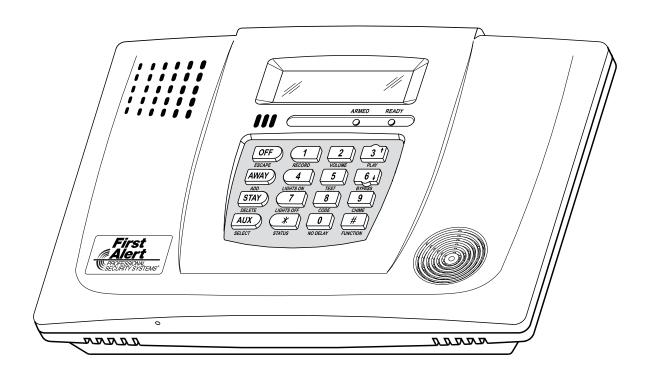


Security Systems

Programming Guide





K15013-2 9/08 Rev. A

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Refer to the Installation and Setup Guide for detailed information on programming the ReadyGuardR-2 system. The Installation and Setup Guide includes full descriptions of all data fields.

UL

ReadyGuardR-2 is not intended for UL985 Household Fire applications unless a 24-hour backup battery (P/N LYNXRCHKIT-HC or LYNXRCHKIT-SHA) is installed.

TO ENTER PROGRAMMING MODE:

- Power up, then depress [*] and [#] both at once, within 50 seconds of powering up. OR
- For factory defaulted system, enter: Installer Code (4 + 1 + 1 + 2) plus 8 + 0 + 0. OR If different Installer Code is programmed, enter: New Installer Code + 8 + 0 + 0. (if *98 was used to exit previously, method 1 above must be used to enter the program mode again)
- 3. Upon entry into Program mode, data field *20 will be displayed (the first data field in the system) and both keypad LEDs will flash.

TO PROGRAM THE DATA FIELDS:

- 1. Press [*] followed by the desired field number (e.g., *21), then make the required entry.
- 2. The keypad beeps three times after entering data, then displays the next data field in sequence.
- 3. For phone number and account number fields, press [*] to end the entry if less than number maximum number of digits is entered.
- 4. To delete an entry, simply press [*] plus that field number and reenter the correct data. For phone number and account number fields *40-*44, *88 and *94, press [*] + field number + [*].

INTERACTIVE MENU MODES:

There are six interactive menu modes as listed below. To enter these modes, first enter Program mode. While in Program mode, press [*] plus the mode number desired (e.g., *56).

*56 Enhanced Zone ProgrammingFor programming zone characteristics, report codes, etc.

- *80 Device Programming......For programming Powerline Carrier Devices
- *81 Zone List ProgrammingFor programming zone lists for use with Powerline Carrier Devices
- *83 Enhanced Sequential ModeFor entering transmitter serial numbers
- *84 Assign Zone Voice DescriptorsFor assigning voice descriptors to zones
- *85 Record Custom Voice DescriptorsFor recording custom voice descriptors

TO LOAD A DEFAULT SET:

While in Program mode, press *97, then enter a number 1-4 corresponding to the default table desired. See the Installation Instructions for the default tables. Enter 0 if you are not selecting a default table.

TO EXIT PROGRAMMING MODE:

- *98 Exits programming mode and *prevents* re-entry by: Installer Code + 8+ 0 + 0. If *98 is used to exit programming mode, system must be powered down, then press [*] and [#] within 50 seconds of power up to re-enter programming mode.
- *99 Exits programming mode and *allows* re-entry by: Installer Code + 8 + 0 + 0 or: Power-up, then press [*] and [#] within 50 seconds of power up.

	DATA FIELDS			
Field	Function	Programmed Values [] = Table 1 Default Values		
SYSTE	M SETUP (* 20– * 30)			
*20	INSTALLER CODE	[4112]		
* 21	QUICK ARM ENABLE	Enter 4 digits, 0–9 [] 0 = no; 1 = yes		
*22	KEYPAD BACKLIGHT TIMEOUT			
*23	FORCED BYPASS	0 = none (backlighting always on); 1 = backlight off after 10secs [] [†] [0] 0 = none; 1 = bypass open zones UL installations = 0		
* 24	RF HOUSE ID CODE	[00] $00 = disable all wireless keypad usage;$ $01-31 = 5804BD/5804BDV house ID$		
*25	POWERLINE CARRIER DEVICE HOUSE CODE	[0] 0 = A; 1 = B, 2 = C, 3 = D, 4 = E, 5 = F, 6 = G, 7 = H, 8 = I, 9 = J, #10 = K, #11 = L, #12 = M, #13 = N, #14 = O, #15 = P		
*26	CHIME BY ZONE	† [0]		
*27	REAL TIME CLOCK DISPLAY	0 = no; 1 = yes (program zones to chime on zone list 3) [1] 0 = no; 1 = yes, display time on keypad		
*29	DAYLIGHT SAVING TIME START/END MONTH	Start End 1-9, #+10, #+11, #+12. Enter 0,0 if no daylight savings time used.		
*30	DAYLIGHT SAVING TIME START/END WEEKEND	Image: Start		
ZONE \$ *31	SOUNDS AND TIMING (* 31- * 39) SINGLE ALARM SOUNDING/ZONE	 † [0] 0 = Alarm Sounding Per Zone will be the same as the Swinger Shutdown" set in field *92; 1 = yes, limit once per arming period (also applies to long range radio output if "0" is selected in *91 field) UL installations = 0 		

[†] Entering a number other than the one specified may give unpredictable results.

Field	Function P	rogrammed Values [] = Table 1 Default Values
*32	SOUNDER TIMEOUT	[† [0]
		0=timeout; 1=no timeout
*33	ALARM BELL TIMEOUT	† [1]
		0 = none; 1=4 min; 2=8 min; 3=12 min; 4 = 16 min UL installations = 1 (4 min) minimum
*34	EXIT DELAY	[†[70]
		00-99 = exit delay time (in seconds).
***		UL installations = 60 seconds max.
*35	ENTRY DELAY 1 (zone type 01)	† [30]
		00-99 = entry delay time (in seconds); UL installations = 45 seconds max.
*36	ENTRY DELAY 2 (zone type 02)	[† [60]
		00-99 = entry delay 2 time (in seconds); UL installations = 45 seconds max.
*37	AUDIBLE EXIT WARNING /	[] † [1, 1]
	QUICK EXIT	Exit Warn Quick Exit
		0 = no; 1 = yes
*38	CONFIRMATION OF ARMING DING	† [0]
	Note: If the control is armed by RF button (key fob), a confirmation ding occurs immediately after arming regardless of field *38 settings. If the control is disarmed by RF button (key fob),	0 = no arming confirmation ding after arming system by APX32EN keypad or RF keypad; 1 = arming confirmation ding after arming system by APX32EN keypad or RF keypad; 2 = arming confirmation ding after arming from RF keypad only
	additional disarming confirmation ding is provided. The ding occurs immediately after disarming and is longer than arming confirmation ding.	If Option 1 is selected, confirmation of arming is provided by a 1/2 second sounder "ding" that sounds when closing report is sent, or at the end of exit delay. If Option 2 is selected the external sounder "ding" occurs immediately after arming from an RF keypad. Note: Confirmation ding only sounds when CONTROL is Armed Away or discursed after being A more down of the second
*39	POWER UP IN PREVIOUS STATE	disarmed after being Armed Away.
105		† [1]
- + - .	ntering a number other than the one spec	0 = no; 1 = yes; UL installations = 1
		chied may give unpredictable results.
	•	of digits shown. Enter 0–9; #+11 for '*'; #+12 for '#'; #+13 for
*40	PABX ACCESS CODE	
		Enter 6 digits. If fewer than 6 digits are entered, pressing st advances to the next field. To clear entries from field, press st 40 st
* 41	PRIMARY PHONE NUMBER	

