

ESPRIT 728 PROGRAMMING GUIDE



SOFTWARE VERSION 2.20

CONTROL PANEL RESET:

Installer lock must be unlocked.
(Address 255: enter any value other than 147)

N.B.: If serial communication is required (i.e. the panel is used with another module 708, 708DV, SRI-18, etc.), PGM1 **must** be disabled: enter [2ND] [2ND] at addresses 196 and 198.

Power down reset

- (1) Remove battery and AC to power down the unit.
- (2) Connect a jumper between "reset jumper" pins.
- (3) Connect AC and/or battery.
- (4) Wait 3 seconds.
- (5) Remove jumper.

Factory default installer and master codes will be reinstated. Values entered at addresses 059-243, as well as all user codes, will be erased ([2ND] [2ND]). Programmed values of all other addresses do not change.

PANEL ANSWER OPTIONS:

ADDRESS 000: ___/___ (factory default [2ND], [8])

Answering machine override 2nd call time:
[2ND] or [1] answering machine override disabled.
[2] = 16 sec. [3] = 24 sec. [4] = 32 sec.
[5] = 40 sec. [6] = 48 sec. [7] = 56 sec.
[8] to [F] = 60 sec.

Number of rings before answer:
Value entered determines number of rings before answer.

Entering [2ND] [2ND] - Panel will not answer.

PANEL IDENTIFIER:

001: ___/___ 002: ___/___

PC PASSWORD:

003: ___/___ 004: ___/___

HEXA DISPLAY

If key is lit = 8 = 4 = 2 = 1	Value of 2 ND digit = 10 (8 + 2 = 10)
If key is lit = 8 = 4 = 2 = 1	Value of 1 ST digit = 3 (2 + 1 = 3) VALUE = "3A"
No display = SKIP (empty)	No light = 0
10 = [0] = [A]	

INSTALLER CODE: (reset code 282828)

Full access to programming, except access codes. (addresses 008-058) No access to arming/disarming. Can be used to modify installer code. Use only numeric keys from [1] to [10]. (key [10] = 0)

005: ___/___ 006: ___/___ 007: ___/___

Dialer circuit is patent pending.

INTELLIZONE DELAY:

ADDRESS 059: ___/[2ND]

First digit: (factory default [3])

- | | | | |
|---------------|----------------|-----------------|-------------------|
| [1] = 16 sec. | [5] = 80 sec. | [9] = 144 sec. | [BYP] = 208 sec. |
| [2] = 32 sec. | [6] = 96 sec. | [10] = 160 sec. | [MEM] = 224 sec. |
| [3] = 48 sec. | [7] = 112 sec. | [11] = 176 sec. | [TRBL] = 240 sec. |
| [4] = 64 sec. | [8] = 128 sec. | [12] = 192 sec. | [2ND] = 256 sec. |

STREAMLINED SECTION PROGRAMMING

Can be used to program sections 00 to 34. (addresses 060 to 199)

Press [ENTER] + installer code + [2] [7]. ([2ND] + [ENTER] flashes alternately.)

Enter a 2-digit section number, followed by 8 digits to program that section (confirmation beep). Data will be saved automatically and the software advances to the next programming section. To exit programming mode press [CLEAR].

TELEPHONE AND ACCOUNT NUMBERS: (reset empty)

Press [TRBL] at the end of a phone number if less than 16 digits are programmed.

If only one central station phone number is used, program the same number for telephone number 1 and 2.

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

REPORTING CODES: (reset code "empty")

ALARM CODES ZONE 1 TO 10:

Streamline section	Data	Description	Address	Streamline section	Data	Description	Address
15	___/___	Zone 1	120	17	___/___	Zone 9	128
	___/___	Zone 2	121		___/___	Zone 10	129
	___/___	Zone 3 (fire)	122 (See add. 220)		[2ND]/[2ND]	N/A	130
	___/___	Zone 4	123		[2ND]/[2ND]	N/A	131
16	___/___	Zone 5	124				
	___/___	Zone 6	125				
	___/___	Zone 7	126				
	___/___	Zone 8	127				

Sections **18** to **20** are not available. Streamline software advances automatically from section **17** to **21**.

