Advanced

Axis AX

D9068P DACT

Digital Alarm Communicator Transmitter

D9068

Installation & Operation Manual

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Notices

FCC Compliance Notice

This equipment was tested and complies with the limits for a Class A digital device, pursuant to Part 15 of the Federal Communications Commission (FCC) Rules. These limits are designed to provide reasonable protection against harmful interference in a commercial installation. This equipment generates, uses, and can radiate radio frequency energy. When this equipment is not installed and used according to the instructions, it might cause harmful interference to radio communications. There is no guarantee that interference will not occur in a particular installation. If this equipment causes harmful interference to radio or television reception that can be determined by turning the equipment off and on, correct the interference by:

- Reorienting or relocating the receiving antenna.
- Increasing the separation between the equipment and the receiver.
- Connecting the equipment to an outlet on a circuit different from that the receiver is connected to.
- Consulting the dealer or an experienced radio or TV technician for help.

FCC Telephone Connection to Users

This control complies with Part 68 of the FCC rules. The ringer equivalence number (REN) for this equipment is 0.0B. When requested, you must provide this information to your local telephone company. The REN helps determine the quantity of devices that can be connected to your telephone line and still have all of those connected devices ring when your telephone number is called. In most areas the sum of the RENs of all devices connected to one line should not exceed five (5.0). To verify the number of devices you can connect to your line, contact your local telephone company to determine the maximum REN for your local calling area. The FCC registration number is ESVMUL-46514-AL-E. The ringer equivalence is 0.0B. Do not use this equipment on coin service provided by the telephone company or connected to party lines. If this equipment harms the telephone network, the telephone company might temporarily discontinue your service. When possible, the telephone company notifies you in advance. If advanced notice is not practical, you are notified as soon as possible. You are informed of your right to file a complaint with the FCC.

The telephone company can make changes in its facilities, equipment, operations, or procedures affecting the proper functioning of your equipment. If they do, you are notified in advance so you can maintain uninterrupted telephone service.

If you experience trouble with this equipment, contact the Installing Distributor or Advanced for information on obtaining service or repairs.

The telephone company might ask you to disconnect this equipment from the network until the problem is corrected, or until you are sure the equipment is not malfunctioning.

The manufacturer, not the user, must make the repairs to this equipment.

Operating this equipment can also be affected if events such as accidents or acts of God interrupt telephone service.

Industry Canada Notice

The Industry Canada label identifies certified equipment. This certification means the equipment meets certain telecommunications network protective, operational, and safety requirements. Industry Canada does not guarantee the equipment operates to the user's satisfaction.

Before installing this equipment, verify you have permission to connect it to the facilities of the local telecommunications company. Install the equipment using an acceptable method of connection. Verify the customer is aware that compliance with the above conditions might not prevent degradation of service in some situations.

An authorized Canadian maintenance facility, designated by the supplier, should make the repairs to the certified equipment. If you make repairs or modifications to this equipment, and if the equipment malfunctions, the telecommunications company might ask you to disconnect the equipment.

Do not attempt to make such connections. Contact the appropriate electric inspection authority or electrician.

For your own protection, ensure the electrical ground connections of the power utility, telephone lines, and internal metallic water pipe system, if present, are connected together.

Installation Guidelines for UL Systems

Failure to install and program the D9068P according to the requirements in this section voids its listing mark.

Test according to NFPA 72 following any modifications, repairs, upgrades, or adjustments to the system.

D9068P UL Requirements
- D9068P is UL Listed for Commercial Digital Alarm Communicator applications (Type service: remote station and central station), UL Standard UL864.
- Install the digital alarm communicator transmitter (DACT) according to NFPA 72 for Commercial Fire installations.
- Use, enable, and supervise both telephone lines.

1   Overview

1.1   System Overview

The D9068P Fire Communicator is a complete communicator for use with AX Series Intelligent Fire Alarm Control Panels. Alarms and communications to the D9068P are accomplished via serial connection. The D9068P includes:

- Multiple data protocols (Contact ID, and SIA 300)
- 100-event history buffer
- Dual telephone line interface
- Connections for programming LCD Keypad (DACT-PRG)
- LEDs for heartbeat, DACT trouble, and telephone line trouble (one per line)
- Serial port for connection to the AX Series Intelligent Fire Alarm Control Panel
- Real-time clock

1.2   Features and Specifications

1.2.1   Power

Table 1: Power Specifications	
Input Voltage	10.2 to 28 VDC
Standby Current	150 mA
Alarm Current	190 mA

Power for the D9068P is wired directly to the AX Series Intelligent Fire Alarm Control Panel via the AX-SEB cable. Although the D9068P can withstand short power losses up to 5 minutes, power losses (AC & DC) greater than 5 minutes, could possibly cause the following:

- History buffer might clear and all stored events are lost.
- Output (report) buffer might clear and all pending reports are lost.
- Alarms initiated before the power loss might reset. If the alarm conditions persist when power is restored, new alarms will be generated.
- DACT time might reset to its default setting.

> If a power loss occurs, programmed settings such as point configuration, telephone numbers, and account number remain intact.

1.2.2   System Supervision

Watchdog: The D9068P is supervised with a hardware watchdog circuit. Failure of the control program causes a hardware reset within 2 sec. The AX Series Intelligent Fire Alarm Control Panel will indicate a DACT trouble condition under this situation.

Self Testing: Occasionally, the dialer (DACT), EEPROM memory, and telephone lines are automatically tested. The EEPROM checksum is verified every 10 minutes. If the EEPROM checksum fails, a DACT trouble condition is indicated on the AX Series Intelligent Fire Alarm Control Panel and a Trouble Report is sent to the Central Station.

1.2.3   Trouble Contact

The D9068P has one Form C relay rated 1 Amp @ 30 VDC. The Form C relay is normally held active and deactivates on any DACT trouble condition.

Note: The trouble contact is not utilized when utilizing the D9068P in conjunction with an AX Series Intelligent Fire Alarm Control Panel. All DACT trouble conditions are reported to the FACP via the supervised serial connection.

1.2.4   User Interface

A Programming LCD Keypad (DACT-PRG) connects to a five-pin connector located on the AX-SEB board. The DACT-PRG is used to program and troubleshoot the D9068P.

Note: The DACT-PRG must be set to address 1 for proper use.

Only use the DACT-PRG LCD Keypad to program the D9068P. Temporarily connect this unit to the D9068P for programming only.

1.2.5   Communication

Formats
The D9068P supports two protocols: Contact ID, and SIA 300.
Report Routing
There are six different report groups that can be routed to one of the following phone settings:
- **PHONE 1 ONLY:** The report is sent to Phone #1 only.
- **PHONE 2 ONLY:** The report is sent to Phone #2 only.
- **PHONE 1 & 2:** The report is sent to Phones #1 and #2.
- **PHONE 2 BACKUP:** The report is sent to Phone #1, and then to Phone #2 if Phone #1 fails.

These reporting groups consist of non-supervisory alarms (NONSUP ALRM), supervisory alarms (SUPVSY ALRM), alarm restoral's and resets (ALM RSTR, RST), supervisory restoral's (SUPVSY RSTR), tests (TESTS), and troubles and trouble restoral's (TBL, TBL RSTR).

Reset Report

A Reset Report is issued when the D9068P is reset from any off normal condition.

Telephone Line Selection

The D9068P follows a predetermined sequence to choose between the two telephone lines. It also implements the new NFPA requirements for alternating telephone lines during test reporting. The D9068P maintains a variable that selects either Phone Line 1 or Phone Line 2 for Auto Test Reports. After each successful Test Report, the variable switches to select the other telephone line.

Users can select the telephone line for Manual Test Reports.

Communication Failed Indication: The D9068P indicates a communication failure after ten attempts to communicate are completed without success. This causes an AX Series Intelligent Fire Alarm Control Panel DACT trouble.

1.2.6   History Buffer

The D9068P has a history buffer that retains up to 100 events. Each event is tagged with the date and time of occurrence. This buffer can be viewed when a DACT-PRG is attached to the AX-SEB board. When the buffer is full, old events are discarded to make room for new events. A watchdog reset is entered in the buffer and does not reset the buffer.

The history buffer might clear when the system loses AC and DC power for more than 5 min.

1.2.7 General Specifications

Table 2: General Specifications	
Storage/Operating Temperature	32^0F to 120^0F (0^0C to 49^0C)
Lightning Protection	Metal oxide varistors (MOVs) and spark gaps provide protection from lightning surges and static discharges for inputs and telephone interface.

1.2.8 Parts List

Table 3: Parts List
1 D9068P Serial DACT PC board
4 DACT PC board mounting clips and screws (not required for AX Series use)
4 sets cable assemblies (only DACT-PRG cable assembly required, others not required with AX Series use)
2 sets telco cable assemblies RJ31X
1 ground wire (not required for AX Series use)
5 end-of-line (EOL) resistors (not required for AX Series use)
1 AX-SEB Serial Expansion Board
1 AX-SEB ON/OFF jumper
1 AX-SEB PL2 cable
1 AX-SEB PL4 cable
1 AX-SEB round standoff with screw (required for AX-CTL-1 Mounting)
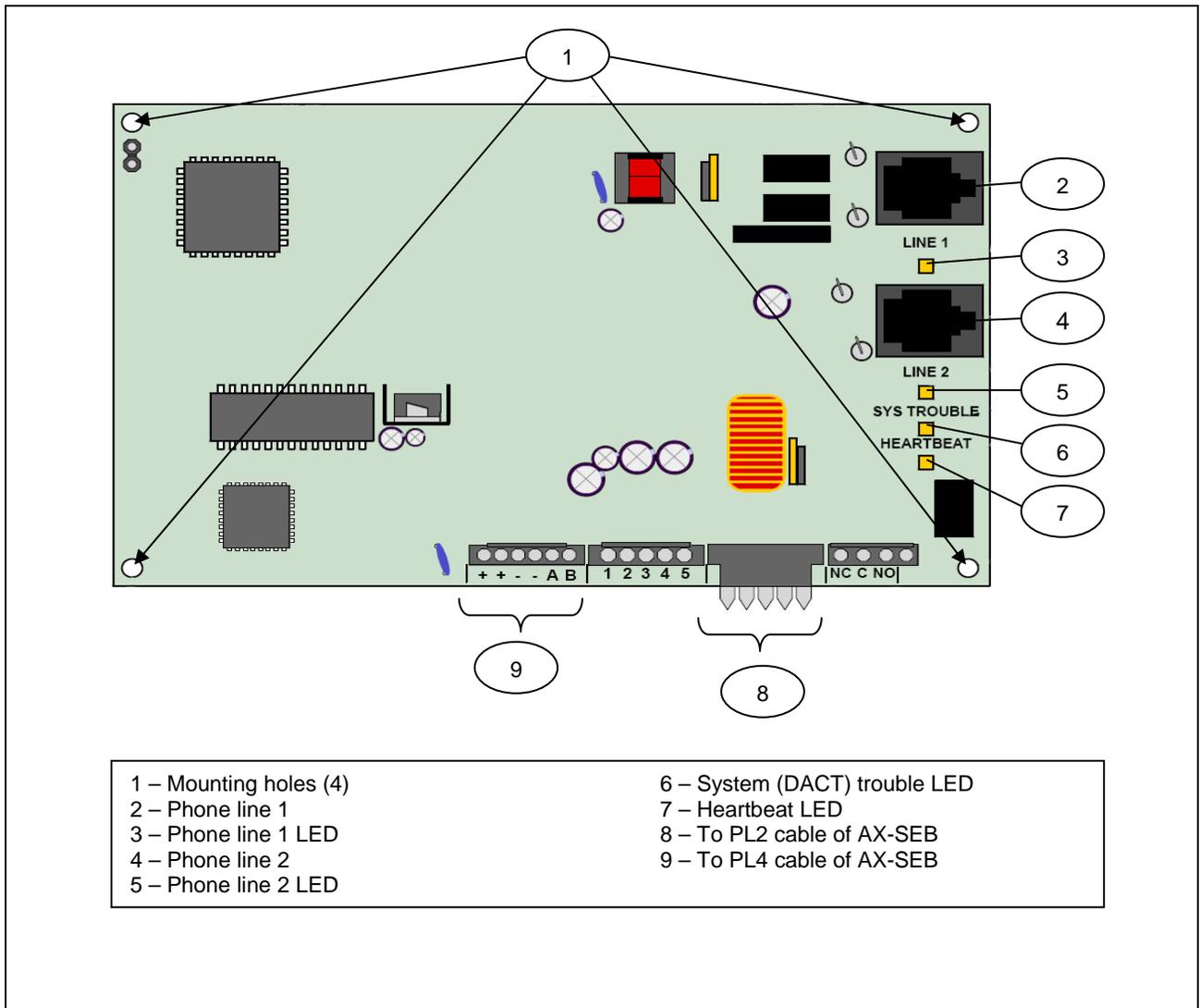
Figure 1 – D9068P PC Board Layout

1 – Mounting holes (4)
2 – Phone line 1
3 – Phone line 1 LED
4 – Phone line 2
5 – Phone line 2 LED

6 – System (DACT) trouble LED
7 – Heartbeat LED
8 – To PL2 cable of AX-SEB
9 – To PL4 cable of AX-SEB

1.1.1 AX-SEB Serial Expansion Board Layout

The AX Series Intelligent Fire Alarm Control Panel communicates to the D9068P DACT serially via an AX-SEB serial expansion board. The AX-SEB Serial Expansion Board plugs into a ten-pin serial expansion port socket located on the bottom left corner of the AX-CTL Base Card. See figure 2. Refer to Section 2.3 regarding AX-SEB installation

Note: When utilizing the AX-SEB the jumper must be set in the DACT "ON" position. When programming the AX Series Intelligent Fire Alarm Control Panel via the PC-NeT software tool the jumper must be placed in the DACT "OFF" position, and upon completion of programming returned to the DACT "ON" position.