Enter up to 20 digits; Do not fill unused spaces. If fewer than 20 digits entered, pressing * advances to the next field. To clear entries from field, press *41*.

Field	Function	Program	ned Values	[] = Table 1	Default Value
*42	SECONDARY PHONE NUMBER		to 24 digits; Do pressing *adva ss *41*.			
	All four digits of the subscriber account selected in *48 (option 5), all ten digits of t					git format is
Enter 4 to dialer rep digit acco To clear o	s $\frac{1}{43}$, $\frac{1}{44}$: b 10 digits. Enter 0–9; #+11 for B; #+12 for borting is to be used. If only 3 digits used, p bount number (for 4+1, 4+2, CID®) is used. entries from field, press $\frac{1}{43}$ or $\frac{1}{44}$. Exam 1234 , enter: 1 + 2 + 3 + 4 : For Acc	oressing * a nples:	advances to the	e next field. Ente	er [*] as the fif	th digit if a 4-
		t. B234 , ent			Acct. 12345678	90, enter:
1 2	3 4 5 6 7 8 9 0 ; For <i>i</i>	Acct. 123 , e	enter: 1 2	2 3 *		
*43	PRIMARY SUBS ACCT #				See r	ote above.
* 44	SECONDARY SUBS ACCT #				See r	ote above.
Enter up *46	to 24 digits. Enter 0-9, #+11 for '*'; #+12 fo "FOLLOW ME" REMINDER PHONE NUMBER	Enter up 1	to 24 digits; Do	not fill unused		
* 47	PHONE SYSTEM SELECT	† [5	ent	ou are using Puls er the numbers sl e to operate.		
		Central		Dialing	Mode	
		Station No WATS	Pulse 0 = No Speaker		Pulse 4 = With	Tone 5 = With
		NO WAIS	Phone		4 = With Speaker Phone	5 = With Speaker Phone
		WATS	2 = No Speaker Phone	3 = No Speaker Phone	6 = With Speaker Phone	7 = With Speaker Phone
*48	REPORT FORMAT for PRIM./SEC	0 = 3+1, 4+ 1 = 3+1, 4+ 2 = 4+2 AD 3 = 4+2 RA 5 = ADEMC 6 or undefin 7 = ADEMC 8 = 3+1, 4+	[7, 7] Secondary 1 ADEMCO L/S 1 RADIONICS S EMCO L/S STAND DIONICS STAND O CONTACT ID® ed = 4+2 ADEM O CONTACT ID® 1 ADEMCO L/S 1 RADIONICS E	STANDARD TANDARD DARD ARD REPORTING WI CO EXPRESS REPORTING W EXPANDED	elected for AAV. TH 10-DIGIT SUE	3S ACCT NO.

[†] Entering a number other than the one specified may give unpredictable results.

Field	Function	Programmed Values	[] = Table 1 Default Val
*49	SPLIT/DUAL REPORTING	[0]	
		0 = Disable (None, unless primary TO PRIMARY PHONE No. 1 = Alarms, Restore, Cancel 2 = All except Open/Close, Test 3 = Alarms, Restore, Cancel 4 = All except Open/Close, Test	/ fails) TO SECONDARY PHONE No. Others Open/Close, Test AII AII
A 7-digit o sent to th followed See Insta the page	Message code (plus optional 16-digit prefix) is le pager consisting of a 3-digit event code, by 0 and a 3-digit user or zone number. Ilation Instructions for an explanation of r code, which takes the following form: AAAAAAAAAAA.EEE-0NNN	5 = AII TO PRIMARY PHONE No. 6 = All except Open/Close 7 = All reports 8 = All reports 9 = All except Open/Close	All TO PAGING** No. (Secondary) Alarms, Open/Close [‡] , Troubles Alarms, Troubles Alarms, Open/Close [‡] , Troubles Open/Close [‡] [‡] Will report users 0, 5-8 or wireless arm/disarm button zones 26-33; all other zones and users do not report
AAA — c	optional 16-digits (see field X 88)	TO PRIMARY PHONE No.	TO SECONDARY ("FOLLOW ME") SYSTEM PHONE No.
EEE = 3 8 0 = a NNN = 3	B-digit event code: 911 (alarm), 101 (open), 102 (close), 311 (trouble) always displayed 3-digit user number or zone number, depending on the type of event (EEE) that occurred.	 10 = All except Open/Close 11 = All reports 12 = All reports 13 = All except Open/Close 	Alarms, Open/Close [‡] , Troubles Alarms, Troubles Alarms, Open/Close [‡] , Troubles Open/Close [‡] Will report users 0, 5-8 or wireless arm/disarm button zones 26-33; all othe zones and users do not report
*50	15 SEC DIALER DELAY (BURG)	[] † [0]	
* 51	PERIODIC TEST REPORT	0 = no; 1 = yes; UL installations =	= 0
		0 = none; $1 = 24$ hours; $2 =$ week (enter Test Code in field $*64$)	dy; 3 = 30 days
*52	FIRST TEST REPORT OFFSET	† [2]	
		0 = 24 hour; $1 = 6$ hours; $2 = 12(Time to 1st report from power up/prog$	
*53	SESCOA/RADIONICS SELECT	[0]	
		0 = Radionics (0–9, B–F reporting Select 0 for all other formats.); 1 = SESCOA (0–9 only reporting
*54	LACK OF USAGE NOTIFICATION	[0]	
		0 = Disabled 1 = 1 day 2 = 7 days 3 = 27 days	4 = 90 days 5 = 180 days 6 = 365 days
*55	REPORTING CHANNELS	[0]	
		0 = Telco Line (no Radio) 1 = LRR/IP(Digital Communication 3 = LRR/IP (Digital Communication 5 = LRR/IP (Digital Communication for 2-way voice session only, it	n only) (no Telco Line) n with AAV) (Telco Line connectio
*56	ENHANCED ZONE PROGRAMMING	See procedure in this guide an	d refer to the Installation Guide.
*58	RF JAM DETECT	[0]	
		0 = no RF Jam Detection; 1 = RF 2 = RF Jam Detect on with CS rep (if trouble/restore report is enabled in f Note: For event logging option 2 must	ort ields *60, *71)

