

**DL150  
DOWNLOADABLE CONTROL COMMUNICATOR  
INSTALLATION MANUAL**

**TABLE OF CONTENTS**

1. GENERAL DESCRIPTION .....	2
2. STANDARD AND OPTIONAL PARTS LIST .....	2
3. FEATURE DEFINITIONS .....	3
4. TERMINAL DRAWING AND SPECIAL NOTES .....	4
5. TERMINAL DESCRIPTION .....	5
6. FUSE DESCRIPTION .....	6
7. PROGRAMMING PROCEDURES & EXAMPLES .....	6 - 7
8. USERS 1-15 ARM / DISARM CODE ENABLING.....	8
9. COMMUNICATOR CODES.....	13 - 17
10. TIMING OPTIONS .....	17 - 18
11. AVAILABLE ZONE TYPES.....	20
12. AVAILABLE ZONE CHARACTERISTICS.....	20 - 21
13. PROGRAMMING THE AUXILIARY OUTPUTS.....	24 - 26
14. CALENDER / CLOCK PROGRAMMING.....	28 - 29
15. PROGRAMMING WORKSHEETS.....	30 - 35
16. APPENDIX 1 & 2.....	36 - 37
17. SPECIFICATIONS & WARRANTY .....	38

**DIRECT ALARM SUPPLIES CONDELL PARK NSW  
SERVICE / TECHNICAL (02) 97092811 OR 1 800 252213**

## **General Description**

The DL150 is a versatile 6 zone up/downloadable security control with a built-in digital communicator. Its microcomputer design gives some of the most versatile, yet easy to use features available for most security applications today. Each of the six zones can be programmed to be one of nine different types including 24-Hour, Handover, Fire, Keyswitch and Day Zone. Each zone is individually annunciated and can be bypassed from the code pad. See page 20 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 DL150 functions. After installation of the security system, complete the information on page 1 of the users manual and explain the system operation to all security system owners/operators.

## **Standard Parts List**

The DL150 is shipped with the parts listed below.

<b>QUANTITY</b>	<b>PART DESCRIPTION</b>	<b>PART NO.</b>
1	MASTER CONTROL PANEL W/O CODE PAD	FS4692
10	3.3K, 1/2 WATT E.O.L. RESISTORS	EOL-33
1	TELEPHONE LEAD	FS4596
1	INSTALLATION MANUAL	IM-DL150
1	USER'S MANUAL	OM-DL150

## **Optional Parts List**

The following parts are available for use with the DL150.

<b>OPTIONAL PARTS DESCRIPTION</b>	<b>PART NO.</b>
6 ZONE LED SMART CODE PAD	FS4691
LCD ALPHA NUMERIC DISPLAY CODE PAD	FS4534
AC POWER SUPPLY 16.5V 1.5 AMP PLUG PACK	FS4402
PROGRAMMER WITH DIGITAL NUMERIC DISPLAY	FS4597
SMART PROGRAMMER WITH LCD DISPLAY	FS4610
12VDC 6AH BATTERY	FS4312
DOWNLOADING SOFTWARE PACKAGE	FS4532

## **FEATURE DEFINITIONS**

### **Answering Machine Defeat**

The DL150 has the ability to defeat an answering machine to receive a call for up/downloading.

### **Auto Arming**

If programmed, the DL150 will automatically arm the system at a specific time, if it has not already been armed by a system user.

### **Auto Isolate Enable**

When enabled, the DL150 can be armed with zones violated, lacking a green "READY" light on the code pad. Under this condition, all zones that are not secure at the end of the exit delay will become isolated. All zones that become secured before the end of the exit delay will become active in the system.

### **Auxiliary Outputs**

The DL150 has four auxiliary outputs that can be activated by 58 different conditions.

### **Chime Feature**

If chime zones are selected, pressing the [1] from the code pad will enable this feature.

### **Competitor Lockout**

Through downloading, local programming can be "locked out" on the DL150. This eliminates the ability to change programming data at the local level.

### **Dynamic Battery Test**

When enabled in location 239, the DL150 can be programmed to perform a Dynamic Battery Test for a selected duration, at the preselected time.

### **Group Isolate**

Zones can be programmed to isolate as a group when the [\*] button is pressed during the exit delay. This feature is enabled in Locations 219-224: **Assigning Special Characteristics For Zones** beginning on page 20 of this manual.

### **Partial Arm**

This unique home level arming allows you to remain inside your home and only arm areas that are not occupied. For example, Night Arming.

### **Quick Arm**

If programmed, the DL150 can be armed by entering a one button "Quick Arm" code which is [3].

### **Secondary Exit Delay**

Used most often for garage doors, this zone type is a second entry/exit delay zone that has its own delay times, independent of the standard entry/exit delay zone.

### **Smoke Detector Reset**

If programmed the [#] key on the code pad can be used to reset smoke detectors.

# TERMINAL DRAWING & SPECIAL NOTES

**WARNING - FOR CONTINUED PROTECTION AGAINST THE RISK OF FIRE REPLACE ONLY WITH THE SAME TYPE AND RATING OF FUSE**



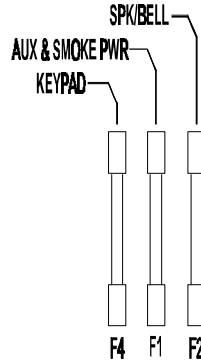
F1 = 1 AMP  
F2 = 2 AMP  
F4 = 1 AMP

FOR AUX OUTPUTS 2.5 AMPS MAXIMUM CURRENT PER OUTPUT LIMITED TO 250 MICROAMPS WHEN OUTPUT IS POSITIVE AND 25 mA WHEN OUTPUT IS NEGATIVE.

**BOX TAMPER**  
THESE PINS CAN BE PREPROGRAMMED AS A NORMALLY CLOSED BOX TAMPER CIRCUIT. SEE PROGRAMMING LOC. 300. MOMENTARILY SHORTING THE REMOTE ARM PINS WILL ARM AND DISARM THE CONTROL PANEL.

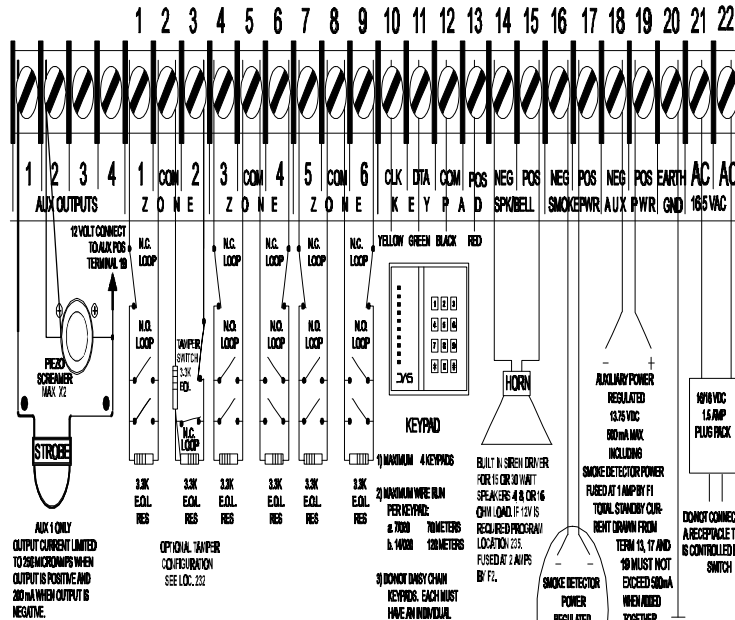


1. ALL UNUSED ZONES MUST HAVE E.O.L. RESISTOR ATTACHED.
2. MINIMUM LOOP RESISTANCE 300 OHMS



2 CENTER PINS - LINE IN  
2 OUTER PINS LINE OUT

**WARNING - TO PREVENT THE RISK OF ELECTRIC SHOCK ALWAYS DISCONNECT THE TELEPHONE LINE PRIOR TO SERVICING**



ZONE 1	
ZONE 2	
ZONE 3	
ZONE 4	
ZONE 5	
ZONE 6	



**DIRECT ALARM SUPPLIES PTY LTD**  
INSTALLATION ASSISTANCE NUMBER  
1 800 252213

**LIGHTNING PROTECTION**  
THE CONTROL PANEL MUST BE EARTH GROUNDING FOR LIGHTNING PROTECTION TO WORK EFFECTIVELY. THE GROUND CONNECTION SHOULD BE TO A VERIFIED COLD WATER GROUND PIPE OR A DESIGNATED BRONZE METAL ROD TO 100 LBS. USE MINIMUM 14 GAUGE WIRE.

**BATTERY CAPACITY FOR EMERGENCY STANDBY AT LEAST 4 HOURS. CONTROL PANEL DRAWS 80 mA. IN STANDBY, MAXIMUM BATTERY CHARGING CURRENT 370 mA.**

**TERMINAL DESCRIPTION**

TERMINAL NO.	DESCRIPTION
AUX OUTPUTS 1	Programmable Auxiliary Output Terminal. Current limited to 250 mA positive and 200 mA negative. This Auxiliary output is normally used to connect the negative lead of the strobe. The positive lead of the strobe can be connected to any of the positive terminals.
2 - 4	This Auxiliary output is normally used to connect the negative lead of the siren or screamer. The positive lead of the screamer can be connected to any of the positive terminals. Up to two D.C. Sirens or Screamers can be connected to this terminal.
ZONES 1	Connect one side of zone 1 loop. Other side of loop to common terminal 6. Open or short causes alarm.
COM 2	Common (-) Terminal Connect one side of zone 2 loop. The other side of loop to common terminal 6. Open or short causes alarm.
3 - 5	See Terminal Drawing and repeat the above sequence for zones 3-5.
6	Zone 6 may be used as part of a two wire smoke detector loop. J8 must be set for two wire smoke detector loop. For normal zone operation, J9 must be set. <b>NOTE: Zone 6 is only compatible with DAS approved two wire smoke detectors.</b>
KEYPAD CLOCK, DATA, COM, POS	Connect code pad wires as follows; yellow to CLOCK, green to DATA, black to COM, red to POS. 70 meters maximum run with 7/020 cable, 120 meters maximum run with 14/020 cable. Home run cable to each code pad.
SPK/BELL NEG(-) & POS(+)	Siren driver output to speaker(s), (speaker rating should be 15 watt at 8 or 16 ohm, or 30/40 watt at 4, 8, or 16 ohms). If siren driver disable is selected in location 235, output becomes voltage output, 12VDC, 1 Amp maximum load. <b>NOTE: A 3K3 resistor must be placed across these terminals when a 12 VDC siren or screamer is used without a horn speaker in parallel. If no resistor is used, you may experience voltage leakage into the siren / screamer which will cause these devices to output a small signal.</b>
SMOKE/PWR NEG(-) & POS(+)	Smoke detector power 12VDC, 100 mA maximum (For those jurisdictions which allow the Priority zone to be used with smoke detectors.)
AUX PWR NEG(-) & POS(+)	Auxiliary power, regulated 12VDC, 500 mA maximum.
EARTH/GND	Earth Ground, connect to a cold water pipe or 2 to 3 meters driven rod.
16.5 VAC	AC input, connect a 16.5V 1.5 Amp Plug Pack.
Battery leads	Standby battery leads black(-) and red(+) connect to a 12VDC lead acid rechargeable battery. Do not connect to a dry cell battery.

## FUSE DESCRIPTION

FUSE NO.	DESCRIPTION	
F1	1 AMP / Aux Power & Smoke Detector Power	
F2	2 AMP / Siren Driver	
F4	1 AMP / Code pad	

## PROGRAMMING

The DL150 can be placed into the "Program" mode by use of the new **FS4610 Smart Programmer**, or the original FS4597 programmer, or for Code Pad programming by utilizing the FS4534 LCD Code Pad (the preferred method) or the FS4623 LED Code Pad. These methods are described below.

### Using a Programmer

The FS4610 Smart Programmer has been designed to make programming of the DL150 simpler as well as more efficient for users. The FS4610 programmer features up to 4 resident standard programs to allow for separate system standardization. Plug the optional model FS4610 programmer into the 4-pin male outlet marked "program" on the DL150 P.C. Board.

### Using The LCD Code Pad

The most straightforward method of Code Pad programming is to utilize the FS4534 LCD Code Pad 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 Code Pad prompts.

### Using The LED Code Pad

The DL150 can also be programmed by the standard binary method of Code Pad programming described below. When the FS4623 LED Code Pad is used for programming, enter the factory default four digit "Go To Program" access code of [9] [7] [1] [3]. NOTE: The DL150 must be disarmed to gain access to programming with this code. After entry of this code, the DL150 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 on the following page.

### Important Function Codes

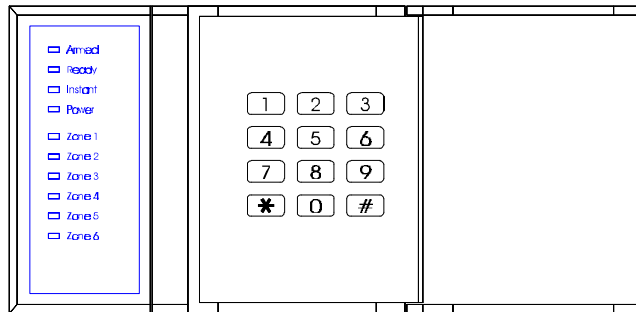
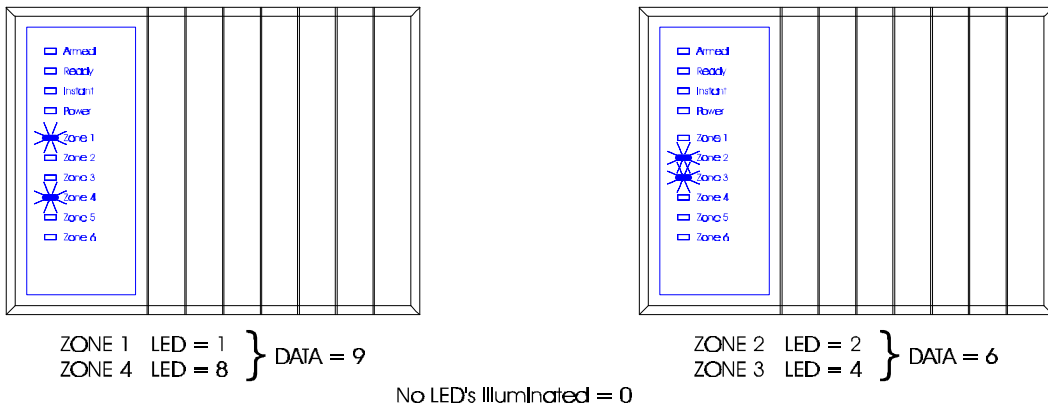
[9]-[5]-[0]-[#] When in the program mode, this function code can be used to write original factory default codes into the DL150.

