

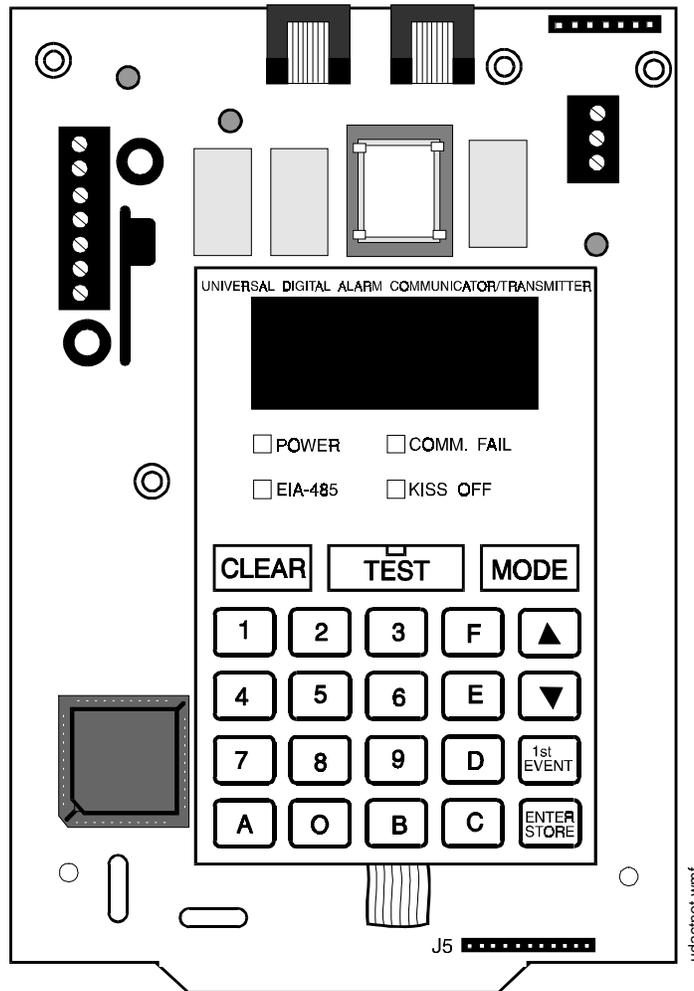


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The ADT-UDACT

Universal Digital Alarm Communicator/Transmitter



Product Information, Installation, Programming and Operation Manual

Fire Alarm System Limitations

An automatic fire alarm system—typically made up of smoke detectors, heat detectors, manual pull stations, audible warning devices, and a fire alarm control with remote notification capability—can provide early warning of a developing fire. Such a system, however, does not assure protection against property damage or loss of life resulting from a fire.

The Manufacturer recommends that smoke and/or heat detectors be located throughout a protected premise following the recommendations of the current edition of the National Fire Protection Association Standard 72 (NFPA 72), manufacturer's recommendations, State and local codes, and the recommendations contained in the Guide for Proper Use of System Smoke Detectors, which is made available at no charge to all installing dealers. A study by the Federal Emergency Management Agency (an agency of the United States government) indicated that smoke detectors may not go off in as many as 35% of all fires. While fire alarm systems are designed to provide early warning against fire, they do not guarantee warning or protection against fire. A fire alarm system may not provide timely or adequate warning, or simply may not function, for a variety of reasons:

Smoke detectors may not sense fire where smoke cannot reach the detectors such as in chimneys, in or behind walls, on roofs, or on the other side of closed doors. Smoke detectors also may not sense a fire on another level or floor of a building. A second-floor detector, for example, may not sense a first-floor or basement fire.

Particles of combustion or "smoke" from a developing fire may not reach the sensing chambers of smoke detectors because:

- Barriers such as closed or partially closed doors, walls, or chimneys may inhibit particle or smoke flow.
- Smoke particles may become "cold," stratify, and not reach the ceiling or upper walls where detectors are located.
- Smoke particles may be blown away from detectors by air outlets.
- Smoke detectors may be drawn into air returns before reaching the detector.

The amount of "smoke" present may be insufficient to alarm smoke detectors. Smoke detectors are designed to alarm at various levels of smoke density. If such density levels are not created by a developing fire at the location of detectors, the detectors will not go into alarm.

Smoke detectors, even when working properly, have sensing limitations. Detectors that have photoelectronic sensing chambers tend to detect smoldering fires better than flaming fires, which have little visible smoke. Detectors that have ionizing-type sensing chambers tend to detect fast-flaming fires better than smoldering fires. Because fires develop in different ways and are often unpredictable in their growth, neither type of detector is necessarily best and a given type of detector may not provide adequate warning of a fire.

Smoke detectors cannot be expected to provide adequate warning of fires caused by arson, children playing with matches (especially in bedrooms), smoking in bed, and violent explosions (caused by escaping gas, improper storage of flammable materials, etc.).

While a fire alarm system may lower insurance rates, it is not a substitute for fire insurance!

Heat detectors do not sense particles of combustion and alarm only when heat on their sensors increases at a predetermined rate or reaches a predetermined level. Rate-of-rise heat detectors may be subject to reduced sensitivity over time. For this reason, the rate-of-rise feature of each detector should be tested at least once per year by a qualified fire protection specialist. *Heat detectors are designed to protect property, not life.*

IMPORTANT! Smoke detectors must be installed in the same room as the control panel and in rooms used by the system for the connection of alarm transmission wiring, communications, signaling, and/or power. If detectors are not so located, a developing fire may damage the alarm system, crippling its ability to report a fire.

Audible warning devices such as bells may not alert people if these devices are located on the other side of closed or partly open doors or are located on another floor of a building. Any warning device may fail to alert people with a disability or those who have recently consumed drugs, alcohol or medication. Please note that:

- Strobes can, under certain circumstances, cause seizures in people with conditions such as epilepsy.
- Studies have shown that certain people, even when they hear a fire alarm signal, do not respond or comprehend the meaning of the signal. It is the property owner's responsibility to conduct fire drills and other training exercise to make people aware of fire alarm signals and instruct them on the proper reaction to alarm signals.
- In rare instances, the sounding of a warning device can cause temporary or permanent hearing loss.

A fire alarm system will not operate without any electrical power. If AC power fails, the system will operate from standby batteries only for a specified time and only if the batteries have been properly maintained and replaced regularly.

Equipment used in the system may not be technically compatible with the control. It is essential to use only equipment listed for service with your control panel.

Telephone lines needed to transmit alarm signals from a premise to a central monitoring station may be out of service or temporarily disabled. For added protection against telephone line failure, backup radio transmission systems are recommended.

The most common cause of fire alarm malfunction is inadequate maintenance. To keep the entire fire alarm system in excellent working order, ongoing maintenance is required per the manufacturer's recommendations, and UL and NFPA standards. At a minimum, the requirements of Chapter 7 of NFPA 72 shall be followed. Environments with large amounts of dust, dirt or high air velocity require more frequent maintenance. A maintenance agreement should be arranged through the local manufacturer's representative. Maintenance should be scheduled monthly or as required by National and/or local fire codes and should be performed by authorized professional fire alarm installers only. Adequate written records of all inspections should be kept.

Installation Precautions

WARNING - Several different sources of power can be connected to the fire alarm control panel. Disconnect all sources of power before servicing. Control unit and associated equipment may be damaged by removing and/or inserting cards, modules, or interconnecting cables while the unit is energized. Do not attempt to install, service, or operate this unit until this manual is read and understood.

CAUTION - *System Reacceptance Test after Software Changes.* To ensure proper system operation, this product must be tested in accordance with NFPA 72 Chapter 7 after any programming operation or change in site-specific software. Reacceptance testing is required after any change, addition or deletion of system components, or after any modification, repair or adjustment to system hardware or wiring.

All components, circuits, system operations, or software functions known to be affected by a change must be 100% tested. In addition, to ensure that other operations are not inadvertently affected, at least 10% of initiating devices that are not directly affected by the change, up to a maximum of 50 devices, must also be tested and proper system operation verified.

This system meets NFPA requirements for operation at 0-49° C/32-120° F and at a relative humidity of 85% RH (non-condensing) at 30° C/86° F. However, the useful life of the system's standby batteries and the electronic components may be adversely affected by extreme temperature ranges and humidity. Therefore, it is recommended that this system and all peripherals be installed in an environment with a nominal room temperature of 15-27° C/60-80° F.

Verify that wire sizes are adequate for all initiating and indicating device loops. Most devices cannot tolerate more than a 10% I.R. drop from the specified device voltage.

Adherence to the following will aid in problem-free installation with long-term reliability:

Like all solid state electronic devices, this system may operate erratically or can be damaged when subjected to lightning-induced transients. Although no system is completely immune from lightning transients and interferences, proper grounding will reduce susceptibility. *Overhead or outside aerial wiring is not recommended, due to an increased susceptibility to nearby lightning strikes.* Consult with the Technical Services Department if any problems are anticipated or encountered.

Disconnect AC power and batteries prior to removing or inserting circuit boards. Failure to do so can damage circuits.

Remove all electronic assemblies prior to any drilling, filing, reaming, or punching of the enclosure. When possible, make all cable entries from the sides or rear. Before making modifications, verify that they will not interfere with battery, transformer, and printed circuit board location.

Do not tighten screw terminals more than 9 in-lbs. Over-tightening may damage threads, resulting in reduced terminal contact pressure and difficulty with screw terminal removal.

Though designed to last many years, system components can fail at any time. This system contains static-sensitive components. Always ground yourself with a proper wrist strap before handling any circuits so that static charges are removed from the body. Use static-suppressive packaging to protect electronic assemblies removed from the unit.

Follow the instructions in the installation, operating, and programming manuals. These instructions must be followed to avoid damage to the control panel and associated equipment. FACP operation and reliability depend upon proper installation by authorized personnel.

FCC Warning

WARNING: This equipment generates, uses, and can radiate radio frequency energy and if not installed and used in accordance with the instruction manual, may cause interference to radio communications. It has been tested and found to comply with the limits for class A computing device pursuant to Subpart B of Part 15 of FCC Rules, which is designed to provide reasonable protection against such interference when operated in a commercial environment. Operation of this equipment in a residential area is likely to cause interference, in which case the user will be required to correct the interference at his own expense.

Canadian Requirements

This digital apparatus does not exceed the Class A limits for radiation noise emissions from digital apparatus set out in the Radio Interference Regulations of the Canadian Department of Communications.

Le présent appareil numérique n'émet pas de bruits radioélectriques dépassant les limites applicables aux appareils numériques de la classe A prescrites dans le Règlement sur le brouillage radioélectrique édicté par le ministère des Communications du Canada.

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This digital communicator has been designed to comply with standards set forth by the following regulatory agencies:

- Underwriters Laboratories Standard UL 864
- NFPA Standards 72 National Fire Alarm Code for Local, Remote Station and Central Station Fire Alarm Systems

Before proceeding, the installer should be familiar with the following documents.



NFPA Standards, NFPA 72 National Fire Alarm Code:

- Central Station Fire Alarm Systems (Automatic, Manual and Waterflow) Protected Premises Unit.
- Local (Automatic, Manual, Waterflow and Sprinkler Supervisory) Fire Alarm Systems.
- Proprietary Fire Alarm Systems (Protected Premises Unit).
- Automatic Fire Detectors
- Installation, Maintenance, and Use of Notification Appliances for Fire Alarm Systems.
- Inspection, Testing and Maintenance for Fire Alarm Systems.



Underwriters Laboratories Documents:

- UL 38 Manually Actuated Signaling Boxes
- UL 217 Smoke Detectors, Single and Multiple Station
- UL 228 Door Closers—Holders for Fire Protective Signaling Systems
- UL 268 Smoke Detectors for Fire Protective Signaling Systems
- UL 268A Smoke Detectors for Duct Applications
- UL 346 Waterflow Indicators for Fire Protective Signaling Systems
- UL 464 Audible Signaling Appliances
- UL 521 Heat Detectors for Fire Protective Signaling Systems
- UL 864 Standard for Control Units for Fire Protective Signaling Systems
- UL 1481 Power Supplies for Fire Protective Signaling Systems
- UL 1638 Visual Signaling Appliances



Other:

- NEC Article 300 Wiring Methods
- NEC Article 760 Fire Protective Signaling Systems
- Applicable Local and State Building Codes
- Requirements of the Local Authority Having Jurisdiction

Relevant ADT Manuals:

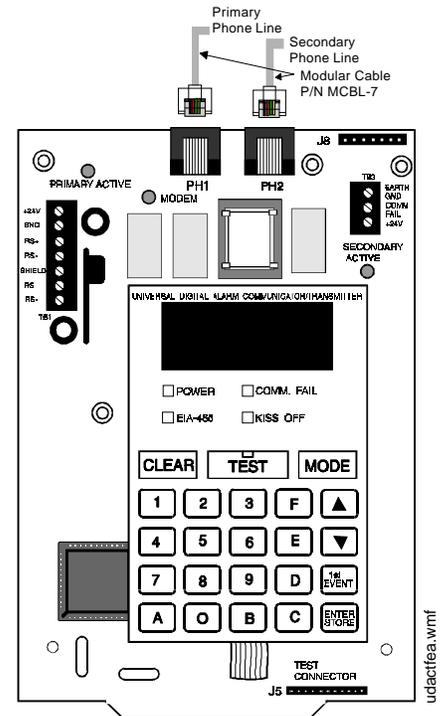
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|------------------------------|-----------------|
| Unimode 2020/1010 manual | Document #51167 |
| Unimode 300/400 Programming | Document #50708 |
| Unimode 300/400 Operating | Document #50709 |
| Unimode 300/400 Installation | Document #50710 |
| AFM Annunciator | Document #15048 |
| ADT-ACS Annunciator | Document #51353 |
| ADT-LCD-80 | Document #51354 |
| ADT-MNNA | Document #50929 |

1.0 Product Description

The Universal Digital Alarm Communicator/Transmitter (ADT-UDACT) may be used with a variety of ADT control panels (refer to Appendices). The ADT-UDACT transmits system status to UL Listed Central Station Receivers via the public switched telephone network. The ADT-UDACT, which is compact in size, mounts internally in some panels or externally in a separate enclosure. EIA-485 annunciator communications bus and 24 volt (nominal) connections are required.

1.1 Product Features

- Dual telephone lines
- Dual telephone line voltage detect
- Surface mount technology
- Compact in size: 6.75" x 4.25"
- Built-in programmer
- Built-in four character red 7-segment LED display
- Manual test report function
- Manual master transmission clear function
- Mounts in separate ADT-ABS-8RF or ADT-UBS-1 enclosure
- Communicates vital system status including:
 - ✓ Independent zone/point alarm
 - ✓ Independent zone/point trouble
 - ✓ Independent zone/point supervisory
 - ✓ AC (mains) power loss (programmable)
 - ✓ Low battery and earth fault
 - ✓ System off normal
 - ✓ 12 or 24 hour test signal
 - ✓ Abnormal test signal per new UL requirements
 - ✓ Annunciation of ADT-UDACT troubles including: loss of phone lines, communication failure with either Central Station, total communication failure
- Troubleshoot mode converts keypad to DTMF touchpad
- Individual LEDs for:
 - ✓ Power
 - ✓ EIA-485 loss
 - ✓ Manual Test
 - ✓ Kissoff
 - ✓ Comm Fail
 - ✓ Primary Line Seize
 - ✓ Secondary Line Seize
- Open collector relay driver for Total Communication Failure or ADT-UDACT trouble.
- Real Time Clock
- Extensive transient protection
- Simple EIA-485 interface to host panel



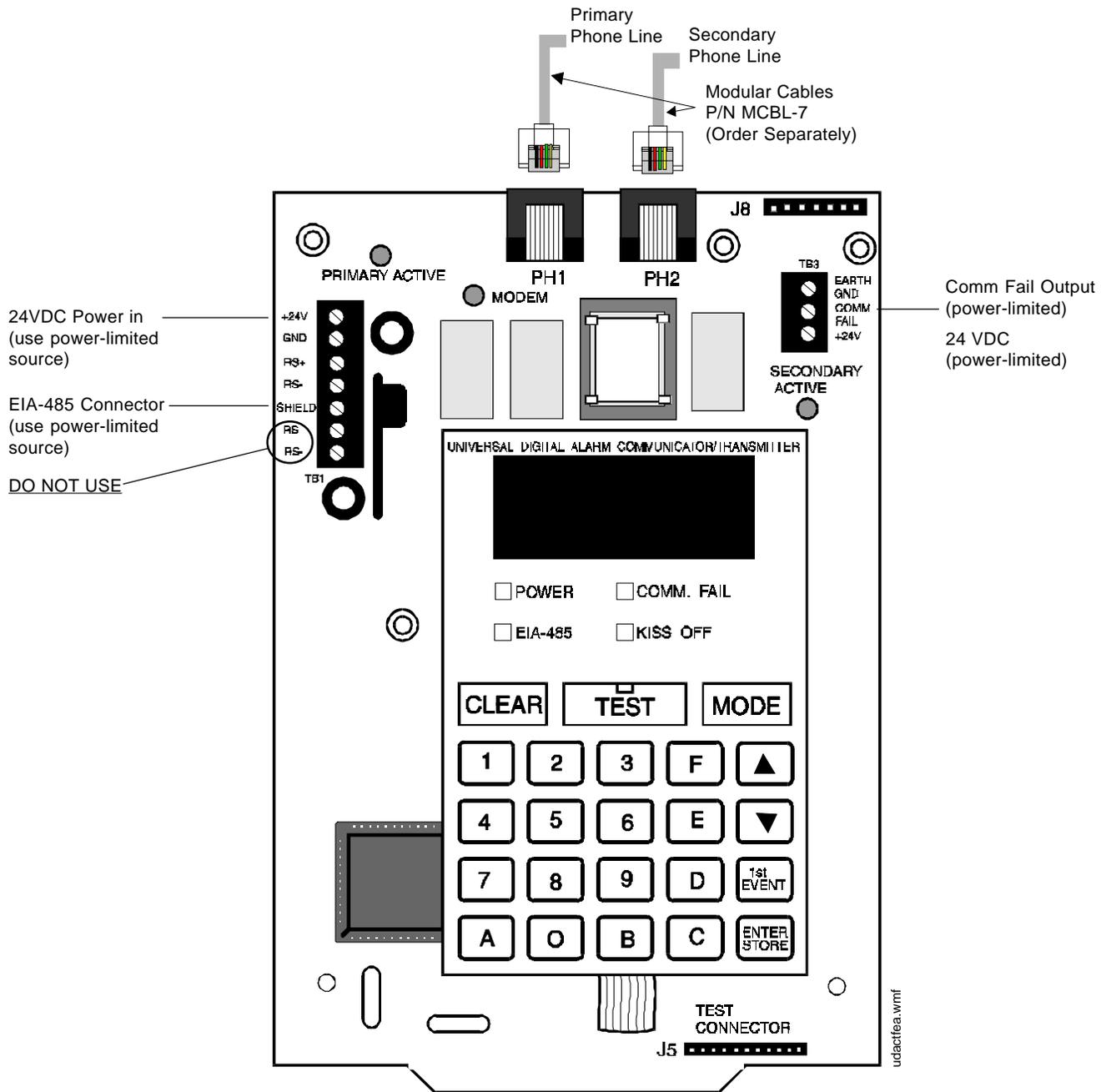


Figure 1-1: ADT-UDACT Assembly

1.2 Controls and Indicators

Front Panel Switches

CLEAR	Digits 0-9
TEST	A
MODE	B
Up Arrow	C
Down Arrow	D
1st EVENT	E
ENTER/STORE	F

DO NOT USE

Displays

- EIA-485 - yellow LED
- COMM. FAIL - yellow LED
- KISS OFF - green LED
- POWER - green LED
- Four, Seven Segment Displays - red
- Primary Phone Line Active - red LED
- Secondary Phone Line Active - red LED
- TEST - green LED

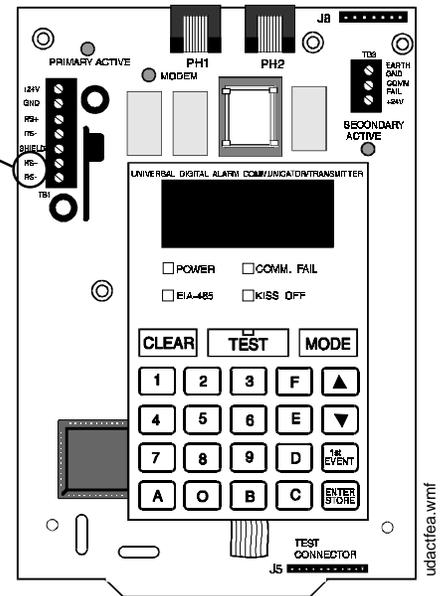


Figure 1-2: Controls and Indicators

1.3 Compatible Panels

The ADT-UDACT has been designed to be compatible with the ADT Unimode 2020/1010, Unimode 300/400, and the ADT-MNNA.

