

XL-2S SYSTEM PROGRAMMING WORKSHEET

NAME: _____ ADDRESS: _____

01 PRIMARY TELEPHONE NUMBER

DEFAULT = 234AAAAAAAAA

L1 L2 L3 L4 L5 L6 L7 L8 L9 L10 L11 L12

02 SECONDARY TELEPHONE NUMBER

DEFAULT = AAAAAAAAAA

L1 L2 L3 L4 L5 L6 L7 L8 L9 L10 L11 L12

03 CALLBACK TELEPHONE NUMBER

DEFAULT = AAAAAAAAAA

L1 L2 L3 L4 L5 L6 L7 L8 L9 L10 L11 L12

04 DIALER OPTIONS

DEFAULT = 1601

L1 L2 L3 L4

05 KEYPAD CONDITIONS

DEFAULT = 1200

L1 L2 L3 L4

06 SYSTEM TIMEOUTS

DEFAULT = 665F

L1 L2 L3 L4

07 MISCEL. SYS. OPTIONS

DEFAULT = 2C10

L1 L2 L3 L4

08 ACCOUNT #1

DEFAULT = 1234

L1 L2 L3 L4

09 ACCOUNT #2

DEFAULT = AAAA

L1 L2 L3 L4

10 ZONE 1 TYPE & CS CODE

DEFAULT = 2031

L1 L2 L3 L4

11 ZONE 2 TYPE & CS CODE

DEFAULT = 4132

L1 L2 L3 L4

12 ZONE 3 TYPE & CS CODE

DEFAULT = 1033

L1 L2 L3 L4

13 ZONE 4 TYPE & CS CODE

DEFAULT = 1034

L1 L2 L3 L4

14 ZONE 5 TYPE & CS CODE

DEFAULT = 1035

L1 L2 L3 L4

15 ZONE 6 TYPE & CS CODE

DEFAULT = 1036

L1 L2 L3 L4

16 AMBUSH & AC LOSS

DEFAULT = AAAA

L1 L2 L3 L4

21 ZONE 1 DESCRIPTOR

DEFAULT = ZONE 1

L1 L2 L3 L4 L5 L6 L7 L8 L9 L10 L11 L12

22 ZONE 2 DESCRIPTOR

DEFAULT = ZONE 2

L1 L2 L3 L4 L5 L6 L7 L8 L9 L10 L11 L12

23 ZONE 3 DESCRIPTOR

DEFAULT = ZONE 3

L1 L2 L3 L4 L5 L6 L7 L8 L9 L10 L11 L12

24 ZONE 4 DESCRIPTOR

DEFAULT = ZONE 4

L1 L2 L3 L4 L5 L6 L7 L8 L9 L10 L11 L12

25 ZONE 5 DESCRIPTOR

DEFAULT = ZONE 5

L1 L2 L3 L4 L5 L6 L7 L8 L9 L10 L11 L12

26 ZONE 6 DESCRIPTOR

DEFAULT = ZONE 6

L1 L2 L3 L4 L5 L6 L7 L8 L9 L10 L11 L12

17 PANIC & LOW BATTERY

DEFAULT = 22AA

L1 L2 L3 L4

18 OPEN, CLOSE & CS TEST

DEFAULT = AAAA

L1 L2 L3 L4

19 BYPASS, RESTORE, TRBL & CANCEL

DEFAULT = AAF8

L1 L2 L3 L4

20 KEYPAD FIRE & AUX.

DEFAULT = AAAA

L1 L2 L3 L4

00 INSTALLER CODE

DEFAULT = 2468

L1 L2 L3 L4

TO ENTER PROGRAMMING:

[CODE] [*] [4 digit Installer Code] [1]

TO SKIP TO A QUESTION:

[*] [2 digit Question Number]

TO MOVE WITHIN A QUESTION:

Press the [#] until the desired location is reached.

TO ENTER DATA:

[single digit: 0 - 9, A - F] [#]

HEXADECIMAL ENTRIES:

A = [CODE] [1] D = [CODE] [4]

B = [CODE] [2] E = [CODE] [5]

C = [CODE] [3] F = [CODE] [6]

TO EXIT PROGRAMMING:

Press the [STAY].

PROGRAMMED BY: _____

DATE: _____

10. PROGRAMMING QUESTIONS

This section of the manual defines the programming questions along with the values expected for each question. **BEFORE USING THE PROGRAMMING SHEET, FILL THE SYSTEM PLANNING WORKSHEETS AT THE END OF THIS MANUAL.** Then, Complete the Programming sheet and then enter the data through the keypad as explained in the section titled Data Entry Through the Keypad. DO NOT ATTEMPT TO ENTER DATA BEFORE COMPLETELY FILLING OUT PROGRAM SHEET.

QUESTION 01 PRIMARY TELEPHONE NUMBER

DEFAULT = 234AAAAAAAAA

Enter the telephone number (including area code and/or dialing prefix IF NECESSARY) of the primary central station receiver in L1 - L12. Enter the valid digits from the table below.