PL2 cable to (8) of D9068P

PL4 cable to (9) of D9068P

AX Series
Programming
Jumper

OFF ☐☐☐ ON

DACT-PRG
Keypad plug
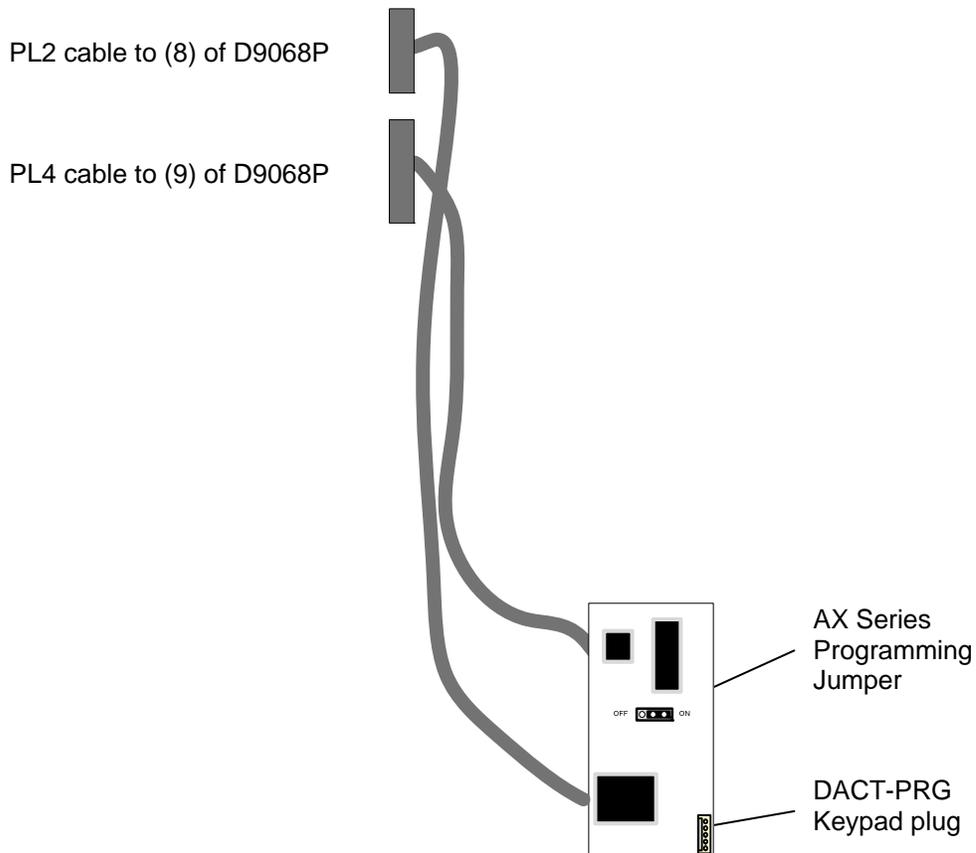
Figure 2 – AX-SEB Serial Expansion Board Layout

2   Installation

The D9068P DACT mounts within any AX Series Intelligent Fire Alarm Control Panel. There are two (2) methods of mounting the D9068P within an AX Series Intelligent Fire Alarm Control. The first method is for mounting the D9068P within an AX-CTL-1 enclosure. The second method is for mounting the D9068P within an /E or /V enclosure (AX-CTL-1L, -2 or -4).

2.1   D9068P mounting within the AX-CTL-1 enclosure

When mounting the D9068P in an AX Series AX-CTL-1, the D9068P is mounted on top of (above) the AX Series Base Card (if also utilizing an AX-Net4 or 7 network card, the network card would be mounted to the left sidewall of the enclosure backbox). See figure 3
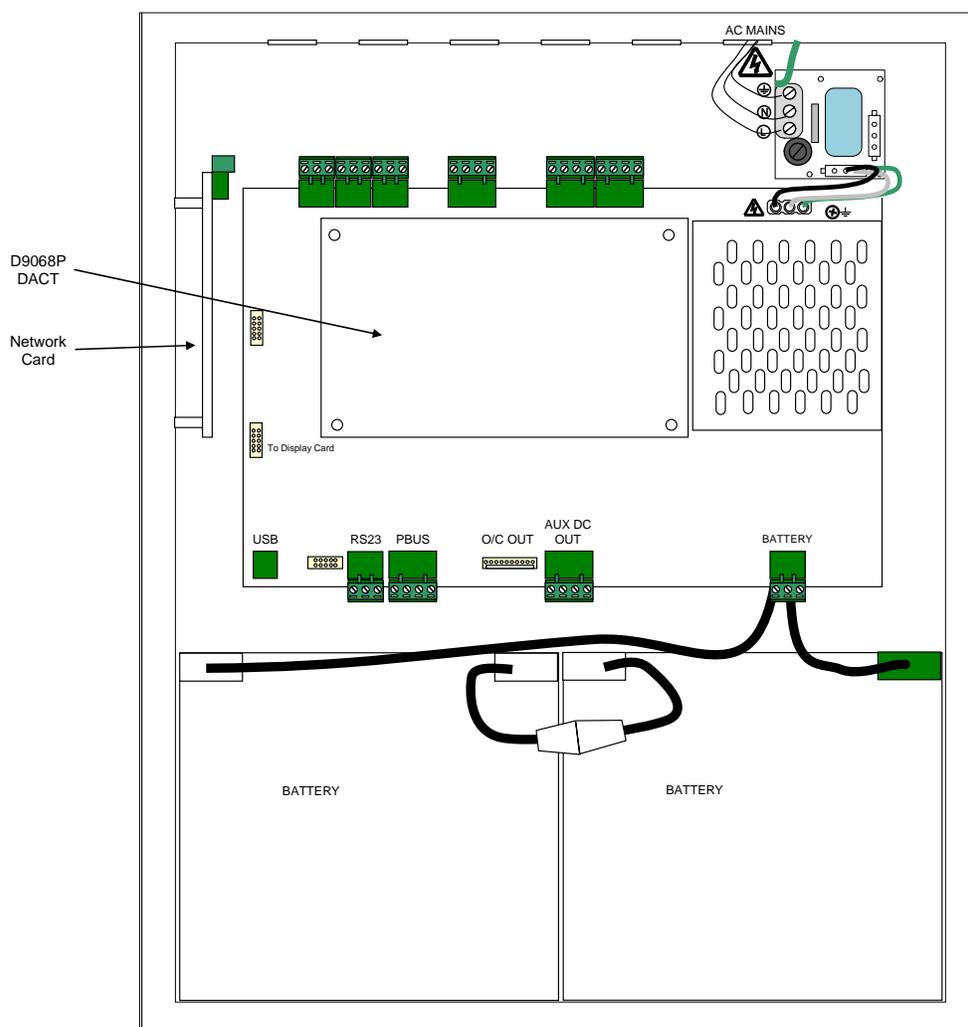
Figure 3 – D9068P Mounted in AX-CTL-1 Enclosure

Remove the two (2) upper middle Regular head screws holding the AX-CTL Base Card to the enclosure back box, and replace with two (2) metal hexagon spacers (H), provided with the D9068P mounting plate. Install the remaining two (2) supplied metal hexagon spacers in the two locations directly below the two (2) installed spacers (H). Do not over tighten metal hexagon spacers as breakage of the spacer can occur. See figure 4

Utilizing four (4) of the Regular head screws provided, install the D9068P mounting plate to the four (4) installed metal hexagon spacers (R), and tighten securely.

Utilizing the four (4) remaining Regular head screws provided, install the D9068P to the D9068P mounting plate (S), and tighten securely.

Refer to Section 2.3 regarding AX-SEB mounting and connections.

Figure 4 – AX-CTL-1, D9068P Mounting Plate and D9068P DACT Installation

2.2 D9068P mounting within the /E and /V enclosure (AX-CTL-1L, -2 and -4)

When mounting the D9068P in a /E or /V enclosure the D9068P is mounted on the left sidewall of the enclosure backbox. See figure 5
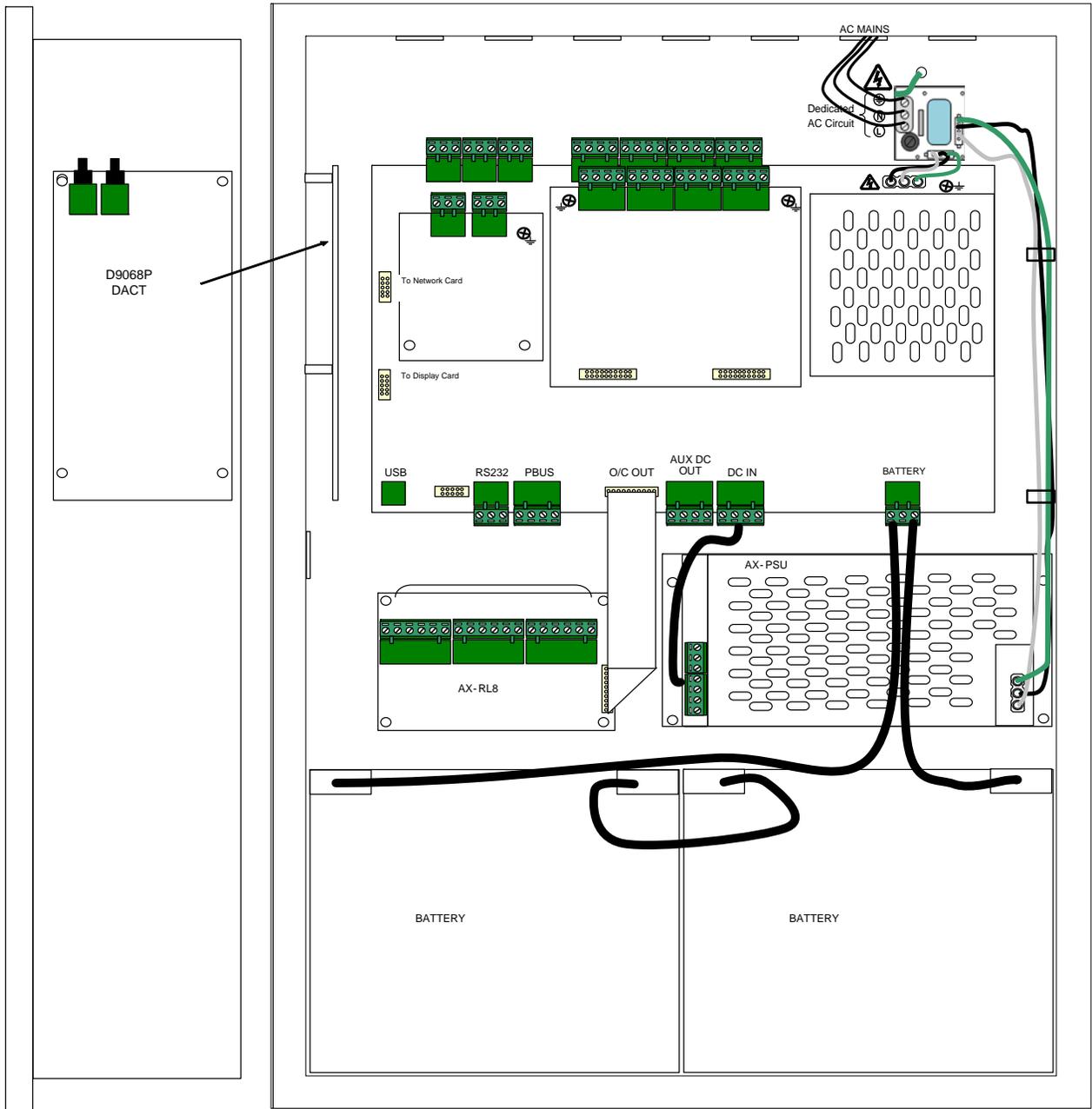
Figure 5 – D9068P Mounted in /E or /V Enclosure

Located on the upper left sidewall of the /E and /V enclosure backbox are three (3) PC board push snap-on standoffs (P) and one (1) screw standoff (S). Push the D9068P DACT module onto the three (3) push snap-on standoffs. Utilizing the supplied Regular head screw, screw the D9068P DACT to the screw standoff (S), and tighten securely. See figure 6

With D9068P installation in /E and /V enclosures install the PL2 and PL4 cables of the AX-SEB prior to mounting the D9068P DACT. Refer to Section 2.3 regarding AX-SEB mounting and connections.
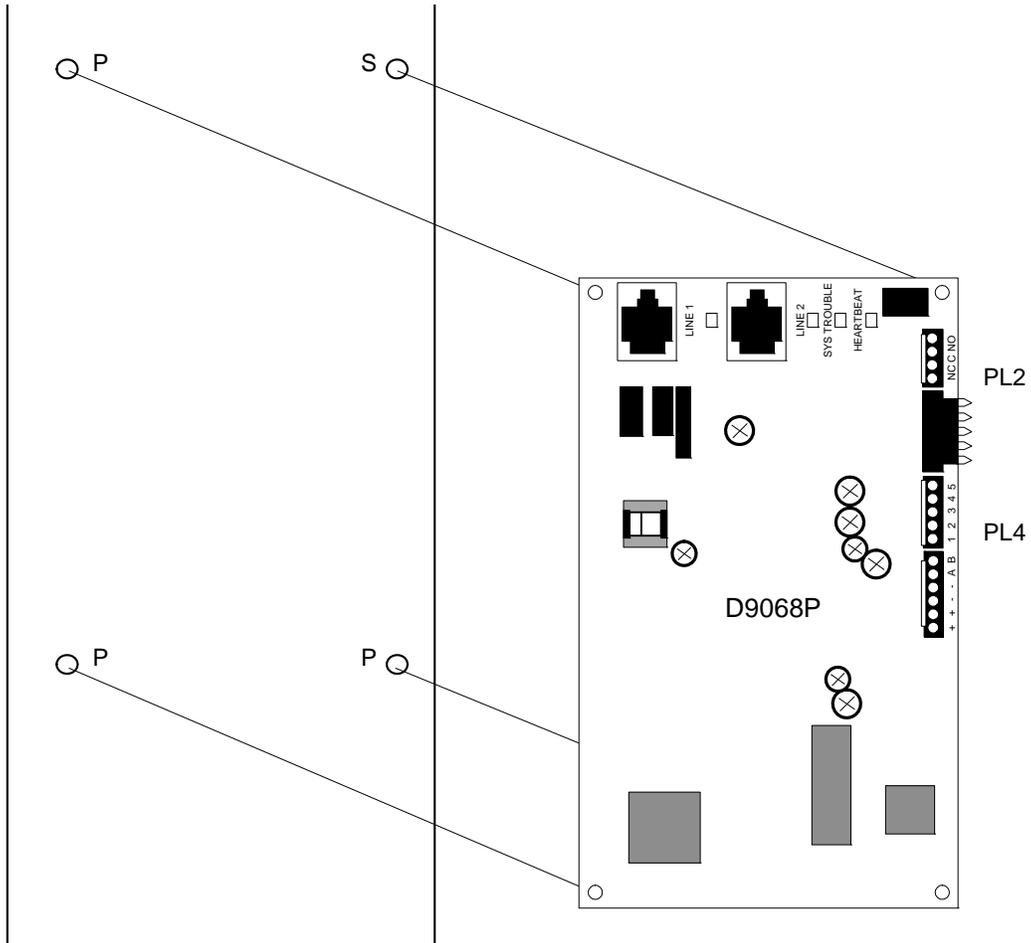
Figure 6 – D9068P Installation in /E or /V Enclosure

2.3   AX-SEB mounting to AX-CTL-1, -1L, -2 and -4 Base Cards

Install the round standoff provided with the AX-SEB into the screwed standoff directly below the AX-CTL Base Card ten-pin serial expansion port socket. The ten-pin serial expansion port socket is located on the bottom left side of the Base Card PC board.

Plug one end of the PL2 cable into the back of the AX-SEB board (PL2 Slot) and connect the other end of the PL2 cable to the DACT DACT-PRG LCD keypad Molex connector on the D9068P.

