STAR XL 4800 EZ ™

Hookup and Installation Instructions

FBii Fire Burglary Instruments, Inc.

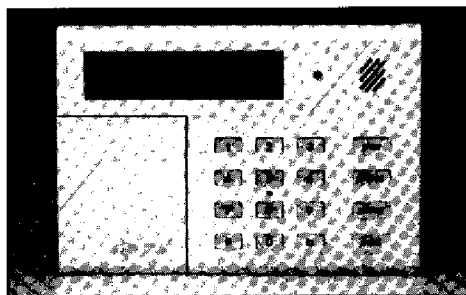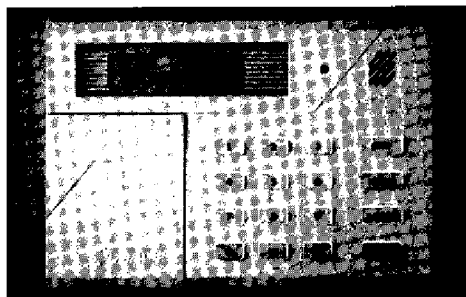# FBI◉
FIRE BURGLARY INSTRUMENTS, INC.

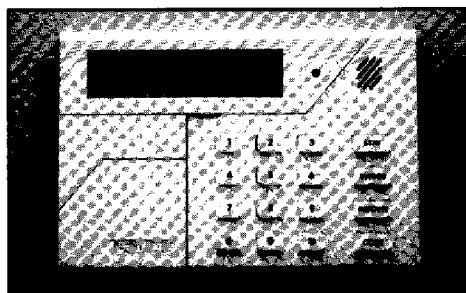# S P E C I F I C A T I O N S

7005L

7005

7015

XL4800
16 Zone EEPROM Control/Communicator with partitioning capability

STANDARD FEATURES:

- 16 fully programmable zones
- EASY programming directly through keypad
- Remotely programmable
- Two line English language keypads, or LED keypads
- Partitioning capability (2 subsystems)
- System event log stores the last 128 events
- Uploading and downloading
- Remote command capabilities
- Fuseless operation eliminates unnecessary service calls
- Enclosure dimensions: 12 x 15 x 4 (XL4800)
  12 x 15 x 4.5 (XL4805)

SYSTEM COMPONENTS

XL4800PO	XL4800 panel only, including transformer
XL4800POLT	XL4800 panel only, less transformer
XL4805	XL4800 system suitable for UL commercial (mercantile installations) including XL4800 LCD keypad
7005	LCD based keypad featuring two line by sixteen character backlit supertwist display and illuminated keys
7015	LED keypad featuring individual LEDs for zone system status with illuminated keys
7005L	LCD keypad features large character supertwist display
7700	EZ-Mate PC Downloader software, IBM compatible. Provides database maintenance and remote communications with the XL4800

XL4800 SPECIFICATIONS

PROGRAMMING
- Programmable through LCD keypad or EZ-Mate PC Downloader
- Customized zone descriptors (16 characters) available through the PC Downloader
- Factory default characteristics simplify installation
- EEPROM memory retains programmable features and current status even during total power loss

ZONES
- 16 fully programmable zones, all with optional EOL supervision
- Four keypad emergency conditions
- Versatile Zone types:
    Burglary zones: *Delay, Interior, Interior follower, Perimeter, Day Zone*
    24 hour zones: *Fire, Audible Panic, Silent Panic, 24 Hour, Trouble*
- Programmable central station alarm and restore reporting codes by zone
- Chime option by zone
- Individual reporting codes for *AC Loss/Restore Test Bypass, Trouble, Low Battery/Restore Opening, Closing*
- Option for 12 or 24 hour system test signal
- Bell test/sounder ringback options
- Smoke reset and verification logic
- Bell lockout feature option
- Separate cutoff times for *Fire* and *Burg* bell
- System test option daily (12/24 hr) or weekly

PARTITIONS
- 2 partitions (subpanels) per system
- Each partition report two central station account numbers

USER CODES
- 16 programmable four digit user codes
- Open/Close by user ID
- Multipartition mode
- *Ambush* code capability
- Two levels of user authorization
- *Quick arm, Bypass, Forced Arming* commands available

CENTRAL STATION COMMUNICATIONS
- Transmission to two separate CS numbers
- Three or four digit account numbers
- Transmission formats include 10PPS, 20PPS, 40PPS, 4 x 2, FBI Superfast, BFSK
- Backup CS reporting for alarm and trouble conditions with split reporting option for openings/closings
- Formats include: 3x1, 4x1, 4x2, Expanded, Single Round Expanded
- Pulse or touch-tone dialing

INSTALLER FUNCTIONS
- Walk test feature
- Local system activity view

KEYPADS
- Up to 8 four wire keypads per system, (4 LED, 4 LCD, may require auxiliary power supply)
- LCD keypad features easy to read, two line by sixteen character supertwist display with illuminated keys
- LED keypads displays zone status for all 16 zones, as well as communications and power status

POWER SPECIFICATIONS
- Special watchdog circuitry insures integrity of microprocessor
- 24 hour battery load test and continuous low battery monitoring
- Total control Aux. power: 12VDC, regulated @900 mA
- Keypad current = 250 mA max smoke current = 150 mA max
- Aux current = 500 mA max if keypad and smoke power is used, or 900 mA max if keypad & smoke power is not used
- Alarm Power: 12 VDC, regulated @ 2 Amps

REMOTE OPERATIONS
- Programmable callback communications method prevents unauthorized access
- Downloading and uploading, locally at the panel site or remotely from Alarm Company location
- Programmable through LCD keypad or EZ-Mate PC Downloader
- Remote communications even in the presence of an answering machine
- Remotely arm, disarm, bypass, read system status and device control

SYSTEM LOG
- Panel retains activity log (128 events max)
- System log viewable by installer locally through LCD keypad or remotely by EZ-Mate Downloader from Alarm Company location

LISTINGS
- UL Household Combination Burglary/Fire (XL4800)
- UL Mercantile Burglary Listing: Local Grade A, Police Connect Grade A, Central Station Grade B (XL4805)
- California State Fire Marshal (CSFM)

SS4800 10/93

1. XL4800™ EZ HOOKUP

ZONE HOOKUP

The XL4800EZ contains 16 zones connected as follows;