1.4 Digital Communicator

Two modular phone jacks allow easy connection to telephone lines. Modular jacks are labeled PH1 and PH2 for the Primary and Secondary phone lines. Telephone line 'Primary and Secondary Active' red LEDs are provided as well as a green 'Kissoff' LED. The integral digital communicator provides the following functions:

- Line Seizure - takes control of the phone lines disconnecting any premises phones.
- Off/On Hook - perform on and off-hook status to the phone lines.
- Listen for dial tone - 440 hertz tone typical in most networks.
- Dialing the Central Station(s) number - default is Touch-Tone®, programmable to rotary.

- For tone burst or touchtone type formats: Discern proper 'Ack' and 'Kiss-off' tone(s) - The frequency and time duration of the tone(s) varies with the transmission format. The ADT-UDACT will adjust accordingly.
- Communicate in the following formats (refer to Section 6.0 for compatible receivers):
 - ✓ 6 Tone Burst Types: 20 pps
(3+1, 4+1, 4+2)
 - ✓ 3 Touchtone Types:
 - 4 + 1 Ademco Express
 - 4 + 2 Ademco Express
 - Ademco Contact ID

The ADT-UDACT circuit board contains a CPU, other primary components and wiring interface connectors.

1.5 Circuits

1.5.1 Power Requirements

Operating voltage for the ADT-UDACT must be power-limited, filtered, nonresettable 21.2 to 28.2 volts. The 24 VDC nominal operating power must be supplied by the Control Panel and is connected to TB1 of the ADT-UDACT.

1.5.2 Communications

Communications between the ADT-UDACT and the host control panel is accomplished over a two wire EIA-485 serial interface which is power-limited and supervised by the control panel and the ADT-UDACT. The wiring connections are made to the RS+, RS- and Shield terminals of TB1 on the ADT-UDACT.

The EIA-485 circuit cannot be T-Tapped and must be wired in a continuous fashion from the control panel to the ADT-UDACT and, if installed, annunciators. The wire must be 12AWG to 18AWG twisted shielded pair cable with a Characteristic Impedance of 120 Ohms, +/-20%. Limit the total wire resistance to 100 Ohms on the EIA-485 circuit. Do not run cable adjacent to, or in the same conduit as 120 volts AC service, noisy electrical circuits that are powering mechanical bells or horns, audio circuits above 25 volts_{RMS}, motor control circuits, or SCR power circuits.

1.5.3 Primary and Secondary Phone Lines

Modular jacks are used to interface the primary and secondary phone lines to the public telephone network.

1.5.4 Communicator Fail Relay Driver

Relay driver output for Central Station communication failure is available.

1.5.5 Earth Ground

An earth ground connection to the ADT-UDACT is required for transient protection. One option allows connection via TB3 terminal 1. A second option allows connection via the upper right corner mounting hole. Using a metal standoff and screws, attach to grounded metal cabinet.

1.6 Optional Device Future Use.

1.7 Specifications

DC Power - TB1, Terminals 1 & 2

24VDC (nominal) filtered, nonresettable and power-limited. Voltage range is 21.2 to 28.2 volts. DC Power TB1 Terminals 1 (+), 2 (-) 40 mA in standby, 75 mA max. while communicating and 100 mA with the open collector output engaged and communicating.

Data Communications - TB1, Terminals 3 - 7

EIA-485 serial interface, TB1 Terminal 3 = RS+, 4 = RS-, 5 = Shield, 6 = Future use, 7 = Future use. Power-limited source must be used.

Auxiliary Output - TB3, Terminals 2 & 3

TB3-2 = Communicator Failure. Power-limited circuit. An Open Collector type output, normally high, active low which sinks up to 40 mA. TB3-3 = 21.2 to 28.2 volts, power-limited. Use UL listed relay P/N: MR-101/C or MR-201/C with this output.

Earth Ground - TB3, Terminal 1

TB3-1 = Earth Ground connection. Connect this terminal to building earth ground using solid 12 AWG wire to provide lightning protection. This connection is not required when the ADT-UDACT is mounted in a grounded metal enclosure via the upper right mounting hole.

1.8 Telephone Requirements and Warnings

1.8.1 Telephone Circuitry - PH1 & PH2

Ringer Equivalence Number (REN) = 0.6B
AC Impedance 10.0 Mega Ohm
Complies with FCC Part 68
Mates with RJ31X Male Connector
Supervision Threshold: less than 4.0 volts for 2 minutes

The REN is used to determine the quantity of devices which may be connected to the telephone line. Excessive REN's on the telephone line may result in the devices not ringing in response to an incoming call. In most, but not all areas, the sum of the REN's should not exceed five (5.0). To be certain of the number of devices that may be connected to the line, as determined by the total REN's, contact the telephone company to determine the maximum REN for the calling area.

1.8.2 Digital Communicator:

Before connecting the ADT-UDACT to the public switched telephone network, the installation of two RJ31X jacks is necessary. The following information is provided if required by the local telephone company :

Manufacturer : Notifier Fire Systems
One Fire-Lite Place
Northford, CT 06472-1653

Product Model Number: ADT-UDACT
FCC Registration Number: 1W6USA-20723-AL-E
Ringer Equivalence 0.6B

1.8.3 Telephone Company Rights and Warnings:

The telephone company under certain circumstances may temporarily discontinue services and/or make changes in its facilities, services, equipment or procedures which may affect the operation of this control panel. However, the telephone company is required to give advance notice of such changes or interruptions.

If the control panel causes harm to the telephone network, the telephone company reserves the right to temporarily discontinue service. Advance notification will be provided except in cases when advance notice is not practical. In such cases, notification will be provided as soon as possible. The opportunity will be given to correct any problems and to file a complaint.

DO NOT CONNECT THIS PRODUCT TO COIN TELEPHONE, GROUND START, OR PARTY LINE SERVICES.

When the control panel activates, premise phones will be disconnected.

Two separate phone lines are required. Do not connect both telephone interfaces to the same telephone line.

The control panel must be connected to the public switched telephone network upstream of any private telephone system at the protected premises.

An FCC compliant telephone cord must be used with this equipment. This equipment is designed to be connected to the telephone network or premises wiring using a compatible RJ31X male modular plug which is Part 68 compliant.

1.9 Modes and Special Functions

1.9.1 Normal Mode:

Normal mode is the standard mode of operation. In this mode, the ADT-UDACT monitors host FACP status as well as monitoring telephone line voltage. The ADT-UDACT reports system status information to UL listed Central Stations. Information transmitted includes general alarm, trouble and supervisory. It also transmits either the number of zones or points activated or the specific point(s) activated, depending upon the compatible panel, programming selections and transmission format selection. Specific system trouble conditions and specific ADT-UDACT troubles are also transmitted.

1.9.2 Program Mode:

Program mode is used to program the ADT-UDACT. While the ADT-UDACT is in the program mode, it cannot receive host FACP status information. See Section 3.0 for complete programming instructions.

1.9.3 Lamp Test Mode:

This mode turns on all segments of the 4 character display plus all LEDs on the ADT-UDACT.

1.9.4 Troubleshoot Mode:

Troubleshoot mode may be used for testing the telephone line wiring. Connection from the ADT-UDACT's modular jacks, through RJ31X jacks and into the telephone network may be easily checked. In this mode, the keypad acts similar to a telephone touchpad.

1.9.5 Type Mode:

Type Mode is used to define the specific type of device (point) used or function of a zone. Type Mode is also used to disable the alarm report for any zone/point in the system. The feature which disables the zone/point alarm report must be used for zones/points programmed into the host FACP as remote silence, reset, drill or acknowledge switches. *Note: Unimode2020/1010 and ADT-MNNA applications restrict Type Mode programming to a maximum of 568 points. All remaining points above 568 will report as fire alarm points only.*

1.9.6 Clear Function:

When the clear function is activated, it causes the ADT-UDACT to immediately stop transmissions, hang-up from the telephone network, clear out any messages that were waiting for transmission and reset.

1.9.7 Manual Test Function:

The manual test function allows for a test report message to be sent to both Central Stations upon activation.

2.0 Installation and Wiring

2.1 General Mounting Options

For information on mounting the ADT-UDACT in a specific fire alarm control panel, refer to the appropriate Appendix.

2.2 Output Circuits Telephone Circuits

Provision to connect to two independent telephone lines is available via two telephone jacks labeled PH1 (Primary) and PH2 (Secondary). Telephone line control/command is possible via double line seizure as well as usage of an RJ31X style interconnection. (RJ31X jacks must be ordered separately).

Note: It is critical that the ADT-UDACT be located as the first device on the incoming telephone circuit to properly function.

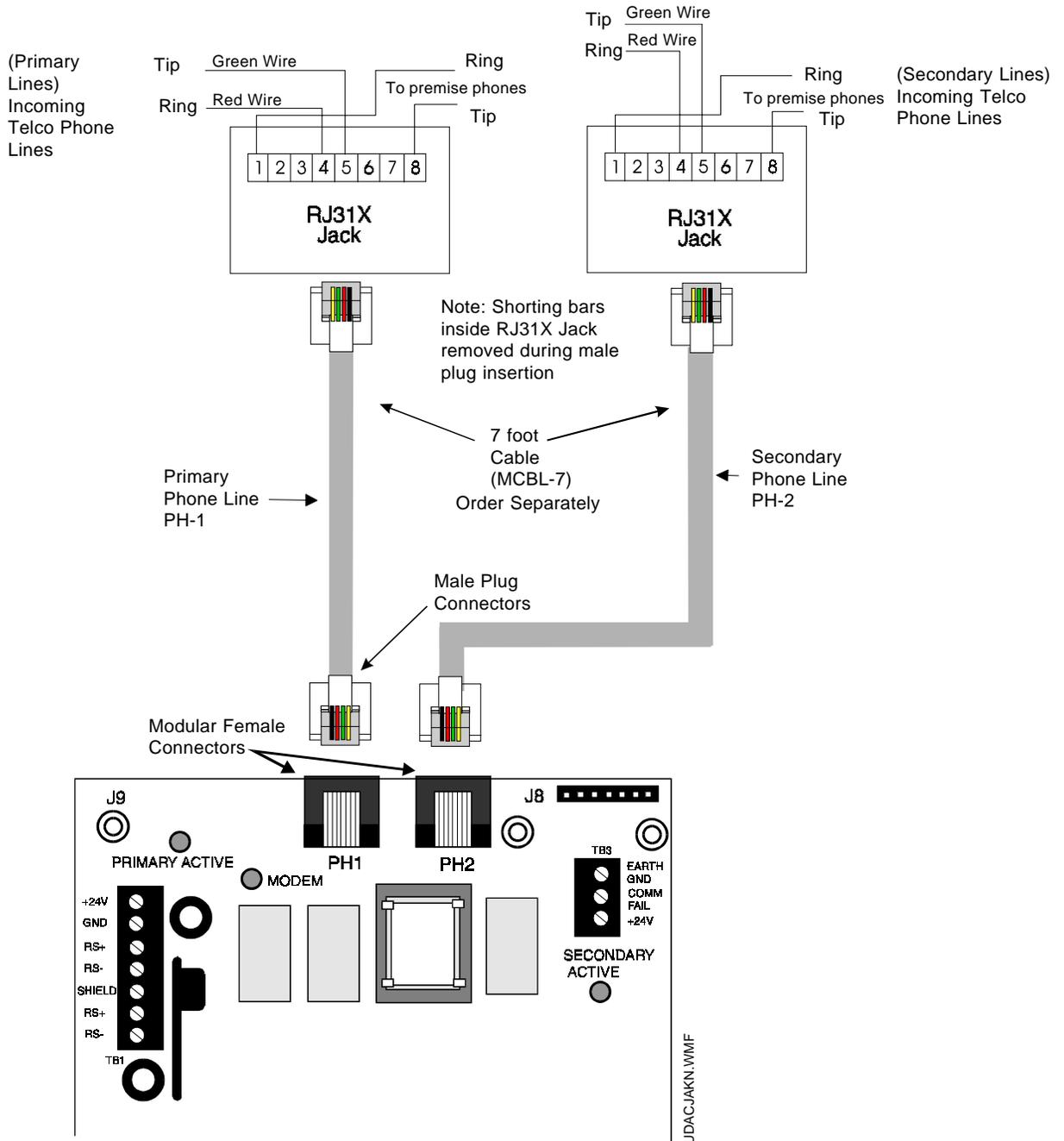


Figure 2-1: Wiring Phone Jacks

Relay Driver

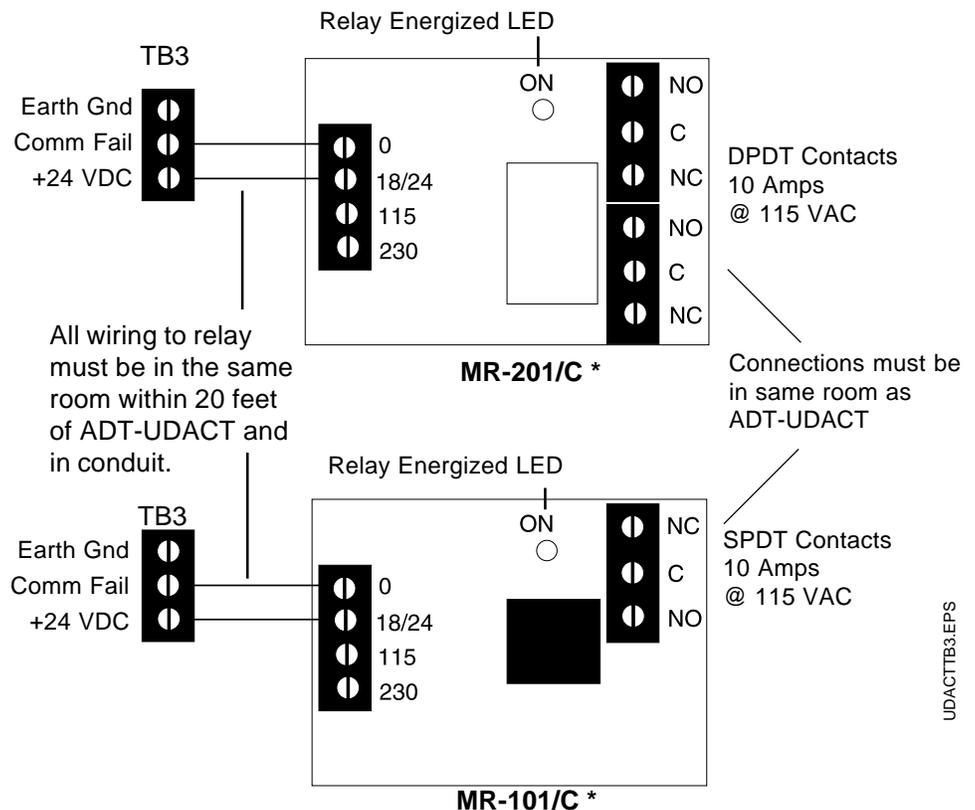
The ADT-UDACT's open collector output on TB3, terminal 2 is provided for Communicator Failure and ADT-UDACT trouble. It can be used to drive UL listed relay MR-101/C or MR-201/C. The output is rated for 40 mA. The normal condition for the output is Off (deenergized).

Communicator Failure occurs when the maximum number of attempts to reach both central stations has taken place or when both phone lines are disconnected. ADT-UDACT trouble conditions include loss of telephone line voltage to the primary and/or secondary phone lines, communication failure to the primary or secondary central stations, total communication failure, entry into program, type and troubleshoot modes.

Wiring from the ADT-UDACT terminal TB3 to the relay must be in the same room no more than 20 feet in length and enclosed in conduit. Wiring from the relay output contacts must remain in the same room as the ADT-UDACT.

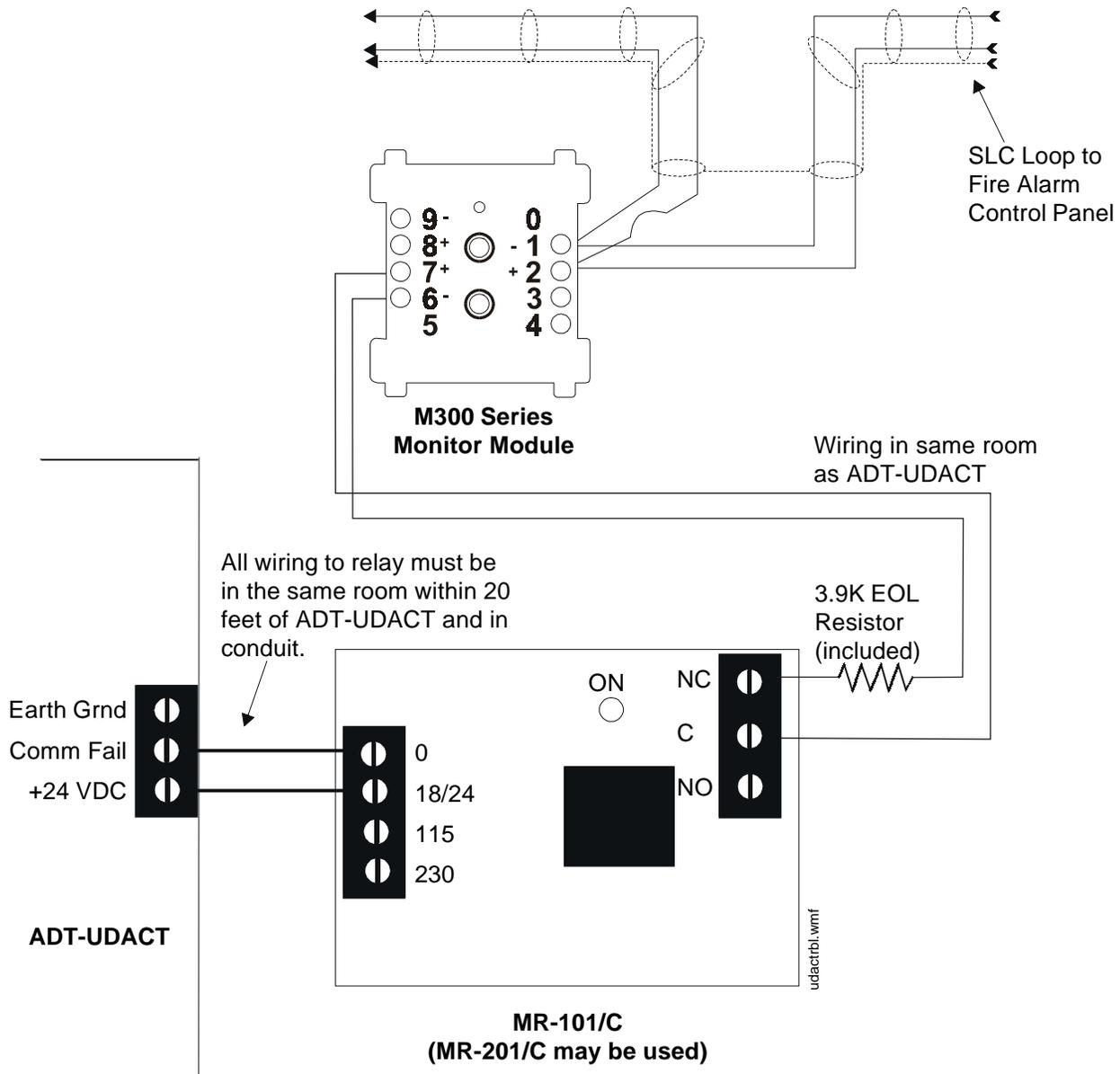
When the ADT-UDACT is programmed for 'Receive Only' (typically this occurs when annunciators are also used and are set for 'Receive/Transmit'), the relay output is used to provide a ADT-UDACT trouble input to the host control panel. For Unimode 2020/1010 applications, use a monitor module to supervise the relay closure. Refer to Figure 2.3. Program the custom label field to read 'UDACT Trouble'.

