P O S O N I C

EX10 & EX18

System Programming Guide

Software Versions 4.8 (EX10) and 4.2 (EX18)

Installer Code (default - EX10: 282828; EX18: 383838)

Full access to programming, except user access codes (PINs). No access to arming/disarming. Use only numeric keys from **[0]** to **[9]**.

Zone Recognition

Table 1: Zone Recognition

Device connected to which input?	EX10 No ATZ	EX10 With ATZ	EX18 No ATZ	EX18 With ATZ
Control Panel				
Input 1 =	Zone 1	Zones 1 & 2	Zone 1	Zones 1 & 9
Input 2 =	Zone 2	Zones 3 & 4	Zone 2	Zones 2 & 10
Input 3 =	Zone 3	Zones 5 & 6	Zone 3	Zones 3 & 11
Input 4 =	Zone 4	Zones 7 & 8	Zone 4	Zones 4 & 12
Input 5 =	N/A	N/A	Zone 5	Zones 5 & 13
Input 6 =	N/A	N/A	Zone 6	Zones 6 & 14
Input 7 =	N/A	N/A	Zone 7	Zones 7 & 15
Input 8 =	N/A	N/A	Zone 8	Zones 8 & 16
Keypad				
Zone 1 =	Zone 5	Zone 9	Zone 9	Zone 17
Zone 2 =	Zone 6	Zone 10	Zone 10	Zone 18

Streamlined Section Programming

This is an alternate method to Hex Programming (see page 2). Addresses **000** to **043** and **300** to **527** are grouped into 68 sections where each section contains four addresses (i.e. section **00** = addresses **000** to **003**). Using this method allows you to program 8 digits (4 addresses) without having to exit and re-enter addresses.

The keypad will not display the current data in the Streamlined Section Programming method.

Table 2: Streamlined Section Programming Method

1. Press **[ENTER]** + **[INSTALLER CODE]** (default - EX10: **282828**; EX18: **383838**) + **[7]**.
2. The **[ENTER]** and **[2ND]** keys will flash to indicate you are in programming mode (LED keypad only).
3. Enter 2-digit **[SECTION]** (**00** to **67**).
4. The **[ENTER]** key will remain on while the **[2ND]** key will be off (LED keypad only).
5. Enter 8-digit **[DATA]** to program the section.
6. The keypad will beep to indicate that the section has been programmed, data is saved and the software has advanced to the next section.
7. Return to step 4 or press **[CLEAR]** to exit programming mode.

Keypad Trouble Display

Press the **[TBL]/[TRBL]** key to view the trouble. Any illuminated keys represent a specific trouble as indicated in *Table 3* below. Press the **[CLEAR]** button to exit the trouble display.

Table 3: Trouble Display

[1] - No Battery or Low Voltage	**[7]** - Communicator Report Failure
[2] - Power Failure	**[8]** - Timer Loss* (to clear, see **[MEM]** key in *Table 11* on page 11)
[4] - Bell Output Disconnected	**[9]** - Tamper or Zone Wiring Failure
[5] - Exceeded Maximum Bell Current	**[10]** - Telephone Line Monitoring Failure
[6] - Exceeded Maximum Auxiliary Current	**[11]** - Fire Loop Trouble

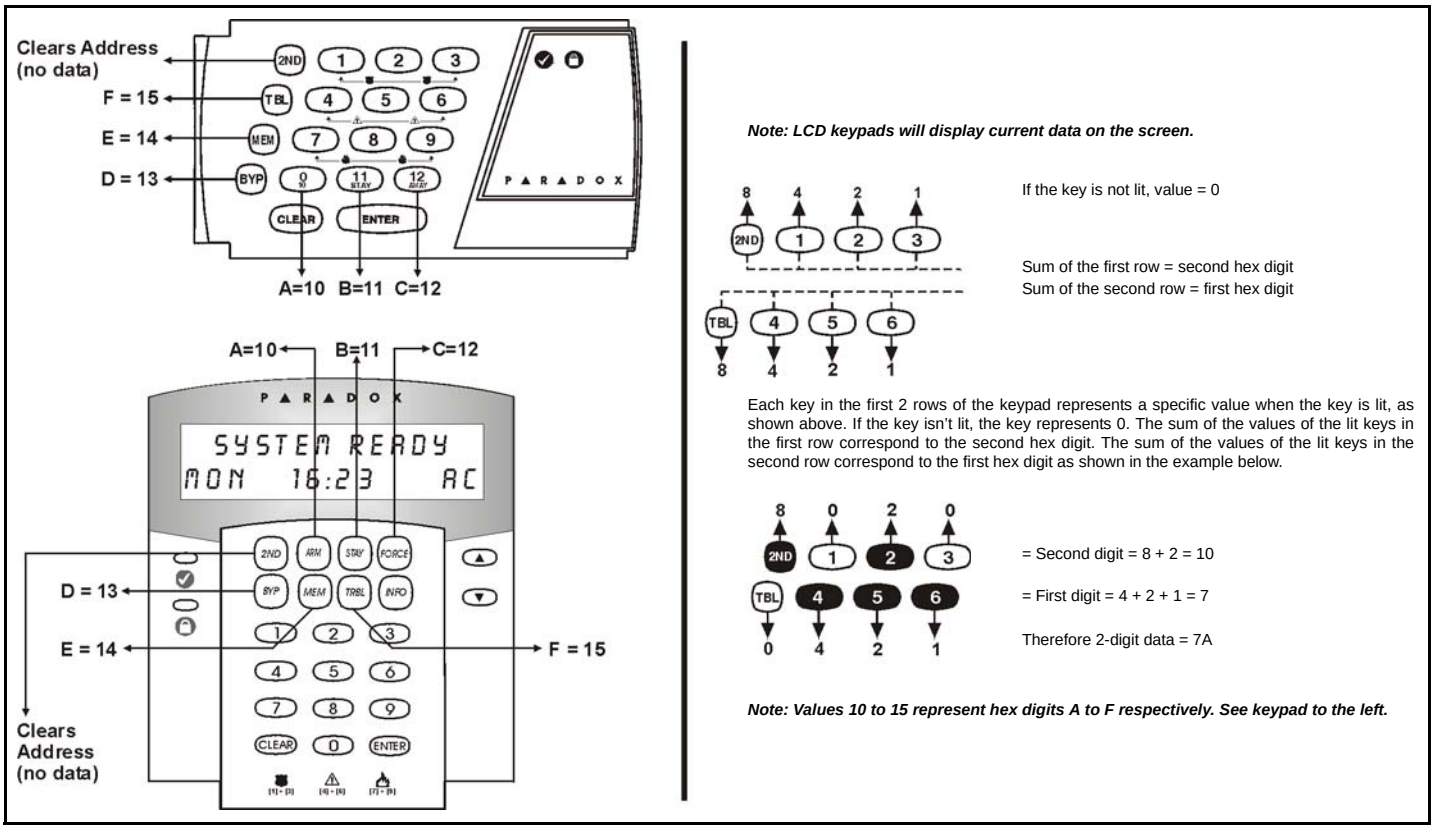
Hex Programming

This is an alternate method to the Streamlined Section Programming (see page 1). Addresses **000** to **043** and **300** to **527** can be programmed using the Hex Programming method. In this mode, you can enter any hexadecimal digit from 0 to F where keys **[1]** to **[9]** represent digits 1 to 9 respectively; the other keys represent hexadecimal digits A to F as shown in Figure 1 below.

Table 4: Hex Programming Method

1. Press **[ENTER]** + **[INSTALLER CODE]** (EX10: **282828**; EX18: **383838**).
2. The **[ENTER]** key will flash indicating you are in programming mode (LED keypad only).
3. Enter the desired 3-digit **[ADDRESS]**.
4. The keypad will display the 2-digit data currently saved at this address as described in Figure 1 below.
5. Enter 2-digit **[DATA]** and do not press **[ENTER]**, the software automatically saves the data.
6. Return to step 2 or press **[CLEAR]** to exit programming mode.

Figure 1: Hex Digit Data Entry and Data Display for LED Keypads



Installer / Panel Answer Options

Streamline Section	Data	Description	Address
00	___ / ___	Installer code (1st, 2nd digit)	**000**
	___ / ___	Installer code (3rd, 4th digit)	**001**
	___ / ___	Installer code (5th, 6th digit)	**002**
	___ / ___	Panel answer options	**003**

Number of rings (Max. 15)

Answering Machine Override

[2ND] or **[1]** = disabled	**[5]** = 40 seconds
[2] = 16 seconds	**[6]** = 48 seconds
[3] = 24 seconds	**[7]** = 56 seconds
[4] = 32 seconds	**[8]** to **[F]** = 60 seconds

First digit disables Answering Machine Override (key **[2ND]** or key **[1]**), or determines period of time between first and second call. Second digit determines number of rings required before panel will answer. If **[2ND][2ND]** is entered, panel will not answer (default value is **[2ND] [8]**).

Streamline Section	Data	Description	Address	
01	___ / ___	Panel Identifier (1st, 2nd digit)	**004**	Identifies the control panel to the PC.
	___ / ___	Panel Identifier (3rd, 4th digit)	**005**	
	___ / ___	PC Password (1st, 2nd digit)	**006**	Identifies the PC to the control panel.
	___ / ___	PC Password (3rd, 4th digit)	**007**	

Telephone and Account Numbers

If only one monitoring station telephone number is used, program the same number for telephone numbers 1 and 2. If only one account number is required, the same number must be entered for both accounts "A" and "B".

