ADDENDUM TO ISSUE 4 OF THE INTER-TEL AXXESS SYSTEM MANUAL

For Software Part Numbers: 827.8658, 827.8659, 827.8660, 827.8661, and 827.8662

This addendum describes feature, programming, and hardware changes that apply when the AXXESS System is installed with the version 4.3 software part numbers listed above. It also includes changes and corrections to Issue 4 of the AXXESS Installation and Field Maintenance Manual. For software installation instructions, refer to the manual or to the document included with the software components. The new system software is identical to the previous version of software, except for the changes and corrections described on these pages. Refer to the manual for detailed system information.

FEATURE, PROGRAMMING, AND HARDWARE CHANGES

New Software Part Numbers

The part numbers for the new version 4.3 software are:

SOFTWARE	PART NO.
Premium Software for CPU/MEM Card (15 ROMs)	827.8659
Premium Software for CPU020/PCM Card (two floppy disks)	827.8658
Database Programming Software (three floppy disks)	827.8662
AXXESSORY Talk Applications Software for OS/2 (five floppy disks)	827.8660
AXXESSORY Talk Applications Software for Windows NT (five floppy disks)	827.8661
AXXESSORY Talk OS/2 Japanese Voice Prompts (four floppy disks)	827.8592
AXXESSORY Talk NT Japanese Voice Prompts (three floppy disks)	827.8742

Changes and New Features in the 4.3 Software Release

New 4.3 features and changes described in this addendum include:

- Agent Set (see page 2)
- "Send Alert Burst To Headset" Station Flag (see page 2)
- 16-Circuit Single-Line Card (SLC-16) and Lamp Options Card (see page 3)
- LGC and LGC-D Modification (see page 6)
- Call Routing to Public Network (see page 7)

- Station Password (see page 10)
- Remote Feature Programming (see page 12)
- Group Listen Feature (see page 13)
- CO Hookflash on Conference Calls (see page 13)
- OPX Disconnect Enhancement (see page 14)
- Advanced CO Interface Premium Feature Required for PRI (see page 14)
- Trunk Group PRI Call By Call (see page 14)
- OS/2 and NT Versions of AXXESSORY Talk (see page 16)
- Fax Delivery Report Indicates Failed Deliveries (see page 23)
- AXXESSORY Talk VisualMail (see page 24)
- Automatic Fax Detection (see page 31)
- Programming Fax-On-Demand Port availability (see page 33)
- Voice Mail Save/Restore To A Network Drive (see page 34)
- Explanation of Extended Ring Cadences (see page 35)
- RS-232-C Changes and Corrections (see page 36)

Changes and Features from Previous Software Releases

Earlier 4.1 and 4.2 features and changes described in this addendum include:

- Preventing Memory Shortages (see page 37)
- New CPU020/PCM Card Configurations (see page 37)
- New CPU/MEM Card Configuration (see page 37)
- New Options Card (OPC) Configuration (see page 37)

- New T1 Card (T1C) Revision Level Changes (see page 37)
- T1 Gain Control (TGC) Daughter Card (see page 37)
- DKSC-16 Extended Loop Length Modification (see page 38)
- New Voice Processing Card (VPC) Models (see page 38)
- CPU020/PCM Card Software Installation Information (see page 38)
- New FCC Part 68 PBX Rating (see page 38)
- New Fax Card Models (see page 38)
- New PC Motherboard (see page 41)
- Config.sys File Change (see page 41)
- ACD Agent IDs (see page 43)
- Primary Rate T1 Service (see page 50)
- Customized AXXESSORY Talk Prompts (see page 53)
- Digital Keyset Enhancements (see page 60)
- "Enable Database Server Compression" Preferences Flag (see page 63)
- "Forced Delayed Major Reset" System Flag (see page 64)
- "CO Provides Progress Tones" T1 Programming Flag (see page 65)
- Canadian Information (see page 66)
- Changes and Corrections to the Issue 4 Manual (see page 67)

Agent Set

The Agent Set is used in place of a keyset with an attached PCDPM. It is connected to a Digital Keyset Card (DKSC or DKSC-16) port just as a keyset would be

It has a jack for plugging in an Inter-Tel handset or headset. It also has a serial connector (DB9) for attaching it to a PC.

The Agent Set does not require a transformer or external power source.

To operate properly, the Agent Set *must* be programmed for headset mode. This can be done in one of the following ways:

- Enable Headset Mode via Station Programming in the AXXESS or Axxent System database
- At the keyset, *unplug the headset or handset* (to take the Agent Set off hook) and enter the Headset On/Off feature code (317) to enable headset mode. Then plug in the headset or handset.

NOTE: There is nothing to prevent the user from disabling headset mode using the Headset On/Off feature code at the station.

Because the Agent Set does not have feature keys, a dialing pad, or a speaker, it must be connected to a PC that is equipped with AXXESSORY Connect (or a similar OAI product that emulates a keyset). The AXXESSORY Connect is used for dialing and feature access.

The Agent Set also requires an Inter-Tel headset or handset. Only Inter-Tel equipment should be used. Other manufacturer's equipment may not be compatible with the Agent Set.

If the user wishes to receive audible signals at the headset, there is a new station flag (described below) that will send a single tone to the headset when a call is ringing.

"Send Alert Burst To Headset" Station Flag

There is a new station flag that will send a single tone to a headset, instead of normal keyset ring tones, when a call is ringing at the station (non-handsfree intercom call, outside call, queue callback, or reminder message). The flag, called "Send Alert Burst To Headset," is programmed on a station-by-station basis.

The "Send Alert Burst To Headset" flag appears in the Station Miscellaneous Flags screen and the Individual Station/Miscellaneous Flags screen below the "Ring Intercom Always" flag. By default the flag is disabled.

16-Circuit Single-Line Card (SLC-16) and Lamp Options Card (LOC-16)

16-Port Single-Line Card (SLC-16)

The SLC-16 can support up to 16 on-premises AC-ringing single-line devices. Like the 8-circuit SLC, it does not support off-premises stations and does not have DID capability.

An SLC-16 cannot be installed in a card slot that is programmed for an SLC. The ports must be specifically programmed for an SLC-16. However, if port programming is changed from SLC to SLC-16, the existing eight circuits will retain their individual programming and the new circuits will be in the default state. If the port is changed from an SLC-16 to an SLC, all circuits will retain their programming, but only the first eight will be available.

The SLC-16 uses 72VDC to generate trapezoidal ringing waveforms, which have the same effect as sine ringing waveforms. The card is capable of delivering a total ringer equivalence number (REN) of 16.0 at a frequency of 20Hz (e.g., 1.0 REN per circuit). No single circuit should exceed a REN of 5.0. If the card requires more than 16.0 REN total, use a larger DC power supply (available from Inter-Tel). If a fax machine, modem, or single-line set does not respond to the ringing provided by the SLC-16, consult the manual for that device and/or contact Inter-Tel Technical Support.

The loop limit for the SLC-16 is 103 ohms/2000 feet (609 m.).

16-Port Lamp Options Card (LOC-16)

A 16-port Lamp Options Card (LOC-16) is also available to provide visual message waiting capabilities for single-line sets equipped with message lamps. The single-line sets are then configured in database programming to receive *visual* and/or *audible* message waiting indication tones. Except for these differences, the installation and operation of the LOC-16 is similar to that of the 8-port LOC described in the manual:

If installing the optional LOC-16:

- a. Carefully remove the two, solid, 16-position jumper straps from jumper locations J3 and J4 on the SLC-16.
- b. Place jumper strap (J6) on the SLC-16 in the LOW position (over the top two pins).
- c. Carefully attach the LOC-16 to jumper locations J3, J4, and J5 on the SLC-16. Make sure that the connectors are properly aligned and seated.
- d. When programming the database, be sure to enable the message waiting lamps in station programming.

Power Supplies

A power supply is required for each SLC-16 because the cards are not designed to pull talk battery, ring, or message lamp power from the system power supply. Power supplies are available that support one card or up to four cards. Refer to the illustration and chart on the next two pages for cable termination information.

NOTE: If you receive a power supply with a connector on the wires, the connector will have to be cut off before the power supply can be installed. Also, if a fourcard power supply is *wall* mounted, be sure that the fully-enclosed side is on the bottom (i.e., facing down).

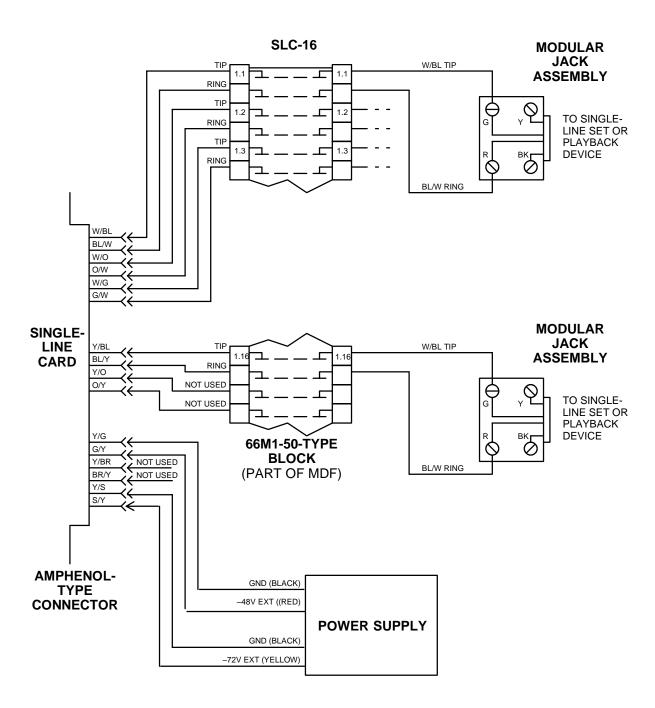
Part Numbers

The new SLC-16, LOC-16, and power supply part numbers are:

SLC-16	550.2116
LOC-16	550.2104
Power Supply for 1 Card	550.0114
Power Supply for up to 4 Cards	550.0116

NOTE: The SLC-16 and LOC-16 can be used only with version 4.3 (or higher) system software.

FIGURE 1. SLC-16 BLOCK CABLE TERMINATIONS



NOTE: For simplicity, this figure shows single-line sets and playback devices being installed using one-pair cable and four-conductor modular jacks. Of course, if three-pair cable and six-conductor modular jacks are used instead (as is recommended), extra terminal blocks and the use of cross-connect wiring techniques are required.

FIGURE 2. SLC-16 CABLE TERMINATIONS ON THE SLC-16 STATION BLOCK

AMPHENOL NO.	CABLE PAIR	SLC-16	
26	W-BL	TIP	
1	BL-W	RING	
27	W-O	TIP	
2	O–W	RING	
28	W-G	TIP	
3	G–W	RING	
29	W-BR	TIP	
4	BR-W	RING	
30	W-S	TIP	
5	S–W	RING	
31	R–BL	TIP	
6	BL–R	RING	
32	R-O	TIP	
7	O–R	RING	
33	R–G	TIP	
8	G–R	RING	
34	R–BR	TIP	
9	BR-R	RING	
35	R–S	TIP	
10	S–R	RING	
36	BK-BL	TIP	
11	BL-BK	RING	
37	BK-O	TIP	
12	O–BK	RING	
38	BK-G	TIP	
13	G–BK	RING	
39	BK–BR	TIP	
14	BR-BK	RING	
40	BK-S	TIP	
15	S–BK	RING	
41	Y–BL	TIP	
16	BL-Y	RING	
42	Y–O	NOT USED	
17	O–Y	NOT USED	
43	Y–G	GND B2 (BLACK)	
18	G–Y	-48V EXT (RED)	
44	Y–BR	NOT USED	
19	BR-Y	NOT USED	
45	Y-S	GND B1 (BLACK)	
20	S-Y	-72V EXT (YELLOW)	
46	V–BL	NOT USED	
21	BL–V	NOT USED	
47	V-O	NOT USED	
22	O–V	NOT USED	
48	V–G	NOT USED	
23	G–V	NOT USED	
49	V–BR	NOT USED	
24	BR-V	NOT USED	
50	V–S	NOT USED	
25	S–V	NOT USED	

Loop/Ground Start Card (LGC) and LGC Daughter Card (LGC-D) Modification

Under certain conditions, previous versions of the LGC (part no. 550.2309) and the LGC-D (part no. 550.2310) were not able to always properly detect the "ground start" signal provided by the central office (CO). A modification to the LGC and LGC-D has been implemented to correct this problem.

More specifically, the previous versions of the LGC and LGC-D did not function properly in ground-start mode when terminated on a CO trunk that had a constant current battery feed of less than approximately 25mA. The new cards have a built-in 50VDC power supply and therefore no longer rely on the current from the CO to detect the "ground start" signal.

Identifying the Problem

A customer site may have this problem if a keyset user's display shows "LINE IS UNPLUGGED" when attempting to access a ground start trunk on an LGC or LGC-D. To determine if the card really does have a problem detecting the ground start signal from the CO, follow these steps:

- (1) Ensure that the appropriate trunk circuit on the card is programmed for ground start mode. (Loop start mode is not subject to this problem.)
- (2) Verify that the card is properly installed and connected as outlined in the *AXXESS Installation & Field Maintenance Manual*.
- (3) Verify that tip and ring for the trunk circuit are properly connected. Here is a simple method that works for most cases:
 - a. At the associated CO block, remove the bridging clips for the trunk.
 - b. On the telco side of the block, attach a test set (butt set) in monitor mode (on-hook) to tip and ring.
 - c. Apply ground to the ring terminal.
 - d. If you hear dial tone (only while ground is applied), tip and ring are properly connected. Replace the bridging clips and check

to make sure the card can still receive dial tone.

If you do not hear dial tone, apply ground to the tip terminal. If you now hear dial tone, tip and ring are reversed.

NOTE: Be sure the test set is in monitor mode. If it is in off-hook mode, sometimes the line can be seized regardless of the polarity, and the test is invalid.

Identifying the Modified Cards

Remove the LGC and/or LGC-D and look at the part number stenciled on the card. Immediately after the part number, there should be a dash (–) and a single letter contained within a box. This denotes the revision level of the card. The following chart shows the revision level of the current, modified cards:

CARD	PART NO.	ECN NO.	REVISION
LGC	550.2309	4813	826.5223–4D (or higher) 826.5223–5D (or higher) 826.5223–6 (any letter)
LGC-D	550.2310	4814	826.5224–3B (or higher) 826.5224–4B (or higher) 826.5224–5 (any letter)

Compatibility

Improperly paired cards will not work together and the trunks attached to these cards will not function.

LGC -6 cards will only work with LGC-D -5 cards (and visa versa). They are not backwards compatible. LGC -4 and -5 cards will only work with either LGC-D -3 and -4 cards.

Resolution

If a system is experiencing this problem *and* if it is equipped with older, unmodified LGC and/or LGC-D cards, the card(s) may be replaced by contacting Inter-Tel Technical Support.

Call Routing to Public Network

This feature changes the AXXESS system in the following ways:

- Call Routing Tables can be programmed to route outside calls to outgoing trunks, using Automatic Route Selection (ARS) or a trunk group. However, Primary Rate trunks can be used only through ARS; individual B-channel trunks or trunk groups containing B-channel trunks will not function properly with this feature.
- The system provides a means for the trunk-to-trunk call to be supervised including normal trunk disconnect supervision and timer disconnect supervision
- Toll restriction will be enforced on call attempts made from one trunk to another trunk or trunk group (but not on trunk-to-ARS calls).

Access To Outgoing Trunks

Call Routing Tables now allow patterns that route calls to destinations of individual trunks, trunk groups, and ARS anywhere single ring-in destinations are programmed.

If the caller is routed to a trunk or trunk group that is busy, the system will camp on to the trunk. The caller will hear busy tones, followed by music. When a trunk becomes available, the caller hears dial tone and can complete the call.

Toll Restriction

To provide security on outgoing calls made through direct trunk-to-trunk interfaces, the toll restriction of the selected *outgoing* trunk will be checked. However, if ARS is used, toll restriction is not checked.

The toll restriction of the *incoming* trunk's group and that trunk's "Subject To Toll Restriction" flag are not checked.

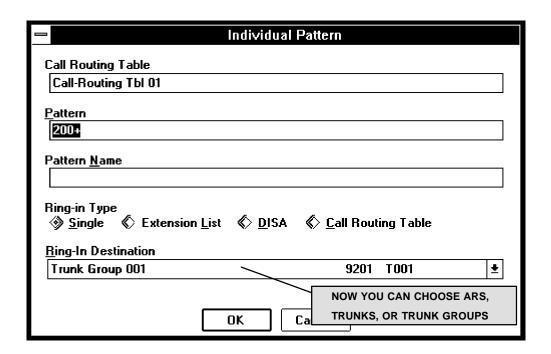
If a caller dials a number that is not allowed through toll restriction, the call will be routed to the primary attendant.

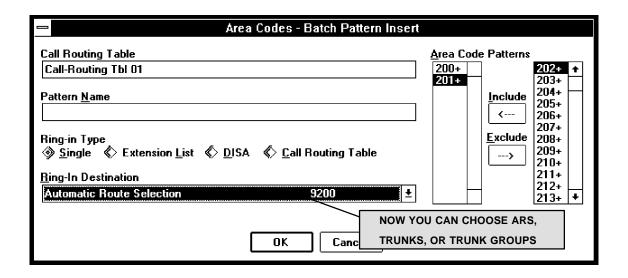
Programming Call Routing Tables

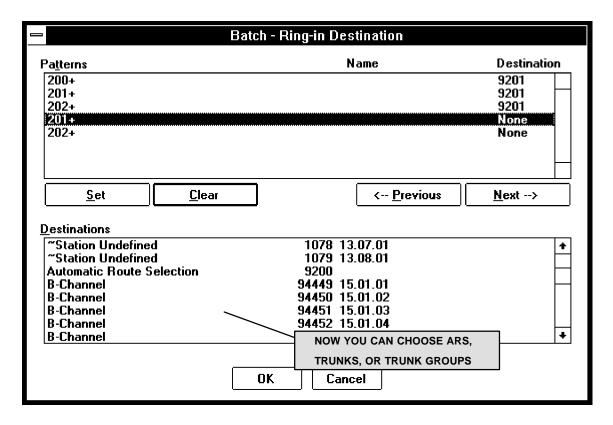
Call Routing to the Public Network is programmed through the Call Routing Table screens for programming Individual Patterns, Area Code Batch Inserts, or Batch Ring-In Destinations, as shown on the next page.

Even though Primary Rate trunks appear in the selection lists, they can only be used by selecting ARS; individual B-channel trunks or trunk groups containing B-channel trunks will not function properly with this feature.

NOTE: This cannot be programmed if you enter database programming using the "User" password and it cannot be programmed through an Administrator's keyset.







SMDR and Message Print Changes To Support Call Routing To The Public Network

Several changes have been made to the Station Message Detail Recording (SMDR) feature to support Call Routing to the Public Network.

You can choose which trunks to include in the SMDR report. This is done through the SMDR Programming screen (shown below), just as it was for including sta-

tions. A new Trunks command button has been added that displays a selection screen (shown at the bottom of the page). The SMDR window also includes a new check box for "Record All Trunk to Trunk Calls." This will include calls, made from one outside caller to another, in the SMDR report.

An outgoing call that has been initiated by another trunk will show the initiating trunk's number in the "EXT" field of the SMDR report.

_			Dat	tabase	Programming - [SMDR]	•
0	E <u>×</u> it!	Prefe <u>r</u> ences	<u>W</u> indows	<u>H</u> elp		\$
		Stations Suppress Suppress Suppress Suppress Suppress Suppress fig Suppress	atput Active Trur A <u>b</u> sorbed Dig Equal Access Outside Party Toll Digits Trunk Numbe lapsed Time ir han 9{NEW (s Digits N <u>u</u> mber E <u>r</u> n Second	 ✓ Record All Operator International Calls ✓ Record All DISA Calls ✓ Record All Conference Calls ✓ Record All DID/DNIS Calls 	
14	:01:35	Local				

SMDR Trunk Selection		
nclude Loop Start Loop Start	94193 07.01.01 94194 07.02.01	
Exclude Loop Start Loop Start Loop Start Loop Start	94166 06.06.01 + 94167 06.07.01 94168 06.08.01 94195 07.03.01	
Loop Start Loop Start Loop Start Loop Start Loop Start	94196 07.04.01 94197 07.05.01 94198 07.06.01 94199 07.07.01 94200 07.08.01	

Station Password

A station password has been added to the system. This password is used for the new Remote Programming feature.

The station password can be up to 8 digits in length. The default password is the extension number of the station. The password can be changed by entering the Program Station Password feature code at the station or when using the new Remote Programming feature (described in detail on page 12). It can also be programmed through Individual Station programming, as described on page 12.

If the new password is programmed from a station, the user will be prompted for the old password, then the new password, and will be asked to verify the new password. If it is programmed through Remote Programming, the user will already have entered a correct password, so the user is only prompted for the new password and will be asked to verify the password.

Should the verified password and new password not match, the old password will be retained and the programming session canceled.

TO CHANGE THE STATION PASSWORD FROM YOUR STATION:

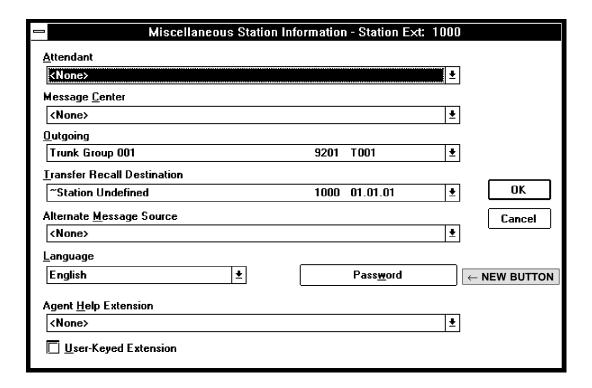
- (4) Enter the Program Station Password feature code (392). You hear a confirmation tone. If you have a display, it shows ENTER PASSWORD.
- (5) Enter your current password, followed by #. (At default it is your extension number.) If you have a display, it shows NEW PASSWORD.
 - **NOTE:** *If you enter an incorrect password,* the display will show INVALID PASSWORD and your station will return to the idle state.
- (6) Enter the new password followed by #. You hear a confirmation tone.
- (7) Enter the new password again for verification followed by #. You hear a confirmation tone. If you have a display, it shows PASSWORD SAVED. Your station returns to the idle state.