When the ADT-UDACT is programmed for 'Receive/Transmit', EIA-485 supervision and ADT-UDACT trouble status are automatically handled by the host control panel. The relay output may, however, be used for ADT-UDACT communications failure if desired.



* Note: The MR-101/C and MR-201/C include an enclosure.

Figure 2-2: Relay Driver Connections



Note: M300 Series Monitor Module is used to supervise Normally Closed output of MR-101/C. On ADT-UDACT trouble and Comm Fail, MR-101/C relay contact will open causing the monitor module to transmit trouble condition to FACP.

Figure 2-3: Monitoring for ADT-UDACT Trouble

2.3 UL Power-limited Wiring Requirements

Power-limited and nonpower-limited circuit wiring must remain separated in the cabinet. All power-limited circuit wiring must remain at least 0.25" away from any nonpower-limited circuit wiring. Furthermore, all power-limited circuit wiring and nonpower-limited circuit wiring must enter and exit the cabinet through different knockouts and/or conduits. A typical wiring diagram for the ADT-UDACT is shown below.

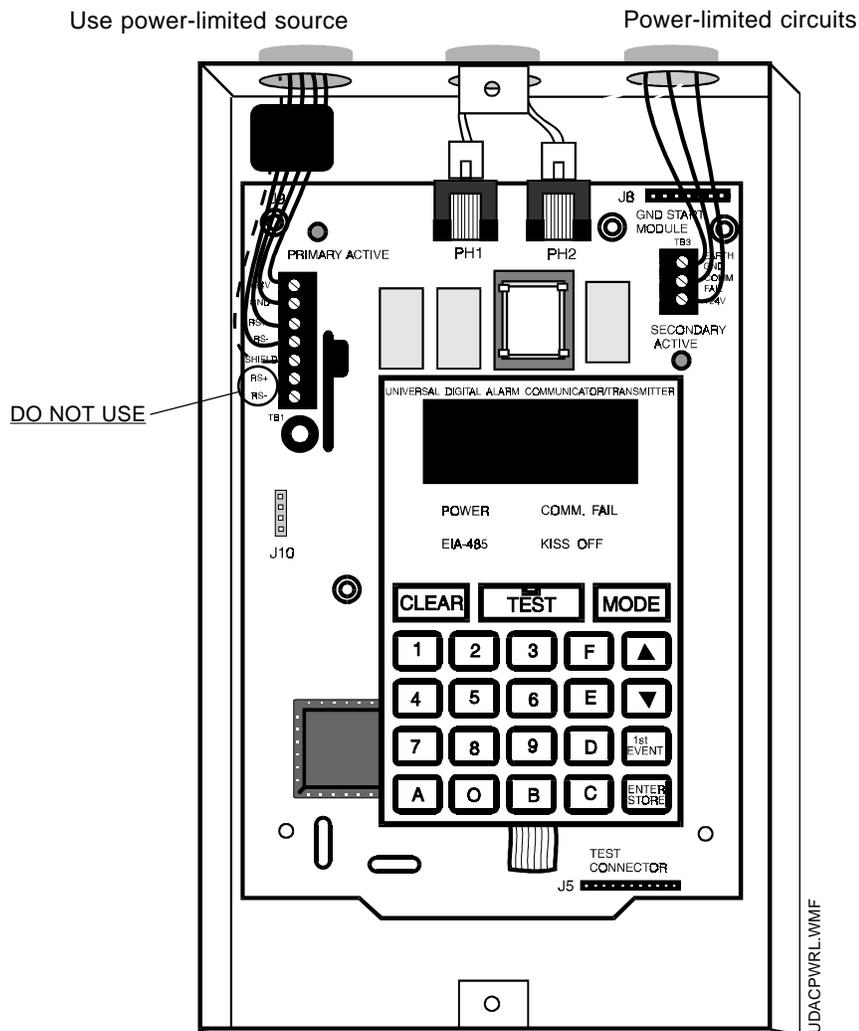


Figure 2-4: Typical Wiring Diagram for UL Power-limited Requirements

3.0 Programming Instructions

Programming Mode Programming of the ADT-UDACT is possible at any time including while the ADT-UDACT is communicating with a Central Station.

The ADT-UDACT has been designed for many different types of applications. After examining your specific application, review the programming options and choose the entries best suited for your system.

The ADT-UDACT has a built-in programmer. All programming selections are stored in nonvolatile Electrically-Erasable Programmable Read-Only Memory (EEPROM). This ensures that the ADT-UDACT will retain all entries made in programming mode even if both AC and battery power are removed.

The user **must** program the primary and secondary phone numbers, account numbers and 24 hour test report times for each Central Station account and the current time. The ADT-UDACT comes with factory chosen options/features already programmed. Other options/features may be programmed if desired. If all factory default settings are acceptable, programming is complete.

3.1 Entering Program Mode

To enter the Program Mode, press the **MODE** key once, (the display will go blank) you then have ten seconds to start entering the code (**7764**).

☎ **7764** spells PROG on a Touch-Tone® phone

If an incorrect key is entered, reenter the proper 4-digit code **before** pressing the **[ENTER/STORE]** key

 7
 77
 776
7764

Note that as you enter information into the ADT-UDACT, the digits will scroll across the display from right to left

You are allowed a pause of up to 10 seconds in between each number while entering the code. After pressing the **[ENTER/STORE]** key, the ADT-UDACT will be in Program Mode and display **00_F**. You are allowed up to ten minutes of idle time at this point before starting your programming, otherwise the ADT-UDACT will go back to Normal Mode. You also have a maximum of 10 minutes between any key stroke. All entries made prior to the 10 minute time-out are valid and stored.

Once in Programming Mode, the ADT-UDACT will:

- Ignore the Test and Clear keys.
- Continue to communicate any events not previously acknowledged at the Central Station prior to entering Programming Mode.

Location 56 is factory set to = 0, *ADT-UDACT communications disabled. This keeps the communicator off until location 56 is changed to 1, 2, 3 or 4. Refer to program selection for address 56 in this section. Once location 56 is changed from 0 and a valid phone number is entered, transmission of the "ADT-UDACT off Normal" report will occur.*

Throughout programming mode, the first three locations on the left of the display represent the memory address which can range from 00 to 208 (Alpha characters are not used). The last location (farthest right) represents the contents of the memory address. The first address displayed is shown below:

00_F
(address)(data)

3.2 Switch Functions *The Function of each switch in program mode is shown below:*

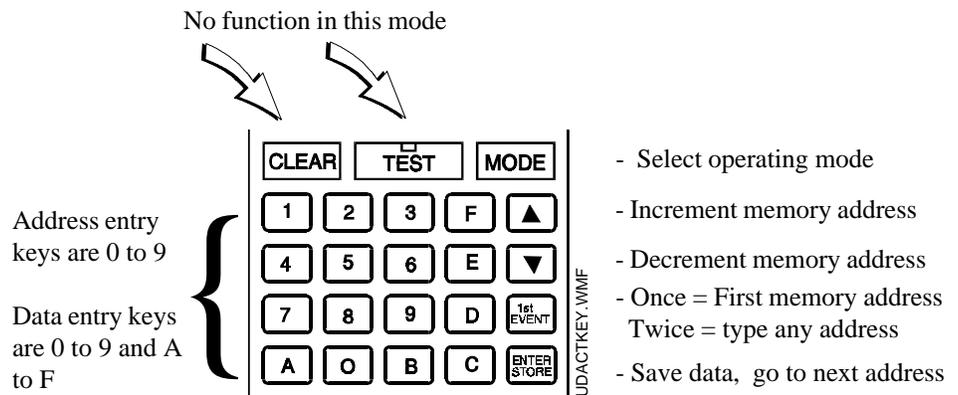


Figure 3-1: ADT-UDACT Keypad

3.3 Programming Options **Primary phone number. (00-15)**

The first sixteen addresses, 00-15, are factory set to 'F' (from **00_F** to **15_F**). Programming is typically done as follows: If your phone # is 484-7161, type **4**, the display will read **00_4**, press **[ENTER/STORE]** to save the entry to memory and increment to the next address **01_F**.

Enter the remaining numbers in their respective addresses as shown below:

4 8 4 7 1 6 1 F F F F F F F F F
00 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15.

Valid entries for both the primary and secondary phone numbers are 0 - F with the numeric digits as dialed numbers and hexadecimal digits (A-F) representing the following functions:

- A= * on a Touchtone phone keypad
- B= # on a Touchtone phone keypad
- C= look for secondary dial tone for up to 2 seconds (then, dial anyway)
- D= 3-second pause
- E= 5-second pause
- F= end of phone number (Note: F must be entered)

Primary Number Communication Format (16)

One location is needed to select the Communication Format to the primary phone number. Address 16 is used for this purpose. The default (factory setting) for this address is **16_A**, which is 4+2 Standard, 1800 Hz 'Carrier', 2300 Hz 'ack'. You may enter 0, 1, 2, 4, 6, 8, C or E in place of the default, then press **[ENTER/STORE]**. When selecting the Format, note that Ademco Contact ID is the only format in the ADT-UDACT which identifies the specific zone or point status to the Central Station. All other formats report the number of zones or points that are active but do not identify the specific zone or point. Choose from the list of formats below:

- 0: 4+1 Ademco Express Standard, DTMF, 1400/2300 ACK
- 1: 4+2 Ademco Express Standard, DTMF, 1400/2300 ACK
- 2: 3+1 Standard 1800 Hz Carrier, 2300 Hz ACK
- 3: Not Used
- 4: 3+1 Standard 1900 Hz Carrier, 1400 Hz ACK
- 5: Not Used
- 6: 4+1 Standard 1800 Hz Carrier, 2300 Hz ACK
- 7: Not Used
- 8: 4+1 Standard 1900 Hz Carrier, 1400 Hz ACK
- 9: Not Used
- A: 4+2 Standard 1800 Hz Carrier, 2300 Hz ACK
- B: Not Used
- C: 4+2 Standard 1900 Hz Carrier, 1400 Hz ACK
- D: Not Used
- E: Ademco Contact ID
- F: Not Used

Note: Consult your Central Station for proper selection or consult our factory representatives. For any format chosen, the ADT-UDACT automatically programs all of the event codes. See Tables 3-2, 3-3, 3-4, 3-5, 3-6 and 3-7.

Primary Number Account Code (17-20) Four locations at addresses 17-20 default to all '0's. Valid entries are (0-9 and A-F). The number of digits entered must match the format selection. If programming '2 or 4' into address 16, enter 3 digits. (location 20 is ignored) If programming '0, 1, 6, 8, A, C, or E' into address 16, enter 4 digits.

Primary Number 24 Hour Test Time (21-24).

Use military time when entering the 24 hour 'test' time. The 24 hour test report to phone number 1 takes up four locations, from addresses 21-24. The default is 00:00 (12:00 midnight). The limits for each location are as follows: 21: enter 0, 1 or 2; 22: enter 0-9; 23 : enter 0-5; 24: enter 0-9. Note: Do not use A-F.

Primary Number 24/12 Hour Test Time Interval (25). The test report sent to the Primary phone number may be sent every 12 or 24 hours. If the message is to be sent every 24 hours, leave the factory default entry of zero. If 12 hour test report time is needed, enter 1=12 hours.

Secondary Phone Number (26-41). Programming is similar to programming the primary phone number located at addresses 00 - 15. The defaults are also all 'F's.

F F F F F F F F F F F F F F F F
26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41.

Secondary Number Communication Format (42). Programming is the same as the primary number's Comm Format at address 16. Default entry is 'A', 4+2 Standard. When selecting the Format, note that Ademco Contact ID is the only format in the ADT-UDACT which identifies the specific zone or point status to the Central Station. All other formats report the number of zones or points that are active but do not identify the specific zone or point. Choose one entry from the list below:

- 0: 4+1 Ademco Express Standard, DTMF, 1400/2300 ACK
- 1: 4+2 Ademco Express Standard, DTMF, 1400/2300 ACK
- 2: 3+1 Standard 1800 Hz Carrier, 2300 Hz ACK
- 3: Not Used
- 4: 3+1 Standard 1900 Hz Carrier, 1400 Hz ACK
- 5: Not Used
- 6: 4+1 Standard 1800 Hz Carrier, 2300 Hz ACK
- 7: Not Used
- 8: 4+1 Standard 1900 Hz Carrier, 1400 Hz ACK
- 9: Not Used
- A: 4+2 Standard 1800 Hz Carrier, 2300 Hz ACK
- B: Not Used
- C: 4+2 Standard 1900 Hz Carrier, 1400 Hz ACK
- D: Not Used
- E: Ademco Contact ID
- F: Not Used

Secondary Number Account Code (43-46) is programmed in addresses 43 - 46 in the same manner as the primary phone number Account Code. Default entries are all '0s'.

Secondary Number 24-Hour Test Time (47-50) is programmed in addresses 47-50 in the same manner as the primary number 24-Hour Test Time. Default is 00:00 (12:00 midnight).

Secondary Number 24/12 Hour Test Time (51) The test message sent to the Secondary phone number may be sent every 12 or 24 hours. If the message is to be sent every 24 hours, leave the factory default entry of zero. If a 12 hour test report time is needed, enter 1=12 hours.

Use the Start and End Monitoring Address programming locations to set the reporting range of the ADT-UDACT.

Start Monitoring Address (52-53) is programmed to indicate the first group of zones or points to be monitored and reported to the Central Station. Valid entries are '11 through 19' for the Unimode 300/400, and '01 through 32' for the Unimode 2020/1010 and ADT-MNNA. The factory default setting is '01'. See Table 3-1.

End Monitoring Address (54-55) is programmed to indicate the last group of zones or points to be monitored and reported to the Central Station. Valid entries are '11 through 19' for the Unimode 300/400, and '01 through 32' for the Unimode 2020/1010 and ADT-MNNA. Factory default setting is '02'.

Zone Reporting (Factory Default)		
	START Addr. 52-53	END Addr. 54-55
Unimode 400	11 ¹	12 ¹
1 = Reports status of up to 99 zones		

Point Reporting		
	START Addr. 52-53	END Addr. 54-55
Unimode 2020/1010, ADT-MNNA	01 ²	32 ²
Unimode 400	11 ³	19 ³
2 = Reports status of up to 2,040 points 3 = Reports status of up to 384 points		

Note: For additional information on the starting and ending addresses, refer to the host FACP Technical Manual.

Table 3-1: Start and End Monitoring Addresses

ADT-UDACT Communication Selection (56)

Leaving address 56 at '0' disables communications to the Central Station(s). Enter '1' for zone reporting, receive only, '2' for zone reporting, receive/transmit, '3' for point reporting, receive only, or '4' for point reporting, receive/transmit. See Type Mode Section 4.2 for additional information on detailed reporting. *Note: Use receive only selection when using remote annunciators. Be certain to set one of the annunciators for receive/transmit for EIA-485 communications bus supervision. Use the receive/transmit entry when annunciators are not installed or when the ADT-UDACT receive/transmit function is to be used to supervise the EIA-485 communication bus. For more information on the receive/transmit function, refer to annunciator manuals.*

Backup Reporting (57) Leaving address 57 at '0' means that reports will be transmitted to the secondary phone number only if attempts to communicate to the primary phone number are unsuccessful. Programming a '1' causes all reports to be transmitted to the secondary phone number.

Touchtone/Rotary Select (58) A '0' programmed in this address by the factory triggers Touchtone dialing over both phone lines. Select '1' for rotary dialing.

Make Break Ratio (59) Use this address only if you have chosen '1' for address 58. The make/break ratio is factory set to '0' which is 67/33, but may be changed to '1' which is a 62/38 ratio.

Address (60) Leave default of 0.

Address (61) Leave default of 0.

AC Loss Reporting Delay (62) '1' is factory default which causes a 6 hour time delay for AC loss reporting. Valid entries are 0 to 9 and A to F corresponding to the following reporting delay times: '1' = 6 hour, '2' = 7 hours, '3' = 8 hours, '4' = 9 hours, '5' = 10 hours, '6' = 11 hours, '7' = 15 hours, '8' = 16 hours, '9' = 17 hours, 'A' = 18 hours, 'B' = 19 hours, 'C' = 20 hours, 'D' = 21 hours, 'E' = 22 hours and 'F' = 23 hours. '0' entry causes immediate reporting of AC loss.

Host Panel ID (63)

Enter one of the following digits corresponding to the Control Panel in which the ADT-UDACT is installed. **A correct entry is essential for proper operation.**

- | | | |
|----------------|----------------|---------------------------------|
| 0 = Do not use | 3 = Do not use | 6 = Do not use |
| 1 = Do not use | 4 = Do not use | 7 = Unimode 2020/1010, ADT-MNNA |
| 2 = Do not use | 5 = Do not use | 8 = Unimode 300/400 |
| | | 9 = Do not use |

Loop Number (64 - 65)

For Contact ID format only. Factory default is '00'. Maximum value is '97'. Refer to Section 5.0 for additional information.

Device/Zone Number (66 - 68)

For Contact ID format only. These entries apply to the general reports only, i.e. general alarm, general trouble, general supervisory. Factory default is '000'. Maximum value is '999'. Refer to Section 5.0 for additional information.

Note: For the Contact ID Format, Loop Number and Device Number do not directly correspond to the SLC Loop or Device Number, instead, it is a convenient way to transmit data to the Central Station. Using the default Loop Number of '00' allows the reporting of a maximum of 999 devices or zones (001-999). To report device addresses or zones higher than 999 (the Unimode 2020 can report up to 2,040 addresses), the Loop Number is incremented by one to report up to an additional 1,000 device addresses or zones on the same panel. Following is an example (using the factory defaults) of Loop Number and Device Number settings for the ADT-UDACT on a single Unimode 2020 control panel:

Loop Number '00'	reports points/zones 00 001 to 00 999
Loop Number '01'	reports points/zones 01 000 to 01,999
Loop Number '02'	reports points/zones 02 000 to 02,040

If the Loop Number (54-65) is programmed to 10, the devices are reported as:

Loop Number '10'	reports points/zones 10 001 to 10 999
Loop Number '11'	reports points/zones 11 000 to 11,999
Loop Number '12'	reports points/zones 12 000 to 12,040

In applications which network multiple Fire Alarm Control Panels, the group number may be used to help identify each facility being monitored. For example, each ADT-UDACT can report its panel's devices by designating different Loop Numbers for each panel. The Loop Numbers assigned to a particular panel must be sequential, but the Loop Numbers from one panel to the next need not be sequential; i.e., the Loop Numbers assigned for the ADT-UDACT on one Unimode 2020 might be 00, 01 or 02 while the Loop Numbers for another FACP might be 10, 11 or 12 or any other set of unused consecutive numbers. For additional information on the Unimode 2020/1010 control panels, refer to Appendix D.

Programming Event Codes (69-208)

The type of reports and 'event codes' that are sent to the Central Station are in Tables 3-2 through 3-7. The selections made for the Primary Central Station Number Communication Format (address 16) and the Secondary Central Station Number Communication Format (address 42) automatically program addresses 69-208 with factory default selections.

Any of the event codes may be changed. *Consult your Central Station prior to altering the event codes.* For the 3+1, 4+1 and 4+1 Express Formats, entering an event code of '0' will cause the communicator to NOT transmit the report. Enter two zeroes for 4+2 and 4+2 Express Formats. For Ademco Contact ID format enter three zeroes. Transmission of reports to *either or both* Central Station phone numbers may be disabled.

Note the special 'System Abnormal Test Report' event code. This report was added per new UL DACT requirements. This report is generated in place of the normal test report when an alarm and/or trouble condition exists at the time the test report is due to be sent.

