

2008 Foundation Series Fire Alarm Control Unit Operation Guide

579-1401 Rev A



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1 Cautions, Warnings, and Regulatory Information

READ AND SAVE THESE INSTRUCTIONS Follow the instructions in this installation manual. These instructions must be followed to avoid damage to this product and associated equipment. Product operation and reliability depend upon proper installation.



DO NOT INSTALL ANY SIMPLEX™ PRODUCT THAT APPEARS DAMAGED Upon unpacking your Simplex product, inspect the contents of the carton for shipping damage. If damage is apparent, immediately file a claim with the carrier and notify an authorized Simplex product supplier.



ELECTRICAL HAZARD Disconnect electrical field power when making any internal adjustments or repairs. All repairs should be performed by a representative or an authorized agent of your local Simplex product supplier.



STATIC HAZARD Static electricity can damage components. Handle as follows:

- Ground yourself before opening or installing components.
- Prior to installation, keep components wrapped in anti-static material at all times.



SULFURIC ACID WARNING Battery contains sulfuric acid, which can cause severe burns to the skin and eyes and can destroy fabric. Replace any leaking or damaged battery while wearing appropriate protective gear. If you come in contact with sulfuric acid, immediately flush skin or eyes with water for 15 minutes and seek immediate medical attention.

FCC RULES AND REGULATIONS – PART 15

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications.

Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

SYSTEM REACCEPTANCE TEST AFTER SOFTWARE CHANGES

To ensure proper system operation, this product must be tested in accordance with NFPA-72, after any programming operation or change in site-specific software. Reacceptance testing is required after any change, addition or deletion of system components, or after any modification, repair or adjustment to system hardware or wiring. All components, circuits, system operations, or software functions known to be affected by a change must be 100% tested. In addition, to ensure that other operations are not inadvertently affected, at least 10% of initiating devices that are not directly affected by the change, up to a maximum of 50 devices, must also be tested and proper system operation verified.

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2 Introduction

The 2008-9101 is a conventional fire alarm control unit (FACU). The system includes eight Class B or four Class A Initiating Device Circuits (IDCs) and two Notification Appliance Circuits (NACs). You can wire the NACs using Class A or Class B wiring.

Use the built-in Digital Alarm Communications Transmitter (DACT) for remote station or central station monitoring.

The 2008-9101 system uses audible and visible indications during alarm, supervisory or trouble conditions. If any of these conditions occur, the system activates the applicable notification appliances, respective LEDs, and the control unit piezo. The indications continue until an operator acknowledges the condition.

The user interface features 2 X 20 characters, LED indicators and a LCD display. The various functions of the control unit are access level protected. Only appropriate personnel can access the control unit's sensitive features.

3 User interface

The user interface is used to operate the FACU.

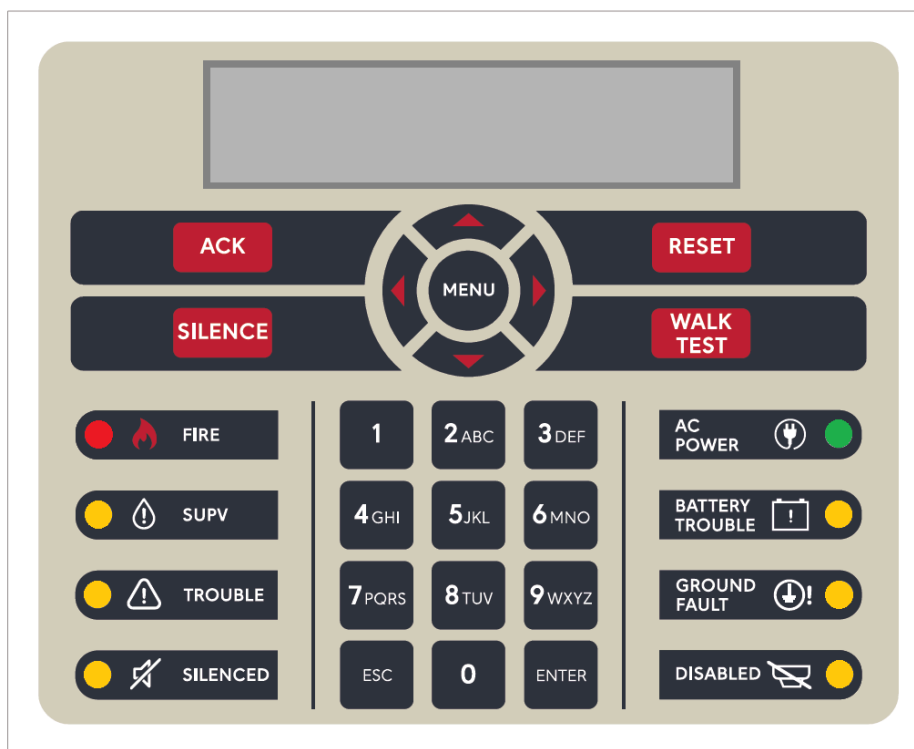


Figure 1: User interface

3.1 Control unit buttons

3.1.1 ACK

Pressing the **ACK** key performs the following actions:

- Acknowledges every abnormal point in the selected system category, for example fire, supervisory or trouble
- Silences the piezo sounder
- Changes the flashing LEDs to steady
- Sends acknowledge messages to the history file.

If all three events are present, the FACU acknowledges the events in the following order:

1. Alarm
2. Supervisory
3. Trouble

The FACU also scrolls through an active list in the same order. While viewing the active list, if any events of higher priority occur, for example, alarms in case of supervisory or trouble list, or alarms and supervisory in case of trouble list, the list shows high priority events after you have viewed all the events in that list. In order to view the new event, press the **ESC** key and then press the **ACK** key. The FACU displays the unacknowledged events in the defined priority.

The **ACK** key does not have any effect on the NACs.

3.1.2 SILENCE

If an alarm exists, press the **SILENCE** key to turn off all silenceable outputs, such as NACs. The system turns on the **ALARM SILENCED** LED and displays the alarm silenced message on the LCD screen.

Hold the **SILENCE** key for more than 10 seconds to perform a **DACT test** and send the test signal to the receiving station.

3.1.3 RESET

Press and release the **RESET** key to complete the following actions:

- Reset all alarm notification appliances and controls.
- Remove alarms from the alarm list after restoring the respective devices to normal state.
- Silence all silenceable outputs.
- Return the system to a normal state, provided that no alarm, supervisory or trouble conditions are present.

Hold the **RESET** key for more than 10 seconds to perform a **Lamp test** by turning on all LEDs, control unit piezos and the LCD display. If any alarm or trouble exists after a reset, the notification appliance circuits sounds again.

If you press the **RESET** key when the control unit is normal or not in alarm, then the control unit performs a hardware (HW) reset.

3.1.4 WALK TEST

Press the **WALK TEST** key to activate the walk test feature and turn on the control unit piezo. The control unit piezo turns on and the **TROUBLE** LED starts flashing. For more information, see [Walk test](#).

3.1.5 MENU

Press the **MENU** key to get to the top of the main menu structure, unless you are in the programming menu.

3.1.6 UP and DOWN

Press the **UP** and **DOWN** keys to scroll through the system lists, such as the historical log and point database.

3.1.7 LEFT and RIGHT

Press the **LEFT** and **RIGHT** keys to scroll through screens with multiple options. The keys advance the focus, indicated by the square brackets **□**, from field to field.

3.1.8 ESC

Press the **ESC** key to exit a menu or display and return to the top level structure. The **ESC** key exits the menu structure one level at a time. In some cases, the **ESC** key returns the operator directly to the top level menu.

3.1.9 ENTER

Press the **ENTER** key to confirm your selection. Press the **ENTER** key in the programming screen to accept that the information on the display is correct. Select an event and press the **ENTER** key to view additional information.

3.2 LED indicators and piezo

Table 1: LED indicators

Component	LED color	Description
Fire LED	Red	Indicates a fire alarm when flashing and an acknowledged alarm when steady on.
Supervisory LED	Yellow	Indicates a supervisory condition when flashing and an acknowledged condition when steady on.
Trouble LED	Yellow	Indicates a trouble condition when flashing, and an acknowledged trouble when steady on.
Alarm Silenced LED	Yellow	Indicates an alarm has been silenced when steady on.
AC Power LED	Green	Indicates AC power is applied to the control unit when steady on.
Battery Trouble LED	Yellow	Indicates a battery trouble state when flashing and an acknowledged trouble when steady on.
Ground Fault LED	Yellow	Indicates a ground fault state when flashing and an acknowledged trouble when steady on.
Disabled LED	Yellow	Indicates the system has been disabled when flashing and an acknowledged trouble when steady on.
Piezo	-	Emits tones during alarm, supervisory and trouble conditions. Tone-alert pulses for an alarm condition, and is on steady for a trouble or supervisory condition.

4 Operations

4.1 Normal operation

Normal condition is the standard condition of operation. When no alarm or trouble conditions exist, the control unit's operator interface shows the following:

- The green **AC POWER** LED is on steady
- All other control unit indicator LEDs and local piezo are off
- All NACs are off
- All relays are in their normal state
- The control unit's LCD displays the following output:

```
SYSTEM NORMAL
```

```
12:35:15 PM 20/09/18
```

4.2 Fire alarm operation

An alarm condition occurs when an initiating device, such as a smoke detector or heat detector, activates. When an alarm occurs, the control unit performs the following actions:

- The red **FIRE** LED starts flashing.
- The local piezo produces a pulse tone.
- Alarms latch are not cleared automatically.
- Activates the general alarm relay and NACs output as programmed by the user.
- Communicates the alarm condition to the central station and the remote station, if programmed.
- The system stores an alarm event in the history file.
- If the **Display First Alarm** option is selected, the display provides information about the first alarm in the system without operator intervention.
- If the **Display First Alarm** option is not selected, the control unit LCD shows the overall system status:

```
FIRE | SUPV | TRBL
```

```
01 | 00 | 01
```

When you press the **ACK** key, the following actions occur:

- The **FIRE** LED illuminates steady.
- The local piezo turns off.
- The system stores an acknowledged event in the history file.
- The system displays specific data on the location of the alarm. For example:

```
CORE 1 MEZZANINE
```

```
FIRE 1/2
```

When you press the **SILENCE** key, the following actions occur:

- The yellow **ALARM SILENCED** LED turns on. There is no effect on any other LEDs.
- The system turns off all devices and circuits that are programmed to turn off when the **SILENCE** key is pressed. For example, when you press the **SILENCE** key, the NACs that are configured as SSIG or relays that are configured as SRELAY turn off.
- The system stores an alarm silence event in the history file
- If a subsequent alarm occurs, the **FIRE** LED will start flashing, the **Alarm Silenced** LED turns off and the NACs and the local piezo resounds.

Note: When you press the **SILENCE** key, a message screen appears indicating

```
Silence Completed
```

Press any key.

To exit from this screen, press any key on the keypad.

When you press the **RESET** key, the following actions occur:

- The screen displays the **RESET IN PROGRESS** message.
- The system returns to its normal state, if an alarm condition has been cleared and the **FIRE** LED turns off.
- All latched circuits reset automatically.
- Turns off all devices and circuits that are programmed to turn off when this key is pressed. For example, when you press the **RESET** key, the NAC's configured as RSIG and relays configured as alarm relay RRELAY turn off.
- The system stores a system reset event in the history file
- If a device remains in alarm state during the reset period, the system reset is aborted, and the system remains in the alarm state. The display shows the devices that remain in alarm.

