

SG-DV1660LC/ SG-DV1660FLC

Intrusion Alarm System



TM

**SG SECURITY
COMMUNICATIONS**

A Division of Sur-Gard Security Systems Ltd.

***Installation
Manual***

Software version 5.0

SG-DV1660LC Software Version 5.0

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WARNING

Do not program "00" for the first two digit of the installer code.

The factory default setting of the "Program Default Installer Code" option (mode 20, location B3, option 29) is set "OFF". In this case the "Installer Lock Out" is enabled. If you want to be able to program the installer code default during transfer to EEPROM you should set this option to "ON".

The DV1660LC Alarm Control Panel with RS4A Keypad has not been designed for, nor does it have the necessary approvals for use in a residential environment, and should be used only in the following markets: commercial-retail-industrial.

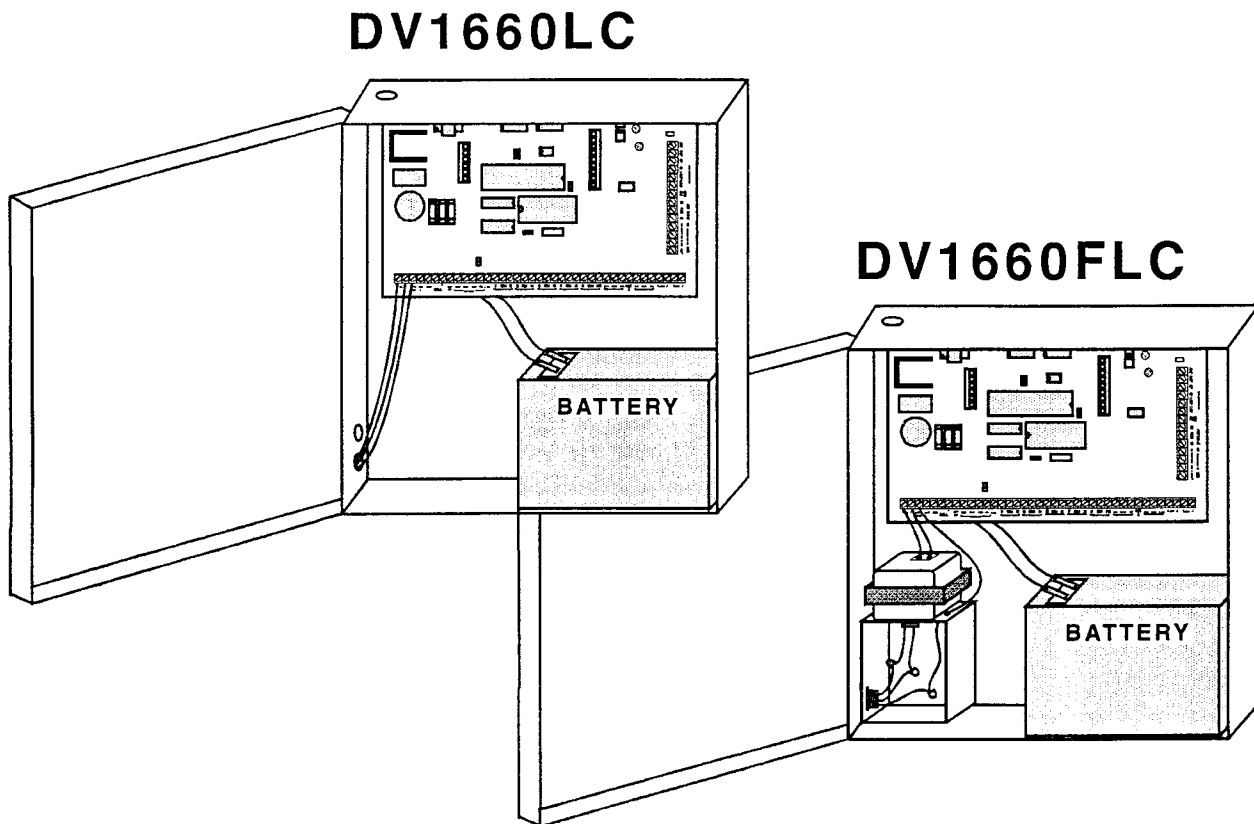
The new product release in SP&T states the new RS4A Keypad will enhance the appearance of the DV1660LC control in the commercial-retail-industrial markets.

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The DV1660LC is a highly flexible and versatile security system which will enable the installer to meet the most demanding security requirements. The heart of the system is the main control panel, designated the DV1660LC, which is connected to other system elements using 4 conductor unshielded station wire. The main panel processes signal information and communicates with the monitoring station. The main panel is capable of supervising 16 zones, any of which may be defined for fire or burglary applications. It also manages up to four separate and independent partitions or groups. Zones and users can be assigned to partitions in any number.

The basic 16 zone capability of the DV1660LC can be expanded using either 8ZE4W or FE4W modules which provide 8 zones of additional inputs respectively up to a system maximum of 64 zones.

Programming and system operation are performed using the RS4A liquid crystal display keypad. The RS4A has a four wire hookup to the system. A maximum of 4 RS4A keypads may be used on any one system.

The DV1660LC has 2 programmable outputs with 34 options available. The number of programmable outputs can be increased by using the DME1 digital dialer and memory expander module (5 additional outputs).

The DME1 is a digital dialer and memory expander module that offers many new features. An additional 16K bits EEPROM of memory, a digital backup which will transmit on a digital line if the DVACS line is cut, and 5 additional programmable outputs.

The DV1660LC includes the capability of driving a serial printer. Some models of printer may be located up to 1500 feet away from the panel with suitable wiring.

EEPROM MEMORY

- All user information is on a non-volatile EEPROM Memory
- Program information is retained even if both AC and Battery power are removed. The EEPROM memory can be reprogrammed thousands of times.

ARM/DISARM CODES AND REPORTING

- 64 user open/close report transmission
- Up to 128 user open/close report with DME1
- Split arming in 4 groups
- Zones and user's codes have programmable group assignment

OPERATION

- All wired zones are programmable as one of 14 types (Delay, instant, 24Hr Silent, 24Hr Audible, etc.)
- 16 zone inputs (14 low loops and 2 high loops)
- 3 fire inputs (1 class A and 2 End Of Line supervisory)
- 3 dedicated keypad zones (fire, emergency, and panic)
- Serial input for zone expansion modules
- Each module adds 8 zones (6 low loops + 2 high loops or 8 E.O.L. loops)
- Up to 48 additional zones with zone expanders
- 1 programmable auxiliary input
- All zones and other alarms (Trouble, Keypad, Alarm...) individually programmable for reporting to the central station
- Choice of simplified 4/2 style alarm code programming or fixed alarm code assignment to reduce installer errors
- Up to 32 special messages directly sent by the user (late closing)
- Built-in low battery disconnect
- Polyswitch and fuse protection
- Built-in DVAC compatible transmitter
- U.L.C. submission for combination fire/burglary

SUPERVISION

- Low or disconnected battery detection
- A.C. fail detect
- Supervised fuse protection
- Continuously polled by the central station
- Microprocessor watchdog circuit
- Communication line fault trouble signal
- Supervised bell output

INCREASED SECURITY

- Separate installers code
- Installer's code can't operate panel or program user's codes
- Memory security "switch" inside control panel
- Programmable requirement to open the control box, triggering a tamper alarm, and plug in a jumper, before the installer can reprogram the system.

KEYPAD PROGRAMMABLE

Your security system includes a default program so it is operational with a minimum of programming. The control panel is completely programmable from the keypad. It can also accept a "Master Installer Chip" for quick entry of an alarm company's standard programming.

- Liquid crystal display, backlit keypads
- 2 System lights: Armed, Bypass
- 4 Wire keypad connection (High Speed Response) and/or Keypress operation

AC POWER FAILURE, LOW BATTERY DISCONNECT

In the event of AC power failure, the backlighting for the keypad and display will pulse on briefly once every 4 seconds, instead of being lit continuously, (standard program). The "Armed" LED will also pulse to indicate the power failure condition and conserve battery power.

When A.C. power is lost for an extended period of time (a day or so), on most systems, the battery will get fully discharged or deep discharged. Your security system however will disconnect the battery when its voltage is below 10.5 volts, eliminating further harmful discharge.

When A.C. power is restored, the panel will automatically reconnect the battery to the charging circuit.

"WATCHDOG MONITOR" Circuit

Even when all precautions are taken so that voltage surges do not cause damage to the control panel, it is possible to cause temporary disruption to the operation of the microprocessor, causing it to lose track of the program sequence. Your security system is equipped with an external "Watchdog Timer" circuit, which continually checks the microprocessor program execution.

STATIC / LIGHTNING PROTECTION

Your security system has been carefully designed and tested to provide reliable in-use protection against static and lightning induced transients. Special "Zap-Trac" circuit board design catches high voltage transients right at the wiring terminals and transient protection devices are placed in all critical areas to further reduce damaging voltages.

Control Panel

- 16 fully programmable zones: 14 low and 2 high loops
- Up to 4 RS4A keypads on the system
- Up to 6 Zone expanders for a total of 64 zones
- Sockets for PGM3 or DME1 plug in modules
- Nominal current draw of 345mA

Audible Alarm Output

- Bell or Siren selectable output 12V, 1.5A (siren driver function included on panel)

Panel Inputs

- 16 Burglary zones: 14 low loops and 2 high loops
 - 3 Fire inputs: 1 Class A and 2 Supervisory *
 - 1 programmable auxiliary input
 - 1 Key switch input
- * The DV1660FLC is intended for use as a fire transmitter only, for connection to a sprinkler riser or to output relay contacts of an existing fire alarm control panel.
- This panel does not include U.L.C. requirements for a complete building fire alarm system such as:
- Ground fault detection, multi-zone with alarm and trouble indicators etc...

Panel Outputs

- Power supply Vaux 12V at 250mA w/15 Ah battery
- Bell/siren output 12V fused at 2A
- 24V output to power modem

2 Programmable Outputs

- Operation controlled through program options
- PGM 1: Switched to -, resistor limited
- PGM 2: Sw. aux +, 12V positive, 300mA

NOTE: The total current drain from the keypads, Aux.12V, programmable outputs, and bell/siren output must not be greater than 2.0 Amps.

Battery Required

- 9.5 to 15 Ah rechargeable gel-cell or sealed lead-acid battery mounted in panel. 24Ah mounted in an external cabinet.

Transformer

- 16 Vac, 40VA Class 2 Transformer (Built-in for the DV1660FLC)

Dimensions

- The SG-DV1660LC is available in all 3 available sizes
- The SG-DV1660FLC is mounted in a medium size cabinet (see dimensions below) with transformer included.
- Small: 29cm(W) x 30cm(H) x 8cm(D)
- Medium: 29cm(W) x 35.5cm(H) x 12.5cm(D)
- Large: 33cm(W) x 46.5cm(H) x 12.5cm(D)

Weight

- Small: 2.3Kg
- Medium: 3.7Kg (4.0Kg for the DV1660FLC)
- Large: 5.0Kg

RS4A Keypad Interface

- ULC listed for up to 4 keypads on the system
- Alphanumeric liquid crystal display
- Four wire hookup

RS4A Remote Keypad

- Up to 4 Keypads on the system
- Alphanumeric liquid crystal display
- Built-in buzzer
- Four wire hookup
- Nominal current draw of 36mA
- Full annunciation of zone and system status
- ULC listed

8ZE4W Zone Expander Module

- Up to 64 zones total on the system
- 8 zone expansion module
- 6 low loops and 2 high loops
- End of line resistance (E.O.L.) or N/C loop
- Four wire "daisy chain" hookup
- Nominal current draw of 32mA
- ULC listed

FE4W Fire Expander Module

- 8 zone expansion module
- 2 Class A zones and 4 supervision zones
- LED indicator for A1 Fire/Trouble and A2 Fire/Trouble
- Four wire "daisy chain" hookup
- Nominal current draw of 32mA

DME1 Digital Memory Expander Module

- Plug in module
- 5 additional programmable outputs
- Digital backup (if DVACS line is cut)
- 16K bits EEPROM memory for zone labeling and digital dialer data
- Nominal current draw of 32mA

BENCH TESTING

Your security system contains a factory default program. Any additional programming required is done through the keypad. For many applications all that will be required is to enter the ID number and alarm codes with keypad entries that are as straight forward as dialing a telephone number. If you need help, talk to your Sur-Gard distributor.

Connect a jumper from each zone (Z1 to Z16) input to the closest common "COM" terminal. Connect an end of line resistor between the S1 input terminal and the "COM" terminal between "S1 and S2". Connect a jumper between this "COM" terminal and the S2 terminal. Connect 2 loops to the sprinkler/fire class A input terminals - out to - in, and + out to + in. Unless all zone loops are properly terminated the panel will not arm.

Connect the four keypad wires to the control panel as shown in the keypad wiring diagram.

To completely test your security system including the communicator data, it is necessary to connect the panel to a test set, such as the SG-DVT1. Then remove the test set and connect the panel to a Sched 3A receiver through a modem and telephone line connection to test communication with a central station.

For testing purposes, so that the sound level is not too loud, connect a small buzzer to the "BELL +" and "BELL -" terminals to indicate when the panel is in alarm.

Connect a 16 or 16.5VAC, 40VA transformer to the "AC" terminals. Before plugging in the transformer, be sure the circuit board is not resting on anything metallic which may cause a short.

NOTE: Your security system WILL NOT START UP IF "AC" IS OFF AND THE BATTERY IS LOW.

When the transformer is plugged in, there should be lights on the keypad, and also, the test buzzer connected to the bell terminals may sound for a few seconds. The "ARMED" light may be on or off the first time the panel is powered. The last armed/disarmed condition is stored in the EEPROM memory so the panel will always power up in the last armed/disarmed state. If the "ARMED" light is on, enter the default master code [1234] to disarm the panel. If the keypad is not active, check for the presence of AC power at the "AC" terminals, check the keypad connections and check the panel fuses.

If all the zones are properly connected with end of line resistors or jumpers as required, the display should give the following: "READY TO ARM" - "ALL SECURE". Note that the panel will arm only if all zones are properly connected

with jumpers or resistors, as required. The keypad should beep several times to indicate acceptance of the master code.

Read the USER MANUAL and enter commands on the keypad to become familiar with the different commands.

Refer to the "PROGRAMMING - GETTING STARTED" section in this manual and enter a sample program into the panel through the keypad to become familiar with the programming commands.

MOUNTING THE PANEL

Select a dry location, close to an unswitched AC source, close to a ground connection, and close to the F1/F2 subset (modem) location.

Remove the printed circuit board, mounting hardware and keypad from cardboard retainer inside panel. Before attaching cabinet to wall, press the five white nylon printed circuit board mounting studs and the ground connection screw into cabinet from the back.

Pull all the cables into the cabinet and prepare them for connection before mounting the circuit board to the back of the cabinet. Press the circuit board down onto the mounting studs.

HOOK-UP PROCEDURE

DO NOT connect transformer or battery until all other wiring has been connected. See power-up procedure.

Connect a ground cable from the cabinet ground connection by the shortest and most direct route to a grounding rod and to the Earth Ground Terminal on the panel.

Connect zone cables to zone loop inputs and put jumpers or end of line resistors as required on any unused zones. Connect wires supplying power to motion detectors to auxiliary supply. Install keypads and connect wires to keypad terminals on panel.

Connect bell or siren to "BELL+" and "BELL-" terminals. Observe correct polarity for sirens and polarized bells. Connect a 1K ohm 1/2 watt resistor across the bell terminals to eliminate trouble condition if bell circuit is not being used.

DESCRIPTION OF ZONES

Your security system has twenty hard wired zones: 16 programmable burglary loops, 1 hardwire dedicated Class A fire zone (A1), two supervisory loops S1 and S2, and an auxiliary zone, which can be used as a panic zone or key switch input.

Zones #1 to #14 on the panel are normally closed (low loop).

The high loops zones 15 & 16 can be configured to be normally closed or tripped by a 0 volt (negative) signal (normally open). To use one of these zones as an N.O. circuit, close the zone with a jumper or loop of normally closed switches. To trigger an alarm, switch to a "COM" terminal of the zones 1-14. (see double loop connection diagram).

You may also use the high loops 15 & 16 as 24Hr loops to supervise all other low loops with a double loop circuit, as described in the diagram.

This is the required wiring method for U.L.C. listed systems.

Maximum wire resistance:

Zones 15 & 16 cct(highloop) Zn 1 to 14 cct (Low loop)

$$R1 + R2 = 500 \text{ Ohms}$$

$$R5 + R6 = 500 \text{ Ohms}$$

$$R3 + R4 = 500 \text{ Ohms}$$

$$R7 = 500 \text{ Ohms}$$

You may also use zones 15 or 16 high loops to supervise a "Grade A" Bell box with a double loop circuit as described in the diagram.

Maximum wire resistance:

Zones 15 & 16 cct(highloop) Zn 1 to 14 cct(Low loop)

$$R3 = R4 = 500 \text{ Ohms}$$

$$R1 = R2 = 500 \text{ Ohms}$$

Bell

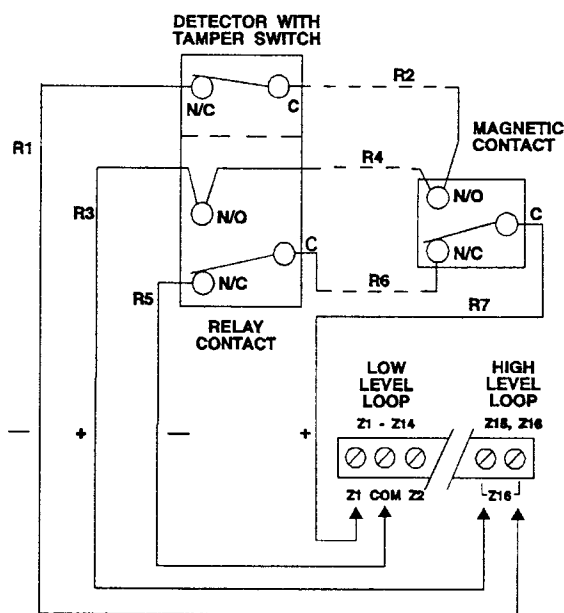
$$R5 + R6 = 2 \text{ Ohms}$$

The supervisory loop "S1" must have a 2.7K end of line resistor. This is not a Class B fire circuit, since either a short or an open condition causes the same supervisory signal. Loop S1 is then able to supervise an N.O. contact switch as well as the N.C. type.