[0] to **[9]** = numeric value
[STAY] = *
[AWAY]/[FORCE] = #
[BYP] = switch from pulse to tone while dialing
[MEM] = pause 4 seconds
[TBL]/[TRBL] = end of number

Computer Telephone Number (View at addresses **008** to **015**)

Streamline Section		Streamline Section		
02	__/__/__/__/__/__/__/__ 1 2 3 4 5 6 7 8	**03**	__/__/__/__/__/__/__/__ 9 10 11 12 13 14 15 16	**Press the [TBL]/[TRBL] key to end phone number if less than 16 digits are programmed.**

Monitoring Station Telephone Number 1 (View at addresses **016** to **023**)

Streamline Section		Streamline Section		
04	__/__/__/__/__/__/__/__ 1 2 3 4 5 6 7 8	**05**	__/__/__/__/__/__/__/__ 9 10 11 12 13 14 15 16	**Press the [TBL]/[TRBL] key to end phone number if less than 16 digits are programmed.**

Monitoring Station Telephone Number 2 (View at addresses **024** to **031**)

Streamline Section		Streamline Section		
06	__/__/__/__/__/__/__/__ 1 2 3 4 5 6 7 8	**07**	__/__/__/__/__/__/__/__ 9 10 11 12 13 14 15 16	**Press the [TBL]/[TRBL] key to end phone number if less than 16 digits are programmed.**

Accounts "A" and "B" (View at addresses **032** to **035**)

Streamline Section			
08	__/__/__/__ 1 2 3 4 **A**	__/__/__/__ 5 6 7 8 **B**	**For 3-digit account numbers, enter "skip" ([2ND]) as first digit. The Standard Pulse report format can support 3- or 4-digit account numbers. The Ademco Express, Ademco Contact ID and the Pager report formats only support 4-digit account numbers.**

Streamline Section	Data	Description	Address
09	[2ND] / [2ND]	Future Use	036
	___ / ___	*1st digit:* Pager Delay (see table at right) *2nd digit:* Time correction (see table at right)	037
	___ / ___	*1st digit:* Communicator Format 1 *2nd digit:* Communicator Format 2	038
	___ / ___	*1st digit:* PGM1 type *2nd digit:* PGM2 type (EX18 only)	039

Streamline Section	Data	Description	Address
10	___ / ___	PGM1	040
	___ / ___	PGM2 (738 Ultra only)	041
	___ / ___	PGM Mask 1	042
	___ / ___	PGM Mask 2 (EX18 only)	043

Pager Delay Table *(1st digit)*

[2ND] or **[1]** = 8s	**[9]** = 72s
[2] = 16s	**[0]** = 80s
[3] = 24s	**[STAY]** = 88s
[4] = 32s	**[FORCE]**/**[AWAY]** = 96s
[5] = 40s	**[BYP]** = 104s
[6] = 48s	**[MEM]** = 112 s
[7] = 56s	**[TBL]**/**[TRBL]** = 120s
[8] = 64s	

Time Correction Table *(2nd digit)*

[2ND] = No adjustment	**[8]** = Minus 4s
[1] = Plus 4s	**[9]** = Minus 8s
[2] = Plus 8s	**[0]** = Minus 12s
[3] = Plus 12s	**[STAY]** = Minus 16s
[4] = Plus 16s	**[FORCE]** = Minus 20s
[5] = Plus 20s	**[BYP]** = Minus 24s
[6] = Plus 24s	**[MEM]** = Minus 28s
[7] = Plus 28s	**[TRBL]** = Minus 32s

Communicator Formats (* = supports 4-digit account codes only)

Key		Key	
[2ND]	= **ADEMCO** slow (1400Hz, 1900Hz, 10bps)	**[6]**	= **RADIONICS** with PARITY (1400Hz, 40bps)
[1]	= (1400Hz, 1800Hz, 10bps)	**[7]**	= **RADIONICS** with PARITY (2300Hz, 40bps)
[2]	= **SILENT KNIGHT** fast (1400Hz, 1900Hz, 20bps)	**[8]**	= *** ADEMCO** express
[3]	= **SESCOA** (2300Hz, 1800Hz, 20bps)	**[9]**	= *** ADEMCO** contact ID (programmable codes)
[4]	= **RADIONICS** (40bps with 1400Hz handshake)	**[0]**	= *** ADEMCO** contact ID (all codes)
[5]	= **RADIONICS** (40bps with 2300Hz handshake)	**[TBL] / [TRBL]**	= *** PAGER FORMAT** (personal dialing)

Programmable Contact ID Event Codes

All addresses from **300** to **527** (sections 11 to 67) programmed with values other than **[2ND] [2ND]** will report the contact ID codes corresponding to the values programmed. Values to be programmed should be selected from this table.

CID	Reporting Code	Prog. Value	CID	Reporting Code	Prog. Value
100:	AUXILIARY ALARM	**[2ND] / [1]**	300:	SYSTEM TROUBLE	**[2] / [2]**
110:	FIRE ALARM	**[2ND] / [2]**	301:	AC LOSS	**[2] / [3]**
111:	FIRE SMOKE	**[2ND] / [3]**	302:	LOW SYSTEM BATTERY	**[2] / [4]**
112:	COMBUSTION	**[2ND] / [4]**	305:	SYSTEM RESET	**[2] / [5]**
113:	WATER FLOW	**[2ND] / [5]**	306:	PROGRAM CHANGED	**[2] / [6]**
114:	HEAT	**[2ND] / [6]**	309:	BATTERY TEST FAIL	**[2] / [7]**
115:	PULLSTATION	**[2ND] / [7]**	320:	SOUNDER/RELAY TROUBLE	**[2] / [8]**
116:	DUCT	**[2ND] / [8]**	321:	BELL 1 TROUBLE	**[2] / [9]**
117:	FLAME	**[2ND] / [9]**	323:	ALARM RELAY TROUBLE	**[2] / [0]**
118:	NEAR ALARM	**[2ND] / [0]**	350:	COMMUNICATION TROUBLE	**[2] / [STAY]**
120:	PANIC ALARM	**[2ND] / [STAY]**	351:	TELCO 1 FAULT	**[2ND] / [AWAY] OR [FORCE]**
121:	DURESS	**[2ND] / [AWAY] OR [FORCE]**	354:	FAIL TO COMMUNICATE	**[2] / [BYP]**
122:	SILENT PANIC	**[2ND] / [BYP]**	370:	PROTECTION LOOP TROUBLE	**[2] / [MEM]**
123:	AUDIBLE PANIC	**[2ND] / [MEM]**	371:	PROTECTION LOOP OPEN	**[2] / [TRBL]**
130:	BURGLARY	**[2ND] / [TRBL]**	372:	PROTECTION LOOP SHORT	**[3] / [2ND]**
131:	PERIMETER BURGLARY	**[1] / [2ND]**	373:	FIRE LOOP TROUBLE	**[3] / [1]**
132:	INTERIOR BURGLARY	**[1] / [1]**	382:	SENSOR TROUBLE	**[3] / [2]**
133:	24HR BURGLARY	**[1] / [2]**	383:	SENSOR TAMPER	**[3] / [3]**
136:	BURGLARY OUTDOOR	**[1] / [3]**	400:	OPEN / CLOSE	**[3] / [4]**
137:	BURGLARY TAMPER	**[1] / [4]**	401:	OPEN / CLOSE BY USER #	**[3] / [5]**
138:	BURGLARY NEAR ALARM	**[1] / [5]**	402:	GROUP OPEN / CLOSE	**[3] / [6]**
140:	GENERAL ALARM	**[1] / [6]**	403:	AUTOMATIC OPENING / CLOSING	**[3] / [7]**
150:	24 HOUR AUXILIARY	**[1] / [7]**	404:	LATE TO OPEN / CLOSE	**[3] / [8]**
151:	GAS DETECTED	**[1] / [8]**	407:	REMOTE ARM DOWNLOAD	**[3] / [9]**
152:	REFRIGERATION	**[1] / [9]**	410:	REMOTE ACCESS	**[3] / [0]**
153:	LOSS OF HEAT	**[1] / [0]**	441:	OPEN / CLOSE - STAY MODE	**[3] / [STAY]**
154:	WATER LEAKAGE	**[1] / [STAY]**	570:	BYPASS	**[3] / [AWAY] OR [FORCE]**
155:	FOIL BREAK ALARM	**[1] / [AWAY] OR [FORCE]**	572:	24 HOUR ZONE BYPASS	**[3] / [BYP]**
156:	DAY TROUBLE ALARM	**[1] / [BYP]**	573:	BURGLARY BYPASS #	**[3] / [MEM]**
157:	LOW GAS LEVEL	**[1] / [MEM]**	574:	GROUP BYPASS	**[3] / [TRBL]**
158:	HIGH TEMPERATURE	**[1] / [TRBL]**	601:	MANUAL TEST	**[4] / [2ND]**
159:	LOW TEMPERATURE	**[2] / [2ND]**	602:	PERIODIC TEST	**[4] / [1]**
161:	LOSS AIR FLOW	**[2] / [1]**	625:	TIME / DATE RESET	**[4] / [2]**
			654:	SYSTEM INACTIVITY	**[4] / [3]**

Reporting Codes

All digits from **[1]** to **[F]** are valid. **[2ND]** = digit will not be reported except for Contact ID programmable codes. For single digit reporting, enter "skip" (**[2ND]**) as the first digit (default = **[2ND]** / **[2ND]**).

Enter FF to program the default Ademco Contact ID report code when using the Ademco Contact ID (programmable codes) or Pager report formats.
If the Contact ID Format (all codes) is selected, addresses 300 to 527 (sections 11 to 67) do not have to be programmed. To select Contact ID (all codes) you must set key [0] at section 09/address 038 for both monitoring station numbers (see page 4).