Plug one end of the PL4 cable into the back of the AX-SEB board (PL4) and connect the other end of the PL4 cable into the serial communications and power Molex connector on the D9068P DACT. See figure 8

On the back of the AX-SEB is a ten-pin male serial connector, plug the ten-pin male serial connector into the ten-pin female connector located on the AX-CTL Base Card. Utilizing the supplied Regular head screw, screw the AX-SEB module to the installed round standoff, and tighten securely. See figure 7
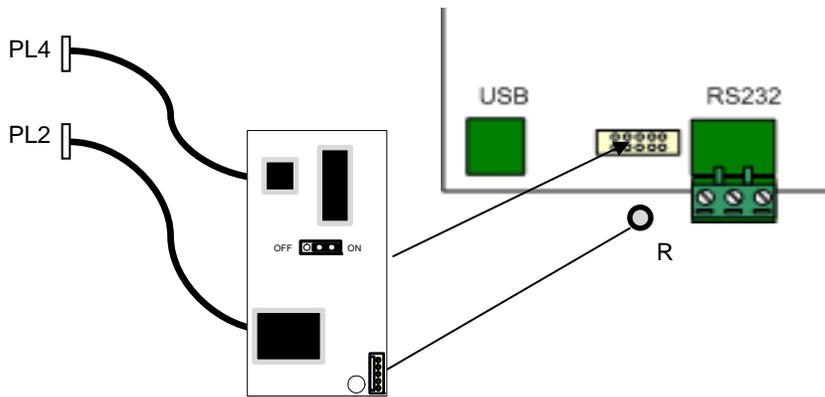
Figure 7 – AX-SEB Mounting to AX-CTL-1, -1L, -2 and -4 Base Cards

2.4   Installing Telco Cable Assemblies

Use the supplied Telco cable assemblies to connect to an RJ31X jack. Ensure the RJ31X jacks are mounted in a secure location to prevent unwanted disconnections or tampering. See figure 8
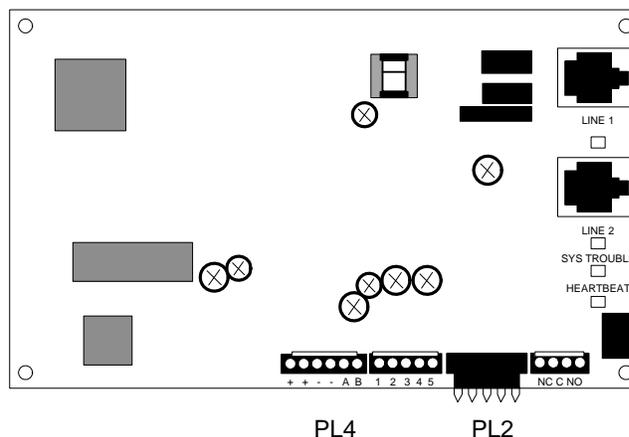
Figure 8 – AX-SEB PL2 and PL4 Cable Connections

2.4.1 Telephone Connections

Telephone Cord Installation

Connect the primary phone line to the D9068P Modular Jack Line 1 using a telephone cord. Connect the secondary phone line to the D9068P Modular Jack Line 2 using another telephone cord.

> For all applications, connect separate primary and secondary phone lines to the D9068P

Location

To prevent jamming of alarm and other reports, wire and locate the RJ31X jack so normal phone use is temporarily interrupted while the D9068P transmits data. See figure 9

After installation, verify the D9068P seizes the line, acquires dial tone, and reports correctly to the central station receiver.

1 - Full modular phone jack
2 - Ring (telco)
3 - Tip (telco)
4 - RJ31X Module
5 - T1 (house telephone tip)
6 - R1 (house telephone ring)
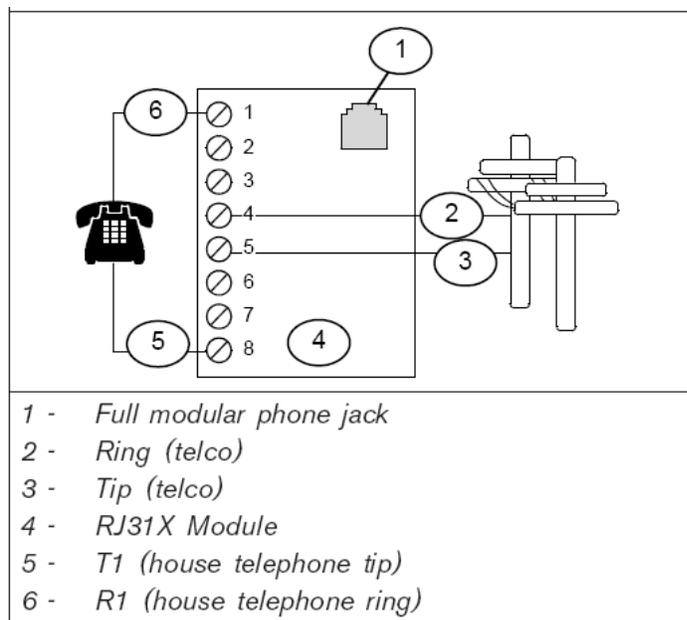
Figure 9 – RJ31X Wiring

> Use the supplied Telco cable assemblies to connect to an RJ31X jack. Ensure the RJ31X jacks are mounted in a secure location to prevent unwanted disconnections or tampering.

Notification

Do not connect registered equipment to party lines or coin-operated telephones. If the local telephone company requests notification before you connect the D9068P to the telephone network, tell them:

- Which line you are connecting to the DACT.
- The make, model, and serial number of the device.
- The FCC registration number (ESVMUL-46514-AL-E) and ringer equivalence (0.0B).

If the telephone company changes its communications facilities, equipment, operations, or procedures that can affect the performance of the D9068P, the telephone company is obligated to notify the user in writing.

The D9068P meets the UL1950 requirements.

2.5 Connecting the DACT-PRG LCD Keypad to the AX-SEB Module

Use the DACT-PRG LCD Keypad to program the D9068P DACT

Carefully pry the back cover of the DACT-PRG LCD Keypad off and wire the provided five (5) wire harness (wire colors; red, two blacks, green, and yellow), with a Molex connector on one end, to the DACT-PRG LCD keypad. See figure 10

With the back cover still removed confirm that the DACT-PRG LCD Keypad address is set to 1. If not, set the address by placing one of the provided black jumpers across pins one and two. This will set the address to 1. See figure 10

Once wired and addressed correctly, the DACT-PRG LCD keypad is capable of being used to program the D9068P DACT. To program the D9068P DACT simply plug the keypad Molex connector into the AX-SEB connector labelled Keypad/PL3, located on the lower right corner of the AX-SEB PC board.
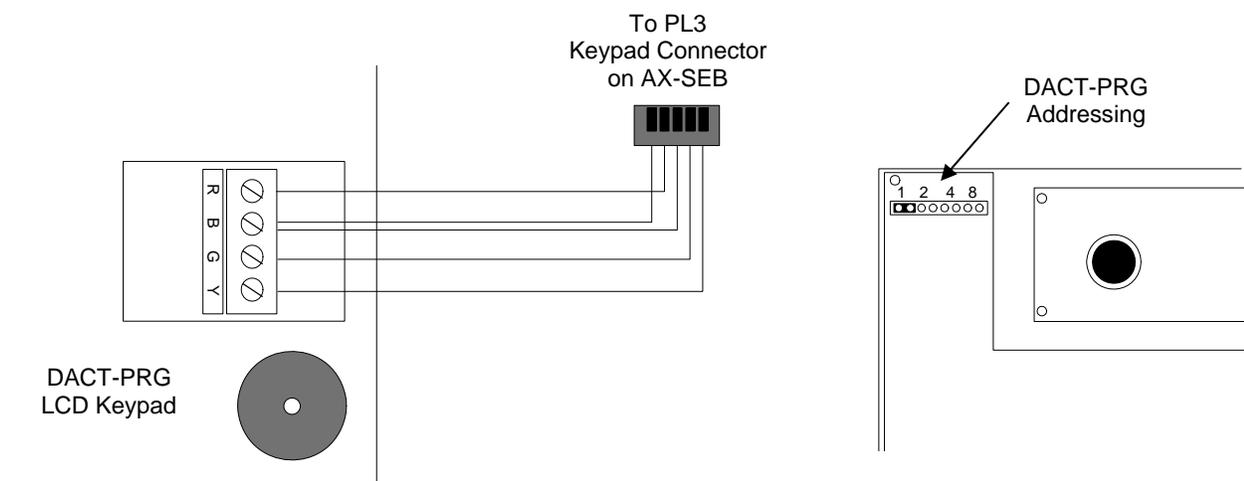
Figure 10 – DACT-PRG LCD Keypad Wiring and Addressing

While utilizing the DACT-PRG LCD Keypad if no keypad activity occurs for 3 minutes, the DACT-PRG LCD Keypad's access will be disabled. When disabled the keypad's buzzer will sound and a SYSTEM FAULT message will appear on the DACT-PRG LCD display. To re-establish communications with the D9068P DACT, simply disconnect the DACT-PRG Molex connector from the AX-SEB and reconnect it.

While the DACT-PRG LCD Keypad is connected and being utilized to program the D9068P, the D9068P does not monitor the connection to the AX Series serial port.

3   D9068P Start Up

This section describes the proper sequence of events pertaining to the D9068P DACT when the AX Series Intelligent Fire Alarm Control Panel is first powered up.

3.1   AX Series Intelligent Fire Alarm Control Panel and D9068P Power up

In addition to the power up requirements of the AX Series Intelligent Fire Alarm Control Panel, the following should be performed with systems that include a D9068P DACT.

3.1.1   Before Powering up

Before applying power to the AX Series FACP, verify:

- That all connections made to the AX-SEB have been done according to this document.
- That all connections made to the D9068P have been made according to this document.
- That all telephone connections have been made to the D9068P according to this document.
- That both RJ31X male connectors are firmly seated in the RJ31X female connectors located on the D9068P DACT.

3.1.2   After Power up

After power is applied to the AX Series Intelligent Fire Alarm Control Panel, verify the following D9068P conditions occur:

- All D9068P LEDs briefly light.
- The D9068P System Trouble LED lights.
- The D9068P Heartbeat LED flashes to indicate the D9068P is functional.

3.2   D9068P Quick Start

Upon power up, the D9068P will be in a trouble condition and will not function properly, nor will the D9068P be supervised by the AX Series Intelligent Fire Alarm Control Panel until the following steps are performed:

1.   Program the D9068P.

2. Assign account numbers to the D9068P.

3. Assign telephone numbers to the D9068P.

4. Program the AX Series Intelligent Fire Alarm Control Panel for serial DACT communications.

> To program the D9068P and the AX Series Intelligent Fire Alarm Control Panel for proper operation, refer to the programming section 5 of this manual.

> If the D9068P is correctly programmed and input wiring is properly connected, only the Heartbeat LED should be flashing. This indicates a normal D9068P operation.
>
> To verify correct communications of the D9068P, perform a manual Communications Test. Refer to section 5.5.4 1: TEST COMM on page 40 for manual communications testing instructions.

> Test according to NFPA 72 following modifications, repairs, upgrades, or adjustments to the AX Series Intelligent Fire Alarm Control Panel and/or D9068P DACT.

> Refer to Appendix B beginning on page 44 for information on error messages or messages indicating abnormal operating conditions.

4   D9068P Operation

4.1   Communicator Operation

The D9068P has an integrated communicator that sends reports to a monitoring station. The communicator operates automatically.

When events occur, the communicator sends corresponding reports to the monitoring station by priority according to NFPA requirements. Fire alarms are sent first, followed by supervisory alarms and trouble reports, and finally by all other reports.

> To comply with UL and NFPA Standards, program both a primary and an alternate telephone number. The numbers must be different.

4.1.1   Phone Line and Phone Number Selection

The D9068P can report to two telephone numbers with full single, double, and backup reporting. It communicates in Contact ID and SIA formats.

To verify the delivery of critical reports, the D9068P can report over two phone lines. Reports can be directed to one or both of the two phone numbers using the report steering feature in the D9068P programming. Account Number 1 is used with Phone Number 1 and Account Number 2 is used with Phone Number 2.

> Except for Test Reports, the D9068P automatically selects the telephone line to use.

Report Routing

There are two ways reports are routed:

1.   Reporting routing starts using Phone Number 1 on Phone Line 1, unless the line monitor shows Phone Number 1 to be bad at the start of reporting. If the report fails on Phone Number 1 on Phone Line 1, the D9068P automatically switches and uses Phone Number 2 on Phone Line 1.

2.   If the report still fails on either phone number on Phone Line 1, the D9068P tries to send the report on Phone Line 2 using Phone Number 1. If this fails, it tries Phone Number 2 on Phone Number 1.

The exception to these options occurs when sending Test Reports (Manual or Auto). Test Reports are sent to alternating telephone lines regardless of telephone monitor or initial failure to report, allowing you to test both phone lines when sending two Manual Test Reports. The first report uses one line the second uses the other line. Auto Test automatically alternates phone lines. You determine which telephone line to use for testing purposes in Manual Test (Phone 1, Phone 2, or alternating telephone lines).

Refer to *Table 4* below for the complete report routing pattern.

Table 4: Report Routing with Primary and Alternate Phone Number, Phone 2 Backup		
Attempt	**Primary Phone Line (Phone 1)**	**Secondary Phone Line (Phone 2)**
1	1st phone number	
2	2nd phone number	
3		1st phone number
4		2nd phone number
5	2nd phone number	
6	1st phone number	
7		1st phone number
8		2nd phone number
9	2nd phone number	
10	1st phone number	

Because the D9068P automatically selects which line to use, both telephone lines must use the same dialing sequences for reporting. For example, a telephone line that requires "9" for dialing an outside line cannot be paired with a line that does not require a "9." The PBX lines and ground start telephone lines do not comply with NFPA requirements for digital communication.

When an Automatic Test Report is received by the central station every other day, and the D9068P is configured to send a Test Report daily, it indicates that one telephone line at the protected premises is inoperative. Correct this condition immediately because other critical reports might be delayed (up to 48 h) while the dialer is attempting to send the test signal through the inoperative telephone line.

4.1.2   Telephone Line Supervision

While the communicator is idle, the D9068P monitors the primary and alternate telephone lines by "sniffing" the line for trouble.

The D9068P sniffs each line every 12 sec. When a trouble remains after three samples, 36 sec, the D9068P sends a Trouble Report and activates the yellow phone line LED in addition the AX Series FACP will indicate a DACT trouble condition.

The yellow telephone line LED indicates active communication and shows line fault conditions. It flashes once every second during active communication. The LED(s) lights steadily for a line fault condition. All line faults are reported and displayed on the AX Series fire alarm control panel.

4.1.3   Wait for Dial Tone

When enabled, the Wait for Dial Tone feature verifies a dial tone is present before dialing. When there is no dial tone present after 7 sec, the D9068P hangs up and tries again after a 30-sec wait. When no dial tone is detected on the second try, the D9068P dials again. When this feature is not enabled, the D9068P waits 7 sec after disconnecting and then re-dials whether or not a dial tone is present.

4.1.4   Call Routing

Each type of event (non-supervisory alarms, supervisory alarms, alarm restoral's, supervisory restoral's, test and trouble, and trouble restoral's) can be programmed with a different call routing. For example, the alarms messages can be set for Phone 2 backup while supervisory restoral's are sent to Phone 2 only.

Phone 2 Backup is the default and recommended setting for all event types. Changing this setting can cause messages to transmit to the central station.

Each event is routed through the phone to the central station one of four ways:

1. **PHONE 1 Only:** Only uses Phone Number 1.
2. **PHONE 2 Only:** Only uses Phone Number 2.
3. **PHON 1 AND 2:** Uses both Phone Number 1 and Phone Number 2.
4. **PHN 2 BACKUP:** Primarily uses Phone Number 1 with Phone Number 2 as a backup when communication cannot be established with Phone Number 1. PHN 2 BACKUP is the default setting for the D9068P.

> Use the default setting of Phone 1 with Phone 2 as a backup. If this setting changes, the telephone lines used also change and the messages might not transmit to the central station

Refer to *Appendix D* on page 50 for more information about report steering.

4.1.5   Call Attempts

When an event must be communicated to the central station, the D9068P makes up to ten attempts to communicate with the central station until the call is answered.

