



Telephone Operation Manual

Model
SCR+

*STARCall, STARCall Plus, STARCall Fusion,
and StarCare Systems*

NOTICE

To ensure the performance of our products and systems, we may occasionally make technological changes and updates. Therefore, the model number suffixes (A, B, C, etc.) listed in the manual or in the drawings may not always match the model you are using. Unless specifically noted, this will not affect the product or its installation, operation, or service.

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Notes

Introduction

The Dukane STARCall[®], STARCall Plus[™], STARCall Fusion[™], and StarCare[™] are advanced, multichannel, microprocessor-controlled communications systems. Each system can simultaneously handle telephone conversations, intercom, and program and page distribution using Dukane Model 7A1111 Standard Telephones (STELs), standard DTMF 2500 compatible telephones with electronic ringers, Dukane Model 7A1110 Administrative Telephones (ATELs), caller ID telephones (CTELs), and standard 25V loudspeakers. Each System is easy to use, with many of its features accessible through the STELs or standard telephones. Additional features are accessible through ATELs or CTELs.

The STARCall Plus can also take advantage of the Dukane Model 110-3889 Network Interface Card (NIC) which can network together up to 16 systems, using one NIC per system. One system is configured as the primary, all others as secondary. This network makes it possible to page, telephone, or intercom seamlessly across all networked systems. Features that can be performed across systems are noted in this manual.

Manual Contents

This manual explains the operation of the STARCall, STARCall Plus, STARCall Fusion, and StarCare feature sets using ATELs, STELs, CTELs, room speakers, and call-in stations. Information that pertains to all four feature sets will be referred to as the System.

The manual is divided into six sections:

- General Information
- Administrative Telephone (ATEL) Operations
- Standard Telephone (STEL, CTEL, and DTMF telephone) Operations
- Using the System
- Call Button Operations
- Appendixes

System Acronyms

The acronyms listed below appear throughout this manual.

ATC-E	Administrative Telephone Card, Expanded
ATEL	Model 7A1110 Administrative Telephone
BTC-P	Balanced Telephone Card, Protected
BTC-E	Balanced Telephone Card, Expanded
CTEL	Caller ID equipped Telephone
DTMF	Dual-Tone Multi-Frequency
KSU	Key Service Unit
MDS	Maintenance and Diagnostic Software
NIC	Network Interface Card
PBX	Private Branch Exchange
RAPID	Remote Programming and Diagnostics Software
STC-E	Standard Telephone Card, Expanded
STEL	Model 7A1111 (or equivalent) Standard Telephone
TIC	Trunk Interface Card
COC	Central Office Card
TCM	Trunk Caller ID Module

Related Documentation

The following manuals contain additional information on the STARCall, STARCall Fusion, and StarCare Systems. The latest revisions are available from Dukane Communication Systems, Warrenville, Illinois. Some of these documents are also available through our web site to registered Dukane distributors at www.dukane.com/csd and go to “For Distributors.”

- STARCall, STARCall Plus, StarCare System Installation Manual, document number 427-06-00034
- SW-4000 STARCall Fusion Server Installation Manual, document number 3100664
- SW-4000 STARCall Fusion Server Installation Quick Start Guide, document number 3100684
- SW-4000 STARCall Fusion PC Attendant Operation Manual, document number 3100652
- SW-4000 STARCall Fusion IVR Operation Manual, document number 3100663
- SW-4000 STARCall Fusion Station Message Detail Reporting (SMDR) Operation Instructions, document number 3100683
- Remote Maintenance Utility (RMU) Programming Manual, document number 427-09-00005
- STARWare Software Quick Reference Guide (for STARCall Plus), document number 427-07-00046
- StarCare SC-2000 Software Quick Reference Guide, document number 427-07-00045

If you need additional copies of this manual or the related documentation, contact your authorized Dukane distributor or call Dukane Communication Systems at (630) 836-3706, during normal central time business hours. In Canada, dial (519) 748-5352 during normal eastern time business hours.

The following software includes online help in place of printed documentation:

- RAPID/MDS Programming
- SW-2000 STARWare User Application Suite (for STARCall Plus)
- SC-2000 StarCare Software

System Priorities

The System manages its audio functions using a priority scheme. The priorities are listed below with 1 as the highest priority and 9 as the lowest.