Arming (Closing) Report Codes:

Streamline Section	Data	Description	Address
11	___ / ___	Auto / Esploade	300
	___ / ___	Master	301
	___ / ___	User Code 1	302
	___ / ___	User Code 2	303
12	___ / ___	User Code 3	304
	___ / ___	User Code 4	305
	___ / ___	User Code 5	306
	___ / ___	User Code 6	307
13	___ / ___	User Code 7	308
	___ / ___	User Code 8	309
	___ / ___	User Code 9	310
	___ / ___	User Code 10	311
14	___ / ___	User Code 11	312
	___ / ___	User Code 12	313
	___ / ___	User Code 13	314
	___ / ___	User Code 14	315
15	___ / ___	User Code 15	316
	___ / ___	User Code 16	317
	___ / ___	User Code 17	318
	___ / ___	User Code 18	319
16	___ / ___	User Code 19	320
	___ / ___	User Code 20	321
	___ / ___	User Code 21	322
	___ / ___	User Code 22	323
17	___ / ___	User Code 23	324
	___ / ___	User Code 24	325
	___ / ___	User Code 25	326
	___ / ___	User Code 26	327
18	___ / ___	User Code 27	328
	___ / ___	User Code 28	329
	___ / ___	User Code 29	330
	___ / ___	User Code 30	331
19	___ / ___	User Code 31	332
	___ / ___	User Code 32	333
	___ / ___	User Code 33	334
	___ / ___	User Code 34	335
20	___ / ___	User Code 35	336
	___ / ___	User Code 36	337
	___ / ___	User Code 37	338
	___ / ___	User Code 38	339
21	___ / ___	User Code 39	340
	___ / ___	User Code 40	341
	___ / ___	User Code 41	342
	___ / ___	User Code 42	343
22	___ / ___	User Code 43	344
	___ / ___	User Code 44	345
	___ / ___	User Code 45	346
	___ / ___	User Code 46	347
23	___ / ___	User Code 47	348
	___ / ___	User Code 48 / (Duress)	349
	Continues in next section.		

Disarming (Opening) Report Codes *(reset code **"empty"**):*

Streamline Section	Data	Description	Address
23	See previous section		
	___ / ___	Auto / Esploade	350
	___ / ___	Master	351
24	___ / ___	User Code 1	352
	___ / ___	User Code 2	353
	___ / ___	User Code 3	354
	___ / ___	User Code 4	355
25	___ / ___	User Code 5	356
	___ / ___	User Code 6	357
	___ / ___	User Code 7	358
	___ / ___	User Code 8	359
26	___ / ___	User Code 9	360
	___ / ___	User Code 10	361
	___ / ___	User Code 11	362
	___ / ___	User Code 12	363

Disarming (Opening) Report Codes *(reset code **"empty"**):* *(continued)*

Streamline Section	Data	Description	Address
27	___ / ___	User Code 13	**364**
	___ / ___	User Code 14	**365**
	___ / ___	User Code 15	**366**
	___ / ___	User Code 16	**367**
28	___ / ___	User Code 17	**368**
	___ / ___	User Code 18	**369**
	___ / ___	User Code 19	**370**
	___ / ___	User Code 20	**371**
29	___ / ___	User Code 21	**372**
	___ / ___	User Code 22	**373**
	___ / ___	User Code 23	**374**
	___ / ___	User Code 24	**375**
30	___ / ___	User Code 25	**376**
	___ / ___	User Code 26	**377**
	___ / ___	User Code 27	**378**
	___ / ___	User Code 28	**379**
31	___ / ___	User Code 29	**380**
	___ / ___	User Code 30	**381**
	___ / ___	User Code 31	**382**
	___ / ___	User Code 32	**383**
32	___ / ___	User Code 33	**384**
	___ / ___	User Code 34	**385**
	___ / ___	User Code 35	**386**
	___ / ___	User Code 36	**387**
33	___ / ___	User Code 37	**388**
	___ / ___	User Code 38	**389**
	___ / ___	User Code 39	**390**
	___ / ___	User Code 40	**391**
34	___ / ___	User Code 41	**392**
	___ / ___	User Code 42	**393**
	___ / ___	User Code 43	**394**
	___ / ___	User Code 44	**395**
35	___ / ___	User Code 45	**396**
	___ / ___	User Code 46	**397**
	___ / ___	User Code 47	**398**
	___ / ___	User Code 48 / (Duress)	**399**

Alarm Report Codes For Zones 1 to 10 (18) †:

Streamline Section	Data	Description	Address
36	___ / ___	Zone 1	**400**
	___ / ___	Zone 2	**401**
	___ / ___	Zone 3/Fire zone* ***(fire address 100)***	**402**
	___ / ___	Zone 4	**403**
37	___ / ___	Zone 5/Fire zone**	**404**
	___ / ___	Zone 6	**405**
	___ / ___	Zone 7	**406**
	___ / ___	Zone 8	**407**
38	___ / ___	Zone 9	**408**
	___ / ___	Zone 10	**409**
	___ / ___	Zone 11 (EX18 only)	**410**
	___ / ___	Zone 12 (EX18 only)	**411**
39 (738 Ultra only)	___ / ___	Zone 13	**412**
	___ / ___	Zone 14	**413**
	___ / ___	Zone 15	**414**
	___ / ___	Zone 16	**415**
40 (738 Ultra only)	___ / ___	Zone 17	**416**
	___ / ___	Zone 18	**417**
41		Future Use	**418 - 423**

Alarm Restore Report Codes For Zones 1 to 10 (18) †:

Streamline Section	Data	Description	Address
42	___ / ___	Zone 1	**424**
	___ / ___	Zone 2	**425**
	___ / ___	Zone 3/Fire zone* ***(fire address 100)***	**426**
	___ / ___	Zone 4	**427**
43	___ / ___	Zone 5/Fire zone**	**428**
	___ / ___	Zone 6	**429**
	___ / ___	Zone 7	**430**
	___ / ___	Zone 8	**431**
44	___ / ___	Zone 9	**432**
	___ / ___	Zone 10	**433**
	___ / ___	Zone 11 (EX18 only)	**434**
	___ / ___	Zone 12 (EX18 only)	**435**
45 (EX18 only)	___ / ___	Zone 13	**436**
	___ / ___	Zone 14	**437**
	___ / ___	Zone 15	**438**
	___ / ___	Zone 16	**439**
46 (EX18 only)	___ / ___	Zone 17	**440**
	___ / ___	Zone 18	**441**
47		Future Use	**442 - 447**

* = Fire zone for 4-wire smoke detectors or 2-wire smoke detectors (with no ATZ enabled—EX10 only).
** = Fire zone for 2-wire smoke detectors (address 086, key **[BYP]**) only when ATZ is enabled (address 090, key **[8]**). Applies only to EX10.
† = Zones 1 to 10 for the 728 Ultra and Zones 1 to 18 for the EX18

Zones 1 to 10 (18)† Shutdown Report Codes:

Streamline Section	Data	Description	Address
48	___ / ___	Zone 1	448
	___ / ___	Zone 2	449
	___ / ___	Zone 3	450
	___ / ___	Zone 4	451
49	___ / ___	Zone 5	452
	___ / ___	Zone 6	453
	___ / ___	Zone 7	454
	___ / ___	Zone 8	455
50	___ / ___	Zone 9	456
	___ / ___	Zone 10	457
	___ / ___	Zone 11 (EX18 only)	458
	___ / ___	Zone 12 (EX18 only)	459
51 (738 Ultra only)	___ / ___	Zone13	460
	___ / ___	Zone 14	461
	___ / ___	Zone 15	462
	___ / ___	Zone 16	463
52 (738 Ultra only)	___ / ___	Zone17	464
	___ / ___	Zone 18	465
53		Future Use	466 - 471

Tampers 1 to 4, 5 and 7 (8)‡ Report Codes:

Streamline Section	Data	Description	Address
54	___ / ___	Tamper 1	472
	___ / ___	Tamper 2	473
	___ / ___	Tamper 3	474
	___ / ___	Tamper 4	475
55	___ / ___	Tamper 5	476
	___ / ___	Tamper 6 (EX18 only)	477
	___ / ___	Tamper 7	478
	___ / ___	Tamper 8 (EX18 only)	479
56 to 59		Future Use	480 - 495

† = Zones 1 to 10 for the EX10 and Zones 1 to 18 for the EX18

‡ = Zones 1 to 4, 5 and 7 for EX10 and Zones 1 to 8 for EX18

Trouble Report Codes:

Streamline Section	Data	Description	Address
60	___ / ___	Max. aux. current	496
	___ / ___	Bell disconnect / max. bell current	497
	___ / ___	Battery disconnect / low voltage	498
	___ / ___	Power failure	499
61	___ / ___	Fire loop trouble	500
	___ / ___	Timer loss	501
	[2ND]/[2ND]	Future Use	502
	[2ND]/[2ND]	Future Use	503

Trouble Restore Report Codes:

Streamline Section	Data	Description	Address
62	___ / ___	Max. aux. current	504
	___ / ___	Bell disconnect / max. bell current	505
	___ / ___	Battery disconnect / low voltage	506
	___ / ___	Power failure	507
63	___ / ___	Fire loop trouble	508
	___ / ___	Timer programmed	509
	___ / ___	Tamper / wiring fault	510
	___ / ___	TLM restore	511

Special Report Codes:

Streamline Section	Data	Description	Address
64	___ / ___	Test report	512
	___ / ___	Panic 1	513
	___ / ___	Panic 2	514
	___ / ___	Panic 3	515
65	___ / ___	Late to close	516
	___ / ___	No movement	517
	___ / ___	Partial Arming	518
	___ / ___	Recent Close	519
66	___ / ___	Duress	520
	___ / ___	Closing Delinquency	521
	[2ND]/[2ND]	Future Use	522
	[2ND]/[2ND]	Future Use	523
67	___ / ___	Login (Espload)	524
	___ / ___	Program Change	525
	[2ND]/[2ND]	Future Use	526
	[2ND]/[2ND]	Future Use	527

Decimal Programming

The decimal programming method is used to program all of the system's timers. This method uses a 3-digit address from **044** to **061** and each address is programmed with a value from **000** to **255**.