Note: On pressing the **RESET** key, a message screen appears indicating **Reset in Progress** and **Press any key**. To exit from this screen, press any key on the keypad.

After the reset is completed, a message screen appears indicating **Reset Completed** and **Press any key**. To exit from this screen, press any key on the keypad.

4.3 Supervisory operation

A supervisory condition occurs when an initiating device activates. An example is a smoke detector or a heat detector that connects to an IDC with a supervisory (SUPV) function type.

When a supervisory condition occurs, the control unit performs the following actions:

- The yellow **SUPV** LED starts flashing.
- The local piezo produces a steady tone.
- Activates the general supervisory relay and other outputs if programmed by the user.
- Communicates the supervisory condition to the central station and the remote station, if programmed.
- The system stores a supervisory event in the history file.

When you press the **ACK** key, the following actions occur:

- The **SUPV** LED illuminates steady.
- The local piezo turns off.
- The system stores an acknowledged event in the history file.
- Depending on the system design or programming options, a supervisory point can be one of the following:
 - Non-latching: The indicators, such as the LED and piezo, turn off automatically when the condition clears.
 - Latching: The control unit must be reset to clear the supervisory condition.

4.4 Trouble operation

When the trouble condition occurs, the control unit performs the following actions:

- The yellow **TROUBLE** LED starts flashing.
- The different LEDs indicate the following specific troubles:
 - If there are troubles in an IDC zone, the respective zone's yellow **TROUBLE** LED starts flashing.
 - If there is AC loss, the green **AC POWER** LED turns off.
 - If there are battery faults, the yellow **BATTERY TROUBLE** LED starts flashing.
 - If there are ground faults, the yellow **GROUND FAULT** LED starts flashing.
 - If the system is disabled, the yellow **DISABLED** LED starts flashing.
- The local piezo produces a steady tone.
- The system activates the general trouble relay and other outputs if programmed by you.
- Communicates the trouble condition to the central station and the remote station, if programmed.
- The system stores a trouble event in the history file.

When you press the **ACK** key, the following actions occur:

- The **TROUBLE** LED and all other specific trouble indicators illuminate steady.
- The local piezo turns off.
- The system stores an acknowledged event in the history file.

The following are latch-able troubles:

1. NAC over current Trouble. NAC short during an alarm condition. To recover, follow these steps:
 - Clear the alarm condition and reset the panel
 - Reset the panel again to clear the trouble
2. Open trouble on IDC Class-A circuit. To recover, reset the panel to clear the trouble

5 User access levels

There are three access levels for logging into the control unit. The lowest user access level 1, is the default. Certain operator functions are passcode-protected at different access levels.

Table 2: Access levels and functions

Functions	Access level 1	Access level 2	Access level 3
Acknowledge Events (Alarm, Supervisory, Trouble)	Yes	Yes	Yes
Alarm Silence	Yes	Yes	Yes
System Reset	Yes	Yes	Yes
View Historical Logs	Yes	Yes	Yes
View Point Information	Yes	Yes	Yes
Lamp Test	Yes	Yes	Yes
View Diagnostics	Yes	Yes	Yes
DACT Manual Test	Yes	Yes	Yes
Software Revision	Yes	Yes	Yes
Display Time	Yes	Yes	Yes
Set Time/Date	No	Yes	Yes
Point Control	No	Yes	Yes
Enable and Disable points	No	Yes	Yes
City Disconnect	No	Yes	Yes
Control Point, Elevator and Door Holder Bypass	No	Yes	Yes
Custom Label editing	No	Yes	Yes
Run Diagnostics	No	Yes	Yes
WALK TEST	No	Yes	Yes
Clear Historical Logs	No	Yes	Yes
Upload and Download	No	No	Yes
Cold and Warm Start	No	No	Yes
Programming	No	No	Yes

Note: You can change the default access levels of all functions except for **Programming**.

6 Logging in or logging out of the control unit

- To perform any of the functions protected at level 2 or above, you need to log into the control unit using a passcode.
- After you complete a task at a certain access level, logout to return the access level to level 1 to prevent unauthorized operation.
- When you are logged in at level 2 or above and no control unit keys are pressed for more than 10 minutes, the control unit automatically returns the system to level 1.
- Logging in at level 3 causes a service mode trouble that you can only clear by restarting the control unit.

Note: To login at access level 2 or 3 for the first time, you need to change the default passcodes or else the control unit will not proceed further. For more information, see [Changing the default passcode of the control unit](#).

6.1 Changing the default passcode of the control unit

To change the default passcode of access level 2, complete the following steps:

1. Press **MENU**.
2. Press **DOWN** until you reach the **[Login/Logout]** option.
3. Press **ENTER** and the control unit displays the following:

```
Access Level 1
<ENTER> = [Login]
```
4. Press **ENTER** and the control unit displays the following:

```
Access Level 1
Passcode: *[0]
```
5. Enter the default passcode for level 2, **2000**, and the following appears:

```
Change Level 2
Default Passcodes
```
6. Enter a new four digit passcode when the control unit displays the following:

```
Level 2
Passcode [0]***
```

Note: New four digit passcodes can be any numeric number other than the default passcodes of level 2 and level 3. New passwords cannot be set to **0000**.

7. Re-enter the passcode when the control unit displays the following:

```
Re-Enter to confirm
Passcode: [0]***
```
8. After you confirm the passcode, press **ENTER** to save job, the control unit displays the following:

```
Passcode updated
```

Note: Repeat this procedure to change the default passcode of access level 3. The default passcode for access level 3 is **3000**.

If you forget the access level 3 password, you can reset the password using the P21 jumper.

6.2 Logging in at access level 2 or 3

To log in at access level 2 or 3, complete the following steps:

1. Press **MENU**.
2. Press **UP/DOWN** until you reach the **[Login/Logout]** option.
3. Press **ENTER** and the control unit displays the following:

```
Access Level 1
```

```
<ENTER> = [Login]
```

4. Press **ENTER** and the control unit displays the following:

```
Access Level 1
```

```
Passcode: *[0]
```

5. Enter the correct four digit passcode and the control unit displays the following:

```
*Login Successful*
```

```
Access Level 2
```

```
or
```

```
Access Level 3
```

7 Auto-program

The **Auto-Program** option provides the ability to quickly and automatically program the control unit's components and features for general alarm operation. It automatically scans the serial communication channel, adding any annunciators found, and city circuit module.

Note: The **Auto-Program** is protected at access level 3. To perform an **Auto-Program** operation, [login the operator at access level 3](#).

The **Auto-Program** option can perform the following actions:

- Reconfigure all hardware.
- Add new hardware.
- Restore factory defaults.
- Accept defaults.
- Edit the system's option settings.

Note: When using the **Auto-Program** option be aware of the following:

- The control unit does not operate as a fire alarm system during auto-programming.
- You need to manually program DACT information, such as phone numbers and account information.

7.1 Creating a new configuration

This option starts the control unit with a new configuration. If a previous configuration is present and this option is selected, it erases the previous configuration and creates a new one with the currently connected hardware.

1. Press **MENU**.
2. Use the **UP** or **DOWN** keys until the **[Auto-Program]** menu item is displayed.
3. Press **ENTER**. The control unit displays the following:

```
FIRE ALARM
```

```
SUSPENDED
```

After a few seconds, the control unit displays the following:

```
<ENTER> to PROGRAM
```

```
<EXIT> to CANCEL
```

4. Press **ENTER** and the control unit displays the following:
5. Press **ENTER**, the following warning message appears indicating that this action deletes the current configuration:

```
<ENTER> = Accept
```

```
AP: [Reconfig All]
```

```
<ENTER> to Continue
```

```
*May CHANGE setting*
```

The display indicates the progress of the **Auto Program** operation.

6. Press the **ESC** key when the auto-programming operation is complete. The control unit displays the following:

```
JOB HAS CHANGED
```

```
[Cont] Dscrd Save
```

7. Use the **LEFT/RIGHT** key to move the cursor to one of the following three options. Press **ENTER** to select an option.
 - Select **Cont** to continue editing the configuration.
 - Select **Dscrd** to discard changes made during the programming session and restore the original configuration, if possible.
 - Select **Save** to save the new job configuration.
8. Select **[Save]** and press **ENTER**. The control unit displays the following:

```
<ENTER> to SAVE JOB
```

```
<ENTER> = SAVE
```

```
** Saving JOB **
```

Note: When you save the configuration, the control unit automatically restarts and runs through its self-test procedure.

7.2 Detecting new hardware

This option adds newly found devices and cards to the existing configuration.

1. Press **MENU**.
2. Use the **UP** or **DOWN** keys until you reach the **[Auto-Program]** menu item.
3. Press **ENTER**. The control unit displays the following:

```
FIRE ALARM
```

```
SUSPENDED
```

After a few seconds, the control unit displays the following:

```
<ENTER> to PROGRAM
```

```
<EXIT> to CANCEL
```

4. Press **ENTER** and use the **UP** or **DOWN** keys until **[DETECT NEW]** is displayed.
5. Pressing **ENTER**. A warning message appears, indicating that this action deletes the current configuration.
6. When the auto-programming operation is complete, press the **ESC** key. The control unit displays the following:

```
JOB HAS CHANGED
```

```
[Cont] Dscrd Save
```

7. Select **[Save]** and press **ENTER** to save the configuration.

7.3 Restoring factory settings

This option restores the 2008-9101 control unit to its original, factory default configuration. All custom programming including IDCs, NACs, relays, system options and access levels are erased from the configuration.

1. Press **MENU**.
2. Use the **UP** or **DOWN** keys until you reach the **[Auto-Program]** menu item.
3. Press **ENTER**. The control unit displays the following:

```
FIRE ALARM
```

```
SUSPENDED
```

After a few seconds, the control unit displays the following:

```
<ENTER> to PROGRAM
```

```
<EXIT> to CANCEL
```

4. Press **ENTER** and use the **UP** or **DOWN** keys until you reach the **[FACTORY DEFAULT]** option.
5. Press **ENTER**. A warning message appears indicating that this action deletes the current configuration. The control unit automatically restarts after the LCD displays the following message:

```
RESTORING DEFAULT
```

7.4 Accepting defaults

This option restores only system options and access levels to their original factory default configuration.

