///// ESPRIT 728 ⊕
PROGRAMMING GUIDE
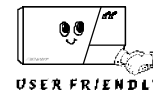
SOFTWARE VERSION 3.10

KEYPAD TROUBLE DISPLAY

Key "ON" =

[1] No battery/low voltage   [7] Communicator report failure
[2] Power failure   [8] Timer loss*
[4] Bell disconnect   [9] Tamper or zone wiring failure
[5] Maximum bell current   [10] Telephone line failure
[6] Max auxiliary current   [11] Fire loop trouble

*To clear timer loss trouble, see Key Access Programming [MEM].
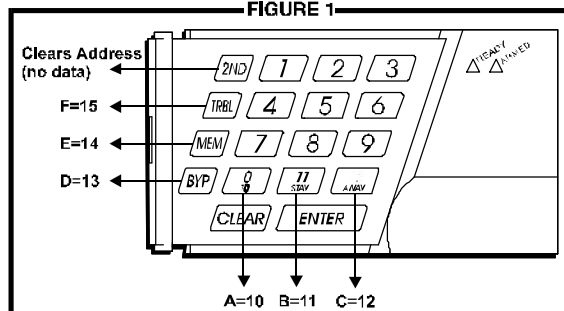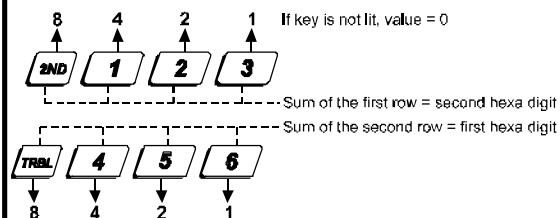Press [CLEAR] to clear troubles.

FIGURE 1

FIGURE 2

HEXA DIGIT DATA DISPLAY FOR LED KEYPADS

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

Each key in the first 2 rows of the keypad represents a specific value when the key is lit, as shown above. If the key isn't lit, the key represents 0. The sum of the values of the lit keys in the first row correspond to the second hexa digit. The sum of the values of the lit keys in the second row correspond to the first hexa digit as shown in the example below.

= Second digit = 8 + 2 = 10
= First digit = 4 + 2 + 1 = 7

Therefore 2-digit data = "7A"
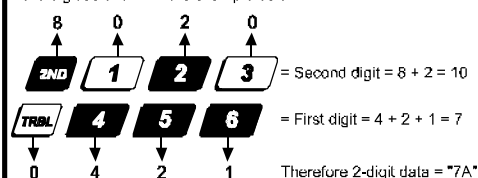
Note: values 10-15 represent hexa digits A - F respectfully, see figure 1

HEXA PROGRAMMING:

Addresses 000 to 043 and 300 to 527 are programmed using the Hexa Programming method. In this mode, you can enter any hexa-digit from 0-F where keys [1] to [9] represent digits 1 to 9 respectively; the other keys represent hexa digits A to F as shown in figure 1. To program using the Hexa Programming method:

1) Press **[ENTER]** + *Installer Code (default: 282828)*
2) The **[ENTER]** key will flash indicating you are in programming mode
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 2
5) Enter 2-digit data; after entering data you do not need to press [ENTER], the software will automatically save the data into the selected address
6) Return to **step 2** or press **[CLEAR]** to exit programming mode

STREAMLINED SECTION PROGRAMMING

This is an alternate method to Hexa Programming. The addresses (000-043 and 300-527) programmed in the Hexa Programming method are grouped into 67 sections where each section contains four addresses (i.e. section 00 = addresses 000-003). Using this method allows you to program 8 digits (4 addresses) without having to exit and re-enter addresses. Note, the keypad will not display the current data in the Hexa Streamlined Programming method. To program using the Hexa Streamlined Section method:

1) Press **[ENTER] +** *Installer code (default: 282828)* **+ [7]**
2) The [ENTER] and [2ND] keys will flash to indicate you are in programming mode
3) Enter **2-digit section** (00-67)
4) The [ENTER] key will remain on while the [2ND] key will be off
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

INSTALLER CODE (Default 282828)

Full access to programming, except user access codes. No access to arming/disarming. Use only numeric keys from **[1]** to **[10]**. (key **[10]** = 0)

PANEL ANSWER OPTIONS

First digit disables "Answering Machine Override" (key **[2ND]** or key **[1]**), or determines period of time between first and second call (see table below). 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	
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

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 panel.
	__/	PC password (3rd, 4th digit)	007	

TELEPHONE AND ACCOUNT NUMBERS

If only one central station phone number is used, program the same number for telephone number 1 and 2. **If only one account number is required, the same number must be entered for both account "A" and "B".** (No Default)

[10]	= the number "0"	**[BYP]**	= switch from pulse to tone while dialing
[11]	= *	**[MEM]**	= pause 4 seconds
[12]	= #	**[TRBL]**	= end of number

COMPUTER TELEPHONE NUMBER (View at addresses **008** to **015**.)

Press [TRBL] to end phone number if less than 16 digits are programmed.

Streamline section
02 __ / __ / __ / __ / __ / __ / __ / __
    1 2 3 4 5 6 7 8

Streamline section
03 __ / __ / __ / __ / __ / __ / __ / __
    9 10 11 12 13 14 15 16

CENTRAL STATION TELEPHONE NUMBER 1 (View at addresses **016** to **023**.)

Press [TRBL] to end phone number if less than 16 digits are programmed.

Streamline section
04 __ / __ / __ / __ / __ / __ / __ / __
    1 2 3 4 5 6 7 8

Streamline section
05 __ / __ / __ / __ / __ / __ / __ / __
    9 10 11 12 13 14 15 16

CENTRAL STATION TELEPHONE NUMBER 2 (View at addresses **024** to **031**.)

Press [TRBL] to end phone number if less than 16 digits are programmed.

Streamline section
06 __ / __ / __ / __ / __ / __ / __ / __
    1 2 3 4 5 6 7 8

Streamline section
07 __ / __ / __ / __ / __ / __ / __ / __
    9 10 11 12 13 14 15 16

ACCOUNT "A" AND "B": (View at addresses **032** to **035**.)

For 3 digit account numbers, enter "skip" ([2ND]) as first digit.