Digit	FUNCTION	COMMENTS
0-9	0-9	
A	Signifies end of the phone number	Enter after last digit of phone number
B	Asterisk (*)	Enter whenever the asterisk is used
C	3 Second pause	Provides delay to wait for dialtone
D	Pound (#)	Enter whenever the pound is used
E	*70C (Touchtone) *1170C (Rotary)	Enter to disable Call Waiting
F	800	Enter whenever the "800" prefix is needed

REPORTING ROUTE:

The system will report all signals to the primary receiver phone number. The panel will alternate between the primary and secondary receivers (if the second phone number is programmed) for a maximum of 8 attempts each until the signal has been acknowledged.

QUESTION 02 SECONDARY TELEPHONE NUMBER

DEFAULT = AAAAAAAAAA

Enter the telephone number (including area code and/or dialing prefix IF NECESSARY) of the secondary central station receiver in L1 - L12.

Enter the valid digits from the table in question 01. The secondary telephone number will be used if the panel is unable to reach the Central Station via the primary number. This is known as BACKUP reporting. If the SPLIT REPORTING feature is programmed, then OPENING and CLOSING signals will be directed to the secondary CS number only, while all other conditions will be reported to the primary number.

If neither split or backup reporting is necessary then this question may be left as factory defaulted and all conditions will be routed to the Primary Telephone number only.

QUESTION 03 CALLBACK TELEPHONE NUMBER

DEFAULT = AAAAAAAAAA

Enter the telephone number (including area code and/or dialing prefix if necessary) for this control panel to reach the callback location. The callback number is the optional location of the EZ-Mate Downloader where the control panel will call during a remote communications (upload/download etc) session. During remote communications the programming device and the control panel will first confirm the CS security code. If valid, communications can begin. If a callback number is defined, the control panel will the hang up and dial the callback number. Enter the valid digits from the table in question 01. **NOTE:** For no callback capability enter AAAAAAAAAA.

QUESTION 04 DIALER OPTIONS

DEFAULT = 1601

There are 4 locations (L1-L4) within this question which define various dialer and system options as follows:

Question 04, L1 - Dialer Formats

DEFAULT = 1

Enter the digit for the desired dialer format from the table below in location L1. **NOTE:** The checkmark highlights which options are selected.

Digit	DIALING FORMAT		CS REPORTING FORMAT
	PULSE	TOUCHTONE	
0	U		STANDARD OR 4X2
1		✓	STANDARD OR 4X2
2	✓		EXTENDED
3		✓	EXTENDED
4	✓		PARTIAL EXTENDED
5		✓	PARTIAL EXTENDED
8	NONE		NO DIALER (LOCAL ALARM ONLY)

NOTE: See Question #04, location 3 to select specific CS Reporting Format Message Length and specific Dialing Pulse Type.

NOTE: If Local Alarm is desired, then no other options are needed to be disabled (Telephone #, CS Codes).

Question 04, L2 - CS Receiver Type**Default = 6**

Enter the digit for the desired receiver type from the table below in location L2. **NOTE:** The checkmark highlights which options are selected.

Digit	FORMAT PULSE SPEED			HANDSHAKE FREQUENCY		PARITY	TYPICAL CS RECEIVER
	10 PPS	20 PPS	40 PPS	1400 HZ	2300 HZ		
0	✓			✓			FBI, ADEMCO, SILENT KNIGHT
1	✓			✓		✓	FBI
2	✓				✓	✓	FBI
3	✓				✓	✓	FBI
4		✓		✓		✓	FBI, SILENT KNIGHT, ADCOR, ADEMCO
5		✓		✓		✓	FBI, RADIONICS
6		✓			✓	✓	FBI, FRANKLIN, SESCOA, DCI, VARITECH
7		✓			✓	✓	FBI, RADIONICS
8			✓	✓		✓	FBI
9			✓	✓		✓	FBI
A			✓		✓	✓	FBI
B			✓		✓	✓	FBI, RADIONICS

NOTE: UL compatible receivers: FBI CP220 (all formats), ADEMCO 685, Silent Knight 8520, 9000, RADIONICS.

Question 04, L3 - CS Format Message Length, System Swinger Shutdown & Pulse Type**Default = 0**

Enter the digit for the desired message length from the table below in location L3. **NOTE:** The checkmark highlights which options are selected.

Digit	CS REPORTING FORMAT MESSAGE LENGTH				SYSTEM SWINGER SHUTDOWN	DIALING PULSE TYPE	
	3X1	3X2	4X1	4X2		U.S.	EUROPEAN
0	✓					✓	
1	✓						✓
2			✓			✓	
3			✓				✓
4		✓				✓	
5		✓					✓
6				✓		✓	
7				✓			✓
8	✓				✓	✓	
9	✓				✓		✓
A			✓		✓	✓	
B			✓		✓		✓
C		✓			✓	✓	
D		✓			✓		✓
E				✓	✓	✓	
F				✓	✓		✓

NOTE: Please consult your Central Station manager to determine the formats and message lengths which are accepted by the receiver. European dialing format has not been tested by UL.

SWINGER SHUTDOWN - If selected, then 3 activations of the same zone within the same arming interval will not activate the bell or the dialer. This applies only to burglary zones as well as 24Hr. Audible zones. For UL installations Swinger Shutdown must not be selected.

DIALING PULSE TYPE - Specifies how this control will perform pulse dialing (U.S. Pulse or European Pulse) when CS transmissions are enabled. **NOTE:** European Pulse has not been tested for UL installations.