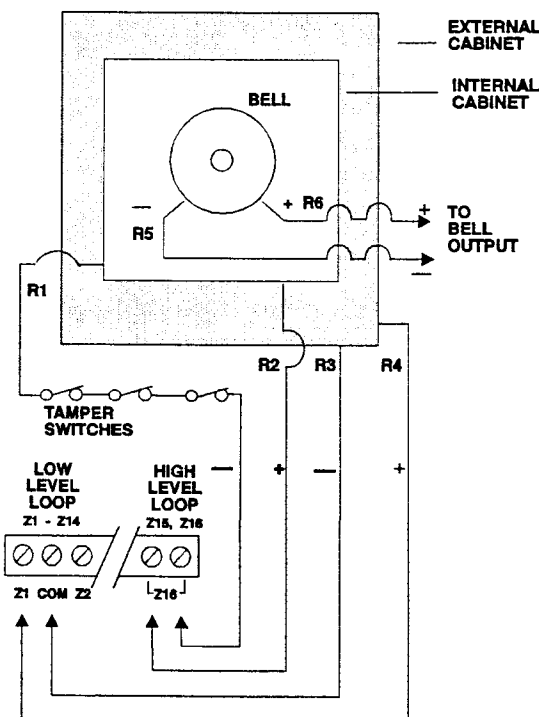
S2 is similar to zones 1 to 14 (low loops).

The A1 Class A Fire/Sprinkler circuit must have one closed loop between its two "+" terminals and another between its two "-" terminals. Opening one of those loops will cause a fire trouble and shorting across the loops will cause a fire alarm.

Double loop connection diagrams



BELL CONNECTIONS



TERMINAL CONNECTIONS

AC POWER TERMINALS "AC"

Use a 16 or 16.5 VAC transformer with a minimum 40VA rating to supply AC power to your security system. The transformer should not be connected to an outlet that is controlled by a switch. If AC failure occurs, it is displayed as a trouble on the keypad (see user manual for [*][02] trouble conditions). It can be also transmitted to the monitoring station as a trouble condition depending on the zone type programmed at location 5C.

AUXILIARY POWER TERMINAL "AUX" AND "GND"

The auxiliary power supply can be used to power motion detectors and other devices requiring 12VDC. 800mA 12VDC is available from the "AUX" (positive) and "GND" (negative) terminals when your security system is used with one keypad. For each additional keypad the auxiliary supply rating must be reduced by 36mA. The auxiliary supply is fused with the keypad supply at 1 amp. Auxiliary fuse failure will cause a trouble transmission.

BELL/SIREN TERMINALS "BELL+" AND "BELL-"

These terminals are for powering bells or other audible devices requiring a steady output voltage on alarm. The bell output is fused for 2 amps. When connecting sirens (speakers with siren driver already built-in), be sure to observe the correct polarity. Connect the positive lead to the "BELL+" terminal and the negative to the "BELL-" terminal. If no siren or bell is used, connect a 1000 ohm 1/2 watt resistor between "BELL+" to "BELL-". The bell/ siren alarm output is usually pulsed (1 second on 1 second off) when an alarm is created by the [F] keypad zone or by the FIRE ZONE.

KEYPAD TERMINALS "RED", "BLK", "YEL", AND "GRN"

Connect the four coloured wires from the keypads to these terminals. When connecting more than one keypad, connect in parallel across the keypad terminals at the control panel (ie. all RED wires together, all BLACKS together, all YELLOWS together and all GREENS together). The keypad red and black power supply terminals are fused through the auxiliary fuse.

PROGRAMMABLE OUTPUT TERMINAL "PGM OUT 1"

The operation of the Programmable Output depends upon which option is selected in the programming table. See the Quick Reference Guide for a list of programmable operation possibilities programmed at Location A1, for the "PGM OUT 1" output. The "PGM OUT 1" is a switch to ground. A 150 ohm current limiting resistor is connected in series. A sensitive relay, a buzzer or other DC operated

device may be connected between the "AUX" (positive) terminal and the "PGM OUT" (switched negative) terminal on the main board.

PRGM OUTPUT #2 SWITCHED AUXILIARY POWER TERMINALS "SW AUX" & "GND"

The switched auxiliary supply can be switched on or off momentarily from the keypad (see KEYPAD COMMANDS in the User Instructions section - [*][0][5]). See the Quick Reference Guide for a list of programmable operation possibilities programmed at Location A2. The "SW AUX" terminal is positive and the "GND" terminal negative. The 800mA auxiliary supply rating must be reduced by any current taken from the switched auxiliary supply. The switched supply shares the same fuse as the auxiliary supply.

AUXILIARY INPUT TERMINAL "AUX IN" (ALSO KEY ARMING)

The "AUX IN" input terminal is a normally open 24 hour zone. It can be programmed from the keypad to be silent or audible. There is a display on the keypad for the "AUX IN" input with the troubles in modes 02 and 09. An alarm on this input is created by applying a positive voltage or by closing a contact between the "AUX IN" terminal and the positive auxiliary supply. See Programming Guide [*][20] section [0A] for programming the alarm and restoral codes. The Aux input is intended to be used as burglary zone or can be used as a momentary key arming/disarming input.

"FIRE" ZONE INPUT

The "FIRE" zone is a supervised (normally open alarm initiating contact) Class A circuit designed to accept sprinkler switches, manual pull stations, building fire alarm control panel alarm output relay contacts or "latching" four-wire smoke detectors. See the DV1660LC (FLC) wiring diagram.

On alarm, (fire loop shorted) once the activation delay has expired, the bell output will pulse (with standard programming) and the alarm is transmitted to the central station. The "Retard" activation delay is programmed at location A7. If the fire input returns to normal or "swings" before the activation delay has expired, there will be no audible or transmitted alarm. This activation delay feature makes it possible to use vane type waterflow switches without false alarms from pressure surges. There is also a restore delay time programmable at location A8, to avoid nuisance repeat alarms. Enter any valid code to reset a fire alarm.

KEYPAD INSTALLATION

With the RS4A keypad, jumper pins "J4" must be shorted using a plug in "SHUNT JUMPER". See the DV1660LC (FLC) wiring diagram.

Mount the keypads near the exit-entry doors. The RS4A keypad has a red, a black, a green and a yellow wire on the back. Connect these four wires to the four keypad terminals on the control panel using four conductor (quad) telephone wire. Up to four keypads may be connected to

one DV1660LC on a ULC Certified System. Connect all green wires from the keypads to the "GRN" terminal on the panel. Connect all yellow wires from the keypads to the "YEL" terminal on the panel. Connect all red wires from the keypads to the "RED" terminal. Connect all black wires from the keypads to the "BLK" terminal.

POWER-UP PROCEDURE

If the keypads are located at a distance from the panel, install an extra keypad temporarily at the panel during power up testing. An extra keypad with a short length of cable and alligator clips attached is helpful for testing and programming DV1660LC systems.

Connect the transformer, wait approx. 5 seconds.

Enter a few keypad commands and open a zone to be sure that the panel and keypad are responding to signals. If the keypad does not respond and there are no indicators on, check for AC voltage at the "AC" terminals. If there is 16 VAC present, check that the keypad wiring is correct and check the keypad /auxiliary supply fuse. If the keypad /

auxiliary supply fuse is blown, check for a short between the keypad red and black wires before replacing the fuse.

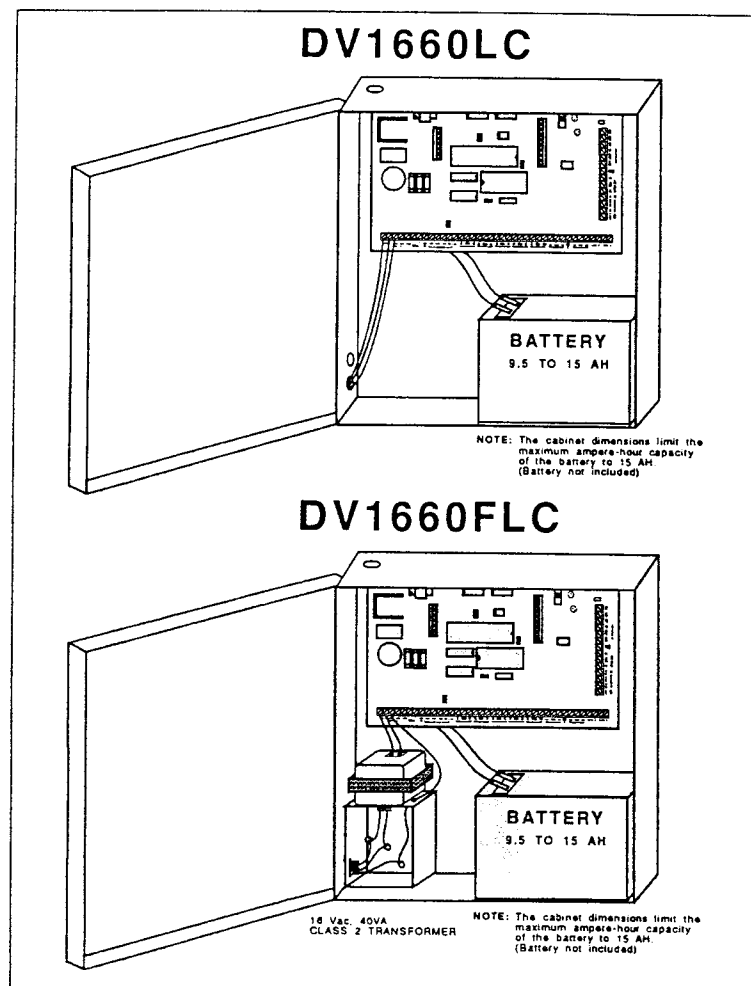
If the keypad is responding normally, connect the battery. The red battery lead attaches to the positive battery post and the black battery lead attaches to the negative battery post.

CAPABILITY TO HAVE ZONE LABELS WITHOUT A DME1 MODULE

The panel can work with 2 type of EEprom: 35c104 normal or **35c116 with room for zone labels**. At power up, the system checks the EEprom type and automatically initializes the read / write parameters. If is not recognized, as would happend if the EEprom was replaced with a new blank one), a prompt is displayed to the installer:

```
EEPROM NOT REC.
<0> 104 , <1> 116
```

The installer should press key "0" or "1" corresponding to the EEprom on the control panel.



Inside Views of the DV1660LC & DV1660FLC

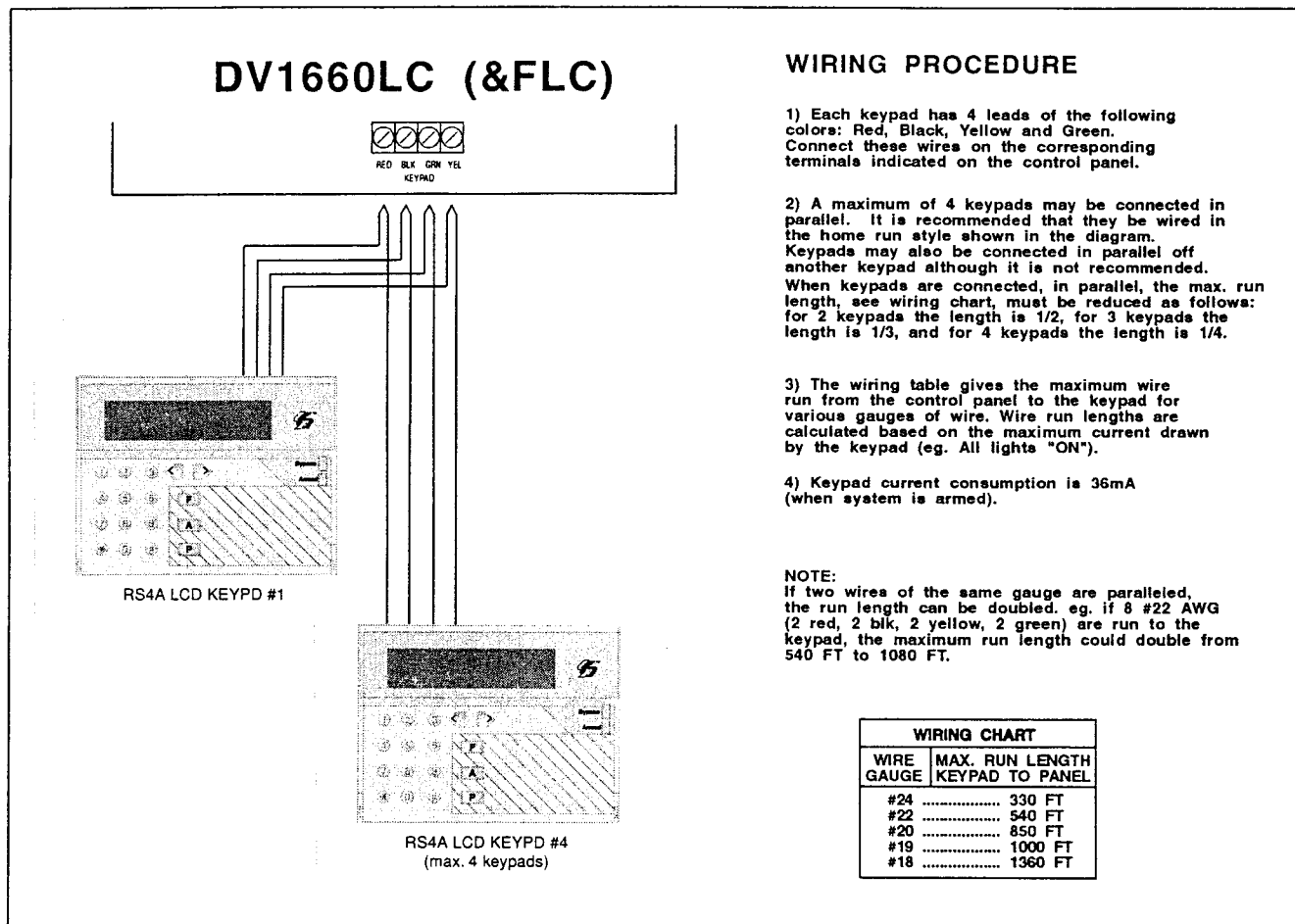
PERMISSIBLE LOADS VERSUS BATTERY SIZE REQUIRED FOR 24 HOUR STANDBY TIME

Misc Aux Load = Motion detectors and other loads besides keypads and zone expanders.

Misc. aux. Load	Keypads	NUMBER OF 8ZE4W ZONE EXPANDERS						
		mA/AMPHR						
		0	1	2	3	4	5	6
0mA	1	345/9.5	376/9.5	407/10	438/12	469/12	500/15	531/15
	2	381/9.5	412/12	443/12	474/12	505/15	536/15	567/15
	3	417/12	448/12	479/12	510/12	541/15	572/15	603/15
	4	453/12	484/12	515/15	546/15	577/15	608/15	639/24*
50mA	1	395/10	426/12	457/12	488/12	519/15	550/15	581/15
	2	431/12	462/12	493/15	524/15	555/15	586/15	617/24*
	3	467/12	498/15	529/15	560/15	591/15	622/24*	653/24
	4	503/15	534/15	565/15	596/15	627/24*	658/24	689/24
100mA	1	445/12	476/12	507/15	538/15	569/15	600/15	631/24
	2	481/12	512/15	543/15	574/15	605/15	636/24	667/24
	3	517/15	548/15	579/15	610/15	641/24*	672/24	703/24
	4	553/15	584/15	615/15	646/24	677/24	708/24	739/24
150mA	1	495/15	526/15	557/15	588/15	619/24	650/24	681/24
	2	531/15	562/15	593/15	624/24*	655/24	686/24	717/24
	3	567/15	598/15	629/24*	660/24	691/24	722/24	753/24
	4	603/15	634/24	665/24	696/24	727/24	758/24	789/24
200mA	1	545/15	576/15	607/15	638/24	669/24	700/24	731/24
	2	581/15	612/15	643/24	674/24	705/24	736/24	767/24
	3	617/15	648/24*	679/24	710/24	741/24	772/24	803/24
	4	653/24	684/24	715/24	746/24	777/24	808/24	839/24
250mA	1	595/15	626/24	657/24	688/24	719/24	750/24	781/24
	2	634/24*	662/24	693/24	724/24	755/24	786/24	817/24
	3	667/24	698/24	729/24	760/24	791/24	822/24	853/24
	4	703/24	734/24	765/24	796/24	827/24	858/24	889/24

* CAN USE 15 AMP HR BATTERY WITH LCD KEYPADS (RS4A)

KEYPAD WIRING DIAGRAM



SYSTEM TESTING

See System Test, Mode 06, in the user manual section

■ [*,] [0], [6], [VALID CODE]

First test the system thoroughly using an SG-DVT1 tester. Contact the monitoring station to request a transmission test. Arm the panel, wait for the exit delay to expire and trip a detector on an instant circuit. Wait for the communication to complete. Disarm panel and check with the monitoring station to confirm the transmission. Perform additional transmissions required by the monitoring station.

Check the "DISPLAY". If it's indicating a trouble condition follow the indication on the display, press[*] to determine if there is a system trouble. The TROUBLE DISPLAY section in KEYPAD COMMANDS gives a description of the different trouble conditions.

Program the exit, entry and alarm cut-off times to the desired values. Activate any other features being used.

INSTRUCTING END-USER

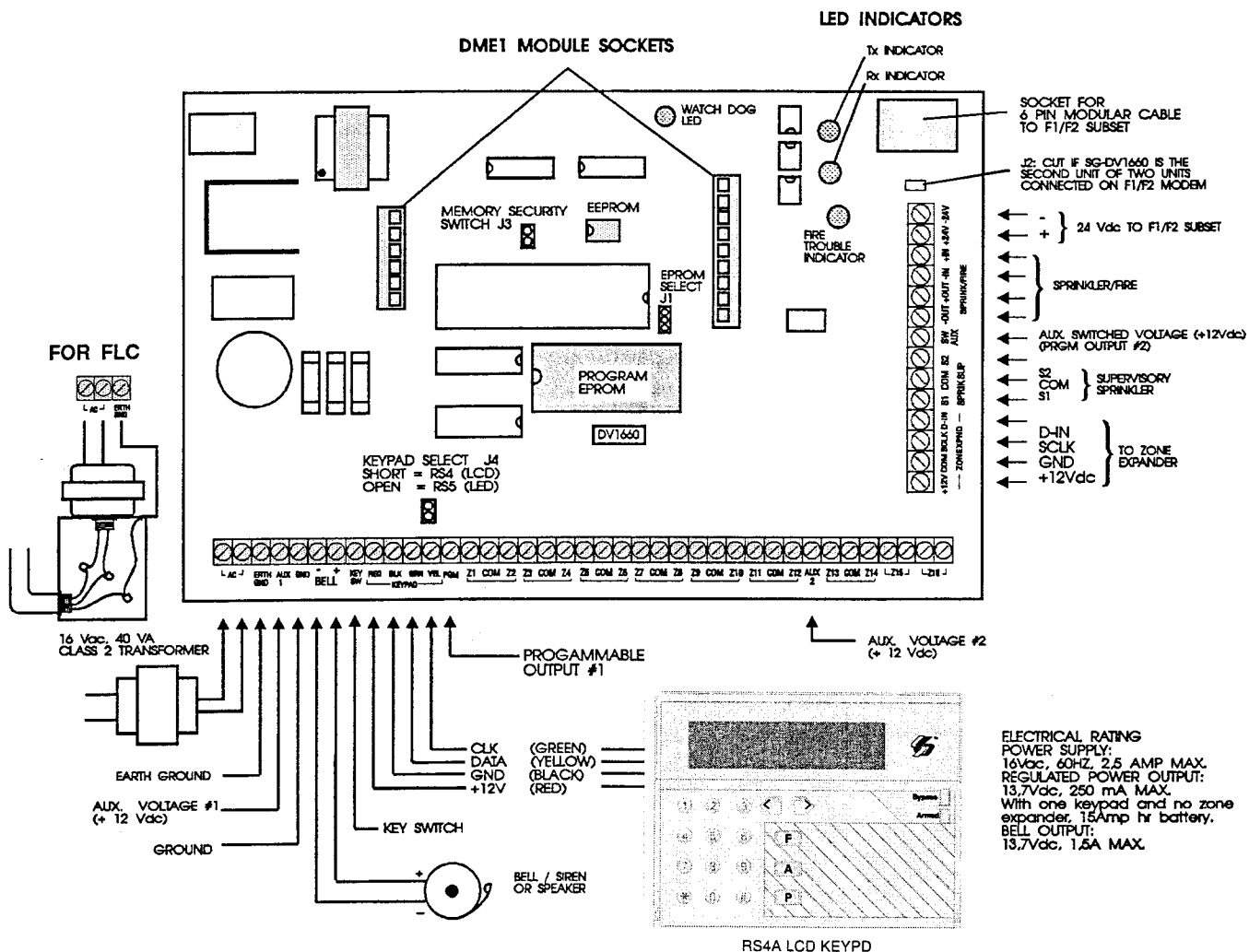
Fill out the system reference guide in your security system user instruction manual. Check off sections in the manual which apply to the user's system and make additional notes if necessary.

