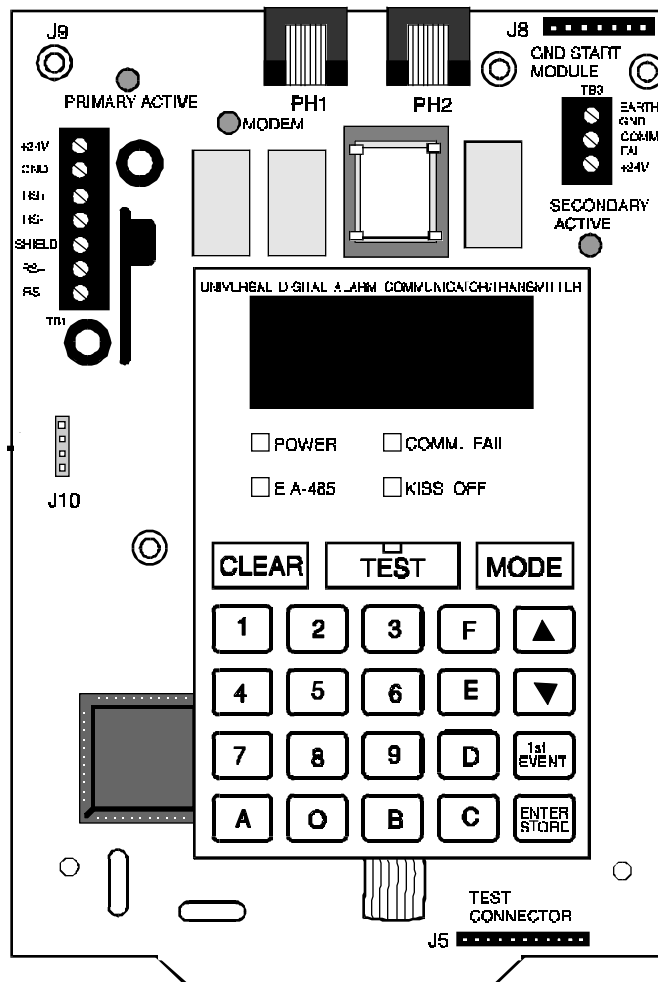




Security  
Systems

# UNI•COM

Universal Digital Alarm Communicator/Transmitter  
for the Unimode Series Fire Alarm Systems



## Product Information, Installation, Programming and Operation Manual

## **Don't Forget Installation Precautions**

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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 72-1993 Local, Remote Station and Central Station Fire Alarm Systems
- CAN/ULC - S527-M87 Standard for Control Units for Fire Alarm Systems

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



**NFPA Standards, NFPA 72-1993 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
- CAN/ULC - S524-M91 Standard for Installation of Fire Alarm Systems



**Other:**

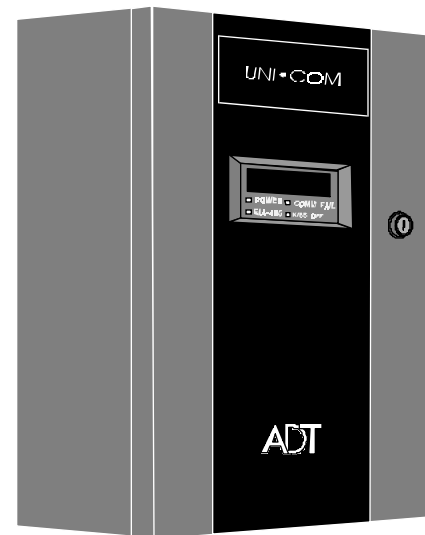
- NEC Article 300 Wiring Methods
- NEC Article 760 Fire Protective Signaling Systems
- Applicable Local and State Building Codes
- Requirements of the Local Authority Having Jurisdiction

# 1.0 Product Description

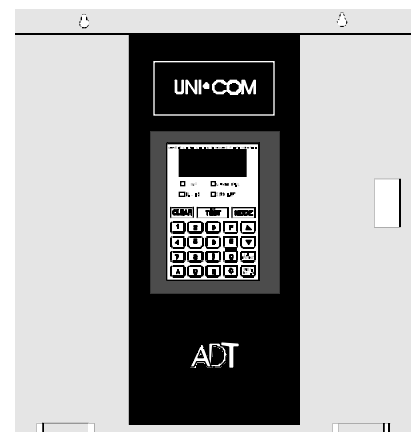
The UNI•COM Universal Digital Alarm Communicator/Transmitter may be used with compatible (refer to Appendices) ADT fire alarm control panels (FACPs). The UNI•COM transmits system status to the UCS (Universal Communication System) via the public switched telephone network. The UNI•COM is compact in size and may be mounted inside selected host control panels or mounted externally in a separate ADT-ABS8RF or ADT-UBS1F 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
- Optional Zone/Point disable
- Mounts either inside selected control panels or in separate ADT-ABS8RF or ADT-UBS1F enclosure
- Optional Dead Front Cover (ADT-DPUBS1F)
- Communicates vital system status including:
  - ✓ Independent zone/point alarm
  - ✓ Independent zone/point trouble
  - ✓ Independent zone/point supervisory
  - ✓ Serviceman on premises
  - ✓ Optional Walktest data transmission (Unimode 200 only)
  - ✓ AC (mains) power loss (programmable)
  - ✓ Low battery
  - ✓ System off normal
  - ✓ 12 or 24 hour test signal
  - ✓ Abnormal test signal per new UL requirements
  - ✓ Annunciation of UNI•COM 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
  - ✓ Modem
- Open collector relay driver for Total Communication Failure or UNI•COM trouble.
- Real Time Clock
- Extensive transient protection
- Simple EIA-485 interface to host panel



ADT-UBS1F



Optional ADT-DPUBS1F

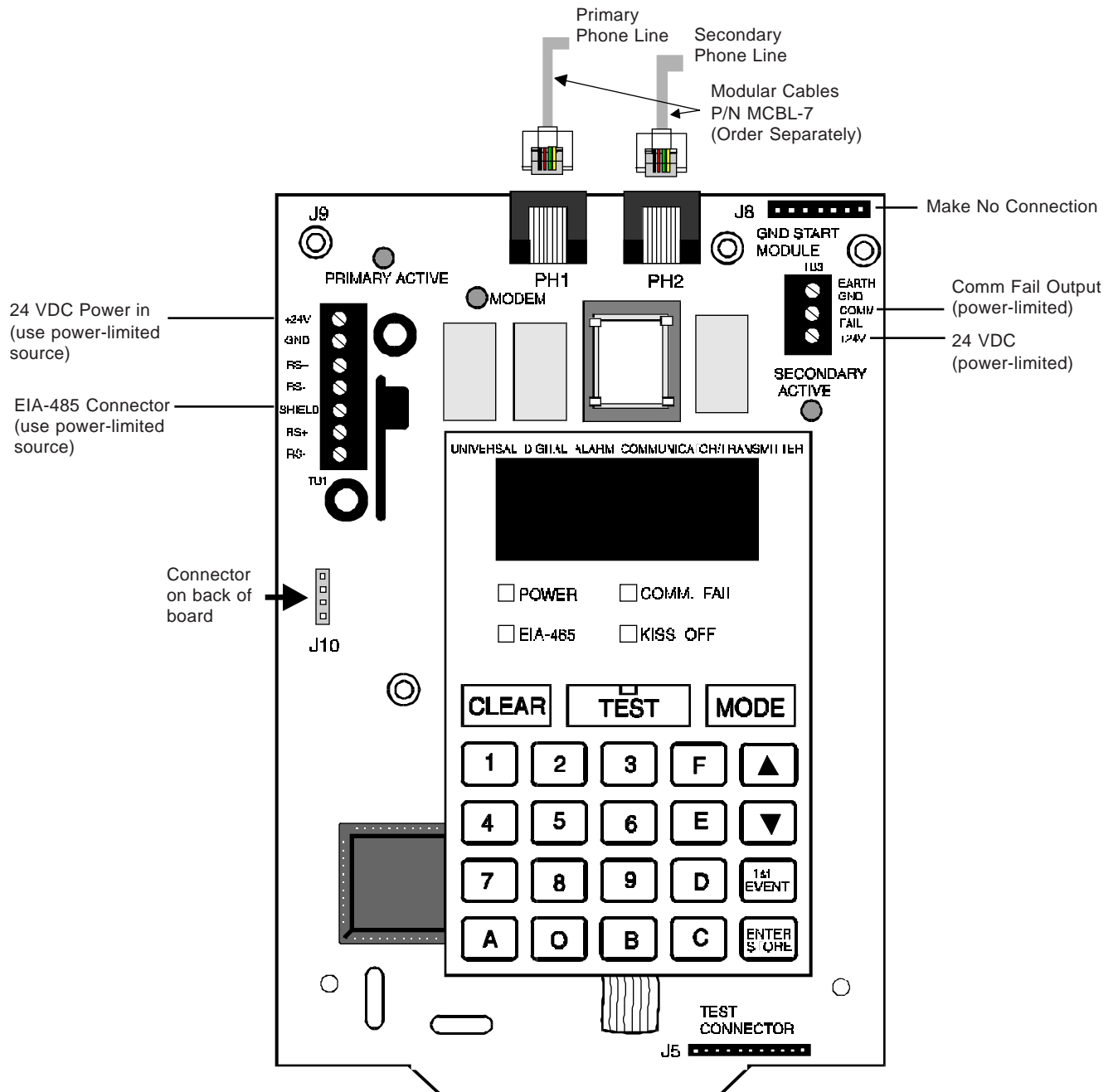


Figure 1-1: UNI-COM Assembly

## 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

### 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
- MODEM - green LED

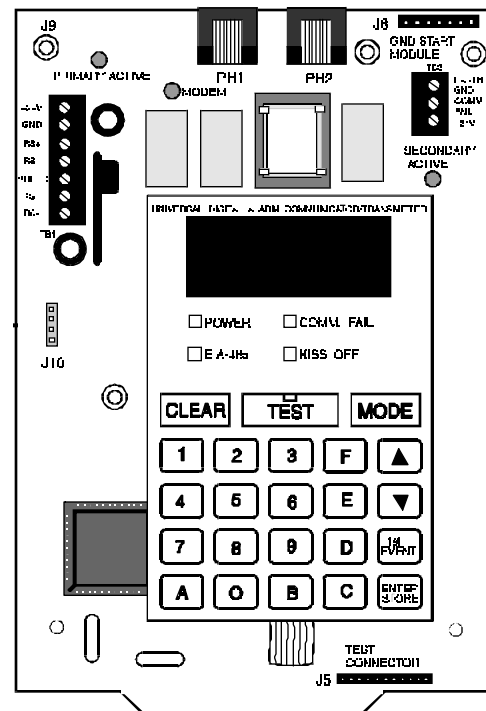


Figure 1-2: Controls and Indicators

## 1.3 Compatible Panels

The UNI•COM has been designed to be compatible with a variety of ADT fire alarm control panels (refer to Appendices).

## 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.
- Discern proper synchronization with UCS receiver.
- Transmit data to UCS receiver.
- Verify data has been accepted by the UCS receiver.
- Hang up and release phone lines.
- Communicate in the ADT FSK II format (refer to Section 5.0 for compatible receivers):



## 1.5

### Circuits

The UNI•COM circuit board contains a CPU, other primary components and wiring interface connectors.

#### 1.5.1 Power Requirements

Operating voltage for the UNI•COM 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 UNI•COM.

*Note: If the UNI•COM is installed in a Unimode 200 Control Panel, power is provided directly through UNI•COM connector J10 which plugs into the Unimode 200 main circuit board.*

#### 1.5.2 Communications

Communications between the UNI•COM 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 UNI•COM. The wiring connections are made to the RS+, RS- and Shield terminals of TB1 on the UNI•COM.

The EIA-485 circuit cannot be T-Tapped and must be wired in a continuous fashion from the control panel to the UNI•COM and, if installed, an annunciator. 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<sub>RMS</sub>, motor control circuits, or SCR power circuits.

*Note: If the UNI•COM is installed in a Unimode 200 Control Panel, the EIA-485 data line is connected directly through UNI•COM connector J10 which plugs into the Unimode 200 main circuit board.*

**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** - Connect a separate earth ground wire to TB3 terminal 1 for transient protection. When mounted in the Unimode 200, the UNI•COM receives an earth ground connection via a metal standoff located on the upper right corner mounting position.

## 1.6 Optional Device

Future use.

## 1.7 Specifications

### DC Power - TB1, Terminals 1 & 2

24 VDC (nominal) filtered, non-resettable 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 (for installation in the Unimode 200 enclosure use connector J10) 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. (For installation in the Unimode 200 use connector J10).

### 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 UNI•COM is mounted in a Unimode 200 since the metal standoff used in mounting provides an earth ground connection.

## 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 UNI•COM 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 : Fire-Lite Alarms Inc.  
12 Clintonville Rd.  
Northford, CT 06472

Product Model Number: UNI•COM  
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.*

#### **1.8.4 For Canadian Applications**

The following is excerpted from CP-01 Issue 5:

"NOTICE: The Canadian Department of Communications label identifies certified equipment. This certification means that the equipment meets certain telecommunications network protective, operational and safety requirements. The Department does not guarantee the equipment will operate to the user's satisfaction.