ZONE	TERMINALS		ZONE	TERMINALS	
1	1 & 2	[Delay]	9	38 & 39	[Perim.]
2	3 & 2	[Int. Foll]	10	39 & 40	[Perim.]
3	4 & 5	[Perim.]	11	41 & 42	[Perim.]
4	6 & 5	[Perim.]	12	42 & 43	[Perim.]
5	7 & 8	[Perim.]	13	44 & 45	[Perim.]
6	9 & 8	[Perim.]	14	45 & 46	[Perim.]
7	10 & 11	[Perim.]	15	48 & 49	[Perim.]
8	12 & 11	[Fire]	16	48 & 49	[Aud. Panic]

The factory default values for each zone is displayed above, and each zone can be programmed for any of the following types; Delay, Interior, Interior Follower, Perimeter, Silent Panic, Audible Panic, Day Trouble, 24 Hour Trouble, or Fire Zone. Each of the zones can be EOL supervised using the 2.2K EOL resistors provided. The zone programming questions are questions 35 and 36 within the LCD keypad programming sequence.

KEYPAD CONNECTIONS

The XL4800 keypads are connected to the control panel with four conductor cables to terminals 13 through 16. Attach each keypad used within the system to the terminals as follows;

T13	Red (+ voltage)
T14	Green
T15	Yellow
T16	Black (- voltage)

The keypads **should** be connected in parallel at the control panel with wire runs not to exceed 3000 feet using 22 gauge wire. Keypads can also be daisy chained, however the maximum sum of the wire run should not exceed 5000 feet from the control panel using 22 gauge wire. For example, if one keypad is 500 feet from the control panel with another keypad run 200 feet from the first keypad, this wire run would be considered 1200 feet (500 to first keypad + 700 to second keypad).

The available keypad power from connections 13 and 16 is restricted to 250 ma. Since each keypad draws approximately 60 ma, a maximum of **4** keypads can obtain their power from these terminals. Additional key pads must obtain their power from the other auxiliary panel outputs(if sufficient capacity is available) or an external power supply. Note: All keypads must be connected to terminals 14 and 15 regardless of where they obtain power.
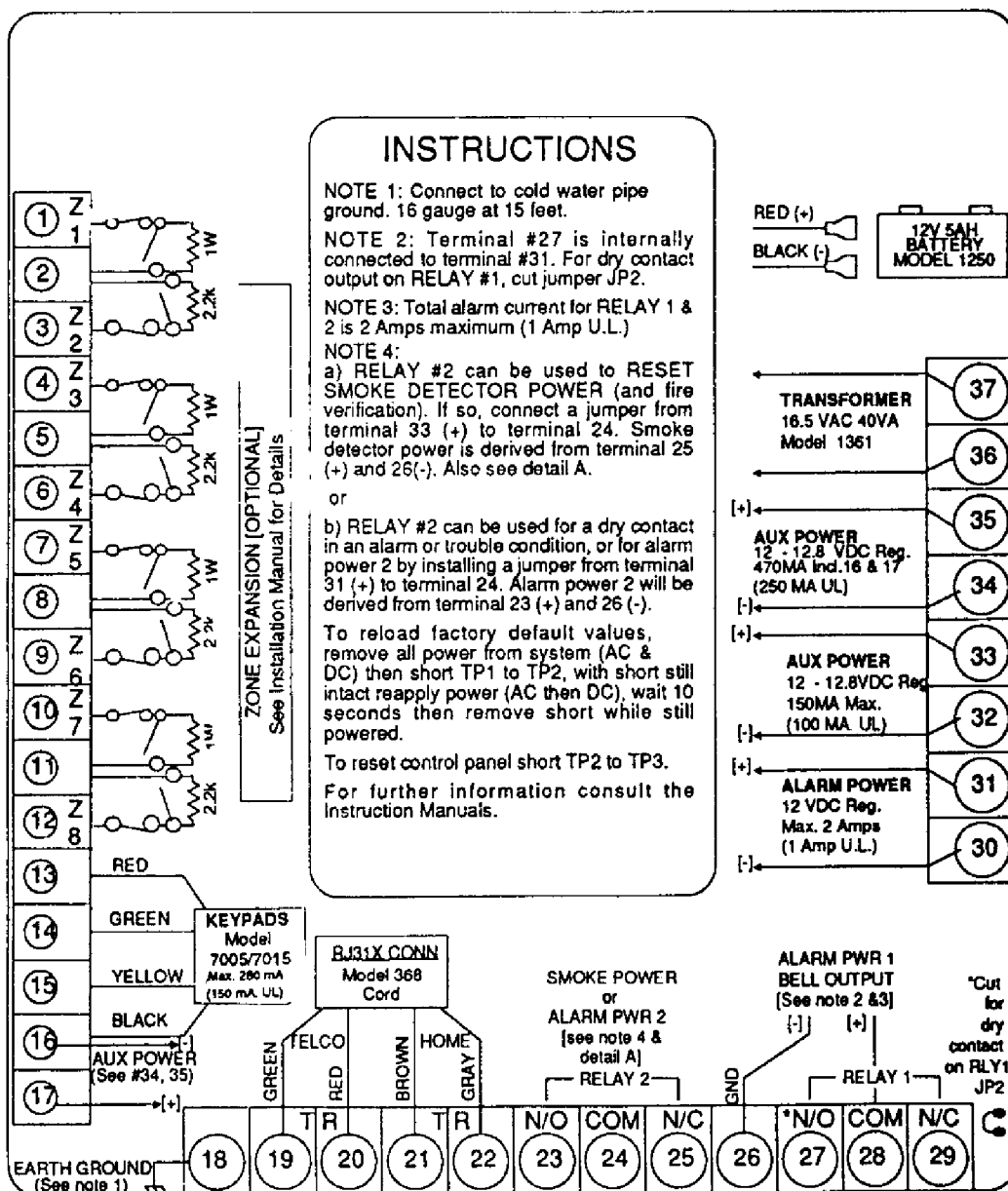
AUXILIARY POWER

Auxiliary power (13.8VDC regulated) can be obtained from three different outputs of the XL4800 EZ panel. The total regulated output power from the XL4800 EZ is 900 ma with power available as follows;

TERMINALS	MAX. CURRENT	APPLICATION
13 (+) & 16(-)	250 Ma.	Keypads
17 (+) & 16(-)	500 Ma.	Misc. (Passives etc.).
33 (+) & 32(-)	150 Ma.	Smoke Detectors

NOTE: Terminal 35(+) is internally connected to 17 (+). The maximum current available from both of these points added together is 500mA. Power can be obtained from any of these connections provided that the total does not exceed the rated capacity of the terminals. Consult the specifications for the devices being connected to determine the power requirements for your installation.

