RANGER 7600

DOWNLOADABLE CONTROL COMMUNICATOR

INSTALLATION MANUAL

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RANGER 7600 INSTALLATION MANUAL

General Description

The Ranger 7600 is a versatile up/downloadable security control with four EOL supervised zones and two nonsupervised normally closed zones. Its microcomputer design provides some of the most versatile, yet easy to use features available for most security applications today. Each of the four supervised zones can be programmed to be one of ten different types including 24 Hour, Interior Follower, and Day zone. The two non-supervised zones can be programmed for any of the available zone types excluding "FIRE". Each zone is individually annunciated and can be bypassed from the keypad. See page 11 for a description of all zone types.

Read the USER'S MANUAL before you begin the installation for the best overall description of how the Ranger 7600 functions. After installation of the security system, complete the information on page 1 of the user's manual and explain the system operation to all security system owners/operators.

Standard Parts List

QUANTITY	PART DESCRIPTION	PART NO.
1	MASTER CONTROL PANEL W / O Keypad	7605
6	3.3K, ½ WATT E.O.L. RESISTORS	EOL-33
1	INSTALLATION MANUAL	IM-7600
1	USER'S MANUAL	OM-7600

The Ranger 7600 is shipped with the parts listed below.

Optional Parts List.

The following parts are available for use with the Ranger 7600.

OPTIONAL PARTS DESCRIPTION	PART NO.
LED REMOTE KEYPAD	8001, 8002, 8601
LCD ALPHA NUMERIC DISPLAY KEYPAD	9050
AC POWER SUPPLY 16.5V 25 VA	T-16.5-25
PROGRAMMER WITH DIGITAL NUMERIC DISPLAY	8950
SMART PROGRAMMER WITH LCD DISPLAY	9075
DOWNLOADING SOFTWARE PACKAGE	DL900

FEATURE DEFINITIONS

<u>ALARM HISTORY</u> - Five seconds after pressing the [0] key, the keypad will annunciate "Freeze Frame" alarm history. The zone LED's will indicate which zone(s) caused the last alarm, regardless of the number of times the Ranger 7600 has been armed or disarmed since that alarm. It annunciates by blinking the zone LED(s) that caused the alarm, and lighting steady those that were bypassed when that alarm occurred. The annunciation will continue for 5 seconds. Alarm History is erased when the Ranger 7600 is put into the program mode. A burglary zone that has been bypassed due to "Swinger Shutdown" will alternate between steady and blinking.

<u>AUTOMATIC ARMING</u> - The Ranger 7600 can be programmed to Automatically Arm at a predesignated time of day, if it has not already been armed. (Page 22, Location 202.)

AUTOMATIC BYPASS/INSTANT ARMING - When enabled, the control panel can automatically bypass interior follower zones if an exit is not detected during the delay time, and delayed zones can be made instant. (Page 16, Location 131.)

<u>AUXILIARY OUTPUT</u> - The 7600 has one auxiliary output that can be activated by up to four different events from a pool of 16 different options. (Page 17, Locations 145-148.)

<u>CHIME</u> - If so programmed, this feature can be turned on and off by pressing [1]. When the system is in the disarmed state, the violation of selected zones will create a one second tone through the keypad sounder. Chime is disabled on all zones from factory. (Page 22 for Locations 186-191.)

<u>CROSS ZONING</u> - When enabled, the 7600 can be programmed for "Cross Zoning" (Page 25, Locations 244-249) which is a feature that requires a trip on more than one zone during a specific time frame (Page 25, Location 255) to verify an alarm condition.

DUAL/SPLIT REPORTING - The Ranger 7600 can be programmed for dual and/or split reporting.

<u>DYNAMIC BATTERY TEST</u> - When enabled, the Ranger 7600 can be programmed to perform a dynamic battery test for a selected duration, at 6:00 AM. (Page 22, Location 203.)

ENTRY-GUARD - This unique low level arming mode has been developed to reduce the most common source of false alarms. When armed in this mode, the opening of any zones designated as "Entry Guard zones" will initiate the keypad sounder and start a delay before creating an alarm. This arming mode will encourage system owners to use their system more frequently when the premises is occupied. (Page 25, Locations 244-249.)

<u>FIRE ALARM VERIFICATION</u> - When enabled, the Ranger 7600 has the ability to verify a Fire alarm by requiring more than one trip on a smoke detector before creating an alarm. (Page 17, Location 143.)

FORCE ARMING - When enabled, the Ranger 7600 can be armed with zones violated, lacking a green "Ready" light on the keypad. Under this condition, all zones that are not secure at the end of the exit delay will become bypassed. All zones that become secured before the end of the exit delay will become active in the system. (Page 22, Location 197.)

<u>GROUP BYPASS</u> - Zones can be programmed to bypass as a group when the **[*][9][*]** keys are pressed while system is disarmed. (Page 25, Locations 244-249.)

INTERNAL EVENT LOG - Up to 80 events can be stored in memory along with the date and time of the event. These events can later be viewed through downloading.

<u>KEYSWITCH ARMING</u> - Keyswitch arming/disarming can be accomplished by using the remote arming input on the PC board, and the auxiliary outputs. It is not necessary to waste a hardwire zone to accommodate Keyswitch arming/disarming.

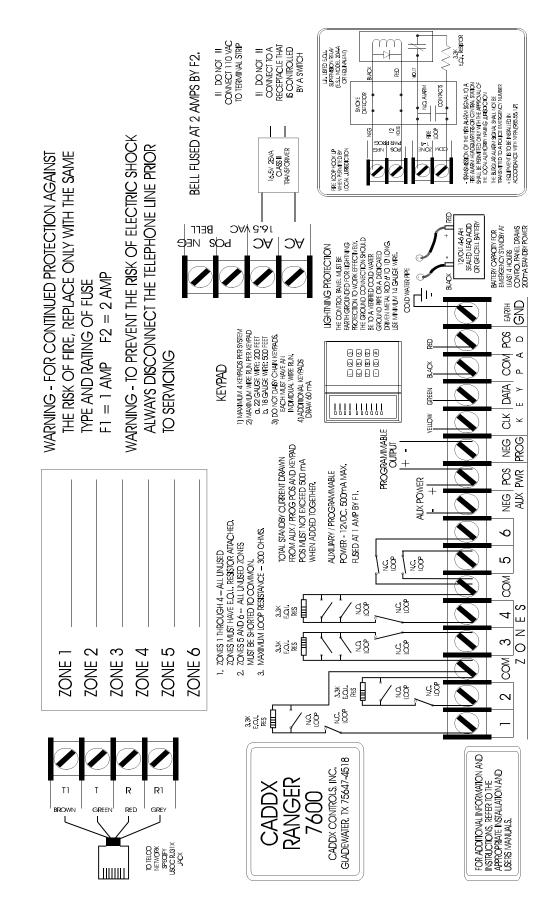
LCD KEYPAD - The 7600 will accommodate the Ranger 9050 custom English Language Keypad.

PAGER AND HIGH SPEED FORMATS - The 7600 has SIA and Contact ID high speed communicator formats. A pager format is also available for reporting to a pager. (Page 9).

QUICK ARM FEATURE - The Ranger 7600 has a one button "Quick Arm" code which can be used to arm the system by pressing one digit at the keypad. (Page 17, Location 139.)

SECONDARY EXIT DELAY - Used most often for garage doors, this zone type is a second entry/exit delay that has its own delay times, independent of the standard entry/exit delay zone. (Page 20, Locations 178-179)

TERMINAL DRAWING & SPECIAL NOTES



TERMINAL DESCRIPTION

	DESCRIPTION	
1	Connect one side of zone 1 loop. The other side of loop to common terminal 3. Open or short causes alarm.	
2	Connect one side of zone 2 loop. The other side of loop to common terminal 3. Open or short causes alarm.	
3	Loop Common For zones 1-3	
4	Connect one side of zone 3 loop. The other side of loop to common terminal 3. Open or short causes alarm.	
5	Connect one side of zone 4 loop. The other side of loop to common terminal 6. Open or short causes alarm.	
6	Loop Common for zones 4-6.	
7	Connect one side of zone 5 loop. The other side of loop to common terminal 6. Open only causes alarm. (DO NOT USE 3.3K EOL RESISTOR ON THIS LOOP.)	
8	Connect one side of zone 6 loop. The other side of loop to common terminal 6. Open only causes alarm. (DO NOT USE 3.3K EOL RESISTOR ON THIS LOOP.)	
9(-)&10(+)	Auxiliary power, regulated 12VDC, 500 mA maximum.	
11	Programmable output current limited at 20 mA when switched negative.	
12,13,14,15	Connect keypad wires as follows; yellow to terminal 12, green to terminal 13, black to terminal 14, red to terminal 15. Wire run 200 feet maximum with 22 gauge, 500 feet maximum with 18 gauge. Home run cable to each keypad.	
16	Earth Ground, connect to a cold water pipe or 6 to 10 foot driven rod.	
17 & 18	AC input; connect a 16.5V 25 VA, approved transformer.	
19(+)&20(-)	Siren/Bell voltage output, 12VDC, 1 Amp maximum load.	
T1 & R1	House Telephones Connection.	
T & R	Incoming Telephone Line Connection.	

FUSE DESCRIPTION

FUSE NO.	DESCRIPTION
F1	1 AMP / Keypad & AUX Power
F2	2 AMP / Siren Voltage Output

PROGRAMMING

The 7600 can be placed into the "Program" mode by use of the new **9075 Smart Programmer**, or the original 8950 programmer, or for Keypad programming, by utilizing the 9050 LCD Keypad or the 8601 LED Keypad. These methods are described below.

Using a Programmer

Plug the optional 8950 Programmer into the 4-pin male outlet marked "PROGRAMMER" on the Ranger 7600 PC Board and the control will enter the program mode. The 8950 will program locations "000" through "255" of the 7600 control (See using the LED Keypad below.) When using a 9075 Smart Programmer, please refer to the 9075 Manual.

Using The LCD Keypad

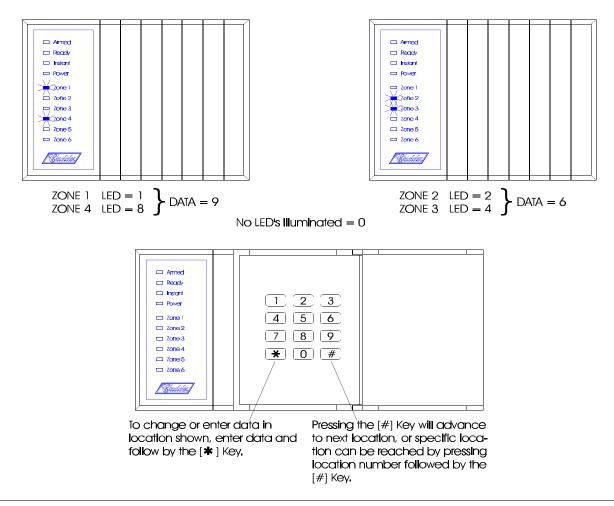
The most straightforward method of Keypad programming is to utilize the 9050 LCD Keypad in the programming mode. To access the programming mode enter [C]-[0]-[0], followed by the four digit "Go To Program" access code which is factory default [9]-[0]-[5]-[0] (this code can be reprogrammed), and follow the Keypad prompts. (See using the LED Keypad below.)

