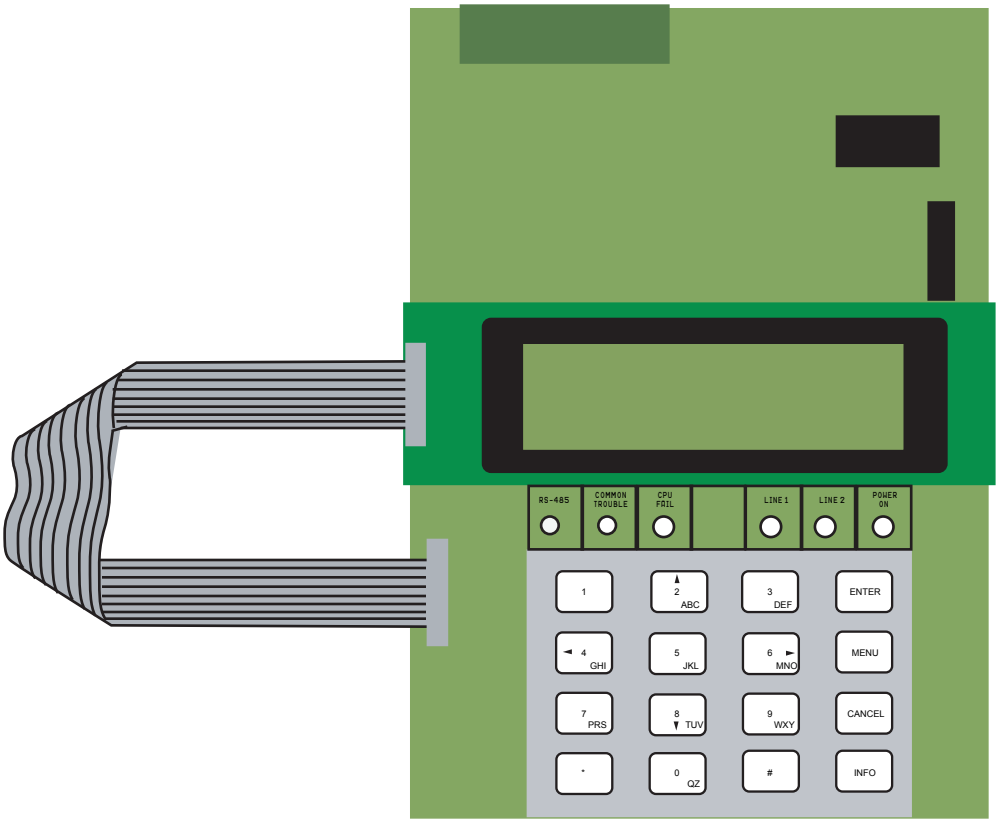
UDACT-9100

Digital Alarm Communicator Transmitter

INSTALLATION and OPERATION MANUAL



NOTICE
All information, documentation, and specifications contained in this manual are subject to change without prior notice by the manufacturer.

Novmber 2008
LT-888POT Rev. 2

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Industry Canada and FCC Notice

Notice for all UDACTs Sold in Canada

Potter's ***UDACT-9100 Digital Communicator*** described in this manual is listed by Underwriters Laboratories Canada (ULC) for use in slave application in conjunction with a Listed Fire Alarm Control Panel under Standard ULC-S527 (Standard for Control Units for Fire Alarm Systems) and ULC/ORD-C693-1994 (Central Station Fire Protective Signalling Systems and Services). These Communicators should be installed in accordance with this manual; the Canadian / Provincial / Local Electrical Code; and/or the local Authority Having Jurisdiction (AHJ).

Industry Canada Notice

Repairs to certified equipment should be made by an authorized Canadian maintenance facility designated by the supplier. Any repairs or alteration made by the user to this equipment, or equipment malfunctions, may give the telecommunications company cause to request the user to disconnect the equipment. Users should ensure for their own protection that the **Earth Ground** connections of the power utility, telephone lines and internal metallic water pipe system, if present, are connected together. This is necessary both for proper operation and for protection.

NOTICE: This equipment meets the applicable Industry Canada Terminal Equipment Technical Specifications. This is confirmed by the registration number. **IC: 1156A-UD300A** The abbreviation, IC, before the registration number signifies that registration was performed based on a Declaration of Conformity indicating that Industry Canada technical specifications were met. It does not imply that Industry Canada approved the equipment.

NOTICE: The Ringer Equivalence Number (REN) for this terminal equipment is **0.2**. The REN assigned to each terminal equipment provides an indication of the maximum number of terminals allowed to be connected to a telephone interface. The termination on an interface may consist of any combination of devices subject only to the requirement that the sum of the Ringer Equivalence Numbers of all the devices does not exceed five.

Notice for all UDACTs Sold in the U.S.A.

Note: The Ringer Equivalence Number (REN) for this product is 0.2

Potter's ***UDACT-9100 Digital Communicator*** described in this manual is listed by Underwriters Laboratories Inc. (ULI) under Standard 864 (Control Units for Fire Protective Signaling Systems). These Communicators comply with the National Fire Protection Association (NFPA) performance requirements for DACTs and should be installed in accordance with NFPA 72 Chapter 4 (Supervising Station Fire Alarm System). These Communicators should be installed in accordance with this manual; the National Electrical Code (NFPA 70); and/or the local Authority Having Jurisdiction (AHJ).

FCC Notice

This equipment complies with the Federal Communications Commission (FCC) rules and regulations governing telephone equipment and the Technical Requirements for Connection to the Telephone Network published by the industry's Administrative Council for Terminal Attachments (ACTA). On the door of this equipment is a label that contains, among other information, a product identifier in the format **US:1M8AL02BUDACT300A**. If requested, this number must be provided to the telephone company. This equipment is capable of seizing the line. This capability is provided in the hardware.

The Ringer Equivalence Number (REN) assigned to each terminal device provides an indication of the maximum number of devices that may be connected to a telephone line. Excessive REN's on a telephone line may result in the devices not ringing in response to an incoming call. In most, but not all areas, the sum of REN's should not exceed five (5.0). To be certain of the number of devices that may be connected to a line, as determined by the total REN's contact the local telephone company. **The REN for this product is 0.2**

Telephone Company Procedures: The goal of the telephone company is to provide you with the best service it can. In order to do this, it may occasionally be necessary for them to make changes in their equipment, operations or procedures. If these changes might affect your service or the operation of your equipment, the telephone company will give you notice, in writing, to allow you to make any changes necessary to maintain uninterrupted service.

In certain circumstances, it may be necessary for the telephone company to request information from you concerning the equipment which you have connected to your telephone line. Upon request of the telephone company, provide the FCC registration number and

the ringer equivalence number (REN); both of these items are listed on the equipment label. The sum of all of the REN's on your telephone lines should be less than five in order to assure proper service from the telephone company. In some cases, a sum of five may not be usable on a given line.

If Problems Arise: If any of your telephone equipment is not operating properly, you should immediately remove it from your telephone line, as it may cause harm to the telephone network. If the telephone company notes a problem, they may temporarily discontinue service. When practical, they will notify you in advance of this disconnection. If advance notice is not feasible, you will be notified as soon as possible. When you are notified, you will be given the opportunity to correct the problem and informed of your right to file a complaint with the FCC. Contact your telephone company if you have any questions about your phone line. In the event repairs are ever needed on the Communicator, they should be performed by Mircom Technologies Ltd. or an authorized representative of Potter Electric Signal Company For information contact Potter Electric Signal Company at the address and phone numbers shown on the back page of this document.

Introduction and Features

UDACT-9100 is a single board Digital Communicator that can connect to a Potter Fire Alarm Control Panel (FACP) such as PFC-9000 and PFC-5000, via an RS-485 data link and common relay connection on a single ribbon cable. It can transmit Zoned Alarm, Supervisory and Trouble information on two telephone lines to a Digital Alarm Communicator Receiver (DACR).