NOTE: For more information on CS Reporting Formats refer to Appendix A at the back of this manual.

Question 04 L4- K.P. Panic, CS Split Reporting, Cancel Bell Ringback & System Bell Test Default = 1

Enter the digit for the desired system options from the table below in location L4. **NOTE:** The checkmark highlights which options are selected.

Digit	KEYPAD PANIC		CS SPLIT REPORTING	CS TEST ENABLE	SYSTEM BELL TEST
	AUDIBLE	SILENT			
0		✓			
1	✓				
2	✓	✓	✓		
3		✓		✓	
4	✓			✓	
5		✓	✓	✓	
6	✓		✓	✓	
7		✓			✓
8	✓				✓
9		✓	✓		✓
A	✓		✓		✓
B		✓		✓	✓
C	✓			✓	✓
D		✓	✓	✓	✓
E	✓		✓	✓	✓
F		✓	✓	✓	✓

KEYPAD SILENT/AUDIBLE PANIC - Determines whether the keypad panic condition (* & # from the keypad) will activate the bell and the keypad buzzer. In either case a signal will be transmitted to the Central Station if a panic code has been programmed. **NOTE:** The keypad panic condition can be enabled through question #05, location 1.

SPLIT REPORTING - The split reporting option will direct all opening and closing signals to the secondary receiver telephone number. All other conditions (alarms, troubles, restores etc.) will adhere to the reporting route described in question 01. If split reporting is selected then the secondary receiver telephone number **MUST** be programmed.

CS TEST ENABLE - If enabled, the system will transmit the test code to the Central Station at the interval selected (see question #07, location 3) in the absence of any other signal. Transmission of any signal will reset the CS Test clock. For example, if a business opened and closed 6 days a week, then a test signal will be generated at the interval selected after the last closing signal. **NOTE:** This must be selected for UL installations.

BELL TEST - If this option is selected the bell will be activated for one second upon successful arming. This option is required for UL Commercial Burglary applications.

QUESTION 05 KEYPAD CONDITIONS**DEFAULT = 1200**

This question contains four locations (L1-L4) for various keypad definable options.

Question 05, L1 - Keypad Panic, Fire and Auxiliary**Default = 1**

Enter the digit for the desired system options from the table below in location L1. **NOTE:** The checkmark highlights which options are selected.

Digit	KEYPAD PANIC	KEYPAD FIRE	KEYPAD AUXILIARY	
			AUDIBLE	SILENT
0	NONE (K.P. CONDITIONS DISABLED)			
1	✓			
2		✓		
3	✓	✓		
4				✓
5	✓			✓
6		✓		✓
7	✓	✓		✓
C			✓	
D	✓		✓	
E		✓	✓	
F	✓	✓	✓	

NOTE: Auxiliary Audible/Silent selection refers to keypad sounder only (not the bell). Keypad Fire is always Audible. Keypad Panic is Audible or Silent based on quest. #04, location 4.

KEYPAD PANIC - If AUDIBLE, then pressing the # & * (at the same time) will annunciate the keypad sounder (STEADY SOUND) and turn on the bell output (STEADY SOUND). If SILENT, then it will **not** annunciate the keypad sounder and turn on the bell output. In both cases, it will transmit a CS code if programmed in question #17, locations 1 & 2.

KEYPAD FIRE - If selected, then pressing the 7 & 9 (at the same time) will annunciate the keypad sounder (PULSING SOUND) and turn on the bell output (PULSING SOUND). It will transmit a CS code if programmed in question #20, locations 1 & 2.

KEYPAD AUXILIARY - If AUDIBLE, then pressing the 1 & 3 (at the same time) will ONLY annunciate the keypad sounder (PULSING SOUND). If SILENT, then it will not annunciate the keypad sounder and turn on the bell output. It will transmit a CS code if programmed in question #20, locations 3 & 4.

Question 05 L2 - Misc Options

Enter the digit from the table below in location L2. **NOTE:** The checkmark highlights which options are selected. **Default = 2**

Digit	ZONE 7 INPUT		KEYSWITCH	AUTO-UNBYPASS ENABLED	USER 5 ARMS ONLY
	AUDIBLE	SILENT			
0					
1		✓		✓	
2	✓		✓	✓	
3		✓			
4			✓		
5	✓				
6		✓		✓	✓
7			✓	✓	✓
8	✓			✓	✓
9		✓			✓
A			✓		✓
B		✓			✓
C			✓		✓
D	✓				✓
E					✓

ZONE 7 INPUT: PANIC or KEYSWITCH - This option determines whether connections 8 & 10 on the control panel will be used as a panic input (audible or silent) or a keyswitch input. In both cases, a MOMENTARY SHORT is required to activate the condition. **NOTE:** If keyswitch is selected and the transmission code sends a user code, then user code #7 will be transmitted.

AUTO-UNBYPASS ENABLE - This option determines whether bypassed zones will automatically be unbypassed upon disarm. If not selected, the zones will remain bypassed and can only be unbypassed manually.

USER 5 ARMS ONLY - If selected, then user 5 will be used as an ARM only code (Maid Code); it will not disarm the system.