[9]-[3]-[0]-[#] This function code is used to exit the programming mode after it was accessed via the Code Pad.

### !!! IMPORTANT !!!

Before programming the DL150 for the first time, enter the "Go To Program Code" [9]-[7]-[1]-[3] from the Code Pad, followed by the factory default function code [9]-[5]-[0]-[#]. The panel defaults will now match this installation manual and you may begin programming the control panel. When using an optional plug-in programmer which automatically enters the programming mode, the only entry necessary is [9]-[5]-[0]-[#] to load factory defaults.

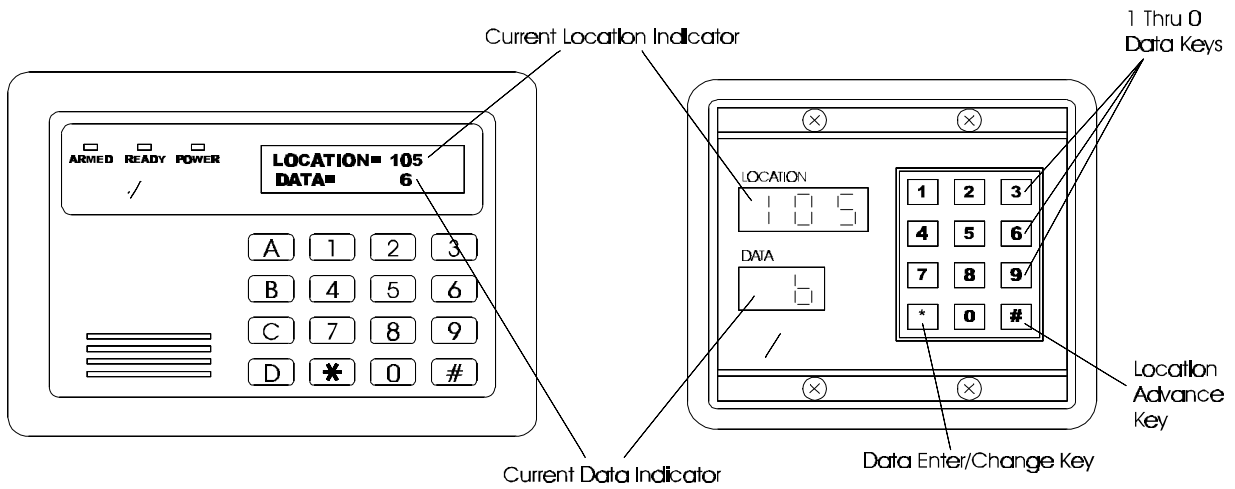
## PROGRAMMING EXAMPLE - FIGURE 2



To change or enter data in location shown, enter data and follow by the [ \* ] Key.

Pressing the [#] Key will advance to next location, or specific location can be reached by pressing location number followed by the [#] Key.

## PROGRAMMERS - FIGURE 3



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

Locations 000-003 contain the 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 - 15. The factory default code is [1]-[2]-[3]-[4].

### **LOCATIONS 004-055: PROGRAMMING THE ARM/DISARM CODE FOR USERS 2 THROUGH 14**

Locations 004-055 contain the arm/disarm codes for users 2 through 14. To program these codes, follow the instructions in the paragraph above. To disable these codes, program a "15" (factory default) as the first digit of the code. These codes can be changed in the RUN mode using the master code (refer to user's manual).

### **LOCATIONS 056-059: PROGRAMMING THE ARM/DISARM CODE FOR USER 15 (DURESS CODE)**

Locations 056-059 contain the arm/disarm code for user number 15 (Duress Code). To program this code, follow the instructions in the paragraph above. This code can be used as a duress code if so programmed in locations 160-161. Factory default for this code is "15", disabled.

### **LOCATION 060-063: GO TO PROGRAM CODE**

Locations 060-063 contain the "Go To Program" access code. Location 060 contains the first digit of the code and location 063 contains the fourth digit of the code. THE CODE MUST CONTAIN FOUR (4) DIGITS. With the DL150 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 060. The factory default setting is [9]-[7]-[1]-[3]. NOTE: The first digit of this code should not match the Quick-Arm digit. NOTE: If a "15" is programmed into location 60 to disable this code, programming can only be accessed through the downloading software, a plug in programmer or using the program code on a LCD code pad.

### **LOCATIONS 064-079: PRIMARY PHONE NUMBER**

Phone # 1 is programmed in successive locations beginning with location 064. Delays of four seconds can be programmed at any point in the phone number by programming a "13" in the appropriate location. If tone dialling is desired, program a "15" in the location where tone dialling should begin. If a "\*" or "#" are required in your phone number then a "11" = "\*" and "12" = "#". If the entire number should be tone dialling, program a "15" in location 064. Factory default is "14" in each location and the phone number is not enabled. A "14" indicates the end of the phone number. Example: If phone number is to be 027244211, and must be touch tone dialling, then this phone number would be programmed as:

[15]-[\*]-[#]-[0]-[\*]-[#]-[2]-[\*]-[#]-[7]-[\*]-[#]-[2]-[\*]-[#]-[4]-[\*]-[#]-[4]-[\*]-[#]-[2]-[\*]-[#]-[1]-[\*]-[#]-[1]-[\*]-[#]-[14]-[\*]-[#]. The "15" selects touch tone dialling, and the "14" ends the phone number. Phone numbers can be programmed by the user in the run mode when formats 3 (Pager) and 5 (Siren tone) are selected in location 084. Tone or pulse dialling must be programmed at this point, where a "15" in the first location of the phone number will enable tone dialling, and any other value will enable pulse dialling. Refer to the user manual for more detail.

### **LOCATIONS 080-083: PRIMARY ACCOUNT CODE**

The account code is sent when any phone number is dialled and is programmed in locations 080-083. If the account code is three digits long, use locations 080- 081- 082, and program a "0" in location 083. If a zero "0" is part of an account code, it should be programmed as a "10". Program a "0" to indicate the end of the account code. Example: Account number of 2090 would be entered as [2]-[\*]-[#]-[10]-[\*]-[#]-[9]-[\*]-[#]-[10]-[\*]-[#] (starting at location 080). Account code of 209 for low speed would be entered as [2]-[\*]-[#]-[10]-[\*]-[#]-[9]-[\*]-[#]-[0]-[\*]-[#] (starting at location 080).



## LOCATION 084: COMMUNICATOR FORMAT

The Communicator Format is transmitted when any phone number is dialled. Select a format from below, and program the appropriate number in this location.

DATA	FORMAT	DESCRIPTION
0	LOCAL ONLY	COMMUNICATOR IS DISABLED
1	ADEMCO CONTACT ID	DTMF FORMAT
2	ADEMCO 4/2 EXPRESS	DTMF FORMAT
3	PAGER FORMAT	REPORTS IN 4 + 2 FORMAT /OR DOMESTIC DIALLING -- <i>PHONE NUMBERS PROGRAMMABLE BY USER, REFER TO USER'S MANUAL FOR DETAILS.</i>
4	ADEMCO HIGH SPEED	DTMF FORMAT
5	SIREN TONE FORMAT	SIREN LIKE SOUND, DOMESTIC DIALLING -- <i>PHONE NUMBERS PROGRAMMABLE BY USER, REFER TO USER'S MANUAL FOR DETAILS.</i>
6	CADDX MODEM	PROPRIETARY
7	VOICE MODULE / RADIONICS EXTENDED SLOW	1800Hz TRANSMITTAL 2300Hz HANDSHAKE 20 PPS HEX EXT DOUBLE ROUND. <b>PULSE DIALLING MUST BE USED WHEN A VOICE MODULE IS CONNECTED.</b>
8	RADIONICS EXTENDED FAST	1800Hz TRANSMITTAL 2300Hz HANDSHAKE 40 PPS HEX EXT DOUBLE ROUND
9	RADIONICS EXTENDED FAST	1800Hz TRANSMITTAL 1400Hz HANDSHAKE 40 PPS HEX EXT DOUBLE ROUND
10	RADIONICS EXT FAST W/PARITY	1800Hz TRANSMITTAL 2300Hz HANDSHAKE 40 PPS HEX EXTENDED
11	ADEMCO/SILENT KNIGHT SLOW	1900Hz TRANSMITTAL 1400Hz HANDSHAKE 10 PPS DOUBLE ROUND PARITY
12	SILENT KNIGHT 4+2 FAST	1900Hz TRANSMITTAL 1400Hz HANDSHAKE 20 PPS DOUBLE ROUND PARITY
13	SESCO/FRANKLIN FAST	1800Hz TRANSMITTAL 2300Hz HANDSHAKE 20 PPS HEX DOUBLE ROUND
14	SIA	FSK FORMAT

Location 84 contains the Communicator Format used to transmit to the receiver or pager connected to any of the phone numbers. Consult the instructions for your central station receiver to determine which format is compatible. Select a format from the 14 listed above. If this location contains a "0", the built-in communicator will be disabled, and the DL150 will function as a local only control.

**PAGER FORMAT (3):** The Pager Format when selected will make all dial attempts programmed into location 128,(Dial attempt counter) with no delay between attempts. The reporting format will consist of the primary account code (location 080-083) followed by the event code and point number. For example, if the account code was programmed as 1234, and zone one alarm was reported, the transmission would look as follows: **1234 31** (1234) account code (3) event number programable for 0 to 15, and (1) point number programable for 0 to 15. The event code and point number location are programmed at each communicator code option. These options start at location 148 through to 196.

**SIREN FORMAT (5):** The Siren Format when selected will make all dial attempts programmed into location 128,(Dial attempt counter) following the selection made in location 127 (communicator dialling sequence controller). A siren-like tone will be transmitted for 40 seconds for each dial attempt. When the called party answers the incoming call, they will hear a siren tone for 4 seconds, followed by a 2-second pause. This will run for a period of 40 seconds per call. During any 2-second pause period, the call recipient can press the star [\*] key on their touch tone phone for a period of 1 second. Note: Not all touch tone phones can produce a continuous tone while their keys are depressed. If this is the case with the selected phone, it will not be able to kiss off the siren tone format.

## **LOCATIONS 085-100: SECONDARY PHONE NUMBER**

Phone # 2 is programmed in successive locations beginning with location 085. Delays of four seconds can be programmed at any point in the phone number by programming a "13" in the appropriate location. If tone dialling is desired, program a "15" in the location where tone dialling should begin. If a "\*" or "#" are required in your phone number then a "11" = "\*" and "12" = "#". If the entire number should be tone dialling, program a "15" in location 085. Factory default is "14" in each location and the phone number is not enabled. A "14" indicates the end of the phone number. Example: If phone number is to be 027244211, and must be touch tone dialling, then this phone number would be programmed as:

[15]-[\*]-[#]-[0]-[\*]-[#]-[2]-[\*]-[#]-[7]-[\*]-[#]-[2]-[\*]-[#]-[4]-[\*]-[#]-[4]-[\*]-[#]-[2]-[\*]-[#]-[1]-[\*]-[#]-[1]-[\*]-[#]-[14]-[\*]-[#]. The "15" selects touch tone dialling, and the "14" ends the phone number. Phone numbers can be programmed by the user in the run mode when formats 3 (Pager) and 5 (Siren tone) are selected in location 084. Tone or pulse dialling must be programmed at this point, where a "15" in the first location of the phone number will enable tone dialling, and any other value will enable pulse dialling. Refer to the user manual for more detail.

## **LOCATIONS 101-116: THIRD PHONE NUMBER**

Phone # 3 is programmed in successive locations beginning with location 101. Delays of four seconds can be programmed at any point in the phone number by programming a "13" in the appropriate location. If tone dialling is desired, program a "15" in the location where tone dialling should begin. If a "\*" or "#" are required in your phone number then a "11" = "\*" and "12" = "#". If the entire number should be tone dialling, program a "15" in location 101. Factory default is "14" in each location and the phone number is not enabled. A "14" indicates the end of the phone number. Example: If phone number is to be 027244211, and must be touch tone dialling, then this phone number would be programmed as:

[15]-[\*]-[#]-[0]-[\*]-[#]-[2]-[\*]-[#]-[7]-[\*]-[#]-[2]-[\*]-[#]-[4]-[\*]-[#]-[4]-[\*]-[#]-[2]-[\*]-[#]-[1]-[\*]-[#]-[1]-[\*]-[#]-[14]-[\*]-[#]. The "15" selects touch tone dialling, and the "14" ends the phone number. Phone numbers can be programmed by the user in the run mode when formats 3 (Pager) and 5 (Siren tone) are selected in location 084. Tone or pulse dialling must be programmed at this point, where a "15" in the first location of the phone number will enable tone dialling, and any other value will enable pulse dialling. Refer to the user manual for more detail.

## **LOCATION 117-126: RESERVED**

## **LOCATIONS 127: COMMUNICATOR DIALLING SEQUENCE CONTROLLER**

The number programmed into this location determines the sequence and method the communicator will utilize when attempting to communicate a given event. Use the table below to build the appropriate number. Add the number(s) associated with the desired features and program the sum in this location. The default for this location is "7". Note. When Pager (3) format is selected in location 084, it will override the options programmed in this location. Refer to location 084 for more detail.