Streamline section
08 __ / __ / __ / __   __ / __ / __ / __
    1 2 3 4   5 6 7 8
      A   **B**

Streamline section	Data	Description	Address

09
- [2ND]/[2ND] Future use — 036
- [2ND]/___ 1st digit: value must be entered i.e. [2ND] — 037
  2nd digit: time correction (See table)
- ___/___ 1st digit: telephone 1 format — 038
  2nd digit: telephone 2 format
- ___/[2ND] 1st digit: PGM type — 039

10
- ___/___ PGM 1 — 040
- [2ND]/[2ND] Future Use — 041
- ___/___ PGM mask 1 — 042
- [2ND]/[2ND] Future Use — 043

TIME CORRECTION:
(address 037 second digit)

[2ND] - No adjustment		[8]	- Minus 4 sec.
[1] - Plus 4 sec.		[9]	- Minus 8 sec.
[2] - Plus 8 sec.		[10]	- Minus 12 sec.
[3] - Plus 12 sec.		[11]	- Minus 16 sec.
[4] - Plus 16 sec.		[12]	- Minus 20 sec.
[5] - Plus 20 sec.		[BYP]	- Minus 24 sec.
[6] - Plus 24 sec.		[MEM]	- Minus 28 sec.
[7] - Plus 28 sec.		[TRBL]	- Minus 32 sec.

COMMUNICATOR FORMATS
Key

[2ND] = **ADEMCO** slow (1400Hz, 1900Hz, 10bps)
[1] = (1400Hz, 1800Hz, 10bps)
[2] = **SILENT KNIGHT** fast (1400Hz, 1900Hz, 20bps)
[3] = **SESCOA** (2300Hz, 1800Hz, 20bps)
[4] = **RADIONICS** (40bps with 1400Hz handshake)
[5] = **RADIONICS** (40bps with 2300Hz handshake)

[6] = **RADIONICS** with PARITY (1400Hz, 40bps)
[7] = **RADIONICS** with PARITY (2300Hz, 40bps)
[8] = *ADEMCO express
[9] = *ADEMCO contact ID (programmable codes)
[10] = *ADEMCO contact ID (all codes)
[TRBL] = *DTMF - no handshake (personal dialing)

* = 4-Digit Codes Only

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] / [10]
118:	NEAR ALARM	[2ND] / [10]	350:	COMMUNICATION TROUBLE	[2] / [11]
120:	PANIC ALARM	[2ND] / [11]	351:	TELCO 1 FAULT	[2] / [12]
121:	DURESS	[2ND] / [12]	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 BURG.	[1] / [2ND]	373:	FIRE LOOP TROUBLE	[3] / [1]
132:	INTERIOR BURG.	[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 AUX	[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] / [10]
153:	LOSS OF HEAT	[1] / [10]	441:	OPEN/CLOSE - STAY MODE	[3] / [11]
154:	WATER LEAKAGE	[1] / [11]	570:	BYPASS	[3] / [12]
155:	FOIL BREAK ALARM	[1] / [12]	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]

REPORTING CODES:
All digits from **[1]** to **[F]** are valid. **[2ND]** = digit will not be reported except for contact I.D. programmable codes. For single digit reporting enter "skip" (**[2ND]**) as first digit. (Default = "empty" **[2ND] [2ND]**)

If CONTACT I.D. format (all codes) is selected, addresses 300 to 527 (sections 11- 67) do not have to be programmed.
(Select Contact I.D. (all codes) - key **[10]** for both central station numbers at section **09** - address **038**.)

ARMING (closing) CODES:

Streamline section	Data	Description	Address
11	__/__	Auto / Espload	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

Streamline section	Data	Description	Address
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

- → See next page

4

REPORTING CODES: *(reset code "empty")*

DISARMING (opening) CODES:

Streamline section	Data	Description	Address
23	→ *See previous page*		
	__/__	Espload	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
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

Streamline section	Data	Description	Address
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 CODES ZONES 1 TO 10:

Streamline section	Data	Description	Address
36	__/__	Zone 1	400
	__/__	Zone 2	401
	__/__	Zone 3 *(fire add. 100)*	402
	__/__	Zone 4	403
37	__/__	Zone 5	404
	__/__	Zone 6	405
	__/__	Zone 7	406
	__/__	Zone 8	407
38	__/__	Zone 9	408
	__/__	Zone 10	409
	[2ND]/[2ND]	Future Use	410
	[2ND]/[2ND]	Future Use	411

Addresses **410-423** reserved for future use.

ZONES 1 TO 10 RESTORE CODES:

Streamline section	Data	Description	Address
42	__/__	Zone 1	424
	__/__	Zone 2	425
	__/__	Zone 3 *(fire add. 100)*	426
	__/__	Zone 4	427
43	__/__	Zone 5	428
	__/__	Zone 6	429
	__/__	Zone 7	430
	__/__	Zone 8	431
44	__/__	Zone 9	432
	__/__	Zone 10	433
	[2ND]/[2ND]	Future Use	434
	[2ND]/[2ND]	Future Use	435

Addresses **434-447** reserved for future use

REPORTING CODES: *(reset code "empty")*

ZONES 1 TO 10 SHUTDOWN 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
	[2ND]/[2ND]	Future Use	458
	[2ND]/[2ND]	Future Use	459

Addresses **458-471** reserved for future use

TAMPER 1 TO 7 TROUBLE CODES:

Streamline section	Data	Description	Address
54	___/___	Tamper 1 (ATZ)	472
	___/___	Tamper 2	473
	___/___	Tamper 3 (ATZ)	474
	___/___	Tamper 4	475
55	___/___	Tamper 5 (ATZ)	476
	[2ND]/[2ND]	Future Use	477
	___/___	Tamper 7 (ATZ)	478
	[2ND]/[2ND]	Future Use	479

Addresses **480-495** reserved for future use

TROUBLE CODES:

Streamline section	Data	Description	Address
60	___/___	Max. auxiliary current	496
	___/___	Bell disconnect / max. bell current	497
	___/___	Battery disconnect / low voltage	498
	___/___	Power failure	499

Streamline section	Data	Description	Address
61	___/___	Fire loop trouble	500
	___/___	Timer loss	501
	[2ND]/[2ND]	Future use	502
	[2ND]/[2ND]	Future use	503

TROUBLE RESTORE CODES:

Streamline section	Data	Description	Address
62	___/___	Max. auxiliary current	504
	___/___	Bell disconnect	505
	___/___	Battery disconnect / low voltage	506
	___/___	Power failure	507