Field	Function	Programmed Values	[] = Table 1 Default Value
With a : B, "#+1 A "0" A "0" With an A "0" With Ac second	OGRAM SYSTEM STATUS, & RESTOR 3+1 or 4+1 Standard Format: Enter a cod 12" for C, "#+13" for D, "#+14" for E, "#+15 (not "#+10") in the first box will disable a rep (not "#+10") in the second box will result in Expanded or 4+2 Format: Enter codes in (not "#+10") in the second box will eliminate (not "#+10") in the second box will eliminate (not "#+10") in both boxes will disable the re demco Contact ID Reporting: Enter any dig boxes will be ignored). (not "#+10") in the first box will disable the re	e in the <i>first</i> box: 1–9, 0, B, C, D, E, o " for F. oort. automatic advance to the next field w <i>both</i> boxes (1st and 2nd digits) for 1- e the expanded message for that repo eport. git (other than "0") in the <i>first</i> box, to e	or F. Enter "#+10" for 0, "#+11" for hen programming. -9, 0, or B-F, as described above. ort.
Example		3 0	
	For Code 3 2 (two digits), enter:		
	For Code B 2 (Hexadecimal), enter:	#+11 2	
SYSTE *59	M STATUS REPORT CODES (*59-*6 EXIT ERROR REPORT CODE	2nd digit is automatically	sent as 2nd digit of the zone alarm in ⊁56, if expanded or 4+2 reporting
*60	TROUBLE REPORT CODE	[1,0]	
*61	BYPASS REPORT CODE	[0,0]	
*62	AC LOSS REPORT CODE	[0,0]	
*63	LOW BATTERY REPORT CODE	[1,0]	
*64	TEST REPORT CODE	[1,0]	
*65	OPEN REPORT CODE	[] [0] (tt 2nd	digit is automatically sent as the user
*66	ARM AWAY/STAY REPORT CODE		ber if expanded or 4+2 reporting is cted.)
*67	RF XMTR LOW BATTERY REPORT	AWAY STAY	
*68	CODE CANCEL REPORT CODE	[1,0]	
RESTC *70	ORE REPORT CODES (*70-*76) ALARM RESTORE REPORT CODE	[1] 2nd digit is automatically report code programmed is selected.	sent as 2nd digit of the zone alarm I in \pm 56, if expanded or 4+2 reporting
* 71	TROUBLE RESTORE REPORT CODE	[1,0]	
*72	BYPASS RESTORE REPORT CODE	[0,0]	
*73	AC RESTORE REPORT CODE	[0,0]	
*74	LOW BAT RESTORE REPORT CODE	[1,0]	

Field	Function	Programmed Values[] = Table 1 Default Value
*75	RF XMTR LO BAT RST RPT CODE	[1,0]
*76	TEST RESTORE RPT CODE	[0,0]
DYNA	AIC SIGNALING FIELD *77	
*77	DYNAMIC SIGNALING DELAY/ DYNAMIC SIGNALING PRIORITY	[0, 0]
		1st Entry (delay before switch CS reporting path)0 = Redundant reporting on dialer and LRR/IP7 = 105 secondsdevice9 = 135 seconds1 = 15 seconds#10 = 150 seconds2 = 30 seconds#11 = 165 seconds3 = 45 seconds#12 = 180 seconds4 = 60 seconds#13 = 195 seconds5 = 75 seconds#14 = 210 seconds6 = 90 seconds#15 = 225 seconds
*78	PROGRAMMABLE TONE GENERATION TIME	2nd Entry 0 = Primary Dialer Preferred Channel $1 = LRR/IP Preferred Channel2 = LRR/IP reporting only00 = Disabled01-09 = 100-900 ms10-99 = 1.0 - 9.9 secs.$
OUTPL *80	JT AND SYSTEM SETUP (*80-*92) DEVICE PROGRAMMING MENU MODE	Program *80 and *81 only if Powerline Carrier Devices or chime by zone are to be used. See procedure later in this
*81	ZONE LISTS MENU MODE	manual.
*83	ENHANCED SEQUENTIAL MODE	See procedure later in this manual.
* 84	ASSIGN ZONE VOICE DESCRIPTOR	See procedure later in this manual.
*85	RECORD CUSTOM VOICE DESCRIPTOR	See procedure later in this manual.
*86	MULTI-MODE (E-MAIL NOTIFICATION)	[0]
	,	0 = Disable multi-mode devices 1 = Enable multi-mode device address #6 only 2 = Enable multi-mode device address #7 only 3 = Enable multi-mode addresses

***87** AUX FUNCTION/ 1-BUTTON PAGING

[0]

0 = Aux key performs defined function (macro);

1 = Aux key sends message to pager or voice message to follow me system phone number.

If 1, you must also select an option 6-9 in field *49 for the pager or 10-13 for the follow me system announcement.

Field	Function	Programmed Values[] = Table 1 Default Value
*88	PAGER CHARACTERS	Up to 16 digits can be entered that will appear in front of the 7-digit pager message sent by the control (either upon system event or upon pressing AUX key [if programmed for paging]; see field *87 and *49 for other options regarding the paging feature). See the Installation Instructions (fields *87, *88 and *49) for full descriptions of the paging feature. You do not need to fill all 16 digits (press [*] to advance to next field). To clear entries, enter *88*. To enter "*" = [#] + [11]; To enter "#" = [#] + 12] To enter 2-second pause = [#] + [13] (some pagers require an
*89	EVENT LOG 80% FULL RPT CODE	additional delay [pause] in order to receive the entire message)
*90	EVENT LOGGING	 [3] 0 = None; 1 = Alarm/Alarm Restore; 2 = Trouble/Trouble Restore; 4 = Bypass/Bypass Restore; 8 = Open/Close. <i>Example:</i> To select "Alarm/Alarm Restore", and "Open/Close", enter 9 (1 + 8); To select all, enter #15. Note: System messages are logged when any non-zero selection is made.
*91	ALARM AUDIO VERIFICATION (AAV)/REMOTE PHONE CONTROL	 [2] 0 = None 1 = AAV and remote phone control 2 = remote phone control only 4 = AAV only Notes: (1) In order to activate the Remote Phone Control feature and defeat an answering machine, ensure that the correct ring detection count ("15") has been programmed in field *95. (2) Remote phone session will be terminated if a report must be sent. (3) Alarm Audio Verification will only function when Contact ID® is selected. AAV cannot be used for UL installations. (4) If an alarm will be reported to primary and secondary phone numbers, AAV can only function via the secondary number. (5) If an alarm will be reported to a pager (6-8 in field *49), or to follow me phone number (10-12 in field *49) AAV cannot be used. (6) If AAV is selected and LRR/IP communications device is enabled, you must enter "0" (primary dialer preferred channel) as the second entry in Field *77.
* 92	NUMBER OF REPORTS IN ARMED PERIOD	$\begin{bmatrix} 0 \\ 0 \\ 1 \\ 0 \\ 1 \\ 0 \\ 1 \\ 0 \\ 1 \\ 0 \\ 0$
DOW	NLOAD INFORMATION (*93, *94, *95)	
*93	FLEXIBLE CALLBACK	[0] 0 = No flexible callback; 1 = Last digit flexible; 2 = Last 2 digits flexible; 3 = Last 3 digits flexible