Using The LED Keypad

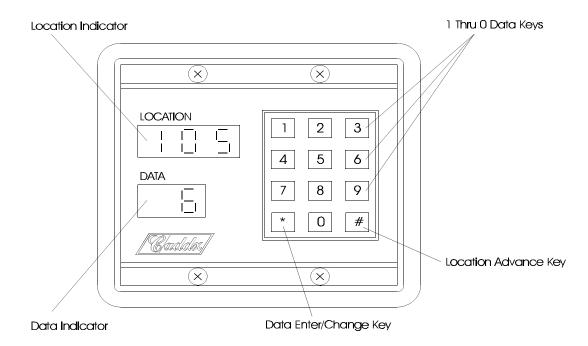
The 7600 can also be programmed by the standard binary method of Keypad programming described below. When the 8601 LED Keypad is used for programming, enter the factory default four digit "Go To Program" access code of [9]-[7]-[1]-[3]. NOTE: The 7600 must be disarmed to gain access to programming with this code. After entry of this code, the 7600 will be in the "Program" mode, and the yellow LED's will display the data in location 000. The data is displayed using a Binary system. With this system the yellow zone 1 LED equals "1" when illuminated. The zone 2 LED equals "2" when illuminated. The zone 3 LED equals "4" when illuminated. The zone 4 LED equals "8" when illuminated. Thus if the data in location 000 is "9", the LED for zone 1 (=1) and zone 4 (=8) would be illuminated. By adding the two values together, (1+8=9) you would determine that the data in location 000 is "9". If the data in location 000 is "6", the LEDs for zone 2 (=2) and zone 3 (=4) would be added (2+4=6) indicating the data in that location to be "6". If no LED's are illuminated, the location contains a "0". To advance from location 000 through 255, press the [#] key. To go to a specific location, press the location number followed by the [#] key. The yellow LED's will then display the data in that location. Data is changed by entering a number 0 to 15 followed by [*****] (***** = data enter). Review the examples in figure 1 on the following page.

Important Function Codes

- [9]-[1]-[0]-[#] When in the program mode, this function code can be used to write original factory default codes into the 7600.
- [9]-[3]-[0]-[#] This function code is used to exit the programming mode after it was accessed via the Keypad.







PROGRAMMING THE COMMUNICATOR

PAGES 8 & 9 DESCRIBE ALL THE LOCATIONS WHICH MUST BE PROGRAMMED IN ORDER FOR THE RANGER 7600 TO FUNCTION AND REPORT TO A CENTRAL STATION. OTHER OPTIONS MAY BE SELECTED BY FOLLOWING THE ADDITIONAL PROGRAMMING INSTRUCTIONS.

LOCATIONS 032-047: PROGRAMMING THE PRIMARY TELEPHONE NUMBER

The primary telephone number is programmed in successive locations beginning with location 032. Any zero (0) within the telephone number, must be programmed as a "10". Programming a "0" will indicate the end of the phone number. Four second delays can be programmed at any point in the phone number by programming a "13" in the location where a delay is desired. If a "*" or "#" are required in the phone number, an "11" = "*" and "12" = "#". If tone dialing is desired, program a "15" in the location where tone dialing should begin. If the entire number should be tone dialing, program a "15" in location 032.

LOCATIONS 048-051: PROGRAMMING THE ACCOUNT CODE FOR THE PRIMARY PHONE NUMBER

The account code sent when the PRIMARY phone number is dialed is programmed in locations 048-051. Any zero (0) within the account code must be programmed as a "10", and the communicator will report a zero (0). If the account code is three digits long, use locations 048, 049, and 050. Program a "0" to indicate the end of the account code.

LOCATION 052: PROGRAMMING COMMUNICATOR FORMAT FOR THE PRIMARY PHONE NUMBER

Location 052 contains the communicator format used to transmit to the receiver connected to the primary phone number. Consult the instructions for your central station receiver to determine which format is compatible. To select Universal 4 + 2, program a "1" in location 052. Contact ID requires a "13" in this location. If you need another format, choose from those listed in the format table located on the following page, and program the data in location 052. If this location contains a "0", the built-in communicator will be disabled, and the Ranger 7600 will function as a local only control.

LOCATION 053: SECONDARY TELEPHONE NUMBER SEQUENCE CONTROL

Location 53 is used to control the secondary telephone number. If location 53 contains a" "0 the secondary phone number is used as a backup to the primary number. Programming a "1" in location 53 will cause the secondary number to be used only with dual and split reporting (no backup reporting enabled). Programming a "3" in location 53 will cause the control to alternate between the primary and secondary number (2 calls each) for the number of attempts programmed in location 134.

LOCATIONS 054-069: PROGRAMMING THE SECONDARY TELEPHONE NUMBER

Locations 054-069 contain the secondary telephone number. This number allows certain communicator reports to go to another number, or to cause the communicator to dial a second number if the primary number does not respond after the number of attempts programmed into location 134 have been tried unsuccessfully. The same number of attempts are made with the back-up number. Tone dialing and delay instructions are the same as for the primary number.

LOCATIONS 070-073: PROGRAMMING THE ACCOUNT CODE FOR THE SECONDARY PHONE NUMBER

The account code sent when the Secondary phone number is dialed is programmed in locations 070-073. Any zero (0) within the account code must be programmed as a "10", and the communicator will report a zero (0). If the account code is three digits long, use locations 070, 071, and 072. Program a "0" to indicate the end of the account code.

LOCATION 074: PROGRAMMING COMMUNICATOR FORMAT FOR THE SECONDARY TELEPHONE NUMBER

Location 074 contains the communicator format for the secondary phone number. Consult the instructions for your central station receiver to determine which format is compatible. To select Ademco/Silent Knight Fast, program a "2" in this location. Sescoa/Franklin Fast requires a "4" in this location, and Radionics 1800HZ/2300HZ Fast with Parity and Hex Capability requires a "9" in this location. For a Pager format, program a "15" in this location, along with the appropriate data in locations 208 and 209. If you need another format, choose from those listed in the format table below, and program the appropriate data in this location. If location 074 is "0", the format programmed in location 052 will be used.

DATA	FORMAT	DESCRIPTION
"0"	LOCAL ONLY	THE COMMUNICATOR IS DISABLED
"1"	UNIVERSAL 4 + 2	1800HZ TRANSMIT 2300HZ HANDSHAKE DOUBLE ROUND PARITY 40 PPS.
"2"	ADEMCO/SILENT KNIGHT FAST	1900HZ TRANSMIT 1400HZ HANDSHAKE DOUBLE ROUND PARITY 20 PPS.
"3"	CADDX MODEM	PROPRIETARY
"4"	SESCOA / FRANKLIN FAST	1800HZ TRANSMIT 2300HZ 20PPS
"5"	EXTENDED RADIONICS SLOW	1800HZ TRANSMIT 2300HZ HANDSHAKE DOUBLE ROUND PARITY 20 PPS EXTENDED HEX CAPABILITY
"6"	EXTENDED RADIONICS SLOW	1800HZ TRANSMIT 1400HZ HANDSHAKE DOUBLE ROUND PARITY 20 PPS EXTENDED HEX CAPABILITY
"7"	EXTENDED RADIONICS FAST	1800HZ TRANSMIT 2300HZ HANDSHAKE DOUBLE ROUND PARITY 40 PPS EXTENDED HEX CAPABILITY
"8"	EXTENDED RADIONICS FAST	1800HZ TRANSMIT 1400HZ HANDSHAKE DOUBLE ROUND PARITY 40 PPS EXTENDED HEX CAPABILITY
"9"	EXTENDED RADIONICS FAST WITH PARITY	1800HZ TRANSMIT 2300HZ HANDSHAKE SINGLE ROUND W/PARITY 40 PPS EXTENDED HEX CAPABILITY
A= "10"	EXTENDED RADIONICS FAST WITH PARITY	1800HZ TRANSMIT 1400HZ HANDSHAKE SINGLE ROUND W/PARITY 40 PPS EXTENDED HEX CAPABILITY
B= "11"	ADEMCO 4 + 2 EXPRESS	DTMF
C= "12"	SILENT KNIGHT 4 + 2	1900HZ TRANSMIT 1400 HANDSHAKE DOUBLE ROUND 20PPS
D= "13"	ADEMCO CONTACT ID	DTMF (SEE APPENDIX 2)
E= "14"	SIA	FSK (SEE APPENDIX 1)
F= "15"	PAGER/CUSTOM FORMAT	SEE OVER-RIDE LOCATIONS 182, 183, 208, 209.

When using the 4+2 format, you must program the Alarm Code in reverse. The Zone number will go in the first Location, and the event will be the second Location.

<u>Example:</u> To send a code 31 for Zone 1 program "1" in location 104 and program "3" in location 105. The central station will receive the code 31.

LOCATIONS 000-003: PROGRAMMING THE MASTER ARM/DISARM CODE

Locations 000-003 contain master arm/disarm code (user number 1). Location 000 contains the first digit of the code; location 003 contains the fourth digit of the code. THE CODE MUST CONTAIN FOUR (4) DIGITS. The master code can then be used in the run mode to enter arm/disarm codes 1-7. The factory default code is [1][2][3][4].

LOCATIONS 004-023: PROGRAMMING THE ARM/DISARM CODE FOR USERS 2 THRU 6

Locations 004-023 contain the arm/disarm codes for user numbers 2 thru 6. Location 004 contains the first digit of the code #2, and location 007 contains the fourth digit of code #2. THESE CODES MUST CONTAIN FOUR (4) DIGITS. To disable a code, PROGRAM a "15" as the first digit of the code. These codes can be changed in the RUN mode using the master code. User codes 8 thru 14 (locations 212-239) can be accessed from the program mode only.

LOCATIONS 024-027: PROGRAMMING THE DURESS CODE OR USER 7

Locations 024-027 contain the arm/disarm code for Duress or for user number 7. Duress capability is enabled by programming a communicator code in locations 086-087. If locations 086-087 are left unprogrammed, user number 7 will act as a standard user code.

LOCATIONS 028-031: PROGRAMMING THE "GO TO PROGRAM" ACCESS CODE

Locations 028-031 contain the "Go To Program" access code. Location 028 contains the first digit of the code and location 031 contains the fourth digit of the code. THE CODE MUST CONTAIN FOUR (4) DIGITS. With the Ranger 7600 disarmed, the "Go To Program" access code can be used to enter the program mode. To disable the "Go To Program" access code, program a "15" in location 028. The factory default setting is [9][7][1][3].

LOCATIONS 032-074: SEE PAGES 8 & 9

LOCATION 075: PROGRAMMING THE ENTRY DELAY TIME

Location 075 contains the number of 10 second increments in the entry delay. The entry delay can be programmed in 10 second increments from 10 to 150 seconds ("1" = 10 seconds through "15" = 150 seconds). For example, programming a "2" in this location will produce an entry delay of 20 seconds. (Note: A "0" entry is treated as 0 seconds). Programming a "6" in this location will produce an entry delay of 60 seconds. Factory default is 30 seconds.

LOCATION 076: PROGRAMMING THE EXIT DELAY TIME

Location 076 contains the number of 10 second increments in the exit delay. The exit delay can be programmed in 10 second increments from 10 to 150 seconds ("1" = 10 seconds through "15" =150 seconds). For example, programming a "2" in this location will produce an exit delay of 20 seconds. (Note: A "0" entry is treated as 0 seconds). Programming a "6" in this location will produce an exit delay of 60 seconds. Factory default is 60 seconds.