RESTORE CODES ZONE 1 TO 10:

Streamline section	Data	Description	Address	Streamline section	Data	Description	Address
21	___/___	Zone 1	144	23	___/___	Zone 9	152
	___/___	Zone 2	145		___/___	Zone 10	153
	___/___	Zone 3	146		[2ND]/[2ND]	N/A	154
	___/___	Zone 4	147		[2ND]/[2ND]	N/A	155
22	___/___	Zone 5	148				
	___/___	Zone 6	149				
	___/___	Zone 7	150				
	___/___	Zone 8	151				

Sections **24** to **26** are not available. Streamline software advances automatically from section **23** to **27**.

TROUBLE CODES:

Streamline section	Data	Description	Address	Streamline section	Data	Description	Address
27	___/___	Max. auxiliary current	168	28	___/___	Program change	172
	___/___	Bell disconnect/ max. bell current	169		___/___	Timer loss	173
	___/___	Battery disconnected/ low voltage	170		___/___	Fire loop trouble	174
	___/___	Power failure	171		___/___	Test report	175

TROUBLE RESTORE CODES:

Streamline section	Data	Description	Address	Streamline section	Data	Description	Address
29	___/___	Max. auxiliary current	176	30	___/___	Tamper/wiring fault	180
	___/___	Bell disconnect	177		___/___	Timer programmed	181
	___/___	Battery disconnected/ low voltage	178		___/___	Fire loop trouble	182
	___/___	Power failure	179		___/___	TLM trouble restore	183

For single digit reporting enter "skip" ([2ND]) as first digit.

REPORTING CODES: (continued)

(reset code "empty")

SPECIAL CODES - FORMATS - PGM:

Streamline section	Data	Description	Address	Streamline section	Data	Description	Address
31	___/___	Panic 1	184	33	___/___	Disarm with Esplod	192
	___/___	Panic 2	185		___/___	Disarm with master code	193
	___/___	Panic 3	186		___/___	1st digit: telephone 1 format	194
	___/___	Partial arming	187		___/[2ND]	2nd digit: telephone 2 format	195
32	___/___	Auto / Esplod arm	188	34	___/[2ND]	1st digit: PGM 1 TYPE	195
	___/___	Arm with master code	189		___/[2ND]	2nd digit: any value must be entered i.e. [2ND]	
	___/___	No Movement*/late to close	190		___/[2ND]	PGM 1 (1st, 2nd digit)	196
	___/[2ND]	Tamper on input 1-4**	191		___/[2ND]	N/A	197
		2nd digit: value must be entered i.e. [2ND]				PGM 1 (3rd, 4th digit)	198
						N/A	199

* No movement for specified time/panel not armed at specified hour - see addresses 245, 246, 253.

**1st digit of zone tamper is reported with 2nd digit on input 1-4 alarm codes - see addresses 120 - 123.

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 (selected codes)
- [10] = ADEMCO contact ID (all codes)
- [TRBL] = DTMF - no handshake (personal dialing)

FEATURE SELECT PROGRAMMING

Addresses **200** to **2 2**. "ON"/"OFF" status of the key lights determines feature selection.

In programming mode, enter 3 digit memory address (**200** to **242**).

To save entries, press [ENTER].

To exit programming mode press [CLEAR].

Reset = "OFF" for addresses **200** to **2 2**

CODE PRIORITY																	
KEY SELECT:		[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]	[12]	[BYP]	[MEM]	[TRBL]	[2ND]
200:	SYSTEM "A" / STAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
		<input type="checkbox"/>															
202:	SYSTEM "B" / AWAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
		<input type="checkbox"/>															
204:	Codes with bypass access	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
		<input type="checkbox"/>															

FEATURE SELECT PROGRAMMING (continued)

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

206:

- Telephone line monitor
- PS1/Keyswitch = regular arm / (A + B).....
- PS1/keys switch arming
- Call back
- Auto arm on time
- Auto arm on no movement
- Pulse dialing
- Partitioning
- Silent zone/panic generates a silent alarm (1:2) PULSE EUROPE
- Reporting options
- N/A
- Bell squawk on arm/disarm
- Auto zone shut down