<b>DATA</b>	<b>DESCRIPTION</b>
"1"	Alternates between phone number #1, phone number #2 and phone number #3 in increments of one (1) call to each, until the selected number of dial attempts has been made to each number. Each dial attempt is equal to the sum of phone numbers programmed. For example, if two (2) dial attempts are programmed in location 128, and phone numbers 1, 2, and 3 are programmed, there would be a total of 6 dial attempts made, two (2) attempts to each number.
"2"	The communicator attempts each phone number once and then goes into Antijam for 90 seconds before it continues with its next attempt.
"4"	The communicator completes the number of dial attempts programmed in the number of dial attempts location (128). If unsuccessful, it will delay 5 minutes and attempt the same number of dial attempts once again. If the communicator is still unsuccessful, a "Fail to Communicate" code will be reported with the next successful communication. If this option is not selected, the communicator will only attempt to communicate for the number of attempts programmed into location (128). If these attempts are completed unsuccessfully, the communicator will report a "Fail To Communicate" code at the next successful communication.

### **LOCATION 128: DIAL ATTEMPTS**

Location 128 contains the number of dial attempts (1 to 15 attempts) the communicator will try for each phone number programmed before ending the notification process. Each dial attempt is equal to the sum of phone numbers programmed. Factory default is "6". The communicator will make 1 attempt to the first number, 1 attempt to the second number (if programmed), and 1 attempt to the third phone number (if programmed), until a total of "6" attempts is made to each phone number programmed. A 90 second Antijam is performed at the end of each group of dial attempts, and if all attempts are unsuccessful, a 5-minute delay will occur before the number of dial attempts are retried. **Note:** The value in the phone sequence controller (location 127) may alter this sequence.

### **LOCATION 129: NUMBER OF RINGS TO ANSWER A DOWNLOAD CALL**

Location 129 contains the number of rings a DL150 must detect before answering the telephone when initiating a download session. If a number from "1" to "15" is entered in this location, the DL150 will answer after the number of rings entered in this location has been detected. If a "0" is programmed into this location the DL150 will not answer the call and Rings To Answer is disabled. **Note:** If a value is programmed into location 130 (Number of calls to answer download call) the call count must have also been reached before the DL150 can initiate a download session. Default for this location is "0" disabled.

### **LOCATION 130: NUMBER OF CALLS TO ANSWER A DOWNLOAD CALL**

Location 130 contains the number of calls the DL150 must detect before accepting the Number of Rings programmed in location 129). A call is satisfied by the DL150 detecting one (1) or more rings per call and then a 8 second period with no ring. The next call must then be made within a 45-second window. Example: If three (3) calls are programmed in location 130, the DL150 must receive 3 calls which exceed 1 ring with a delay of no less than 8 seconds between each call and no more than 45 seconds between each call. On the fourth call, the Number of Rings programmed in location 129 must be reached before the DL150 can initiate a download session. This feature can not be selected if Answering Machine Defeat in location 131) is enabled.

### **LOCATION 131: ANSWERING MACHINE DEFEAT**

Location 131 contains the number of rings (maximum 3) or less the control must see before it starts a 45-second defeat timer. To defeat an answering machine or fax, two (2) 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. There must be at least 8 seconds delay between the first and second call to allow the DL150 to determine that there are no more rings coming from the first call. To disable this feature program a "0" into this location. Options for this location are "1" "2" or "3". **(Default "0" disabled.) Note:** This feature must not be used when the control is connected to a phone line that may experience call traffic, such as described above, which may cause the control to answer normal incoming calls. If this feature is enabled, Number Of Calls To Answer A Download Call in location 130 will be disabled.

### **LOCATION 132: ALL ABORT ENABLE**

Programming a "1" in location 132 will cause the communicator to abort its report at the end of an attempt in progress, or instantly if an attempt has not begun, if a valid code is entered. All 24-hour zones and codepad-activated events will also abort. This feature only operates when Pager (3) and Siren Tone (5) Formats are selected in location 084. Default for this location is "0", all abort disabled.

### **LOCATION 133: DELAY BEFORE DIAL TIME**

Location 133 contains the number of 2-second increments in the Delay Before Dial Time. The Delay Before Dial Time can be programmed in 2-second increments from 2 to 30 seconds (1 =2 seconds through "15" = 30 seconds). For example, programming a "4" in this location will produce a Delay Before Dial Time of eight seconds. If a valid code is entered within the delay time programmed, the dialler will abort any communicator report which may be generated. 24 hour zones and duress alarms will have no delay time. The default Delay Before Dial Time is "0", no delay time before dialling.

### **LOCATION 134: COMMUNICATOR ZONE ALARM REPORT CONTROLLER**

If a "1" is programmed in location 134, the communicator will only report once per zone during each arming cycle. The zone alarm restore code (if programmed in location 193) will be reported at the Opening (Disarm) time. Factory default is "0", and this feature is not enabled. It will report zone alarms and restores (if programmed) as they physically occur. If a value from 2 through to 15 is entered, then this value would represent the additional number of zone alarm reports each zone can share before that zone is locked out. A zone trip will not be subtracted from the number count until the zone has tripped more than once. Once a zone is locked out, the final zone alarm restore code (if programmed in location 193) will be reported at the Opening (Disarm) time.

VALUE	DESCRIPTION
0	UNLIMITED COMMUNICATOR
1	LIMITED COMMUNICATOR TO ONCE PER ZONE
2-15	THE NUMBER OF DIAL ATTEMPTS THE DL150 CAN MAKE AFTER A ZONE HAS MADE ITS OWN DIAL ATTEMPT

### **LOCATIONS 135: CALLBACK TELEPHONE NUMBER CONTROL**

The number programmed in location 135 controls the use of the Callback Telephone Number. This number is programmed in locations 008 - 023 of the download section and must be programmed for location 135 to have an effect. The Callback Telephone Number will be used according to the following binary scale.

VALUE	DESCRIPTION
1	THE DL150 WILL NOT USE THE CALLBACK NUMBER FOR A DOWNLOAD SESSION.
2	THE [*]-[9]-[8]-[#] SITE INITIATED DOWNLOAD IS ENABLED.
4	CALLBACK AT AUTOTEST INTERVALS ENABLED AND PERFORMS AUTOMATIC FUNCTION SELECTED IN THE DASLOAD DOWNLOAD SOFTWARE.

### **LOCATION 136: RING DETECT ADJUST**

Programming a "6" thru "12" in location 136 may assist, if difficulties are experienced with the DL150 answering an incoming call. This will make the ring detect window wider so that a greater number of exchange types and ring frequencies can be catered for. Note: "6" is most sensitive and "12" is least sensitive. Caution must be taken when programming this location the DL150 does not become too sensitive to incoming calls.

### **LOCATION 137: TELEPHONE LINE MONITOR**

Location 137 is used to program the Telephone Line Monitor. Select a number from the table below which corresponds to the activation required for your installation. Factory default is "0" and this feature is not enabled. NOTE: When using a phone line monitor, it is suggested that a delay be programmed into location 138 to delay alarm activation upon phone line fault. This could eliminate the possibility of a false alarm being created due to phone line maintenance performed by the telephone company, which is often performed during late night or early morning hours.

VALUE	DESCRIPTION
"0"	DISABLED
"1"	ENABLED - SILENT MODE
"3"	ENABLED - ACTIVATE SIREN ONLY
"5"	ENABLED - ACTIVATE KEYPAD SOUNDER ONLY
"7"	ENABLED - ACTIVATE SIREN & KEYPAD SOUNDER
"9"	ENABLED - SILENT MODE (ARMED ONLY)
"11"	ENABLED - ACTIVATE SIREN ONLY (ARMED ONLY)
"13"	ENABLED - ACTIVATE KEYPAD SOUNDER ONLY (ARMED ONLY)
"15"	ENABLED - ACTIVATE SIREN & KEYPAD SOUNDER (ARMED ONLY)

### **LOCATION 138: TELEPHONE LINE MONITOR DELAY**

Location 138 contains the number of 10-second increments in the Telephone Line Monitor Delay before phone line fault is activated. The Telephone Line Monitor Delay is used to overcome unnecessary telephone line faults caused by the momentary removal of the DL150 phone line socket. **THE MINIMUM DELAY TIME IS 20 SECONDS, THE BUILT-IN 20-SECOND DELAY TIME MUST BE ADDED TO THE VALUE SELECTED IN THIS LOCATION.** The Telephone Line Monitor Delay can be programmed in 10 second increments from 0 to 150 seconds ("0" = 0 seconds through "15" = 150 seconds). For example, programming a "2" in this location will produce a Telephone Line Monitor Delay of 40 seconds. Programming a "6" in this location will produce a Telephone Line Monitor Delay of 80 seconds. The phone line fault condition will not restore until the phone line is restored for the same period of time as programmed in this location. Factory default is "1" for 30 seconds delay.

### **LOCATION 139: FAILED DIAL ATTEMPT COUNTER**

The number programmed in location 139 (1 to 15) will represent the number of failed dial attempts made by the DL150 before the action programmed in location 137 is activated. Factory default is "0" and this feature is not enabled. This feature can be used with a normally silent alarm activation that may require an audible action after a number of failed dial attempts.

### **LOCATION 140-147: RESERVED**

### **LOCATION 148-149: PROGRAMMING THE COMMUNICATOR CODE FOR ZONE 1**

Locations 148-149 contain the Communicator Code to be reported each time zone 1 creates an alarm. Location 148 contains the event code, and location 149 contains the point number. When using Ademco High Speed, program a one (1) in the second location to enable this report; a "1555 5555 7" is reported. When Contact ID is selected, program the event code with the required event code from appendix 1 to enable this report event. Programming a three (3) in the event code will select an event "130 - Burglary" to be reported. The data in the point number must be left at default or changed to whatever zone number that is to be reported.

### **LOCATION 150-151: PROGRAMMING THE COMMUNICATOR CODE FOR ZONE 2**

Locations 150-151 contain the Communicator Code to be reported each time zone 2 creates an alarm. Location 150 contains the event code, and location 151 contains the point number. When using Ademco High Speed, program a two (2) in the second location to enable this report; a "5155 5555 7" is reported. When Contact ID is selected, program the event code with the required event code from appendix 1 to enable this report event. Programming a three (3) in the event code will select an event "130 - Burglary" to be reported. The data in the point number must be left at default or changed to whatever zone number that is to be reported.

### **LOCATION 152-153: PROGRAMMING THE COMMUNICATOR CODE FOR ZONE 3**

Locations 152-153 contain the Communicator Code to be reported each time zone 3 creates an alarm. Location 152 contains the event code, and location 153 contains the point number. When using Ademco High Speed, program a three (3) in the second location to enable this report; a "5515 5555 7" is reported. When Contact ID is selected, program the event code with the required event code from appendix 1 to enable this report event. Programming a three (3) in the event code will select an event "130 - Burglary" to be reported. The data in the point number must be left at default or changed to whatever zone number that is to be reported.

### **LOCATION 154-155: PROGRAMMING THE COMMUNICATOR CODE FOR ZONE 4**

Locations 154-155 contain the Communicator Code to be reported each time zone 4 creates an alarm. Location 154 contains the event code, and location 155 contains the point number. When using Ademco High Speed, program a four (4) in the second location to enable this report, a "5551 5555 7" is reported. When Contact ID is selected, program the event code with the required event code from appendix 1 to enable this report event. Programming a three (3) in the event code will select an event "130 - Burglary" to be reported. The data in the point number must be left at default or changed to whatever zone number that is to be reported.

### **LOCATION 156-157: PROGRAMMING THE COMMUNICATOR CODE FOR ZONE 5**

Locations 156-157 contain the Communicator Code to be reported each time zone 5 creates an alarm. Location 156 contains the event code, and location 157 contains the point number. When using Ademco High Speed, program a five (5) in the second location to enable this report; a "5555 1555 7" is reported. When Contact ID is selected, program the event code with the required event code from appendix 1 to enable this report event. Programming a three (3) in the event code will select an event "130 - Burglary" to be reported. The data in the point number location must be left at default or changed to whatever zone number that is to be reported.

## **LOCATION 158-159: PROGRAMMING THE COMMUNICATOR CODE FOR ZONE 6**

Locations 158-159 contain the Communicator Code to be reported each time zone 6 creates an alarm. Location 158 contains the event code, and location 159 contains the point number. When using Ademco High Speed, program a six (6) in the second location to enable this report; a "5555 5155 7" is reported. When Contact ID is selected, program the event code with the required event code from appendix 1 to enable this report event. Programming a three (3) in the event code, will select an event "130 - Burglary" to be reported. The data in the point number must be left at default or changed to whatever zone number that is to be reported.

## **LOCATION 160-161: PROGRAMMING THE DL150 FOR DURESS CODE CAPABILITY**

The DL150 has the ability to report a Duress Code when the system is armed or disarmed with user code number 15 and a duress communicator code is programmed in locations 160-161. Location 160 contains the event code, and location 161 contains the point number. When using Ademco High Speed, program a one (1) in the second location to report a "1555 5555 1" - Duress. When Contact ID is selected, program a one (1) in the event code to report an event "121 - Duress". The Open/Close report will accompany the Duress report complete with the user number to indicate that an Open or Close was performed under Duress. No restore code is reported for this event. If both locations are "0", the Duress Code Capability is disabled and user code number 15 can only be used as a standard arm/disarm code.

## **LOCATION 162-163: PROGRAMMING FOR AUXILIARY 1, [1] & [3] DOUBLE KEYPRESS**

The DL150 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 code pad. The desired reporting code is programmed in locations 162-163. Location 162 contains the event code, and location 163 contains the point number. When using Ademco High Speed, program a one (1) in the second location to report a "1555 5555 1" - Duress. When Contact ID is selected, program a one (1) in the event code to report an event "110 - Fire". If activated, the siren can be silenced by entering any arm/disarm code. No restore code is reported for this event. If both locations are "0", the Auxiliary 1 Double Keypress is disabled.

## **LOCATION 164-165: PROGRAMMING FOR AUXILIARY 2, [4] & [6] DOUBLE KEYPRESS**

The DL150 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 code pad. The desired Auxiliary 2 code is programmed in locations 164 - 165. Location 164 contains the event code, and location 165 contains the point number. When using Ademco High Speed, program a one (1) in the second location to report a "1555 5555 1" - Duress. When Contact ID is selected, program a one (1) in the event code to report an event "100 - Medical". If activated, the code pad sounder can be silenced by entering any Arm/Disarm code. No restore code is reported for this event. If both locations are "0", Auxiliary 2 Double Keypress is disabled.