LOCATION 077: PROGRAMMING THE SIREN SHUTDOWN/RECYCLE TIMEOUT

Location 077 contains the number of 2 minute increments in the automatic cutoff time. The automatic cutoff time can be programmed in 2 minute increments from 2 to 30 minutes ("1" = 2 min thru "15" = 30 min). For example, programming a "2" in this location will produce an automatic cutoff time of 4 minutes. Programming a "6" in this location will produce an automatic cutoff time s 8 minutes.

LOCATIONS 078-083: PROGRAMMING THE ZONE TYPES

Locations 078 through 083 contain a number identifying the characteristics of each of the 6 zones. Location 078 corresponds to zone 1 and location 083 corresponds to zone 6. Each zone will factory default according to the programming worksheet. To program zone characteristics other than the default values, program a number from "1" to "10" based on the characteristics in the list below. NOTE: Zones 5 and 6 cannot be Priority (FIRE) zones.

NUMBER	ZONE CHARACTERISTICS DESCRIPTION
"1"	DAY ZONE - A trip on a Day zone will produce an instant alarm when armed, and activate the keypad sounder when disarmed.
"2"	24 HOUR - A trip on a 24 Hour zone will produce an instant alarm when armed or disarmed.
"3"	ENTRY/EXIT - A trip will start entry delay. The lack of a trip during exit delay will enable the "Automatic Bypass" or "Instant" mode if so programmed.
"4"	INTERIOR DELAY - A trip on Interior Delay zone will initiate an entry delay. It will be ignored during exit delay and when disarmed .
"5"	INTERIOR FOLLOWER - Interior zone that follows delay zones. It can be bypassed before arming, or automatically bypassed in the "Automatic Bypass/Instant" mode if so programmed. When bypassed, it can be reactivated by entering first digit of User 1 code then pressing [*].
"6"	INSTANT - Produces an instant alarm when tripped in the armed mode, ignored when disarmed.
"7"	24 HOUR SILENT - A trip on a 24 hour silent zone will communicate to the central station when the Ranger 7600 is armed or disarmed.
"8"	PRIORITY - A short on a Priority zone (non-bypassable) will communicate to the central station when the Ranger 7600 is armed or disarmed. An open will create a Trouble condition. Keypad LED will be steady for FIRE, and flashing for Trouble. Only Zones 1-4 can be used as Priority.
"9"	SECONDARY DELAY - A secondary delay zone works like an entry/exit zone but has its own independent delay time (see locations 178-179).
"10"	24 HOUR - A trip on a 24 Hour zone will produce a beeping keypad when armed or disarmed.

LOCATION 084: PROGRAMMING THE ZONE 1-4 SIREN SELECT

Location 84 is used to select the Siren for zones 1-4. Refer to the chart below to choose the zone(s) for siren activation. Add the values of the zones selected and program the sum in location 084.

VALUE	DESCRIPTION
1	Zone 1
2	Zone 2
4	Zone 3
8	Zone 4

Example: If zones 2 & 3 are to sound the siren for an alarm, program a "6". Factory default is "15", all zones initiate a siren.

LOCATION 085: PROGRAMMING THE ZONE 5-6 SIREN SELECT

Location 85 is used to select the Siren for zones 5-6. Refer to the chart below to choose the zone(s) for siren activation. Add the values of the zones selected and program the sum in location 085. Default is "3".

VALUE	DESCRIPTION
1	Zone 5
2	Zone 6

!!!! IMPORTANT NOTE !!!!

WHEN PROGRAMMING THE FOLLOWING COMMUNICATOR CODES, A "10" MUST BE PROGRAMMED IN ORDER TO REPORT A ZERO (0).

LOCATION 086-087: PROGRAMMING THE RANGER 7600 FOR DURESS CODE CAPABILITY

The Ranger 7600 has the ability to report a duress code when the system is armed or disarmed with user code number 7 and a duress communicator code is programmed in locations 086-087. If both locations are "0", the duress capability is disabled and user code number 7 can only be used as a standard arm/disarm code. Location 086 contains the standard digit, and location 087 contains the extended digit. When Contact ID is selected, program the extended or the second location with the required event code from Appendix 2 to enable this report event.

LOCATION 088-089: PROGRAMMING FOR AUXILIARY 1, [1] & [3] DOUBLE KEYPRESS

The Ranger 7600 has the ability to report an Auxiliary 1 code and activate the Priority siren each time the [1] and [3] keys are pressed simultaneously on the keypad. The desired reporting code is programmed in locations 088-089. If both locations are "0", the Auxiliary 1 double keypress is disabled. Location 088 contains the standard digit, and location 089 contains the extended digit. If activated, the siren can be silenced by entering any arm/disarm code. When Contact ID is selected, program the extended or the second location with the required event code from Appendix 2 to enable this report event.

LOCATION 090-091: PROGRAMMING FOR AUXILIARY 2, [4] & [6] DOUBLE KEYPRESS

The Ranger 7600 has the ability to report an Auxiliary 2 code and activate the pulsing buzzer each time the [4] and [6] keys are pressed simultaneously on the keypad. The desired Auxiliary 2 code is programmed in locations 090-091. If both locations are "0", the Auxiliary 2 double keypress is disabled. Location 090 contains the standard digit, and location 091 contains the extended digit. If activated, the keypad sounder can be silenced by entering any Arm/Disarm code. When Contact ID is selected, program the extended or the second location with the required event code from Appendix 2 to enable this report event.

LOCATION 092-093: PROGRAMMING FOR KEYPAD PANIC, [*] & [#] DOUBLE KEYPRESS

The Ranger 7600 has the ability to report a Keypad panic code and activate the Burg siren each time the [*****] and [#] keys are pressed simultaneously on the keypad. The desired Keypad panic code is programmed in locations 092-093. If both locations are "0", the Keypad panic double keypress is disabled. Location 092 contains the standard digit, and location 093 contains the extended digit. If activated, the siren can be silenced by entering any Arm/Disarm code. (Can also be silent - see Loc. 129) When Contact ID is selected, program the extended or the second location with the required event code from appendix 2 to enable this report event.

LOCATION 094-095: PROGRAMMING THE KEYPAD TAMPER FEATURE

The Ranger 7600 has an optional tamper feature that, when enabled, will lock out the keypads for 1 minute if 30 random keypresses are made without producing a valid code. The desired tamper code should be programmed in locations 094-095. If the control is not programmed for local only, the tamper will be communicated. If both locations are "0", the tamper feature will not be enabled or reported. Location 094 contains the standard digit, and location 095 contains the extended digit. When Contact ID is selected, program the extended or the second location with any number to activate this report.

LOCATION 096-097: PROGRAMMING TO REPORT DOWNLOADING COMPLETE

Locations 096-097 contain the communicator codes sent each time a download session has been completed. The report will come in after a disconnect has been made from a downloading session. Location 096 contains the standard communicator code, and location 097 contains the extended communicator code. If locations 096-097 are "0", this report is disabled. When Contact ID is selected, program the extended or the second location with any number to activate.

LOCATION 098-099: PROGRAMMING FOR AUTOTEST REPORTS

The Ranger 7600 has the ability to send autotest reports at intervals from 1 to 15 days. Locations 098-099 contain the communicator codes sent for autotest. Location 098 contains the standard communicator code, and location 099 contains the extended code. If locations 098-099 are "0", autotest is disabled. When Contact ID is selected, program the extended, or second location with any number to activate.

(NOTE: WHEN USING AUTOTEST, LOCATIONS 152-166 MUST BE PROGRAMMED.)

LOCATION 100-101: PROGRAMMING THE 7600 TO REPORT FAIL TO COMMUNICATE

The 7600 has the ability to send a failure to communicate report each time communication is re-established after a signal has been unable the report. The data that failed to communicate will not be sent but it can be recovered from the log. The desired Fail to communicate code is programmed in locations 100-101. If both locations are "0", Fail to Communicate will not be reported. Location 100 contains the standard digit, and location 101 contains the extended digit. When Contact ID is selected, program the extended, or second location with any number to activate.

LOCATION 102: PROGRAMMING TO REPORT CLOSING

The Ranger 7600 has the ability to report a closing code each time the control is armed. Program the desired closing-code in Location 102. If this location contains a "0", closing will not be reported. When using a one button "Quick Arm" code or the Remote Arming input, the man number is 1. When using the Auto Arm feature, the man number is 9. The closing report will not be initiated until the end of the exit delay. When Contact ID is selected, program with any number to activate this report.

LOCATION 103: PROGRAMMING TO REPORT OPENINGS

The Ranger 7600 has the ability to report an opening code each time the control is disarmed. Program the desired opening code in Location 103. If this location contains "0", openings will not be reported. When using the remote arming input, the man number is 1. When Contact ID is selected, program with any number to activate this report.

LOCATION 104-105: PROGRAMMING THE COMMUNICATOR CODE FOR ZONE 1

Locations 104-105 contains the communicator code to be reported each time zone 1 creates an alarm. Location 104 contains the standard digit, and location 105 contains the extended digit. When using Contact ID format, the number programmed in location 104 is sent as the Zone ID. On location 105 Refer to Appendix 2. If left unprogrammed, it will follow the Zone type.

LOCATION 106-107: PROGRAMMING THE COMMUNICATOR CODE FOR ZONE 2

Locations 106-107 contain the communicator code to be reported each time zone 2 creates an alarm. Location 106 contains the standard digit, and location 107 contains the extended digit. When using the Contact ID format, the number programmed in location 106 is sent as the Zone ID. On location 107 refer to Appendix 2. If left unprogrammed, it will follow the Zone type.

LOCATION 108-109: PROGRAMMING THE COMMUNICATOR CODE FOR ZONE 3

Locations 108-109 contain the communicator code to be reported each time zone 3 creates an alarm. Location 108 contains the standard digit, and location 109 contains the extended digit. When using the Contact ID format, the number programmed in location 108 is sent as the Zone ID. On location 109 refer to Appendix 2. If left unprogrammed, it will follow the Zone type.

LOCATION 110-111: PROGRAMMING THE COMMUNICATOR CODE FOR ZONE 4

Locations 110-111 contain the communicator code to be reported each time zone 4 creates an alarm. Location 110 contains the standard digit, and location 111 contains the extended digit. When using the Contact ID format, the number programmed in location 110 is sent as the Zone ID. On location 111 refer to Appendix 2. If left unprogrammed, it will follow the Zone type.

LOCATION 112-113: PROGRAMMING THE COMMUNICATOR CODE FOR ZONE 5

Locations 112-113 contain the communicator code to be reported each time zone 5 creates an alarm. Location 112 contains the standard digit, and location 113 contains the extended digit. When using the Contact ID format, the number programmed in location 112 is sent as the Zone ID. On location 113 refer to Appendix 2. If left unprogrammed, it will follow the Zone type.

LOCATION 114-115: PROGRAMMING THE COMMUNICATOR CODE FOR ZONE 6

Locations 114-115 contain the communicator code to be reported each time zone 6 creates an alarm. Location 114 contains the standard digit, and location 115 contains the extended digit. When using the Contact ID format, the number programmed in location 114 is sent as the Zone ID. On location 115 refer to Appendix 2. If left unprogrammed, it will follow the Zone type.

LOCATION 116-117: PROGRAMMING TO REPORT START OF TEST MODE

The Ranger 7600 has the ability to signal the central station that a test mode has begun. This test mode can be used to alert the central station not to dispatch alarms sent during the test. The test mode is entered by pressing[*****]-[9]-[0]-[#] (followed by the master code). Locations 116-117 contain the communicator code sent when the control is in the test mode. Location 116 contains the standard digit and location 117 contains the extended digit. When Contact ID is selected, program the extended or the second location with any number to activate.