1. Press **MENU**.
2. Press **UP** or **DOWN** until you reach the **[Auto-Program]** menu item.
3. Press **ENTER**. The control unit displays the following:

```
FIRE ALARM
```

```
SUSPENDED
```

After a few seconds, the control unit displays the following:

```
<ENTER> to PROGRAM
```

```
<EXIT> to CANCEL
```

4. Press **ENTER** and press **UP** or **DOWN** until **[ACCEPT DEFAULT]** is displayed.
5. Press **ENTER**. A warning message appears indicating that this action deletes the current configuration. The LCD displays the message:

```
Default Restored
```

The control unit displays the following:

```
<ENTER> to PROGRAM
```

```
<EXIT> to CANCEL
```

6. Press the **ESC** key and the control unit displays the following:

```
JOB HAS CHANGED
```

```
[Cont] Dscrd Save
```

7. Select **[Save]** and press **Enter** to save the configuration.

7.5 Editing system options

To set the control unit's automatic functions, edit the system options by completing the following steps:

1. Press **MENU**.
2. Use the **UP** or **DOWN** keys until you reach the **[Auto-Program]** menu item.
3. Press **ENTER**. The control unit displays the following:

```
FIRE ALARM
```

```
SUSPENDED
```

After a few seconds, the control unit displays the following:

```
<ENTER> to PROGRAM
```

```
<EXIT> to CANCEL
```

4. Press **ENTER** and use the **UP** or **DOWN** keys until you reach the **[SYS OPTIONS]** option.
5. Press **ENTER**. The first prompt appears similar to the following:

```
<ENTER>=Accept
```

```
Opt: [Time/Date]
```

6. Use the **UP** and **DOWN** keys to review the options. Press **ENTER** when the option is set to the appropriate value. For more information about each system option, see Table 3.

Table 3: System options

Option	Settings
Time/Date format	Choose 12- or 24-hour format
Reminder (Active status reminder)	Choose: ON or OFF (default = ON) Set reminder interval (1 to 12 hours; default = 8 hours) Set signal duration (0 to 60 seconds; 0=on until ack; default=0)
Inhibit (Alarm silence/reset inhibit)	Choose a timer range from 0 to 60 minutes; (default=0 - no inhibit)
Alarm cutout	Choose a timer range from 0 to 60 minutes; (default=0 - no cutout)
Alarm doors	Choose a timer range from 0 to 60 seconds; (default=0 - immediate)
AC doors	Choose a timer range from 0 to 60 minutes; (default=5 minutes)
Depl batt cut (Depleted battery cutout)	Choose ON or OFF; default = OFF
City circuit	Choose ON or OFF; default = OFF
Disp 1st Alm (Display 1st alarm)	Choose ON or OFF; default = OFF
AHJ reset	If this option is not selected, a device or point must be in normal state to enable a system reset. When this option is selected, a device or point only needs to be, not in an alarm state, for the system to be reset. For example, a point can be in trouble.
NFPA NAC	When this option is selected, the horns and strobes on the QALERT NACs, turn off when alarm silence is activated. If the option is not selected, the strobes turn off upon completion of system reset.
Cross zone	Selectable for each alarm group. Selects whether one alarm or more than one alarm is required to trigger outputs for that alarm group. Alarm Groups programmed as Cross Zone must not contain any devices programmed with the VSMOKE Input Function Type.
Edit passcodes	Enables you to change the existing passwords.

7.6 Restoring default system options

Use this option to restore the factory default options. Selecting this option deletes any edits that were performed in the **Edit System Options** menu, but does not effect any card or point programming.

8 Default programming assignments

8.1 IDC, NAC, and relay default function types

For information about the default function types assigned by the auto programming process to IDC, NAC and relays, see Table 4.

The function type determines how the device operates. For example, a function type of SSIG or SRELAY means the device is on until an alarm silence is performed.

The function type is a programmable attribute that you can manually change.

Table 4: Default function types of IDC, NAC and relay

Circuit	Default function type
IDC1-8	Fire
NAC1 and NAC2	QALERT
AUX1 (Relay 1)	Common Fail-Safe Trouble (non-programmable)
AUX2 (Relay 2)	Common Alarm, On Until Reset (programmable)
AUX3 (Relay 3)	Common Supervisory (Programmable)
AUX4 (Relay 4)	Common Trouble (Programmable)

8.2 NAC, relay, and signal circuit output mode assignments

For the default output method, for example, steady or temporal assignments for the NAC and relay circuits, see Table 5.

The output mode is a programmable attribute that you can manually change.

Table 5: Default operating modes of NAC, relay and signal circuit outputs

Circuit	Default function type
NAC1 and NAC2	Temporal code, is a three pulse coding pattern consisting of three 1/2 second pulses, each separated by 1/2 second silence. Each group of three pulses is separated by 1.5 seconds of silence
Relay 1 to 4	Steady on
SIGNAL modules	Steady on

8.3 DACT defaults

The defaults for the DACT are as follows:

- Tone else pulse dialing
- AC Fail reporting delay is 2 hours.
- Reporting format is contact ID (CID).
- Primary and secondary phone number. There are no values for the primary and secondary phone numbers or account codes.
- Default event codes are shown in Table 6.

Table 6: Default CID event codes

Function type	Fire	Supervisory	Trouble	Function type	Fire	Supervisory	Trouble
FIRE	110	-	330	SUPV	-	200	330
WATER	113	-	330	UTIL	-	-	330
HEAT	114	-	330	TROUBLE	-	-	330
DUCT	116	-	330	VSMOKE	111	-	330
PULL	115	-	330	LATSUPV	-	200	330
SMOKE	111	-	330	STYLEC	110	-	330
SO	-	200	330	DRILL	-	-	330
WSO	110	200	330	OTHER TRBL (see note)	-	-	330

Note: Any other trouble not specifically mentioned would have a code of 330, for example, a trouble on an output device would report an event code of 330.

9 Programming

Important: Notice to installers, authorities having jurisdiction, and other involved parties: This product incorporates field-programmable software. In order for the product to comply with the requirements in the Standard for Control Units and Accessories for Fire Alarm Systems, UL 864, certain programming features or options must be limited to specific values or not used at all as the following table indicates.

Table 7: IDC, NAC, relay function settings

Program feature or option	Permitted in UL 864? (Y/N)	Possible settings	Settings permitted in UL 864
IDC Function Type	Y	FIRE, WATER, HEAT, DUCT, PULL, SMOKE, SO, WSO, SUPV, UTIL, TROUBLE, VSMOKE, STYLEC, LATSUPV, DRILL	FIRE, WATER, HEAT, DUCT, PULL, SMOKE, SO, WSO, SUPV, TROUBLE, VSMOKE, STYLEC, LATSUPV
NAC Function Type	Y	QALERT, SSIG, RSIG, SUPV, TRBL, UTILITY	QALERT, SSIG, RSIG, SUPV, TRBL
Relay Function Type	Y	SRELAY, RRELAY, SUPV, TRBL, UTILITY, PRIMARY, ALTERN, DRESET, DHOLDER	SRELAY, RRELAY, SUPV, TRBL, PRIMARY, ALTERN, DRESET, DHOLDER
Reminder Setting option	Y	On/Off	On
Reminder signal duration until acknowledge	Y	0 sec = On until acknowledge 1 sec to 60 sec.	0 sec = On until acknowledge
AC delay transmission setting	Y	0 hrs to 24 hrs	0 hrs to 3 hrs
Panel display language setting	Y	Display in English, Spanish and Portuguese languages	Display in English language only

This section describes setting the characteristics of each initiating device, notification appliance and the programmable AUX relay to the specific values required for the job.

You can set the following attributes for each of the control unit's IDCs, NACs and AUX relays:

- **Function Type** determines the operation of the point.
 - IDC: You can set whether the device indicates the status change as a fire alarm or supervisory.
 - NAC and AUX relay: You can set whether the device turns off on silence or resets.
- **Label** You can use up to 20 characters to create a custom label for the point.
 - Use the word library, containing common words associated with fire alarm points, and an alphanumeric keypad to quickly and accurately create labels.
- **Alarm Group** Applies to NACs, relays, and Initiating Device Circuit points.

You can define selective signaling groups. You can associate each NAC or relay point with up to three alarm groups, and you can specify which initiating devices can activate the device.

9.1 Programming IDCs

The following section describes the IDC editing options, for example, function type, label and alarm groups. To edit an IDC function type, complete the following steps:

1. Press **MENU**.
2. Use the **UP** or **DOWN** keys until the **[Programming]** option is displayed and then press **ENTER**. The control unit displays the following:

```
FIRE ALARM
```

```
SUSPENDED
```

After a few seconds, the control unit displays the following:

```
<ENTER> to PROGRAM
```

```
<EXIT> to CANCEL
```

3. Press **ENTER**. The **Programming** menu appears. Select **[Points]** to make changes to a specific point's programming.

```
<ENTER>=Accept
```

```
Prg: [Points]
```

4. Press **ENTER**. You can select the type of point to manually edit when the control unit displays the following:

```
<ENTER>=Accept
```

```
Prg: [IDC]
```

[IDC] is the default first choice.

5. Press **ENTER**. The control unit displays the following:

```
<ENTER>=Accept
```

```
IDC: [Edit]
```

6. Press **ENTER**. Information about the first IDC in the list appears.

```
IDC1
```

```
Fire M1
```

Note: The top line shows the custom label assigned to the first IDC point, IDC1 in the example shown in Step 6. Use the **UP** and **DOWN** keys to scroll through the list of IDC circuits.

7. Press **ENTER** when the appropriate IDC is displayed. Specify the function type when the control unit displays the following:

```
IDC1
```

```
Fn: [Function]
```

8. Press **ENTER** and use the **UP** and **DOWN** keys to scroll through the choices shown in the IDC function types table. The default function type assigned to all IDCs is **FIRE**.
9. Press **ENTER** to accept any changes made and exit.
10. Press the **ESC** key to quit editing without saving.

Table 8: IDC function types

Function type	Device state = status	Description
FIRE	Normal = NORMAL Abnormal = FIRE Short = FIRE Open = TROUBLE	Fire monitor zone
WATER	Normal = NORMAL Current Limited = FIRE Short = FIRE Open = TROUBLE	Waterflow monitor zone

Table 8: IDC function types

Function type	Device state = status	Description
HEAT	Normal = NORMAL Current Limited = FIRE Short = FIRE Open = TROUBLE	Heat detector zone
DUCT	Normal = NORMAL Current Limited = FIRE Short = FIRE Open = TROUBLE	Duct detector zone
PULL	Normal = NORMAL Current Limited = FIRE Short = FIRE Open = TROUBLE	Pull station zone
SMOKE	Normal = NORMAL Current Limited = FIRE Short = FIRE Open = TROUBLE	Smoke detector zone
SO	Normal = NORMAL Current Limited = SUPERVISORY Short = SUPERVISORY Open = TROUBLE	Sprinkler supervisory zone
WSO	Normal = NORMAL Current Limited = SUPERVISORY Short = FIRE Open = TROUBLE	Combination waterflow and water supervisory zone
SUPV	Normal = NORMAL Abnormal = SUPERVISORY Short = SUPERVISORY Open = TROUBLE	Supervisory monitor
UTIL	Normal = OFF Abnormal = ON Short = ON Open = TROUBLE	Supervised utility monitor
TROUBLE	Normal = NORMAL Abnormal = TROUBLE Short = TROUBLE Open = TROUBLE	Trouble monitor
VSMOKE See note	Normal = NORMAL Abnormal = VERIFY Short = FIRE Open = TROUBLE	Verified fire alarm – The abnormal (current limited) state causes the alarm verification cycle to start. A short is an immediate alarm.
LATSUPV	Normal = NORMAL Abnormal = SUPERVISORY Short = SUPERVISORY Open = TROUBLE	Latching supervisory monitor The supervisory latches until the system is reset.