TO CHANGE THE STATION PASSWORD USING REMOTE PROGRAMMING:

- (1) If calling from an outside telephone, access the system through a DISA line. Enter the DISA security code (if applicable). You hear a confirmation tone.
 - If programming from another station, lift the handset or press the SPKR key.
- (2) Enter the Remote Programming feature code (359). You hear a confirmation tone. If you have a display, it shows ENTER EXTENSION. (Executive Keyset users can press the IC DIR key to use the intercom directory to look up a number.)
- (3) Enter the extension to be programmed. You hear a confirmation tone. If you have a display, it shows ENTER PASSWORD. *If you entered an invalid extension number*, you will hear reorder tones and can try again.
- (4) Enter the extension's password followed by #. You hear a confirmation tone.
 - **NOTE:** *If you enter an incorrect password*, the display will show INVALID PASSWORD. Outside callers will be returned to dial tone and stations will return to the idle state.
- (5) Enter the Program Station Password feature code (392). You hear a confirmation tone. If you have a display, it shows NEW PASSWORD.
- (6) Enter the new password, followed by #. You hear a confirmation tone.
- (7) Enter the new password again for verification, followed by #. You hear a confirmation tone. If you have a display, it shows PASSWORD SAVED. Outside callers will hear dial tone and stations return to the idle state.

The Program Station Password feature code (392) is now included in the Extensions, Usernames, and Feature Codes programming screen.

There is also a Station Password command button in Individual Station Information, Miscellaneous Station Information screen that allows the programmer to change the password, as shown on the next page.

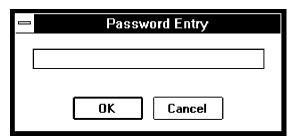


To change the station password through database programming, use the screen shown above. It can be reached by selecting Miscellaneous Station Information from the Individual Station Information programming screen.

NOTE: This cannot be programmed if you enter database programming using the "User" password and it cannot be programmed through an Administrator's keyset.

PASSWORD: When you select the Password command button, the following window appears. Enter the desired password, up to eight digits, and select OK. (Or,

select Cancel to exit without changing the password.) Another screen will appear that allows you to verify the password. Enter the password again, exactly as you entered it the first time. If you make a mistake, you will see an error message and must start over.



Remote Feature Programming

The Remote Programming feature allows a user to place a phone in do-not-disturb mode (DND) or forward the station's calls, either from another station or through DISA.

The Remote Programming feature code (359) is now included in the Extensions, Usernames, and Feature Codes programming screen.

Do-Not-Disturb Programming

TO PLACE A STATION IN DO-NOT-DISTURB MODE USING THE REMOTE PROGRAMMING FEATURE:

NOTE: After each entry, non-display keyset users will hear a confirmation tone. Outside callers using a DISA line will hear confirmation tone followed by DISA dial tone. Display keyset users will not hear confirmation tones but will see a prompt asking for the next entry.

- (1) If calling from an outside telephone, access the system through a DISA line. Enter the DISA security code (if applicable). You hear a confirmation tone followed by DISA dial tone.
 - If programming from another station, lift the handset or press the SPKR key.
- (2) Enter the Remote Programming feature code (359). If you have a display, it shows ENTER EXTENSION. (Executive Keyset users can press the IC DIR key to use the intercom directory to look up a number.)
- (3) Enter the extension to be placed in DND. If you have a display, it shows ENTER PASSWORD. *If you entered an invalid extension number*, you will hear reorder tones and can try again.
- (4) Enter the extension's password, followed by #. If you have a display, it shows ENTER FEATURE CODE.

NOTE: *If you enter an incorrect password,* the display will show INVALID PASSWORD and the call is disconnected. Station users will hear reorder tones.

(5) **To turn on Do-Not-Disturb:**

a. Enter the Do-Not-Disturb On feature code (370). (The On/Off feature code cannot be used in remote programming.) *If you entered an invalid feature code*, you will hear reorder tones and can try again.

NOTE: If the station you are programming is not allowed to use DND, you will hear reorder tones and the display will show CANNOT ACCESS RESERVED FEATURE.

- Outside callers will be returned to dial tone and stations will return to the idle state.
- b. Enter the desired do-not-disturb message number (01–20). *If you entered an invalid message number*, you will hear reorder tones and can try again.
- c. Enter the optional second-line message text, if desired, using any combination of the following methods:

Remain in numeric mode: Press the keypad keys to enter the desired number. Use the pound key (#) for a hyphen (–) and the asterisk key (*) for a colon (:). Keyset users can press the FWD key once to leave a space, or press the MUTE key to backspace.

Change to alphanumeric mode (keysets only): Press the MSG key (the key lights) or the USE ALPHA MODE menu key, then enter the desired characters. (Refer to the chart and instructions in your user guide.) Keyset users can press the FWD key once to advance or twice to leave a space, or press the MUTE key to backspace.

Use speed-dial and/or redial numbers (keysets only): In either numeric or alphanumeric mode, you can speed dial a number (using the speed-dial key or feature code). In numeric mode you can press the REDIAL key to enter the stored characters. You may chain speed-dial and/or redial numbers together.

- d. Hang up to complete the programming.
- (6) **To turn off Do-Not-Disturb:** Enter the Do-Not-Disturb Off feature code (371). (The On/Off feature code cannot be used in remote programming.) The call is automatically disconnected when the feature code is accepted. *If you entered an invalid feature code*, you will hear reorder tones and can try again.

Remote Forward Programming

TO FORWARD A STATION USING THE REMOTE PROGRAMMING FEATURE:

NOTE: After each entry, non-display keyset users will hear a confirmation tone. Outside callers using a DISA line will hear confirmation tone followed by DISA dial tone. Display keyset users will not hear confirmation tones but will see a prompt asking for the next entry.

(1) If calling from an outside telephone, access the system through a DISA line. Enter the DISA se-

curity code (if applicable). You hear a confirmation tone followed by DISA dial tone.

If programming from another station, lift the handset or press the SPKR key.

- (2) Enter the Remote Programming feature code (359). If you have a display, it shows ENTER EXTENSION. (Executive Keyset users can press the IC DIR key to use the intercom directory to look up a number.)
- (3) Enter the extension to be forwarded. If you have a display, it shows ENTER PASSWORD. If you entered an invalid extension number, you will hear reorder tones and can try again.
- (4) Enter the extension's password, followed by #. If you have a display, it shows ENTER FEATURE CODE.

NOTE: *If you enter an incorrect password,* the display will show INVALID PASSWORD and the call is disconnected. Station users will hear reorder tones.

(5) To turn on Call Forward:

a. Enter one of the following Call Forward feature codes. *If you entered an invalid feature code*, you will hear reorder tones and can try again.

Call Forward All Calls	355
Call Forward If Busy	357
Call Forward If No Answer	356
Call Forward If No Answer/Busy	358

b. Enter the forwarding destination. This can be an extension number or a trunk access code followed by an outside telephone number.

If the forward destination is an extension number, programming is complete and the call is disconnected automatically.

If the forward destination is an outside number, hang up to complete the programming.

If the station is not permitted to forward to the destination entered, you will hear reorder tones and can try again.

If you hang up before entering a forward destination, the programmed forward is canceled.

(6) **To turn off Call Forward:** Enter 355 and then hang up instead of entering a destination. You hear a confirmation tone.

Group Listen Feature (Keysets Only)

The Group Listen feature allows a keyset user to transmit a conversation over the keyset speaker while in handset or headset mode. This allows other people in the room to listen to the conversation. However, the keyset microphone remains disabled so that only the headset or handset user can speak.

This feature cannot be used on a handsfree call. The user must be on a call using the handset or a headset before entering the feature code. Group Listen cannot be used on single-line sets.

TO TURN THE GROUP LISTEN FEATURE ON OR OFF DURING A CALL:

While on a call using the handset or a headset, press the Special key and enter the Group Listen feature code (312). You hear a confirmation tone and the display shows GROUP LISTEN ON or GROUP LISTEN OFF. (The other party will not hear the confirmation tone.)

The Group Listen feature code (312) is now included in the Extensions, Usernames, and Feature Codes programming screen. It is also available through the Executive Keyset display menu.

When the feature is active in handset mode, the SPKR lamp will remain unlit. This allows the user to place the call into handsfree mode at any time during the call by pressing the SPKR key. When the feature is active in headset mode, the SPKR lamp is lit. Pressing the key will disconnect the call.

The Group Listen feature code can be programmed under a feature key or DSS/BLF key just like any other feature. The key functions as a toggle. If the key has a lamp, it is lit when the feature is activated and unlit when the feature is turned off.

If the Group Listen feature is active when an OHVA call is received by the keyset, the OHVA call will camp on (because the speaker is busy).

CO Hookflash on Conference Calls

The system now supports the CO Hookflash feature code (330) during a conference call.

TO GENERATE A HOOKFLASH WHILE ON A CONFERENCE CALL:

Press $\bigcirc \infty$ and dial the Hookflash feature code (330).

OPX Disconnect Enhancement

In previous software versions, some sites had difficulties when using a loop start T1 line configured for OPX to connect two Inter-Tel systems and performing "semi-networking" applications such as intercom access, lighting message lamps, and shared voice mail. The reason for the difficulty is that the T1 OPX does not send a disconnect signal to the loop start trunk, which caused trunks to be "locked up."

The solution was to add a new flag in the 4.3 software version. The station flag, for single-line stations only, is called "Send T1 OPX Disconnect Flash." It sends a proprietary disconnect signal from the T1 OPX to the loop start trunk. (The "A" bit is toggled high for the duration of the SL Disconnect Flash Duration timer.) At default, this flag is disabled.

The "Send T1 OPX Disconnect Flash" flag appears in the Station Miscellaneous Flags screen and the Individual Station/Miscellaneous Flags screen below the "Outside Party Call Information Has Priority" flag. By default the flag is disabled.

To use this new station flag, you must have a T1 Card equipped with the proper firmware. The part numbers for the chips are 827.8664 (U4) and 827.8665 (U5). To remind you, a warning will be displayed in Database Programming whenever the flag is changed. The warning states that the flag will have no effect unless the correct T1 firmware is installed on the card. If your T1 Card does not have the proper firmware, there is an upgrade kit available (part number 828.1423).

NOTE: This flag does not affect T1 channels configured for Loop Start. Therefore, an Inter-Tel system can be on the receiving end with T1 Loop Start channels and will recognize the disconnect. However, it cannot *send* the disconnect — only an AXXESS with 4.3 software and T1 OPX can send the disconnect.

Advanced CO Interfaces Premium Feature

Database Programming will not allow the system to equip a T1/PRI Card unless the Premium Feature for "Advanced CO Interfaces" is enabled.

When a database is updated and the update program detects that a T1/PRI card is equipped without the "Advanced CO Interfaces" premium feature enabled, it will display an error message that says, "You have B-channels disabled. To activate the B-channels, turn on the Advanced CO Interfaces Premium Feature."

Trunk Group PRI Call By Call Feature

AXXESS trunk groups now provide limited access to PRI Call By Call services. Each trunk group that contains B channels can be assigned a PRI Call By Call feature to use for outgoing calls. The supported Call By Call features include switched digital circuit services, foreign exchange, TIE services, local exchange, OUTWATS, inter-exchange carrier services, and custom AT&T and Nortel private networks, features, and services. If the customer wishes to use more than one PRI Call By Call feature, there can be multiple trunk groups, each programmed to use a different feature. The customer then can select the Call By Call feature by selecting the trunk group associated with the feature.

When the trunk group has a programmed Call By Call feature, all channels within the specified trunk group will indicate the PRI Call By Call feature code in the outgoing ISDN message. Each outgoing ISDN call sends a SETUP message on the Primary Rate D channel that contains the B channel (voice channel) assignment, called digits information, and the network-specific facility. The PRI Call By Call feature is specified within the network-specific facility, ISDN information element which contains the Call By Call feature code.

To properly program the PRI Call By Call feature, the installer must analyze the customer's ISDN outgoing call traffic and configure the amount of B channels needed to support a particular Call By Call feature or service. In the service order, the installer must request the Call By Call service for the PRI span or a subset of channels.

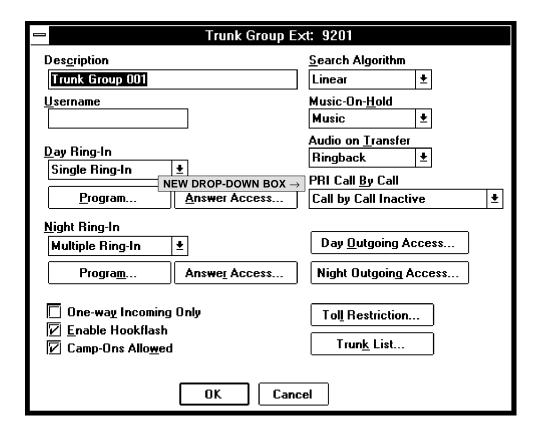
Programming

The installer selects the Call By Call feature during trunk group programming, as shown on the next page, by selecting the desired feature from the PRI Call By Call drop down box.

After the trunk group has been created and assigned to a Call By Call feature, the appropriate ISDN B channels are programmed into the trunk group.

Operation

The station user dials ARS or a PRI trunk group extension. The AXXESS system selects the trunk group's programmed Call By Call feature. The AXXESS system automatically inserts the Call By Call feature into the ISDN call control message and transmits the message to the public network. The Public Network accepts or rejects the requested Call By Call feature in the ISDN message.



The PRI Call By Call drop down box includes the following selections:

- Call By Call Inactive
- AT&T WATS Band
- AT&T Banded OUTWATS
- AT&T Foreign Exchange
- AT&T TIE Trunk
- AT&T Local Operator
- AT&T Carrier Operator
- AT&T Virtual Private Network
- AT&T MEGACOM 800
- AT&T MEGACOM
- AT&T INWATS
- AT&T WATS Maximal Band
- AT&T ACCUNET Switched Digital

- AT&T International LDS
- AT&T International 800
- AT&T Electronic Tandem Network
- AT&T Private Virtual Network
- AT&T DIAL-IT 900 / MultiQ
- AT&T National ISDN INWATS
- AT&T Unbanded OUTWATS
- Nortel Private Network
- Nortel INWATS
- Nortel OUTWATS
- Nortel Foreign Exchange
- Nortel TIE trunk

NOTE: This cannot be programmed if you enter database programming using the "User" password and it cannot be programmed through an Administrator's keyset.

OS/2 And NT Versions of AXXESSORY Talk

There are now two versions of AXXESSORY Talk that are compatible with the 4.3 software release. One version runs under OS/2 and the other runs under Windows NT Workstation 4.0.

The OS/2 version has two major changes from the previous release:

- Fax Delivery Report now indicates failed deliveries (see page 23)
- Programming Fax-On-Demand Port availability (see page 33)

The Windows NT version includes several new features:

- Fax Delivery Report indicates failed deliveries (see page 23)
- AXXESSORY Talk VisualMail (see page 24)
- Automatic Fax Detection to transfer to an extension number or to forward the fax to an E-mail address (see page 31)
- Programming Fax-On-Demand Port availability (see page 33)
- Voice Mail Save/Restore to a Network drive (see page 34)

NOTE: The AXXESSORY Talk database is compatible in both versions. This means that a customer that has the OS/2 version can switch over to the Windows NT version (or vice versa) and simply copy the database files from one version to the other. All mailbox configurations (messages, timers, etc.), will have the same programming as in the other version.

Windows NT PC

Because the new Windows NT-based PC is somewhat similar in design and function to the original OS/2-based PC, only the differences are noted in this addendum. For all other specification and installation information, refer to the Issue 4 AXXESS Installation and Field Maintenance Manual.

The part numbers for the new system are as follows:

NT PC Upgrade Unit	550.5220
NT 4-Port PC	550.5221
NT 8-Port PC	550.5222
NT 12-Port PC	550.5223

NT 16-Port PC	550.5224
NT 24-Port PC	550.5225
NT 32-Port PC	550.5226

NOTE: Installers must provide Inter-Tel with proof of Windows NT certification to purchase the new voice mail PC or to receive Technical Support assistance.

Specifications

The Windows NT-based AXXESSORY Talk PC is equipped with the following items:

- Microsoft Windows NT Workstation version 4.0 operating system software (equipped with Service Pack 3)
- Pentium 133MHz (or higher) microprocessor
- 32MB (or more) RAM
- 1.2GB (or larger) hard disk drive
- 3.5-inch (1.44MB) double-sided/high-density floppy disk drive
- CD-ROM
- Network Interface Card
- Standard VGA monitor, keyboard, and mouse

The Network Interface Card (NIC) is a specially designed network communications processor card that can transfer data packets between the AXXESSORY Talk PC and a Local Area Network (LAN).

The RJ45 connector on the Network Interface Card connects to the LAN via a customer-provided standard network interface cable.

Hardware Installation

The chassis and motherboard used in the NT-based PC are slightly different than the chassis and motherboard used in the OS/2-based PC. See Figures 3 and 4 on pages 21 and 22 for sample diagrams. For all other hardware installation information, refer to the Issue 4 manual.

Windows NT Installation

The NT-based AXXESSORY Talk PC is shipped with Windows NT Workstation (version 4.0 with Service Pack 3) already installed and properly set up. If necessary, Windows NT can be re-installed using the instructions outlined in Microsoft's installation manual, while observing the items listed below:

• Use FAT file allocation rather than NTFS

- Install TCP/IP protocol
- Install Service Pack 3 (which can be downloaded directly from Microsoft's web site)

AXXESSORY Talk Software Installation

If necessary, use the following procedure to re-install the Windows NT version of AXXESSORY Talk applications software.

NOTE: The hard disk drive must be properly formatted and must have Windows NT Workstation version 4.0 with Service Pack 3 installed. Also, if upgrading from a previous version of Windows NT AXXESSORY Talk, first stop the Avdap service in Control Panel (see page 19 for details).

- (1) If not already installed, attach the VGA monitor to the 15-pin Monitor Card connector on the back of the AXXESSORY Talk PC. Then, plug in the monitor's AC power cord and turn on the monitor's AC power switch.
- (2) If not already installed, attach the keyboard and mouse to their appropriate connectors on the back of the PC.
- (3) Turn on the PC's AC power switch and allow the system to boot up.
- (4) Press Ctrl–Alt-Del, log on as the system administrator, and the press the OK command button to continue.
 - **NOTE:** In the default state, the NT system administrator does not have a password. Inter-Tel recommends setting up a password.
- (5) Insert Applications Software Disk 1 of 5 in the PC's floppy disk drive.
 - **NOTE:** "Applications Software" disks 1–5 must be installed. For optional Japanese voice prompts, "Japanese Prompts" disks 1–3 may also be installed as described in step 30.
- (6) Select "Start" and then "Run."
- (7) In the Command Line text box, enter "A:setup" (or "B:setup" if the B drive is used). Then select the OK command button.
 - **NOTE:** If necessary, you can select Cancel from any setup window to exit without performing the installation. Also, during the file installation process, pressing ESC will exit the setup program without completing the installation.
- (8) A Welcome window appears. Select the Next command button to begin the installation. If the

- software has been installed before, you will be asked to stop the Avdap service.
- (9) A Select Destination Directory window asking you for the desired destination directory name appears. If the software has been installed before, the previous directory will be the default value, if not it is C:\AVDAP.
- (10) To use the default drive and directory name, select the Next command button. To select another drive and/or directory, select the Browse command button and follow the displayed instructions. If you are re-installing software, skip to step 15.

NOTE: If the directory already exists, a message displays asking if you are sure you want to use that directory. Select the Yes command button to continue.

- (11) The next window asks, "Create Installer Account?" If you want a user account for the installer to log into Windows NT, select Yes. If not, select No and skip to step 15.
- (12) The User Account Information window appears. Enter the desired logon name.
- (13) Enter and then verify the password. This is a case-sensitive password that can contain up to 25 characters (any character).
- (14) Select the Next command button to continue.
- (15) When the "Ready To Install" window appears, select the Next command button.
- (16) Follow the installation instructions displayed on the monitor to install disks 2–5.
- (17) After most of the files from the fifth disk are installed, a Rhetorex Configuration Wizard window appears. Select the Next command button to continue.
- (18) A Board Information window appears. Select the Add command button.
- (19) Select VP (RDSP/Vantage) as the Board Type.
- (20) Select the appropriate model from the list. The model depends on number of ports. For example, use RDSP/4000 for four ports, RDSP/8000 for eight ports, RDSP/24000 for 24 ports, etc.
- (21) Set the Address to 300 (default) for the first board in the PC. Use 308 for the second board and 310 for the third board.

NOTE: If any VPCs are later added or removed from the system, the Rhetorex Configuration

Wizard window can be accessed by running the Rhetorex Configuration Utility that is located in the AXXESSORY Talk folder inside the Programs group.

- (22) Select the OK command button, followed by the Next command button.
- (23) An Interrupt Request (IRQ) window appears. Make sure the IRQ Value is set to "5" (default). Then select the Next command button to continue.
- (24) A Shared Memory Address window appears. Make sure the shared memory address is set to "0xD0000" (default). Then select the Next command button to continue.
- (25) An Advanced Options window appears. Select the Advanced Options command button to open a dialog. In the dialog, change the Driver Start-up to "Automatic." Then select Ok to close the dialog and select the Next command button to continue.
- (26) Another window displays, asking if you wish to automatically start the drivers after updating your configuration. Select No (default) and then select the Finish command button to continue.
- (27) After some additional files are installed, the HASP Device Driver Installation Utility for Windows NT window appears. Select the OK command button to continue.
- (28) After the remaining files are installed, a window appears stating that AXXESSORY Talk has been successfully installed. Select the Finish command button to continue.
- (29) A window appears informing you that you must restart the system to complete the installation. Select the OK command button.
- (30) To install the Japanese voice prompts (if desired), remove Applications Software Disk 5 of 5 and insert NT Japanese Prompts Disk 1 of 3. Select "Start" and then "Run." Enter "a:pmtsetup" and press ENTER. Then follow the installation instructions displayed on the monitor.
 - **NOTE:** If Japanese language prompts are not installed, yet a user attempts to access them, English prompts will be delivered instead.
- (31) *If desired,* disconnect the monitor, keyboard, and mouse.