4. SYSTEM WIRING AND HOOKUP

4.1. WIRING DIAGRAM

INSTRUCTIONS

NOTE 1: Connect to cold water pipe ground. 16 gauge at 15 feet.

NOTE 2: Terminal #27 is internally connected to terminal #31. For dry contact output on RELAY #1, cut jumper JP2.

NOTE 3: Total alarm current for RELAY 1 & 2 is 2 Amps maximum (1 Amp U.L.)

NOTE 4:
a) RELAY #2 can be used to RESET SMOKE DETECTOR POWER (and fire verification). If so, connect a jumper from terminal 33 (+) to terminal 24. Smoke detector power is derived from terminal 25 (+) and 26(-). Also see detail A.

or

b) RELAY #2 can be used for a dry contact in an alarm or trouble condition, or for alarm power 2 by installing a jumper from terminal 31 (+) to terminal 24. Alarm power 2 will be derived from terminal 23 (+) and 26 (-).

To reload factory default values, remove all power from system (AC & DC) then short TP1 to TP2, with short still intact reapply power (AC then DC), wait 10 seconds then remove short while still powered.

To reset control panel short TP2 to TP3.

For further information consult the Instruction Manuals.

RED (+)
BLACK (-)
12V 5AH BATTERY MODEL 1250

TRANSFORMER 16.5 VAC 40VA Model 1361 — 37, 36

AUX POWER 12 - 12.8 VDC Reg. 470MA Ind.16 & 17 (250 MA UL) — 35, 34 [+] [-]

AUX POWER 12 - 12.8VDC Reg 150MA Max. (100 MA UL) — 33, 32 [+] [-]

ALARM POWER 12 VDC Reg. Max. 2 Amps (1 Amp U.L.) — 31, 30 [+] [-]

Z1 ① ②
Z2 ③
Z3 ④ ⑤
Z4 ⑥
Z5 ⑦ ⑧
Z6 ⑨
Z7 ⑩ ⑪
Z8 ⑫

ZONE EXPANSION [OPTIONAL] See Installation Manual for Details

RED ⑬
GREEN ⑭
YELLOW ⑮
BLACK ⑯
AUX POWER (See #34, 35) ⑰
EARTH GROUND (See note 1)

KEYPADS Model 7005/7015 Max. 280 mA (150 mA UL)

BJ31X CONN Model 368 Cord

SMOKE POWER or ALARM PWR 2 [see note 4 & detail A] — RELAY 2

ALARM PWR 1 BELL OUTPUT [See note 2 &3] [-] [+] — RELAY 1

*Cut for dry contact on RLY1 JP2

| | TELCO | | HOME | | | | | | | | |
GREEN	RED		BROWN	GRAY				GND			
	T	R	T	R	N/O	COM	N/C		*N/O	COM	N/C
18	19	20	21	22	23	24	25	26	27	28	29

2. KEYPAD MOUNTING

Keypad mounting is identical for both the LED and LCD versions. Keypads can be surface mounted as follows;

1- Remove both sections of the keypad plastic coverings using a screwdriver in the slots as indicated in the diagram below.

2- Connect keypad wiring to the control panel.

3- Remove the four screws which secure the keypad to the rear mounting plate.

4- Secure the rear mounting plate to the wall through any of the mounting holes provided.

5- Reconnect the XL4800 keypad to the mounting plate using the screws removed in step 3. Next replace the keypad plastic sections removed in step 1.

NOTE: When selecting the mounting location for LCD keypads it must be noted that the display used is a top view device which means that the display is best viewed when looking down at the display. Therefore the location should be selected to optimize the viewing of the display.
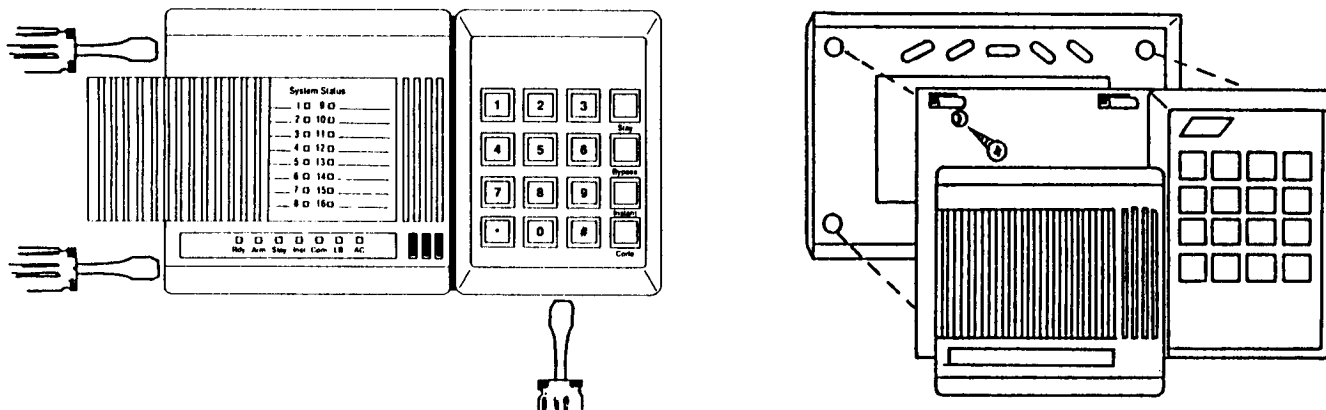
KEYPAD ADDRESSING

Both versions of XL4800 keypads (XL4800LED, or XL4800LCD) contain switches to set the address of the keypad, which identifies the keypad to the control panel. This switch contains 4 locations numbered SW1 - SW4, and is physically located behind the left hand plastic cover of the keypad. To access this switch, remove the cover plate by prying the cover open using a screwdriver as shown in the keypad mounting section.