Table 8: IDC function types

Function type	Device state = status	Description
STYLEC	Normal = NORMAL Abnormal = FIRE Short = TROUBLE Open = TROUBLE	Style-C Fire monitor
DRILL	Normal = OFF Abnormal = ON Short = ON Open = TROUBLE	Drill switch

Note: The alarm verification cycle works for each zone as follows:

- Only connect smoke detectors to IDCs with the VSMOKE function type. If a device with the function type VSMOKE enters a current-limited state, the alarm verification cycle begins. The control unit starts a delay timer of 25 seconds. When the timer expires, the zone containing the activated detector is reset. Following the reset, another 15 second timer starts. When the 15 second timer expires, the system checks the zone for an alarm. If a current-limited condition exists on the zone, the control unit initiates a fire alarm. If no current-limited condition exists, the control unit starts a 2 minute timer. While the timer is counting down, any current-limited condition on any zone will trigger a fire alarm.
- Only connect the following detectors to IDCs with the VSMOKE function type:
 - smoke detectors without an alarm verification feature
 - smoke detectors with an alarm verification feature of less than 10 sec that do not reset

A short from a pull-station always triggers an alarm condition, regardless of the alarm verification cycle.

At any stage of the alarm verification cycle, the presence of two devices in alarm triggers an alarm condition.

9.1.1 Editing IDC labels

To edit an IDC label, complete the following steps:

1. See [Programming IDCs](#) for function editing and repeat steps 1 to 6.
2. Press **ENTER** when the appropriate IDC is displayed. Use the **UP** and **DOWN** keys to scroll through the choices until **[Edit Label]** or **[Clear Label]** appears.

IDC1

Fn: [Edit Label]

Note: **[Edit Label]** preserves the existing label and enables editing. **[Clear Label]** deletes the existing label first and then enables editing.

3. Press **ENTER**. A cursor appears beneath the leftmost letter of the currently assigned custom label. Use the **LEFT** and **RIGHT** arrow keys to move the cursor between letters. The following characters are available for labels:

A-Z 0-9 , blank space & () * + - . / : ' # ! @ \$ % ^ = ?

Note: After clearing the existing label, pressing **ENTER** stops you from saving a blank label. You need to add a description for the label.

You can edit a label in one of three ways:

- Using the **Keypad**. Press the alphanumeric key corresponding to the letter you want. For example, for the letter **C**, press the **2** key on the keypad four times. Use the **LEFT** and **RIGHT** keys to move to the next letter in the label.
- Use the **UP** and **DOWN** keys. Each time you press the **DOWN** key, the display advances to the next character. Likewise, each press of the **UP** key moves backward one character. Use the **LEFT** and **RIGHT** keys to move to the next letter in the label.
- Use the **Word Library**, which is a stored list of common words sorted alphabetically. Press **MENU**. The control unit displays the following:

IDC1

<MENU>=Word Library

To jump to a word, press the alphanumeric key corresponding to the first letter in the word. For example, to use the word **Floor**, press the **3** key repeatedly until **Floor** appears.

To access words beginning with the same letter use the **UP** and **DOWN** keys to select the word.

See Table 9 for a list of all words in the library.

Table 9: Word library

2ND	FIRST	UPPER	FLR_1	CLASSROOM	ZONE
3RD	LOWER	WEST	FLR_2	CLOSET_	OFFICE
4TH	MAIN	ELECT. RM	FLR_3	BASEMENT	HVAC_ROOM
5TH	NORTH	ELEVATOR	FLR_4	BOILER_RM	STORE_ROOM
CENTR	REAR	ENTRANCE	FLR_5	FLOOR	LOBBY
EAST	SOUTH	RM __	CORRIDOR	WING	ROOM
FRONT	STAIRWAY	GARAGE	PATIENT	HALLWAY	RESTROOM
KITCHEN					

4. Press **ENTER** to accept any changes made and exit. Press **ESC** to quit editing without saving.

9.1.2 Editing IDC alarm groups

With Alarm groups, you can program selective signaling. Assign the IDC an alarm group number from 1 to 99. Assign the same alarm group number to the notification appliances that you want to turn on when one of the IDCs in the alarm group activates. Each IDC can be in up to three groups.

To edit an alarm group, complete the following steps:

1. See [Programming IDCs](#) and repeat steps 1 to 6.
2. Press **ENTER** and then press the **UP** and **DOWN** keys until **[Alarm Groups]** is displayed and then press **ENTER**. The control unit displays the following:


```
ALARM GROUPS
[99] 00 00
```
3. Use the **UP** and **DOWN** keys to scroll the number in the brackets. Use the **RIGHT** and **LEFT** keys to move between the alarm groups. Press **ENTER** when all the values are set correctly.
4. When IDC programming is complete, press the **ESC** key until the control unit displays the following:


```
[Cont] Dscrd Save
```
5. Select **[Save]** and press **ENTER** to save the configuration.

9.2 Programming NACs

This section describes the NAC editing options, for example, function type, label, alarm groups and end-of-line resistor selection.

1. Press **MENU**.
2. Press **UP** or **DOWN** until the **[Programming]** option is displayed and then press **ENTER**. The control unit displays the following:


```
FIRE ALARM
SUSPENDED
```

After a few seconds, the control unit displays the following:

```
<ENTER> to PROGRAM
<EXIT> to CANCEL
```
3. Press **ENTER**. The control unit displays the following:


```
<ENTER>=Accept
Prg: [Points]
```
4. Press **ENTER**. Use the **UP** and **DOWN** keys to choose **[NAC]**.


```
<ENTER>=Accept
Prg: [NAC]
```
5. Press **ENTER**. The control unit displays the following:


```
NAC1
A/V 1/2
```
6. Use the **UP** and **DOWN** keys to select NAC circuits. Press **ENTER** when the appropriate NAC circuit is selected. The following prompt appears, asking you to specify the function type:


```
NAC1
Fn: [Function]
```
7. Press **ENTER** and use the **UP** and **DOWN** keys to scroll through the choices shown in the NAC function types table. The default function type assigned to all NACs is **QALERT**.


```
NAC1
[QALERT] TEMPRL
```
8. Use the **RIGHT** key to move the cursor to the coding pattern, and then use the **UP** and **DOWN** keys to set the pattern. See Table 11 for NAC coding patterns. The default coding pattern assigned to all NACs is **TEMPRL**.
9. Press **ENTER** to accept any changes and exit the menu.

10. Press **ESC** to quit editing without saving.

Table 10: NAC function types

Function type	Description
SSIG	General alarm (on-until-silence). Use for NAC circuits containing only audible devices. If you use NAC circuits to connect external sync modules, set coding pattern as Steady .
RSIG	General alarm (on steady-until-reset). If you use NAC circuits to connect visual-only devices, set coding pattern as Sync . If you use NAC circuits to connect external sync modules, set coding pattern as Steady .
TROUBLE	NAC activates when there is a trouble condition active in the system. NAC is on until trouble condition is cleared or acknowledged.
SUPV	NAC activates when there is a supervisory condition active in the system. NAC is on until supervisory condition is cleared.
QALERT	General alarm horn and strobe (horn on-until-silence; strobe on-until-reset). Use for NAC circuits containing both horns and strobes. Note: If NFPA NAC is enabled, then horns and strobes turn off, on pressing silenced key
UTILITY	NAC activates when an IDC with the following attributes activates: <ul style="list-style-type: none"> • IDC must be in same alarm group as utility NAC. • IDC must be assigned a Utility function type. Typically used for process monitoring function. For example, a relay on a machine is tied to the IDC. When the relay activates, the utility IDC activates and triggers the utility NAC.

Table 11: NAC coding patterns

Coding pattern	Description	Coding pattern	Description
Temporal	Standard temporal coded pattern. A three pulse coding pattern consisting of three 1/2 second pulses, each separated by 1/2 second silence. Each group of three pulses is separated by 1.5 seconds of silence.	Steady	Steady on
		20 BPM	Slow march time - 20 beats in every minute, see note.
Synch	Generates synchronization pulse for visual only devices connected to NAC circuits.	120 BPM	Fast march time - 120 beats in every minute, see note.

Note: A march-time rate of 60 BPM is used, when the QALERT function types are selected and either 20 BPM or 120 BPM is selected as the NAC coding pattern.

9.2.1 Editing the NAC EOLR value

An end-of-line resistor (EOLR) is required for NAC terminated in Class B wiring style. To select the EOLR value, complete the following steps:

1. See the [Programming NACs](#) section and repeat the steps from 1 to 6.
2. Use the **UP** and **DOWN** keys to scroll through the choices until **[Select EOLR]** appears:

```
NAC1
```

```
Fn: [Select EOLR]
```

3. Press **ENTER** and use the **UP** and **DOWN** keys to scroll through the choices shown in Table 12.

Table 12: Supported EOLR

EOLR value	EOLR value
3.9 K	5.6 K
4.7 K	10 K, default
5.1 K	15 K

4. Press **ENTER** to accept any changes made and exit. Press **ESC** to quit editing without saving.

9.2.2 Editing NAC labels

To edit an NAC label, complete the following steps:

1. See [Programming NACs](#) and repeat steps 1 to 6.
2. Use the **UP** and **DOWN** keys to scroll through the choices until you reach **[Edit Label]** or **[Clear Label]**.

```
NAC1
```

```
Fn: [Edit Label]
```

Note: **[Edit Label]** preserves the existing label and enables editing. **[Clear Label]** deletes the existing label first and then enables editing.

3. Press **ENTER**. A cursor appears beneath the leftmost letter of the currently assigned custom label. Use the **LEFT** and **RIGHT** keys to move the cursor between letters. The characters available for labels are:

```
A-Z 0-9 , blank space & ( ) * + - . / : ' # ! @ $ % ^ = ?
```

4. Press **ENTER** to accept any changes made and exit. Press **ESC** key to quit editing without saving. You can edit a label in one of three ways:

- Use the **Keypad**: Press the alphanumeric key corresponding to the letter you want. For example, for the letter **C**, press the **2** key on the keypad four times. Use the **LEFT** and **RIGHT** keys to move to the next letter in the label.
- Use the **UP** and **DOWN** keys. Each time you press the **DOWN** key, the display advances to the next character. Likewise, each press of the **UP** key moves backward one character. Use the **LEFT** and **RIGHT** keys to move to the next letter in the label.
- Use the **Word Library**, which is a stored list of common words sorted alphabetically. Press **MENU**. The control unit displays the following:

```
NAC1
```

```
<MENU>=Word Library
```

To jump to a word, press the alphanumeric key corresponding to the first letter in the word. For example to use the word **Floor**, press the **3** key repeatedly until **Floor** appears.

To access words beginning with the same letter use the **UP** and **DOWN** keys to select the word. See Table 9 for a list of all words in the library.

9.2.3 Editing NAC alarm groups

With alarm groups, you can program selective signaling. Assign the NAC an alarm group number from 1 to 99. Assign the same alarm group number to the initiating devices that you want to control the NAC. Each NAC can be in up to three groups.