Question 05 L3 - Quick Commands & Reset Enable

Enter the digit from the table below in location L2. **NOTE:** The checkmark highlights which options are selected. **Default = 0**

Digit	QUICK FORCED ARMING	QUICK ARMING	QUICK BYPASS	RESET ENABLE
0	NONE (QUICK COMMANDS DISABLED)			
1	✓			
2		✓		
3	✓	✓		
4	NONE (QUICK COMMANDS DISABLED)			
5	✓			✓
6		✓		✓
7	✓	✓		✓
8			✓	
9	✓		✓	
A		✓	✓	
B	✓	✓	✓	
C			✓	✓
D	✓		✓	✓
E		✓	✓	✓
F	✓	✓	✓	✓

QUICK FORCED ARM - Specifies whether Quick Forced Arming (#2) will be permitted. If the system is armed by this method it will arm the system bypassing any faulted zones. Openings/Closings will report user #8 to the CS if enabled. **NOTE:** For UL installations do not select this option.

QUICK ARMING - Specifies whether Quick Arming (#1) will be permitted. If the system is armed by this method it will arm the system ONLY if the system is READY. Openings/Closings will report user #8 to the CS if enabled.

QUICK BYPASS - Specifies whether bypassing a zone without a user code is permitted.

RESET ENABLE - This option will allow in addition to using a valid user code the * (asterisk) from the keypad will reset the following conditions: communications failure and alarm memory.

Question 05, L4 - Rest. Foll. Loop, User On-line, CS Test K.P. Ringback & Stay/Instant Arm Default = 0
Enter the digit from the table below in location L4. **NOTE:** The checkmark highlights which options are selected.

Digit	RESTORE AFTER BELL	RESTORE FOLLOWS LOOP	USER ON-LINE	CS TEST KEYPAD RING BACK		STAY ARMING ONLY	STAY/INSTANT ARMING
				SILENT	AUDIBLE		
0	✓				✓		✓
1		✓			✓		✓
2	✓		✓		✓		✓
3		✓	✓		✓		✓
4	✓			✓			✓
5		✓		✓			✓
6		✓	✓	✓			✓
7		✓	✓	✓			✓
8	✓				✓	✓	
9	✓	✓			✓	✓	
A	✓	✓	✓		✓	✓	
B		✓	✓		✓	✓	
C	✓			✓		✓	
D		✓		✓		✓	
E	✓		✓	✓		✓	
F		✓	✓	✓		✓	

RESTORE AFTER BELL - Restores will be transmitted after the loop has returned to normal after bell cutoff, or upon system disarming regardless of the loop status.

RESTORE FOLLOWS LOOP - This option will transmit restores immediately upon zone restoral while the system is armed, or upon system disarm regardless of the loop status.

USER ON-LINE & CHIME TOGGLE ENABLED - This option indicates whether the end user command (#9) for the on-line download will be enabled. This command would allow an end user to be instructed how to initiate an on-line download and possibly prevent a service call. This also controls the user chime toggle enable. If enabled, then the user will be able to toggle the system chime.

CS TEST RING BACK - Normally, after a CS Test Report has reached the Central Station, a sounder ringback can be heard from the keypad indicating a successful communication to the CS. If SILENT is selected, then **NO sounder ringback** will be heard from the keypad after a CS Test Report. If AUDIBLE is selected, then a **sounder ringback** will be heard from the keypad after a CS Test Report.

STAY ARMING ONLY (STAY/INSTANT DISABLED) - If this option is selected, then the INSTANT button will be disabled on the keypads removing the STAY/INSTANT option. **NOTE:** INSTANT mode is not available by itself. **The STAY mode is always enabled.**

STAY/INSTANT ARMING (STAY/INSTANT ENABLED) - This option permits the INSTANT button (STAY/INSTANT mode) to be used.

QUESTION 06 SYSTEM TIMEOUTS

DEFAULT = 665F

There are 4 locations (L1-L4) within this question which define various system timing options as follows:

Question 06 L1 - Entry Delay 1

Default = 6

Enter the desired entry delay time. Refer to Exit/Entry Times below for valid choices. If zones 1-3 are delay zones, then they follow entry delay 1. For UL applications the maximum entrance delay shall not exceed 45 seconds for household applications or 15 seconds for commercial burglary applications. **NOTE:** See programming question #07, location 1 for Entry Delay 2.

Digit	ENTRY TIMEOUTS
0	1 SECOND
1	5 SECONDS
2	10 SECONDS
3	15 SECONDS
4	20 SECONDS
5	25 SECONDS
6	30 SECONDS
7	35 SECONDS
8	40 SECONDS
9	45 SECONDS
A	50 SECONDS
B	55 SECONDS
C	1 MINUTE
D	1 MINUTE 5 SECONDS
E	1 MINUTE 10 SECONDS
F	3 MINUTES

Question 06 L2 - Exit Delay

Default = 6

Enter the desired exit time. **NOTE:** For UL applications the maximum exit delay shall not exceed 60 seconds.