LOCATION 118-119: PROGRAMMING TO REPORT END OF TEST MODE

The 7600 has the ability to signal the central station that a test mode has ended. This test mode can be used to alert the central station that the test mode has ended. The test mode is exited by pressing [*]-[9]-[0]-[#] (followed by the master code). The test mode will automatically expire after 1 hour. Locations 118-119 contain the communicator code sent when the control exits the test mode. Location 118 contains the standard digit and location 119 contains the extended digit. When Contact ID is selected, program the extended or the second location with any number to activate.

LOCATION 120-121: PROGRAMMING TO REPORT AC POWER LOSS

The Ranger 7600 has the ability to report an AC power failure code when AC power is lost. This report can be immediate, or delayed depending on the information programmed in location 150 (AC POWER LOSS DELAY). The desired AC failure mode should be programmed in locations 120-121. If both locations are "0", AC power failures will not be reported. Location 120 contains the standard digit, and location 121 contains the extended digit. When Contact ID is selected, program the extended or the second location with any number to activate this report.

LOCATION 122-123: PROGRAMMING TO REPORT LOW BATTERY

The Ranger 7600 has the ability to report a low battery code when AC power has been lost and the battery has discharged down to 10.3 volts. The desired low battery code is programmed in locations 122-123. If both locations are "0", low battery will not be reported. Location 122 contains the standard digit, and, location 123 contains the extended digit. When Contact ID is selected, program the extended or the second location with any number to activate this report.

LOCATION 124: PROGRAMMING FOR PRIORITY ZONE TROUBLE REPORTING

The Ranger 7600 has the ability to report a trouble code each time a Priority zone opens. The desired trouble code is programmed in location 124. If this location contains a "0", the Priority Trouble will not be reported. When Contact ID is selected, program the location with any number to activate this report.

LOCATION 125: PROGRAMMING FOR ZONE BYPASS REPORTING

The Ranger 7600 has the ability to report a bypass on zones 1-6. The desired bypass code is programmed in location 125. If this location contains a "0", zone bypass will not be reported. The bypass will be reported at the end of the exit delay for non-24 hour zones. 24 hour zones will report a bypass immediately. When a bypass is removed, a restore will be reported if "Restore" is enabled in location 126. When Contact ID is selected, program with any number to activate this report.

LOCATION 126: PROGRAMMING THE COMMUNICATOR CODE FOR RESTORAL

Location 126 contains the communicator code that will be sent for restoral of a zone. If this location contains a "0", no restorals will be reported. If a restoral code is programmed and an extended format is selected, the restorals will be reported by zone. If a restoral code is programmed and an extended format is not selected, a restoral code will be sent when all of the previously reported conditions have restored. When Contact ID is selected, program with any number to activate this report.

LOCATION 127: PROGRAMMING THE COMMUNICATOR CODE FOR CANCEL (EXCEPTION OPENING)

Location 127 contains the communicator code that will be sent for cancel. The cancel code programmed in this location will be sent if an arm/disarm code is entered after a trip on zones 1 through 6 has been reported (excluding 24 hour zones). After a cancel has been reported, no loop restorals will be transmitted on non-24 Hour zones. If this location contains a "0", cancel is disabled. When Contact ID is selected, program with any number to activate this report.

LOCATION 128: PROGRAMMING ABORT DELAY BEFORE DIAL TIME

Location 128 is used to enable the communicator abort. The number programmed in location 128 is the number of 2 second increments the communicator will delay before dial of a burglary alarm. If an arm/disarm code is entered during this delay the 7600 will abort the transmission. If this location contains a "0", the Ranger 7600 will not abort any reports.

(24 hour Zone will not abort)

LOCATION 129: PROGRAMMING FOR SILENT PANIC/HOLD-UP

Location 129 is used to silence the audible output for a panic/hold-up alarm. Programming a "1" in this location will silence the audible output during a panic/hold-up alarm. If this location contains a "0", the Ranger 7600 will have an audible panic/hold-up output.

LOCATION 130: LIMITED SIREN AND/OR COMMUNICATOR OUTPUTS

Location 130 is used to limit the sirens or the communicator, or both, to one output per zone during a single arming cycle. The following table will indicate the value to be programmed in location 130 to give the 7600 the desired characteristics. Factory default is "0", unlimited siren, and unlimited reports for the communicator.

VALUE	DESCRIPTION
0	SIRENS AND COMMUNICATOR NOT LIMITED
1	SIREN ONCE PER ZONE, COMMUNICATOR NOT LIMITED
2	COMMUNICATOR ONE REPORT PER ZONE, SIREN NOT LIMITED
3	SIREN AND COMMUNICATOR LIMITED TO ONCE PER ZONE

LOCATION 131: AUTOMATIC BYPASS / INSTANT ARMING

Location 131 is used to enable "Automatic Bypass/Instant Arming". Programming a "1" in this location will cause the control to automatically enter the "Instant" mode and bypass interior follower zones if a fault is not detected on an entry/exit zone during the exit delay. Programming a "3" in this location, will cause the interior follower zones to become bypassed if a fault is not detected on an entry/exit zone, yet will not change the status of the entry/exit zone. If this location contains a "0", these features are disabled. Pressing the [*****] key when the system is armed, will cause the "Instant" light to toggle. When the "Instant" light is on, the entry/exit zone is instant; when off, the entry/exit zone is delayed. The [*****] key will toggle the "Instant" mode regardless of the programming data in this location. When the system is armed, bypassed interior follower zones can be reactivated by entering [first digit of master code] followed by [*****]. Once the interior is reactivated they cannot be bypassed again without disarming the control.

LOCATION 132: ENABLE KEYPAD SIREN SOUNDER

The built-in keypad siren of the 8001 is enabled in location 132 by programming a "1" in location 132 to enable.

LOCATION 133: L.E.D. EXTINGUISH FEATURE

Keypad LEDs (with the exception of the A.C. LED) will be extinguished after 60 seconds of keypad inactivity if a "1" is programmed in location 133. The LEDs will become illuminated immediately upon a keypress or alarm condition.

LOCATION 134: ENTERING THE NUMBER OF DIAL ATTEMPTS

Location 134 is used to enter the number of dial attempts (1 to 15 attempts) the communicator will try for the appropriate phone number(s) before ending the notification process. If this location contains an "8", the communicator will make 8 attempts to the first number, and then eight attempts to a second number, if a second number is programmed as backup.

LOCATION 135: POWER UP CONDITION

If a "1" is programmed in location 135, the Ranger 7600 will power-up disarmed if there is a total power shutdown and battery failure. If a "2" is programmed in this location, it will power up armed. If this location contains a "0", the Ranger 7600 will maintain the condition it was in at power down. A watchdog circuit reset will cause the Ranger 7600 to reset to the selected condition.

LOCATION 136: POWER UP DELAY

If a "1" is programmed in location 136, the Ranger 7600 will not delay 60 seconds before accepting open or short inputs from any zone. If a "0" is programmed, sensors on all zones are allowed 60 seconds to stabilize at power-up, or after exiting the program mode. After 60 seconds, the Ranger will once again accept loop opens or shorts as an alarm condition. This 60 second period will also be initiated after a watchdog circuit reset condition.

LOCATION 137: IMMEDIATE RESTORE BY ZONE

If a "1" is programmed in location 137, restoral signals will follow the restore condition and report restores immediately after the condition has unfaulted. A non-extended format will not send a restore message until all zones and trouble conditions have restored. If this location contains a "0", the restore signal or signals will be reported only after siren timeout.

LOCATION 138: NO ARMING WITH A ZONE BYPASSED

If a "1" is programmed in location 138, the Ranger 7600 will not arm with any zone bypassed.

LOCATION 139: ENABLING QUICK ARM

The Ranger 7600 can be programmed to "Quick Arm" with the 3 key by programming a "1" in location 139. A "0" in this location will disable this feature. If the "Quick Arm" digit is the same as the first digit of the "Go To Program Code", the "Quick Arm" code will not function.

LOCATION 140: PRIORITY SIREN CUTOFF INHIBIT

If a "1" is programmed in location 140, a Priority zone type siren will sound continuously until an arm/disarm code is entered. If this location contains a "0", the Priority zone type siren will shutdown after the amount of time programmed in location 077 has elapsed. Programming in this location does not affect the burglary siren.

LOCATION 141: PROGRAMMING LOCAL SYSTEM FUNCTIONS

Location 141 is used to enable the exit warning tone and the missing battery test. The exit warning tone sounds a long beep followed by 3 short beeps, 10 seconds before the exit delay expires. To enable the exit warning, program a "1" in location 141. Location 141 is also used to enable the missing battery test. When enabled this feature will cause the system to test the standby battery once every 40 seconds to see if it is present. If it is not, a low battery will be detected. To enable missing battery detection program a "2" in location 141. To enable both exit warning and missing battery detection program a "3".

LOCATION 142: SIREN/BELL TEST FEATURE

The siren/bell can be programmed to activate upon different conditions. Using the chart below, add the values of the desired condition(s) and program the sum of those values in location 142. When the siren/bell is activated by pressing the [1] and [7] keys simultaneously, the communicator will not report a message, the siren/bell will be activated and a 1 minute battery test will begin. The bell/siren can be silenced by entering an arm/disarm code.

VALUE	DESCRIPTION
1	Activation by pressing [1] and [7] keys simultaneously
2	Momentary activation at arming
4	Momentary at end of exit delay
8	Momentary at kiss off ringback

LOCATION 143: SMOKE POWER RESET AND/OR FIRE ALARM VERIFICATION

Programming a "1" in location 143 will cause the 7600 (when in the disarmed state) to interrupt the smoke detector power each time the [#] button is pressed. If this location contains a "0", the smoke detector power will reset only after the [#] button is pressed when the corresponding LED(s) for zones designated as "Priority" are on steady for alarm or blinking for trouble. Programming a "2" in this location will enable the "Fire Alarm Verification" feature. When the "Fire Alarm Verification" feature is enabled, a smoke detector will be powered down and reset automatically after the first trip, waiting for a second trip within a 2 minute time frame (thus verifying a fire alarm condition) before creating an alarm and communicating a message.

LOCATION 144: RESERVED

LOCATION 145-148: PROGRAMMING THE AUXILIARY OUTPUT

The 7600 has one auxiliary output located on terminal 11 on the control PC board. This output can be activated by four different conditions selected from the 16 options in the following table. To utilize this output, program locations 145-148 with a number from "0" to "15" in accordance with the desired characteristics listed below. The output will trigger for any of the activations programmed in any of these locations.

PROGRAM DIGIT	ACTIVATION ON	NOTES
"0"	DISABLED	DISABLED
"1"	BURGLAR ALARM	MOMENTARY OUTPUT
"2"	FIRE ALARM	MOMENTARY OUTPUT
"3"	PANIC ALARM/DURESS	MOMENTARY OUTPUT
"4"	ARMED STATE	LATCHED OUTPUT
"5"	AC POWER	LATCHED OUTPUT
"6"	LOW BATTERY	LATCHED OUTPUT
"7"	LINE SEIZURE	MOMENTARY OUTPUT
"8"	TAMPER ALARM	LATCHED OUTPUT
"9"	AUTOTEST	MOMENTARY OUTPUT
"10"	RESERVED	NOT USED
"11"	ALARM MEMORY	LATCHED OUTPUT
"12"	ENTRY	LATCHED OUTPUT
"13"	EXIT	LATCHED OUTPUT
"14"	SMOKE DETECTOR POWER	LATCHED OUTPUT
"15"	GROUND START	MOMENTARY OUTPUT

AUXILIARY OUTPUT TABLE

LOCATIONS 149: INVERTING THE AUXILIARY OUTPUT

The auxiliary output of the 7600 is normally POSITIVE (+) going NEGATIVE (-). It can be changed to a normally NEGATIVE (-) going POSITIVE (+) by programming a 1 in location 149. {NOTE: CURRENT LIMITED TO 250 MICRO AMPS POSITIVE AND 20 mA NEGATIVE).

