
Installation Manual

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Description of Major Features

- Up to 15 user codes
- Microprocessor Watchdog circuit with dead battery microprocessor shutdown
- An advanced "Freeze Frame" alarm history allows you to see the exact condition of the control sectors during the last alarm
- Each sector is E.O.L. supervised for maximum protection and flexibility
- One keypress Quick-Arm feature
- Four wire keypad
- A unique keypad "LED Extinguish" feature saves current on standby battery and allows the keypad to be used in sleeping areas without disturbing the occupants
- Built-in siren driver and 1 Amp DC voltage output
- 400 mA of regulated auxiliary power
- 100 mA of switched auxiliary power
- Separate fuse for auxiliary power makes the keypad tamper resistant
- Entry-Guard capability selectable by sector
- Day Annunciation selectable by sector
- Programmable Automatic Isolate capability
- A.C. Failure detection
- Advanced transient protection featuring state of the art Transorb technology
- Optional Manual Panic activation from the keypad
- EEPROM memory holds all programming features even after total power failure

208L

INSTALLATION MANUAL

General Description

The DAS 208L is a versatile 8 sector control panel. Its microcomputer design gives some of the most versatile, yet easy to use features in the industry today. Each of the Eight sectors can be programmed to be one of six different types including 24 Hour, Handover, and Day Sector. Each sector is individually annunciated and can be isolated from the keypad.

Read the *OPERATORS MANUAL* before you begin the installation for the best overall description of how the 208L functions. After installation of the security system complete the information on page 2 of the operators manual and explain the system operation to all security system owners/operators.

Standard Parts List.

The 208L is shipped with the parts listed below included.

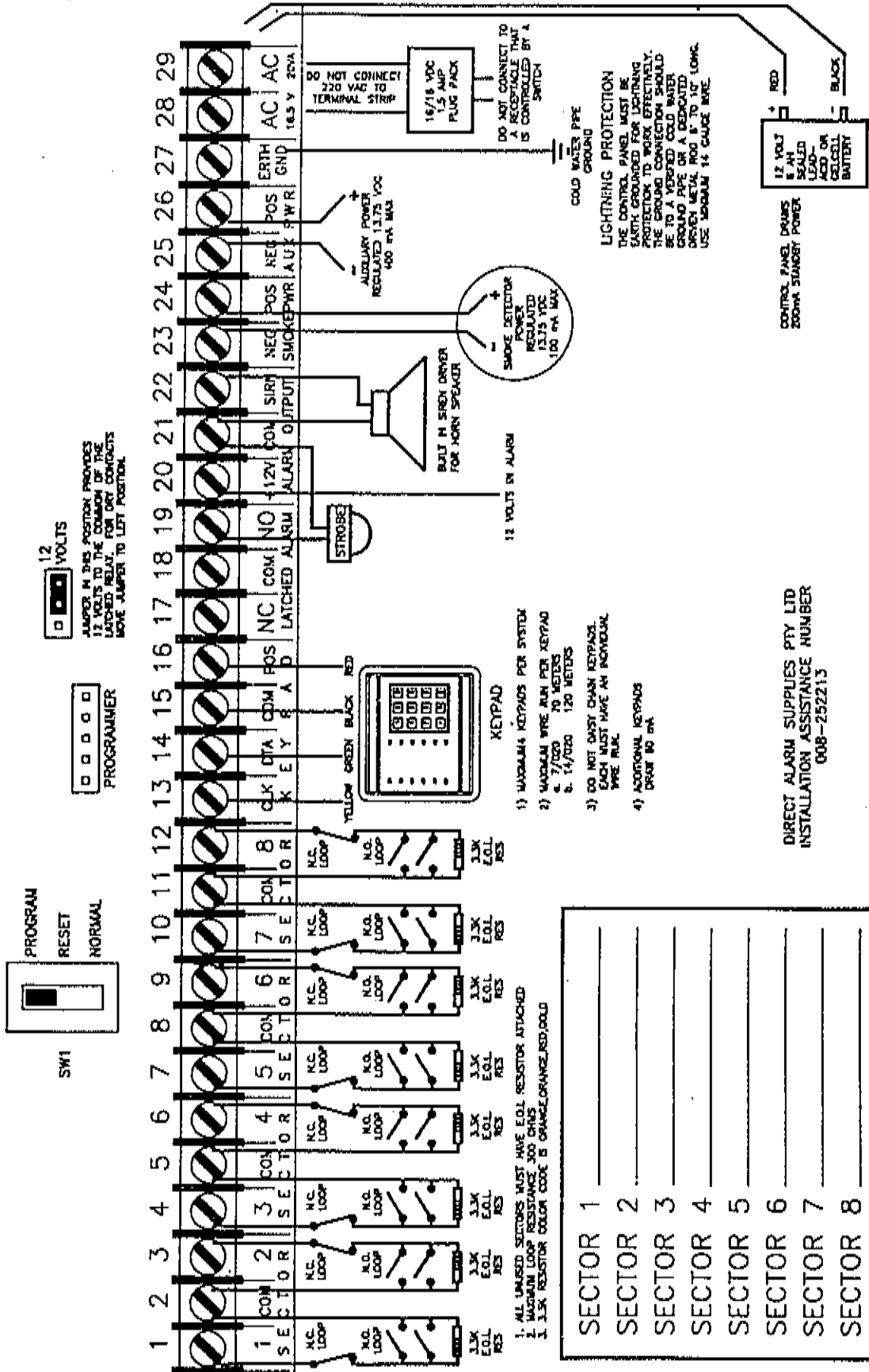
QUANTITY	PART DESCRIPTION	PART NO.
1	MASTER CONTROL PANEL INCLUDING KEYPAD	FS4560
1	INSTALLATION MANUAL	IM-208L
1	OPERATORS MANUAL	OM-208L