## **LOCATION 166-167: PROGRAMMING FOR AUXILIARY 3, [7] & [9] DOUBLE KEYPRESS**

The DL150 has the ability to report an Auxiliary 3 code each time the [4] and [6] keys are pressed simultaneously on the code pad. The desired Auxiliary 3 code is programmed in locations 166-167. Location 166 contains the event code, and location 167 contains the point number. When using Ademco High Speed, program a one (1) in the second location to report a "1555 5555 1" - Duress. When Contact ID is selected, program the event code with the required event code from appendix 1 to enable this report event. Programming a "15" in location 166 will report an event "602 - Manual Autotest". No restore code is reported for this event. If both locations are "0", Auxiliary 3 Double Keypress is disabled.

## **LOCATION 168-169: PROGRAMMING FOR CODE PAD PANIC, [\*] & [#] DOUBLE KEYPRESS**

The DL150 has the ability to report a Code Pad Panic code and activate the Burg siren each time the [\*] and [#] keys are pressed simultaneously on the code pad. The desired Code Pad Panic code is programmed in locations 168-169. Location 168 contains the event code, and location 169 contains the point number. When using Ademco High Speed, program a one (1) in the second location to report a "1555 5555 1" - Duress. When Contact ID is selected, program a one (1) in the event code to report an event "120 - Code Pad Panic". If activated, the siren can be silenced by entering any Arm/Disarm code. No restore code is reported for this event. If both locations are "0", the Code Pad Panic Double Keypress is disabled.

### **LOCATION 170-171: PROGRAMMING THE CODE PAD TAMPER FEATURE**

The DL150 has an optional Code Pad Tamper feature that, when enabled, will lock out the code pads for 1 minute if 30 random keypresses are made without producing a valid code. The desired tamper code should be programmed in locations 170-171. If the control is not programmed for local only, the tamper will be communicated. Location 170 contains the event code, and location 171 contains the point number. When using Ademco High Speed, program a one (1) in the second location to report a "5555 5551 7" - Zone 8 Alarm. When Contact ID is selected, program a one (1) in the event code to report an event "137 - Code Pad Tamper". No restore code is reported for this event. If both locations are "0", the tamper feature will not be enabled or reported.

### **LOCATION 172-173: PROGRAMMING TO REPORT DOWNLOADING COMPLETE**

Locations 172-173 contain the communicator report 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 172 contains the event code, and location 173 contains the point number. When using Ademco High Speed, program a one (1) in the second location to report a "5515 5555 6". When Contact ID is selected, program a one (1) in the event code to report an event "412 - Download Complete". If locations 172-173 are "0", this report is disabled.

### **LOCATION 174-175: PROGRAMMING FOR AUTOTEST REPORTS**

The DL150 has the ability to send autotest reports hourly or once a week. Locations 174-175 contain the communicator codes sent for autotest. Location 174 contains the event code, and location 175 contains the point number. When using Ademco High Speed, program a one (1) in the second location to report a "5555 5555 9". When Contact ID is selected, program a one (1) in the event code to report an event "602 - Autotest". If locations 174-175 are "0", Autotest is disabled. (See also location 272-281).

### **LOCATIONS 176-177: FAIL TO COMMUNICATE COMMUNICATOR CODES**

The DL150 has the ability to report a Fail To Communicate code to the base station if a report fails to get through to the base in its pre-determined number of dial attempts. After a report has failed to communicate to the base station the DL150 will store a Fail To Communicate code. When the very next report is communicated to the base the Fail To Communicate will be reported. When using Ademco High Speed, program a one (1) in the second location to report a "5555 5555 9" - Auto Test. When Contact ID is selected, program a "1" in the event code to report event "354 - Fail to Communicate". No restore code is reported for this event. If a "0" is programmed, Fail to Communicate is disabled.

### **LOCATIONS 178-179: BOX TAMPER COMMUNICATOR CODES**

The DL150 has the ability to report a Box Tamper if the tamper input changes from a normally closed state to open circuit. The desired communicator code must be programmed into these locations. When Contact ID is selected, program a "1" in the event code to report event "137 - Box Tamper". When using Ademco High Speed, program a one (1) in the second location to report a "5555 5555 9" - Box Tamper. By enabling the Box Tamper event code it will change the remote arming pins on the DL150 PCB to a box tamper input. The remote arm pins are located at the center of the DL150 PCB. When box tamper is enabled in this location, the remote arming pins will become a normally closed circuit and must be open circuit for activation. If a "0:0" is programmed, Box Tamper is disabled. Refer to location 209 (Tamper Sounder Controller) to enable the Box Tamper feature.

### **LOCATIONS 180-181: SIREN FAULT**

The DL150 has the ability to report a Siren Fault if the wires to the siren are cut or the siren fuse blows. Locations 180-181 contain the communicator codes sent for Siren Fault. Location 180 contains the extended communicator code and location 181 contains the standard communicator code. When using Ademco High Speed, program a one (1) in the second location to enable this report; a "5555 5555 9" is reported. When Contact ID is selected, program a one (1) in the event code to report an event "321 - Siren Trouble". If locations 180-181 are "0", Siren Fault is disabled.

### **LOCATIONS 182-183: AUXILIARY FUSE**

The DL150 has the ability to send Auxiliary Fuse reports if the keypad or auxiliary power fuse is blown. Locations 182-183 contain the communicator codes sent for system trouble. Location 182 contains the event code and location 183 contains the point number. When using Ademco High Speed, program a one (1) in the second location to enable this report, a "5555 5555 9" is reported. When Contact ID is selected, program a one (1) in the event code to report an event 300 - "System Trouble". If locations 182-183 are "0", Auxiliary Fuse is disabled. Fuse 2 (siren fuse) will not report a fuse fail report.

### **LOCATIONS 184-185: AC POWER FAIL COMMUNICATOR CODES**

The DL150 has the ability to report an AC Power Loss code to the base station after the power has been off for a selected number of minutes from 0 to 15 (see location 241). The desired communicator code must be programmed into these locations. When Contact ID is selected, program a "1" in the event code to report event "301 - AC Power Fail". When using Ademco High Speed, program a one (1) in the second location to report a "1555 5555 6" - AC Power Fail. If "0" is programmed, AC Power Fail is disabled.

### **LOCATIONS 186-187: LOW BATTERY COMMUNICATOR CODES**

The DL150 has the ability to report a Low Battery code to the base station when AC power has been lost and the battery has discharged down to 10.3 Volts. Low battery will also report if the Dynamic Battery Test fails. The desired communicator code must be programmed into these locations. When Contact ID is selected, program a "1" in the event code to report event "302 -Low Battery" or "309- Fail Dynamic Battery Test". When using Ademco High Speed, program a one (1) in the second location to report a "5155 5555 6" - Low Battery and Fail Dynamic Battery Test. If a "0" is programmed, Low Battery is disabled.

### **LOCATION 188: AC POWER RESTORE COMMUNICATOR CODE**

The DL150 has the ability to report to the base station when the AC power has been restored. Once the AC power has been restored to the DL150, there will be a delay time before the restore code will be sent to the base station. The time programmed into location 188 for AC Loss Delay will also be the restore delay. Program a "1" into this location to enable AC Power Loss Restore reports. Program a "0" into this location to disable restore reports. Default for AC Power Restore code is "1" enabled.

### **LOCATION 189: LOW BATTERY RESTORE COMMUNICATOR CODE**

The DL150 has the ability to send a restore code to the base station when the battery voltage is restored to normal operating level (above 10.3 volts). Program a "1" into this location to enable Low Battery Restore codes. Program a "0" into this location to disable Low Battery Restore codes. Default for Low Battery Restore code is "1" enabled.

### **LOCATION 190: PROGRAMMING FOR PRIORITY ZONE FIRE REPORTING**

The DL150 has the ability to report a trouble code each time a Fire zone opens. The desired trouble code is programmed in location 190. When using Ademco High Speed, program a one (1) in this location to enable this report. A one (1) will be displayed for the channel corresponding to the zone in Trouble alarm, i.e. "5155 5555 5" will be reported for zone two (2). When Contact ID is selected, program a one (1) in this location to report an event "380 - Zone Trouble". If this location contains a "0", the Fire Trouble will not be reported.

### **LOCATION 191: ZONE TAMPER CODE**

Location 191 is used to program reporting of the Zone Tamper code for zones (1 thru 6) when Contact ID and Ademco High Speed is selected. The Zone Tamper communicator code can be reported when a Double End Of Line Zone is in an Open/Closed circuit condition. When Contact ID is selected, program a one (1) in this location to report an event "137 - General Tamper". When using Ademco High Speed, program a one (1) in this location to enable this report. A one (1) will be displayed for the channel corresponding to the zone that is in Tamper, i.e. "5155 5555 5" will be reported for zone two (2). Default for Zone Tamper code is "0" disabled.

### **LOCATION 192: PROGRAMMING FOR ISOLATE REPORTING**

The DL150 has the ability to report an Isolate on zones 1-6. The desired Isolate code is programmed in location 192. When using Ademco High Speed, program a one (1) in this location to enable this report. A one (1) will be displayed for the channel corresponding to the zone that is Isolated, i.e. "5155 5555 3" will be reported for zone two (2). When Contact ID is selected, program a one (1) in this location to report an event "570 - Zone Isolate". If this location contains a "0", Zone Isolate will not be reported.

### **LOCATION 193: PROGRAMMING THE COMMUNICATOR CODE FOR ZONE RESTORE**

Location 193 contains the communicator code that will be sent for restore of a zones and or system report events (not including A.C. or Battery restores). When using Ademco High Speed, program a one (1) in this location to enable this report. When Contact ID is selected, program a one (1) in this location to enable this report. If this location contains a "0", no zone restores will be reported.



### **LOCATION 194: PROGRAMMING TO REPORT CLOSING**

The DL150 has the ability to report a Closing code each time the control is armed. Program a "1" in this location to enable this report. When using a one button "Quick Arm" code, user number 14 is reported. When reporting "Auto Arm", user number 13 is reported. When using keyswitch zone or remote arming pins, user number 12 is reported. The closing report will not be initiated until the end of the exit delay. When Ademco high speed is selected, a "U444 4444 4" event is reported. When Contact ID is selected, an event "401 - Open/Close" is reported. If this location contains a "0", Closing will not be reported.

### **LOCATION 195: PROGRAMMING TO REPORT OPENINGS**

The DL150 has the ability to report an Opening code each time the control is disarmed. Program a "1" in this location to enable this report. When using the remote arming input or keyswitch zone, user number 12 is reported. When Ademco high speed is selected, a "U222 2222 2" event is reported. When Contact ID is selected, an event "401 - Open/Close" is reported. If this location contains "0", Openings will not be reported.

### **LOCATION 196: PROGRAMMING THE COMMUNICATOR CODE FOR CANCEL (EXCEPTION OPENING)**

Location 196 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). When using Ademco High Speed, program a one (1) in this location to enable this report. The opening event will be reported with the user code number used. When Contact ID is selected, program a one (1) in this location to report event "406 - Open". The opening event will be reported with the user code number used. This feature cannot be enabled when Open/Close reporting is also enabled. If this location contains a "0", Cancel is disabled. NOTE: When Cancel communicator reports a cancel code, all stored Restore codes will be cleared and not reported.

### **LOCATION 197-198: RESERVED**

### **LOCATION 199: TWIN TRIP ZONE SOUNDER CONTROL**

Location 199 controls the audible characteristic of the DL150 for the Twin Trip activation. Refer to location 225-230 for further details on a twin trip zone type. Twin Trip zones are also individually enabled in locations 183-190. The audible characteristic programmed will be activated when the first trip occurs on a Twin Trip zone. If a second trip occurs within the period programmed in location 200, or a continuous trip for more than 10 seconds occurs, the normal audible characteristic programmed for that zone type will override any options programmed in this location. Twin Trip zones can not be programmed for entry/exit zones. The audible characteristic will sound for the duration of the Siren Cutoff time programmed in location 206. Factory default is "0" (silent characteristics).

VALUE	SOUNDER CONTROL
0	SILENT
1	SIREN
2	CODE PAD SOUNDER
3	CODE PAD SOUNDER & SIREN

### **LOCATION 200: TWIN TRIP TIME PERIOD**

Location 200 contains the number of 1-minute increments in the Twin Trip Zone Time Period. The Twin Trip Zone Time Period can be programmed in 1-minute increments from 1 to 15 minutes ("1" = 1 minute through "15" = 15 minutes). The time programmed in this location will set the time period whereby two or more zones must trip before an alarm condition will be registered, or the one zone must trigger twice within this time period. Default is 5 minutes.

### **LOCATION 201: PRIMARY ENTRY TIME**

Location 201 contains the number of 5-second increments in the Entry Delay. The Entry Delay can be programmed in 5-second increments from 5 to 75 seconds ("1" = 5 seconds through "15" = 75 seconds). For example, programming a "2" in this location will produce a delay of 10 seconds. (Note: A "0" entry is treated as 0 seconds). Programming a "6" in this location will produce a delay of 30 seconds. The initiation of the entry time will produce a steady code pad sounder for the period of the entry delay. Factory default is 20 seconds.

### **LOCATION 202: PRIMARY EXIT TIME**

Location 202 contains the number of 10-second increments in the Primary 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. At the end of the Exit Delay, a one (1) second beep will sound at the code pad indicating the end of the Primary Exit Delay. Factory default is 60 seconds.

### **LOCATION 203: SECONDARY ENTRY TIME**

Location 203 contains the number of 10-second increments in the Secondary Entry Delay, when an entry delay is initiated by a zone type 7. This entry delay can be programmed in 10-second increments for 10 to 150 seconds ("1" = 10 seconds through "15" = 150 seconds). (Note: A "0" entry is treated as zero (0) seconds). Programming a "6" in this location will produce an entry delay of 60 seconds. The initiation of the entry time will produce a steady code pad sounder for the period of the entry delay. Factory default is 60 seconds.