Before installing this equipment, users should ensure that it is permissible to be connected to the facilities of the local telecommunications company. The equipment must also be installed using an acceptable method of connection. In some cases, the company's inside wiring associated with a single line individual service may be extended by means of a certified connector assembly (telephone extension cord). The customer should be aware that compliance with the above conditions may not prevent degradation of service in some situations.

Repairs to certified equipment should be made by an authorized Canadian maintenance facility designated by the supplier. Any repairs or alterations made by the user to this equipment, or equipment malfunctions, may give the telecommunications company cause to request the user to disconnect the equipment.

Users should ensure for their own protection that the electrical ground connections of the power utility, telephone lines and internal metallic water pipe system, if present, are connected together. This precaution may be particularly important in rural areas.

Caution: Users should not attempt to make such connections themselves, but should contact the appropriate electric inspection authority, or electrician, as appropriate."

"The Load Number (LN) assigned to each terminal device denotes the percentage of the total load to be connected to a telephone loop which is used by the device, to prevent overloading. The termination on a loop may consist of any combination of devices subject only to the requirement that the total of the Load Numbers of all the devices does not exceed 100."

Industry Canada (IC) Compliance - "This digital apparatus does not exceed the Class A limits for radio noise emissions from digital apparatus set out in the Radio Interference Regulations of the Canadian Department of Communications."

IC Registration Number: 2132 6030 A

Load Number: 3

## 1.9 Modes and Special Functions

### 1.9.1 Normal Mode:

Normal mode is the standard mode of operation in which the UNI•COM monitors host FACP status as well as telephone line voltage. The UNI•COM reports system status information to UL listed Central Station Receivers. Information transmitted includes zone/point: fire alarm, fire alarm trouble and supervisory alarm. Specific system trouble conditions and specific UNI•COM troubles are also transmitted.

### 1.9.2 Serviceman Code:

The serviceman code, once entered, allows access to program, walktest, troubleshoot and type modes. The serviceman code also enables the clear function. Refer to following sections.

### 1.9.3 Program Mode:

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

### 1.9.4 Walktest Mode:

While in the walktest mode, transmission of FACP system events may be optionally transmitted to the UCS receiver (Central Station).

### 1.9.5 Troubleshoot Mode:

Troubleshoot mode may be used for testing the telephone line wiring. Connection from the UNI•COM'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.

### 1.9.6 Type Mode:

Type mode is used to program into the UNI•COM the system zones/points which are non-fire alarm, i.e. supervisory type. This 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.

### 1.9.7 Clear Function:

When the clear function is activated, it causes the UNI•COM to immediately stop transmissions, disconnect from the telephone network, clear out any messages that were waiting for transmission and reset.

### 1.9.8 Manual Test Function:

The manual test function allows a test report message to be sent to both central stations upon activation. A Serviceman Code is not required.

### 1.9.9 Lamp Test Mode:

The UNI•COM 4-character display segments plus all LEDs illuminate in this mode.

### 1.9.10 User Code:

The user code, once entered, allows for user level testing and maintenance functions. The user may be allowed to transmit walktest data to the UCS for the Unimode 200 system.

# 2.0 Installation and Wiring

**2.1 General** For information on installing the UNI•COM in a specific ADT 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 UNI•COM be located as the first device on the incoming telephone circuit to properly function.*

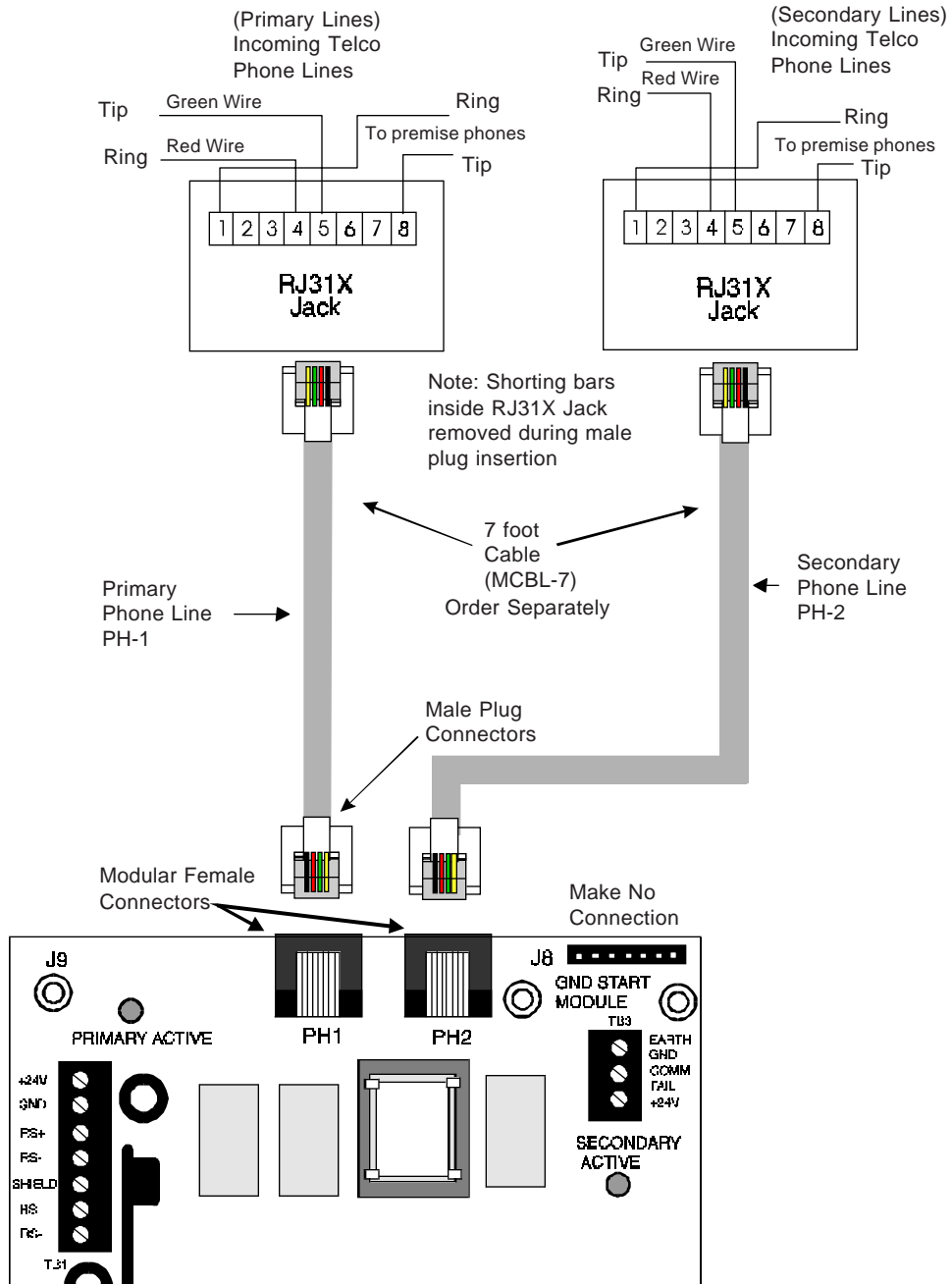


Figure 2-1: Wiring Phone Jacks

### Relay Driver

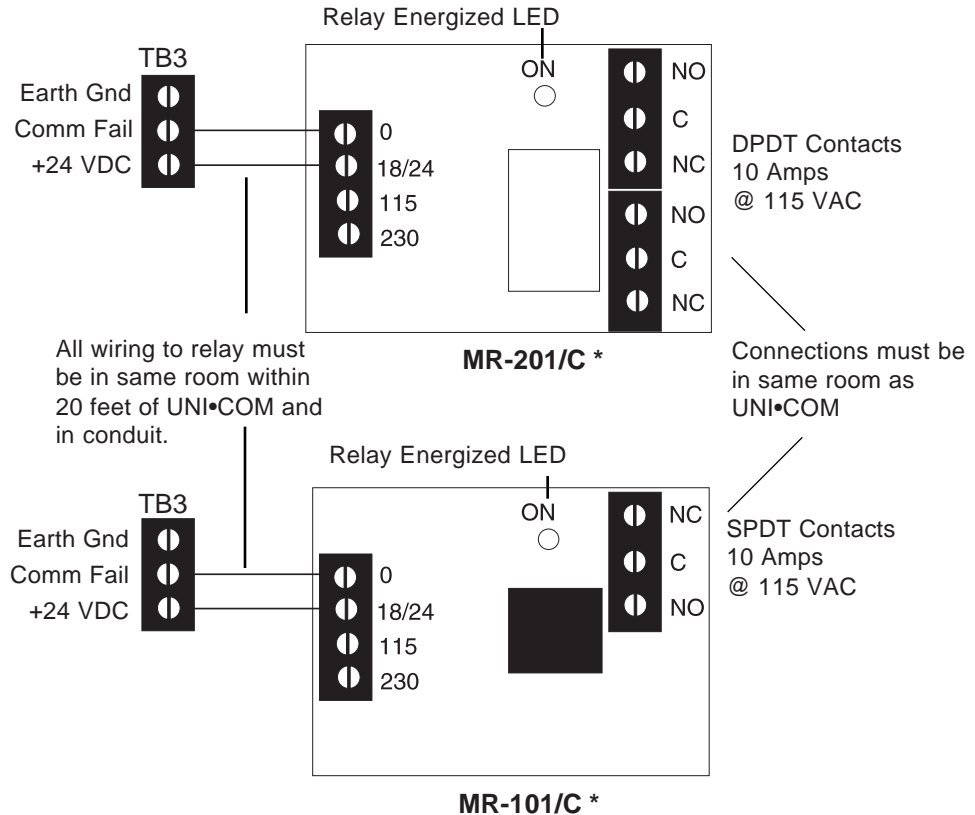
The UNI•COM's open collector output on TB3, terminal 2 is provided for Communicator Failure and UNI•COM trouble. It can be used to drive UL listed relay MR-101/C or MR-201/C. The output is rated for 40 mA and is power-limited. The normal condition for the output is Off (deenergized).

Communicator Failure occurs when the maximum number of attempts to reach both central stations has taken place or when both phone lines are disconnected. UNI•COM trouble conditions include loss of telephone line voltage to the primary or secondary phone lines, communication failure to the primary or secondary central stations or entry into Programming, Troubleshoot or Type Mode..

Wiring from the UNI•COM 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 also remain in the same room as the UNI•COM.

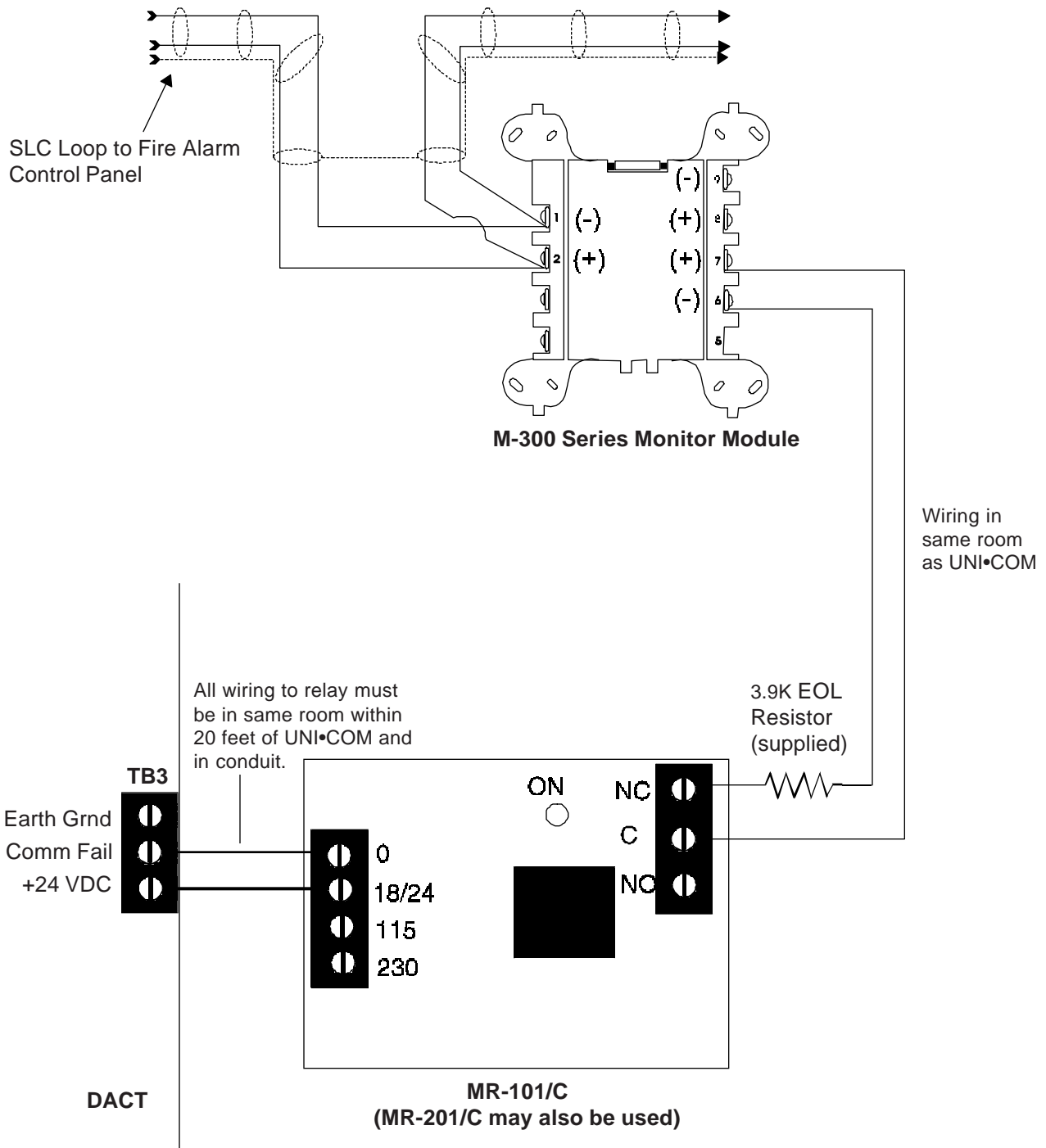
When the UNI•COM is programmed as 'Receive Only' (typically this occurs when annunciators are also used and are set for 'Receive/Transmit'), the relay output is used to provide a UNI•COM trouble input to the host control panel. For Unimode 200 applications, use a monitor module to supervise the relay closure. Refer to Figure 2-3. Program the adjective and noun fields for 'DACT Trouble'. For Unimode II or Unimode 4-16 applications, wire the relay output to the annunciator trouble input circuit or use the relay to trigger zone trouble.