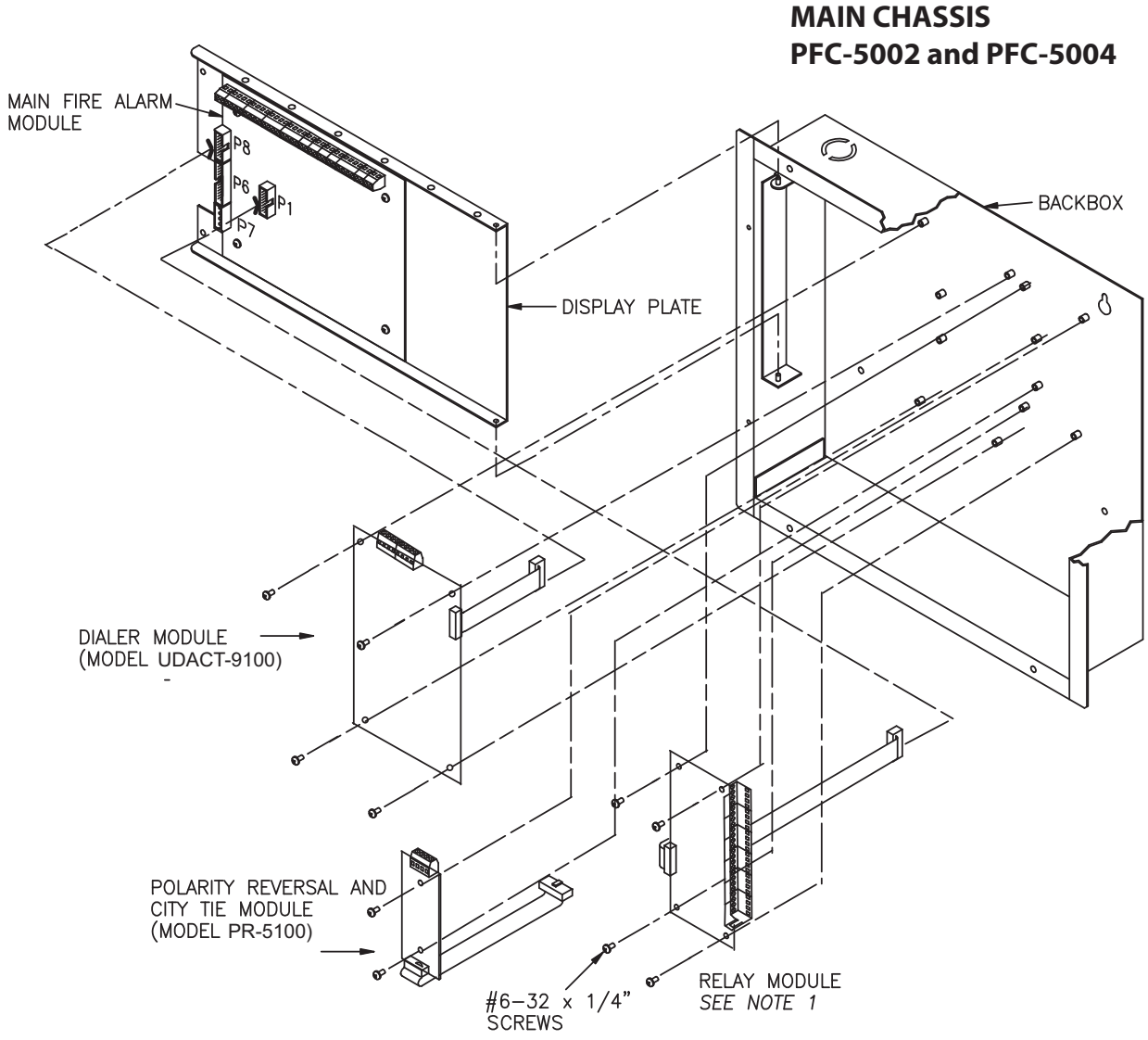
Features:

- Receives events from the FACP via an RS-485 data link and common relay connection.
- Communicates to a DACR using **Ademco Contact ID** or **SIA DCS** reporting protocols (300 baud or 110 baud rate).
- The UDACT-9100 has the ability of disconnecting the incoming and outgoing calls and capturing the line for transmission to the DACR.
- Provides telephone line monitoring and reports status via LED indication on-board, yellow for trouble and red for dialing out.
- User configurable locally by on-board keypad and a **CFG-LCD Configuration Tool** or using a **UIMA** and computer with serial port or USB. Remotely configurable via a Personal Computer modem.
- Provides event logs of 500 entries each to save events from local dialer or remote fire alarm panel. These logs can be reviewed locally with CFG-LCD Configuration Tool or remotely via modem.

Mechanical Installation and Dimensions

The **UDACT-9100** board is a single PCB assembly, which is a replacement for the UDACT-9000. Any reference pertaining to the UDACT-9000 regarding mechanical mounting can be adhered to. Its mechanical installation is determined by the Fire Alarm Control Panel (FACP) it will be installed in, and is described in the appropriate FACP Installation Manual. Figure 1 below shows the mechanical installation for an PFC-5002 and PFC-5004 FACP.

Figure 1: UDACT-9100 Mechanical Installation



Notes:

1. Front plate is not shown.
2. Reserved for PR-5000andUDACT9100
3. Other circuit adder modules may be:
   - ZA-9008 Detection Circuit Adder Module
   - IDC-9004 Signal Circuit Adder Module
   - ARM-9008 Relay Circuit Adder Module
   - SLA-127P SINGLE LOOP ADDER MODULE
   - DLA-254P LOOP ADDER MODULE

Connections and Settings

UDACT-9100 MAIN BOARD:

There are two jumpers on the UDACT-9100 which are used for operation/configuration purposes. Jumper JW1 is used to reset the default passcode. Jumper JW2 is required for configuring the UDACT-9100. Refer to the **Figure 2** for location of jumpers, cable connections, pushbutton and LEDs. Table 1 following, provides a description of the user items on the UDACT-9100.