Streamline section	Data	Description	Address
63	___/___	Fire loop trouble	508
	___/___	Timer programmed	509
	___/___	Tamper / wiring fault	510
	___/___	TLM trouble restore	511

SPECIAL 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

Streamline section	Data	Description	Address
66	___/___	Duress	520
	[2ND]/[2ND]	Future use	521
	[2ND]/[2ND]	Future use	522
	[2ND]/[2ND]	Future use	523
67	___/___	Log-in (Espload)	524
	___/___	Program change	525
	[2ND]/[2ND]	Future use	526
	[2ND]/[2ND]	Future use	527

DECIMAL PROGRAMMING

1) Press **[ENTER] +** *Installer Code (default: 282828)*
2) The [ENTER] key will flash to indicate you are in programming mode
3) Enter **3-digit address** (044-061)
4) The keypad will now display the current 3-digit data currently saved at this address as described in figure 3
5) Enter **3-digit data** (000-255) value; after entering data you do not need to press **[ENTER]**, the software will automatically save the data into the selected address
6) Return to **step 2** or press **[CLEAR]** to exit programming mode

FIGURE 3

DECIMAL DISPLAY FOR LED KEYPADS
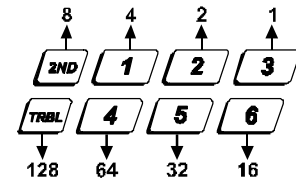
Note: LCD keypads will display current data on the screen.

Each key in the first 2 rows of the keypad represents a specific value when the key is lit, as shown above. 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.

Example

Therefore 8 + 1 + 32 + 16 = 057

044: ___/___/___ (hours) Auto arm time (between "000" and "023")

045: ___/___/___ (minutes) Auto arm time (between "000" and "059")

046: ___/___/___ (days) Auto test report every ? days (between "001" and "255") (000 = disabled)

047: ___/___/___ (hours) Auto test report (between "000" and "023")

048: ___/___/___ (minutes) Auto test report (between "000" and "059")

049: ___/___/___ (seconds) Exit delay *(factory default 60 seconds)*

050: ___/___/___ (seconds) Entry delay 1 *(factory default 45 seconds)*

051: ___/___/___ (seconds) Entry delay 2 *(factory default 45 seconds)*

052: ___/___/___ (minutes) Bell cut-off time *(factory default 5 minutes)*

053: ___/___/___ (x 15 mSec.) Zone speed *(factory default 600 mSec.)*

054: ___/___/___ (minutes) Power failure report delay *(factory default 30 minutes)* (000 = disabled)

055: ___/___/___ (x 15 minutes) "No movement" report time *(factory default 8 hours)* (000 = disabled)

056: ___/___/___ PGM timer setting (001 to 127 for seconds and 129 to 255 for minutes) *(factory default 5 seconds)* Add 128 to desired value in minutes (i.e. for 5 minutes: enter 5 + 128 = 133)

057: ___/___/___ Intellizone delay (in seconds, minimum = 10 seconds) *(factory default 48 seconds)*

058: ___/___/___ Installer code lock (147 = locked, 000 = unlocked)

059: ___/___/___ (seconds) Programmable delay before alarm transmission (5 to 63 seconds) (000 = disabled)

060: ___/___/___ (seconds) Recent closing delay (000 = disabled)

061: ___/___/___ Future Use

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/Off status of each key determines the selected feature. To program using the Feature Select Programming method:

1) Press **[ENTER]** + *Installer Code (default: **282828**)*
2) The [ENTER] key will flash to indicate you are in programming mode
3) Enter **3-digit address** (062-126)
4) After entering the address, the keypad will display the feature selection status. Turn the keys On/Off by pressing the appropriate key until the desired options are set. Then 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

CODE PRIORITY

	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]	[12]	[BYP]	[MEM]	[TRBL]	[2ND]
062: SYSTEM "A" / STAY	User #: 1 ☐	2 ☐	3 ☐	4 ☐	5 ☐	6 ☐	7 ☐	8 ☐	9 ☐	10 ☐	11 ☐	12 ☐	13 ☐	14 ☐	15 ☐	16 ☐
064: SYSTEM "A" / STAY	User #: 17 ☐	18 ☐	19 ☐	20 ☐	21 ☐	22 ☐	23 ☐	24 ☐	25 ☐	26 ☐	27 ☐	28 ☐	29 ☐	30 ☐	31 ☐	32 ☐
066: SYSTEM "A" / STAY	User #: 33 ☐	34 ☐	35 ☐	36 ☐	37 ☐	38 ☐	39 ☐	40 ☐	41 ☐	42 ☐	43 ☐	44 ☐	45 ☐	46 ☐	47 ☐	48 ☐
068: SYSTEM "B" / AWAY	User #: 1 ☐	2 ☐	3 ☐	4 ☐	5 ☐	6 ☐	7 ☐	8 ☐	9 ☐	10 ☐	11 ☐	12 ☐	13 ☐	14 ☐	15 ☐	16 ☐
070: SYSTEM "B" / AWAY	User #: 17 ☐	18 ☐	19 ☐	20 ☐	21 ☐	22 ☐	23 ☐	24 ☐	25 ☐	26 ☐	27 ☐	28 ☐	29 ☐	30 ☐	31 ☐	32 ☐
072: SYSTEM "B" / AWAY	User #: 33 ☐	34 ☐	35 ☐	36 ☐	37 ☐	38 ☐	39 ☐	40 ☐	41 ☐	42 ☐	43 ☐	44 ☐	45 ☐	46 ☐	47 ☐	48 ☐
074: Codes with bypass access	User #: 1 ☐	2 ☐	3 ☐	4 ☐	5 ☐	6 ☐	7 ☐	8 ☐	9 ☐	10 ☐	11 ☐	12 ☐	13 ☐	14 ☐	15 ☐	16 ☐
076: Codes with bypass access	User #: 17 ☐	18 ☐	19 ☐	20 ☐	21 ☐	22 ☐	23 ☐	24 ☐	25 ☐	26 ☐	27 ☐	28 ☐	29 ☐	30 ☐	31 ☐	32 ☐
078: Codes with bypass access	User #: 33 ☐	34 ☐	35 ☐	36 ☐	37 ☐	38 ☐	39 ☐	40 ☐	41 ☐	42 ☐	43 ☐	44 ☐	45 ☐	46 ☐	47 ☐	48 ☐

KEY SELECT:

Addresses **080** to **085** for future use.

