled	▲ Enabled
	6	Call tel. #2/monitoring rcvr. #2 for trouble/restore report codes	Disabled	▲ Enabled
	7	Call pager for trouble/restore report codes	▲ Disabled	Enabled

▲ = Default

### GSM Options

**Table 38: Description of GSM options (PCS series)**

	Option	Description	OFF		ON		Option	Primary	Backup	Option		Description	
	1	2	1	2	5	6							
Section [805]	1 & 2	GSM reporting	See options 1 & 2, on right		See options 1 & 2, on right		OFF	OFF	Landline	Landline	OFF	OFF	Disabled
	3 & 4	Future use	-	-	-	-	OFF	ON	Landline	GSM	OFF	ON	Trouble only
	5 & 6	GSM/GPRS no service trouble feedback	See options 5 & 6, on right		See options 5 & 6, on right		ON	OFF	GSM	Landline	ON	OFF	When disarmed: trouble only; when armed: audible alarm
	7	Future use	-	-	-	-	ON	ON	GSM	GSM	ON	ON	Silent alarm becomes audible alarm
	8	GSM RF jamming supervision	Disabled	▲	Enabled								

▲ = Default

### IP/GPRS Options

**Table 39: Description of IP/GPRS options (section [806])**

	Option	Description	OFF		ON		Option		Description
	5 & 6	7	5	6	5	6	5	6	
Section [806]	5 & 6	IP no service trouble feedback	▲	See options 5 & 6	See options 5 & 6		OFF	OFF	Disabled
	7	User dialer reporting	▲	As IP/GPRS reporting backup	Enabled		OFF	ON	Trouble only
	8	Enable IP/GPRS reporting		Disabled	▲	Enabled	ON	OFF	When disarmed: trouble only; when armed: audible alarm
	▲ = Default								
							ON	ON	Silent alarm becomes audible alarm



## Test Report and Report Delays

Use worksheet 40 to record your settings for sections [850] to [852]. For additional timers, see worksheets 38 and 49 on pages 44 and 51, respectively.

### Worksheet 40: Test Report and Report Delays

Section	Data	Description	Default
[850]	__/_/_/___	HH:MM	Auto test report time of day (see table 36 on page 42)
[851]	__/_/_/___	000 to 255 minutes	Armed report delay
[852]	__/_/_/___	000 to 255 minutes	Disarmed report delay

## GSM Settings

Use worksheet 41 to record your settings for sections [855] to [856]. See table 41 on page 45 for applicable SMS language codes.

### Worksheet 41: GSM Settings (PCS series)

Section	Data	Description	Default
[855]	__/_/_/___	000 to 255 x 2 seconds	GSM no service timer
[856]	__/_/_/___	000 to 255	SMS language (see table 41 for SMS language codes)

Table 41: SMS language codes for GSM settings

Input Value	SMS Language	Input Value	SMS Language	Input Value	SMS Language	Input Value	SMS Language	Input Value	SMS Language
000	English	005	Polish	010	Czech	015	Russian	020	Serbian
001	French	006	Portuguese	011	Dutch	016	Bulgarian	021 to 255	Future use
002	Spanish	007	German	012	Croatian	017	Romanian		
003	Italian	008	Turkish	013	Greek	018	Slovak		
004	Swedish	009	Hungarian	014	Hebrew	019	Chinese		

## System and Communication Report Codes

Use the following section to program system report codes, as well as additional communication report codes on your MG/SP control panel.

### Entering Report Codes

- **For Ademco slow, Silent Knight, SESCOA, and Ademco express formats**, key-in the desired two-digit hex value from 00 to FF.
- **For Ademco Programmable Format**, enter the desired two-digit hex value, found in table 43 on page 47. Entering FF will set the report code to those outlined in table 44 on page 49.
- **For Ademco All Codes Format**, the control panel automatically generates report codes from the ones found in table 44 on page 49.

## Special Arming and Disarming Report Codes

Use worksheet 42 to record your settings for special arming and disarming report codes.

### Worksheet 42: Special Arming and Disarming Report Codes

Section	Data	Description	Section	Data	Description	Section	Data	Description
[860]	FF	Auto-arming	[861]	00	<b>Quick arming</b>	[862]	FF	Cancel auto-arm
	FF	Late to close		FF	Arming via PC		FF	Disarming via PC
	FF	No movement		FF	Arming with keyswitch		FF	Cancel alarm with user, or WinLoad/BabyWare
	00	<b>Partial arming</b>		FF	-		FF	Cancel paramedic

Default: FF

## Special Alarm Report Codes

Use worksheet 43 to record your settings for special alarm report codes.

### Worksheet 43: Special Alarm Report Codes

Section	Data	Description	Section	Data	Description
[863]	FF	Emergency panic	[864]	FF	Zone shutdown
	FF	Auxiliary panic		FF	Duress
	04	<b>Fire panic</b>		FF	Keypad lockout
	FF	Recent closing		FF	Paramedic alarm

## System Trouble Report Codes

Use worksheet 44 to record your settings for system trouble report codes.

### Worksheet 44: Special Trouble Report Codes

Section	Data	Description
<b>[865]</b>	<b>FF</b>	-
	<b>FF</b>	AC failure
	<b>FF</b>	Battery failure
	<b>FF</b>	Auxiliary supply
<b>[868]</b>	<b>FF</b>	Module power fail
	<b>FF</b>	Module low/no battery*
	<b>FF</b>	Wireless zone low battery
	<b>FF</b>	Wireless zone supervision lost

Section	Data	Description
<b>[866]</b>	<b>FF</b>	Bell output overload
	<b>FF</b>	Bell output disconnected
	<b>FF</b>	Timer loss
	<b>FF</b>	Fire loop trouble
<b>[869]</b>	<b>FF</b>	Wireless module supervision lost
	<b>FF</b>	Wireless module tamper
	<b>FF</b>	Remote low battery
	<b>FF</b>	-

Section	Data	Description
<b>[867]</b>	<b>FF</b>	Fail to communicate
	<b>FF</b>	RF jamming
	<b>FF</b>	Module lost
	<b>FF</b>	Module tamper

Default: FF

## System Trouble Restore Codes

Use worksheet 45 to record your settings for system trouble restore codes.

### Worksheet 45: System Trouble Restore Codes

Section	Data	Description
<b>[870]</b>	<b>FF</b>	TLM
	<b>FF</b>	AC failure
	<b>FF</b>	Battery failure
	<b>FF</b>	Auxiliary supply
<b>[873]</b>	<b>FF</b>	Module power fail
	<b>FF</b>	Module low/no battery*
	<b>FF</b>	Wireless zone low battery
	<b>FF</b>	Wireless zone supervision lost

Section	Data	Description
<b>[871]</b>	<b>FF</b>	Bell output overload
	<b>FF</b>	Bell output disconnect
	<b>FF</b>	Timer loss
	<b>FF</b>	Fire loop trouble
<b>[874]</b>	<b>FF</b>	Wireless module supervision lost*
	<b>FF</b>	Wireless module tamper
	<b>FF</b>	Remote low battery
	<b>FF</b>	-

Section	Data	Description
<b>[872]</b>	<b>FF</b>	Fail to communicate
	<b>FF</b>	RF jamming
	<b>FF</b>	Module lost
	<b>FF</b>	Module tamper

Default: FF

## System Special Report Codes

Use worksheet 46 to record your settings for system special report codes.

### Worksheet 46: System Special Report Codes

Section	Data	Description
<b>[875]</b>	<b>FF</b>	Cold start
	<b>FF</b>	Test report
	<b>FF</b>	-
	<b>FF</b>	Software out

Default: FF

Section	Data	Description
<b>[876]</b>	<b>FF</b>	Installer in
	<b>FF</b>	Installer out
	<b>FF</b>	Closing delinquency
	<b>FF</b>	-

Section	Data	Description
<b>[877]</b>	<b>FF</b>	-
	<b>FF</b>	-
	<b>FF</b>	-
	<b>FF</b>	Fail to arm

**NOTE:** For report code formatting instructions, see *Entering Report Codes* on page 45.

## Installer Function Keys

Table 42: Description of installer functions for MG/SP keypads

Function	Action	Description
Test report	<b>ENTER</b> + installer code + <b>MEM</b>	Sends the <i>Test Report</i> report code programmed in section <b>[875]</b> , to the monitoring station.
Cancel communication	<b>ENTER</b> + installer code + <b>STAY</b>	Cancels all communication with the WinLoad/BabyWare software or with the monitoring station, until the next reportable event.
Answer WinLoad/BabyWare software	<b>ENTER</b> + installer code + <b>SLEEP</b>	Will force the console to answer an incoming call from the monitoring station, which is using the WinLoad/BabyWare software.
Call WinLoad/BabyWare software	<b>ENTER</b> + installer code + <b>BYP</b>	Will dial the PC telephone number programmed in section <b>[915]</b> , thereby initiating communication with a computer using the WinLoad software.
Installer test mode	<b>ENTER</b> + installer code + <b>TBL</b>	This mode allows to perform walk tests, where the siren will squawk to indicate opened zones. To exit, press <b>TBL</b> .

## Contact ID Report Codes

Table 43: Ademco contact ID report codes

Type	CID #	Reporting Code	Value
Medical Alarms (100)	100	Medical alarm	01
	101	Pendant transmitter	02
	102	Fail to report in	03
Fire Alarms (110)	110	Fire Alarm	04
	111	Smoke	05
	112	Combustion	06
	113	Water Flow	07
	114	Heat	08
	115	Pull Station	09
	116	Duct	0A
	117	Flame	0B
	118	Near Alarm	0C
	Panic Alarms (120)	120	Panic alarm
121		Duress	0E
122		Silent	0F
123		Audible	10
124		Duress - access granted	11
125		Duress - egress granted	12
Burglar Alarms (130)	130	Burglary	13
	131	Perimeter	14
	132	Interior	15
	133	24-hour	16
	134	Entry/exit	17
	135	Day/night	18
	136	Outdoor	19
	137	Tamper	1A
General Alarms (140)	138	Near alarm	1B
	139	Intrusion verifier	1C
	140	General alarm	1D
	141	Polling loop open	1E
	142	Polling loop short	1F
	143	Extension module failure	20
	144	Sensor tamper	21
	145	Expansion module tamper	22
	146	Silent burglary	23
	147	Sensor supervision failure	24

Table 43: Ademco contact ID report codes (Continued)

Type	CID #	Reporting Code	Value
24-hour Non-burglary (150 & 160)	150	24-hour non-burglary	25
	151	Gas detected	26
	152	Refrigeration	27
	153	Loss of heat	28
	154	Water leakage	29
	155	Foil break	2A
	156	Day trouble	2B
	157	Low bottled gas level	2C
	158	High temperature	2D
	159	Low temperature	2E
	161	Loss of air flow	2F
	162	Carbon monoxide detected	30
	163	Tank level	31
	Fire Supervisory (200 & 210)	200	Fire supervisory
201		Low water pressure	33
202		Low CO2	34
203		Gate valve sensor	35
204		Low water level	36
205		Pump activated	37
206		Pump failure	38
300		System trouble	39
System Troubles (300 & 310)	301	AC loss	3A
	302	Low system battery	3B
	303	RAM checksum bad	3C
	304	ROM checksum	3D
	305	System reset	3E
	306	Panel program changed	3F
	307	Self-test failure	40
	308	System shutdown	41
	309	Battery test failure	42
	310	Ground fault	43
	311	Battery missing/dead	44
	312	Powr. supply over current limit	45
	313	Engineer reset	46
	Sounder/Relay Troubles (320)	320	Sounder relay
321		Bell 1	48
322		Bell 2	49
323		Alarm relay	4A
324		Trouble relay	4B
325		Reversing relay	4C
326		Notification appliance chk. #3	4D
327		Notification appliance chk. #4	4E

Table 43: Ademco contact ID report codes (Continued)

Type	CID #	Reporting Code	Value	
System Peripheral Troubles (330 & 340)	330	System peripheral	4F	
	331	Polling loop open	50	
	332	Polling loop short	51	
	333	Expansion module failure	52	
	334	Repeater failure	53	
	335	Local printer paper out	54	
	336	Local printer failure	55	
	337	Exp. module DC loss	56	
	338	Exp. module low battery	57	
	339	Exp. module reset	58	
	341	Exp. module tamper	59	
	342	Exp. module AC loss	5A	
	343	Exp. module self-test fail	5B	
	344	RF receiver jam detected	5C	
Communication Troubles (350 & 360)	350	Communication	5D	
	351	Telco fault 1	5E	
	352	Telco fault 2	5F	
	353	Long range radio	60	
	354	Fail to communicate	61	
	355	Loss of radio supervision	62	
	356	Loss of central polling	63	
	357	Long range radio VSWR problem	64	
	Protection Loop Troubles (370)	370	Protection loop	65
		371	Protection loop open	66
		372	Protection loop short	67
		373	Fire trouble	68
		374	Exit error alarm	69
375		Panic zone trouble	6A	
376		Hold-up zone trouble	6B	
377		Swinger trouble	6C	
378		Cross-zone trouble	6D	
Sensor Troubles (380 & 390)		380	Sensor trouble	6E
		381	Loss of supervision - RF	6F
	382	Loss of supervision - RPM	70	
	383	Sensor tamper	71	
	384	RF transmitter low battery	72	
	385	Smoke detector hi sensitivity	73	
	386	Smoke detector low sensitivity	74	
	387	Intrusion detector hi sensitivity	75	
	388	Intrusion detector low sensitivity	76	
	389	Sensor self-test failure	77	
	391	Sensor watch trouble	78	
	392	Drift compensation error	79	
	393	Maintenance alert	7A	

Table 43: Ademco contact ID report codes (Continued)