To edit an NAC alarm group, complete the following steps:

1. See [Programming NACs](#) and repeat steps 1 to 6.
2. Press **ENTER** and then press the **UP** and **DOWN** keys until **[Alarm Groups]** is displayed. Then press **ENTER**. The control unit displays the following:

```
ALARM GROUPS
```

```
[99] 00 00
```

3. Use the **UP** and **DOWN** keys to scroll the number in the brackets. Use the **RIGHT** and **LEFT** keys to move between the alarm groups. Press **ENTER** when all the values are set correctly.
4. When NAC programming is complete, press **ESC** key until the control unit displays the following:

```
[Cont] Dscrd Save
```

5. Select **[Save]** and press **ENTER** to save the configuration.

9.3 Programming AUX relays

This section describes AUX relay editing options, for example, function type, label and alarm groups.

9.3.1 Editing relay function type

To edit relay function type, complete the following steps:

1. Press **MENU**.
2. Press **UP** or **DOWN** until the **[Programming]** option is displayed and then press **ENTER**. The control unit displays the following:

```
FIRE ALARM
```

```
SUSPENDED
```

After a few seconds, the control unit displays the following:

```
<ENTER> to PROGRAM
```

```
<EXIT> to CANCEL
```

3. Press **ENTER** and the following appears:

```
<ENTER>=Accept
```

```
Prg: [Points]
```

4. Press **ENTER** and use the **UP** and **DOWN** keys to choose **[Relay]**:

```
<ENTER>=Accept
```

```
Prg: [Relay]
```

5. Press **ENTER** and use the **UP** and **DOWN** keys to choose the relay, for example, AUX2, AUX3 and AUX4, to program.

```
AUX2
```

```
Alarm 1/3
```

6. Press **ENTER** when the appropriate relay is displayed. A prompt appears, asking you to specify the function type:

```
AUX2
```

```
Fn: [Function]
```

7. Press **ENTER** and use the **UP** and **DOWN** keys to scroll through the choices shown in Table 13. The default function types are AUX2 = Alarm, AUX3 = Supervisory, and AUX4 = Trouble.

```
AUX2
```

```
[RRELAY] STEADY
```

Note: You can not edit the coding pattern.

8. Press **ENTER** to accept changes and exit.
9. Press **ESC** to quit editing without saving.

Table 13: Relay function types

Function type	Description	Function type	Description
SRELAY	Relay activates on general alarm; remains on-until-silence	DHOLDER	Relay typically provides 24 V power to larger door holder relay with separate power source.
RRELAY	Relay activates on general alarm; remains on-until-reset		Relay activates on general alarm and signals door holder relay to cut power of door holder magnets.
TROUBLE	Relay activates when a Trouble condition occurs; remains on-until-cleared	PRIMARY See the following note	Relay activates on general alarm. Relay is tied to primary elevator recall contacts.
SUPV	Relay activates when a Supervisory condition occurs; remains on-until-cleared	ALTERN See the following note	Relay activates on general alarm. Relay is tied to alternate elevator recall contacts.
UTILITY	Relay activates when a utility IDC in the same alarm group activates	DRESET	Relay provides 24 V power to four wire detectors. Relay turns off for 5 secs on system reset).

Note: Elevator recall requires the following:

- The relay must have a function type of Primary or Alternate and must be wired to the appropriate elevator control contact.
- The IDC zones used to trigger elevator recall must be associated with the following alarm groups:
 - Alarm Group 98: Associate all zones used to recall the elevator to the primary floor in this alarm group.
 - Alarm Group 97: Associate all zones used to recall the elevator to the alternate floor in this alarm group.

9.3.2 Editing relay labels

To edit the relay label, use the following steps:

1. See the [Editing relay function type](#) and repeat steps 1 to 6.
2. Use the **UP** and **DOWN** keys to scroll through the choices until **[Edit Label]** or **[Clear Label]** appears.

```
AUX2
```

```
Fn: [Edit Label]
```

Note: **[Edit Label]** preserves the existing label and enables editing. **[Clear Label]** deletes the existing label first and then enables editing.

3. Press **ENTER**. A cursor appears beneath the leftmost letter of the currently assigned custom label. Use the **LEFT** and **RIGHT** arrow keys to move the cursor between letters. The characters available for labels are:

```
A-Z 0-9 , blank space & ( ) * + - . / : ' # ! @ $ % ^ = ?
```

4. Press **ENTER** to accept any changes made and exit. Press **ESC** key to quit editing without saving. You can edit a label in one of three ways:
 - Using the **Keypad**. Press the alphanumeric key corresponding to the letter you want. For example, for the letter **C**, press the **2** key on the keypad four times. Use the **LEFT** and **RIGHT** arrow keys to move to the next letter in the label.
 - Use the **UP** and **DOWN** keys. Each time you press the **NEXT** key, the display advances to the next character. Likewise, each press of the **UP** key moves backward one character. Use the **LEFT** and **RIGHT** arrow keys to move to the next letter in the label.
 - Use the **Word Library**, which is a stored list of common words sorted alphabetically. Press **MENU**. The control unit displays the following:

```
AUX2
```

```
<MENU>=Word Library
```

To jump to a word, press the alphanumeric key corresponding to the first letter in the word. For example, to use the word **Floor**, press the **3** key repeatedly until **Floor** appears.

To access words beginning with the same letter use the **UP** and **DOWN** keys to select the word. See Table 9 for a list of all the words in the library.

5. When relay programming is complete, press **ESC** key until the control unit displays the following:

```
[Cont] Dscrd Save
```

6. Select **[Save]** and press **ENTER** to save the configuration.

9.4 Programming DACT

With the DACT facility, the control unit can use one or two telephone lines, or a single Ethernet connection, to call a supervising station (remote station or central station) and report a local alarm, trouble, or supervisory condition.

This section describes programming the DACT options to specify the characteristics of the DACT's phone connection, communication format, and the format of the event or CID codes used by the supervising station.

Login at level 3 before starting DACT programming.

9.4.1 Accessing the DACT program menu

To access the DACT program menu, complete the following steps:

1. Press **MENU**.
2. Press **UP** or **DOWN** until the **[Programming]** option is displayed and then press **ENTER**. The control unit displays the following:


```
FIRE ALARM
SUSPENDED
```

 Then a few seconds later, the control unit displays the following:


```
<ENTER> to PROGRAM
<EXIT> to CANCEL
```
3. Press **ENTER**. The control unit displays the following:


```
<ENTER>=Accept
Prg: [Points]
```
4. Use the **UP** and **DOWN** keys to choose **[DACT]** and press **ENTER**. The control unit displays the following:


```
<ENTER>=Accept
DACT: [Options]
```
5. Use the **UP** and **DOWN** keys to select one of the following choices:
 - **[Options]**
 - **[Event Codes]**
 - **[CID Points]**

DACT Options: With these options, you can program a wide range of DACT parameters like supervising station phone numbers and account codes.

Note: If no DACT is installed, use this option to disable the DACT.

CID Points: The Contact ID communication format supports per-point reporting of system events.

The supervising station receives a code identifying the point and the event type like Alarm or Trouble. With this format, the DACT can also send a restoral code to the supervising station after the device experiencing the alarm, trouble, or supervisory condition is restored to a normal state.

9.4.2 Enabling or disabling the DACT

To enable or disable the DACT, complete the following steps:

1. See [Accessing the DACT program menu](#) and repeat the steps from 1 to 4.
2. Press **ENTER**. The control unit displays the following:

```
<ENTER>=Accept
```

```
Opt: [Enable DACT]
```

3. Press **ENTER**. The control unit displays the following:

```
Enable DACT
```

```
[ON]
```

4. Use the **UP** and **DOWN** keys to change the setting to OFF, if you want to disable the DACT.
5. Press **ENTER**. The control unit displays a prompt to confirm the choice.
6. Press **ENTER** to confirm the selection. The prompt shown in Step 2 reappears.
7. Press **DOWN** key to move to next option **[Pri Phone #]**.

Note: By default, the DACT is enabled, but unconfigured. The DACT will report a configuration trouble until the phone numbers and account numbers are programmed, or until it is disabled if it will not be used.

9.4.3 Setting the primary phone number

To set the primary phone number, complete the following steps:

1. See the [Accessing the DACT program menu](#) section and repeat the steps from 1 to 4.
2. Press **ENTER** and then press the **UP** and **DOWN** keys until **[Pri Phone #]** is displayed.

```
<ENTER>=Accept
```

```
Opt: [Pri Phone #]
```

Note: The user can set the primary phone number of the supervising station. This is the number that the DACT dials first. When connecting to a TL300, enter any telephone number.

3. Press **ENTER**. The following prompt appears.

```
Pri Phone #
```

```
[X]XXXXXXXXXXXXXXXXXX
```

4. Use the **LEFT** and **RIGHT** keys to move the cursor from one digit to another. Use the keypad numbers, or use the **UP** and **DOWN** keys to enter each number. Press **ENTER** when the number is correctly entered. The control unit displays a prompt to confirm the number that you entered.
5. Press **ENTER**. The prompt shown in Step 2 reappears.
6. Press the **DOWN** key to move to next option **[Pri Account #]**

Note: The following special characters are available for use when setting the primary and secondary phone numbers.

- B: Use if it is necessary to input a DTMF (touchtone) asterisk (*) into the phone number.
- C: Use if it is necessary to input a DTMF pound sign (#) into the phone number.
- D: Inserting this character into the phone number causes a three second delay at the point at which the D appears.
- E: With this character, DACT can start dialing as soon as a dial tone is detected.

If **E** is not the first character of the number, the DACT waits seven additional seconds before dialing.

Do not use **E** after the first digit unless a secondary dial tone is expected.

9.4.4 Setting the primary account number

To set the primary account number, complete the following steps:

1. See the [Accessing the DACT program menu](#) section and repeat the steps from 1 to 4.
2. Press **ENTER** and then press the **UP** and **DOWN** keys until **[Pri Account #]** is displayed.

```
<ENTER>=Accept
```

```
Opt: [Pri Account #]
```
3. Press **ENTER**. The control unit displays the following:

```
Pri Account #
```

```
[0]000
```
4. Use the **LEFT** and **RIGHT** keys to move the cursor from one digit to another. Use the keypad numbers, or use the **UP** and **DOWN** keys to enter each number. Press **ENTER** when the number is correctly entered. The control unit displays a prompt to confirm the number that you entered.
5. Press **ENTER**. The prompt shown in Step 2 reappears.
6. Press the **DOWN** key to move to the next option **[Sec Phone #]**.

9.4.5 Setting the secondary phone number

To set the secondary phone number, complete the following steps:

1. See the [Accessing the DACT program menu](#) section and repeat the steps from 1 to 4.
2. Press **ENTER** and then press the **UP** and **DOWN** keys until **[Sec Phone #]** is displayed.

```
ENTER>=Accept
```

```
Opt: [Sec Phone #]
```
3. Press **ENTER**. The control unit displays the following:

```
Sec Phone #
```

```
[X]XXXXXXXXXXXXXXXXXX
```
4. Use the **LEFT** and **RIGHT** keys to move the cursor from one digit to another. Use the keypad numbers, or use the **UP** and **DOWN** keys to enter each number. Press **ENTER** when the number is correctly entered. The control unit displays a prompt to confirm the number that you entered.
5. Press **ENTER**. The prompt shown in Step 2 reappears.
6. Press the **DOWN** key to move to next option **[Sec Account #]**.