### **LOCATION 204: SECONDARY EXIT TIME**

Location 204 contains the number of 10-second increments after arming, before zone trips will be recognized on a zone type 7. 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 zero (0) seconds). Programming a "6" in this location will produce an exit delay of 60 seconds. At the end of the exit delay, a one (1) second beep will sound at the code pad indicating the end of the Secondary Exit Delay. If the Secondary Exit Delay time in this location is less than or equal to, that of the Primary Exit Delay in location 201, then the Secondary Exit Delay time will follow the Primary Exit Delay time. Factory default is 60 seconds.

### **LOCATION 205: PARTIAL ARM TIME**

Location 205 contains the number of the 10 second increments in the **Partial Arm** Entry Delay time. The delay time can be programmed in 10-second increments from 10 to 150 seconds ("1" = 10 seconds through "15" = 150 seconds). For example, programming a 4 in this location will create a delay time of 40 seconds. Factory default is "3" (30 seconds). An "0" equals zero seconds, or instant.

### **LOCATION 206: SIREN CUT-OFF TIME**

Location 206 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 minutes through "15" = 30 minutes). For example, programming a "2" in this location will produce an Automatic Cutoff Time of 4 minutes. (Note: A "0" entry is treated as the factory default of 8 minutes). Programming a "5" in this location will produce an Automatic Cutoff Time of 10 minutes. NOTE: Please check your state regulations for the maximum siren time allowed by law.

### **LOCATION 207: AUTOMATIC STROBE CUT-OFF TIME**

Location 207 contains the number of 4-hour increments in the Automatic Strobe Cutoff Time. The Automatic Strobe Cutoff Time can be programmed in 4-hour increments from 4 to 60 hours ("1" = 4 hours through "15" = 60 hours). For example, programming a "2" in this location will produce an Automatic Strobe Cutoff Time of 8 hours. Note that the default is "0" which will latch the strobe output until a valid code is entered.

### **LOCATION 208: SIREN OUTPUT CONTROLLER**

If a "1" is programmed in location 208, the siren output will activate once per zone during each arming cycle. When a "0" is programmed in this location the system siren will be unlimited per zone. If a value from 2 to 15 is entered, then this value would represent the number of zone siren activations each zone can share before that zone is locked out. If a "1" is programmed in location 134, the communicator will only report once per zone during each arming cycle.

VALUE	DESCRIPTION
0	UNLIMITED SIRENS
1	LIMITED SIREN TO ONCE PER ZONE
2-15	THE NUMBER OF SIREN ATTEMPTS THE DL150 CAN MAKE AFTER A ZONE HAS MADE ITS OWN SIREN ATTEMPT

### **LOCATION 209: TAMPER SOUNDER CONTROL / BOX TAMPER ENABLE**

Location 209 controls the audible characteristic of the DL150 for any Zone Tamper, or Box Tamper activation. To select one of the options available program one of these characteristics listed in the table below in location 209. Factory default is "4".

VALUE	TAMPER SOUNDER CONTROL
0	SILENT
1	SIREN
2	CODE PAD SOUNDER
4	ENABLE BOX TAMPER

### **LOCATION 210: RADIO REMOTE ARMING**

Location 210 enables the Radio Remote Arming feature for the DL150. If a "1" is programmed in this location, the siren and the 12 volt siren outputs will pulse for a single 50 mS burst, when the DL150 is disarmed. The speaker output will also pulse two 50 mS bursts when the DL150 is armed. If a "2" is programmed in this location, the strobe output will flash for a single 2-second burst when the DL150 is disarmed, and pulse two 2-second bursts when the DL150 is armed. This output will not activate for Partial Arming, Disarming or when a code pad is used to arm the DL150. If the Opening / Closing communicator codes are enabled, Radio Remote Arming / disarming will report via user code 12. Factory default is a "0" and the Radio Remote Arming feature is disabled.

VALUE	DESCRIPTION
1	SIREN PULSES FOR ARMING / DISARMING
2	STROBE FLASHES FOR ARMING / DISARMING
3	SIREN PULSES AND STROBE FLASHES FOR ARMING / DISARMING

### **LOCATION 211: PROGRAMMING FOR SILENT PANIC/HOLD-UP**

Location 211 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 DL150 will have an audible Panic/Hold-up output.

### **LOCATION 212: SIREN TEST / MOMENTARY SIREN ACTIVATE 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 212. When the siren/bell is activated by pressing the [1] and [7] keys simultaneously, the communicator will not report a message, and the siren/bell can be silenced by entering an arm/disarm code.

VALUE	DESCRIPTION
1	ACTIVATION BY PRESSING [1] AND [7] KEYS SIMULTANEOUSLY
2	MOMENTARY ACTIVATION OF SIRENS AT ARMING
4	MOMENTARY ACTIVATION OF SIRENS AT END OF EXIT DELAY
8	MOMENTARY ACTIVATION OF SIRENS AT KISSOFF OF A CLOSING REPORT

## LOCATIONS 213-218: PROGRAMMING THE ZONE TYPES FOR ZONES 1 - 6

Locations 213-218 contain a number identifying the characteristics of zones 1 through 6. Location 213 corresponds to zone 1 and location 218 corresponds to zone 6. Other zone characteristics can be found in the table on this page.

DATA	AVAILABLE ZONE TYPES
"1"	<b>DAY ZONE</b> - When armed, a trip produces an instant alarm. When disarmed, a trip activates the code pad sounder.
"2"	<b>24 HOUR</b> - A trip on a 24-Hour zone produces an instant alarm when armed or disarmed.
"3"	<b>ENTRY/EXIT</b> - A trip will start entry delay. This zone type may be the only one faulted while arming if location 231 (auto isolation) is programmed with a value "2".
"4"	<b>KEY SWITCH</b> - A zone attached to a momentary key switch will cause the DL150 to arm or disarm when the zone is momentarily shorted from a sealed condition, i.e. a 3.3K resistor must be used to seal the zone for the feature to work. NOTE: Check the corresponding "Special Characteristics" for the selected zone. If the zone programmed to operate as a key switch type also has Partial Arm selected, i.e. "4" in "Special Characteristics", then the Key Switch will arm/disarm Partial Mode. If the Opening / Closing communicator codes are enabled, Key Switch arming/ disarming will report via user code 12.
"5"	<b>HANDOVER</b> - Interior zone that follows the entry delay zones. Instant alarm type unless an entry zone is faulted first. If location 231 (auto isolation) is programmed with a "2", this zone type may be the only one faulted while arming.
"6"	<b>INSTANT</b> - Produces an instant alarm if tripped when armed. Ignored when disarmed.
"7"	<b>24 HOUR SILENT</b> - A trip on a 24 hour silent zone will communicate to the central station when the DL150 is armed or disarmed, but not activate sirens.
"8"	<b>FIRE</b> - A short on a FIRE zone will create an alarm condition when the DL150 is armed or disarmed. An Open will create a <b>Trouble</b> condition. The code pad zone LED is steady for a Fire condition and flashing for a Trouble condition. After a fire activation, the [#] key must be pressed on the keypad to clear the condition and reset the fire zone.
"9"	<b>SECONDARY DELAY</b> - Like an Entry/Exit zone, but has its own independent delay time.

## LOCATIONS 219-224: ASSIGNING SPECIAL CHARACTERISTICS FOR ZONES 1-6

Locations 219 - 224 are used to assign zone characteristics for zones 1 through 6. Location 219 is for zone 1, and location 224 is for zone 6. Each zone can have any or all of the following characteristics regardless of the zone type selected in locations 213-218, excluding **Fire** zones, which cannot be **Isolated**. Factory default is "8" for each of these locations, meaning that **Zone Isolate Capability & Partial Arm** is enabled, and the other characteristics are not enabled. When **Partial Arm** is enabled, that zone is active in Partial Mode. Remove this option from the zone(s) which are to be isolated in Partial Mode. Note: Zone will not isolate in Partial Mode or Group Isolate if (8) **Zone Isolate Capability** is not enabled.

VALUE	CHARACTERISTIC	VALUE	CHARACTERISTIC
0	NO FEATURE SELECTED	8	ZONE ISOLATE CAPABILITY
1	CHIME ZONE	9	CHIME ZONE ZONE ISOLATE CAPABILITY
2	GROUP ISOLATE ZONE	10	GROUP ISOLATE ZONE ZONE ISOLATE CAPABILITY
3	CHIME ZONE GROUP ISOLATE ZONE	11	CHIME ZONE GROUP ISOLATE ZONE ZONE ISOLATE CAPABILITY
4	PARTIAL ARM ZONE (Active)	12	PARTIAL ARM ZONE (Active) ZONE ISOLATE CAPABILITY
5	CHIME ZONE PARTIAL ARM ZONE (Active)	13	CHIME ZONE PARTIAL ARM ZONE (Active) ZONE ISOLATE CAPABILITY
6	GROUP ISOLATE ZONE PARTIAL ARM ZONE (Active)	14	GROUP ISOLATE ZONE PARTIAL ARM ZONE (Active) ZONE ISOLATE CAPABILITY
7	CHIME ZONE GROUP ISOLATE ZONE PARTIAL ARM ZONE (Active)	15	CHIME ZONE GROUP ISOLATE ZONE PARTIAL ARM ZONE (Active) ZONE ISOLATE CAPABILITY

**LOCATIONS 225-230: REPORTING / SPECIAL CHARACTERISTICS FOR ZONES 1 - 6**

Locations 225-230 are used to assign communicator characteristics to individual zones 1 through 6. Location 225 is for zone 1, and location 230 is for zone 6. Each zone can have one, or a combination of these characteristics. Factory default for all zones is (8 + 4 = "12"). This means that each zone has **Restore Reporting (Value = 4)**, **Trouble Reporting (Value = 8)** enabled. It should be noted that these locations are used to enable individual zone report capability by zone. A reporting code must be programmed in the appropriate location to enable overall reporting capability of **Restore** reports (location 193) **Isolate** reports (location 190). Twin trip and Fast Loop (20 millisecond) Zones 1 through 6 are also enabled in these locations. Program Twin Trip (Value + 1) and Fast Loop (Value = 2) to enable these features.

VALUE	CHARACTERISTICS	VALUE	CHARACTERISTICS
0	NO FEATURE SELECTED	8	TROUBLE REPORT ENABLE
1	TWIN TRIP ENABLE	9	TWIN TRIP ENABLE TROUBLE REPORT ENABLE
2	FAST LOOP ( 20mS )	10	FAST LOOP TROUBLE REPORT ENABLE
3	TWIN TRIP ENABLE FAST LOOP	11	TWIN TRIP ENABLE FAST LOOP TROUBLE REPORT ENABLE
4	RESTORE REPORT ENABLE	12	RESTORE REPORT ENABLE TROUBLE REPORT ENABLE
5	TWIN TRIP ENABLE RESTORE REPORT ENABLE	13	TWIN TRIP ENABLE RESTORE REPORT ENABLE TROUBLE REPORT ENABLE
6	FAST LOOP RESTORE REPORT ENABLE	14	FAST LOOP TROUBLE REPORT ENABLE RESTORE REPORT ENABLE
7	TWIN TRIP ENABLE FAST LOOP RESTORE REPORT ENABLE	15	TWIN TRIP ENABLE FAST LOOP TROUBLE REPORT ENABLE RESTORE REPORT ENABLE

**TWIN TRIP:**

A Twin Trip zone requires two trips within the time programmed in location 200, or a continuous trip for more than ten seconds for an alarm activation. If a single trip on a Twin Trip zone was initiated, an alarm would only occur if any other zone has been in alarm, is still in alarm, or any other zone is tripped within the delay time set in location 200. The DL150 may have a combination of an audible alarm or code pad sounder after the first trip, but before the second trip. The Twin Trip Sounder Control is programmed in location 199. Reporting can only occur after the full alarm activation.

Note: Entry/Exit zone types can NOT be set for Twin Trip zones.

**LOCATION 231: AUTO ISOLATE**

Programming a "1" in location 231 will allow the DL150 to be armed without all the zones secure (no "Ready" LED illuminated). Any zones that are not secure at the end of the exit delay will be automatically isolated, but will de-isolate if they re-seal at any time during the armed period. Zones that are secure will be armed. Programming a "2" in this location will only allow any Entry/Exit or Handover zones to be unsealed before arming. At the end of the exit delay they will be automatically isolated if still unsealed, but will de-isolate if they re-seal at any time during the armed period. Factory default is "0", Auto Isolate disabled, and all zones must be secure before arming can occur.

VALUE	DESCRIPTION
0	ALL ZONE MUST BE SEALED BEFORE ARMING
1	ANY ZONE CAN BE FAULTED BEFORE ARMING
2	ONLY ENTRY/EXIT AND HANDOVER ZONES CAN BE FAULTED BEFORE ARMING

### **LOCATION 232: DUAL EOL**

Location 232 is used to enable the Dual EOL feature. Program a "1" in this location to enable Zone Tamper Monitoring for all zones other than keyswitch and fire zone types. Program a "0" to disable this feature.

### **LOCATION 233: PROGRAMMING THE QUICK ARM DIGIT [3]**

The DL150 can be programmed to "Quick Arm" with the digit [3] by programming a "1" in location 233. A "0" in this location will disable this feature. If the Closing communicator code is enabled, Quick Digit Arming will report via user code 14.

### **LOCATION 234: PARTIAL MODE SECURITY FEATURE / UNI ARM FEATURE**

Program a "1" in location 234 to enable the Partial Arm security feature. The Partial Mode security feature is the requirement to enter a full four-digit code to disarm from Partial Mode. If a "2" is programmed into this location, the DL150, once armed in the Full Mode, will check for a break of an entry/exit zone during the exit period. If a break occurs, the DL150 will arm in the Full Arm Mode. If no break is detected, the DL150 will arm in the Partial Mode. A "0" in this location will disable this feature.

VALUE	DESCRIPTION
0	PARTIAL MODE CAN BE DISARMED VIA DIGIT [2]
1	PARTIAL MODE CAN ONLY BE DISARMED WITH A FOUR DIGIT CODE
2	<b>ENABLES "UNI ARM"</b> - WHEN SYSTEM ARMED, EXIT ZONE IS CHECKED FOR FAULT CONDITION. IF FAULTED, SYSTEM FULLY ARMS. IF NOT FAULTED, SYSTEM ARMS IN PARTIAL MODE.