Figure 2: UDACT-9100 Board Layout

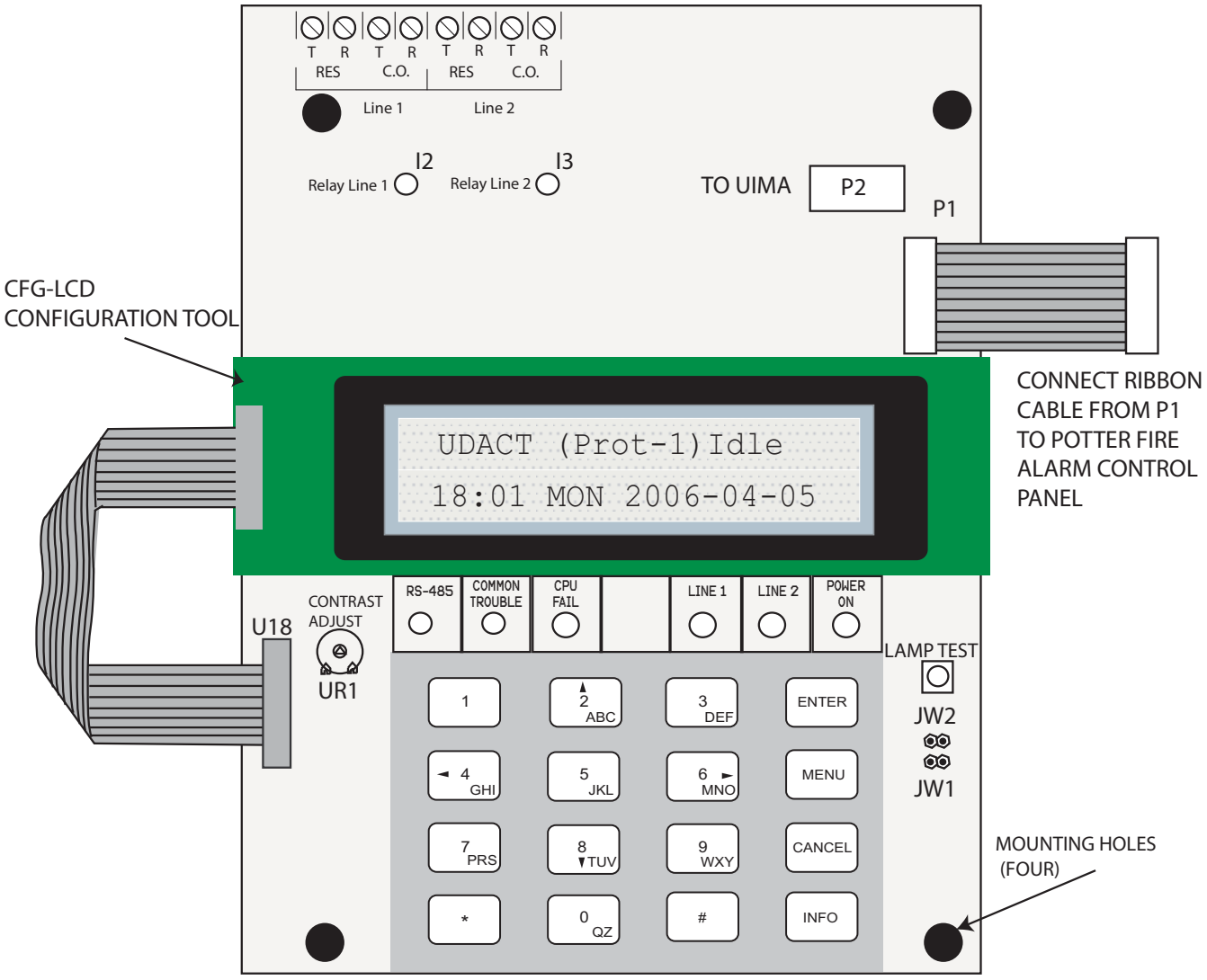


Table 1: Cable Connectors and Miscellaneous

Cable Connector	Function
P1	Ribbon Cable for connecting to Potter Fire Alarm Control Panel (FACP)
P2	RS-232C/RS-485 Connection for computer configuration.
U18	Connector for CFG-LCD Configuration Tool
Lamp Test button	Press and hold this button to test all the UDACT-9100 LEDs and LCD display
UR1 Potentiometer	This potentiometer is for adjustment of the CFG-LCD LCD contrast.

The following table lists all the LEDs located on the UDACT-9100 board and states the function of each LED.

Table 2: UDACT-9100 List of LEDs and their Functions

LEDs	FUNCTION
Relay Line 1	Located below Line 1 terminal block. When Line 1 relay is energized, this green LED will illuminate
Relay Line 2	Located below Line 2 terminal block. When Line 2 relay is energized, this green LED will illuminate.
RS-485	Status LED for communication, will flash when RS-485 communication is active.
Common Trouble	Steady amber for any troubles on the Fire Alarm panel or UDACT-9100.
CPU Fail	Steady amber for any on board CPU trouble.
Telephone Line 1	Telephone status indicator LED; Red when the line is in use, Amber when there is a line trouble.
Telephone Line 2	Telephone status indicator LED; Red when the line is in use, Amber when there is a line trouble.
Power ON	Green LED is ON steady when power is supplied to the board.

The following table lists the user jumpers available on the UDACT-9100 and their functions.

Table 3: UDACT-9100 List of Jumpers for Operation and Configuration

JUMPER NUMBER	JUMPER FUNCTIONS
JW1	Normally open. Place jumper here and power down the UDACT-9100 by disconnecting P1 or power down the fire alarm panel (AC and Batteries), then power back to revert to default passcode. After reset, remove the jumper. Leave normally open.
JW2	Normally open to BLOCK remote configuration via modem, PC with a UIMA converter module or using the LCD and keypad at the UDACT-9100. Place jumper here to ALLOW any type of configuration. Remove jumper once configuration is complete.

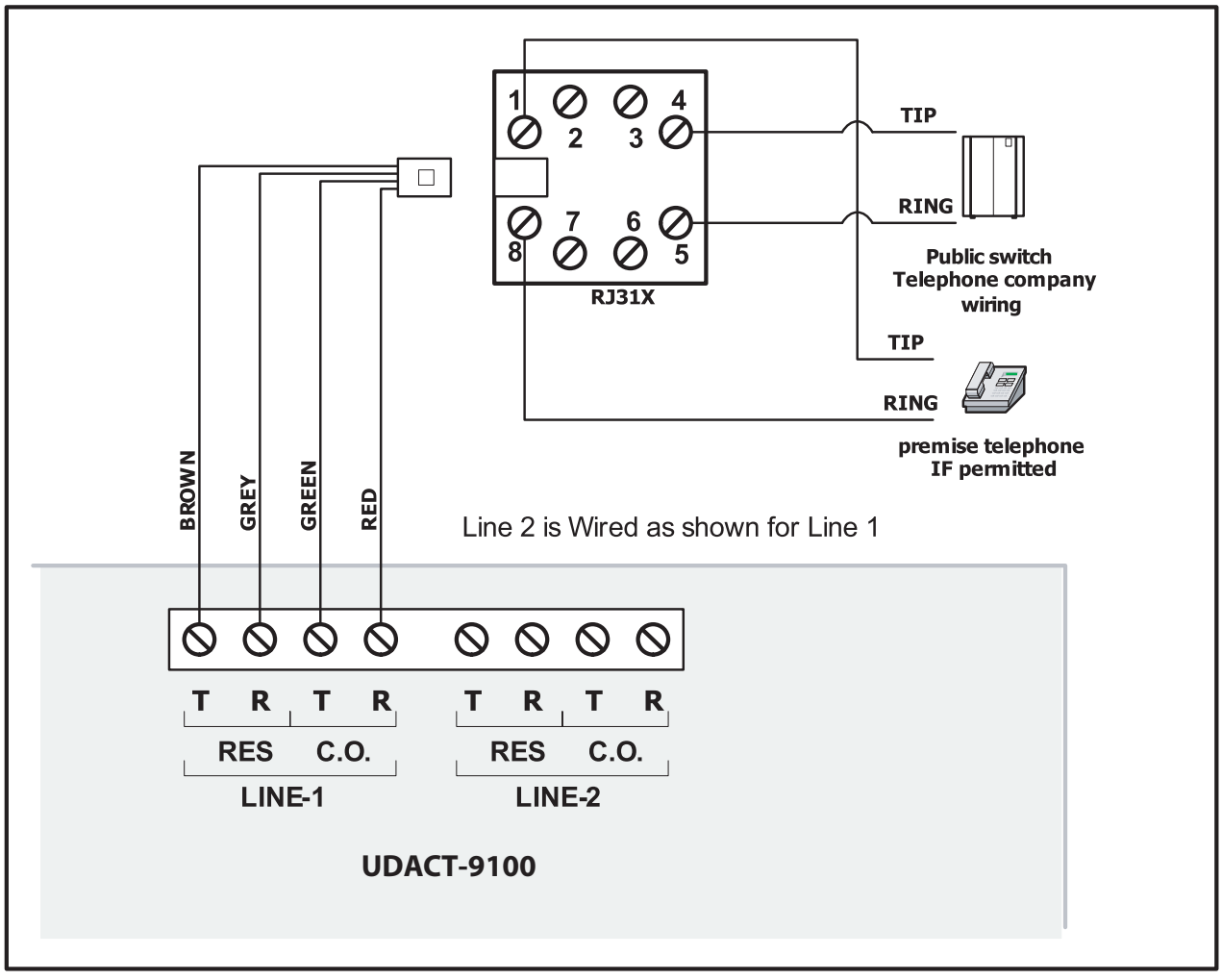
Field Wiring

UDACT-9100 MAIN BOARD TERMINAL CONNECTIONS:

Wire the two telephone lines to RJ31X Connector terminals as shown in Figure 3 below. The UDACT-9100 terminals are located on the top left hand corner of the board. If using a cellular or wireless service, use the Line 2 interface connection only.