Table 4 on page 19 shows the procedure the D9068P follows in attempting to communicate with the central station when it is programmed to use Phone 2 Backup (default) or Phones 1 and 2.

4.1.6   Communication Fault

When a report must be transmitted to the central station, the D9068P makes up to ten attempts to communicate (refer to *Table 4*). If after ten attempts the D9068P does not connect successfully, a communication failure occurs and a Comm Fault Report is generated. Then, the D9068P makes up to ten attempts to communicate the Comm Fault to the central station. If the D9068P does not succeed, the original report and the Comm Fault Report clear from the D9068P's buffer.

The total time from the first sequence of attempts to a communications failure is approximately 15 min. This time varies depending on how Ack Wait time is programmed. A Comm Fault Restoral Report transmits when communication restores after a communications failure.

4.1.7   Programming Fault

Programming faults indicate if specific telephone programming items are not completed.

A programming fault generates when:

- Both account numbers are not changed from their default values of 0000.
- No telephone number is programmed.
- A report is routed to Phone Number 1 and either Account Number 1 is 0000 or Phone Number 1 is invalid.
- A report is routed to Phone Number 2 and either Account Number 2 is 0000 or Phone Number 2 is invalid.
- A report is routed to Phone Numbers 1 and 2 or to Phone 1 with Phone 2 as backup. At least one of the account numbers is 0000 or one of the telephone numbers is invalid.

4.1.8   Lost Data and Limited Reports

A Data Lost Report generates when an event cannot transmit to the central station. This occurs when the:

- Reporting buffer contains the maximum of 32 events and another event occurs. The lowest priority event in the report buffer is deleted and replaced by Data Lost unless the report is already a Data Lost Report. If the new event has a higher priority than an event already in the report buffer, the lower priority event is discarded and replaced with the higher priority event. When the buffer is full, the lowest priority event is discarded when a new event occurs. The Data Lost Report is the last event sent, emptying the report

buffer. If the buffer fills again, another Data Lost Report is sent.

- D9068P sent 99 Trouble Reports in a 24-hour period and another Trouble Report generates. That report becomes a Data Lost Report. The Data Lost Report tells the central station the 100-event limit for trouble messages has been reached.

The Data Lost Reports are entered into the history buffer.

The Trouble Report counter can be reset to allow more Trouble Reports sent to the central station. A Manual Test Report resets the counter to zero. The counter is always reset at 9:00 a.m. regardless of when it is manually reset.

4.1.9   Communications Tests

The D9068P can perform two types of communications tests: Auto Test and Manual Test. These tests verify the D9068P's operation and its ability to transmit a report over the phone line to a receiver. The Auto Test occurs automatically at a fixed frequency set by the installer. The Manual Test occurs when you initiate it.

Auto Test

Auto Test is an automatic test used to verify proper operation of each phone line connected to the D9068P. The programmable parameters for Auto Test are set at the DACT-PRG Keypad. Refer to section 5.4.1 *2: AUTO TEST* on page 32.

The time automatic testing begins and the testing frequency interval are established from the DACT-PRG Keypad. This time appears in 24-hour format.

The frequency at which the Auto Test Reports are sent can be set to every 6 h, every 12 h, every 24 h, every 7 days, or every 28 days. For example, if the test time is set to 2300 (11:00 p.m.) and the test frequency is set for every 24 h, automatic testing begins at 2300 h and repeats every 24 h. There is also a Disabled option for turning off automatic testing.

> If test frequency is not programmed before test time, the first Auto Test is not performed. Setting Auto Test to 7 days, 28 days, or Disabled is not compliant with UL.

> A power failure (AC & DC) of more than 5 min can change the system time to 000. Check the system time after a power outage.

The Auto Test Report is sent even if the maximum number of Trouble Reports to be sent in a 24-hour period (100) is exceeded. If the report queue is full of reports waiting to be sent, a Data Lost Report is sent unless one is already in the queue. In this case, the Auto Test Report is not sent.

Every time an Auto Test Report is sent, the telephone line is used alternates. For example, if the first report uses

> Sending a Manual Test Report does not affect the alternating telephone line sequence of the Auto Test Report.

Phone Line 1, the second report uses Phone Line 2, and the third report uses Phone Line 1.

Unless it successfully sends the report on the first attempt, the D9068P continues to send the Auto Test

Report up to ten times. These attempts can take up to 15 min to complete. The reports priority is reevaluated for each phone call attempt. If a higher priority event occurs while attempting an Auto Test, the higher priority event is sent on the following phone call.

If the D9068P fails to send the Auto Test Report after ten tries, a Comm Fault Report is sent. The D9068P sends the Comm Fault Report using its normal report routing. When it is time for the next Auto Test attempt, it is conducted on the alternate telephone line, not the failing telephone line.

When it is time to send a report, the D9068P checks its status. When there are any alarms, troubles, or system faults present, the D9068P sends the Off Normal at Test Report instead. When all conditions are normal, the D9068P sends the Auto Test Report.

Manual Test

Initiate a Manual Communications Test from the DACT-PRG Keypad. Refer to *Section 5.5.4 3-TEST* on page 40. When a Manual Test is initiated, you are prompted to select a telephone line (Line 1 or Line 2). After a phone line is selected, a Manual Test Report is sent to the receiver using the specified telephone line.

When the Manual Test Report is successfully added to the report queue, the message COMMUNICATOR

INITIALIZING... appears on the DACT-PRG Keypad. This message remains on the keypad until the D9068P tries to transmit the report.

While the Manual Test Report is sent, the DACT-PRG Keypad Display updates to show the telephone line being used and the transmission attempt being made. The message COMMUNICATOR LINE 1, TRY 1 indicates Phone Line 1 is being used on transmission attempt 1.

After the report successfully transmits, the DACT-PRG Keypad Display updates to show COMMUNICATOR PASSED. After this message appears for 2 sec, the keypad emits a brief tone and the rotating Test Menu returns to the keypad LCD.

Unless it successfully sends the report, the D9068P twice tries sending a Manual Test Report. This can take up to 3 min. The reports' priority is reevaluated on each phone call attempt. If a higher priority event occurs while attempting a Manual Test, the higher priority event is sent on the following telephone call.

> Refer to *Appendix B* on page 44 for information on error messages or messages indicating abnormal operating conditions.

4.2   Keypad Operation

> While installing the DACT-PRG Keypad, the system does not monitor the serial connection from the AX Series Intelligent Fire Alarm Control Panel.

4.2.1   DACT-PRG LCD Keypad

The DACT-PRG LCD Keypad is an alphanumeric LCD keypad used for programming and debugging only while it is connected to the D9068P. The DACT-PRG Keypad has a two-line, 16-character display showing information on various D9068P programming functions. In most cases, the first line shows general system status information and the second line describes the specific programming menus and prompts.

Refer to *Figure 10* on page 16 to connect the DACT-PRG Keypad to the D9068P via the AX-SEB. *Figure 11* identifies and describes the DACT-PRG LCD Keypad keys.

4.2.2   Scrolling Menus

Figure 11: DACT-PRG Keypad
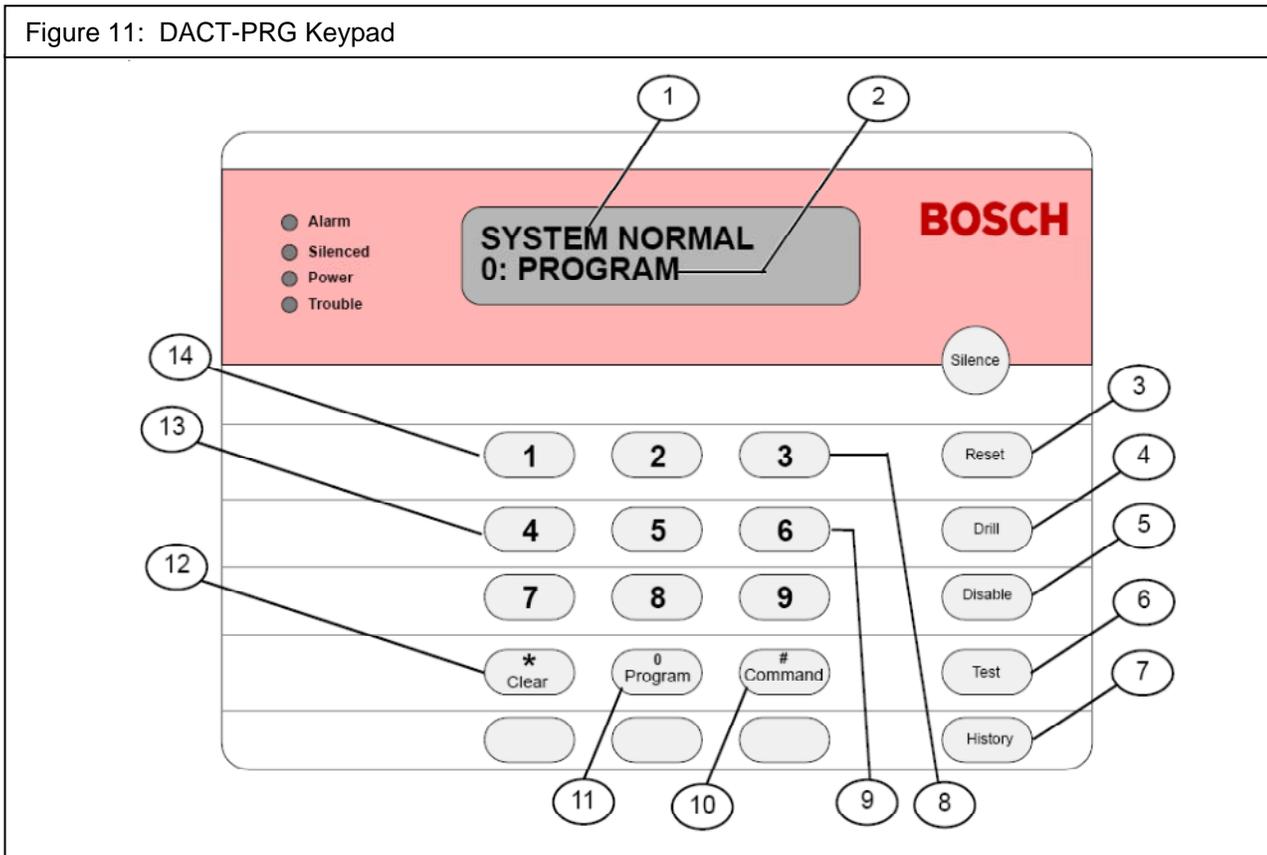
1.   *First line of display.*
2.   *Second line of display.*
3.   *[Reset] key: Initiates a manual reset of D9068P (refer to Section 4.3 Reset on page 26 for more information). Clears the character selected by the cursor (refer to Figure 12 on page 24).*
4.   *[Drill] key: Advances to the next programmable feature or character position (refer to Figure 12).*
5.   *[Disable] key: Returns to the previous programmable feature or character position (refer to Figure 12).*
6.   *[Test] key: Enters Test Mode. Pressing [Test] when entering a phone number, accesses three phone control code option. Refer to Section 5.5.4, 3-TEST on page 40 for more information.*
7.   *[History] key: Enters History Mode. Refer to Section 4.2.4 History on page 25 for more information.*
8.   *[3] key: Increases DACT-PRG backlight intensity. Press and hold [* Clear] first. Then press [3] to adjust the intensity.*
9.   *[6] key: Decreases DACT-PRG backlight intensity. Press and hold [* Clear] first, then press [6] to adjust the intensity.*
10. *[# Command] key: Accepts programming entries into D9068P. Press this key after every programming entry.*
11. *[0 Program] key: Enters the Programming Mode menu. Refer to Section 5 Programming on page 26 for programming instructions.*
12. *[* Clear] key: Cancels any programming menu without making changes. Return to the message SYSTEM NORMAL by pressing [* Clear] until SYSTEM NORMAL appears across the first line.*
13. *[4] key: Decreases DACT-PRG sounder volume. Press and hold [* Clear] first, then press [4] to adjust the volume.*
14. *[1] key: Increases DACT-PRG sounder volume. Press and hold [* Clear] first, then press [1] to adjust the volume.*

Figure 12: Additional Functions of the [Drill], [Disable], and [Reset] Keys

1 - Press [Drill] to advance the curser to the next position.
2 - Press [Disable] to move the cursor back one position.
3 - Press [Reset] to clear the character that is currently selected.
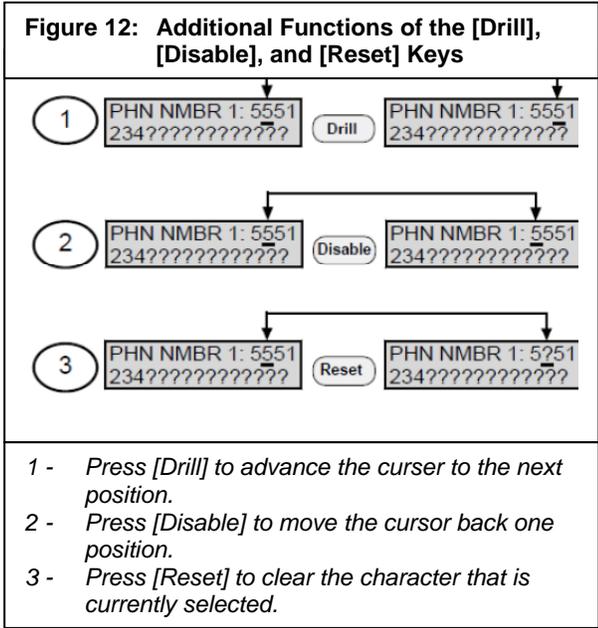
When properly connected to the D9068P, the DACT-PRG Keypad shows a scrolling menu of possible user actions along its second line. This scrolling menu is the D9068P Main Menu. The scrolling menu items flash one at a time at 1-second intervals through the list and then start over. When operating normally. SYSTEM NORMAL appears on the first line on the DACT-PRG LCD (*Figure 13).*

Figure 13: Additional Functions of the [Drill], [Disable], and [Reset] Keys

1 - Scrolling items
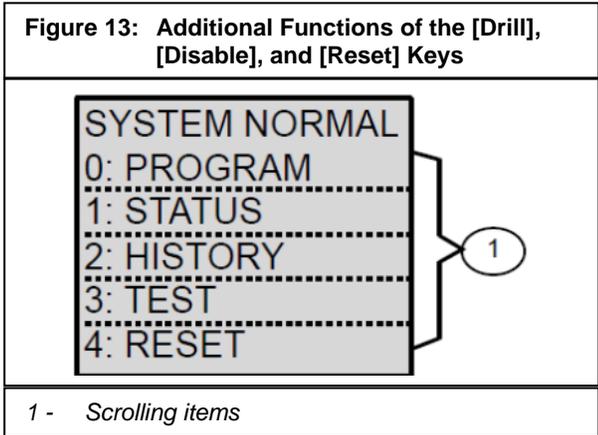
The Programming Menu and Test Menu options also flash across the second line, one at a time at 1-second intervals. The display rate speed can be adjusted. Refer to *2: DISPLAY RATE* on page 34 for more information.

4.2.3 Selecting Menu Items

Depending on which menu level you are at such as the menu, submenu, and sub-submenu, you can select an item using exclusive keys, shared keys, or submenu items.

Exclusive Keys: In the Main Menu, **Test** and **History** have an exclusive key on the DACT-PRG Keypad.