9.4.6 Setting the secondary account number

To set the secondary account number, complete the following steps:

1. See the [Accessing the DACT program menu](#) section and repeat the steps from 1 to 4.
2. Press **ENTER** and then press the **UP** and **DOWN** keys until **[Sec Account #]** is displayed.

```
<ENTER>=Accept
```

```
Opt: [Sec Account #]
```
3. Press **ENTER**. The control unit displays the following:

```
Sec Account #
```

```
[0]000
```
4. Use the **LEFT** and **RIGHT** keys to move the cursor from one digit to another. Use the keypad numbers, or use the **UP** and **DOWN** keys to enter each number. Press **ENTER** when the number is correctly entered. The control unit displays a prompt to confirm the number that you entered.
5. Press **ENTER**. The prompt shown in Step 2 reappears.
6. Press the **DOWN** key to move to the next option **[Dialing Mode]**.

9.4.7 Setting the test report time

This option specifies the time at which the Test Report Event is sent to the supervising station. Time is set in 24 hour, military format. For system software revision 01.00 and later, the test report message is sent at six hour intervals beginning at the time entered.

To set the report time, complete the following steps:

1. See the [Accessing the DACT program menu](#) section and repeat the steps from 1 to 4.
2. Press **ENTER** and then press the **UP** and **DOWN** keys until **[Test Rpt Time]** is displayed.

```
<ENTER>=Accept
```

```
Opt: [Test Rpt Time]
```
3. Press **ENTER**. The control unit displays the following:

```
Test Rpt Time
```

```
[02]:00
```
4. Use the **UP** and **DOWN** keys to decrement or increment the hour setting, the two digits on left.
5. Use the **RIGHT** key to move the cursor to the minutes, the two digits on the right. Use **UP** and **DOWN** keys to decrement or increment the minutes setting.
6. Press **ENTER** to accept the choice. The prompt shown in Step 2 reappears.
7. Press **ENTER**.
8. Press the **DOWN** key to move to next option **[AC Fail Delay]**.

9.4.8 Setting the AC fail delay

To set the AC fail delay, complete the following steps:

1. See the [Accessing the DACT program menu](#) section and repeat the steps from 1 to 4.
2. Press **ENTER** and then press the **UP** and **DOWN** keys until **[AC Fail Delay]** is displayed.

```
<ENTER>=Accept
```

```
Opt: [AC Fail Delay]
```
3. Press **ENTER**. The control unit displays the following:

```
AC Fail Delay
```

```
[02] Hrs
```
4. Use the **UP** and **DOWN** keys to scroll through the choices.
5. Press **ENTER** to accept the choice. The prompt shown in Step 2 reappears.
6. Press **ENTER**.
7. Press the **DOWN** key to move to next option **[IP COMMUNICATR]**.

9.4.9 Selecting the IP communicator

With this option, you can choose between IP communicator and PSTN line connection for DACT.

To select the IP communicator, use the following steps:

1. See the [Accessing the DACT program menu](#) section and repeat the steps from 1 to 4.
2. Press **ENTER** and then press the **UP** and **DOWN** keys until **[IP COMMUNICATOR]** is displayed.

```
<ENTER>=Accept
```

```
Opt: [IP COMMUNICATOR]
```
3. Press **ENTER**. The control unit displays the following:

```
IP COMMUNICATOR
```

```
[NORMAL 2 LINES]
```
4. Use the **UP** and **DOWN** keys to scroll through the choices.
5. Press **ENTER** to accept the choice. The prompt shown in Step 2 reappears.
6. Press **ENTER**.

9.4.10 Reporting CID points

The CID reporting format requires you to specify the group and Contact ID for each point. There is no need to specify the type of event with the CID format, this information is automatically derived from the point's function type. See Table 14 for default CID event codes.

Note: Default CID point values are provided in the control unit. Before changing these values, contact an authorized representative at the supervising station.

To select the reporting points, complete the following steps:

1. See the [Accessing the DACT program menu](#) section and repeat the steps from 1 to 4.
2. Press **ENTER** and then use the **UP** and **DOWN** keys until **[CID POINTS]** is displayed.

```
<ENTER>=Accept
```

```
DACT: [CID POINTS]
```

3. Press **ENTER**. The control unit displays the following:

```
[Garage IDC1]
```

```
[GRP:01 ID:001]
```

This prompt consists of the following fields:

- **Point Custom Label:** The top line of the prompt displays the custom label assigned to the point.
- **Grp:** Two-digit number used to group associated devices together.
- **ID (Contact ID):** Three-digit number used to identify a specific point and device.

4. For each point, use the **RIGHT** key to move between the digits of the GRP and ID fields. Use the **UP** and **DOWN** keys to increment or decrement the value of a digit.
5. To choose another point, press the **RIGHT** key until the cursor is on the top line (custom label) of the prompt. Use the **UP** and **DOWN** keys to scroll to another point and then repeat Step 4.
6. When all points have been configured press **ENTER**. The control unit displays the following prompt:

```
<ENTER>=Confirm
```

```
GRP: 01 ID: 001
```

7. Press **ENTER**. The prompt shown in Step 2 reappears.
 8. When DACT programming is complete, press **ESC** key until the control unit displays the following prompt:
- ```
[Cont] Dscrd Save
```
9. Select **[Save]** and press **ENTER** to save the configuration.

**Table 14: CID points default values**

| Description               | CID points                          | Event code                    |
|---------------------------|-------------------------------------|-------------------------------|
| IDC 1 through IDC 8       | GRP:01 ID:001 through GRP:01 ID:008 | Based on device function type |
| NAC 1                     | GRP:01 ID:201                       | *                             |
| NAC 2                     | GRP:01 ID:202                       | *                             |
| Aux Relay 1               | GRP:01 ID:203                       | *                             |
| Aux Relay 2               | GRP:01 ID:204                       | *                             |
| Aux Relay 3               | GRP:01 ID:205                       | *                             |
| Aux Relay 4               | GRP:01 ID:206                       | *                             |
| AC Power                  | GRP:01 ID:207                       | Trouble 301                   |
| Aux Power                 | GRP:01 ID:208                       | Trouble                       |
| Positive Earth Fault      | GRP:01 ID:209                       | Trouble 310                   |
| Negative Earth Fault      | GRP:01 ID:210                       | Trouble 310                   |
| Low Battery               | GRP:01 ID:211                       | Trouble 302                   |
| Battery Depleted          | GRP:01 ID:212                       | Trouble                       |
| Low Battery Cutout        | GRP:01 ID:213                       | Trouble                       |
| Charger Trouble           | GRP:01 ID:214                       | Trouble                       |
| Manual Test Report        | GRP:01 ID:233                       | Test 601                      |
| DACT Phone Line 1 Trouble | GRP:01 ID:233                       | Trouble 351                   |
| DACT Phone Line 2 Trouble | GRP:01 ID:234                       | Trouble 352                   |
| 6 hr Test Report          | GRP:01 ID:235                       | Test 602                      |

**Table 14: CID points default values**

| Description                  | CID points    | Event code |
|------------------------------|---------------|------------|
| 6 hr Test Report, Off Normal | GRP:01 ID:235 | Test 608   |
| Extra Card                   | GRP:01 ID:236 | Trouble    |
| External Comm Trouble        | GRP:01 ID:237 | Trouble    |
| Cold Start                   | GRP:01 ID:239 | Trouble    |
| Warm Start                   | GRP:01 ID:240 | Trouble    |
| Time/Date Not Set            | GRP:01 ID:242 | Trouble    |
| Service Mode                 | GRP:01 ID:243 | Trouble    |
| List Overflow                | GRP:01 ID:244 | Trouble    |
| City Disconnect              | GRP:01 ID:245 | Trouble    |
| City 1 Trouble               | GRP:01 ID:246 | Trouble    |
| City 2 Trouble               | GRP:01 ID:247 | Trouble    |
| Control Bypass               | GRP:01 ID:248 | Trouble    |
| Elevator Bypass              | GRP:01 ID:249 | Trouble    |
| Door Bypass                  | GRP:01 ID:250 | Trouble    |
| AV Tally Exceeded            | GRP:01 ID:251 | Trouble    |
| WalkTest Active              | GRP:01 ID:252 | Trouble    |
| Programming Mode             | GRP:01 ID:255 | Trouble    |
| Event Queue Overflow         | GRP:01 ID:256 | Trouble    |

## 9.5 Programming system options

The programming system options can be either of the following:

- Pre-defined modes of operation with a range of settings to choose. These type of system options define global operations such as the time and date format and door drop timers.
- Options you can use to enable or disable a specific hardware module, such as the city circuit.

Login at level 3 before you start programming.

To edit system options, complete the following steps:

1. Press **MENU**.
2. Press the **UP** or **DOWN** keys until you reach the **[Programming]** option and press **ENTER**.

```
FIRE ALARM
```

```
SUSPENDED
```

After a few seconds later, the control unit displays the following:

```
<ENTER> to PROGRAM
```

```
<EXIT> to CANCEL
```

3. Press **ENTER**, and use the **UP** or **DOWN** keys until **[Options]** is displayed.

```
<ENTER>=Accept
```

```
Prg: [Options]
```

4. Press **ENTER** and the control unit displays the following:

```
<ENTER>=Accept
```

```
Opt: [Time/Date]
```

5. Use the **UP** and **DOWN** keys to select one of the choices shown in Table 15.
6. When the option programming is complete, press the **ESC** key until the control unit displays the following prompt:

```
[Cont] Dscrd Save
```

7. Select **[Save]** and press **ENTER** to save the configuration.

**Table 15: System options setting**

| Options                     | Settings                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Options                 | Settings                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|-----------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Time/Date Format            | Choose 12 (am/pm) or 24-hour (military) format.<br>Use <b>UP</b> and <b>Down</b> keys to scroll between options and <b>ENTER</b> to set.                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | AC Doors                | The Door Holder Drop on AC Failure allows the control unit to hold doors open for a set duration during an AC power loss condition. After that timer has expired, the control unit turns off the door holder relays (all DHOLDER point types).<br>The range for the timer is 0 to 60 minutes (default=5 minutes).<br>To have the door holders drop the doors immediately upon AC power loss, set the timer to 0.<br>This option applies to all DHOLDER relay function types regardless of their Alarm Group setting.                                                                                                                                  |
| Active Status Reminder      | With the Active Status Reminder option, the operator can set an interval and duration during which the system piezo reminds operators that a FIRE, SUPV, or TBL condition still exists.<br>This is accomplished by sounding the front control unit tone-alert in addition to flashing the LEDs for respective events.<br>• Choose: ON or OFF (default = ON).<br>• Set reminder interval<br>(1 to 12 hours; default = 8 hours)<br>• Signal duration. This option sets the duration of the acknowledge signal.<br>(0 to 60 seconds; 0=on until ack; default = 0, means acknowledge is required to silence the reminder) |                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| Alarm Silence/Reset Inhibit | While the timer is counting down, the Alarm Silence/Reset Inhibit Timer prevents a system operator from using either the Alarm Silence or System Reset functions.<br>When the inhibit timer expires, the system operator can silence or reset the control unit.<br>Choose a timer range from 0 to 60 minutes (default=0, means no inhibit).                                                                                                                                                                                                                                                                           | Depleted Battery Cutout | Choose ON or OFF (default = OFF).<br>This option selects the operation of the control unit if an alarm occurs during an AC power loss while a depleted battery trouble exists.<br>If this option is selected, the system does the following:<br>• WILL NOT initiate an alarm if the first alarm occurs after the depleted battery state has been detected. If the hardware jumper for depleted battery cutout has been clipped, the system will shut down 60 seconds after the depleted battery condition is detected.<br>• WILL continue sounding the alarm if the depleted battery state is reached after the system is already in the alarm state. |
| Alarm Cutout Timer          | With the Alarm Signal Cutout timer, the operator can set a duration for how long notification appliances sound after an alarm. In other words, when an alarm condition exists, the signals sound until silenced.<br>With this option set at two minutes, building signals sound on alarm for two minutes and then automatically stop sounding, however the alarm condition remains active.<br>Choose a timer range from 0 to 60 minutes (default=0, means no cutout).                                                                                                                                                 | Enable City Circuit     | Choose ON or OFF (default = OFF)<br>This option activates the control unit's city circuit module.<br>If a city circuit is used in the system, select this option or a trouble will be reported.<br>If this option is selected and the city module is not connected, the trouble will be reported.<br>There is no other programming required for the city module.<br>The city type is configured with jumpers on the city circuit board.                                                                                                                                                                                                               |