- | | |
|-----------------------------------------------|-------------------------------|
| 1. Emergency Intercom | 6. Intercom |
| 2. Emergency Page | 7. Custodial Tone |
| 3. Civil Emergency | 8. Low Priority Event Tone |
| 4. Manual Time Tone, High Priority Event Tone | 9. Audio Program Distribution |
| 5. All Call and Zone Page | |

A higher priority function is never interrupted by a lower priority function. Interrupted functions are automatically restored when the higher priority function ends. Telephone conversations are not interrupted by any audio function.

Password Control

The System can be configured to require a programmable four-digit password for access to certain functions. If a function has been configured this way, a double tone burst is heard after you press # to start the selected function. You must then enter the password to activate the function. Function access is denied if no password or an incorrect password is entered. Contact your system administrator for details.

Note:

If a function is programmed for password controlled access, the password will be required for access regardless of the type of phone used (ATEL, STEL, DTMF telephone, or CTEL).

continued

If you need to access functions in an emergency and your system administrator is unavailable to assist you with a password, try the factory default password 1234 (this password can be changed). If your attempt to access a password-protected function is unsuccessful, hang up before trying again because the telephone must be on-hook for at least two seconds before you can attempt to access that function again. When you lift the handset again, you must start over and press all keys.

If you have been using the SPKR. PHONE key while attempting to access functions, the handset must be in its cradle for at least two seconds in order to clear the line before attempting to access that function again. When you press SPKR. PHONE again, you must start over and press all keys.

STARCall Fusion Feature Set

STARCall Plus systems can be equipped with the optional Fusion feature set which provides direct connection to outside telephone lines and various telephony functions, such as class of service. In general, these features are configured using STARCall RAPID and cannot be changed using system telephones. Some of these features which affect outside telephone line access are explained below.

Class of Service

Class of Service is a group of attributes that control the operation of each extension in the System. It governs such things as outside line access, intercom access, system administration rights, auto off-hook answer, and much more. A class of service is assigned to every extension during system configuration using the RAPID system configuration application. Any individual extension in the System may or may not be able to perform a particular operation based on its assigned class of service. Contact your System Administrator for details on class of service for your facility.

Hunt Groups

The System supports up to eight hunt groups, each with up to eight extension numbers. Each hunt group can have an associated dial number.

When a call from an outside telephone line is routed to a hunt group, the system will route the call to the first idle non-forwarded extension in that group. If all extensions in the hunt group are forwarded, the call is routed to the first idle forwarded extension. If no extensions are available, the system waits for an extension to become available. All call routing activities are transparent to the caller, who simply hears the normal ringback sound in the handset.

Cyclical Hunt Groups

A hunt group can be configured using RAPID such that if a call has not been answered within a specified number of rings (1 to 10), the call is routed to the next free extension within the hunt group. Once all extensions have been tried, the call will be routed through the hunt group again, starting at the first free extension. This cyclical routing continues until either the caller disconnects (by hanging up) or the call is answered.

Voice Mail Hunt Group

If the System is equipped with the optional voice mail feature, one hunt group can be configured as a voice mail hunt group, which contains extensions that connect directly to the voice mail system. Outside telephone calls directed to the voice mail hunt group are greeted by the auto-attendant when calling into the system. Internal callers that wish to use the voice mail system simply dial the number of the voice mail hunt group.

A call transferred by the voice mail system to a busy or non-answering extension can be directed to the voice mailbox of that extension if the caller so wishes or another extension can be called.

DIL (Direct Inward Line) Extension

When a call from an outside telephone line is routed to a DIL (Direct Inward Line) extension, the trunk rings the extension. If the extension is busy, the trunk waits and the caller hears ringback until the extension becomes free, at which point the trunk rings the extension. If there is no answer, the extension rings until the caller hangs up. If the called extension is forwarded, the trunk call is directed to the forwarded extension.

Dial Tone

When a call from an outside telephone line is routed to a dial tone, the caller will hear the dial tone after one or two ringback tones. The caller can then dial the desired extension number. The caller may not access room speakers, outbound lines, or dial 700 codes from an outside line. If the caller dials "0" to reach the operator the call is transferred to the attendant hunt group. If the extension dialed is busy, the busy signal will be heard. If there is no answer, the extension rings until the caller hangs up. If the called extension is forwarded, the trunk call is directed to the forwarded extension.