Digit	EXIT TIMEOUTS
0	1 SECOND
1	10 SECONDS
2	20 SECONDS
3	30 SECONDS
4	40 SECONDS
5	50 SECONDS
6	1 MINUTE
7	1 MINUTE 10 SECONDS
8	1 MINUTE 20 SECONDS
9	1 MINUTE 30 SECONDS
A	1 MINUTE 40 SECONDS
B	1 MINUTE 50 SECONDS
C	2 MINUTES
D	2 MINUTES 10 SECONDS
E	2 MINUTES 20 SECONDS
F	3 MINUTES

Question 06 L3 - Burglary Bell Cutoff

Default = 5

Enter the desired bell cutoff time on alarm conditions for burglary and panic in 3 minute intervals. The valid range of input is 1 - F, with F indicating an infinite burg bell cutoff. Example 3 = 9 minutes. For UL installations in commercial applications the minimum bell cutoff shall be 15 minutes, or 6 minutes for household burglary applications.

Digit	BURGLARY & FIRE BELL TIMEOUTS
1	3 MINUTES
2	6 MINUTES
3	9 MINUTES
4	12 MINUTES
5	15 MINUTES
6	18 MINUTES
7	21 MINUTES
8	24 MINUTES
9	27 MINUTES
A	30 MINUTES
B	33 MINUTES
C	36 MINUTES
D	39 MINUTES
E	42 MINUTES
F	INFINITE

Question 06 L4 - Fire Bell Cutoff

Enter the desired bell cutoff time for fire conditions in three minute intervals. The valid range of input is 1 - F, with F indicating an infinite fire bell cutoff. Example 3 = 9 minutes. For UL installations the minimum fire bell cutoff time shall be 6 minutes.

Default = F**QUESTION 07 MISCELLANEOUS SYSTEM OPTIONS****DEFAULT = 2C10**

There are 4 locations (L1-L4) within this question which define various system timing options as follows:

Question 07 L1 - Entry Delay 2**Default = 2**

Enter the desired entry delay time Refer to Exit/Entry Times in question #06 for valid choices. **If zones 4-6 are delay zones, then they follow entry delay 2.** For UL applications the maximum entrance delay shall not exceed 45 seconds for household applications or 15 seconds for commercial burglary applications. **NOTE:** See programming question #06, location 1 for table of applicable values. IF ZONE 6 IS PROGRAMMED AS A FIRE ZONE FOR BELL SUPERVISION, THEN TO USE EXIT DELAY 2 SELECT EITHER ZONE 4 OR 5 AS A DELAY ZONE.

Question 07, L2 - Ring Count & System Dialer Delay**Default = C**

Enter the digit from the table below in location L2. **Select from the choices below:**

Digit	REMOTE COMMUNICATIONS RING COUNT
0	NONE (REMOTE COMM. DISABLED)
1	1 RING
2	2 RINGS
3	3 RINGS
4	4 RINGS
5	5 RINGS
6	6 RINGS
7	7 RINGS
8	8 RINGS
9	9 RINGS
A	10 RINGS
B	11 RINGS
C	12 RINGS
D	13 RINGS
E	14 RINGS
F	15 RINGS

REMOTE COMMUNICATIONS RING COUNT - is a the number of rings for the control panel to pickup for a remote communications session. This should be selected to a value that does not interfere with normal operation of the panel location. The default value is 12 rings. **NOTE:** A value of 0 means that remote programming will be disabled.

Question 07, L3 - CS Test Time Intervals and European Ring Detect**Default = 1****Digit****CS TEST TIME INTERVAL**

Question 07, L4 - Smoke Power or Trigger Types**Default = 0**

The smoke power terminals (15 & 16) can be used as a trigger output. If a fire zone is used in the system, the trigger should be programmed as "0". If the fire device does not need a power reset, or no fire zone type is selected, the trigger can be programmed as follows:

Digit	TRIGGER TYPE DEFINITION	DESCRIPTION OF OPERATION
0	Smoke Power Output (Trigger #1 Only)	Used in Fire Verification to reset smoke power
1	Fire Bell ON	Follows Fire Bell Timer
2	Burglary Bell ON	Follows Burglary Bell Timer
3	Telephone Line Seizure	Follows Line Seizure Relay when dialer is activated
4	Ready	Follows Ready LED; used for keyswitch
5	Armed	Follows Armed LED; used for keyswitch
6	Exit Time	ON during exit time
7	Entry Time	ON during entry time
8	Fire Only Latch	ON w/Fire Bell, OFF w/code
9	Burglary Only Latch	ON w/Burglary Bell, OFF w/code
A	Strobe	ON steady w/Burglary Bell, Pulse w/Fire Bell
B	Panic Alarm	Zone 7 (Hardwired Panic): ON w/alarm, OFF w/code
C	Shock Asterisk Reset	Asterisk "*" activates for 2-6 seconds
D	Shock Code Reset	Normally sinking current: floats when armed for 2-6 sec.

NOTE: Unless otherwise specified, the trigger output is normally floating and actively sinks on activation.

QUESTION 08 ACCOUNT NUMBER 1**DEFAULT = 1234**

Enter the three(3) or four(4) digit subscriber account number for Central Station phone number 1 in locations L1-L4. If a three(3) digit number is used then enter an A in location L4. Valid entries are 0-9, and B-F. The value A is interpreted as the null value for account numbers.