**Table 15: System options setting**

| Options     | Settings                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | Options           | Settings                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|-------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Alarm Doors | <p>The control unit can hold doors open for a set duration during an alarm condition.</p> <p>After that duration has expired, the control unit shuts off the door holder relays (all DHOLDER point types)</p> <p>Choose a timer range from 0 to 60 seconds (default=0, means immediate door drop).</p> <p>This option applies to all DHOLDER relay function types, regardless of their Alarm Group setting.</p>                                                                                                                                                                                                                                                                                            | Display 1st Alarm | <p>Choose ON or OFF (default = OFF).</p> <p>When this option is selected, the control unit will automatically display the first (oldest) alarm instead of the Alarm Tally abnormal screen.</p> <p>The first responder can then determine the location of the first alarm in the system without having to open the door and press the acknowledge key. If an unacknowledged alarm exists, the system displays that alarm. When that alarm is acknowledged, the system must revert to displaying the oldest alarm.</p> <p>If no fire alarms exist in the system, the first supervisory event is shown on the display.</p> <p>If no supervisory exist, the first trouble is shown on the display.</p> <p>If there are no fire alarms, supervisory, or troubles, the SYSTEM NORMAL screen is displayed.</p> |
| Cross Zone  | <p>Selectable for each alarm group. Selects whether one alarm or more than one alarm is required to trigger outputs for that alarm group.</p> <p>For example, if you enable cross zoning for Alarm Group 1, it takes two activated alarms in Alarm Group 1 before outputs associated with that Alarm Group will activate.</p> <p>To set this option, use the <b>UP</b> and <b>DOWN</b> keys to increment or decrement the alarm group.</p> <p>Use the <b>RIGHT</b> key to move to the <b>On/Off</b> field.</p> <p>Use the <b>UP</b> and <b>DOWN</b> keys to toggle between On and Off.</p> <p>Alarm Groups programmed as Cross Zone must not contain any zones programmed as VSMOKE IDC Function Type.</p> | NAC Class A       | <p>Choose ON or OFF (default = OFF)</p> <p>Set to ON if the standard Notification Appliance Circuits are to be configured in Class-A wiring.</p> <p>Set to OFF if standard Notification Appliance Circuits are to be configured in Class-B wiring.</p> <p>If this option is selected and the wiring is not connected in Class-A style, a trouble condition will result.</p>                                                                                                                                                                                                                                                                                                                                                                                                                             |
| IDC Class A | <p>Choose ON or OFF (default = OFF)</p> <p>Set to ON if the standard Initiating Device Circuits are to be configured in Class-A wiring.</p> <p>After enabling the option, only four out of eight IDC's, IDC1 to IDC4 will be available, .</p> <p>Connect the devices according to the Class-A wiring and configure the Class-A jumpers correctly. Refer to Table 3: IDC settings in the installation manual 579-1400 .</p> <p>Set to OFF if standard Initiating Device Circuits are to be configured in Class-B wiring.</p> <p>If this option is selected and the wiring is not connected in Class-A style, a trouble condition will result.</p>                                                           | AHJ Reset         | <p>Choose ON or OFF (default = OFF)</p> <p>Set to ON, enables the reset of the system if the current state of device or point no longer cause an alarm.</p> <p>For example, this enables reset of a device or circuit whose state is 'trouble'.</p> <p>Set to OFF, enables the reset of the system only if the current state of device or point is normal.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | NFPA NAC          | <p>Choose ON or OFF (default = OFF)</p> <p>Set to ON, enables both horns and strobes connected on the QALERT NACs, will turn Off when alarm silence is activated.</p> <p>Set to OFF, causes strobes to turn off upon completion of system reset.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |



## 9.6 Walk test

The operator can use the walk test feature to test the functionality of the control unit's devices.

Press the **WALK TEST** key to activate the walk test mode. The walk test feature turns on the control unit piezo, the trouble LED starts flashing, and the **WALK TEST ENABLED** trouble displays on the control unit.

To disable the walk test feature, press the **WALK TEST** key again.

The walk test options are configured as follows:

- **Log (predefined):** Enables logging - the system sends walk test alarms and troubles to the trouble logs.
- **NoLog:** Disables logging.
- **Signal:** Enables the NAC for signal activation of an alarm or trouble condition.
- **Silence:** Disables the NACs so that the NACs do not sound during **Walk Test**.

To set the **WALK TEST** option, complete the following steps:

1. Press **MENU**.
2. Press the **UP** or **DOWN** keys until the control unit displays the following:

```
<ENTER>=Accept
```

```
Menu: [Walktest]
```

3. Press **ENTER** and the control unit displays the following:

```
<ENTER>=Accept
```

```
[NoLog] [Silence]
```

4. Use the **LEFT** and **RIGHT** keys to move from one option to another.
5. Use the **UP** and **DOWN** keys to scroll through the option's choices.
6. Press **ENTER** to select the appropriate option.

When the control unit is in **Walk Test** mode, you can test the following features:

- **IDC alarm sensing:** To test the alarm capability of each detector, use a pole magnet or canned smoke to activate the initiating device. If the device is functioning correctly, either of the following actions occur:
  - If the walk test signaling option is set to **Signal**, the control unit pulses the device's zone number on the control unit's NACs. After seven seconds, the control unit drops power to the zone, resetting the activated device. Subsequently activating another initiating device on the same zone sounds a double pulse on the NAC.
  - If the **Walk Test** logging option is set to **Log**, the control unit logs the alarm activation to the TLOG. Use the **[History Logs]** menu option to view the TLOG.
- **IDC trouble sensing:** To test the control unit's ability to sense a trouble condition for each initiating device, disconnect one of the IDC wires at the detector. If the control unit senses the trouble condition correctly, either of the following actions occur:
  - If the **Walk Test** signaling option is set to **Signal**, the control unit activates the control unit's NACs for four seconds.
  - If the **Walk Test** logging option is set to **Log**, the control unit logs the trouble activation to the TLOG. Use the **[History Logs]** menu option to view the TLOG.
- **Earth Ground Sensing:** To test the control unit's ability to detect an Earth Ground, short one of the control unit's circuits to Earth. If the control unit senses the trouble condition correctly, either of the following actions occur:
  - If the **Walk Test** signaling option is set to **Signal**, the control unit activates the control unit's NACs for four seconds.
  - If the **Walk Test** logging option is set to **Log**, the control unit logs the trouble activation to the TLOG. Use the **[History Logs]** menu option to view the TLOG.
- **NAC Trouble Sensing:** To test the control unit's ability to sense a trouble condition for each NAC, disconnect one of the NAC wires at the control unit. If the control unit senses the trouble condition correctly, either of the following actions occur:
  - If the **Walk Test** signaling option is set to **Signal**, the control unit activates the control unit's NACs for four seconds.
  - If the **Walk Test** logging option is set to **Log**, the control unit logs the trouble activation to the TLOG. Use the **[History Logs]** menu option to view the TLOG.

## 9.7 Alarm groups

You can implement basic selective signaling applications with alarm groups.

When you program an input, such as a zone of smoke detectors, and output points, such as an NAC or relay, you can associate the point with an alarm group number.

The number can range from 1 to 99 and each point can be in up to three alarm groups.

When programming is complete, an initiating device can trigger only the output devices such as relays or NACs that share its alarm groups.

## 9.8 Viewing and clearing historical logs

The control unit has four separate, non-volatile historical logs:

- Alarm
- Supervisory
- Trouble
- User

You can view historical logs separately, or you can view each log in chronological order as a single combined log. For different logs and their stored events, see Table 16.

Each log records information about the event and the time the event occurred.

You can view logs at access level 1, but only an operator with a level 2 login or higher can clear logs.

**Table 16: Logs contents**

| Historical log                 | Stored events                                                                                                                                          |
|--------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------|
| ALOG (Alarm Log 100 entries)   | Alarms<br>Alarm acknowledge<br>Log cleared<br>Alarm silence<br>System reset                                                                            |
| Supervisory Log (100 entries)  | Supervisory conditions<br>Supervisory acknowledge<br>Log cleared                                                                                       |
| TLOG (Trouble Log 300 entries) | Trouble events<br>Log cleared<br>WALK TEST events<br>HW reset                                                                                          |
| User Log (100 entries)         | Login events for level 2 or higher<br>Logout events for manual and auto logout<br>Invalid login attempts - for incorrect password entry<br>Log cleared |
| CLOG (Combined Log)            | All events in chronological order                                                                                                                      |

## 9.8.1 Viewing historical logs

To view a historical log, complete the following steps

1. Press **MENU**.
2. Press the **UP** or **DOWN** keys until the control unit displays the following:

```
<ENTER>=Accept
```

```
Menu: [History Logs]
```

3. Press **ENTER** and the control unit displays the following:

```
<ENTER>=Accept
```

```
Log: [ALOG]
```

4. Use the **UP** or **DOWN** keys to choose one of the logs:

- ALOG
- Supervisory Log
- TLOG
- User Log
- CLOG

5. Press **ENTER** to access the contents of the log.
6. Use the **UP** or **DOWN** keys to scroll through each log entry.

## 9.8.2 Clearing logs

To clear a log, complete the following steps:

1. Press **ENTER** to clear the log you are currently viewing. The control unit displays the following:

```
<ENTER>=Clear Log
```

```
<EXIT> to cancel
```

2. Press **ENTER** to clear the current log.

The control unit adds an entry to the log to indicate that it is cleared.

## 9.9 Viewing and controlling points

You can view each point in the system for the following reasons:

- Obtain additional information
- Control an operation
- Enable an operation
- Disable an operation

You can view points at access level 1, but only an operator with a level 2 login or higher can control and disable or enable operations.

### 9.9.1 Viewing points

To view a point, complete the following steps:

1. Press **MENU**.
2. Press the **UP** or **DOWN** keys until the control unit displays the following:

```
<ENTER>=Accept
```

```
Menu: [Control/View]
```

3. Press **ENTER** and the control unit displays the following:

```
<ENTER>=Accept
```

```
Ctrl/View: [IDC]
```

4. Use the **UP** or **DOWN** keys to choose one of the options:

- IDC
- Relay
- NAC
- System

**Note:** You can use system points for viewing only, but you can not control the system points.

5. Press **ENTER** to select the appropriate point category. The control unit displays the following:

IDC1

Fire NORMAL

6. Use the **UP** or **DOWN** keys to scroll through the list of points in the selected category.

7. Press **ENTER** to view the status of the selected point. The hardware type and function type for the point are shown similar to the following example:

IDC1

Fire NORMAL M1

Additional information and control options are available as described in Table 17.