3 = Last 3 digits flexible

Field	Function	Programmed Values [] = Table 1 Default Value
*94	DOWNLOAD PHONE NUMBER	
		Enter up to 20 digits, 0–9; $\#+11$ for ' $*$ '; $\#+12$ for ' $\#$ '; $\#+13$ for a pause. Do not fill unused spaces. If fewer than 20 digits entered, pressing $*$ advances to the next field. To clear entries from field, press $*94*$.
		Note: In UL installations, downloading may only be performed if a technician is at the site.
* 95	RING DETECT COUNT FOR DOWNLOADING/REMOTE PHONE CONTROL MODE	[15] 0 = Disable Station Initiated Download; $1-14$ = number of rings (1-9, [#]+10 =10, [#] +11 =11, [#] +12 =12, [#] +13 =13, [#] +14 =14); 15 = answering machine defeat ([#] +15
* 96	INITIALIZE DOWNLOAD ID &	=15) No entry required
* 97	SUBSCRIBER ACCOUNT SET ALL PROGRAM FIELDS TO 1 OF 4 SETS OF DEFAULT VALUES	Enter 1-4 to select from default tables 1-4 Enter 0 to abort.
* 98	EXITS PROGRAMMING MODE (PREVENTS RE-ENTRY)	If *98 is used to exit programming mode, you cannot enter the Installer Code + 8+ 0 + 0 for re-entry. You must press "*" and "#" within 50 seconds of power up or from exiting Programming mode to re-enter Programming mode. Note: After exiting Program mode, the system takes up to 1 minute to reset. To bypass the reset delay, press [#] + [0].
99	EXITS PROGRAMMING MODE (ALLOWS RE-ENTRY)	 Installer Code + 8 + 0 + 0 or: Power-up, then press "" and "#" within 50 seconds of power up or from exiting Programming mode. Note: After exiting Program mode, the system takes up to 1 minute to reset. To bypass the reset delay, press [#] + [0].

***56 ENHANCED ZONE PROGRAMMING PROCEDURE**

Use this mode to program zone information. Press *56 while in programming mode.

- **Notes:** (1) Entering a number other than the one specified may give unpredictable results.
 - (2) You may find it convenient to adjust the volume setting before entering the Programming Mode. This will allow you to clearly hear feedback announcements or system beeps.



ZONE NUMBER

Enter the 2-digit zone number to be programmed. The system will announce the Voice Descriptor for the selected zone, if it is programmed.

- [*] = Continue
- 00 = exit zone programming mode;
 - upon exiting, the prompt "56" blinks; press
- [*] + any field number to go to that field.
- Zones 2-25 = RF transmitter zones (only)
- Zone 26-41 = RF button zones (only)
 - Zone 92 = Duress
 - Zone 95, 96, 99 = Panic zones

ZONE TYPE

Enter the 2-digit zone type (*zt*) for this zone (see table of zone types on worksheet).

- [*] = Continue [if 00 is entered the system will skip to DELETE ZONE PARAMETERS prompt (F)].
- [#] = Return to previous prompt



REPORT CODE

Enter the report code (rc) for this zone.

Report consists of 2 hexadecimal digits, each composed of 2 numerical digits (A = 10, B = 11, C = 12, D = 13, E = 14, F = 15; see Report Code description for explanation of codes). [*] = Continue; If this is zone 95, 96 or 99, the system skips to the VOICE DESCRIPTOR prompt (1C) [#] = Return to previous prompt

INPUT TYPE

Enter the input type (i) for the transm	itter assigned to this zone as follows:	Zo
3 = Supervised RF (RF)	[*] = Continue	as
4 = Unsupervised RF (UR)	<pre>[#] = Return to previous prompt</pre>	26
5 = Button type (BR)		Ту

Note Zones 2-25 should be assigned as Input Type 3 or 4 and Zones 26-41 should be assigned as Type 5 only.



d

i

LOOP NUMBER or LOOP AND SERIAL NUMBER (if using RF Learning)

Note: It is not necessary to manually enter a Loop Number if using the RF Learning Mode.

RF Learning - Two (2) transmissions (two key depressions at least five seconds apart) will be required for BR type devices (device type 5). Two beeps will sound after the second transmission, confirming that the loop number and serial number have been learned.

For all other device types, four (4) transmissions are required (fault, restore and fault, restore). A single beep will sound after the second transmission confirming that the loop and serial number have been captured. Following the fourth transmission the system will confirm that the loop and serial number have been learned by announcing the Voice Descriptor for the zone, if it is programmed, followed by two beeps.

Note: BR type devices cannot be enrolled by using UR or RF type. Likewise, UR or RF type devices cannot be enrolled by using a BR type device. There is a 52-second time-out for RF enrolling. At the end of the time-out, the system returns to the INPUT TYPE prompt (d). If enrolled, loop number and "L" are displayed.

Manual Entry - Enter the desired loop number and press [*] to continue (see the transmitter's Installation Instructions for specific loop designations). If "L" is displayed the zone's serial number has already been enrolled.

- **Note**: The loop number can be changed even if the zone has already been entered. Care should be taken when using this feature as it has the capability to make zones inoperable by creating a mismatch of a working serial number/loop number combination. This should be re-confirmed if the loop number is changed.
- 0 + [*] = to Delete Serial Number prompt (F)
- [*] = Continue to the ENROLL MODE prompt (1A) if not enrolled, or VOICE DESCRIPTOR prompt (1C) if already enrolled.
- [#] = Return to previous prompt
- 1-4 = Loop number for the zone of the transmitter being entered or learned

***56 ENHANCED ZONE PROGRAMMING PROCEDURE**

F

18

lb

LC

DELETE ZONE PARAMETERS

0 = Discard the delete request.

1 = Confirm the requested delete.

If 00 is entered in the zone type, confirmation of the delete request will delete all information associated with zone currently being programmed.