Programming the Real-Time Clock

Entering an address greater than 209 will cause a display of the current time. On initial power up, the clock will start running from the factory setting of 00:01 (military time). The far left digit will be flashing, indicating that this is the first digit to be programmed.

Hours/Minutes

Select a digit then press [ENTER/STORE]. The digit 2nd from the left will start flashing. Select a digit then press [ENTER/STORE]. Hours setting is complete. With the digit 2nd from the right flashing, select a digit then press [ENTER/STORE]. The digit on the far right will start flashing. Select a digit then press [ENTER/STORE]. Minutes setting is complete.

End Programming

Exit Programming Mode by pressing **MODE**, followed by the 4-digit code corresponding to an alternate mode of operation, then press [ENTER/STORE]. During Program Mode, if no key is pressed within 10 minutes, the ADT-UDACT will revert to normal mode.

3+1, 4+1 Express and 4+1 Standard Formats If '0, 2, 4, 6 or 8' are entered for address 16, the following data is automatically programmed for the Primary phone number event codes. Enter a '0' for the data setting to disable the report. These formats do not support zone/point programming. For zone/point reporting, refer to Contact ID.

<u>Address</u>	<u>Description</u>	<u>Setting</u>
69	Primary # General Alarm Code	1
70	Primary # Zone/Point Alarm Code	0
71	Primary # General Supervisory Code	8
72	Primary # Zone/Point Supervisory Code	0
73	Primary # General Fault Code	F
74	Primary # AC Fault Code	F
75	Primary # Zone/Point Fault Code	0
76	Primary # Low Battery Fault Code	F
77	Primary # Telco Primary Line Fault Code	F
78	Primary # Telco Secondary Line Fault Code	F
79	Primary # NAC Fault Code	F
80	Primary # Comm. Trouble Primary # Code	F
81	Primary # Comm. Trouble Secondary # Code	F
82	Primary # 485 Comm. Trouble Code	F
83	Primary # System Off Normal Code	F
84	Primary # ADT-UDACT Off Normal Code	F
85	Primary # General Alarm Restore Code	E
86	Primary # Zone/Point Alarm Restore Code	0
87	Primary # General Supervisory Restore Code	E
88	Primary # Zone/Point Supervisory Restore Code	0
89	Primary # General Fault Restore Code	E
90	Primary # AC Fault Restore Code	E
91	Primary # Zone/ Point Fault Restore Code	0
92	Primary # Low Battery Fault Restore Code	E
93	Primary # Telco Primary Line Fault Restore Code	E
94	Primary # Telco Secondary Line Fault Restore Code	E
95	Primary # NAC Fault Restore Code	E
96	Primary # Comm.Trouble Primary Number Restore Code	E
97	Primary # Comm. Trouble Secondary Number Restore Code	E
98	Primary # 485 Comm. Trouble Restore Code	E
99	Primary # System Off Normal Restore Code	E
100	Primary # ADT-UDACT Off Normal Restore Code	E
101	Primary # System 24 Hour Test	9
102	Primary # System 24 Hour Test w/active event	F
103	Primary # Manual Test	9

Note: Zero entries prevent the transmission of the report to the Central Station.

Table 3-2: Event Codes, Primary Number

4+2 Standard and 4+2 Express Formats

If '1, A or C' are entered for address 16, the following data is automatically programmed for the Primary phone number event codes. Enter a '0' for the data setting to disable the report. These formats do not support zone/point programming. For zone/point reporting, refer to Contact ID.

<u>Address</u>	<u>Description</u>	<u>Settings</u>
69 - 70	Primary # General Alarm Code	11
71 - 72	Primary # Zone/Point Alarm Code	00
73 - 74	Primary # General Supervisory Code	81
75 - 76	Primary # Zone/Point Supervisory Code	00
77 - 78	Primary # General Fault Code	F1
79 - 80	Primary # AC Fault Code	F6
81 - 82	Primary # Zone/Point Fault Code	00
83 - 84	Primary # Low Battery Fault Code	F8
85 - 86	Primary # Telco Primary Line Fault Code	FA
87 - 88	Primary # Telco Secondary Line Fault Code	FB
89 - 90	Primary # NAC Fault Code	FC
91 - 92	Primary # Comm. Trouble Primary Number Code	FD
93 - 94	Primary # Comm. Trouble Secondary Number Code	FE
95 - 96	Primary # 485 Comm. Trouble Code	FE
97 - 98	Primary # System Off Normal Code	FF
99 - 100	Primary # ADT-UDACT Off Normal Code	FF
101 - 102	Primary # General Alarm Restore Code	E1
103 - 104	Primary # Zone/Point Alarm Restore Code	00
105 - 106	Primary # General Supervisory Restore Code	E2
107 - 108	Primary # Zone/Point Supervisory Restore Code	00
109 - 110	Primary # General Fault Restore Code	E3
111 - 112	Primary # AC Fault Restore Code	E6
113 - 114	Primary # Zone/Point Fault Restore Code	00
115 - 116	Primary # Low Battery Fault Restore Code	E8
117 - 118	Primary # Telco Primary Line Fault Restore Code	EA
119 - 120	Primary # Telco Secondary Line Fault Restore Code	EB
121 - 122	Primary # NAC Fault Restore Code	EC
123 - 124	Primary # Comm. Trouble Primary # Restore Code	ED
125 - 126	Primary # Comm. Trouble Secondary # Restore Code	EE
127 - 128	Primary # 485 Comm. Trouble Restore Code	EE
129 - 130	Primary # System Off Normal Restore Code	EF
131 - 132	Primary # ADT-UDACT Off Normal Restore Code	EF
133 - 134	Primary # System 24 Hour Test	99
135 - 136	Primary # System 24 Hour Test w/active events	91
137 - 138	Primary # Manual Test	92

Note: Zero entries prevent the transmission of the report to the Central Station.

Table 3-3: Event Codes, Primary Number

Ademco Contact ID Format

If 'E' is entered for address 16, the following data is automatically programmed for the Primary phone number event codes. Enter a '000' for the data setting to disable the report.

<u>Address</u>	<u>Description</u>	<u>Setting</u> ¹	<u>Group #</u> ⁶	<u>Sensor No.</u>
69 - 71	Primary # General Alarm Code	110	00	000 ²
72 - 74	Primary # Zone/Point Alarm Code ⁵	110 ⁴	00	Note ³
75 - 77	Primary # General Supervisory Code	200	00	000 ²
78 - 80	Primary # Zone/Point Supervisory Code ⁵	200	00	Note ³
81 - 83	Primary # General Fault Code	300	00	
84 - 86	Primary # AC Fault Code	301	00	
87 - 89	Primary # Zone/Point Fault Code ⁵	380	00	Note ³
90 - 92	Primary # Low Battery Fault Code	302	00	
93 - 95	Primary # Telco Primary Line Fault Code	351	00	
96 - 98	Primary # Telco Secondary Line Fault Code	352	00	
99 - 101	Primary # NAC Fault Code	321	00	
102 - 104	Primary # Comm. Trouble Primary # Code	354	00	
105 - 107	Primary # Comm. Trouble Secondary # Code	354	00	
108 - 110	Primary # 485 Comm. Trouble Code	300	00	
111 - 113	Primary # System Off Normal Code	308	00	
114 - 116	Primary # ADT-UDACT Off Normal Code	350	00	
117 - 119	Primary# System 24 Hour Test	602	00	
120 - 122	Primary # System 24 Hour Test w/active event	608	00	
123 - 125	Primary # Manual Test Message	601	00	

Notes:

- 1) Note: Zero entries prevent the transmission of the report to the Central Station.
- 2) Refer to Contact ID program locations 64 - 68.
- 3) The identification of the zone/device number is automatically transmitted by the ADT-UDACT and is added to the main event code. See Table 5-3 for more information.
- 4) For control panels Unimode 2020/1010, ADT-MNNA, and the Unimode 300/400 the factory default event code is 110 and reprogrammable. The Unimode 400 is unique in point reporting mode in that only the control module report codes are programmable. The factory setting of report code 111 is fixed for addressable smoke detectors and cannot be changed.
- 5) The Group # is automatically incremented for Unimode 2020/1010 and ADT-MNNA applications.

Table 3-4: Ademco Contact ID, Primary Number

3+1, 4+1 Express or 4+1 Standard Formats

If '0, 2, 4, 6 or 8' are entered for address 42, the following is automatically programmed for the Secondary phone number event codes. Enter a '0' for the data setting to disable the report. These formats do not support zone/point programming. For zone/point reporting, refer to Contact ID.

<u>Address</u>	<u>Description</u>	<u>Setting</u>
139	Secondary # General Alarm Code	1
140	Secondary # Zone/Point Alarm Code	0
141	Secondary # General Supervisory Code	8
142	Secondary # Zone/Point Supervisory Code	0
143	Secondary # General Fault Code	F
144	Secondary # AC Fault Code	F
145	Secondary # Zone/Point Fault Code	0
146	Secondary # Low Battery Fault Code	F
147	Secondary # Telco Primary Line Fault Code	F
148	Secondary # Telco Secondary Line Fault Code	F
149	Secondary # NAC Fault Code	F
150	Secondary # Comm. Trouble Primary # Code	F
151	Secondary # Comm. Trouble Secondary # Code	F
152	Secondary # 485 Comm. Trouble Code	F
153	Secondary # System Off Normal Code	F
154	Secondary # ADT-UDACT Off Normal Code	F
155	Secondary # General Alarm Restore Code	E
156	Secondary # Zone/Point Alarm Restore Code	0
157	Secondary # General Supervisory Restore Code	E
158	Secondary # Zone/Point Supervisory Restore Code	0
159	Secondary # General Fault Restore Code	E
160	Secondary # AC Fault Restore Code	E
161	Secondary # Zone/ Point Fault Restore Code	0
162	Secondary # Low Battery Fault Restore Code	E
163	Secondary # Telco Primary Line Fault Restore Code	E
164	Secondary # Telco Secondary Line Fault Restore Code	E
165	Secondary # NAC Fault Restore Code	E
166	Secondary # Comm.Trouble Primary # Restore Code	E
167	Secondary # Comm. Trouble Secondary # Restore Code	E
168	Secondary # 485 Comm. Trouble Restore Code	E
169	Secondary # System Off Normal Restore Code	E
170	Secondary # ADT-UDACT Off Normal Restore Code	E
171	Secondary # System 24 Hour Test	9
172	Secondary # System 24 Hour Test w/active event	F
173	Secondary # Manual Test	9

Note: Zero entries prevent the transmission of the report to the Central Station.

Table 3-5: Event Codes, Secondary Number

4+2 Standard and 4+2 Express Formats

If '1, A or C' are entered for address 42, the following is automatically programmed for the Secondary phone number event codes. Enter a '0' for the data setting to disable the report. These formats do not support zone/point programming. For zone/point reporting, refer to Contact ID.

<u>Address</u>	<u>Description</u>	<u>Setting</u>
139 - 140	Secondary # General Alarm Code	11
141 - 142	Secondary # Zone/Point Alarm Code	00
143 - 144	Secondary # General Supervisory Code	81
145 - 146	Secondary # Zone/Point Supervisory Code	00
147 - 148	Secondary # General Fault Code	F1
149 - 150	Secondary # AC Fault Code	F6
151 - 152	Secondary # Zone/Point Fault Code	00
153 - 154	Secondary # Low Battery Fault Code	F8
155 - 156	Secondary # Telco Primary Line Fault Code	FA
157 - 158	Secondary # Telco Secondary Line Fault Code	FB
159 - 160	Secondary # NAC Fault Code	FC
161 - 162	Secondary # Comm. Trouble Primary Number Code	FD
163 - 164	Secondary # Comm. Trouble Secondary Number Code	FE
165 - 166	Secondary # 485 Comm. Trouble Code	FE
167 - 168	Secondary # System Off Normal Code	FF
169 - 170	Secondary # ADT-UDACT Off Normal Code	FF
171 - 172	Secondary # General Alarm Restore Code	E1
173 - 174	Secondary # Zone/Point Alarm Restore Code	00
175 - 176	Secondary # General Supervisory Restore Code	E2
177 - 178	Secondary # Zone/Point Supervisory Restore Code	00
179 - 180	Secondary # General Fault Restore Code	E3
181 - 182	Secondary # AC Fault Restore Code	E6
183 - 184	Secondary # Zone/Point Fault Restore Code	00
185 - 186	Secondary # Low Battery Fault Restore Code	E8
187 - 188	Secondary # Telco Primary Line Fault Restore Code	EA
189 - 190	Secondary # Telco Secondary Line Fault Restore Code	EB
191 - 192	Secondary # NAC Fault Restore Code	EC
193 - 194	Secondary # Comm. Trouble Primary # Restore Code	ED
195 - 196	Secondary # Comm. Trouble Secondary # Restore Code	EE
197 - 198	Secondary # 485 Comm. Trouble Restore Code	EE
199 - 200	Secondary # System Off Normal Restore Code	EF
201 - 202	Secondary # ADT-UDACT Off Normal Restore Code	EF
203 - 204	Secondary # System 24 Hour Test	99
205 - 206	Secondary # System 24 Hour Test w/active events	91
207 - 208	Secondary # Manual Test	92

Note: Zero entries prevent the transmission of the report to the Central Station.

Table 3-6: Event Codes, Secondary Number

Ademco Contact ID Format

If 'E' is entered for address 42, the following data is automatically programmed for the Secondary phone number event codes. Enter a '000' for the data setting to disable the report.

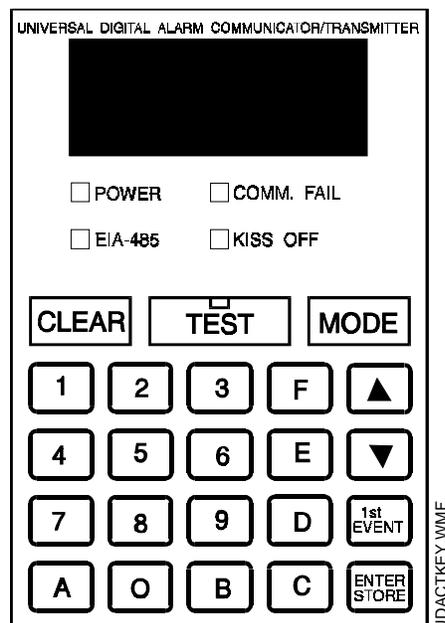
<u>Address</u>	<u>Description</u>	<u>Setting</u> ¹	<u>Group #</u> ⁶	<u>Sensor No.</u>
139 - 141	Secondary # General Alarm Code	110	00	000 ²
142 - 144	Secondary # Zone/Point Alarm Code	110 ⁴	00	Note ³
145 - 147	Secondary # General Supervisory Code	200	00	000 ²
148 - 150	Secondary # Zone/Point Supervisory Code	200	00	Note ³
151 - 153	Secondary # General Fault Code	300	00	
154 - 156	Secondary # AC Fault Code	301	00	
157 - 159	Secondary # Zone/Point Fault Code	380	00	Note ³
160 - 162	Secondary # Low Battery Fault Code	302	00	
163 - 165	Secondary # Telco Primary Line Fault Code	351	00	
166 - 168	Secondary # Telco Secondary Line Fault Code	352	00	
169 - 171	Secondary # NAC Fault Code	321	00	
172 - 174	Secondary # Comm. Trouble Primary # Code	354	00	
175 - 177	Secondary # Comm. Trouble Secondary # Code	354	00	
178 - 180	Secondary # 485 Comm. Trouble Code	300	00	
181 - 183	Secondary # System Off Normal Code	308	00	
184 - 186	Secondary # ADT-UDACT Off Normal Code	350	00	
187 - 189	Secondary # System 24 Hour Test	602	00	
190 - 192	Secondary # System 24 Hour Test w/active event	608	00	
193 - 195	Secondary # Manual Test Message	601	00	

Notes:

- 1) Note: Zero entries prevent the transmission of the report to the Central Station.
- 2) Refer to Contact ID program locations 64 - 68.
- 3) The identification of the zone/device number is automatically transmitted by the ADT-UDACT and is added to the main event code. See Table 5-3 for more information.
- 4) For control panels Unimode 2020/1010, ADT-MNNA, and Unimode 300/400 the factory default event code is 110 and reprogrammable. The Unimode 300 and Unimode 400 are unique in point reporting mode in that only the control module report codes are programmable. The factory setting of report code 111 is fixed for addressable smoke detectors and cannot be changed.
- 5) The Group # is automatically incremented for Unimode 2020/1010 and ADT-MNNA applications.

Table 3-7: Ademco Contact ID, Secondary Number

4.0 Operating Instructions



4.1 Normal Mode

The ADT-UDACT has five Modes of operation; Normal, Program, Lamp Test, Troubleshoot and Type mode. *Upon initial power up, the system will be in Normal Mode. This section discusses operation of the ADT-UDACT in the Normal Mode.*

4.1.1 Keys

Below is a description of the function keys in Normal Mode:

CLEAR The Clear function will cause the ADT-UDACT to:

- cease transmissions
- clear any active or pending transmissions
- reset and return to normal system processing

To perform the Clear function, press the Clear Key followed by 2, 5, 3, 2, then press the [ENTER/STORE] key.

TEST If the Test Key is pressed three times in rapid succession the ADT-UDACT will transmit a test message to both Central Stations. The message reported is the same as the automatic test message for all formats except Ademco Contact ID.

MODE Pressing the Mode Key followed by a valid 4-digit numerical code and [ENTER/STORE] selects one of the four modes of operation.

- ☛ To enter normal mode from any other mode press **MODE** then **6676 [ENTER/STORE]**. **6676** spells NORM on a Touch-Tone® phone.

- 1st EVENT** This key along with the Up Arrow and Down Arrow keys, are used to display ADT-UDACT fault conditions. Press the 1st Event key at any time to display the first event that occurred.
- DOWN ARROW** Use the Down Arrow key to view other ADT-UDACT fault events (older) that have occurred and are active - not cleared yet.
- UP ARROW** Use the Up Arrow key to view other ADT-UDACT fault events (newer), that have occurred and are active - not cleared yet.
- [ENTER/STORE]** See individual mode descriptions in other sections.

4.1.2 Displays:

Four 7-segment red LED characters provide visual annunciation of ADT-UDACT trouble conditions. A list of messages that may appear on the display in normal mode is shown below:

PH_1 Primary Number Communication Fault
PH_2 Secondary Number Communication Fault
no_1 Primary Phone Line Fault
no_2 Secondary Phone Line Fault

Individual LEDs are provided for:

EIA-485—A yellow LED that turns on steady when a fault on the EIA-485 circuit is detected.

Comm. Fail—This yellow LED turns on to indicate the loss of both telephone lines or that the maximum number of attempts to communicate with both Central Stations has been unsuccessful. Note: During a comm fail, the display will show either a PH1 and PH2 or no1 and no2.

Power On—A green LED that remains on while DC power is supplied to the ADT-UDACT. *If this indicator fails to light under normal conditions, service the system immediately.*

Kiss-Off—A green LED that blinks when the Central Station has acknowledged receipt of each transmitted message.

Test—A green LED that turns on to indicate that a manual test message is being transmitted.

Primary Line Active—A red LED that indicates the primary phone line is active.

Secondary Line Active—A red LED that indicates the secondary phone line is active.

Modem—A green LED that stays on steady during modem types of communications.