**Table 17: Additional point information**

| Function     | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|--------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| IDC          | <p>1. Press <b>ENTER</b> to view the point's hardware type and assigned function type. For example:</p> <p>IDC1</p> <p>BZONE FIRE</p> <p>2. Press the <b>DOWN</b> key to view the following information for the IDC:</p> <ul style="list-style-type: none"> <li>- Enable and disable status</li> <li>- Alarm verification tally</li> <li>- Electrical state (normal, short, open, abnormal)</li> <li>- Assigned alarm groups</li> </ul>                               |
| NAC          | <p>1. Press <b>ENTER</b> to view the point's hardware type and assigned function type. For example:</p> <p>NAC1</p> <p>NAC</p> <p>2. Press the <b>DOWN</b> key to view the following information for the point.</p> <ul style="list-style-type: none"> <li>- Electrical State (open/short/normal)</li> <li>- Enable and disable status</li> <li>- Output state (on/off/coding)</li> <li>- Function type and output method</li> <li>- Assigned alarm groups</li> </ul> |
| System point | <p>1. Press <b>ENTER</b> to view a description of the first system point in the list.</p> <p>2. Press <b>DOWN</b> to scroll through the list of points.</p>                                                                                                                                                                                                                                                                                                           |

## 9.9.2 Enabling or disabling points

To enable or disable a point, complete the following steps:

1. Press **MENU**.
2. Press the **UP** or **DOWN** keys until the control unit displays the following:
 

```
<ENTER>=Accept
```

```
Menu: [Control/View]
```
3. Press **ENTER** and the control unit displays the following:
 

```
<ENTER>=Accept
```

```
Ctrl/View: [IDC]
```
4. Use the **UP** or **DOWN** keys to choose one of the following options:
  - IDC
  - Relay
  - NAC
  - System
5. Press **ENTER** to select the appropriate point category. The control unit displays the following:
 

```
IDC1
```

```
Fire NORMAL
```
6. Use the **UP** or **DOWN** keys to scroll through the list of points in the selected category. Press **ENTER** when you reach the point that you want to enable or disable.
7. Use the **UP** and **DOWN** keys to scroll through the list until the control unit displays **[DISABLE/ENABLE]**.
8. Press **ENTER**. The control unit displays the following:
 

```
IDC1
```

```
FN: [ENABLE]
```
9. Use the **DOWN** key to toggle between **Enable** and **Disable**. Press **ENTER**. A prompt appears asking you to confirm the operation.
10. Press **ENTER**.

**Note:** When you are enabling or disabling points:

- When a monitor point is disabled, any status changes occurring on the point are ignored by the control unit.
- When a monitor point is enabled, a 30-second countdown will start to prevent an operator from accidentally enabling a point that will alarm the system.
- If a control point is disabled, any automatic functions are inhibited.
- A disable trouble will exist for each disabled point in the system.
- The point can be enabled immediately by pressing **ENTER**, or the enable can be aborted by pressing **EXIT**.

## 9.10 Accessing the control functions

The control unit includes pre-programmed functions. For the list of pre-programmed functions, see Table 18.

To access the control functions, complete the following steps:

1. Press **MENU**.
2. Press the **UP** or **DOWN** keys until the control unit displays the following:

```
<ENTER>=Accept
```

```
Menu: [CTRL FUNCTION]
```

3. Press **ENTER**. Use the **UP** or **DOWN** keys to choose one of the options shown in Table 18.

**Table 18: Control functions**

| Function                       | Operations performed                                           |
|--------------------------------|----------------------------------------------------------------|
| City/DACT Disconnect (Level 2) | Disconnects the city circuit or DACT (causes trouble)          |
| Control Point Bypass (Level 2) | Bypasses all the NAC and relay function types (causes trouble) |
| Elevator Bypass (Level 2)      | Bypasses elevator recall operation (causes trouble)            |
| Door holder Bypass (Level 2)   | Bypasses the door holder operation (causes trouble)            |
| Display Time (Level 1)         | Shows the current time and date                                |

4. Press **ENTER** to select the appropriate option.

## 9.11 Setting the time and date

To change the system time and date, complete the following steps:

1. Press **MENU**.
2. Press the **UP** or **DOWN** keys until the control unit displays the following:

```
<ENTER>=Accept
```

```
Menu: [Set Time/Date]
```

3. Press **ENTER** and the control unit displays the following:

```
<ENTER>=Accept
```

```
[11]:23 pm 11/12/19
```

4. Use the **LEFT** or **RIGHT** keys to move the focus from field-to-field for editing.
5. Use the **UP** or **DOWN** keys to change the currently selected fields.

**Note:** You can only change the **am/pm** field by scrolling through the hour values.

Reset the Date and Time setting after every panel restart and at the time of maintenance.

## 9.12 Running the diagnostic options

To run the control unit's diagnostic options, complete the following steps:

1. Press **MENU**.
2. Press the **UP** or **DOWN** keys until the control unit displays the following:  

`<ENTER>=Accept`

`Menu: [Diagnostics]`
3. Press **ENTER** and use the **UP** or **DOWN** keys to scroll through the options listed in Table 19.
4. Press **ENTER** to select the appropriate option.

**Table 19: Diagnostic options**

| Option         | Description                                                                                                                                                                                                                                                                            | Option                  | Description                                                                                                                                                                                                                                                                                                                 |
|----------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| BAT CHGR METER | View battery charger incoming voltage and output current.                                                                                                                                                                                                                              | CLR Tally/TBL (Level 2) | This option clears the alarm verification tallies for all IDCs in the system. Typically this is only done when an Alarm Verification Tally Limit trouble occurs. The Alarm Verification Tally Limit trouble occurs if an IDC programmed for alarm verification starts the verification cycle, but does not verify 10 times. |
| Battery Meter  | View battery voltage and battery load.                                                                                                                                                                                                                                                 |                         |                                                                                                                                                                                                                                                                                                                             |
| HW Reset       | The Hardware Reset is context sensitive. If the reset is performed with an alarm in the system, the alarms are reset. If there are no alarms present, a HW reset (power is dropped to all zones for 15 s) is performed. The hardware reset will attempt to clear any latched troubles. |                         |                                                                                                                                                                                                                                                                                                                             |

## 9.13 Uploading and downloading files

Upload or download files to transfer the control unit's job files between a service computer and the control unit.

The term upload refers to transferring a job file from the control unit to a computer. The term download refers to moving a job file from the PC to the control unit.

To start transfer from the control unit, complete the following steps:

1. Press **MENU**.
2. Press the **UP** or **DOWN** keys until the control unit displays the following:  

`<ENTER>=Accept`

`XFER: [UPLD/DWNLD]`
3. Press **ENTER**. The control unit displays the following:  

`<ENTER>=Accept`

`XFER: [Start XFER]`

## 9.14 Restarting the CPU

To start the CPU using different memory configurations, you can use the warm or cold start functionality.

**Warm start:** Clears the service mode trouble, clears the alarm verification tally trouble, and restarts the control unit, but preserves the control unit's non-volatile memory, including time and date information, historical logs, and all currently disabled points.

**Cold start:** Clears the service mode trouble and re-initializes the control unit's non-volatile memory, historical logs, and disabled points, but saves the time and date information.

To restart the CPU, complete the following steps:

1. Press **MENU**.
2. Press the **UP** or **DOWN** keys to choose either of the following options:
  - Warm start
  - Cold start
3. Press **ENTER** to select the appropriate option.

The system startup prompt appears on the screen, followed by the system status message.

## 9.15 Viewing software revision and job information

To view the software revision and job information, complete the following steps:

1. Press **MENU**.
2. Press the **UP** or **DOWN** keys until the control unit displays:  
`<ENTER>=Accept`  
`Menu: [Software Rev]`
3. Press **ENTER**. The control unit displays:  
`Rev 01.00.00`  
`<NEXT>=View Job Info`
4. Press the **DOWN** key to see the job revision number and the date that the control unit was edited. The job revision number is the number of times the job has been edited and saved.  
`JOB REV: 1 2008JOB`  
`12:00:00 am 04/09/20`



## 10 Appendix A: System points

**Table 20: Diagnostic options**

| Points ID              | Description         | Points ID                | Description                   |
|------------------------|---------------------|--------------------------|-------------------------------|
| 00-01                  | Panel ToneAlert     | 18-04                    | Extra Card                    |
| 00-02                  | Comm Disconnect     | 18-05                    | External Comm                 |
| 00-03                  | Fire LED            | 18-06                    | Reserved                      |
| 00-04                  | Supervisory LED     | 18-07                    | Cold Start                    |
| 00-05                  | Trouble LED         | 18-08                    | Warm Start                    |
| 00-06                  | Silenced LED        | 18-09                    | Time/Date not set             |
| 00-07                  | AC Power LED        | 18-10                    | Service Mode                  |
| 00-08                  | LCD Backlight       | 18-11                    | Key Inactive Disable          |
| 00-09                  | Battery Trouble LED | 18-12                    | List Overflow                 |
| 00-10                  | Ground Fault LED    | 18-13                    | City/DACT Disc                |
| 00-11                  | Disabled LED        | 18-14                    | City 1 Trouble                |
| 04-01 through to 04-04 | Annunciator Points  | 18-15                    | AHJ City Reset                |
| 05-01 through to 05-24 | Annunciator Points  | 18-16                    | Control Bypass                |
| 06-01 through to 06-24 | Annunciator Points  | 18-17                    | Elevator Bypass               |
| 07-01 through to 07-24 | Annunciator Points  | 18-18                    | Door Bypass                   |
| 14-01 through to 14-02 | NACs 1-2            | 18-19                    | AV Tally Exceeded             |
| 15-01 through to 15-08 | IDCs 1-8            | 18-20                    | WalkTest Active               |
| 17-01                  | AC Fail             | 18-21                    | Reserved                      |
| 17-02                  | Aux Over Current    | 18-22                    | Programming Mode              |
| 17-03                  | Positive Earth      | 18-23                    | Event Queue Overflow          |
| 17-04                  | Low Battery         | 18-24 through to 18-30   | Reserved                      |
| 17-05                  | Depleted Battery    | 18-31                    | Sil/Rst Inhibit Actv          |
| 17-06                  | Low Battery Cutout  | 18-32                    | City 2 Trouble                |
| 17-07                  | Charger Trouble     | 22-01 through to 22-99   | Alarm Groups                  |
| 17-08                  | Charger ON/OFF      | 22-100 through to 22-113 | Reserved                      |
| 17-09                  | Negative Earth      | 23-01                    | DACT Phone Line 1 Trouble     |
| 18-01                  | Unacked Fire        | 23-02                    | DACT Phone Line 2 Trouble     |
| 18-02                  | Unacked Supervisory | 23-03                    | Central Station Communication |
| 18-03                  | Unacked Trouble     |                          | Trouble                       |