Type	CID #	Reporting Code	Value
Open/Close (400)	400	Open/close	7B
	401	Open/close by user	7C
	402	Group open/close	7D
	403	Automatic open/close	7E
	406	Cancel	7F
	407	Remote arm/disarm	80
	408	Quick arm	81
	409	Keyswitch open/close	82
	Remote Access (410)	411	Call back request made
412		Successful - download access	84
413		Unsuccessful access	85
414		System shutdown	86
415		Dialer shutdown	87
416		Successful upload	88
Access Control (420 & 430)	421	Access denied	89
	422	Access report by user	8A
	423	Forced access	8B
	424	Egress denied	8C
	425	Egress granted	8D
	426	Access door propped open	8E
	427	Access point door status monitor trouble	8F
	428	Access point request to exit	90
	429	Access program mode entry	91
	430	Access program mode exit	92
	431	Access threat level change	93
	432	Access relay/trigger fail	94
	433	Access RTE shunt	95
	434	Access DSM shunt	96
Arming (440 & 450)	441	Armed stay	97
	442	Keyswitch armed stay	98
	450	Exception open/close	99
	451	Early open/close	9A
	452	Late open/close	9B
	453	Failed to open	9C
	454	Failed to close	9D
	455	Auto-arm failed	9E
	456	Partial arm	9F
	457	User exit error	A0
System (460)	458	User on premises	A1
	459	Recent close	A2
	461	Wrong code entry	A3
	462	Legal code entry	A4
	463	Re-arm after alarm	A5
	464	Auto-arm time extended	A6
	465	Panic alarm reset	A7
	466	Service ON/OFF premises	A8

Table 43: Ademco contact ID report codes (Continued)

Type	CID #	Reporting Code	Value
Sounder Relay Disabled (520)	520	Sounder/relay disabled	A9
	521	Bell 1 disabled	AA
	522	Bell 2 disabled	AB
	523	Alarm relay disabled	AC
	524	Trouble relay disabled	AD
	525	Reversing relay disabled	AE
	526	Notification appliance chk. #3 disabled	AF
	527	Notification appliance chk. #4 disabled	B0
Modules (530)	531	Module added	B1
	532	Module removed	B2
Communication Disabled (550 & 560)	551	Dialer disabled	B3
	552	Radio transmitter disabled	B4
	570	Zone bypass	B5
Bypasses (570)	571	Fire bypass	B6
	572	24-hour zone bypass	B7
	573	Burglary bypass	B8
	574	Group bypass	B9
	575	Swinger bypass	BA
	576	Access zone shunt	BB
	577	Access point bypass	BC

Table 43: Ademco contact ID report codes (Continued)

Type	CID #	Reporting Code	Value
Test/Misc (600)	601	Manual trigger test	BD
	602	Periodic test report	BE
	603	Periodic RF transmission	BF
	604	Fire test	C0
	605	Status report to follow	C1
	606	Listen-in to follow	C2
	607	Walk test mode	C3
	608	Periodic test - system trouble present	C4
	609	Video transmitter active	C5
	611	Point test OK	C6
	612	Point not tested	C7
	613	Intrusion zone walk tested	C8
	614	Fire zone walk tested	C9
	615	Panic zone walk tested	CA
	616	Service request	CB
	621	Event log reset	CC
	622	Event log 50% full	CD
	623	Event log 90% full	CE
	624	Event log overflow	CF
	625	Time/date reset	D0
	626	Time/date inaccurate	D1
	627	Program mode entry	D2
	628	Program mode exit	D3
	629	32-hour event log marker	D4
	630	Schedule change	D5
	631	Exception schedule change	D6
	632	Access schedule change	D7
	654	System inactivity	D8



## Automatic Report Codes

Table 44: List of automatic report codes

System Event	Default Contact ID Report Code		Default SIA Report Code	
Arming with user code (##)	3 4A1	Close by user	CL	Closing report
Auto arming	3 4A3	Automatic close	CA	Automatic closing
Late to close	3 452	Late to close	OT	Late to close
No movement	3 452	Late to close	NA	No activity
Arm with PC software	3 4A7	Remote arm/disarm	CQ	Remote arming
Keyswitch arming	3 4A9	Keyswitch arming	CS	Keyswitch arming
Disarm with user code (##)	1 4A1	Open by user	OP	Opening report
Disarm after alarm with user code (##)	1 4A1	Open by user	OP	Opening report
Cancel alarm with user code (##)	1 4A6	Cancel by user	OR	Disarm from alarm
Auto arming cancellation	1 464	Deferred open/close	CE	Closing extend
Disarm with PC software	1 4A7	Remote arm/disarm	OQ	Remote disarming
Disarm after an alarm with PC software	1 4A7	Remote arm/disarm	OR	Disarm from alarm
Cancel alarm with PC software	1 4A6	Cancel by user	OR	Disarm from alarm
Cancel paramedic alarm	1 4A6	Cancel by user	MH	Medical alarm restore
Keyswitch disarm	1 4A9	Keyswitch disarm	OS	Keyswitch disarm
Keyswitch disarm after alarm	1 4A1	Keyswitch disarm after alarm	OS	Keyswitch disarm after alarm
Keyswitch cancel alarm	1 4A6	Keyswitch cancel alarm	OS	Keyswitch cancel alarm
Zone bypassed (##)	1 57A	Zone bypass	UB	Untyped zone bypass
Zone alarm (##)	1 13A	Burglary alarm	BA	Burglary alarm
Fire alarm (##)	1 11A	Fire alarm	FA	Fire alarm
Zone alarm restore (##)	3 13A	Burglary alarm restore	BH	Burglary alarm restore
Fire alarm restore (##)	3 11A	Fire alarm restore	FH	Fire alarm restore
24-hr gas alarm (##)	1 151	Gas detected	GA	Gas alarm
24-hr heat alarm (##)	1 153	Loss of heat	KA	Heat alarm
24-hr water alarm (##)	1 154	Water leakage	WA	Water alarm
24-hr freeze alarm (##)	1 152	Refrigeration	ZA	Freeze alarm
24-hr gas alarm restore (##)	3 151	Gas restore	GR	Gas alarm restore
24-hr heat alarm restore (##)	3 153	Heat restore	KR	Heat alarm restore
24-hr water alarm restore (##)	3 154	Water restore	WR	Water alarm restore
24-hr freeze alarm restore (##)	3 152	Freeze restore	ZR	Freeze alarm restore
24-hr hold-up alarm	1 12A	Panic alarm	PA	Panic alarm
24-hr hold-up alarm restore	3 12A	Panic alarm restore	PR	Panic restore
Panic 1: emergency	1 12A	Panic alarm	PA	Panic alarm
Panic 2: medical	1 1AA	Medical alarm	MA	Medical alarm
Panic 3: fire	1 110	Fire Alarm	FA	Fire alarm
Recent closing	3 459	Open/close	CR	Recent closing
Global zone shutdown	1 575	Group bypass	CG	Close area
Duress alarm	1 121	Duress	HA	Hold-up alarm
Keypad lockout	1 421	Access denied	JA	User code tamper
Zone shutdown (##)	1 57A	Zone bypass	UB	Untyped zone bypass
Zone tampered (##)	1 144	Sensor tamper	TA	Tamper alarm
Zone tamper restore (##)	3 144	Sensor tamper restore	TR	Tamper restoral
TLM Trouble	1 351	Telco 1 fault	LT	Phone line trouble
AC failure	1 3A1	AC loss	AT	AC trouble
Battery failure	1 3A9	Battery test failure	YT	System battery trouble
Auxiliary supply trouble	1 3AA	System trouble	YP	Power supply trouble
Bell output current limit	1 321	Bell 1	YA	Bell fault

Table 44: List of automatic report codes (Continued)

System Event	Default Contact ID Report Code		Default SIA Report Code	
Bell absent	1 321	Bell 1	YA	Bell fault
Clock lost	1 626	Time/date inaccurate	JT	Time changed
Fire loop trouble	1 373	Fire trouble	FT	Fire trouble
Communication fail	1 354	Communication fail	YC	Fail to communicate
RF jamming	1 344	RF receiver jam detection	XQ	RF jamming
GSM/GPRS module RF interference	1 552	Radio transmitter disabled	YS	Communication trouble
GSM/GPRS network failure	1 552	Radio transmitter disabled	YS	Communication trouble
GSM/GPRS supervision lost	1 552	Radio transmitter disabled	YS	Communication trouble
GSM/GPRS fail to communicate	1 354	Communication fails	YC	Fail to communicate
IP network failure	1 552	Radio transmitter disabled	YS	Communication trouble
IP supervision lost	1 552	Radio transmitter disabled	YS	Communication trouble
IP fail to communicate	1 354	Communication fails	YC	Fail to communicate
TLM trouble restore	3 351	Telco 1 fault restore	LR	Phone line restoral
AC failure restore	3 3A1	AC loss restore	AR	AC restoral
Battery failure restore	3 3A9	Battery test restore	YR	System battery restoral
Auxiliary supply trouble restore	3 3AA	System trouble restore	YQ	Power supply restored
Bell output current limit restore	3 321	Bell 1 restore	YH	Bell restored
Bell absent restore	3 321	Bell 1 restore	YH	Bell restored
Clock programmed	3 625	Time/date reset	JT	Time changed
Fire loop trouble restore	3 373	Fire trouble restore	FJ	Fire trouble restore
Fail to communicate with monitoring station restore	3 354	Fail to communicate restore	YK	Communication fails restore
RF jamming restore	3 344	RF receiver jam detection restore	XH	RF jamming restoral
GSM/GPRS module RF interference restore	3 552	Radio transmitter restore	YK	Communication restore
GSM/GPRS network restore	3 552	Radio transmitter restore	YK	Communication restore
GSM/GPRS supervision restore	3 552	Radio transmitter restore	YK	Communication restore
GSM/GPRS fail to communicate restore	3 354	Communication restore	YK	Fail to communicate restore
IP network restore	3 552	Radio transmitter restore	YK	Communication restore
IP supervision restore	3 552	Radio transmitter restore	YK	Communication restore
IP fail to communicate restore	3 354	Communication restore	YK	Fail to communicate restore
Combus fault	1 333	Expansion module failure	ET	Expansion trouble
Module tamper	1 341	Expansion module tamper	TA	Tamper alarm
Module AC fail	1 342	AC failure on module	AT	Module AC fail
Module battery fail	1 338	Battery failure on module	YT	Module battery fail
Bus fault restore	3 333	Expansion module failure restore	ER	Expansion restoral
Module tamper restore	3 341	Expansion module tamper restore	TR	Tamper restoral
Module AC fail restore	3 342	AC restored on module	AR	Module AC fail restore
Module battery fail restore	3 338	Battery failure on module	YR	Module battery fail restore
Cold start	1 3A8	System shutdown	RR	Power up
Test report engaged	1 6A2	Periodic test report	TX	Test report
PC software communication finished	1 412	Successful - download access	RS	Remote program success
Installer on site	1 627	Program mode entry	LB	Local program
Installer programming finished	1 628	Program mode exit	LS	Local program success
Maintenance in	1 627	Program mode entry	LB	Local program
Maintenance out	1 628	Program mode exit	LS	Local program success
Closing delinquency	1 654	System inactivity	CD	System inactivity
Manual trigger test in	1 6A1	Manual trigger test in	TS	Manual trigger test in
Manual trigger test out	3 6A1	Manual trigger test out	TS	Manual trigger test out
Exit error	1 374	Exit error	EE	Exit error
RF module low battery	1 384	RF transmitter low battery	XT	Transmitter battery trouble
RF module battery restore	3 384	RF transmitter battery restore	XR	Transmitter battery restoral

Table 44: List of automatic report codes (Continued)

System Event	Default Contact ID Report Code		Default SIA Report Code	
RF zone supervision lost	1 381	Loss of supervision - RF	US	Untype zone supervision
RF zone supervision restore	3 381	Supervision restore - RF	UR	Untyped zone restoral
RF module supervision lost	1 381	Loss of supervision - RF	US	Untyped zone supervision
RF module supervision restore	3 381	Loss of supervision - RF restore	UR	Untyped zone restoral
RF module tamper	1 145	Expansion module tamper	ES	Expansion device tamper
RF module tamper restore	3 145	Expansion module tamper restore	EJ	Expansion device restore
Paramedic alarm	1 1AA	Medical	MA	Medical alarm
Zone forced	1 57A	Zone forced	XW	Zone forced
Zone included	3 57A	Zone included	UU	Zone included
Remote low battery	1 338	Battery failure on module	YT	Module battery fail
Remote low battery restore	3 338	Battery failure on module restore	YR	Module battery fail restore
Failed to arm	1 454	Failed to close	CI	Failed to close

## Communication Report Codes

Use worksheet 47 to record your settings for communication report codes. Sections **[879]** and **[884]** apply to both GSM and network (GPRS/GSM) communications. See *Communication Programming* on page 42, for more communication features. In addition, refer to *Description of Sections [966] and [967]* on page 54, for clearing and resetting codes.

### Worksheet 47: Communication Report Codes

Section	Data	Description	Section	Data	Description	Section	Data	Description
<b>[879]</b>	<b>FF</b>	PCS series RF jam	<b>[880]</b>	<b>FF</b>	-	<b>[884]</b>	<b>FF</b>	GSM lost communication with panel
	<b>FF</b>	PCS series no service		<b>FF</b>	IP100 no service		<b>FF</b>	-
	<b>FF</b>	PCS series module supervision lost		<b>FF</b>	IP100 supervision lost		<b>FF</b>	-
	<b>FF</b>	Receiver fail to communicate (GPRS)		<b>FF</b>	IP receiver fail to communicate		<b>FF</b>	-

## Communication Restore Report Codes

Use worksheet 48 to record your settings for communication restore report codes. Section **[881]** applies to both GSM and network (GPRS/GSM) communications.

### Worksheet 48: Communication Restore Report Codes

Section	Data	Description	Section	Data	Description
<b>[881]</b>	<b>FF</b>	PCS series RF jam	<b>[882]</b>	<b>FF</b>	-
	<b>FF</b>	PCS series no service		<b>FF</b>	IP100 no service
	<b>FF</b>	PCS series module supervision lost		<b>FF</b>	IP100 supervision lost
	<b>FF</b>	Receiver fail to communicate (GPRS)		<b>FF</b>	IP receiver fail to communicate

## Software Options and Additional Timers

Use the following section to program software options and additional communication timers on your MG/SP control panel.

Table 45: Description of section [900] (WinLoad/BabyWare options)

Section	Option	Description	OFF	ON
<b>[900]</b>	1	Call back	▲ Disabled	Enabled
	2	Automatic event buffer transmission	▲ Disabled	Enabled

▲ = Default

## Additional Communication Timers

Use worksheet 49 to record your settings for sections **[901]** and **[902]**. For additional timers, see worksheets 38 and 40. Sections **[901]** and **[902]** are also applicable when using a VDMP3 Plug-in Voice Dialer.

### Worksheet 49: Additional Communication Timers

Section	Data	Description	Default
<b>[901]</b>	___/___/___	000 to 255 rings	Number of rings <b>008</b>
<b>[902]</b>	___/___/___	000 to 255 secs. (max 127)	Answering machine override delay <b>030</b>

## BabyWare Options

Use worksheet 50 to record your settings for WinLoad and BabyWare options.