Optional Parts List.

The following parts are available for use with the 208L.

PART DESCRIPTION	PART NO.
PROGRAMMER WITH DIGITAL NUMERIC DISPLAY	FS4597
KEYSWITCH MODULE (allows arming with a momentary keyswitch)	FS4578
REMOTE KEYPAD	FS4575
16/18 VAC, 1.5 AMP PLUG PACK	FS4402
12VDC 6AH BATTERY	FS4312

Terminal drawing and special notes



DIRECT ALARM SUPPLIES PTY LTD
 INSTALLATION ASSISTANCE NUMBER
 008-252215

Terminal Description

TERMINAL NO.	DESCRIPTION
1	Connect one side of Sector 1 loop. The other side of loop to common terminal 2.
2	Common (-) Terminal.
3	Connect one side of Sector 2 loop. The other side of loop to common terminal 2.
4 - 12	See Terminal Drawing and repeat the above sequence for sectors 3-8.
13,14,15,16	Connect keypad wires as follows; yellow to terminal 13, green to terminal 14, black to terminal 15, red to terminal 16. 70 meter maximum run with 7/020 cable, 150 meter maximum run with 14/020 cable.
17	Latched alarm output normally closed output. Dry contact if shunt is in left position, 12 volts if shunt is in volt position.
18	Latched alarm output common output. Dry contact If shunt is in left position, 12 volts if shunt is in volt position.
19	Latched alarm output normally open output. Dry contact If shunt is in left position, 12 volts if shunt is in volt position.
20	Timed Alarm voltage output 12 volts at 1 amp in alarm.
21(-)& 22(+)	Siren driver output to speaker(s), maximum load 4 ohms.
23(-)& 24(+)	Keypad resettable power 12VDC, 100 mA maximum.
25(-)& 26(+)	Auxiliary power, regulated 12VDC, 400 mA maximum.
27	Earth Ground, connect to a cold water pipe or 2 to 3 meter driven rod.
28 & 29	AC input, connect a 16/18 Volt 1.5 amp plug pak.
Battery leads	Standby battery leads black(-) and red(+) connect to a 12VDC lead acid rechargeable battery. Do not connect to a dry cell battery.

PROGRAMMING

The 208L can be placed into the "Program" mode by any one of the three following methods.

1. Slide the Program/Run switch from the run position (down) to the program position (up).
2. Enter the 4 digit "Go To Program" code which must have been entered into locations 92-95 previously. At initial power-up there is no code in these slots and the 208L must be programmed by method 1 above or method 3 below. The control must be disarmed.
3. Plug the optional model #8950 programmer into the 4-pin male outlet marked "program" on the 208L P.C. Board.