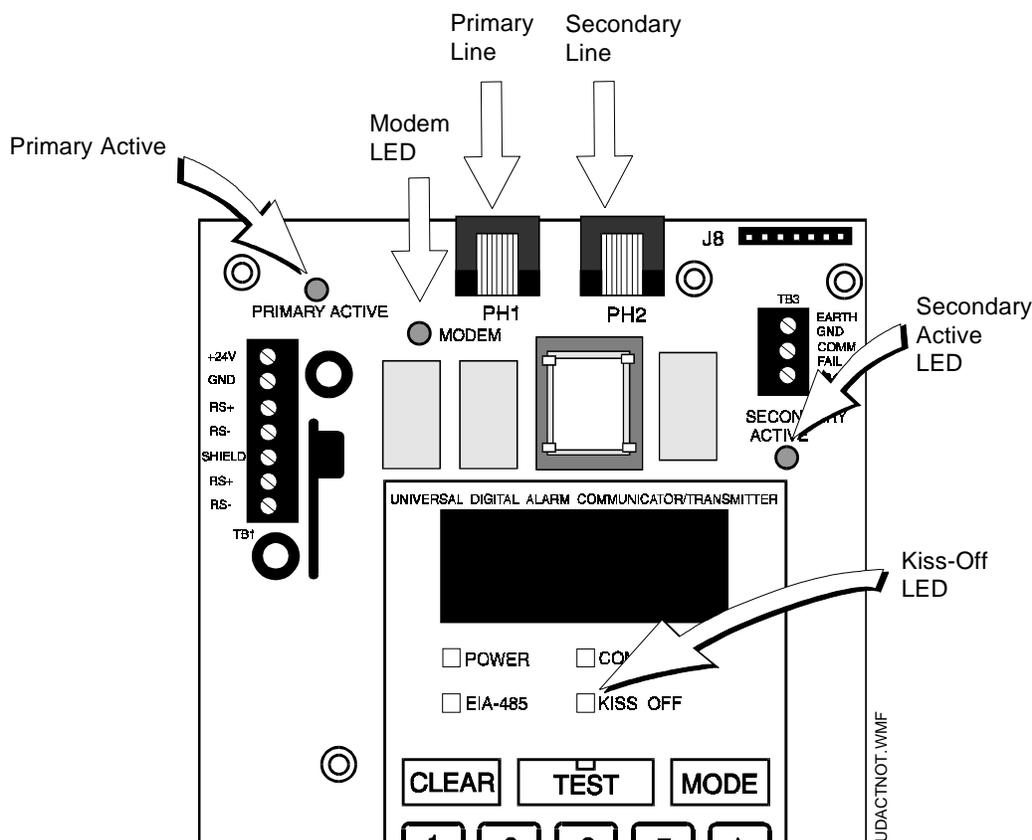


Figure 4-1: ADT-UDACT Phone Connectors and LEDs

4.1.3 Normal Mode Operation:

Normal mode is the standard mode of operation. In this mode, the ADT-UDACT monitors host FACP status, power input, EIA-485 communications and telephone line voltage.

The four character 7-segment display is normally off and does not annunciate events that are being transmitted. The display will only annunciate ADT-UDACT trouble conditions in the normal mode.

The ADT-UDACT transmits zone/point and system status reports to a Central Station via the public switched telephone network. Two supervised telephone line connections are made to interface the ADT-UDACT to the telephone lines.

The ADT-UDACT supervises both telephone lines for proper voltage. A delay of two minutes will occur before a fault in either phone line connection is reported as a trouble. When a fault is detected, the 4 character display will show either 'no 1' or 'no 2' (depending upon which telephone line has the fault. 'no 1' = Primary Line, 'no 2' = Secondary Line) and the trouble condition will be reported to the Central Station over the remaining good phone line.

The ADT-UDACT comes with line seizure capability provided for both the primary and secondary telephone line interfaces. **Any time that the ADT-UDACT needs to make a call to the Central Station, line seizure will disconnect any local premises phones sharing the same telephone line.**

All transmission to the Central Station will be sent over the Primary phone line. In the event of noisy phone lines, transmissions will be sent over the backup Secondary phone line.

Two phone numbers must be programmed, the Primary phone number and the Secondary phone number. All system reports will be transmitted to the primary phone number. Reports will automatically be sent to the secondary phone number if attempts to transmit to the primary phone number are unsuccessful. If 10 total attempts to communicate are unsuccessful, the Communicator Failure output will be turned on (TB3, terminal 2). Note that as an option, *all* reports may also be sent to the secondary phone number. Refer to Section 3.0 Programming Instructions.

The ADT-UDACT meets NFPA 72 for Remote Station Protective Signaling Service and Central Station Signaling Service reporting requirements for: (a) the type of signal (b) condition and (c) location of the reporting premises.

Since higher priority events take precedence over lower priority events, the ADT-UDACT will transmit higher priority events before sending the lower priority events. Priorities are as follows:

Event Activations

1. General Alarm
2. Zone/Point Alarm #N
3. General Supervisory
4. Zone/Point Supervisory #N
5. General System Trouble
6. AC Power Loss
7. Zone/Point Trouble #N
8. Low Battery
9. Telco Primary Line Fault
10. Telco Secondary Line Fault
11. NAC Fault Code
12. Communication Trouble, Primary Number
13. Communication Trouble, Secondary Number
14. EIA-485 Communication Bus Trouble
15. System Off-Normal Code
16. System Automatic Test Report
17. System Abnormal Automatic Test Report
18. Manual Activated Test Report

Event Restorals

19. General Alarm Restoral
20. Zone/Point Alarm #N Restoral
21. General Supervisory Restoral
22. Zone/Point Supervisory #N Restoral
23. General System Trouble Restoral
24. AC Power Loss Restoral
25. Zone/Point Trouble #N Restoral
26. Low Battery Restoral
27. Telco Primary Line Fault Restoral
28. Telco Secondary Line Fault Restoral
29. NAC Fault Code Restoral
30. Communication Trouble, Primary Number Restoral
31. Communication Trouble, Secondary Number Restoral
32. EIA-485 Communication Bus Trouble Restoral
33. System Off-Normal Code Restoral

Where #N represents the number of zones or devices in alarm or trouble. This is valid for all formats except Ademco Contact ID.

For all formats, the 'general' reports are always transmitted (unless disabled). The zone or point information may follow the general report if enabled.

For all pulsed formats and both Ademco Express formats, the zone/point report is repeated per the total number of zones or points activated once factory default entries of zero are removed. See Tables 3-2, 3-3, 3-4, 3-5, 3-6 and 3-7. When Ademco Contact ID format is used, the actual zone or point activated is identified in the report.

The ADT-UDACT comes factory programmed with the reports identified above as item numbers 2, 4, 7, 20, 22 and 25 set to zero, preventing the reports from being transmitted for the pulsed and Ademco Express formats. These reports are factory programmed for active transmission when using the Ademco Contact ID.

4.1.4 Key Report Descriptions

ADT-UDACT OFF Normal Report

Removing the ADT-UDACT from Normal Mode and placing it into Program or Troubleshoot Mode causes a transmission of an 'UDACT off normal' fault message. Returning the ADT-UDACT to Normal Mode causes a transmission of a 'UDACT return to normal' restoral message.

Panel OFF Normal Report

The ADT-UDACT will report a "System off normal" report when the host FACP temporarily shuts down the EIA-485 communications bus during various aspects of system programming. When the host FACP is returned to normal, restoring the fire protection, the ADT-UDACT will report a 'system off normal restoral' report.

System Test Report

The ADT-UDACT will transmit a test message to both Central Stations at programmed intervals (typically every 24 hours). Should there exist an abnormal condition in the fire alarm system (such as an alarm, trouble or supervisory condition) at the time when the test report is due to be transmitted, the ADT-UDACT will report the 'system abnormal test report.' If the system is normal, the report transmitted will be the normal 'system test report.'

EIA-485 Communications Trouble Report

The ADT-UDACT supervises the integrity of the information received from the FACP via the EIA-485 communications bus. Should the communications bus malfunction or be temporarily disabled, the ADT-UDACT transmits the report '485 comm trouble.' When the communications bus returns to proper operation, the ADT-UDACT will report '485 comm trouble restoral.'

4.2 Type Mode

Type Mode may be used to disable reports by zone or point and to identify the specific functionality of each zone or point in the system via Ademco Contact ID format. Factory default for all zones is Fire Alarm. When reporting point information, the factory default for addressable monitor modules is Fire Alarm code 110 and the default for addressable detectors is Smoke Detector code 111. The smoke detector default cannot be modified. Use Type Mode to identify the function of each zone or point as follows:

- General fire alarm
- Supervisory
- Pull stations
- Heat detectors
- Waterflows
- Duct detectors
- Flame sensor
- Smoke zone
- Burglary
- 24 hour non-burglary
- High temperature
- Low temperature
- Low water pressure
- Low water level
- Pump failure

Note: Unimode 2020/1010 and ADT-MNNA applications restrict Type Mode programming to a maximum of 568 points. All remaining points above 568 will report as fire alarm points.

To access Type Mode, press the **MODE** key followed by the 4-digit code **8973** and then press the **[ENTER/STORE]** key. The ADT-UDACT will display three digits. For example, initial entry will display **01 0**.

The characters to the left identify the zone or point number. In this example, 01 identifies zone 01 or point address 01. The character to the right (0 in this example) identifies the type of zone or point as follows:

- 0 = Zone or point defined as fire alarm
- 1 = Disable zone or point report
- 2 = Zone or point defined as supervisory
- 3 = Zone or point defined as pull station
- 4 = Zone or point defined as heat detector
- 5 = Zone or point defined as waterflow
- 6 = Zone or point defined as duct detector
- 7 = Zone or point defined as flame sensor
- 8 = Zone or point defined as smoke zone (Use for group of addressable or conventional smoke detectors. Also use for addressable monitor modules monitoring conventional smoke detectors).
- 9 = Zone or point defined as burglary (Unimode 300/400 and ADT-MNNA)
- A = Zone or point defined as 24 hour non-burglary
- B = Zone or point defined as high temperature
- C = Zone or point defined as low temperature
- D = Zone or point defined as low water pressure
- E = Zone or point defined as low water level
- F = Zone or point defined as pump failure

Factory default is all zones or points set to '0' for fire alarm. The '0' setting for zone reporting allows the mixing of types of devices on a single zone. To change the type definition of the zone or point from the factory default of 0, select 2 to F corresponding to the type of device(s) used (do not mix device types for these settings), or select 1 to disable alarm reporting of any zone or point. The digit entered will appear on the far right display. Next press the **[ENTER/STORE]** key. This stores the entry into E² memory and increments to the next higher address.

Use the **UP**, **DOWN** and **1st EVENT** keys to move through the list of zones/points (refer to Appendices), similar to the method described in the programming section of this manual.

To define all zones or points as fire alarm (return to original factory default settings) enter zone or point 999 and then press the **[ENTER/STORE]** key. The display will change to **01 0**, indicating a return to the factory default settings.

4.2.1 Disabling of Zones or Points

This feature is primarily used when system points have been defined as remote reset, acknowledge, silence or drill switches. Refer to the FACP technical manual for additional information. *Activation of remote switches appear as alarms on the EIA-485 bus. The ADT-UDACT will report these points as fire alarm points unless disabled in the Type Mode.* Disabling zones or points also prohibits the activation (shorted or alarm activated condition) from being reported by the ADT-UDACT. Disabling of the zone or point does not affect the reporting of the zone or point trouble condition.

Note: Type Mode '1' for zones 90-99, disables reports for these zones. To transmit reports for zones 90-99, use Type Mode entries of '0' or '2' through 'F'.

4.2.2 Zone or Point Supervisory

A zone or point must be defined as supervisory to allow the ADT-UDACT to identify the correct report to transmit to the central station. Follow the programming instructions in the FACP manual to program a zone or point as supervisory. Next, program the zone or point as a code 2 for supervisory. Use the charts in Appendices to enter point and zone definitions. *Note that the ADT-UDACT fire protection and reporting capabilities are inactive while in Type Mode.*

4.3 Troubleshoot Mode

To get into the Troubleshoot Mode, press **MODE 8768** and **[ENTER/STORE]**.

☛ **8768** spells TROU on a Touch-Tone® phone.

Once in this mode, the ADT-UDACT will:

- Transmit the 'UDACT off normal' message to the Central Station(s).
- Continue to communicate any events not yet acknowledged at the Central Station prior to entering Troubleshoot Mode.

The **UP Arrow key**, **Down Arrow key** and **1st EVENT** keys do not function in this mode.

Telephone Line Testing

Pressing **C** for touchtone dialing or **D** for rotary dialing, followed by **[ENTER/STORE]** causes seizure of the Primary phone line which in turn lights the red LED signifying Primary phone line active. After a delay of three seconds, the ADT-UDACT goes off hook to acquire a dial tone.

The ADT-UDACT keypad may be used as a telephone touchpad for number dialing. Once the first digit is pressed, the display will move the **C** or **D** character one position to the left, while placing the digit to be dialed on the farthest right display position. Continue to press the phone numbers to be dialed. Successive depressions of the **[ENTER/STORE]** key hangs up and picks up the phone (places the phone on or off the hook).

The secondary phone line may be tested by pressing the **E** key for touchtone dialing or the **F** key for rotary dialing and then following the same procedure used for the primary phone line.

A handset may be temporarily connected across transformer T1 as indicated in Figure 4-2. The handset, when connected across T1, may be used only as an amplifier/speaker or telephone with the ADT-UDACT used for number dialing.

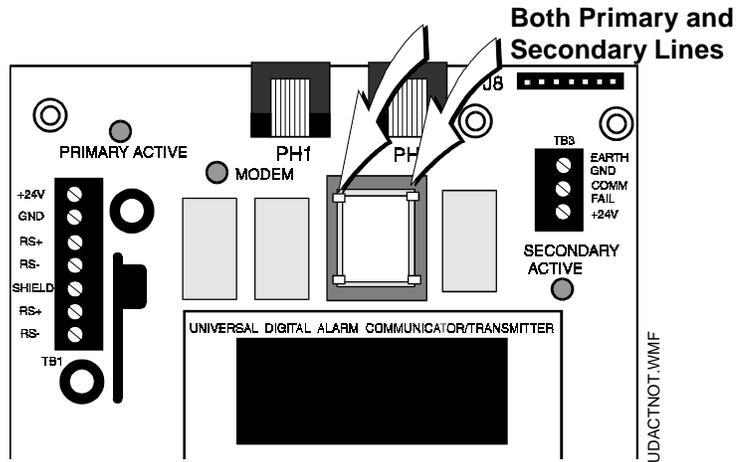


Figure 4-2: Handset/Speaker Connection

4.4 Lamp Test Mode To perform a Lamp Test, press **MODE** then **5267** followed by **[ENTER/STORE]**. This will test all system LEDs. The LEDs will stay on for five seconds, then the ADT-UDACT will return to normal mode.

☛ **5267** spells LAMP on a Touch-Tone® phone.

5.0 Reporting Formats

Table 5-1 shows the data reporting structure for each of the pulsed formats as well as the Ademco Express formats. Ademco Express formats allow a typical data message to be transmitted to the Central Station in under 5 seconds. Pulsed formats typically require 15 to 20 seconds in comparison. Table 5-2 defines each letter code used in Table 5-1. Table 5-3 describes the data reporting structure used for Ademco Contact ID format. Do not select any of the pulsed or Ademco Express Formats if identification of the specific zone or point is desired. Use Ademco Contact ID for specific zone or point identification.

	Format # 0, 2, 4, 6, 8	Format # 1, A, C
Report	3+1/4+1/Standard 4+1 Express	4+2/Standard 4+2 Express
Alarm	SSS(S) A	SSSS AA2
Alarm Restore	SSS(S) RA	SSSS RARA2
Zone Trouble (Zone Open)	SSS(S) RTZ	SSSS TZTZ2
Zone Trouble Restore	SSS(S) RTZ	SSSS RTZRTZ2
System Trouble	SSS(S) TS	SSSS TSTS2
System Trouble Restore	SSS(S) RTS	SSSS RTSRTS2
Low Battery	SSS(S) L	SSSS LL2
Low Battery Restore	SSS(S) RL	SSSS RLRL2
AC Loss	SSS(S) P	SSSS PP2
AC Loss Restore	SSS(S) RP	SSSS RPRP2
Supervisory Condition	SSS(S) V	SSSS VV2
Supervisory Condition Restore	SSS(S) RV	SSSS RVRV2
Test Report	SSS(S) X	SSSS XX2
Abnormal Test Report	SSS(S) XA	SSSS XAXA2

Table 5-1: Data Reporting Structure

Refer to Table 5-2 for an explanation of each letter code in Table 5-1.
Refer to Table 6-1 for a list of compatible receivers.

Where:

SSS Or	
SSSS	= Subscriber ID
A	= Alarm (1st digit)
A2	= Alarm (2nd digit)
RA	= Alarm Restore (1st digit)
RA2	= Alarm Restore (2nd digit)
TZ	= Zone Trouble (1st digit)
TZ2	= Zone Trouble (2nd digit)
RTZ	= Zone Trouble Restore (1st digit)
RTZ2	= Zone Trouble Restore (2nd digit)
TS	= System Trouble (1st digit)
TS2	= System Trouble (2nd digit)
RTS	= System Trouble Restore (1st digit)
RTS2	= System Trouble Restore (2nd digit)
L	= Low Battery (1st digit)
L2	= Low Battery (2nd digit)
RL	= Low Battery Restore (1st digit)
RL2	= Low Battery Restore (2nd digit)
P	= AC Loss (1st digit)
P2	= AC Loss (2nd digit)
RP	= AC Loss Restore (1st digit)
RP2	= AC Loss Restore (2nd digit)
V	= Supervisory Condition (1st digit)
V2	= Supervisory Condition (2nd digit)
RV	= Supervisory Condition Restore (1st digit)
RV2	= Supervisory Condition Restore (2nd digit)
X	= Test Report (1st digit)
X2	= Test Report (2nd digit)
XA	= Abnormal Test Report (1st digit)
XA2	= Abnormal Test Report (2nd digit)

Table 5-2: Letter Code Definitions

(Refer to Table 5-1)

The reporting structure for the Ademco Contact ID format is as follows:

SSSS 18 QXYZ GG CCC

where

SSSS = Four digit Subscriber ID (addresses 17 - 20 and 43 - 46)
 18 = Identifies transmission as Contact ID to the receiver at the Central Station
 Q = Event Qualifier
 1 = New Event
 2 = New Restore
 XYZ = Event code (shown in Tables 3-4 and 3-7)
 GG = Group number or Loop number
 CCC = Device or Zone number

For general reports (alarm, trouble and supervisory), the GG and CCC fields are transmitted as 00 and 000 unless changes to addresses 64-65 and 66-68 are made.

64 - 65 = Loop number (GG), (factory default is 00)
 66 - 68 = Device/Zone number (CCC) for General Alarm, Fault or Supervisory messages (factory default is 000).

A typical printout of alarm and trouble reports in the Ademco Contact ID Reporting Structure follows:

<u>Time</u>	<u>Date</u>	<u>Rcvr/ Line ID</u>	<u>SSSS</u>	<u>QXYZ</u>	<u>GG</u>	<u>CCCC</u> ⁴	
11:28	03/25	11	7777	E110	00	C000	- general alarm
11:28	03/25	11	7777	E111	00	C046	- alarm SD46
11:28	03/25	11	7777	E300	00	C000	- general trouble
11:28	03/25	11	7777	E380	00	C046	- trouble SD46
11:28	03/25	11	7777	R110	00	C000	- general alarm restore
11:28	03/25	11	7777	R111	00	C046	- alarm SD46 restore
11:28	03/25	11	7777	R300	00	C000	- general trbl restore
11:28	03/25	11	7777	R380	00	C046	- trouble SD46 restore

Table 5-3: Ademco Contact ID Reporting Structure

Notes:

- 1) In the sample report, SD46 refers to smoke detector at address 46 or on zone 46.
- 2) **18**, which is used in the reporting structure to identify the transmission as Contact ID, is not printed out in the alarm and trouble report.
- 3) **Q**, which is the Event Qualifier for the reporting structure, is printed out in the report as an **E** for New Event or **R** for New Restore.
- 4) **CCCC**, the first C is not transmitted by the ADT-UDACT but is printed by the Central Station Receiver printer output.