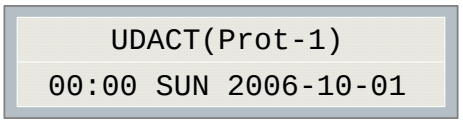
Note: Most Authorities Having Jurisdiction (AHJ) do not allow the connection of premise telephones. see specifications for more information.

Figure 3: Telephone Line Wiring Diagram



Power Up Procedures

1. UDACT-9100 board should be securely mounted mechanically into Potter PFC-9000 and PFC-5000 Fire Alarm Panels.
2. Check that the telephone lines are connected as shown in Figure 3.
3. Connect cable from P1 on the UDACT-9100 board to the Fire Alarm Control Panel. Connects to P2 for Potter PFC-9000 and P4 for the Potter PFC-5000 Fire Alarm Control Panels.
4. Connect the CFG-LCD Configuration Tool to the U18 connector and place over the mounting studs on the UDACT-9100 above the keypad and secure. This CFG-LCD Configuration Tool can be removed once configuration has been completed.
5. Power up the Fire Alarm Panel and the message on the CFG-LCD Configuration Tool should be:



Basic Operation and Supervision

The UDACT-9100 can receive events from the FACP through the RS-485 data link and the common relay connections on the PR-5000 ribbon cable. It will always report events sorted in the order in which they are received/ recognized. When the dialer buffer is full, all new incoming events will be ignored. While working in the UDACT mode, the detailed zone information (event code with zone number) will be reported to the monitoring station. The UDACT-9100 also monitors the communication on the RS-485 between the FACP and itself. If the sum of the RS-485 data link errors within 24 hours exceeds the predefined threshold, a Communication Trouble with ID# 485 will be reported during the 24-hour periodic test. While working in the DACT mode, UDACT-9100 scans the common relay connections from the FACP (including Common Alarm, Common Supervisory and Common Trouble relays) and reports the common status only.

The UDACT-9100 is capable of reporting multiple events to a single account number, within a single call session. For a single event not yet reported, up to 4 retries will be made within a single call attempt. A failure to report to either or both accounts will generate corresponding events that will be queued for reporting. Once the UDACT-9100 fails to report on all telephone lines, it stops retrying, but an Alarm Event, Manual Test or 24-hour Periodic Test will force the UDACT-9100 to seize the line and try reporting again. For two regular Telco telephone line connections, the UDACT-9100 checks each line operation by reporting the 24-hour periodic test result on Line #1 or Line #2 alternatively.

The UDACT-9100 continuously supervises the status of each of two connected Telco Lines at approximately 1 minute intervals. The regular line supervision includes DC voltage level validation and dial tone detection. Line supervision is skipped while (1) the dialer is busy reporting, (2) the modem is working or (3) there is ringing on the line. If the line supervision fails, a Line #1 or Line #2 Trouble will be reported after a 30 second verification. Once the line has been restored, a Line Trouble Restore will be reported.

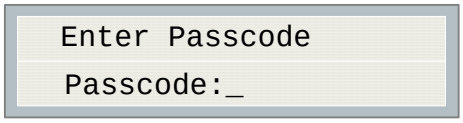
Configuration Setup

There are 3 ways of configuring the UDACT-9100.

1. Locally with the on-board keypad and CFG-LCD Configuration Tool.
2. Locally with a Personal Computer via the RS-232 connection, a UIMA and Potter Software MSW-012.
3. Remotely with a computer, modem and Potter Software MSW-012.

CONFIGURATION VIA ON-BOARD KEYPAD:

1. Place jumper on JW2, located in the bottom right hand corner of the UDACT-9100 board (this will generate a trouble on the UDACT-9100 and report this to the receiver).
2. Press Menu on the keypad to enter the configuration menu and configure the UDACT-9100. The following screen will ask for the passcode.



3. Enter the default passcode, 1111.

See next section entitled Configuration & LCD Operation for further instructions on Configuration.

CONFIGURATION VIA a UIMA AND COMPUTER(LOCAL):

1. Set-up UIMA connection: the 10-pin cable connector of UIMA is connected to P2 on UDACT-9100 board. A serial cable or USB cable is needed to connect the UIMA to the computer.
2. Place a jumper at JW2 on the UDACT-9100 board to allow the configuration (a trouble is generated and reported to the receiver DACR).
3. Start the Potter Software MSW-012 on the computer to configure the UDACT-9100. Follow the instructions of MSW-012 menu to complete the configuration of the UDACT-9100.
4. Remove jumper on JW2 after configuration is finished, otherwise a trouble will occur.

CONFIGURATION VIA MODEM AND COMPUTER(REMOTE):

1. Set-up the modem connection on the computer. Make sure the phone line is working properly.
2. Place a jumper at JW2 on the UDACT-9100 board to allow the configuration (a trouble is generated and reported to the receiver DACR).
3. Start the Potter Software MSW-012 on the computer to configure the UDACT-9100. Follow the instructions of MSW-012 menu to complete the configuration of the UDACT-9100.
4. Remove jumper on JW2 after configuration is finished, otherwise a trouble will occur.