FEATURE SELECT PROGRAMMING (continued)

(On/off status of key lights determines which feature is selected.)

086:

Feature	KEY OFF / ON	
See "TLM" table _ _ _ _ _ _ _ _ _ _ _ _ _	□ [2ND] □	
	□ [1] □	
PS1/Keyswitch = regular arm _ _ _ _ _ _ _	□ [2] □	stay arm / System A
PS1/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_ _ _ _ _ _ _ _ _ _ _ _	□ [10] □	(1:1.5) Pulse USA
	□ [11] □	
See "Reporting" table · _ _ _ _ _ _ _ _ _ _	□ [12] □	
N/A	□ [BYP] □	N/A
Bell squawk on arm/disarm _ _ _ _ _ _ _ _	□ [MEM] □	enabled
Auto zone shutdown _ _ _ _ _ _ _ _ _ _ _	□ [TRBL] □	enabled

TELEPHONE LINE MONITOR
Address 086, Key [2ND] [1]

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
Address 086, Key [11] [12]

KEY [11]	[12]	TYPE	DIALING SEQUENCE (tel. No.)
OFF	OFF	Reporting disabled	
OFF	ON	Regular reporting	– 1,2,1,2,1,2,1,2, fail to comm.
ON	OFF	Split reporting: Alarms*	– 1,1,1,1,1,1,1,1, fail to comm.
		System report	– 2,2,2,2,2,2,2,2, fail to comm.
ON	ON	Double reporting	– 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:

Feature	KEY OFF / ON	
Automatic event buffer transmission _ _ _ _	□ [2ND] □	enabled
Panic 1 (keys [1] & [3], PS1) _ _ _ _ _ _ _ _ _	□ [1] □	enabled
Panic 2 (keys [4] & [6]) _ _ _ _ _ _ _ _ _ _ _	□ [2] □	enabled
Panic 3 (keys [7] & [9]) _ _ _ _ _ _ _ _ _ _ _	□ [3] □	enabled
Panic 1 silent (PS1) _ _ _ _ _ _ _ _ _ _ _ _	□ [4] □	audible
Panic 2 silent _ _ _ _ _ _ _ _ _ _ _ _ _ _	□ [5] □	audible
Panic 3 silent _ _ _ _ _ _ _ _ _ _ _ _ _ _	□ [6] □	fire
Key [10] regular arm _ _ _ _ _ _ _ _ _ _ _	□ [7] □	enabled
Key [11] stay or system A arm _ _ _ _ _ _ _	□ [8] □	enabled
6 digit access codes _ _ _ _ _ _ _ _ _ _ _	□ [9] □	4 digit
Tamper Recognition _ _ _ _ _ _ _ _ _ _ _ _	□ [10] □	
	□ [11] □	
Beep on exit delay _ _ _ _ _ _ _ _ _ _ _ _	□ [12] □	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
Address 088, Key [10] [11]

SYSTEM ARMED	KEY [10]	[11]	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 and alarm codes reported
	ON	ON	– Audible alarm. Trouble and alarm codes reported**

* Exception: for 24 hour zones the tamper definition will follow the audible/silent alarm definition of the 24 hour zone.
** Silent zones will generate a silent alarm.

090:

Feature	KEY OFF / ON	
Exclude power failure from trouble display	□ [2ND] □	enabled
Zone 4 enabled _ _ _ _ _ _ _ _ _ _ _ _ _ _	□ [1] □	disabled (in case of fire zone 3 only)
Auto arm = regular arm _ _ _ _ _ _ _ _ _ _	□ [2] □	stay / System A
N/A	□ [3] □	N/A
N/A	□ [4] □	N/A
N/A	□ [5] □	N/A
No tamper bypass _ _ _ _ _ _ _ _ _ _ _ _	□ [6] □	tamper follows zone bypass definition
N/A	□ [7] □	N/A
Zone doubling (ATZ) _ _ _ _ _ _ _ _ _ _ _	□ [8] □	enabled
Audible trouble warning _ _ _ _ _ _ _ _ _ _	□ [9] □	enabled
Duress _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _	□ [10] □	enabled
Keypad 1 zone supervision _ _ _ _ _ _ _ _	□ [11] □	enabled
Keypad 2 zone supervision _ _ _ _ _ _ _ _	□ [12] □	enabled
N/A	□ [BYP] □	N/A
N/A	□ [MEM] □	N/A
N/A	□ [TRBL] □	N/A

ZONE DEFINITION: (reset = "OFF")										
KEY SELECT:	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]
Intellizone = ON **092**	1 ☐	2 ☐	3 ☐	4 ☐	5 ☐	6 ☐	7 ☐	8 ☐	9 ☐	10 ☐
Silent = ON **096**	1 ☐	2 ☐	3 ☐	4 ☐	5 ☐	6 ☐	7 ☐	8 ☐	9 ☐	10 ☐
24HR./Fire = ON **100**	1 ☐	2 ☐	3🔥 ☐	4 ☐	5 ☐	6 ☐	7 ☐	8 ☐	9 ☐	10 ☐
🔥 When zone 3 is defined "24 Hour" it becomes a fire zone										
Instant = ON **104**	1 ☐	2 ☐	3 ☐	4 ☐	5 ☐	6 ☐	7 ☐	8 ☐	9 ☐	10 ☐
Follow = ON **108**	1 ☐	2 ☐	3 ☐	4 ☐	5 ☐	6 ☐	7 ☐	8 ☐	9 ☐	10 ☐
Delay 2 = ON **112**	1 ☐	2 ☐	3 ☐	4 ☐	5 ☐	6 ☐	7 ☐	8 ☐	9 ☐	10 ☐
If ON, zone is armed on stay or "system A" arming **116**	System A / STAY									
	1 ☐	2 ☐	3 ☐	4 ☐	5 ☐	6 ☐	7 ☐	8 ☐	9 ☐	10 ☐
If ON, zone is armed in "system B" arming **120**	System B									
	1 ☐	2 ☐	3 ☐	4 ☐	5 ☐	6 ☐	7 ☐	8 ☐	9 ☐	10 ☐
Bypass enable = ON **124**	1 ☐	2 ☐	3 ☐	4 ☐	5 ☐	6 ☐	7 ☐	8 ☐	9 ☐	10 ☐

Zones that are not selected at addresses **100** to **112** become "Delay 1" zones.