Describe the system to an authorized user. Describe arming and disarming procedures. Describe the basic keypad functions. Assist the user in working through examples of each type of command.

Provide users with the instruction manual and advise them to read the manual to become familiar with the system operation.

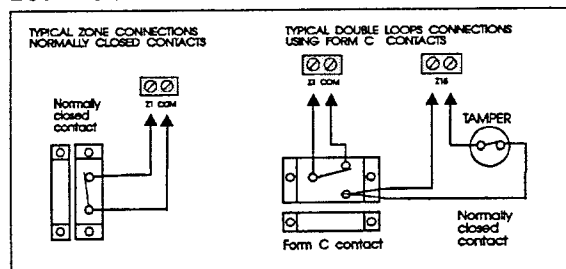
Instruct the user to test the system on a regular basis as described in the user manual. The Master Code should be changed from the default setting.

SG-DV1660LC (&FLC)

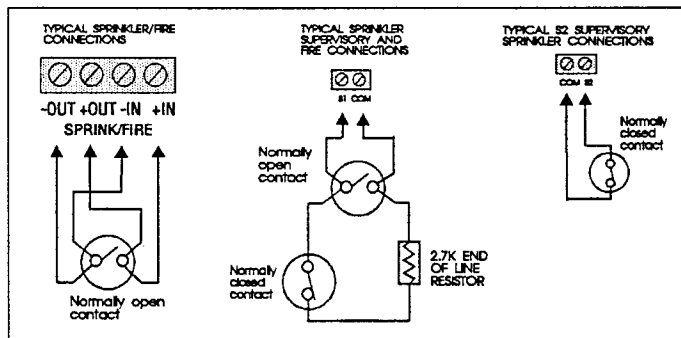


RS4A LCD KEYPD

ZONE CONNECTIONS



SPRINKLER/FIRE CONNECTIONS

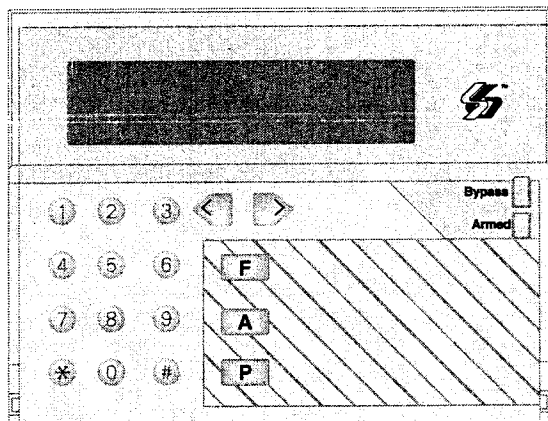


INTRODUCTION

The RS4A remote keypad is the user interface to the security system control panel. The panel can be fully programmed from the keypad. The display provides alarm and status indication for the alarm circuits. The 2 function lights guide the user in operating the system. The built-in sounder lets the user hear correct key entries and other alert signals. The 12 digit keypad is used for code entry and other programming functions. All user keypad entries are made by pressing one key at a time, (except for the quick arming, if this feature is selected and Hex digits "A" through "F"). The system is normally in the arm/disarm mode. In this condition, the display indicates the opening and closing of zones. The system can be directed to perform other functions such as zone bypassing, displaying trouble conditions, displaying alarm memory and programming, by entering one of the various [*] commands described below. Pressing the [#] key or not making any key entry for 2 minutes always returns the keypad to the arm/disarm mode.

Entering Letters A to F on the RS4A Keypad.

Letter	Keypad operation
A	Press 1 & 2 keys simultaneously
B	Press 2 & 3 keys simultaneously
C	Press 4 & 5 keys simultaneously
D	Press 5 & 6 keys simultaneously
E	Press 7 & 8 keys simultaneously
F	Press 8 & 9 keys simultaneously



MASTER CODE

A default master security code "1234" is programmed into the DV1660LC at the factory. The master security code is used for arming and disarming the control panel, for programming up to sixty three additional security codes using the [*][0][3] command and for entering other user functions, depending on programming. The master code can be reprogrammed unless system option 17 is on. Because your security system uses EEPROM memory, the codes and other data are retained even after complete AC and battery failure.

INSTALLER'S PROGRAMMING CODE

A default installer's programming code "1660" is programmed into your security system. The code is used with the [*][20], [21], or [22] commands by the installer to gain access to the system in order to enter panel or communicator program information. The installer's program code may be changed by the installer.

MODE DESCRIPTIONS

Normal Mode: Arm/Disarm Mode

Mode #01: Zone Bypassing (Shunting)

Mode #02: Trouble Display Mode

Mode #03: Programming Additional Entry Codes

Mode #04 & 05: Utility Output Modes

Mode #06: Multiple Functions

01 Setting The Clock (Hour/Min.)

02 Setting The Date (DD/MM)

03 Setting The Day of The Week

04 Quick Arm Select

06 Activate Bell for 3 Seconds

07 Activate Programmable Outputs

08 Activate Buzzer for 3 Seconds

09 Keypad Display Speed Select

10 Auto Arm Time of Day for Schedule #1

12 Auto Arm Time of Day for Schedule #2

14 Auto Arm Time of Day for Schedule #3

16 Day Assignment for Schedule #1

17 Day Assignment for Schedule #2

18 Day Assignment for Schedule #3

Note: Functions 11,13, and 15 are reserved for special applications

Mode #07: Zone Chiming Select

Mode #08, 09 & 10: Alarm Memory Display

Mode #11: Sending a User Message

Mode #12: Last person who armed/disarmed group A to group D

Mode #17: Check for identical user codes

Mode #18: Programmable zone labels (DME1)

Mode #19: Programmable group labels

Mode #20: Installer programming mode

Mode #21: Installer programming mode (DME1)

Mode #22: Programmable Event Descriptors (DME1)

Mode #24: System Clock

Mode #99: Language Select

To enter any Mode:

1. Simply Press the [*] key.
2. Enter the Number of the Mode.
3. Enter a valide code.

See the user's manual for an explanation of all user functions accessible from the keypad.

The DV1660LC has its own EEPROM which is used to save all the installer programming and that won't erase in the case of power failure.

MEMORY SECURITY JUMPER J3

This feature provides added security by requiring the control panel box to be opened, causing a tamper alarm, before installer programming can be done.

If the MEMORY SECURITY feature is enabled (Location B3 option 21) jumper pins J3 must be shorted using a plug-in "shunt jumper", before the control will allow installer programming. This jumper must be removed after installer programming is complete.

In the event that the installer's code is "lost" through unintended reprogramming, it is possible to reload all the default data, including the factory default installer's code. Use the following procedure:

TRANSFER OF DEFAULTS TO THE EEPROM

(Hardware Reset of EEPROM to Factory Defaults)

1. Power unit down by removing both AC and battery power.
2. Using a "Plug-In" jumper, short pins marked "Memory Security" J3 together.
3. Power up DV1660LC.
4. The display shows the following:

```
ENTER FUNCTION  
NUMBER.....:
```

- 0 -> All data
- 1 -> Master code #1 (1-2-3-4)
- 2 -> All user codes
- 3 -> Zone name
- 4 -> Group name
- 5 -> Installation data
- 6 -> Dialer data (DME1)
- 7 -> Clear both telephone numbers and account codes

After pressing the key between 0 and 7, the system asks for a confirmation:

```
TO CONFIRM.....X  
<0> NO, <1> YES
```

If you press 0 (for no), the system goes to the message "ENTER FUNCTION NUMBER", if you press 1 (for yes) the system program the standard you choose.

WARNING: If Option 29 (PROG. OF DEFAULT INSTALLER CODE DURING TRANSFER TO EEPROM, p.25) has not been selected then the default installer's code will not be programmed by the DV1660LC. If the installer's code is not known, it must be reprogrammed using an Installer's Master Chip.

(Please contact your SUR-GARD distributor for more information)

NOTE: It is also possible to transfer the defaults to the EEPROM by an installer programming command. See mode 20 location B9 (Transfer of default data to the EEPROM) on page 26 for more information.

INTRODUCTION

ALL PROGRAMMING MUST BE DONE ACCORDING TO THE STANDARDS AND REQUIREMENTS OF THE CENTRAL MONITORING STATION TO WHICH THIS EQUIPMENT IS CONNECTED, AND ACCORDING TO THE RESTRICTIONS OF UNDERWRITERS' LABORATORIES OF CANADA, IF APPLICABLE. USE SPLIT ARMING ONLY IF THE CENTRAL STATION HAS THE MEANS TO KEEP TRACK OF WHICH GROUPS (PARTITIONS) ARE ARMED ACCORDING TO THE CODES RECEIVED.

NOTE: All data shown are generally in **Decimal Values** (Except for alarm/restore codes which may be in Hex value).(The locations are in Hex value).

MODE 20 INSTALLER PROGRAMMING (MODE 20)

1. Press the [*] key.
2. The display should give the following:

ENTER NUMBER OF
NEW MODE

3. Add jumper to J3 (if "memory security option" is selected). Enter the two digit code [2][0].
4. The display should give the following:

ENTER VALID CODE

5. Enter valid installer's code. (FACTORY DEFAULT 1660)
6. At this point the display will show

ENTER NUMBER OF
NEW LOCATION.:

Enter the number of the location you wish to view. Locations are explained in detail in the following pages or you may refer to the "PROGRAMMING WORK SHEETS at the end of this manual.

7. At this point you can make four different operations, that are:
 1. Changing the data that is displayed by entering a two digits number. After programming the new data for a specific location, the unit will go automatically to the next location. (Except for locations AB to B8, see details below).
 2. Going to the next location without changing the data at the previous one, by pressing the [*] key. If the unit was at the last location when you performed this operation, it will go to the first location [0][0].

3. Going to the previous location without changing the data at the present one, by pressing the [*] & [0] keys simultaneously. If the unit was at the first location when you performed this operation, it will go to the last location ("B9").
4. Jumping to any location, by pressing the [*] & [#] keys simultaneously. The display should give the following: "ENTER NUMBER OF NEW LOCATION". Enter a two digits number corresponding to the location of the data to be changed.

NOTE: At any time, you may press the [#] key to go back to arm/disarm mode.

SPECIAL 99 & 00 FUNCTIONS FOR LOC. AB TO B8:

When programming locations requiring multiple entries, such as Code Assignment for Group A, 99 may be entered to select all codes (01 to 64) and 00 may be entered to deselect all codes.

- 99 Selects all codes.
00 Deselects all codes.
199 For loc. AF to B2 with DME1

LOCATION:

[00] The identification code

You may change the account identification code by entering a two digit number in hex. (DEFAULT 00)

[01] Maximum number of alarms per arm period (subsequent alarms).

Each alarm can be limited in the number of times it can be tripped within one arm period. The choices are: Once, twice or the unit can report an unlimited number of times. The limiting applies when the system is communicating normally with the central station. The data of location 01 represents the number of times each zone could be tripped, (until this feature is reset by disarming/arming the control).

# of alms	Data
1	01
2	02
unlimited	03

Example: If dealer wants each zone to give a maximum of 2 alarms, 02 is programmed at location 01. (DEFAULT 03)

[02] & [03] All Call Options

An "All Call" is a command sent by the central station's receiver after each scanning of 8 identification codes. If a transmitter has an alarm at this moment, it can be sent immediately to the central station, if the unit is programmed to respond to that "ALL CALL". With this feature, it is usually not necessary for that transmitter to wait for its turn to be polled, before it is able to send an alarm to the central station.

Example of receiver scanning:

01-02-03..08-ALL CALL #1-09-0A-0B..10-ALL CALL #2..

It is recommended that just 1 All Call be selected, and the choice of All Call be divided evenly over the installations. In this way, approximately an equal number of subscribers will be programmed for All Calls #1 and #2.

If two units are connected on the same modem (F1F2 subset):

Skip at least 2 codes between your 2 identification codes. (ex: #01,#04 so that 02 and 03 are used at other locations.)

Each unit should have a different All Call selected. So with automatic all call selection, you should have an odd and an even identification code.

No response on All Call should be used for lower security installations, and when more than two units are connected to one modem - for the 3rd and additional units.

[02] OPTION 1 - All Call select

Program a code from 00 to 04:

- 00 No response on All Call.
- 01 Response on All Call #1 only.
- 02 Response on All Call #2 only.
- 03 Response on both All Calls.
- 04 Automatic selection of All Call: All Call #1 for odd acct. #, All Call #2 for even acct. #.

NOTE: A number programmed higher than 04 gives, the same selection as 04.

(DEFAULT 04)

[03] OPTION 2 - All Call Answer

The unit can send an alarm and a restore on All Call, but it is possible and preferable to program it to send only an alarm and wait for the polling of its acc. code before sending the restore.

- 00 All Call Answer on alarm and restore
- 01 All Call Answer on alarm only

(DEFAULT 01)

[04] TO [50] Alarm/Restore Codes

Program the alarm code like a 4/2 format digital dialer. The restore is generated automatically. Your security system microprocessor does the necessary calculations to generate the proper function byte and zone position bit, so you don't have to think about these things. Refer to the PROGRAMMING WORK SHEETS at the end of this manual.

NOTE: The alarm on exit code (location 07) is transmitted only if a zone is tripped during the Exit Delay. (This code will not be transmitted if a trouble is generated during the Exit Delay),

[51] & [52] USER MESSAGES FUNCTION BYTES

See the user manual, "MODE 11 sending user message".

51 FUNC BYTE, MESSAGE 1 TO 8 / 17 TO 24

52 FUNC BYTE, MESSAGE 9 TO 16 / 25 TO 32

With "1E" programmed at 51 and "1F" at 52, the first 16 messages will be received and printed at the central station as alarms on zone A0 to AF and messages 17 to 32 will be received and printed at the central station as restores on zone A0 to AF.

[53] TO [9F] Zone Definition (Type)

Each zone can be configured to have a definition (or type). To assign a definition to a zone or other alarm, enter the corresponding value at the location specified.

Determine which data to program corresponding to desired type according to the following table:

DATA	DEFINITION
0	24 HRS SILENT
1	24 HRS AUDIBLE
2	24 HRS PULSE BELL
3	DAY LOOP (SILENT DAY, AUDIBLE NIGHT)
4	DAY LOOP + BUZZER
5	DELAY
6	DELAY/INSTANT
7	INSTANT
8	BUZZER ONLY (NO REPORT)
9	NO ALARM
A	DOUBLE DELAY (ENTRY TIME * 2)
B	PROBATION (NO ALM BUT RECORDED IN MEM GUARD) (PANEL ARMED ONLY)
C	BUZZER 30 SECONDS (WITH REPORT)
D	NO ALARM
E	DELAY/INSTANT (HOME & AWAY)
F	AUDIBLE ALARM/NO REPORT DURING THE DAY

Ex: Dealer wants: zone #2 = 24 Hrs pulse bell
 zone #3 = delay zone
 zone #4 = silent 24 hrs
 zone #5 = audible 24 hrs

Program : location data

61.....2

62.....5

63.....0

64.....1

Refer to the following page for more information or to the PROGRAMMING WORK SHEETS at the end of this manual.

ZONE DEFINITION (TYPE) DESCRIPTIONS

0: 24HR SILENT

Alarm is active regardless of the armed/disarmed status of the system. It will be reported to the central station and stored in memory guard. The unit does not advise the user that an alarm occurred (no bell, no buzzer, no led).

1: 24 HR AUDIBLE

Alarm is active regardless of the armed/disarmed status of the system. It will be reported to the central station and stored in memory guard. The unit will advise the user that an alarm occurred (bell). If this zone is left open it will be indicated on the LCD and Ready Led.

2: 24 HR PULSE BELL

Functions as the 24 hr audible type, but the bell is turned on for 1 or 2 seconds and turned off for 1 or 2 seconds, repeatedly...

3: DAY LOOP (SILENT DAY, AUDIBLE NIGHT)

("Day" means the system is disarmed and "night" means the system is armed.) This type is like the 24 hr audible, but will activate the bell output only if the system is armed.

4: DAY LOOP + BUZZER.

Functions the same as type 3 but the buzzer will sound continuously when this type of alarm occurs if the system is armed or disarmed.

5: DELAY

This delay is used to give the User the time to exit or enter the building through the specified zones that are set to this TYPE. The exit delay time is programmed at location [A4] and will activate the alarm only at the end of the exit time. The entry time is programmed at location [A3] and will activate the alarm at the end of the entry time if the system is not disarmed. The bell is activated when this zone is in alarm. The abort (delayed transmission) feature does not apply for this type.

6: DELAY/INSTANT (FOR MOTION DETECTORS IN THE EXIT/ENTRY PATH)

This type triggers an alarm instantly if activated first. But in the case of a User exiting or entering the building, the Delays programmed in TYPE 5 will be in effect. This means you may open this zone during the exit or entry time without causing an instant alarm. The bell is activated when this zone is in alarm.

7: INSTANT (FOR WINDOW AND DOOR CONTACTS)

This type triggers an alarm instantly when the system is armed including during the entry and exit delay periods. The bell is activated when this zone is in alarm.

8: BUZZER ONLY (NO REPORT)

This type causes the buzzer to "beep" continuously until it is restored. But it is never reported to the central station and never stored in memory guard.