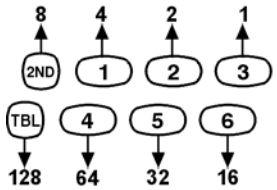
Table 5: Decimal Programming Method

1. Press **[ENTER]** + **[INSTALLER CODE]** (default - EX10: **282828**; EX18: **383838**)
2. The **[ENTER]** key will flash to indicate that you are in programming mode (LED keypad only).
3. Enter 3-digit **[ADDRESS]** (**044** to **061**).
4. The keypad displays the current 3-digit data saved at this address as described in *Figure 2* below.
5. Enter 3-digit **[DATA]** (000 to 255) and do **not** press **[ENTER]**. The software will automatically save the data.
6. Return to step 2 or press **[CLEAR]** to exit programming mode.

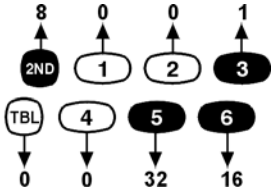
Address	Data	Description	Default
044	___ / ___ / ___	(hours) Auto arm time (between "000" and "023")	*000*
045	___ / ___ / ___	(minutes) Auto arm time (between "000" and "059")	*000*
046	___ / ___ / ___	(days or hours) Auto test report every ? (between "001" and "254") (000 = disabled) If address 090 key **[3]** OFF = address 046 in days (see page 10) If address 090 key **[3]** ON = address 046 in hours (see page 10) **EX18 only:** Enter "255" to enable a Timed Test Transmission when the system is armed or disarmed (see the "728 Ultra/738 Ultra Reference & Installation Manual" for more information)	*000*
047	___ / ___ / ___	(hours) Auto test report (between "000" and "023") **EX18only:** (minutes) If address 046 = 255 and the system is armed, Armed Test Report (between "001" and "255")	*000*
048	___ / ___ / ___	(minutes) Auto test report (between "000" and "059") **EX18 only:** (minutes) If address 046 = 255 and the system is disarmed, Disarmed Test Report (between "001" and "255")	*000*
049	___ / ___ / ___	(seconds) Exit delay	*60 seconds*
050	___ / ___ / ___	(seconds) Entry delay 1	*45 seconds*
051	___ / ___ / ___	(seconds) Entry delay 2	*45 seconds*
052	___ / ___ / ___	(minutes) Bell cut-off time	*5 minutes*
053	___ / ___ / ___	(x 15 ms) Zone speed	*600 ms*
054	___ / ___ / ___	(minutes) Power failure report delay (000 = disabled)	*30 minutes*
055	___ / ___ / ___	(x 15 minutes) No movement Auto-Arm time (000 = disabled)	*Disabled*
056	___ / ___ / ___	PGM timer setting (001 to 127 for seconds and 129 to 255 for minutes) Add 128 to desired value in minutes (i.e. for 5 minutes: enter 5 + 128 = 133)	*5 seconds*
057	___ / ___ / ___	Intellizone delay (in seconds, minimum = 10 seconds)	*48 seconds*
058	___ / ___ / ___	Installer code lock (147 = locked, 000 = unlocked). When Installer Lock is enabled on a control panel: For 4 seconds during power up, the STATUS LED flashes while the dialer relay opens and closes making a clicking noise.	*Unlocked*
059	___ / ___ / ___	(seconds) Programmable delay before alarm transmission (005 to 063 seconds) (000 = disabled)	*Disabled*
060	___ / ___ / ___	(seconds) Recent closing delay (000 = disabled)	*Disabled*
061	___ / ___ / ___	(days or hours) Closing delinquency timer (System A) If address 090 key **[3]** OFF = address 061 in days (see page 10) If address 090 key **[3]** ON = address 061 in hours (see page 10)	*Disabled*

Figure 2: Decimal Display For LED Keypads

Each key in the first 2 rows of the keypad represents a specific value when the key is lit, as shown below left. When the key isn't lit, the key represents 0. Add the values of the lit keys to obtain the entered data value as shown in the example below right.



Example:



Therefore
8 + 1 + 32 + 16 = 057

Note: LCD keypads will display current data on the screen.

Feature Select Programming

Addresses **062** to **126** are programmed using the Feature Select Programming method. In this method, every key on the keypad in each address represents an option or feature. Pressing a key will display it on the keypad and pressing it again will extinguish the key. The ON or OFF status of each key determines the selected feature. Addresses **080** to **085** are reserved for future use. To program using the Feature Select Programming method:

Table 6: Feature Select Programming Method

1. Press **[ENTER]** + **[INSTALLER CODE]** (default - EX10: **282828**; EX18: **383838**)
2. The **[ENTER]** key will flash to indicate you are in programming mode (LED keypad only).
3. Enter 3-digit **[ADDRESS]** (**062** to **126**).
4. After entering the address, the keypad will display the feature selection status. Turn the keys ON or OFF by pressing the appropriate key until the desired options are set. Press the **[ENTER]** key to accept, there will be a confirmation beep indicating the options have been accepted. The **[ENTER]** key will flash to indicate that the software is awaiting the next address entry.
5. Return to step 3 to continue programming or press **[CLEAR]** to exit programming mode.

Table 7: Code Priority For System “A” / STAY

KEY SELECT:	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[0]	[STAY]	[AWAY]/ [FORCE]	[BYP]	[MEM]	[TRBL]	[2ND]
User #:	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
062	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
User #:	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32
064	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
User #:	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48
066:	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐

Table 8: Code Priority For System “B” / AWAY / FORCE

KEY SELECT:	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[0]	[STAY]	[AWAY]/ [FORCE]	[BYP]	[MEM]	[TRBL]	[2ND]
User #:	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
068:	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
User #:	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32
070:	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
User #:	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48
072:	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐

Table 9: Code Priority for Codes with Bypass Access

KEY SELECT:	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[0]	[STAY]	[AWAY]/ [FORCE]	[BYP]	[MEM]	[TRBL]	[2ND]
User #:	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
074:	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
User #:	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32
076:	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
User #:	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48
078:	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐

△ = default

086:

	OFF	KEY	ON	
See "TLM" table at right	△	[2ND]	☐	
	△	[1]	☐	
Keyswitch = Regular arm	△	[2]	☐	Stay arm / System A
Keyswitch arming	△	[3]	☐	Enabled
Call back	△	[4]	☐	Enabled
Auto arm on time	△	[5]	☐	Enabled
Auto arm on no movement	△	[6]	☐	Enabled
Pulse dialing	△	[7]	☐	Tone dialing (DTMF)
Partitioning	△	[8]	☐	Enabled
Silent zone/panic generates a silent alarm	△	[9]	☐	Generates only a report
(1:2) Pulse Europe	△	[0]	☐	(1:1.5) Pulse USA
See "Reporting Options" table at right	△	[STAY]	☐	
	△	[AWAY]/[FORCE]	☐	
2-wire smoke detector (input 3)	△	[BYP]	☐	Enabled
Bell squawk on arm/disarm	△	[MEM]	☐	Enabled
Auto zone shutdown	△	[TRBL]	☐	Enabled

Telephone Line Monitoring (TLM)

KEY [2ND]	[1]	
OFF	OFF	- TLM disabled
OFF	ON	- TLM generates trouble only
ON	OFF	- Generates an alarm if armed
ON	ON	- Silent alarm becomes audible

(address **086**, key **[9]** has to be **OFF**)

Reporting Options

KEY [STAY]	[AWAY]/[FORCE]	
OFF	OFF	- Reporting disabled
OFF	ON	- Regular reporting
ON	OFF	- Split* reporting (Alarms & System)
ON	ON	- Double reporting

Report Dialing Sequence (tel. no.)

Regular:	1,2,1,2,1,2,1,2, fail to comm.
Split*:	Alarms - 1,1,1,1,1,1,1,1, fail to comm System - 2,2,2,2,2,2,2,2, fail to comm
Double:	1,1,1,1,1,1,1,1, fail to comm 2,2,2,2,2,2,2,2, fail to comm

**** On alarm, all reports are made to Tel. #1 until system is disarmed. Once disarmed, system reports are made to Tel. #2.***

088:

	OFF		ON	
Automatic event buffer transmission	△	[2ND]	☐	Enabled
Panic 1 (keys **[1]** and **[3]**)	△	[1]	☐	Enabled
Panic 2 (keys **[4]** and **[6]**)	△	[2]	☐	Enabled
Panic 3 (keys **[7]** and **[9]**)	△	[3]	☐	Enabled
Panic 1 silent	△	[4]	☐	Audible
Panic 2 silent	△	[5]	☐	Audible
Panic 3 silent	△	[6]	☐	Fire
Key **[0]/[ARM]** - Regular arming	△	[7]	☐	Enabled
Key **[STAY]** - Stay or system A arm	△	[8]	☐	Enabled
6-digit access codes	△	[9]	☐	4-digit access codes
Tamper Recognition	△	[0]	☐	
	△	[STAY]	☐	
Beep on exit delay	△	[AWAY]/[FORCE]	☐	Enabled
Report zone restore on bell cut-off	△	[BYP]	☐	On zone closure
Zones with EOL (1kΩ)	☐	[MEM]	△	No EOL
Always report disarm	△	[TRBL]	☐	Only after alarm

Tamper / Wire Fault Definitions

System Armed	KEY [0]	[STAY]	System Disarmed*
Alarm as per individual zone definitions	OFF	OFF	- Tamper supervision disabled
Always generate trouble and alarm, audible or silent as per individual zone definitions	OFF	ON	- No alarm. Trouble code reported
	ON	OFF	- Silent alarm. Trouble & alarm codes reported
	ON	ON	- Audible alarm. Trouble & alarm codes reported**