Windows NT Software Configuration

The following optional Windows NT software configuration changes can be made if necessary.

AXXESSORY Talk (Avdap) Service: The version 4.3 Windows NT-based AXXESSORY Talk software is designed to start as a service using the default system service account. Once started, it attempts to logon as a network user in order to gain network access and, if necessary, will continue to try to log on about once a minute until it either succeeds or is terminated. However, these attempts will not delay the start of AXXESSORY Talk features, other than VisualMail. While the network connection is down (either while the service is awaiting logon or because of a later failure), VisualMail and activities, such as print report or save/restore, mapped to a network location will fail. Once the logon succeeds and while the network is up, activities involving the network connection will succeed.

AXXESSORY Talk will start up automatically and does not require a user to log on to Windows NT in order to start it. However, the service must wait for "log on" to get access to network resources in the following situations:

- If the customer's E-mail System is configured to MAPI, the service needs to log on so that it can access the E-mail server.
- The B: drive is mapped to a network drive; the service needs to log on so that it can access the directory on the network drive.

To log on to the domain server, the service requires a valid user ID and password on the domain server. They are programmed through AXXESSORY Talk Database Programming in the AXXESSORY Talk System-Wide Programming window (see page 27). The user ID and password can be obtained from the Windows NT system administrator. It is important that the system administrator set up the password so that it will not expire. If the password expires, the log on will fail.

The account that the Avdap service uses must be part of the local "Administrator" group on the AXXESSORY Talk PC and it must have an Advanced User Right set to "Log on as a batch job." To do this, follow these steps:

- (1) Select the Start button and open Programs, then Administrative Tools (Common), and then select User Manager.
- (2) Select the Administrators group from the list in User Manager.
- (3) Select the Add button.

- (4) Choose the Avdap service account from the Names list. Select the Add button to add this name.
- Select OK to exit to the Local Group Properties window.
- (6) Select "User Rights" from the Policies dropdown menu.
- (7) Check the box in the lower left corner to "Show Advanced User Rights."
- (8) Select "Log on as a batch job" from the Right drop-down list, then select the Add command button.
- (9) Choose the Avdap account from the "Names" list and select the Add command button. Then select OK.
- (10) Select OK to exit the User Rights window.
- (11) Exit the User Manager program.

There are two ways you can start the Avdap service manually:

- Open Services inside the Control Panel. Select the "Avdap" service and select the Start button.
- Open a command shell, then type: net start avdap

There are three ways you can shut down the Avdap service manually:

- From the avdapmon window (see next section), type ~ (tilde).
- Open Services inside the Control Panel. Select the "Avdap" service and select the Stop button.
- Open a command shell, then type: net stop avdap

AvdapMon Utility: Because the AXXESSORY Talk software is running as a service, it does not have a console for displaying output. Inter-Tel provides a stand alone program called "AvdapMon" that can be used for viewing the AXXESSORY Talk software messages. The setup program automatically creates a shortcut to Avdapmon in the AXXESSORY Talk programming group in the Programs folder.

Avdapmon uses a TCP/IP socket to connect to the AXXESSORY Talk software. It can be run from the AXXESSORY Talk PC itself or any other PC running Windows NT or Windows 95, as long as there is a TCP/IP network connection from the PC running the Avdap-Mon utility to the AXXESSORY Talk PC. Note that the software supports only one active Avdap-Mon connection.

This program has the following parameters:

avdapmon <IP number> <socket number>

The *<IP number>* is the IP number of the AXXESSO-RY Talk PC in "dotted notation" (e.g. 190.253.11.210).

The *<socket number>* is the socket number of the Avdap service. If not configured differently, the default socket number is 4444.

If the AvdapMon utility is run on the AXXESSORY Talk PC itself, there is a shortcut notation to specify the IP and port numbers. In this case, simply type *avdapmon*. (that is: *avdapmon* followed by a space, a period, a space, and a period again).

To protect the AXXESSORY Talk against unauthorized access through AvdapMon, a password can be required to use the AvdapMon utility. This password is set through Database Programming (see page 27).

Registry Information: AXXESSORY Talk 4.3 now uses Windows NT Registry to store the command line options. To modify values in the Registry, use the Windows NT registry editor program called REGEDT32.EXE.

CAUTION: This registry configuration is not a part of the software configuration. It is included here for diagnostic and troubleshooting purposes only. Under normal circumstances, you should never need to access the registry settings. This procedure should only be performed by a trained installer; modifying the registry values improperly can damage Windows NT configuration and render it unusable.

To modify the Avdap parameter in the registry, follow these steps:

- (1) Run the registry editor program by typing *regedt32* from a command prompt or select the Start button, select Run, and type *regedt32* in the Open line.
- (2) Select the HKEY_LOCAL_MACHINE window and locate the subkey called "Software." Open the Software subkey.
- (3) Locate and open the subkey called "Inter-Tel."
- (4) Locate and select the Avdap subkey.
- (5) Inside this subkey is a value called "Parameters." The type of this value is REG_MULTI SZ. Edit the value.
- (6) You will see a window called Multi-String Editor that permits you to add or remove the Avdap command option. Note that each option has to appear a separate line. To add a new option, simply type it in on a new line. To remove an option, delete its line.
- (7) When finished, select the OK button.
- (8) Exit the registry editor program. The registry will be saved automatically.

Microsoft Exchange (MAPI) Setup

Use the following procedures to set up VisualMail using Microsoft Exchange (a MAPI E-mail system).

NOTE: Be sure the AXXESSORY Talk PC has Windows NT 4.0 Service Pack 3 installed.

INSTALL MICROSOFT EXCHANGE:

Perform these procedures from the Administrator account on the AXXESSORY Talk PC.

- (1) Add the Network Account to the Administrator group on the AXXESSORY Talk PC. This is necessary for the account to have access to the Exchange profile stored in the Windows NT Registry.
- (2) Run Exchange's Setup.exe.
- (3) When asked to type in your full name, use the name of the mailbox that AXXESSORY Talk's VisualMail will use as its connection to the server. This needs to be the same as the network logon account name.
- (4) Select the OK button for this screen and for each of the next two screens.
- (5) Choose Typical installation.
- (6) After the installation ends, place the cursor on the Inbox desktop icon and click the right button. Then select "Properties" from the pop-up menu.
- (7) Select the Add button to start Exchange's Setup Wizard to create a profile.
- (8) Verify that the Microsoft Exchange Server information service is selected, then select the Next button.
- (9) Type in the name of the Microsoft Exchange server.
- (10) Verify the name of the VisualMail's mailbox.
- (11) Select the Next button for this screen and for each of the next three screens.

- (12) At the conclusion screen, select the Finish button.
- (13) After the Setup Wizard concludes, verify that the profile you just created has the name of the VisualMail account and that it is indicated as the default profile.
- (14) Select the Close button to exit.
- (15) Run the program copy_profile.exe to copy the newly created profile into an area of the Windows NT Registry used by Exchange when started from the VisualMail. This program must be run whenever there is a change to the profile or to the selection of the default profile in this Properties dialog. (Like Setup.exe, this program can be run from the Windows NT Explorer, from the Start menu's Run selection, or from a command shell.)

Lotus Notes (VIM) Special Setup

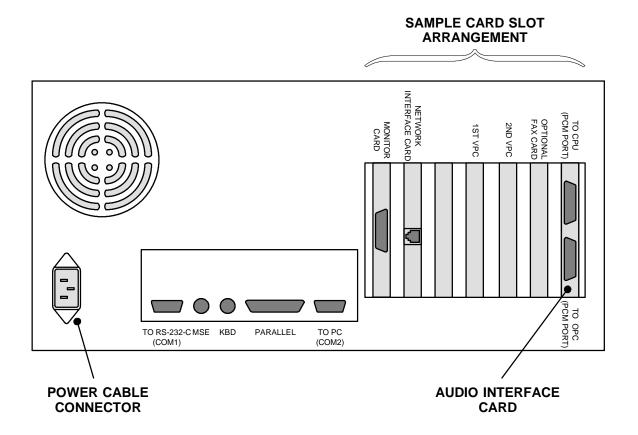
When using Lotus Notes (a VIM E-mail system), include the directory where Lotus Notes is installed in the Path System Variables. To do this, in Control Panel, open System and select the Environment tab. then select the Path variable from the System Variables list and enter the Lotus Notes directory in the Value text box. Select OK to close System. The Path will take effect the next time the PC is rebooted.

SMTP/POP3 Special Setup

When VisualMail is configured for SMTP/POP3, you must program the E-mail Real Name field as described on page 28. However, the VisualMail must not be logged on to the SMTP/POP3 E-mail service.

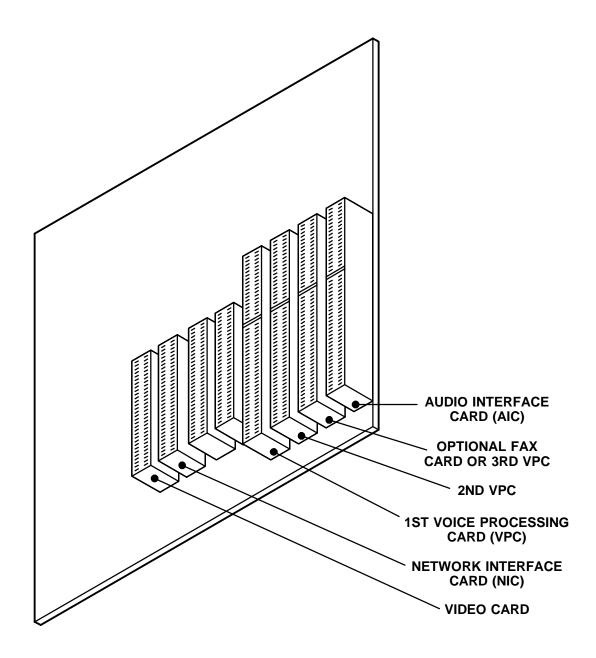
This is because when the VisualMail logs on to the SMTP/POP3 server, the E-mail Real Name appears as the sender. Once it is logged in, programming changes to the E-mail Real Name will not take effect until VisualMail logs out and back in again. The best way to log out is to change the E-mail System to "None," update the database. Wait at least 3 minutes to allow the database update to take effect. Then change the E-mail System back to "SMTP/POP3" and update again. Visual-Mail will log back into the E-mail server.

FIGURE 3. SAMPLE BACK OF ASSEMBLED AXXESSORY TALK PC



NOTE: Depending on the model of PC being used, the sample card slot arrangement and connector locations shown above could vary somewhat.

FIGURE 4. SAMPLE PC MOTHERBOARD CARD SLOT ARRANGEMENT



NOTE: Depending on the specific model of PC Motherboard being used, the sample card slot arrangement shown above could vary somewhat.

Fax Delivery Report Indicates Failed Deliveries

The Fax Delivery Report now displays an asterisk (*) immediately to the left of the delivery status in the Fax Delivery Report for an entry representing a fax delivery that failed and was removed from the delivery queue. The sample Fax Delivery Report below illustrates the change. The last entry indicates a fax delivery failure.

Fax deliveries can fail for many reasons, but the most common problem is that the fax number entered was not a fax machine, but was a company's main number or answering service. In the sample below, the failures to 1–415–345–2159 all were No Answer, probably indicating that the number was not a fax machine.

The System Administrator should review the Fax Delivery Report on a regular basis to check for delivery failures.

FAX DELIVERY REPORT			Date: 4/02/1997
	Request Date/Time		Fax Number
4-02-1997 13:44:46 - 8615	4-02-1997 13:43:40) Successful	16176251201
4-02-1997 13:52:14 - 218	4-02-1997 13:51:17	No Answer	14153452159
4-02-1997 13:56:21 - 111	4-02-1997 13:55:14	Busy	15056327936
	4-02-1997 13:54:52	2 Successful	15056327936
- 53			
- 101 - 102			
- 110			
4-02-1997 14:03:28 - 218	4-02-1997 13:51:17	No Answer	14153452159
4-02-1997 14:08:07 - 111	4-02-1997 13:55:14	Successful	15056327936
4-02-1997 14:13:15	4-02-1997 13:58:51	Busy	19089963039
- 61 - 60			
4-02-1997 14:14:36 - 218	4-02-1997 13:51:17	No Answer	14153452159
4-02-1997 14:25:05 - 218	4-02-1997 13:51:17	No Answer	14153452159
4-02-1997 14:28:00	4-02-1997 13:58:51	Successful	19089963039
- 61 - 60			
4-02-1997 14:35:28	4-02-1997 13:51:17	*No Answer	14153452159
- 218			

AXXESSORY Talk VisualMail

This is available in the AXXESSORY Talk NT version only. AXXESSORY Talk VisualMail is a feature that provides the first step to linking Inter-Tel's NT version of AXXESSORY Talk voice mail with E-mail. AXXESSORY Talk VisualMail provides users the ability to receive a voice mail message as an E-mail message with a voice attachment. The voice attachment will be in the form of a "wave" (.wav) file that can be played on any computer equipped with a sound card, speakers, and multimedia software (such as Sound Recorder).

When a mailbox receives a voice mail message or uses the voice mail Record-A-Call feature, one of three things can occur, depending on how the mailbox's VisualMail field is programmed.

- If the field is programmed to DISABLED, the voice mail or Record-A-Call message is delivered to the mailbox just as normal and no E-mail is sent.
- If the field is programmed to FORWARD ONLY, the AXXESSORY Talk will convert the voice mail or Record-A-Call message to an 8-bit WAV file, build an E-mail message, attach the WAV file, and send the E-mail message to the address specified in the mailbox's E-mail Address field. Once the Email message is sent, the original message will be deleted from the mailbox. (If the E-mail message cannot be delivered to the specified address, it will be stored as a voice mail message in the mailbox and will not be deleted.) **NOTE:** If VisualMail is programmed for FORWARD ONLY, the mailbox cannot use the Remote Notification feature. Because all messages are automatically sent to the Email address, there is no voice mail message to trigger the Remote notification.
- If the mailbox's VisualMail field is programmed to COPY & FORWARD, the voice mail or Record-A-Call message will be stored in the mailbox and the AXXESSORY Talk will convert the file to WAV, attach it to an E-mail message, and deliver the E-mail message to the address specified in the mailbox's E-mail Address field.

NOTE: Due to the nature of network connections, the AXXESSORY Talk software is designed to handle a network failure gracefully. If the network link from the AXXESSORY Talk to the E-mail server is down, AXXESSORY Talk will store the messages in a queue. If the network does not come back up in 15 minutes, the AXXESSORY Talk will deliver all pending messages in the queue back to the voice mailboxes and temporarily disable the E-mail queue until the network is

available. This means that new messages will remain in the mailboxes and will not be converted to E-mail messages until the network link is restored.

AXXESSORY Talk VisualMail is a "one-way" feature. That is, the user cannot reply to the sender of a voice mail message using E-mail. If a user attempts to reply, the message will be sent to the Administrator's E-mail Address instead of to the sender of the voice mail message. The user should forward the message or send a new message instead of replying.

E-mail messages containing WAV files can be forwarded to other E-mail addresses or stored on the computer's local drive, just like any other E-mail message. Or, the WAV file can be detached from the message and stored on the computer.

E-mail System Requirements

To use this new feature, the customer must have an existing E-mail system based on Message Application Programming Interface (MAPI), Vendor Independent Messaging (VIM), or Simple Mail Transport Protocol/Post Office Protocol (SMTP/POP3). The following list shows the E-mail systems that are supported, and the protocols on which they are based.

- Microsoft Mail or Microsoft Exchange (MAPI)
- cc:Mail or Lotus Notes (VIM)
- Internet mail (SMTP/POP3)

NOTE: Be sure the AXXESSORY Talk PC has Windows NT 4.0 Service Pack 3 installed.

The AXXESSORY Talk VisualMail feature requires that the AXXESSORY Talk PC is able to communicate with the customer's E-mail system through the customer's TCP/IP network (such as a LAN). This requires a network interface card in the AXXESSORY Talk PC. Since each customer's network can be different, the customer's network administrator should be responsible for configuring the network interface card in the AXXESSORY Talk PC as well as the network settings in Windows NT. (Note that the AXXESSORY Talk software will use TCP/IP protocol, therefore the customer's network must support this protocol.)

The Windows NT networking should be properly configured for the customer's network and the underlying E-mail system that will be used by the AXXESSORY Talk VisualMail PC must also be configured properly. Due to the various configuration areas, the process requires participation and coordination between the customer's network or MIS personnel, the voice mail administrator, and the voice mail installer/programmer.

System Software Keys

To use the AXXESSORY Talk VisualMail feature, you must have a software key attached to the parallel port on the AXXESSORY Talk PC. The software key also determines the number of users that can be programmed to use AXXESSORY Talk VisualMail. If the key is removed, the VisualMail feature will default to five-user status. Keys are available for the following quantities of users:

NO. OF USERS	PART NUMBER	
5	NO KEY NEEDED	
25	827.8703	
50	827.8704	
100	827.8705	
250	827.8706	
500	827.8707	
1000	827.8708	

A user is defined as a mailbox that has VisualMail enabled or has a Fax E-mail Address programmed.

The software compares the number of mailboxes programmed for VisualMail against the user limit of the software key periodically. It then sends a message showing the number of users to Avdapmon, which can be viewed using the Avdapmon utility. Exceeding the user limit of the software key will disable VisualMail for all mailboxes. If this happens, there will be a warning message in Avdapmon and an alarm at the System Administrator's station. You must install a higher-limit software key or disable VisualMail or Fax E-mail Addresses at some mailboxes to be back within the user limit. When you are within the limit, VisualMail will restart automatically.

WAV File Storage Requirements

WAV files require more storage space than Rhetorex voice files. For example, a 1MB voice mail message will require 2.67MB as a WAV file. Here are some sample file sizes for comparison:

DURATION OF MSG IN SECONDS	VOICE MAIL FILE SIZE IN BYTES	WAV FILE SIZE IN BYTES
30	89,640	239,148
60	180,480	481,324
90	269,568	718,892
120	361,536	964,140
600	1,801,056	4,802,860

Because the WAV files are stored on the customer's E-mail server, the customer's network administrator is

responsible for allotting sufficient space for the messages.

E-mail Message Format

The E-mail message sent by the voice mail will have the following components:

- To: The TO line will contain the recipient's E-mail address.
- From: The FROM line will contain the E-mail address of the AXXESSORY Talk. If an E-mail Real Name has been programmed for the AXXESSORY Talk, it will also be shown on this line.
- **Subject:** The SUBJECT line will contain the line "<*length of message*> Message for MB <*number*> from <*source*>." If the message is marked priority, the subject line will be preceded by the word "PRIORITY." The source of the voice mail message will appear as one of the following:
 - MB < number>
 - x < extension number>
 - the voice mail system
 - an unknown caller
 - an outside caller at *<phone number>*

NOTE: If the message is from an extension ID or a mailbox, the programmed username will be shown inside parentheses after the number. For example: mailbox 1000 (ADMIN).

- **Received on:** The RECEIVED ON line contains the date and time that the voice mail was received by the mailbox.
- **Priority, Private, or Certified:** If the voice mail message was sent with a delivery option, the body will contain the line "Message marked <*PRIOR-ITY, PRIVATE or CERTIFIED>*." Note that this is for informational purposes only and does not affect on the E-mail message itself. For example, if a voice mail message is marked for certified delivery, the sender will receive a confirmation when the recipient listens to the voice mail message using the mailbox. However, the sender will not receive confirmation when the recipient reads the E-mail.
- WAV file attachment: The WAV file attachment will appear as a file with the name VM.WAV. To listen to the message, the user must play the WAV file using multimedia software (such as Sound Recorder).

Programming

AXXESSORY Talk VisualMail must be programmed on the system-wide level and the mailbox level. It cannot be programmed through the AXXESSORY Talk mailboxes.

System-wide programming is performed through the AXXESSORY Talk System-Wide Information screen, as shown on the next page. After the system-wide E-mail fields have been programmed and saved to the database, the AXXESSORY Talk will log on to the customer's E-mail system. At that point, it is ready to start sending E-mail messages.

NOTE: The installer should watch the voice mail monitor closely and examine the AXXESSORY Talk messages to make sure that VisualMail is started. If it does not start, the AXXESSORY Talk will keep trying every 30 seconds until login is successful or VisualMail is manually disabled.

Next, each mailbox that is going to use the AXXESSO-RY Talk VisualMail feature must be configured. This requires programming of the mailbox's VisualMail and E-mail Address fields. Once these fields are pro-

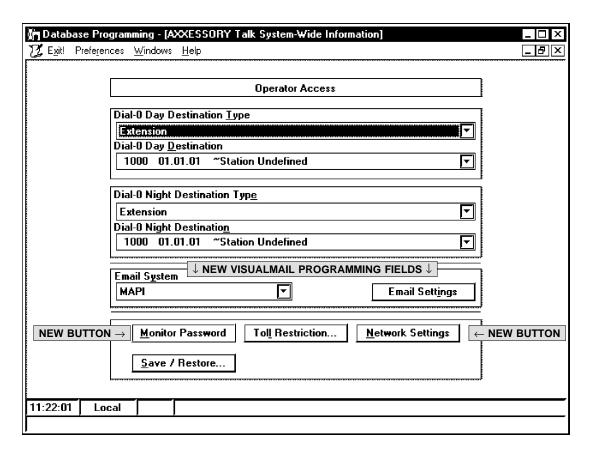
grammed, AXXESSORY Talk VisualMail is fully operational. Mailbox programming is performed using the Mailbox screen shown on page 30.

Note that there are some other external configurations involved in getting the AXXESSORY Talk VisualMail to work:

- The network interface card installed in the AX-XESSORY Talk PC must be configured properly.
- Windows NT networking must be properly configured for the customer's network configuration.
- The customer's E-mail System that is used by AX-XESSORY Talk VisualMail should be tested to send and receive E-mail properly.

The installer/programmer should test the AXXESSO-RY Talk to make sure that:

- All E-mail addresses are programmed correctly.
- E-mail messages are sent to the E-mail server successfully.
- The E-mail server delivers the messages to users successfully.