An XL4800 installation can contain a total of eight keypads (4 LED and 4 LCD). Each keypad **must** be assigned a unique, sequential address from the table below. For example, if there are 4 LCD keypads and 2 LED keypads, the LCD keypads should be numbered 1, 2 , 3, and 4, while the LED keypads should be numbered 1 & 2.

SW1 -SW3

KEYPAD NUMBER	SW1	SW2	SW3
1	ON	ON	ON
2	OFF	ON	ON
3	ON	OFF	ON
4	OFF	OFF	ON

If the system is programmed for partitioned setup, then there can be a total of 2 LCD and 2 LED keypads per partition (subsystem). Again there should not be any duplication of addresses between keypads of the same type. Partition #1 can contain keypads 1 & 2 , with partition 2 containing keypads 3 & 4.

SWITCH 4

This switch sets the partition number: ON = Partition 1, OFF=Partition 2. If the system is setup in a non partitioned manner then SW4 should be ON for all keypads.

3. INSTALLER FUNCTIONS

The XL4800 EZ contains functions reserved for the installer for the initial installation and subsequent troubleshooting of the panel. Entry into the installer mode is protected by a six digit installer code which can be programmed for each installing company. The default value for the installer code is 123456.

Entry into the installer mode requires the following sequence;

CODE * [INSTALLER CODE] x

where:

CODE	is the CODE key on the keypad
*	is the asterisk key
[INSTALLER CODE]	is the six digit installer code
x	is the desired function as follows;

1	Programming
2	Time/Day Setup
3	Walk Test
4	Walk Test with Bell Output
5	Default Reset
6	System Log View *

* LCD Keypad Only

Note: The system must be in a disarmed state in order to perform any of the installer functions.

1- KEYPAD PROGRAMMING

Keypad programming can only be performed through an LCD keypad. Further information on keypad programming can be found within the XL4800 EZ Programming Instructions.

2- TIME DATE SETUP

The XL4800 EZ contains a real time clock which is used for system operation such as time stamping the system activity log. The current system time can be set as follows:

CODE [INSTALLER CODE] 2 0 YY MM DD HH MM *

where:

YY = Current year (Example 1988 = 88)

MM = Current month (Example January = 01)

DD = Current date (01 - 31)

HH = Hour in military time (00 = midnight, 23 = 11PM)

MM = Minute (00 - 59)

* = Asterisk key which terminates the time set command.

EXAMPLE: Current time = 5:52 PM on July 31, 1988

CODE [Installer Code] 2 0 88 07 31 17 52 *

NOTE: The time can be entered through either an LCD or LED keypad. The LCD keypad will display questions for entry of each of the values. On the LCD keypad only, display of the current time can be performed through depression of the # key instead of the 0 key in the sequence.

3- WALK TEST

The walk test facility allows entry into a mode where all the zones can be tested and keypad will display the zone(s) that have been activated.

Upon entry into installer walk test mode the keypad emits a two second buzzer. At this point the individual zones can be tripped to test their operation. As each zone is tested the keypad will indicate the zone number activated. A buzzer will sound for one second every time a zone has been violated and/or restored. The display area of LCD keypads will contain the zone number of each zone as it is violated and the zone number will blink on and off when the zone is restored. The LCD display will show the first 8 zones on the first line and the second 8 zones on the second.LED keypads will use the individual zone indicator LEDs to show violations with the zone LED solid ON and restores with the LEDs blinking.

To exit the walk test mode press the * key. This will restart the panel and return to the prior panel status.

4- WALK TEST WITH BELL OUTPUT

This function is identical to the normal bell test function except the bell will be tested upon entering the walk test mode.

5- DEFAULT RESET

The XL4800 EZ is shipped from the factory with default values which can be viewed within the Programming Instructions. The DEFAULT RESET function will return the system to these original default values, overwriting any values modified by programming. This procedure may take as long as 30 seconds as the default values are being read into the panel. After completion the panel will reset and return to the current panel status.

This function can also be performed by shorting the DEFAULT RESET (TP1, TP2) pins directly on the control board.

6- SYSTEM LOG VIEW

The XL4800 EZ contains a feature which retains the last 128 events. This system event log can be read directly through an LCD keypad or retrieved remotely by an EZ-Mate PC Downloader.

NOTE: The system log can not be read through an LED keypad.

Entry into the system log view will obtain the most recent entry into the system log. Depression of the **STAY** key will advance backwards through the events until the oldest event is obtained. Depression of the **BYPASS** key will scan through the list in reverse order.

The list below displays the possible events which may appear on the LCD display. This represents the information appearing on the second line of the LCD display, the first line contains the time and date of the entry. Note: The items shown in lower case letters will contain the actual zone number or partition based on the type of message.

LOG MESSAGE	EXPLANATION
ALARM Keyp pz p	Keypad emergency conditions. pz = keypad condition 1-4, p=partition
ALARM Zone zn p	Zone alarm zn= actual zone, p= partition
TROUBLE zn p	Trouble condition zn= actual zone p = partition
BYPASS us zn p	Bypass us = user performing the bypass, zn= zone bypassed, p=partition
RESTORE Z zn p	Restore of zone. zn= actual zone, p= partition
SYS TRBL	System trouble such as AC loss, Low Battery or System Error
SYS RSTR	System restore of condition such as AC Loss, Low Battery, System Error.
OPENING us p	Opening us= user performing the opening p=partition
CLOSING us p	Closing us = user performing the closing p= partition
CODE/RESET xx p	System abort or user code entered to leave alarm view mode
CS TEST	System test transmitted to Central Station
DOWNLOAD	Indicates that a download has taken place.
AMBUSH us p	Indicates that an ambush code has been entered us = user number p = partition
CALLBACK Request	Indicates that a remote communications session requiring a callback was made.
Clock Set	Indicates system time/date was changed. The entry on the first line displays the revised system time.
ANSWERED telcall	Shows that the XL4800EZ has picked up the telephone line in response to a remote communication request.
ENDED Telcall	Indicates that a remote communications session has ended.

Upon completion of the system log view depress the * key to exit. This will terminate the system log view and return to the previous panel status.