When the system keypad is utilized for programming (as described by methods 1 and 2 above), the 208L will be in the program mode and the yellow LED's will display the data in location 000. For easier programming use the "Installers Binary Programming Guide" label which is included with your keypad. The data is displayed using a Binary system. With this system the yellow Sector 1 LED equals 1 when illuminated. The Sector 2 LED equals 2 when illuminated. The Sector 3 LED equals a 4 when illuminated. The Sector 4 LED equals 8 when illuminated. Thus if the data in location 000 is 9 the LED for Sector 1 (=1) and Sector 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 LED for Sector 2 (=2) and Sector 3 (=4) would be added (2+4=6) and the data in location would be 6. If no LED's are illuminated the location has a zero (0). To step from location 000 to 001 through 095 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 a [*] ("*" = data enter).

When using the optional #8950 Programmer, the programming keystrokes will be the same as with the system keypad. The #8950 however, has the ability to display the location number and the data in that location on the numeric display.

There are three function codes that are used to program the 208L. These are 210, 220 and 230 and are described below.

- After all the data has been entered into locations 000-095 you must enter the code 220 followed by a "#" to permanently place the information into the EEPROM. If this step is not taken, the data in the EEPROM will not change and the 208L will not change characteristics.
- To change the 208L data back to the original default values enter the code 210 followed by a "#" to load the data into the RAM memory and then 220 followed by a "#" to load that data into the EEPROM.
- To exit the Program mode after it has been accessed with the four digit program code enter code 230 followed by a "#".

PROGRAMMING WORKSHEET

LOC	DESCRIPTION	DATA	DEFAULT
000	SECTOR 1 TYPE		ENTRY/EXIT (3)
001	SECTOR 2 TYPE		HANDOVER (5)
002	SECTOR 3 TYPE		HANDOVER (5)
003	SECTOR 4 TYPE		INSTANT (6)
004	SECTOR 5 TYPE		INSTANT (6)
005	SECTOR 6 TYPE		INSTANT (6)
006	SECTOR 7 TYPE		INSTANT (6)
007	SECTOR 8 TYPE		INSTANT (6)
008	ENTRY TIME (10 SEC INC)		20 SEC (2)
009	EXIT TIME (10 SEC INC)		60 SEC (6)
010	SIREN CUTOFF TIME (2MIN INC)		8 MIN (4)
011	KEYPAD PANIC AUDIBLE DISABLE		AUDIBLE (0)
012	SECTOR 1 FAST LOOP/ENTRY-GUARD/DOOR ANNUNCIATOR SELECT		NONE SELECTED (0)
013	SECTOR 2 FAST LOOP/ENTRY-GUARD/DOOR ANNUNCIATOR SELECT		NONE SELECTED (0)
014	SECTOR 3 FAST LOOP/ENTRY-GUARD/DOOR ANNUNCIATOR SELECT		NONE SELECTED (0)
015	SECTOR 4 FAST LOOP/ENTRY-GUARD/DOOR ANNUNCIATOR SELECT		NONE SELECTED (0)
016	SECTOR 5 FAST LOOP/ENTRY-GUARD/DOOR ANNUNCIATOR SELECT		NONE SELECTED (0)
017	SECTOR 6 FAST LOOP/ENTRY-GUARD/DOOR ANNUNCIATOR SELECT		NONE SELECTED (0)
018	SECTOR 7 FAST LOOP/ENTRY-GUARD/DOOR ANNUNCIATOR SELECT		NONE SELECTED (0)
019	SECTOR 8 FAST LOOP/ENTRY-GUARD/DOOR ANNUNCIATOR SELECT		NONE SELECTED (0)
020	SIREN OUTPUT LIMITATIONS		LIMITED SIREN (1)
021	AUTO ISOLATE ENABLE		DISABLED (1)
022	INVERT VOLTAGE OUT		12V IN ALARM3
023	L.E.D. EXTINGUISH ENABLE		DISABLED (0)
024	POWER UP DELAY DISABLE		DISABLED (1)
025	NO ARMING WITH A SECTOR ISOLATED		DISABLED (0)
026	TIMED LATCHED OUTPUT		DISABLED
027	KEYPAD TAMPER		ENABLED (1)
028	POWER UP DISARMED ENABLE		LAST CONDITION (0)
029	QUICK ARM ENABLE (#3 KEY)		DISABLED (0)
030	ENTRY TIME (FOR ENTRY-GUARD)		20 SECONDS (2)
031	RESERVED FOR FUTURE USE (DO NOT USE)		