System-wide AXXESSORY Talk VisualMail fields cannot be programmed if you enter the database using the "User" password. The programming fields are as follows:

E-MAIL SYSTEM: This system-wide field specifies the type of E-mail system that will be used to transfer messages. The value programmed in this field must correspond to the customer's underlying E-mail system. For example, if the customer's E-mail system is Lotus Notes, this field should be programmed to VIM. This field can be programmed to NONE, MAPI, VIM, or SMTP/POP3. If it is programmed to NONE, the AX-XESSORY Talk VisualMail feature is disabled for the entire voice mail system. The default value for this field is NONE.

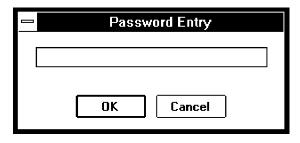
E-MAIL SETTINGS: After you have selected the E-mail System, the E-mail Settings command button is available. When you select it, the window shown on the next page appears. The fields that need to be programmed depend on the E-mail System selected:

- If the E-mail System field is programmed to MAPI or VIM, only the E-mail Username and E-mail Password fields need to be programmed.
- If the E-mail System is programmed to SMTP/ POP3, the E-mail SMTP Server and E-mail Address fields must also be programmed, in addition

to the username and password fields. The E-mail Real Name field is optional when using SMTP/POP3.

NETWORK SETTINGS: For VisualMail to function, the "Avdap" service must be able to log on to the network as a user. To program the logon information (network domain, username, and password), select the Network Settings command button. A window appears as shown on page 29.

MONITOR PASSWORD: To protect the AXXESSORY Talk against unauthorized access, a password can be required to use the AvdapMon utility described on page 19. When you select this command button, the following screen appears. Enter the password and select OK. Then you will be prompted to enter the password again. Enter it exactly as you did the first time and select OK. (Or select Cancel to leave the password unchanged.)





E-MAIL ADDRESS: This field specifies the AXXES-SORY Talk's E-mail address. It is only required if the E-mail System field is programmed to SMTP/POP3. When the voice mail PC sends an Internet mail message, this address will be used as the E-mail address in the "Reply-To" field of the E-mail header. This is the address at which the voice mail PC will receive Internet mail messages. This field can contain up to 127 characters and it is empty by default. For example, when using Internet mail, this field might look like johndoe@intertel.com.

E-MAIL REAL NAME: This field specifies the AX-XESSORY Talk's user name (such as VOICE MAIL). It is only programmable if the E-mail System field is programmed to SMTP/POP3 and it is optional. When the voice mail PC sends an Internet mail message, this name will be included in the FROM field of the E-mail header. This field can contain up to 127 characters, and it is empty by default.

E-MAIL USERNAME: This field specifies the username for the voice mail PC's E-mail account. Before the voice mail PC can send or receive E-mail messages, it must log on to the underlying E-mail system. Therefore, the voice mail PC must have an account on the customer's E-mail system, and this field specifies the username for that account. This field can contain up to 127 characters and it is empty by default.

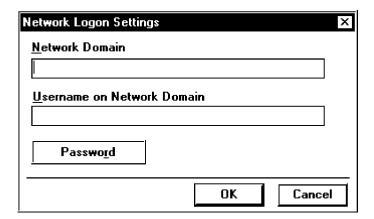
E-MAIL SMTP SERVER: This field specifies the AXXESSORY Talk's SMTP mail server. It is only programmable if the E-mail System field is programmed to SMTP/POP3. The SMTP mail server is the server that the voice mail PC connects to in order to send

E-mail messages over the Internet. This field can contain up to 127 characters and it is empty by default.

E-MAIL POP SERVER: This field specifies the POP mail server that will be used to receive E-mail messages. It is only programmable if the E-mail System field is programmed to SMTP/POP3. The POP mail server is the server the voice mail PC connects to in order to send E-mail messages through the Internet. This field can contain up to 127 characters and it is empty by default.

ADMINISTRATOR E-MAIL ADDRESS: This field specifies the E-mail address of the System Administrator. Whenever an E-mail message is undeliverable (due to invalid or wrong E-mail address, etc.) it will be forwarded to this address. Or, if a user attempts to reply to a VisualMail E-mail message, the message will go to this address instead of going to the AXXESSORY Talk PC. This field can contain up to 127 characters and it is empty by default. NOTE: Even though this field is not required, Inter-Tel strongly recommends that you provide an E-mail address to forward any E-mail received by the AXXESSORY Talk PC. It will alert the Administrator to any problem with the E-mail addresses.

PASSWORD: This system-wide field specifies the password for the voice mail PC's E-mail account. Before the voice mail PC can send or receive E-mail messages, it must log on to the underlying E-mail system. Therefore, the voice mail PC must have an account on the customer's E-mail system, and this field specifies the password for that account. This field can contain up to 40 characters and it is empty by default.



The following information is used by the Avdap service when it logs on to the network. Refer to page 18 for information about setting up the Avdap user account.

NETWORK DOMAIN: This field specifies the name of the network domain in which the AXXESSORY Talk PC is a member.

USERNAME ON NETWORK DOMAIN: This field specifies the username that the Avdap service user account will use to log on to the network.

PASSWORD: This field specifies the network password for the Avdap service user account.

─ Miscellaneous Mailbox Information - Mailbox Number: 1000				
Maximum Mailbox Message Capacity 30 min. (Default 30) (Range 0-600) Maximum Non-subscriber Message Length 5 min. (Default 5) (Range 1-Capacity) Maximum Outgoing Message Length 5 min. (Default 5) (Range 1-120)		Greeting System Greeting Iransfer Method Unannounced Allow Transfer Method Programming Play Recording Instructions Auto Attendant Transfer Prompt		
Recorded Name Length	Envelope Settings ☐ Announce Date and Time ☐ Unlisted Number ☐ Private Extension ☐ Announce Message Length ☐ Directory Information ☐ Unlisted Number ☐ Private Extension ☐ and Mailbox Number			
Fax Delivery Destination				
"Station Undefined		1000 01.	01.01	±
Eax Delivery Email Address				
VisualMail FORWARD & COPY	Email A	ddre <u>s</u> s for Voice I	Messages	
↑ NEW VISUALMAIL PROGRAMMING FIELDS ↑ OK Cancel				

Mailbox programming for AXXESSORY Talk Visual-Mail can be programmed using the "User" password. However, it cannot be changed through the mailboxes. It uses these two new fields in the Miscellaneous Mailbox Information screen:

VISUALMAIL: This field specifies the operation of AXXESSORY Talk VisualMail for each individual mailbox. This field can be programmed to DISABLED, FORWARD ONLY, or COPY & FORWARD.

- When programmed to DISABLED, the mailbox functions as a normal mailbox. This is the default value for this field.
- When programmed to FORWARD ONLY, all voice mail messages delivered to the mailbox are forwarded to the E-mail address specified in the mailbox's E-mail Address field. Note that in this configuration, the voice mail messages are not saved in the mailbox. In other words, when the user

deletes the E-mail message containing the voice mail message, all record of the voice mail message is gone.

When this field is programmed to COPY & FOR-WARD, all voice mail messages for the mailbox are delivered to the mailbox as normal and a copy is forwarded to the mailbox's E-mail Address. If one is deleted, the other is unaffected.

E-MAIL ADDRESS: This field specifies the E-mail address to which the voice mail messages will be forwarded. This field is unavailable if the VisualMail field is programmed to DISABLED. The content and format of the field depends on the E-mail system being used. For example, when using Lotus Notes, this field could be something like John Doe/Chandler/Inter-Tel, and when using Internet mail, it would be johndoe@intertel.com. This field can contain up to 127 characters and is empty by default.

Automatic Fax Detection

This is available in the AXXESSORY Talk NT version only. With Automatic Fax Detection, Call Routing Announcement applications and mailboxes can be programmed to automatically route incoming fax calls to a specified extension or to an E-mail address.

If the feature is enabled, the mailbox or Call Routing Announcement Application will automatically listen for fax tone.

- A mailbox will listen for fax tones during the mailbox greeting and while a message is being recorded. If the mailbox detects fax tones, the call will be transferred to the specified extension or E-mail address. If the tones are detected after a recording has started, the call will be disconnected.
- Call Routing Applications will be able to detect fax tones during the greeting and up to time-out. The fax tone detection will also be disabled if the caller performs an action that removes them from the Call Routing Announcement (transferring to an extension, transferring to a mailbox, etc.).

This feature is enabled in database programming. It can be programmed using the "User" password. However, it cannot be changed through the mailboxes.

AXXESSORY Talk VisualMail Required

To send faxes to an E-mail address, the AXXESSORY Talk VisualMail feature, described on page 24, must also be enabled. Refer to the description of that feature for E-mail system requirements and programming instructions. Note that programming a mailbox Fax E-mail Address counts as one user, as described in the Software Key section on page 25.

Fax Card Required

To send and receive faxes, the AXXESSORY Talk PC must have a fax card installed. This can be the same fax card that supports the Fax On Demand feature. The software will support up to eight fax ports. See page 33 for more information on allocating fax ports for the Automatic Fax Detection and Fax On Demand features.

Programming Call Routing Announcements And Mailboxes

Both Call Routing Announcements and voice mailboxes now have two new fields. The affected programming screens are shown on the next page.

- **Fax Destination:** This field, if programmed, specifies the extension of the fax machine that will receive incoming faxes.
- Fax E-mail Address: This field, if programmed, specifies the E-mail Address of the account that

will receive incoming faxes. The fax is converted to a TIFF file and sent to the E-mail address as an attached file. The address can be up to 127 characters. To view a message, use any TIFF file viewer (such as Imaging for Windows).

If only the Fax Destination field is programmed, the AXXESSORY Talk performs a blind transfer to send the fax to the programmed extension, allowing the fax machine to process the incoming fax.

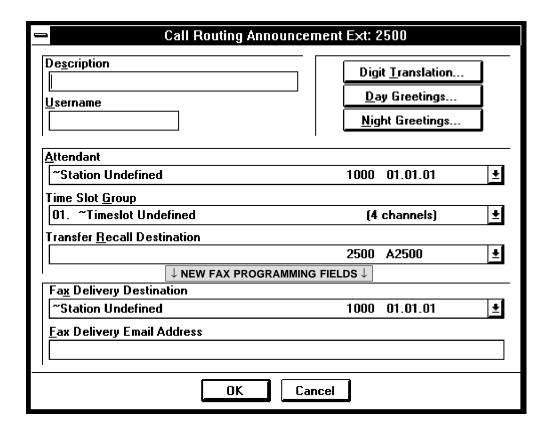
If the Fax E-mail Address field is programmed, the disk is not full, and the AXXESSORY Talk has an available fax port to receive the incoming fax, the AXXESSORY Talk receives the fax and stores the image in TIFF Class F format. If the AXXESSORY Talk cannot receive the fax because the disk is full or the fax ports are busy, the fax is transferred to the Fax Destination extension. If the Fax Destination is not programmed, the AXXESSORY Talk disconnects the call (because it cannot process the incoming fax).

If the disk becomes full while the AXXESSORY Talk is receiving the fax, the AXXESSORY Talk disconnects the call and deletes the portion of the fax received to that point. If the AXXESSORY Talk receives the fax successfully, it disconnects the call and places the received fax in a queue to be delivered to E-mail. The AXXESSORY Talk processes the fax queue and delivers the fax images to the appropriate destination E-mail accounts in the order they were received.

E-mail Message Format

The E-mail message sent by the voice mail will have the following components:

- To: The TO line will contain the recipient's E-mail address.
- From: The FROM line will contain the E-mail address of the AXXESSORY Talk. If an E-mail Real Name has been programmed for the AXXESSORY Talk, it will also be shown on this line.
- **Subject:** The SUBJECT line will contain the line "Fax received from *<source>*." The source will be the Call Routing Application number or the mailbox number from where the fax is received, for example: CRA 2505 or MB 1000.
- Received On: The RECEIVED ON line contains the date and time that fax was received.
- **FAX.TIF file attachment:** The file attachment will appear as a file with the name FAX.TIF. To view the fax, the user must display the TIF file using graphics software.



■ Miscellaneou	ıs Mailbox Info	rmation - Mailbo	x Number: 1000	
Maximum Mailbox Message C 30 min. (Default 30) (Rai Maximum Non-subscriber Me 5 min. (Default 5) (Rang Maximum Outgoing Message 5 min. (Default 5) (Rang	nge 0-600) ssage Length ge 1-Capacity) Length	Play Recordi	<u> </u>	
Recorded Name Length	Announce b	_	Directory Information Unlisted Number Private Extension and Mailbox Number	
Fax Delivery Destination				
~Station Undefined		1000 01.4	01.01	±
Eax Delivery Email Address				
VisualMail FORWARD & COPY	Email A	ddre <u>s</u> s for Voice N	1essages 	
OK Cancel				

Programming Fax-On-Demand Port Availability

NOTE: This option is available in both NT and OS/2 versions of AXXESSORY Talk.

In order to help make sure the AXXESSORY Talk has one or more fax ports available for processing incoming faxes, there is a new database field in the Fax On Demand programming screen shown below. The field is called "Maximum Fax On Demand Ports" and it sets the maximum number of fax ports the system can use for performing Fax On Demand (either delivering outgoing faxes or importing fax documents from the system administrator mailbox). By placing a limit on the number of Fax On Demand ports, the programmer can reserve fax ports for receiving incoming faxes through mailboxes and Call Routing Announcement applica-

tions. For example, if the system has eight fax ports and the Maximum Fax On Demand Ports field is set to six, there will be two ports available for faxes received through mailboxes and Call Routing.

NOTE: If the Maximum Fax-On-Demand Ports field is programmed to a number that exceeds the actual fax ports available, the software will automatically adjust the limit.

Also, to help support this new feature and Fax On Demand, the AXXESSORY Talk will now support up to eight fax ports.

The maximum number of fax ports is set in database programming. It can be programmed using the "User" password. However, it cannot be changed through the mailboxes.

Fax-On-Demand - Miscellaneous Information			
Fax <u>Retry Timer</u> iii min. (Default 10) (Range 1-255) Fax Retransmission Timer NEW FIELD → 1 min. (Default 1) (Range 1-255)	Maximum Fax Delivery Attempts [5] (Default 5) (Range 1-15) Maximum Fax-On-Demand Ports [0] (Default 8) (Range 0-8)		
Automatic <u>H</u> eader Reduction 4 sixteenths of inches (Default 4) (R. Fax <u>I</u> one Wait Timer 40 sec. (Default 40) (Range 1-255)	ange 0-160) Maximum <u>F</u> ax Selections 10 (Default 10) (Range 1-20)		
Maximum Fax-On-Demand <u>L</u> ibrary Size O megabytes (Default 0) (Range 0-2! Current Fax-On-Demand Library Size O bytes <u>D</u> efault OK	55) Percentage of Maximum Currently Used None Cancel		

Voice Mail Save/Restore To A Network Drive

The NT version of the AXXESSORY Talk allows the user to save or restore the database, voice data, and selected information using a network directory in addition to the AXXESSORY Talk hard drive or floppy drive. The AXXESSORY Talk provides this support by mapping the B drive to the desired target directory as follows:

- The Avdap service must have access to directory (read access for a restore and read/write access for a save). If using a network path, it will need to run AXXESSORY Talk so that it logs in as a network user that has access to the network path.
- Tell the Avdap service to map the B drive as the specified directory.
- Specify the B drive as the save/restore drive from Database Programming.

NOTE: In order for this feature to work, the AXXES-SORY Talk PC must not have a B drive (either real or mapped). Otherwise, the AXXESSORY Talk will not be able to perform its own B-drive mapping.

To map the B drive to a directory on the network, the voice mail administrator needs to add a new command option to the avdap.opt file in the root directory where the AXXESSORY Talk software is installed. For example, if the AXXESSORY Talk software is installed in $C:\AVDAP$, the avdap.opt will have an absolute filename $C:\AVDAP\avdap.opt$. Note that capitalization is unimportant. The format of the command option to map the B drive to a network directory is:

-map_b=UNC_path

UNC_path is the name of the target directory in the Universal Naming Convention as follows:

- If the target directory is a Netware path, the UNC_path can specify a directory path (for example, \\nwserver\sy2\ud\avdap\save).
- If the target directory is on another NT machine, the UNC_path must specify a share name (for example, \\ntserver\save_avdap_share).

For example, suppose a site wishes to perform saves to the C:\AVDAPSV directory on the AXXESSORY Talk PC itself (machine name VM_PC). The system administrator needs to create a share for the C:\AVDAPSV directory. For example, the new shared directory is called VM_SAVE. The voice mail administrator would then need to edit the file avdap.opt and add the following line:

-map_b=\\VM_PC\VM_SAVE

To save to a directory on a different PC, the system administrator needs to create the shared directory on the target PC, give the AXXESSORY Talk's account read/write access to the directory, and specify the -map_b line that refers to the target PC's share.

CAUTION

When the AXXESSORY Talk performs a save operation, it erases files and/or directories from the UNC_path. Therefore, be careful when specifying the save/restore path. For example, do not specify C:\ as the save/restore path because the AXXESSORY Talk would delete the entire C drive.

Explanation of Extended Ring Cadences

The following table explains the difference between standard and extended ring cadences for the various types of single-line devices used on the AXXESS System in the United States. (The flag for enabling Extended Ring Cadences is described on page 6–32 of the AXXESS manual.)

SINGLE-LINE DEVICE	CADENCE TYPE	DESCRIPTION
SLA, SLC, SLC-16, or T1 OPX	Standard IC Ring	This is a repeating 2-second cadence that rings twice. Each ring lasts 200 ms and is separated from the next ring by 400 ms of silence. The remaining 1.2 seconds is silent.
	Extended IC Ring	This is a repeating 6-second cadence that rings twice. Each ring lasts 800 ms and is separated from the next ring by 400 ms of silence. The remaining 4 seconds is silent
	Standard CO Ring	This is a repeating 6-second cadence that rings once for 2 seconds followed by 4 seconds of silence.
	Extended CO Ring	This is a repeating 6-second cadence that rings once for 2 seconds followed by 4 seconds of silence.
Digital Keyset MDPM	Standard IC Ring	This cadence has two 250 ms rings every 2 seconds.
	Extended IC Ring	This is a repeating 3-second cadence that rings once for 1 second followed by 2 seconds of silence.
	Standard CO Ring	This is a repeating 6-second cadence that rings once for 2 seconds followed by 4 seconds of silence.
	Extended CO Ring	This is a repeating 6-second cadence that rings once for 4 seconds followed by 2 seconds of silence.
Analog Keyset Data Port Module	Standard IC Ring	This cadence rings for 1024 milliseconds followed by 2048 milliseconds of silence.
	Extended IC Ring	This is a repeating 2-second cadence that rings twice. Each ring lasts 200 ms and is separated from the next ring by 400 ms of silence. The remaining 1.2 seconds is silent.
	Standard CO Ring	This is a repeating 6-second cadence that rings once for 2 seconds followed by 4 seconds of silence.
	Extended CO Ring	Same as Standard CO Ring cadence.

RS-232-C Changes and Corrections

The CPU/MEM, CPU020/PCM, and Options Card RS-232-C connection information described on pages 2–35 and 2–36 in the Issue 4 manual should be modified as follows:

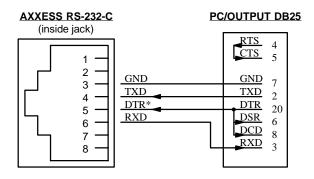
If necessary, an eight-wire MOD-TAP modular adapter and an eight-wire reversing (inverting) line cord can be used for special applications requiring hardware flow control. The pin functions of the AXXESS CPU/MEM Card, CPU020/PCM Card, and Options Card RS-232-C ports are listed in the following chart.

NOTE: The PC or output device RS-232-C ports must be configured as Data Terminal Equipment (DTE). The AXXESS RS-232-C ports are always configured as Data Carrier Equipment (DCE).

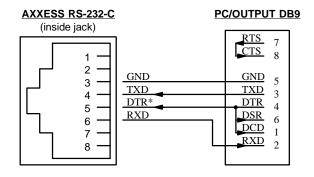
SIGNAL NAME	<u>FUNCTION</u>	AXX. <u>PIN</u>	DB9 <u>PIN</u>	DB25 <u>PIN</u>
No Connection		1		
No Connection		2		
Signal Ground	Reference Ground	3	5	7
Transmit Data (TXD)	Data to Axxess	4	3	2
Data Term. Ready (DTR)*	Signal to Axxess*	5	7	4
Receive Data (RXD)	Data from Axxess	6	2	3
Data Set Ready (DSR)	Signal from Axxess	s 7	6	6
	(always true)			
Clear To Send (CTS)	Signal from Axxess	s 8	8	5

^{*} The CPU Card RS-232-C port does not support DTR. All other RS-232-C ports (MEM and CPU020/PCM) do support DTR.

Software flow control adapters: The following wiring diagrams can be used to build adapters that will, with a line cord, connect one of the RS-232-C ports on the CPU/MEM, CPU020/PCM, or Options Card(s) to the DB9 or DB25 ports found on most PCs and output devices.

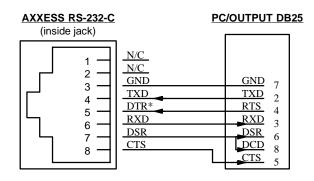


* The CPU Card RS-232-C port does not support DTR. All other RS-232-C ports (MEM and CPU020/PCM) do support DTR. DB25 internal jumpers: 4–5 and 20–6–8.

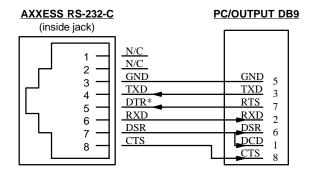


* The CPU Card RS-232-C port does not support DTR. All other RS-232-C ports (MEM and CPU020/PCM) do support DTR. DB9 internal jumpers: 7–8 and 4–6–1.

Hardware flow control adapters: The following wiring diagrams can be used to build adapters that will, with a line cord, connect one of the RS-232-C ports on the CPU/MEM, CPU020/PCM, or Options Card(s) to the DB9 or DB25 ports found on most PCs and output devices.



* The CPU Card RS-232-C port does not support DTR. All other RS-232-C ports (MEM and CPU020/PCM) do support DTR. DB25 internal jumpers: 6–8.



* The CPU Card RS-232-C port does not support DTR. All other RS-232-C ports (MEM and CPU020/PCM) do support DTR. DB9 internal jumpers: 6–1.