Account Codes

The STARCall Fusion feature set supports up to 256 account codes. Each account code is a four-digit PIN (Personal Identification Number) that has both a day and night class of service assigned to it. Account codes may also be governed during the course of a day through the Event class of service function.

When a user calls from a system extension and that extension's current class of service does not support the operation requested by the user, a double-beep password prompt sounds in the handset. The user can then enter their account code. If the class of service currently in force for that account code supports the requested operation, the call proceeds normally. If the class of service currently in force for that account code does not support the requested function, the reorder tone sounds and the call is denied.

The following telephone extension attributes are controlled via account codes:

Intercom Off-Hook Answer	Intercom call-in is answered when the extension goes off-hook.
Emergency Ring Access	Extension can receive emergency priority speaker station call-ins.
Normal Ring Access	Extension can receive normal priority speaker station call-ins.
Telephone Ring Access	Extension can receive calls from other extensions.
Dial Access	Extension allows a user to dial.
Tone Access	Extension allows a user to initiate tone distribution.
Page Access	Extension allows a user to initiate pages.
Program Access	Extension allows a user to initiate a Program distribution.
Intercom Access	Extension allows a user to initiate Intercom to a speaker station.
Intercom Off-Hook Transfer	Transfer speaker intercom to handset when extension goes off-hook is allowed.
Off-Hook Duress	Duress call-in occurs if extension remains off-hook for duress time-out.
Room Exclusion Access	Extension allows user to exclude speakers from audio reception.
Output Control Access	Extension allows user to turn on/off system outputs.
Forward Access	Extension allows user to forward calls (locally or via another extension).
Admin Access	Extension allows user to set clock, schedules, music source or clear errors.
Digit 9 Access	Extension allows user to access dial-9 trunks.
Digit 8x Access	Extension allows user to access dial-8x trunks. (x = 0-9)

Interactive Voice Response (IVR) System

Outside telephone calls routed to the IVR are greeted by the auto-attendant. The caller may then enter the extension they wish to reach, or they may access other IVR features. If a called extension is busy or does not answer, the IVR offers the appropriate options, including leaving a voice mail message or calling another extension.

For detailed information on IVR operations, please refer to the latest revision of document number 3100663, the STARCall Fusion SW-4000 IVR Operation Manual.

System Speed Dial Numbers

The Fusion feature set supports up to 20 System-wide speed dial numbers which are assigned during system configuration. These numbers can be dialed from any telephone connected to the System. For example, *01 can be configured to initiate an All Call page (normally 720#).

These numbers can also be used to access an outbound line and dial an outside telephone number. For example, *02 could dial 91234567 in which the 9 would seize an outside line and dial the telephone number 1234567.

Contact the System Administrator for details on implementation in your System. Note that operations initiated by speed dial may be restricted by the class of service assigned to the extension used to speed dial.

Toll Restriction

The Fusion feature set supports eight toll restriction levels and eight toll permit levels which assigned during System configuration. This function can be used to prevent any number of System telephones from calling outside area and/or country codes, local exchanges, or even particular outside telephone numbers.

The 911 emergency number is not toll restricted and will not be restricted even if placed in the toll restrict table.

Contact the System Administrator for details on implementation in your System.

Notes

Section 2

ATEL Description and Features

ATEL Description and Features

The Dukane Model 7A1110 Administrative Telephone (ATEL) is shown in *Figure 1*. It provides user-friendly access to all System features. The 16-character alphanumeric LCD display shows all telephone, intercom, and paging status information related to the ATEL. Time and date are displayed when the ATEL is idle. Ring tones produce cadences distinctive to the incoming call type. Two tone types, each with three volume settings, are available. An off setting, which turns off both tone types, is also provided. The ATEL has 28 pushbuttons including 12 standard telephone, one speaker phone, one talk, one volume up/down, one menu, eight programmable general purpose, and four programmable special function keys.

Two-way intercom communication to a room speaker can be conducted privately through the handset using a voice activated switch (VOX), or through the built-in microphone and speaker using the talk switch for manual audio direction control. Telephone conversations can be conducted privately through the handset, or through the built-in microphone and speaker in hands-free (auto) or talk (manual) mode. Intercom, telephone, and background music speaker operations each have 16 possible volume settings, independent of one another. One-way paging to speakers can be conducted either through the handset or through the microphone in hands-free or talk mode.