Note: 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.

KEY ACCESS PROGRAMMING

Programs features quickly, without entering addresses or section numbers.
To activate "key access programming", press **[ENTER]**, followed by installer, master or user code 1. (Code required depends on the feature you wish to access - see below.) Press the key corresponding to the desired feature.
Press **[ENTER]** or **[CLEAR]** to exit.

key

[8]   **Installer test mode**   *(installer code only)*
In installer test mode, a confirmation beep (intermittent) indicates test is "on", a "rejection" beep (long) indicates test is "off". The bell will squawk during walk testing to indicate opened, functional zones.

[9]   **"Auto arming" time program**   *(all 3 codes)*
Key [9] flashes. Enter two digits (00 to 23) for hours + 2 digits (00 to 59) for minutes.

[MEM] **"Panel time" and clear "trouble 8"**   *(all 3 codes)*
Key **[MEM]** flashes. Enter two digits (00 to 23) for hours + 2 digits (00 to 59) for minutes.

[BYP] **Test report**   *(all 3 codes)*
Reporting is enabled at address **086**, keys **[11]**, **[12]**. A value must be entered at address **512**, and both telephone and account numbers must be programmed.

[TRBL] **Call Espload via telephone**   *(all 3 codes)*
Panel identifier and PC password (addresses **004-007**) and computer telephone number (addresses **008-015**) must be programmed.

[AWAY] **Answer Espload**   *(all 3 codes)*
This feature is available when using the ADP-1 adapter. In Espload, "blind dial" must be activated in "modem setup" section, and panel phone number programmed (works also without ADP-1).

[STAY] **Cancel communication attempts**   *(master code and user 1 can only stop calls to Espload)*
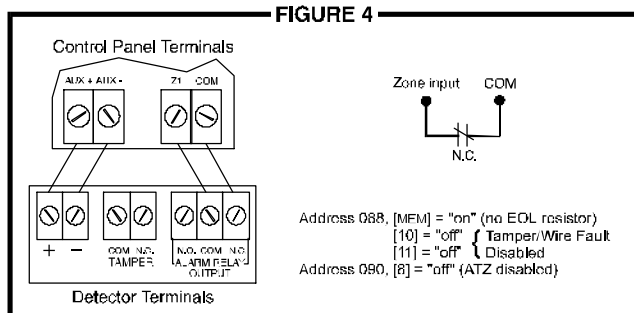Until next reportable event   *(installer code - all communications)*

When communicating with Espload, it is impossible to enter programming mode.
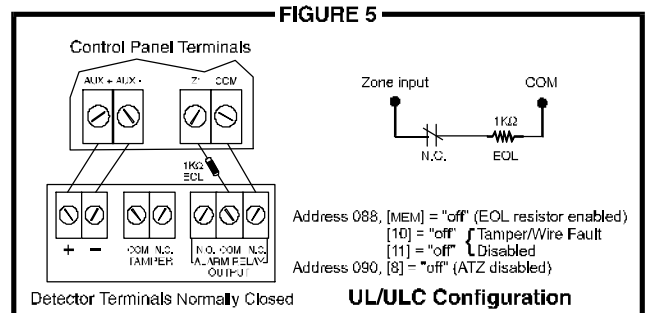
CONNECTION DIAGRAMS

The system hardware will recognize the following zone conditions:
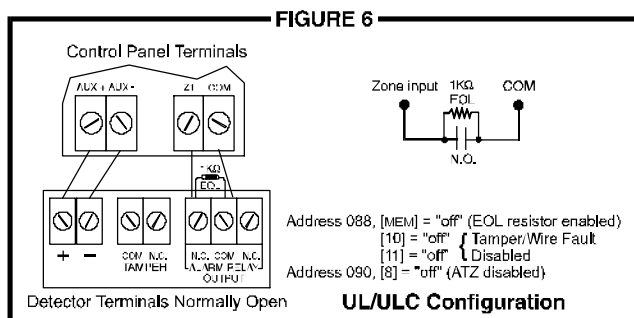
SINGLE ZONE CONNECTIONS
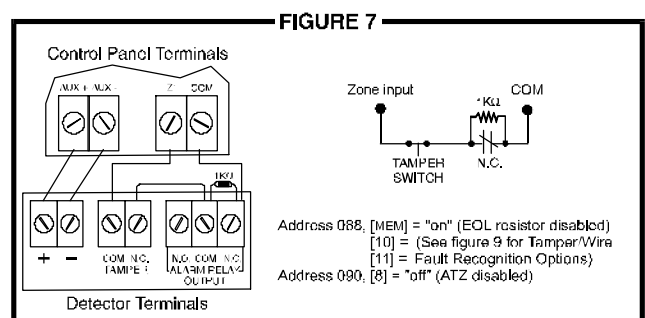
N.C. Contacts, Without EOL Resistor

FIGURE 4

Control Panel Terminals

Zone input   COM

N.C.

Address 088, [MEM] = "on" (no EOL resistor)
       [10] = "off" { Tamper/Wire Fault
       [11] = "off" { Disabled
Address 090, [8] = "off" (ATZ disabled)

Detector Terminals

N.C. Contacts, With EOL Resistor (UL/ULC)

FIGURE 5

Control Panel Terminals

Zone input   COM
1KΩ
N.C.   EOL

Address 088, [MEM] = "off" (EOL resistor enabled)
       [10] = "off" { Tamper/Wire Fault
       [11] = "off" { Disabled
Address 090, [8] = "off" (ATZ disabled)

Detector Terminals Normally Closed   **UL/ULC Configuration**

N.O. Contacts, With EOL Resistor (UL/ULC)

FIGURE 6

Control Panel Terminals

Zone input 1KΩ COM
EOL
N.O.