### Worksheet 50: BabyWare Options

Section	Data	Description
[910]	___/___/___/___	Panel ID
[911]	___/___/___/___	PC password
[915]	___/___/___/___/___/___/___/___/___/___/___/___/___/___/___/___	PC telephone number (landline/GSM communication only)

**WARNING: For increased communication security, change the default panel ID and PC password.**

## IP and Software Configurations

Use the following section to configure IP and software requirements on your MG/SP control panel.

### IP Account Numbers

Use worksheet 51 to record the IP account numbers for network communication.

#### Worksheet 51: IP Account Numbers

Section	Data	Description
[918]	___/___/___/___	IP account partition 1
[919]	___/___/___/___	IP account partition 2

### Software and PCS Connection Settings

Use worksheet 52 to record connection settings for WinLoad, BabyWare, and PCS series.

#### Worksheet 52: Software and PCS Connection Settings

Section	Data	Description	Default
[920]	___/___/___/___	Port	<b>10000</b>
[921]	___/___/___/___/___/___/___/___/___/___/___/___/___/___/___/___	Access point name (APN), part 1 (e.g., <i>internet.com</i> )	-
[922]	___/___/___/___/___/___/___/___/___/___/___/___/___/___/___/___	Access point name (APN), part 2	-
[923]	___/___/___/___/___/___/___/___/___/___/___/___/___/___/___/___	User name, part 1	-
[924]	___/___/___/___/___/___/___/___/___/___/___/___/___/___/___/___	User name, part 2	-
[925]	___/___/___/___/___/___/___/___/___/___/___/___/___/___/___/___	Password, part 1	-
[926]	___/___/___/___/___/___/___/___/___/___/___/___/___/___/___/___	Password, part 2	-
[927]	___/___/___/___/___/___/___/___/___/___/___/___/___/___/___/___	Installer software password (WinLoad, BabyWare)	<b>admin</b>

### IP Receiver Configurations

Use worksheets 53 to 55 (on page 53) to configure IP receivers. Table 46 provides a description of the IP/GPRS registration status.

**Table 46: IP/GPRS registration status**

Key	Main Menu Trouble	Key	Sub-menu Trouble
1	IP/GPRS module registration status	1	OFF = Unregistered
		1	Slow flash = Registering
		1	ON = Registration OK
2	IP/GPRS module error	7	No IP/GPRS module
		8	Ethernet cable unplugged; GSM no service
		9	No IP address acquired by module/GPRS network trouble
3	IP/GPRS programming error	7	No IP address (not programmed)
		8	No IP port (not programmed)
		9	No IP account (not programmed)
		10	No access point name (not programmed; GPRS only)
4	IP/GPRS registration error	7	Cannot connect
		8	Invalid profile
		9	Invalid format
		10	Account already registered under another MAC address
Register module		-	When all troubles are cleared, press <b>ARM</b> to register module

**Worksheet 53: IP Receiver 1 Configuration**

Section	Data	Description	Default
[929]	__/__/__ . __/__/__ . __/__/__ . __/__/__	WAN1 IP address (e.g., 100.100.100.100); for one or two-digit numbers, add 0s before the first digit	-
[930]	__/__/__/__	WAN1 IP port	10000
[931]	__/__/__ . __/__/__ . __/__/__ . __/__/__	WAN2 IP address	-
[932]	__/__/__/__	WAN2 IP port	10000
[933]	__/__/__/__/__/__/__/__/__/__/__/__/__	IP password	123456
[934]	__/_	IP profile (e.g., 01)	-
[935]	To view status or to register, press <b>ARM</b> (see table 46 on page 52)	IP receiver status	-

**Worksheet 54: IP Receiver 2 Configuration**

Section	Data	Description	Default
[936]	__/__/__ . __/__/__ . __/__/__ . __/__/__	WAN1 IP address (e.g., 100.100.100.100)	-
[937]	__/__/__/__	WAN1 IP port	10000
[938]	__/__/__ . __/__/__ . __/__/__ . __/__/__	WAN2 IP address	-
[939]	__/__/__/__	WAN2 IP port	10000
[940]	__/__/__/__/__/__/__/__/__/__/__/__/__	IP password	123456
[941]	__/_	IP profile (e.g., 01)	-
[942]	To view status or to register, press <b>ARM</b> (see table 46 on page 52)	IP receiver status	-

**Worksheet 55: IP Receiver Backup Configuration**

Section	Data	Description	Default
[943]	__/__/__ . __/__/__ . __/__/__ . __/__/__	WAN1 IP address (e.g., 100.100.100.100)	-
[944]	__/__/__/__	WAN1 IP port	10000
[945]	__/__/__ . __/__/__ . __/__/__ . __/__/__	WAN2 IP address	-
[946]	__/__/__/__	WAN2 IP port	10000
[947]	__/__/__/__/__/__/__/__/__/__/__/__/__	IP password	123456
[948]	__/_	IP profile (e.g., 01)	-
[949]	To view status or to register, press <b>ARM</b> (see table 46 on page 52)	IP receiver status	-

**Usability Sections**

The sections described in the ensuing segment are used to clear, reset, and display various settings and features on your MG/SP control panel.

**Description of Sections [950], [955], and [960]**

Table 47: Description of sections [950], [955], and [960]

Section	Description
[950]	Resets all programmable sections to their respective factory-set, default values. Once accessed, press <b>ENTER</b> to reset.
[955]	Clears bus module troubles. Once cleared, remove disconnected module from the bus.
[960]	Displays the wireless transmitter serial number. Once accessed, press any button on the assigned remote control, or press the tamper switch of the download memory key. Press <b>ENTER</b> to view the next digit.

**Description of Section [965]**

Table 48: Description of section [965] (reset labels)

	Option	Description	OFF	ON
Section [965]	1	Reset zone labels	▲ Disabled	Enabled
	2	Reset user labels	▲ Disabled	Enabled
	3	Reset partition labels	▲ Disabled	Enabled
	4	Reset PGM labels	▲ Disabled	Enabled
	5	Reset bus module labels	▲ Disabled	Enabled
	6	Reset wireless repeater and siren labels	▲ Disabled	Enabled
	7	Reset wireless keypad, repeater, and siren labels	▲ Disabled	Enabled

▲ = Default

**NOTE:** When resetting any option in section [965], ensure that all other options are deselected. Press **ENTER** to reset the respective set of labels to their default values, before exiting the section.

## Description of Sections [966] and [967]

Table 49: Description of sections [966] and [967] (clear and reset report codes)

	Option	Description	OFF	ON		Option	Description	OFF	ON		
Section [966]	1	Clear zone report codes	Disabled	▲	Enabled	Section [967]	1	Reset zone report codes to default	Disabled	▲	Enabled
	2	Clear user report codes	Disabled	▲	Enabled		2	Reset user report codes to default	Disabled	▲	Enabled
	3	Clear arm/disarm/alarm report codes	Disabled	▲	Enabled		3	Reset arm/disarm/alarm report codes to default	Disabled	▲	Enabled
	4	Clear trouble report codes	Disabled	▲	Enabled		4	Reset trouble report codes to default	Disabled	▲	Enabled
	5	Clear system special report codes	Disabled	▲	Enabled		5	Reset system special report codes to default	Disabled	▲	Enabled
	6	Clear report code for GSM lost communication with panel	Disabled	▲	Enabled		6	Reset report code for GSM lost communication with panel	Disabled	▲	Enabled

▲= Default

**NOTE:** When clearing or resetting any option in sections [966] AND [967], ensure that all other options are deselected. Press **ENTER** to reset the respective set of labels to their default values, before exiting the section.

## Description of Sections [970], [975], and [980]

Table 50: Description of sections [970], [975], and [980]

Section	Description
[970]	Downloads data from the memory key to the control panel. To download data, enter section [970], and then press <b>ENTER</b> .
[975]	Uploads data from the control panel to the memory key. To upload data, enter section [975], and then press <b>ENTER</b> .
[980]	Displays version number of the control panel. Once accessed, press <b>ENTER</b> to view the next digit.

## Label Programming with LCD Keypads

Use the information in the following section to program system labels, using an LCD keypad (K32LCD/K32LX).

### Function keys

Table 51: Description of the special function keys, used for programming labels on LCD keypads

Function	Keypad Key
Insert space	<b>STAY</b>
Delete	<b>SLEEP</b>
Delete entire entry	<b>ARM</b>
Toggle between numeric and alphanumeric keys	<b>OFF</b>
Toggle between lower and upper case keys	<b>BYP</b>
Insert special characters	<b>MEM</b>
Move the cursor to the right	▲
Move the cursor to the left	▼

**Catalogues of Special Characters**

The following section outlines the different catalogues of special characters, including those in Hebrew, Greek, and Russian.

Figure 1: Standard special characters

032	048	064	080	096	112	128	144	160	176	192	208
!	1	A	Q	a	q	Ú	È	À	§	Ø	•
"	2	B	R	b	r	Û	É	Í	ij	Ð	°
#	3	C	S	c	s	Ü	Ê	Ï	↑	Β	´
\$	4	D	T	d	t	Ù	Ë	Ĳ	↓	ϕ	'
%	5	E	U	e	u	Ò	È	İ	↵	®	~
&	6	F	V	f	v	Ó	É	Ń	f	□	÷
'	7	G	W	g	w	Ô	Ï	ñ	£	☒	«
(	8	H	X	h	x	Õ	À	Ň	→	μ	»
)	9	I	Y	i	y	Ö	Ä	Ǆ	↓	∅	†
*	:	J	Z	j	z	◊	Å	ğ	↑	ÿ	\
+	;	K	[	k	{	ô	â	ı	↓	Ă	χ
,	<	L	¥	ı		ò	à	ŷ	↑	¢	©
-	=	M	J	m	}	ó	á	w	½	ä	©
.	>	N	^	n	→	ö	â	W	½	Ö	²
/	?	O	_	o	←	ç	À	Æ	¼	ö	≡

Figure 3: Russian special characters

032	048	064	080	096	112	128	144	160	176	192	208	224	240
!	1	A	Q	a	q			Б	Ю	Ч		Д	¼
"	2	B	R	b	r			Г	Я	Ш		Ц	1/3
#	3	C	S	c	s			Ё	Ъ	Ы	!!	Л	½
\$	4	D	T	d	t			Ж	В	Ы	!!	Л	¼
%	5	E	U	e	u			З	Г	Ь		Ф	
&	6	F	V	f	v			И	Ё	Э		И	
'	7	G	W	g	w			Й	Ж	Ю		Ш	
(	8	H	X	h	x			Л	З	Л			
)	9	I	Y	i	y			П	И	«			
*	:	J	Z	j	z			Ф	К	»	↑		
+	;	K	[	k	{			Ч	Л	»	↑		
,	<	L	¢	ı		12		Ш	М			ıj	
-	=	M	J	m	15			Ь	П	¿		§	
.	>	N	^	n	←			Ы	П	f		¶	
/	?	O	_	o		127	143	159	175	191	207	223	239

Figure 2: Hebrew special characters

032	048	064	080	096	112	128	144	160	176	192	208	224	240
!	1	A	Q	a	q	ו	ז	ח	ט	י	כ	ל	מ
"	2	B	R	b	r	פ	צ	ק	ר	ש	ת	ך	ץ
#	3	C	S	c	s	ת	ך	ץ	ך	ץ	ך	ץ	ך
\$	4	D	T	d	t	ד	ט	ז	ח	ט	ז	ח	ט
%	5	E	U	e	u	ה	ו	ז	ח	ט	ז	ח	ט
&	6	F	V	f	v	ו	ז	ח	ט	ז	ח	ט	ז
'	7	G	W	g	w	ג	ד	ה	ו	ז	ח	ט	ז
(	8	H	X	h	x	ח	ט	ז	ח	ט	ז	ח	ט
)	9	I	Y	i	y	י	כ	ל	מ	נ	ס	ע	פ
*	:	J	Z	j	z	ך	ץ	ך	ץ	ך	ץ	ך	ץ
+	;	K	[	k	{	כ	ל	מ	נ	ס	ע	פ	ק
,	<	L	¥	ı		ל	מ	נ	ס	ע	פ	ק	ר
-	=	M	J	m	}	מ	נ	ס	ע	פ	ק	ר	ש
.	>	N	^	n	→	נ	ס	ע	פ	ק	ר	ש	ת
/	?	O	_	o	←	ס	ע	פ	ק	ר	ש	ת	ך

Figure 4: Greek special characters

016	032	048	064	080	096	112	128	144	160	176	192	208	224	240
±	∓	ø	æ	ø	ϖ	ϕ	ϕ	ϕ	ϕ	ϕ	ϕ	ϕ	ϕ	ϕ
≡	!	1	A	Q	a	q	∓	∓	∓	∓	∓	∓	∓	∓
∓	"	2	B	R	b	r	∓	∓	∓	∓	∓	∓	∓	∓
∓	#	3	C	S	c	s	∓	∓	∓	∓	∓	∓	∓	∓
∓	\$	4	D	T	d	t	∓	∓	∓	∓	∓	∓	∓	∓
∓	%	5	E	U	e	u	∓	∓	∓	∓	∓	∓	∓	∓
∓	&	6	F	V	f	v	∓	∓	∓	∓	∓	∓	∓	∓
∓	'	7	G	W	g	w	∓	∓	∓	∓	∓	∓	∓	∓
∓	(	8	H	X	h	x	∓	∓	∓	∓	∓	∓	∓	∓
∓	)	9	I	Y	i	y	∓	∓	∓	∓	∓	∓	∓	∓
∓	*	:	J	Z	j	z	∓	∓	∓	∓	∓	∓	∓	∓
∓	+	;	K	[	k	{	∓	∓	∓	∓	∓	∓	∓	∓
∓	,	<	L	¥	ı		∓	∓	∓	∓	∓	∓	∓	∓
∓	-	=	M	J	m	15	∓	∓	∓	∓	∓	∓	∓	∓
∓	.	>	N	^	n	←	∓	∓	∓	∓	∓	∓	∓	∓
∓	/	?	O	_	o		∓	∓	∓	∓	∓	∓	∓	∓

Figure 5: Polish, Hungarian, and Turkish special characters

Polish	001	002	003	004	005	006	007
	ż	ć	ą	ę	ź	ł	ś
Hungarian	001	002	003				
	Á	ű	ő				
Turkish	001						
	ü						

## Keypad Letter Assignments

The following section outlines the different configurations for keypad letter assignments, including those in Hebrew, Greek, and Russian.