When the UNI•COM is programmed as 'Receive/Transmit', EIA-485 supervision and UNI•COM trouble status are automatically handled by the host control panel.



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

**Figure 2-2: Relay Driver Connections**



Note: 1) M-300 Series Monitor Module is used to supervise Normally Closed output of M-101/C. On DACT trouble and Comm Fail, MR-101/C relay contact will open causing M-300 to transmit trouble condition to FACP.

**Figure 2-3: Monitoring for UNI•COM 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 UNI•COM is shown below.

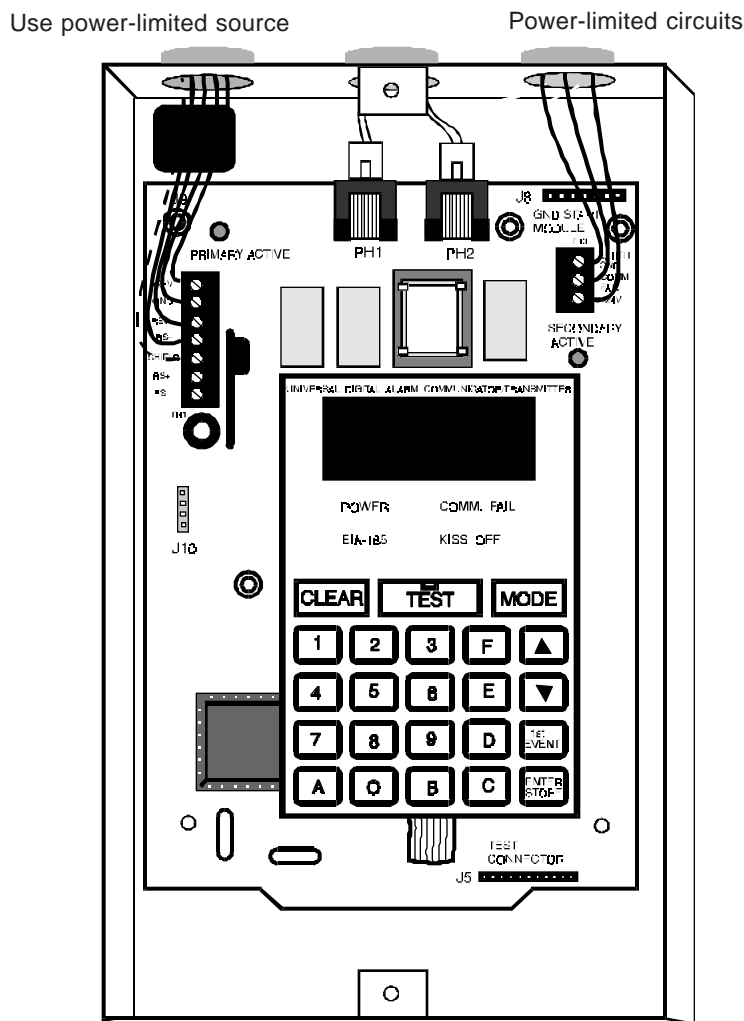


Figure 2-4: Typical Wiring Diagram for UL Power-limited Requirements



## 3.0 Programming Instructions

### Programming Mode

Programming of the UNI•COM is possible at any time including while the UNI•COM is communicating with a central station.

The UNI•COM has a built-in programmer. All programming selections are stored in nonvolatile Electrically-Erasable Programmable Read-Only Memory (EEPROM). This ensures that the UNI•COM will retain all entries made in programming mode even if power is 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 UNI•COM 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.

*Note: Access to the Programming Mode is not available to the end user. It may only be accessed by the serviceman.*

### 3.1 Entering Program Mode

To enter the Program Mode, first press the **MODE** key followed by the 4-digit serviceman code (factory default is 6, 3, 2, 1) then press the **ENTER** key. Next, to enter the Program Mode, press the **MODE** key once (the display will go blank) then start entering the code (**7764**). You have ten seconds to start entering the code.

☛ **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 UNI•COM, 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 UNI•COM 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 UNI•COM 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 UNI•COM will:

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

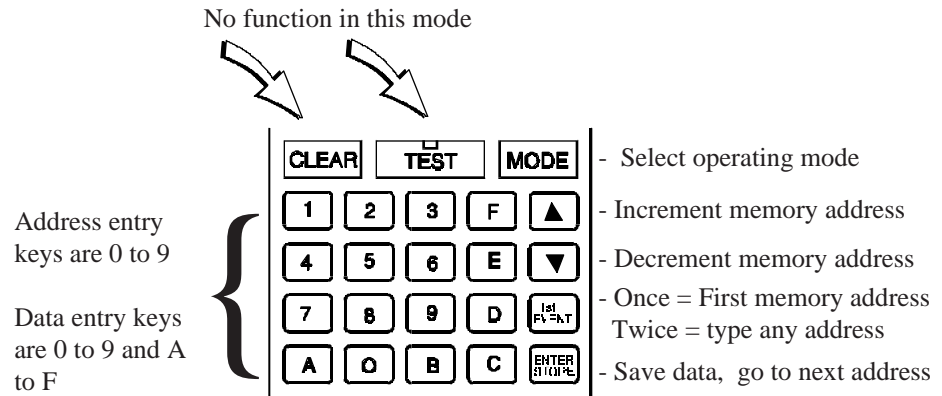
Location 54 is factory set to = 0, *UNI•COM communications disabled. This keeps the communicator off until location 54 is changed to 1, 2, 3 or 4. Refer to program selection for address 54 in this section. Once location 54 is changed from 0 to 1, 2, 3 or 4 and a valid phone number is entered, transmission of the Serviceman on Premises 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 164 (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: UNI•COM 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 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 '0' and cannot be changed. The format is ADT FSK II.

**Primary Number Account Code (17-19)** Three locations at addresses 17-19 default to all '0's. Valid entries are 0-9.

**Primary Number 24 Hour Test Time (20-23).**

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 20-23. The default is 00:00 (12:00 midnight). The limits for each location are as follows: 20: enter 0, 1 or 2; 21: enter 0-9; 22 : enter 0-5; 23: enter 0-9. Note: Do not use A-F.

**Primary Number 24/12 Hour Test Time Interval (24).** 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 (25-40).** Programming is similar to programming the primary phone number located at addresses 00 - 15. The defaults are also all 'F's.

<b>F</b>	<b>F</b>	<b>F</b>	<b>F</b>	<b>F</b>	<b>F</b>	<b>F</b>	<b>F</b>	<b>F</b>	<b>F</b>	<b>F</b>	<b>F</b>	<b>F</b>	<b>F</b>	<b>F</b>	
25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40

**Secondary Number Communication Format (41).** Programming is the same as the primary number's Comm Format at address 16. Default entry is '0', ADT FSK II.

**Secondary Number Account Code (42-44)** is programmed in addresses 42 - 44 in the same manner as the primary phone number Account Code. Default entries are all '0s'.

**Secondary Number 24-Hour Test Time (45-48)** is programmed in addresses 45-48 in the same manner as the primary number 24-Hour Test Time. Default is 00:00 (12:00 midnight).

*Note: The UNI•COM automatically programs all of the event codes. See Tables 3-2 and 3-3.*

**Secondary Number 24/12 Hour Test Time (49)** 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.

**Start Monitoring Address (50-51)** is programmed to indicate the first group of zones or points to be monitored and reported to the central station. Default is '01'. Valid entries are '01, 02, 03 and 04'. See Table 3-1.

**End Monitoring Address (52-53)** is programmed to indicate the last group of zones or points to be monitored and reported to the central station. Default is '01'. Valid entries are '01, 02, 03 and 04'. See Table 3-1.

Use the Start and End Monitoring Address programming locations to set the reporting range of the UNI•COM.

Zone Reporting (Factory Default)			Point Reporting		
	START Addr. 50-51	END Addr. 52-53		START Addr. 50-51	END Addr. 52-53
Unimode 200 <sup>1</sup>	01	01	Unimode 200	01 <sup>1</sup>	04 <sup>1</sup>
Unimode 4-16 <sup>1</sup>	01	01			
Unimode II <sup>2</sup>	01	02			
1 = Reports status of 56 zones. 2 = Reports status of 120 zones.			1 = Report status of 198 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 Address**

**UNI•COM Communication Selection (54)**

Leaving address 54 at '0' disables communications to the central station(s). Enter '1' for zone reporting, receive only. Enter '2' for zone reporting, receive/transmit. Enter '3' for point reporting, receive only. Enter '4' for point reporting, receive/transmit.

*Note: Use receive only selections 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 entries when annunciators are not installed or when the UNI•COM receive/transmit function is used to supervise the EIA-485 communication bus. For additional information on the receive/transmit function, refer to annunciator technical manuals.*

**Backup Reporting (55)** address 55 entry of '0' allows reports to be sent to Secondary phone number as backup only. Leaving address 55 with the default setting of '1' permits transmission to either the central station's Primary or Secondary phone number. The report will be sent to the first available receiver. An entry of '2' disables reports from being sent to the Secondary phone number.

**Touchtone/Rotary Select (56)** A '0' programmed in this address by the factory triggers Touchtone dialing over both phone lines. Select '1' for rotary dialing.

**Make Break Ratio (57)** Use this address only if you have chosen '1' for address 56. 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 (58)** Leave default of 0.

**Address (59)** Leave default of 0.

**AC Loss Reporting Delay (60)** '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 (61)**

Enter one of the following digits corresponding to the Control Panel in which the UNI•COM is installed. *A correct entry is essential for proper operation.*

- 0 = Unimode 200
- 1 = Unimode 416
- 2 = Unimode II
- 3 = Do not use
- 4 = Do not use
- 5 = Do not use
- 6 = Do not use
- 7 = Do not use
- 8 = Do not use
- 9 = Do not use

#### **Serviceman Code (62-65)**

The factory default is 62=6, 63=3, 64=2 and 65=1. The code must be properly entered to enable the following modes: program, walktest, troubleshoot and type. It also enables the clear function. The code may be changed. If, however, the code is changed and then forgotten, the factory default code of **6321** may be restored by pressing the **MODE** key followed by **A, A, 1, 2, 3** and then pressing [**ENTER/STORE**].

#### **Safety Delay Time (66-68)**

Factory default is addresses 66=0, 67=0 and 68=0. Do not use.

#### **User Codes (69-98)**

Six 4-digit user codes may be programmed. The user is identified at the UCS receiver by this 4-digit code. In addition, each user code may designate whether or not the walktest events are transmitted to the UCS when the UNI•COM is used with a Unimode 200 FACP.

- 69 - 72 = User 1 Walk Test Code
- 73 = User 1 Walk Test Transmit Enable
- 74 - 77 = User 2 Walk Test Code
- 78 = User 2 Walk Test Transmit Enable
- 79 - 82 = User 3 Walk Test Code
- 83 = User 3 Walk Test Transmit Enable
- 84 - 87 = User 4 Walk Test Code
- 88 = User 4 Walk Test Transmit Enable
- 89 - 92 = User 5 Walk Test Code
- 93 = User 5 Walk Test Transmit Enable
- 94 - 97 = User 6 Walk Test Code
- 98 = User 6 Walk Test Transmit Enable

For all User Walk Test Codes, the factory default of FFFF means no user is identified. Altering the default entries causes the user to be identified. Valid entries are 0 - 9 and A - F. For the Walk Test Transmit Enable addresses, a factory default entry of '0' disables the transmission of walktest events, while an entry of '1' enables the transmission of walktest events.

### **Programming Event Codes (99-168)**

A description of the type of reports with reported 'event code' that are sent to the central station appear in Tables 3-2 and 3-3. Entering a transmit selection of '0' will cause the communicator to inhibit transmission of the report. 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 172 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 UNI•COM will revert to normal mode.