If 0 is entered in the loop number, confirmation of the delete request will delete the serial number associated with zone currently being programmed.

Note: 00 was entered as a zone type in prompt (b), 00 will be retained and system will advance to prompt (1C).

ENROLL MODE

0 = Skip to the VOICE DESCRIPTOR prompt (1C). If zone type is "00," then skips to DELETE SERIAL NUMBER prompt instead.

- 1 = Enroll now and proceed to SERIAL NUMBER prompt (1b) (If "L" is not displayed).
- 2 = Copy the last serial number from the local memory buffer (If "L" is not displayed).
- 3 = View existing serial number. (Only if "L" is displayed).
- 9 = Delete existing serial number. (Only if "L" is displayed).
- [*] = Advance to the VOICE DESCRIPTOR prompt (1C). This will save all zone parameters.
- [#] = Return to the loop number prompt (E).
- Notes: (1) "L" will be displayed only if transmitter was already learned.
 - (2) The system will announce the Voice Descriptor for the selected zone, if it is programmed, followed by three beeps and "C" will be displayed only after confirmation.

SERIAL NUMBER

Manually enter the transmitter's 7-digit serial number (printed on the transmitter). If an incorrect digit is entered, press the [#] key to return to prompt (1A).

Note: In order for all parameters to be accepted, you must advance to prompt (1C).

When all 7 digits are entered, press the [*] key. The serial number will be copied into EEROM and the local memory buffer and the system will return to the (1A) prompt and "L" will be displayed. If 52 seconds pass and no entry is been made, the system will return to prompt (1A).



VOICE DESCRIPTOR

0 =Skip to next zone (A)

1 = Enter descriptor mode (existing zone descriptor will be announced, then descriptor 1 will be repeated)



DESCRIPTOR 1

Enter [#] + 2-digit vocabulary index[†] number (*vi*) of first descriptor word for this zone. To change the entered index number, press [#] + desired index number. 6 = accept word and advance to descriptor 2 (descriptor 2 will be announced) 8 = accept word and advance to next zone (prompt A) – zone descriptor will be announced Press any other key to repeat the selected word



DESCRIPTOR 2

Enter [#] + 2-digit vocabulary index[†] number (*vi*) of second descriptor word for this zone. To change the entered index number, press [#] + desired index number. 6 = accept word and advance to descriptor 3 (descriptor 3 will be announced)

8 = accept word and advance to next zone (prompt A) – zone descriptor will be announced
 Press any other key to repeat the selected word



DESCRIPTOR 3

Enter [#] + 2-digit vocabulary index[†] number (*vi*) of third descriptor word for this zone. To change the entered index number, press [#] + desired index number. 6 or 8 = accept word and advance to next zone (prompt A) – zone descriptor will be announced Press any other key to repeat the selected word

[†] See *84 ASSIGN ZONE VOICE DESCRIPTORS section for Vocabulary Index.

***80 DEVICE PROGRAMMING**

Use this mode to program Powerline Carrier Devices or zone lists for Chime by Zone feature. It is also used to program the Remote Services Multi-mode (e-mail) event triggers. Press *80 while in programming mode. **Note:** Entering a number other than the one specified may give unpredictable results.

	intering u	hamber offer than the one specified may give an predictable results.
	80	Device Programming 0 = Exit mode, upon which this prompt blinks. 1 = Enter mode
8	01	DEVICE NUMBER Enter the 2-digit device number to be programmed 01-08 = X10 device number 09-16 = Multimode (e-mail) event triggers [*] = Continue 00 = Exit Device Programming mode (displays blinking 80; enter * + desired data field or menu mode number)
b	aa	DEVICE ACTIONEnter the 1-digit action, 0-3, for the device being programmed (current action is displayed).0 = No response3 = Pulse on and off1 = Close for 2 seconds[*] = Continue2 = Close and stay closed[#] = Return to previous prompt
٢	et	START EVENT TYPE (if applicable)Enter the 1-digit start event type, 0-3, for the device being programmed.0 = Not used3 = Trouble1 = Alarm[*] = Continue2 = Fault[#] = Return to previous prompt
d	zl	START ZONE LIST (if applicable) Enter the 1-digit zone list number, 1-3, or 0 if not used, for the device being programmed. [*] = Continue [#] = Return to previous prompt
Ε	zt	START ZONE TYPE (if applicable) Enter the 2-digit start zone type for the device being programmed (see Powerline Carrier Device Worksheet for zone type/system operation codes later in this manual). [*] = Continue [#] = Return to previous prompt
F	zl	STOP ZONE LIST (if applicable) Enter the 1-digit zone list number, 1-3, or 0 if not used, for the device being programmed. [*] = Continue [#] = Return to previous prompt
IR	zt	<pre>STOP ZONE TYPE (if applicable) Enter the 2-digit stop zone type for the device being programmed (see Powerline Carrier Device Worksheet for zone type/system operation codes later in this manual). [*] = Return to Device Number prompt (A) [#] = Return to previous prompt</pre>

***81 ZONE LISTS**

Use this mode to define zone lists for Powerline Carrier Devices and/or for the chime by zone feature. Press *81 while in programming mode.

Note: Entering a number other than the one specified may give unpredictable results.



ZONE LIST PROGRAMMING

0 = Exit mode, upon which this prompt blinks. 1 = Enter mode



ZONE LIST NUMBER

Enter the 2-digit zone list number (01-03) to be programmed (use zone list 03 for chime by zone feature). [*] = Continue

00 = Exit mode (displays blinking 81; enter * + desired data field or menu mode number)



ZONE ENTRY TO LIST

Enter the 2-digit zone number (zz) to be added to this zone list. The system will announce the Voice Descriptor for the selected zone, if it is programmed. [*] = Accept zone number and enter the next zone number 00 = Accept zone number and continue to next prompt



DELETE ENTIRE ZONE LIST?

- 0 = Don't delete; continue to next prompt
- 1 = Delete the current zone list



DELETE SPECIFIC ZONES FROM LIST?

- 0 = Don't delete; continue to next zone list number (prompt A 01)
- 1 = Continue to delete zones prompt



DELETE ZONES

Enter the 2-digit zone number to be deleted from the current zone list. When deleting a zone(s) from the zone list, if the selected zone has a Voice Descriptor programmed, upon deletion it will be announced as a confirmation that it has been deleted.

[*] = Delete zone and enter next zone to be deleted

00 = Return to next zone list number (prompt A 01)

Use this mode to enter transmitter serial numbers. Press *83 while in programming mode.



ZONE NUMBER

Enter the 2-digit zone number of the first transmitter to have its serial number entered. The system will announce the Voice Descriptor for the selected zone if it has been programmed. [*] = Continue; system searches for zones not yet entered, (for zones 2 to 25 a zone type must be entered) then advances to ENROLL SERIAL NUMBER prompt (1b). 00 = Exit Sequential mode, upon which the prompt "83" blinks.