EXAMPLES OF SYSTEM LOG DISPLAYS:

```
JUL-12      12:18
TROUBLE  02 1
```
Trouble in zone 2 within partition 1 at 12:18 on July 12. Note: All times are displayed in military (24 hour) time.

```
AUG-01      16:15
BYPASS  11 02 1
```
Bypass performed by user 11 on zone 2 within partition 1 at 16:16 (4:15PM) on August 1.

# 4. XL4800 EZ KEYPAD FUNCTIONS SUMMARY

END USER FUNCTIONS

PROCEDURE	KEY SEQUENCE
ARM SYSTEM	[USER]
STAY	STAY [USER]
INSTANT	INSTANT [USER]
INSTANT-STAY	INSTANT STAY[USER] or STÅY INSTANT [USER]
BYPASS	BYPASS [ZN]
BYPASS multiple	BYPASS [ZN] BYPASS [ZN] BYPASS [ZN] ......
UNBYPASS	BYPASS [ZN]
UNBYPASS multiple	BYPASS [ZN] BYPASS [ZN] BYPASS [ZN] ......
FORCED ARMING	#2
DISARM	[USER]
USER DEFINITION	CODE[USER][US#][US#][USID][USID][LEV][LEV]
MULTI-PARTITION	# 0 [USER] p
QUICK ARM	# 1
TIME/DATE SET	# 3 0 YY MM DD HH MM
ZONE DIRECTORY *	# 4
CHIME MODE	# 6

INSTALLER FUNCTIONS

PROCEDURE	KEY SEQUENCE
KEYPAD PROGRAMMING*	CODE * [INSTALLER CODE] 1
EXIT PROG.MODE	* + # (Together)
TIME/DATE SETUP	CODE * [INSTALLER CODE] 2
WALK TEST w/o BELL	CODE * [INSTALLER CODE] 3
WALK TEST with BELL	CODE * [INSTALLER CODE] 4
DEFAULT RESET	CODE * [INSTALLER CODE] 5
SYSTEM LOG VIEW*	CODE * [INSTALLER CODE] 6

LCD Keypad Only

KEYPAD EMERGENCY CONDITIONS
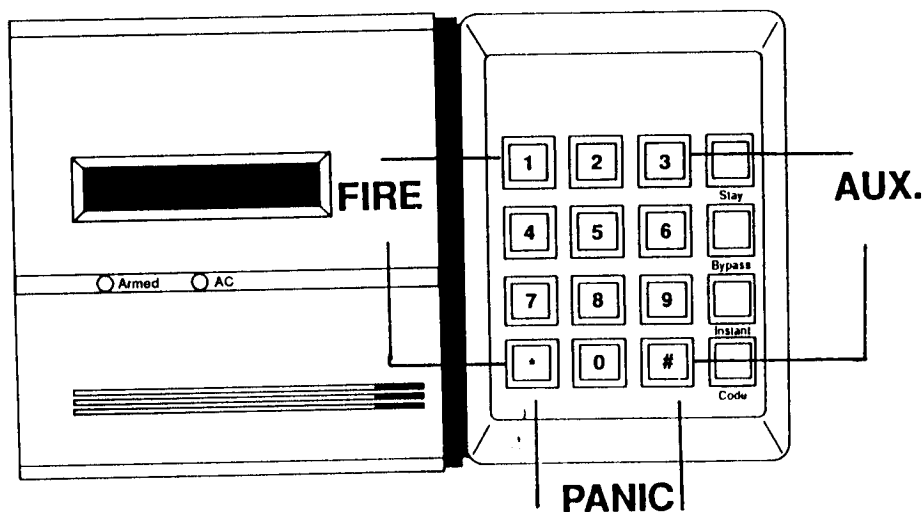
STAR XL 4800 EZ™
EZ Programming Instructions

ENTRY INTO KEYPAD PROGRAMMING

Press the CODE Key followed by The * Key, your six digit
installer code, and The Digit 1. (Example:)

| CODE | * | 1 | 2 | 3 | 4 | 5 | 6 | 1 |

Installer Code
(Default=123456)
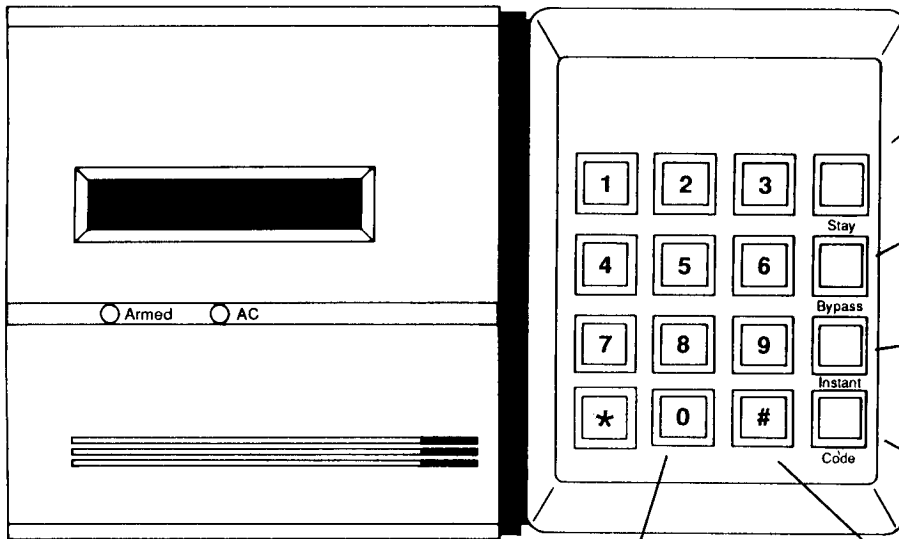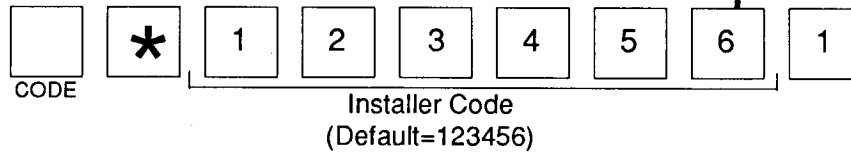
NEXT QUESTION
Accepts current information
and advances to the next
programming question.

PREVIOUS QUESTION
Accepts current information
and goes to the previous
programming question.

NEXT ZONE
Advances to the next zone
or keypad emergency
condition.(Applies to questions
35-37 only).