LOC	DESCRIPTION	DATA1	DATA2	DATA3	DATA4	DEFAULT
032-035	USER 1 ARM/DISARM CODE (MASTER CODE)					1-2-3-4
036-039	USER 2 ARM/DISARM CODE					DISABLED (15)
040-043	USER 3 ARM/DISARM CODE					DISABLED (15)
044-047	USER 4 ARM/DISARM CODE					DISABLED (15)
048-051	USER 5 ARM/DISARM CODE					DISABLED (15)
052-055	USER 6 ARM/DISARM CODE					DISABLED (15)
056-059	USER 7 ARM/DISARM CODE					DISABLED (15)
060-063	USER 8 ARM/DISARM CODE					DISABLED (15)
064-067	USER 9 ARM/DISARM CODE					DISABLED (15)
072-075	USER 11 ARM/DISARM CODE					DISABLED (15)
076-079	USER 12 ARM/DISARM CODE					DISABLED (15)
080-083	USER 13 ARM/DISARM CODE					DISABLED (15)
084-087	USER 14 ARM/DISARM CODE					DISABLED (15)
088-091	USER 15 ARM/DISARM CODE					DISABLED (15)
092-095	"GO TO PROGRAM" CODE					DISABLED (15)

LOCATIONS 000-007: PROGRAMMING THE SECTOR TYPES

Locations 000 through 007 contain a number identifying the characteristics of each of the 8 sectors. Location 000 corresponds to sector 1 and location 007 corresponds to sector 8. Each sector will Factory default according to the following list:

SECTOR NUMBER	DEFAULT CHARACTERISTIC
SECTOR 1	ENTRY/EXIT
SECTOR 2	HANDOVER
SECTOR 3	HANDOVER
SECTOR 4	INSTANT
SECTOR 5	INSTANT
SECTOR 6	INSTANT
SECTOR 7	INSTANT
SECTOR 8	INSTANT

To program sector characteristics other than the default values, program a number from 1 to 8 based on the characteristics found in the following list:

NUMBER	SECTOR CHARACTERISTICS DESCRIPTION
1	DAY SECTOR - A trip on a Day sector will produce an instant alarm when armed and activate the keypad sounder when disarmed.
2	24 HOUR - A trip on a 24 Hour sector will produce an instant alarm when the 208L is armed or disarmed.
3	ENTRY/EXIT - A trip when armed will start entry delay. When arming, the sector will delay the selected number of seconds to allow exit before siren and communicator activation.
4	INTERIOR DELAY - A trip on Interior Delay sector when armed in the instant or away mode will initiate an entry delay. It will be ignored during exit delay and when disarmed
5	HANDOVER - Interior sector that follows the delay sectors. It is instant during non-delay times.
6	INSTANT - Produces an instant alarm when tripped in the armed mode. It is ignored when disarmed.

LOCATION 008: PROGRAMMING THE ENTRY DELAY TIME

Location 008 contains the number of 10 second increments in the entry delay. The entry delay can be programmed in 10 second increments from 10 to 150 seconds. (1 =10 seconds through 15 =150 seconds) For example, placing a 2 in location 008 will produce an entry delay of 20 seconds. Placing a 6 in location 008 will produce an entry delay of 60 seconds.

LOCATION 009: PROGRAMMING THE EXIT DELAY TIME

Location 009 contains the number of 10 second increments in the exit delay. The exit delay can be programmed in 10 second increments from 10 to 150 seconds. (1 =10 seconds through 15 =150 seconds) For example, placing a 2 in location 009 will produce an exit delay of 20 seconds. (Note: A zero (0) entry is treated as the factory default of 60 seconds). Placing a 6 in location 009 will produce an exit delay of 60 seconds.

LOCATION 010: PROGRAMMING THE SIREN SHUTDOWN/RECYCLE TIMEOUT

Location 010 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, placing a 2 in location 010 will produce an automatic cutoff time of 4 minutes. (Note: A zero (0) entry is treated as the factory default of 8 minutes.) Placing a 6 in location 010 will produce an automatic cutoff time of 12 minutes.

LOCATION 011: KEYPAD PANIC/HOLD-UP DISABLE

Location 011 is used to disable the audible output for the KEYPAD panic/hold-up alarm. Placing a one (1) in location 011 will disable the keypad panic/hold-up alarm. If this location contains "0", the 208L will have an audible keypad panic/hold-up output.

LOCATIONS 012-019: PROGRAMMING SECTOR CHARACTERISTICS

Locations 012 (sector 1) to 019 (sector 8) are used to program the loop response time and to enable Entry-Guard and/or Day Annunciator features for each sector. Use the following chart to determine the correct number to be placed in location 012 thru 019 to enable these features.