LOCATION 150: AC POWER LOSS DELAY FEATURE

Location 150 contains the number of 2 minute delays (2 to 30 minutes) the communicator will wait before reporting an AC power failure. A "1" programmed in this location will create a two minute delay, and a "15" will create a 30 minute delay. If a "0" is programmed in this location, AC power failures will be reported WITHIN 30 SECONDS if AC power loss reporting is enabled in locations 120-121.

LOCATION 151: PROGRAMMING THE NUMBER OF RINGS TO ANSWER DOWNLOAD CALL

Location 151 contains the number of rings the 7600 must detect before answering the telephone when initiating a download. If a number from "1" to "15" is programmed in this location, the control will answer after THIS number of rings has been detected. If a "0" is programmed in this location, the 7600 will not answer the download call.

LOCATION 152: PROGRAMMING THE NUMBER OF DAYS LEFT UNTIL AUTOTEST REPORT

Location 152 contains the number of days left until the next autotest report. If this location contains a "0", an autotest signal will be reported the first time the current time equals the autotest time programmed in locations 162-165. Locations 098-099 must be programmed to enable autotest reporting.

LOCATION 153: PROGRAMMING THE CLOCK, CURRENT MONTH

Location 153 contains the current month. The month must be programmed using a number from "1" to "12".

LOCATION 154: PROGRAMMING THE CLOCK, CURRENT YEAR - TENS DIGIT

Location 154 contains the current year - tens digit. If the current year is 1996, this location should contain a "9", which is the tens digit of the current year.

LOCATION 155: PROGRAMMING THE CLOCK, CURRENT YEAR - ONES DIGIT

Location 155 contains the current year - ones digit. If the current year is 1996, this location should contain a "6", which is the ones digit of the current year.

LOCATION 156: PROGRAMMING THE CLOCK, CURRENT DAY OF THE MONTH - TENS DIGIT

Location 156 contains the current day of the month - tens digit. If the current day of the month is the 5th (05), this location should contain a "0", which is the current day of the month - tens digit. If the current day of the month is the 26th, this location should contain a "2".

LOCATION 157: PROGRAMMING THE CLOCK, CURRENT DAY OF THE MONTH - ONES DIGIT

Location 157 contains the current day of the month - ones digit. If the current day of the month is the 5th (05), this location should contain a "5", which is the current day of the month - ones digit. If the current day of the month is the 26th, this location should contain a "6".

LOCATION 158: PROGRAMMING THE CLOCK, CURRENT HOUR - TENS DIGIT

Location 158 contains the current hour - tens digit. The time is entered in 24 hour time. If the current time is 5:25 PM, the 24 hour time is 17:25, so this location should contain a "1", which is the current hour - tens digit. If the current time is 9:36 AM, the 24 hour time is 09:36, so this location should contain a "0".

LOCATION 159: PROGRAMMING THE CLOCK, CURRENT HOUR - ONES DIGIT

Location 159 contains the current hour - ones digit. The time is entered in 24 hour time. If the current time is 5:25 PM, the 24 hour time is 17:25, so this location should contain a "7", which is the current hour - ones digit. If the current time is 9:36 AM, the 24 hour time is 09:36, and this location should contain a "9".

LOCATION 160: PROGRAMMING THE CLOCK, CURRENT MINUTES - TENS DIGIT

Location 160 contains the current minutes - tens digit. The time is entered in 24 hour time. If the current time is 5:25 PM, the 24 hour time is 17:25, so location 160 should contain a "2", which is the current minutes - tens digit. If the current time is 9:36 AM, the 24 hour time is 09:36, and this location should contain a "3".

LOCATION 161: PROGRAMMING THE CLOCK, CURRENT MINUTES - ONES DIGIT

Location 161 contains the current minutes - ones digit. The time is entered in 24 hour time. If the current time is 5:25 PM, the 24 hour time is 17:25, so this location should contain a "5", which is the current minutes - ones digit. If the current time is 9:36 AM, the 24 hour time is 09:36, and this location should contain a "6".

LOCATION 162: PROGRAMMING THE AUTOTEST TIME, HOUR - TENS DIGIT

Location 162 contains the tens digit of the hour that the autotest report is initiated. The time is entered in 24 hour time. If the desired autotest time is 5:25 PM, the 24 hour time is 17:25, so this location should contain a "1", which is the tens digit of the desired hour for autotest. If the desired autotest time is 9:36 AM, the 24 hour time is 09:36, and this location should contain a "0".

LOCATION 163: PROGRAMMING THE AUTOTEST TIME, HOUR - ONES DIGIT

Location 163 contains the ones digit of the hour that the autotest report is desired. The time is entered in 24 hour time. If the desired autotest time is 5:25 PM, the 24 hour time is 17:25, so this location should contain a "7", which is the ones digit of the hour for autotest. If the desired autotest time is 9:36 AM, the 24 hour time is 09:36, and this location should contain a "9".

LOCATION 164: PROGRAMMING THE AUTOTEST TIME, MINUTES - TENS DIGIT

Location 164 contains the tens digit, of the minutes after the hour that the autotest is desired. The time is entered in 24 hour time. If the desired autotest time is 5:25 PM, the 24 hour time is 17:25, so this location should contain a "2", which is the tens digit of the minutes for autotest time. If the desired autotest time is 9:36 AM, the 24 hour time is 09:36, this location should contain a "3".

LOCATION 165: PROGRAMMING THE AUTOTEST TIME, MINUTES - ONES DIGIT

Location 165 contains the ones digit, of the minutes after the hour that the autotest is desired. The time is entered in 24 hour time. If the desired autotest time is 5:25 PM, the 24 hour time is 17:25, so this location should contain a "5", which is the ones digit of the minutes for autotest time. If the desired autotest time is 9:36 AM, the 24 hour time is 09:36, and this location should contain a "6".

LOCATION 166: PROGRAMMING THE AUTOTEST REPORTING INTERVALS

Location 166 contains the number of days between automatic test reports. If a report is desired every 7 days, this location should contain a "7". Valid entries are "1" to "15" days.

LOCATION 167: PROGRAMMING USER 14 AS A SIREN SILENCE CODE

Programming an "8" in location 167 will cause the user 14 code to be a siren silence code. Entering this code when the siren is on will cause the 7600 to silence the siren but will not change the armed state. Entering the code when the siren is not on will restart the exit delay. When location 167 is programmed with an" 8", user 14 can never be used to disarm the control. Programming a "4" in Location 167 is for 50Hz AC Supply.

LOCATION 168-175: RESERVED

LOCATION 176: SPLIT REPORTING - PROGRAMMING TAMPER, DOWNLOAD COMPLETE, AND AUTOTEST TO REPORT TO THE SECONDARY PHONE NUMBER.

The 7600 is capable sending certain reports to the secondary telephone number. This feature known as split reporting can be used to send alarm reports to one number and supervisory reports to another number. When using split reporting with the 7600, the primary telephone number always takes priority over the secondary telephone number. The 7600 always sends zone and alarm reports to the primary telephone number. There are 6 reports that can be programmed to report to the second telephone number. Location 176 is used to force up to three of these individual reports to the second telephone number. To program tamper, download complete, or autotest to report to the secondary telephone number, use the following chart and program the appropriate number in location 176. For Dual Reporting see locations 204-206.

REPORTS TO SEND TO SECONDARY NUMBER	DATA TO PROGRAM IN LOCATION 176
AUTOTEST	"2"
DOWNLOAD COMPLETE	"4"
DOWNLOAD COMPLETE ; AUTOTEST	"6"
TAMPER	"8"
TAMPER ; AUTOTEST	A = "10"
TAMPER ; DOWNLOAD COMPLETE	C = "12"
TAMPER : DOWNLOAD COMPLETE : AUTOTEST	E = "14"

LOCATION 177: SPLIT REPORTING - PROGRAMMING AC POWER FAIL, LOW BATTERY, AND OPEN/CLOSE TO REPORT TO THE SECONDARY PHONE NUMBER

The 7600 is capable sending certain reports to the secondary telephone number. This feature known as split reporting can be used to send alarm reports to one number, and supervisory reports to another number. When using split reporting with the 7600, the primary telephone number always takes priority over the secondary number. The 7600 always sends zone and alarm reports to the primary number. There are 6 reports that can be programmed to report to the second telephone number. Location 177 is used to force up to three of these individual reports to the second number. To program AC power fail, low battery, or open/close to report to the secondary number, use the following chart and program the appropriate data in this location.

REPORTS TO SEND TO SECONDARY NUMBER	DATA FOR LOCATION 177
OPEN/CLOSE	"2"
LOW BATTERY	"4"
LOW BATTERY; OPEN/CLOSE	"6"
AC FAIL	"8"
AC FAIL; OPEN/CLOSE	A = "10"
AC FAIL; LOW BATTERY	C = "12"
AC FAIL; LOW BATTERY; OPEN/CLOSE	E = "14"

LOCATION 178: PROGRAMMING THE SECONDARY ENTRY DELAY

Location 178 contains the number of 10 second increments in the secondary entry delay. This delay can be programmed from 10 to 150 seconds ("1" = 10 sec. through "15" = 150 sec.) NOTE: ACCORDING TO SECTION 26 OF U.L. 1023, THE SECONDARY ENTRY TIME SHALL NOT EXCEED 45 SECONDS.

LOCATION 179: PROGRAMMING THE SECONDARY EXIT DELAY (ZONE TYPE 9)

Location 179 contains the number of 10 second increments after arming, before trips will be recognized on a zone type 9. The exit delay can be programmed in 10 second increments from 10 to 150 seconds ("1" = 10 seconds through "15" = 150 seconds). (Note: A "0" entry is treated as zero (0) seconds). If the exit delay time in this location is less than that of location 076, this secondary delay will follow the amount of time in location 076.

LOCATION 180: PROGRAMMING THE LOOP RESPONSE TIME

Location 180 is used to program the loop response time for all zones programmed as fast loop response in locations 186-193. The response time is equal to 20 milliseconds times the number programmed in this location ("1" = 20 milliseconds and "5" = 100 milliseconds). If this location contains a "0", the loop response time will be 500 milliseconds.

LOCATION 181: AUTOTEST SUPPRESSION

Programming a "1" in location 181 will cause the 7600 to suppress an autotest report if the communicator has sent any report since the last autotest. Programming a "0" in location 181 will cause all autotest reports to be sent. Factory default is a "0".

LOCATION 182: FORMAT OVER-RIDE LOCATION

The number selected in this location will select the format options as follows:

VALUE	DESCRIPTION
1	Add for extended reporting
2	Add for hex digits allowed
4	Add for 20PPS
8	Add for 10PPS

LOCATION 183: FORMAT OVER-RIDE LOCATION

The number selected in this location will select the format options as follows:

VALUE	DESCRIPTION
1	Add for 1800hz transmit
2	Add for 2300hz handshake
4	Add for single round parity
8	Add for 2 digit event code

LOCATIONS 184-185: RESERVED

LOCATIONS 186-191: ASSIGNING SPECIAL CHARACTERISTICS FOR ZONES 1-6

Locations 186-191 are used to assign individual characteristics for each of zones 1-6. These locations can be used to enable or disable the chime feature, restore reporting, bypass feature, and fast loop response for each of the individual zones 1-6. Add the sum of the features you desire and program that number in Locations 186-191. Factory default is "6".