**** Exception: for 24 Hr zones, the tamper definition will follow the audible/silent alarm definition of the 24 Hr zone.***

***** Silent zones will generate a silent alarm.***

090:

	OFF		ON	
Exclude power failure from trouble display	△	[2ND]	☐	Enabled
Zone 4 (728 Ultra)/Zone 11 (738 Ultra)* enabled	△	[1]	☐	Disabled*
Auto arm = Regular arm	△	[2]	☐	Stay / System A
Auto test report / Closing delinquency timer in days	△	[3]	☐	In hours
Restrict arming on battery failure	△	[4]	☐	Enabled
Restrict arming on tamper trouble**	△	[5]	☐	Enabled**
No tamper bypass	△	[6]	☐	Tamper follows zone bypass definition
Zone doubling (ATZ) wiring in series	△	[7]	☐	Parallel
Zone doubling (ATZ)	△	[8]	☐	Enabled
Audible trouble warning	△	[9]	☐	Enabled
Duress	△	[0]	☐	Enabled
Keypad zone 1 supervision	△	[STAY]	☐	Enabled
Keypad zone 2 supervision	△	[AWAY]/[FORCE]	☐	Enabled
Master code lock	△	[BYP]	☐	Enabled
Pager format (wait delay)	△	[MEM]	☐	Personal dialing (during delay)
Pager report alarms only	△	[TRBL]	☐	All events

**** NOTE 1: When ATZ is enabled (address 090 key [8] ON) and zone 3 is defined as a 4-wire fire zone, if you are not using zone 4 (728 Ultra) or 11 (738 Ultra), it must be disabled.***

***** NOTE 2: Only the installer can clear a tamper trouble***

Table 10: Zone Definition

Address	KEY SELECT:		[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[0]	[STAY]	[FORCE] /[AWAY]		[1]	[2]	[3]	[4]	[5]	[6]
	Zone:		1	2	3	4	5	6	7	8	9	10	11	12		13	14	15	16	17	18
092:	Intellizone = **ON**	**092:**	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	**094:**	☐	☐	☐	☐	☐	☐
	Zone:		1	2	3	4	5	6	7	8	9	10	11	12		13	14	15	16	17	18
096:	Silent = **ON**	**096:**	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	**098:**	☐	☐	☐	☐	☐	☐
	Zone:		1	2	3*	4	5	6	7	8	9	10	11	12		13	14	15	16	17	18
100:	24Hr./Fire = **ON**	**100:**	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	**102:**	☐	☐	☐	☐	☐	☐

⚠ ***Keypad zones cannot be set as 24Hr zones.***

* When zone 3 is defined as 24Hr, it becomes a 4-wire smoke detector fire zone (2-wire smoke detector support must be disabled, address 086 key **[BYP]** = OFF).
If using 2-wire smoke detectors and ATZ is enabled, zone 3 can be defined as 24Hr (EX10 only).

	Zone:		1	2	3	4	5	6	7	8	9	10	11	12		13	14	15	16	17	18
104:	Instant = **ON**	**104:**	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	**106:**	☐	☐	☐	☐	☐	☐
	Zone:		1	2	3	4	5	6	7	8	9	10	11	12		13	14	15	16	17	18
108:	Follow = **ON**	**108:**	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	**110:**	☐	☐	☐	☐	☐	☐
	Zone:		1	2	3	4	5	6	7	8	9	10	11	12		13	14	15	16	17	18
112:	Delay 2 = **ON**	**112:**	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	**114:**	☐	☐	☐	☐	☐	☐
	SYSTEM A / STAY (if ON, zone is armed on Stay or "System A" arming)																				
	Zone:		1	2	3	4	5	6	7	8	9	10	11	12		13	14	15	16	17	18
116:		**116:**	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	**118:**	☐	☐	☐	☐	☐	☐
	SYSTEM B (if ON, zone is armed in "System B" arming)																				
	Zone:		1	2	3	4	5	6	7	8	9	10	11	12		13	14	15	16	17	18
120:		**120:**	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	**122:**	☐	☐	☐	☐	☐	☐
	Zone:		1	2	3	4	5	6	7	8	9	10	11	12		13	14	15	16	17	18
124:	Bypass = **ON**	**124:**	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	**126:**	☐	☐	☐	☐	☐	☐

⚠ ***Fire zones cannot be bypassed.***

⚠ ***Do not use the Intellizone feature and an entry delay for the same zone, otherwise an alarm may occur as a user tries to disarm the system. Zones that are not selected at addresses 100 to 112 (EX10) or 114 (EX18) become "Delay 1" zones.***

Key Access Programming

Programs features quickly, without entering addresses or sections numbers. To activate Key Access Programming, press **[ENTER]** followed by the Installer code, Master code or User code 1 (code required depends on the desired feature; see below). Press the key corresponding to the desired feature. Press **[ENTER]** or **[CLEAR]** to exit. When communicating with Espload, it is impossible to enter programming mode.

Table 11: Key Access Programming

Key	Feature	*Codes that can access feature*
[8]	**Installer Test Mode** In Installer Test mode, a confirmation beep (intermittent) indicates that the test mode is enabled. A rejection beep indicates that the test mode is disabled. The bell will squawk during walk testing to indicate opened, functional zones.	*Installer Code Only*
[9]	**"Auto Arming" Time Program** Key **[9]** flashes. Enter 2-digit hour (00 to 23) and 2-digit minutes (00 to 59).	*Installer Code, Master Code or User Code 1*
[MEM]	**Panel Time Programming** **[MEM]** key flashes. Enter 2-digit hour (00 to 23) and 2-digit minutes (00 to 59).	*Installer Code, Master Code or User Code 1*
[BYP]	**Test Report** Reporting is enabled at address **086**, keys **[STAY]** and **[AWAY]/[FORCE]** (see page 10). A value must be entered at address **512** (page 7) and both telephone and account numbers must be programmed.	*Installer Code, Master Code or User Code 1*
[TRBL]	**Call Espload Via Telephone** Panel identifier and PC password (addresses **004** to **007** on page 3) and computer telephone number (addresses **008** to **015** on page 3) must be programmed.	*Installer Code, Master Code or User Code 1*
[AWAY]	**Answer Espload** This feature is available when using the ADP-1 adapter. In Espload, "blind dial" must be activated in the "modem setup" section and panel phone number programmed.	*Installer Code, Master Code or User Code 1*
[STAY]	**Cancel Communication Attempts** Until next reportable event.	*Master Code/User Code 1 only cancel calls to Espload* *The Installer Code can cancel all communications*

Connection Diagrams

The system hardware will recognize the following zone conditions:

Single Zone Connections

Figure 3: N.C. Contacts, without EOL Resistor

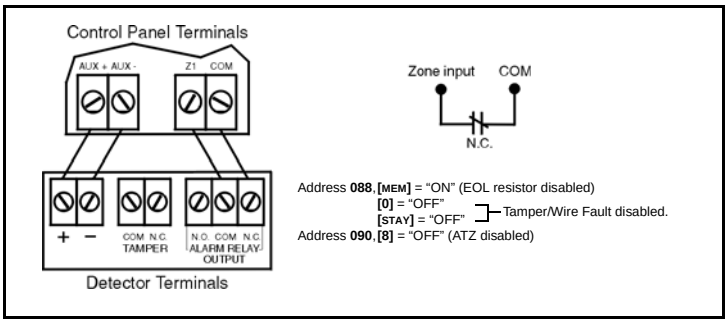


Figure 4: N.C. Contacts, with EOL Resistor (UL/cUL)

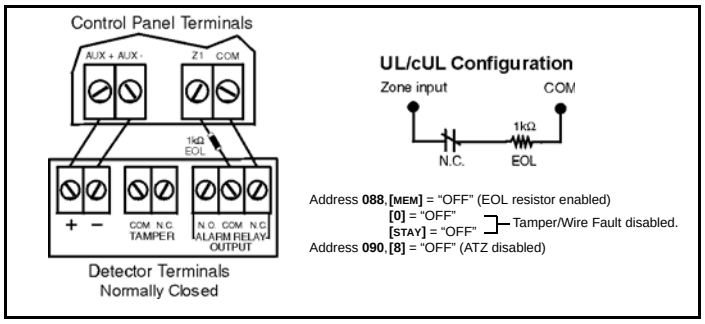


Figure 5: N.O. Contacts, with EOL Resistor (UL/cUL)