You select these options by pressing the corresponding key or the function key. For example, 3: **Test** is the third option so you press [3] from the Main Menu to open the Test Mode Menu. You can also press [Test] on the keypad (*Figure 14*).

Figure 14: Exclusive Keys

1 - From the Main Menu, press [3].
2 - On the DACT-PRG Keypad, press [Test].
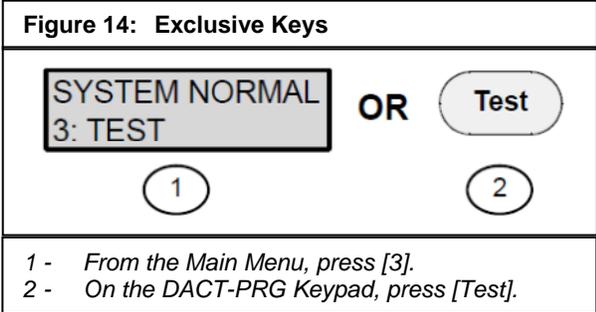
Shared Keys: The [Program] key is not exclusive, but is shared with other characters. The character sharing the corresponding key appears on the same key. To select one of these items, press the shared key. For example, the [PROGRAM] key is also the [0] key (*Figure 15*).

Figure 15: Shared Keys

1 - Press [0 Program] to enter the Programming Mode.
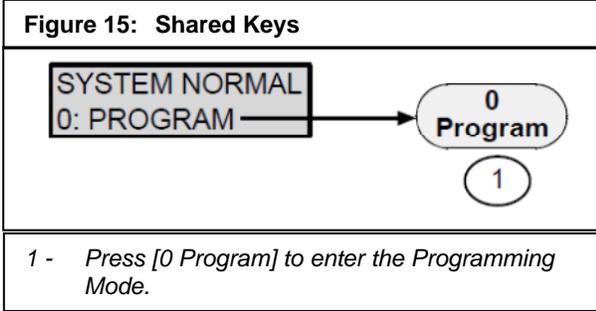
Submenu Items: The corresponding key to a submenu item can appear in the second line preceding a colon. Press the corresponding key to select that item. For example, press [1] to select PROG TIME from the Programming Mode Menu (*Figure 16*).

Figure 16: Submenu Items

1 - Corresponding key
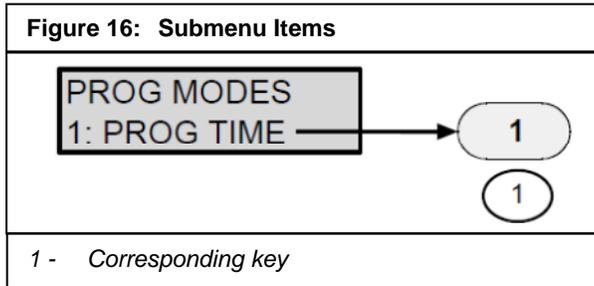
When a scrolling menu is active, it is not necessary to wait for the desired menu item to appear before making your selection. You can select any item on the current menu rotation at any time.

4.2.4 History

The history buffer can be cleared when the system loses all power (AC and DC) for more than 3 minutes.

The **History** option accesses a list of system events that occurred. To select **History**, press [2] from the Main Menu or press [History] on the keypad.

A maximum of 100 events can be stored in the history buffer.

When you enter the History Mode, the most recent system event appears on the top line of the DACT-PRG LCD. The time and date appears on the second line. As a reminder, the bottom line toggles every 4 seconds between the time and date the event occurred and the keys used to navigate through the history buffer (*Figure 17*).

Navigate the history buffer by pressing the following DACT-PRG Keypad keys:
- [Disable] moves to older events in the history buffer.
- [Drill] moves to newer events in the history buffer.
- [* Clear] finishes the History Mode and returns to the Main Menu.

Figure 17: Event History Example

1 - Total of stored events
2 - Event #
3 - Event
4 - Time
5 - Month
6 - Day
7 - Year
8 - Press [Drill] to advance to next event.
9 - Press [Disable} to show previous event.
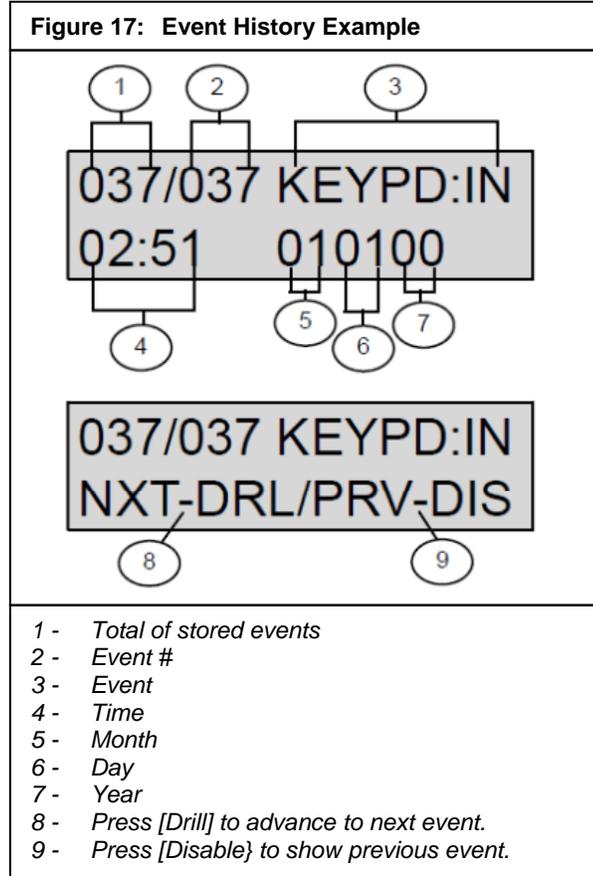
Table 5 lists the event history abbreviations.

Table 5: Event History Abbreviations	
Abbreviation	**Meaning**
A, ALRM	Alarm
AUTOTST	Auto test
ARST	Alarm restore
BATT:LOW	Battery low
BAT:RSTR	Battery restore
COMM	Communication
DATALOST	Data lost
EE2	EEPROM
F	Fire
FLT	Fault
KEYPD: IN	Keypad installed
KEYPD: RS	Keypad removed
M	Monitor
MANULTST	Manual test
SER:FL	Panel communication failure
OFFNORM	Off normal at test
PGMG:FLT	Trouble programming
PH1	Phone Line 1
PH2	Phone Line 2
RS,RST,RSTR	Restore
S	Supervisory
SYSFLT:F	Trouble input
SYSFLT:R	Trouble input restore
SYS:RSET	System reset
SYSTRB	System trouble
WDOG:RST	Automatic CPU reset (watchdog)
TRBL	Trouble
TRST	Trouble restore
W	Waterflow alarm
SER:RS	Panel communication restore

Note: Events received from the AX Series Intelligent Fire Alarm Control Panel over the serial connection are not stored in the history buffer these events are stored in the AX Series FACP history buffer.

4.3 Reset

Reset the D9068P in one of four ways:
1. At the DACT-PRG LCD Remote Keypad, press [4] to select **Reset** from the Main Menu or press [Reset]. Pressing either key resets the D9068P only when off-normal conditions are present. The system sends an Open Reset Report with the user ID parameter of 99.
2. Exiting the Test Mode. The system sends an Open Reset Report with the user ID parameter of 99.
3. Exiting the Programming Mode. The system sends an Open Reset Report with a user ID parameter of 01.
4. Powering up the D9068P, No Open Reset Report is sent.

5 Programming

5.1 Using the Keypad

All programming for the D9068P is done using the DACT-PRG LCD Remote Keypad. To properly program the D9068P, you must always press the [* Command] and [* Clear] keys in addition to the key(s) necessary to make specific programming entries.
- Press [# Command] to accept an entry into the D9068P.
- Press [* Clear] after pressing [* Command] to return to the submenu or menu selections.

Refer to *Figure 18* for the complete programming key sequence for setting the D9068P operational date.

Figure 18: Programming Key Sequence for System Date

ENTER DATE
MMDDYY: 010100
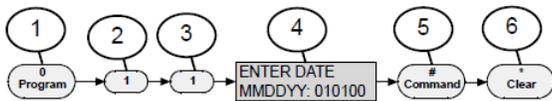
1 - Press [0 Program] to enter the Programming Mode Menu.
2 - Press [1] to enter the Prog Time Submenu.
3 - Press [1] again to select **SYSTEM** for the system date and time.
4 - Enter the current date using the keypad keys [0] to [9].
5 - Press [# Command] to enter the date into the system.
6 - Press [* Clear] to move to the next menu item, or to return to previous menus.

When you enter the Programming Menu (Level 2), you no longer need to press [0] to re-enter the Programming Menu. If you press [0] while already in the Programming Menu, the keypad emits a three-beep error tone.

When Programming Mode is entered, all monitoring ceases. The D9068P does not supervise the phone lines, or monitor the serial link between the AX Series Intelligent Fire Alarm Control Panel. The central station communication is disabled.

5.2 Programming Key Sequences

A programming key sequence is a series of keys you press to reach the desired level option. The programming key reduces repetition and provides brief instructions when programming the D9068P.

Level 1 is the Main Menu. Select [0 Program] for all system programming. The first number in the key sequence is "0". The Main Menu selections are:
- PROGRAM
- STATUS
- HISTORY
- TEST
- RESET

Level 2 is the Programming Mode Menu. It represents the second number in the key sequence. The programming options are:
- PROG TIME
- PROG TIMERS
- PROG INPUTS
- PROG RELAY
- PROG ACC'NTS
- PROG FORMATS
- PROG DEFLTS
- SERIAL CONECTN

Level 3 provides options that branch from Level 2 (*Figure 19*). The third number in the key sequence represents the option selected in Level 3.

Figure 19: Programming Key Sequence Diagram
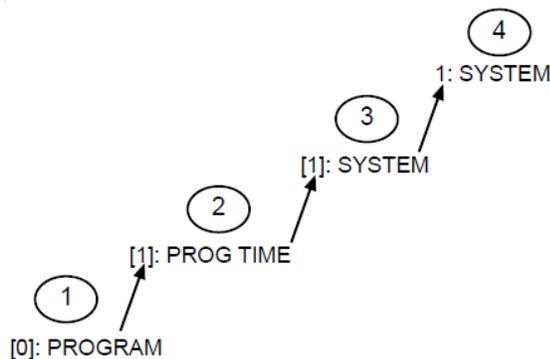
1 - Main Menu (Level 1)
2 - Programming Menu (Level 2)
3 - Prog Time Submenu (Level 3)
4 - Level 4

Level 4 includes keypad prompts that supply instructions specific to the selected menu item.

Level 5 includes submenu prompts specific to Level 4.

Not all programming menus extend to Level 4. If a menu does not reach Level 4, the instructional prompts appear on the last (highest) menu level.

The example in *Figure 19* shows the programming key sequence used to enter system settings such as the date and time. Once you enter the key sequence, follow the procedure of the specific function you are programming.

When you enter the Programming Menu (Level 2), you no longer need to press [0] to re-enter the Programming Menu. If you press [0] while already in the Programming Menu, the keypad emits a three-beep error tone.

1. At the Main Menu (Level 1), press [0] to enter the Programming Menu (Level 2).
2. At the Programming Menu, press [1] to enter the Prog Time Submenu.
3. At the Prog Time Submenu (Level 3), press [1] to select **1: SYSTEM** (Level 4).
4. Follow the keypad prompts to select system settings.
5. Press [#] to verify the setting.

5.3   Programming Menu Tree

Level 2 (Programming Menu)	**Level 3**	**Level 4**	**Level 5**

1: PROG TIME →

1: SYSTEM
2: AUTO TEST →
3: DAYLIGHT SAV

1: TEST TIME
2: TEST FREQUENCY →

TEST FREQ (_)
1: 4 HOURS
2: 12 HOURS
3: 24 HOURS
4: 7 DAYS
5: 28 DAYS
6: DISABLED

Note: Setting Auto Test to 7 days, 28 days, or Disabled is not compliant with UL.

2: PROG TIMERS →

1: AC FAIL DLY →
2: DISPLAY RATE

1: WAIT FOR DC
2: WAIT DLY TIME

3: PROG INPUTS →

NOT REQUIRED FOR AX SERIES
FACP SERIAL CONNECTION

4: PROG RELAY →

NOT REQUIRED FOR AX SERIES
FACP SERIAL CONNECTION

5: PROG ACC'NTS →

* PROG ACC'NTS is also continued on the following page

1: ACCOUNT NUMS →

1: NUMBER 1
2: NUMBER 2

2: PHONE NUMS →

1: PHONE #1
2: PHONE # 2
3: PHONE # 3

Note: Selections 1 & 5 not available when utilizing AX Series FACP serial connection

3: PHONE CONTROL →

1: PHONE 1 FORMAT →

1: 4/2 REPORT
2: SIA 110, RPRT
3: CONTACT ID
4: SIA 300, RPRT
5: MODEM III

2: PHONE 2 FORMAT →

Same as PHONE 1

⊠ Items crossed out are not currently supported

Level 2 (Programming Menu)	Level 3	Level 4	Level 5	Level 6

Level 2 (Programming Menu) **Level 3** **Level 4** **Level 5** **Level 6**

5: PROG ACC'NTS

3: PHONE CONTROL

3: PHONE 1 TONE → NOT REQUIRED FOR AX SERIES FACP SERIAL CONNECTION

4: PHONE 2 TONE → Same as Above

5: PHONE 1 TEXT

6: PHONE 2 TEXT

4: RPT STEERING

1: NONSUP ALRM →
1: PHONE 1 ONLY
2: PHONE 2 ONLY
3: PHON 1 AND 2
4: PHONE 2 BACKUP

2: SUPVSY ALRM → Same as NONSUP ALRM

3: ALRM RSTR, RST → Same as NONSUP ALRM

4: SUPVSY RSTR → Same as NONSUP ALRM

5: TEST → Same as NONSUP ALRM

6: TBL, TBL RSTR → Same as NONSUP ALRM

5: LINE CONTROL

1: LINE #1 →
1: DIALING TYPE → 1: PULSE ONLY / 2: TONE OR PULSE / 3: TONE ONLY
2: MONITOR LINE
3: WAIT DIALTONE

2: LINE #2 → Same as LINE 1

6: ACK WAIT TIME
7: RING COUNT
8: MACHINE BYPASS

| | **Level 2**
(Programming Menu) | **Level 3** | **Level 4** |

Level 2
(Programming Menu)   **Level 3**   **Level 4**

6: PROG FORMATS ●→

  1: 4/2 POINT RPT ●→   NOT AVAILABLE WITH
                         AX SERIES FACP
                         SERIAL CONNECTION

  2: 4/2 RPT CODES ●→   NOT AVAILABLE WITH
                         AX SERIES FACP
                         SERIAL CONNECTION

  3: SIA SILENC RPT ●→   1: LEFT BYTE
                         2: RIGHT BYTE

7: PROG DEFLTS ●→

  1: CLEAR HISTRY
  2: DEFAULT ALL EE
  3: ~~DEFFLT 4/2 CDES~~

8: SERIAL CONECTN ●→

  1: YES
  2: NO

5.4   Programming the D9068P

The D9068P uses scrolling menus to show the menu choices. The Main Menu shows:

```
SYSTEM NORMAL
0:  PROGRAM
1:  STATUS
2:  HISTORY
3:  TEST
4:  RESET
```

To enter the Programming Menu, press [0]. The Programming Menu shows:

```
1:  PROG TIME
2:  PROG TIMERS
3:  PROG INPUTS
4:  PROG RELAY
5:  PROG ACC'NTS
6:  PROG FORMATS
7:  PROG DEFLTS
8:  SERIAL CONECTN
```

3: PROG INPUTS, 4: PROG RELAY, 6: PROG FORMATS and **8: SERIAL CONECTN** programming areas are not utilized with the D9068P.