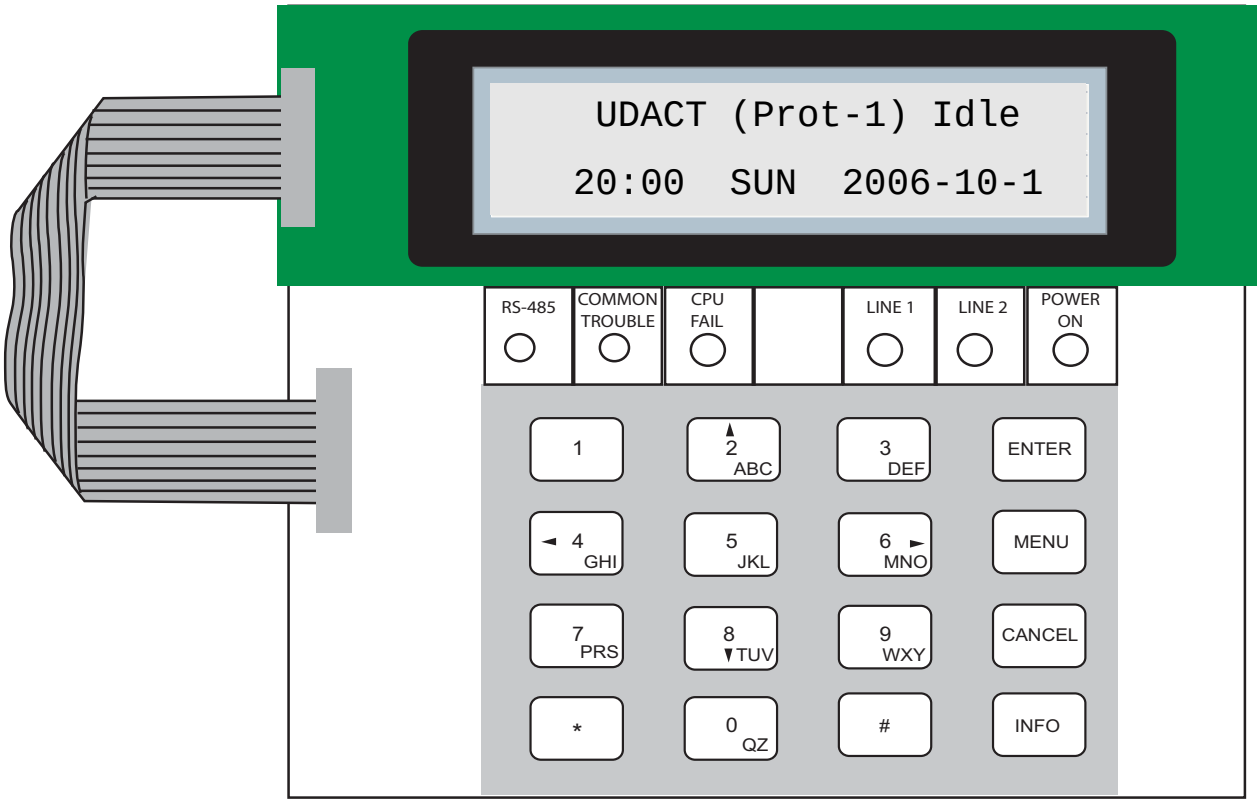
Configuration & LCD Operation

The following shows the configuration at the UDACT-9100 using the keypad and the CFG-LCD Configuration Tool. The Potter Digital Communicator is configured by connecting the cable of the **CFG-LCD Configuration Tool** to the U18 connector on the UDACT-9100 Main Board and placing the LCD over the 3 standoffs as shown in Figure 2.

In order to configure the UDACT-9100, place a jumper on JW2, remove once configuration is complete otherwise there will be a trouble message.

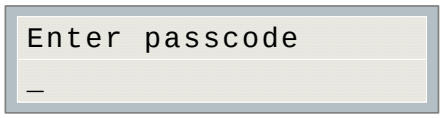
To access configuration mode press the Menu button on the front panel display. The CFG-LCD will display the Main Menu. The keypad on the UDACT-9100 board and the CFG-LCD is shown together in Figure 4, below.

Figure 4: UDACT-9100 Configuration



Entering the Passcode

The programming section is passcode protected. The following image shows the message that is displayed to enter the passcode. The minimum number of digits allowed is four and the maximum allowable passcode is ten digits long; numerical values only. Press the “ENTER” key after entering the passcode. If the passcode is correct, it will take you to the main command menu. If the passcode is incorrect, the system will ask you to re-enter the passcode. The system will be exhausted after three retries and will then take you back to the Normal message display. The default passcode is “1111” (without quotes).

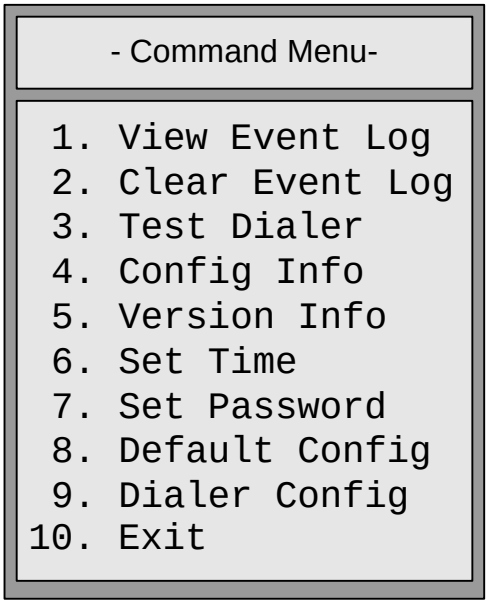


After you select a feature item by pressing the "ENTER" key, use the "UP" and "DOWN" keys to move through the different features. Use the "LEFT" and "RIGHT" keys to change the values. **To confirm the changes press the "ENTER" key.** To go one level back press the "CANCEL" key.

Command Menu

The main command menu is pictured below. The first line of the LCD will always show “-Command Menu-“, and the second line displays the different selections. Use the “UP” and “DOWN” keys to move through the menu, and press the “ENTER” key to make a selection. To exit from the main command menu, press “CANCEL” or select the “Exit” menu option and then press the “ENTER” key

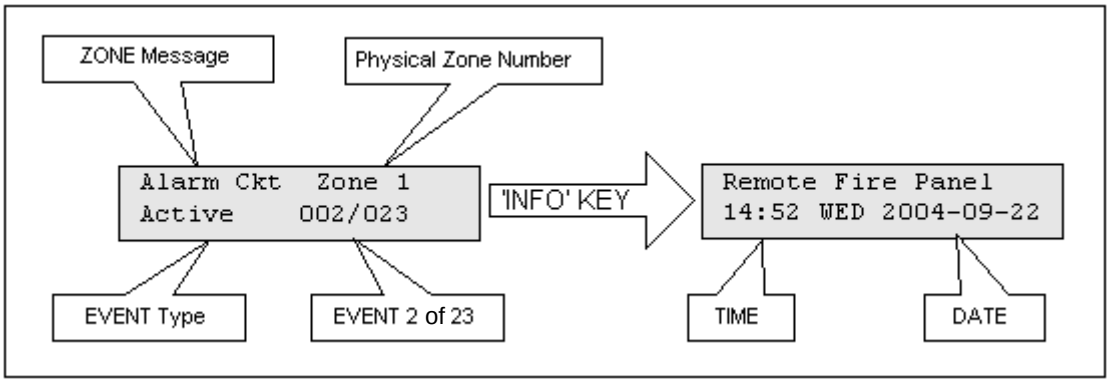
Note: Command Menu feature 9 can only be accessed if jumper JW2 is placed on the main board, see Table 3.



1. View Event Log

-View Event Logs- 1 Remote Log 2 Local Log Select the type of log to view. Press the "ENTER" key. The system will then show the log chosen.	Use this function to select the log to view. Either the local or remote log. The remote log contains all events associated with the fire alarm panel. The local log contains all events associated with the UDACT-9100. Each log can hold up to 500 events.

Pressing the "INFO" key provides more information about the displayed event. The illustration below provides an example of how the "INFO" key works.

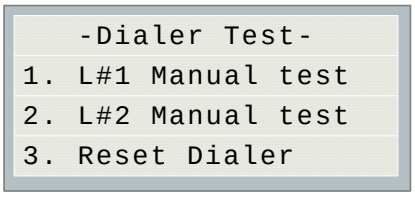


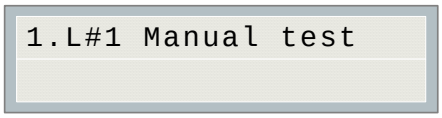
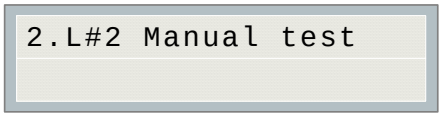
There are a maximum of 500 recent events saved in the event log. If the number of events goes beyond 500, all new incoming events will be ignored.

2. Clear Event Log (Command-Menu)

-Clear Log- 1 Remote Log 2 Local Log 3 All Logs Select the type of log to clear. Press the "ENTER" key. The system will then confirm before clearing logs. Clear all the selected log(s)? Y Press the "ENTER" key to confirm or the "CANCEL" key to cancel the operation. Log(s) cleared	Use this function to clear remote logs, local logs, or both. The remote log contains all events associated with the fire alarm panel. The local log contains all events associated with the UDACT-9100 at the panel. Each log can hold up to 500 events.