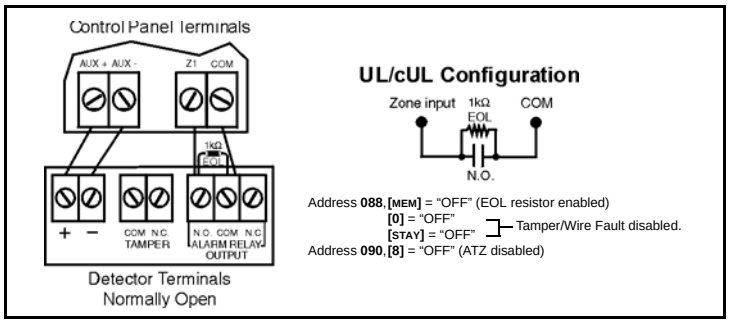


Figure 6: N.C. Contacts, without EOL Resistor, with Tamper Recognition

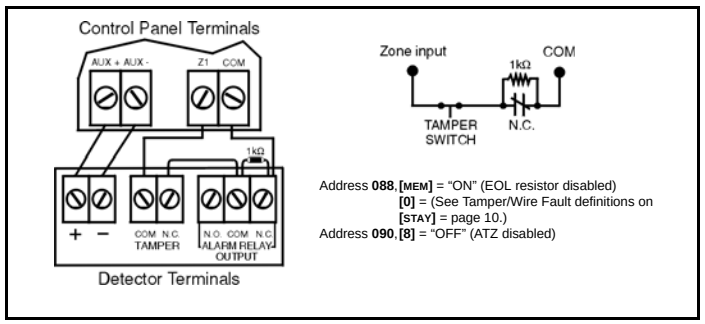
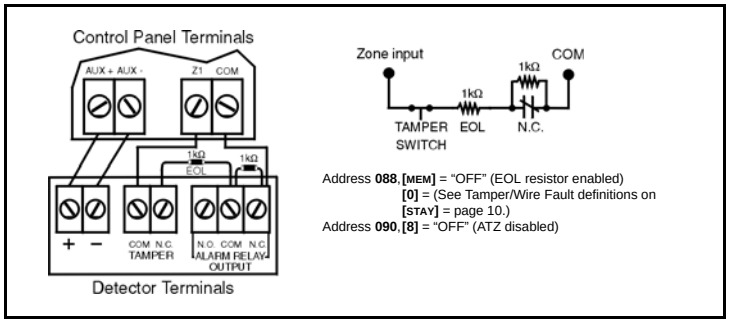
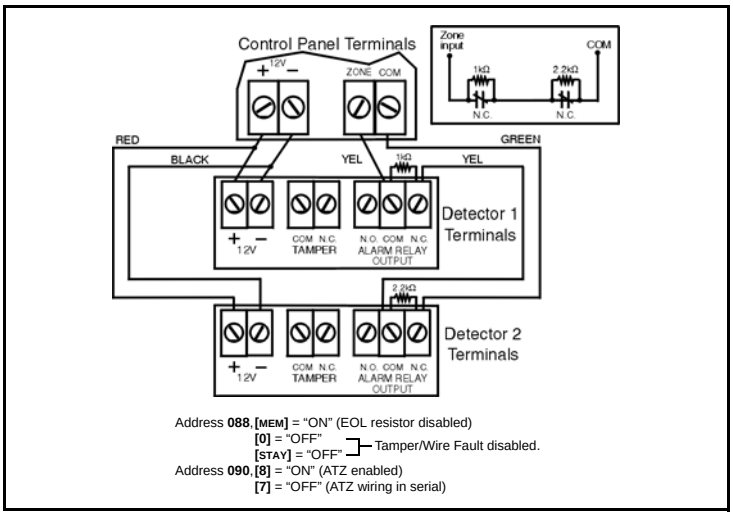


Figure 7: N.C. Contacts, with EOL resistor, with Tamper and Wire Fault Recognition (UL/cUL)



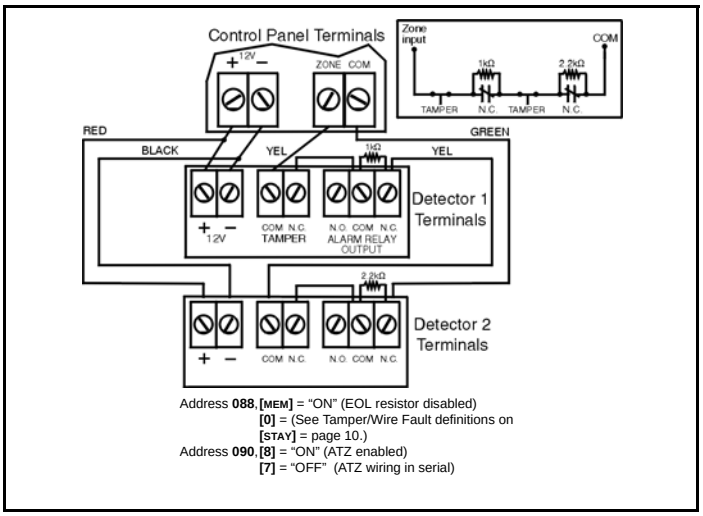
Advanced Technology Zone (ATZ) Connections

Figure 8: N.C. Contacts, without EOL Resistor



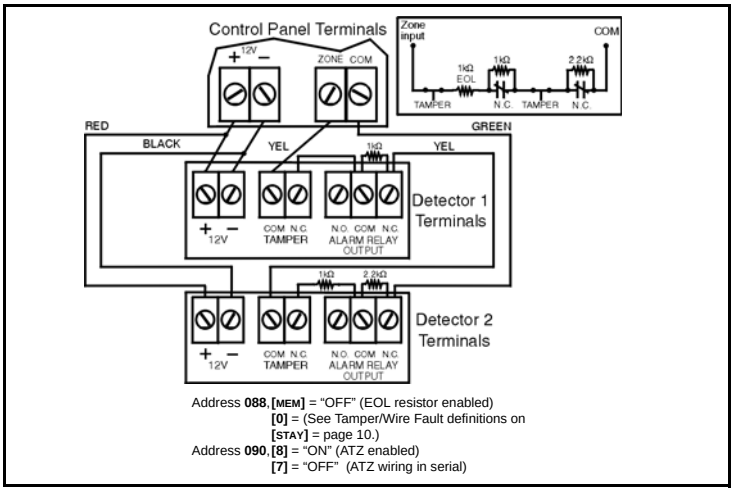
Address **088**,**[MEM]** = "ON" (EOL resistor disabled)
[0] = "OFF"
[STAY] = "OFF" — Tamper/Wire Fault disabled.
Address **090**,**[8]** = "ON" (ATZ enabled)
[7] = "OFF" (ATZ wiring in serial)

Figure 9: N.C. Contacts, without EOL Resistor, with Tamper Recognition



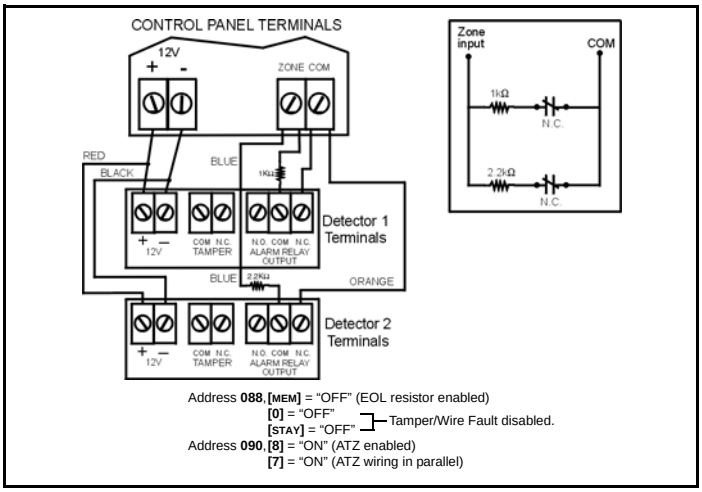
Address **088**,**[MEM]** = "ON" (EOL resistor disabled)
[0] = (See Tamper/Wire Fault definitions on
[STAY] = page 10.)
Address **090**,**[8]** = "ON" (ATZ enabled)
[7] = "OFF" (ATZ wiring in serial)

Figure 10: N.C. Contacts, with EOL Resistor, with Tamper and Wire Fault Recognition (UL/cUL)



Address **088**,**[MEM]** = "OFF" (EOL resistor enabled)
[0] = (See Tamper/Wire Fault definitions on
[STAY] = page 10.)
Address **090**,**[8]** = "ON" (ATZ enabled)
[7] = "OFF" (ATZ wiring in serial)

Figure 11: Parallel Wiring



Address **088**,**[MEM]** = "OFF" (EOL resistor enabled)
[0] = "OFF"
[STAY] = "OFF" — Tamper/Wire Fault disabled.
Address **090**,**[8]** = "ON" (ATZ enabled)
[7] = "ON" (ATZ wiring in parallel)

Other Connection Diagrams

Figure 12: Connecting Keypad Zone(s)