QUESTION 09 ACCOUNT NUMBER 2**DEFAULT = AAAA**

Enter the three(3) or four(4) digit subscriber account number for Central Station phone number 2 in locations L1-L4. If a three(3) digit number is used then enter an A in location L4. Valid entries are 0-9, and B-F. The value A is interpreted as the null value for account numbers. If the second phone number is not used this question can be left as factory defaulted.

THIS ACCOUNT NUMBER MUST BE ENTERED IF YOU HAVE PROGRAMMED A SECOND RECEIVER PHONE NUMBER FOR BACKUP OR SPLIT REPORTING.

10.1. ZONE PROGRAMMING

Questions 10-15 represent all the options related to programmable zones 1-6. Each question contains four(4) locations L1-L4. The first two locations (L1 & L2) define the zone type and options. The second two locations (L3 & L4) define the alarm code transmitted to the Central Station for that zone.

ZONE TYPES

Zones 1-6 can be programmed for any one of the following zone types:

L1L2 Digits	BURGLARY (CONTROLLED) ZONES						
	ZONE TYPE			ZONE OPTIONS			
	INSTANT (PERIMETER)	DELAY (EXIT/ENTRY)	INTERIOR FOLLOWER	CHIME	DAY	BYPASS IN STAY	DIALER DELAY
10	✓						
11	✓						
12	✓						
13	✓						
14	✓						
15	✓			✓			
16	✓			✓			
17	✓						✓
18	✓						✓
19	✓						✓
1A	✓						✓
1B	✓						✓
1C	✓						✓
1D	✓						✓
20		✓					
21		✓					
24		✓					
25		✓					
40			✓				
41			✓				
44			✓				
45			✓				
46			✓				
49			✓				✓
4C			✓				✓
4D			✓				✓

NOTE: For 24
Hour Zone types
see next page.

BURGLARY (CONTROLLED) ZONES

DELAY - This is the industry standard exit/entry zone. When the system is armed exit time begins. After exit expires, any subsequent violation of this zone will begin entry time. If the system is not disarmed within the programmed entry time an alarm will occur. The keypad sounder will annunciate steadily during entry time, unless there had been an alarm condition, at which time it will pulse. Delay zones will activate instantly when the system is armed using the STAY/INSTANT mode if enabled. Delay zones employ the Exit Error Warning feature described in the note below.

INTERIOR - All interior zones have exit delay time upon system arming. Furthermore, all interior zones will have entry delay time if a delay zone is violated first. If this zone is violated first however, it will generate an immediate alarm. Interior zones are bypassed if the system is armed in the STAY MODE. Interior zones employ the Exit Error Warning feature described in the note below.

PERIMETER - This zone type (sometimes known as INSTANT) will generate an alarm when violated while the system is armed.

EXIT ERROR WARNING - At the end of exit time a 1 second window is started. If any delay or interior zones are violated after arming within this window (exit time expires and entry time starts) the burglary bell and keypad sounder will be turned on forcing the user to enter their code preventing a false alarm transmission. This helps avoid the common false alarms that take place after arming the system.

BURGLARY ZONE OPTIONS

RESTORE - This option is selected for all burglary zones by enabling the restore report code (question 19, location 2). The programmed restore code will be reported upon bell cutoff, assuming the loop is restored unless Restore Follows Loop is selected in question #05, location 4. The restore code will also be reported if the system is disarmed during an alarm. **NOTE:** Restore is not selectable by zone.

BYPASS IN STAY - This option allows zones to be bypassed when the system is armed in the STAY mode.

CHIME - If this option is selected the keypad sounder will annunciate for 1 second when this zone is violated in the disarmed mode.

DIALER DELAY - If this option is selected, then the system will allow a 15 second delay before dialing, allowing the end user to ABORT the transmission. If this option is not selected, any alarm condition will result in an immediate transmission that cannot be aborted. **NOTE:** For UL installations dialer delay may not be used.

DAY FEATURE - If a zone with this option is violated while the system is DISARMED, the keypad sounder and zone LED will pulse for as long as the violation remains. In addition, the SYSTEM TROUBLE CODE will be transmitted to the central station. THE SOUNDER CAN BE SILENCED through entry operation of any valid user code. While the system is armed, a DAY zone will act as an alarm when violated.

Zones 1-6 can be programmed for any one of the following 24 hour zone types:

L1L2 Digits	24 HOUR ZONES				
	ZONE TYPE			ZONE OPTIONS	
	24 HR. ALARM	FIRE	24 HR. TROUBLE	AUDIBLE	SILENT
81	✓			✓	
82			✓	✓	
84		✓		ALWAYS AUDIBLE	
89	✓				✓
8A			✓		✓

24 HR. ZONES

FIRE - FIRE zones on the system contain Fire Verification Logic. Upon detection of the first violation, smoke detector power will be reset for a period of 8 seconds. After this time period, power is restored. For a period of 5 seconds the fire zone will not be scanned allowing the smoke detectors to settle. Future violations within a two minute period will result in a PULSING BELL OUTPUT, RAPID PULSING ZONE LED, and IMMEDIATE transmission to the CS. Fire signals cannot be aborted.

Entry of any valid user code will silence the sounder, bell and reset smoke detector power. If the system detects that the fire zone is still violated within 2 minutes of power reset, the zone LED will pulse slowly to indicate a fire trouble. Thereafter, smoke detector power will be reset every 4 minutes automatically in an attempt to clear the fire zone.