Address	Description	Setting	Event Codes
99	Primary # General Alarm Code	1	FA
100	Primary # Zone/Point Alarm Code	1	FA###*1ST
101	Primary # General Supervisory Code	1	SS
102	Primary # Zone/Point Supervisory Code	1	SS###*1ST
103	Primary # General System Fault Code	1	FT
104	Primary # AC Fault Code	1	AA
105	Primary # Zone/Point Fault Code	1	FT###*2ST
106	Primary # Supervisory Zone/Point Fault Code	1	ST###*2ST
107	Primary # Low Battery/Earth Fault Code	1	YT
108	Primary # Telco Primary Line Fault Code	1	LT1
109	Primary # Telco Secondary Line Fault Code	1	LT2
110	Primary # NAC Fault Code	1	UT*2ST
111	Primary # Comm. Trouble Primary # Code	1	LT1*8ST
112	Primary #Comm. Trouble Secondary # Code	1	LT2*8ST
113	Primary # 485 Communication Trouble Code	1	YC
114	Primary # Serviceman on Premises	1	id##SI
115	Walk Test Start	1	id#FM1
116	General Alarm Restore Code	1	FH
117	Primary # Zone/Point Alarm Restore Code	1	FR###
118	General Supervisory Restore Code	1	SR
119	Primary # Zone/Point Supervisory Restore Code	1	SR###
120	Primary # General Fault Restore Code	1	FJ
121	Primary # AC Fault Restore Code	1	AH
122	Primary # Alarm Zone/Point Fault Restore Code	1	FR###
123	Primary # Supervisory Zone/Point Fault Restore Code	1	SR###
124	Primary # Low Battery Fault Restore Code	1	YR
125	Primary #Telco Primary Line Fault Restore Code	1	LR1
126	Primary #Telco Secondary Line Fault Restore Code	1	LR2
127	Primary # NAC Fault Restore Code	1	UR
128	Primary # Comm. Trouble Primary # Restore Code	1	LR1
129	Primary # Comm. Trouble Secondary # Restore Code	1	LR2
130	Primary # 485 Communication Trouble Restore Code	1	YO
131	Primary # System Serviceman off Premises	1	id##SO
132	Primary # Walk Test End	1	id#FK1
133	Primary # Normal System 24 Hour Test	1	RP1
134	Primary # Abnormal System 24 Hour Test	1	RP5
135	Manual Test	1	RP1

- Note: 1) Setting of 0 = do not transmit report to UCS  
2) Setting of 1 = transmit report to UCS  
3) Reports transmitted to the UCS for zone or point transmission use the following convention: \*1ST = Alarm Only, \*2ST = Trouble Only, \*3ST = Alarm & Trouble Simultaneously

**Table 3-2: Event Codes, Primary Number**

Address	Description	Setting	Event Codes
136	Secondary # General Alarm Code	1	FA
137	Secondary # Zone/Point Alarm Code	1	FA###*1ST
138	Secondary # General Supervisory Code	1	SS
139	Secondary # Zone/Point Supervisory Code	1	SS###*1ST
140	Secondary # General System Fault Code	1	FT
141	Secondary # AC Fault Code	1	AA
142	Secondary # Zone/Point Fault Code	1	FT###*2ST
143	Secondary # Supervisory Zone/Point Fault Code	1	ST###*2ST
144	Secondary # Low Battery/Earth Fault Code	1	YT
145	Secondary # Telco Primary Line Fault Code	1	LT1
146	Secondary # Telco Secondary Line Fault Code	1	LT2
147	Secondary # NAC Fault Code	1	UT*2ST
148	Secondary # Comm. Trouble Primary # Code	1	LT1*8ST
149	Secondary #Comm. Trouble Secondary # Code	1	LT2*8ST
150	Secondary # 485 Communication Trouble Code	1	YC
151	Secondary # Serviceman on Premises	1	id##SI
152	Walk Test Start	1	id#FM1
153	General Alarm Restore Code	1	FH
154	Secondary # Zone/Point Alarm Restore Code	1	FR###
155	General Supervisory Restore Code	1	SR
156	Secondary # Zone/Point Supervisory Restore Code	1	SR###
157	Secondary # General Fault Restore Code	1	FJ
158	Secondary # AC Fault Restore Code	1	AH
159	Secondary # Alarm Zone/Point Fault Restore Code	1	FR###
160	Secondary # Supervisory Zone/Point Fault Restore Code	1	SR###
161	Secondary # Low Battery Fault Restore Code	1	YR
162	Secondary #Telco Primary Line Fault Restore Code	1	LR1
163	Secondary #Telco Secondary Line Fault Restore Code	1	LR2
164	Secondary # NAC Fault Restore Code	1	UR
165	Secondary # Comm. Trouble Primary # Restore Code	1	LR1
166	Secondary # Comm. Trouble Secondary # Restore Code	1	LR2
167	Secondary # 485 Communication Trouble Restore Code	1	YO
168	Secondary # System Serviceman off Premises	1	id##SO
169	Secondary # Walk Test End	1	id#FK1
170	Secondary # Normal System 24 Hour Test	1	RP1
171	Secondary # Abnormal System 24 Hour Test	1	RP5
172	Manual Test	1	RP1

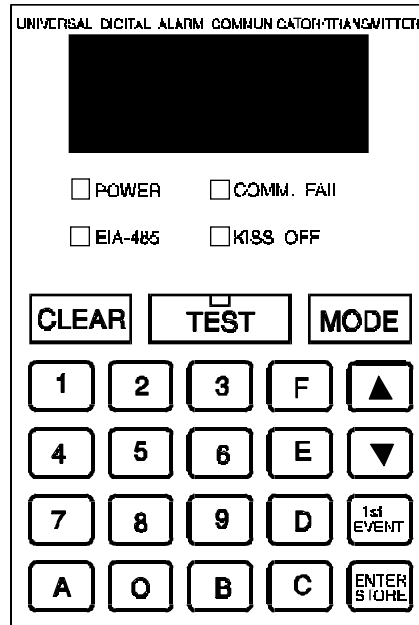
- Note: 1) Setting of 0 = do not transmit report to UCS  
2) Setting of 1 = transmit report to UCS  
3) Reports transmitted to the UCS for zone or point transmission use the following convention: \*1ST = Alarm Only, \*2ST = Trouble Only, \*3ST = Alarm & Trouble simultaneously

**Table 3-3: Event Codes, Secondary Number**



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## 4.0 Operating Instructions



### 4.1 Normal Mode

The UNI•COM has six Modes of operation; Normal, Program, Walktest, Troubleshoot, Type and Lamp Test. *Upon initial power up, the system will be in Normal Mode. This section discusses operation of the UNI•COM in the Normal Mode.*

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

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

**TEST** If the Test Key is pressed three times in rapid succession the UNI•COM will transmit a manual test message to both central stations.

**CLEAR** The Clear function will cause the UNI•COM to:

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

To perform the Clear function, first press the **MODE** key, enter a valid serviceman code and then press the [ENTER/STORE] key. Next press the **CLEAR** key followed by **2, 5, 3, 2**, then press the [ENTER/STORE] key.

- 1st EVENT** This key along with the **UP Arrow** and **DOWN Arrow** keys, are used to display UNI•COM 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 UNI•COM fault events (older) that have occurred and are active - not cleared yet.
- UP ARROW** Use the **UP Arrow** key to view other UNI•COM 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 UNI•COM 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 UNI•COM. *If this indicator fails to light under normal conditions, service the system immediately.*

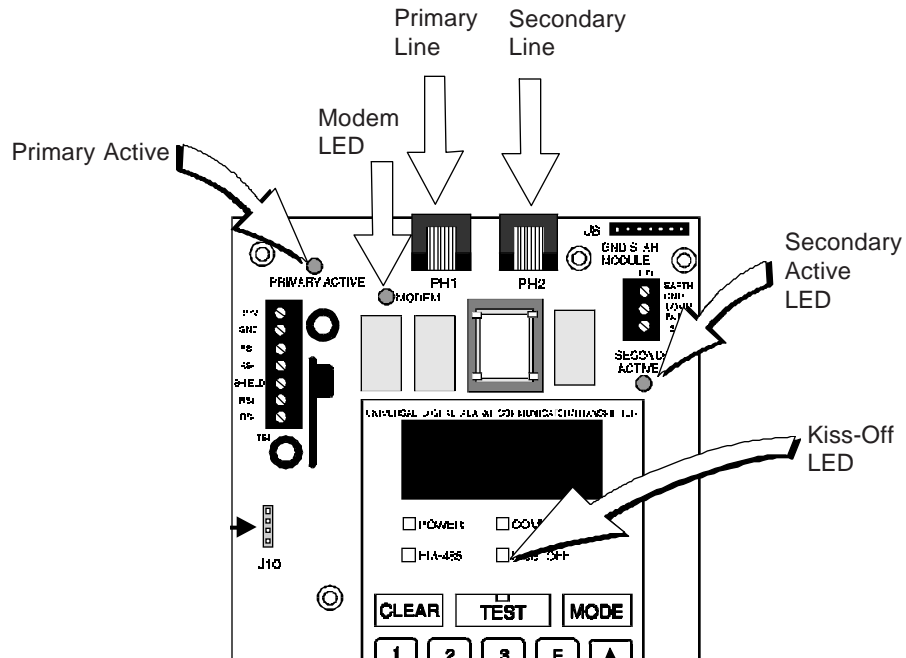
**Kiss-Off**—A green LED that blinks when the central station has acknowledged receipt of each transmitted message.

**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 while communication to the UCS is taking place.



**Figure 4-1: UNI•COM Phone Connectors and LEDs**

**4.1.3 Normal Mode Operation:** Normal mode is the standard mode of operation. In this mode, the UNI•COM 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 UNI•COM trouble conditions in the normal mode.

The UNI•COM 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 UNI•COM to the telephone lines.

The UNI•COM 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 UNI•COM comes with line seizure capability provided for both the primary and secondary telephone line interfaces. **Any time that the UNI•COM 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.

Options exist to: (1) send reports to the secondary phone number as backup only, (2) send reports to either the primary or secondary phone numbers or (3) send reports to the primary phone number only. For additional information, refer to programming address 55. If 10 total attempts to communicate are unsuccessful, the Communicator Failure output will be turned on (TB3, terminal 2).

The UNI•COM 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 UNI•COM 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. Serviceman on Premises
16. Walktest Start
17. System Automatic Test Report
18. System Abnormal Automatic Test Report
19. Manual Activated Test Report

Event Restorals

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

Where #N represents the zone or device ID number.

*Note: The Unimode 200 has a maximum capacity of 99 addressable smoke detectors and 99 addressable modules. When the UNI•COM is programmed for point transmission, the reported range of addresses is 001 to 099 for detectors at addresses 01 to 99 and 101 to 199 for modules at addresses 01 to 99.*

*When using AIM modules with the Unimode II, the UNI•COM will report AIM devices in up to 8 zones maximum.*

*The 'general' reports for general fire, general supervisory and general fault are always transmitted (unless disabled). Zone or point information will follow the general reports if enabled.*

#### **4.1.4 Key Report Descriptions**

##### **Serviceman on Premises**

This report is generated any time that the serviceman enters a 4-digit code into the UNI•COM that matches the entry programmed into addresses 62-65. The report generated to the UCS receiver tells the central station that a serviceman is on the premises and is about to perform some type of maintenance on the system.

The Serviceman Code must first be entered in order for the serviceman to gain access to program, walktest, troubleshoot and type modes. The Serviceman Code also enables the clear function.

To enter the Serviceman Code, press the **MODE** key followed by the correct 4-digit code, then press the [ENTER/STORE] key. Once the [ENTER/STORE] key is pressed, the UNI•COM transmits the serviceman on premises report to the UCS. At this time, the UNI•COM continues to be fully capable of reporting system status to the central station.

Once the Serviceman Code is correctly entered, the UNI•COM may be placed into any mode by pressing the **MODE** key, entering the appropriate 4-digit code and then pressing the [ENTER/STORE] key. While in any of the selected modes, the UNI•COM is not capable of reporting system status to the central station. The 4-digit codes are as follows:

Program Mode	7764
Walktest Mode	9255
Troubleshoot Mode	8768
Type Mode	8973
Clear Function	2532

For additional information on the functionality of each mode, see the appropriate sections.

Note: If the Serviceman Code is forgotten, the factory default code of 6321 may be restored by pressing the **MODE** key followed by **A, A, 1, 2, 3** and then pressing the [ENTER/STORE] key.

*The UNI•COM will also transmit the Serviceman on Premises Report when the correct level one password is entered into the Unimode 200.*

##### **Serviceman off Premises Report**

The serviceman off premises report is generated to indicate that the serviceman has completed maintenance on the fire alarm system and is exiting the premises. This report is transmitted by the UNI•COM by pressing the **MODE** key, entering the digits **99** and then pressing the [ENTER/STORE] key.

##### **System Test Report**

The UNI•COM 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 UNI•COM 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 UNI•COM supervises the integrity of the information received from the FACP via the EIA-485 communications bus. Should the communications bus malfunction, the UNI•COM transmits the report '485 comm trouble.' When the communications bus returns to proper operation, the UNI•COM will report '485 comm trouble restoral.' The EIA-485 communications bus is supervised when the UNI•COM is configured for receive only or receive/transmit operation.