**Table 52: Standard keypad letter assignment**

Key	Press Key Once	Press Key Twice	Press Key Three Times
1	A	B	C
2	D	E	F
3	G	H	I
4	J	K	L
5	M	N	O
6	P	Q	R
7	S	T	U
8	V	W	X
9	Y	Z	

**Table 53: Greek keypad letter assignment**

Key	Press Key Once	Press Key Twice	Press Key Three Times
1	A	B	G
2	D	E	Z
3	H	Q	I
4	K	L	M
5	N	Ξ	O
6	P	R	S
7	T	U	F
8	C	Y	W

**Figure 6: Hebrew keypad letter assignment**

Key	Press key once	Press key twice	Press key three times
[1]	א	ב	ג
[2]	ד	ה	ו
[3]	ז	ח	ט
[4]	י	כ	ל
[5]	מ	נ	ס
[6]	ע	פ	צ
[7]	ק	ר	ש
[8]	ת		
[9]			

**Figure 7: Russian keypad letter assignment**

Key	Press key once	Press key twice	Press key three times	Press key four times
[1]	А	Б	В	Г
[2]	Д	Е	Ё	Ж
[3]	З	И	Й	К
[4]	Л	М	Н	О
[5]	П	Р	С	Т
[6]	У	Ф	Х	Ц
[7]	Ч	Ш	Щ	Ъ
[8]	Ы	Ь	Э	Ю
[9]	Я			

## Trouble Display

The following section provides information on the different troubles associated with your MG/SP control panel. To view the trouble display, press **TBL** on your MG/SP keypad. Table 54 outlines the troubles appearing in the main menu and their corresponding sub-menu troubles. To view the sub-menu troubles, press the trouble's respective key in the main menu.

**NOTE:** Keypads can be programmed to emit a beep every five seconds, whenever a new trouble condition has occurred. Press **TBL** to stop the beeping.

**Table 54: Description of troubles for MG/SP control panels**

Key	Main Menu Trouble	Key	Sub-menu Trouble
1	Wireless zone low battery	1 to 32	Zones in low battery
2	Power trouble	1	Low/no battery on the control panel
		2	AC failure on control panel
		3	Auxiliary overload on control panel
		4	Wireless keypad AC failure
		5	Wireless keypad battery failure
		6	Wireless repeater AC failure
		7	Wireless repeater battery failure
		8	Wireless siren AC failure
		9	Wireless siren battery failure
		10	Remote low battery (press [0] to view which remote)
3	Bell trouble	1	Bell disconnected on control panel
		2	Bell overload on control panel



Table 54: Description of troubles for MG/SP control panels

4	Communication trouble	1	Telephone line monitoring on control panel
		2	Fail to communicate on monitoring telephone 1, on control panel
		3	Fail to communicate on monitoring telephone 2, on control panel
		5	Fail to communicate on voice telephone, on control panel
		6	Fail to communicate with PC, on control panel
		7	Fail to communicate with IP receiver 1 or 2 (GPRS)
		8	Fail to communicate with IP receiver 1 or 2 (IP)
		9	GSM no service (GSM network failure)
		10	IP module no service (network failure)
		<b>STAY</b>	GSM RF jamming
		<b>OFF</b>	IP receiver unregistered (IP/GPRS)
		5	Tamper and zone wiring failure
6	Module tamper trouble	1	2WPGM
		2	Keypad bus
		3	ZX8 bus module
		4	RTX3 bus module
		5	Wireless siren
		6	GSM/GPRS module
7	Fire loop trouble	1 to 32	Zones in fire loop trouble
8	Timer loss	-	
9	Wireless zone supervision loss	1 to 32	Zones in supervision lost
		<b>STAY</b>	RF jamming trouble
0 (10), or 10	Module supervision loss	1	2WPGM
		2	Keypad bus (panel reset will not clear this trouble; clear it in section <b>[955]</b> )
		3	ZX8 bus module
		4	RTX3 bus module
		5	Wireless keypad
		6	Wireless repeater
		7	-
		8	VDMP3
		9	PCS series
		10	IP100
		<b>STAY</b>	Wireless siren
16	Keypad fault (K32, K32RF, K37, K35 only)	-	
17	Upgrade panel to V3.2 or higher (K37 only)	-	
<b>SLEEP</b>	Keypad fault (K636, K10V/H only)	-	

## Product Compatibility Chart

**Table 55: Product compatibility chart for MG/SP control panels**

Product Type	Product	MG5000	MG5050	SP4000	SP65	SP5500			SP6000			SP7000		
		V4.1 - V4.5	V4.1 - V4.5	V4.9	V4.9	V4.5	V4.7	V5.0	V4.5	V4.7	V5.0	V4.5	V4.7	V5.0
Hardwired Keypads	K32LCD (V1.30 or higher)	✓	✓	✓	✓	✓	✓	✓ <sup>3</sup>	✓	✓	✓ <sup>3</sup>	✓	✓	✓ <sup>3</sup>
	K32LX	-	-	✓	✓	-	✓	-	-	✓	-	-	✓	-
	K32	✓	✓	✓	✓	✓	✓	✓ <sup>3</sup>	✓	✓	✓ <sup>3</sup>	✓	✓	✓ <sup>3</sup>
	K10V/K10H	✓	✓	✓	✓	✓	✓	✓ <sup>3</sup>	✓	✓	✓ <sup>3</sup>	✓	✓	✓ <sup>3</sup>
	K35 (K32I)	✓	✓	✓	✓	✓	✓	✓ <sup>3</sup>	✓	✓	✓ <sup>3</sup>	✓	✓	✓ <sup>3</sup>
	K636	✓	✓	✓	✓	✓	✓	✓ <sup>3</sup>	✓	✓	✓ <sup>3</sup>	✓	✓	✓ <sup>3</sup>
Wireless Keypads	K37 (K32IRF)	✓	✓	-	✓ <sup>2</sup>	✓ <sup>2</sup>			✓ <sup>2</sup>			✓ <sup>2</sup>		
	K32RF (K32LRF)	✓	✓	-	✓ <sup>2</sup>	✓ <sup>2</sup>			✓ <sup>2</sup>			✓ <sup>2</sup>		
Zone Expansion Modules	ZX8	✓	✓	✓	✓	✓	✓	✓ <sup>3</sup>	✓	✓	✓ <sup>3</sup>	✓	✓	✓ <sup>3</sup>
	ZX8SP	✓	✓	✓	✓	✓	✓	✓ <sup>3</sup>	✓	✓	✓ <sup>3</sup>	✓	✓	✓ <sup>3</sup>
	RTX3	-	-	✓	✓	✓	✓	✓ <sup>3</sup>	✓	✓	✓ <sup>3</sup>	✓	✓	✓ <sup>3</sup>
	RX1	-	-	✓	✓	✓	✓	✓ <sup>3</sup>	✓	✓	✓ <sup>3</sup>	✓	✓	✓ <sup>3</sup>
Wireless Sirens	SR150 (V1.10)	✓	✓	-	✓ <sup>2</sup>	✓			✓			✓		
Wireless Programmable Output	2WPGM	✓	✓	-	✓ <sup>2</sup>	✓ <sup>2</sup>			✓ <sup>2</sup>			✓ <sup>2</sup>		
Remote Controls	REM1	✓	✓	✓ <sup>1</sup>	✓ <sup>1</sup>	✓ <sup>1</sup>			✓ <sup>1</sup>			✓ <sup>1</sup>		
	REM15	✓	✓	✓ <sup>1</sup>	✓ <sup>1</sup>	✓ <sup>1</sup>			✓ <sup>1</sup>			✓ <sup>1</sup>		
	REM2	✓	✓	✓ <sup>2</sup>	✓ <sup>2</sup>	✓ <sup>2</sup>			✓ <sup>2</sup>			✓ <sup>2</sup>		
	REM3	✓	✓	✓ <sup>2</sup>	✓ <sup>2</sup>	✓ <sup>2</sup>			✓ <sup>2</sup>			✓ <sup>2</sup>		
	RAC1	✓	✓	✓ <sup>1</sup>	✓ <sup>1</sup>	✓ <sup>1</sup>			✓ <sup>1</sup>			✓ <sup>1</sup>		
Wireless Repeaters	RPT1	✓	✓	-	✓ <sup>2</sup>	✓ <sup>2</sup>			✓ <sup>2</sup>			✓ <sup>2</sup>		
Reporting and Communication	PCS200 (V2.01 GSM/GPRS)	✓	✓	✓	✓	✓			✓			✓		
	PCS200 (V1.00 GSM edition)	✓	✓	✓	✓	✓			✓			✓		
	IP100 (V1.50 IP reporting)	✓	✓	✓	✓	✓			✓			✓		
	IP100 (V1.00)	✓	✓	✓	✓	✓			✓			✓		
	VDMP3	✓	✓	✓	✓	✓			✓			✓		
Peripheral Modules	HUB2	✓	✓	✓	✓	✓	✓	✓ <sup>3</sup>	✓	✓	✓ <sup>3</sup>	✓	✓	✓ <sup>3</sup>
	PGM4 (V3.00 and up)	✓	✓	✓	✓	✓	✓	✓ <sup>3</sup>	✓	✓	✓ <sup>3</sup>	✓	✓	✓ <sup>3</sup>
	PRT3	-	✓	✓	✓	-			-			-		
Programming Keys	PMC5	✓	✓	✓	✓	✓			✓			✓		
Software	WinLoad	✓	✓	-	-	✓			✓			✓		
	BabyWare	-	-	✓	✓	-			-			-		

<sup>1</sup> Requires RTX3/RX1

<sup>2</sup> Requires RTX3

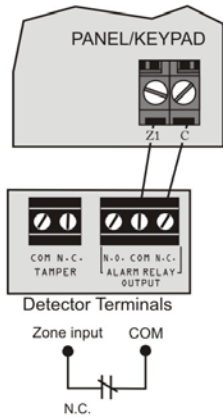
<sup>3</sup> Requires modules V5.00 only

**NOTE:** For the most up-to-date and comprehensive MG/SP product compatibility chart, always refer to [paradox.com](http://paradox.com).

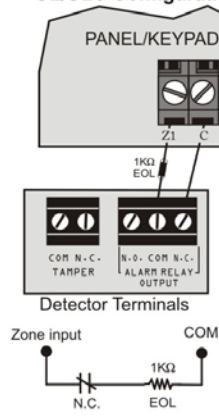
## Hardware Connections

### Single Zone Inputs

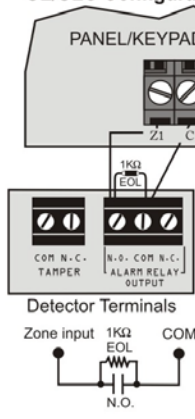
**N.C. Contacts, No EOL**



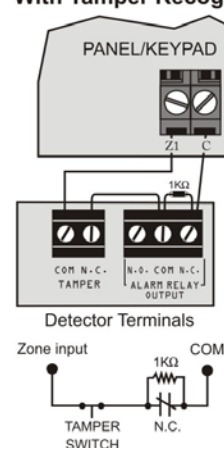
**N.C., With EOL  
UL/ULC Configuration**



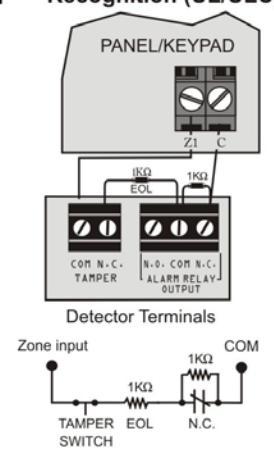
**N.O., With EOL  
UL/ULC Configuration**



**N.C. Contacts, No EOL,  
With Tamper Recognition**



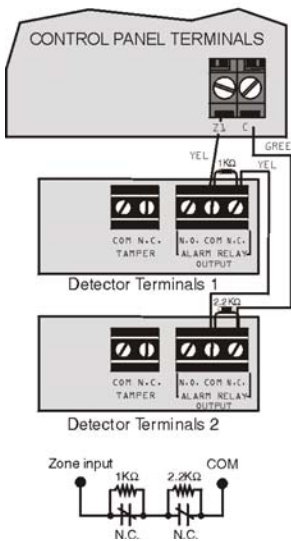
**N.C., With EOL, With  
Tamper & Wire Fault  
Recognition (UL/ULC)**



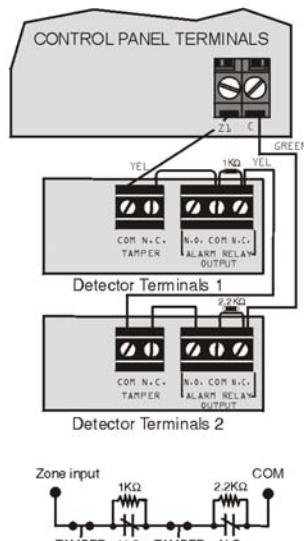
**NOTE:** Keyswitches are connected as standard zones and will follow ATZ options 1 and 2, programmed in section [705] (see page 37).

### Advanced Technology Zone (ATZ) Connections

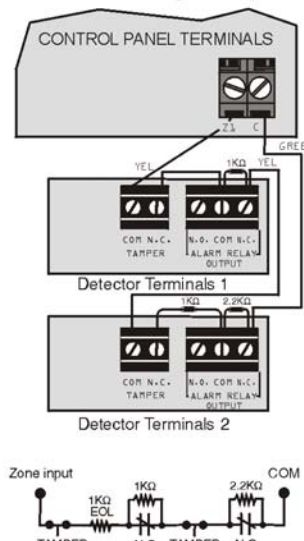
**N.C. Contacts, No EOL**



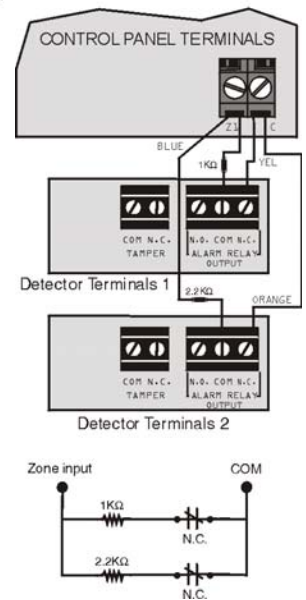
**N.C. Contacts, No EOL, with Tamper Recognition**



**N.C. Contacts, with EOL, with Tamper  
and Wire Fault Recognition (UL/cUL)**

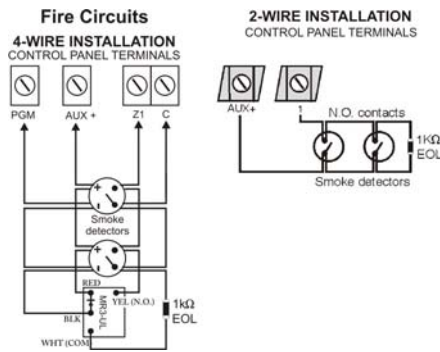


**Parallel Wiring**



## Connecting Fire Circuits

For 4-wire installation, program the activation event so that the smoke detectors can be reset by simultaneously pressing **CLEAR** and **ENTER** for three seconds (see event group 06 on page 21). For 2-wire installation, press **CLEAR** and **ENTER** simultaneously to automatically reset smoke detectors (not applicable to SP5500, SP4000, SP65).