Address 088, [MEM] = "off" (EOL resistor enabled)
       [10] = "off" { Tamper/Wire Fault
       [11] = "off" { Disabled
Address 090, [8] = "off" (ATZ disabled)

Detector Terminals Normally Open   **UL/ULC Configuration**

N.C Contacts, Without EOL Resistor, With Tamper Recognition

FIGURE 7

Control Panel Terminals

Zone input   COM
1KΩ
TAMPER   N.C.
SWITCH

Address 088, [MEM] = "on" (EOL resistor disabled)
       [10] = (See figure 9 for Tamper/Wire
       [11] = Fault Recognition Options)
Address 090, [8] = "off" (ATZ disabled)

Detector Terminals

N.C. Contacts, With EOL Resistor, With Tamper and Wire Fault Recognition (UL/ULC)

FIGURE 8

Control Panel Terminals

Zone input   COM
1KΩ
1KΩ
TAMPER EOL N.C.
SWITCH

Address 088, [MEM] = "off" (EOL resistor enabled)
       [10] = (See figure 9 for Tamper/Wire
       [11] = Fault Recognition Options)
Address 090, [8] = "off" (ATZ disabled)

Detector Terminals

FIGURE 9

TAMPER / WIRE FAULT DEFINITIONS
Address 088, Key [10] [11]

SYSTEM ARMED	KEY [10]	[11]	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 and alarm codes reported
	ON	ON	Audible alarm. Trouble and alarm codes reported**

* Exception: for 24 hour zones the tamper definition will follow the audible/silent alarm definition of the 24 hour zone.
** Silent zones will generate a silent alarm.

CONNECTION DIAGRAMS (continued)

ADVANCED TECHNOLOGY ZONE CONNECTIONS (2 zones / input)
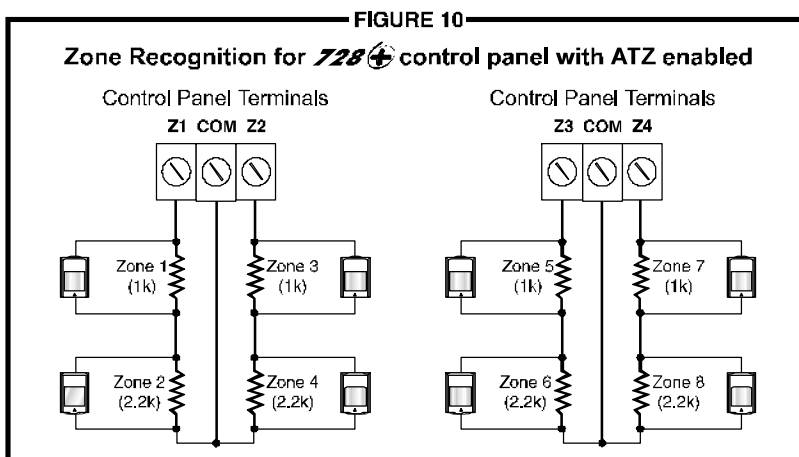
FIGURE 10

Zone Recognition for 728⊕ control panel with ATZ enabled

N.C. Contacts, Without EOL Resistor

FIGURE 11

N.C. Contacts, Without EOL Resistor, With Tamper Recognition

FIGURE 12

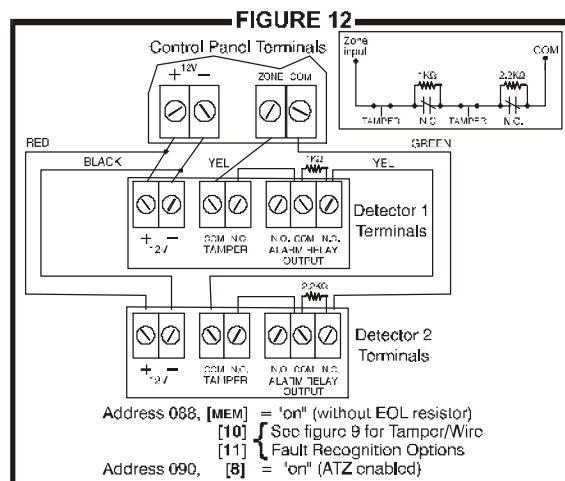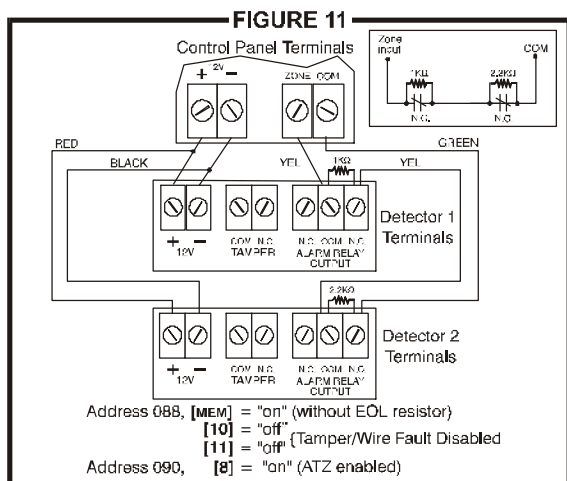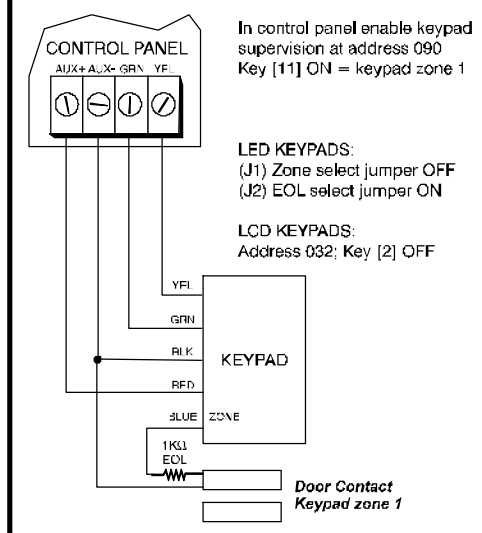***N.C. Contacts, With EOL Resistor, With Tamper & Wire Fault Recognition (UL/ULC)***
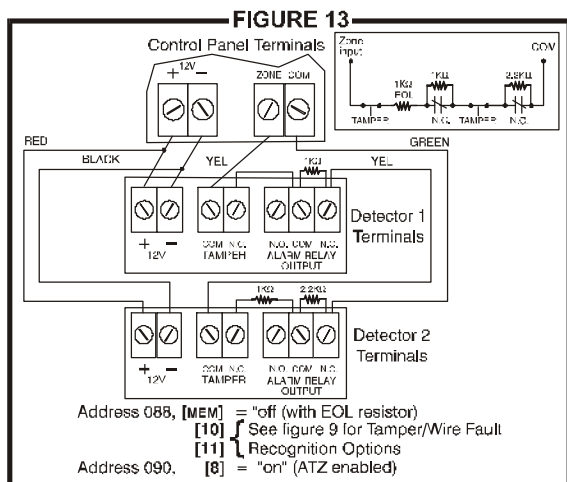
FIGURE 13