VALUE	SPECIAL CHARACTERISTICS
1	Fast loop response time (see location 180)
2	Bypass Capability
4	Zone Restoral Reporting
8	Chime enable

LOCATION 192-195: RESERVED

LOCATION 196: ANSWERING MACHINE DEFEAT

Location 196 contains the answering machine defeat. To defeat an answering machine, two telephone calls must be made to the premises. On the first call, let the phone ring the same number of times (or less) as the number programmed in this location (maximum 3) and disconnect. The control panel will detect these rings and start a 45 second timer, during which, the control panel will answer the next call on the first ring. This location will override location 280 if it contains something other than a "0" (factory default).

LOCATION 197: FORCE ARMING

Programming a "1" in location 197 will allow the Ranger 7600 to be armed without all zones secure (no "Ready" LED illuminated). At the end of the exit delay, unsecured zones will automatically bypass, while zones that secure will become armed. Factory default is "0", Force Arming disabled.

LOCATIONS 198-201: AUTOMATIC ARMING TIME

Locations 198-201 contain the time for automatic arming if enabled in location 202. Enter the time in 24 hour time.

LOCATION 202: AUTOMATIC ARMING

Programming a "1" in location 202 will enable Automatic arming. The arming time is programmed in location 198-201. If automatic arming is enabled, the keypad sounder will activate for 50 seconds before automatically arming. If the sounder is silenced by entering a valid arm/disarm code during the 50 second time frame, the panel will not arm. If the sounder is still on at the end of 50 seconds, the control will arm. Any zones not secured will be bypassed when automatic arming is used.

LOCATION 203: DYNAMIC BATTERY TEST

The number programmed in location 203 determines the number of minutes (1 to 15) the 7600 will perform dynamic battery testing during each 24 hour period. The red "Power" LED will flash if the battery fails the dynamic test. Factory default is "0" (disabled).

LOCATION 204: DUAL REPORTING - PROGRAMMING TAMPER, DOWNLOAD COMPLETE, AND AUTOTEST TO REPORT TO THE BOTH PHONE NUMBERS

The 7600 is capable of sending certain reports to both the primary and secondary phone numbers. When using dual reporting, the primary phone number always takes priority over the secondary number. There are 6 reports that can be individually programmed to report to both phone numbers. Location 204 is used to force up to three of these individual reports to both numbers. To program tamper, download complete, or autotest to report to both numbers, use the following chart and program the appropriate data in location 204.

REPORT TO BOTH PHONE NUMBERS	DATA TO PROGRAM IN LOCATION 204
AUTOTEST	"2"
DOWNLOAD COMPLETE	"4"
DOWNLOAD COMPLETE ; AUTOTEST	"6"
TAMPER	"8"
TAMPER ; AUTOTEST	A = "10"
TAMPER ; DOWNLOAD COMPLETE	C = "12"
TAMPER ; DOWNLOAD COMPLETE ; AUTOTEST	E = "14"

LOCATION 205: DUAL REPORTING - PROGRAMMING AC POWER FAIL, LOW BATTERY, AND OPEN/CLOSE TO REPORT TO THE PRIMARY AND SECONDARY PHONE NUMBERS

The 7600 is capable of sending certain reports to both the primary and secondary phone numbers. When using dual reporting, the primary number always takes priority over the secondary number. There are 6 reports that can be programmed to report to both numbers. Location 205 is used to force up to three of these individual reports to both phone numbers. To program AC power fail, low battery, or open/close to report to both numbers, use the following chart and program the appropriate data in this location.

REPORTS TO BOTH PHONE NUMBERS	DATA FOR LOCATION 205
OPEN/CLOSE	"2"
LOW BATTERY	"4"
LOW BATTERY; OPEN/CLOSE	"6"
AC FAIL	"8"
AC FAIL; OPEN/CLOSE	A = "10"
AC FAIL; LOW BATTERY	C = "12"
AC FAIL; LOW BATTERY; OPEN/CLOSE	E = "14"

LOCATION 206: ALL REPORTS TO BOTH THE PRIMARY AND SECONDARY PHONE NUMBERS

Programming a "1" in location 206 will cause the 7600 to send all reports to both the primary and secondary telephone numbers.

LOCATION 207: CALLBACK PHONE NUMBER CONTROL

The number programmed in location 207 controls the use of the callback telephone number. The callback number must be programmed in the download section for this location to have an effect. Add the sum of the features you desire and program that number in Location 207.

VALUE	DESCRIPTION
1	Add if a callback should not occur before a download session
2	Add if [*] [8] [#] sight initiated download is enabled
4	Add if callback at autotest intervals is enabled
8	Add for automatic callback when event log is full

LOCATION 208: FORMAT OVER-RIDE LOCATION

The number selected in this location will select the format options as follows:

VALUE	DESCRIPTION
1	Add for Pager format
2	Add for Ademco Handshake
4	Add for Caddx modem
8	Add for Sescoa Superfast

LOCATION 209: FORMAT OVER-RIDE LOCATION

The number selected in this location will select the format options as follows:

VALUE	DESCRIPTION
1	Add for Contact ID
2	Add for SIA
4	Add for 4 + 3
8	Add for DTMF transmission

LOCATION 210: PROGRAMMING TO REPORT EXIT ERROR

The Ranger 7600 has the ability to report an exit error code if an entry/exit zone is violated at the moment the exit delay expires. The desired exit error code is programmed in location 210. If this location contains a "0", exit errors will not be reported. When using the remote arming input, the man number is 1. When using a one button "Quick Arm" code the man number is 1. When Contact ID is selected, program any number to activate this report.

LOCATION 211: PROGRAMMING TO REPORT RECENT CLOSING

The Ranger 7600 has the ability to report a recent closing code if an alarm occurs within 5 minutes of a closing. The desired recent closing code is programmed in location 211. If this location contains a "0", recent closings will not be reported. When using the remote arming input, the man number is 1. When using a one button "Quick Arm" code the man number is 1. When Contact ID is selected, program any number to activate this report.

LOCATIONS 212-239: PROGRAMMING THE ARM/DISARM CODES FOR USERS 8-14

Locations 212-239 contain the arm/disarm codes for user numbers 8-14. These codes can be accessed only in the program mode, or through downloading.

LOCATION 240: ENTERING THE NUMBER OF DIAL ATTEMPTS TO SECONDARY PHONE NUMBER

Location 240 is used to enter the number of dial attempts (1 to 15 attempts) the communicator will try to the second phone number before ending the notification process. If this location contains an "8", the communicator will make 8 attempts to the second number, if a second number is programmed. If this location contains a "0", the number programmed in location 134 will be used.

LOCATION 241-243: RESERVED

LOCATIONS 244-249: ASSIGNING SPECIAL CHARACTERISTICS FOR ZONES 1-6

Locations 244-249 are used to assign individual characteristics for each of zones 1-6. These locations can be used to enable or disable the Trouble Reporting, Group Bypass, Entry-Guard, and Cross Zone feature for each of the individual zones 1-6. To enable these features, enter a binary number according to the following chart:

VALUE	DESCRIPTION
1	Cross Zone
2	Entry Guard Zone
4	Group Bypass Zone
8	Trouble Reporting

<u>**CROSS ZONING**</u> - This feature requires a trip on 2 or more zones programmed as Cross Zones within the time frame programmed in Location 255 (1-15 minutes). It is important that at least 2 zones be programmed for cross zoning if this feature is to be used. First zone trip will initiate the keypad sounder, second zone trip creates an alarm. Either can be silenced by entering a valid code.

ENTRY GUARD - Enable this feature by adding a "4" to the number programmed in location 131. Program the zone(s) that you wish to be monitored (armed) with a "2". When enabled, all non Entry-Guard zones will be bypassed and all other zones will be delayed when the "Instant" LED is illuminated. When the "Instant" LED is off, all non bypassed zones will resume their normal characteristics. To arm the 7600 in "Entry Guard" mode, press [2]. To disarm, press [2] or your user code. If you wish to suppress the use of the [2] as a disarming key, add an "8" to the number programmed in location 131. **NOTE**: The Entry Guard entry timing will follow the Primary entry time.

<u>GROUP BYPASSING</u> - This feature will allow all zones programmed as group bypass zones to be bypassed by entering [*****] [9] [*****] when the control is disarmed.

LOCATION 250-251: RESERVED

LOCATION 252-253: PROGRAMMING REPORT KEYPAD AUXILIARY 3

The Ranger 7600 has the ability to report a Silent Auxiliary 3 code each time the [7] and [9] keys are pressed simultaneously on the keypad. The desired Auxiliary 3 code is programmed in locations 252-253. If both locations are "0", the Auxiliary 3 double keypress is disabled. Location 252 contains the standard digit, and location 253 contains the extended digit. When Contact ID is selected, program the extended or second location with any number to activate this report.

LOCATION 254: PROGRAMMING "USER ON SITE"

The 7600 has the ability to send a "user on site" report by entering [*] - [0], followed by a valid arm/disarm code at the keypad when the system is not armed. This can be used to log the return of latch key kids or the presence of employees. The desired "user on site" code is programmed in location 254. If this location contains a "0", "user on site" report will not be sent.. When Contact ID is selected, program with any number to activate this report.

LOCATION 255: PROGRAMMING THE CROSS ZONE TIME

Location 255 contains the number of minutes (1 to 15) in which a second trip must occur on a cross zone before an alarm is created. Care must be taken when activating this feature that two or more cross zones are set up that will be tripped within this time frame in the event of a burglary. This feature should only be used on interior zones. Never activate cross zoning on a perimeter zone.

THE REMAINING LOCATIONS ARE ACCESSIBLE ONLY THROUGH DOWNLOADING !

LOCATIONS 256-263: CONTROL PANEL ACCESS CODE

Locations 256-263 contain the eight digit access code the 7600 must receive from the downloading software before the panel will permit downloading to occur. The factory default code is listed in the instructions provided with the CADDX download software package.

LOCATIONS 264-279: CALL BACK TELEPHONE NUMBER

The presence of a phone number in locations 264-279 will cause the control panel to dial back this number after a successful panel access code has been entered. If a telephone number is present, the control panel will hang up for approximately 36 seconds (insuring that the calling party has disconnected), then it will call back. If tone dialing is desired, program an "F" in the location where tone dialing should begin. If the entire number should be tone dialing, program an "F" in location 260. Four second delays can be obtained anywhere in the sequence by programming a "D" in the appropriate delay location. WARNING: THE CALLBACK PHONE NUMBER SHOULD ALWAYS BE REVIEWED FOR ACCURACY BEFORE DISCONNECTING.

LOCATION 280: ANSWERING MACHINE DEFEAT

Location 280 contains the answering machine defeat enable. To defeat an answering machine, two telephone calls must be made to the premises. On the first call, let the phone ring the same number of times (or less) as the number programmed in this location (maximum 3). The control panel will detect these rings and start a 45 second timer. If a call comes in during that 45 second time frame, the control panel will answer on the first ring. To disable this feature, program a "0" in this location.