FAST LOOP RESPONSE TIME (200MS)	1
DAY ANNUNCIATOR FEATURE	4
DAY ANNUNCIATOR AND FAST LOOP RESPONSE	5
ENTRY-GUARD FEATURE	8
ENTRY-GUARD AND FAST LOOP RESPONSE	9
ENTRY-GUARD AND DAY ANNUNCIATOR	12
ENTRY-GUARD, DAY ANNUNCIATION AND FAST LOOP	13

LOCATION 020: LIMITING ALARMS TO ONCE PER SECTOR

Location 020 is used to limit alarms to once per sector during an arming cycle. When a "1" is placed in location 020 each sector will only activate the siren output once during each arming cycle. If a "0" is placed in location 020 all sectors can trip an unlimited number of times per arming cycle.

LOCATION 021: ENABLING THE AUTOMATIC ISOLATE FEATURE

Location 021 is used to enable the "Auto Isolate" feature of the 208L. This feature is enabled by placing a zero (0) in this location. Factory default is one (1) and this feature is not enabled. If this feature is selected and a sector is not secured at the end of the exit delay, it will be auto isolated and the security system will arm normally. If a sector is not secure at code entry, but is secure at the end of the exit delay, that sector will not be auto isolated and will arm in a normal condition.

LOCATION 022: INVERTING THE ALARM VOLTAGE OUTPUT

If location 022 contains a 1, the alarm voltage on terminal 20 will be normally high and open circuit in an alarm condition. This allows this output to be used as the holdoff for a satellite siren. If location 022 contains a "0", the alarm voltage output will be normally open and switch to 12 volts in alarm. This output will turn off at the end of siren time regardless of the condition of location 022.

LOCATION 023: ENABLING OF THE L.E.D. EXTINGUISH FEATURE

Keypad LEDs (with the exception of the A.C. LED) will be extinguished after 60 seconds of keypad inactivity if a one (1) is placed in location 023. The LEDs will become illuminated immediately if any key on the keypad is pressed.

LOCATION 024: POWER UP DELAY DISABLE

If a one (1) is placed in location 024, the 208L will not delay 60 seconds before accepting open or short inputs from any sector. If a "0" is programmed, sensors on all sectors are allowed 60 seconds to stabilize at power-up after a total power shutdown and battery failure. After 60 seconds, the 208L will once again accept loop opens or shorts as an alarm condition. This 60 second period will also be initiated after a watchdog circuit reset condition.

LOCATION 025: NO ARMING WITH A SECTOR ISOLATED

If a one (1) is placed in location 025, the 208L cannot be armed with any sector isolated. If programmed with a "0", up to 7 of the 8 burglary sectors can be isolated and the 208L can still be armed.

LOCATION 026: MAKING THE LATCHED OUTPUT TIMED

If a 1 is placed in location 026, the latched alarm outputs (terminals 17,18, and 19) will turn off at the end of siren time. If location 026 contains a "0" these outputs will remain on until an arm/disarm code is entered.

LOCATION 027: KEYPAD TAMPER FEATURE

Placing a 1 in location 027 will enable the keypad tamper feature. When this feature is enabled, the 208L will lock out the keypads for 1 minute if 30 random keypresses are made without producing a valid code.

LOCATION 028: POWER UP DISARMED ENABLE

If a one (1) is placed in location 028, the 208L will power up in the disarmed condition if there is a total power shutdown and battery failure. If a 2 is placed in this location the 208L will power up armed. If it contains a "0" the 208L will power up in the state it was in when power was lost. A watchdog circuit reset will also cause the 208L to reset to the selected condition.

LOCATION 029: QUICK-ARM ENABLE

If a one (1) is placed in location 029, the 208L can be armed by pressing the #3 key on the keypad. Factory default is zero (0) and the Quick-Arm feature is not enabled.

LOCATION 030: DELAY TIME FOR ENTRY-GUARD SECTORS

Location 030 contains the number of 10 second increments for Entry-Guard sectors. The Entry-Guard delay can be programmed in 10 second increments from 10 to 150 seconds. (1=10 seconds thru 15=150 seconds) Factory default is 2 or 20 seconds.