### **LOCATION 235: BUILT-IN SIREN DRIVER / 1 AMP VOLTAGE OUTPUT**

The built-in siren driver has a steady sound (for Fire zone type), and a yelp sound (for Burglary and Panic). Factory default enabling this feature is "0". If the built-in siren driver is NOT to be used, program a "1" in location 235. Terminals 16 & 17 will now output 1 Amp at 12VDC.

### **LOCATION 236: SMOKE POWER RESET AND/OR FIRE ALARM VERIFICATION**

Programming a "1" in location 236 will cause the DL150 (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 "Fire" 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 237: L.E.D. EXTINGUISH FEATURE**

Code pad LEDs (with the exception of the A.C. LED) will be extinguished after 60 seconds of code pad inactivity, if a "1" is programmed in location 237. The LEDs will become illuminated immediately upon a keypress or alarm condition.

### **LOCATION 238: NO ARMING WITH A ZONE ISOLATED**

If a "1" is programmed in location 238, the DL150 will not arm with any zone isolated. If programmed with a "0", up to five burglary zones can be isolated, and the DL150 can still be armed.

### **LOCATION 239: DYNAMIC BATTERY TEST CONTROL**

Location 239 is used to assign the Dynamic Battery Test Control for the DL150, which can be programmed for one or a combination of four options. If a "1" is programmed in this location, the battery voltage will be tested every 6 seconds for 50 mS for a missing or totally discharged battery. (This option does not perform a dynamic battery test). If a "2" is programmed in this location, the battery will be dynamically tested at arming for the time programmed in location 240. If a "4" is programmed in this location, the DL150 will inhibit arming with a low or lost battery. Factory default is "0" and Dynamic Battery Test will be performed at disarming for the period programmed in location 240. Note: Dynamic Battery Test can only occur once every 24-hour period. The beginning and end of this period is "00:00" hours. If location 240 contains a "0", then a Dynamic Battery Test will not be performed.

VALUE	DYNAMIC BATTERY TEST CONTROL	VALUE	DYNAMIC BATTERY TEST CONTROL
0	TEST AT DISARMING FOR THE TIME PROGRAMMED IN LOCATION 240	4	INHIBIT ARMING WITH A LOW BATTERY only for low battery or missing battery, not Dynamic battery fail.
1	TEST FOR 50 mS EVERY 6 SECONDS	5	TEST FOR 50 mS EVERY 6 SECONDS INHIBIT ARMING WITH A LOW BATTERY
2	TEST AT ARMING FOR THE TIME PROGRAMMED IN LOCATION 240	6	TEST AT ARMING FOR THE TIME PROGRAMMED IN LOCATION 240 INHIBIT ARMING WITH A LOW BATTERY
3	TEST FOR 50 mS EVERY 6 SECONDS TEST AT ARMING FOR THE TIME PROGRAMMED IN LOCATION 240	7	TEST FOR 50 mS EVERY 6 SECONDS TEST AT ARMING FOR THE TIME PROGRAMMED IN LOCATION 240 INHIBIT ARMING WITH A LOW BATTERY

### **LOCATION 240: DYNAMIC BATTERY TEST TIME DURATION**

The number programmed in location 240 will determine the number of minutes the DL150 will go into the Dynamic Battery Test Mode during each 24-hour period. This test removes the AC power input and causes the control to function with the system battery, thus verifying that the battery is capable of performing as designed during an actual power failure. This location is programmed in 1-minute increments from 1 to 15 minutes ("1" = 1 minute through "15" = 15 minutes). For example, if a "5" was programmed in this location, the Dynamic Battery Test will occur for 5 minutes if enabled in location 239. Factory default is "0" and this feature is disabled.

### **LOCATION 241: AC POWER FAIL REPORT DELAY**

The number programmed into location 241 represents the number of 1-minute increments the AC power is lost before a communication is initiated, from 1 to 15 minutes. Factory default is "1" which will delay AC power loss for 1 minute. The AC Power Restore, if enabled in location 188, will also delay reporting until after the number of minutes programmed in this location has elapsed. If a "0" is selected (instant) the delay will be approximately 20 seconds. This is to allow for transients and power surges.

### **LOCATION 242: POWER UP CONDITION**

If a "1" is programmed in location 242, the DL150 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 DL150 will maintain the condition it was in at power-down. A watchdog circuit reset will also cause the DL150 to reset to the selected condition.

### **LOCATION 243: POWER UP DELAY**

If a one "1" is programmed in location 243, the DL150 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 DL150 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.

## LOCATIONS 244-255: PROGRAMMING THE AUXILIARY OUTPUT OPTIONS

Locations 244-255 control the output options for the four auxiliary outputs. Each of the four outputs have three individual programming locations that will be referred to in this section as **DATA 1**, **DATA 2**, and **DATA 3**. There are 60 events or conditions that can be programmed to activate these four auxiliary outputs. The following descriptions of these data locations will help you to understand how to program each of these locations. Refer to the worksheet for a full list of individual locations.

**DATA 1 (Duration)** - The number programmed in the **Data 1** location represents the amount of time that a trigger output will remain activated. This duration time is selectable in 2-second increments, from 2 to 28 seconds. For example, programming a "5" in the Data 2 location will create a voltage trigger that would last for 10 seconds (2 x "5" = 10 seconds). Programming a "0" will cause the output to follow the condition. Programming a "15" will latch the trigger output and a valid user code must be entered to reset this condition. Programming selections for this location are the numbers "0" through "15". **NOTE:** If you want to change the increments from seconds to minutes, follow the programming instructions for location 265, and the duration time will be selectable from 2 to 28 minutes.

**DATA 2 (Category)** - The number programmed in the **Data 2** location will determine the category from which you will select an activation event. Refer to the following event table to select which category number to program in this location. Programming selections for this location are "0" through "3".

**DATA 3 (Event)** - The number programmed in the **Data 3** location will determine the actual event in which you wish to have the trigger activate upon. Refer to the event table to select which event number to program in this location. Programming selections for this location are "0" through "15".

<b>DATA 2 CATEGORY</b>	<b>DATA 3 EVENT</b>	<b>DESCRIPTION OF EVENT</b>
"0"	"0"	Any "FIRE ALARM".
	"1"	Any "PANIC ALARM".
	"2"	Any "BURGLARY ALARM".
	"3"	Any "TROUBLE CONDITION".
	"4"	Any "BYPASS REPORT"
	"5"	"STROBE" ( follows location 207)
	"6"	"BOX TAMPER" activation.
	"7"	"AC FAILURE"
	"8"	"DURESS" <b>(NO LATCHING OPTION)</b>
	"9"	"AUXILIARY 1" [1] & [3] Double Keypress
	"10"	"AUXILIARY 2" [4] & [6] Double Keypress
	"11"	"CODE PAD PANIC" [*] & [#] Double Keypress
	"12"	"CODE PAD TAMPER"
	"13"	"AUTOTEST"
	"14"	Any "FAILURE TO COMMUNICATE REPORT"
"15"	"CANCEL"	



DATA 2 CATEGORY	DATA 3 EVENT	DESCRIPTION OF EVENT
"1"	"0"	Activation of "PRIORITY (FIRE) SIREN"
	"1"	Activation of "BURGLARY SIREN"
	"2"	"ANY SIREN"
	"3"	"ARMED WITH ISOLATED ZONE(S)" (NO LATCHING OPTION)
	"4"	"ALARM MEMORY"
	"5"	"LOW BATTERY"
	"6"	"ENTRY DELAY TIME"
	"7"	"EXIT DELAY TIME" (NO LATCHING OPTION)
	"8"	"ENTRY AND EXIT DELAY TIME" (NO LATCHING OPTION)
	"9"	"PARTIAL LED" illumination.
	"10"	"ARMED LED" illumination. (NO LATCHING OPTION)
	"11"	"SECURE LED" illumination.
	"12"	"AC LED" illumination.
	"13"	"CODE PAD SOUNDER" activation. (CHIME)
	"14"	"FIRE LED" illumination.
"2"	"15"	"FIRE TROUBLE LED" illumination.
	"0"	"ENTRY OF ANY VALID CODE ENTRY"
	"1"	"ENTRY OF CODE 1"
	"2"	"ENTRY OF CODE 2"
	"3"	"ENTRY OF CODE 3"
	"4"	"ENTRY OF CODE 4"
	"5"	"ENTRY OF CODE 5"
	"6"	"ENTRY OF CODE 6"
	"7"	"ENTRY OF CODE 7"
	"8"	"ENTRY OF CODE 8"
	"9"	"ENTRY OF CODE 9"
	"10"	"ENTRY OF CODE 10"
	"11"	"ENTRY OF CODE 11"
	"12"	"ENTRY OF CODE 12"
	"13"	"ENTRY OF CODE 13"
"3"	"14"	"ENTRY OF CODE 14"
	"15"	"ENTRY OF CODE 15"
	"0"	"SMOKE DETECTOR POWER"
	"1"	"DYNAMIC BATTERY TEST"
	"2"	"LINE SEIZURE"
	"3"	"ANY OPEN"
	"4"	"ANY SHORT"

DATA 2 CATEGORY	DATA 3 EVENT	DESCRIPTION OF EVENT
	"5"	"ANY OPEN OR SHORT"
	"6"	"OPEN TIME (AUX OPEN TIME)"
	"7"	RESERVED
	"8"	"PHONE LINE FAULT"
	"9"	"AUTO ARM WARNING TIMER" activation

**LOCATION 256-259: AUXILIARY OUTPUT OPENING WINDOW**

To enable Event option "Open Time" (Category 3 / Event 6) as an auxiliary output to activate on a pre-determined time, a 24-hour (military) opening time must be programmed into locations 256-259. For example, to enter an opening time of 8:15am (08:15), program a "0" into location 256, an "8" in location 257, a "1" in location 258, and a "5" in location 259. Note: The Opening window time must not be later than the Closing window time.

**LOCATION 260-263: AUXILIARY OUTPUT CLOSING WINDOW**

To enable Event option "Open Time" (Category 3 / Event 6) as an auxiliary output to deactivate on a pre-determined time, a 24-hour (military) closing time must be programmed into locations 260-263. For example, to enter a closing time of 6:30pm (18:30), program a "1" into location 260, an "8" in location 261, a "3" in location 262, and a "0" in location 263. Note: The Closing window time must be later than the Opening window time.

**LOCATION 264: AUXILIARY OUTPUT INVERSION**

The auxiliary outputs of the DL150 are normally POSITIVE (+) going NEGATIVE (-). They can be changed to a normally NEGATIVE (-) going POSITIVE (+) by programming the appropriate number in this location. Auxiliary Output 1 has a value of "1", Auxiliary Output 2 has a value of "2", Auxiliary Output 3 has a value of "4", and Auxiliary Output 4 has a value of "8". The values for the outputs that you wish to change to NEGATIVE going POSITIVE must be added together and the total programmed in this location. For example, if you wished to make outputs 2 (=2) and 3 (=4) NEGATIVE going POSITIVE, you would program "6" (2+4=6) in this location. **NOTE: THE PINS ARE CURRENT LIMITED TO 250 mA POSITIVE AND 20 mA NEGATIVE.**

VALUE	OUTPUT INVERSION	VALUE	OUTPUT INVERSION
0	NO AUX INVERTED	8	INVERT AUX 4 OUTPUT
1	INVERT AUX 1 OUTPUT	9	INVERT AUX 1 & 4 OUTPUT
2	INVERT AUX 2 OUTPUT	10	INVERT AUX 2 & 4 OUTPUT
3	INVERT AUX 1 & 2 OUTPUT	11	INVERT AUX 1, 2 & 4 OUTPUT
4	INVERT AUX 3 OUTPUT	12	INVERT AUX 3 & 4 OUTPUT
5	INVERT AUX 1 & 3 OUTPUT	13	INVERT AUX 1, 3 & 4 OUTPUT
6	INVERT AUX 2 & 3 OUTPUT	14	INVERT AUX 2, 3 & 4 OUTPUT
7	INVERT AUX 1, 2 & 3 OUTPUT	15	INVERT AUX 1, 2, 3 & 4 OUTPUT

### **LOCATION 265: AUXILIARY OUTPUT MINUTES TIMING ENABLE**

The number programmed into this location will determine if the 4 auxiliary output(s) described in the above locations will create 2 to 28 second, or 2 to 28 minute voltage trigger outputs. If this location contains a "0" (factory default = "0"), the output duration time is computed in seconds. By adding the value that corresponds to each pin number in the table below, and programming the sum in this location, the "second" increments will convert to "minute" increments for the output(s) selected:

VALUE	CONVERTING OUTPUT TIMING	VALUE	CONVERTING OUTPUT TIMING
0	ALL AUXILIARIES ARE IN SECONDS	8	AUX 4 OUTPUT TIME TO MINUTES
1	AUX 1 OUTPUT TIME TO MINUTES	9	AUX 1 & 4 OUTPUT TIME TO MINUTES
2	AUX 2 OUTPUT TIME TO MINUTES	10	AUX 2 & 4 OUTPUT TIME TO MINUTES
3	AUX 1 & 2 OUTPUT TIME TO MINUTES	11	AUX 1, 2 & 4 OUTPUT TIME TO MINUTES
4	AUX 3 OUTPUT TIME TO MINUTES	12	AUX 3 & 4 OUTPUT TIME TO MINUTES
5	AUX 1 & 3 OUTPUT TIME TO MINUTES	13	AUX 1, 3 & 4 OUTPUT TIME TO MINUTES
6	AUX 2 & 3 OUTPUT TIME TO MINUTES	14	AUX 2, 3 & 4 OUTPUT TIME TO MINUTES
7	AUX 1, 2 & 3 OUTPUT TIME TO MINUTES	15	AUX 1, 2, 3 & 4 OUTPUT TIME TO MINUTES

### **LOCATION 266: RESERVED**

### **LOCATION 267: AUTOMATIC ARMING**

Programming a "1" in location 267 will enable Automatic Arming. The time of the arming is programmed in location 268-271. If Automatic Arming is enabled, the code pad 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 automatically arm. If the sounder is still on at the end of the 50 seconds, the control will arm. Any zones not secure will be isolated when Automatic Arming is used. If open/close reports are enabled, the DL150 will report user code "13" closing when it Auto Arms. Programming a "2" in location 267 will enable Automatic Partial Arming. This feature will only attempt to Partial Arm the DL150 once at the Auto Arm time ( location 268-271). Program a "0" to disable this feature.