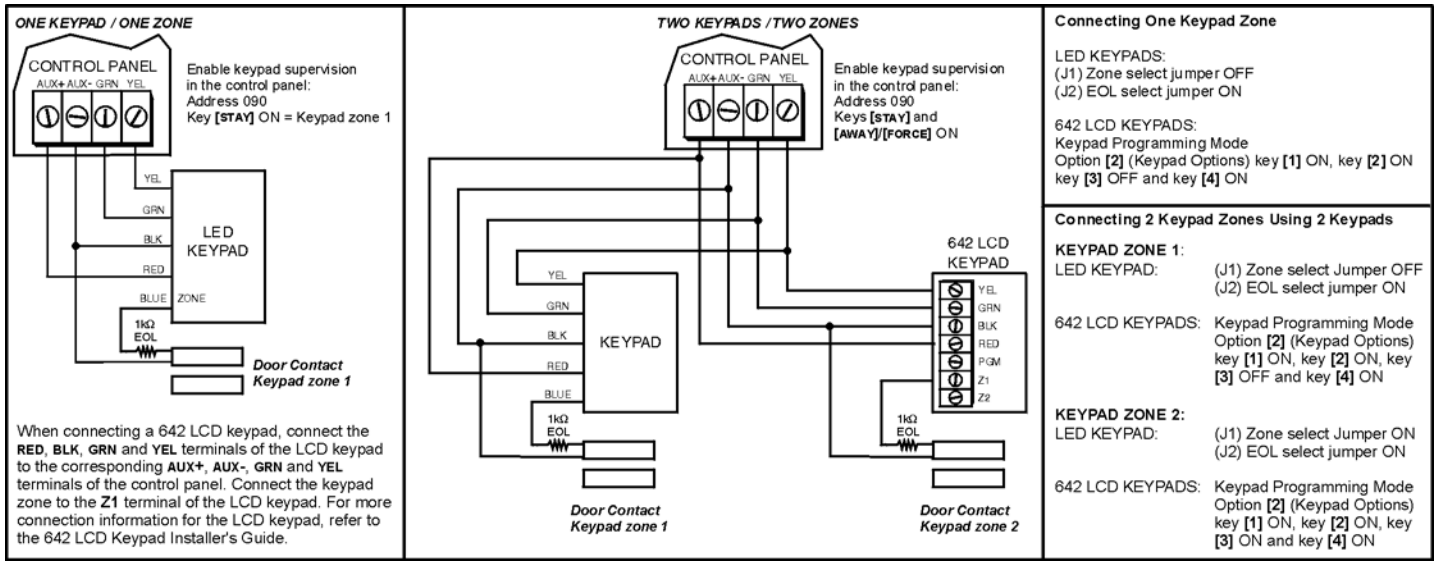


Figure 13: LED Keypad Anti-tamper Switch Connection

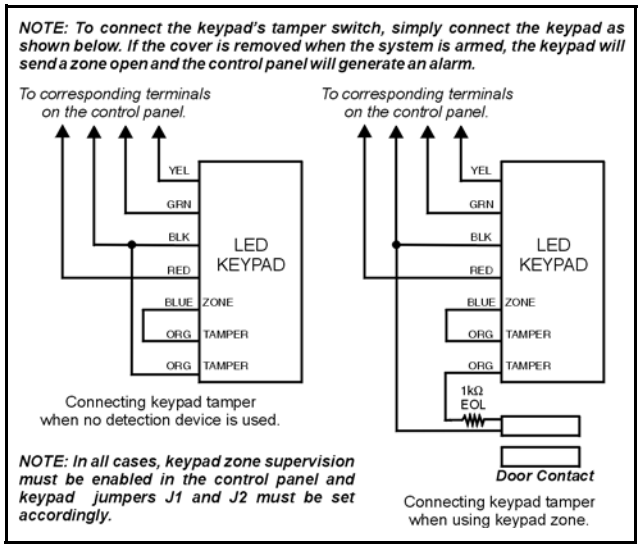


Figure 14: PGM Output Relay

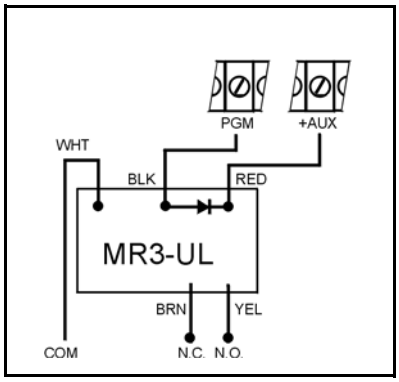


Figure 15: Ground Start Circuit

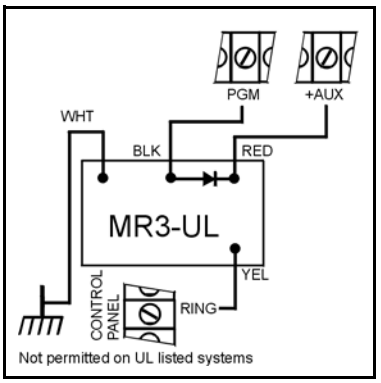


Figure 16: 4-Wire Smoke Detector Connections (Fire Zone)

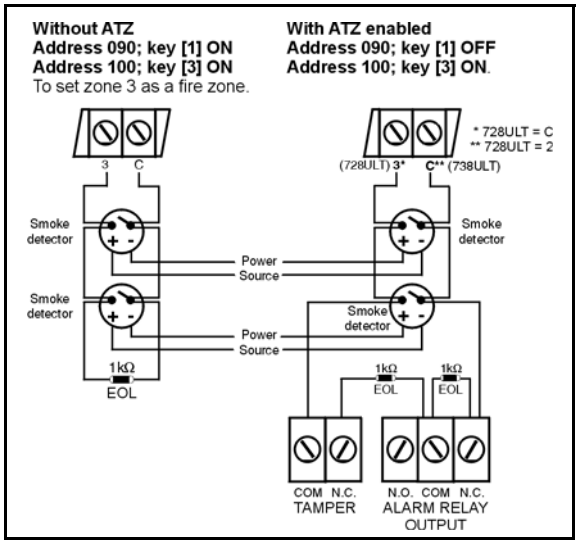


Figure 17: 4-Wire Smoke Detector Fire Reset

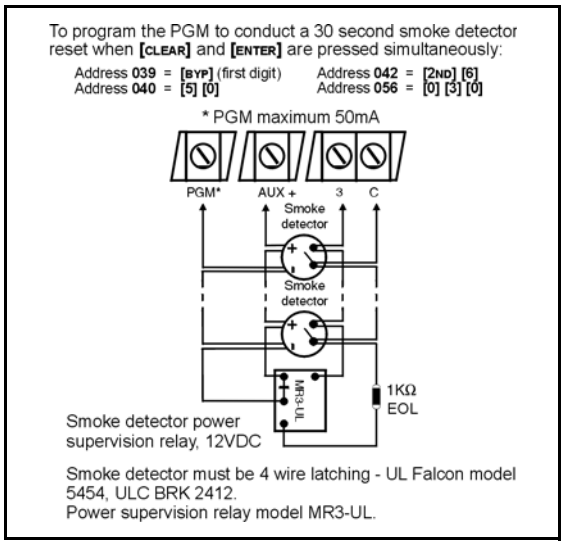
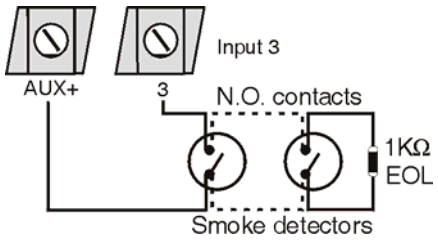


Figure 18: 2-Wire Smoke Detector Connections (Fire Zone)



2-Wire Smoke Detector Fire Reset:

Simultaneously press and hold for 3 seconds the **[ENTER]** and **[CLEAR]** keys on any keypad to conduct a 30 second reset.

Address 086; key [BYP] ON (728 Ultra)

Connect the two-wire smoke detector to input 3. Without ATZ, zone 3 is used by the two-wire smoke detector. With ATZ enabled, zone 5 is used by the 2-wire smoke detector and zone 6 will be disabled automatically.

Address 086; key [BYP] ON (738 Ultra)

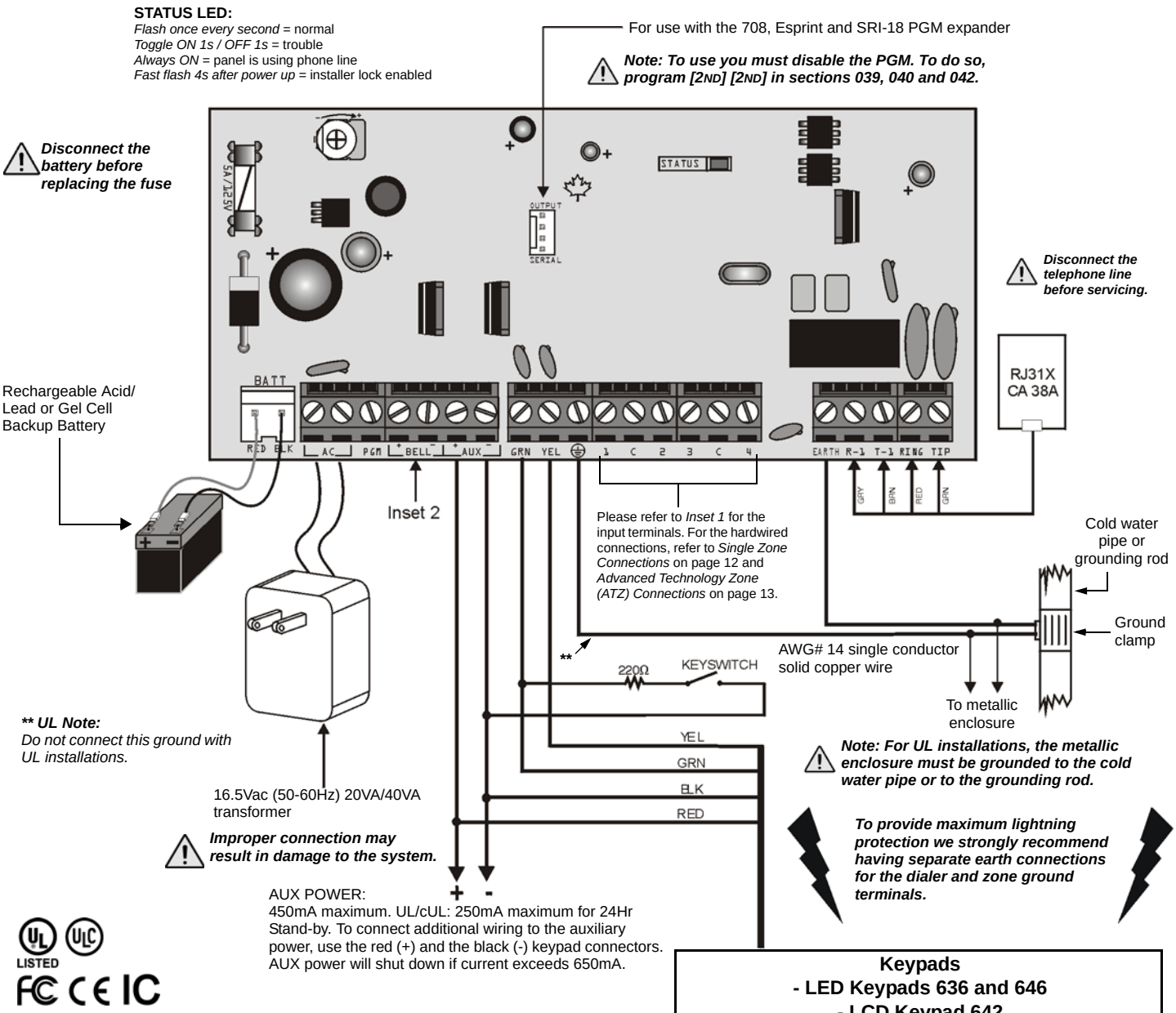
Connect the two-wire smoke detector to input 3. Zone 3 is used by the two-wire smoke detector. With ATZ enabled, zone 11 will be disabled automatically.