9: NO ALARM

For a zone which is not used or needs to be permanently bypassed.

A: DOUBLE DELAY (2 x ENTRY TIME)

This delay is the same as type 5, except that the entry time is doubled.

B: PROBATION (MOSTLY USED FOR TESTING)

Never reported to the central station and never activates bell. It will be recorded in memory only if it is opened when the system is armed. If you left this zone open when the system is disarmed, it will be indicated on the LCD and Ready LED.

C: 30 SECOND BUZZER (WITH REPORT)

Alarm is active regardless of armed/disarmed status of the system. It will be reported to the central station and stored in memory guard. When it is in alarm the bell is not activated, but the buzzer will make a short beep every 30 seconds.

D: NO ALARM

For a zone which is not used or needs to be permanently bypassed.

E: DELAY/INSTANT (HOME AND AWAY)

For this zone type, if a delay door is not opened during the exit time, the zone is automatically bypassed. Otherwise, it has the same characteristics as type 6.

F: AUDIBLE ALARM/NO REPORT DURING DAY

If a zone of this type is triggered when the system is **disarmed**, the bell, siren sounds, but no report is transmitted to the central station.

If a zone of this type is triggered when the system is armed, the bell, siren sounds and a report is transmitted to the central station.

[A0] NUMBER OF ZONE EXPANDERS

This number in this location identifies how many zone expanders the system should look for. (DEFAULT 00)

[A1] & [A2] PROGRAMMABLE OUTPUT CHARACTERISTIC

There are two programmable outputs on the DV1660LC system and 5 on DME1 module. Programmable outputs #1 and #2 are found on the main circuit board as "pgm out" & "sw". aux. Both outputs can be programmed by entering the value corresponding to a function at the corresponding location.

Mode 20

A1 P-out 1 characteristic (DEFAULT FF)
A2 P-out 2 characteristic (DEFAULT FF)

Mode 21 If you have DME1 module installed

DC P-out 3 characteristic (DEFAULT FF)
DD P-out 4 characteristic (DEFAULT FF)
DE P-out 5 characteristic (DEFAULT FF)
DF P-out 6 characteristic (DEFAULT FF)
E0 P-out 7 characteristic (DEFAULT FF)

PROGRAMMABLE OUTPUT TYPE

00 KISS OFF
01 DVAC COMMUNICATION PROBLEM
02 COURTESY LIGHT
03 FOLLOW BELL
04 FOLLOW GR.A ARM/DISARM STAT.
05 FOLLOW GR.B ARM/DISARM STAT.
06 FOLLOW GR.C ARM/DISARM STAT.
07 FOLLOW GR.D ARM/DISARM STAT.
08 FOLLOW GR.A READY STATUS
09 FOLLOW GR.B READY STATUS
0A FOLLOW GR.C READY STATUS
0B FOLLOW GR.D READY STATUS
0C UTIL.OUT.([*][04 OR 05]) NO CODE
0D UTIL.OUT.([*][04 OR 05][USER CD]) ANY CODE
0E UTIL.OUT.([*][04 OR 05][4&5]) KEY CONTROL
0F UTIL.OUT.([*][04 OR 05][GR.A CD]) GROUP A CODE
10 UTIL.OUT.([*][04 OR 05][GR.B CD]) GROUP B CODE
11 UTIL.OUT.([*][04 OR 05][GR.C CD]) GROUP C CODE
12 UTIL.OUT.([*][04 OR 05][GR.D CD]) GROUP D CODE
13 FOLLOW CHIMING
14 FOLLOW BUZZER
15 FOLLOW AC CUT STATUS
16 FOLLOW FIRE LOOP ALARM
17 STROBE OUTPUT
18 30 MINUTE STROBE OUTPUT
19 BELL/SIREN OUTPUT FOR GROUP A
20 BELL/SIREN OUTPUT FOR GROUP B
21 BELL/SIREN OUTPUT FOR GROUP C
22 BELL/SIREN OUTPUT FOR GROUP D
23 FOLLOW AUTO-ARM DELAY
24 SERIAL PRINTER OUTPUT 300 BD *
25 SERIAL PRINTER OUTPUT 600 BD *
26 SERIAL PRINTER OUTPUT 1200 BD*
27 SERIAL PRINTER OUTPUT 2400 BD*
28 TO FF NO FUNCTION

* Programmable Output 1 Only.

PROGRAMMABLE OUTPUT DESCRIPTIONS**00: KISS OFF**

Activates the output when a kiss off is received from the central station.

01: DVAC COMMUNICATION PROBLEM

Activates the output when there is a DVACS communication problem.

02: COURTESY LIGHT

Activates the output during the entry time, to provide a light when entering the building.

03: FOLLOW BELL

Activates the output when the bell is in operation.

04 to 07: FOLLOW GR.A to D ARM/DISARM STAT

04 activates the output when group A is armed.
05 activates the output when group B is armed.
06 activates the output when group C is armed.
07 activates the output when group D is armed.

08 to 0B: FOLLOW GR.A to D READY STATUS

08 activates the output when group A is ready to arm.
09 activates the output when group B is ready to arm.
0A activates the output when group C is ready to arm.
0B activates the output when group D is ready to arm.

0C: UTIL.OUT.([*][04 OR 05]) NO CODE

Activates output #2 when [*][04] is entered and output #1 to #7 when [*][05] is entered.

0D: UTIL.OUT.([*][04 OR 05][USER CD] ANY CODE

Activates output #2 when [*][04]&[user code] is entered and output #1 to #7 when [*][05]&[user code] is entered.

0E: UTIL.OUT.([*][04 OR 05][4&5] KEY CONTROL

Activates output #2 when [*][04]&[keys 4&5 pressed simultaneously] are entered and output #1 to #7 when [*][05]&[keys 4&5 pressed simultaneously] are entered.

0F to 12: UTIL.OUT.([*][04 OR 05][Group A to D Code]) GROUP A to D CODE

0F activates the output #2 when [*][04]&[group A code] is entered and output #1 to #7 when [*][05]&[group A code] is entered.

10 activates the output #2 when [*][04]&[group B code] is entered and output #1 to #7 when [*][05]&[group B code] is entered.

11 activates the output #2 when [*][04]&[group C code] is entered and output #1 to #7 when [*][05]&[group C code] is entered.

12 activates the output #2 when [*][04]&[group D code] is entered and output #1 to #7 when [*][05]&[group D code] is entered.

13: FOLLOW CHIMING

Activates the output when the chim is in operation.

14: FOLLOW BUZZER

Activates the output when the buzzer is in operation.

15: FOLLOW AC CUT STATUS

Activates the output when the AC is cut.

16: FOLLOW FIRE LOOP ALARM

Activates the output when the fire loop alarm is in operation.

17: STROBE OUTPUT

Activates the output when an alarm occurs and stays on until a valid code is entered.

18: 30 MINUTE STROBE OUTPUT

Activates the output when an alarm occurs and stays on for 30 minutes or until a valid code is entered.

19 to 22: BELL/SIREN OUTPUT FOR GR. A TO D

19 activates the output when the bell or siren is in operation for group A.

20 activates the output when the bell or siren is in operation for group B.

21 activates the output when the bell or siren is in operation for group C.

22 activates the output when the bell or siren is in operation for group D.

23: FOLLOW AUTO-ARM DELAY

Activates the output during the auto-arming exit delay.

24 to 27: SERIAL PRINTER OUTPUT (300, 600, 1200, AND 2400 BAUD)

See printer setup for more information.

28 to FF: NO FUNCTION**PROGRAMMING EXAMPLE:**

- Ex: Dealer wants
- Prog. out#1 to be serial printer output at 2400 baud.
 - Prog. out #2 to be a 30 minute strobe output.

Program: Location Data
 A1.....27
 A2.....18

NOTE:

All the programmable outputs, bell and the buzzer can be controlled from the central station. They may be made to:

- flash (continued pulsing)*
- output one pulse
- turn on
- turn off

* flash command does not apply to the bell output and P-OUT 3 to 7 on DME1.

A command for one of these outputs from the central station always has priority over the normal programmed function.

EX: The programmable output #1 is programmed to follow the bell, normally. The central station sends a command to flash this output. It will flash, without checking the programmed function, until the central sends the command to stop. (Yes, it can flash because it is not the bell output, terminals -, + Bell, but is a programmable output which is capable of being flashed).

EX: The programmable output #1 is programmed to follow the bell. The central sends a command to pulse this output. It will pulse for one second and return to the normal programmed function for this output.

For remote controlled operation, the central station accesses these outputs as control points "01", "02", etc., according to this table:

<u>CONTROL POINT</u>	<u>CONTROLLED OUTPUT</u>
_1	PRGM1
_2	PRGM2 (SW AUX +)
_3	BUZZER
_4	BELL
_5	P-OUT3 (on DME1)
_6	P-OUT4 (on DME1)
_7	P-OUT5 (on DME1)
_8	P-OUT6 (on DME1)
_9	P-OUT7 (on DME1)

Refer to the PROGRAMMING WORK SHEETS at the end of this manual.

[A3] TO [A8] System Time Functions

Note: Times are programmed as decimal numbers from 1-99.

WARNING: When using double delay zone (doubles entry time) make sure that the entry time is less than 79 HEX. A delay time under 5 seconds is not recommended by manufacturer

A3	ENTRY TIME (SEC)	(DEFAULT 30)
A4	EXIT TIME (SEC)	(DEFAULT 60)
A5	BELL TIME (MIN)	(DEFAULT 06)
A6	ZNS ALARM ABORT TIME(SEC)	(DEFAULT 15)
A7	ACTIVATION DELAY FOR A1 ALARM (SEC)	(DEFAULT 10)
A8	ACTIVATION DELAY FOR A1 RESTORE (SEC)	(DEFAULT 30)

[A9] & [AA] INSTALLER PROGRAMMING CODE

The dealer can change the factory default setting of the installer (dealer) code. The factory default is 1-6-6-0. Enter 4 digits corresponding to the desired number

A9 INST. CODE DIG 1 & 2 (DEFAULT 16)

AA INST. CODE DIG 3 & 4 (DEFAULT 60)

WARNING: Do Not Enter "0000"

NOTE: It is strongly recommended to program a code using alphabetic characters (letters from A to F) in order to be almost sure to obtain a different code from those programmed by users. In Mode 17 if installer code match with user code, the installer code displayed discretely as "User #65"

[AB] TO [B8] BLOCK OPTIONS LOCATIONS

When you go to one of these locations, the unit will not automatically go to the next location after programming a new data. It will stay at the same location until you perform the command for jump to another location [*] & [#].

At the desired location, display will show the already selected number.

01 02 03 *->

If there was no selected number

NONE

for example: location AF

CODE FOR GROUP A
01 02 03 04 *->

To select a zone, enter the desired 2 digit zone number.

To remove an already selected zone, enter the desired two digit zone number.

Press the [*] key to see other selected numbers.

Press the [#] key to go back to arm/disarm mode.

Press the [0] key twice to remove all selected numbers.

Press the [*] & [#] simultaneously to go to the next location.

When you go to one of these locations, the unit will not automatically go to the next location after programming a new data. It will stay at the same location until you perform the command for next location [*], the command for previous location [*] & [0] or the jump to another location command [*] & [#].

[AB] ZONES ASSIGNMENT FOR GROUP A

The following display shows zones assigned to group A. Simply enter the desired 2 digit code to select or deselect zones for this group.

ZONE FOR GROUP A
01 02 03 *->

[AC] ZONES ASSIGNMENT FOR GROUP B

The following display shows zones assigned to group B. Simply enter the desired 2 digit code to select or deselect zones for this group.

ZONE FOR GROUP B
01 02 03 *->

[AD] ZONES ASSIGNMENT FOR GROUP C

The following display shows zones assigned to group C. Simply enter the desired 2 digit code to select or deselect zones for this group.

ZONE FOR GROUP C
01 02 03 *->

[AE] ZONES ASSIGNMENT FOR GROUP D

The following display shows zones assigned to group D. Simply enter the desired 2 digit code to select or deselect zones for this group.

ZONE FOR GROUP D
01 02 03 *->

[AF] CODES ASSIGNMENT FOR GROUP A

The following display shows user codes assigned to group A. Simply enter the desired 2 digit code to select or deselect user codes for this group if you have a DME1 module installed it's 3 digit code.

CODE FOR GROUP A
01 02 03 *->

[B0] CODES ASSIGNMENT FOR GROUP B

The following display shows user codes assigned to group B. Simply enter the desired 2 digit code to select or deselect user codes for this group if you have a DME1 module installed it's 3 digit code.

CODE FOR GROUP B
01 02 03 *->

[B1] CODES ASSIGNMENT FOR GROUP C

The following display shows user codes assigned to group C. Simply enter the desired 2 digit code to select or deselect user codes for this group if you have a DME1 module installed it's 3 digit code.

```
CODE FOR GROUP C
01 02 03    *->
```

[B2] CODES ASSIGNMENT FOR GROUP D

The following display shows user codes assigned to group D. Simply enter the desired 2 digit code to select or deselect user codes for this group if you have a DME1 module installed it's 3 digit code.

```
CODE FOR GROUP D
01 02 03    *->
```

[B3] 1st System Options Code

The display should show the following:

```
OPTION SELECTED
01 03 05 06 *->
```

NOTE: Press [*] to see the other options selected.

To select an option, enter the desired 2 digit option number.

To deselect an option, enter the desired 2 digit option number.

01: OPEN/CLOSE REPORT

When selected: Reports Opening and Closing to the central station when arming and disarming the panel.

02: CLOSE CONFIRMATION (Ring-Back):

When selected: If the open/close report option is also selected, the exit time will only start when a kiss-off from the central is received. The keypad will then beep indicating the kiss-off has been received and flash the ready light indicating exit time is in progress. The **OPEN/CLOSE REPORT** option must be selected.

03: ARMING INHIBIT

When selected: Panel will not arm when a zone is left open, except optionally in the case of Delay and Delay/Instant zones.

NOTE: It is not recommended to turn this option "OFF" since this will permit arming when a particular zone is open which will consequently trigger an alarm.

04: QUICK ARMING

When selected: Arming of the System can be done by pressing the [7]&[8]keys on the keypad simultaneously.

05: LINE CUT BUZZER

When selected: The buzzer will sound if the DVACS line and the digital line (if DME1 module) is cut. It will continue to sound until you enter in trouble memory (see mode 09 in the user manual).

06: MEMORY GUARD ADVICE

When selected: If an alarm is in memory, the display will advise the customer. If not selected, the alarm is still stored in memory, but the unit will not advise the customer.

07: SIREN OUTPUT

When selected: The bell output is modulated so that a speaker can be hooked up to the output and give a siren sound.

08: BELL SQUAWK OPTION

When selected: The bell/siren will sound for one short burst each time a group is armed and two short bursts each time any group is disarmed.

09: CODE FOR BYPASS OPTION

When selected: The user must enter a valid master code (or arm/disarm with bypass code) to bypass a zone.

10: SEND USER # HIGHER THAN 64

When selected: The unit can send to the central a user number between 64 and 128.

11: BYPASS REPORT ON EXIT

When selected: A bypass report is sent to the central station when the panel is armed.

NOTE: Bypass reports on exit will be aborted when the transmission buffer becomes full. (ie: more than 20 events pending)

12: IMMEDIATE BYPASS REPORT

When selected: A bypass report is immediately sent to central when a zone is bypassed or unbypassed.

13: COMMON BYPASS REPORT OPTION

When selected: The unit will send only one code for all zones bypassed or unbypassed. However, you have to unbypass all zones before the unit sends an unbypass report to the central station. When not selected, the unit sends an individual bypass/unbypass report for each zone.

14: BYPASSED ZONE DISPLAY ON EXIT

When selected: Unit will show all zones that are bypassed on the keypad display when arming.

15: AUTO-UNBYPASS ON ENTRY

When selected: All zones that were bypassed will be automatically unbypassed when panel is disarmed.

16: ALL CLOSED REPORT

When selected this option will send a CLOSE REPORT to the central station only when all the groups in use are armed. If any of the groups in use are not armed a CLOSE REPORT will not be sent. When the first group is disarmed (provided all groups were armed) an OPEN REPORT will be sent to the central station. This option is OFF by default and must be selected in order to function.

17: MASTER CODE NOT CHANGEABLE

When selected: This option will prohibit any changes to the master code for user #1 only.

18: ONLY MASTER CODE FOR USER MESSAGE

When selected: Only a user who has a master code will be permitted to send messages to the central station. When not selected, an arm/disarm with bypass code can also send user messages.

19: IMMEDIATE RESTORE

When selected: The restore for all zones is sent to the central immediately that the loop returns to normal, even if bell/siren is active. It is recommended to program All Call answer for alarm and restore when this option is selected.

20: OPENING REPORT ON ALARM

When selected and option 1 is not selected: The panel send an "opening report" to the central when disarming the panel if an alarm occurs during the arming period.

21: MEMORY SECURITY SWITCH OPTION

When selected: The installer must place the plug-in shunt jumper on the pins marked J3 to go in an installer programming mode.

22: KEY SWITCH OPTION

When selected: It allows you to put a key switch (normally open momentary), for arming and disarming the system, between terminals labelled "KEY SW" and Aux1. (+).

23: MAINTAINED KEY SWITCH

When selected: It allows you to use a maintained key switch instead of a momentary key switch (use with option 22 key option select) for arming and disarming the system, between terminals labelled "KEYSW" and "Aux1 (+)".

24: AUTO-ARM SQUAWK

When selected: During the auto-arm delay, the bell/siren will sound for one short burst each 10 seconds

25: ARMING BY CENTRAL STATION:

When selected: The central station may arm the groups.

26: DISARMING BY CENTRAL

When selected: The central station may disarm the groups.

27: UTILITY OUTPUT 2 NORMALLY HIGH

When selected: The Switched + Prog. Output 2 will be normally high (on) if location A2 is programmed with a value between 0C and 12, for one of the "Utility Out" commands. Then User mode 05 will turn off momentarily this output, to reset smoke detectors, for example.

28: FORCE AUTO-ARM AND/OR ARMING BY CENTRAL

When selected: Bypassed open zone on auto-arm or arming by central when delay begin, regardless of type.

When not selected: The operation will vary, according to the choices for the Arming Inhibit options 3 and 31, as follows:

1- Arming Inhibit (option 03) = OFF

(Option 31 not working when option 3 is not selected).

If the zones were open when auto arm or arming by the central occurred, the system arms and the delay starts.

Zones of types 5,6,7 A and E must be closed before the end of the delay, if not, an alarm will occur.

2- Arming Inhibit (option 03) = ON

No inhibit for delay delay/instant zones (option 31) = OFF

If zones were open when the auto arm or arming by the central occurred, the system will not arm and sends the message "Inhibit Arming" to the central station.