Figure 1: Model 7A1110 Administrative Telephone (ATEL)

continued

The ATEL also features:

- The ability to dial three-, four-, or five-digit alphanumeric extensions and room numbers
- Intercom features:
 - Queuing of call-ins
 - Queue scroll and select
 - Privacy indication
- Telephone features:
 - System extension, PBX/KSU, and outside line dial
 - Call hold
 - Call transfer
 - Call forward
 - Music-on-hold
 - Three-party conference
- System features:
 - Paging
 - Tone distribution
 - Audio program distribution and monitoring
 - Background music
 - System time and date set

Note:

Many System telephone features are governed by the System programming. Contact your Dukane distributor if a feature is not enabled.

Display Window

When the ATEL is not in use and no calls are present, the display shows the date and time in either 12- or 24-hour mode. When a call-in is received from a room speaker, the calling station number and the position of the call within the call-in queue appear on the display. When an emergency priority call-in is received, the display flashes and a distinctive tone sounds. When a call from an STEL or CTEL is received, "Call from X" appears. (X is the number of the calling extension.) When the ATEL is used to call another System extension, the dialed extension number appears on the display. When the ATEL is used to make a page or distribute tones, the display shows the active mode (page or tone).

When the ATEL dials 9 or 8X to dial an outside telephone, it displays "CO" followed by each digit dialed. Once dialing is completed, the display is updated to read "COXX Telephone Number" where XX is the actual outside line being used and Telephone Number is the number which was dialed.

When line pickup (79XX) is used to select a specific line, such as line one, for dialing out, the display would read "CO01" after which each digit dialed would be displayed. Once dialing is completed, the display is updated to read "CO01 Telephone Number."

Handset

The ATEL's handset can be used for normal conversations (intercom or telephone) and for voice paging. See pages *Calling a Speaker Station*, page 25; *Calling a Telephone*, page 31; and *Paging*, page 48, for additional information. Lifting the handset switches the ATEL to handset operation, regardless of the state of the speaker/microphone.

Microphone

The ATEL console has a built-in electret microphone for excellent sound quality. It can be used for talk intercom conversations with room speakers, hands-free or talk telephone conversations, and hands-free or talk paging. See *Manually Answering a Call-In (Auto Answer Disabled)*, page 28, and *Calling a Telephone*, page 31, for additional information.

Speaker

The ATEL's built-in speaker allows you to listen to loudspeaker intercom, speaker phone audio, and background music, and to monitor an audio program. See *Setting the ATEL Background Music* on page 18, *Manually Answering a Call-In (Auto Answer Disabled)*, page 28, and *Monitoring Audio Program Sources*, page 65, for additional information.

Volume

The VOL up and down key adjusts the ATEL speaker's volume to one of 16 levels. Volume levels for intercom listen, telephone speaker phone listen, and background music to the speaker are adjusted independently of each other. The VOL key also adjusts the ringer type and volume. See *Adjusting the Voice and Music Volumes* on page 17 for more information.

Key Pad

The ATEL has a standard telephone key pad. Keys 0 through 9, *, and # work the same way as a standard DTMF telephone. The * key also allows the selection of alpha characters as shown below. Note that the ATEL does not display the alpha characters when dialing.

*2 = A
**2 = B
***2 = C
*3 = D

The # key is also used to dial speaker stations for special function dialing sequences. See *Calling a Speaker Station*, page 25, for additional information.

Talk Key

The TALK key is used in intercom, telephone, or page mode to manually switch the voice direction when using the speaker/microphone. In intercom mode it is used to switch from listen to talk. Pressing the TALK key during telephone hands-free speaker phone operation switches the ATEL to push-to-talk operation and manually controls the voice direction. Pressing the TALK key during a page switches the ATEL from hands-free operation to push-to-talk operation to provide a means of muting voice when released. While programming speed dial strings, the TALK key can insert a one second pause in the dialing sequence. See *Programming the Dedicated Function Keys*, page 15, *Calling a Speaker Station*, page 25, and *Emergency Paging All Rooms*, page 48 for more information.