PREVIOUS ZONE
Obtains the previous zone or
keypad emergency condition.
(Applies to questions
35-37 only).

NEXT FIELD
Advances to the next field on
the second line of the display.
(Applies to question 33-37 only).

DIRECT ACCESS MODE
To obtain specific question press:

| * | | | |

STAY

Question #
01-37

TOGGLE
Scrolls through the available
programming options for the current
question.When the desired choice
appears on the second line of the
LCD display,press the STAY key.
(or # Key on question 35)
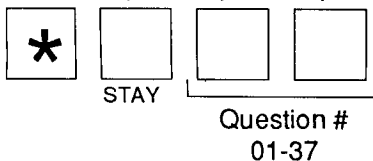
EXIT PROGRAMMING

To exit press the * and # keys at the same time.

| * | # |

Press keys
together
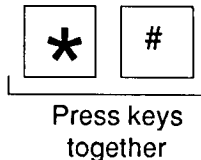
ENTRIES A-F
Questions which require data entry such as
telephone numbers, account numbers and
CS reporting codes may require entry of A-F
as follows:

A = * 1   D = * 4

B = * 2   E = * 5

C = * 3   F = * 6

NOTE: Programming Customized Zone Descriptions requires use of the Model 7170
EZ-Mate Product Cartridge or The EZ-Mate PC Downloader.

I-2448 6/89

XL4800 EZ PROGRAMMING QUESTIONS

01 DIALING TYPE TOUCH-TONE

Depression of the 0 key will toggle between TOUCH-TONE and PULSE DIAL for CS reporting. [Default = TOUCH-TONE]

02 PHONE NO. CS#1 234

Enter up to sixteen digits for the primary Central Station receiver telephone number. Enter 0 - 9 or C [* 3] for 3 second delay. Alarm and trouble conditions will always transmit to CS#1 with backup to CS#2. To erase an entire telephone number press * 6. [Default = 234]

03 CS#1 RCVR TYP 20PPS 2300HZ

Select the desired receiver type for the primary Central Station receiver. Depression of the 0 key will toggle through the available choices. These options include pulse format (10 20 or 40 , FBI, BFSK), receiver handshake (1400, 2300hz) and parity (parity, no parity where applicable). [Default = 20PPS 2300HZ]

04 CS#1 FORMAT STANDARD

Select the desired format transmitted to the primary CS receiver. Depression of the 0 key will toggle through the following choices; STANDARD, EXTENDED, PARTIAL EXTENDED, 4x2. [Default = STANDARD]

05 PHONE NO. CS#2

Enter up to sixteen digits for the secondary Central Station receiver telephone number. Enter 0 - 9 or C [* 3] for 3 second delay. Alarm and trouble conditions will attempt to alternate for 8 attempts between CS#1 and CS#2. To erase an entire telephone number press * 6. [Default =   ]

06 CS#2 RCVR TYP 20PPS 2300HZ

Select the desired receiver type for the secondary Central Station receiver. Depression of the 0 key will toggle through the available choices. These options include pulse formats (10, 20 or 40 pps) , FBI SUPERFAST, BFSK), receiver handshake (1400, 2300hz) and parity (parity, no parity where applicable). [Default = 20PPS 2300Hz]

07 CS#2 FORMAT STANDARD

Select the desired format transmitted to the secondary CS receiver. Depression of the 0 key will toggle through the following choices; STANDARD, EXTENDED, PARTIAL EXTENDED, 4x2.[Default = STANDARD]

08 PARTITIONING NO

Partitioning allows one STAR XL4800EZ panel to look like two separate control systems. This includes separate account numbers, and a division of the user codes and zones. If partitioning is selected (YES) then zones 1-8 and users 1-8 will be allocated to partition #1 with zones 9-16 and users 9-15 belonging to partition #2. If partitioning is not selected then all sixteen zones and all of the user codes will belong to partition 1. Note: User 16 is the system-wide ambush code. [Default = NO]

09 CROSS PART YES

If partitioning is selected then this question determines whether user #1 is valid in both partitions. For example, if the owner of a building is allowed in both partitions then the owners access code will be valid at any keypad within either partition. In addition, user #1 will be permitted to create users in either partition. [Default = Yes]

10 P1 ACCT # CS#1 000

Enter the account number transmitted to CS#1 for partition #1. For a three digit account number enter xxxF, where xxx is the three digit account number and F is entered by pressing * followed by 6. [Default = 000]

11 P1 ACCT # CS#2

Enter the account number transmitted to CS#2 for partition #1. [Default =   ]

12 P2 ACCT # CS#1

Enter the account number transmitted to CS#1 for partition #2. [Default =   ]

13 P2 ACCT # CS#2

Enter the account number transmitted to CS#2 for partition #2. [Default =   ]

14 INSTALL COD 123456

The installer code is a six digit entry required to perform installer reserved functions such as keypad programming, system log view, walk test etc. [Default value = 123456.]

15 CALLBACK NO

The callback number is an optional dedicated telephone number at the Alarm Company location used for remote operations (uploading, downloading etc.). If a callback number is entered then the panel will hang up and dial the callback number upon a valid request for remote operation. [Default =   ]

16 BELL RINGBACK NO

Indicates whether the bell ringback has been enabled upon closing. Depression of the 0 key will toggle between YES and NO. [Default = NO]

17 O/C CS TYPE NO TRANSMISSION

Indicates how opening and closing signals will be transmitted to the Central Station. Depression of the 0 key will toggle through the following options; NO TRANSMISSION, CS#1 WITH BACKUP (CS#2), SPLIT REPORTING (alarms to CS#1, O/C to CS#2). If open/close reporting is selected then the QUICK commands from the keypad will not be available, [Default = No Transmsission]

18 TEST TYPE NO TRANSMISSION

System test signals can be programmed for transmission to the CS on either a daily (12 or 24 hour) or weekly basis. Depression of the 0 key will toggle through the following choices for system test:NO TRANSMISSION, SUNDAY, MONDAY, TUESDAY, WEDNESDAY, THURSDAY, FRIDAY, SATURDAY, 12 HOUR, 24 HOUR. [Default = No Transmission]