- KEY
- [2ND]
 - [1]
 - [2] stay arm / System A
 - [3] enabled
 - [4] enabled
 - [5] enabled
 - [6] enabled
 - [7] Tone dialing (DTMF)
 - [8] enabled
 - [9] generates only a report
 - [10] (1:1.5) PULSE USA
 - [11]
 - [12]
 - [BYP] N/A
 - [MEM] enabled
 - [TRBL] enabled

TELEPHONE LINE MONITOR

Address 206, 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 206, key [9] has to be OFF)

208:

- Automatic event buffer transmission
- Panic 1 (keys [1] & [3], PS1)
- Panic 2 (keys [4] & [6])
- Panic 3 (keys [7] & [9])
- Panic 1 silent (PS1)
- Panic 2 silent
- Panic 3 silent
- Key [10] regular arm / (A + B)
- Key [11] stay or system A arm
- 6 digit access codes
- Tamper Recognition
- Beep on exit delay
- Report zone restore on bell cut-off
- Zones with EOL (1KΩ)
- Always report disarm

- KEY
- [2ND] enabled
 - [1] enabled
 - [2] enabled
 - [3] enabled
 - [4] audible
 - [5] audible
 - [6] fire
 - [7] enabled
 - [8] enabled
 - [9] 4 digit
 - [10]
 - [11]
 - [12] enabled
 - [BYP] on zone closure
 - [MEM] no EOL
 - [TRBL] only after alarm

REPORTING OPTIONS

Address 206, Key [11] [12]

KEY	TYPE	DIALING SEQUENCE (tel. No.)
[11]	[12]	
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)

TAMPER / WIRE FAULT DEFINITIONS

Address 208, Key [10] [11]

SYSTEM ARMED	KEY		SYSTEM DISARMED*
	[10]	[11]	
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.

210:

- Exclude power failure from trouble display
- Zone 4
- Auto arm = regular arm / (A + B)
- N/A
- N/A
- N/A
- No tamper bypass
- N/A
- Zone doubling (ATZ)
- Audible trouble warning
- 20 sec. delay before alarm transmission
- Keypad 1 zone supervision
- Keypad 2 zone supervision

- KEY
- [2ND] enabled
 - [1] disabled (if zone 3 is defined "fire" zone and ATZ is enabled)
 - [2] stay arm / System A
 - [3] N/A
 - [4] N/A
 - [5] N/A
 - [6] tamper follows zone bypass definition
 - [7] N/A
 - [8] enabled
 - [9] enabled
 - [10] enabled
 - [11] enabled
 - [12] enabled

PS1 software version 1.1
Keypad software versions prior to 4.0 } Keypad supervision must be OFF

PS1 software versions 2.0 onward
Keypad software versions 4.0 onward } Keypad supervision must be ON

(See Wiring Diagram)

ZONE DEFINITION: (reset = " ")																					
KEY SELECT: [1] [2] [3] [4] [5] [6] [7] [8] [9] [10]											[1] [2] [3] [4] [5] [6] [7] [8] [9] [10]										
212 1 2 3 4 5 6 7 8 9 10 Intellizone = ON <input type="checkbox"/>											216 1 2 3 4 5 6 7 8 9 10 Silent = ON <input type="checkbox"/>										
220 1 2 3 4 5 6 7 8 9 10 24 Hr. /Fire = ON <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>											224 1 2 3 4 5 6 7 8 9 10 Instant = ON <input type="checkbox"/>										
🔥 When zone 3 is defined "24 Hour" it becomes a fire zone																					
228 1 2 3 4 5 6 7 8 9 10 Follow = ON <input type="checkbox"/>											232 1 2 3 4 5 6 7 8 9 10 Delay 2 = ON <input type="checkbox"/>										
236 1 2 3 4 5 6 7 8 9 10 Bypass enabled = ON <input type="checkbox"/>																					
240 1 2 3 4 5 6 7 8 9 10 Stay / system A <input type="checkbox"/>											242 1 2 3 4 5 6 7 8 9 10 System B <input type="checkbox"/>										

Zones that are not selected at addresses **220** to **232** become "Delay 1" zones.