3- Arming Inhibit (option 03) = ON

No inhibit for delay (option 31) = ON

The zones of types 5,6,A and E may be left open when the auto-arm or arming by central arms the system and the delay starts. If other types of zones were open, the panel will send the message "Inhibit Arming" to the central station, and not arm the groups.

NOTE: If zones 5,6,7,A and E are open during the auto-arm or arming by central delay, no alarm will occur during that delay.

29: PROG. OF DEFAULT INSTALLER CODE DURING TRANSFER TO EEPROM

When **OFF**: Will prevent programming of installer code default 1-6-6-0 during EPROM to EEPROM downloading (**Installer lock out** enabled).

When **ON**: The installer code will be reset to the factory default 1-6-6-0 during transfer to EEPROM (**Installer lock out** disabled).

WARNING: If the installer code is LOST and this option is **OFF** it's impossible to retrieve the installer code. (See your **SUR-GARD** distributor for reprogramming information)

30: OPEN/CLOSE REPORT BY GROUP

When this option is selected, the DV1660LC panel will provide group information as well as user information when generating open/close reports. When deselected, the panel will provide only user information with open/close reports. This option need not be selected if the system is using only 1 group.

Example: All 4 groupes of a particular panel are armed by user #1. The following reports will be issued:

OPTION 30 = ON OPTION 30 = OFF

CLOSE GROUP A CLOSE USER #01

CLOSE GROUP B

CLOSE GROUP C

CLOSE GROUP D

CLOSE USER #01

31: NO INHIBIT FOR DEL. & DEL./INST. ZONES

This option is effective only when Arming Inhibit (Option 03) is selected. When Option 31 is selected, zones of type 5, 6, A, and E may be left open when attempting to arm the system. These zones must be closed before the end of the exit delay unless they are assigned to more than one group and at least one of these groups is disarmed.

If a delay or double delay zone is left open after the exit delay and all groups to which they are assigned are armed, the entry delay for all groups concerned will be activated, and an alarm will occur at the end of the entry delay if no valid code is entered.

If a delay/instant zone is left open after the exit delay and all groups to which it is assigned are armed, an instant alarm will be triggered by this zone.

When Option 31 is deselected zones of type 5, 6, A, and E may not be left open when attempting to arm the system. The default setting for Option 31 is ON.

32: DME1(DIGITAL DIALER MEMORY EXPANDER)

When selected: The digital dialer, memory expander (zone labels) and programmable outputs are enabled.

When not selected: Only memory expander (zone labels) is enabled.

Capability to supervise the telephone line. Refer to the **DME1 installation manual for more details.**

[B4] BYPASS MASK

This feature will prevent selected zones from being bypassed in mode 01.

The display should show the following:

```

AVOID BYPASS ON
01 02 03    *->
  
```

All indicated zones have the bypass mask, and cannot be bypassed.

[B5] NO RESTORE REPORT FOR ZONE

This feature will prevent restore codes from being sent to the central station.

The display should show following:

```

NO RST REPORT ON
01 02 03    *->
  
```

The displayed zones **DO NOT SEND A RESTORE** signal to the central station.

[B6] NO RESTORE FOR MISCELLANEOUS

Same as location B5, but for miscellaneous only. Enter the desired two digit number corresponding to the miscellaneous "ZONE".

NUMBER MISCELLANEOUS

```

01.....A1 (fire)
02.....Aux Alm
03.....Supervisory 1
04.....Supervisory 2
05.....Ac cut
06.....Bell cut/blown fuse
07.....Low battery
08.....A1 (trouble)
  
```

[B7] DELAYED TRANSMISSION (ABORT) SELECT FOR ZONES #1 TO #64

All zones installed can have a delay between the audible alarm signal and communication to central station.

The display should show the following:

```
ABORT SELECT ON:
NONE
```

To abort a zone, enter the desired 2 digit zone number.

```
NEW MODE .....3
<0> NO , <1> YES
```

Press <1> will permit the group assignment to be done by the master user

Press <0> for only the installer must assign groups to the user codes.

Refer to the user manual, mode 03 for more details

[B9] TRANSFER OF DEFAULT DATA TO THE EEPROM

When you go to this location, the display shows the following:

```
ENTER FUNCTION
NUMBER.....:
```

- 0 -> All data
- 1 -> Master code #1 (1-2-3-4)
- 2 -> All user codes
- 3 -> Zone name
- 4 -> Group name
- 5 -> Installation data
- 6 -> Dialer data (DME1)
- 7 -> Clear both telephone numbers and account codes.

After pressing the key between 0 and 7, the system asks for a confirmation:

```
TO CONFIRM.....X
<0> NO, <1> YES
```

If you press 0 (for no), the system goes to the message "ENTER FUNCTION NUMBER", if you press 1 (for yes) the system program the standard you choose.

When you're at this location, the unit will not go automatically to the next location after programming new data. It will stay at the same location until you perform the command for previous location [*], the command for last location ([*] & [0] or the jump to another location command [*] & [#]. Press [#] key to go back to the arm/disarm mode.

[BA] MASTER CAN ASSIGN GROUPS TO USER CODES

This option is selected by the installer to give the opportunity to the user (master code) to assign groups to user codes.

When you go to this location, the display shows the following

MODE 25: WALK TEST MODE

Press [*] + [25] + [MASTER, ARM\DISARM\BYPASS, OR INSTALLER CODE]

Mode 25 "Walk Test Mode" is used to test your security system. You need simply walk around your premises and activate all the zones. This mode can only be accessed by a Master, Arm\Disarm\Bypass, or Installer Code. A Walk Test Report is sent to your Central Station and the Local Printer, if a printer is used. The keypad display will indicate when the test is complete or which zones are left to be tested.

1. Press the [*] key.
2. The display will show:

```
ENTER NUMBER OF
NEW MODE.....:
```

3. Enter the desired two digit number [2][5].
4. The display will show:

```
ENTER VALIDE CODE
```

5. Enter a Master, Arm\Disarm\Bypass, or Installer Code, the display will show:

```
NONE=0    SIREN=1
BUZZER=2  BOTH=3
```

SOUND INDICATION:

- 0 = No sound indication when a zone is tested.
- 1 = The siren will sound when a zone is tested.
- 2 = The buzzer will sound when a zone is tested.
- 3 = The siren and buzzer will both sound when a zone is tested

6. Once the type of sound indication has been selected the display will show:

```
REP. ALL ZONE TO
CENTRAL? N=0 Y=1
```

DETAILED ZONE REPORT SENT TO CENTRAL STATION:

- 0 = Detailed Zone Report Not Sent to the Central Station. All the zones tested will be reported on the local printer, if the printer option is used.
- 1 = Detailed Zone Report is Sent to the Central Station. All the zones tested will be reported on the local printer, if the printer option is used.

NOTE:The following Reports (Start Test Code, Number of Zones Not Tested\All Zones Tested Code, and End of Test Code) will be sent to the Central Station and Local Printer, regardless of how you answered the question.

NOTE:Zones are reported only after they have gone into alarm and have been restored, during the Walk Test. Each zone can only be tested once and will only send one code to show that the zone was tested.

7. The Walk Test starts after the report to central question is answered. It lasts 15 minutes, or until the [#] key is pressed. During this time the display will show:

```
ZONE TO TEST:
01 02 03 04 *->
```

The display will list the zones left to be tested.

NOTE:Zones of Type 9 (No Alarm) or B(Probation) are not displayed or reported during the Walk Test.

Example of Local Printer Printout:
Date Time Message

```
24\04 16:30 ZONES TO TEST: 14
24\04 16:31 ALARM ZONE #01
24\04 16:31 ALARM ZONE #02
24\04 16:32 ALARM ZONE #05
24\04 16:33 ALARM ZONE #08
24\04 16:33 ALARM ZONE #10
24\04 16:34 ALARM ZONE #13
24\04 16:35 ZONES NOT TESTED: 08
24\04 16:35 END OF TEST
```

8. When all the zones have been tested the display will show:

```
TEST COMPLETED
```

Press the [#] key to quit this mode at any time during the test.

SYSTEM AND HUB OPTIONS

NOTE: If this is a new network please configure the network in a STAR CONFIGURATION instead of the usual cascade arrangement as there may be up to 240 drops on the network.

DATA LINE TYPE: Sched 3A w/dvacs at 150 baud

DATA STRING TYPE: 1 START +8 DATA +1 PARITY
+1 STOP BIT

NETWORK CONFIGURATION: Master/Slave

<u>OPTIONS</u>	<u>ENABLE</u>
Lock out (L.K.):	Yes
Long Transmission (L.T.) delay at 4 sec.:	Yes
Poll & Cut (P.C.):	Yes
Count & Cut (C.C.) set at 16:	Yes

F1/F2 Subset Options:

EIA (L,N, & X):	Yes
10 mA (T1):	Yes
Originate mode (B):	Yes
Normal Loop Marking (E):	Yes
Continuous carrier (K):	Yes
Battery Charging (Q):	No
Carrier Light (V):	No

Full Duplex on master F1/F2 (D)

Half Duplex on slave F1/F2 (C)

- NOTES:**
1. RS-232 cables not necessary (cord supplied by Sur-Gard).
 2. 24V power pack not necessary (24 Vdc provided by Sur-Gard terminal equipment).

(DVACS Compatible)

UPDATED FOR VERSION 4 DECODING

A section of the more than 2000 zones available on the MLR1 receiver has been set up for printer and computer outputs like the 4/2 digital dialer format. Here is a table of those zones:

ZONE #	PRINTER MESSAGE	COMP. ZN#	BYTE
01-08	— Alm/Rst Zn#01-08	01-08	50
09	— Alm/Rst Zn#09	09	51
10-17	Fire! Alm/Rst Zn#10-17	10-17	0C
18-1F	Fire! Alm/Rst Zn#18-1F	18-1F	0D
20-27	Panic Alm/Rst Zn#20-27	20-27	0E
28-2F	Panic Alm/Rst Zn#28-2F	28-2F	0F
30-37	Inst. Alm/Rst Zn#30-37	30-37	10
38-3F	Inst. Alm/Rst Zn#38-3F	38-3F	11
40-47	Mtion Alm/Rst Zn#40-47	40-47	12
48-4F	Mtion Alm/Rst Zn#48-4F	48-4F	13
50-57	24Hrs Alm/Rst Zn#50-57	50-57	14
58-5F	24Hrs Alm/Rst Zn#58-5F	58-5F	15
60-67	Tampr Alm/Rst Zn#60-67	60-67	16
68-6F	Tampr Alm/Rst Zn#68-6F	68-6F	17
70-77	Delay Alm/Rst Zn#70-77	70-77	18
78-7F	Delay Alm/Rst Zn#78-7F	78-7F	19
80-87	Optn1 Alm/Rst Zn#80-87	80-87	1A
88-8F	Optn1 Alm/Rst Zn#88-8F	88-8F	1B
90-97	Optn2 Alm/Rst Zn#90-97	90-97	1C
98-9F	Optn2 Alm/Rst Zn#98-9F	98-9F	1D
A0-A7	Optn3 Alm/Rst Zn#A0-A7	A0-A7	1E
A8-AF	Optn3 Alm/Rst Zn#A8-AF	A8-AF	1F
B0-B7	Fire: Alm/Rst Zn#B0-B7	B0-B7	2E
B8-BF	Fire: Alm/Rst Zn#B8-BF	B8-BF	2F
C0-C7	Hpres Trb/Rst Zn#C0-C7	C0-C7	34
C8-CF	Lpres Trb/Rst Zn#C8-CF	C8-CF	35
D0-D7	Valve Trb/Rst Zn#D0-D7	D0-D7	36
D8-DF	Other Trb/Rst Zn#D8-DF	D8-DF	37
E0-E7	XXXXX Alm/Rst Zn#E0-E7	E0-E7	6C
E8-EF	XXXXX Alm/Rst Zn#E8-EF	E8-EF	6B
F0-FF	DO NOT USE		

The following are outputs for bypass and unbypass.

ZONE #	PRINTER MESSAGE	COMP. ZN#	BYTE
01-08	— Byp/Unb Zn#01-08	01-08	D0
09	— Byp/Unb Zn#09	09	D1
10-17	Fire! Byp/Unb Zn#10-17	10-17	8C
18-1F	Fire! Byp/Unb Zn#18-1F	18-1F	8D
20-27	Panic Byp/Unb Zn#20-27	20-27	8E
28-2F	Panic Byp/Unb Zn#28-2F	28-2F	8F
30-37	Inst. Byp/Unb Zn#30-37	30-37	90
38-3F	Inst. Byp/Unb Zn#38-3F	38-3F	91
40-47	Mtion Byp/Unb Zn#40-47	40-47	92
48-4F	Mtion Byp/Unb Zn#48-4F	48-4F	93
50-57	24Hrs Byp/Unb Zn#50-57	50-57	94
58-5F	24Hrs Byp/Unb Zn#58-5F	58-5F	95
60-67	Tampr Byp/Unb Zn#60-67	60-67	96
68-6F	Tampr Byp/Unb Zn#68-6F	68-6F	97
70-77	Delay Byp/Unb Zn#70-77	70-77	98
78-7F	Delay Byp/Unb Zn#78-7F	78-7F	99
80-87	Optn1 Byp/Unb Zn#80-87	80-87	9A
88-8F	Optn1 Byp/Unb Zn#88-8F	88-8F	9B
90-97	Optn2 Byp/Unb Zn#90-97	90-97	9C
98-9F	Optn2 Byp/Unb Zn#98-9F	98-9F	9D
A0-A7	Optn3 Byp/Unb Zn#A0-A7	A0-A7	9E
A8-AF	Optn3 Byp/Unb Zn#A8-AF	A8-AF	9F
B0-B7	Fire: Byp/Unb Zn#B0-B7	B0-B7	9E
B8-BF	Fire: Byp/Unb Zn#B8-BF	B8-BF	9F
C0-C7	Hpres Byp/Unb Zn#C0-C7	C0-C7	94
C8-CF	Lpres Byp/Unb Zn#C8-CF	C8-CF	95
D0-D7	Valve Byp/Unb Zn#D0-D7	D0-D7	96
D8-DF	Other Byp/Unb Zn#D8-DF *	D8-DF	97
E0-E7	Zn#E0-E7 Bypass/Unbyp.	E0-E7	9C
E8-EF	**Zn#E8-EF Bypass/Unbyp.	E8-EF	9B
F0-FF	DO NOT USE		

* "X"s may represent different messages
(see MLR1 library)

NOTE:

- * Zone D8 is the default for common bypass.
- ** Individual messages per zone are standard.
See "DVACS LINE CARD ALARM DECODING VERSION 4" for more details.
- *** The printer messages for zones 10-AF can be changed to "—" with the word Alm/Rst or Byp/Unb, as well as "Zn#".

HEXADECIMAL CONVERSION CHART

DEC	HEX	BINARY	DEC	HEX	BINARY	DEC	HEX	BINARY	DEC	HEX	BINARY	DEC	HEX	BINARY
000	00	0000 0000	056	38	0011 1000	112	70	0111 0000	168	A8	1010 1000	224	E0	1110 0000
001	01	0000 0001	057	39	0011 1001	113	71	0111 0001	169	A9	1010 1001	225	E1	1110 0001
002	02	0000 0010	058	3A	0011 1010	114	72	0111 0010	170	AA	1010 1010	226	E2	1110 0010
003	03	0000 0011	059	3B	0011 1011	115	73	0111 0011	171	AB	1010 1011	227	E3	1110 0011
004	04	0000 0100	060	3C	0011 1100	116	74	0111 0100	172	AC	1010 1100	228	E4	1110 0100
005	05	0000 0101	061	3D	0011 1101	117	75	0111 0101	173	AD	1010 1101	229	E5	1110 0101
006	06	0000 0110	062	3E	0011 1110	118	76	0111 0110	174	AE	1010 1110	230	E6	1110 0110
007	07	0000 0111	063	3F	0011 1111	119	77	0111 0111	175	AF	1010 1111	231	E7	1110 0111
008	08	0000 1000	064	40	0100 0000	120	78	0111 1000	176	B0	1011 0000	232	E8	1110 1000
009	09	0000 1001	065	41	0100 0001	121	79	0111 1001	177	B1	1011 0001	233	E9	1110 1001
010	0A	0000 1010	066	42	0100 0010	122	7A	0111 1010	178	B2	1011 0010	234	EA	1110 1010
011	0B	0000 1011	067	43	0100 0011	123	7B	0111 1011	179	B3	1011 0011	235	EB	1110 1011
012	0C	0000 1100	068	44	0100 0100	124	7C	0111 1100	180	B4	1011 0100	236	EC	1110 1100
013	0D	0000 1101	069	45	0100 0101	125	7D	0111 1101	181	B5	1011 0101	237	ED	1110 1101
014	0E	0000 1110	070	46	0100 0110	126	7E	0111 1110	182	B6	1011 0110	238	EE	1110 1110
015	0F	0000 1111	071	47	0100 0111	127	7F	0111 1111	183	B7	1011 0111	239	EF	1110 1111
016	10	0001 0000	072	48	0100 1000	128	80	1000 0000	184	B8	1011 1000	240	F0	1111 0000
017	11	0001 0001	073	49	0100 1001	129	81	1000 0001	185	B9	1011 1001	241	F1	1111 0001
018	12	0001 0010	074	4A	0100 1010	130	82	1000 0010	186	BA	1011 1010	242	F2	1111 0010
019	13	0001 0011	075	4B	0000 1011	131	83	1000 0011	187	BB	1011 1011	243	F3	1111 0011
020	14	0001 0100	076	4C	0100 1100	132	84	1000 0100	188	BC	1011 1100	244	F4	1111 0100
021	15	0001 0101	077	4D	0100 1101	133	85	1000 0101	189	BD	1011 1101	245	F5	1111 0101
022	16	0001 0110	078	4E	0100 1110	134	86	1000 0110	190	BE	1011 1110	246	F6	1111 0110
023	17	0001 0111	079	4F	0100 1111	135	87	1000 0111	191	BF	1011 1111	247	F7	1111 0111
024	18	0001 1000	080	50	0101 0000	136	88	1000 1000	192	C0	1100 0000	248	F8	1111 1000
025	19	0001 1001	081	51	0101 0001	137	89	1000 1001	193	C1	1100 0001	249	F9	1111 1001
026	1A	0001 1010	082	52	0101 0010	138	8A	1000 1010	194	C2	1100 0010	250	FA	1111 1010
027	1B	0001 1011	083	53	0101 0011	139	8B	1000 1011	195	C3	1100 0011	251	FB	1111 1011
028	1C	0001 1100	084	54	0101 0100	140	8C	1000 1100	196	C4	1100 0100	252	FC	1111 1100
029	1D	0001 1101	085	55	0101 0101	141	8D	1000 1101	197	C5	1100 0101	253	FD	1111 1101
030	1E	0001 1110	086	56	0101 0110	142	8E	1000 1110	198	C6	1100 0110	254	FE	1111 1110
031	1F	0001 1111	087	57	0101 0111	143	8F	1000 1111	199	C7	1100 0111	255	FF	1111 1111
032	20	0010 0000	088	58	0101 1000	144	90	1001 0000	200	C8	1100 1000			
033	21	0010 0001	089	59	0101 1001	145	91	1001 0001	201	C9	1100 1001			
034	22	0010 0010	090	5A	0101 1010	146	92	1001 0010	202	CA	1100 1010			
035	23	0010 0011	091	5B	0101 1011	147	93	1001 0011	203	CB	1100 1011			
036	24	0010 0100	092	5C	0101 1100	148	94	1001 0100	204	CC	1100 1100			
037	25	0010 0101	093	5D	0101 1101	149	95	1001 0101	205	CD	1100 1101			
038	26	0010 0110	094	5E	0101 1110	150	96	1001 0110	206	CE	1100 1110			
039	27	0010 0111	095	5F	0101 1111	151	97	1001 0111	207	CF	1100 1111			
040	28	0010 1000	096	60	0110 0000	152	98	1001 1000	208	D0	1101 0000			
041	29	0010 1001	097	61	0110 0001	153	99	1001 1001	209	D1	1101 0001			
042	2A	0010 1010	098	62	0110 0010	154	9A	1001 1010	210	D2	1101 0010			
043	2B	0010 1011	099	63	0110 0011	155	9B	1001 1011	211	D3	1101 0011			
044	2C	0010 1100	100	64	0110 0100	156	9C	1001 1100	212	D4	1101 0100			
045	2D	0010 1101	101	65	0110 0101	157	9D	1001 1101	213	D5	1101 0101			
046	2E	0010 1110	102	66	0110 0110	158	9E	1001 1110	214	D6	1101 0110			
047	2F	0010 1111	103	67	0110 0111	159	9F	1001 1111	215	D7	1101 0111			
048	30	0011 0000	104	68	0110 1000	160	A0	1010 0000	216	D8	1101 1000			
049	31	0011 0001	105	69	0110 1001	161	A1	1010 0001	217	D9	1101 1001			
050	32	0011 0010	106	6A	0110 1010	162	A2	1010 0010	218	DA	1101 1010			
051	33	0011 0011	107	6B	0110 1011	163	A3	1010 0011	219	DB	1101 1011			
052	34	0011 0100	108	6C	0110 1100	164	A4	1010 0100	220	DC	1101 1100			
053	35	0011 0101	109	6D	0110 1101	165	A5	1010 0101	221	DD	1101 1101			
054	36	0011 0110	110	6E	0110 1110	166	A6	1010 0110	222	DE	1101 1110			
055	37	0011 0111	111	6F	0110 1111	167	A7	1010 0111	223	DF	1101 1111			