UL Warnings. For UL/cUL installations:

- ***The operating voltage of the fire circuit must be between 11 to 12Vdc.***
- ***Use only the Hochicki model SLR 835BH-2 2-wire smoke detector.***
- ***2-wire smoke detectors of different models other than the Hochicki model are not to be used.***
- ***Both the EX10 and the EX18 control panels support a maximum of five 2-wire smoke detectors per control panel.***

It is recommended that the smoke detectors be connected using a daisy chain configuration.

EX10 Wiring Diagram

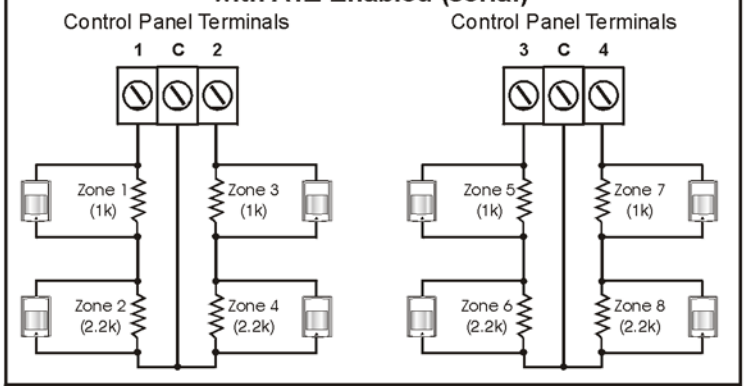


For UL and cUL warnings, refer to the Warnings section in the EX10 & EX18 Installation Manual".

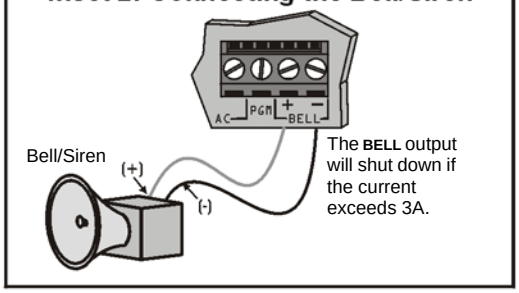
Keypads
- LED Keypads 636 and 646
- LCD Keypad 642

The maximum number of keypads per installation is dependent on the auxiliary output, which is not to exceed 450mA. Refer to the EX10 & EX18 Reference & Installation Manual for the current consumption table. Refer to *Figure 12* on page 13 for information on keypad zone connections.

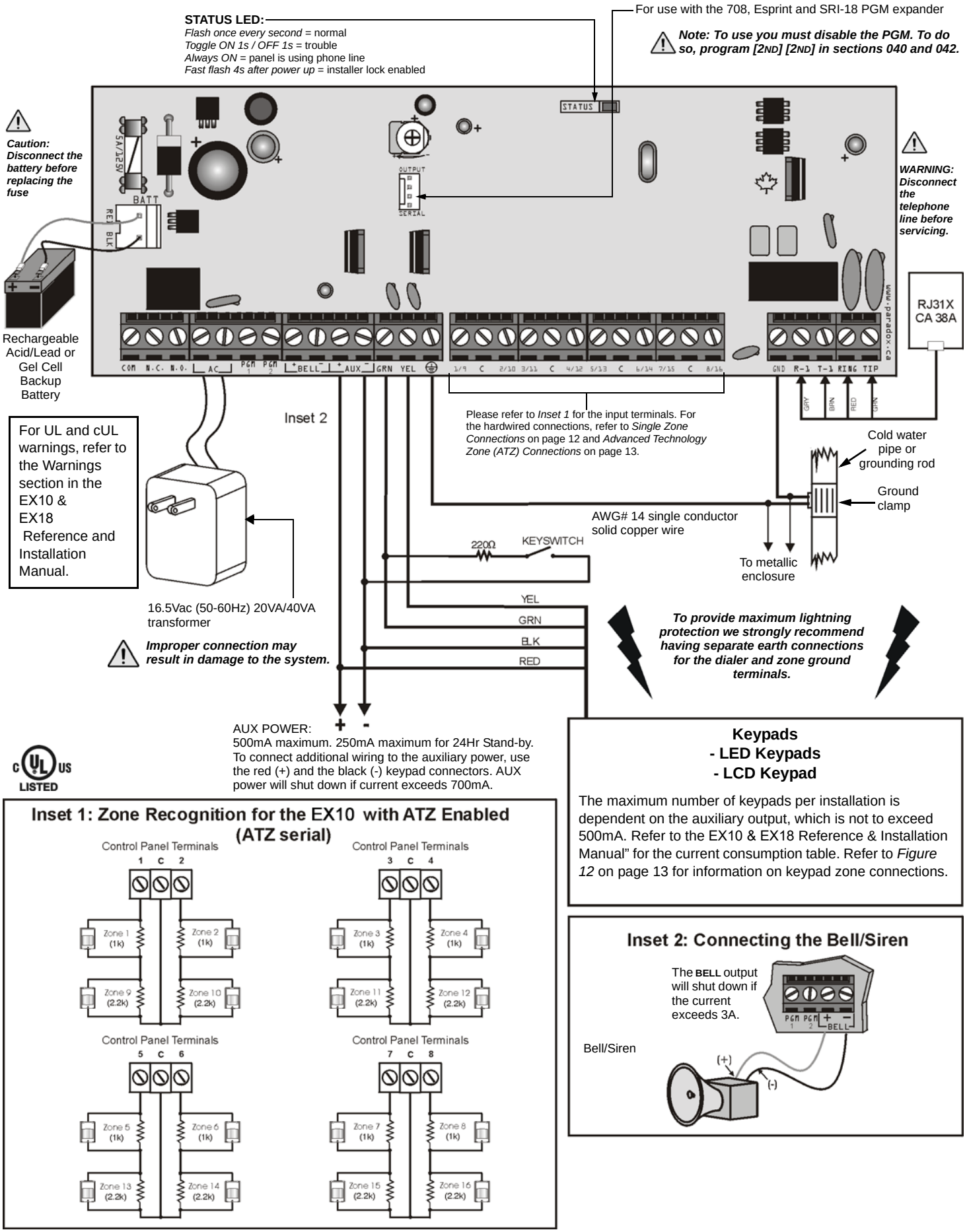
Inset 1: Zone Recognition for the EX10 with ATZ Enabled (serial)



Inset 2: Connecting the Bell/Siren



EX18 Wiring Diagram

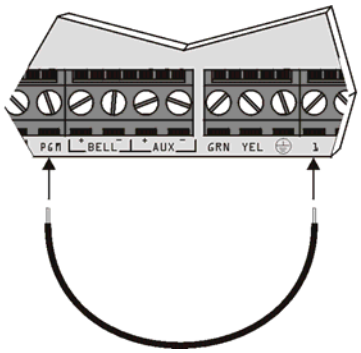


Power Down Reset

Performing a power down reset will set the Installer and Master codes to factory default. Values entered at addresses **008** to **043**, **062** to **124**, **300** to **527** and all user codes will be set to factory defaults. Programmed values at addresses **003** to **007** do not change. To perform a reset, the installer lock must be disabled. To perform a power down reset perform the following:

1. Verify installer lock is disabled.
2. Remove the battery and AC power from the control panel.
3. Remove all connected wires and devices from the PGM (PGM1 for EX18) and zone 1 terminals.
4. Short the PGM (PGM1 for EX18) and zone 1 terminals with a wire.
5. Reconnect the AC and battery power to the control panel.
6. Wait for 10 seconds and remove the wire.

Figure 19: Power Down Reset for EX10 or EX18



1. Remove power.
2. Remove all connected wires and devices from the PGM (PGM1 for EX18) and zone 1 terminals.
3. Short the PGM (PGM1 for EX18) and zone 1 terminals.
4. Reconnect power.
5. Wait 10 seconds and remove wire.

Warranty

Paradox Security Systems Ltd. (“Seller”) warrants its products to be free from defects in materials and workmanship under normal use for a period of one year. Except as specifically stated herein, all express or implied warranties whatsoever, statutory or otherwise, including without limitation, any implied warranty of merchantability and fitness for a particular purpose, are expressly excluded. Because Seller does not install or connect the products and because the products may be used in conjunction with products not manufactured by Seller, Seller cannot guarantee the performance of the security system and shall not be responsible for circumstances resulting from the product’s inability to operate. Seller obligation and liability under this warranty is expressly limited to repairing or replacing, at Seller's option, any product not meeting the specifications. Returns must include proof of purchase and be within the warranty period. In no event shall the Seller be liable to the buyer or any other person for any loss or damages whether direct or indirect or consequential or incidental, including without limitation, any damages for lost profits stolen goods, or claims by any other party, caused by defective goods or otherwise arising from the improper, incorrect or otherwise faulty installation or use of the merchandise sold.

Notwithstanding the preceding paragraph, the Seller’s maximum liability will be strictly limited to the purchase price of the defective product. Your use of this product signifies your acceptance of this warranty.

BEWARE: Dealers, installers and/or others selling the product are not authorized to modify this warranty or make additional warranties that are binding on the Seller.

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Notes