DECIMAL PROGRAMMING

Values entered at addresses "244 - 255" contain 3 digits between "000" and "255". ([10] = 0)

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

245: ___/___/___ (hours) Auto test report / Auto arm time (between "000" and "023")

246: ___/___/___ (minutes) Auto test report / Auto arm time (between "000" and "059")

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

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

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

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

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

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

253: ___/___/___ (x 15 minutes) Time for "No Movement" Report (000=disabled) (factory default **8** hours)

254: ___/___/___ 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)

255: ___/___/___ Installer lock (**147** = locked, **000** = unlocked) (factory default **unlocked**)

DECIMAL VALUE DISPLAY

If key is lit = 8 = 4 = 2 = 1

2ND

1

2

3

Total value (57)

(8 + 1 + 32 + 16 = 57)

TRBL

4

5

6

If key is lit = 128 = 64 = 32 = 16

No light = 0

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.) Then press the key corresponding to the desired feature. Press **[ENTER]** or **[CLEAR]** to exit.

key

- [9]** "Auto arming" time program (accessible to master and user 1 only)
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 **206** keys **[11]**, **[12]**. A value must be entered at address **175**, and both telephone and account numbers must be programmed.
- [TRBL]** Call Espload via telephone (all 3 codes)
Panel identifier and PC password (addresses **001-004**) and computer telephone number (addresses **060-067**) 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 from/to Espload)
Until next reportable event (installer code - all communications)
- [2], [6]** 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.
- [2], [9]** "Auto arming" time program (accessible to installer code only)
(Same as key **[9]** above)

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

CONNECTION DIAGRAMS

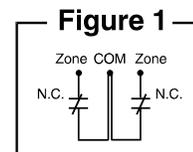
The system hardware will recognize the following zone conditions:

ZONE connection without EOL resistor (N.C. contacts)

address **208**, key **[MEM]** = "on"
key **[10]** = "off" (reset)
key **[11]** = "off" (reset)

N.C. contacts see Figure 1

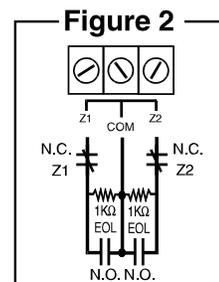
Keypad zones always use (1K OHM) EOL



ZONE connection with EOL resistor (N.C. and N.O. contacts)

address **208**, key **[MEM]** = "off" (reset)
key **[10]** = "off" (reset)
key **[11]** = "off" (reset)

N.C. and/or N.O. contacts, see Figure 2



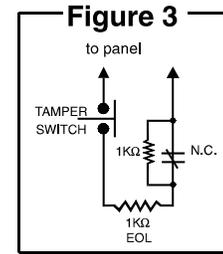
ESPRIT 728 CONNECTION DIAGRAMS

The system hardware will recognize the following conditions:

ZONE connection with EOL resistor and tamper recognition (N.C. contacts)

address **208**, key [MEM] = "off"
 key [10] = See "Tamper/wire Fault Definitions and Options"
 key [11] =