VALUE	DESCRIPTION
0	AUTO ARMING DISABLED
1	AUTO ARMS IN FULL ARM MODE
2	AUTO ARMS IN PARTIAL MODE

### **LOCATIONS 268-271: AUTOMATIC ARMING TIME**

Locations 268-271 contain the time of an Automatic Arming, if Automatic Arming is enabled in location 272. The time is entered as 24-hour (military) time beginning with location 268.

### **LOCATION 272-275: TIME TO PERFORM AUTOTEST**

In these locations you program the time that you want the Autotest to report. The time must be entered in a 24-hour (military) format. For example, if the Autotest time will be 23:50, the location 272 contains a "2", location 273 contains a "3", location 274 contains a "5", and location 275 contains a "0". If an Autotest time of midnight is required, then set these locations to 00:00. The minutes locations (274-275) will be used to determine the minutes setting when Hourly Autotest is used in locations 278-279. Factory default is "02:00". Note: The Autotest communicator code must be enabled in locations 174-175 for Autotest to report.

### **LOCATION 276: WEEKLY OR DAILY AUTO TEST ENABLE**

Location 276 is used to select the day of the week in which an Autotest report will occur or a daily Autotest. Program a number from 1 (Sunday) to 7 (Saturday) or 8 (daily) for the day of the week or for a daily Autotest. The test will be performed at the hour specified in locations 272-275. The default is "0" and Autotests will be performed on an hourly interval based on the settings of locations 274-275. Note: The Autotest communicator code must be enabled in locations 174-175 for Autotest to report.

### **LOCATION 277: RESERVED**

### **LOCATIONS 278-279: HOURLY AUTOTEST INTERVAL**

Locations 278-279 are used to set the hourly Autotest interval. Hourly Autotests are disabled if there are Autotest day intervals programmed in location 276. Programmed in these locations are the number of hours (1 - 99) between Autotest reports. To determine when the first Autotest will be reported, "Number of elapsed hours since last autotest" in locations 280-281 must be set. The minutes setting for this Autotest report can be programmed in locations 274-275. Factory default is "2"-4". Note: The Autotest communicator code must be enabled in locations 174-175 for Autotest to report.

### **LOCATIONS 280-281: NUMBER OF ELAPSED HOURS SINCE LAST AUTOTEST**

Locations 280-281 sets the number of elapsed hours since the last Autotest and is only used in conjunction with the "Hourly Autotest Interval" feature in locations 278-279. For example, if you want the Autotest to be reported every 4 hours and 20 minutes past the hour, you would first program the hourly intervals, i.e. program locations 278-279 (Hourly Autotest Interval) with a "0" in location 278, and a "4" in location 279 for 4 hour reporting. Then program the minutes of the hour that the Autotest will report, i.e. program locations 274-275 (Time to Perform Autotest) with a "2" in location 274, and a "0" in location 275 to report on the 20th minute of the selected hour. Then finally program these location with the elapsed hours since the last Autotest.

### **LOCATION 282: PROGRAMMING CURRENT DAY OF WEEK**

A number from 1 to 7 is programmed in this location to indicate the current day of the week. If the day is Monday program a "2" in this location. If the day is Friday, program a "6" in this location. Sunday = "1" and Saturday = "7".

### **LOCATION 283: PROGRAMMING THE CURRENT MONTH**

Location 283 contains the current month. The month must be programmed using a number from "1" to "12".

### **LOCATION 284: PROGRAMMING THE CURRENT DAY OF MONTH - TENS DIGIT**

Location 284 contains the current day of the month - tens digit. If the current date is December 25th, program a "2" in location 284, which is the tens digit of the current day of the month.

### **LOCATION 285: PROGRAMMING THE CURRENT DAY OF MONTH - ONES DIGIT**

Location 285 contains the current day of the month - ones digit. If the current date is December 25th, program a "5" in location 285, which is the ones digit of the current day of the month.

### **LOCATION 286: PROGRAMMING THE CURRENT YEAR - TENS DIGIT**

Location 286 contains the current year - tens digit. If the current year is 1998, this location should contain a "9", which is the tens digit of the current year.

### **LOCATION 287: PROGRAMMING THE CURRENT YEAR - ONES DIGIT**

Location 287 contains the current year - ones digit. If the current year is 1998, this location should contain an "8", which is the ones digit of the current year.

### **LOCATION 288: PROGRAMMING THE CURRENT HOUR - TENS DIGIT**

Location 288 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 289: PROGRAMMING THE CURRENT HOUR - ONES DIGIT**

Location 289 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 location 289 should contain a "7", which is the current hours - tens digit. If the current time is 9:36 am, the 24-hour time is 09:36, so this location should contain a "9".

### **LOCATION 290: PROGRAMMING THE CURRENT MINUTES - TENS DIGIT**

Location 290 contains the current minutes - tens digit. The time is entered in 24-hour time. If the current time is 5:25pm, the 24-hour time is 17:25, so location 290 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 291: PROGRAMMING THE CURRENT MINUTES - ONES DIGIT**

Location 291 contains the current minutes - ones digit. The time is entered in 24-hour time. If the current time is 5:25pm, 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".

## **THE REMAINING LOCATIONS ARE ACCESSIBLE ONLY THROUGH DOWNLOADING**

### **LOCATIONS 000-015: CONTROL PANEL ACCESS CODE**

Locations 000-015 contain the eight-digit access code the DL150 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 LOAD downloading software package.

### **LOCATIONS 015-023: CALL BACK TELEPHONE NUMBER**

The presence of a phone number in locations 015-023 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. Any zero (0) within the telephone number must be programmed as an "A". If tone dialing is desired, program an "F" in the location where tone dialing should begin.

### **LOCATION 024: LOCAL PROGRAMMING LOCKOUT**

Location 024 is used to disable local programming lockout. 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 024 will allow all local programming.

### **LOCATION 025: CONTROL PANEL SHUTDOWN**

Location 025 is used to shut down the control panel. Programming an "A" in this location will completely shutdown the control panel. The code pad will appear "dead", and the siren and communicator will not operate.

## DL150 WORKSHEETS

### ARM/DISARM CODES 1 - 15

LOCATION	PAGE	DESCRIPTION	DATA 1	DATA 2	DATA 3	DATA 4	"DEFAULT"
000-003	8	USER #1 ARM/DISARM CODE					"1-2-3-4"
004-007	8	USER #2 ARM/DISARM CODE					"15" DISABLED
008-011	8	USER #3 ARM/DISARM CODE					"15" DISABLED
012-015	8	USER #4 ARM/DISARM CODE					"15" DISABLED
016-019	8	USER #5 ARM/DISARM CODE					"15" DISABLED
020-023	8	USER #6 ARM/DISARM CODE					"15" DISABLED
024-027	8	USER #7 ARM/DISARM CODE					"15" DISABLED
028-031	8	USER #8 ARM/DISARM CODE					"15" DISABLED
032-035	8	USER #9 ARM/DISARM CODE					"15" DISABLED
036-039	8	USER #10 ARM/DISARM CODE					"15" DISABLED
040-043	8	USER #11 ARM/DISARM CODE					"15" DISABLED
044-047	8	USER #12 ARM/DISARM CODE					"15" DISABLED
048-051	8	USER #13 ARM/DISARM CODE					"15" DISABLED
052-055	8	USER #14 ARM/DISARM CODE					"15" DISABLED
056-059	8	USER #15 ARM/DISARM CODE					"15" DISABLED
060-063	8	"GO TO PROGRAM" ACCESS CODE					"9-7-1-3"

### PRIMARY PHONE NUMBER

LOCATION	PAGE	DESCRIPTION	PHONE NUMBER								"DEFAULT"
064-071	8	PRIMARY PHONE NUMBER, DIGITS 1 - 8									"14" DISABLED
072-079	8	PRIMARY PHONE NUMBER, DIGITS 9 - 16									"14" DISABLED

"0" = 0, "10" = 0, "11" = \*, "12" = #, "13" = 4 Second Pause, "14" = Disable, "15" = Tone dialling

### PRIMARY ACCOUNT NUMBER

LOCATION	PAGE	DESCRIPTION	ACCOUNT CODE				"DEFAULT"
080-083	8	PRIMARY ACCOUNT NUMBER					"0" DISABLED

### PRIMARY FORMAT

LOCATION	PAGE	DESCRIPTION	FORMAT	"DEFAULT"
84	9	PRIMARY FORMAT	OPT=("1" THUR "15")	"0" DISABLED

## SECOND PHONE NUMBER

LOCATION	PAGE	DESCRIPTION	PHONE NUMBER	"DEFAULT"
085-092	10	SECONDARY PHONE NUMBER, DIGITS 1 - 8		"14" DISABLED
093-100	10	SECONDARY PHONE NUMBER, DIGITS 9 - 16		"14" DISABLED

"0" = 0, "10" = 0, "11" = \*, "12" = #, "13" = 4 Second Pause, "14" = Disable, "15" = Tone dialling

## THIRD PHONE NUMBER

LOCATION	PAGE	DESCRIPTION	PHONE NUMBER	"DEFAULT"
101-108	10	THIRD PHONE NUMBER, DIGITS 1 - 8		"14" DISABLED
109-116	10	THIRD PHONE NUMBER, DIGITS 9 - 16		"14" DISABLED

"0" = 0, "10" = 0, "11" = \*, "12" = #, "13" = 4 Second Pause, "14" = Disable, "15" = Tone dialling

## RESERVED LOCATIONS

LOCATION	PAGE	DESCRIPTION	FORMAT	"DEFAULT"
117 - 126	10	RESERVED		

## DIAL CONTROLLER

LOCATION	PAGE	DESCRIPTION	DATA	"DEFAULT"
127	10	PHONE SEQUENCE CONTROLLER	OPTIONS 1 THRU 7	"7"
128	11	DIAL ATTEMPTS	OPTIONS 1 THRU 15 ATTEMPTS	"6" ATTEMPTS
129	11	NUMBER OF RINGS TO ANSWER	OPTIONS 1 THRU 15 ATTEMPTS	"0" DISABLED
130	11	NUMBER OF CALLS TO ANSWER	OPTIONS 1 THRU 15 ATTEMPTS	"0" DISABLED
131	11	ANSWERING MACHINE DEFEAT	OPTIONS 1 THRU 3 ATTEMPTS	"0" DISABLED
132	11	ALL ABORT ENABLE	1 = ENABLE 0 = DISABLED	"0" DISABLED
133	11	DELAY BEFORE DIAL TIME	OPTIONS 1 THRU 15 ATTEMPT 2 SECOND	"0" DISABLED
134	12	COMMUNICATION ALARM REPORT CONTROLLER	0=UNLIMITED 1=LIMITED	"0" UNLIMITED
135	12	CALLBACK PHONE NUMBER CONTROL		"0" DISABLED
136	12	RING DETECT ADJUST		"0" DISABLED
137	12	PHONE LINE MONITOR	OPTIONS 1 THRU 15	"0" DISABLED
138	13	PHONE LINE MONITOR DELAY	OPTIONS 1 THRU 15 ATTEMPTS 10 SECOND	"1" 10 SEC
139	13	FAILED DIAL ATTEMPT COUNTER	OPTIONS 1 THRU 15	"0" DISABLED
140-147	13	RESERVED FOR FUTURE USE		

## COMMUNICATOR CODES

LOCATION	PAGE	DESCRIPTION	EVENT CODE	POINT NO.	"DEFAULT"
148-149	13	ZONE #1 COMMUNICATOR CODE			"3" - "1"
150 - 151	13	ZONE #2 COMMUNICATOR CODE			"3" - "2"
152-153	13	ZONE #3 COMMUNICATOR CODE			"3" - "3"
154-155	13	ZONE #4 COMMUNICATOR CODE			"3" - "4"
156-157	13	ZONE #5 COMMUNICATOR CODE			"3" - "5"
158-159	14	ZONE #6 COMMUNICATOR CODE			"3" - "6"
160-161	14	DURESS COMMUNICATOR CODES			"0" - "0"
162-163	14	CODE PAD AUX 1 KEY [1] + [3] COMMUNICATOR CODE			"0" - "0"
164-165	14	CODE PAD AUX 2 KEY [4] + [6] COMMUNICATOR CODE			"0" - "0"
166-167	14	CODE PAD AUX 3 KEY [7] + [9] COMMUNICATOR CODE			"0" - "0"
168-169	14	CODE PAD PANIC KEYS [*] + [#] COMMUNICATOR CODE			"1" - "0"
170-171	15	CODE PAD TAMPER COMMUNICATOR CODE			"0" - "0"
172-173	15	DOWNLOAD COMPLETE COMMUNICATOR CODE			"0" - "0"
174-175	15	AUTO TEST COMMUNICATOR CODES			"0" - "0"
176-177	15	FAIL TO COMMUNICATE COMMUNICATOR CODE			"0" - "0"
178-179	15	BOX TAMPER COMMUNICATOR CODE			"0" - "0"
<del>180-181</del>	15	<del>SIREN TAMPER</del>			<del>"0" - "0"</del>
182-183	15	BLOWN FUSE REPORT CODE			"0" - "0"
184-185	16	AC POWER COMMUNICATOR CODE			"0" - "0"
186-187	16	LOW BATTERY COMMUNICATOR CODE			"0" - "0"
188	16	AC POWER RESTORE COMMUNICATOR CODE		RESTORE	"0"
189	16	LOW BATTERY RESTORE COMMUNICATOR CODE		RESTORE	"0"
190	16	TROUBLE COMMUNICATOR CODE		ZONE NUMBER	"0"
191	16	ZONE TAMPER COMMUNICATOR CODE		ZONE NUMBER	"0"
192	16	ISOLATE COMMUNICATOR CODE		ZONE NUMBER	"0"
193	16	RESTORE COMMUNICATOR CODE		ZONE NUMBER	"0"
194	17	CLOSING COMMUNICATOR CODE		MAN NUMBER	"0"
195	17	OPENING COMMUNICATOR CODE		MAN NUMBER	"0"
196	17	CANCEL COMMUNICATOR CODE		MAN NUMBER	"0"
197-198	17	RESERVED			