LOCATION 281: LOCAL PROGRAMMING LOCKOUT

Location 281 is used to disable local programming If a "5" is programmed in this location, all local programming is locked out. If an "A" is programmed in this location, all programming functions related to the digital communicator will be locked out. Any other number in location 281 will allow all local programming.

LOCATION 282: CONTROL PANEL SHUTDOWN

Location 282 is used to shut down the control panel. Programming an "A" in this location will completely shutdown the control panel. The keypad will appear "dead", and the siren and communicator will not operate. WARNING: EXTREME CARE SHOULD BE TAKEN NOT TO INADVERTENTLY PROGRAM THIS LOCATION.

ADDITIONAL COMMENTS ABOUT THE 7600

- 1. The Fire, Panic, Burglary options for the auxiliary outputs can be programmed for momentary, or to follow the siren. Programming a "2" in location 132 will momentarily activate the auxiliary outputs when the corresponding event occurs. Programming a "0" in location 132 will cause the Burglary and Panic outputs to activate when the yelping siren is on and the Fire auxiliary output to activate when the steady siren is on.
- 2. The 7600 allows downloading of custom information to 9050 LCD keypads.
- 3. Keyswitch arming is allowed through the remote arming input on the PC board.
- 4. EXIT WARNING- If an entry exit zone is violated at the instant the exit delay expires, the siren will sound to alert the user the door was not closed in time. An alarm will not be sent to the central station if a valid code is entered before the entry delay time expires.

ARM/DISARM CODES 1-7

LOCATION	PAGE	DESCRIPTION	DATA 1	DATA 2	DATA 3	DATA 4	DEFAULT
000-003	10	USER #1 ARM / DISARM CODE					"1-2-3-4"
004-007	10	USER #2 ARM / DISARM CODE					"15" DISABLED
008-011	10	USER #3 ARM / DISARM CODE					"15" DISABLED
012-015	10	USER #4 ARM / DISARM CODE					"15" DISABLED
016-019	10	USER #5 ARM / DISARM CODE					"15" DISABLED
020-023	10	USER #6 ARM / DISARM CODE					"15" DISABLED
024-027	10	USER #7 ARM / DISARM CODE					"15" DISABLED
028-031	10	"GO TO PROGRAM" ACCESS CODE					"9-7-1-3"

PHONE NUMBERS, ACCOUNT CODES, & FORMATS

032-039	8	PRIMARY PHONE NUMBER DIGITS 1 - 8	"0" DISABLED
040-047	8	PRIMARY PHONE NUMBER DIGITS 9 - 16	"0" DISABLED
048-051	8	PRIMARY ACCOUNT CODE	"0" DISABLED
052	8	PRIMARY FORMAT	"0" DISABLED
053	8	SECONDARY PHONE NUMBER CONTROL	"0" DISABLED
054-061	8	SECONDARY PHONE NUMBER DIGITS 1 - 8	"0" DISABLED
062-069	8	SECONDARY PHONE NUMBER DIGITS 9 - 16	"0" DISABLED
070-073	9	SECONDARY ACCOUNT CODE	"0" DISABLED
074	9	SECONDARY FORMAT	"0" DISABLED

CONTROL & COMMUNICATOR FEATURES

LOCATION	PAGE	DESCRIPTION	DATA	DEFAULT
075	10	ENTRY DELAY TIME (10 SECOND INCREMENTS)		"3" 30 SECONDS
076	10	EXIT DELAY TIME (10 SECOND INCREMENTS)		"6" 60 SECONDS
077	10	SIREN SHUTDOWN / RECYCLE TIME OUT (2 MINUTE INCREMENTS)		"4" 8 MINUTES
078	11	ZONE 1 TYPE		"3" ENTRY / EXIT
079	11	ZONE 2 TYPE		"5" INT FOLLOWER
080	11	ZONE 3 TYPE		"6" INSTANT
081	11	ZONE 4 TYPE		"6" INSTANT
082	11	ZONE 5 TYPE		"6" INSTANT
083	11	ZONE 6 TYPE		"6" INSTANT
084	11	ZONE 1-4 SIREN SELECT		"15" AUDIBLE
085	11	ZONE 5-6 SIREN SELECT		"3" AUDIBLE

LOCATION	PAGE	DESCRIPTION	ZONE ID	EVENT/EXT CODE	DEFAULT
086-087	12	DURESS COMMUNICATOR CODE			"0" DISABLED
088-089	12	AUX 1 COMMUNICATOR CODE			"0" DISABLED
090-091	12	AUX 2 COMMUNICATOR CODE			"0" DISABLED
092-093	12	KEYPAD PANIC COMMUNICATOR CODE			"2 - 0"
094-095	12	TAMPER COMMUNICATOR CODE			"0" DISABLED
096-097	13	DOWNLOAD COMPLETE COMM CODE			"0" DISABLED
098-099	13	AUTOTEST COMMUNICATOR CODE			"0" DISABLED
100-101	13	FAIL TO COMMUNICATE CODE			"0" DISABLED

LOCATION	PAGE	DESCRIPTION	ZONE ID	EVENT/EXT CODE	DEFAULT
102	13	CLOSING COMMUNICATOR CODE		MAN NUMBER	"0" DISABLED
103	13	OPENING COMMUNICATOR CODE		MAN NUMBER	"0" DISABLED
104-105	13	ZONE 1 COMMUNICATOR CODE			"1 - 0"
106-107	13	ZONE 2 COMMUNICATOR CODE			"2 - 0"
108-109	13	ZONE 3 COMMUNICATOR CODE			"3 - 0"
110-111	14	ZONE 4 COMMUNICATOR CODE			"4 - 0"
112-113	14	ZONE 5 COMMUNICATOR CODE			"5 - 0"
114-115	14	ZONE 6 COMMUNICATOR CODE			"6 - 0"
116-117	14	START TEST COMMUNICATOR CODE			"0 - 0" DISABLED
118-119	14	END TEST COMMUNICATOR CODE			"0 - 0" DISABLED
120-121	14	AC POWER LOSS COMMUNICATOR CODE			"0" DISABLED
122-123	14	LOW BATTERY COMMUNICATOR CODE			"0" DISABLED
124	15	TROUBLE COMMUNICATOR CODE		ZONE NUMBER	"0" DISABLED
125	15	ZONE BYPASS COMMUNICATOR CODE		ZONE NUMBER	"0" DISABLED
126	15	RESTORE COMMUNICATOR CODE		ZONE NUMBER	"0" DISABLED
127	15	CANCEL COMMUNICATOR CODE		MAN NUMBER	"0" DISABLED

LOCATION	PAGE	DESCRIPTION	DATA	DEFAULT
128	15	ABORT DELAY BEFORE DIAL TIME		"0" DISABLED
129	15	KEYPAD PANIC SILENT OR AUDIBLE		"0" AUDIBLE
130	15	LIMITED SIREN AND/OR COMMUNICATOR OUTPUTS		"0" UNLIMITED
131	16	AUTO BYPASS / INSTANT ARMING		"0" DISABLED
132	16	ENABLE KEYPAD SIREN SOUNDER (8001 KEYPAD ONLY)		"0" DISABLED
133	16	LED EXTINGUISH FEATURE		"0" DISABLED
134	16	NUMBER OF DIAL ATTEMPTS		"8" EIGHT
135	16	POWER UP CONDITION		"0" LAST
136	16	POWER UP DELAY		"0" 60 SEC DELAY
137	16	IMMEDIATE RESTORE BY ZONE		"0" DISABLED
138	16	NO ARMING WITH ZONE BYPASSED		"0" DISABLED
139	17	QUICK ARM ENABLE		"0" DISABLED
140	17	FIRE SIREN CUTOFF INHIBIT		"0" RECYCLES
141	17	EXIT WARNING ENABLE (BATTERY TEST -DISABLED)		'1" ENABLED
142	17	SIREN/BELL TEST FEATURE		"0" DISABLED
143	17	SMOKE POWER RESET AND/OR FIRE ALARM VERIFICATION		"1" POWER RESET
144	17	RESERVED		RESERVED
145	17	AUXILIARY OUTPUT CONDITION #1		"14"
146	17	AUXILIARY OUTPUT CONDITION #2		"0"
147	17	AUXILIARY OUTPUT CONDITION #3		"0"
148	17	AUXILIARY OUTPUT CONDITION #4		"0"
149	18	INVERTING THE AUXILIARY OUTPUT		"0" HI GOING LOW
150	18	DELAY AC POWER LOSS REPORT		"5 " = 10 MINUTES
151	18	NUMBER OF RINGS TO ANSWER DOWNLOAD CALL		"0"
152	19	NUMBER OF DAYS LEFT UNTIL AUTOTEST		UNDEFINED

LOCATION	PAGE	DESCRIPTION	DATA	DEFAULT
153	19	PROGRAM CLOCK, CURRENT MONTH		UNDEFINED
154	19	PROGRAM CLOCK, CURRENT YEAR - TENS DIGIT (19 9 4)		UNDEFINED
155	19	PROGRAM CLOCK, CURRENT YEAR - ONES DIGIT (199 4)		UNDEFINED
156	19	PROGRAM CLOCK, CURRENT DAY OF MONTH - TENS DIGIT		UNDEFINED
157	19	PROGRAM CLOCK, CURRENT DAY OF MONTH - ONES DIGIT		UNDEFINED
158	19	PROGRAM CLOCK, CURRENT HOUR - TENS DIGIT		UNDEFINED
159	19	PROGRAM CLOCK, CURRENT HOUR - ONES DIGIT		UNDEFINED
160	19	PROGRAM CLOCK, CURRENT MINUTE - TENS DIGIT		UNDEFINED
161	20	PROGRAM CLOCK, CURRENT MINUTE - ONES DIGIT		UNDEFINED
162	20	PROGRAM AUTOTEST TIME, HOUR - TENS DIGIT		"0"
163	20	PROGRAM AUTOTEST TIME, HOUR - ONES DIGIT		"0"
164	20	PROGRAM AUTOTEST TIME, MINUTE - TENS DIGIT		"0"
165	20	PROGRAM AUTOTEST TIME, MINUTE - ONES DIGIT		"0"
166	20	PROGRAM AUTOTEST REPORTING INTERVALS		"0"
167	20	SIREN SILENCE SELECT AND 50Hz SOURCE		"0" DISABLED
168 - 175	20	RESERVED		RESERVED
176	20	SPLIT REPORTING - TAMPER, DOWNLOAD COMPLETE, & AUTOTEST		"0" PHONE #1
177	20	SPLIT REPORTING - AC FAILURE, LOW BAT, & OPEN/CLOSE		"0" PHONE #1
178	20	SECONDARY ENTRY DELAY TIME		"0"
179	21	SECONDARY EXIT DELAY TIME		"0"
180	21	LOOP RESPONSE TIME		"0" 500 MS
181	21	AUTOTEST SUPPRESSION		"0"
182	21	FORMAT OVER-RIDE		"0"
183	21	FORMAT OVER-RIDE		"0"
184-185	21	RESERVED		RESERVED
186	21	ZONE 1 SPECIAL CHARACTERISTICS		"6"
187	21	ZONE 2 SPECIAL CHARACTERISTICS		"6"
188	21	ZONE 3 SPECIAL CHARACTERISTICS		"6"
189	21	ZONE 4 SPECIAL CHARACTERISTICS		"6"
190	21	ZONE 5 SPECIAL CHARACTERISTICS		"6"
191	21	ZONE 6 SPECIAL CHARACTERISTICS		"6"
192-195	21	RESERVED		RESERVED
196	22	ANSWERING MACHINE DEFEAT ENABLE		"0"
197	22	FORCE ARMING ENABLE		"0"
198	22	TIME FOR AUTOMATIC ARMING, HOUR - TENS DIGIT		"2"
199	22	TIME FOR AUTOMATIC ARMING, HOUR - ONES DIGIT		"2"
200	22	TIME FOR AUTOMATIC ARMING, MINUTE - TENS DIGIT		"0 "
201	22	TIME FOR AUTOMATIC ARMING, MINUTE - ONES DIGIT		"0 "
202	22	AUTOMATIC ARMING ENABLE		"0 "
203	22	DYNAMIC BATTERY TEST		"0 "
204	22	DUAL REPORT - TAMPER, DOWNLOAD COMPLETE, & AUTOTEST		"0" PHONE #1
205	23	DUAL REPORT - AC FAILURE, LOW BAT, & OPEN/CLOSE		"0" PHONE #1
206	23	DUAL REPORT EVERYTHING		"0"
207	23	CALLBACK PHONE NUMBER CONTROL		"0"
208	24	FORMAT OVER-RIDE		"0"
209	24	FORMAT OVER-RIDE		"0"