**WARNING: It is recommended that smoke detectors be connected in a daisy-chain configuration. Each control panel, except for the SP4000, SP5500, and SP65, supports a maximum of five 2-wire smoke detectors.**

## Alarm Relay and PGM Connections

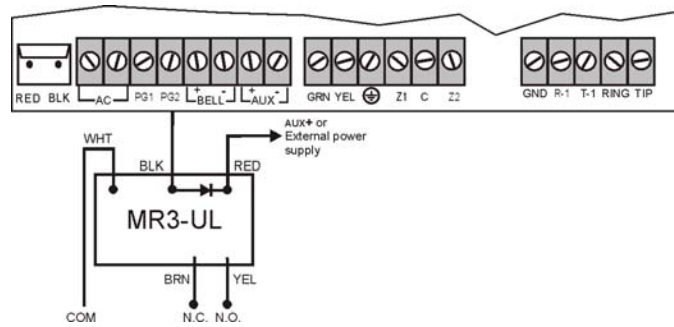
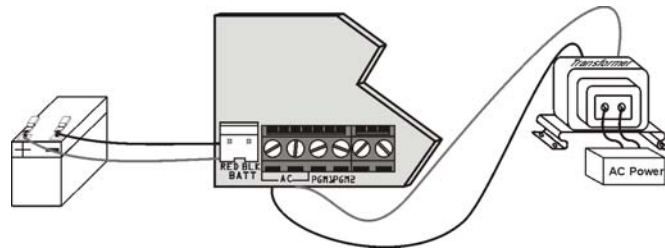


Table 56: PGM power sources

Power Source	Description
AUX + terminal	<ul style="list-style-type: none"> <li>MG5000/MG5050: max. 700 mA</li> <li>SP5500/SP6000/SP7000: max. 700 mA</li> <li>SP4000: max. 600 mA</li> <li>SP65: max. 750 mA</li> </ul>
External power supply	PGMs cannot exceed 100 mA or the power supply's current limit.

## AC Power & Backup Battery Connections



**WARNING: A 12 Vdc / 7 Ah battery is required to comply with UL fire requirements.**

**WARNING: Improper connection of the transformer may result in damage to the system.**

**WARNING: Disconnect battery before replacing the fuse.**

Table 57: Transformation requirements

Power Source	Description
Transformer	<ul style="list-style-type: none"> <li>16 Vac 20 VA* (Amseco XP-1620)</li> <li>16.5 Vac 40 VA (Universal UB1640W)</li> </ul> <p>* not verified by UL</p>
DC power supply rate	<ul style="list-style-type: none"> <li>MG5000/MG5050: 1.0A</li> <li>SP5500/SP6000/SP7000: 1.4A</li> <li>SP4000/SP65: 1.1A</li> </ul>
Auxiliary supply rate	<ul style="list-style-type: none"> <li>MG5000/MG5050: typ. 600 mA / max. 700 mA</li> <li>SP5500/SP6000/SP7000: typ. 600 mA / max. 700 mA</li> <li>SP4000: typ. 450 mA / max. 600 mA</li> <li>SP65: typ. 500 mA / max. 750 mA</li> <li>UL installations: typ. 200 mA</li> </ul>
Acceptable battery charge current (see section [700], option 2, on page 36)	<ul style="list-style-type: none"> <li>MG5000/MG5050: 350 mA / 700 mA</li> <li>SP5500/SP6000/SP7000: 350 mA / 700 mA</li> <li>SP4000/SP65: 1.1A</li> </ul>

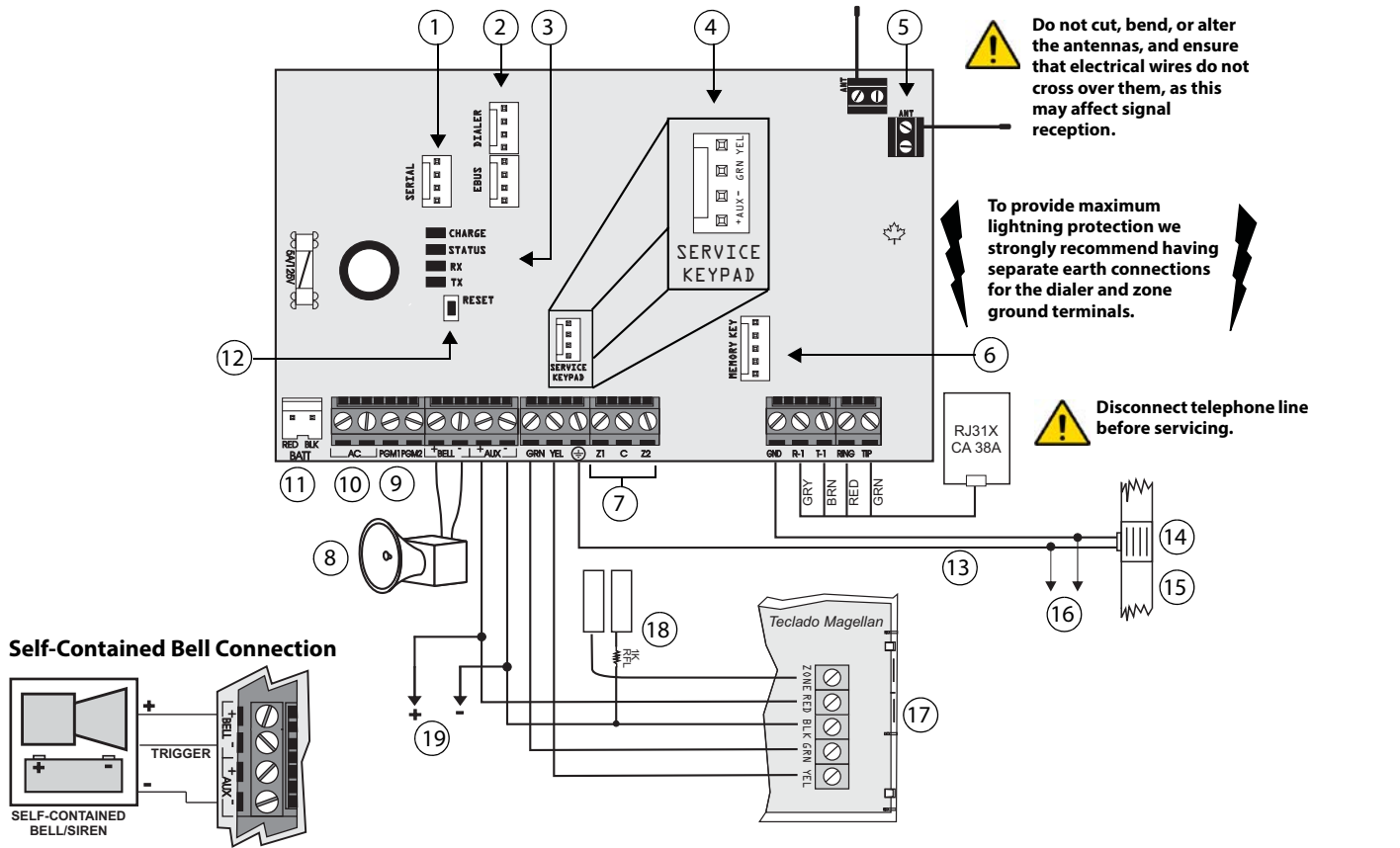
## Demonstration or Emergency System Power-up without an AC Source

To power-up the control panel for demonstration or emergency purposes only, use a standard 12 VDC, 4 Ah/7 Ah backup battery. To power the control panel using a backup battery:

1. Connect the battery to the control panel's **BATT** terminal.
2. Use a wire to short the battery's negative terminal to the panel's **AUX-** terminal.

## PCB Layouts/Wiring Diagrams

### MG5000

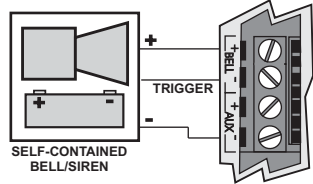


Do not cut, bend, or alter the antennas, and ensure that electrical wires do not cross over them, as this may affect signal reception.

To provide maximum lightning protection we strongly recommend having separate earth connections for the dialer and zone ground terminals.

Disconnect telephone line before servicing.

#### Self-Contained Bell Connection



- |  |   |
|--|---|
| <p>1 Used for connecting the IP100 Internet Module; also used for In-Field Firmware upgrade through a 307USB Direct Connect Interface</p> <p>2 EBUS and Dialer used with:</p> <ul style="list-style-type: none"> <li>• VDMP3 Plug-in Voice Module for voice reporting</li> <li>• PCS Series GSM Communicator Module</li> </ul> <p>3 <b>LEDs</b></p> <p>Charge LED:</p> <ul style="list-style-type: none"> <li>• Charging and battery test</li> </ul> <p>Status LED:</p> <ul style="list-style-type: none"> <li>• Flash once every second: Normal</li> <li>• Flashes ON 1 sec. and OFF 1 sec.: Any trouble</li> <li>• Always ON: Panel is using phone line</li> <li>• Fast flash 6 seconds after power-up: Installer lock enabled</li> </ul> <p>RX &amp; TX LED:</p> <ul style="list-style-type: none"> <li>• Flashes quickly when receiving or transmitting RF signals from wireless devices</li> </ul> <p>4 Four-pin connector can be used for quick installation of a keypad</p> <p>5 Antennas</p> | <p>6 Paradox Memory Key (PMC-4, PMC5)</p> <p>7 Refer to <i>Hardware Connections</i> on page 59</p> <p>8 The <b>BELL</b> output will shutdown if the current exceeds 3A</p> <p>9 Refer to <i>Alarm Relay and PGM Connections</i> on page 60</p> <p>10 16.5 Vac (50 or 60 Hz), minimum 20 VA (40 VA recommended)</p> <p>11 Refer to <i>AC Power &amp; Backup Battery Connections</i> on page 60</p> <p>12 Refer to <i>Panel Reset</i> on page 3</p> <p>13 AWG #14 single conductor solid copper wire</p> <p>14 Ground clamp</p> <p>15 Cold water pipe grounding</p> <p>16 To metallic enclosure</p> <p>17 For the keypad's zone configurations, see <i>Installer Quick Menu</i> on page 7</p> <p>18 If EOL is enabled, see section [706] option 2, on page 38; for the keypad's zone configurations, see <i>Installer Quick Menu</i> on page 7</p> <p>19 To connect additional wiring to auxiliary power, use the red (+) and black (-) keypad connectors; auxiliary power will shut down if current exceeds 1.1A; if the auxiliary output is overloaded and shuts down, you must disconnect all loads from the output for at least 10 sec. before reconnecting any load back to the auxiliary output</p> |
|--|---|

The sum of the current drawn from the BELL and AUX must be limited to 1.3A. Exceeding this limit will overload the panel power supply and lead to complete system shutdown.

40 VA transformer strongly recommended.

This equipment must be installed and maintained by qualified service personnel only.

For UL and C-UL warnings, refer to the UL and C-UL Warnings section at the back of the MGSP Reference & Installation Manual.

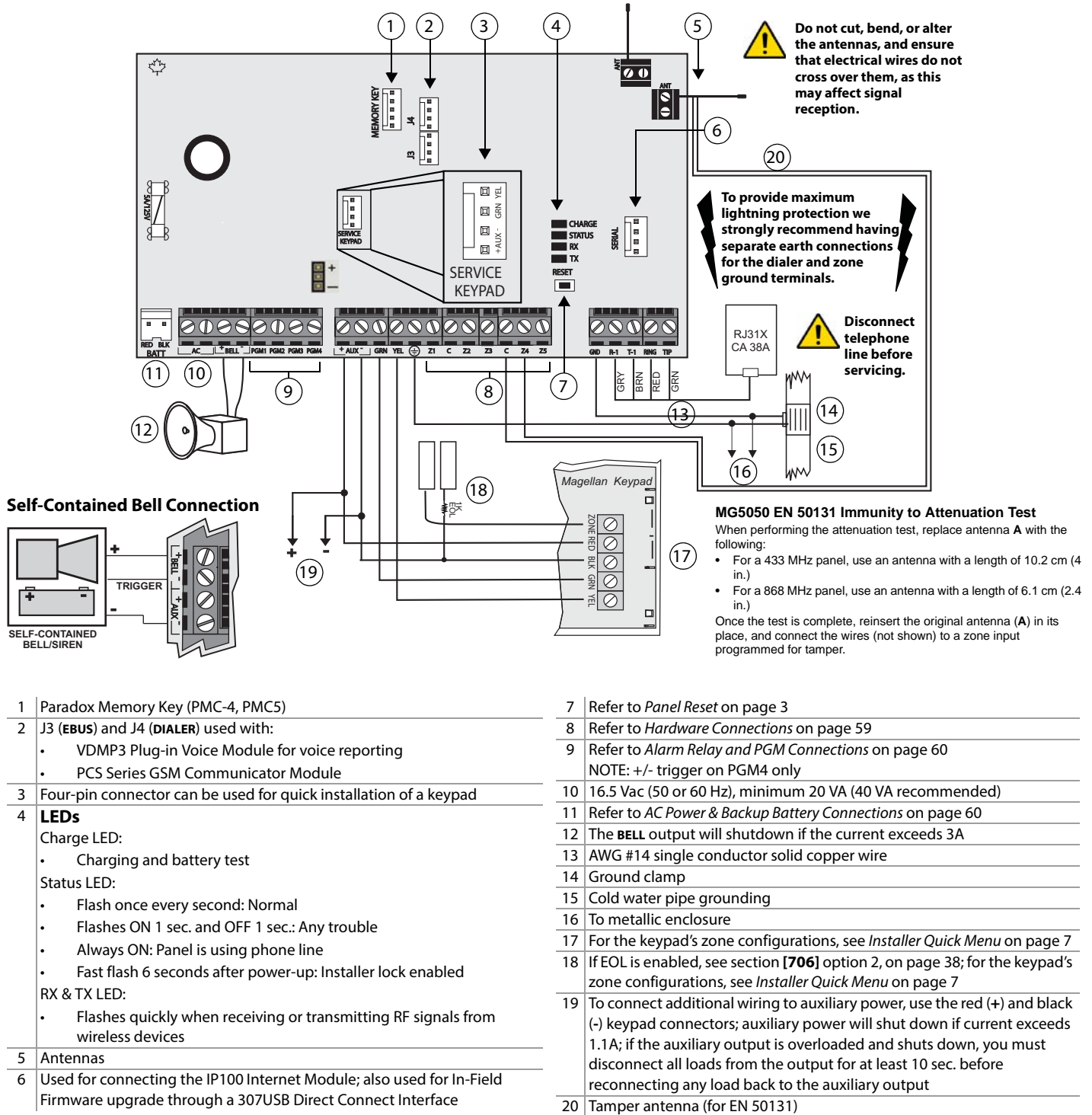
Max. number of keypads: 15 keypads

Max. aux. current: 700 mA

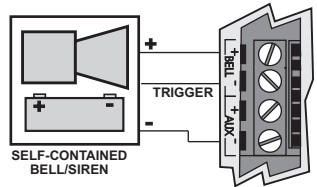
Max. distance of bus module from panel: 76 m (250 ft.)