Speaker Phone Key

The SPKR. PHONE key is used for intercom, telephone, or page operation when the speaker/microphone combination is desired. See *Calling a Speaker Station*, page 25, *Calling a Telephone*, page 31, and *Paging*, page 48, for additional information. Pressing the SPKR. PHONE key while the handset is in the cradle and the unit is idle places the ATEL off-hook and into speaker/microphone operation, ready for dialing. Pressing the SPKR PHONE key while the handset is off-hook switches the ATEL to speaker/microphone operation, regardless of the current state of the ATEL.

Programmable Dedicated Function Keys

The dedicated function keys provide easy one-button access to common System functions. They are programmed at the factory to the default settings. The settings can be changed at any time, however this manual assumes that these default settings have not been changed. If they have, the keys will operate differently than described. It is recommended that any reprogramming of these keys be written down in the chart provided in *Appendix B* on page 79 for future reference. To customize these keys see *Programming the Dedicated Function Keys* on page 15.

EMERGENCY

The EMERGENCY key initiates emergency voice pages to all speakers or to any combination of speaker zones. Pressing this button automatically dials 70, which is the factory default setting to access emergency paging functions. The factory default setting also requires you to then press the # key to initiate page access (this requirement can be changed by System programming). See *Paging* beginning on page 48 for full instructions.

TONE

The TONE key initiates or cancels tone distribution through the System speakers. The tone type is user selectable and can be distributed to all speakers, any combination of speaker zones, or any combination of individual room speakers. Pressing this button automatically dials 71, which is the factory default setting to access tone distribution. See *Distributing Tones* on page 55 for full instructions.

PAGE

The PAGE key initiates general voice pages to all speakers, any combination of speaker zones, or any combination of individual room speakers. Pressing this button automatically dials 72, which is the factory default setting to access paging functions. See *Paging* beginning on page 48 for full instructions.

PROGRAM

The PROGRAM key initiates, modifies, or cancels audio program source distribution to the speakers. The audio source is user selectable and can be distributed to all speakers, any combination of speaker zones, or any combination of individual room speakers. Changes can be made while audio program distribution is in progress, depending on the hardware configuration and the change desired. Pressing this button automatically dials 73, which is the factory default setting to access audio program source distribution. See *Distributing Audio Programs* beginning on page 60 for full instructions.

Programmable F1 through F8 Keys

The F1–F8 function keys provide easy one-button access to common ATEL functions. They are programmed at the factory to default settings. The overlay sheet on the ATEL provides text for the default settings, but it can be modified by turning over the sheet. While settings can be changed at any time, this manual assumes that these default settings have not been changed. If they have, the keys will operate differently than described. They can alternatively be programmed as general purpose speed dials. It is recommended that any reprogramming of these keys be written down in the chart provided in *Appendix B* on page 79 for future reference. To customize these keys see *Programming the F1 through F8 Function Keys* on page 16.

PREVIOUS	Displays the previous call in the queue (F1 default).
NEXT	Displays the next call in the queue (F2 default).
MUSIC	Toggles the background music on/off (F3 default).
SCROLL	Displays messages longer than 16 characters (F4 default).
REDIAL	Redials the last number sequence (F5 default).
MUTE	Mutes the panel microphone in speaker/microphone push-to-talk (PTT) operation, or the handset transmitter and receiver in handset operation (F6 default).
FLASH	Indicates a hookswitch flash (F7 default).
ANSWER	Answers the next intercom call in the queue (F8 default).
CALL PARK	Allows a line to be parked.
DO NOT DISTURB	Forward all calls to voice mail (only available with voice mail system).
CALL HOLD	Places a call (telephone or trunk) on hold.
CALL TRANSFER	Places a call (telephone or trunk) on hold

Menu Key

The MENU key places the ATEL into the Local Diagnostic/Programming Mode. In this mode, the ATEL's F1–F8 keys, the four dedicated function keys, the ringer type, and the ringer volume can be custom programmed. See *Local Diagnostic/Programming Mode* on the next page.

Error Codes

Error codes appear on the ATEL display if communication problems occur within the System. These codes display as “SYSTEM ERROR” followed by a two-digit error code. When an error code appears, write down the exact display and contact your system administrator or authorized Dukane distributor for assistance.

Selectively Answering Call-Ins (ATEL Only)

There are two ways to selectively answer calls:

- To view the call-ins in the queue, press # or the function key programmed as NEXT to scroll forward through the call-in waiting queue. Press * or the function key programmed as PREVIOUS to scroll backward.