LOCATION	PAGE	DESCRIPTION		DEFAULT
210	24	EXIT ERROR COMMUNICATOR CODE		"0"
211	24	RECENT CLOSING COMMUNICATOR CODE		"0"
212-215	24	USER #8 ARM / DISARM CODE		"15" DISABLED
216-219	24	USER #9 ARM / DISARM CODE		"15" DISABLED
220-223	24	USER #10 ARM / DISARM CODE		"15" DISABLED
224-227	24	USER #11 ARM / DISARM CODE		"15" DISABLED
228-231	24	USER #12 ARM / DISARM CODE		"15" DISABLED
232-235	24	USER #13 ARM / DISARM CODE		"15" DISABLED
236-239	24	USER #14 ARM / DISARM CODE		"15" DISABLED
240	24	NUMBER OF DIAL ATTEMPTS TO PHONE #2		"0"
241-243	24	RESERVED		RESERVED
244	25	ZONE #1 SPECIAL CHARACTERISTICS		"8"
245	25	ZONE #2 SPECIAL CHARACTERISTICS		"8"
246	25	ZONE #3 SPECIAL CHARACTERISTICS		"8"
247	25	ZONE #4 SPECIAL CHARACTERISTICS		"8"
248	25	ZONE #5 SPECIAL CHARACTERISTICS		"8'
249	25	ZONE #6 SPECIAL CHARACTERISTICS		"8"
250-251	25	RESERVED		RESERVED
252	25	AUXILIARY 3 COMMUNICATOR CODE		"0"
253	25	AUXILIARY 3 EXTENDED COMMUNICATOR CODE		"0"
254	25	USER ON SITE COMMUNICATOR CODE		"0"
255	25	CROSS ZONING TIME (MINUTES)		"5"

DOWNLOADING ACCESSIBLE LOCATIONS

LOCATION	PAGE	DESCRIPTION	DATA		DEFAULT		
256-263	26	CONTROL PANEL ACCESS CODE					"8600000"
264-271	26	CALLBACK PHONE NUMBER - DIGITS 1 - 8					"0" DISABLED
272-279	26	CALLBACK PHONE NUMBER - DIGITS 9 - 16					"0" DISABLED
280	26	ANSWERING MACHINE DEFEAT	ANSWERING MACHINE DEFEAT		"0" DISABLED		
281	26	LOCAL PROGRAMMING LOCKOUT		"0" NOT LOCKED			
282	26	CONTROL PANEL SHUTDOWN		"0" CONTROL ON			

APPENDIX 1 - REPORTING IN SIA FORMAT

The 7600 has the ability to report SIA level 1 transmissions to either or both phone numbers. Each report in SIA consists of an Event Code and a Zone or User ID. The Zone is programmed in the first digit of each report. When programming the event code (the second digit) for zones 1-6 (locations 105, 107, 109, 111, 113, or 115), programming a zero will cause the event code to follow the zone type for that zone. The event code for the zone type can be overridden by programming a digit from the table below. Duress (location 87), AUX 1 (location 89), AUX 2 (location 91), and Keypad Panic (location 93) must be programmed from the table below.

Programmed Event	SIA Code	Description
1	FA	Fire Alarm
2	PA	Panic alarm
3	BA	Burglary Alarm
4	GA	Gas Alarm
5	KA	Heat Alarm
6	WA	Water Alarm
7	QA	Emergency Alarm
8	SA	Sprinkler Alarm
9	UA	Untyped Alarm
10	HA	Holdup Alarm
11	MA	Medical Alarm
12	ZA	Freeze Alarm
13	TA	Tamper Alarm
14	RP	Periodic Test
15	YF	System Fault

The following reports will send fixed event codes regardless of the number programmed in the event code location:

Event	SIA Code	Event Code Location
Keypad Tamper	ТА	95
Download Complete	RS	97
Autotest	RP	99
Fail to Communicate	RT	101
Closing	CL	102
Opening	OP	103
Start Test	TS	116
End Test	TE	116
AC Loss	AT	121
Low Battery	ΥT	123
Trouble	Τ*	124
Bypass	B*	125
Bypass Restore	U*	125 - 126
Restore	R*	126
Cancel	OC	127
Exit Error	EE	210
Recent Closing	CR	211
Auxiliary 3	UA	253
User on site	YY	254

*These will send the event code for the zone bypassed, restored, or in trouble.

APPENDIX 2 - REPORTING IN CONTACT ID

The 7600 has the ability to report Ademco Contact ID transmissions to either or both phone numbers. Each report in Contact ID consists of an Event Code and a Zone or User ID. The Zone is programmed in the first digit of each report. When programming the event code (the second digit) for zones 1-6 (locations 105, 107, 109, 111, 113, or 115), programming a zero will cause the event code to follow the zone type for that zone. The event code for the zone type can be overridden by programming a digit from the table below. Duress (location 87), AUX 1 (location 89), AUX 2 (location 91), and Keypad Panic (location 93) must be programmed from the table below.

Programmed Event Code	Contact ID Code	Description
1	110	Fire Alarm
2	122	Panic alarm
3	130	Burglary Alarm
4	131	Perimeter Alarm
5	132	Interior Alarm
6	133	24 Hour Burglary
7	134	Entry Alarm
8	135	Day/Night Alarm
9	150	Non-Burglary 24 Hour
10	121	Duress Alarm
11	100	Medical Alarm
12	123	Audible Panic Alarm
13	137	Tamper Alarm
14	602	Periodic Test
15	300	System Fault

The following reports will send fixed event codes regardless of the number programmed in the event code location:

<u>Event</u>	Contact ID Code	Event Code Location
Keypad Tamper	137	95
Download Complete	412	97
Autotest	602	99
Fail to Communicate	354	101
Closing	401	102
Opening	401	103
Start Test/End Test	607	116
AC Loss	301	121
Low Battery	302	123
Trouble	380	124
Bypass	570	125
Restore	*	126
Cancel	406	127
Exit Error	138	210
Recent Closing	401	211
Auxiliary 3	140	253
User on site	605	254

* This will send the event code for the zone restored.

LOCAL TELEPHONE COMPANY INTERFACE INFORMATION

TELEPHONE CONNECTION REQUIREMENTS

Except for telephone company provided ringers, all connections to the telephone network shall be made through standard plugs and standard telephone company provided jacks or equivalent in such a manner as to allow for immediate disconnection of the terminal equipment. Standard jacks shall be so arranged that if the plug connected thereto is withdrawn, no interference to the operation of the equipment at the customers premises which remains connected to the telephone network, shall occur by reason of such withdrawal.

INCIDENCE OF HARM

Should terminal equipment or protective circuitry cause harm to the telephone network, the telephone company shall, where practical, notify the customer that temporary discontinuance of service may be required; however, where prior notice is not practical, the telephone company may temporarily discontinue service if such action is deemed reasonable in the circumstances. In the case of such temporary discontinuance, the telephone company shall promptly notify the customer who will be given the opportunity to correct the situation. The customer also has the right to bring a complaint to the FCC if he feels the disconnection is not warranted.

CHANGES IN TELEPHONE COMPANY EQUIPMENT OR FACILITIES

The telephone company may make changes in its communications facilities, equipment, operations, or procedures where such action is reasonably required and proper in its business. Should any such change render the customers terminal equipment incompatible with the telephone company facilities, the customer shall be given adequate notice to make modifications to maintain uninterrupted service.

GENERAL

The FCC prohibits customer provided terminal equipment be connected to party lines.

IMPORTANCE OF THE RINGER EQUIVALENCE NUMBER

The Ringer Equivalence Number of this device is 0.0 B. This number is a representation of the electrical load that it applies to your telephone line.

MALFUNCTION OF THE EQUIPMENT

In the event that the device should fail to operate properly, the customer shall disconnect the equipment from the telephone line to determine if it is the customers equipment that is not functioning properly. If the problem is with the device the customer shall discontinue use until it is repaired.

EQUIPMENT INFORMATION

MANUFACTURER OF CONNECTING EQUIPMENT: **CADDX CONTROLS, INC.** FCC REGISTRATION NUMBER: GCQ4DC-17266-AL-E, RINGER EQUIVALENCE: 0.0 B

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INSIDE BACK COVER IS BLANK

SPECIFICATIONS

OPERATING POWER	16.5 VAC 25 VA Transformer
AUXILIARY POWER	12 VDC 500mA
LOOP RESISTANCE	300 Ohms Maximum
ALARM CURRENT AVAILABLE	1 Amp
LOOP RESPONSE	Selectable to 500mS
OPERATING TEMPERATURE	32 to 120 degrees F
KEYPAD DIMENSIONS	5.50" Wide 4.25" High .850" Deep
METAL ENCLOSURE DIMENSION	11.25" Wide 11.25" High 3.50" Deep
SHIPPING WEIGHT	9 lbs.

FIVE YEAR LIMITED WARRANTY

CADDX CONTROLS, INC. GUARANTEES THIS PRODUCT AGAINST DEFECTIVE PARTS AND WORKMANSHIP FOR TWENTY-FOUR (24) MONTHS FROM DATE OF MANUFACTURING. IF ANY DEFECT APPEARS DURING THE WARRANTY PERIOD RETURN IT TO CADDX, POSTAGE PREPAID. THE UNIT WILL BE REPAIRED AND RETURNED.

FOR THE REMAINING 36 MONTHS OF WARRANTY, THE UNIT WILL BE REPAIRED FOR A FEE NOT TO EXCEED \$10.00 PLUS SHIPPING AND HANDLING.

CADDX ASSUMES NO LIABILITY FOR CONSEQUENTIAL OR INDIRECT DAMAGE AND ACCEPTS NO RESPONSIBILITY FOR REPAIRING DAMAGE TO THE PRODUCT CAUSED BY MISUSE, CARELESS HANDLING, OR WHERE REPAIRS HAVE BEEN MADE BY OTHERS.

NO OTHER GUARANTEE, WRITTEN OR VERBAL, IS AUTHORIZED BY OR ON BEHALF OF CADDX CONTROLS, INC., GLADEWATER, TEXAS.

> CADDX CONTROLS, INC. 1420 NORTH MAIN STREET GLADEWATER, TEXAS 75647 TOLL FREE 800-727-2339 FAX 903-845-6811

7600 INSTALLATION MANUAL 7600ID98 REV D (07/10/98)