When you enter the Programming Menu (Level 2), you no longer need to press [0] to re-enter the Programming Menu. If you press [0] while already in the Programming Menu, the keypad emits a three-beep error tone.

5.4.1   PROG TIME

The **PROG TIME** feature provides programming options for setting the system date and time, establishing automatic testing times, and adhering to daylight savings time.
To access the **PROG TIME** programming options:
• At the Programming Menu, press [1] to select **1: PROG TIME.** The window shows:

```
DATE/TIME
1:  SYSTEM
2:  AUTO TEST
3:  DAYLIGHT SAV
```

Refer to the following sections for the **PROG TIME** programming options.

1: SYSTEM
To access **SYSTEM**, select [0]: **PROGRAM**---> **[1]: PROG TIME**--->**[1]: SYSTEM**. This option allows you to set the current date and time for system operations.

To set the current date and time for system operations:
1. At the Prog Time Submenu, press [1] to select **1: SYSTEM.** The window shows:

```
ENTER DATE
MMDDYY:  _____
```

2. Enter the date and press [# Command] to accept the entry.
3. Press [* Clear] to move to the next feature.

```
ENTER TIME
HHMM:  _____
```

4. Enter the time in 24-hour format and press [# Command] to accept the entry.
5. Press [* Clear] to return to the Prog Time (Date/Time) scrolling menu. The keypad shows the entries that were made before returning to the Prog Time Menu.

2: AUTO TEST
To access **AUTO TEST**, select **[0]: PROGRAM**---> **[1]: PROG TIME**--->**[2]: AUTO TEST**. This option allows you to set the time the Auto Test is sent and how often the Auto Test occurs.

To set the time the Automatic Test is sent and how often an Auto Test occurs:
• At the Prog Time Submenu, press [2] to select **2: AUTO TEST.** The window shows:

```
AUTOMATIC TEST
1:  TEST TIME
2:  TEST FREQUENCY
```

Refer to the following sections for the Automatic Test programming options.

2: TEST FREQUENCY

To access **TEST FREQUENCY**, select
[0]: PROGRAM--->**[1]: PROG TIME**--->**[2]: AUTO TEST**--->**[2]: TEST FREQUENCY**. Choosing this option allows you to program how often the Auto Test Reports are sent. The first test is sent when the system time matches the next programmed test time. Subsequent reports are sent to the selected intervals.

To program the frequency of Auto Test Reports:

1. At the Auto Test Submenu, press [2] to select **2: TEST FREQUENCY.** The window shows:

```
AUTO FREQ (_)
1: 4 HOURS
2: 12 HOURS
3: 24 HOURS
4: 7 DAYS
5: 28 DAYS
6: DISABLED
```
This item is currently not supported.

The **6: DISABLED** option is not currently supported.

2. Press the number key that corresponds to your selection and then press [# Command]. The revised setting appears in parentheses on the first line.
3. After programming this feature, press [* Clear] to return to the Auto Test Submenu.

1: TEST TIME

To access **TEST TIME**, select
[0]: PROGRAM--->**[1]: PROG TIME**--->**[2]: AUTO TEST**--->**[1]: TEST TIME**. This option allows you to program the time of day the Auto Tests occur and uses a 24-hour clock. For example, enter 2300 for 11:00 p.m.

To program the time an Auto Test occurs:

1. At the Auto Test Submenu, press [1] to select **1: TEST TIME.** The window shows:

```
AUTO TEST TIME
HHMM: _____
```

2. Enter the time in 24-hour format and press [# Command].
3. Press [* Clear] to return to the Auto Test Submenu.

If the test frequency is not programmed before the test time, the first Auto Test is not performed.

3: DAYLIGHT SAV

To access **DAYLIGHT SAV**, select **[0]: PROGRAM**--->**[1]: PROG TIME**--->**[3]: DAYLIGHT SAV**. This option enables the automatic adjustment of system time for daylight savings. The adjustment dates are pre-programmed into the system.

To set the system for Daylight Savings Time:

1. At the Prog Time Submenu, press [3] to select **3: DAYLIGHT SAV.** The window shows:

```
DAYLIGHT SAVING?
NO: YES (1)/NO (0)
```

2. The current setting precedes the colon (:) in the second line. Press [1] to set **DAYLIGHT SAV** to **Yes**. Press [0] to set it to **No**.
3. Press [# Command] to verify your selection.
4. After programming this feature, press [* Clear] to return to the Prog Time Submenu.

5.4.2   PROG TIMERS

The **PROG TIMERS** feature allows you to set time-related parameters for the AC Fail Delay and the Display Rate.

To set time-related parameters for AC Fail Delay and Display Rate:

•   At the Programming Menu, press [2] to select **1: PROG TIME.** The window shows:

```
PROG TIMERS
1: AC FAIL DLY
2: DISPLAY RATE
```

Refer to the following sections for the programming options.

1: AC FAIL DLY

To access **AC FAIL DLY**, select **[0]: PROGRAM**--->**[2]: PROG TIMERS**--->**[1]: AC FAIL DLY**. The window shows:

```
AC FAIL DLY(__)
1: WAIT FOR DC
2: WAIT DLY TIME
```

This option sets the number of hours the D9068P waits after an AC failure is signaled before sending an AC Failure Report.

1: WAIT FOR DC
To access **WAIT FOR DC**, select **[0]: PROGRAM** --->**[2]: PROG TIMERS**--->**[1]: AC FAIL DLY**---> **[1]: WAIT FOR DC**.

Once an AC Fail signal is received on the AC Fail input, the D9068P waits for a low battery signal. The WAIT FOR DC function causes the D9068P to wait and then send the AC Fail and Low Batt Reports simultaneously. The current setting appears in parentheses on the first line.

> When a Low Battery input, followed by an AC Fail input activates, the AC Fail Report is sent immediately.

To set the D9068P to wait and send AC Fail and Low Batt Reports simultaneously:

1. Press [1] and then [# Command]. The setting in parentheses reflects the setting.
2. After programming this feature, press [* Clear] to return to the Prog Timers Submenu.

2: WAIT DLY TIME
To access **WAIT DLY TIME**, select **[0]: PROGRAM** --->**[2]: PROG TIMERS**--->**[1]: AC FAIL DLY**---> **[2]: WAIT DLY TIME**. This option allows you to select the length of time to wait after an AC Fail signal is received before reporting the event over the phone line.

> When both the AC Fail and Low Battery events are present, the AC Fail event is reported regardless of any wait time.

> Programming WAIT DLY TIME for 00 allows the D9068P to send an AC Fail Report without delay.

To choose the length of time to wait after receiving an AC Fail signal:

1. At the AC Fail Dly Submenu, press [2] to select **2: WAIT DLY TIME** and then press [# Command]. The window shows:

```
AC  FAIL  DLY  (__)
(00-24 HRS):  _____
```
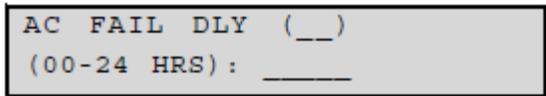
2. The current setting appears in parentheses on the first line. Enter the time and the press [# Command].

3. After programming this feature, press [* Clear] to return to the Prog Timers Submenu.

2: DISPLAY RATE
To access **DISPLAY RATE**, select **[0]: PROGRAM** --->**[2]: PROG TIMERS**--->**[2]: DISPLAY RATE**. This option allows you to set the speed (in units of 0.25 sec) at which the menu lines are updated on the LCD.

To set the speed for updating the LCD menu lines:
1. At the Prog Timers Submenu, press [2] to select **2: DISPLAY RATE**. The window shows:

```
DSPLY RATE (__)
.25 X (1-16):  _____
```
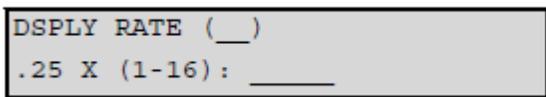
2. The current setting appears in parentheses on the first line. Enter the desired value and press [# Command].
3. After programming this feature, press [* Clear] to return to the Prog Timers Submenu.

5.4.3 PROG INPUTS
The D9068P operates via serial communications from the AX Series Intelligent Fire Alarm Control Panel, for this reason programming inputs "PROG INPUTS" should not be performed. The reporting of point, zone, and network information is handled by the AX Series FACP.

> PROG INPUTS should not be performed with the D9068P. The reporting of point, zone, and network information is handled by the AX Series FACP.

5.4.4 PROG RELAY

The D9068P operates via serial communications from the AX Series Intelligent Fire Alarm Control Panel, for this reason programming the trouble relay "PROG RELAY" should not be performed. The monitoring and reporting of D9068P troubles/faults is performed by the AX Series FACP.

> PROG RELAY should not be performed. The monitoring and reporting of D9068P troubles/faults is performed by the AX Series FACP.

5.4.5 PROG ACC'NTS

```
PROG ACC'NTS
1: ACCOUNT NUMS
2: PHONE NUMS
3: PHONE CONTROL
4: RPT STEERING
5: LINE CONTROL
6: ACK WAIT TIME
```

The **PROG ACC'NTS** feature allows you to program parameters for event reporting.

To program parameters for event reporting:

1. At the Programming Menu, press [5] to select **5: PROG ACC'NTS**.
    2. Press the number key that corresponds to your selection. Refer to the following sections for account programming information.

1: ACCOUNT NUMS
To access **ACCOUNT NUMS**, select **[0]: PROGRAM**--->**[5]: PROG ACC'NTS**--->**[1]: ACCOUNT NUMS**.
The account numbers identify the D9068P when it reports to the central station. To use account numbers to identify the D9068P when reporting the central station:

1. At the **PROG ACC'NTS** Submenu, press [1] to select **1: ACCOUNT NUMS**. The window shows:

```
ACCOUNT NUMS
1: NUMBER 1
2: NUMBER 2
```

2. Press the number that corresponds with the account number you want to set. The window shows:

```
ACCOUNT #1: 0000
NEW NUMBER: 0000
```

3. The existing number appears on the top line. Access hexadecimal digits A through F by pressing [Test]. Press [1] for A, [2] for B, [3] for C, [4] for D, [5] for E, and [6] for F.
4. Enter the new number on the second line and press [#] to verify your entry.
5. Press [* Clear] to return to the Prog Acc'nts Submenu.
6. Program Account Number 2 using the same procedure.

> 0000 is not a valid account number. At least one of the digits must be non-zero.

2: PHONE NUMS
To access **PHONE NUMS**, select **[0]: PROGRAM**--->**[5]: PROG ACC'NTS**--->**[2]: PHONE NUMS**. The system can be programmed with two reporting phone numbers. Use Phone Number 1 with Account Number 1 and Phone Number 2 with Account Number 2. Remote programming occurs on Phone Line 1 using Phone Number 3.
*   PHONE #1 is Phone Number 1.
*   PHONE #2 is Phone Number 2.
*   PHONE #3 is Phone Number 3. This phone number is not available at this time. It is reserved for future use.

> Use both telephone numbers to comply with UL and NFPA standards.

To program the system with phone numbers:
1. At the Prog Acc'nts Submenu, press [2] to select **PHONE NUMS**. The window shows:

```
PHONE NUMS
1-  PHONE #1
2-  PHONE #2
3-  PHONE #3
```

2. Press the number key that corresponds with the phone number you want to configure. In this example, [1] was pressed to select **1: PHONE #1**. The window shows:

```
PHN NMBR 1: ????
???????????????
```

3. Enter the telephone number and press [Drill] or [Disable] to move between the digits.
4. Press [# Command] when the entry is complete. Then, press [* Clear] to return to the Prog Acc'nts Submenu.

> Before exiting the Phone Numbers Programming Submenu, refer to the following information on special control codes for telephone numbers.

You can include several special control codes in the phone number by pressing [Test]. These phone control codes are:

```
PHONE CONTROL CODE
1: * CODE
2: # CODE
3: /3 SEC DELAY
```

- * CODE: Press [Test] and then [1] for Touch Tone "*" action.
- # CODE: Press [Test] and then [2] for Touch Tone "#" action.
- /3 SEC DELAY: Press [Test] and then [3] for a 3-second delay.

3: PHONE CONTROL
To access **PHONE CONTROL**, select **[0]: PROGRAM** --->**[5]: PROG ACC'NTS**--->**[3]: PHONE CONTROL**.

The following information describes the features associated with each telephone number.

To set telephone control:

1. At the Prog Acc'nts Submenu, press [3] to select **3: PHONE CONTROL**. The window shows:

```
PHONE CONTROL
1:  PHONE 1 FORMAT
2:  PHONE 2 FORMAT
3:  PHONE 1 TONE
4:  PHONE 2 TONE
5:  PHONE 1 TEXT
6:  PHONE 2 TEXT
```

> **3: PHONE 1 TONE** and **4: PHONE 2 TONE** options are not used with the D9068P. These tone settings are utilized in 4/2 format communications, which are not supported by the D9068P.

> **5: PHONE 1 TEXT** and **6: PHONE 2 TEXT** options are not used with the D9068P. Text settings are utilized in Modem IIIa^2 format communications, which is not supported by the D9068P.

2. Press the number key (1 or 2 for Phone Format) that corresponds to the phone you want to configure. In this example, **PHONE #1** is selected. The window shows:

```
PHONE FORMAT (__)
1:  4/2 REPORT
2:  SIA 110, RPRT
3:  CONTACT ID
4:  SIA 300, RPRT
5:  MODEM III
```

> The D9068P supports two protocols: Contact ID, and SIA 300. **1: 4/2 REPORT,** 2**: SIA 110, RPRT** and **5: MODEM III** PHONE FORMAT(s) are not supported by the D9068P.

3. Press the number key that corresponds to your selection. The current setting appears in parentheses on the first line. Press [# Command] to verify your selection. Then press [* Clear] to return to the Phone Control Submenu.
4. Use the Phone 1 Format instructions when setting the Phone 2 Format.

4: RPT STEERING
To access **RPT STEERING**, select **[0]: PROGRAM**
--->**[5]: PROG ACC'NTS**--->**[4]: RPT STEERING**.

You can direct the various classes of reports to specific phone numbers. The report classes are:
- **Non-supervisory Alarms:** Include fire alarms, waterflow alarms, and monitor alarms.
- **Supervisory Alarms:** Come from points that are configured as a supervisory type.
- **Non-supervisory Restoral's:** Include fire, waterflow, and monitor restoral's.
- **Supervisory Restoral's:** Come only from points that are configured as a supervisory type.
- **Trouble Reports:** Include all point and system troubles and restoral's. The tests include Auto Tests, Manual Tests, and Off-normal at Test Reports.

Refer to *Appendix D* on page 50 for the appropriate routing of each report.