In the event the fire zone experiences an open, the system indicates fire trouble by pulsing the keypad zone LED and sounder slowly. The system trouble code (followed by the zone code) will be reported to the CS.

The keypad sounder can be SILENCED through entry of ANY VALID USER CODE. **NOTE:** FIRE ZONES cannot be bypassed.

24 HR. ALARM - This zone type is always active, independent of the system arming status. Programming options include audible (STEADY BELL) or silent (NO BELL or keypad indications). Upon violation the zone LEDS will pulse rapidly (audible zones only) and an immediate CS transmission will occur which cannot be aborted.

24 Hour Alarm zones can be bypassed, however they cannot be unbypassed if a violation exists on the zone terminals.

24 HR. TROUBLE - This zone type is always active, independent of the system arming status. Programming options include audible (PULSING KEYPAD SOUNDER) or silent. Upon violation the zone LED will pulse slowly. Trouble condition must exist for 15 seconds before a transmission will occur. The keypad display and sounder will clear upon zone restoral.

24 Hour Trouble zones can be bypassed, however they cannot be unbypassed if a violation exists on the zone terminals.

NOTE: 24 hour trouble is not to be used for fire and burglary detection zones. 24 Hour silent alarm zones are not to be used for perimeter protection. THE SOUNDER MAY BE SILENCED THROUGH ENTRY OF ANY VALID USER CODE. **NOTE:** IF ZONE 6 IS PROGRAMMED AS A FIRE ZONE FOR BELL SUPERVISION, THEN TO USE EXIT DELAY 2 SELECT EITHER ZONE 4 OR 5 AS A DELAY ZONE.

ZONE ALARM CODES

As previously specified locations L3 and L4 of the zone questions represent the alarm code that will be reported to the central station.

NOTE: Zones will transmit to the Central Station unless these digits are defined as AA for any individual zone, or the local dialer option is selected for all zones in question #04, location 1.

Based on the dialer format selected enter the alarm code as follows:

STANDARD FORMAT (3X1 or 4X1): Enter the desired single digit alarm code in location L3 for the specific zone. The value placed in L4 will not be used.

EXTENDED (3X1 Ext. or 4X1 Ext.): Enter the desired first digit of the alarm code in location L3 for the specific zone and the second digit in L4.

PARTIAL EXTENDED (3X1 Part. Ext. or 4X1 Part. Ext.): Enter the desired digit in both locations L3 and L4 for the specific zone. This will generate a single digit transmissions for alarms and troubles (the second digit will not be used) and an extended transmissions for all system conditions such as restores, bypasses, openings/closings, etc. (the second digit will be used).

3X2 or 4x2: Enter the desired first digit of the alarm code in location L3 and the second digit in L4 for the specific zone. Both digits will be used for all transmissions.

NOTE: For more information on CS Reporting Formats refer to Appendix A at the back of this manual.

QUESTIONS 10 - 15 ZONES 1 - 6

There are 4 locations (L1-L4) within each of these questions which define the operation of the zones. Enter a 2 digit number in locations L1 and L2 from the zone chart for the desired type for this zone. Enter the desired alarm code in locations L3 and L4 for this zone relative to the dialer format selected.

QUESTION 10 ZONE 1 TYPE & CS CODE

Question 10, L1 & L2 - Zone 1 Type

Question 10, L3 & L4 - CS Code for Zone 1

Zone 1 = Delay (Entry/Exit) w/CS reporting code = 31

DEFAULT = 2031

Default = 20

Default = 31

QUESTION 11 ZONE 2 TYPE & CS CODE

Question 11, L1 & L2 - Zone 2 Type

Question 11, L3 & L4 - CS Code for Zone 2

Zone 2 = Interior Follower w/CS reporting code = 32

DEFAULT = 4132

Default = 41

Default = 32

QUESTION 12 ZONE 3 TYPE & CS CODE

Question 12, L1 & L2 - Zone 3 Type

Question 12, L3 & L4 - CS Code for Zone 3

Zone 3 = Instant (Perimeter) w/CS reporting code = 33

DEFAULT = 1033

Default = 10

Default = 33

QUESTION 13 ZONE 4 TYPE & CS CODE

Question 13, L1 & L2 - Zone 4 Type

Question 13, L3 & L4 - CS Code for Zone 4

Zone 4 = Instant (Perimeter) w/CS reporting code = 34

DEFAULT = 1034

Default = 10

Default = 34

QUESTION 14 ZONE 5 TYPE & CS CODE

Question 14, L1 & L2 - Zone 5 Type

Question 14, L3 & L4 - CS Code for Zone 5

Zone 5 = Instant (Perimeter) w/CS reporting code = 35

DEFAULT = 1035

Default = 10

Default = 35

QUESTION 15 ZONE 6 TYPE & CS CODE**DEFAULT = 1036**

There are 4 locations L1-L4 in this question as follows:

Question 15, L1 & L2 - Zone 6 Type**Default = 10****Question 15, L3 & L4 - CS Code for Zone 6****Default = 36**

Zone 6 = Instant (Perimeter) w/CS reporting code = 36

NOTE: If zones 1 - 3 are programmed as DELAY zones, they follow ENTRY DELAY 1. If zones 4 - 6 are programmed as DELAY zones, they follow ENTRY DELAY 2.