LOCATION 031:(FOR FUTURE USE) DO NOT PROGRAM THIS LOCATION

LOCATIONS 032-035: PROGRAMMING THE MASTER ARM/DISARM CODE

Locations 032-035 contain master arm/disarm code (user number 1). Location 032 contains the first digit of the code; location 035 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 (see page 13, ENTERING AND CHANGING THE MASTER CODE). The factory default code will be 1-2-3-4.

LOCATIONS 036-039: PROGRAMMING THE ARM/DISARM CODE FOR USER 2

Locations 036-039 contain the arm/disarm codes for user number 2. Location 036 contains the first digit of the code, location 039 contains the fourth digit of the code. THE CODE MUST CONTAIN FOUR (4) DIGITS. To disable a code enter a "15" as the first digit of the code. This code can be changed in the RUN mode using the master code. (see page 13 , ENTERING AND CHANGING AUXILIARY CODES). The factory default for user 2 is disabled.

LOCATIONS 040-091: PROGRAMMING THE ARM/DISARM CODE FOR USERS 3-15:

Locations 040-091 contain the arm/disarm codes for user number 3-15. To program these codes follow the instructions for user number 2 corresponding to the following table:

USER NUMBER	LOCATION	COMMENTS
3	040-043	Can be changed in the run mode
4	044-047	Can be changed in the run mode
5	048-051	Can be changed in the run mode
6	052-055	Can be changed in the run mode
7	056-059	Can be changed in the run mode
8	060-063	Can be changed in the run mode
9	064-067	Can be changed in the run mode
10	068-071	Can be changed in the run mode
11	072-075	Can be changed in the run mode
12	076-079	Can be changed in the run mode
13	080-083	Can be changed in the run mode
14	084-087	Can be changed in the run mode
15	088-091	Can be changed in the run mode

LOCATIONS 092-095: PROGRAMMING THE "GO TO PROGRAM" CODE

Locations 092-095 contain the "GO TO PROGRAM" code. Location 092 contains the first digit of the code; location 095 contains the fourth digit of the code. THE CODE MUST CONTAIN FOUR (4) DIGITS. The "GO TO PROGRAM" code can be used in the run mode to enter the program mode. To disable the "GO TO PROGRAM" code enter a "15" in location 092. The factory default is "GO TO PROGRAM" code disabled.

General Operating Instructions

Arming and Disarming the 208L

To turn the security system on, close all protected doors and windows. The green "SECURE" LED will be on. Input a valid code to change the armed status. The following conditions will prevent the armed status from changing when a code is entered:

1. The SECURE LED is out and the system is currently disarmed (the keypad sounder will beep 3 times if green SECURE LED is not illuminated)
2. The siren is currently on for something other than a control sector (in this case silence the siren by entering a 4 digit code)
3. The keypad sounder is currently beeping for a Day sector (in this case silence the keypad sounder by entering a 4 digit code)

Isolating Sectors

To isolate any of the sectors 1-8, disarm the control and press [*], sector numbers to isolate, and [*]. If the control is in the disarmed state, the isolate condition of the sectors will toggle.

Entering and Changing the Master Code (User Code #1)

When the 208L is first powered-up the master code is standard default code 1-2-3-4. To change the master code from the keypad in the run (standard) mode the following procedure must be followed. To change the master code from 1-2-3-4 to 5-6-7-8, the sequence is as follows: Press [*][1][#] (This enters programming for user code #1) then [1][2][3][4] (old master code) press [*][1][#], verifying that used code #1 is being changed, then new code [5][6][7][8]. Now end this sequence by pressing [*][1][#] to exit programming. So, the entire procedure would consist of pressing 17 keys, as follows:

[*][1][#] - [1][2][3][4] - [*][1][#] - [5][6][7][8] - [*][1][#]

(NOTE: IF THE MASTER CODE IS CHANGED, ALL AUXILIARY CODES ARE INVALIDATED !)

Entering and Changing an Auxiliary Code

In order to program auxiliary codes you must know the master code (user code #1). Each auxiliary code has its own unique number from 2-15 and must be referred to by its number. The auxiliary code is programmed much like changing the master code. For example: to program auxiliary code #2 the sequence would be as follows:

[*][2][#] - [1][2][3][4] - [*][2][#] - [][][][] - [*][2][#]
NEW CODE

Codes 3 through 15 would be entered by using the above sequence and replacing [2] with the appropriate number 3-15.

Removing Auxiliary Codes

To remove an auxiliary code simply program it to be the master code. For example, to remove user code #2, the sequence would be as follows:

[*][2][#] - [1][2][3][4] - [*][2][#] - [1][2][3][4] - [*][2][#]

User code #2 has now been eliminated.