Tamper fault transmits separate code, see Figure 3

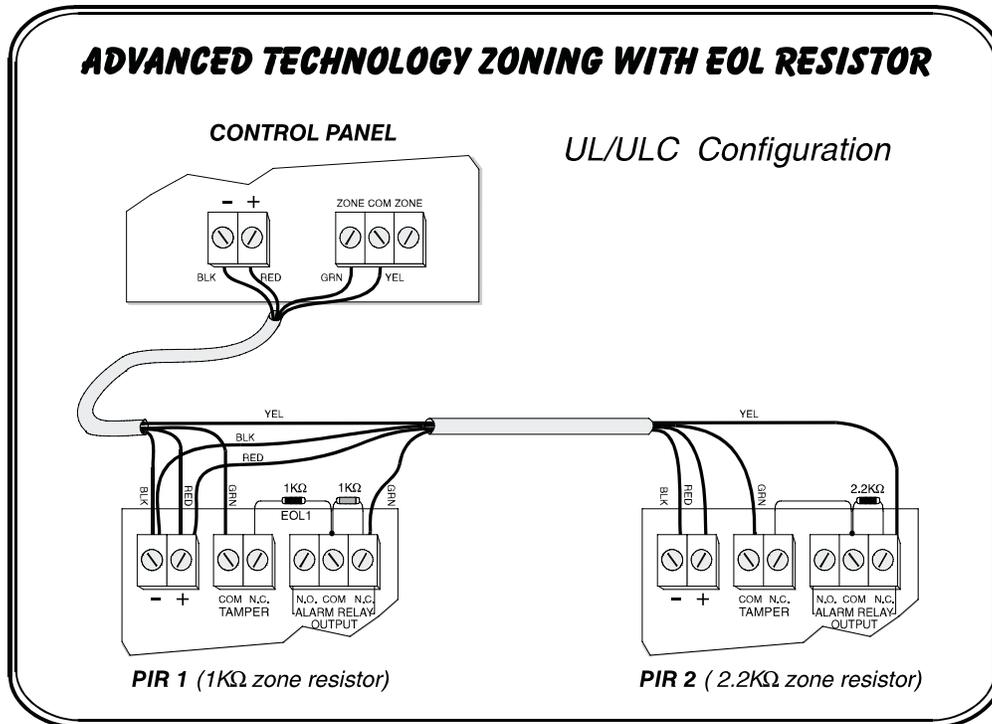
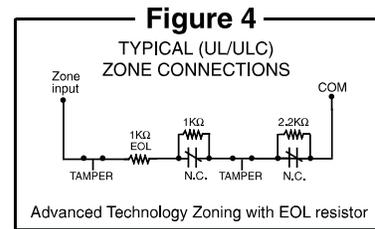


ADVANCED TECHNOLOGY ZONE connection, 2 zones with zone resistors, 1 EOL resistor (1Kohm) tamper (open) recognition, wire fault (short circuit) recognition (N.C. contacts)

address **208**, key [MEM] = "off"
 key [10] = See "Tamper/wire Fault Definitions and Options"
 key [11] =

address **210**, key [8] = "on"

Each zone transmits a separate alarm code.
 Tamper/wire fault transmits a separate alarm code, indicated by fast flashing zone light on keypad and is annunciated in **Esplod**, see figure 4.