### **Manual Test Report**

By pressing the **TEST** key three times in rapid succession, the UNI•COM will transmit a manual test report to the UCS. The **TEST** key may be pressed at any time. The Serviceman Code is not required.

*Program settings for zone or point reporting must match in both the host FACP and the UNI•COM. Refer to the Unimode 200 Technical Manual section on Level One programming for instructions on setting the FACP for zone or point annunciation. Refer to Section 3.3 of this manual for instructions on setting addresses 50 through 54 and 61. Also refer to Section 4.3 for a discussion of Type Mode.*

### **Zone/Point Fire Alarm Report**

The UNI•COM reports activated status of specific zones or points defined as fire alarm. Fire alarm devices include smoke detectors, pull stations, waterflow devices, heat sensors, etc. The report transmitted includes the fire alarm message and the identity of the activated zone or point.

Note: Use the Type Mode to identify all supervisory devices installed in the system to the UNI•COM. Refer to the Type Mode instructions in Section 4.3.

### **Zone/Point Supervisory Activation Report**

The UNI•COM reports activated status of specific zones or points defined as supervisory. The report transmitted includes the supervisory alarm message and the identity of the activated zone or point.

### **General Fault Report**

The general fault report is transmitted for most types of system trouble conditions including the following:

- Zone/point trouble
  - ✓ Maintenance alert
  - ✓ Wrong device
  - ✓ Improper device
  - ✓ Improper address
  - ✓ Auto-detector test failure
  - ✓ No response
  - ✓ Shorted or open initiating device circuit
- Main SLC loop fault
- Earth fault
- Reverse polarity/city box trouble
- Memory corruption
- Disabled point
- Off-line programming
- Annunciator trouble.

Note: When a zone or point is in trouble, transmitted messages include the specific zone or point trouble report and and the general fault report (unless disabled).

A general fault report is not sent for AC loss and EIA-485 failure. These trouble conditions are transmitted as individual trouble reports.

### **Zone or Point Restoral Report**

Zone or point restoral reports are not transmitted to the UCS unless the zone or point is fully cleared of both alarm and trouble conditions.

### **Walktest Begin and End Reports**

#### **• Serviceman Walktest:**

Once a correct Serviceman Code is entered, Walktest Mode may be entered. In Walktest Mode, the serviceman has the option of transmitting all system walktest activity to the UCS or not reporting the activity to the UCS. The begin and end walktest messages identify the person walktesting the system as a serviceman (User id7).

#### **• User Walktest:**

Once a correct User Code is entered, Walktest Mode may be entered at the host FACP. In Walktest Mode, the user option of transmitting all system walktest activity to the UCS or not reporting the activity to the UCS is determined by program entries 69-98. The begin and end walktest messages identify the user walktesting the system as user 1 through 6. Refer to Section 3.3 for programming addresses 69-98.

## **4.2 Walktest Mode**

When used with a Unimode 200 FACP, Walktest Mode allows the option of transmitting all system activity during walktesting to a central station. It also prevents unwanted signals from being transmitted to the central station that may be interpreted as real fire alarm reports.

For Unimode II and Unimode 4-16 applications, placing the FACP into Walktest Mode causes transmission of an EIA-485 bus failure message. Exiting Walktest Mode at the FACP causes the UNI•COM to transmit a restoral of EIA-485 bus message.

To perform a Walktest, first, enter the Serviceman Code into the UNI•COM by pressing the **MODE** key, entering **9255** and then pressing the **[ENTER/STORE]** key. Next, place the host FACP into Walktest Mode (refer to appropriate section in the host FACP Technical Manual). *Note that the Unimode 200 must be placed into point reporting operation in order to transmit walktest reports.*

The display will show the letter **C** as the left most character and a flashing zero as the right character. If the **[ENTER/STORE]** key is pressed, system walktesting will occur without transmitting the system activity to the central station. With the zero flashing, if the digit 1 is pressed changing the right most character to 1, and then the **[ENTER/STORE]** key is pressed, walktesting will occur with system activity transmitted to the central station.

The UNI•COM will display **9256** if walktest data is not being transmitted to the central station. If the UNI•COM is transmitting the walktest data, **9259** will be displayed.

The clear function may be used while in the walktest mode to stop the UNI•COM from completing transmissions of walktest data. Exiting walktest mode is not possible as long as there is walktest data waiting to be transmitted.

If users are allowed to walktest a system, they must follow the same steps described above except they must first enter their User Code.

The UNI•COM will not transmit any system walktest data unless the UCS receiver (central station) first acknowledges receipt of the Begin Walk Test report. This is an added precaution to insure that the walktest data is not misinterpreted at the central station as a live report.

Exit walktest mode by entering the Serviceman off Premises code or return to an alternate mode by entering the appropriate 4-digit code for that mode. Users should enter the Normal Mode by entering code 6676. *Should no activity occur in the system for one hour, the UNI•COM will automatically exit walktest mode and report 'id0BE1'.*

### 4.3 Type Mode

Type mode may be used for the following purposes:

- Disable alarm reports by zone or point
- Identify which zones or points in the system are supervisory points
- Identify which zones or points are fire alarm points
- Change NAC fault report to unique report versus zone/point fault
- Bypass reports for alarm or trouble on a zone/point

To access Type Mode, enter a valid serviceman code and press the **MODE** key. Next enter the 4-digit code **8973** and then press the **[ENTER/STORE]** key. The UNI•COM will display three digits. For example the display may be as follows:

**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 for alarm only, transmit zone or point fault
- 2 = Zone or point defined as supervisory
- 3 = NAC fault to be reported as 'UT###'
- 4 = Bypass zone or point reports entirely. No transmission of zone/point alarm or fault

Factory default is all zones or points set to '0' for fire alarm. To change the type definition of the zone or point from the factory setting of '0', press the 1, 2, 3 or 4 keys. The digit entered will appear on the far right display. Next press the **[ENTER/STORE]** key. This stores the entry into E<sup>2</sup> memory and increments to the next higher address.

Use the **UP**, **DOWN** and **1st EVENT** keys to move through the list of 120 zones or 198 points (refer to Appendices A, B and C), similar to the method described in the programming section of this manual.

For Unimode 200 applications, when the UNI•COM is programmed for point reporting, detectors are reported as points 001 to 099 and modules are reported as points 101 to 199.

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.



#### 4.3.1 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 while in point type of annunciation. The UNI•COM will report these points as fire alarm points unless disabled in the Type Mode.

Disabling of zones or points also prohibits the activation (shorted or alarm activated condition) from being reported by the UNI•COM. *Disabling of the zone or point does not affect the reporting of the zone or point trouble condition.*

#### 4.3.2 Zone or Point Supervisory

Defining a zone or point as supervisory is required in order for the UNI•COM to identify the correct report to transmit to the UCS. Follow the programming instructions in the Unimode 200 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 C and D to enter point and zone definitions.

Note that while in Type Mode, the fire protection and reporting capabilities of the UNI•COM remain inactive.

## 4.4 Troubleshoot Mode

To access the Troubleshoot Mode, enter the correct Serviceman Code, then press **MODE 8768** and **[ENTER/STORE]**.

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

Once in this mode, the UNI•COM will continue to communicate any events not yet acknowledged at the central station prior to entering Troubleshoot Mode.

The **UP Arrow**, **DOWN Arrow** 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 UNI•COM goes off hook to acquire a dial tone.

The UNI•COM 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 UNI•COM used for number dialing.

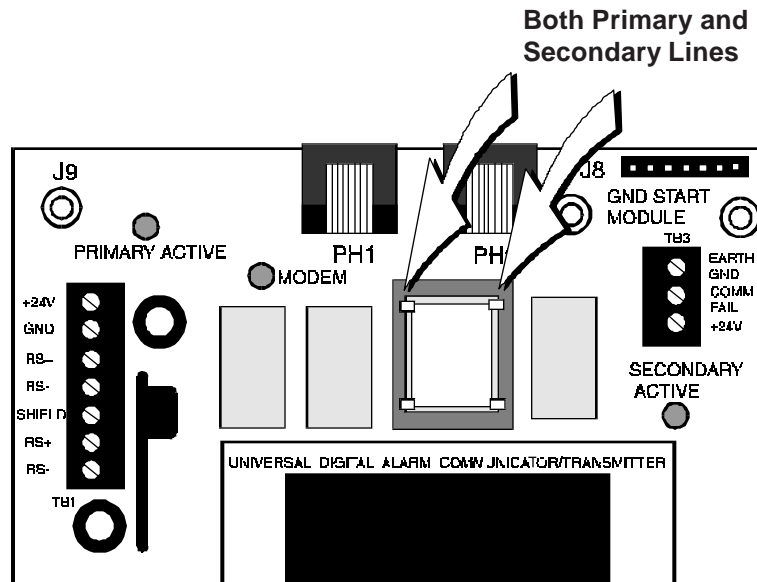


Figure 4-2: Handset/Speaker Connection

#### 4.5

#### 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 UNI•COM will return to normal mode.

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

---

## 5.0 Compatible Receivers

The table below shows UL listed receivers compatible with the UNI•COM:

Addresses 16 and 41	Format Type	ADT UCS Receiver
Factory Default 0	ADT FSK II	Model # E
		Revision # E913
		Software Revision # 31893

# 6.0 Programming Reference Sheets

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

<sub>00</sub> <sub>01</sub> <sub>02</sub> <sub>03</sub> <sub>04</sub> <sub>05</sub> <sub>06</sub> <sub>07</sub> <sub>08</sub> <sub>09</sub> <sub>10</sub> <sub>11</sub> <sub>12</sub> <sub>13</sub> <sub>14</sub> <sub>15</sub>

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

<sub>16</sub> Primary Comm Format: 0 = ADT FSK II.

<sub>17</sub> <sub>18</sub> <sub>19</sub> Primary Account Code: Valid keys are 0-9.

<sub>20</sub> <sub>21</sub> <sub>22</sub> <sub>23</sub> Primary 24-Hour Test Time. Enter military time (i.e. 1400 for 2 PM).

<sub>24</sub> Primary Number Test Time Interval. Enter '0' for 24-hour; '1' - 12-hour.

<sub>25</sub> <sub>26</sub> <sub>27</sub> <sub>28</sub> <sub>29</sub> <sub>30</sub> <sub>31</sub> <sub>32</sub> <sub>33</sub> <sub>34</sub> <sub>35</sub> <sub>36</sub> <sub>37</sub> <sub>38</sub> <sub>39</sub> <sub>40</sub>

Addresses 25-40 store the Secondary Phone Number. Enter 'F' to represent the end of the number.

<sub>41</sub> Secondary Comm Format: 0 = ADT FSK II.

<sub>42</sub> <sub>43</sub> <sub>44</sub> Secondary Account Code: Valid keys are 0-9.

<sub>45</sub> <sub>46</sub> <sub>47</sub> <sub>58</sub> Secondary 24-Hour Test Time. Enter military time (i.e. 1400 for 2 PM).

<sub>49</sub> Secondary Number Test Time Interval. Enter '0' for 24-hour; '1' - 12-hour.

<sub>50</sub> <sub>51</sub> Start Monitoring Address.

<sub>52</sub> <sub>53</sub> End Monitoring Address.

<sub>54</sub> UNI•COM Communication Selection. Enter '0' to disable UNI•COM communication; '1' for zone reporting receive only communication; '2' for zone reporting receive/transmit communication; '3' for point reporting receive only communication; '4' for point reporting receive/transmit communication.

<sub>55</sub> Backup Reporting. Enter '0' to have secondary phone number act as backup only; '1' to have either primary or secondary phone number receive reports; '2' to disable reports to the secondary phone number.

<sub>56</sub> Touchtone/Rotary Select. Enter '0' for touchtone dialing; '1' for rotary dialing.

<sub>57</sub> 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.

<sub>58</sub> Leave default of 0.

<sub>59</sub> Leave default of 0.

<sub>60</sub> 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.











































































<sub>61</sub> Host Panel ID. Enter '0' for Unimode 200; '1' for Unimode 416 or '2' for Unimode II; all other entries are invalid.

<sub>62</sub> <sub>63</sub> <sub>64</sub> <sub>65</sub> Serviceman Code. Valid entries are 0-9.

<sub>66</sub> <sub>67</sub> <sub>68</sub> Leave default of '000'.