Max. total run of wire: 230 m (750 ft.)

MG5050/MG5050E



**Self-Contained Bell Connection**



- |  |  |
|--|--|
| <p>1 Paradox Memory Key (PMC-4, PMC5)</p> <p>2 J3 (EBUS) and J4 (DIALER) used with:</p> <ul style="list-style-type: none"> <li>• VDMP3 Plug-in Voice Module for voice reporting</li> <li>• PCS Series GSM Communicator Module</li> </ul> <p>3 Four-pin connector can be used for quick installation of a keypad</p> <p>4 <b>LEDs</b><br/>             Charge LED:</p> <ul style="list-style-type: none"> <li>• Charging and battery test</li> </ul> <p>Status LED:</p> <ul style="list-style-type: none"> <li>• Flash once every second: Normal</li> <li>• Flashes ON 1 sec. and OFF 1 sec.: Any trouble</li> <li>• Always ON: Panel is using phone line</li> <li>• Fast flash 6 seconds after power-up: Installer lock enabled</li> </ul> <p>RX &amp; TX LED:</p> <ul style="list-style-type: none"> <li>• Flashes quickly when receiving or transmitting RF signals from wireless devices</li> </ul> <p>5 Antennas</p> <p>6 Used for connecting the IP100 Internet Module; also used for In-Field Firmware upgrade through a 307USB Direct Connect Interface</p> | <p>7 Refer to <i>Panel Reset</i> on page 3</p> <p>8 Refer to <i>Hardware Connections</i> on page 59</p> <p>9 Refer to <i>Alarm Relay and PGM Connections</i> on page 60<br/>             NOTE: +/- trigger on PGM4 only</p> <p>10 16.5 Vac (50 or 60 Hz), minimum 20 VA (40 VA recommended)</p> <p>11 Refer to <i>AC Power &amp; Backup Battery Connections</i> on page 60</p> <p>12 The BELL output will shutdown if the current exceeds 3A</p> <p>13 AWG #14 single conductor solid copper wire</p> <p>14 Ground clamp</p> <p>15 Cold water pipe grounding</p> <p>16 To metallic enclosure</p> <p>17 For the keypad's zone configurations, see <i>Installer Quick Menu</i> on page 7</p> <p>18 If EOL is enabled, see section [706] option 2, on page 38; for the keypad's zone configurations, see <i>Installer Quick Menu</i> on page 7</p> <p>19 To connect additional wiring to auxiliary power, use the red (+) and black (-) keypad connectors; auxiliary power will shut down if current exceeds 1.1A; if the auxiliary output is overloaded and shuts down, you must disconnect all loads from the output for at least 10 sec. before reconnecting any load back to the auxiliary output</p> <p>20 Tamper antenna (for EN 50131)</p> |
|--|--|



The sum of the current drawn from the BELL and AUX must be limited to 1.3A. Exceeding this limit will overload the panel power supply and lead to complete system shutdown.

40 VA transformer strongly recommended.

This equipment must be installed and maintained by qualified service personnel only.

For UL and C-UL warnings, refer to the UL and C-UL Warnings section at the back of the MGSP Reference & Installation Manual.

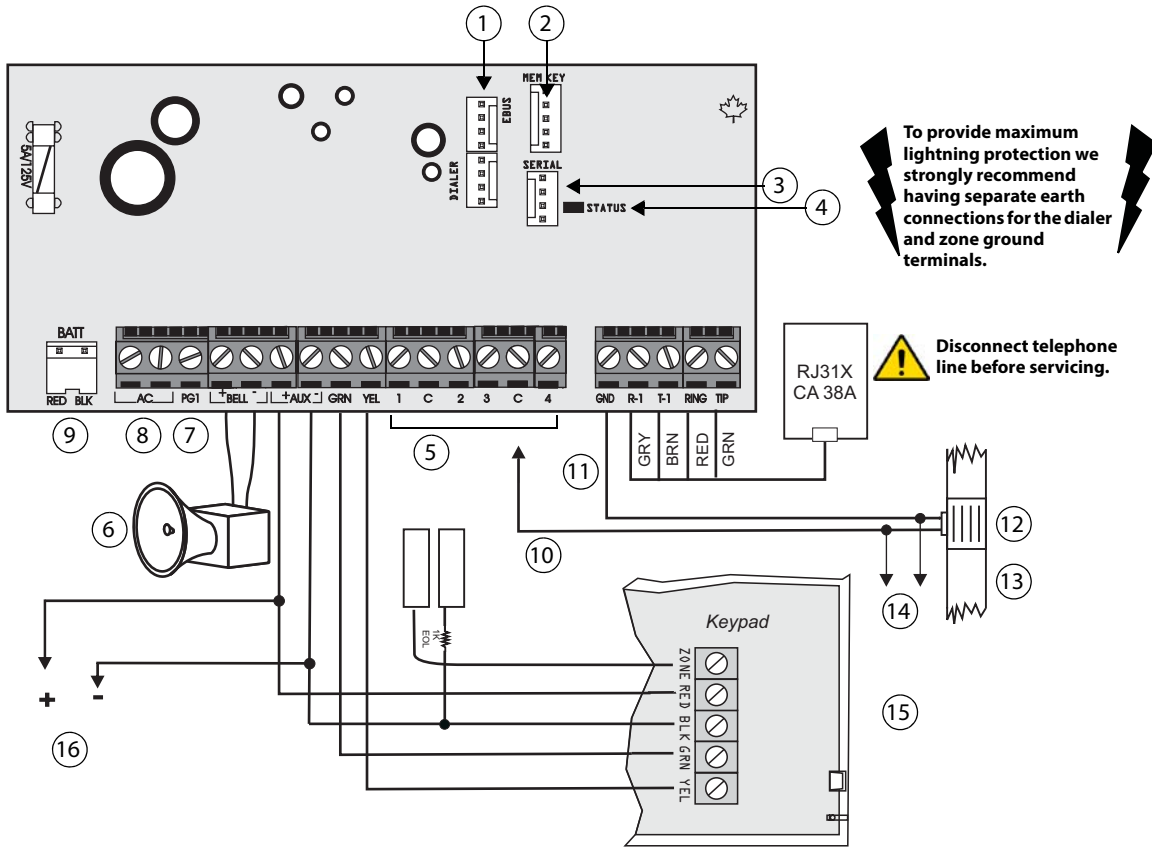
Max. number of keypads: 15 keypads

Max. aux. current: 700 mA

Max. distance of bus module from panel: 76 m (250 ft.)

Max. total run of wire: 230 m (750 ft.)

SP4000



To provide maximum lightning protection we strongly recommend having separate earth connections for the dialer and zone ground terminals.

Disconnect telephone line before servicing.

- 1 EBUS port used for GSM reporting using the PCS Series GSM Communicator Module; if using a CVT485 Plug-In RS485 Converter, connect the PCS module to the RS485 bus; DIALER and EBUS port used for voice reporting with the VDMP3 Plug-in Voice Module.
- 2 Paradox Memory Key (PMC-4, PMC5)
- 3 Used for connecting the IP100 Internet Module; also used for In-Field Firmware upgrade through a 307USB Direct Connect Interface
- 4 Status LED:
  - Flash once every second: Normal
  - Flashes ON 1 sec. and OFF 1 sec.: Any trouble
  - Always ON: Panel is using phone line
  - Fast flash 6 seconds after power-up: Installer lock enabled
- 5 Refer to *Hardware Connections* on page 59
- 6 The BELL output will shutdown if the current exceeds 3A
- 7 Refer to *Alarm Relay and PGM Connections* on page 60

- 8 16.5 Vac (50 or 60 Hz), minimum 20 VA (40 VA recommended)
- 9 Refer to *AC Power & Backup Battery Connections* on page 60
- 10 Connect to any common input
- 11 AWG #14 single conductor solid copper wire
- 12 Ground clamp
- 13 Cold water pipe grounding
- 14 To metallic enclosure
- 15 For the keypad's zone configurations, see *Installer Quick Menu* on page 7; If EOL is enabled, see section [706] option 2, on page 38
- 16 To connect additional wiring to auxiliary power, use the red (+) and black (-) keypad connectors; auxiliary power will shut down if current exceeds 1.1A; if the auxiliary output is overloaded and shuts down, you must disconnect all loads from the output for at least 10 sec. before reconnecting any load back to the auxiliary output

**Panel Reset**

To perform a panel reset, see *Panel Reset* on page 3.



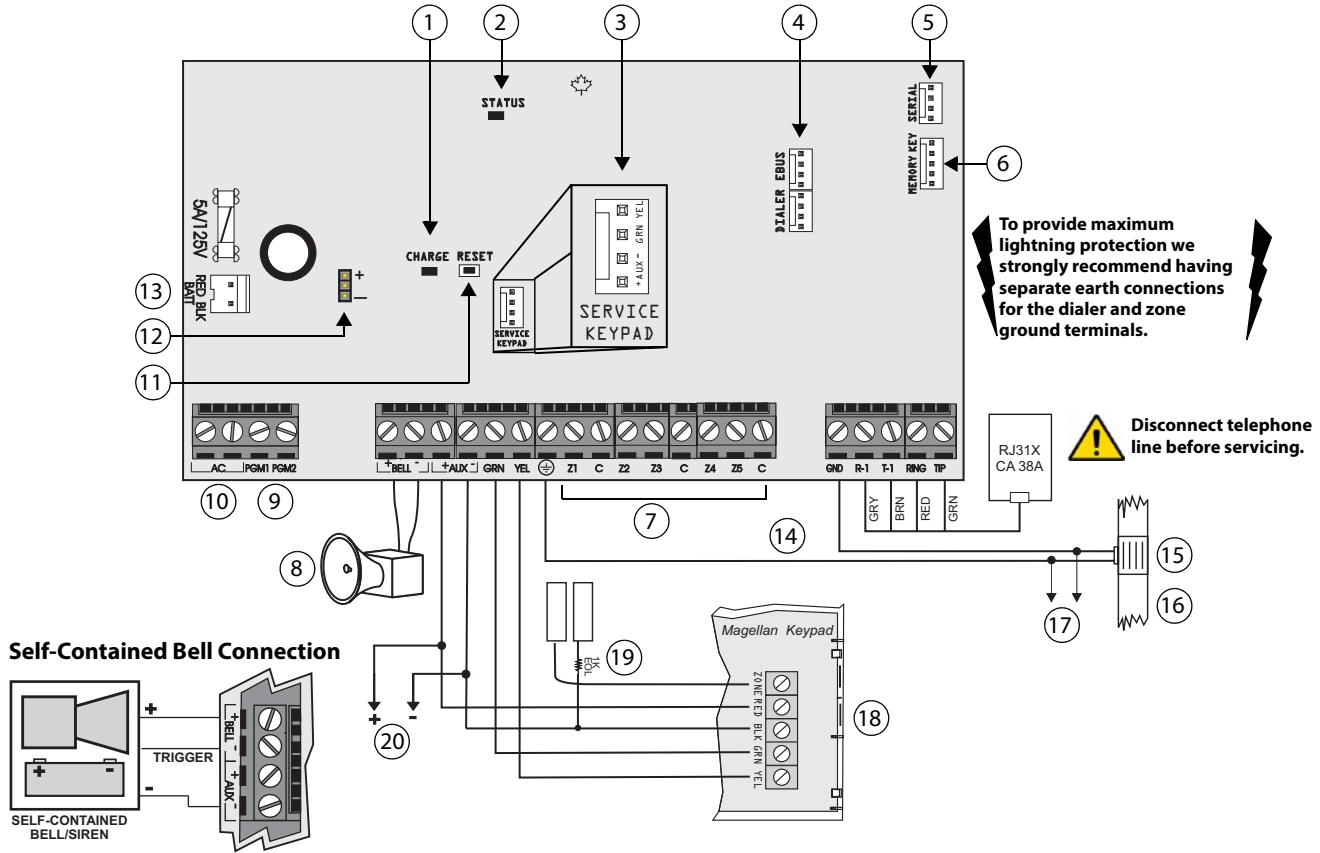
The sum of the current drawn from the BELL and AUX must be limited to 1.3A. Exceeding this limit will overload the panel power supply and lead to complete system shutdown.

40 VA transformer strongly recommended.

This equipment must be installed and maintained by qualified service personnel only. For UL and C-UL warnings, refer to the UL and C-UL Warnings section at the back of the MGSP Reference & Installation Manual.

- Max. number of keypads: 15 keypads
- Max. aux. current: 450 mA
- Max. distance of bus module from panel: 76 m (250 ft.)
- Max. total run of wire: 230 m (750 ft.)

SP5500



The sum of the current drawn from the BELL and AUX must be limited to 1.3A. Exceeding this limit will overload the panel power supply and lead to complete system shutdown.