To direct reports to particular telephone numbers:
1. From the **PROG ACC'NTS** Submenu, press [4] to select **4: RPT STEERING**. The window shows:

```
REPORT STEERING
1: NONSUP ALRM
2: SUPVSY ALRM
3: ALM RSTR, RST
4: SUPVSY RSTR
5: TESTS
6: TBL, TBL RSTR
```

2. Press the number key that corresponds to your selection. The window that appears depends on your choice. In this example, the non-supervisory alarm is selected. The window shows:

```
NONSUP ALRM (__)
1- PHONE 1 ONLY
2- PHONE 2 ONLY
3- PHON 1 AND 2
4- PHN 2 BACKUP
```

The options on this window are:
- PHONE 1 ONLY: Sends the report only to Phone #1.
- PHONE 2 ONLY: Send the report only to Phone #2.
- PHONE 1 AND 2: Send the report to both Phone #1 and Phone #2.
- PHONE 2 BACKUP: Sends the report to Phone #1 and then to Phone #2 if Phone #1 fails. The D9068P attempts to send the report to Phone Number 1 first, and if that attempt fails, the D9068P sends the report to Phone Number 2.

3. Press the number key that corresponds with your selection followed by [# Command]. Then press [* Clear] to return to the Report Steering Submenu.

Report Steering Menu choices 2 to 6 have the same menu options as Report Steering **1: NONSUP ALRM**. Use the instructions for NONSUP ALRM to set Report Steering Menu choices 2 through 6.

5: LINE CONTROL

To access **LINE CONTROL**, select **[0]: PROGRAM**
--->**[5]: PROG ACC'NTS**--->**[5]: LINE CONTROL**.

This option allows you to set the dialing type and line supervision for each telephone line. To set the dialing type and line supervision for phone lines:

1. From the Prog Acc'nts Submenu, press [5] to select **5: LINE CONTROL**. The window shows:

```
LINE CONTROL
1: LINE #1
2: LINE #2
```

2. Press the number key that corresponds with the line you want to configure. The example here is **LINE #1**. The window shows:

```
LINE 1 CONTROL
1: DIALING TYPE
2: MONITOR LINE
3: WAIT DIALTONE
```

The Dialing Type determines which format the D9068P uses for dialing on each telephone line. Tone/Pulse attempts tone dialing first, and then pulse dialing if tone dialing fails.

Monitor Line supervises phone line integrity.

> Use both telephone lines (enabled and supervised) for UL installations.

If Wait Dialtone is set to **Yes**, the D9068P starts dialing when it receives a dial tone. When the Wait Dialtone is set to **No**, the D9068P waits 7 sec before dialing.

3. Press [1] to select **1: DIALING TYPE**. The window shows:

```
DIAL #1 (_____)
1: PULSE ONLY
2: TONE/PULSE
3: TONE ONLY
```

4. Press the number key that corresponds with your selection followed by [# Command]. Then press [* Clear] to return to the Line Control Submenu.

5. At the Line Control Submenu, press [2] for **2: MONITOR LINE**. The window shows:

```
MONITOR LINE #1
YES: YES (1)/NO (0)
```

6. The current selection precedes the colon (:) on the second line. Press the number key that corresponds with your selection.
7. Press [# Command]. Then press [* Clear] to return to the Line Control Submenu.

8. At the Line Control Submenu, press [3] to select **3: WAIT DIALTONE**. The window shows:

```
WAIT DIALTONE #1
YES: YES (1)/NO (0)
```

9. The current selection precedes the colon (:) on the second line. Press the number key that corresponds with your selection followed by [# Command]. Then press [* Clear] to return to the Line Control Submenu.
10. Use this same procedure to configure Line #2.

6: ACK WAIT TIME

To access **ACK WAIT TIME**, select **[0]: ROGRAM --->[5]: PROG ACC'NTS--->[6]: ACK WAIT TIME**.

After the D9068P dials the telephone number, it waits for the receiver to answer the telephone and send the proper handshake tones. If the handshake is not detected, the D9068P hangs up. This parameter sets the length of time the D9068P waits before hanging up.

To set the amount of time the D9068P waits before hanging up:
1. At the Prog Acc'nts Submenu, press [6] to select **6: ACK WAIT TIME**. The window shows:

```
ACK WAIT TIME   (___)
(20-99 SECS):      ___
```

2. Enter a value between 20 and 99 for the ACK WAIT TIME and then press [# Command]. The default value is 45 sec.
3. Press the [* Clear] key to return to the Prog Acc'nts Submenu.

5.4.6   PROG FORMATS

> **PROG FORMATS** are used with 4/2 reporting, 4/2 reporting is not supported by the D9068P.

5.4.7 PROG DEFLTS

```
PROG DEFLTS
1: CLEAR HISTORY
2: DEFAULT ALL EE
3: DEFLT 4/2 CDES
```

The **PROG DEFLTS** feature clears the history logger, resets the D9068P to its default EEPROM settings, and applies default reporting codes.

1: CLEAR HISTORY
To access **CLEAR HISTORY**, select **[0]: PROGRAM**--->**[7]: PROG DEFLTS**--->**[1]: CLEAR HISTORY.** You can clear some or all of the history records in the D9068P using this option.

To clear the history logger, reset the D9068P to default settings, and apply default reporting codes:

1. At the Prog Defaults Submenu, press [1] to select **1: CLEAR HISTORY**. The window shows:

```
HIST ITEMS= _____
DEL OLDEST ###
```

2. The number on the first line shows the total number of records stored in the history logger. Enter the number of history records you want to delete and press [# Command]. Those events are erased and the D9068P returns to the Prog Defaults Menu.

2: DEFAULT ALL EE

To access **DEFAULT ALL EE**, select **[0]: PROGRAM**--->**[7]: PROG DEFLTS**--->**[2] DEFAULT ALL EE**.
This option allows you to set the D9068P to the original factory programming configuration.

All programming, including the point configurations and option selections, is lost when this operation is performed.

Date/Time settings are not affected when placing the D9068P in the default.

To set the D9068P to the original factory programming configuration:

1. At the Prog Defaults Submenu, press [2] to select **2: DEFAULT ALL EE**. The window shows:

```
DEFAULT EE?
NO: YES (1)/NO (0)
```

2. The entry preceding the colon (:) on the second line indicates the current setting. To restore the D9068P to its factory settings, press [1] and [# Command].
3. Then press [* Clear]. The window shows:

```
SETTING EEPROM
TO DEFAULT...
```

When the operation is complete, the Prog Defaults Submenu reappears.

3: DEFLT 4/2 CDES

DEFLT 4/2 CDES default setting is used with 4/2 reporting, 4/2 reporting is not supported by the D9068P.

5.4.8 SERIAL CONECTN

SERIAL CONECTN configuration programming is used to set the BOSCH D9068 DACT to work serially with BOSCH fire alarm control panels. The D9068P is an Advanced DACT designed to work with AX Series Intelligent Fire Alarm Control Panels. The D9068P does not support BOSCH FACP interfacing.

5.5 Operating Modes

The D9068P operating modes are Program, Status, History, Test, and Reset. Each mode appears as an option on the D9068P's Main Menu.

```
SYSTEM NORMAL
0- PROGRAM
1- STATUS
2- HISTORY
3- TEST
4- RESET
```

5.5.1 0- PROGRAM

When the DACT-PRG LCD Keypad is connected to the D9068P, the Main Menu appears a short time after the keypad starts up. Refer to *Section 5 Programming* on page 26 for programming instructions.

5.5.2 1- STATUS

When you select **1- STATUS**, the top line shows the highest priority off-normal condition. The second line shows each off-normal condition sequentially.
Press [* Clear] to finish the Status Mode and returns to the Main Menu.

5.5.3 2- HISTORY

When you select **2- HISTORY**, the most recent event in the history log appears. Refer to *Section 4.2.4 History* on page 25 for a detailed description of History Mode operation.

5.5.4 3- TEST

Do not select **2: TEST TONES**. This selection is for factory testing only.

When you select **3- TEST**, the window shows the test items:

```
TEST MODES
1: TEST COMM
2: TEST TONES
```

1: TEST COMM
To access **TEST COMM**, select **[3]: TEST**--->**[1]: TEST COMM**. Selecting this option allows you to initiate a Manual Communications Test.

To initiate a Manual Communications Test:
1. At the Main Menu, press [3] to select **3: TEST**. The Test Modes window appears.
2. Press [1] to select **1: TEST COMM**. The window shows:

```
SEL PHONE LINE
1: LINE 1
2: LINE 2
3: ALTERNATE
```

The ALTERNATE option uses the telephone line not used in the previous Comm Test.

3. Select the appropriate line to be tested, LINE 1 or LINE 2. You can also press [* Clear] to end testing. Once a line is selected, a Manual Communications Test is initiated and the window shows:

```
COMMUNICATOR
LINE 1, TRY 1
```

The bottom line indicates the line on which the Manual Communications Test was initiated and the current attempt (try). The D9068P makes up to two attempts before declaring a failure. When the D9068P declares a failure, the window shows:

```
COMMUNICATOR
FAILED
```

This message appears briefly, then the LCD returns to the Test Modes Menu.

If the Manual Communications Test passes, the window shows:

```
COMMUNICATOR
PASSED
```

This message appears briefly, and then the LCD returns to the Test Modes Menu.

For more information about the types of communications tests the D9068P can perform, refer to *Section 4.1.9 Communications Tests* on page 21.

5.5.5 4- RESET

You can manually reset the D9068P by either selecting **RESET** from the Main Menu or pressing [Reset] on the DACT-PRG Keypad. Refer to *Section 4.3 Reset* on page 26 for a details description on resetting the D9068P.

6   Appendix A: Troubleshooting

Do not use this section as an acceptance testing procedure. This information is provided as a general guide to help you determine, recognize, and resolve a D9068P during installation, maintenance, and normal standby.

6.1   On-Board LEDs

The D9068P has four on-board LEDs to indicate various conditions.

Line 1 LED: This LED blinks when a report is being sent out on Line 1. When a line fault condition occurs on Line 1, this LED lights steadily in conjunction with the Sys Trouble LED, and of course AX Series FACP DACT trouble. If the Line 1 LED lights steadily:

1. Use a voltmeter to measure the voltage present across each telephone line (Tip to Ring), while the telephone line is idle.

> Caution: The voltage present while there is an incoming call can be more than 100 VAC.

    Ensure the standby telco battery voltage is between 30 VDC and 50 VDC. The D9068P accepts any voltage over 6 VDC. The voltage polarity does not matter.
2. Check for other devices that are using the telephone line such as fax machines, credit card verifiers, or PBX systems.
    NFPA 72 requires a dedicated telephone line for fire reporting. If the devices sharing the telephone line cannot be removed, ensure they are wired so the D9068P's line seizure relay disconnects them when needed.
    Measure the line voltage while these devices are in use, and verify it remains above 6 V.
3. Check for intermittent faults on the phone line. Make a test call to verify the line is free of distortion and noise. Temporarily swap Lines 1 and 2 on the D9068P to check if the problem indication moves to the D9068P's other telephone line channel. If the problem indication moves, the telephone line is causing the problem rather than the line monitor.
    Ensure the fault message is PHONE FAULT and not COMM FAULT. Set report steering for all events to Phone 1 Only if only one telephone number is available for reporting.

COMM FAULT can also happen if one of the phone lines has telco battery voltage, but does not complete a call. Make test calls to the receiver(s) on both telephone lines, listening for the receiver ACK tone.

4. Verify two phone lines are available.
    NFPA 72 requires the Auto Test Report be sent on a different telephone line each time it is sent. If only one telephone line is connected to the D9068P, a COMM FAULT is generated on every other test call.

Line 2 LED: This LED blinks when a report is sent on Line 2. When a line fault condition occurs on Line 2, this LED lights steadily along with the System Trouble LED, and the AX Series DACT trouble. When the Line 2 LED lights steadily, refer to the preceding steps for Line 1 LED.

Heartbeat LED: This LED illuminates and blinks if the D9068P is functioning properly. When not illuminated:
*   Check the D9068P's main power. Refer to *Table 1* on page 6.
*   Verify there are no wire faults in the power connections.
*   Refer to *Section 1.2.1 Power* on page 6 for additional power requirements.

Sys Trouble LED: This LED is off when the D9068P operates properly, and lights steadily for D9068P system (DACT) trouble. It also operates with the D9068P's on-board trouble relay (which is not required, as the AX Series Intelligent Fire Alarm Control Panel processes and displays via its LCD display these troubles). The number of times the Sys Trouble LED flashes determines which trouble condition is indicated. Refer to *Table 6* on the following page.

Table 6: Sys Trouble LED Indications		
No. of Flashes	Indicates	Description
2	Internal RAM Test Failure	The internal RAM failed. This failure can occur any time. During failure, the D9068P continuously cycles through its start-up routine. Each time the start-up routine takes place, the SYS TROUBLE LED flashes two times. Contact Advanced Technical Support immediately at (508) 453-9995.
3	External RAM Test Failure	The external RAM failed. This failure can occur any time. During failure, the D9068P continuously cycles through its start-up routine. Each time the start-up routine takes place, the SYS TROUBLE LED flashes three times. Contact Advanced Technical Support immediately at (508) 453-9995.
4	ROM Checksum Failure	The ROM checksum failed. This failure can occur at any time. During failure, the D9068P continuously cycles through its start-up routine. Each time the start-up routine occurs, the SYS TROUBLE LED flashes four times. Contact Advanced Technical Support immediately at (508) 453-9995.
5	EEPROM Checksum Failure	An EEPROM Test is performed every 10 minutes. If the checksum fails, the D9068P automatically defaults. The SYS TROUBLE LED illuminates and TROUBLE PROGRAMMING appears on the keypad. You must reprogram all configuration settings. If this failure occurs often, contact Advanced Technical Support immediately at (508) 453-9995.

6.2   Input Points

Input Points are not supported by the D9068P. The reporting of point, zone, and network information is handled by the AX Series FACP.

6.3   Trouble Relay

Trouble Relay operation is not used with the D9068P. The monitoring and reporting of D9068P troubles/faults is performed by the AX Series FACP.

6.4   Manual Test Report Failure

If the D9068P fails to send the Manual Test Report in two attempts or the [* Clear] key is pressed, the report transmission is aborted. A COMM FAULT message is not sent. The DACT-PRG Keypad emits a three-beep tone and the message COMMUNICATOR FAILED appears. After 2 sec, the keypad display is updated to show CLEARING ALL REPORTS!! Any report in the report queue, including the Manual Test Report, is deleted. The rotating Test Menu appears after 2 sec.

6.5   Reports in Queue

If there are any reports in the queue, the DACT-PRG Keypad shows the message REPORTS IN QUEUE PLEASE WAIT. The D9068P then waits for these reports to be sent. If you press [* Clear] on the DACT-PRG Keypad, the wait ends, the DACT-PRG Keypad emits a three-beep tone, and the keypad's LCD shows the message, ERROR DURING COMM TEST. The rotating Test Menu returns to the keypad's LCD after showing the message for 2 sec.

When the report queue is empty, the D9068P prompts you to select the telephone line to be used (either Line 1 or Line 2). The D9068P can also prompt you to alternate the telephone lines. For details, refer to *1: TEST COMM* on page 40. When the third option (**ALTERNATE**) is selected, the telephone line is switched from the line used in the last Manual Test Report to the other line. This switch occurs whether you select the line number or **ALTERNATE**. Pressing [* Clear] instead of a selection key switches between Line 1 and Line 2. Sending an Auto Test does not affect the phone line sequence of the Manual Test Report. When the line selection is complete, the Manual Test Report is added to the report queue.