KEYPAD ZONE CONNECTION DIAGRAMS
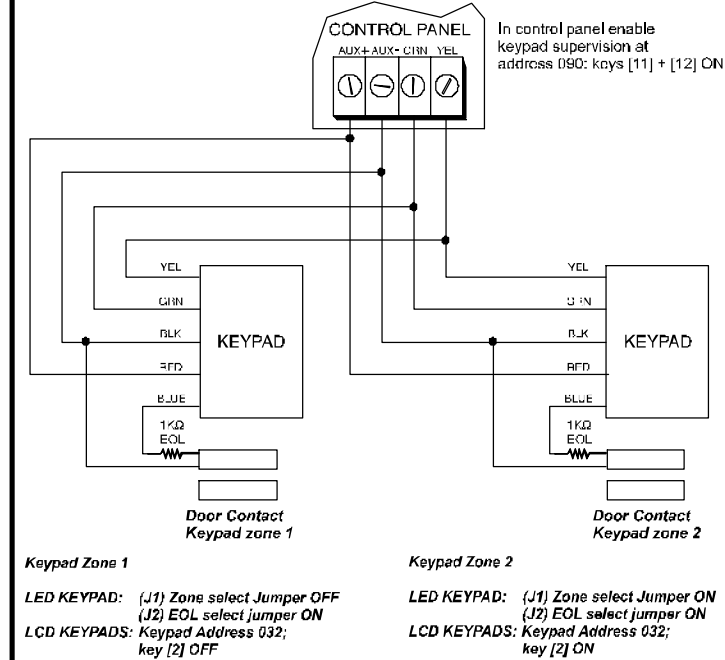
Note: Keypad zones always use (1K OHM) EOL resistor.
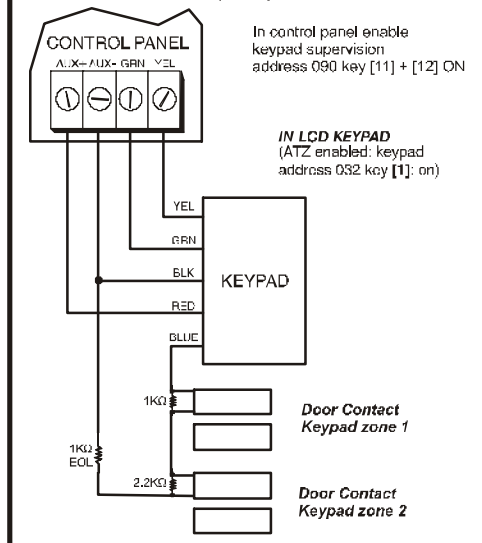
FIGURE 14

ONE KEYPAD / ONE ZONE

In control panel enable keypad supervision at address 090 Key [11] ON = keypad zone 1

LED KEYPADS:
(J1) Zone select jumper OFF
(J2) EOL select jumper ON

LCD KEYPADS:
Address 032; Key [2] OFF

CONTROL PANEL
AUX+ AUX- GRN YEL

KEYPAD

Door Contact
Keypad zone 1

FIGURE 15

TWO KEYPADS / TWO ZONES

In control panel enable keypad supervision at address 090: keys [11] + [12] ON

CONTROL PANEL
AUX+ AUX- GRN YEL

KEYPAD

KEYPAD

Door Contact
Keypad zone 1

Door Contact
Keypad zone 2

Keypad Zone 1

LED KEYPAD: (J1) Zone select Jumper OFF
(J2) EOL select jumper ON
LCD KEYPADS: Keypad Address 032;
key [2] OFF

Keypad Zone 2

LED KEYPAD: (J1) Zone select Jumper ON
(J2) EOL select jumper ON
LCD KEYPADS: Keypad Address 032;
key [2] ON

FIGURE 16

639 LCD KEYPAD
ONE KEYPAD (W/ATZ) / TWO ZONES

In control panel enable keypad supervision address 090 key [11] + [12] ON

IN LCD KEYPAD
(ATZ enabled: keypad address 032 key [1]: on)

CONTROL PANEL
AUX+ AUX- GRN YEL

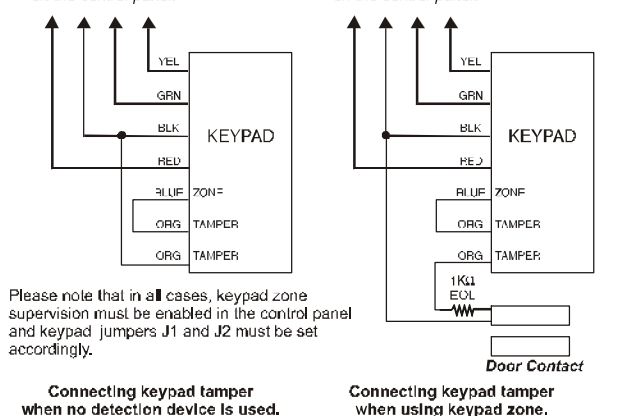KEYPAD

Door Contact
Keypad zone 1

Door Contact
Keypad zone 2

KEYPAD TAMPER SWITCH

NOTE: To connect the keypad's tamper switch, simply connect the keypad as shown below. If the cover is removed when the system is armed, the keypad will send a zone open and the control panel will generate an alarm.

To corresponding terminals on the control panel.
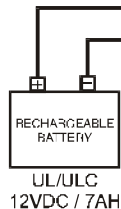
To corresponding terminals on the control panel.

KEYPAD

KEYPAD

Please note that in all cases, keypad zone supervision must be enabled in the control panel and keypad jumpers J1 and J2 must be set accordingly.

Connecting keypad tamper when no detection device is used.

Connecting keypad tamper when using keypad zone.

ESPRIT 728✛ WIRING DIAGRAM

PARADOX SECURITY SYSTEMS

Charging and battery test LED
(every 60 seconds)

SERIAL OUTPUT

DIALER

For use with 708, Esprint, and SRI-18 PGM expander.
Note: To use you must disable PGM. To do so program [2ND] [2ND] in sections 039, 040 + 042.

Service Keypad

+ AUX − GRN YEL

Four pin connector can be used for quick installation of an Esprit keypad.

RESET JUMPER

728✛

"TLM" LED: Short flash = OK
Long flash = Fault
OFF = Disabled
Constant = On Line

Warning:
Disconnect telephone line before servicing.