IR zz

LE

!R



0 = Advance to next unlearned zone.

1 = Enter now and proceed to SERIAL NUMER prompt (1b). For 4-button keys (zones 26-29, 30-33, 34-37 and 38-41) the serial number will be learned to all four buttons.

2 = copy the previous serial number entry from the buffer.

Note: Before you can copy a serial number you must first enter a serial number. If no serial is stored in the buffer and a copy is attempted the panel will emit a long beep indicating an invalid operation.

3 = View existing serial number. (Only if "L" is displayed. If "L" is not displayed, panel will emit a long beep. Each digit will be displayed and the keypad will beep once for digits 1-6 and three times for last digit.

4 = Copy the 4-button key template set for zones 26 - 29 (includes all zone parameters except serial numbers). Only valid on 4-button key zones 30-33, 34-37 and 38-41 that do not have serial numbers learned. (Template acceptance is indicated by two beeps after copying. A single long beep emitted when copying templates indicates the template is not valid.)

9 = Delete existing serial number. Go to the (1A) prompt. (For 4-button key zones 26-29, 30-33, 34-37 and 38-41, deletes all four at once.)

[*] = Advance to the next unlearned zone.

[#] = Return to previous prompt (1A).





SERIAL NUMBER

This prompt can be used to enroll the transmitter serial number via RF transmission or manually.

RF Learning - Two (2) transmissions (two key depressions at least five second apart) will be required for BR type or four (4) transmissions (fault, restore and fault, restore) for UR or RF type. BR type devices can be enrolled only by transmission from BR devices. Likewise, UR and RF devices can only be enrolled by transmission from a UR or RF device.

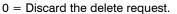
If the learned serial number has a different loop number than that entered in ± 56 the system will announce the Voice Descriptor, if it is programmed, followed by two beeps and will return to Prompt (1A) and "L" will be displayed.

If the loop number captured by RF transmission and that entered in *56 mode match, the system will announce the Voice Descriptor, if it is programmed, followed by three beeps and return to Prompt (1A) and "LC" will be displayed. No additional transmissions are needed for confirmation.

Manual Entry - Enter the 7-digit serial number printed on the transmitter. If you enter an incorrect digit, press the [#] key to backup to prompt (1A) and start over. When all 7 digits are entered, press the [*] key. If less than 7 digits are entered, the keypad will emit a single long beep and return to the (1A) prompt without displaying the "L". If more than 7 digits have been entered, the first 6 digits will be saved along with the last digit that was entered (entering 123456789 yields the serial number 1234569).

Note: If 52 seconds passes and no entry has been made, the system returns to prompt (1A).

DELETE ZONE PARAMETERS CONFIRMATION



1 = Confirm requested delete.



***84 ASSIGN ZONE VOICE DESCRIPTORS**

system	i annou	nces any event involving a zone number. Press *84 while in programming mode.
Note: E	Intering	a number other than the one specified may give unpredictable results.
	<u> </u>	ASSIGN ZONE VOICE DESCRIPTORS
	84	0 = Exit mode, upon which this prompt blinks.
		1 = Enter mode
0		ZONE NUMBER
8	ZZ	Enter the 2-digit zone number (zz) for which this descriptor is being assigned. The Voice Descriptor
		for the selected zone will be announced, if it is programmed.
		[*] = Continue to next prompt (existing descriptors will be announced, then descriptor 1 will be
		repeated.)
		00 = Exit Zone Voice Descriptor mode (displays blinking 84; enter * + desired data field or menu
		mode number)
b		DESCRIPTOR 1
b	VV	Enter [#] + 2-digit vocabulary index number of first descriptor word for this zone.
		To change the entered index number, press [#] + desired index number.
		6 = accept word and advance to descriptor 2 (descriptor 2 will be announced)
		8 = accept word and advance to next zone (prompt Azz) - zone descriptor will be announced
		Press any other key to repeat the selected word
-		DESCRIPTOR 2
Ε	VV	Enter [#] + 2-digit vocabulary index number of second descriptor word for this zone.
		To change the entered index number, press [#] + desired index number.
		6 = accept word and advance to descriptor 3 (descriptor 3 will be announced)
		8 = accept word and advance to next zone (prompt Azz) - zone descriptor will be announced
		Press any other key to repeat the selected word
,		DESCRIPTOR 3
d	VV	Enter [#] + 2-digit vocabulary index number of third descriptor word for this zone.
		To change the entered index number, press [#] + desired index number.
		6 or 8 = accept word and advance to next zone (prompt Azz) – zone descriptor will be announced
		Press any other key to repeat the selected word

VOCABULARY INDEX					
00 1/2 sec pause	F	М	S	29 1 st	
A	43 FAMILY ROOM	14 MAIN	64 SECOND FLOOR	30 2 ND	
82 ALARM	87 FIRE	15 MASTER	65 SEVEN	31 3 RD	
32 ATTIC	44 FIRE DETECTION	54 MASTER	20 SHED	70 Custom Word #1	
В	07 FIRST FLOOR	BEDROOM	21 SHOP	71 Custom Word #2	
01 BABY	45 FIVE	55 MEDICAL	66 SIDE	72 Custom Word #3	
33 BACK	08 FLOOR	84 MESSAGE	67 SILENT POLICE	73 Custom Word #4	
34 BASEMENT	46 FOUR	56 MOTION DETECTOR	68 SIX	74 Custom Word #5	
35 BATHROOM	47 FRONT	N	69 SLIDING	99 Blank (to erase	
36 BEDROOM	G	57 NINE	22 SMOKE	previously	
С	48 GARAGE	16 NORTH	23 SOUTH	programmed word)	
83 CHECK	49 GUEST ROOM	58 NURSERY	24 STORAGE	,	
D	09 GUN	0	85 SYSTEM	SYSTEM WORDS	
37 DELAY DOOR	н	59 OFFICE	Т	(Announced by system –	
38 DEN	50 HALL	60 ONE	25 THIRD FLOOR	not programmable)	
02 DETECTOR	I	17 OUTSIDE	75 THREE	AC LOSS	
03 DINING	10 INSIDE	Р	76 TRANSMITTER	ARMED	
39 DINING ROOM	К	61 PATIO	77 TWO	AWAY	
04 DOOR	51 KITCHEN	62 POLICE	U	BYPASSED	
40 DOWNSTAIRS	L	18 POOL	78 UPSTAIRS	CARBON MONOXIDE	
05 DRIVEWAY	11 LAUNDRY	R	26 UTILITY	CHIME	
E	52 LAUNDRY ROOM	63 REAR	79 UTILITY ROOM	DISARMED	
06 EAST	12 LIBRARY	19 ROOM	W	DISARM SYSTEM	
41 EIGHT	13 LIVING		27 WEST	NOW	
42 EMERGENCY	53 LIVING ROOM		80 WINDOW	EXIT NOW	
			Y	FAULT	
			28 YARD	INSTANT	
			Z	LOW BATTERY	
			81 ZERO	NOT	
			86 ZONES	READY TO ARM	
				STAY	

Use this mode to assign voice descriptors for each zone. These are the descriptors that are announced when the

stem appounces any event involving a zone number. Press *84 while in programming mode sy N

Note: If a Wireless Keypad is being installed along with this system, not all the voice descriptors shown on this list can be announced by keypad. (Refer to the Wireless Keypad documentation for further information).