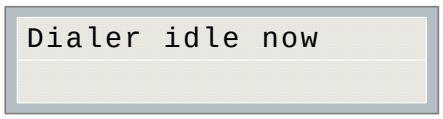
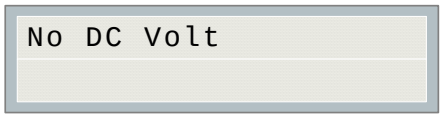
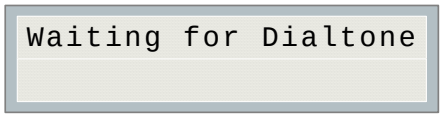
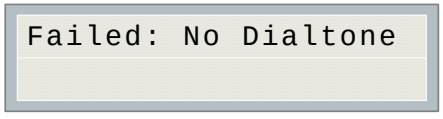
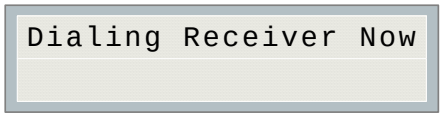
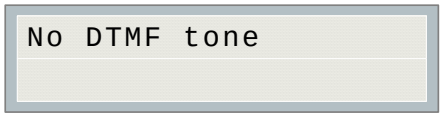
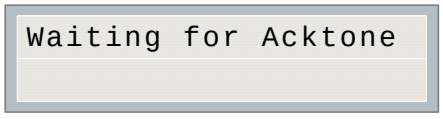
3. Test Dialer (Command-Menu)

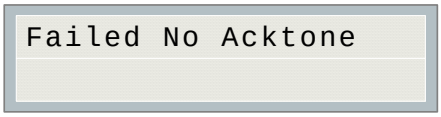
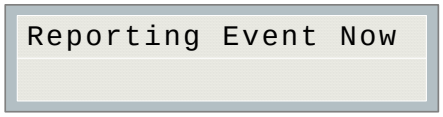
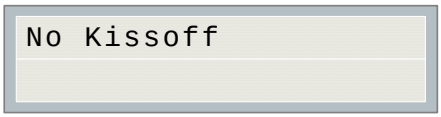
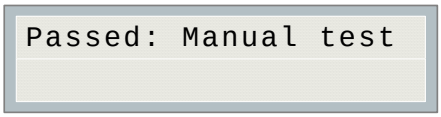


	Press Enter to test Line #1. Press Cancel to exit this menu. For a description of test messages, see *Dialer Test Messages* on the following page.
	Press Enter to test Line #2. Press Cancel to exit this menu. For a description of test messages, see *Dialer Test Messages* on the following page.
	This feature flushes all reportable events from the buffer, clears all dialer troubles and resets the dialer operation. Press Enter to reset the dialer. Press Cancel to exit this menu.

Dialer Test Messages

The following messages will display during the test processes of Lines #1 and #2. The messages that will appear depend on the status of the dialer and the test results that are found.

	The dialer is checking the line for voltage. This message automatically displays when Manual Test is selected.
	No DC line voltage. The line is dead or no phone line is connected or the phone line operates at abnormal voltage.
	The dialer is waiting for a dial tone.
	This message may indicate a noisy telephone line.
	The dial tone was detected and telephone number dialing is in process.
	This message indicates that the dialer failed to send a DTMF tone.
	Waiting for availability of the receiver. The receiver confirms the availability by sending an Ack tone.

	Dialer failed to detect Ack tone. This message indicates that either the telephone number may be wrong or the receiver is not available.
	Sending events to the receiver.
	The dialer is waiting for the Kissoff tone. The Kissoff tone indicates that the receiver has received the event reports.
	No Kissoff means dialer did not detect Kissoff tone.
	The line passed the test; everything is OK.

4. Config Info (Command-Menu)

Configuration type: Factory default Press down arrow key to see more information.	Configuration type will show how the panel was configured. “Factory default” means the panel has not been configured, it is as it came from the factory. “Front Panel” means it was configured at the panel. “Serial Port” means the configuration was done from a computer through the serial port. “Modem” means the configuration was completed remotely through a modem.
Job Name: No job loaded	If you upload a job configuration to the panel using the PC configuration utility, the job name will appear on this screen. The job name can be up to a maximum of 20 characters.
Technician ID: Unknown Press down arrow key for further info	If you upload a job configuration to the panel using the PC configuration utility, the technician’s name (ID) will appear on this screen. The technician ID can be up to a maximum of 10 characters.
Cfg. Date and Time: hh:mm day year:mm:dd Press down arrow key for further info	Configuration date and time will appear for all means of configuration, thus revealing date and time configuration was last changed.
Cfg. Tool S/W Vers.: Version:x.x.x.x	This specifies the configuration tool version. It will display 0.0.0.0 if no PC configurator has been used.

5. Version Info

S/UDACT-9100
Version 1.0.1

The first line shows the model number and panel type and the second line shows the software version number. The version of the software is read as Major.Minor.Revision. The display will remain for 10 seconds.

6. Set Time (Command-Menu)

```
1 Daylight Save
2 Time Clock
3 Compensation
```

Command Menu/Set Time
1. Daylight saving time
`Daylight Saving`
`[X] DISABLE`
	`[X] DISABLE ->Default`
	`[ ] ENABLE`
		Use this function to enable daylight savings time.

Command Menu/Time Clock
2. Set time and date
`HH:MM WKD YYYY-MM-DD`
`00:00 MON 2000-01-01`
	`Default`
	`00:00 MON 2000-01-01`
		Use this function to set the time and date. Use the “LEFT” and “RIGHT” keys to move the cursor to the desired location in the display and use the “UP” and “DOWN” keys to increase or decrease the values. Press the “ENTER” key to accept the changes and the “CANCEL” key to ignore the changes. **Note:** time is in 24hr format

Command Menu/Time Clock
3. Compensation
`Daily Compensation:`
`0`
Once the compensation value is entered the display will be:
`Daily Compensation:`
`Panel Config Updated`
	`Compensation value can range from -15 to +15 seconds.`	Use the up down arrow keys to select daily compensation value and press ENTER. For a fast clock adjust negatively. For a slow clock adjust positively. For example: for a clock which runs 5 minutes a month (based on 30 days) fast select -10 seconds.

7. Set Password (Command-Menu)

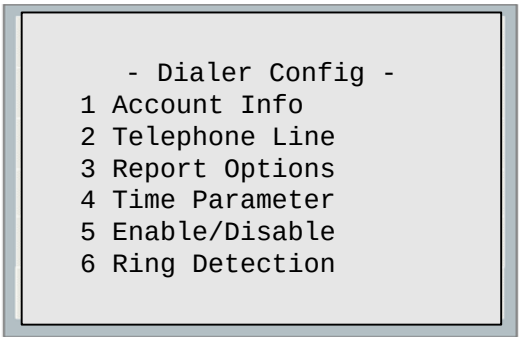
Command Menu/Set Password Enter new passcode _ Re-enter passcode _ If the passcode does not match, the following message appears and the system exit to the main menu invalid passcode If the passcode is OK the following message appears and exits to the main menu Passcode updated	1111 -> Default	Use this function to change the passcode. The minimum number of digits is 4 and the maximum number is 10. ONLY numeric digits are allowed.

8. Default Config (Command-Menu)

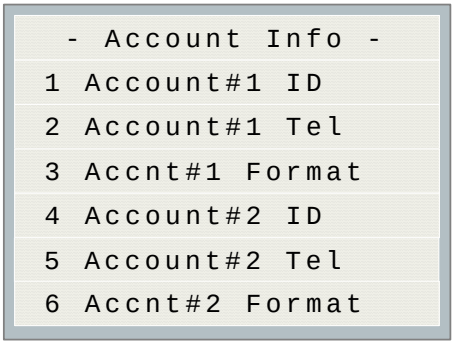
Command Menu/Default Config Load the default settings? Y Press “UP” and “DOWN” to select between Y/N. if “ENTER” is pressed the default configuration is restored. Default settings have been loaded	Use this function to load the default configuration in the panel. **Warning:** By loading default configuration all the previously programmed configuration is lost permanently.	

9. Dialer Config (Command-Menu):

The following illustration shows the dialer configuration menu. Each item in this menu is described below in detail. Use the Up and Down keys to scroll through the menu and press the Enter key to make a selection. To exit from the menu, select the Exit menu option and then press either the Enter or Cancel key. Once a menu feature has been selected, use the Left and Right keys to change values or the numerical keys to enter account numbers.