NOTE: When building adapters from these diagrams, keep in mind that *the connections between the AXXESS RS-232-C* port and the DB9 or DB25 port include the modular adapter and a line cord. The connection must be made as indicated in the diagram (correct pins connected) regardless of whether a reversing or non-reversing line cord is used.

Preventing Memory Shortages

Inter-Tel recommends that fully loaded AXXESS Systems, with a large number of trunks and heavy call traffic, have extended memory added on the CPU. The kit (part number 828.1405) contains four RAM chips that are installed in sockets on the CPU.

Without added memory on the CPU, fully loaded AX-XESS Systems may periodically reset due to memory shortages. The reset is the result of the CPU attempting to recover memory.

New CPU020/PCM Card Configurations

New CPU020/PCM Card combination kits are now available. Each kit includes a CPU020 Card, a PCM Card, the proper boot ROM and memory map PAL, and any additional memory components required. The combined cards are shipped pre-assembled, with the current production version system software already loaded.

The CPU020/PCM Card combinations available are:

CPU020/PCM COMBINATION	PART NO.
CPU020-Q/PCM-F (CPU 512 Master)	550.9015
CPU020-X/PCM-F (CPU 512 Slave)	550.9016
CPU020-D/PCM-D (CPU 256)	550.9017

New CPU/MEM Card Configuration

A new CPU/MEM Card combination kit is now available. The kit includes a CPU Card and a MEM Card. The combined cards are now compatible with both version 3.X and version 4.X systems. Only the appropriate Premium ROMs need to be added.

CPU/MEM COMBINATION	PART NO.
CPU/MEM (CPU 112)	550.9018

The MEM Card (550.2100), which is sold separately and in the CPU/MEM Card combination, now contains all of the components that were previously supplied in kit number 828.1278 (a PAL and 2 RAM chips). This makes it compatible with both version 3.X and version 4.X systems. In addition, the MEM Card is also shipped with the version 2 PAL so that it can be modified for use on older systems.

Because the MEM Card now contains the latest U19 PAL (827.8387), that chip is no longer supplied with the version 3.2 and 4.1 (or later) Premium ROMs.

New Options Card (OPC) Configuration

Each new Options Card (OPC) will now be equipped with the two ROMs (from kit part no. 828.1279) that allow the card to work with version 2 or later system software. In addition, the part numbers of the two ROMs in the kit have been changed from 827.8078 (U3) and 827.8073 (U29) to 827.8590 and 827.8599 respectively.

New T1 Card (T1C) Revision Level Changes

To work properly with version 4.X system software, T1Cs must be at revision level "2.G" or later. To work properly with the version 4.1 (or later) Primary Rate Interface (PRI) feature and daughter card (as well as all older versions of system software), the T1Cs must also be equipped with two special software components — part nos. 827.8550 (U4) and 827.8551 (U5). Revision level "3.K" or later T1Cs should have all of the necessary components already installed and will work with any version of system software.

NOTE: Any revision level "2.G" or later T1Cs that have U4 labeled 827.8376 and U5 labeled 827.8375 must first be equipped with an upgrade kit (part no. 828.1367) before using them with the version 4.1 (or later) PRI feature. Revision level "2.F" or earlier T1Cs cannot be upgraded; they must be replaced with new T1Cs.

This information is summarized in the following chart:

T1C REV. LEVEL	SYSTEM SOFTWARE LEVEL
up through 2.F	v2 or v3 T1 only
2.G to 3.J	v2–v4 T1, and v4.1 (or later) PRI (if equipped with 828.1367 kit and PRI Daughter Card)
3.K or later	v2–v4 T1, and v4.1 (or later) PRI (if equipped with PRI Daughter Card)

T1 Gain Control (TGC) Daughter Card

If experiencing excessive E&M gain levels on a T1 Card that is not equipped with a PRI Daughter Card, two special software components and a TGC Daughter Card (kit part no. 828.1397) can be attached to the card to provide 6dB of attenuation.

To use the TGC Daughter Card, the T1 Card must be at revision level "2.G" or later.

DKSC-16 Extended Loop Length Modification

For longer station loop lengths (up to 154 ohms/3000 ft.), if necessary, an optional external power supply with the following characteristics can be connected to the DKSC-16 termination block:

- 36VDC
- 120mA per keyset (1.92A for all 16 circuits)

This option is available only on DKSC-16s that are at revision level "2.0" or later or that have been modified and labeled with FSM100995. The external power supply is connected to pins 50 (+36V, V/SL) and 25 (GND, SL/V) on the termination block. In addition, the strap on jumper JP1 must be placed over pins 1 and 2 to enable the external power supply.

New Voice Processing Card (VPC) Models

The 4-Port and 8-Port VPCs described in the Issue 4 manual have been superseded by newer "mini-size" models. Other than their smaller size, these new mini-size cards install and function the same as the original full-size cards. The part numbers of the new cards are listed in the following table.

NEW VPCs	PART NUMBERS
4-Port "Mini" VPC	550.5209
8-Port "Mini" VPC	550.5210

CPU020/PCM Card Software Installation Information

The following information will be useful when loading CPU 512 Master and Slave software.

New Warning Message: A warning message will now appear if you attempt to load CPU 512 Master software without a CPU 512 Slave Card installed and communicating. The message says, "WARNING, the Slave CPU is off-line. Uploading code without a Slave CPU may cause serious system problems. Do you wish to continue with the upload?" You can continue the upload by selecting Yes or abort the upload by selecting No. (If you select Yes, you must install software on the CPU 512 Slave Card before it will function. Refer to page 3–73 in the manual for details.)

Checking Validity of Software On A Slave CPU: You can use the following procedure to check the validity of software on your CPU 512 Slave Card:

(1) Attach a terminal (or a PC using terminal emulation software) to the serial port on the secon-

- dary CPU in slot 24. (Communication parameters are: 9600 baud, no parity, 8 bits, 1 stop bit.)
- (2) Turn off the secondary cabinets (slots 17–31).
- (3) Turn on the secondary cabinets while watching the power-up messages on the terminal. You should see:
 - Boot Version 4.0 (827.8536 U25, CPU020-EXP, Slave) AXXESS 4.x Call Processing Quad
- (4) If you do not see the correct information, upload the version 4.X *Premium* software from the programming PC to the CPU020/PCM Card as outlined on page 3–73 in the manual.

New FCC Part 68 PBX Rating

The AXXESS System is now officially rated as a PBX system by the FCC. The official registration number is: BE2USA-24359-PF-E. This means the AXXESS System now carries all three ratings: KF (key system), MF (hybrid system), and PF (PBX system).

New Fax Card Model

The optional Fax Card described in the Issue 4 manual has been superseded by a newer model. (Note that the part number for the new model card remains 550.5122). If installing one of these newer model cards (which can be identified by the drawing on page 40), use the instructions outlined below in place of step 8 on page 3–108 in the manual.

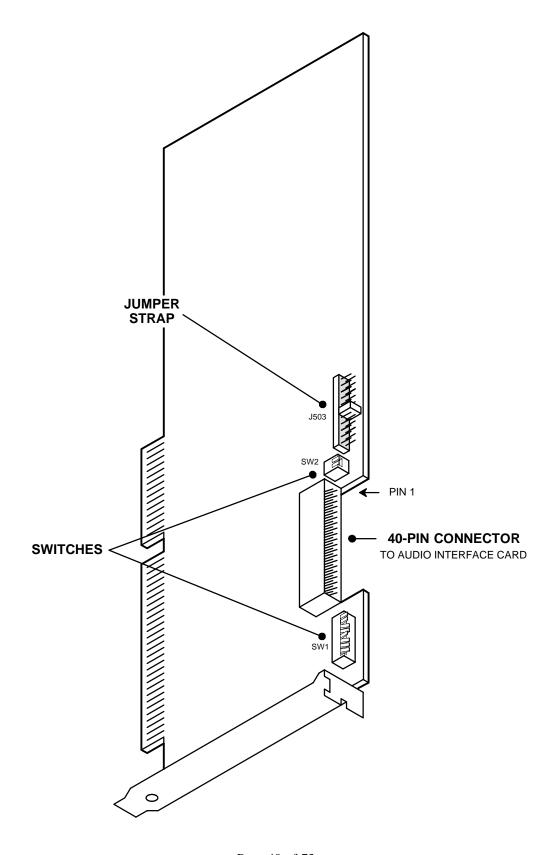
- (1) If desired and if not already installed, install the optional Fax Card as follows (refer to drawing on page 40):
 - a. Remove the bracket that covers the opening to the appropriate 16-bit (full-size) slot, and set the bracket and screw aside. (Refer to Figure 3–57 on page 3–111 in the manual for a sample card slot arrangement.)
 - b. Check to make sure that a jumper strap is placed over the middle two pins (IRQ9) of interrupt jumper J503 (refer to drawing on page 40).
 - c. Ensure that the eight address selection DIP switches (SW1) are set to 320 hex: 1–3 & 5–6 = ON (down); 4 & 7–8 = OFF (up).
 - d. Check to make sure the two MVIP clock termination DIP switches (SW2) are set in the OFF (up) position.

- e. Insert the Fax Card in the appropriate slot and attach it to the chassis using the screw removed in step 8a. Make sure the card is securely attached to the PC Motherboard and does not touch any adjacent cards.
- f. Attach the next available connector on the AIC-to-VPC interface cable to the 40-pin

connector on the Fax Card. (One end of the cable was previously attached to the 40-pin connector on the AIC.)

NOTE: Be sure that the colored edge of the AIC-to-VPC interface ribbon cable aligns with pin 1 on the connector.

FIGURE 5. OPTIONAL FAX CARD



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New PC Motherboard

The 80486 PC Motherboard described in the Issue 4 manual has been superceded by a newer 80486 model. The part number for the new model motherboard is 550.5189. See the drawings below and on the next page for diagrams of the new motherboard and its changes to the layout on the back of the PC.

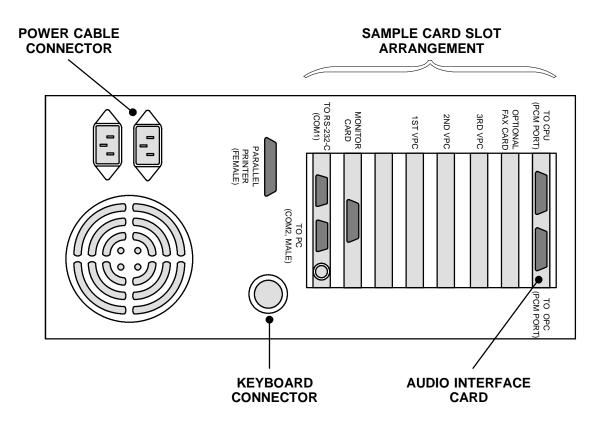
The new model has the floppy and hard disk controllers built into the motherboard and therefore does not require a separate Disk Controller Card. Also, the COM2 serial port on the back of the PC now has a DB9 connector rather than a DB25 connector. (To use the DB25

modular adapter from the optional SMDR retrieval cable kit, first attach a straight-through DB9-to-DB25 converter.)

Config.sys File Change

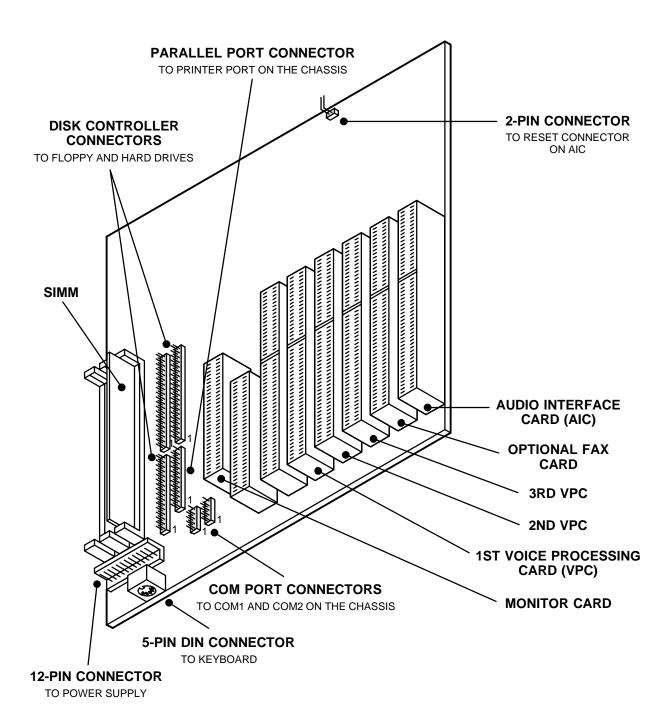
The new version AXXESSORY Talk applications software modifies the PC's config.sys file to use memory address \$D0000 rather than \$E0000. This change was necessary to support the new PC Motherboard model (described in the previous section). Note that this new address also works with all previous AXXESSORY Talk PC Motherboards.

FIGURE 6. SAMPLE BACK OF ASSEMBLED AXXESSORY TALK PC



NOTE: Depending on the model of PC being used, the sample card slot arrangement and connector locations shown above could vary somewhat.

FIGURE 7. SAMPLE PC MOTHERBOARD CARD SLOT ARRANGEMENT



NOTE: Depending on the model of PC Motherboard being used, the sample card slot arrangement and the location of the reset connector shown above could vary somewhat.

ACD Agent IDs

There is a new ACD hunt group option that allows the use of Agent ID numbers in place of station extensions in the hunt group list.

NOTE: For optimum system performance, there should not be more than 1000 Agent IDs in any hunt group and no more than 2000 Agent ID entries in all hunt groups combined.

ACD hunt group members are referred to as "agents." Agents log in to the ACD hunt group to receive calls and log out to halt ACD hunt group calls. An ACD hunt group can now be programmed to circulate calls to agents in two ways:

- Agent IDs: If the hunt group is programmed to use ACD Agent IDs, each agent is assigned an Agent ID number to enter during the login procedure (described below). The hunt group calls are routed to logged in agents, according to their Agent ID number instead of their station extension. Because the Agent ID is not associated with any station extension, the agent can use any station in the system to log in and does not have to use the same station every time.
- **Members:** If the hunt group *is not* programmed to use Agent IDs, it will have a list of stations and will send calls to the stations where agents are logged in.

There can be up to 1000 Agent IDs in the system.

ACD Agent IDs can be included in Extension Lists. This allows several ACD Agents to receive a call at once.

The ACD Hunt Groups premium feature must be enabled for this feature to be used.

When a call camps on to an ACD hunt group that uses Agent IDs, only the agents currently logged in to the hunt group will receive camp-on indications.

ACD hunt group supervisors will receive visual campon displays if they are programmed as members of the hunt group and have the ACD Agent Logout feature enabled.

ACD Agent Login Changes

With the addition of the ACD Agent ID feature, the log in and log out procedures changed. They are described on page 4–18 in the manual. (The log out procedure using the code described on page 4–19 of the manual did not change.)

There are two feature codes that can be used for logging in to the ACD hunt groups:

- **ACD Agent Login:** This performs only the logging in operation.
- ACD Agent Login/Logout: This is a toggle feature code that logs the station in or out of all associated ACD hunt groups at once.

If the ACD Login/Logout feature code is programmed in a user-programmable key with a lamp, the lamp will be *lit* when the agent is logged in to any ACD hunt group, and *unlit* when the agent is logged out of all ACD hunt groups.

The new procedures are as follows:

TO LOG OUT OF ALL OF YOUR ACD HUNT GROUPS AT ONCE USING THE LOGIN/LOGOUT FEATURE CODE:

While on or off hook (single-line users must lift the handset), enter the ACD Agent Login/Logout feature code (328). The display shows AGENT LOGGED OUT OF ALL ACDS and you hear a confirmation tone. Hang up if off hook.

TO LOG IN TO ALL OF YOUR ACD HUNT GROUPS AT ONCE USING THE LOGIN/LOGOUT FEATURE CODE:

- (1) While on or off hook (single-line users must lift the handset), enter the ACD Agent Login/Logout feature code (328). *If you were already logged in*, the display shows AGENT LOGGED OUT OF ALL ACDS and you hear a confirmation tone. *If you were not logged in*, continue to the next step.
- (2) The display shows AGENT LOGIN AGENT ID. Do one of the following:

To log into all ACD hunt groups for which you have an Agent ID: Enter your Agent ID. The display shows AGENT LOGGED INTO ALL ACDS. You are logged into only the ACD hunt group(s), that use the Agent ID that you entered. Hang up if off hook. If another agent is already logged in at this station, you hear reorder tones and the display shows DIFFERENT AGENT ID ALREADY USED. You must have the other agent log out before you can use that station.

To log into all of your ACD hunt groups that do not use Agent IDs: Press #. The display shows AGENT LOGGED INTO ALL ACDS. You are logged into only the ACD hunt group(s) that do not use Agent IDs. Hang up if off hook.

TO LOG IN TO ONE OR MORE HUNT GROUPS USING THE ACD AGENT LOGIN FEATURE CODE:

- (1) While on or off hook (single-line users must lift the handset), enter the ACD Agent Login feature code (326). The display shows AGENT LOGIN ACD NUMBER.
- (2) Enter the pilot number of the desired ACD hunt group. (Or you can press # to log in to several ACD hunt groups at once.)
 - *If you entered an invalid hunt group number*, the display shows NOT AN ACD HUNT GROUP and you hear reorder tones.
- (3) The display shows AGENT LOGIN AGENT ID. Then do one of the following:

To log into to ACD hunt group(s) using Agent IDs: Enter your Agent ID. The display shows AGENT LOGGED INTO ALL ACDS. You are logged into *only* the ACD hunt group(s) that you requested in step 2, that use the Agent ID that you entered in

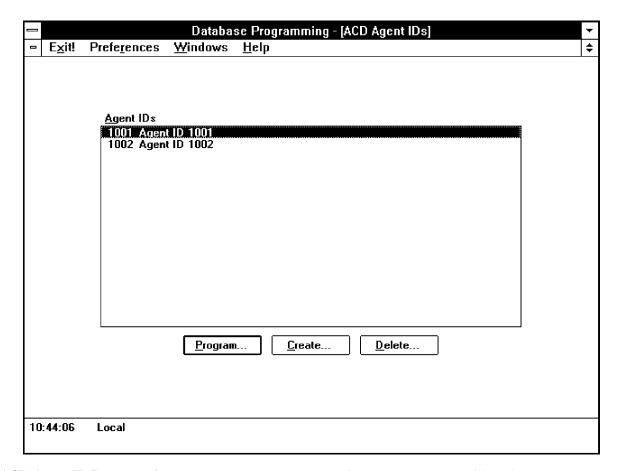
this step. If another Agent ID is already logged in at this station, you hear reorder tones and the display shows DIFFERENT AGENT ID ALREADY USED. You must have the other agent log out before you can use that station.

To log into to ACD hunt group(s) that do not use Agent IDs: Press #. The display shows AGENT LOGGED INTO ALL ACDS. You are logged into *only* the ACD hunt group(s) that you requested in step 2, *that do not use Agent IDs.*

If you were already logged in, the display shows ALREADY LOGGED INTO *<hunt group>*.

If you are not a member of the entered hunt group, the display shows NOT AN AGENT IN THIS HUNT GROUP and you hear reorder tones. Start over.

(4) If off hook, hang up. Repeat this procedure to log into additional ACD groups, if necessary.



ACD Agent ID Programming

The "ACD Agent IDs" programming option appears in the main screen (shown on page 6–23 of the manual) when you select System-Wide Programming. The new option is located between "Account Code Information" and "ARS Programming." The abbreviated command for ACD Agent IDs is "AGID" (other abbreviated commands are shown on page 6–25 in the manual).

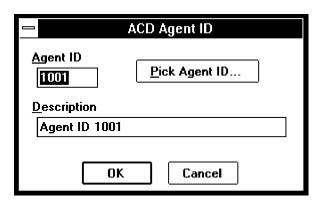
New program planning sheets for Hunt Groups and Agent IDs are included on page 49.

When you select the ACD Agent IDs option from the System-Wide Programming menu, the window shown above appears. Use the following procedures to create, program, or delete Agent IDs.

PROGRAM or CREATE: To create a new ACD Agent ID, select the Create command button. Or, to program an existing Agent ID, highlight the Agent ID to be programmed and select the Program command button. The Window at the right appears:

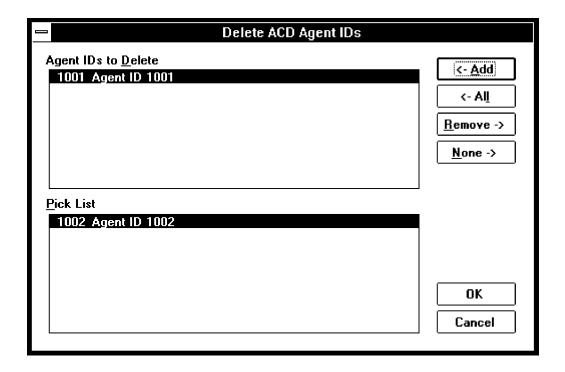
number of up to five digits. If desired, you can use the Pick Agent ID command button to view a list of available numbers and select your Agent ID from the list. (Do not enter the same number as an exist-

ing Agent ID, or you will receive an error message when you try to exit.)



- **DESCRIPTION:** Enter a description for the Agent ID. You can use up to 20 characters.
- OK/CANCEL: When you have entered the Agent ID and its description, select the OK command button to exit and save the information. Or, to exit without saving your entry, select the Cancel command button.

DELETE: To delete one or more Agent IDs, select the Delete command button. A window appears as shown on the next page.



When you select the Delete command button shown on the previous page, the window above appears.

AGENT IDs TO DELETE/PICK LIST: Agent IDs are listed in the Pick List box. To select the IDs to be deleted, use the following command buttons:

• ADD/ALL: Use the Add command button to move the highlighted ID from the Pick List to the Agent IDs To Delete list, or use the All command button to place all IDs in the Delete list.