***85 RECORD CUSTOM VOICE DESCRIPTORS**

Use this mode to record up to 5 custom voice descriptors for use with zone announcements. Press *85 while in programming mode.

NOTE: Entry of a number other than one specified will give unpredictable results.



RECORD CUSTOM VOICE DESCRIPTORS 0 = Exit mode, upon which this prompt blinks.

CUSTOM DESCRIPTOR NUMBER



Enter 7 + d + [*] where d = 0-4, each representing custom word 70, 71, 72, 73 or 74 respectively. Existing descriptor will be announced.

Press [#] to start recorder. Begin speaking immediately after the third beep.

Speak the desired word clearly near the keypad microphone. Recording stops after 1.5 seconds.

6 = Accept word and ready to record next descriptor (prompt A....7d)

[#] = Re-record descriptor

1 = Enter mode

00 = Exit Record mode after pressing 6 (displays blinking 85; enter * + desired data field or menu mode number)

Press any other key to repeat the recorded word.

***56 ENHANCED ZONE PROGRAMMING WORKSHEET**

Fill in the required data on this worksheet, then follow the programming procedure in the Installation and Setup Guide. *ZONES ON CONTROL:* See explanation of headings (defaults shown are for Table 1)

Zone Description Duress		Zone Zone No. (a 02) Type (zt		arm rpt co ex) (rc)	ode	Vocabulary Index
Keypad Panic	(1 & *)	9 5	[00]			
Keypad Panic		9 6	[00]		[00 00]	
Keypad Panic	(* & #)	99	[06]		[01 00]	
Zone No. (A 02)	Zone Type (zt)	Alarm Report Code in hex (rc)	Input Type (i)	Loop No. (I)	Transmitter Serial Number	Vocabulary Index
0 2	[01]	[01 00]	[3]	[2]		[47-04-99]
0 3	[01]	[01 00]	[3]	[2]		[33-04-99]
0 4	[03]	[01 00]	[3]	[2]		[80-99-99]
0 5	[10]	[01 00]	[3]	[1]		[56-99-99]
0 6						
0 7						
0 8						
0 9						
1 0						
1 1						
1 2						
1 3						
1 4						
1 5						
1 6						
1 7						
1 8						
1 9						
20						
2 1						
2 2						
2 3						
2 4						
2 5						

Zone No. (A 02)	Zone Type (zt)	Alarm Report Code in hex (rc)	Input Type (i)	Loop No. (I)	Transmitter Serial Number	Vocabulary Index	
Button Zones							
2 6	[21]	[01 00]	[5]	[3			
2 7	[22]	[01 00]	[5]	[2]			
2 8	[20]	[01 00]	[5]	[4]			
2 9	[23]	[00 00]	[5]	[1]			
30	[21]	[01 00]	[5]	[3]			
3 1	[22]	[01 00]	[5]	[2]			
3 2	[20]	[01 00]	[5]	[4]			
3 3	[23]	[00 00]	[5]	[1]			
3 4							
3 5							
3 6							
3 7							
3 8							
39							
40							
4 1							
		PLANATION OF ZONE					
A 02 = ZON	NE No. Zone N	umbers are 2-25 (RF) only	v, 26-41 (Bi	utton) only,	92 (duress), 95, 96, 99) (panic)	
zt = ZONE		Not Used			hout Verification		
		Entry/Exit #1 Entry/Exit #2		= Interior = Carbon	,		
		Perimeter		= Arm–Sta			
		Interior Follower		= Arm–Av	•		
	05 =	Trouble Day/Alarm Night		e = Disarm			
		24 Hr Silent			m Response		
		24 Hr Audible	24	= Silent B	burglary		
rc – ALAR		24 Hr Aux DE Two Hey Digits For	each Hev	Digit ente	r: 00–09 for 0–9, 10 for .	Δ 11 for B 12	
					entered as the first dig		
		no report for that zo	one.				
					code only. Enter any h cond pair of boxes is ic		
i = INPUT	TYPE	Enter 3 for RF: Supe					
		Enter 4 for UR: Uns Enter 5 for BR: Butte	upervised	RF 4 and	es 2-25 should be assigned d Zones 26-41 should be a		
	NUMBER	Used with 5800 RF	Loop Inpu	t Devices. F	Record transmitter loop	number. Entries	
		are 1-4, depending	e 1-4, depending on device being used. Refer to the transmitter's instructions for propriate loop numbers.				

POWERLINE CARRIER DEVICES WORKSHEET FOR *80 and *81

Applicable only if Powerline Carrier Devices are to be used, or chime-by-zone feature is used.

UL Powerline Carrier Devices have not been evaluated by UL.

***80 OUTPUT DEVICES**

Fill in the required data on the worksheet on below and follow the programming procedure in the Installation Instructions as you enter the data during the displays and prompts that appear in sequence. **Note:** If using X10 devices, Field *25 must be programmed with a House Code.

		START		STOP		
		either or both		either or both		
DEVICE	ACTION	EVENT	ZONE	ZONE TYPE	RESTORE	ZONE TYPE/
NUMBER	(aa)	TYPE (et)	LIST (zl)	SYS OPERATION (zt)	ZONE LIST (zl)	SYS OPERATION (zt)
P.L.C.D.*† 01						
P.L.C.D.*† 02						
P.L.C.D.*† 03						
P.L.C.D.* 04						
P.L.C.D.* †05						
P.L.C.D.*† 06						
SYS. P.L.C.D.*† 07						
SYS. P.L.C.D.*† 08	[2]			[33]		[36]
E-mail event trigger 09						
E-mail event trigger 10						
E-mail event trigger 11						
E-mail event trigger 12						
E-mail event trigger 13						
E-mail event trigger 14						
E-mail event trigger 15						
E-mail event trigger 16	[2]			[33]		[36]

* P.L.C.D. = Powerline Carrier Device (X10).

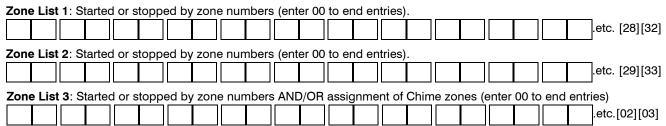
Note: If using an X10 Powerhouse Security SH10A Siren as device 8, you must change the action default to "3" if using default table 4.