- <sub>69</sub> <sub>70</sub> <sub>71</sub> <sub>72</sub> User 1 Walk Test Code. Valid entries are 0-9
- <sub>73</sub> User 1 Walk Test Transmit Enable: Enter '0' for no transmit of walktest events; '1' for transmit.
- <sub>74</sub> <sub>75</sub> <sub>76</sub> <sub>77</sub> User 2 Walk Test Code. Valid entries are 0-9
- <sub>78</sub> User 2 Walk Test Transmit Enable: Enter '0' for no transmit of walktest events; '1' for transmit.
- <sub>79</sub> <sub>80</sub> <sub>81</sub> <sub>82</sub> User 3 Walk Test Code. Valid entries are 0-9
- <sub>83</sub> User 3 Walk Test Transmit Enable: Enter '0' for no transmit of walktest events; '1' for transmit.
- <sub>84</sub> <sub>85</sub> <sub>86</sub> <sub>87</sub> User 4 Walk Test Code. Valid entries are 0-9
- <sub>88</sub> User 4 Walk Test Transmit Enable: Enter '0' for no transmit of walktest events; '1' for transmit.
- <sub>89</sub> <sub>90</sub> <sub>91</sub> <sub>92</sub> User 5 Walk Test Code. Valid entries are 0-9
- <sub>93</sub> User 5 Walk Test Transmit Enable: Enter '0' for no transmit of walktest events; '1' for transmit.
- <sub>94</sub> <sub>95</sub> <sub>96</sub> <sub>97</sub> User 6 Walk Test Code. Valid entries are 0-9
- <sub>98</sub> User 6 Walk Test Transmit Enable: Enter '0' for no transmit of walktest events; '1' for transmit.

# Programming Reference Sheet

 99	 100	 101	 102	 103	 104	 105	 106	 107	 108	 109	 110	 111
 112	 113	 114	 115	 116	 117	 118	 119	 120	 121	 122	 123	 124
 125	 126	 127	 128	 129	 130	 131	 132	 133	 134	 135	 136	 137
 138	 139	 140	 141	 142	 143	 144	 145	 146	 147	 148	 149	 150
 151	 152	 153	 154	 155	 156	 157	 158	 159	 160	 161	 162	 163
 164	 165	 166	 167	 168	 169	 170	 171	 172				

## Programming Reference Sheet Factory Default Settings

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

**F**<sub>00</sub> **F**<sub>01</sub> **F**<sub>02</sub> **F**<sub>03</sub> **F**<sub>04</sub> **F**<sub>05</sub> **F**<sub>06</sub> **F**<sub>07</sub> **F**<sub>08</sub> **F**<sub>09</sub> **F**<sub>10</sub> **F**<sub>11</sub> **F**<sub>12</sub> **F**<sub>13</sub> **F**<sub>14</sub> **F**<sub>15</sub>

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

**0**<sub>16</sub> Primary Comm Format: 0 = ADT FSK II.

**0**<sub>17</sub> **0**<sub>18</sub> **0**<sub>19</sub> Primary Account Code.

**0**<sub>20</sub> **0**<sub>21</sub> **0**<sub>22</sub> **0**<sub>23</sub> Primary 24-Hour Test Time. 0000 = 12:00 midnight.

**0**<sub>24</sub> Primary Number Test Time Interval. '0' for 24-hour.

**F**<sub>25</sub> **F**<sub>26</sub> **F**<sub>27</sub> **F**<sub>28</sub> **F**<sub>29</sub> **F**<sub>30</sub> **F**<sub>31</sub> **F**<sub>32</sub> **F**<sub>33</sub> **F**<sub>34</sub> **F**<sub>35</sub> **F**<sub>36</sub> **F**<sub>37</sub> **F**<sub>38</sub> **F**<sub>39</sub> **F**<sub>40</sub>

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

**0**<sub>41</sub> Secondary Comm Format: 0 = ADT FSK II.

**0**<sub>42</sub> **0**<sub>43</sub> **0**<sub>44</sub> Secondary Account Code.

**0**<sub>45</sub> **0**<sub>46</sub> **0**<sub>47</sub> **0**<sub>48</sub> Secondary 24-Hour Test Time. 0000 = 12:00 midnight.

**0**<sub>49</sub> Secondary Number Test Time Interval. '0' for 24-hour.

**0**<sub>50</sub> **1**<sub>51</sub> Start Monitoring Address

**0**<sub>52</sub> **1**<sub>53</sub> End Monitoring Address

**0**<sub>54</sub> UNI•COM Communication Selection. '0' for UNI•COM Communication disabled.

**1**<sub>55</sub> Backup Reporting. '1' reports to either Primary or Secondary Central Station.

**0**<sub>56</sub> Touchtone/Rotary Select. '0' for Touchtone.

**0**<sub>57</sub> Make/Break Ratio. '0' for 67/33 make/break ratio.

**0**<sub>58</sub> Leave default of zero.

**0**<sub>59</sub> Leave default of zero.

**1**<sub>60</sub> AC Loss reporting delay. '1' for 6 hour time delay.

**0**<sub>61</sub> Host PANEL ID. '0' for Unimode 200.

**6**<sub>62</sub> **3**<sub>63</sub> **2**<sub>64</sub> **1**<sub>65</sub> Serviceman Code. Factory default setting.

**0**<sub>66</sub> **0**<sub>67</sub> **0**<sub>68</sub> Leave default of '000'.

**F**<sub>69</sub> **F**<sub>70</sub> **F**<sub>71</sub> **F**<sub>72</sub> User 1 Walktest Code. 'F' for no user identified.

**0**<sub>73</sub> User 1 Walktest Transmit Enable. '0' for no transmit.

**F**<sub>74</sub> **F**<sub>75</sub> **F**<sub>76</sub> **F**<sub>77</sub> User 2 Walktest Code. 'F' for no user identified.

**0**<sub>78</sub> User 2 Walktest Transmit Enable. '0' for no transmit.

**F**<sub>79</sub> **F**<sub>80</sub> **F**<sub>81</sub> **F**<sub>82</sub> User 3 Walktest Code. 'F' for no user identified.

**0**<sub>83</sub> User 3 Walktest Transmit Enable. '0' for no transmit.

**F**<sub>84</sub> **F**<sub>85</sub> **F**<sub>86</sub> **F**<sub>87</sub> User 4 Walktest Code. 'F' for no user identified.

**0**<sub>88</sub> User 4 Walktest Transmit Enable. '0' for no transmit.

**F**<sub>89</sub> **F**<sub>90</sub> **F**<sub>91</sub> **F**<sub>92</sub> User 5 Walktest Code. 'F' for no user identified.

**0**<sub>93</sub> User 5 Walktest Transmit Enable. '0' for no transmit.

**F**<sub>94</sub> **F**<sub>95</sub> **F**<sub>96</sub> **F**<sub>97</sub> User 6 Walktest Code. 'F' for no user identified.

**0**<sub>98</sub> User 6 Walktest Transmit Enable. '0' for no transmit.



## Programming Reference Sheet Factory Default

1 <sub>99</sub>	1 <sub>100</sub>	1 <sub>101</sub>	1 <sub>102</sub>	1 <sub>103</sub>	1 <sub>104</sub>	1 <sub>105</sub>	1 <sub>106</sub>	1 <sub>107</sub>	1 <sub>108</sub>	1 <sub>109</sub>	1 <sub>110</sub>	1 <sub>111</sub>
1 <sub>112</sub>	1 <sub>113</sub>	1 <sub>114</sub>	1 <sub>115</sub>	1 <sub>116</sub>	1 <sub>117</sub>	1 <sub>118</sub>	1 <sub>119</sub>	1 <sub>120</sub>	1 <sub>121</sub>	1 <sub>122</sub>	1 <sub>123</sub>	1 <sub>124</sub>
1 <sub>125</sub>	1 <sub>126</sub>	1 <sub>127</sub>	1 <sub>128</sub>	1 <sub>129</sub>	1 <sub>130</sub>	1 <sub>131</sub>	1 <sub>132</sub>	1 <sub>133</sub>	1 <sub>134</sub>	1 <sub>135</sub>	1 <sub>136</sub>	1 <sub>137</sub>
1 <sub>138</sub>	1 <sub>139</sub>	1 <sub>140</sub>	1 <sub>141</sub>	1 <sub>142</sub>	1 <sub>143</sub>	1 <sub>144</sub>	1 <sub>145</sub>	1 <sub>146</sub>	1 <sub>147</sub>	1 <sub>148</sub>	1 <sub>149</sub>	1 <sub>150</sub>
1 <sub>151</sub>	1 <sub>152</sub>	1 <sub>153</sub>	1 <sub>154</sub>	1 <sub>155</sub>	1 <sub>156</sub>	1 <sub>157</sub>	1 <sub>158</sub>	1 <sub>159</sub>	1 <sub>160</sub>	1 <sub>161</sub>	1 <sub>162</sub>	1 <sub>163</sub>
1 <sub>164</sub>	1 <sub>165</sub>	1 <sub>166</sub>	1 <sub>167</sub>	1 <sub>168</sub>	1 <sub>169</sub>	1 <sub>170</sub>	1 <sub>171</sub>	1 <sub>172</sub>				

# Appendix A: Point Assignments (Unimode 200)

Point No.	Type of Device (Detectors)	Point No.	Type of Device (Detectors)	Point No.	Type of Device (Detectors)	Point No.	Type of Device (Detectors)
01		51		101		151	
02		52		102		152	
03		53		103		153	
04		54		104		154	
05		55		105		155	
06		56		106		156	
07		57		107		157	
08		58		108		158	
09		59		109		159	
10		60		110		160	
11		61		111		161	
12		62		112		162	
13		63		113		163	
14		64		114		164	
15		65		115		165	
16		66		116		166	
17		67		117		167	
18		68		118		168	
19		69		119		169	
20		70		120		170	
21		71		121		171	
22		72		122		172	
23		73		123		173	
24		74		124		174	
25		75		125		175	
26		76		126		176	
27		77		127		177	
28		78		128		178	
29		79		129		179	
30		80		130		180	
31		81		131		181	
32		82		132		182	
33		83		133		183	
34		84		134		184	
35		85		135		185	
36		86		136		186	
37		87		137		187	
38		88		138		188	
39		89		139		189	
40		90		140		190	
41		91		141		191	
42		92		142		192	
43		93		143		193	
44		94		144		194	
45		95		145		195	
46		96		146		196	
47		97		147		197	
48		98		148		198	
49		99		149		199	
50		100	Not Used	150			

NOTE: The UNI•COM is capable of reporting 198 points when used with the Unimode 200. Use chart to carefully identify supervisory points and remote switches in the system. Identify these points using Type Mode (refer to Section 4.3 Type Mode).

# Appendix B: Zone Assignments (Unimode 200 & Unimode 4-16)

Zone No.	Zone Function	Zone No.	Zone Function
1		29	
2		30	
3		31	
4		32	
5		33	
6		34	
7		35	
8		36	
9		37	
10		38	
11		39	
12		40	
13		41	
14		42	
15		43	
16		44	
17		45	
18		46	
19		47	
20		48	
21		49	
22		50	
23		51	
24		52	
25		53	
26		54	
27		55	
28		56	

NOTE: The UNI•COM is capable of reporting 56 zones when used with the Unimode 200 or Unimode 4-16. Use chart to carefully identify supervisory zones. Identify these zones using Type Mode (refer to Section 4.3 Type Mode).

# Appendix C: Zone Assignments (Unimode II)

Zone No.	Zone Function	Zone No.	Zone Function	Zone No.	Zone 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	

NOTE: Use chart to carefully identify supervisory points and remote switches in the system. Identify these 120 zones using Type Mode (refer to Section 4.3 Type Mode).

# Appendix D: Unimode 200

The UNI•COM is capable of reporting 198 points or 56 zones when used with the Unimode 200.

The UNI•COM may be mounted in the Unimode 200 control panel or remotely in an ADT-ABS8RF or ADT-UBS1F 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 UNI•COM using twisted, shielded pair wire. Power should be wired from the control panel's 24 VDC (nominal) filtered, non-resettable output to TB1 on the UNI•COM if mounted remotely.

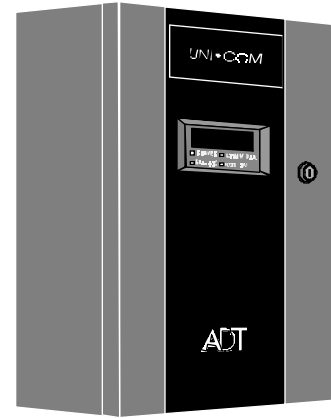


Figure D-1: ADT-UBS1F

## UNI•COM mounting in Unimode 200

Remove all power from the Unimode 200 by disconnecting AC and batteries. Install the supplied standoffs (three nylon and one aluminum standoff) in the appropriate holes located on the right side of the Unimode 200 main circuit board as illustrated in Figure D-2. Position J10 located on the back of the UNI•COM over connector J16 which is located center right on the main Unimode 200 circuit board, and carefully connect. Secure the UNI•COM to the aluminum standoff with the screw provided.

The EIA-485 circuit and 24 VDC power are provided directly from connector J16 of the Unimode 200. Note: A 120 ohm EOL resistor is not required on the UNI•COM EIA-485 terminals when it is installed inside the Unimode 200 cabinet. The EOL resistor is required at the last device on the EIA-485 line external to the Unimode 200 panel.