MODE FUNCTION

- 01 BYPASSING
- 02 TROUBLE DISPLAY
- 03 ENTRY CODE CHANGE:
 - 0 MASTER CODE
 - 1 ARM/DISARM & SHNT CODE
 - 2 ARM ONLY CODE
 - 3 ARM/DISARM ONLY CODE
- 04 UTILITY OUPUT #2 COMMAND
- 05 UTILITY OUPUT #1 to #7 COMMAND
- 06 MULTIPLE FUNCTION MODE
 - 01 SETTING THE CLOCK
 - 02 SETTING THE DATE
 - 03 SETTING THE DAY OF WEEK
 - 04 QUICK ARM SELECT
 - 06 ACTIVATE BELL FOR 3 SEC.
 - 07 ACTIVATE PRG.OUT FOR 3 SEC
 - 08 ACTIVATE BUZZER FOR 3 SEC.
 - 09 KEYPAD SPEED SELECT
 - 10 AUTO-ARM TIME SCHEDULE #1
 - 12 AUTO-ARM TIME SCHEDULE #2
 - 14 AUTO-ARM TIME SCHEDULE #3
 - 16 DAY ASSIGNMENT SCHEDULE #1
 - 17 DAY ASSIGNMENT SCHEDULE #2
 - 18 DAY ASSIGNMENT SCHEDULE #3
- 07 CHIMMING
- 08 ZONES & A1 ALM MEM. DISPLAY
- 09 TROUBLE MEMORY DISPLAY
- 10 REMOTE ALARM MEM. DISPLAY
- 11 SENDING USER MESSAGE MODE
- 12 WHO ARMED/DISARMED LAST GR.A to GR.D
- 17 SCAN USER CODES
- 18 EDIT ZONE LABELS *
- 19 EDIT GROUP LABELS
- 20 ALL INSTALLATION DATA
- 21 DME1 INSTALLATION DATA *
- 22 DME1 EVENT DESCRIPTOR DATA *
- 24 VIEW CLOCK
- 99 SELECT DISPLAY LANGUAGE

* ONLY WITH OPTIONAL MODULE (DME1).

MODE 20, LOC.01: MAX. # OF ALARMS

- 01 ONLY 1 ALARM
- 02 ONLY 2 ALARMS
- 03 INFINITE ALARMS

MODE 20, LOC.02: ALL CALL SELECT

- 00 NO RESPONSE ON ALL CALL
- 01 RESPONSE ON ALL CALL #1
- 02 RESPONSE ON ALL CALL #2
- 03 RESPONSE ON BOTH ALL CALLS
- 04 AUTOMATIC SELECTION

MODE 20, LOC.03: ALL CALL ANSWER

- 00 FOR ALARM AND RESTORE
- 01 FOR ALARM ONLY

MODE 20, LOC.53 TO 9F: ZONE DEFINITIONS

- 0 24 HRS SILENT
- 1 24 HRS AUDIBLE
- 2 24 HRS PULSE BELL
- 3 DAY LOOP (SILENT WHEN DISARM, AUDIBLE WHEN ARM)
- 4 DAY LOOP + BUZZER
- 5 DELAY
- 6 DELAY/INSTANT
- 7 INSTANT
- 8 BUZZER ONLY (NO REPORT)
- 9 NO ALARM
- A DOUBLE DELAY(ENTRY TIME X2)
- B PROBATION(NO ALM BUT RECORDED IN MEMORY GARD)
- C BUZZER 30 SECONDES (REPORT)
- D NO ALARM
- E DELAY/INSTANT (HOME & AWAY)
- F AUDIBLE ALARM/NO REPORT DURING DAY

MODE 20 FOR PG OUT 1 AND 2 LOC. A1, A2: PROGRAMMABLE OUTPUT TYPE

- 00 KISS OFF
- 01 DVAC COMMUNICATION PROBLEM
- 02 COURTESY LIGHT
- 03 FOLLOW BELL
- 04 FOLLOW GR.A ARM/DISARM STAT.
- 05 FOLLOW GR.B ARM/DISARM STAT.
- 06 FOLLOW GR.C ARM/DISARM STAT.
- 07 FOLLOW GR.D ARM/DISARM STAT.
- 08 FOLLOW GR.A READY STATUS
- 09 FOLLOW GR.B READY STATUS
- 0A FOLLOW GR.C READY STATUS
- 0B FOLLOW GR.D READY STATUS
- 0C UTIL.OUT.([*][04 OR 05]) NO CODE
- 0D UTIL.OUT.([*][04 OR 05][USER CD]) ANY CODE
- 0E UTIL.OUT.([*][04 OR 05][4&5]) KEY CONTROL
- 0F UTIL.OUT.([*][04 OR 05][GR.A CD]) GROUP A CODE
- 10 UTIL.OUT.([*][04 OR 05][GR.B CD]) GROUP B CODE
- 11 UTIL.OUT.([*][04 OR 05][GR.C CD]) GROUP C CODE
- 12 UTIL.OUT.([*][04 OR 05][GR.D CD]) GROUP D CODE
- 13 FOLLOW CHIMING
- 14 FOLLOW BUZZER
- 15 FOLLOW AC CUT STATUS
- 16 FOLLOW FIRE LOOP ALARM
- 17 STROBE OUTPUT
- 18 30 MINUTE STROBE OUTPUT
- 19 BELL\SIREN OUTPUT FOR GROUP A
- 20 BELL\SIREN OUTPUT FOR GROUP B
- 21 BELL\SIREN OUTPUT FOR GROUP C
- 22 BELL\SIREN OUTPUT FOR GROUP D
- 23 FOLLOW AUTO-ARM DELAY
- 24 SERIAL PRINTER OUTPUT 300 BD **
- 25 SERIAL PRINTER OUTPUT 600 BD **
- 26 SERIAL PRINTER OUTPUT 1200 BD**
- 27 SERIAL PRINTER OUTPUT 2400 BD**
- 28 TO FF NO FUNCTION

** Programmable Output 1 Only.

MODE 20, LOC.B3: SYSTEM OPTIONS

- 01 OPEN/CLOSE REPORT SELECT
- 02 CLOSE CONFIRMATION
- 03 ARMING INHIBIT SELECT
- 04 QUICK ARM SELECT
- 05 LINE CUT BUZZER
- 06 MEMORY GUARD ADVICE
- 07 SIREN DRIVER ENABLE
- 08 BELL SQUAWK OPTION
- 09 NEED CODE FOR BYPASSING
- 10 SEND USER # HIGHER THAN 64
- 11 BYPASS REPORT ON EXIT
- 12 IMMEDIATE BYPASS REPORT
- 13 COMMON BYPASS REPORT
- 14 BYPASSED ZNS DISPLAY ON EXIT
- 15 AUTO UNBYPASS ON ENTRY
- 16 ALL CLOSED REPORT
- 17 MASTER CODE #1 NOT CHANGEABLE
- 18 ONLY MASTER FOR USER MESSAGE
- 19 IMMEDIATE RESTORE
- 20 OPENING REPORT ON ALARM
- 21 MEMORY SECURITY SWITCH
- 22 KEY OPTION SELECT
- 23 MAINTAINED KEY SWITCH
- 24 AUTO-ARM SQUAWK
- 25 ARMING GROUP BY CENTRAL
- 26 DISARMING GROUP BY CENTRAL
- 27 PROG.OUTPUT #2 NORMALLY HIGH
- 28 FORCE AUTO-ARM AND/OR ARMING BY CENTRAL
- 29 PROG. INSTALLER CD DEFAULT 1-6-6-0 DURING TRANSFER TO EEPROM (OFF=INSTALLER LOCK OUT)
- 30 OPEN/CLOSE REPORT WITH GROUP
- 31 NO INHIBIT FOR DEL & DEL/INST
- 32 DME1's DIGITAL DIALER AND PROG OUTPUTS

MODE 20, LOC.B6: REST. FOR MISC.

- 01 A1 (FIRE)
- 02 AUX ALM
- 03 SUP1
- 04 SUP2
- 05 AC FAIL
- 06 BELL CUT/BLOWN FUSE
- 07 LOW BATTERY
- 08 A1 (TROUBLE)

MODE 21 FOR PG OUT 3 TO 7 (DME1 REQUIRED) LOC. DC TO E0: SEE PROGRAMMABLE OUTPUT TYPES LISTED IN MODE 20

INSTALLER SHEET

DV1660LC (& FLC)

Customer _____

Country _____

Address _____

Cross Street _____

Phone _____

Installation Date _____

Contact:

#1 Name _____

Phone _____

#2 Name _____

Phone _____

#3 Name _____

Phone _____

Control _____ Version # _____ Account # _____

Receiver Number _____

Installers Code _____

Zone Type	Protected Area
1 _____	_____
2 _____	_____
3 _____	_____
4 _____	_____
5 _____	_____
6 _____	_____
7 _____	_____
8 _____	_____

Fire Zone _____

Sprinkler Zone S1 _____

Sprinkler Zone S2 _____

Aux. Alarm _____

(See next page for zone expander zones)

Keypad Zones[F] Key

ON	OFF
----	-----

[A] Key

ON	OFF
----	-----

[P] Key

ON	OFF
----	-----

Zone Type	Protected Area
9 _____	_____
10 _____	_____
11 _____	_____
12 _____	_____
13 _____	_____
14 _____	_____
15 _____	_____
16 _____	_____

Entry Time _____

Exit Time _____

Bell Cut Off _____

Quick Arm

ON	OFF
----	-----

Auto Arm

ON	OFF
----	-----

Inst Lock Out

ON	OFF
----	-----

 ❶❶ The Installer Lock Out is ON when Option 29
"Programming of default installer code" is OFF.

Installers Name _____

If Equipped for up to 48 Additional Zones

(Max. 6 Zone Expanders for total 64 Zones)

Zone Type	Protected Area	Zone Type	Protected Area
17 _____	_____	41 _____	_____
18 _____	_____	42 _____	_____
19 _____	_____	43 _____	_____
20 _____	_____	44 _____	_____
21 _____	_____	45 _____	_____
22 _____	_____	46 _____	_____
23 _____	_____	47 _____	_____
24 _____	_____	48 _____	_____
25 _____	_____	49 _____	_____
26 _____	_____	50 _____	_____
27 _____	_____	51 _____	_____
28 _____	_____	52 _____	_____
29 _____	_____	53 _____	_____
30 _____	_____	54 _____	_____
31 _____	_____	55 _____	_____
32 _____	_____	56 _____	_____
33 _____	_____	57 _____	_____
34 _____	_____	58 _____	_____
35 _____	_____	59 _____	_____
36 _____	_____	60 _____	_____
37 _____	_____	61 _____	_____
38 _____	_____	62 _____	_____
39 _____	_____	63 _____	_____
40 _____	_____	64 _____	_____

NOTES

LOC. (Mode 20)	Default		
[00] Account Code	0 0		page 17
[01] Max. # of alarms per arm period	0 3		page 17
[02] All Call Select	0 4		page 18
[03] All Call Answer	0 1		"
[04] Alarm/Restore Code keypad fire	E 8		page 18
[05] Alarm/Res. Code keypad panic	E 9		"
[06] Alarm/Res. Code keypad medical	E A		"
[07] Alarm/Res. Code Alarm on Exit	9 9		"
[08] Alarm/Res. Code Invalide Code	E D		"
[09] Alarm/Res. Code for AI Fire	B 0		page 18
[0A] Alarm/Res. Code for Auxiliary	C 8		"
[0B] Alarm/Res. Code for S1	C 0		"
[0C] Alarm/Res. Code for S2	D 0		"
[0D] Alarm/Res. Code for AC Fail	D 9		"
[0E] Alarm/Res. Code Bell Cut/Fuse	D A		"
[0F] Alarm/Res. Code Low Battery	D B		"
[10] Alarm/Res. Code AI Trouble	D 8		"

[11-2E] Alarm/Restore codes for zones 1-64 page 18

LOC. (Mode 20)	Default	LOC. (Mode 20)	Default
[11] Alarm/Restore Code for Zn #1	0 1	[20] Alarm/Restore Code for Zn #16	1 6
[12] Alarm/Restore Code for Zn #2	0 2	[21] Alarm/Restore Code for Zn #17	1 7
[13] Alarm/Restore Code for Zn #3	0 3	[22] Alarm/Restore Code for Zn #18	1 8
[14] Alarm/Restore Code for Zn #4	0 4	[23] Alarm/Restore Code for Zn #19	1 9
[15] Alarm/Restore Code for Zn #5	0 5	[24] Alarm/Restore Code for Zn #20	2 0
[16] Alarm/Restore Code for Zn #6	0 6	[25] Alarm/Restore Code for Zn #21	2 1
[17] Alarm/Restore Code for Zn #7	0 7	[26] Alarm/Restore Code for Zn #22	2 2
[18] Alarm/Restore Code for Zn #8	0 8	[27] Alarm/Restore Code for Zn #23	2 3
[19] Alarm/Restore Code for Zn #9	0 9	[28] Alarm/Restore Code for Zn #24	2 4
[1A] Alarm/Restore Code for Zn #10	1 0	[29] Alarm/Restore Code for Zn #25	2 5
[1B] Alarm/Restore Code for Zn #11	1 1	[2A] Alarm/Restore Code for Zn #26	2 6
[1C] Alarm/Restore Code for Zn #12	1 2	[2B] Alarm/Restore Code for Zn #27	2 7
[1D] Alarm/Restore Code for Zn #13	1 3	[2C] Alarm/Restore Code for Zn #28	2 8
[1E] Alarm/Restore Code for Zn #14	1 4	[2D] Alarm/Restore Code for Zn #29	2 9
[1F] Alarm/Restore Code for Zn #15	1 5	[2E] Alarm/Restore Code for Zn #30	3 0

[2F-50] Alarm/Restore codes for zones 1-64 page 18

Loc. (Mode 20)	Default	Loc. (Mode 20)	Default
[2F] Alarm/Restore Code for Zn #31	3 1	[40] Alarm/Restore Code for Zn #48	4 8
[30] Alarm/Restore Code for Zn #32	3 2	[41] Alarm/Restore Code for Zn #49	4 9
[31] Alarm/Restore Code for Zn #33	3 3	[42] Alarm/Restore Code for Zn #50	5 0
[32] Alarm/Restore Code for Zn #34	3 4	[43] Alarm/Restore Code for Zn #51	5 1
[33] Alarm/Restore Code for Zn #35	3 5	[44] Alarm/Restore Code for Zn #52	5 2
[34] Alarm/Restore Code for Zn #36	3 6	[45] Alarm/Restore Code for Zn #53	5 3
[35] Alarm/Restore Code for Zn #37	3 7	[46] Alarm/Restore Code for Zn #54	5 4
[36] Alarm/Restore Code for Zn #38	3 8	[47] Alarm/Restore Code for Zn #55	5 5
[37] Alarm/Restore Code for Zn #39	3 9	[48] Alarm/Restore Code for Zn #56	5 6
[38] Alarm/Restore Code for Zn #40	4 0	[49] Alarm/Restore Code for Zn #57	5 7
[39] Alarm/Restore Code for Zn #41	4 1	[4A] Alarm/Restore Code for Zn #58	5 8
[3A] Alarm/Restore Code for Zn #42	4 2	[4B] Alarm/Restore Code for Zn #59	5 9
[3B] Alarm/Restore Code for Zn #43	4 3	[4C] Alarm/Restore Code for Zn #60	6 0
[3C] Alarm/Restore Code for Zn #44	4 4	[4D] Alarm/Restore Code for Zn #61	6 1
[3D] Alarm/Restore Code for Zn #45	4 5	[4E] Alarm/Restore Code for Zn #62	6 2
[3E] Alarm/Restore Code for Zn #46	4 6	[4F] Alarm/Restore Code for Zn #63	6 3
[3F] Alarm/Restore Code for Zn #47	4 7	[50] Alarm/Restore Code for Zn #64	6 4

Loc. (Mode 20)	Default
[51] Func. byte for user mess. 1 to 8 / 17 to 24	1 E
[52] Func. byte for user mess. 9 to 16 / 25 to 32	1 F

[53] Zone Definition keypad fire	2	page 18
[54] Zone Definition keypad panic	0	"
[55] Zone Definition keypad medical	0	"
[56] Future Use		"
[57] Zone Definition Invalide Code	1	"