1. Account Info Menu



Command Menu/Dialer Config/Account Info **1.Account# 1 Identification** Account#1 ID: 123456	123456->Default	Use this function to set the Account ID for the monitoring station to which the dialer reports events. The maximum number of digits allowed is six. For contact ID, only the first four digits are used; the last two are truncated. If you are using the Contact ID protocol, the allowed digits for the account ID are simple digits 0 to 9 and hexadecimal digits A to F. The SIA protocol only allows digits 0 to 9. To enter hexadecimal digits, press the INFO button. The letter “A” will appear. To scroll through the rest of the letters, press INFO repeatedly. Press # key to move the cursor to the right or press * key to move it to the left.
Command Menu/Dialer Config/Account Info **2.Account#1 Telephone Number** Account#1 Telnum: 101	101 ->Default	Use this function to set the telephone number of the monitoring station. The maximum number of digits allowed is 19 including commas “,” and numerals. The commas will be treated as 1 sec delay. To enter a comma “,” press the INFO button. Press the # key to move the cursor to the right or press the * key to move it to the left. An example of a typical telephone number is 9,,1234567008, 9 being the dial out where required.

Command Menu/Dialer Config/Account Info **3.Account#1 Reporting Format** ACCNT#1 Format: [X] Contact ID	[X] CONTACT ID-Default [ ] SIA 300 Baud [ ] SIA 110 Baud	Set the reporting format that is recognized or preferred by the monitoring station.
Command Menu/Dialer Config/Account Info **4. Account# 2 Identification** Account#2 ID: 654321	654321->Default	Same as Account#1.
Command Menu/Dialer Config/Account Info **5.Account# 2 Telephone Number** Account#2 Telnum: 101	101 ->Default	Same as Account#1.
Command Menu/Dialer Config/Account Info **6.Account# 2 Reporting Format** ACCNT#2 Format: [X] Contact ID	[X] Contact ID->Default [ ] SIA 300 Baud [ ] SIA 110 Baud	Same as Account#1.

2. Telephone Line Menu

```
- Telephone Line -
1 Line1 Dialtype
2 Line2 Dialtype
3 Line1 Dialtone
4 Line2 Dialtone
5 Num of Retries
```

Command Menu/Dialer-Config/Telephone Line
1. Line#1 Dialing Type
`Line#1 Dialing Type:`
`[X] DTMF Dial`
	`[X] DTMF Dial->Def`
	`[ ] Pulse Dial`
		Set the dialing type for line #1 DTMF is the type recognized or preferred by the telephone company.

Command Menu/Dialer-Config/Telephone Line
2. Line#2 Dialing Type
`Line#2 Dialing Type:`
`[X] DTMF Dial`
	`[X] DTMF Dial->Def`
	`[ ] Pulse Dial`
		Same as Line#1.

Command Menu/Dialer-Config/Telephone Line
3. Line#1 wait for Dial tone
`Line#1 Wait Dialtone`
`[X] ENABLE`
	`[X] ENABLE ->Default`
	`[ ] DISABLE`
		Use this function to let the system know whether or not to wait for a dial tone before dialing.

Command Menu/Dialer-Config/Telephone Line
4.Line#2 wait for Dial tone
`Line#2 Wait Dialtone`
`[X] ENABLE`
	`[X] ENABLE ->Default`
	`[ ] DISABLE`
		Same as Line#1.
		When a wireless or cellphone service is employed, it could be connected with Line2 interface only. The dial-tone detection should be disabled.

Command Menu/Dialer-Config/Telephone Line
5.Number of retries
`Number of Retries:`
`06`
	`06 ->Default`	Set the number of retries for both line#1 and line#2. This function lets the dialer retry on either line if it is busy or not available. If the retry count expires, the panel reports a line trouble.

3. Report Options Menu

```
- Report Options -
1 Alarm Prio.
2 Trouble Prio.
3 Supv. Priority
4 Ignore Supervisory
5 Protocol
6 Operation Mode
7 Checksum Bits
```

CommandMenu/Dialer-Config/Report Options *1.Alarm priority* Alarm Priority: [X] Account 1	[X] Account 1->Def [ ] Account 2	Use this function to set the account priority for reporting alarms. If the priority is set for account#1 then the dialer will try account#1 first for reporting.
CommandMenu/Dialer-Config/Report Options *2.Trouble priority* Trouble Priority: [X] Account 1	[X] Account 1->Def [ ] Account 2	Use this function to set the account priority for reporting trouble. If the priority is set for account#1 then the dialer will try account#1 first for reporting.
CommandMenu/Dialer-Config/Report Options *3.Supervisory priority* SUPV Priority [X] Account 1	[X] Account 1->Def [ ] Account 2	Use this function to set the account priority for reporting supervisory troubles. If the priority is set for account#1 then the dialer will try account#1 first for reporting.
Command Menu/Dialer-Config/Report Options 4.Ignore Supervisory Ignore Supervisory [X] Disable	[ ] ENABLE [X] DISABLE->Default	If this function is enabled, the UDACT-9100 will bypass all supervisory event reporting.
Command Menu/Dialer-Config/Report Options 5.Protocol type Protocol: [X] Level 1	[ ] Level 0 [X] Level 1 [ ] Level 2 [ ] Level 1-G	Change this function as required for appropriate fire alarm panel. Level 1 is the PFC-5000. Level 2 is the PFC-9000 and Level 0 and 1-G are not used.
Command Menu/Dialer-Config/Report Options 6.Dialer operation mode Dialer Oper. Mode: [X] (U)DACT	[X](U)DACT ->Default [ ] DACT	Use this function to select the functionality of the dialer. In DACT mode only common trouble/ alarm/supervisory are reported, while in UDACT mode all zone point information is reported
Command Menu/Dialer-Config/Report Options 7.Checksum Bits Checksum Bits: [X] 8 Bits	[X] 8 Bit->Default [ ] 16 Bits	For PFC-5000 and PFC-9000, choose 8 Bits. 16 Bits is not used.

4. Time Parameter Menu

```
  -Time Parameter-
1 AC-Loss Delay
2 Cellphone Date
3 Auto-Test Time
```

Command Menu/Dialer-Config/Time Parameter
1.AC Loss delay
`AC-Loss Delay(Hrs)`
`0`
	`0 ->Default`	Use this function to delay the reporting of AC loss trouble on the dialer for the programmed time period. Selection is from 0 to 20 hours.

Command Menu/Dialer-Config/Time Parameter
2.Cellular report date
`Cellular Report Date`
`0`
	`0 ->Default`	This function is not used, leave default as is at 0.

Command Menu/Dialer-Config/Time Parameter
3.Auto test time
`Auto-Test Time`
`00:30`
	`00:30 ->Default`	Use this function to set the time for auto test. This test has to be performed once a day to send the test report to the monitoring station. The time is in 24hr format, which means 00:30 is 30 minutes after midnight.
		Please avoid the following Test Times: 00:00, 01:55, 02:00 and 03:00

Command Menu-->Dialer-Config

5. Dialer Enable / Disable

Command Menu/Dialer-Config/Enable/Disable		
Enable/Disable [X] Enable ------Warning------- Dialer Disabled!!!	[X] ENABLE ->Default [ ] DISABLE	The dialer is enabled by default. When the dialer is enabled or disabled, a warning message appears. **Warning:** The dialer cannot report any event to the monitoring station if it is disabled.

6. Ring Detection

Command Menu/Dialer-Config/Enable/Disable		
-Ring Detect Number- [X]5	[ ] Disabled [ ] 1 [ ] 2 [ ] 3 [ ] 4 [X] 5->Default [ ] 6 [ ] 7 [ ] 8	Use this menu item to select the number of rings on which the panel's modem will answer. The default number of rings is five. The maximum number of rings you can define is eight. If you select the "Disabled" option, the modem will be disabled and the panel will not pick up the incoming call.