ESPRIT 728 CONNECTION DIAGRAMS

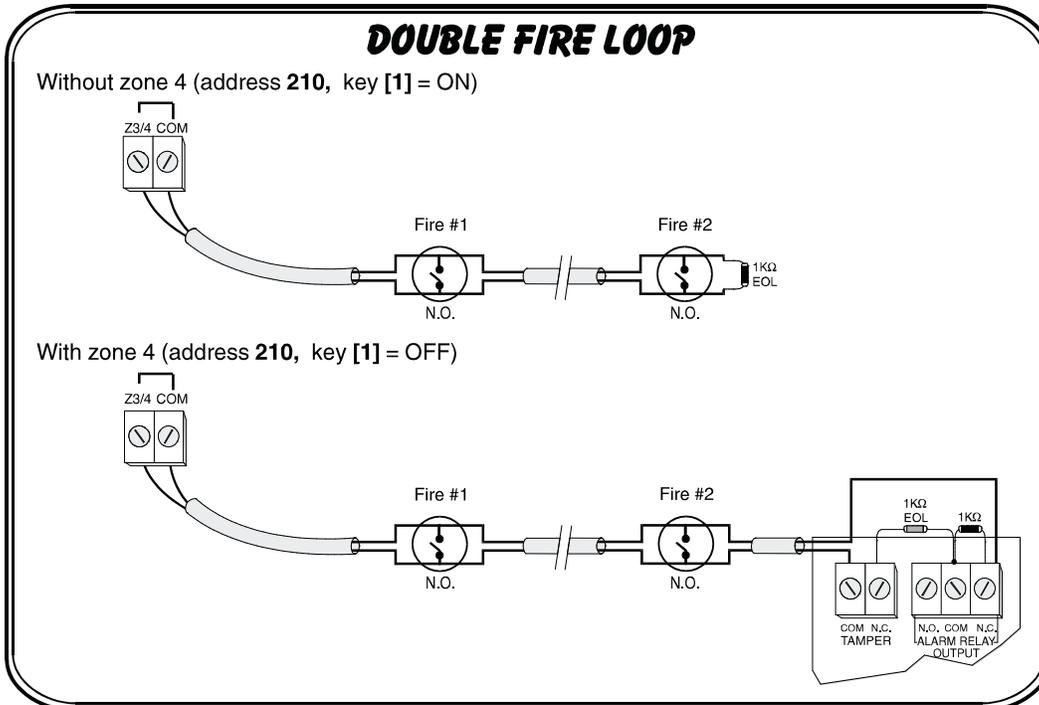
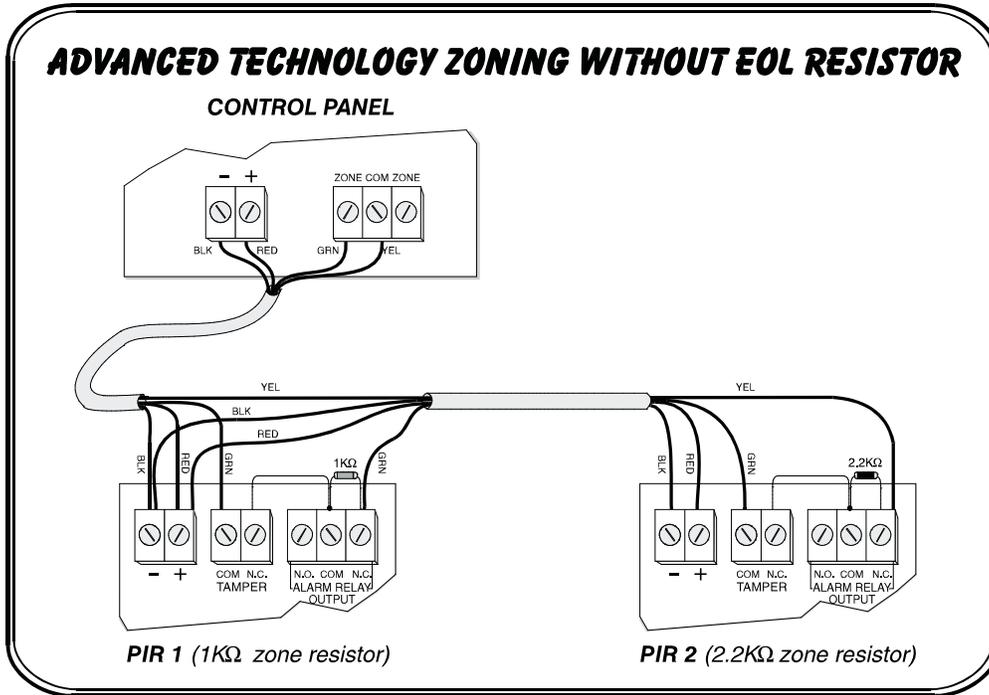
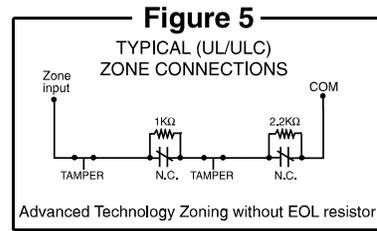
ADVANCED TECHNOLOGY ZONE connection, 2 zones resistor (without EOL), tamper recognition (N.C. contacts)

address 208, key [MEM] = "on"
 key [10] = See "Tamper/wire Fault Definitions and Options"
 key [11] =

address 210, key [8] = "on"

Tamper fault transmits separate code

Each zone transmits separate alarm code, see Figure 5



ESPRIT 728 WIRING DIAGRAM

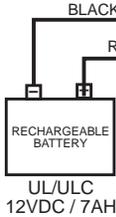
Charging and battery test LED (every 60 seconds)

Service Keypad



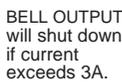
Four pin connector can be used for quick installation of an Esprit keypad.

Caution: Disconnect battery before replacing fuse.



UL: K12 model T16 V40
ULC: Frost model FTC 1637

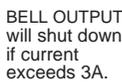
Warning: Improper connection may result in damage to the system.