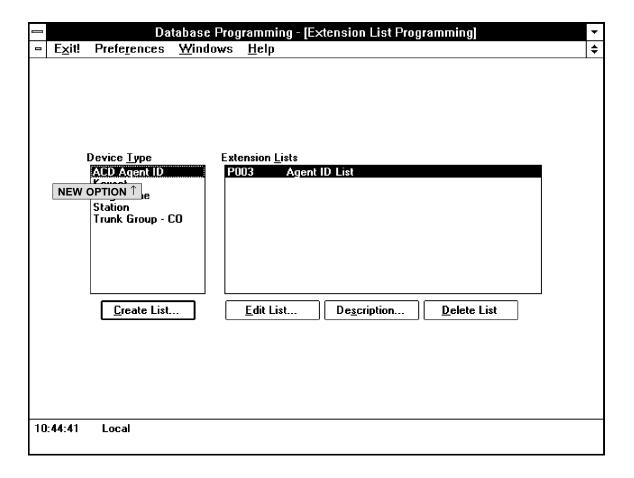
• **REMOVE/NONE:** To remove an Agent ID from the Delete list, highlight it and select the Remove command button. Or, to remove all Agent IDs, use the None command button.

OK/CANCEL: When the Agent IDs To Delete list appears as desired, select the OK command button to delete the selected IDs. Or, to exit without deleting any IDs, select the Cancel command button.

ACD Agent ID Extension List Programming

There is now a new type of extension list for Agent IDs, as shown in the screen below. This type of extension

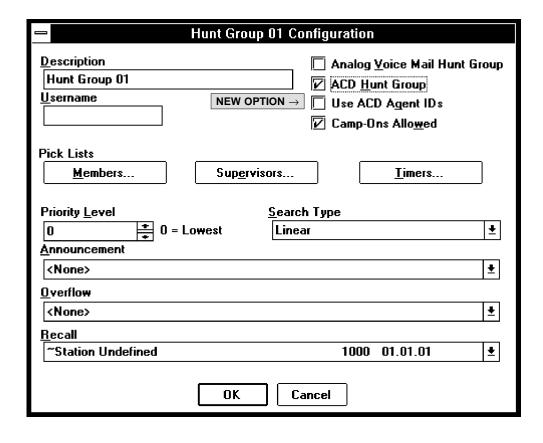
list includes only ACD hunt group Agent IDs. The lists are programmed as described on page 6–78 of the manual. If no Agent IDs have been created, this option cannot be used.



ACD Hunt Group Programming For Agent IDs

ACD Hunt groups can now be programmed to route calls on the basis of Agent IDs, as shown in the new hunt group screen below. ACD Agent IDs can be included in Extension Lists, which allows several Agent IDs to receive a call at once.

The new hunt group flag is "USE ACD AGENT IDs." If the ACD Hunt Group Option is checked, you can choose to route calls according to ACD Agent ID numbers instead of station extensions. When the Use ACD Agent IDs option is checked, the "Members" command button changes to an "Agents" command button. The Agent ID list is programmed exactly as described for the member list on page 6–93 of the manual.



Hunt Group Program Planning Sheet

TO USE: (Make sufficient copies of this page and fill in information for each hunt group.)

Hunt Group Number:	
Description:	
Username:	
Extension Number:	
Announcement Station:	
Overflow Station:	
Recall Destination:	
Analog Voice Mail?	Yes or No
ACD?	Yes or No
Use ACD Agent IDs?	Yes or No
Camp On Allowed?	Yes or No
Priority Level:	
Search Type:	Linear or Distributed or Longest Idle or Balanced
Supervisor(s):	

Agent ID Program Planning Sheet

TO USE: (Make sufficient copies of this page and fill in information for each Agent ID.)

AGENT ID NUMBER	DESCRIPTION

Primary Rate T1 Service

Primary Rate T1 service is already described in the Issue 4 manual. (See pages 2–22, 3–68, 4–21, 4–22, 6–138, 6–139, 6–143, 6–252, 6–262, 7–4, and 8–3.) However, the following additional information may be helpful in installing and programming Primary Rate T1 Service.

Specifications

On the AXXESS System, primary rate T1 service must be 23B+D. Primary Rate service is available only on AXXESS Systems equipped with CPU020/PCM cards. It cannot be used on systems with CPU/MEM cards.

NOTE: For version 4.1 and 4.2 Software: For optimal system performance, no more than four T1 Cards should be equipped with PRI Daughter Cards. For version 4.3 Software: For optimal system performance, no more than six T1 Cards should be equipped with PRI Daughter Cards.

The available ISDN services are shown in the chart below. They are divided into two categories: services supported by AXXESS and unsupported services. If the B-channel trunks provide an unsupported service, the system will still function properly. However, it will not make use of the service.

	1
SUPPORTED BY AXXESS	UNSUPPORTED
 Automatic Number Identification (ANI) B-Channel Negotiation On-Demand B-Channel Selection Dialed Number Identification Service (DNIS) 	 Calling Party Number D-Channel Backup Flexible Billing Network Ring Again Non-Facility Associated Signaling (NFAS) Primary Rate Interface Nodal/Centrex Express PRI & Private Line Integration Switched Digital Services User-To-User Information Wide Area ACD AT&T Call-By-Call Service Selection

The AXXESS System is designed to support only AT&T 4ESS, AT&T 5ESS (not 5ESS National ISDN), and DMS-100/250 switch types. *No other switch types are currently supported by the AXXESS system.*

NOTE: Primary Rate trunks that are not subject to toll restriction will not return dial tone. This is because these unrestricted trunks are treated as if they are connected to another AXXESS System. Therefore, no dial tone is provided, no digits are collected, and the setup is immediate.

When ordering Primary Rate Interface services, refer to the following chart for the information your carrier will need to know:

Protocol	Custom ISDN only (we do not support National ISDN)
Signaling	Clear Channel 64Kbs
Framing	ESF
Coding	B8ZS
Jack Type	RJ48C
Data	Normal (not inverted)
Glare	CPE Yields on Incoming Calls

Terminology

Some common terms associated with Primary Rate and ISDN include the following:

2B+D: A 2B+D circuit is divided into two 64 kbps B-channels that can carry voice, video, or data. It also has a 16 kbps D-channel for low-speed data and signaling. There are two types of 2B+D interfaces that use different wiring: the "U" interface uses a single twisted pair and the "S/T" interface uses two twisted pairs. This is also referred to as "Basic Rate Interface (BRI)." *This is not supported in AXXESS version 4.X software.*

23B+D: A 23B+D circuit is divided into 23 B-channels (64 kbps each) that can carry voice, data, and video simultaneously. It also has a 64 kbps D-channel for out-of-band signaling, call control, and packet data. (**NOTE:** The AXXESS System does not support the use of the D-channel for packet data.). This interface uses two twisted-pairs of wire. This is also referred to as "Primary Rate Interface (PRI)."

30B+D: This is the standard European ISDN interface. A 30B+D circuit is divided into 30 B-channels (64 kbps) that can carry voice, data, and video simultaneously. It also has a 64 kbps D-channel for out-of-band signaling and call control, and one framing channel. This interface uses two twisted-pairs of wire.

Automatic Call Number Identification (ANI): Automatic Numbering Identification (ANI) information identifies the caller's telephone number. The system receives a specified number of digits. *ANI* is another type of ANI that does not require a specified number of digits. The system receives a star (*) before the ANI digits to signal the beginning of the caller's telephone number. Then there is another star after the digits to signal the end of the ANI information.

B-Channel: The B-channel, or "bearer" channel, is the basic component of ISDN interfaces. A B-channel can transmit or receive voice or data at up to 64,000 bits per second (64 kbps).

B-Channel Negotiation: This allows the AXXESS System to request the channel that will be used for each call. When the AXXESS System requests a specific B-channel for an outgoing call, the network decides which channel will be used. However, if the channel selected by the network is not the requested channel, the AXXESS System will release that channel (if seized) and attempt to re-initiate the call using the channel specified by the network. (For an incoming call, the AXXESS System does need to request a channel.)

Bandwidth: The bandwidth of a device determines the frequency range it can handle. Different types of communications use different bandwidths. For example, telephone communication requires a relatively narrow bandwidth, while video requires a wide bandwidth.

Basic Rate Interface (BRI): Also called 2B+D, BRI provides two 64 kbps B-channels that can carry voice or data and a 16 kbps D-channel for low-speed data and signaling. This can be used for homes and Centrex sites that do not require PRI. *This is not supported in AXXESS version 4.X software.*

Calling Party Number Service: This service provides the calling party's line number (not billing number) to the called party. *This is not supported in AXXESS version 4.X software.*

D-Channel: The data channel, or D-channel, carries the signaling information at 64 kbps for the B-channels in a Primary Rate Interface or at 16 kbps in a Basic Rate Interface.

D-Channel Backup: Because the D-channel supports the other channels in the ISDN network, loss of the D-channel would cause loss of access to the ISDN circuits. D-channels can be backed up to provide protection in the event of D-channel loss. D-channel backup is especially important in Non-Facility Associated Signaling (NFAS), because the D-channel supports all

of the B-channels in the *entire* network. *This is not sup*ported in AXXESS version 4.X software.

Dedicated Service: Dedicated service reserves a group of B channels for a specific function, such as outgoing calls. The AXXESS system uses trunk group programming to determine how the channels are used. Therefore, the system would require a separate trunk group for each function. The installer can create "PBX-provided" dedicated service on call-by-call circuits through database programming (such as incoming only or accessible only to a group of users) or the service provider can determine the dedicated service.

Dialed Number Identification Service (DNIS): DNIS identifies the number that the caller dialed to reach your location. The system receives a base number and a specified number of digits that identify the dialed number. *DNIS* is a form of DNIS that does not have a specified number of digits. The system receives a star (*) before the DNIS digits to signal the beginning of the dialed number. Then there is another star after the digits to signal the end of the DNIS information.

Flexible Billing: Flexible billing allows a 900 subscriber to modify a call's billing rate while speaking with the caller. *This is not supported in AXXESS version 4.X software.*

H0 and H11: These are switched digital service types that combine contiguous B-channels into a single bit stream. H0 combines six channels into a 384 kbps bit stream. H11 combines 24 channels into a 1536 kbps bit stream. Applications for these services include video conferencing and LAN connections. *This is not supported in AXXESS version 4.X software.*

Integrated Services Digital Network (ISDN): ISDN is a network of channels that can provide simultaneous voice, data, and video communication.

Multi-Rate ISDN: This type of switched digital service allows the user to dial up, on demand, any number of combined B-channels. *This is not supported in AXXESS version 4.X software.*

N X 64 kbps: This switched digital service type combines the B-channels into a single bit stream. Applications for this service include video conferencing and LAN connections. *This is not supported in AXXESS version 4.X software.*

Network Ring Again: Network ring again is like the AXXESS queue feature that allows a caller to queue on to a busy station and then be called when the station is available. However, network ring again allows queuing between two PBXs that are on the same ISDN network. *This is not supported in AXXESS version 4.X software.*

Non-Facility Associated Signaling (NFAS): When a site uses several Primary Rate Interface circuits, the D-channel on one circuit can support the B-channels on other circuits, providing one additional B-channel per circuit (that is, 24 B-channels instead of 23B+D). This is called Non-Facility Associated Signaling or NFAS. This arrangement also requires D-channel backup. *This is not supported in AXXESS version 4.X software.*

On-Demand B-Channel Selection: This feature allows on-demand allocation of B-channels. With on-demand B-channel selection, all B-channel trunks can be assigned to one trunk group and then programmed to be used as needed (ARS, outgoing access, etc.). This feature takes full advantage of the AXXESS System features (trunk groups, ARS, and call routing) and allows maximum on-demand use of the bandwidth. This can be combined with Dedicated Service.

Primary Rate Interface (PRI): This is the ISDN circuit that provides B-channels that can carry voice, data, and video simultaneously. It also has one D-channel for out-of-band signaling and packet data. (**NOTE:** The AXXESS System does not support the use of the D-channel for packet data.) See also 23B+D and 30B+D.

Primary Rate Interface Nodal/Centrex Express: This service type allows communication between a PBX system and a Centrex system. *This is not supported in AXXESS version 4.X software.*

Private Line Integration: This allows the system to have private lines using individual channels. The D-channel is not used on the private lines. *This is not supported in AXXESS version 4.X software.*

Switched Digital Services: Switched digital services provide ISDN over a single telephone line by combining several B-channels into a single bit stream. Switched digital service types include H0, H11, Multirate, and N X 64 kbps. *This is not supported in AXXESS version 4.X software.*

Two-Stage Caller Identification (*ANI*DNIS*): This is a two-stage address service that provides both the caller's telephone number and the dialed number. It combines the *ANI* and the *DNIS* features described above.

User-To-User Information (UUI): This type of ISDN service allows two users to share and manipulate data over the D-channel while maintaining a voice connection on a B-channel. For example, both parties can view the same document, discuss it, edit it and see the changes as they are made. *This is not supported in AXXESS version 4.X software.*

Wide Area Automatic Call Distribution (ACD): Like the AXXESS ACD feature, this service can distribute calls to provide faster service. However, Wide Area ACD allows the calls to be sent to other PBXs in the network. *This is not supported in AXXESS version 4.X software.*

Customized AXXESSORY Talk Prompts

All of the pre-recorded prompts in AXXESSORY Talk can now be customized, using the Voice Mail System Administrator's mailbox.

If the Multilingual feature is enabled, and the Japanese prompts have been loaded, the System Administrator can change either the English prompts or the Japanese prompts. When the System Administrator's keyset is in English mode, the English prompts will be changed when the following procedure is performed. If the System Administrator's keyset is in Japanese mode, the Japanese prompts will be changed.

Re-Recording System Prompts

TO RECORD CUSTOM SYSTEM PROMPTS (OR RESTORE SYSTEM PROMPTS):

- (1) Dial the Voice Mail application access number. You hear the main menu.
- (2) During or after the greeting, press * to identify yourself as a subscriber.
- (3) Enter the System Administrator mailbox number and password.
- (4) Press 9 to access the System Administrator's Menu.
- (5) When you hear the System Administrator Menu, press 6 to select the System Prompt Replacement option.
- (6) Enter the desired prompt number (001–545) followed by # or ACCEPT. If the number is valid, the current system and/or custom prompt is played. (*If the number is not valid,* you hear an error message and must choose another prompt number.)
- (7) Do one of the following:

To	hear	the	prompt	again,	press	1	
----	------	-----	--------	--------	-------	---	--

If you wish to replace the current system or custom prompt with a new custom prompt, press and continue to the next step.

To delete a custom prompt and reinstate the system prompt, press $\boxed{9}$.

If you wish to leave the prompt unchanged and return to the previous menu, press *.

(8) Record the new prompt. (*To pause while recording the prompt*, press 2. To continue, press any key.)

- If the AXXESSORY Talk PC disk is full, a prompt will notify you that it cannot accept your prompt. Hang up and try again later.
- (9) When you have completed recording your prompt, you have the following options:

If you are satisfied with your prompt, hang up.

If you wish to hear your prompt, press 1.

If you wish to add to your prompt, press 2 and continue your prompt as described in step 3.

To erase and re-record your prompt, press 3.

Default System Prompts

The following is a list of all pre-recorded prompt numbers and their text. The Japanese prompts have the equivalent text in the same prompt numbers. If you change any of the prompts, you should create a chart like this one, showing the new text.

NOTE: If you change the text of the prompts, be sure you keep the content similar to the default text. Otherwise, the prompts will not make sense to the listeners when played by AXXESSORY Talk.

#	PROMPT
001	To leave a message, please enter a mailbox number.
002	For the directory, press POUND.
003	To reach an operator, press 0.
004	I'm sorry
005	is not available.
006	The number entered is not valid.
007	Using the keys on your telephone, please spell the last name of the person, then press POUND. For the letter Q, press 7. For the letter Z, press 9.
008	To exit the directory, press STAR.
009	Mailbox number
010	If this is correct, press POUND.
011	For the previous name in the directory, press 1.
012	To hear additional information, press 2.
013	To hear the next directory name, press 3.
014	To spell a new name, press 4.
015	Extension number
017	is not a valid choice.
018	Please try again.

#	PROMPT
019	After the tone, please record your message. When finished, you may hang up to deliver the message or press POUND for more options.
020	Message delivered.
021	To replay, press 1.
022	To erase and re-record, press 3.
023	To append this recording, press 2.
024	To accept, press POUND.
025	Please record after the tone. To end, press POUND.
026	Recording erased.
027	Recording stopped.
028	Please begin speaking after the tone.
029	Message play stopped. To continue, press POUND.
030	Enter the destination mailbox or group list number.
031	Logon canceled.
032	Enter your password. Then press POUND.
033	There have been 3 invalid attempts to log onto your mailbox.
034	Invalid password.
035	Thank you for calling. Good-bye.
036	To access voice mail features, you must change your system-assigned password.
037	You have not finished setting up your mailbox.
038	Subscriber access denied.
039	Because this is the first time you are entering your mailbox, you must record your name for the company directory.
040	Since you are entering your mailbox for the first time, you should be aware of a few standard features. To cancel an option you have accessed and return to the previous menu, press STAR. To accept your recording or dialing sequence, or to advance to your next message, press POUND. For help, you may press 0 at any time you are at a menu and voice mail will replay the current menu and or give you additional information. Certain voice mail features such as remote messaging are available from your mailbox only if authorized by your system administrator. Your mailbox is now fully set up.

#	PROMPT
041	Your password may be up to 12 digits.
042	Enter your new password, then press POUND. If you don't want a password, press POUND now.
043	You new password is
044	The number entered is too long.
045	To accept this entry, press POUND.
046	To erase and re-enter, press 3.
047	Password erased.
048	Password saved.
049	Your mailbox is full and cannot receive any new messages. Please delete old messages.
052	Your mailbox is almost full. Please delete any messages you no longer need so new messages may arrive.
053	You have
054	You have one new message.
055	new messages.
056	of which is priority.
057	You have no new messages.
058	You have one saved message.
059	saved messages.
060	Remote messaging is currently enabled.
061	To listen to new messages, press 1.
062	To record a message, press 2.
063	To listen to saved messages, press 3.
064	For personal options, press 4.
065	To setup remote messaging, press 5.
066	For your primary setup, press 1.
067	For your alternate setup, press 2.
068	If this is the correct destination, press POUND.
069	To send this message now, press POUND.
070	For special delivery options, press 9.
071	To return to the previous menu, press STAR.
072	Message canceled.
073	To mark this message private, press 1.
074	To mark this message for certified delivery, press 2.
075	To mark this message priority, press 3.

#	PROMPT		
076	Message marked private.		
077	Message marked certified.		
078	Message marked priority.		
079	To send this message to additional mailboxes, press POUND.		
080	To backup within your message or recording, press 1.		
081	To pause at any time, press 2.		
082	To advance press 3.		
083	To lower the voice mail volume, press 4.		
084	To increase volume, press 6.		
085	To save this message, press 7.		
086	To delete this message, press 9.		
087	To skip to the end of your message or recording, press POUND.		
088	To return to the main menu, press STAR.		
089	To reply to this message, press 2.		
090	To forward a copy of this message to another destination, press 3.		
091	To skip back to the previous message, press 4.		
092	To replay the message envelope, press 5.		
093	To listen to your next message, press 6.		
094	There are no previous messages.		
095	Message saved.		
096	Message deleted.		
097	There are no further messages.		
098	Message received		
099	at		
100	from		
101	totaling		
102	minutes		
103	minute		
104	seconds		
105	second		
106	Message received from an outside caller.		
107	To record an introduction with a copy of this message, press 1.		
108	To change your personal greeting, press 1.		
109	To change your name in the directory, press 2.		

#	PROMPT		
110	To change your password, press 3.		
111	To change your message envelope, press 4.		
112	To replay the message, press 1.		
113	To use your primary greeting, press 1.		
114	To select your alternate greeting, press 2.		
115	To select the system greeting, press 3.		
116	After the tone, please record your greeting, then press POUND.		
117	Greeting saved.		
118	After the tone, please record your name, then press POUND.		
119	Name saved.		
120	Your message envelope is currently set to return		
121	all information.		
122	time and date		
123	message source		
124	and		
125	message length		
126	To turn on all envelope options, press 4.		
127	For message source, press 2.		
128	For message length, press 3.		
129	This option is now off.		
130	This option is now on.		
131	For time and date, press 1.		
132	Your message envelope will play all options.		
133	is turned on to call you at		
134	AM		
135	PM		
136	Extension ID number		
137	Every day.		
138	Monday through Friday.		
139	Sunday		
140	Monday		
141	Tuesday		
142	Wednesday		
143	Thursday		
144	Friday		

#	PROMPT		
145	Saturday		
146	To turn this number on or off, press 1.		
147	To change the phone number, press 2.		
148	To change times of day, press 2.		
149	To change days of the week, press 3.		
150	For pager notification, press 1.		
151	For personal phone notification, press 2.		
152	For notification of all new messages, press 1.		
153	For priority-only, press 2.		
154	Please enter the destination telephone number and wait for further instructions.		
155	The new number is		
156	Please enter the start time.		
157	Please enter the stop time.		
158	I'm sorry. You must program a telephone number first.		
159	Invalid time.		
160	For AM, press 1.		
161	Please select the days of the week on which you wish to be notified.		
163	Please enter your mailbox number.		
164	Today		
165	Yesterday		
166	January		
167	February		
168	March		
169	April		
170	May		
171	June		
172	July		
173	August		
174	September		
175	October		
176	November		
177	December		
178	First		
179	Second		
180	Third		
181	Fourth		

#	PROMPT		
182	Fifth		
183	Sixth		
184	Seventh		
185	Eighth		
186	Ninth		
187	Tenth		
188	Eleventh		
189	Twelfth		
190	Thirteenth		
191	Fourteenth		
192	Fifteenth		
193	Sixteenth		
194	Seventeenth		
195	Eighteenth		
196	Nineteenth		
197	Twentieth		
198	Twenty-first		
199	Twenty-second		
200	Twenty-third		
201	Twenty-fourth		
202	Twenty-fifth		
203	Twenty-sixth		
204	Twenty-seventh		
205	Twenty-eighth		
206	Twenty-ninth		
207	Thirtieth		
208	Thirty-first		
209	the voice mail system.		
210	The system is set to notify you between		
211	is turned off.		
212	is turned on to call your pager at		
213	with all new messages.		
214	with all priority messages.		
215	starting at		
216	ending at		
217	For mailbox and group list maintenance, press 2.		
218	To send a message to all subscribers, press 1.		