19 TEST TIME __ (00)

Specifies the time of day for transmission of the test signal. Enter 00 (midnight) - 23 (11PM). Test signals will be transmitted based on the selection in question 18.[Default = 00]

20 LOCKOUT NO

Specifies whether burglary zones will participate in bell lockout. This excludes fire zones, panic zones and 24 hr. trouble zones. If YES then subsequent alarm violations within the same arming interval will not activate the bell. NOTE: The dialer will continue to report all violations. [Default = NO]

21 BELL TEST NO

Indicates whether a bell test on arming will occur. [Default = NO]

22 RES FOL LOOP NO

Indicates whether restore signals will follow the loop or after bell cutoff. If NO then restores occur after bell cutoff period. [Default = NO]

23 EXIT DELAY 60 SECONDS

Specify the exit delay time period in 15 second intervals. Depression of the 0 key will toggle through the available choices from 15 to 120 seconds. [Default = 60 Seconds]

24 ENTRY DELAY **30 SECONDS**	Specify the entry delay time period in 15 second intervals. Depression of the 0 key will toggle through the available choices from 15 to 120 seconds. [Default = 30 Seconds]
25 BURG CUT-OFF **15 Minutes**	Specify the bell cutoff time for burglary (non fire) zones in 3 minute intervals. Depression of the 0 key will advance through the available choices from 3 - 42 minutes and INFINITE. [Default = 15 minutes]
26 FIRE CUT-OFF **Infinite**	Specify the bell cutoff time for fire zones in 2 minute intervals. Depression of the 0 key will advance through the available choices from 2 - 28 minutes and INFINITE. [Default = Infinite]
27 ABORT ACTION **No Abort**	Indicates the action taken on aborts. The options are; NO ABORT, or STOP ON ABORT. [Default = No Abort]
28 TROUBLE CODE **F**	Indicates the system-wide code transmitted for trouble conditions. If a two digit transmission format is selected then this trouble code will be followed by the second digit of the zone CS code. If troubles are not transmitted enter 0. [Default = F]
29 BYPASS CODE **0**	Indicates the system-wide code transmitted for bypass conditions. If a two digit transmission format is selected then the bypass code will be followed by the second digit of the zone CS code. If bypasses are not transmitted enter 0. [Default = 0]
30 OPENING CODE **B**	Indicates the CS code for openings. If a two digit reporting format has been selected then the user number will be transmitted as the second digit. [Default = B]
31 CLOSING CODE **C**	Indicates the CS code for closings. If a two digit reporting format has been selected then the user number will be transmitted as the second digit. [Default = C]
32 TEST CODE **00**	Enter the system test code. The time of day and type of system test transmission are programmed in questions 18 and 19. [Default = 00]
33 AC LOSS CODES **AC:_ RESTORE:_** ↑ ↑	Enter the codes transmitted for AC failure (1st field) and AC restore (2nd field). Depression of the # key will advance to the second field of the display. If a two digit transmission format is selected, then AC loss will be sent as the system wide trrouble code (question 28) followed by the AC code (1st digit) entered. Restores will be sent as the AC restore code entered (2nd field) followed by the AC loss code (1st digit), if a two digit transmission format is selected. [Default = 9E]
34 LOW BATT CODES **AC:_ RESTORE:_** ↑ ↑	Enter the codes transmitted for Low Battery (1st field) and Low Battery Restore (2nd field). Depression of the # key will advance to the second field of the display. If a two digit trans mission format is selected, then Low Battery will be sent as the system wide trrouble code (question 28) followed by the low battery code (1st digit) entered. Restores will be sent as the Low Battery restore code entered (2nd field) followed by the low battery loss code (1st digit), if a two digit transmission format is selected. [Default = 9E]
35 ZNE: x LOOP C **DELAY ZNE EOL N** ↑ ↑ ↑	This question programs the zone characteristics. The # key will advance to the next field on the display, while the INSTANT and CODE keys are used to advance forward and backwards through the various zones.

Note: Fire Zones will always be defined as EOL and o7 3 cannot be programmed for chime.

Note: Remember to press INSTANT to program next zone or STAY to move to the next question.

The first question is the zone type. Depression of the 0 key will advance through the following types; DELAY ZONE, INTERIOR, INT. FOLLOWER (interior zone which follows delay zone), PERIMETER, SILENT PANIC, AUDIBLE PANIC, DAY TROUBLE, 24 HR TROUBLE, FIRE ZONE. After selecting the desired zone type press the # key to advance to the next field.

The second field determines the type of sensor used within this zone. The following options exist; EOL (EOL resistor supervision desired), N/O (normally open device, EOL not required), or N/C (normally closed device, EOL not required).

The third field selects the chime option which will activate the keypad sounder for one second upon violation when the system is disarmed. Depression of the 0 key will toggle between Y (Yes) and N (NO).

DEFAULTS

Zone	TYPE	EOL	CHIME
1	Delay	EOL	N
2	Interior Follower	EOL	N
3-7	Perimeter	EOL	N
8	Fire	EOL	N
9-15	Perimeter	EOL	N
16	Audible Panic	EOL	N

36 ZNE: x   CODES **AL: _ RESTORE:_** ↑   ↑

Enter the alarm codes and restore code transmitted to the Central Station for this zone. If the transmission format is STANDARD then only the second digit entered in the alarm code field (AL) will be transmitted. Restores will transmit the restore code entered followed by the second digit of the alarm code if a two digit format is selected, and 0 means no restore reporting for the zone.

ZONES	Alarm	Restore Code
1 - 7	33	E
8	11	E
9 - 15	33	E
16	22	E

37 KPAD Panic **SIL AL CODE: _** ↑   ↑

This question defines keypad emergency conditions which can be initiated through depression of two keys simultaneously from the keypad. Depression of the INSTANT key will advance to the next keypad emergency condition as follows with the default values displayed:

1= PANIC [* + #]   Silent 00
  2 = FIRE   [* + 1]   Audible 00
  3 = AUX.   [# + 3]   Audible 00
  4 = Duress [User #16] Silent 00
  NOTE: Fire must always be audible. Duress must always be silent.

The first field selects whether the condition is SIL (silent) or AUD (audible). The second field defines the CS alarm code with 00 disabling the keypad condition. NOTE: If the AL code for Duress is 00 then duress and user #16 will not be available within the system.