10. Exit (Command-Menu)

Pressing "ENTER" after selecting "Exit from the main menu will return the UDACT-9100 to normal.

ADEMCO *CONTACT-ID*

UDACT-9100 Internal Events:

Event Description	Event Family	Qualifier	Code	Group #	Contact #
Phone Line #1 trouble detected	Trouble	New event	1 351	00	000
Phone Line #2 trouble detected	Trouble	New event	1 352	00	000
Phone Line #1 trouble restored	Trouble	Restore	3 351	00	000
Phone Line #2 trouble restored	Trouble	Restore	3 352	00	000
Failure to report to an Account	Trouble	New event	1 354	Acct #	Acct #
Report to an Account successful	Trouble	Restore	3 354	Acct #	Acct #
RS-485 Communication Trouble	Trouble	New event	1 350	00	485
Periodic (24 hr) Test Event (NORMAL)	Test	New event	1 602	00	000
Periodic (24 hr) Test Event (OFF NORMAL)	Test	New event	1 608	00	000
Manually initiated dialer test	Test	New event	1 601	00	000

UDACT-9100 External Events:

Event Description	Event Family	Qualifier	Code	Group #	Contact #
Zone Fire Alarm	Alarm	New event	1 110	00	NNN
Zone Fire Alarm restored	Alarm	Restore	3 110	00	NNN
Zone Trouble detected	Trouble	New event	1 300	00	NNN
Zone Trouble restored	Trouble	Restore	3 300	00	NNN
Zone Supervisory condition	Supervisory	New event	1 200	00	NNN
Zone Supervisory restored	Supervisory	Restore	3 200	00	NNN
Waterflow	Alarm	New event	1 113	00	NNN
Waterflow restored	Alarm	Restore	3 113	00	NNN
Indicating Zone Trouble	Trouble	New event	1 320	00	NNN
Indicating Zone Trouble restored	Trouble	Restore	3 320	00	NNN
General Alarm	Alarm	New event	1 140	00	NNN
General Alarm restored	Alarm	Restore	3 140	00	NNN
AC power lost	Trouble	New event	1 301	00	000
AC power restored	Trouble	Restore	3 301	00	000
Battery Low	Trouble	New event	1 302	00	000
Battery Low restored	Trouble	Restore	3 302	00	000
Ground Fault	Trouble	New event	1 310	00	000
Ground Fault restored	Trouble	Restore	3 310	00	000

NNN-Refers to Sensor number for zone causing event.

SECURITY INDUSTRIES ASSOC. *SIA-DCS*

UDACT-9100 Internal Events:

Event Description	Event Family	Qualifier	SIA Event Code	Parameter
Phone Line #1 trouble detected	Trouble	New event	LT	001
Phone Line #2 trouble detected	Trouble	New event	LT	002
Phone Line #1 trouble restored	Trouble	Restore	LR	001
Phone Line #2 trouble restored	Trouble	Restore	LR	002
Failure to report to an Account	Trouble	New event	RT	Acct #
Report to an Account successful	Trouble	Restore	YK	Acct #
RS485 Communication Trouble	Trouble	New event	YS	485
Periodic (24 hr) Test Event (Normal)	Test	New event	RP	000
Periodic (24 hr) Test Event (Off-normal)	Test	New event	RY	000
Manually initiated dialer test	Test	New event	RX	000

UDACT-9100 External Events:

Event Description	Event Family	Qualifier	SIA Event Code	Parameter
Zone Fire Alarm	Alarm	New event	FA	NNN
Zone Fire Alarm restored	Alarm	Restore	FH	NNN
Zone Trouble detected	Trouble	New event	FT	NNN
Zone Trouble restored	Trouble	Restore	FJ	NNN
Zone Supervisory condition	Supervisory	New event	FS	NNN
Zone Supervisory restored	Supervisory	Restore	FR	NNN
Waterflow alarm	Alarm	New event	WA	NNN
Waterflow alarm restored	Alarm	Restore	WH	NNN
General Alarm	Alarm	New event	QA	NNN
General Alarm restored	Alarm	Restore	QH	NNN
Indicating Zone Trouble (*)	Trouble	New event	UT	NNN
Indicating Zone Trouble restored (*)	Trouble	Restore	UR	NNN
AC power lost	Trouble	New event	AT	000
AC power restored	Trouble	Restore	AR	000
Battery Low	Trouble	New event	YT	000
Battery Low restored	Trouble	Restore	YR	000
Ground Fault	Trouble	New event	YP	000
Ground Fault restored	Trouble	Restore	YQ	000

* SIA protocol does not define indicating zone troubles, but lists it as Untyped Zone Trouble/Restore.

Compatible Fire Alarm Control Panels

Potter UDACT-9100: Compatible with **PFC-9000** and **PFC-5000** Fire Alarm Control Panels.

Compatible Receivers

The **Potter UDACT-9100** is compatible with the following **Digital Alarm Communicator Receivers (DACR)** ...

DACR Receiver Model	Protocols
SurGard MLR2 Multi-Line Receiver (ULC, ULI Approved)	**SIA-DCS and Ademco Contact ID**
SurGard SLR Single-Line Receiver (ULC, ULI Approved)	**SIA-DCS and Ademco Contact ID**
Osborne-Hoffman Quickalert! II Receiver (ULI Approved)	**SIA-DCS and Ademco Contact ID**
Osborne-Hoffman OH-2000 Receiver (ULI Approved)	**SIA-DCS and Ademco Contact ID**
Silent Knight Model 9500 Receiver (ULI Approved)	**SIA-DCS and Ademco Contact ID**
Radionics Model D6500 Receiver (ULI Approved)	**Ademco Contact ID**
Radionics Model D6600 Receiver (ULI Approved)	**SIA-DCS and Ademco Contact ID**

Specifications

All Circuits are Power Limited

UDACT-9100 Digital Communicator

•Connects to two Telephone Lines and performs line supervision.

•Connects to a Potter FACP via a ribbon cable. This connection provides DC power, RS-485 Data Link, common relay connections and all other signalling between the Communicator and the FACP.

•Transmits Zoned Alarm, Supervisory, and Trouble status to a Central Monitoring Station, using either Ademco Contact ID or SIA DCS Protocols.

•User configurable locally or remotely. Configuration is passcode protected.

•Current Consumption: **Standby**: 40 mA **Alarm**: 60 mA

Battery Calculations

UDACT-9100

The UDACT-9100 Battery Calculations are performed as part of the calculations for the Fire Alarm Control Panel it will be used in. See the appropriate Potter Installation and Operation Manual.

Warranty

Potter Electric Signal Co., manufactured equipment is guaranteed to be free of defects in material and workmanship for a period of one (1) year from the date of original shipment. Potter will repair or replace, at its option, any equipment which it determines to contain defective material or workmanship. Said equipment must be shipped to Potter prepaid. Return freight will be prepaid by Potter. We shall not be responsible to repair or replace equipment which has been repaired by others, abused, improperly installed, altered or otherwise misused or damaged in any way. Unless previously contracted by Potter, Potter will assume no responsibility for determining the defective or operative status at the point of installation, and will accept no liability beyond the repair or replacement of the product at our factory authorized service depot.

Potter Electric Signal Company

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USA 63146-4161

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Web Page: http://www.pottersignal.com

UDACT-9100 INFORMATION FORM

Account #1 Identification (max. 6 digits): _ _ _ _ _ _

Account #1 Telephone number (including area code): _____

Telephone number of receiving station (including area code) : _____

Reporting Format: ☐ Contact ID

☐ SIA

Account #2 Identification (max. 6 digits): _ _ _ _ _ _

Account #2 Telephone number (including area code): _____

Telephone number of receiving station (including area code): _____

Reporting Format: ☐ Contact ID

☐ SIA

Notes

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