#	PROMPT		
219	To make a custom recording, press 1.		
220	To select a custom recording, press 2.		
222	Please enter the recording number.		
223	After the tone, please record. Then press POUND.		
224	Recording saved.		
225	To continue recording, press POUND.		
227	No saved messages.		
228	To change and spell the first name, press 5.		
229	To change and spell the last name, press 5.		
230	Using the keys on your telephone, please spell the first name of the person. Then press POUND. For the letter Q, press 7. For the letter Z, press 9.		
231	No message left.		
232	last		
233	an outside caller at		
234	Message was sent from		
235	This matches the mailbox of		
236	an unknown caller.		
237	To turn off the envelope, press 5.		
238	To accept the changes, press POUND.		
239	The envelope is turned off.		
240	Please enter the application extension number.		
241	To select a day recording, press 1.		
242	To select a night recording, press 2.		
243	If this is the correct recording, press POUND.		
244	Warning, no recording has been made.		
245	Invalid application entered.		
246	is not a valid recording number.		
253	This is a return receipt verifying the message sent has been heard.		
254	I'm sorry. Private messages cannot be forwarded.		
255	This is the message center calling for		
256	If you are the correct person, press POUND.		
257	One		
258	Two		
259	Three		

#	PROMPT	
260	Four	
261	Five	
262	Six	
263	Seven	
264	Eight	
265	Nine	
266	Ten	
267	Eleven	
268	Twelve	
269	Thirteen	
270	Fourteen	
271	Fifteen	
272	Sixteen	
273	Seventeen	
274	Eighteen	
275	Nineteen	
276	Twenty	
277	Thirty	
278	Forty	
279	Fifty	
280	Sixty	
281	Seventy	
282	Eighty	
283	Ninety	
284	Hundred	
285	This mailbox is currently full and cannot receive new messages.	
286	Oh	
287	of which are priority.	
288	Priority message received	
289	Otherwise, press STAR.	
290	When you are finished entering mailbox numbers, press POUND.	
291	Otherwise, press POUND.	
292	For PM, press 2.	
293	For Sunday, press 1.	
294	For Monday, press 2.	
295	For Tuesday, press 3.	
296	For Wednesday, press 4.	

#	PROMPT		
297	For Thursday, press 5.		
298	For Friday, press 6.		
299	For Saturday, press 7.		
300	For Monday through Friday service, press 1.		
301	For all the days of the week, press 2.		
302	Thousand		
303	The hard disk is		
304	percent full.		
305	I'm sorry. Voice mail is full and cannot record any messages.		
306	Zero		
307	POUND		
308	STAR		
309	Group list number		
310	Please speak louder.		
311	You have recorded for the maximum time permitted.		
313	Resuming playback.		
314	You have one priority message.		
315	Use 2 digits for the hour and 2 digits for the minutes.		
318	You have chosen not to have a password.		
319	I'm sorry. This mailbox is currently in use and cannot be accessed. Please try again later.		
321	If you are calling from a rotary-type telephone, please stay on the line and your call will be answered.		
322	You can not reply to a system sent message.		
323	Zero is not a valid entry. To spell a name, please press one number on the telephone key pad for each letter of the person's name you are entering. For the letter A, press the number 2 key one time and for the letter F, press the number 3 key one time. When you are finished, press POUND.		
324	Zero is not a valid entry. To spell a name, please press the associated number on the telephone keypad with the desired letter of the person's name you are entering. For the letter A, press the number 2 key once. for the letter B, press it twice and for the letter C, three times. When you are finished, press POUND.		

#	PROMPT	
325	Please select the days of the week.	
326	To select individual week days, press 3.	
327	Service is set for Monday through Friday.	
328	Service is set for each day of the week.	
329	Recording canceled.	
330	The system was busy and could not deliver message notification at the specified time.	
331	The system was unable to deliver message notification due to a programming error.	
332	Extension ID	
333	the operator.	
334	the operator	
335	Remote Messaging will call	
336	To change a cascade level, press 1.	
337	To select a message notification category, press 4.	
338	Please enter the cascade level you wish to program.	
339	with a pager number of	
340	To change the pager dial string, press 3.	
341	To call an internal extension, press 1.	
342	To call an outside number, press 2.	
344	Please enter the digits for your digital pager and wait for further instructions.	
345	The new pager number is	
346	Mailbox Number	
347	New Message Count	
348	Pause	
349	You must program a telephone number first.	
350	You have chosen not to have a pager number.	
351	Cascade Level	
352	You did not enter a valid document number.	
353	This document is currently unavailable.	
354	is not a valid document number.	
355	You have already selected that document.	
356	To cancel, press STAR.	
357	You have selected the maximum number of documents allowed.	
358	To send your fax, press pound.	
359	You have selected one document.	

#	PROMPT		
360	You haven't selected any documents yet.		
361	You may select one more document during this call.		
362	You may select up to		
363	more documents during this call.		
364	Selections Canceled.		
365	The number that will appear on your fax cover sheet is		
366	You have chosen not to have your extension appear on your cover sheet.		
367	If you would like to have your fax automatically delivered to you later, press pound.		
368	To re-enter the number, press 3.		
369	If you wish to have your extension appear on your cover sheet, enter the extension followed by the POUND key.		
370	If you are calling from your fax machine, press 1.		
371	Press the start button on your fax machine now.		
372	All of our fax lines are currently busy.		
373	Please try again later.		
374	Your fax will be delivered to		
375	Your fax will be delivered shortly.		
376	I am unable to communicate with your fax machine. Please make sure it is operating properly and try again.		
377	Please enter the 10 digit area code and telephone number of your fax machine.		
378	The number you enter may be up to twenty digits in length.		
379	Your fax is scheduled to be delivered at		
380	Please enter a document number.		
381	When you have finished importing documents, press star.		
382	Document number		
383	is currently in use.		
384	already exists.		
385	To replace this document, press POUND.		
386	Document received.		
387	Press POUND to continue.		
388	To import a fax document, press 4.		

#	PROMPT	
389	If this is an international call, enter 011 followed by your country code and your fax number. Then, press POUND.	
390	I'm sorry. I'm not allowed to dial that number.	
391	To receive your documents, please hang up and call from your fax machine.	
392	The system does not have enough disk space to import your document.	
393	The system is unable to import your document because it will exceed the Maximum Fax Library Size.	
394	For recording options, press 3.	
395	There are	
396	calls ahead of you.	
397	Your call should be answered within	
398	You have selected	
399	documents.	
400	Hello, you've reached our voice messaging system.	
401	Hello, you've reached our automated call handling system.	
500	If you know your party's extension number, enter it now.	
501	To leave a message, press 1.	
502	To try another extension, press 2.	
503	Please hold while your call is being transferred to	
505	To return to the menu, press 2.	
506	Your fax is scheduled to be delivered on	
507	The system already contains the maximum number of fax documents allowed.	
508	The system does not have enough disk space to import any more documents.	
509	The system is currently at or above the Maximum Fax Library Size.	
510	Levels 1 through 9 are currently disabled.	
511	Your call will be answered in the order it was received.	
512	There is one call ahead of you.	
513	To change your transfer method, press 5.	
514	Your current transfer method is unannounced.	
515	Your current transfer method is screened.	

#	PROMPT		
516	Your current transfer method is announce only.		
517	To select unannounced transfers, press 1.		
518	For screened transfers, press 2.		
519	For announce only, press 3.		
520	Who should I say is calling?		
521	To replay the announcement, press 1.		
522	To send this call to voice mail, press 2.		
523	To forward this call to another extension, press 3.		
524	To accept this call, press POUND.		
525	To refuse this call, press STAR.		
526	You have a call from		
535	Please enter the extension number.		
536	Time updated.		
537	Date updated.		
538	For system prompt replacement or reinstatement, press 6.		
539	Please enter the number of the system prompt.		
540	The system prompt has been replaced by the following custom prompt		
541	The original system prompt is		
542	To replace this system prompt with a custom prompt, press 3.		
543	is not a valid system prompt number.		
544	To delete the custom prompt and reinstate the system prompt, press 9.		
545	To replace this custom prompt with a new custom prompt, press 3.		

Digital Keyset Enhancements

The Executive, Standard, and Basic Digital Keysets have the following enhancements:

- The Executive, Standard, and Basic Digital Keysets are now available with red/green LEDs. These new keysets have a slightly different faceplate layout than the previous versions. The new layouts and key values are shown on the next page. In the 4.0 software version, the FWD, SPKR, MUTE, and MSG keys were fixed-function keys and could not be programmed. In version 4.2 and 4.3 software, all keyset keys are programmable. (See pages 4–49, 6-54, and 6–59 in the manual for a list of default key values.)
- The red/green LED functions are described in more detail in the LED chart shown on page 62.
 This replaces the chart on page 4–51 of the manual.
- The new red/green LED keysets also have a different keycap on the Special Key; instead of special keys have on the keycap.
- The new red/green LED Standard and Basic keysets also have an extended volume range. The volume settings now range from 1 to 7, with db levels of -12, -8, -4, 0, +4, +8, and +12 respectively. The Executive keyset volume range is unchanged, with settings from 1–8 (db levels of -12, -8, -4, 0, +3, +6, +9, and +12 respectively).
- The red/green LED Executive keysets do not have the six display-oriented keys (PREVIOUS, NEXT, BACKSPC, FORWARD, CLEAR, CANCEL).
- Standard Digital Keysets are now available as display models only.
- Only digital keysets can be used for viewing Japanese prompts. Analog keysets do not support Japanese displays.

Digital Keyset Layouts:

EXECUTIVE KEYSET	STANDARD KEYSET	BASIC KEYSET
	1 7	1 5
	2 8	2 6
	3 9	3 12
	4 10	4 1 11
1 2 3 4 5 6	5	
7 8 9 10 11 12		
	6	
13 14 28 29	13 14 28 29	13 14 28 29
15 16	15 16	15 16
30 31	30 31	30 31
32 26	32 26	32 26
∇ Δ		V A
27	27	27

The keys are numbered to show the functions of the keys on the various maps. (Note that when a key is changed on one map, the corresponding key on any other keyset type in that map is automatically changed to match.) Blank keys are not programmable. The keys are defined as follows in the default key maps shown above:

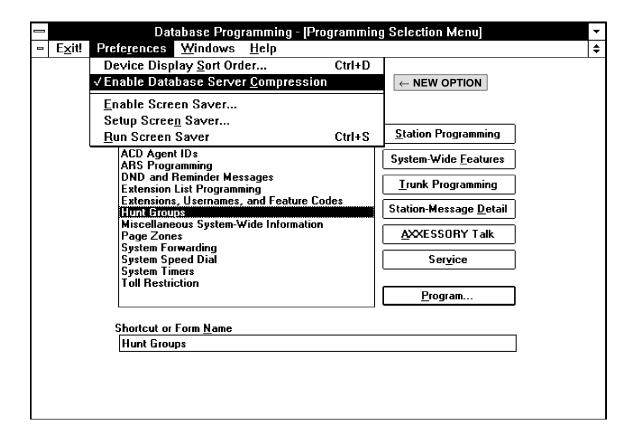
KEY	DEFINITION		
1	Call Key 1		
2	Call Key 2		
3	Call Key 3		
4	Call Key 4		
5	IC (Intercom)		
6	Programmable Key 1: Do-Not-Disturb		
7	Programmable Key 2: Undefined		
8	Programmable Key 3: Undefined		
9	Programmable Key 4: Undefined		
10	Programmable Key 5: Undefined		
11	Programmable Key 6: Undefined		

12	Programmable Key 7: Conference	
13	Programmable Key 8: Individual Hold	
14	Programmable Key 9: Transfer To Ring	
15	Programmable Key 10: System Speed Dial	
16	Programmable Key 11: Redial	
26	Forward	
27	Special (SPCL)	
28	Answer	
29	Outgoing	
30	Speakerphone On/Off	
31	Message	
32	Microphone Mute	

Keyset Light-Emitting Diode (LED) Indications

	STEADY 0 IPM	SLOW 30 IPM	MEDIUM 120 IPM	FAST 240 IPM	FLUTTER 60/960 IPM
DATA	Auto-dial modem is dialing and the data port is unavailable. (Red LED)			Ring signal is being sent to the data de- vice. (Red LED)	Data call is in progress and accessible. A continuous flutter indicates that the data device is off hook. (Red LED)
IC		Intercom call is in progress. (Green LED*)	Recalling intercom call is camped on. (Green LED*)	Intercom call is camped on (waiting). (Green LED*)	Intercom call is on hold. (Green LED*)
SPKR	Speakerphone is on or ready for use. Or, station programming is in progress. (Red LED)				
CNF		Conference is in progress. (Green LED*)	Conference is recalling your station. (Green LED*)		A conference party is on conference wait hold. (Green LED*)
MUTE	Microphone is muted. (Red LED)				
FWD	Calls are being forwarded. (Red LED)				
MSG	Station is in alphanumeric mode. (Red LED)		Message is waiting. (Red LED)		
DND	Your station is in do-not-disturb. (Red LED)				
SPEED DIAL or DSS	Station is busy or unplugged. (Red LED)	Station is in do-not-disturb. (Red LED)		Station has a call ringing in. (Red LED)	Continuous flutter indicates that the sta- tion was left off hook. (Red LED)
HUNT GROUP	All stations in hunt group are unavail- able. (Red LED)			Hunt group has a call camped on. (Red LED)	
CALL		Call is active at your station. (Green LED*)	Call is recalling from hold or transfer. (Green LED*)	Call or queue call- back is ringing in or camped on (waiting). (Green LED*)	Call is on hold. (Green LED*)
TRUNK	Trunk is in use at another station, in a conference at your station, or is un- plugged. (Red LED)	Trunk is in use at your station. (Green LED*)	Trunk is recalling from hold or trans- fer. (Red LED)	Trunk is ringing in or camped on (waiting). (Red LED if on another station or green if at your station*) Or, busy trunk queue callback to your station. (Green LED*)	Trunk is on hold. (Red LED if on another station or green if at your sta- tion*)

^{*}This applies only to keysets with red/green LEDs.



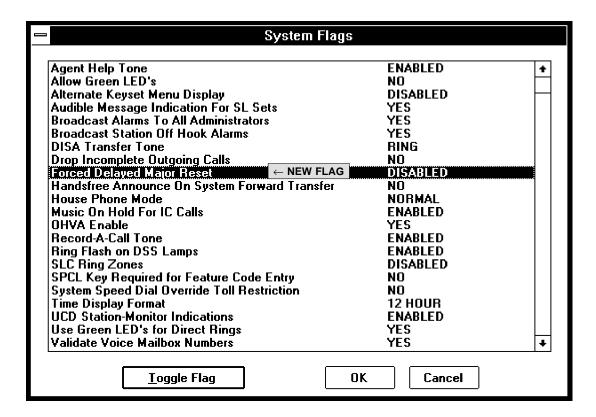
"Enable Database Server Compression" Preferences Flag

As shown above, a new "Enable Database Server Compression" flag was added to the Preferences drop-down menu in the Main programming screen. When this flag is checked, database programming information going through the CPU to the AXXESSORY Talk PC will be compressed to speed up data transfers.

When the system is in the default state, the database

information from the AXXESSORY Talk PC to the CPU is also compressed. This can be decompressed by entering a command at the AXXESSORY Talk PC. The command is _dbcompression=1<RETURN> for compression and _dbcompression=0<RETURN> for non-compression.

CAUTION: At default, data compression is enabled both through the CPU and through the AXXESSORY Talk PC. You should not disable either flag unless instructed to do so by Inter-Tel personnel.



"Forced Delayed Major Reset" System Flag

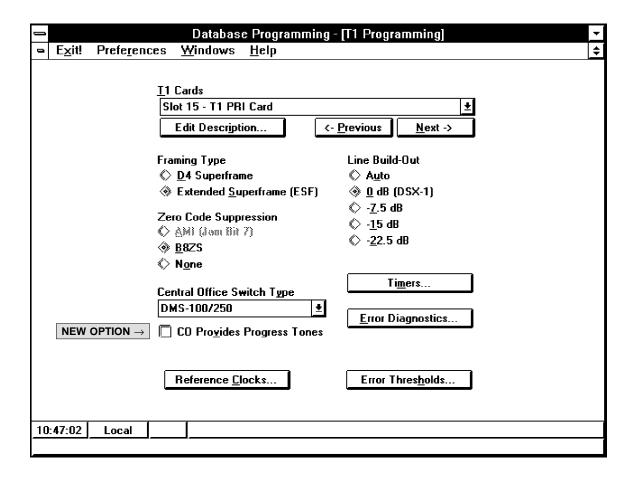
As shown above, a new "Forced Delayed Major Reset" flag was added to the System Flags screen.

Normally, the system will not perform a major reset if there are any active calls. However, if this flag is enabled, the system will force a major reset at a specified time. The time is either the default delayed major time or the user-specified delayed major time programmed in the Miscellaneous System-Wide Information screen. The default for this flag is "Disabled."

The major reset will cause all active calls on the system to be dropped. Because of this, the flag should be used only on systems which run on a 24-hour basis and do not have a consistent time, when all resources are idle, during which a normal delayed major reset can be performed.

This flag affects any request to perform a major reset, whether it be by the system itself for resource reconciliation, or requested by the programmer through the Database Save/Restore screen, Reset System command.

NOTE: If this flag is enabled, the installer should inform the customer that enabling this flag will drop all active calls at the specified delayed major time, should a major reset be necessary. This will not happen every day, but it will happen occasionally. The customers should be aware of this so that they do not mistake the reset for a system failure.



"CO Provides Progress Tones" T1 Programming Flag

As shown above, the "CO Provides Progress Tones" flag was added to the Trunk Programming — T1 Programming screen. This flag is used for T1C and T1/PRI boards only.

This flag was added because, when the AXXESS System provides local ringback, some central offices take too long to send the AXXESS System the connect message when a call is received. (This is particularly true in the UK.) When the CO connects a call too slowly, the

AXXESS user can answer before the caller is on the line, causing the caller to miss the greeting (such as "Welcome to Inter-Tel. How may I help you?").

If this flag is enabled, the AXXESS System does not provide local ringback. Instead, the AXXESS connects the call to the line and the caller hears CO ringback. That way, when the called party answers, the calling party is already on the line.

The flag is shown disabled in the sample screen above, because it is disabled by default. Most sites will not require this flag and it is best to leave it disabled unless the delayed-connect problem occurs.

Canadian Information

The AXXESS System has been tested and certified for installation in Canada. Following is a list of Industry Canada regulations which are similar to the FCC regulations already included in the manual.

INDUSTRY CANADA REGULATIONS

NOTICE: The Industry Canada label identifies certified equipment. This certification means that the equipment meets certain telecommunications network protective, operational, and safety requirements as prescribed in the appropriate Terminal Equipment Technical Requirements document(s). It 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. 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 coordinated by a representative 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.
- 3. 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.

4. The Ringer Equivalence Number (REN) of this device is:

1.1

NOTICE: The REN assigned to each terminal device provides an indication of the maximum number of terminals allowed to be connected to a telephone interface. The termination on an interface may consist of any combination of devices subject only to the requirement that the sum of the Ringer Equivalence Numbers of all the devices does not exceed 5.

5. The standard connecting arrangement codes for this equipment are:

CA11A

CA21A

CA81A

CA48C

CHANGES AND CORRECTIONS TO THE ISSUE 4 AXXESS MANUAL

Please note the following changes and corrections to Issue 4 of the manual.

Various locations throughout the manual: Japanese prompts can be viewed only on "digital" display keysets. Analog keysets do not support Japanese displays.

Page xx, step 1: Add the following to the list of FCC registration numbers: BE2USA-24359-PF-E.

Page xxi: The FCC chart at the top of the page should contain the changes/additions shown in the chart at the bottom of this page.

Page xxii: The AXXESS system is now product safety certified by Canadian Standards Association (CSA) for use in both the United States and Canada.

Page 1–9: The maximum number of AXXESSORY Consoles that can be installed on the system (dual or quad) is four.

Pages 2–2, 2–23, 3–74, 4–42, 4–53, and 8–2: The volume adjustment range of non-AIM and non-DVK analog keysets may not be suitable in all user environments. In such cases, Inter-Tel recommends using AIM and/or DVK keysets, if possible.

Pages 2–5, 2–19, 3–68, and 6–142: Add the following note to these pages. **NOTE:** In tri-/quad-cabinet installations, the master T1C (if one exists) should be located in the master dual-cabinet.

Page 2–6, paragraph 3.13: Some of the dimensions listed for the new-style dual-cabinet KSU are incorrect. The height should be 10.5 in. (26.7 cm.), the width should be 33.0 in. (83.8 cm.), and the depth should be 11.5 in. (29.2 cm.).

Page 2–8, paragraph 3.22, NOTE: Delete "automated attendants" from this note. Automated attendants use the DTMF receivers on the AXXESSORY Talk Voice Processing Card(s).

Page 2–12, paragraph 3.52, first bullet: The relay jack information for the CPU/MEM Card should read: The output is two normally-open (deactivated) single-pole double-throw (SPDT) relays that are held closed (activated) at the same time during system operation.

Page 2–14, first bullet: Add the following fiber-optic cable specifications:

Fiber Diameter	62.5/125 (outer/inner core in microns)
Mode	Multi-mode
Wavelength	820nm
Maximum Attenuation	5db/km
Minimum Bandwidth	50MHz
Terminating Connector	ST.
Pairs	1
Maximum Length	1km
B-L Product	20MHz

Page 2–14, second column, second bullet: The relay jack information for the CPU020/PCM Card should read: The output is *one* normally-open (deactivated) double-pole double-throw (DPDT) relay (actually wired as SPDT) that is held closed (activated) during system operation.

Pages 2–24, 3–80, and 8–5: The original model PCDPM (part no. 550.3014) has been replaced with a new model (part no. 550.3018) that does not require an external AC transformer. Refer to the revised installation instructions included with the new unit.

Pages 2–24, 3–83, and 8–5: The MDPM (part no. 550.3015) now includes an AC transformer; it no longer needs to be ordered separately.

Page 2–33, paragraph 5.2, second bullet: The second sentence in the note following the bullet should be changed to read: Also, for systems with 16 or more ports, the PC Motherboard should be equipped with 16MB RAM.