If the report queue is full of reports to send, a Data Lost Report is sent unless one is already in the queue and the Manual Test Report is not sent. The Data Lost Report goes in the History Log when it is added to the report queue.

6.6   Error During Comm Test

When a Manual Test is requested, the D9068P verifies there is at least one good phone line. If not, the DACT-PRG Keypad emits a three-beep tone and ERROR DURING COMM TEST appears for 2 sec. The rotating Test Menu returns to the keypad's LCD.

7 Appendix B: D9068P Reporting

As indicated previously, the D9068P reports in SIA 300 or Contact-ID formats.

SIA 300 Format Reporting (AX Series FACP Zone and Point Reporting)

Data Range of D9068P DACT/ reporting format:
- Zone reference is reported in the range of 1-9999 (i.e. AX Series zone number)
- Device Address is reported in the range 1-9999 (i.e. AX Series point address)

Events are reported by point however, sub-address information is not reported.

Note: The non-reporting of sub-addresses can lead to some confusing reports and must be explained to the central station, for example; if all NAC circuits are disabled then four events will be reported (one for each circuit) but each report will be against the same zone address (i.e. the panel zone number), not the individual address of the NAC circuit (assigned by the AX Series FACP). Each report will be identical unless each NAC circuit is set to a different zone.

Contact-ID Reporting (AX Series FACP Node and Zone Reporting)

Data Range of D9068P DACT/ reporting format:
- Node reference is reported in the range 1-99 (any reports of nodes greater than 99 will be reported as node 99).
- Zone reference is reported in the range 1-999 (zone 1000 will be reported as zone 999). **DO NOT USE ZONE 1000.**

If multiple alarms/events occur from a number of different devices, each alarm/event is reported via the D9068P DACT – if new alarms/events are from the same node & zone then the reports will look identical.
When the panel is reset following the alarm, or an alternative event returns to normal, the restoral will only be reported once the zone has returned normal (i.e. a restoral is only issued if it is valid for the whole zone).

The same restriction regarding sub-addressing in SIA reporting applies to Contact-ID (i.e. no sub-address information will be transmitted to the central station).

D9068P Reporting Codes Cross-Reference

Table 7: Reporting Summaries			
AX Series FACP Event Type	DACT Report Description	SIA Code	Contact ID Code
Alarm and Supervisory Reporting			
Alarm (pull station or detector)	Point Fire Alarm	*FA pppp	1 110 nn zzz
Alarm Restoral	Point Fire Alarm Restore	*FR pppp	3 110 nn zzz
Supervisory	Point Supervisory Alarm	*SS pppp	1 200 nn zzz
Supervisory Restoral	Point Supervisory Alarm Restore	*SR pppp	3 200 nn zzz
Monitor Module	Point Monitor Alarm	*UA pppp	1 140 nn zzz
Monitor Module Restoral	Point Monitor Alarm Restore	*UR pppp	3 140 nn zzz

Table 7: Reporting Summaries Continued			
AX Series FACP **Event Type**	**DACT** **Report Description**	**SIA** **Code**	**Contact ID** **Code**
Point Trouble Reporting			
Activation of: Device Dirty Device Trouble Device Missing New Device NAC Module Trouble NAC Module Lost Input Module Trouble Double Address Type Change EEPROM Mode Not Ready Too High Too Low Fail to Open Fail to Close	Point Monitor Trouble	*UT pppp	1 373 nn zzz
Restoral of: Device Dirty Device Trouble Device Missing New Device NAC Module Trouble NAC Module Lost Input Module Trouble Double Address Type Change EEPROM Mode Not Ready Too High Too Low Fail to Open Fail to Close	Point Monitor Restore	*UR pppp	3 373 nn zzz
Disable and Ground Fault Reporting			
Disable	Point Monitor Disable	*FB pppp	1 571 nn zzz
Disable Restoral	Point Monitor Disable Restore	*FH pppp	3 571 nn zzz
Ground Fault	Ground Fault Trouble	*IA aaaa	1 310 nn 000
Ground Fault Restoral	Ground Fault Trouble Restore	*IR aaaa	3 310 nn 000

Table 7: Reporting Summaries Continued			
AX Series FACP Event Type	**DACT Report Description**	**SIA Code**	**Contact ID Code**
System Trouble Reporting			
Low/No Battery	Low Battery	*YT aaaa	1 302 nn 000
Low/No Battery Restoral	Low Battery Restore	*YR aaaa	3 302 nn 000
Power Supply Trouble	AC Fail	*AT aaaa	1 301 nn 000
Power Supply Trouble Restoral	AC Fail Restore	*AR aaaa	3 301 nn 000
Activation of: Corrupt Data Open Circuit Short Circuit Circuit Overload NAC Internal Trouble NAC Internal Lost PSU Input Trouble System Programming	System Trouble	*IA aaaa	1 300 nn zzz
Restoral of: Corrupt Data Open Circuit Short Circuit Circuit Overload NAC Internal Trouble NAC Internal Lost PSU Input Trouble System Programming	System Trouble Restore	*IR aaaa	3 300 nn zzz
Display Error CPU Reset	System Trouble	*IA aaaa	1 300 nn zzz
Display Error CPU Restoral	System Trouble Restore	*IR aaaa	3 300 nn zzz
Program Error Config. Error	EEPROM Failure	*IA aaaa	1 307 nn 000
Program Error Config. Error Restoral	EEPROM Failure Restore	*IR aaaa	3 307 nn 000
Network Lost, Node Lost, Trbl.	System Trouble Comm Fault	*NT aaaa	1 300 nn zzz
Network Restoral	System Trouble Comm Fault Restore	*NR aaaa	3 300 nn zzz
Switch/Button Activation Reporting			
Reset	Open Reset	*OR 0000	1 401 nn 000
Drill	Fire Drill	FI aaaa	1 607 nn 000
Drill Restoral	Fire Drill Restore	FK aaaa	3 607 nn 000

Report Summary Notes:

SIA Reporting –
- * = All code numbers reporting include a prefix "RI aaaa" area (zone) parameter. This is only sent when the area (zone) parameter is greater than zero.
- pppp = AX Series device number (device address). (1-9999)
- aaaa = AX Series zone number assigned to individual devices and the panel. (1-9999)

Contact ID Reporting –
- nn = AX Series network node number (panel, annunciator, ipGateway, etc. number). (1-99)
- zzz = AX Series zone number assigned to individual devices and the panel. (1-999)

AX Series Base Card On-board Circuit Addresses

The below information may be required for deciphering certain reports sent to the central station regarding Base Card on-board troubles:

Table 8: On-board Circuit Addresses	
Address	Circuit Use
1	On-board Sounder Circuits (NACs) - General
2	On-board Sounder Circuits (NACs) – Overload Monitor
3	Battery
4	Charger
5	Ground Fault Monitor
6	Aux Power Overload Monitor
7	SLC Loop Overload Monitor
8	SLC Loop Volts OUT Monitor
9	SLC Loop Volts IN Monitor
10	Front Panel Inputs (contact inputs on back of display)
11	On-board Relays
12	General Loop Driver Address
13	General Control Panel Address
14	AC Mains Monitor
15	Front Panel Control Keys
16	Not Used
17	Reserved for Future
18	Reserved for Future
19	Not Used
20	DACT Address (this address reports on a D9068P trouble)
21	Network Earth Monitor Address

8 Appendix C: D9068P Programming Defaults

This appendix contains the programming defaults for the D9068P. Use D9068 Program Record Sheet (P/N: 46086) to record programming entries.

Program Time
  • System Date*: 01 01 00
  • System Time*: 0000
* Once the user enters the system date and time, resetting the D9068P to its default settings does not reset the system date and time. The system time can be corrupted if the AC & DC power fails for more than 5 minutes.

Auto Test
  • Auto Test Time: 0400
  • Auto Test Frequency: 24 hours

Daylight Savings: No

Timers
  • AC Fail Delay: 6 hour
  • Display Rate: 1 second

Program Inputs (Configure)
  • Point 1:   Waterflow
  • Point 2:   Fire
  • Point 3:   Supervisory
  • Point 4:   Fire
  • Point 5:   Fire

Program Inputs (Supervised)
  • Point 1:   No
  • Point 2:   No
  • Point 3:   No
  • Point 4:   No
  • Point 5:   No

Configure Relay: Release on Trouble

Program Accounts
  • Account #1:   0000
  • Account #2:   0000

Phone Numbers
  • Phone #1:   ?????????
  • Phone #2:   ?????????
  • Phone #3:   ?????????

Phone Control
  • Phone #1 Format: SIA 300
  • Phone #2 Format: SIA 300
  • Phone #1 Tone: 19D, 14A, 10PS
  • Phone #2 Tone: 19D, 14A, 10PS
  • Phone #1 Text: No
  • Phone #2 Text: No

Report Steering
  • Non-SUP Alarm: Phone 2 Backup
  • Supervisory Alarm: Phone 2 Backup
  • Alarm Restor, Reset: Phone 2 Backup
  • Supervisory Restore: Phone 2 Backup
  • Tests: Phone 2 Backup
  • Trbl, Trbl Restore: Phone 2 Backup

Line Control
  • Line 1 Dialing Type: Tone/Pulse
  • Line 2 Dialing Type: Tone/Pulse
  • Line 1 Monitor Line: Yes
  • Line 2 Monitor Line: Yes
  • Line 1 Wait Dial Tone: Yes
  • Line 2 Wait Dial Tone: Yes

ACK WAIT TIME: 45 seconds

Program Formats (4/2 Point Rpt)
  • Fire Alarm Digit 1:   0
  • Fire Rstrl Digit 1:   3
  • Waterflow Digit 1:   0
  • Supervise Digit 1:   0
  • Trouble Digit 1:   6
  • Trbl Rstrl Digit 1:   3
  • Disable Digit 1:   B
  • Disable Rtrl Digit 1:   3
  • Monitor Digit 1:   0
  • Zone 1 Digit 1:   1
  • Zone 2 Digit 1:   2
  • Zone 3 Digit 1:   3
  • Zone 4 Digit 1:   4
  • Zone 5 Digit 1:   5

Program Formats (4/2 Rpt Codes Group 1)
  • System in Tst: F1
  • Sys Tst Rstrl: E1
  • Silence: 9F
  • Fire Drill: F2
  • Fire Drill Rstl: E2
  • Open Reset: 9F
  • Low Batt: F9
  • Low Batt Rstrl: E9
  • AC Fail: F8
  • AC Fail Rst: E8
  • Auto Tst Rpt: EE
  • Off Norm Tst: FD
  • Phone 1 Trbl: FB
  • Phone 1 Trbl Rstrl: EB
  • Phone 2 Trbl: FC
  • Phone 2 Trbl Rstrl: EC
  • System Trbl: FD
  • System Trbl Rstrl: ED

Program Formats (4/2 Rpt Codes Group 3)
- • Man Tst Rpt: FE
- • Data Lost: FF
- • EEPROM Fail: FD
- • Reset Reboot: ED
- • ~~Smk Pwr Trbl:~~   ~~FD~~
- • ~~Smk Pwr Trbl Rstr:~~   ~~ED~~
- • ~~Gnd Flt Trbl:~~   ~~FD~~
- • ~~Gnd Flt Rstrl:~~   ~~ED~~
- • ~~Trbl Input Rpt:~~   ~~FD~~

Program Formats (4/2 Rpt Codes Group 4)
- • Trbl Input Rtrl: ED
- • Analog Servc: FD
- • ~~Analog Rstrl:~~   ~~ED~~
- • Equip Fail: FD
- • Equip Restore: ED
- • Network Fail: FD
- • Network Restor: ED
- • Sens Bus Rpt: FD
- • Sens Bus Rstrl: ED

Program Formats (4/2 Rpt Codes Group 5)
- • Rmt Prg Fail: FD
- • ~~Rmt Prg Succ:~~   ~~ED~~
- • ~~Unknown Flt:~~   ~~FF~~

SIA Silence Report
- • Left Byte: 4B
- • Right Byte: 42

SERIAL CONECTN   No

Items crossed out are not supported.

9   Appendix D: Report Routing

The information in this appendix shows the mapping of point-related and non-point-related events to their respective report routing group, lists the priority level of each event, and identifies the reporting limit for specific types of events.

Point-Related Report Routing

Point-Related Events

Report Description	Report Routing	Report Priority
Point Fire Alarm	NONSUP ALRM	0
Point Waterflow Alarm	NONSUP ALRM	0
Point Supervisory Alarm	SUPVSY ALRM	3
Point Monitor Alarm	NONSUP ALRM	3
Point Fire Trouble*	TBL, TBL RSTR	3
Point Waterflow Trouble*	TBL, TBL RSTR	3
Point Supervisory Trouble*	TBL, TBL RSTR	3
Point Monitor*	TBL, TBL RSTR	3
Point Fire Dirty Report*	TBL, TBL RSTR	3
Pont Fire Disable*	TBL, TBL RSTR	3
Point Fire Alarm Restore	ALM RSTR, RST	4
Point Waterflow Restore	ALM RSTR, RST	4
Point Supervisory Restore	SUPVSY RSTR	4
Point Monitor Restore	SUPVSY RSTR	4
Point Fire Trouble Restore*	TBL, TBL RSTR	4
Point Waterflow Trouble Restore*	TBL, TBL RSTR	4
Point Supervisory Trouble Restore*	TBL, TBL RSTR	4
Point Monitor Trouble Restore*	TBL, TBL RSTR	4

* Event is limited to a total of 100 reports sent in a 24-hour period. If this limit is exceeded, the 100th event is replaced with a Data Lost Report.

Non-Point Related Report Routing

Non-Point-Related Events

Report Description	Report Routing	Report Priority
System Test	TESTS	4
System Test Restore	TESTS	4
Silence	TESTS	4
Fire Drill	TESTS	4
Open Reset	ALM RSTR, RST	4
Low Battery*	TBL, TBL RSTR	3
Low Battery Restore*	TBL, TBL RSTR	3
AC Fail*	TBL, TBL RSTR	3
AC Fail Restore*	TBL, TBL RSTR	3
Auto Test	TESTS	4
Off Normal at Test	TESTS	4
Phone 1 Trouble*	TBL, TBL RSTR	3
Phone 2 Trouble*	TBL, TBL RSTR	3
Phone 1 Restore*	TBL, TBL RSTR	3
Phone 2 Restore*	TBL, TBL RSTR	3
Manual Test* **	TESTS	4
Data Lost	TBL, TBL RSTR	6
EEPROM Failure*	TBL, TBL RSTR	3
System Reset, Reboot	TBL, TBL RSTR	3
Equipment Fail*	TBL, TBL RSTR	3
Equipment Restore*	TBL, TBL RSTR	3
Network Failure*	TBL, TBL RSTR	3
Sensor Bus Failure*	TBL, TBL RSTR	3
Trouble Input*	TBL, TBL RSTR	3
Trouble Input Restore*	TBL, TBL RSTR	3
System Trouble Keypad*	TBL, TBL RSTR	3
System Restore Keypad*	TBL, TBL RSTR	3
System Trouble Comm Fault*	TBL, TBL RSTR	3
System Restore Comm Fault*	TBL, TBL RSTR	3
System Trouble Programming*	TBL, TBL RSTR	3
System Restore Programming*	TBL, TBL RSTR	3

* Event is limited to a total of 100 reports sent in a 24-hour period. If this limit is exceeded, the 100th event is replaced with a Data Lost Report.

** Event resets the count of limited reports and can send 100 additional reports.

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