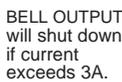
A.C. POWER



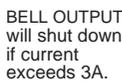
BELL OUTPUT will shut down if current exceeds 3A.
UL/ULC Wheelock 46T-12



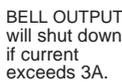
DIALER



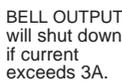
RESET JUMPER



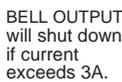
SERIAL OUTPUT



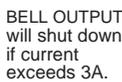
PARADOX SECURITY SYSTEMS



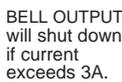
AC AC +BELL- PGM + +AUX- GRN YEL 1 COM 2 3 COM 4 R-1 T-1 RING TIP



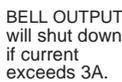
Z3 COM N.O. contacts 1KΩ EOL Smoke and heat detectors YEL GRN BLK RED



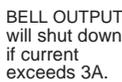
R-1 T-1 RING TIP To cabinet and grounding rod



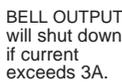
Address 220 *Zone 3 = Fire zone if zone definition is "24 hour".



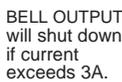
AUX POWER 400mA max. 250mA max. for 24 hr. standby. To connect additional wiring to auxiliary power, use the red (+) and black (-) keypad connectors. Aux power will shut down if current exceeds 1A.



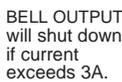
For zone connections see diagrams below



* Keypad 1 or 2 N.O. 1KΩ EOL N.C.

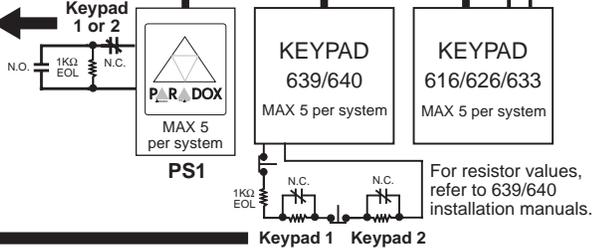


PS1 MAX 5 per system KEYPAD 639/640 MAX 5 per system KEYPAD 616/626/633 MAX 5 per system



For resistor values, refer to 639/640 installation manuals.

* PS1 software version 1.1
Keypad software versions prior to 4.0 } Keypad supervision must be OFF
PS1 software versions 2.0 onward
Keypad software versions 4.0 onward } Keypad supervision must be ON
(See Address 210, key [11] [12])



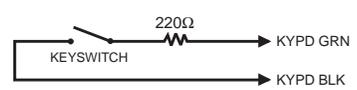
FIRE RESET

To program PGM1 to conduct 4 second smoke detector reset when [CLEAR] and [ENTER] are pressed simultaneously:

Address 195 = [BYP] (first digit) Address 198 = [2ND] [6]
Address 196 = [5] [10] Address 254 = [10] [10] [4]

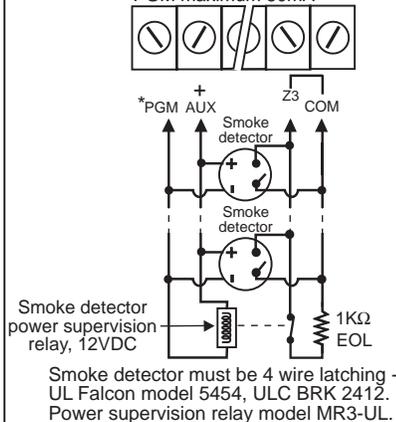
Keyswitch can be used in parallel with keypad (or PS1).

KEYSWITCH CONNECTION



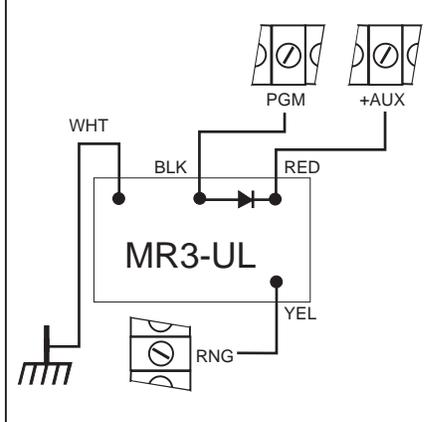
FIRE ALARM ZONE CONNECTIONS

* PGM maximum 50mA



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

GROUND START CIRCUIT



PGM OUTPUT RELAY