Page 2–38, paragraph 6.20: Add the following note to the drawing. **NOTE:** On the CPU020/PCM Card, R1C is wired in parallel to R2C, R1NC is wired in parallel to R2NC, and R1NO is wired in parallel to R2NO.

Pages 3–39 and 3–45: The drawing on page 73 of this addendum contains some additional grounding information from DITEK. (Inter-Tel's Factored Products division sells DITEK surge/spike protectors.)

TYPE OF PORT INTERFACE	FACILITY INTERFACE CODE (FIC)	RINGER EQUIV- ALENCE NO. (REN)	SERVICE ORDER CODE (SOC)	USOC JACK CONNECTOR
2-Wire Loop	02LS2	0.6B	_	RJ21X
2-Wire Loop/Ground	02LS2/02GS2	3.6B/4.4B	_	RJ21X
Primary Rate	04DU9-1SN	_	6.0Y	RJ48C

- **Page 3–59, paragraph 8.18:** The middle part of the sentence should read: ...(as measured in step 6 on page 3–48, 3–51, or 3–54)...
- **Page 3–59, paragraph 8.18, step 2:** The end of the sentence should read: ...(see Figure 3–30, 3–31, or 3–32 on page 3–49, 3–52, or 3–55).
- Page 3–75, step 11: Some keyset models (even newer ones) do not have potentiometers.
- Page 3–78, paragraph 9.10, step 4 and page 3–80, paragraph 9.12, step 4: Add the following note to step four. NOTE: If installing the unit on a digital keyset equipped with red LEDs only, use the original PCDPM-to-keyset interface cable (part no. 813.1567). If installing the unit on one of the new digital keysets equipped with both red and green LEDs, use the new cable (part no. 813.1634) now included with each unit.
- Page 3–78, paragraph 9.10, step 3 and page 3–80, paragraph 9.12, step 3: Add the following information to the note following step three:

Initially, some of the new digital keysets equipped with both red and green LEDs did not have a plastic knockout in the upper portion of the back of the keyset to allow easy connection to the keyset control board.
Instead, you must open the back of the keyset (secured
by four screws) and route the cable through the plastic
knockout in the lower portion of the back housing, just
as you would if you were wall-mounting the keyset.

- **Page 3–107, step 5b:** The first part of the sentence should read: Depending on which number VPC (1-3)...
- Page 3–121, paragraph 13.2, step 6a (the second one): The end of the sentence should read: ...(default is 91000 for the CPU 256 or CPU 512 Master and 91001 for the CPU 512 Slave).
- Page 4–6, Default Station feature code: The description should read: This single feature code cancels *account code for all calls following*, do-not-disturb, manual call forwarding, background music, ring intercom always, and queue requests. It restores handsfree mode, pages, hunt group calls, and system forwarding and it returns keyset volumes to default values.
- **Page 4–11, paragraph 4.3, second bullet:** The first sentence should be: If the call is *not seized and* not sent to a station, the caller will hear ringing until he or she hangs up.
- Page 4–12, paragraph 4.12: It should read as follows: If a station user transfers or forwards an outside call to an outside telephone number, it becomes an "unsupervised" CO-to-CO call because no inside parties are involved. The CO-to-CO call is limited by the Unsupervised CO timer. When the timer expires, the call recalls

the primary attendant station and causes the CNF key to flash...

- Page 4–12, paragraph 4.15: Add the following sentence: The Unsupervised CO timer is ignored and the Abandoned Call timer is determines how long the call will recall the station before it is disconnected.
- **Page 4–12, paragraph 5.4:** Add this to the end of the paragraph: There can be up to 5000 entries in a triple-or quad-cabinet system.
- **Page 4–13, paragraph 6.7:** Several minor changes have been made to make the hunt group explanation clearer. The new information should read as follows:

Hunt group stations receive the following indications when a call is ringing in:

- If an outside call is ringing, the station designated to receive the call first shows ring flash on the associated individual trunk key (if it has one) or a Call key until the call is answered or the No Answer Advance timer expires and the call moves to the next station.
- If hunt group camp on is allowed and all stations on the hunt group list are unavailable (busy, in do-notdisturb, or with hunt group remove enabled), an intercom or outside call will camp on and the stations will receive the following indications:
 - Busy stations receive hunt group camp-on tones (if enabled) and display. If there is an individual trunk key associated with the trunk, it shows ring flash. (There is a programmable station flag that can disable the camp-on tones for hunt group calls. See PROGRAMMING, page 6–31.)
 - Stations with Hunt Group Remove enabled receive camp-on tones and display. If there is an individual trunk key associated with the trunk, it shows ring flash.
 - Stations with Do-Not-Disturb enabled receive no camp-on indications, but if there is an individual trunk key associated with the trunk, it shows ring flash.
 - The first station that becomes available receives ringing and a flashing trunk or Call key. The camp-on and ring flash indications end at the other stations. (The associated trunk key will be steadily lit at those stations to show that the trunk is busy.)
- If hunt group camp on is **not** allowed and all stations on the hunt group list are unavailable, the hunt group members will not have any camp-on indications. (See page 6–86 for camp-on flag programming information.) Callers will hear one of the following:

- Intercom callers will hear busy signals.
- Callers on a trunk that does not have to be seized for AXXESS to return busy signal (such as a T1 E&M) will hear busy signals.
- Callers on a trunk that has to be seized for AXXESS to return busy signal (such as a non-T1 loop-start) will hear ringing and the call will be sent to the primary attendant.
- Page 4–14, paragraph 6.11, second bullet: The first sentence should read as follows: Stations that are busy and have their calls unconditionally forwarded...
- Page 4–14, paragraph 6.13, last bullet and page 6–87, last timer: The Average Connect Time Per Call timer is available only in UCD hunt groups. ACD hunt groups can only use the timer if they are also flagged as UCD.
- Page 4–16, paragraph 6.31: This paragraph should read as follows: UCD priority levels range from 0 (low) to 75 (high). If a station is a member of multiple hunt groups that have the same priority level, calls received by those hunt groups will be queued in the order they were received by the phone system. (Non-UCD hunt groups are treated as if they have a priority level of 0.)
- **Page 4–17, paragraph 6.33:** Single-line stations can be programmed as hunt group supervisors. Therefore, the first sentence should read: In database programming, each hunt group can have one or more *stations* assigned as the hunt group supervisor(s).
- Page 4–17, paragraph 6.36: The first sentence should read: If the supervisor attempts to monitor a station that is not on an active call that allows monitoring, the system sends reorder tones and the supervisor must enter the feature code again to try another number.
- **Page 4–17, paragraph 6.37:** Add the following: Multiple supervisors can monitor the same station, providing that a conference circuit is available for each supervisor.
- **Page 4–17, paragraph 6.39:** In step 2, the MUTE key does not light. In step 3, **r**emove the "OR" statement. The step should read as follows:
 - (3) To monitor another hunt group member's call: Enter the Station Call Monitoring feature code (321), and dial the extension number (or press the speed-dial key).
- **Page 4–21, paragraph 7.3:** The second sentence should read as follows: While on a dial-pulse trunk, a station user can switch from dial-pulse to DTMF signals by pressing the pound (#) or asterisk (*) keys.

- **Page 4–28, paragraph 7.39, third bullet:** It should refer to *page 6–31* instead of page 6–97.
- **Page 4–29, paragraph 7.42:** The second sentence should read as follows: If the camp-on feature is disabled, callers will hear *continuous* busy signals when all trunks in the trunk group are in use or unavailable.
- Page 4–30, paragraph 7.53, second sample: The first sentence should say: This is an ANI table for various area codes.
- Page 4–33, paragraph 7–55, third bullet: Add this information: If SMDR is enabled, the modified telephone number, not the dialed digits, appear in the SMDR call record.
- Page 4–34, paragraph 7.61: The third sentence should read as follows: However, if the trunk is marked as "subject to toll restriction" and the user attempting to make the outgoing call dials one or more digits before realizing that there is an incoming call, and the digits dialed represent a restricted number for the station and trunk group being used, the call will be dropped (unless the "Drop Incomplete Outgoing Calls" flag is disabled as described on page 6–98 in PROGRAMMING).
- Pages 4–46, 6–54, and 6–59, descriptions of keys: Change the descriptions for the following two keys:
- **Down Key:** (This key type is not required for digital keysets.) No further programming is necessary. This key can be used scrolling backward through displays. When the keyset is idle, it can be used for adjusting volume, in place of the VOLUME key. (Digital Keysets use the VOLUME DOWN key.)
- Up Key: (This key type is not required for digital keysets. It is intended for analog keyset use.) No further programming is necessary. This key can be used for scrolling forward through displays. When the keyset is idle, it can be used for adjusting volume, in place of the VOLUME key. (Digital keysets use the VOLUME UP key.)
- Page 4–52, paragraph 8.65, second bullet and page 6–99, first bullet: The information should read as follows:
- Use Green LEDs For Direct Ring: This flag determines whether direct ring-in calls cause a red or green lamp. If the flag is enabled, direct ring-in calls to your station will be green. If disabled, all direct ring-in calls will cause the LED to be red. In the default state, this flag is enabled.
- **Page 4–56, paragraph 8.90:** The paragraph should read as follows: With ring zones enabled, devices 1–3 on the card will ring first, 4–6 ring next, then 7–8.

Page 4–58, paragraph 9.3, NOTE: The last sentence should read as follows: There can be up to 20 DSS/BLF Units in the system.

Page 4–61, paragraph 12.4 and page 6–98, transfer audio flag: Remove these paragraphs. The Transfer Audio flag does not perform correctly, as described. Callers will hear music-on-hold (or silence if a music source is not available).

Page 4–87 to 4–88, paragraph 24.5, Step (5): There is a cut-and-paste error in this step. The correct step is as follows:

(5) Connect all waiting parties in the conference:

Executive Digital Keyset: Press the CONNECT TO CONFERENCE menu key. All parties are connected. (Display shows CNF IN PROGRESS.) The CNF key and a Call key flash slowly. You can use the following menu keys:

- HOLD: Press this key to place the conference on hold.
- DISCONNECT: Press this key to remove your station from the conference. If there are no other stations in the conference, all parties are disconnected. If there is still another station in the conference, the parties remain connected.
- ADD PARTY: This key appears only if you have not reached the maximum number of allowed parties. Press this key to leave the conference parties connected while you place another call to be added to the conference.
- MUTE: Press this key to turn the keyset microphone on or off during the conference.
- TRANSFER CNF: Press this key and enter an extension number to transfer the conference to another station or the Voice Mail application.

Other Keysets: Press the CNF key again. Or press SPCL and enter 5 again. All parties are connected. (Display keysets show CNF IN PROGRESS.) The CNF key and a Call key flash slowly.

Single-Line Set: When all parties are on conference wait hold, hookflash and enter the Conference feature code (5). All parties are connected.

Page 4–90, paragraph 25.10 and page 6–215, paragraph: The Record-A-Call Maximum Message Length overrides the mailbox's maximum message length set-

ting. However, if a Record-A-Call message exceeds the mailbox maximum message length, the mailbox will be considered full until that Record-A-Call message is deleted.

Page 4–92, paragraph 26.10: The first sentence should be: If necessary, the requesting station in an Agent Help call can use the Hold, Transfer, Record-A-Call, or other features during the call, while the Agent Help Extension is connected.

Page 4–98, paragraph 28.18: The paragraph should read as follows: Stations with Forced Local Toll Call and Forced Long-Distance Toll Call account codes cannot forward calls to outside numbers.

Page 4–109, paragraph 32.6: Remove this paragraph. It is not valid for the AXXESS System.

Page 4–114, paragraph 35.13, Keyset instructions: The first sentence should read: Press the DND key or *press the SPCL key and then* enter a Do-Not-Disturb feature code (370 or 372).

Page 4–122, paragraph 40.16, step 4: A portion of the step is incorrect. The directions for entering a complete number should be as follows:

Enter a complete number: Enter the extension number using your keypad. When the circuit information is displayed, press # again to continue.

Page 4–124, paragraph 40.17, first bullet: The Do-Not-Disturb messages are defined incorrectly. The correct messages are as follows:

01 DO-NOT-DISTURB 11 OUT OF TOWN 'TILL 02 LEAVE A MESSAGE 12 OUT OF OFFICE 13 OUT UNTIL 03 IN MEETING UNTIL 04 IN MEETING 14 WITH A CLIENT 05 ON VACATION 'TILL 15 WITH A GUEST 06 ON VACATION 16 UNAVAILABLE 07 CALL ME AT 17 IN CONFERENCE 08 AT THE DOCTOR 18 AWAY FROM DESK 09 ON A TRIP 19 GONE HOME 10 ON BREAK 20 OUT TO LUNCH

Page 4–125, paragraph 40.17, last bullet: The last sentence should read: The new extension number cannot conflict with an existing number.

Page 4–131, Exempt From ARS and Subject to toll restriction programming instructions: The # after the Yes or No response is not required. The instructions should read as follows:

 Exempt from ARS: To program the Exempt from ARS option, press 3 or the EXEMPT FROM ARS menu key. When the display shows EX-EMPT FROM ARS, press 1 or the YES menu

- key to enable the option. Or, press 2 or the NO menu key to disable it. Then press # or ACCEPT to continue.
- Subject to toll restriction: To program the trunk group Subject to Toll Restriction option, press 4 or the SUBJECT TO TOLL menu key. When the display shows SUBJECT TO TOLL, press 1 or the YES menu key to enable the option. Or, press 2 or the NO menu key to disable it. Then press # or ACCEPT to continue.
- Page 4–131, *Trunk List* programming instructions: In the last substep, the display should be ENTER *TRUNK* EXTENSION (not STATION).
- **Page 4–140, paragraph 41.9:** The Record All Incoming Calls option should say: Records all incoming calls that are answered, *except DID/DNIS calls*.
- **Page 4–142 DIALED DIGITS:** Add this information: If ARS was used to place the call, the modified telephone number, not the dialed digits, are shown.
- Page 5–34, paragraph 9.5: The paragraph should read as follows: If desired, the SMDR records can be retrieved and processed using Inter-Tel Inside Track, a separate call accounting software package, to create customized reports.
- **Page 6–4, section 28:** Add the following entries to section 28 of the table of contents.
- G. System Serial Port Assignment . . . 6–265 H. System Serial Port Configuration . 6–267 I. T1 Diagnostics 6–269
- Page 6–44, paragraph 9.82, first bullet: The fifth sentence should say: COS designations 2–16 are programmable.
- **Page 6–47, paragraph 9.90:** The first sentence should say: The Voice Mail Information window is shown *on the next page*.
- **Page 6–47, paragraph 9.91, first bullet:** There is not a "None" option when programming a Record-A-Call Mailbox. Therefore, the correct information is as follows:

- Record-A-Call Mailbox and User Keyed Mailbox: Determine which mailbox, if any, will be dialed automatically when the Record-A-Call feature is used. The Record-A-Call Mailbox can be set to "Associated Mailbox" to call the mailbox assigned to that station, or it can be set to any valid mailbox number. If you do not want a mailbox number dialed automatically when the Record-A-Call feature is used at this station, enable the User Keyed Mailbox flag. This overrides the automatic entry and allows the station user to enter the desired mailbox number. The operation of the feature is determined by the programmed combination of these flags, as shown in the chart at the bottom of the page.
- **Page 6–86, last bullet:** The first sentence should be: Prepare a list of up to 75 hunt groups and the stations/ extension lists to be included in them.
- **Page 6–93, paragraph 11.92:** The database allows up to *15* "local" area codes (not three, as stated).
- **Page 6–102, paragraph 11.114:** The first sentence should say: Up to *200* unique forwarding paths (001–200) can be programmed.
- **Page 6–114, Voice Mail Dial Delay Timer:** This timer is for analog voice mail hunt groups only.
- Page 6–158, paragraph 17.4: The third sentence should be: Enter the desired rate in the text box (0.00 to 99.99) and select the OK command button.
- Page 6–159, paragraph 17.9: The Record All Incoming Calls flag should say: Selecting this check box includes all incoming calls, *except DID/DNIS calls*, in the SMDR report.
- Page 6–162, paragraph 18.3: The screen used for programming the AXXESSORY Talk communication port has changed. The correct information is: AXXESSORY Talk programming cannot be performed until an AXXESSORY Talk communications port has been established in the *System Serial Port Assignment programming window* (shown on page 6–265).

RECORD-A-CALL MAILBOX	USER KEYED MAILBOX	RESULT
"Associated" or mailbox number	Disabled	The Record-A-Call Mailbox is automatically called when the feature code is entered.
"Associated" or mailbox number	Enabled	The user is prompted to enter the desired mailbox number after the Record-A-Call feature code is en- tered. If a number is not entered before the dialing timer expires, the programmed Record-A-Call Mail- box number is dialed automatically.

Page 6–163, first bullet: The information should read as follows:

Voice Mail: This application handles all calls that
are directed to voice mail (other than to the Message Notification/Retrieval application) by subscribers and non-subscribers. Callers will hear the
main company greeting, followed by a menu of
available options. Stations can forward or transfer
calls directly to their mailbox using this application's extension number.

Page 6–176, second bullet, and page 6–198, first bullet: The second sentence should say: This applies to calls transferred by Automated Attendant and Call Routing Announcement applications, including transfers to the operator's mailbox or extension ID.

Page 6–196, paragraph 23.22, second column, Notification Category and Call For Each New Message bullets and page 6–201, paragraphs 23.33 and 23.34: To clarify how this feature works, the information should read as follows:

Notification Category: Message notification can be set to place the notification call *for all messages* or only when priority messages are received. (This defaults to *all messages*.)

Call For Each New Message: This determines whether the AXXESSORY Talk should attempt message notification *every* time a message is received (that meets the notification category set above), or only when a message is received and no other messages are waiting to be picked up.

Page 6–205, paragraph 23.64 and page 6–208, paragraph 24.5: The second sentence should say: This applies to transfers from Call Routing Announcement applications that use the Transfer To Extension action (as described on page 6–169).

Page 6–224, paragraph 26.2: The available baud rates are 300, 1200, 2400, 4800, 9600, *and 19200*.

Page 6–225, paragraph 27.2: The last sentence should read: If "Extension" is selected, any station, application, or hunt group extension number can be selected.

Page 6–226, paragraph 27.8: The third sentence should say: (Refer to the Save/Restore information on *page 6–231* for further AXXESSORY Talk information.)

Page 6–231, Database Save And Restore: Please note that performing a database Save or Restore operation will cause the system to slow down. If at all possible, these operations should not be performed during nor-

mal business hours when the system is being used to place and receive calls.

Page 6-250, paragraph 28.53: Add the following note.

NOTE: If multiple OPCs, T1Cs, T1Cs with PRI Daughter Cards, and/or DKSC-16s are installed in expanded KSUs, resource blocking can be prevented by splitting the cards between the cardfiles and/or installing them in the same cardfile as the LGCs or LSCs. In tri-/quad-cabinet installations, the master T1C (if one exists) should be located in the master dual-cabinet.

Page 6–253, paragraph 28.58, first bullet: The last sentence should say: Keysets will be included in Keyset Map #1.

Page 6–255, paragraph 28.65, third bullet and sixth bullet: The correct capacities are as follows:

- Up to 20 DSS/BLF units can be connected to Executive or Standard keysets with PCDPMs. Each of those keysets can have up to four DSS/BLF Units in addition to using the Off-Hook Voice Announce feature that is available to all keysets with PCDPMs. (See page 6–34 for keyset attached device programming information.)
- Modem Data Port Modules (MDPMs) can be programmed for use on Executive or Standard keysets. An Executive or Standard keyset with an MDPM and a PCDPM can use the off-hook voice announce and have a single-line set or data device connected.

Page 6–266, paragraph 28.114, second bullet: The information should read as follows:

• Level 2: The bidirectional support enhanced protocol is running, using the RS-232C interface.

Page 8–2: Add the following part numbers to the list of digital station instruments:

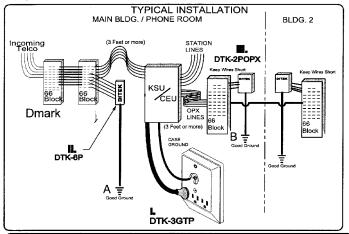
Page 8–3, Software: The AXXESSORY Talk Applications Software should read *five* floppy disks, not nine.

Pages 8–5 and 8–6: The part number for the Digital Signal Processor (DSP) chip has been changed from 834.2328 to 834.2566.

FIGURE 8. GROUNDING GUIDELINES FROM DITEK

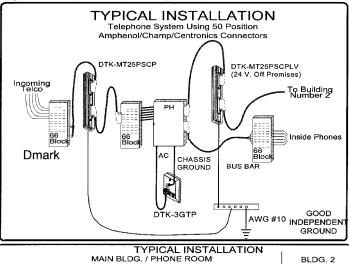
Telephone / Interconnect Technical Diagrams

Diagrams are to be used as a Guideline only. Contact the factory for any specific application questions.









(3 Feet or more)

KSU

∕CEU

DTK-3GTP

Incoming Telco

DTK-RJ14-SCP

Add Suffix for appropriate DTK-12P 497B voltage level. SPK D Suffix

VRMS VRMS VRMS VRMS VRMS 134 VDC VDC VDC VDC VDC VDC VDC 48 volt 24 volt off Data

Protection is based on two principles:

- 1) Right product on the application
- 2) Proper Grounding

Priorities of Grounds:

- 1)Building Frame
- 2) Driven Ground Rod (min 8')
- 3)Cold water Pipe (watch out for PVC plastic pipe!)

Equipment with chasis grounds should use protector with ground terminating point (DTK-3GTP)

- Elininates difference in ground potential and step voltage blowout.

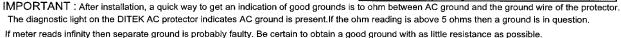
KSU's without chasis grounds use DTK-3F or DTK-6F.

DTK-7 (strip) accepts up to 3 Class II transformers.

Important Considerations:

- How many incoming Telco (CO) lines do you have? (Do you plan to expand?)
- Do you have any OPX (Off Premise Extension) lines? How Many? What is max ring Voltage?
- Do you have an external paging Speaker?
- (check Peak voltage) Is there any station with wires exposed to the

environment (running across trusses, outside, etc.)?



Run Ground wire in shortest path. Avoid sharp bends in wire. Always run toward earth. Avoid using wire nuts (twisting reduces ground path.)

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