When the desired calling room number appears, lift the handset if auto answer is enabled, or dial 742#, or press the function key programmed to dial that sequence. (F8 factory default)

—OR—

- Without displaying the calling room number, lift the handset or press SPKR PHONE, press #, and dial the calling room number.

Local Diagnostic/Programming Mode

Entering the Local Diagnostic/Programming Mode

To enter the Local Diagnostic/Programming Mode, press the MENU key for 1-1/2 seconds. Once the ATEL is in this mode, it alternately displays its model number and its hardware revision/software version. Thereafter, every time a key is pressed, the ATEL will sound a confirmation tone and display the key's function.

Exiting the Local Diagnostic/Programming Mode

To exit the Local Diagnostic/Programming Mode, press the MENU key for 1-1/2 seconds. The time and date display should reappear.

Displaying the ATEL Hardware Revision and Software Version

Press the MENU key for 1-1/2 seconds to enter the Local Diagnostic/Programming Mode. The ATEL will alternately display its model number and its hardware revision/software version. Press MENU for 1-1/2 seconds again to exit the Local Diagnostic/Programming Mode.

Verifying a Key's Function

The EMERGENCY, TONE, PAGE, and PROGRAM keys and the F1–F8 keys on an ATEL can be reprogrammed to perform different functions. To determine the current function of any key, follow the steps below.

1. Press MENU for 1-1/2 seconds to enter the Local Diagnostic/Programming Mode.
2. Press and release the key you want to verify. The key's function appears on the ATEL display and the feedback tone sounds.
3. Press MENU for 1-1/2 seconds to exit the Local Diagnostic/Programming Mode.

Programming the Dedicated Function Keys

The EMERGENCY, TONE, PAGE, and PROGRAM keys can be reprogrammed to dial a different sequence. Operation of these dedicated function keys will differ from what is described in this manual if the default settings are reprogrammed. The factory default settings for the dedicated function keys are:

EMERGENCY	70
TONE	71
PAGE	72
PROGRAM	73

As you reprogram the function keys, write down their new functions in the chart provided in **Appendix B** on page for future reference.

1. Press MENU for 1-1/2 seconds to enter the Local Diagnostic/Programming Mode.
2. Press the desired function key. The display will show a two-character code indicating the function key (EM, TN, PG, or PR) accompanied by the current programmed dial sequence and a flashing cursor.

continued

3. Enter the desired dial sequence using the numeric key pad. Up to 32 digits can be entered. Entering the first digit clears the display of any previously assigned dial sequence. See *Appendix A* on page 75 for a listing of 700 codes.
4. One or more one-second pauses, indicated by a W, can be inserted at any time using the TALK key.
5. If you make an entry error or wish to cancel your modification of a previously programmed dial sequence, press another function key, or exit the Local Diagnostic/Programming Mode by pressing MENU for 1-1/2 seconds.
6. When you have entered the new sequence, press the function key again. The display shows the new dial sequence without the flashing cursor.
7. Press MENU for 1-1/2 seconds to exit the Local Diagnostic/Programming Mode.

Programming the F1 through F8 Function Keys

The F1 through F8 function keys can be reprogrammed to dial a different sequence. Operation of these function keys will differ from what is described in this manual if the default settings are reprogrammed. The factory default settings for the F1 through F8 function keys are:

F1	PREVIOUS
F2	NEXT
F3	MUSIC
F4	SCROLL
F5	REDIAL
F6	MUTE
F7	FLASH
F8	742#

As you reprogram the function keys, write down their new functions in the chart provided in **Appendix B** on page for future reference.

1. Press MENU for 1-1/2 seconds to enter the Local Diagnostic/Programming Mode.
2. Press the desired F1–F8 function key. The display will show the key’s current programming as one of seven preset functions (e.g., PREVIOUS, NEXT) or the F<#>, a dial sequence, and a flashing cursor.
3. If a preset function is desired, press and hold the function key until the desired preset function is displayed. Release the key.