**PROGRAMMING AUDIBLE OPTIONS**

LOCATION	PAGE	DESCRIPTION	DATA	"DEFAULT"
199	17	TWIN TRIP SOUNDER CONTROL		"0" SILENT
200	17	TWIN TRIP TIME PERIOD		"5" 5 MINUTES
201	17	PRIMARY ENTRY DELAY	OPT=("0" THUR "15") 5 SEC INC	"6" 30 SEC
202	18	PRIMARY EXIT DELAY	OPT=("0" THUR "15") 10 SEC INC	"6" 60 SEC
203	18	SECONDARY ENTRY DELAY	OPT=("0" THUR "15") 10 SEC INC	"3" 30 SEC
204	18	SECONDARY EXIT DELAY	OPT=("0" THUR "15") 10 SEC INC	"6" 60 SEC
205	18	PARTIAL MODE ENTRY DELAY	OPT=("0" THUR "15") 10 SEC INC	"3" 30 SEC
206	18	SIREN CUTOFF TIME	OPT=("0" THUR "15") 2 MIN INC	"4" 8 MIN
207	18	STROBE CUTOFF TIME	OPT=("0" THUR "15") 4 HR INC	"0" LATCH
208	18	SIREN OUTPUT CONTROLLER	"0" = UNLIMITED "1" = LIMITED	"1" LIMITED
209	19	TAMPER SOUNDER CONTROLLER / BOX TAMPER ENABLE		"4" BOX TAMPER
210	19	RADIO REMOTE ARMING	"1" = SIREN "2" = STROBE	"0" DISABLED
211	19	SILENT CODE PAD PANIC	'0' = AUDIBLE "1" = SILENT	"0" AUDIBLE
212	19	SIREN / BELL TEST FEATURE		"0" DISABLED

**ZONE TYPES FOR ZONES 1 - 6**

LOCATION	PAGE	DESCRIPTION	DATA	"DEFAULT"
213	20	ZONE #1 - ZONE TYPE		"3" ENTRY/EXIT
214	20	ZONE #2 - ZONE TYPE		"5" HANDOVER
215	20	ZONE #3 - ZONE TYPE		"6" INSTANT
216	20	ZONE #4 - ZONE TYPE		"6" INSTANT
217	20	ZONE #5 - ZONE TYPE		"6" INSTANT
218	20	ZONE #6 - ZONE TYPE		"6" INSTANT

**SPECIAL CHARACTERISTICS FOR ZONES 1 - 6**

LOCATION	PAGE	DESCRIPTION	DATA	"DEFAULT"
219	20	ZONE #1 - SPECIAL CHARACTERISTICS		"12"
220	20	ZONE #2 - SPECIAL CHARACTERISTICS		"12"
221	20	ZONE #3 - SPECIAL CHARACTERISTICS		"12"
222	20	ZONE #4 - SPECIAL CHARACTERISTICS		"12"
223	20	ZONE #5 - SPECIAL CHARACTERISTICS		"12"
224	20	ZONE #6 - SPECIAL CHARACTERISTICS		"12"

**SPECIAL CHARACTERISTICS FOR ZONES 1 - 6**

LOCATION	PAGE	DESCRIPTION	DATA	"DEFAULT"
225	21	ZONE #1 - SPECIAL CHARACTERISTICS		"12"
226	21	ZONE #2 - SPECIAL CHARACTERISTICS		"12"
227	21	ZONE #3 - SPECIAL CHARACTERISTICS		"12"
228	21	ZONE #4 - SPECIAL CHARACTERISTICS		"12"
229	21	ZONE #5 - SPECIAL CHARACTERISTICS		"12"
230	21	ZONE #6 - SPECIAL CHARACTERISTICS		"12"

## PROGRAMMING OPTIONS

LOCATION	PAGE	DESCRIPTION	DATA	"DEFAULT"
231	21	AUTO ISOLATION "1" = ENABLED "2" = ENTRY/EXIT ZONES ONLY		"0" DISABLED
232	21	DUAL EOL ENABLE "1" = ENABLED		"0" DISABLED
233	22	QUICK ARM DIGIT - DIGIT 3 ONLY "1" = ENABLED		"0" DISABLED
234	22	PARTIAL ARM SECURITY / UNI ARM FEATURE "0"=DISABLED "2"= UNI ENABLED		"1" SECURITY
235	22	BUILT-IN SIREN DRIVER / 1 AMP VOLTAGE OUTPUT "1" = VOLTAGE		"0" SIREN
236	22	SMOKE POWER RESET AND/OR FIRE ALARM VERIFICATION		"1" ENABLED
237	22	LED EXTINGUISH ENABLE "1" = ENABLED		"0" DISABLED
238	22	NO ARMING WITH A ZONE ISOLATED "1" = ENABLED		"0" DISABLED
239	23	DYNAMIC BATTERY TEST		"0" DISABLED
240	23	DYNAMIC BATTERY TEST DURATION OPT=("0" THUR "15") 1 MIN INC		"0 " DISABLED
241	23	AC POWER FAIL REPORT DELAY OPT=("0" THUR "15") 1 MIN INC		"1" MINUTE
242	23	POWER UP CONDITION		"0" LAST CON
243	23	POWER UP DELAY "0" = 60 SEC DELAY		"1" NO DELAY

## AUXILIARY OUTPUT OPTIONS

LOCATION	PAGE	DESCRIPTION	DATA 1	DATA 2	DATA 3	"DEFAULT"
244-246	24	AUX PIN #1				"0" - "0" - "5"
247-249	24	AUX PIN #2				"0" - "1" - "2"
250-252	24	AUX PIN #3				"0" - "1" - "10"
253-255	24	AUX PIN #4				"0" - "1" - "11"
256-259	26	AUXILIARY OUTPUT OPENING WINDOW				"0" "6" "0" "0"
260-263	26	AUXILIARY OUTPUT CLOSING WINDOW				"2" - "0" - "0" - "0"
264	26	AUXILIARY OUTPUT INVERSION OPT=("0" THRU "15")				"0"
265	27	AUXILIARY OUTPUT MINUTES TIMING OPT=("0" THRU "15")				"0"
266	27	RESERVED				RESERVED

## PROGRAMMING TIMER OPTIONS

LOCATION	PAGE	DESCRIPTION	"DEFAULT"
267	27	AUTO ARM ENABLE	"0"
268-271	27	AUTO ARM TIME	"2" - "0" - "0" - "0"
272-275	27	WEEKLY OR DAILY AUTOTEST TIME	"0" - "2" - "0" - "0"
276	28	WEEKLY OR DAILY AUTOTEST ENABLE SUN = "1" SAT = "7" DAILY = "8"	"0"
277	28	RESERVED	"0"
278-279	28	HOURLY AUTOTEST INTERVALS	"2" - "4"
280-281	28	NUMBER OF HOURS ELAPSED SINCE LAST AUTOTEST	"UNDEFINED"

**PROGRAMMING TIMER OPTIONS**

LOCATION	PAGE	DESCRIPTION	DATA	"DEFAULT "
282	28	DAY OF THE WEEK ( <i>SUNDAY = "1" SATURDAY= "7"</i> )		"UNDEFINED"
283	28	MONTH OF THE YEAR ( <i>JANUARY = "1" DECEMBER = "12"</i> )		"UNDEFINED"
284	28	DAY OF THE MONTH - TENS DIGIT ( <i>25TH = "2"</i> )		"UNDEFINED"
285	28	DAY OF THE MONTH - ONES DIGIT ( <i>25TH = "5"</i> )		"UNDEFINED"
286	28	CURRENT YEAR - TENS DIGIT ( <i>1998 = "9"</i> )		"UNDEFINED"
287	28	CURRENT YEAR - ONES DIGIT ( <i>1998 = "8"</i> )		"UNDEFINED"
288	28	CURRENT HOUR - TENS DIGIT		"UNDEFINED"
289	29	CURRENT HOUR - ONES DIGIT		"UNDEFINED"
290	29	CURRENT MINUTE - TENS DIGIT		"UNDEFINED"
291	29	CURRENT MINUTE - ONES DIGIT		"UNDEFINED"

**THE FOLLOWING LOCATIONS ARE ACCESSIBLE ONLY THROUGH DOWNLOADING**

LOCATION	PAGE	DESCRIPTION	DATA	"DEFAULT"
000-007	29	CONTROL PANEL ACCESS CODE		"15000000"
008-015	29	CALLBACK PHONE NUMBER, DIGITS 1 - 8		"0" DISABLED
016-023	29	CALLBACK PHONE NUMBER, DIGITS 9 - 16		"0" DISABLED
24	29	LOCAL PROGRAMMING LOCKOUT		"0" DISABLED
25	29	CONTROL PANEL SHUTDOWN		"0" DISABLED

## APPENDIX 1

This document lists the event reporting codes for Contact ID reporting in the DL150. The event codes are programmed by placing a number from 0-15 in the Event code for the event being reported. The point number programmed is sent as the zone identifier. The following event codes will be sent for the digit programmed:

PROGRAMMED EVENT CODE	ADEMCO EVENT CODE	DEFINITION
1	110	FIRE
2	120	PANIC
3	130	BURGLARY
4	131	PERIMETER BURGLARY
5	132	INTERIOR BURGLARY
6	133	24 HOUR AUXILIARY
7	134	ENTRY/EXIT BURGLARY
8	135	DAY/NIGHT BURGLARY
9	150	NON-BURG 24 HOUR
10	121	DURESS
11	100	MEDICAL ALARM
12	123	AUDIBLE PANIC
13	137	GENERAL TAMPER
14	602	AUTOTEST
15	601	MANUAL TEST

### !!! IMPORTANT !!!

**The following event codes are sent automatically but must be enabled by programming a "1" in the communicator code location for that report:**

REPORTING EVENT	ADEMCO EVENT DIGIT	LOCATIONS
KEYPAD TAMPER	137	170
AUTOTEST	602	174
FAIL TO COMMUNICATE	354	176
BOX TAMPER	137	178
A.C. LOSS	301	184
LOW BATTERY	302	186
BATTERY TEST FAIL	309	186
RESTORE	EVENT CODE FOR ALARM	193
ZONE ISOLATE	570	192
ZONE TROUBLE	380	190
ZONE TAMPER	137 / 144	191
OPENING/CLOSING	401	194 / 195
CANCEL	406	196
DOWNLOAD COMPLETE	412	172
DURESS	121	160
CODE PAD AUX 1	110	162
CODE PAD AUX 2	100	162
PANIC	120	168
BELL TAMPER	321	180
BLOWN FUSE	300	182
AC RESTORE	301	188
LOW BATTERY RESTORE	302	189

\* If location 191 contains a "1", the event code will be 137. If location 191 contains a "2", the event code will be 144.

## APPENDIX 2

This document describes the DL150 reporting event codes when using the SIA format (format 14). The event codes are programmed by placing a number from 0-15 in the Event code for the event being reported. The point number programmed is sent as the zone identifier. The following event codes will be sent for the digit programmed:

PROGRAMMED EVENT CODE	SIA CODE	DEFINITION
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	RX	MANUAL TEST

### !!! IMPORTANT !!!

The following event codes are fixed but must be enabled by programming a 1 in the corresponding location.

REPORTING EVENT	SIA CODE	LOCATION
TAMPER	TA	190
AUTOTEST	RP	174
FAIL TO COMMUNICATE	RT	176
AC LOSS	AT	184
LOW BATTERY	YT	186
AC RESTORE	AR	188
BATTERY RESTORE	YR	189
RESTORE CODE	*R	193
BYPASS CODE	*B	192
BYPASS RESTORE	*U	192 / 193
TROUBLE CODE	*T	190
TROUBLE RESTORE	*R	190 / 193
OPENING	OP	195
CLOSING	CL	194
CANCEL	OC	193
DOWNLOAD COMPLETE	RS	172
DURESS	HA	160
CODE PAD AUX 1	FA	162
CODE PAD AUX 2	MA	164
CODE PAD PANIC	PA	168
BOX TAMPER	TA	178
BELL TEMPER	YA	180
BLOWN FUSE	YP	182

\* The character transmitted in this location will be the first character in the SIA code from the top list for the event being transmitted. If a "1" is programmed in location 192, and a Burglary Alarm (B A) restores, a B R will be transmitted. If a "1" is programmed in location 190, and a Fire Alarm (F A) zone goes into Trouble, an (F T) will be transmitted.

## SPECIFICATIONS

<b>OPERATING POWER</b>	<b>16.5 VAC 1.5 AMP Plug Pack</b>
<b>AUXILIARY POWER</b>	<b>12 VDC Regulated 500 mA</b>
<b>LOOP RESISTANCE</b>	<b>300 Ohms Maximum</b>
<b>BUILT-IN SIREN DRIVER</b>	<b>4 Ohms Max</b>
<b>LOOP RESPONSE</b>	<b>Selectable 500 mS</b>
<b>OPERATING TEMPERATURE</b>	<b>32 to 120 degrees F</b>
<b>KEYPAD DIMENSIONS</b>	<b>5.50" Wide 4.25" High .850" Deep</b>
<b>METAL ENCLOSURE DIMENSION</b>	<b>11.25" Wide 11.25" High 3.50" Deep</b>
<b>SHIPPING WEIGHT</b>	<b>9 lbs.</b>

## WARRANTY STATEMENT

**DIRECT ALARM SUPPLIES GUARANTEES THIS PRODUCT AGAINST DEFECTIVE PARTS AND WORKMANSHIP FOR TWENTY-FOUR (24) MONTHS FROM DATE OF PURCHASE. IF ANY DEFECT APPEARS DURING THE WARRANTY PERIOD RETURN IT TO DAS, POSTAGE PREPAID.**

**THE UNIT WILL BE REPAIRED AND RETURNED. DAS 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 DIRECT ALARM SUPPLIES 9 NOWILL STREET CONDELL PARK NSW.**

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