NOTE: To return to a specific question number, press * , then STAY, then enter the desired question number 01-37 (Direct Access Mode).

XL4800EZ PROGRAMMING WORKSHEET

COMMUNICATIONS

01. Dialing Type [ ] **Touchtone**   [ ] Pulse
02. CS #1 Phone # _ _ _ _ _ _ _ _ _ _ _ _ _ _ **(234)**
03. CS #1 Receiver Type _____ (see chart)
04. CS#1 Format   [ ] **Standard** [ ] Extended [ ] Part. Ext.   [ ] 4x2
05. CS #2 Phone # _ _ _ _ _ _ _ _ _ _ _ _ _ _
06. CS #2 Receiver Type _____ (see chart)
07. CS #2 Format [ ] **Standard** [ ] Extended [ ] Part. Ext.   [ ] 4x2
08. Partitioning [ ] Yes [ ] **No**   09. Cross Partition User #1 [ ] **Yes**   [ ] No

CS RECEIVER TYPES	
10 PPS 1400hz	40 PPS 1400hz
10 PPS 2300hz	40 PPS 2300hz
10 PPS 1400hz PARITY	40 PPS 1400hz PARITY
10 PPS 2300hz PARITY	40 PPS 2300hz PARITY
20 PPS 1400hz	FBI 1400hz
20 PPS 2300hz	FBI 1400hz
20 PPS 1400hz PARITY	BFSK 1400hz
20 PPS 2300hz PARITY	BFSK 2300hz

CS ACCOUNT NUMBERS

10. Part. #1 CS #1 _ _ _ _ **(000)**   11. Part #1 CS #2 _ _ _ _
12. Part. #2 CS #1 _ _ _ _   13. Part #1 CS #2 _ _ _ _
14. Installer Code _ _ _ _ _ _ **(123456)**   15. Callback Number _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _

SYSTEM ATTRIBUTES

16. Bell Ringback [ ] Yes [ ] **No**   17. O/C CS Type [ ] **No Trans.**   [ ] CS#1 or CS#2   [ ] Split Rpt.
18. Test Type   [ ] **No Transmission**   [ ] Sun [ ] Mon [ ] Tue [ ] Wed [ ] Thur [ ] Fri [ ] Sat [ ] 12 Hour [ ] 24 Hour
19. Test Time _ _ **(00)**   20. Lockout [ ] Yes   [ ] **No**
21. Bell Test   [ ] Yes   [ ] **No**   22. Restore to Follow Loop   [ ] Yes [ ] **No**
23. Exit Delay _____ **(60 seconds)**   24. Entry Delay _____ **(30 seconds)**
25. Burg. Bell Cutoff _____ **(15 minutes)** 26. Fire Bell Cutoff _____ **(Infinite)**
27. Action on Abort   [ ] **No Abort**   [ ] Stop on Abort

CS CODES

28. Trouble Code __ **(F)**   29. Bypass Code __ **(0)**
30. Opening Code __ **(B)**   31. Closing Code __ **(C)**
32. Test Code   __ **(00)**   33. AC Loss - **(9)** Restore - **(E)**   34. Low Batt Code - **(9)** Low Batt Rest. - **(E)**

ZONE DEFINITIONS

35. Zone #	Zone Type(see cht)	Sensor Type	Chime	Alarm	Restore
1	_____ (Delay)	[ ]EOL [ ]N/O [ ]N/C	[ ]Yes [ ]No	_ _ (33)	__ (E)
2	_____ (Int.Foll)	[ ]EOL [ ]N/O [ ]N/C	[ ]Yes [ ]No	_ _ (33)	__ (E)
3	_____ (Perim)	[ ]EOL [ ]N/O [ ]N/C	[ ]Yes [ ]No	_ _ (33)	__ (E)
4	_____ (Perim)	[ ]EOL [ ]N/O [ ]N/C	[ ]Yes [ ]No	_ _ (33)	__ (E)
5	_____ (Perim)	[ ]EOL [ ]N/O [ ]N/C	[ ]Yes [ ]No	_ _ (33)	__ (E)
6	_____ (Perim)	[ ]EOL [ ]N/O [ ]N/C	[ ]Yes [ ]No	_ _ (33)	__ (E)
7	_____ (Perim)	[ ]EOL [ ]N/O [ ]N/C	[ ]Yes [ ]No	_ _ (33)	__ (E)
8	_____ (Fire)	[ ]EOL [ ]N/O [ ]N/C	[ ]Yes [ ]No	_ _ (11)	__ (E)
9	_____ (Perim)	[ ]EOL [ ]N/O [ ]N/C	[ ]Yes [ ]No	_ _ (33)	__ (E)
10	_____ (Perim)	[ ]EOL [ ]N/O [ ]N/C	[ ]Yes [ ]No	_ _ (33)	__ (E)
11	_____ (Perim)	[ ]EOL [ ]N/O [ ]N/C	[ ]Yes [ ]No	_ _ (33)	__ (E)
12	_____ (Perim)	[ ]EOL [ ]N/O [ ]N/C	[ ]Yes [ ]No	_ _ (33)	__ (E)
13	_____ (Perim)	[ ]EOL [ ]N/O [ ]N/C	[ ]Yes [ ]No	_ _ (33)	__ (E)
14	_____ (Perim)	[ ]EOL [ ]N/O [ ]N/C	[ ]Yes [ ]No	_ _ (33)	__ (E)
15	_____ (Perim)	[ ]EOL [ ]N/O [ ]N/C	[ ]Yes [ ]No	_ _ (33)	__ (E)
16	_____ (Aud Pan)	[ ]EOL [ ]N/O [ ]N/C	[ ]Yes [ ]No	_ _ (22)	__ (E)

36. CS Codes

Zone Types
Delay Zone
Interior
Interior Follower
Perimeter
Silent Panic
Audible Panic
Day Trouble
24 Hr Trouble
Fire Zone

KEYPAD EMERGENCY CONDITIONS

Condition	37. Silent/Audible	CS Code
1. Keypad Panic	[ ] **Silent** [ ] Audible	_/ _ (00)
2. Keypad Fire	[X] Audible	8 _ (00)
3. Keypad Aux.	[ ] Silent [ ] **Audible**	9 _ (00)
4. Duress	[X] **Silent**	0 0 (00)