[58] Zone Definition for AI Fire	2	page 18
[59] Zone Definition for Auxiliary	C	"
[5A] Zone Definition for S1	C	"
[5B] Zone Definition for S2	C	"
[5C] Zone Definition for AC Fail	C	"
[5D] Zone Definition Bell Cut/Fuse	C	"
[5E] Zone Definition for Low Battery	C	"
[5F] Zone Definition for AI Trouble	C	"

[60-9F] Zone Definitions for zones 1-64

page 18

Loc. (Mode 20)**Default**

[60] Zone Definition for Zn #1	<input type="text" value="5"/>	<input type="text"/>
[61] Zone Definition for Zn #2	<input type="text" value="6"/>	<input type="text"/>
[62] Zone Definition for Zn #3	<input type="text" value="6"/>	<input type="text"/>
[63] Zone Definition for Zn #4	<input type="text" value="6"/>	<input type="text"/>
[64] Zone Definition for Zn #5	<input type="text" value="6"/>	<input type="text"/>
[65] Zone Definition for Zn #6	<input type="text" value="7"/>	<input type="text"/>
[66] Zone Definition for Zn #7	<input type="text" value="7"/>	<input type="text"/>
[67] Zone Definition for Zn #8	<input type="text" value="7"/>	<input type="text"/>
[68] Zone Definition for Zn #9	<input type="text" value="7"/>	<input type="text"/>
[69] Zone Definition for Zn #10	<input type="text" value="7"/>	<input type="text"/>
[6A] Zone Definition for Zn #11	<input type="text" value="7"/>	<input type="text"/>
[6B] Zone Definition for Zn #12	<input type="text" value="7"/>	<input type="text"/>
[6C] Zone Definition for Zn #13	<input type="text" value="7"/>	<input type="text"/>
[6D] Zone Definition for Zn #14	<input type="text" value="7"/>	<input type="text"/>
[6E] Zone Definition for Zn #15	<input type="text"/>	<input type="text"/>
[6F] Zone Definition for Zn #16	<input type="text"/>	<input type="text"/>
[70] Zone Definition for Zn #17	<input type="text" value="7"/>	<input type="text"/>
[71] Zone Definition for Zn #18	<input type="text" value="7"/>	<input type="text"/>
[72] Zone Definition for Zn #19	<input type="text" value="7"/>	<input type="text"/>
[73] Zone Definition for Zn #20	<input type="text" value="7"/>	<input type="text"/>
[74] Zone Definition for Zn #21	<input type="text" value="7"/>	<input type="text"/>
[75] Zone Definition for Zn #22	<input type="text" value="7"/>	<input type="text"/>
[76] Zone Definition for Zn #23	<input type="text" value="7"/>	<input type="text"/>
[77] Zone Definition for Zn #24	<input type="text" value="1"/>	<input type="text"/>
[78] Zone Definition for Zn #25	<input type="text" value="7"/>	<input type="text"/>
[79] Zone Definition for Zn #26	<input type="text" value="7"/>	<input type="text"/>
[7A] Zone Definition for Zn #27	<input type="text" value="7"/>	<input type="text"/>
[7B] Zone Definition for Zn #28	<input type="text" value="7"/>	<input type="text"/>
[7C] Zone Definition for Zn #29	<input type="text" value="7"/>	<input type="text"/>
[7D] Zone Definition for Zn #30	<input type="text" value="7"/>	<input type="text"/>
[7E] Zone Definition for Zn #31	<input type="text" value="7"/>	<input type="text"/>
[7F] Zone Definition for Zn #32	<input type="text" value="1"/>	<input type="text"/>

Loc. (Mode 20)**Default**

[80] Zone Definition for Zn #33	<input type="text" value="7"/>	<input type="text"/>
[81] Zone Definition for Zn #34	<input type="text" value="7"/>	<input type="text"/>
[82] Zone Definition for Zn #35	<input type="text" value="7"/>	<input type="text"/>
[83] Zone Definition for Zn #36	<input type="text" value="7"/>	<input type="text"/>
[84] Zone Definition for Zn #37	<input type="text" value="7"/>	<input type="text"/>
[85] Zone Definition for Zn #38	<input type="text" value="7"/>	<input type="text"/>
[86] Zone Definition for Zn #39	<input type="text" value="7"/>	<input type="text"/>
[87] Zone Definition for Zn #40	<input type="text" value="1"/>	<input type="text"/>
[88] Zone Definition for Zn #41	<input type="text" value="7"/>	<input type="text"/>
[89] Zone Definition for Zn #42	<input type="text" value="7"/>	<input type="text"/>
[8A] Zone Definition for Zn #43	<input type="text" value="7"/>	<input type="text"/>
[8B] Zone Definition for Zn #44	<input type="text" value="7"/>	<input type="text"/>
[8C] Zone Definition for Zn #45	<input type="text" value="7"/>	<input type="text"/>
[8D] Zone Definition for Zn #46	<input type="text" value="7"/>	<input type="text"/>
[8E] Zone Definition for Zn #47	<input type="text" value="7"/>	<input type="text"/>
[8F] Zone Definition for Zn #48	<input type="text" value="1"/>	<input type="text"/>
[90] Zone Definition for Zn #49	<input type="text" value="7"/>	<input type="text"/>
[91] Zone Definition for Zn #50	<input type="text" value="7"/>	<input type="text"/>
[92] Zone Definition for Zn #51	<input type="text" value="7"/>	<input type="text"/>
[93] Zone Definition for Zn #52	<input type="text" value="7"/>	<input type="text"/>
[94] Zone Definition for Zn #53	<input type="text" value="7"/>	<input type="text"/>
[95] Zone Definition for Zn #54	<input type="text" value="7"/>	<input type="text"/>
[96] Zone Definition for Zn #55	<input type="text" value="7"/>	<input type="text"/>
[97] Zone Definition for Zn #56	<input type="text" value="1"/>	<input type="text"/>
[98] Zone Definition for Zn #57	<input type="text" value="7"/>	<input type="text"/>
[99] Zone Definition for Zn #58	<input type="text" value="7"/>	<input type="text"/>
[9A] Zone Definition for Zn #59	<input type="text" value="7"/>	<input type="text"/>
[9B] Zone Definition for Zn #60	<input type="text" value="7"/>	<input type="text"/>
[9C] Zone Definition for Zn #61	<input type="text" value="7"/>	<input type="text"/>
[9D] Zone Definition for Zn #62	<input type="text" value="7"/>	<input type="text"/>
[9E] Zone Definition for Zn #63	<input type="text" value="7"/>	<input type="text"/>
[9F] Zone Definition for Zn #64	<input type="text" value="1"/>	<input type="text"/>

Loc. (Mode 20)		Default		
[A0]	Number of zone expanders	0 0		page 20
[A1]	Output type for prog. output #1	F F		page 20
[A2]	Output type for prog. output #2	F F		"
[A3]	Entry time (sec)	3 2		page 21
[A4]	Exit time (sec)	6 4		"
[A5]	Bell time (min)	0 6		"
[A6]	Del. trans.(abort) time of Zns (s)	1 5		page 21
[A7]	Activation Del. for alm. on AI(s)	1 0		"
[A8]	Activation Del. for res. on AI(s)	3 0		"
[A9]	Installer code digits (1 & 2)	1 6		page 22
[AA]	Installer code digits (3 & 4)	6 0		"

SPECIAL 99 & 00 FUNCTIONS FOR LOC. AB TO B8:

When programming locations requiring multiple entries, such as Code Assignment for Group A, 99 may be entered to select all codes (01 to 64) and 00 may be entered to deselect all codes.

99 Selects all codes.

00 Deselects all codes.

199 Select all codes with DME1 for loc. AF to B2

Loc. (Mode 20)

[AB] Zone Assignment for Group A

page 22

User	Default	User	Default	User	Default	User	Default
Zn #1	On	Zn #17	On	Zn #33	On	Zn #49	On
Zn #2	On	Zn #18	On	Zn #34	On	Zn #50	On
Zn #3	On	Zn #19	On	Zn #35	On	Zn #51	On
Zn #4	On	Zn #20	On	Zn #36	On	Zn #52	On
Zn #5	On	Zn #21	On	Zn #37	On	Zn #53	On
Zn #6	On	Zn #22	On	Zn #38	On	Zn #54	On
Zn #7	On	Zn #23	On	Zn #39	On	Zn #55	On
Zn #8	On	Zn #24	On	Zn #40	On	Zn #56	On
Zn #9	On	Zn #25	On	Zn #41	On	Zn #57	On
Zn #10	On	Zn #26	On	Zn #42	On	Zn #58	On
Zn #11	On	Zn #27	On	Zn #43	On	Zn #59	On
Zn #12	On	Zn #28	On	Zn #44	On	Zn #60	On
Zn #13	On	Zn #29	On	Zn #45	On	Zn #61	On
Zn #14	On	Zn #30	On	Zn #46	On	Zn #62	On
Zn #15	On	Zn #31	On	Zn #47	On	Zn #63	On
Zn #16	On	Zn #32	On	Zn #48	On	Zn #64	On

■ Check (✓) selected zones in "USER" column

[AC] Zone Assignment for Group B

page 22

User	Default	User	Default	User	Default	User	Default
Zn #1	Off	Zn #17	Off	Zn #33	Off	Zn #49	Off
Zn #2	Off	Zn #18	Off	Zn #34	Off	Zn #50	Off
Zn #3	Off	Zn #19	Off	Zn #35	Off	Zn #51	Off
Zn #4	Off	Zn #20	Off	Zn #36	Off	Zn #52	Off
Zn #5	Off	Zn #21	Off	Zn #37	Off	Zn #53	Off
Zn #6	Off	Zn #22	Off	Zn #38	Off	Zn #54	Off
Zn #7	Off	Zn #23	Off	Zn #39	Off	Zn #55	Off
Zn #8	Off	Zn #24	Off	Zn #40	Off	Zn #56	Off
Zn #9	Off	Zn #25	Off	Zn #41	Off	Zn #57	Off
Zn #10	Off	Zn #26	Off	Zn #42	Off	Zn #58	Off
Zn #11	Off	Zn #27	Off	Zn #43	Off	Zn #59	Off
Zn #12	Off	Zn #28	Off	Zn #44	Off	Zn #60	Off
Zn #13	Off	Zn #29	Off	Zn #45	Off	Zn #61	Off
Zn #14	Off	Zn #30	Off	Zn #46	Off	Zn #62	Off
Zn #15	Off	Zn #31	Off	Zn #47	Off	Zn #63	Off
Zn #16	Off	Zn #32	Off	Zn #48	Off	Zn #64	Off

■ Check (✓) selected zones in "USER" column

Loc. (Mode 20)**[AD] Zone Assignment for Group C**

page 22

User	Default	User	Default	User	Default	User	Default
Zn #1	Off	Zn #17	Off	Zn #33	Off	Zn #49	Off
Zn #2	Off	Zn #18	Off	Zn #34	Off	Zn #50	Off
Zn #3	Off	Zn #19	Off	Zn #35	Off	Zn #51	Off
Zn #4	Off	Zn #20	Off	Zn #36	Off	Zn #52	Off
Zn #5	Off	Zn #21	Off	Zn #37	Off	Zn #53	Off
Zn #6	Off	Zn #22	Off	Zn #38	Off	Zn #54	Off
Zn #7	Off	Zn #23	Off	Zn #39	Off	Zn #55	Off
Zn #8	Off	Zn #24	Off	Zn #40	Off	Zn #56	Off
Zn #9	Off	Zn #25	Off	Zn #41	Off	Zn #57	Off
Zn #10	Off	Zn #26	Off	Zn #42	Off	Zn #58	Off
Zn #11	Off	Zn #27	Off	Zn #43	Off	Zn #59	Off
Zn #12	Off	Zn #28	Off	Zn #44	Off	Zn #60	Off
Zn #13	Off	Zn #29	Off	Zn #45	Off	Zn #61	Off
Zn #14	Off	Zn #30	Off	Zn #46	Off	Zn #62	Off
Zn #15	Off	Zn #31	Off	Zn #47	Off	Zn #63	Off
Zn #16	Off	Zn #32	Off	Zn #48	Off	Zn #64	Off

■ Check (✓) selected zones in "USER" column

[AE] Zone Assignment for Group D

page 22

User	Default	User	Default	User	Default	User	Default
Zn #1	Off	Zn #17	Off	Zn #33	Off	Zn #49	Off
Zn #2	Off	Zn #18	Off	Zn #34	Off	Zn #50	Off
Zn #3	Off	Zn #19	Off	Zn #35	Off	Zn #51	Off
Zn #4	Off	Zn #20	Off	Zn #36	Off	Zn #52	Off
Zn #5	Off	Zn #21	Off	Zn #37	Off	Zn #53	Off
Zn #6	Off	Zn #22	Off	Zn #38	Off	Zn #54	Off
Zn #7	Off	Zn #23	Off	Zn #39	Off	Zn #55	Off
Zn #8	Off	Zn #24	Off	Zn #40	Off	Zn #56	Off
Zn #9	Off	Zn #25	Off	Zn #41	Off	Zn #57	Off
Zn #10	Off	Zn #26	Off	Zn #42	Off	Zn #58	Off
Zn #11	Off	Zn #27	Off	Zn #43	Off	Zn #59	Off
Zn #12	Off	Zn #28	Off	Zn #44	Off	Zn #60	Off
Zn #13	Off	Zn #29	Off	Zn #45	Off	Zn #61	Off
Zn #14	Off	Zn #30	Off	Zn #46	Off	Zn #62	Off
Zn #15	Off	Zn #31	Off	Zn #47	Off	Zn #63	Off
Zn #16	Off	Zn #32	Off	Zn #48	Off	Zn #64	Off

■ Check (✓) selected zones in "USER" column

Loc. (Mode 20)

[AF] Code Assignment for Group A page 22

User	Default	User	Default	User	Default	User	Default
User #1	On	User #17	On	User #33	On	User #49	On
User #2	On	User #18	On	User #34	On	User #50	On
User #3	On	User #19	On	User #35	On	User #51	On
User #4	On	User #20	On	User #36	On	User #52	On
User #5	On	User #21	On	User #37	On	User #53	On
User #6	On	User #22	On	User #38	On	User #54	On
User #7	On	User #23	On	User #39	On	User #55	On
User #8	On	User #24	On	User #40	On	User #56	On
User #9	On	User #25	On	User #41	On	User #57	On
User #10	On	User #26	On	User #42	On	User #58	On
User #11	On	User #27	On	User #43	On	User #59	On
User #12	On	User #28	On	User #44	On	User #60	On
User #13	On	User #29	On	User #45	On	User #61	On
User #14	On	User #30	On	User #46	On	User #62	On
User #15	On	User #31	On	User #47	On	User #63	On
User #16	On	User #32	On	User #48	On	User #64	On

■ Check (✓) selected codes in "USER" column

[AF] Code Assignment for Group A (If you have the DME1 installed) page 22

User	Default	User	Default	User	Default	User	Default
* User #65	Off	User #81	On	User #97	On	User #113	On
* User #66	Off	User #82	On	User #98	On	User #114	On
* User #67	Off	User #83	On	User #99	On	User #115	On
* User #68	Off	User #84	On	User #100	On	User #116	On
* User #69	Off	User #85	On	User #101	On	User #117	On
* User #70	Off	User #86	On	User #102	On	User #118	On
* User #71	Off	User #87	On	User #103	On	User #119	On
* User #72	Off	User #88	On	User #104	On	User #120	On
User #73	On	User #89	On	User #105	On	User #121	On
User #74	On	User #90	On	User #106	On	User #122	On
User #75	On	User #91	On	User #107	On	User #123	On
User #76	On	User #92	On	User #108	On	User #124	On
User #77	On	User #93	On	User #109	On	User #125	On
User #78	On	User #94	On	User #110	On	User #126	On
User #79	On	User #95	On	User #111	On	User #127	On
User #80	On	User #96	On	User #112	On	User #128	On

■ Check (✓) selected codes in "USER" column

*** IMPORTANT NOTE: (For the DV1660LC (&FLC) with or without the DME1 installed)**

- User # 65 is used for auto-arming schedule #1.
- User # 66 is used for auto-arming schedule #2.
- User # 67 is used for auto-arming schedule #3.
- User # 68 is used for quick arming.
- User # 69 is used for key switch arming.
- User # 70 is used for arming/disarming by central.
- User numbers 71 and 72 are reserved for future use.

Loc. (Mode 20)

[B0] Code Assignment for Group B page 22

User	Default	User	Default	User	Default	User	Default
User #1	Off	User #17	Off	User #33	Off	User #49	Off
User #2	Off	User #18	Off	User #34	Off	User #50	Off
User #3	Off	User #19	Off	User #35	Off	User #51	Off
User #4	Off	User #20	Off	User #36	Off	User #52	Off
User #5	Off	User #21	Off	User #37	Off	User #53	Off
User #6	Off	User #22	Off	User #38	Off	User #54	Off
User #7	Off	User #23	Off	User #39	Off	User #55	Off
User #8	Off	User #24	Off	User #40	Off	User #56	Off
User #9	Off	User #25	Off	User #41	Off	User #57	Off
User #10	Off	User #26	Off	User #42	Off	User #58	Off
User #11	Off	User #27	Off	User #43	Off	User #59	Off
User #12	Off	User #28	Off	User #44	Off	User #60	Off
User #13	Off	User #29	Off	User #45	Off	User #61	Off
User #14	Off	User #30	Off	User #46	Off	User #62	Off
User #15	Off	User #31	Off	User #47	Off	User #63	Off
User #16	Off	User #32	Off	User #48	Off	User #64	Off

■ Check () selected zones in "USER" column

[B0] Code Assignment for Group B (If you have the DME1 installed) page 22

User	Default	User	Default	User	Default	User	Default
* User #65	Off	User #81	Off	User #97	Off	User #113	Off
* User #66	Off	User #82	Off	User #98	Off	User #114	Off
* User #67	Off	User #83	Off	User #99	Off	User #115	Off
* User #68	Off	User #84	Off	User #100	Off	User #116	Off
* User #69	Off	User #85	Off	User #101	Off	User #117	Off
* User #70	Off	User #86	Off	User #102	Off	User #118	Off
* User #71	Off	User #87	Off	User #103	Off	User #119	Off
* User #72	Off	User #88	Off	User #104	Off	User #120	Off
User #73	Off	User #89	Off	User #105	Off	User #121	Off
User #74	Off	User #90	Off	User #106	Off	User #122	Off
User #75	Off	User #91	Off	User #107	Off	User #123	Off
User #76	Off	User #92	Off	User #108	Off	User #124	Off
User #77	Off	User #93	Off	User #109	Off	User #125	Off
User #78	Off	User #94	Off	User #110	Off	User #126	Off
User #79	Off	User #95	Off	User #111	Off	User #127	Off
User #80	Off	User #96	Off	User #112	Off	User #128	Off

■ Check (✓) selected codes in "USER" column

*** IMPORTANT NOTE: (For the DV1660LC (&FLC) with or without the DME1 installed)**

User # 65 is used for auto-arming schedule #1.