QUESTION 16 CS CODES for AMBUSH and AC LOSS**DEFAULT = AAAA**

There are 4 locations L1-L4 in this question as follows:

Question 16, L1 & L2 - Ambush Code**Default = AA**

If an ambush code is defined, then user number 6 is the ambush code. The same rules apply here regarding dialer format. If transmission is not desired, then program AA in locations L1 & L2. **NOTE:** AMBUSH transmissions are immediate and not abortable.

Question 16, L3 & L4 - AC Loss Code**Default = AA**

The same rules apply here regarding dialer format. AC LOSS will be transmit a dedicated PID code of 301 if PID format is selected. If transmission is not desired, then program AA in locations L1 & L2. **NOTE:** AC LOSS is reported 15 minutes after detection.

QUESTION 17 CS CODES for PANIC and LOW BATTERY**DEFAULT = 22AA**

There are 4 locations L1-L4 in this question.

Question 17, L1 & L2 - Panic Code**Default = 22**

The same rules for programming regarding dialer format apply here. If transmissions are not desired, then program AA in locations 1 & 2. **NOTE:** PANIC transmissions are immediate and not abortable.

Question 17, L3 & L4 - Low Battery Code**Default = AA**

The same rules for programming regarding dialer format apply here. If transmissions are not desired, then program AA in locations 1 & 2. LOW BATTERY transmissions will be reported 4 minutes after detection. LOW BATTERY RESTORE CODE will be reported WITHIN 4 minutes after detection of GOOD BATTERY condition. **NOTE:** If transmitting in PID format, THEN a dedicated PID code of 309 will be transmitted for low battery conditions.

QUESTION 18 CS CODES for OPEN/CLOSE and CS TEST**DEFAULT = AAAA**

There are 4 locations L1-L4 in this question.

Question 18, L1 - Opening Code**Default = A****Question 18, L2 - Closing Code****Default = A**

L1 is the single digit OPENING CODE. L2 is the single digit CLOSING CODE. Entry of AA into these two locations means that openings and closings are not desired. If a dialer format other than standard is programmed then the second digit transmitted will be the user number.

Question 18, L3 & L4 - CS Test Code**Default = AA**

L3 - L4 is the CS Test CODE. Entry of AA means that CS Test is not enabled. If CS Test code is selected then ANY valid transmission will reset the CS Test timer.

QUESTION 19 CS CODES for BYPASS, RESTORE, TROUBLE and CANCEL**DEFAULT = AAF8**

There are four(4) locations L1 - L4 in this question.

Question 19, L1 - Bypass Code**Default = A**

L1 is the single digit system BYPASS CODE that will be reported to the central station if a zone is bypassed, UPON ARMING. Entry of an A means that bypasses are not transmitted. If a two digit dialing format has been selected then the Bypass code will be followed by the programmed second digit of the zones code.

Question 19, L2 - Restore Code**Default = A**

L2 is the single digit system RESTORE CODE reported to the central station. Restores will be reported for all burglary or 24 hour zones by enabling this code (entry of any code except A). Entry of an A means that restores are not transmitted. If a two digit dialer format has been programmed then the restore code will be followed by the programmed second digit of the zones code. **NOTE:** Restore is not selectable by zone.

Question 19, L3 - Trouble Code**Default = F**

L3 is the single digit system TROUBLE CODE reported to the central station. This code will be reported on DAY TROUBLE and any FIRE TROUBLE. If a two digit format has been programmed then this code will be followed by the second digit of the respective zones code.

Question 19, L4 - Cancel Code

Default = 8

L4 is the single digit system CANCEL CODE reported to the central station. This code will be sent if after a violation of a controlled zone, a user code is entered. If the zone is still violated, entry of a user code will transmit the cancel code. If the zone is programmed for restoral, then the restore code will be transmitted when the loop status has returned to normal. An entry of A in this field indicates that cancel codes are not transmitted. In formats requiring 2 digits, the user number functions as the second digit.

QUESTION 20 CS CODES for KEYPAD FIRE and KEYPAD AUXILIARY

DEFAULT = AAAA

There are 4 locations L1-L4 in this question.

Question 20, L1 & L2 - Keypad Fire Code

Default = AA

L1 - L2 is the alarm code that will be transmitted upon activation of the keypad fire condition (pressing the 7 & 9 keys on the keypad). This code can vary from any of the zones which are programmed as fire.

Question 20, L3 & L4 - Keypad Auxiliary Code

Default = AA

L3 - L4 is the code transmitted to the CS for keypad aux. condition (1 & 3 from the keypad).

NOTE: These keypad emergency conditions are optional and can be enabled within question #05 of the programming sequence. If either or both of these transmissions are not desired, program their respective locations AA.

QUESTION 00 INSTALLER CODE

DEFAULT = 2121

There are 4 locations L1 - L4 in this question. Enter any 4 digit (0-9 installer code desired). This code is used to ENTER the system programming mode via the keypad.

Typically each installing company would use a unique installer code in order to prevent unauthorized people from gaining access to their panels.