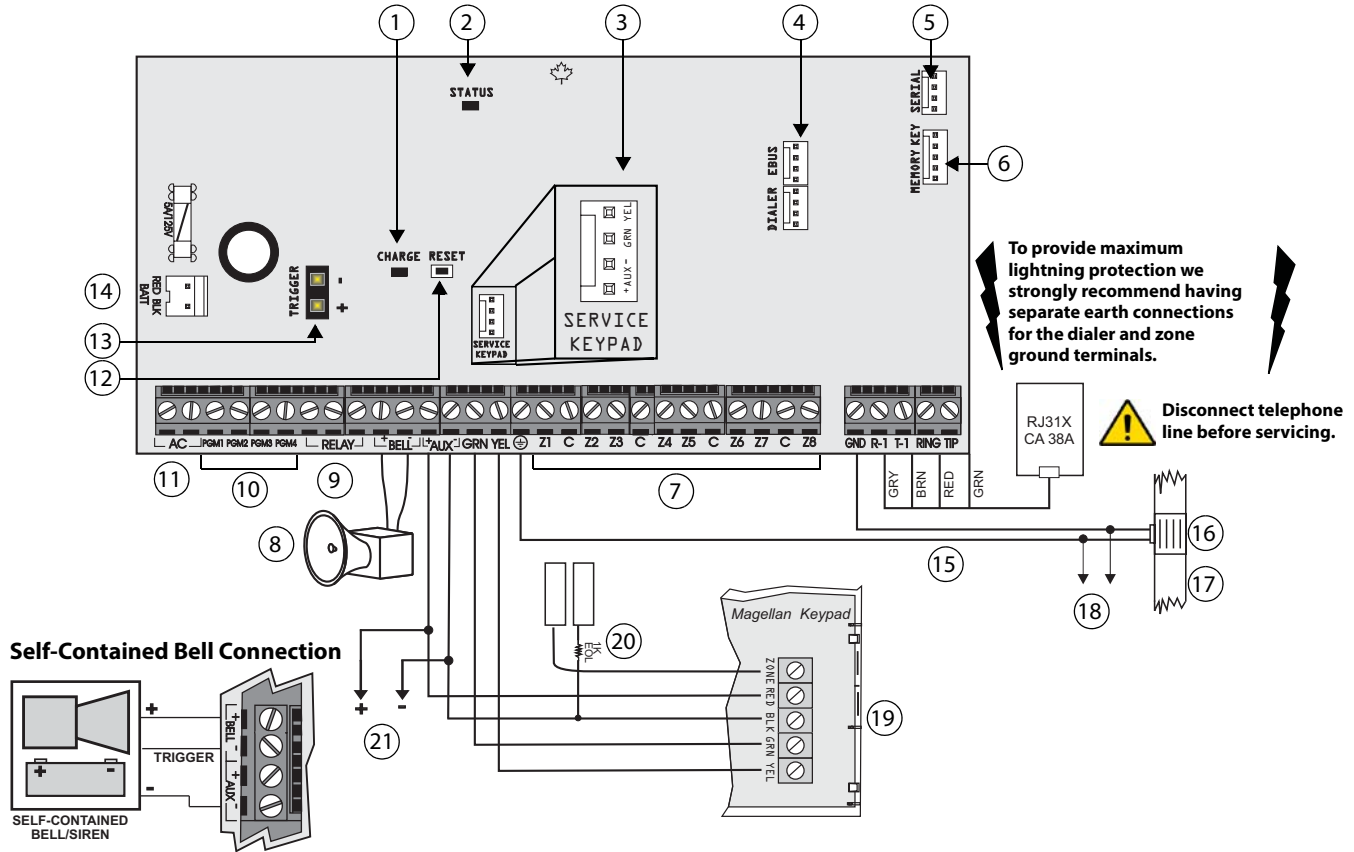
40 VA transformer strongly recommended.

This equipment must be installed and maintained by qualified service personnel only. For UL and C-UL warnings, refer to the UL and C-UL Warnings section at the back of the MGSP Reference & Installation Manual.

- Max. number of keypads: 15 keypads
- Max. aux. current: 700 mA
- Max. distance of bus module from panel: 76 m (250 ft.)
- Max. total run of wire: 230 m (750 ft.)



SP6000



- |  |  |
|--|--|
| <p>1 Charge LED:<br/>• Charging and battery test</p> <p>2 Status LED:<br/>• Flash once every second: Normal<br/>• Flashes ON 1 sec. and OFF 1 sec.: Any trouble<br/>• Always ON: Panel is using phone line<br/>• Fast flash 6 seconds after power-up: Installer lock enabled</p> <p>3 Four-pin connector can be used for quick installation of a keypad</p> <p>4 EBUS and Dialer used with:<br/>• VDMP3 Plug-in Voice Module for voice reporting<br/>• PCS Series GSM Communicator Module</p> <p>5 Used for connecting the IP100 Internet Module; also used for In-Field Firmware upgrade through a 307USB Direct Connect Interface</p> <p>6 Paradox Memory Key (PMC-4, PMC5)</p> <p>7 Refer to <i>Hardware Connections</i> on page 59</p> <p>8 The BELL output will shutdown if the current exceeds 3A</p> <p>9 Programmable output relay: max. 5A @ 60 Vdc or 120 Vac</p> <p>10 Refer to <i>Alarm Relay and PGM Connections</i> on page 60</p> | <p>11 16.5 Vac (50 or 60 Hz), minimum 20 VA (40 VA recommended)</p> <p>12 Refer to <i>Panel Reset</i> on page 3</p> <p>13 PGM trigger: this jumper allows you to choose whether the solid state relay PGMs are grounded (-) or give out 12V (+)</p> <p>14 Refer to <i>AC Power &amp; Backup Battery Connections</i> on page 60</p> <p>15 AWG #14 single conductor solid copper wire</p> <p>16 Ground clamp</p> <p>17 Cold water pipe grounding</p> <p>18 To metallic enclosure</p> <p>19 For the keypad's zone configurations, see <i>Installer Quick Menu</i> on page 7</p> <p>20 If EOL is enabled, see section [706] option 2, on page 38; for the keypad's zone configurations, see <i>Installer Quick Menu</i> on page 7</p> <p>21 To connect additional wiring to auxiliary power, use the red (+) and black (-) keypad connectors; auxiliary power will shut down if current exceeds 1.1A; if the auxiliary output is overloaded and shuts down, you must disconnect all loads from the output for at least 10 sec. before reconnecting any load back to the auxiliary output</p> |
|--|--|

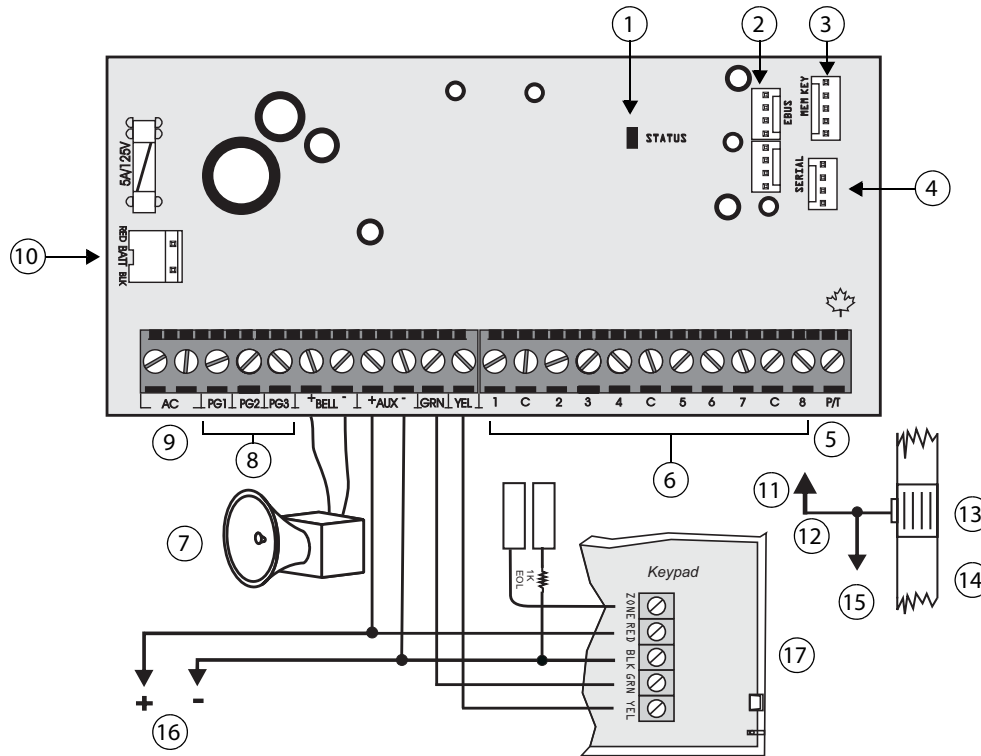
**The sum of the current drawn from the BELL and AUX must be limited to 1.3A. Exceeding this limit will overload the panel power supply and lead to complete system shutdown.**  
**40 VA transformer strongly recommended.**

**This equipment must be installed and maintained by qualified service personnel only.**  
**For UL and C-UL warnings, refer to the UL and C-UL Warnings section at the back of the MGSP Reference & Installation Manual.**

- Max. number of keypads: 15 keypads
- Max. aux. current: 700 mA
- Max. distance of bus module from panel: 76 m (250 ft.)
- Max. total run of wire: 230 m (750 ft.)

**When using an SP6000 in conjunction with an RTX3, all K32 and K10V/H keypads must be versions 2.0 and higher.**

SP65



- |   |  |    |  |
|---|--|----|--|
| 1 | Status LED: <ul style="list-style-type: none"> <li>Flash once every second: Normal</li> <li>Flashes ON 1 sec. and OFF 1 sec.: Any trouble</li> <li>Always ON: Panel is using phone line</li> </ul> Fast flash 6 seconds after power-up: Installer lock enabled | 9  | 16.5 Vac (50 or 60 Hz), minimum 20 VA (40 VA recommended)  |
| 2 | EBUS port used for GSM reporting using the PCS Series GSM Communicator Module; if using a CVT485 Plug-In RS485 Converter, connect the PCS module to the RS485 bus; DIALER and EBUS port used for voice reporting with the VDM3 Plug-in Voice Module.           | 10 | Refer to <i>AC Power &amp; Backup Battery Connections</i> on page 60   |
| 3 | Paradox Memory Key (PMC-4, PMC5)   | 11 | Connect to any common input  |
| 4 | Used for connecting the IP100 Internet Module; also used for In-Field Firmware upgrade through a 307USB Direct Connect Interface   | 12 | AWG #14 single conductor solid copper wire   |
| 5 | Panic/tamper input   | 13 | Ground clamp   |
| 6 | Refer to <i>Hardware Connections</i> on page 59  | 14 | Cold water pipe grounding  |
| 7 | The BELL output will shutdown if the current exceeds 3A  | 15 | To metallic enclosure  |
| 8 | Refer to <i>Alarm Relay and PGM Connections</i> on page 60   | 16 | To connect additional wiring to auxiliary power, use the red (+) and black (-) keypad connectors; auxiliary power will shut down if current exceeds 1.1A; if the auxiliary output is overloaded and shuts down, you must disconnect all loads from the output for at least 10 sec. before reconnecting any load back to the auxiliary output |
|   |  | 17 | For the keypad's zone configurations, see <i>Installer Quick Menu</i> on page 7; If EOL is enabled, see section [706] option 2, on page 38   |

**Panel Reset**

To perform a panel reset, see *Panel Reset* on page 3.



The sum of the current drawn from the BELL and AUX must be limited to 1.3A. Exceeding this limit will overload the panel power supply and lead to complete system shutdown.

40 VA transformer strongly recommended.

This equipment must be installed and maintained by qualified service personnel only.

For UL and C-UL warnings, refer to the UL and C-UL Warnings section at the back of the MGSP Reference & Installation Manual.

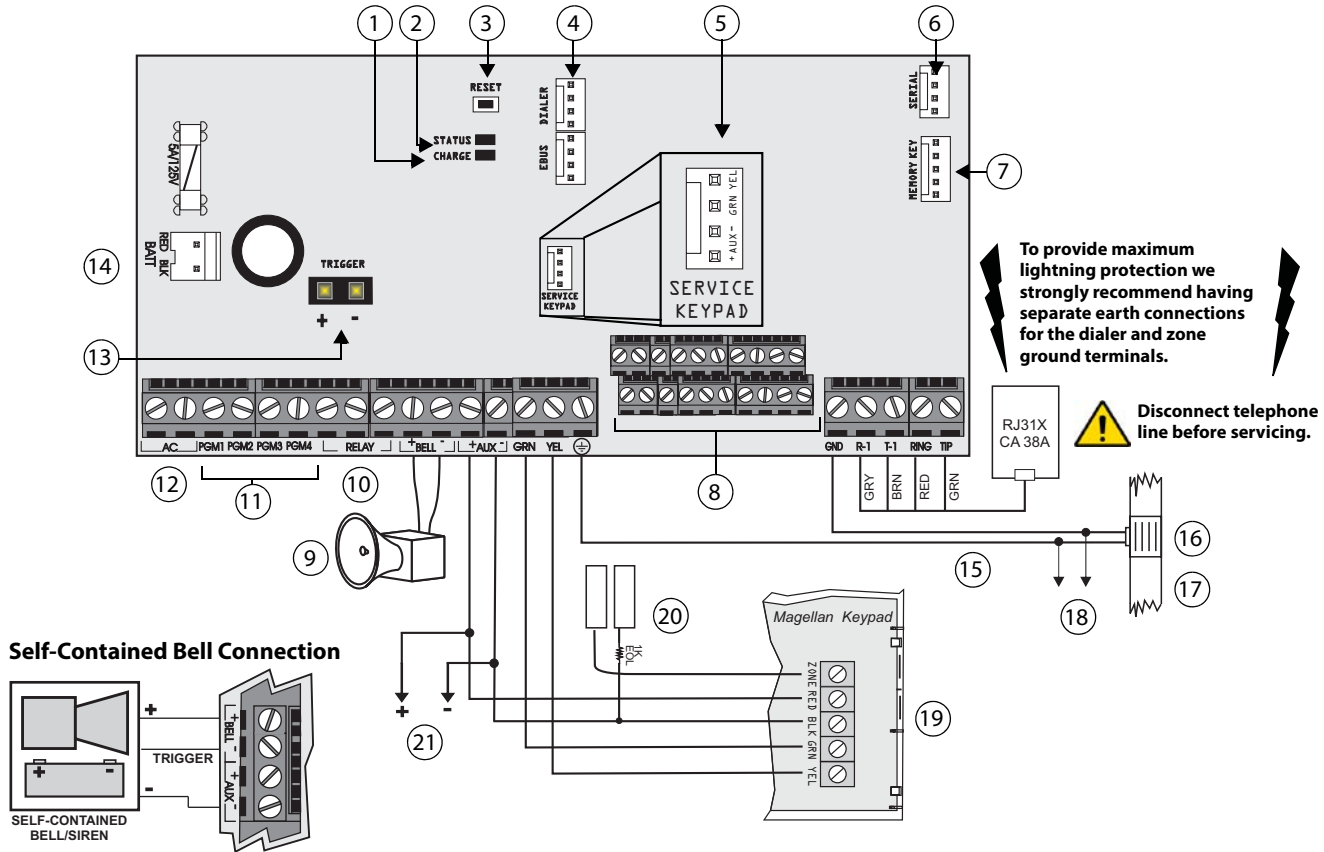
Max. number of keypads: 15 keypads

Max. aux. current: 500 mA

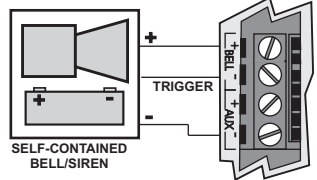
Max. distance of bus module from panel: 76 m (250 ft.)