BATT
RED BLK

RECHARGEABLE BATTERY
UL/ULC
12VDC / 7AH

BATT 5 AMP

SERVICE KEYPAD

RJ31X
CA 38A

Caution:
Disconnect battery before replacing fuse.

AC   PGM   BELL   AUX   GRN YEL   1/2   C   3/4   5/6   C   7/8   EARTH R-1   T-1   RING   TIP

GRY   BRN   RED   GRN

Cold water pipe grounding

Ground clamp

UL: K12
model T16 V4O
ULC: Frost
model FTC 1637

TRANSFO
16.5VAC 40VA

BELL OUTPUT
will shut down if current exceeds 3A.

BELL

SIREN
UL/ULC
Wheelock
46T-12

220Ω   KEYSWITCH

YEL
GRN
BLK
RED

AWG#14 single conductor solid copper wire

To mounting cabinet

Warning: Improper connection may result in damage to the system.

A.C. POWER

AUX POWER 400mA max. 250mA max. for 24 hr. standby. To connect additional wiring to auxiliary power, use the red (+) and black (-) keypad connectors. Aux power will shut down if current exceeds 1A.

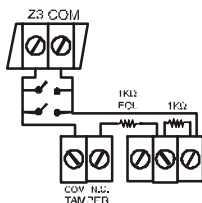To provide maximum lightning protection we strongly recommend having separate earth connections for the dialer and zone ground terminals.

FIRE ALARM ZONE CONNECTIONS

Without ATZ
Address 090; key [1] on
Address 100; key [3] on.
To set zone 3 as a fire zone.

Z3 COM

N.O. contacts

1KΩ
EOL

Smoke and heat detectors
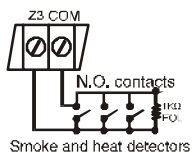
With ATZ enabled
Address 090; key [1] off
Address 100; key [3] on.

Z3 COM

1KΩ
EOL   1KΩ
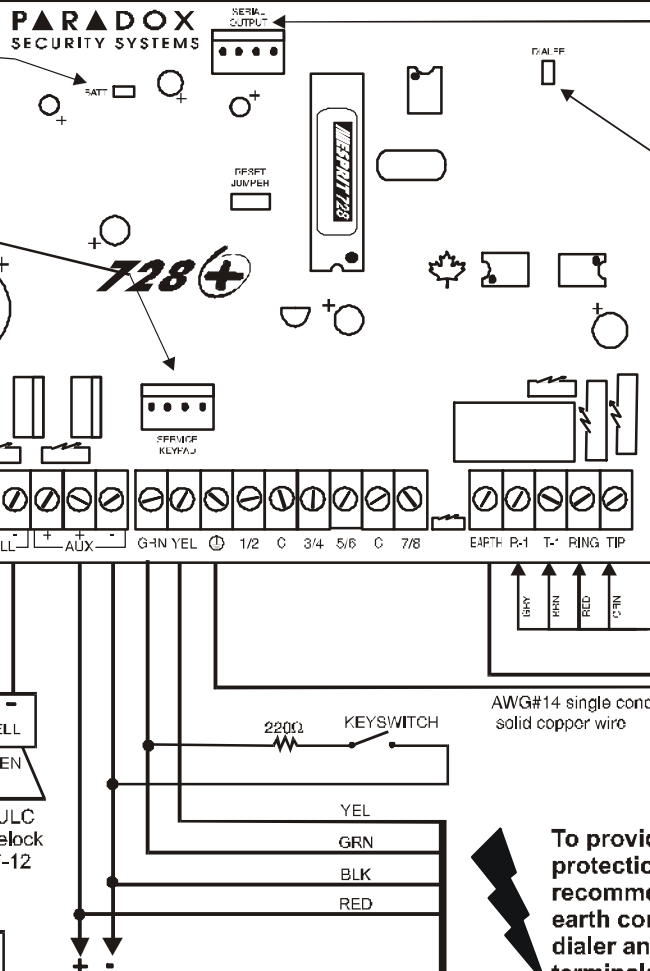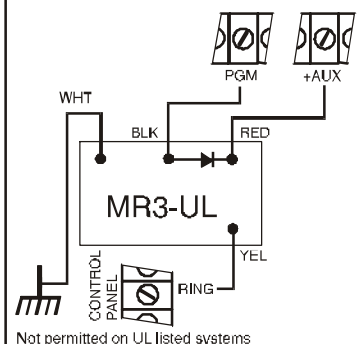
COM N.C.
TAMPER

FIRE RESET

To program PGM to conduct a 4 second smoke detector reset when [CLEAR] and [ENTER] are pressed simultaneously:

Address 039 = [BYP] (first digit)
Address 040 = [5] [0]
Address 042 = [2ND] [6]
Address 056 = [0] [0] [4]

* PGM maximum 50mA

PGM   AUX +   Z3 COM

Smoke detector
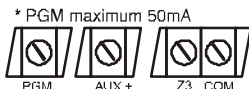
Smoke detector

Smoke detector power supervision relay, 12VDC

1KΩ EOL

Smoke detector must be 4 wire latching - UL Falcon model 5454, ULC BRK 2412.
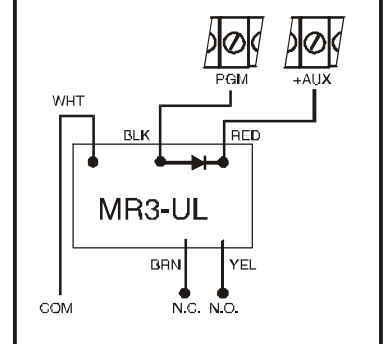Power supervision relay model MR3-UL.

KEYPADS

- LED Keypads 616, 626, & 633
- LCD Keypads 639 and 640
- PS1 Bedside Remote

The maximum number of keypads per installation is dependent on the auxiliary output, which is not to exceed 400mA. Please refer to the current consumption table in section 2.3.3 of the instruction manual. For information on connecting keypad zones, refer to page 13 of the programming guide.

GROUND START CIRCUIT

PGM   +AUX

WHT

BLK   RED

MR3-UL

CONTROL PANEL   RING   YEL

Not permitted on UL listed systems

PGM OUTPUT RELAY

PGM   +AUX

WHT

BLK   RED

MR3-UL

COM   BRN   YEL
N.C. N.O.

PARADOX
SECURITY SYSTEMS