Note: If an attempt is made to change any of the codes from the keypad, and a invalid master code is entered or a [*] or [#] is made part of a code, the keypad sounder will beep 3 times and the keypad will return to the normal state. If the master code is changed, all auxiliary codes will be invalidated.

Activating Entry-Guard

This feature must be individually enabled for each sector by programming the correct number in locations 012 thru 019. Entry-Guard is activated by pressing the number two [2] key and waiting 5 seconds. If no other keys are pressed within 5 seconds, the system will become armed in the Entry-Guard mode. While in this mode, all designated Entry-Guard sectors will cause the keypad sounder to sound for the period selected in location 030. All other sectors will be isolated. If a Entry-Guard sector is violated and a valid code is not entered before the delay period is over, the siren will be activated. While in the Entry-Guard mode, the 208L can also be disarmed with the number two [2] key unless the siren has been activated. After siren activation a valid 4 digit user code must be entered to disarm the system and silence the siren.

Activating Day Annunciator

This feature must be individually enabled for each sector by programming the correct number in locations 012 thru 019. To activate Day annunciation, disarm the control and press the number one [1] key on the keypad. If no other keys are pressed within 5 seconds, the keypad sounder will beep and the Day Annunciator will become activated. Use the same procedure to remove this feature.

Alarm History

Pressing the zero [0] key for 5 seconds will cause the keypad to announce "Freeze Frame" alarm history after five seconds. The keypad will announce the sectors which produced the last alarm. It announces by flashing the sectors that caused the alarm and lighting steady the sectors that were isolated when the alarm occurred. Alarm History is erased when the 208L is placed into the program mode.

Sector Recycling

All sectors on the 208L will reset independent of each other. When a sector has reset, it is then able to create another audible alarm. If the siren/audible has not recycled, a trip or a re-trip will extend the time for another recycle period.

Keypad Operation

The 208L will accept up to four Control Keypads. The keypad is a four wire keypad that has a 12 key telephone type keypad, a sounder, and 12 LEDs.

The LEDs are used to indicate the following:

ARMED - (red) On when system is armed; off otherwise. Blinks on non-24 hour sectors as alarm memory until a valid code is entered.

SECURE - (green) On when sectors 1 through 8 are secure; off otherwise.

PARTIAL - (red) On when the Entry-Guard mode has been selected.

AC ON - (red) On when AC power is on; off otherwise. This light will not go out in the LED extinguish mode unless A.C. power is lost.

SECTORS 1-8 - On when isolated; blinking when faulted; off otherwise. Blinks when "Freeze Frame" alarm history is being shown, if faulted during the last alarm. On steady if sector isolated during last alarm.

Keypad Sounder - The keypad sounder is built into the keypad and will sound for the following reasons:

- Beeps for all keypresses.
- Sounds continuously during entry delay.
- Pulses when a Day sector trips or when the 208L is armed with a sector isolated. When pulsing, it can be silenced by entering a code. (armed status will not change)
- 3 Beeps for trying to arm when a faulted sector is not isolated and Auto Isolate is disabled.
- Beeps 1 second for Day Annunciation and activation of Day Annunciation.
- 3 Beeps when errors are made reprogramming codes.
- Beeps 1 second at the end of the exit delay.
- Beeps 3 times when all sectors are isolated.
- Beeps 3 times when a error is made when isolating a sector.
- Beeps 3 times to let the user know if the armed status did not change.

SPECIFICATIONS

OPERATING POWER:	16/18 VAC 1.5 AMP PLUG-PACK
AUXILIARY POWER:	12 VDC Regulated 400 mA
LOOP RESISTANCE:	300 Ohms Maximum
BUILT-IN SIREN DRIVER:	4 OHMS MAX
ALARM CURRENT AVAILABLE:	1 Amp
(If above driver is not used)	
LOOP RESPONSE:	Selectable 0-200ms or 500ms
OPERATING TEMPERATURE:	32° to 120° F
KEYPAD dimension:	4-90" Wide
	4-40" High
	1-25" Deep
METAL ENCLOSURE dimension:	11-25" Wide
	11-25" High
	3-50" Deep
SHIPPING WEIGHT:	9 lbs

WARRANTY STATEMENT

DIRECT ALARM SUPPLIES LTD 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 ALARMS SUPPLIES LTD, RIVERWOOD NSW.

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