Where:	A = DEVICE ACTION	0 = No Response; 1 = Cl	nse; 1 = Close for 2 sec; 2 = Close and stay closed; 3 = Pulse on and off.					
	ET = EVENT TYPE	0 = Not used; 1 = Alarm; 2 = Fault; 3 = Trouble.						
	Z L = ZONE LIST	1, 2, or 3 (from Field * 81) or 0 = Not Used. "START" ZONE LIST: Upon alarm, fault, or trouble of ANY zone on this list, device ac START. "STOP" <i>RESTORE of ZONE LIST</i> : Upon restore of ALL zones on this list, dev will STOP. It need not be same list as used for START.						
		Note: Do not assign zones with types 20, 21, or 22 to a zone list.						
	ZT = ZONE TYPE/ SYSTEM OPERATIO	00 = Not osed $01 = Entry/Exit#1$ $02 = Entry/Exit#2$ $03 = Perimeter$ $04 = Interior Follower$ $05 = Trouble Day/Alarm I$ $06 = 24 Hour Silent$ Note: Any zone in "ZT device with the	07 = 24 Hour Au 08 = 24 Hour Au 09 = Fire Zone w 10 = Interior with 14 = Carbon Mo	x vithout Verification n Delay noxide ary e will activate rem is in				
		Choices for System Ope	ration are:					
		21 = Arming-Away 22 = Disarming (Code + 1 31 = End of Exit Time 32 = Start of Entry Time	39 = Any Fire Alarm	52 = Kissoff				
		* Or at Disarming, which	ever occurs earlier.					
Note: In r	normal operation mode:	<u>For Devices 1-6:</u> Function + Lights On + N Function + Lights Off + N	For Devices 7 and 8: Code + Function + 4 + N Code + Function + 7 + N	N = device (unit) number (Entry starts Device N) (Entry stops Device N)				

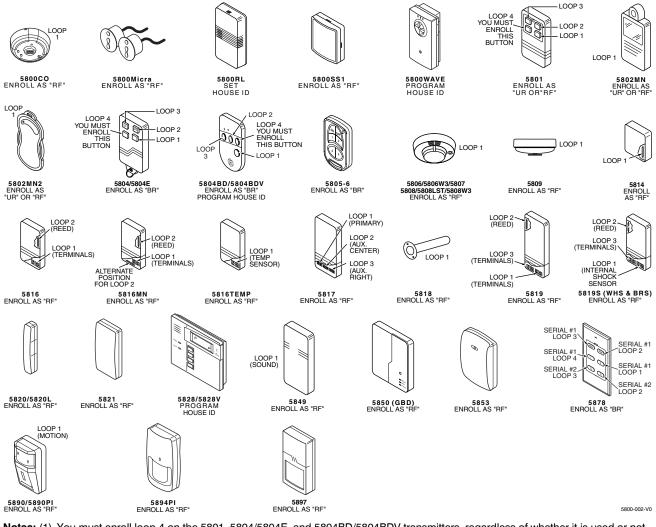
***81 ZONE LISTS FOR OUTPUT DEVICES**

Fill in the required data on the worksheet below and follow the procedure in the installation manual as you enter the data during the displays and prompts that appear in sequence.

Note: Record desired zone numbers below. More or fewer boxes than shown may be needed, since any list may include *any* or *all* of a system's zone numbers.



5800 SERIES LOOP NUMBERS



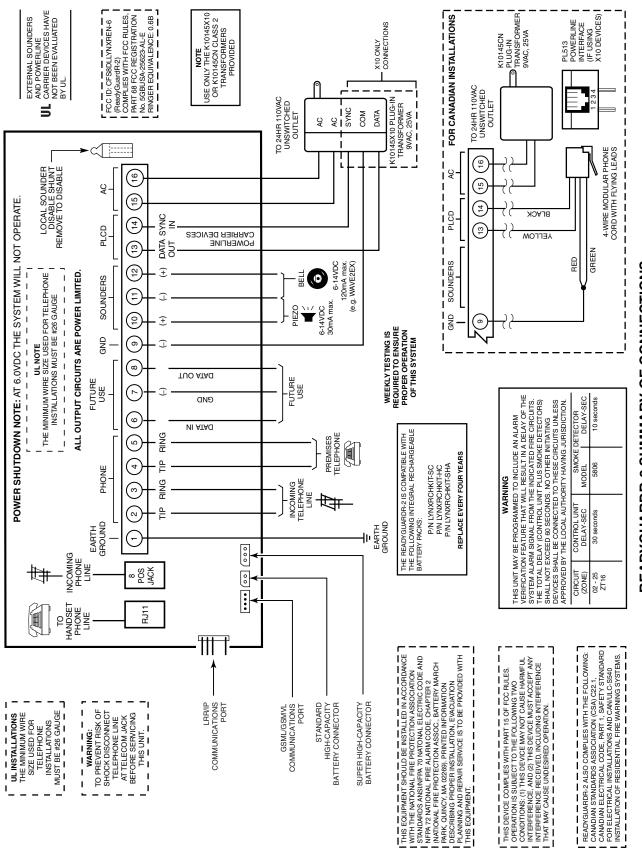
Notes: (1) You must enroll loop 4 on the 5801, 5804/5804E, and 5804BD/5804BDV transmitters, regardless of whether it is used or not.
 (2) 5804E encrypted (High-Security) devices must be activated while the system is in Go/No Go Test Mode. Refer to the transmitter's installation instructions for complete details. The system will confirm enrollment of the encrypted device by beeping two times.

UL

The 5800RL, 5802MN, 5802MN2, 5804, 5804BD, 5804BDV, 5804E, 5808LST, 5814, 5816TEMP, 5819, 5819S(WHS & BRS), 5828/5828V and 5850(GBD) transmitters are not intended for any UL installations.

SPECIAL MESSAGES

- **EE** = Data Entry Error (invalid field number entered while programming; re-enter valid field number).
- **FC** = Communication Failure
- **EA** = Exit Alarm
- CA = Cancel Alarm
- **CC** = Modem Communication (system is in communication with the central station)
- dl = Displayed approximately 4 seconds after powering up. This will revert to the Real-time Clock in approximately 1 minute and the green "READY" LED should light. To bypass this delay, press: [#] + [0]. If "dl" remains displayed for more than one minute the system is disabled.
- **PC** = Remote phone control feature is active
- **PH** = Speaker phone mode feature is active
- **90** = RF Jam
- **bF** = Backup LRR/GSM/IP module communication failure (displayed on RF Keypad only)



READYGUARDR-2 SUMMARY OF CONNECTIONS

09019-016-V0



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