By using the Type Mode feature, identification of zone/point types is possible. Limits for the maximum number of zones/points reported for each panel are as follows:

Unimode 300 = 192 points / 99 zones
 Unimode 400 = 384 points / 99 zones
 Unimode 2020/1010 = 568 points
 ADT-MNNA = 568 points

TYPE ID #	ACTIVATED DEVICE	ZONE/POINT #	REPORT
2	Supervisory Alarm	1	E200 00 C001
3	Pull Station Alarm	3	E115 00 C003
4	Heat Sensor Alarm	4	E114 00 C004
5	Waterflow Alarm	5	E113 00 C005
6	Duct Detector Alarm	6	E116 00 C006
7	Flame Sensor Alarm	7	E117 00 C007
8	Smoke Zone Alarm (Conventional)	2	E111 00 C002
9	Burglary	8	E130 00 C008
A	24 Hour Non-burglary	9	E150 00 C009
B	High Temperature	10	E158 00 C010
C	Low Temperature	11	E159 00 C011
D	Low Water Pressure	12	E201 00 C012
E	Low Water Level	13	E204 00 C013
F	Pump Failure	14	E206 00 C014
.....	through
Limit for Unimode 2020/1010 and ADT-MNNA		568	
Limit for Unimode 400		448	

6.0 Compatible Receivers

The chart below shows UL listed receivers compatible with the ADT-UDACT:

Format # (Addresses 16 & 42)	Ademco 685 (1)	Silent Knight 9000	ITI CS-4000 (3)	FBI CP220FB	Osborne Hoffman Quick Alert Models 1 & 2	Radionics 6000/6500 (5)	Linear/Sescoa 3000R (7)	Surguard MLR-2 (9)
0 4+1 Ademco Express	✓			✓				✓
1 4+2 Ademco Express	✓			✓	✓(8)			✓
2 3+1/Standard/1800/2300	✓	✓ (2)	✓	✓ (4)	✓	✓(5,6)	✓	✓
3 Not Used								
4 3+1/Standard/1900/1400	✓	✓ (2)		✓ (4)	✓		✓	✓
5 Not Used								
6 4+1/Standard/1800/2300	✓	✓ (2)	✓	✓ (4)	✓	✓ (5)	✓	✓
7 Not Used								
8 4+1/Standard/1900/1400	✓	✓ (2)		✓ (4)	✓		✓	✓
9 Not Used								
A 4+2/Standard/1800/2300	✓	✓ (2)	✓	✓ (4)	✓	✓ (5)	✓	✓
B Not Used								
C 4+2/Standard/1900/1400	✓	✓ (2)		✓ (4)	✓		✓	✓
D Not Used								
E Ademco Contact ID	✓			✓	✓			✓
F Not Used								

- (1) With 685-8 Line Card with Rev 4.4d software.
- (2) With 9002 Line Card Rev 9035 software or 9032 Line Card with 9326A software.
- (3) Rev. 4.0 software.
- (4) FBI CP220FB Rec-11 Line Card with Rev 2.6 software and a memory card with Rev 3.8 software.
- (5) Model 6500 with Rev 600 software.
- (6) Model 6000 with Rev 204 software.
- (7) With Rev B control card at Rev 1.4 software and Rev C line card at Rev 1.5 software.
- (8) Model 2 only.
- (9) Version 1.62 software.

Table 6-1: Compatible UL Listed Receivers

7.0 Programming Reference Sheets

--- To enter Programming, press Mode: 7 7 6 4, Enter

Addresses 00 to 15 store the Primary Phone Number. Enter 'F' to represent the end of the number.

₁₆ Primary Comm Format: Enter 0 - F.

₁₇ ₁₈ ₁₉ ₂₀ Primary Account Code: Valid keys are 0-F.

₂₁ ₂₂ ₂₃ ₂₄ Primary 24-Hour Test Time. Enter military time (i.e. 1400 for 2 PM).

₂₅ Primary Number Test Time Interval. Enter '0' for 24-hour; '1' - 12-hour.

₂₆ ₂₇ ₂₈ ₂₉ ₃₀ ₃₁ ₃₂ ₃₃ ₃₄ ₃₅ ₃₆ ₃₇ ₃₈ ₃₉ ₄₀ ₄₁

Addresses 26-41 store the Secondary Phone Number. Enter 'F' to represent the end of the number.

₄₂ Secondary Comm Format: Enter 0-F.

₄₃ ₄₄ ₄₅ ₄₆ Secondary Account Code: Valid keys are 0-F.

₄₇ ₄₈ ₄₉ ₅₀ Secondary 24-Hour Test Time. Enter military time (i.e. 1400 for 2 PM).

₅₁ Secondary Number Test Time Interval. Enter '0' for 24-hour; '1' - 12-hour.

₅₂ ₅₃ Start Monitoring Address. Valid entries are 01 through 32.

₅₄ ₅₅ End Monitoring Address. Valid entries are 01 through 32.

₅₆ ADT-UDACT Communication Selection. Enter '0' to disable ADT-UDACT communication; '1' for zone reporting receive only communication; '2' for zone reporting receive/transmit communication; '3' for point reporting receive only; or '4' for point reporting receive/transmit.

₅₇ Backup Reporting. Enter '0' to have secondary phone number act as backup only; '1' to have secondary phone number receive all reports and messages along with primary phone number.

₅₈ Touchtone/Rotary Select. Enter '0' for touchtone dialing; '1' for rotary dialing.

₅₉ Make/Break Ratio. If rotary dialing is selected in Address 58; Enter '0' for a 67/73 make/break ratio; '1' for a 62/38 make/break ratio.

₆₀ Leave default of 0.

₆₁ Leave default of 0.

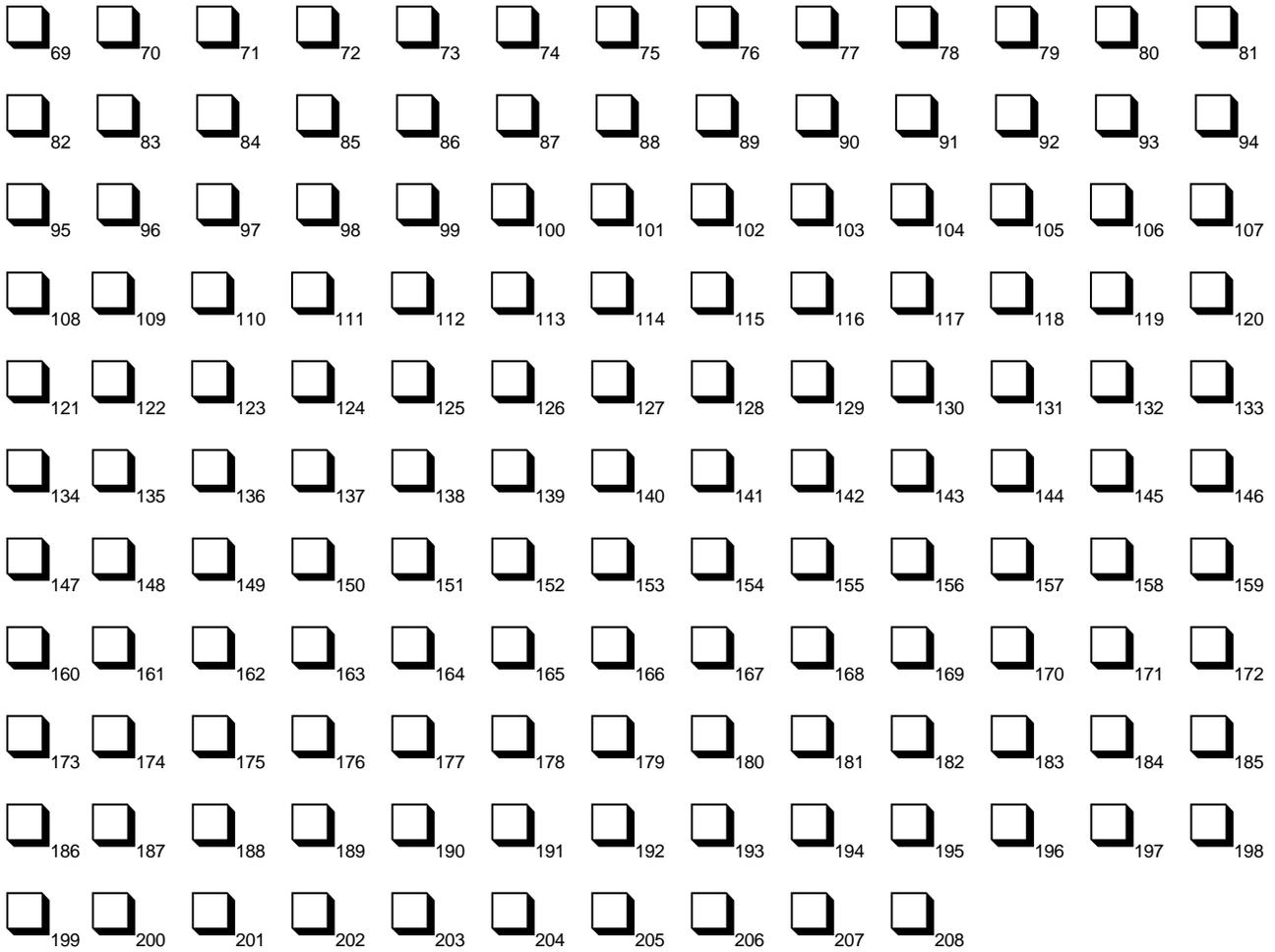
₆₂ AC Loss Reporting Delay. Enter '0' for no time delay after AC loss; '1' for 6 hour delay; '2' for 7 hour delay; '3' for 8 hour delay; '4' for 9 hour delay; '5' for 10 hour delay; '6' for 11 hour delay; '7' for 15 hour delay; '8' for 16 hour delay; '9' for 17 hour delay; 'A' for 18 hour delay; 'B' for 19 hour delay; 'C' for 20 hour delay; 'D' for 21 hour delay; 'E' for 22 hour delay; or 'F' for 23 hour delay.

₆₃ Host Panel ID. Enter '7' for Unimode 2020/1010 and ADT-MNNA; '8' for Unimode 300/400; all other entries are invalid.

₆₄ ₆₅ Loop Number. Factory set to '00'. Valid entries are 00 through 97

₆₆ ₆₇ ₆₈ Device/Zone Number for General Reports. Factory set to '000'. Valid entries are 000 through 999.

Programming Reference Sheet



Programming Reference Sheet Factory Default Settings

--- To enter Programming, press Mode: 7 7 6 4, Enter

F₀₀ **F**₀₁ **F**₀₂ **F**₀₃ **F**₀₄ **F**₀₅ **F**₀₆ **F**₀₇ **F**₀₈ **F**₀₉ **F**₁₀ **F**₁₁ **F**₁₂ **F**₁₃ **F**₁₄ **F**₁₅

Addresses 00 to 15 store the Primary Phone Number. Enter 'F' to represent the end of the number.

A₁₆ Primary Comm Format: (4+2 Standard 1800/2300).

0₁₇ **0**₁₈ **0**₁₉ **0**₂₀ Primary Account Code.

0₂₁ **0**₂₂ **0**₂₃ **0**₂₄ Primary 24-Hour Test Time. 0000 = 12:00 midnight.

0₂₅ Primary Number Test Time Interval. '0' for 24-hour.

F₂₆ **F**₂₇ **F**₂₈ **F**₂₉ **F**₃₀ **F**₃₁ **F**₃₂ **F**₃₃ **F**₃₄ **F**₃₅ **F**₃₆ **F**₃₇ **F**₃₈ **F**₃₉ **F**₄₀ **F**₄₁

Addresses 26-41 store the Secondary Phone Number. Enter 'F' to represent the end of the number.

A₄₂ Secondary Comm Format: (4+2 Standard 1800/2300).

0₄₃ **0**₄₄ **0**₄₅ **0**₄₆ Secondary Account Code.

0₄₇ **0**₄₈ **0**₄₉ **0**₅₀ Secondary 24-Hour Test Time. 0000 = 12:00 midnight.

0₅₁ Secondary Number Test Time Interval. '0' for 24-hour.

0₅₂ **1**₅₃ Start Monitoring Address

0₅₄ **2**₅₅ End Monitoring Address

0₅₆ ADT-UDACT Communication Selection. '0' for ADT-UDACT Communication disabled.

0₅₇ Backup Reporting. '0' for backup.

0₅₈ Touchtone/Rotary Select. '0' for Touchtone.

0₅₉ Make/Break Ratio. '0' for 67/33 make/break ratio.

0₆₀ Leave default of zero.

0₆₁ Leave default of zero.

1₆₂ AC Loss reporting delay. '1' for 6 hour time delay.

8₆₃ Host PANEL ID. '8' for Unimode 300/400.

0₆₄ **0**₆₅ Loop Number. For Ademco Contact ID only. Loop number = '00',

0₆₆ **0**₆₇ **0**₆₈ Device/Zone Number for general reports. For Ademco Contact ID only. Device number = '000'.

Programming Reference Sheet Factory Default

1 ₆₉	1 ₇₀	0 ₇₁	0 ₇₂	8 ₇₃	1 ₇₄	0 ₇₅	0 ₇₆	F ₇₇	1 ₇₈	F ₇₉	6 ₈₀	0 ₈₁
0 ₈₂	F ₈₃	8 ₈₄	F ₈₅	A ₈₆	F ₈₇	B ₈₈	F ₈₉	C ₉₀	F ₉₁	D ₉₂	F ₉₃	E ₉₄
F ₉₅	E ₉₆	F ₉₇	F ₉₈	F ₉₉	F ₁₀₀	E ₁₀₁	1 ₁₀₂	0 ₁₀₃	0 ₁₀₄	E ₁₀₅	2 ₁₀₆	0 ₁₀₇
0 ₁₀₈	E ₁₀₉	3 ₁₁₀	E ₁₁₁	6 ₁₁₂	0 ₁₁₃	0 ₁₁₄	E ₁₁₅	8 ₁₁₆	E ₁₁₇	A ₁₁₈	E ₁₁₉	B ₁₂₀
E ₁₂₁	C ₁₂₂	E ₁₂₃	D ₁₂₄	E ₁₂₅	E ₁₂₆	E ₁₂₇	E ₁₂₈	E ₁₂₉	F ₁₃₀	E ₁₃₁	F ₁₃₂	9 ₁₃₃
9 ₁₃₄	9 ₁₃₅	1 ₁₃₆	9 ₁₃₇	2 ₁₃₈	1 ₁₃₉	1 ₁₄₀	0 ₁₄₁	0 ₁₄₂	8 ₁₄₃	1 ₁₄₄	0 ₁₄₅	0 ₁₄₆
F ₁₄₇	1 ₁₄₈	F ₁₄₉	6 ₁₅₀	0 ₁₅₁	0 ₁₅₂	F ₁₅₃	8 ₁₅₄	F ₁₅₅	A ₁₅₆	F ₁₅₇	B ₁₅₈	F ₁₅₉
C ₁₆₀	F ₁₆₁	D ₁₆₂	F ₁₆₃	E ₁₆₄	F ₁₆₅	E ₁₆₆	F ₁₆₇	F ₁₆₈	F ₁₆₉	F ₁₇₀	E ₁₇₁	1 ₁₇₂
0 ₁₇₃	0 ₁₇₄	E ₁₇₅	2 ₁₇₆	0 ₁₇₇	0 ₁₇₈	E ₁₇₉	3 ₁₈₀	E ₁₈₁	6 ₁₈₂	0 ₁₈₃	0 ₁₈₄	E ₁₈₅
8 ₁₈₆	E ₁₈₇	A ₁₈₈	E ₁₈₉	B ₁₉₀	E ₁₉₁	C ₁₉₂	E ₁₉₃	D ₁₉₄	E ₁₉₅	E ₁₉₆	E ₁₉₇	E ₁₉₈
E ₁₉₉	F ₂₀₀	E ₂₀₁	F ₂₀₂	9 ₂₀₃	9 ₂₀₄	9 ₂₀₅	1 ₂₀₆	9 ₂₀₇	2 ₂₀₈			

Appendix A: Zone Assignments (Unimode 300/400)

Zone No.	Zone Function	Zone No.	Zone Function	Zone No.	Zone Function
1		34		67	
2		35		68	
3		36		69	
4		37		70	
5		38		71	
6		39		72	
7		40		73	
8		41		74	
9		42		75	
10		43		76	
11		44		77	
12		45		78	
13		46		79	
14		47		80	
15		48		81	
16		49		82	
17		50		83	
18		51		84	
19		52		85	
20		53		86	
21		54		87	
22		55		88	
23		56		89	
24		57		90	
25		58		91	
26		59		92	
27		60		93	
28		61		94	
29		62		95	
30		63		96	
31		64		97	
32		65		98	
33		66		99	

Note: Use chart to carefully identify function of each zone in the system. Take special precaution with any supervisory zones in the system. Use Type Mode (refer to Section 4.2 Type Mode) to match the function of remaining zones in the system for proper reporting.

Caution: When selecting burglar zones, modify the general supervisory report at addresses 75-77 and 145-147, to report general burglary.

Appendix B: Point Assignments (Unimode 300*/400)

Point No.	Type of Device (Modules Loop	Point No.	Type of Device (Modules Loop	Point No.	Type of Device (Modules Loop	Point No.	Type of Device (Modules Loop
001	1)	051	1)	101	2)	151	2)
002		052		102		152	
003		053		103		153	
004		054		104		154	
005		055		105		155	
006		056		106		156	
007		057		107		157	
008		058		108		158	
009		059		109		159	
010		060		110		160	
011		061		111		161	
012		062		112		162	
013		063		113		163	
014		064		114		164	
015		065		115		165	
016		066		116		166	
017		067		117		167	
018		068		118		168	
019		069		119		169	
020		070		120		170	
021		071		121		171	
022		072		122		172	
023		073		123		173	
024		074		124		174	
025		075		125		175	
026		076		126		176	
027		077		127		177	
028		078		128		178	
029		079		129		179	
030		080		130		180	
031		081		131		181	
032		082		132		182	
033		083		133		183	
034		084		134		184	
035		085		135		185	
036		086		136		186	
037		087		137		187	
038		088		138		188	
039		089		139		189	
040		090		140		190	
041		091		141		191	
042		092		142		192	
043		093		143		193	
044		094		144		194	
045		095		145		195	
046		096		146		196	
047		097		147		197	
048		098	Do Not Program	148		198	Do Not Program
049		099		149		199	
050		100		150		200	

Note: Use chart to carefully identify all points in the system. Take special precaution with any supervisory points and remote switches in the system. Use Type Mode (refer to Section 4.2 Type Mode) to match the function of remaining points in the system for proper reporting. *For Unimode 300, use only Loop 1 in the chart.

Appendix B (continued): Point Assignments (Unimode 300*/400)

Point No.	Type of Device (Detectors Loop 1)	Point No.	Type of Device (Detectors Loop 1)	Point No.	Type of Device (Detectors Loop 2)	Point No.	Type of Device (Detectors Loop 2)
201		251		301		351	
202		252		302		352	
203		253		303		353	
204		254		304		354	
205		255		305		355	
206		256		306		356	
207		257		307		357	
208		258		308		358	
209		259		309		359	
210		260		310		360	
211		261		311		361	
212		262		312		362	
213		263		313		363	
214		264		314		364	
215		265		315		365	
216		266		316		366	
217		267		317		367	
218		268		318		368	
219		269		319		369	
220		270		320		370	
221		271		321		371	
222		272		322		372	
223		273		323		373	
224		274		324		374	
225		275		325		375	
226		276		326		376	
227		277		327		377	
228		278		328		378	
229		279		329		379	
230		280		330		380	
231		281		331		381	
232		282		332		382	
233		283		333		383	
234		284		334		384	
235		285		335		385	
236		286		336		386	
237		287		337		387	
238		288		338		388	
239		289		339		389	
240		290		340		390	
241		291		341		391	
242		292		342		392	
243		293		343		393	
244		294		344		394	
245		295		345		395	
246		296		346		396	
247		297		347		397	
248		298	Do Not Program	348		398	Do Not Program
249		299		349		399	
250		300		350		400	

Note: Addressable detectors on Loops 1 and 2 may be disabled using Type Mode. The Event Code cannot be altered.
 *For Unimode 300, use only Loop 1 in the chart.