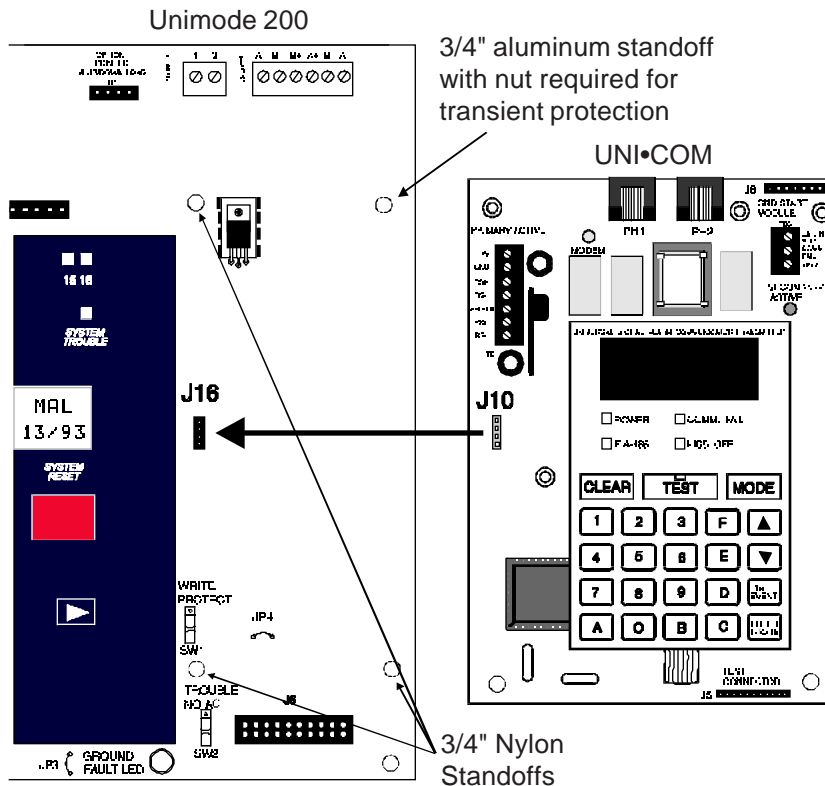
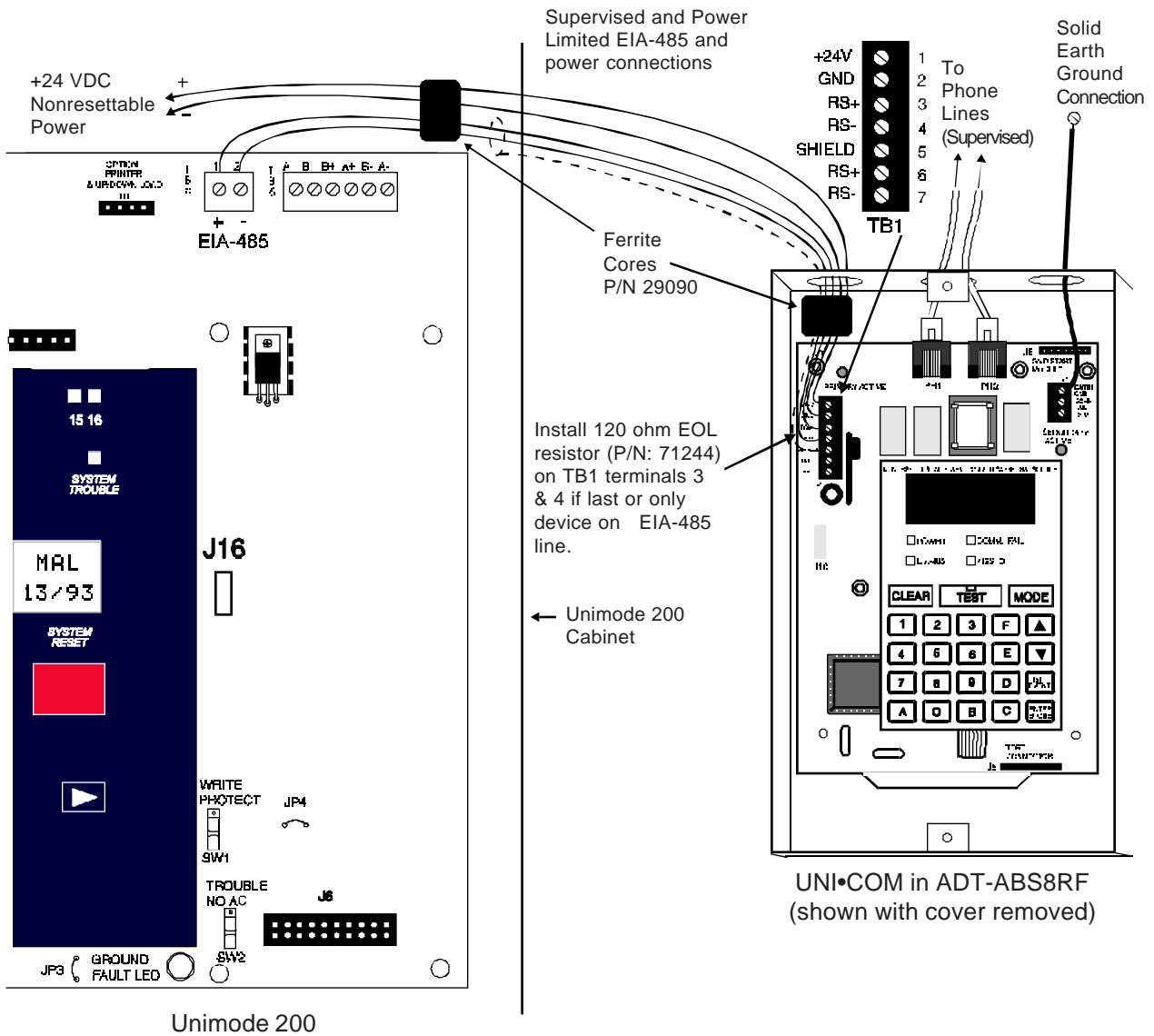


Figure D-2: UNI•COM Mounting to Unimode 200



Notes:

- 1) This arrangement allows use of the UNI•COM simultaneously with the RTM-8F module.
- 2) Ferrite cores are recommended for all applications.
- 3) Recommended wire is 12 AWG to 18 AWG twisted pair.
- 4) 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 UNI•COM as shown in Figure D-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.*
- 5) Conduit is recommended for external wire runs. Consult local building codes.
- 6) Connect Ground Strap (supplied with ADT-ABS8RF enclosure) from Earth Ground terminal on UNI•COM to a solid building earth ground. Conduit alone will not provide a reliable earth ground.
- 7) UNI•COM may be located up to 6000 feet away from the host control panel.
- 8) Refer to Specifications for power requirements.

**Figure D-3: External UNI•COM Mounting in ADT-ABS8RF**

# Appendix E: Unimode 4-16

The UNI•COM is capable of reporting a maximum of 56 zones when used with the Unimode 4-16. The UNI•COM reports alarms and troubles on inputs and reports only troubles on outputs. Beware of 'gaps' in the reporting of input circuits. The gaps depend upon the mounting location and FACP configuration. The Unimode 4-16 has a maximum of 16 inputs.

The UNI•COM must be mounted remotely in an ADT-ABS8RF or ADT-UBS1F enclosure and may be placed 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 UNI•COM using twisted, shielded pair wire. Power should be wired from the control panel's main power supply (MPS-24BPCA) 24 VDC (nominal) filtered power supply output to TB1 on the UNI•COM.

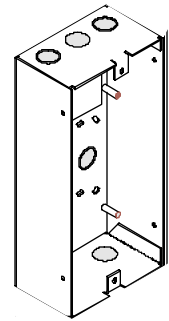
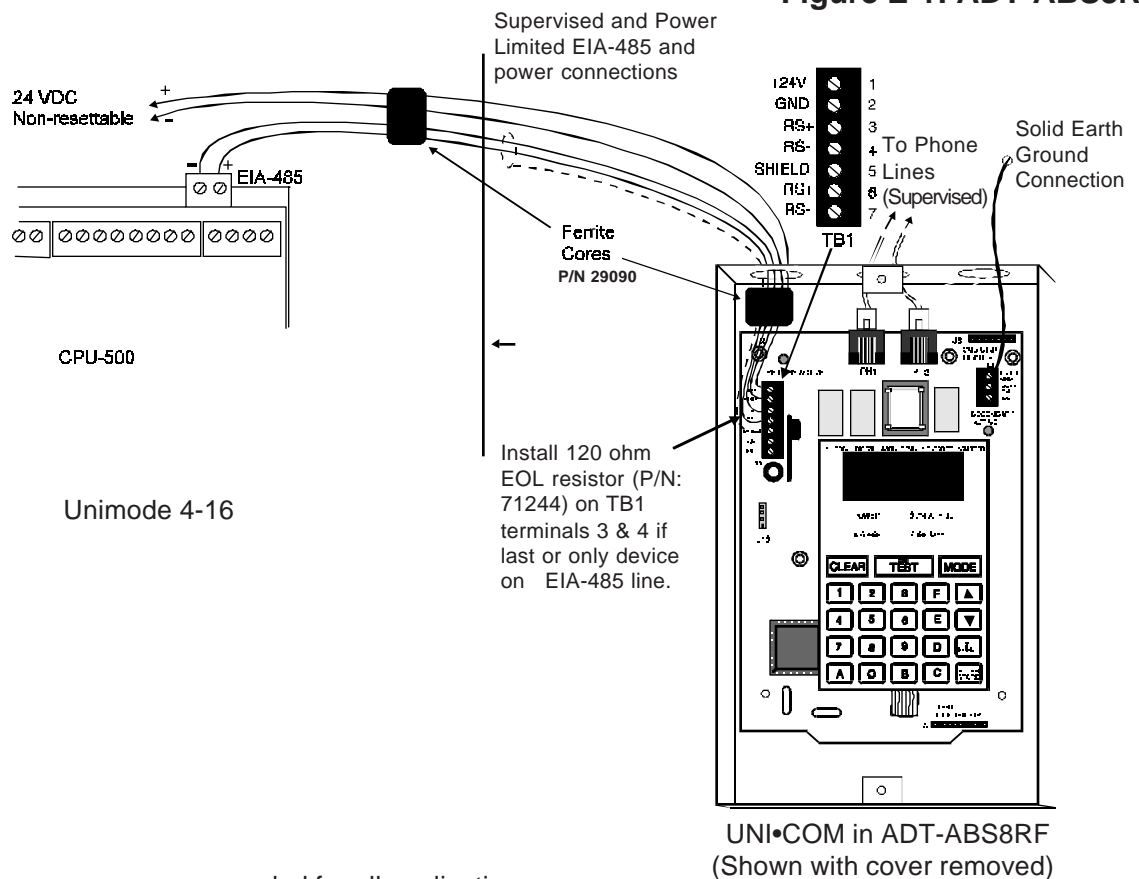


Figure E-1: ADT-ABS8RF

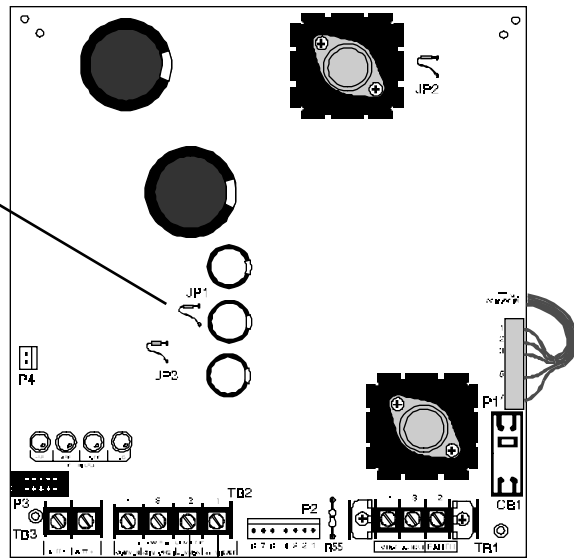


Notes:

- 2) Ferrite cores are recommended for all applications.
- 3) Recommended wire is 12 AWG to 18 AWG twisted pair.
- 4) 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 UNI•COM as shown in Figure E-2. *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.*
- 5) Conduit is recommended for external wire runs. Consult local building codes.
- 6) Connect Ground Strap (supplied with ADT-ABS8RF enclosure) from Earth Ground terminal on UNI•COM to a solid building earth ground. Conduit alone will not provide a reliable earth ground.
- 7) UNI•COM may be located up to 6000 feet away from the host control panel.
- 8) Refer to Specifications for power requirements.

Figure E-2: External UNI•COM Mounting in ADT-ABS8RF

Cut jumper JP1 to make output nonresettable for use with UNI•COM



Filtered, regulated, resettable, power-limited 24 VDC

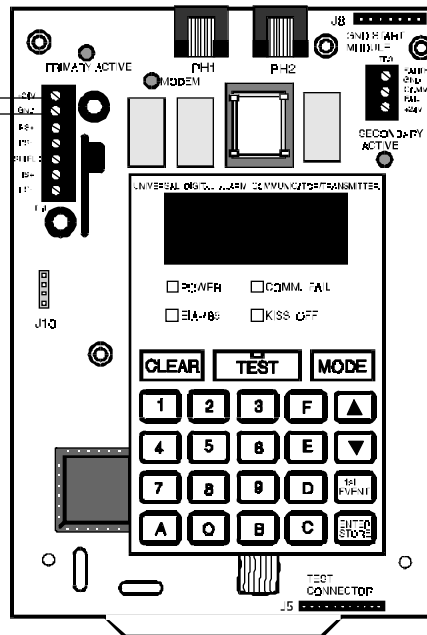


Figure E-3: MPS-24BCA Connection to UNI•COM



# Appendix F: Unimode II

The UNI•COM is capable of reporting 120 zones when used with the Unimode II. The UNI•COM reports alarms and troubles on inputs but reports only troubles on outputs. Beware of 'gaps' in the reporting of input circuits. The gaps depend upon the mounting location and the Unimode II system configuration. AIM modules are reported as a maximum of 8 zones.