Max. total run of wire: 230 m (750 ft.)

SP7000



Self-Contained Bell Connection



- |  |   |
|--|---|
| <p>1 Charge LED:</p> <ul style="list-style-type: none"> <li>• Charging and battery test</li> </ul> <p>2 Status LED:</p> <ul style="list-style-type: none"> <li>• Flash once every second: Normal</li> <li>• Flashes ON 1 sec. and OFF 1 sec.: Any trouble</li> <li>• Always ON: Panel is using phone line</li> <li>• Fast flash 6 seconds after power-up: Installer lock enabled</li> </ul> <p>3 Refer to <i>Panel Reset</i> on page 3</p> <p>4 EBUS and Dialer used with:</p> <ul style="list-style-type: none"> <li>• VDMP3 Plug-in Voice Module for voice reporting</li> <li>• PCS Series GSM Communicator Module</li> </ul> <p>5 Four-pin connector can be used for quick installation of a keypad</p> <p>6 Used for connecting the IP100 Internet Module; also used for In-Field Firmware upgrade through a 307USB Direct Connect Interface</p> <p>7 Paradox Memory Key (PMC-4, PMC5)</p> <p>8 Refer to <i>Hardware Connections</i> on page 59</p> <p>9 The <b>BELL</b> output will shutdown if the current exceeds 3A</p> <p>10 Programmable output relay: max. 5A @ 60 Vdc or 120 Vac</p> | <p>11 Refer to <i>Alarm Relay and PGM Connections</i> on page 60</p> <p>12 16.5 Vac (50 or 60 Hz), minimum 20 VA (40 VA recommended)</p> <p>13 PGM trigger: this jumper allows you to choose whether the solid state relay PGMs are grounded (-) or give out 12V (+)</p> <p>14 Refer to <i>AC Power &amp; Backup Battery Connections</i> on page 60</p> <p>15 AWG #14 single conductor solid copper wire</p> <p>16 Ground clamp</p> <p>17 Cold water pipe grounding</p> <p>18 To metallic enclosure</p> <p>19 For the keypad's zone configurations, see <i>Installer Quick Menu</i> on page 7</p> <p>20 If EOL is enabled, see section [706] option 2, on page 38; for the keypad's zone configurations, see <i>Installer Quick Menu</i> on page 7</p> <p>21 To connect additional wiring to auxiliary power, use the red (+) and black (-) keypad connectors; auxiliary power will shut down if current exceeds 1.1A; if the auxiliary output is overloaded and shuts down, you must disconnect all loads from the output for at least 10 sec. before reconnecting any load back to the auxiliary output</p> |
|--|---|



The sum of the current drawn from the BELL and AUX must be limited to 1.3A. Exceeding this limit will overload the panel power supply and lead to complete system shutdown.

40 VA transformer strongly recommended.

This equipment must be installed and maintained by qualified service personnel only. For UL and C-UL warnings, refer to the UL and C-UL Warnings section at the back of the MGSP Reference & Installation Manual.

- Max. number of keypads: 15 keypads
- Max. aux. current: 700 mA
- Max. distance of bus module from panel: 76 m (250 ft.)
- Max. total run of wire: 230 m (750 ft.)



**Magellan & Spectra  
Quick Programming Guide  
AU Defaults V1.7**

Led Keypads

**[ENTER] - [0000]**

Default panel **[950] - [ENTER] ONCE only!**

Reset Switch

Press and hold until status light flashes fast, release, then press again once quickly.

Zones 001 ~ 032 (32 Zones)				
Location	Zone	Type	Area	Zone Options
001	1	01	1	1 2 3 4 5 6 7 8
002	2	06	1	1 2 3 4 5 6 7 8
003	3	09	1	1 2 3 4 5 6 7 8
004	4	09	1	1 2 3 4 5 6 7 8
005	5	09	1	1 2 3 4 5 6 7 8
006	6	09	1	1 2 3 4 5 6 7 8
007	7	09	1	1 2 3 4 5 6 7 8
008	8	09	1	1 2 3 4 5 6 7 8

Dialler		
Location	Features	Data
Note	Account Number (811) 0 = A on TM50	
811	Account P1	----
815	Phone # 1	-----
817	Backup Phone	-----
840	Auto Test Days	007
850	Auto Test Time	02 : 00

Timers		
Location	Features	Data
710	Entry Delay 1	030
712	Swinger Shutdown	001
713	Twin Trip Timer	048
720	Sleep Entry Delay	015
745	Area 1 Exit Time	045
747	Bell Timer	004
839	AC Fail Delay	015

00 - Disabled
01 - Entry 1 + Sleep
03 - Entry 1
06 - Handover + Sleep
07 - Handover
09 - Instant + Sleep
10 - Instant
12 - Fire (30 sec delay)
15 - 24 Hour Buzzer
16 - 24 Hour Audible

1 - Swinger Shutdown
2 - Bypassable Zone
3 - RF Zone Supervision
4 - Siren:Stdy, Sil, Pulsed
5 - Siren:Stdy, Sil, Pulsed
6 - Twin Trip
7 - Delay Alarm TX
8 - Forced Zone enable

Installer / Master Codes		
Location	Codes	Data
397	Installer	0000
399	System Master	1234

PGM's (Panel specific)	
PGM	Feature
PGM 1	Strobe
PGM 2	Screamer
PGM 3	Smoke Reset
PGM 4	Button C on Remote
PGM 5	Button C on Remote

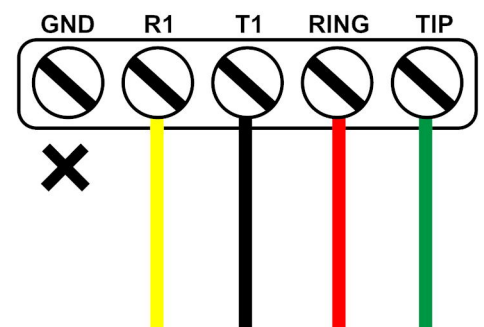
700		701		702		703		704	
1	Partitioning	1	4 digit code	1	Panic 1, Police	1	Quick arm away	1	Force arm away
2	Battery charge increase	2	Lock master code	2	Panic 2, Medical	2	Quick arm stay	2	Force arm stay
3	C/Pad beeps on trouble	3	Confidential mode	3	Panic 3, Fire	3	Quick arm sleep	3	Force arm sleep
4	C/Pad beeps on AC fail	4	Key to exit confidential	4	Panic 1, audible	4	Quick bypass	4	Bell squawk / remotes
5	RF jam supervision	5	Confidential time 5sec	5	Panic 2, audible	5	No Arm if battery fail	5	Bell squawk / keypad
6	Exit delay termination	6	REM2 V2.01 up	6	Panic 3, audible	6	No Arm if tamper	6	Exit Beeps enabled
7	Tmp sup. on bus/module	7	Entry delay on LCD	7	N/A	7	No Arm if supervision	7	No exit beeps / stay arm
8	N/A	8	Exit delay on LCD	8	N/A	8	Arm/Disarm VDMP3	8	No exit delay / remotes

705		706		800		801		802	
1	Zone Doubling	1	Supervision check in	1	Phone line monitor	1	Open ONLY after alarm	1	Open/Close Rec # 1
2	Parallel EOLs	2	EOLs enabled	2	Phone line monitor	2	Zone restores	2	Open/Close Rec # 2
3	Zone tamper	3	2 Wire smoke	3	Pulse dialing	3	Auto test	3	Open/Close Pager
4	Zone tamper	4	ZX8 A Zone 1 = tamper	4	Alternate dial	4	Auto test	4	N/A
5	Tamper on bypass	5	ZX8 B Zone 1 = tamper	5	Force dial	5	Contact ID override	5	Alarm/Restores Rec # 1
6	Wireless supervision	6	ZX8 C Zone 1 = tamper	6	DTMF	6	Bell on alarm kissoff	6	Alarm/Restores Rec # 2
7	Wireless supervision	7	N/A	7	Pulse ratio	7	Bell on arming kissoff	7	Alarm/Restores Pager
8	Supervision on bypass	8	N/A	8	Deactivate dialler	8	C/Pad beeps on kissoff	8	N/A

**Note: Turn 1 OFF for Monitored Commercial**

User Report Codes 471 ~ 502 (32 users) FF FF for Commercial installations		
Location	Codes	Data
471	User 1	00 FF
472	User 2	00 FF
473	User 3	00 FF
474	User 4	00 FF
475	User 5	00 FF
476	User 6	00 FF
477	User 7	00 FF
478	User 8	00 FF

Notes			
EOL's	1K (Green), 2K2 (Red Red Red)		
181~212	Zone Labels		
341~356	PGM Labels		
511~542	User Labels		
955	Module Scan		
970	Download from Key TO control panel		
975	Upload FROM control panel to Key		
0	Sleep	B	OFF
C	BYP	F	



# Wireless

Wireless Zones 061 ~ 092 (32 Zones)		
Signal Strength = 101 ~ 132 Labels = 181 ~ 212		
Location	Zone	Serial Number
061	1	000000
062	2	000000
063	3	000000
064	4	000000
065	5	000000
066	6	000000
067	7	000000
068	8	000000

Wireless Keyfobs 651 ~ 682 (32 Keyfobs)		
Labels = 511 ~ 542		
Location	Keyfobs	Serial Number
651	1	000000
652	2	000000
653	3	000000
654	4	000000
655	5	000000
656	6	000000
657	7	000000
658	8	000000

Wireless Keypads 571 ~ 578 (8 Keypads)		
Signal Strength = 591 ~ 598 Labels = 599 ~ 606 PWR +BYP to learn in		
Location	Keypad	Serial Number
571	1	000000
572	2	000000
573	3	000000
574	4	000000
575	5	000000
576	6	000000
577	7	000000
578	8	000000

Wireless PGM's 301 ~ 316 (16 PGM's)		
Signal Strength = 321 ~ 336 Labels = 341 ~ 356		
Location	PGM	Serial Number
301	1	000000
302	2	000000
303	3	000000
304	4	000000
305	5	000000
306	6	000000
307	7	000000
308	8	000000

Wireless Siren 683 ~ 686 (4 max)		
Signal Strength = 687 ~ 690 Labels = 691 ~ 694		
Location	Siren	Serial Number
683	1	000000
684	2	000000
685	3	000000
686	4	000000

Wireless Repeater		
Signal Strength = 548 ~ 549 Labels = 568 ~ 569 RPT1 Device allocation = 551 ~ 557 RPT2 Device allocation = 561 ~ 567		
Location	Repeater	Serial Number
545	1	000000
546	2	000000

Key fob Buttons functions ( REM1, 2 and 15)				
Location				
610	(1) (Arm)	(4) (Sleep)	(C) (PGM)	(8) (Panic)



REM 15



REM 2



REM 3

Add / Modify a User Code	
Step	
1	[MASTER CODE]
2	2 Digit user number 01~32
3	New user code
4	New user code
5	[ENTER]
	<i>Back to step 2</i>
6	[CLEAR] to Exit

Delete a User Code	
Step	
1	[MASTER CODE]
2	2 Digit user number 01~32
3	[SLEEP] Hold for 3 seconds
	<i>Back to step 2</i>
4	[CLEAR] to Exit

Set Time and Date AM / PM Format	
Step	
1	[MASTER CODE]
2	[TBL] 5
3	Hours : Minutes
4	[2] = AM, [3] = PM
5	Year : Month : Day
6	[CLEAR] to Exit

Backlight	
Step	
1	[MEM] Hold for 3 seconds
2	Press [MEM] to raise / lower
3	[CLEAR][CLEAR] to Exit

Personal Phone Numbers	
Step	
1	[MASTER CODE]
2	[MEM]
3	[3] Personal Phone # 1
	[4] Personal Phone # 2
	[5] Personal Phone # 3
	[6] Personal Phone # 4
	[7] Personal Phone # 5
4	Phone Number [ENTER]
5	[CLEAR] to Exit

Smoke Reset	
Step	
1	Press and hold  for 5 seconds

Chime On / Off	
Step	
1	Press and hold Zone key to turn Chime On / Off

[TBL]	Trouble Display
1	Wireless zone low battery
2	Power trouble
3	Bell trouble
4	Communication trouble
5	Tamper / Zone wiring trouble
6	Module tamper trouble
7	Fire loop trouble
8	Timer loss
9	Wireless zone supervision loss
10	Module supervision loss
16	Keypad fault (K32, K35, K37)
Sleep	Keypad fault (K10, K636)

Additional information on page 56 of programming manual



1300 319 499

The whole Paradox team wishes you a successful and easy installation. We hope this product performs to your complete satisfaction.

Should you have any questions or comments, please contact us.

For support, please contact your local distributor, or dial 1-800-791-1919 (in North America) or +1-450-491-7444 (outside North America), Monday to Friday, from 8:00 a.m. to 8:00 p.m. EST.

You may also e-mail us at [support@paradox.com](mailto:support@paradox.com).  
Additional information can be found at [PARADOX.COM](http://PARADOX.COM)



**1300 319 499**

**P ▲ R ▲ D O X™**

MGSP-EP29\_AU\_V1.31