User # 66 is used for auto-arming schedule #2.

User # 67 is used for auto-arming schedule #3.

User # 68 is used for quick arming.

User # 69 is used for key switch arming.

User # 70 is used for arming/disarming by central.

User numbers 71 and 72 are reserved for future use.

Loc. (Mode 20)

[B1] Code Assignment for Group C page 23

User	Default	User	Default	User	Default	User	Default
User #1	Off	User #17	Off	User #33	Off	User #49	Off
User #2	Off	User #18	Off	User #34	Off	User #50	Off
User #3	Off	User #19	Off	User #35	Off	User #51	Off
User #4	Off	User #20	Off	User #36	Off	User #52	Off
User #5	Off	User #21	Off	User #37	Off	User #53	Off
User #6	Off	User #22	Off	User #38	Off	User #54	Off
User #7	Off	User #23	Off	User #39	Off	User #55	Off
User #8	Off	User #24	Off	User #40	Off	User #56	Off
User #9	Off	User #25	Off	User #41	Off	User #57	Off
User #10	Off	User #26	Off	User #42	Off	User #58	Off
User #11	Off	User #27	Off	User #43	Off	User #59	Off
User #12	Off	User #28	Off	User #44	Off	User #60	Off
User #13	Off	User #29	Off	User #45	Off	User #61	Off
User #14	Off	User #30	Off	User #46	Off	User #62	Off
User #15	Off	User #31	Off	User #47	Off	User #63	Off
User #16	Off	User #32	Off	User #48	Off	User #64	Off

■ Check (✓) selected codes in "USER" column

[B1] Code Assignment for Group C (If you have the DME1 installed) page 23

User	Default	User	Default	User	Default	User	Default
* User #65	Off	User #81	Off	User #97	Off	User #113	Off
* User #66	Off	User #82	Off	User #98	Off	User #114	Off
* User #67	Off	User #83	Off	User #99	Off	User #115	Off
* User #68	Off	User #84	Off	User #100	Off	User #116	Off
* User #69	Off	User #85	Off	User #101	Off	User #117	Off
* User #70	Off	User #86	Off	User #102	Off	User #118	Off
* User #71	Off	User #87	Off	User #103	Off	User #119	Off
* User #72	Off	User #88	Off	User #104	Off	User #120	Off
User #73	Off	User #89	Off	User #105	Off	User #121	Off
User #74	Off	User #90	Off	User #106	Off	User #122	Off
User #75	Off	User #91	Off	User #107	Off	User #123	Off
User #76	Off	User #92	Off	User #108	Off	User #124	Off
User #77	Off	User #93	Off	User #109	Off	User #125	Off
User #78	Off	User #94	Off	User #110	Off	User #126	Off
User #79	Off	User #95	Off	User #111	Off	User #127	Off
User #80	Off	User #96	Off	User #112	Off	User #128	Off

■ Check (✓) selected codes in "USER" column

*** IMPORTANT NOTE: (For the DV1660LC (& FLC) with or without the DME1 installed)**

User # 65 is used for auto-arming schedule #1.
 User # 66 is used for auto-arming schedule #2.
 User # 67 is used for auto-arming schedule #3.
 User # 68 is used for quick arming.
 User # 69 is used for key switch arming.
 User # 70 is used for arming/disarming by central.
 User numbers 71 and 72 are reserved for future use.

Loc. (Mode 20)

[B2] Code Assignment for Group D page 23

User	Default	User	Default	User	Default	User	Default
User #1	Off	User #17	Off	User #33	Off	User #49	Off
User #2	Off	User #18	Off	User #34	Off	User #50	Off
User #3	Off	User #19	Off	User #35	Off	User #51	Off
User #4	Off	User #20	Off	User #36	Off	User #52	Off
User #5	Off	User #21	Off	User #37	Off	User #53	Off
User #6	Off	User #22	Off	User #38	Off	User #54	Off
User #7	Off	User #23	Off	User #39	Off	User #55	Off
User #8	Off	User #24	Off	User #40	Off	User #56	Off
User #9	Off	User #25	Off	User #41	Off	User #57	Off
User #10	Off	User #26	Off	User #42	Off	User #58	Off
User #11	Off	User #27	Off	User #43	Off	User #59	Off
User #12	Off	User #28	Off	User #44	Off	User #60	Off
User #13	Off	User #29	Off	User #45	Off	User #61	Off
User #14	Off	User #30	Off	User #46	Off	User #62	Off
User #15	Off	User #31	Off	User #47	Off	User #63	Off
User #16	Off	User #32	Off	User #48	Off	User #64	Off

■ Check (✓) selected codes in "USER" column

[B2] Code Assignment for Group D (If you have the DME1 installed) page 23

User	Default	User	Default	User	Default	User	Default
* User #65	Off	User #81	Off	User #97	Off	User #113	Off
* User #66	Off	User #82	Off	User #98	Off	User #114	Off
* User #67	Off	User #83	Off	User #99	Off	User #115	Off
* User #68	Off	User #84	Off	User #100	Off	User #116	Off
* User #69	Off	User #85	Off	User #101	Off	User #117	Off
* User #70	Off	User #86	Off	User #102	Off	User #118	Off
* User #71	Off	User #87	Off	User #103	Off	User #119	Off
* User #72	Off	User #88	Off	User #104	Off	User #120	Off
User #73	Off	User #89	Off	User #105	Off	User #121	Off
User #74	Off	User #90	Off	User #106	Off	User #122	Off
User #75	Off	User #91	Off	User #107	Off	User #123	Off
User #76	Off	User #92	Off	User #108	Off	User #124	Off
User #77	Off	User #93	Off	User #109	Off	User #125	Off
User #78	Off	User #94	Off	User #110	Off	User #126	Off
User #79	Off	User #95	Off	User #111	Off	User #127	Off
User #80	Off	User #96	Off	User #112	Off	User #128	Off

■ Check (✓) selected codes in "USER" column

*** IMPORTANT NOTE: (For the DVI660LC (&FLC) with or without the DME1 installed)**

User # 65 is used for auto-arming schedule #1.
 User # 66 is used for auto-arming schedule #2.
 User # 67 is used for auto-arming schedule #3.
 User # 68 is used for quick arming.
 User # 69 is used for key switch arming.
 User # 70 is used for arming/disarming by central.
 User numbers 71 and 72 are reserved for future use.

Loc. (Mode 20)

[B3] System Options

page 23

Default	Opt.#	Option ON	Option OFF
<input type="checkbox"/> Off	<input type="checkbox"/> 01	Open\close report enabled	Open\close report disabled
<input type="checkbox"/> Off	<input type="checkbox"/> 02	Close Confirmation enabled	Close Confirmation disabled
<input type="checkbox"/> On	<input type="checkbox"/> 03	Arming Inhibit	No Arming Inhibit
<input type="checkbox"/> Off	<input type="checkbox"/> 04	Quick Arm enabled	Quick Arm disabled
<input type="checkbox"/> On	<input type="checkbox"/> 05	Line Cut Buzzer activated	Line Cut Buzzer deactivated
<input type="checkbox"/> On	<input type="checkbox"/> 06	Memory Guard Advice	No Memory Guard Advice
<input type="checkbox"/> On	<input type="checkbox"/> 07	Siren Driver enabled	Bell Driver enabled
<input type="checkbox"/> Off	<input type="checkbox"/> 08	Bell Squawk enabled	Bell Squawk disabled
<input type="checkbox"/> On	<input type="checkbox"/> 09	Need Code for Bypassing	Don't Need Code for Bypassing
<input type="checkbox"/> Off	<input type="checkbox"/> 10	Send User # higher than 64	Always send 64 for any User # higher than 64
<input type="checkbox"/> Off	<input type="checkbox"/> 11	Bypass Report on Exit	No Bypass Report on Exit
<input type="checkbox"/> Off	<input type="checkbox"/> 12	Immediate Bypass Report	No Immediate Bypass Report
<input type="checkbox"/> Off	<input type="checkbox"/> 13	Common Bypass Report	Individual Bypass Report
<input type="checkbox"/> On	<input type="checkbox"/> 14	Bypassed zones on Exit displayed	Bypassed zones on Exit not displayed
<input type="checkbox"/> On	<input type="checkbox"/> 15	Auto Unbypass on Entry	No Unbypass on Entry
<input type="checkbox"/> Off	<input type="checkbox"/> 16	All Closed Report enabled	All Closed Report disabled
<input type="checkbox"/> Off	<input type="checkbox"/> 17	Master Code#1 not changeable	Master Code#1 changeable
<input type="checkbox"/> On	<input type="checkbox"/> 18	Only Master for user message	Any code for user message (Types 0 and 1 only)
<input type="checkbox"/> Off	<input type="checkbox"/> 19	Immediate Restore	Restore when bell off
<input type="checkbox"/> Off	<input type="checkbox"/> 20	Opening report on alarm	No opening report on alarm
<input type="checkbox"/> Off	<input type="checkbox"/> 21	Memory Security Switch enabled	Memory Security Switch disabled
<input type="checkbox"/> Off	<input type="checkbox"/> 22	Key option enabled	Key option disabled
<input type="checkbox"/> Off	<input type="checkbox"/> 23	Maintained Key switch	Momentary Key switch
<input type="checkbox"/> Off	<input type="checkbox"/> 24	Auto-arm squawk enabled	Auto-arm squawk disabled
<input type="checkbox"/> Off	<input type="checkbox"/> 25	Arming Group by Central enabled	Arming Group by Central disabled
<input type="checkbox"/> Off	<input type="checkbox"/> 26	Disarming Group by Central enabled	Disarming Group by Central disabled
<input type="checkbox"/> Off	<input type="checkbox"/> 27	Utility output #2 normally high	Utility output #2 normally low
<input type="checkbox"/> Off	<input type="checkbox"/> 28	Force auto-arm and/or arming by central	enabled (ON) / disabled (OFF)
<input type="checkbox"/> Off	<input type="checkbox"/> 29	Prog. of Inst. Default code enabled	Installer Lock Out
<input type="checkbox"/> Off	<input type="checkbox"/> 30	Open/Close Report by Group enabled	Open/Close Report by Group disabled
<input type="checkbox"/> Off	<input type="checkbox"/> 31	No Inhibit for all del. & del./inst. zones	No Inhibit for all del. & del./inst. zones disabled
<input type="checkbox"/> Off	<input type="checkbox"/> 32	DME1's Digital Dialer and Prog Outputs enabled	enabled (ON) / disabled (OFF)

■ To enable Close Confirmation (option #02), the Open/Close report option (option #1) must be enabled (ON).

■ To enable Common bypass report (option #13), option #11 must be ON.

■ To activate Maintained key switch (option #23), option #22 must be ON. If option #22 is not selected, make sure both options #22 and #23 are OFF.

Loc. (Mode 20)

[B4] Bypass (Shunt) Mask

page 25

	User	Default		User	Default		User	Default		User	Default
Zn #1		Off	Zn #17		Off	Zn #33		Off	Zn #49		Off
Zn #2		Off	Zn #18		Off	Zn #34		Off	Zn #50		Off
Zn #3		Off	Zn #19		Off	Zn #35		Off	Zn #51		Off
Zn #4		Off	Zn #20		Off	Zn #36		Off	Zn #52		Off
Zn #5		Off	Zn #21		Off	Zn #37		Off	Zn #53		Off
Zn #6		Off	Zn #22		Off	Zn #38		Off	Zn #54		Off
Zn #7		Off	Zn #23		Off	Zn #39		Off	Zn #55		Off
Zn #8		Off	Zn #24		Off	Zn #40		Off	Zn #56		Off
Zn #9		Off	Zn #25		Off	Zn #41		Off	Zn #57		Off
Zn #10		Off	Zn #26		Off	Zn #42		Off	Zn #58		Off
Zn #11		Off	Zn #27		Off	Zn #43		Off	Zn #59		Off
Zn #12		Off	Zn #28		Off	Zn #44		Off	Zn #60		Off
Zn #13		Off	Zn #29		Off	Zn #45		Off	Zn #61		Off
Zn #14		Off	Zn #30		Off	Zn #46		Off	Zn #62		Off
Zn #15		Off	Zn #31		Off	Zn #47		Off	Zn #63		Off
Zn #16		Off	Zn #32		Off	Zn #48		Off	Zn #64		Off

■ Check (✓) selected zones in "USER" column

[B5] No Restore Report For Zones

page 25

	User	Default		User	Default		User	Default		User	Default
Zn #1		Off	Zn #17		Off	Zn #33		Off	Zn #49		Off
Zn #2		Off	Zn #18		Off	Zn #34		Off	Zn #50		Off
Zn #3		Off	Zn #19		Off	Zn #35		Off	Zn #51		Off
Zn #4		Off	Zn #20		Off	Zn #36		Off	Zn #52		Off
Zn #5		Off	Zn #21		Off	Zn #37		Off	Zn #53		Off
Zn #6		Off	Zn #22		Off	Zn #38		Off	Zn #54		Off
Zn #7		Off	Zn #23		Off	Zn #39		Off	Zn #55		Off
Zn #8		Off	Zn #24		Off	Zn #40		Off	Zn #56		Off
Zn #9		Off	Zn #25		Off	Zn #41		Off	Zn #57		Off
Zn #10		Off	Zn #26		Off	Zn #42		Off	Zn #58		Off
Zn #11		Off	Zn #27		Off	Zn #43		Off	Zn #59		Off
Zn #12		Off	Zn #28		Off	Zn #44		Off	Zn #60		Off
Zn #13		Off	Zn #29		Off	Zn #45		Off	Zn #61		Off
Zn #14		Off	Zn #30		Off	Zn #46		Off	Zn #62		Off
Zn #15		Off	Zn #31		Off	Zn #47		Off	Zn #63		Off
Zn #16		Off	Zn #32		Off	Zn #48		Off	Zn #64		Off

■ Check (✓) selected zones in "USER" column

Loc. (Mode 20)**[B6] No Restore Report For Miscellaneous**

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#	User	Default	Description
01	<input type="checkbox"/>	<input type="checkbox"/> Off	AI Fire Alarm
02	<input type="checkbox"/>	<input type="checkbox"/> Off	Auxiliary Alarm
03	<input type="checkbox"/>	<input type="checkbox"/> Off	S1 Alarm
04	<input type="checkbox"/>	<input type="checkbox"/> Off	S2 Alarm
05	<input type="checkbox"/>	<input type="checkbox"/> Off	AC Fail
06	<input type="checkbox"/>	<input type="checkbox"/> Off	Bell Cut/Blown Fuse
07	<input type="checkbox"/>	<input type="checkbox"/> Off	Low Battery
08	<input type="checkbox"/>	<input type="checkbox"/> Off	AI Fire Trouble

[B7] Transmission Delay (Abort) Select

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User	Default	User	Default	User	Default	User	Default
Zn #1	Off	Zn #17	Off	Zn #33	Off	Zn #49	Off
Zn #2	Off	Zn #18	Off	Zn #34	Off	Zn #50	Off
Zn #3	Off	Zn #19	Off	Zn #35	Off	Zn #51	Off
Zn #4	Off	Zn #20	Off	Zn #36	Off	Zn #52	Off
Zn #5	Off	Zn #21	Off	Zn #37	Off	Zn #53	Off
Zn #6	Off	Zn #22	Off	Zn #38	Off	Zn #54	Off
Zn #7	Off	Zn #23	Off	Zn #39	Off	Zn #55	Off
Zn #8	Off	Zn #24	Off	Zn #40	Off	Zn #56	Off
Zn #9	Off	Zn #25	Off	Zn #41	Off	Zn #57	Off
Zn #10	Off	Zn #26	Off	Zn #42	Off	Zn #58	Off
Zn #11	Off	Zn #27	Off	Zn #43	Off	Zn #59	Off
Zn #12	Off	Zn #28	Off	Zn #44	Off	Zn #60	Off
Zn #13	Off	Zn #29	Off	Zn #45	Off	Zn #61	Off
Zn #14	Off	Zn #30	Off	Zn #46	Off	Zn #62	Off
Zn #15	Off	Zn #31	Off	Zn #47	Off	Zn #63	Off
Zn #16	Off	Zn #32	Off	Zn #48	Off	Zn #64	Off

■ Check (✓) selected zones in "USER" column

Loc. (Mode 20)

Default

[B8] Future Use**[B9]** Transfer of all default data to the EEPROM

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See the DME1 manual for information on Modes 21 and 22.

Mode 21 is used to program all the information required for the digital dialer and to program the 5 additional programmable outputs that are available on the DME1.

Mode 22 is used to program the Event Descriptors used in the Sur-Gard 4-3 communication format.

Limited Warranty

Sur-Gard Security Systems Ltd. warrants that for a period of twelve months from the date of purchase, the product shall be free of defect in materials and workmanship under normal use and that in fulfillment of any breach of such warranty. Sur-Gard Security Systems Ltd. shall, at its option, repair or replace the defective equipment upon return of the equipment to its repair depot. This warranty applies only to defects in parts and workmanship and not to damage incurred in shipping or handling, or damage due to causes beyond the control of Sur-Gard Security Systems Ltd. such as lightning, excessive voltage, mechanical shock, water damage, or damage arising out of abuse, alteration or improper application of the equipment.

The foregoing warranty shall apply only to the original buyer, and is and shall be in lieu of any and all other warranties, whether expressed or implied and of all other obligations or liabilities on the part of Sur-Gard Security Systems Ltd. This warranty contains the entire warranty. Sur-Gard Security Systems Ltd. neither assumes, nor authorizes any other person purporting to act on its behalf to modify or to change this warranty, nor to assume for it any other warranty or liability concerning this product.

In no event shall Sur-Gard Security Systems Ltd. be liable for any direct, indirect or consequential damages, loss of anticipated profits, loss of time or any other losses incurred by the buyer in connection with the purchase, installation or operation or failure of this product.

WARNING: Sur-Gard Security Systems Ltd. recommends that the entire system be completely tested on a regular basis. However, despite frequent testing, and due to, but not limited to, criminal tampering or electrical disruption, it is possible for this product to fail to perform as expected.

How to Contact Us:***Sales***

For information about additional products, please call our sales number: 1-800-418-7618, or e-mail us at sales@sur-gard.com.

Technical Support

If you have questions or problems when using Sur-Gard products, you can call our Technical Support Department, or e-mail us at support@sur-gard.com. If you are within the United States, Puerto Rico, the U.S. Virgin Islands or Canada, you can get support by dialing 1-800-503-5869 ext.1. If you are outside these areas, please call (416) 665-4494 ext.1, Fax (416) 665-1500.

Internet

Sur-Gard is now on the World Wide Web. You will be able to search the Sur-Gard technical information database and read information about new products at our web site. You will also be able to send us your questions. Our World Wide Web address is <http://www.sur-gard.com>.