Appendix B (continued): Point Assignments (Unimode 300*/400)

Point No.	Type of Device	Point No.	Type of Device				
401		451					
402		452					
403		453					
404		454					
405		455					
406		456					
407		457					
408		458					
409		459					
410		460					
411		461					
412		462					
413		463					
414		464					
415							
416							
417							
418							
419							
420							
421							
422							
423							
424							
425							
426							
427							
428							
429							
430							
431							
432							
433							
434							
435							
436							
437							
438							
439							
440							
441							
442							
443							
444							
445							
446							
447							
448							
449							
450							

Note: Event Code cannot be altered. Physical location is critical to the point number reported.

Appendix C: Point Assignments (ADT-MNNA)

Note: Use the following charts to carefully identify the function of each point in the system. Take special precaution with any supervisory points in the system. For the ADT-UDACT to report a supervisory point to the central station, both the FACP and the ADT-UDACT must have the point programmed as supervisory. Failure to program the panel or ADT-UDACT correctly will result in a fire alarm signal being transmitted to the central station. All points greater than 568 can only be transmitted as fire alarm points. Use Type Mode (refer to Section 4.2 Type Mode) to match the function of points in the system for proper reporting.

Point No.	Point Function	Point No.	Point Function	Point No.	Point Function
1		41		81	
2		42		82	
3		43		83	
4		44		84	
5		45		85	
6		46		86	
7		47		87	
8		48		88	
9		49		89	
10		50		90	
11		51		91	
12		52		92	
13		53		93	
14		54		94	
15		55		95	
16		56		96	
17		57		97	
18		58		98	
19		59		99	
20		60		100	
21		61		101	
22		62		102	
23		63		103	
24		64		104	
25		65		105	
26		66		106	
27		67		107	
28		68		108	
29		69		109	
30		70		110	
31		71		111	
32		72		112	
33		73		113	
34		74		114	
35		75		115	
36		76		116	
37		77		117	
38		78		118	
39		79		119	
40		80		120	

Appendix C (continued): Point Assignments (ADT-MNNA)

Point No.	Point Function	Point No.	Point Function	Point No.	Point Function
121		161		201	
122		162		202	
123		163		203	
124		164		204	
125		165		205	
126		166		206	
127		167		207	
128		168		208	
129		169		209	
130		170		210	
131		171		211	
132		172		212	
133		173		213	
134		174		214	
135		175		215	
136		176		216	
137		177		217	
138		178		218	
139		179		219	
140		180		220	
141		181		221	
142		182		222	
143		183		223	
144		184		224	
145		185		225	
146		186		226	
147		187		227	
148		188		228	
149		189		229	
150		190		230	
151		191		231	
152		192		232	
153		193		233	
154		194		234	
155		195		235	
156		196		236	
157		197		237	
158		198		238	
159		199		239	
160		200		240	

Appendix C (continued): Point Assignments (ADT-MNNA)

Point No.	Point Function	Point No.	Point Function	Point No.	Point Function
241		281		321	
242		282		322	
243		283		323	
244		284		324	
245		285		325	
246		286		326	
247		287		327	
248		288		328	
249		289		329	
250		290		330	
251		291		331	
252		292		332	
253		293		333	
254		294		334	
255		295		335	
256		296		336	
257		297		337	
258		298		338	
259		299		339	
260		300		340	
261		301		341	
262		302		342	
263		303		343	
264		304		344	
265		305		345	
266		306		346	
267		307		347	
268		308		348	
269		309		349	
270		310		350	
271		311		351	
272		312		352	
273		313		353	
274		314		354	
275		315		355	
276		316		356	
277		317		357	
278		318		358	
279		319		359	
280		320		360	

Appendix C (continued): Point Assignments (ADT-MNNA)

Point No.	Point Function	Point No.	Point Function	Point No.	Point Function
361		401		441	
362		402		442	
363		403		443	
364		404		444	
365		405		445	
366		406		446	
367		407		447	
368		408		448	
369		409		449	
370		410		450	
371		411		451	
372		412		452	
373		413		453	
374		414		454	
375		415		455	
376		416		456	
377		417		457	
378		418		458	
379		419		459	
380		420		460	
381		421		461	
382		422		462	
383		423		463	
384		424		464	
385		425		465	
386		426		466	
387		427		467	
388		428		468	
389		429		469	
390		430		470	
391		431		471	
392		432		472	
393		433		473	
394		434		474	
395		435		475	
396		436		476	
397		437		477	
398		438		478	
399		439		479	
400		440		480	

Appendix C (continued): Point Assignments (ADT-MNNA)

Point No.	Point Function	Point No.	Point Function	Point No.	Point Function
481		521		561	
482		522		562	
483		523		563	
484		524		564	
485		525		565	
486		526		566	
487		527		567	
488		528		568	
489		529			
490		530			
491		531			
492		532			
493		533			
494		534			
495		535			
496		536			
497		537			
498		538			
499		539			
500		540			
501		541			
502		542			
503		543			
504		544			
505		545			
506		546			
507		547			
508		548			
509		549			
510		550			
511		551			
512		552			
513		553			
514		554			
515		555			
516		556			
517		557			
518		558			
519		559			
520		560			

Appendix D: Unimode 2020/1010

The ADT-UDACT is capable of reporting up to 2,040 points when used with the Unimode 2020/1010 (1,980 Addressable devices plus 60 zones or 1,800 Addressable devices plus 240 zones) The first 568 points can be programmed using the Type Mode feature (refer to Section 4.2). All points greater than 568 can be transmitted only as fire alarm points. For the ADT-UDACT to report a supervisory point to the central station, both the FACP and the ADT-UDACT must have the point programmed as supervisory. Failure to program the panel or ADT-UDACT correctly will result in a fire alarm signal being transmitted to the central station.

The ADT-UDACT may be mounted in the Unimode 2020/1010 control panel using the CHS-4 chassis or remotely in an ADT-ABS-8RF or ADT-UBS-1F enclosure up to 6000 feet away from the control panel. All power must be removed from the control panel before making any connections to prevent circuit damage. The EIA-485 serial interface is connected between the control panel and ADT-UDACT using twisted, shielded pair wire. Power should be wired from the control panel's main power supply 24 VDC (nominal) filtered, nonresettable output to TB1 on the ADT-UDACT.

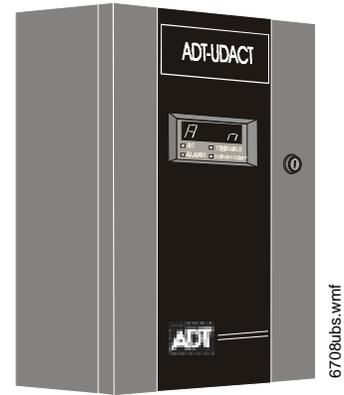
Note: The ADT-UDACT does not support voice and burglar options when used with the Unimode 2020/1010. Refer to the Unimode 2020/1010 Manual for additional restrictions.

ADT-UDACT mounting in a Unimode 2020/1010

Remove all power from the FACP by disconnecting AC and batteries. Install the three supplied nylon support posts for the top and bottom left of the ADT-UDACT, one aluminum/nylon and one aluminum standoff in the CHS-4 chassis slot in which the ADT-UDACT is to be installed (refer to Figure D-2). Position the ADT-UDACT on the standoffs and secure on aluminum standoff with a #6-32 screw.

Connect the communication line between the EIA-485 terminal block on the Unimode 2020/1010 SIB card and TB-1 terminals 3 and 4 on the ADT-UDACT being certain to observe polarity (refer to Figure D-3). Recommended wire is 12 AWG to 18 AWG twisted pair. If no other devices are connected to the EIA-485, install a 120 ohm EOL resistor across ADT-UDACT TB1 terminals 3 and 4.

Connect the supplied Ground Strap from the ADT-UDACT Earth Ground terminal on TB3 to the CHS-4 chassis. Connect 24 VDC filtered, regulated power to TB1 terminals 1 and 2 on the ADT-UDACT.



**Figure D-1:
ADT-UBS-1F**

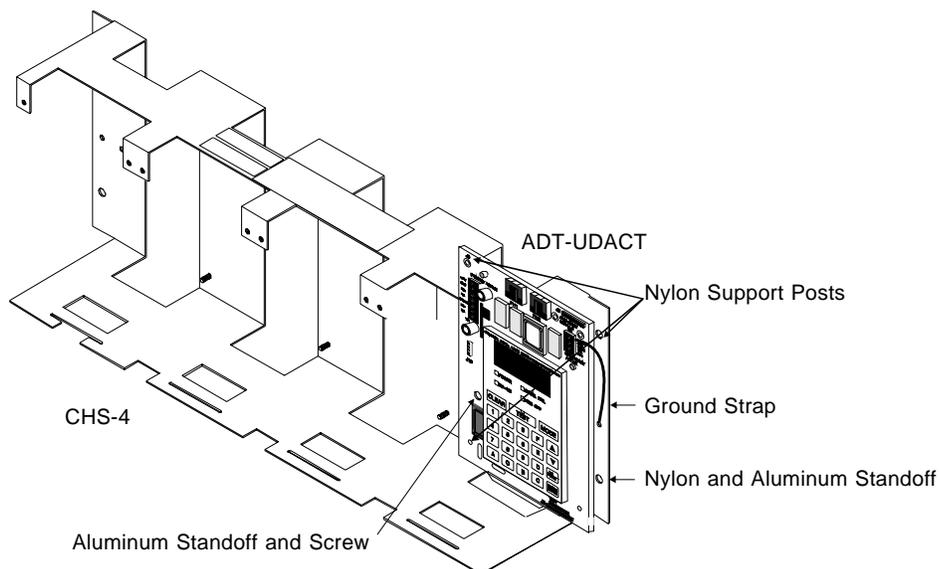


Figure D-2: ADT-UDACT Mounting in CHS-4

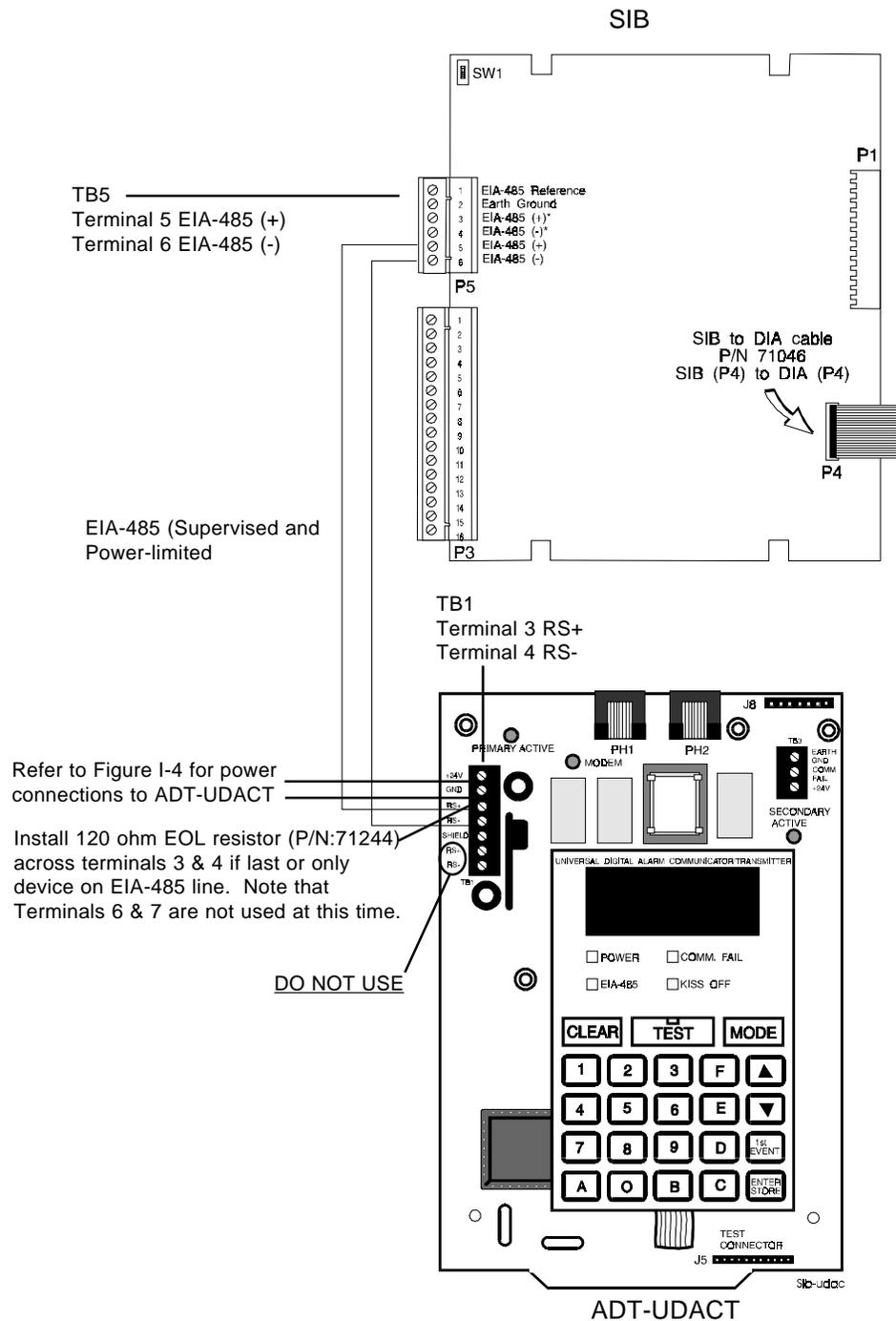
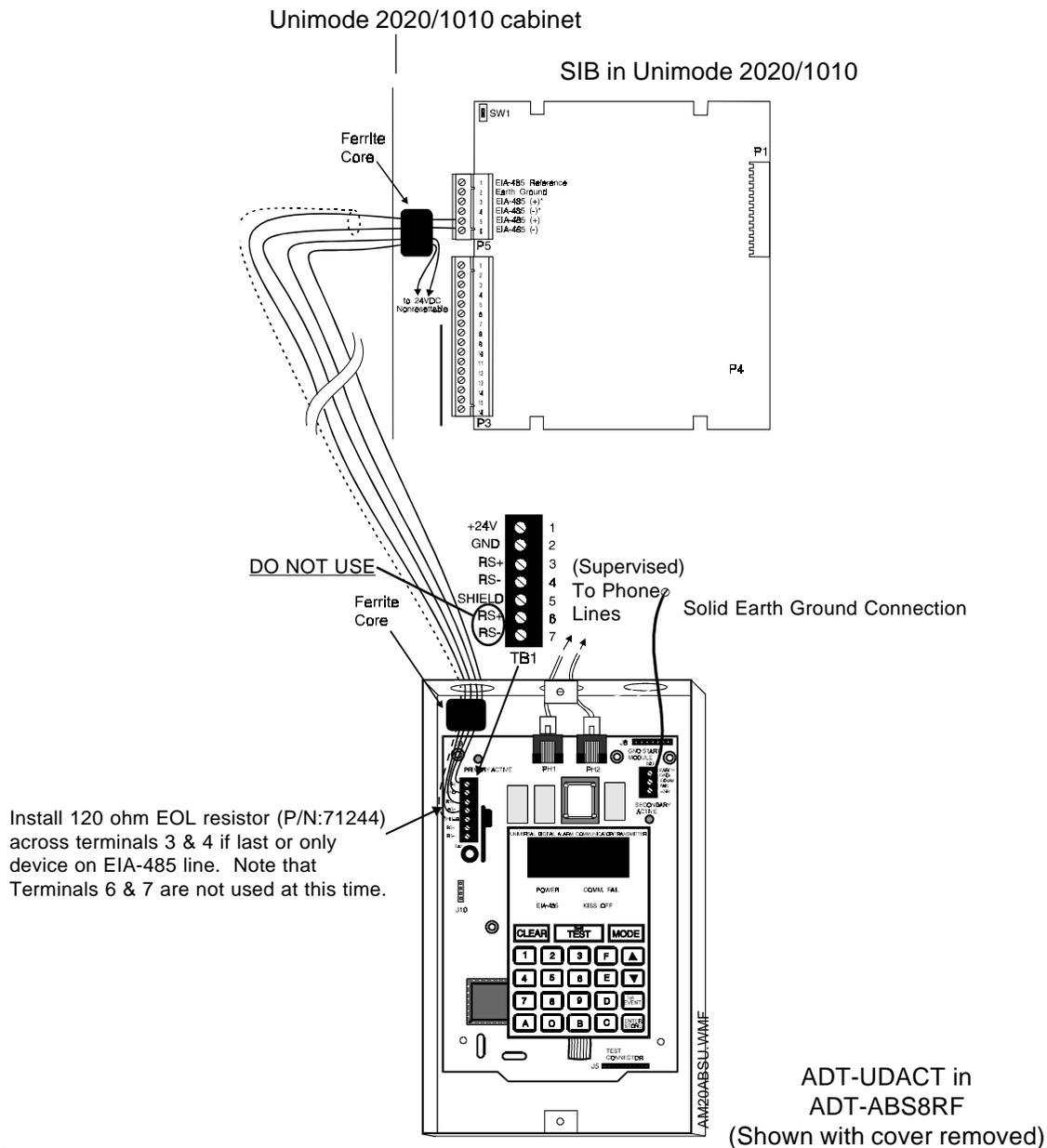


Figure D-3: EIA-485 Connection to Panel Mounted ADT-UDACT



Notes:

- 1) Ferrite cores are recommended for all applications.
- 2) Recommended wire is 12 AWG to 18 AWG twisted pair.
- 3) Shielded wire is not required (unless mandated by local AHJ).
If shielded wire is used, connect only one end of shield:
 - a) shield may be connected to cabinet (earth ground) at fire alarm panel, or
 - b) shield may be connected to TB1 Terminal 5 (Shield) at ADT-UDACT as shown in Figure D-4.

NOTE: The shield end that is not connected should be insulated to prevent accidental grounding. Do not connect both ends of shield under any circumstance since a ground fault may result.
- 4) Conduit is recommended for external wire runs. Consult local building codes.
- 5) Connect Ground Strap (supplied with ADT-ABS8RF enclosure) from Earth Ground terminal on ADT-UDACT to a solid building earth ground. Conduit alone will not provide a reliable earth ground.
- 6) ADT-UDACT may be located up to 6000 feet away from the host control panel.
- 7) Refer to Specifications for power requirements.

Figure D-4: EIA-485 Connection to Remote ADT-UDACT

Appendix E: Unimode 300/400

The ADT-UDACT is capable of reporting a maximum of 99 zones or 448 points when used with the Unimode 400.

The ADT-UDACT must be mounted remotely in an ADT-ABS8RF or ADT-UBS-1 enclosure up to 6000 feet away from the control panel. All power must be removed from the Control Panel before making any connections to prevent circuit damage. The EIA-485 serial interface is connected between the Control Panel and ADT-UDACT using twisted, shielded pair wire. Power should be wired from the MPS-400 24 VDC nonresettable output to TB1 on the ADT-UDACT.

Remove all power from the control panel by disconnecting AC and batteries. Since the Unimode 400 cannot accommodate the ADT-UDACT in the control panel enclosure, the ADT-UDACT must be mounted remotely using an ADT-ABS8RF enclosure. Ferrite cores are recommended for this application. Refer to Figure E-3 and the accompanying notes for wiring alternatives.

Connect the communication line between the EIA-485 terminal block TB4 on the Unimode 300/400 and TB-1 terminals 3 and 4 on the ADT-UDACT, being certain to observe polarity (refer to Figure E-3). Recommended wire is 12 AWG to 18 AWG twisted pair. If no other devices are connected to the EIA-485, install a 120 ohm EOL resistor across ADT-UDACT TB1 terminals 3 and 4.

Connect the supplied ground strap from the ADT-UDACT Earth Ground terminal on TB3 to a solid building earth ground. Connect 24VDC nonresettable power to TB-1 terminals 1 and 2 on the ADT-UDACT (refer to Figure E-3).