The UNI•COM may be mounted in the Unimode II control panel or remotely in an ADT-ABS8RF or ADT-UBS1F 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 UNI•COM using twisted, shielded pair wire. Power should be wired from the control panel's main power supply 24 VDC (nominal) filtered, non-resettable output to TB1 on the UNI•COM.

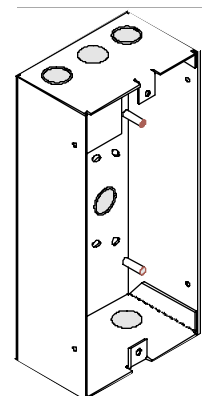


Figure F-1: ADT-ABS8RF

## UNI•COM mounting in Unimode II

Remove all power from the Unimode II by disconnecting AC and batteries. Install the three supplied nylon support posts for the top and bottom left of the UNI•COM, one aluminum/nylon and one aluminum standoff in the CHS-4 chassis slot in which the UNI•COM is to be installed (refer to Figure F-2). Position the UNI•COM 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 CPU-5000 and TB-1 terminals 3 and 4 on the UNI•COM being certain to observe polarity (refer to Figure F-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 UNI•COM TB1 terminals 3 and 4.

Connect the supplied Ground Strap from the UNI•COM Earth Ground terminal on TB3 to the CHS-4 chassis. Connect 24 VDC filtered, regulated power to TB1 terminals 1 and 2 on the UNI•COM (refer to Figure F-4).

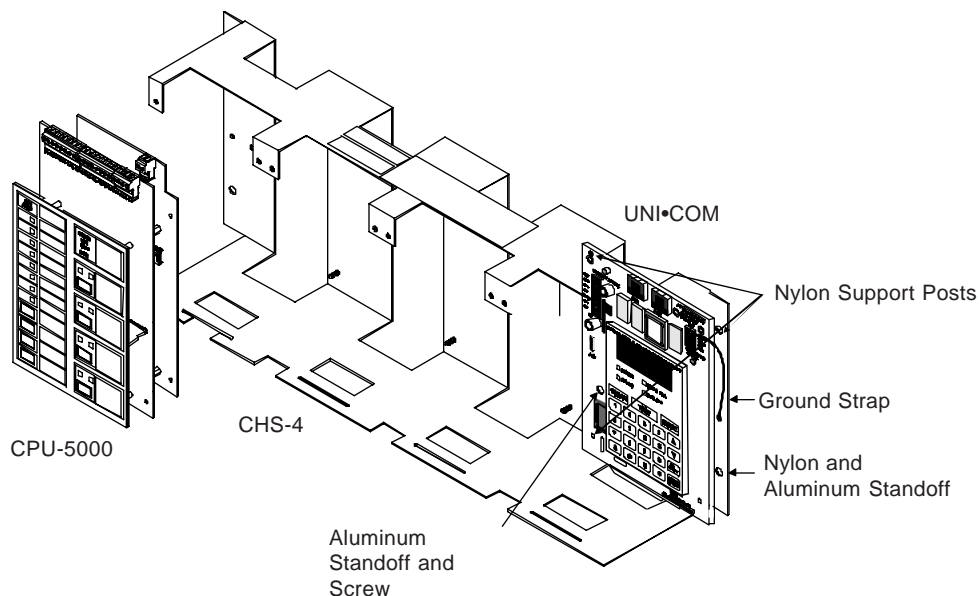


Figure F-2: UNI•COM Mounting in CHS-4

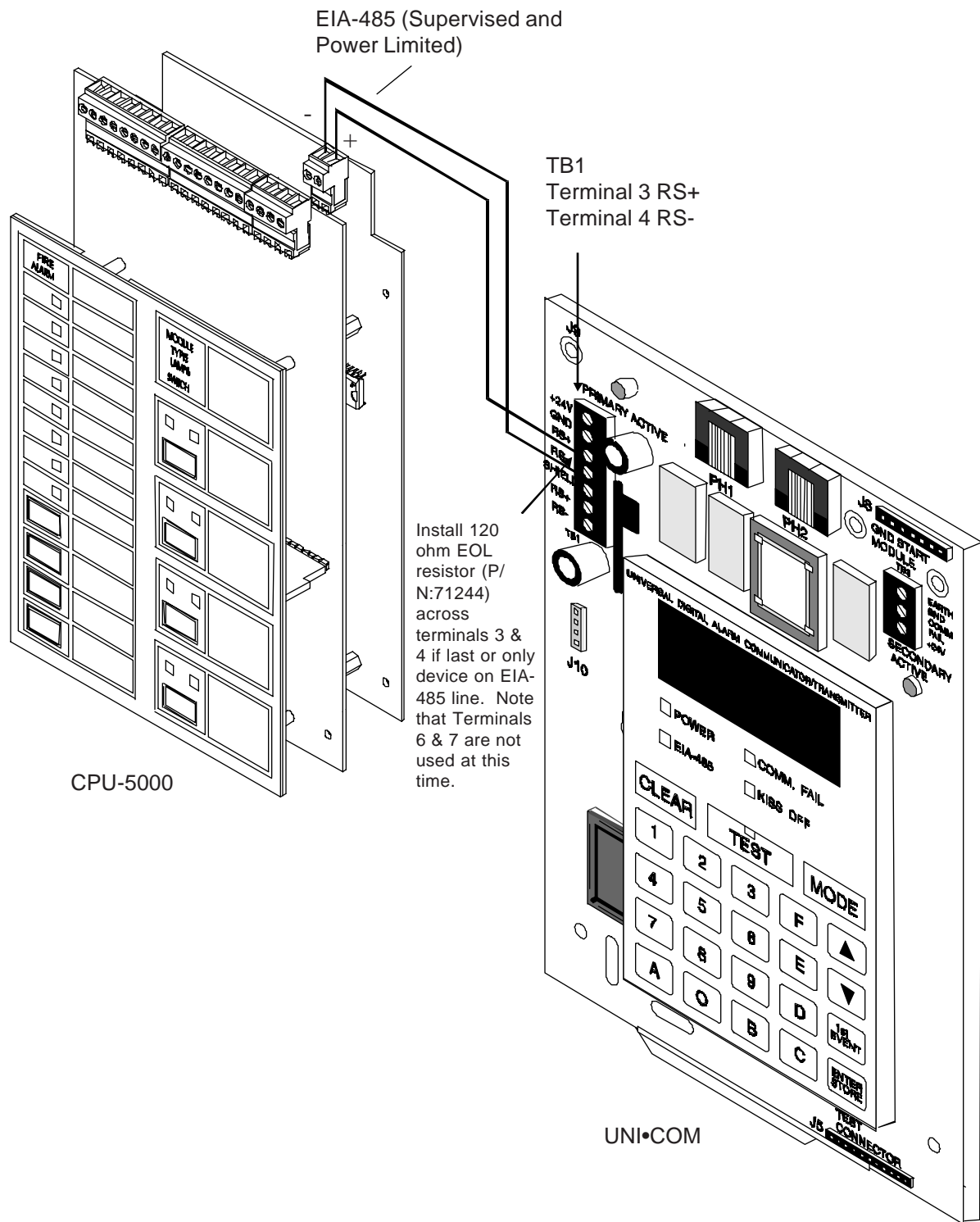
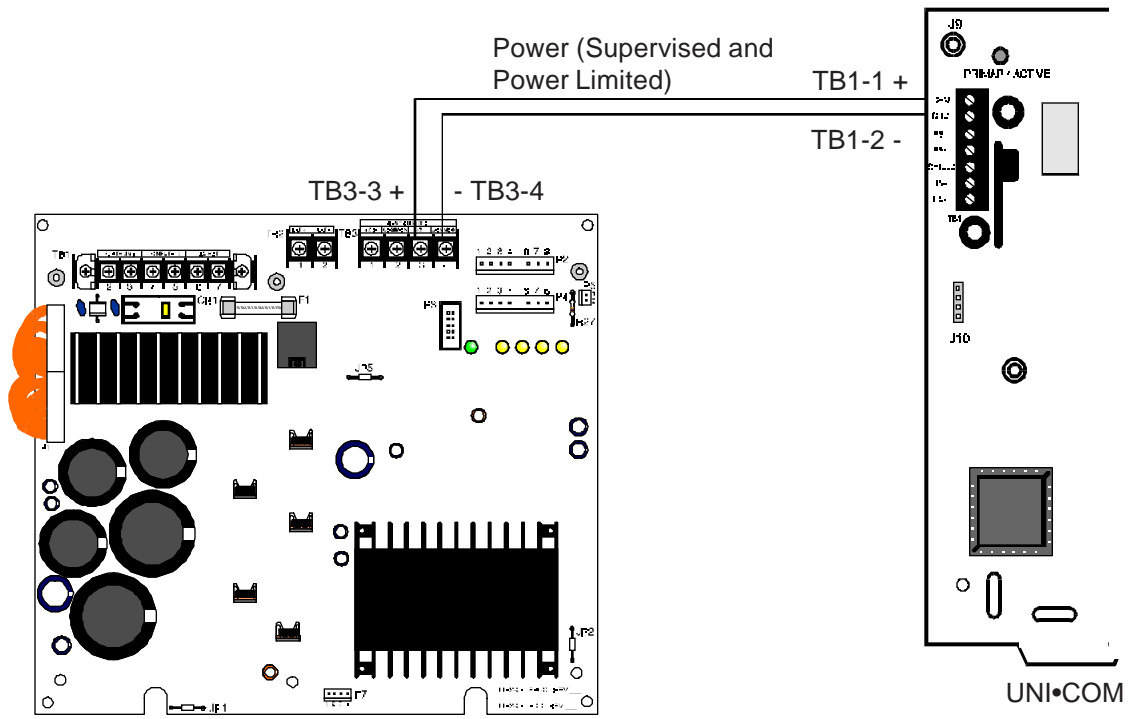
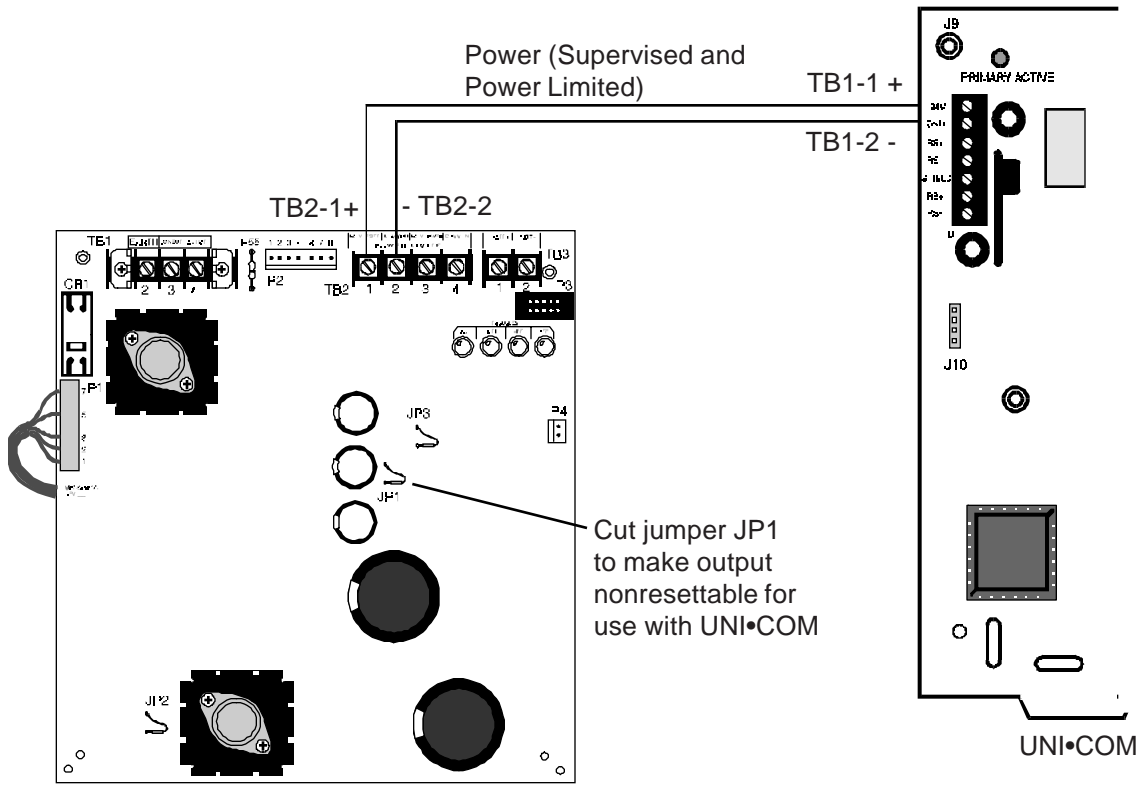


Figure F-3: EIA-485 Connection



MPS-24A



MPS-24B

Figure F-4: 24 VDC Power Connection to UNI•COM

## NOTES

## NOTES

## NOTES