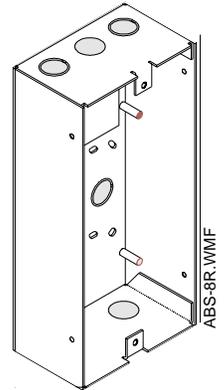


Figure E-1:
ADT-ABS8RF

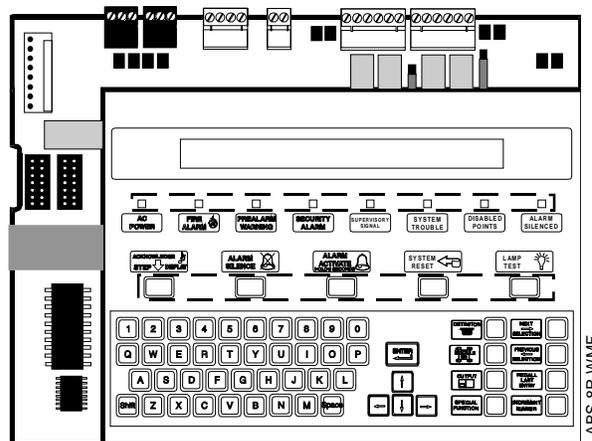
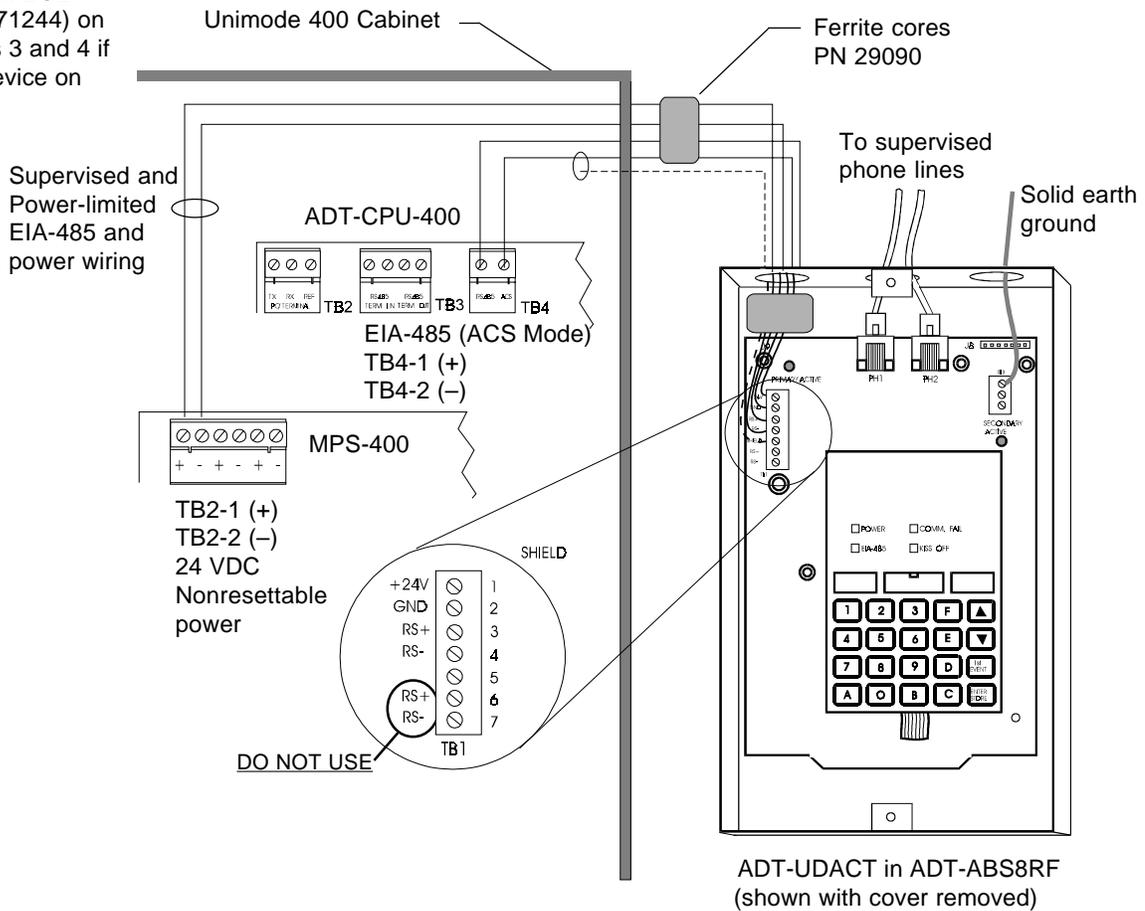


Figure E-2: ADT-CPU-400 Module

Install 120 watt EOL resistor (PN: 71244) on TB1 terminals 3 and 4 if last or only device on EIA-485 line



Notes:

- 1) Ferrite cores are recommended for all applications.
- 2) Recommended wire is 12 AWG to 18 AWG twisted pair.
- 3) Shielded wire is not required (unless mandated by local AHJ).
If shielded wire is used, connect only one end of shield:
 - a) shield may be connected to cabinet (earth ground) at fire alarm panel, or
 - b) shield may be connected to TB1 Terminal 5 (Shield) at ADT-UDACT as shown in Figure E-3.

NOTE: The shield end that is not connected should be insulated to prevent accidental grounding. Do not connect both ends of shield under any circumstance since a ground fault may result.
- 4) Conduit is recommended for external wire runs. Consult local building codes.
- 5) Connect Ground Strap (supplied with ADT-ABS8RF enclosure) from Earth Ground terminal on ADT-UDACT to a solid building earth ground. Conduit alone will not provide a reliable earth ground.
- 6) ADT-UDACT may be located up to 6,000 feet away from the host control panel.
- 7) Refer to Specifications for power requirements.

Figure E-3: Unimode 400 External ADT-UDACT Mounting in ADT-ABS8RF

Type Mode Programming

To disable or identify a zone or point in Type Mode (refer to Section 4.2), the following Entries/Addresses are used:

For Zone Identification:

Zones 1 - 99 are programmed by Entries/Addresses 01 - 99. The factory default code is 'fire alarm.'

For Point Identification:

Loop 1, Modules 101 - 196 are programmed by Type Mode Entries/Addresses 01 - 96
 Loop 2 Modules 201 - 296 are programmed by Type Mode Entries/Addresses 101 - 196
 Loop 1, Detectors 101 - 196 are programmed by Type Mode Entries/Addresses 201 - 296
 Loop 2, Detectors 201 - 296 are programmed by Type Mode Entries/Addresses 301 - 396
 System 5000 output modules are programmed by Type Mode Entries/Addresses 401 - 464

CAUTION: Addresses 97 - 100, 197 - 200 and 297 - 300 must not be programmed. Refer to the CAB illustrations below.

Event Code/Report Transmission via Ademco Contact ID Format Only

For Zone Reporting:

Zones 1 - 99 report as zone numbers 01 - 99

For Point Reporting:

Loop 1, Modules 101 - 196 report as device numbers 01 - 96 (Report defaults to '110')
 Loop 2, Modules 201 - 296 report as device numbers 101 - 196 (Report defaults to '110')
 Loop 1, Detectors 101 - 196 report as device numbers 201 - 296 (Report defaults to '111')
 Loop 2, Detectors 201 - 296 report as device numbers 301 - 396 (Report defaults to '111')
 Output Modules 1 - 64 report as device numbers 401 - 464 (Report defaults to '380', trouble only)

CAUTION: Point reports for Loop 1, Modules 197 through 199, Detectors 197 through 199 and point reports for Loop 2, Modules 297 through 299 and Detectors 297 through 299 are omitted. However, when devices are installed on either SLC Loop and the device is in alarm or trouble, the ADT-UDACT will transmit the general alarm and general trouble reports if enabled.

Following are module locations and their corresponding addresses in various cabinets:

ADT-CAB - B3

AFP-400 CPU		417 - 424	425 - 432
433 - 440	441 - 448	449 - 456	457 - 464

ADT-CAB - C3

AFP-400 CPU			
401 - 408	409 - 416	417 - 424	425 - 432
433 - 440	441 - 448	449 - 456	457 - 464

ADT-CAB - 400AA

AFP-400 CPU	401 - 408
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Appendix F: ADT-MNNA

The ADT-UDACT is capable of reporting up to 2,040 points when used with the ADT-MNNA. The first 568 points can be programmed using the Type Mode feature (refer to Section 4.2). All points greater than 568 can be transmitted only as fire alarm points. For the ADT-UDACT to report a supervisory point to the central station, both the FACP and the ADT-UDACT must have the point programmed as supervisory. Failure to program the panel or ADT-UDACT correctly will result in a fire alarm signal being transmitted to the central station.

The ADT-UDACT may be mounted in the ADT-MNNA control panel using the CHS-4 chassis or remotely in an ADT-ABS8RF or ADT-UBS-1 enclosure up to 6,000 feet away from the control panel. All power must be removed from the control panel before making any connections to prevent circuit damage. The EIA-485 serial interface is connected between the control panel and ADT-UDACT using twisted, shielded pair wire. Power should be wired from the control panel's main power supply 24 VDC (nominal) filtered, nonresettable output to TB1 on the ADT-UDACT.

Note: The ADT-UDACT does not support voice and burglar options when used with the ADT-MNNA. Refer to the ADT-MNNA Manual for additional restrictions.

ADT-UDACT mounting in an ADT-MNNA

Remove all power from the ADT-MNNA by disconnecting AC and batteries. Install the three supplied nylon support posts for the top and bottom left of the ADT-UDACT, one aluminum/nylon and one aluminum standoff in the CHS-4 chassis slot in which the ADT-UDACT is to be installed. Position the ADT-UDACT on the standoffs and secure on aluminum standoff with a #6-32 screw.

Connect the communication line between the EIA-485 terminal block on the ADT-MNNA and TB-1 terminals 3 and 4 on the ADT-UDACT being certain to observe polarity (refer to Figure F-1). Recommended wire is 12 AWG to 18 AWG twisted pair. If no other devices are connected to the EIA-485, install a 120 ohm EOL resistor across ADT-UDACT TB1 terminals 3 and 4.

Connect the supplied Ground Strap from the ADT-UDACT Earth Ground terminal on TB3 to the CHS-4 chassis. Connect 24 VDC filtered power to TB1 terminals 1 and 2 on the ADT-UDACT.

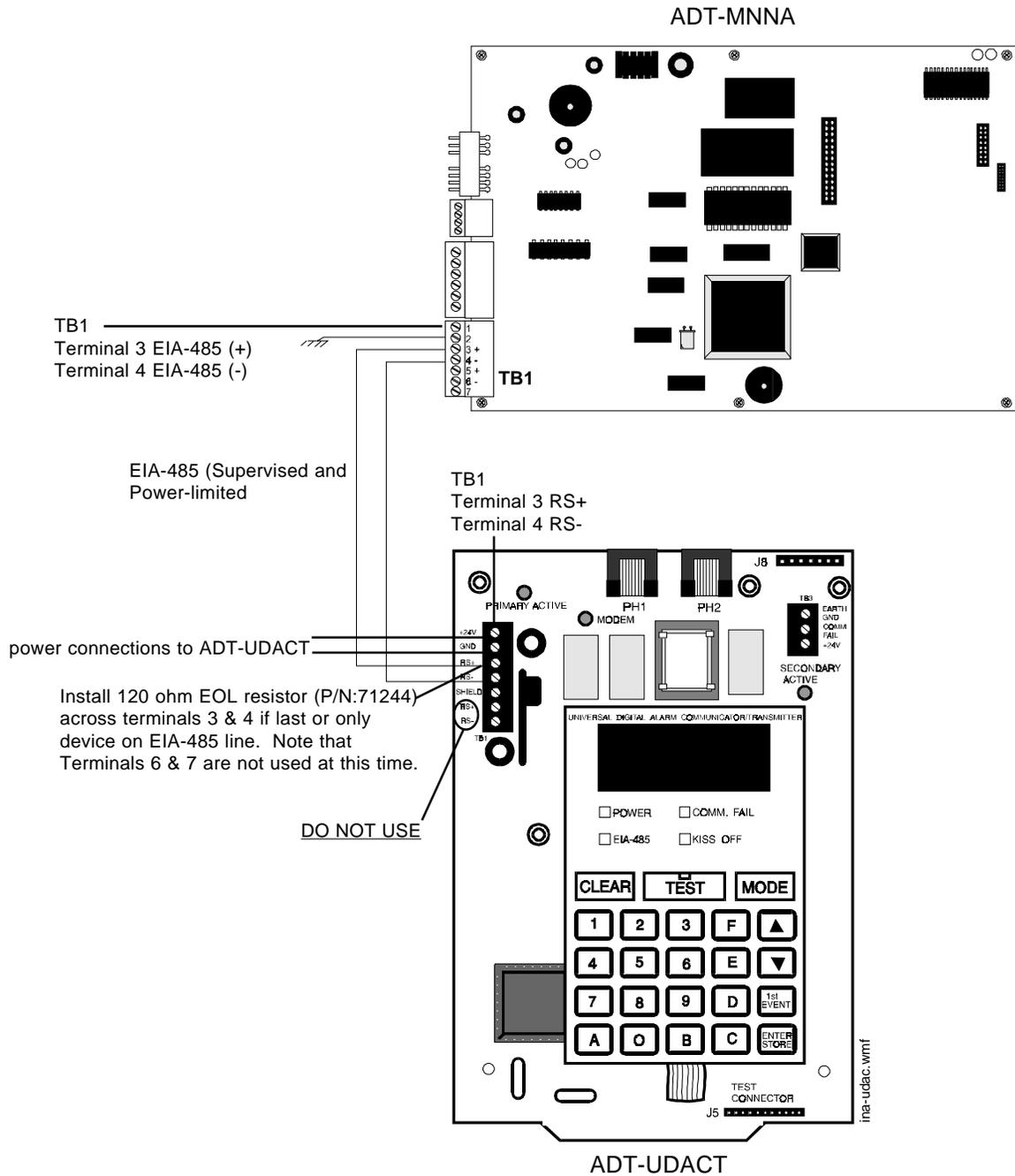
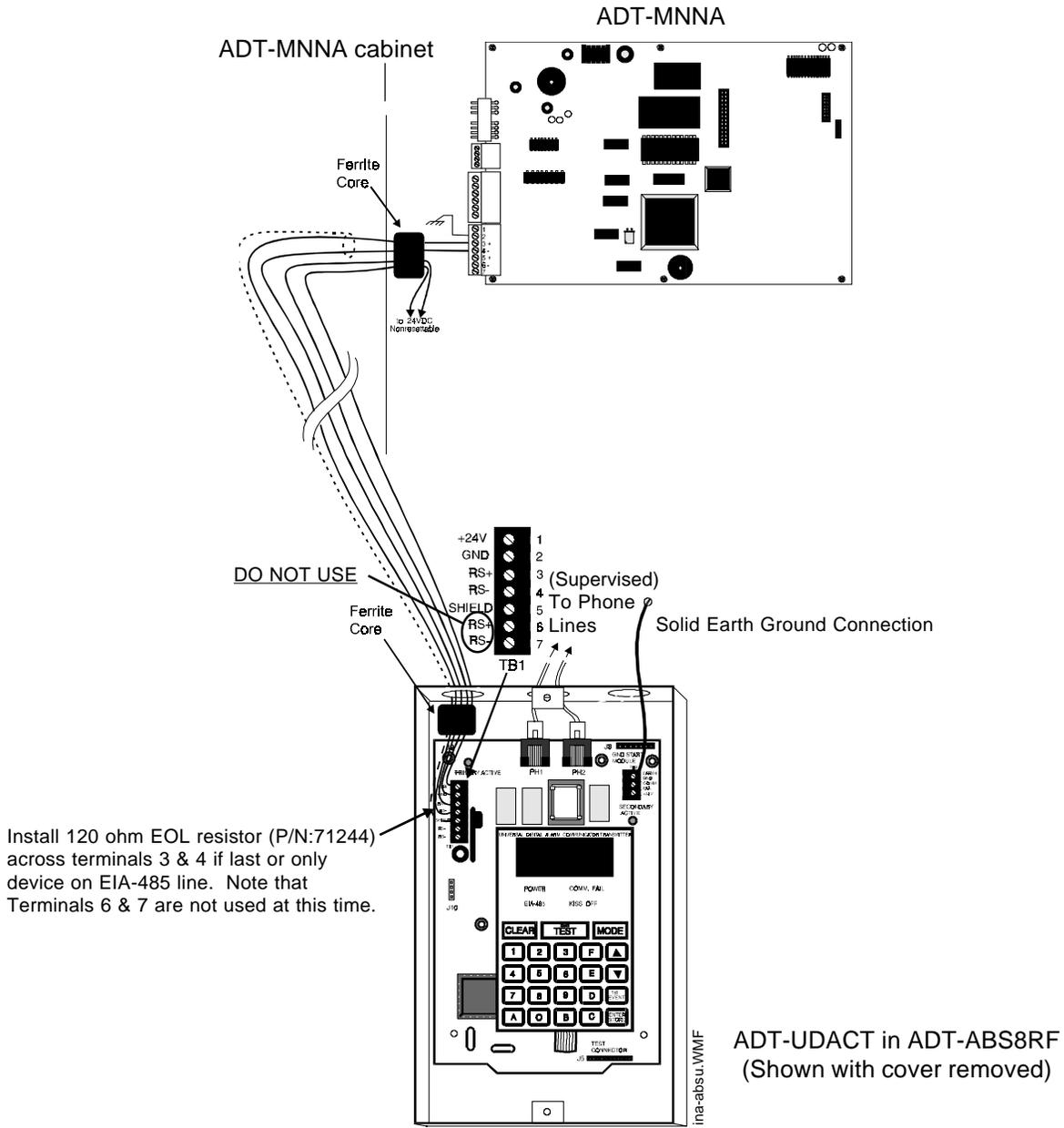


Figure F-1: EIA-485 Connection to Panel Mounted ADT-UDACT



Notes:

- 1) Ferrite cores are recommended for all applications.
- 2) Recommended wire is 12 AWG to 18 AWG twisted pair.
- 3) Shielded wire is not required (unless mandated by local AHJ).
If shielded wire is used, connect only one end of shield:
 - a) shield may be connected to cabinet (earth ground) at fire alarm panel, or
 - b) shield may be connected to TB1 Terminal 5 (Shield) at ADT-UDACT.

NOTE: The shield end that is not connected should be insulated to prevent accidental grounding. Do not connect both ends of shield under any circumstance since a ground fault may result.
- 4) Conduit is recommended for external wire runs. Consult local building codes.
- 5) Connect Ground Strap (supplied with ADT-ABS8RF enclosure) from Earth Ground terminal on ADT-UDACT to a solid building earth ground. Conduit alone will not provide a reliable earth ground.
- 6) ADT-UDACT may be located up to 6,000 feet away from the host control panel.
- 7) Refer to Specifications for power requirements.

Figure F-2: EIA-485 Connection to Remote ADT-UDACT

Appendix G: Annunciators

The ADT-UDACT is connected to the EIA-485 communication bus. AFM series and LDM series annunciators may also occupy the same bus. Use of an ADT-UDACT along with one of the above mentioned annunciators on the same control panel will alter the assignments of the first eight yellow LEDs on the annunciator as follows:

Unimode 300/400			Unimode 2020/1010, ADT-MNNA		
Yellow Annunciator LED	Assignment Without UDACT	Assignment With UDACT	Yellow Annunciator LED	Assignment Without UDACT	Assignment With UDACT
1	System Trouble (except AC loss)	System Trouble (except AC loss)	1	Programmable	System Trouble (less AC loss, batt. & supv.)
2	Signals Silenced	Signals Silenced	2	Programmable	Not Used
3	Not Used	Program Mode	3	Programmable	Program Mode
4	Not Used	Supervisory	4	Programmable	Supervisory
5	Supervisory	Bell Trouble	5	Programmable	Not Used
6	Prealarm	Prealarm/ Maintenance Alert	6	Programmable	Maintenance Alert (future use)
7	AC Fail	Low Battery	7	Programmable	Low Battery/No Battery
8	Panel Trouble	AC Fail	8	Programmable	AC Fail

Note: When using a ADT-UDACT with the Unimode 2020/1010 or ADT-MNNA, the first Red LED on an annunciator is used to annunciate alarms while LEDs 2 through 8 are not used.