4. If a dial sequence is desired:
 - a. Press and hold the function key until the F<#> + dial sequence and a flashing cursor are displayed. Release the key.
 - b. Enter the desired dial sequence using the numeric key pad. Up to 32 digits can be entered. Entering the first digit clears the display of any previously assigned dial sequence. See *Appendix A* beginning on page 75 for a listing of 700 codes.
 - c. One or more one-second pauses, indicated by a W, can be inserted at any time using the TALK key.
 - d. If you make an entry error or wish to cancel your modification of a previously programmed dial sequence, press another function key, or exit the Local Diagnostic/Programming Mode by pressing MENU for 1-1/2 seconds.
 - e. When you have entered the new sequence, press the function key again. The display shows the new dial sequence without the flashing cursor.
5. Press MENU for 1-1/2 seconds to exit the Local Diagnostic/Programming Mode.

Adjusting the Ringer Type and Volume

1. Press MENU for 1-1/2 seconds to enter the Local Diagnostic/Programming Mode.
2. Press the VOL up and down key to scroll through the ringer settings—Off, Type 1 Lo, Type 1 Mid, Type 1 Hi, Type 2 Lo, Type 2 Mid, Type 2 Hi. By default, the ringer type and volume are Type 1 Mid.

Note:

To maintain UL 1069 integrity in a StarCare System, the ringer type/volume CANNOT be set to Off.

3. When the desired setting appears on the display, press MENU for 1-1/2 seconds to exit the Local Diagnostic/Programming Mode.

Adjusting the Voice and Music Volumes

Voice and music volumes can be adjusted by pressing the VOL up and down key while the function is in use. Each level is set independently, and there is no display indication of the setting. Sixteen levels are available, with the factory default settings for telephone, intercom, and background music being:

Telephone	Level 4
Intercom	Level 4
Background Music	Level 9

Restoring Default Key Settings

The EMERGENCY, TONE, PAGE, and PROGRAM keys and F1 through F8 keys can be restored to their default settings by individual programming in Local Diagnostic/Programming Mode (see page 14), or by the following method:

1. Unplug the ATEL.
2. While holding down the TALK and MENU keys reconnect the ATEL.
3. The message DEFAULT KEYS SET should appear on the display.
4. The message will stay on the display until an action is taken or until the next System time update occurs (once per minute).

Setting the ATEL Background Music

You can toggle the ATEL background music function on or off by pressing the F key assigned to that function (default is F3) or by pressing 1 while the ATEL is on-hook. The background music source is selected as described under **Selecting a Source for Music-on-Hold and ATEL Background Music** on page , and is the same as the System-wide music-on-hold source.

Background music continues to be heard from the ATEL speaker after you hang up the handset or press SPKR PHONE. The music is muted during telephone, page, or intercom operations.

You can adjust the background music volume while listening to it by pressing the VOL up/down key as needed. The background music volume level is independent of intercom listen or telephone listen volume settings.

This feature does not use a telephone link, so it can be left on all the time without reducing available System resources.

Note:

This feature requires that the ATEL be connected to an ATC-E4 card. The ATC-B card does not support the ATEL background music function. See your Dukane distributor for assistance.

Introduction

With a few exceptions, many of the ATEL's operational features can be performed by the STEL, CTEL, or by a standard DTMF 2500 compatible telephone with electronic ringer. Multi-function display capabilities, however, are only available on the ATEL.

This section explains the operation of the Dukane Model 7A1111 Standard Telephone (STEL), a DTMF-type phone. The operations in this section also apply to standard Caller-ID telephones with electronic ringer, referred to in this manual as CTEs, and standard, "off-the-shelf" DTMF 2500 compatible telephones. CTEL and DTMF telephones are not sold by Dukane, but can be purchased from various manufacturers. The majority of information in this section is relevant to STELs, CTEs, and DTMF telephones. Information that pertains to all three will be referred to as the phone.

Notes:

- The phone operations described in this section require the optional Model 437-00122 Classroom Telephone Feature Package 1, and an STC or BTC in the equipment rack.
- Any phone connected to the System must have a REN (Ringer Equivalence Number) of 1.5 or less to work with an STC or 3 or less to work with a BTC (Balanced audio Telephone Card).

STEL Description and Features

The Dukane Model 7A1111 (STEL), is shown in *Figure 2* on page 20. It has a standard 12-button telephone key pad, three programmable speed dial buttons, and four dedicated feature buttons (STORE, MEM DIAL, FLASH, and REDIAL). The handset allows private, telephone-style conversations.

System functions that can only be performed by regular telephones (STEL, DTMF telephone, or CTEL) are described on the following pages.

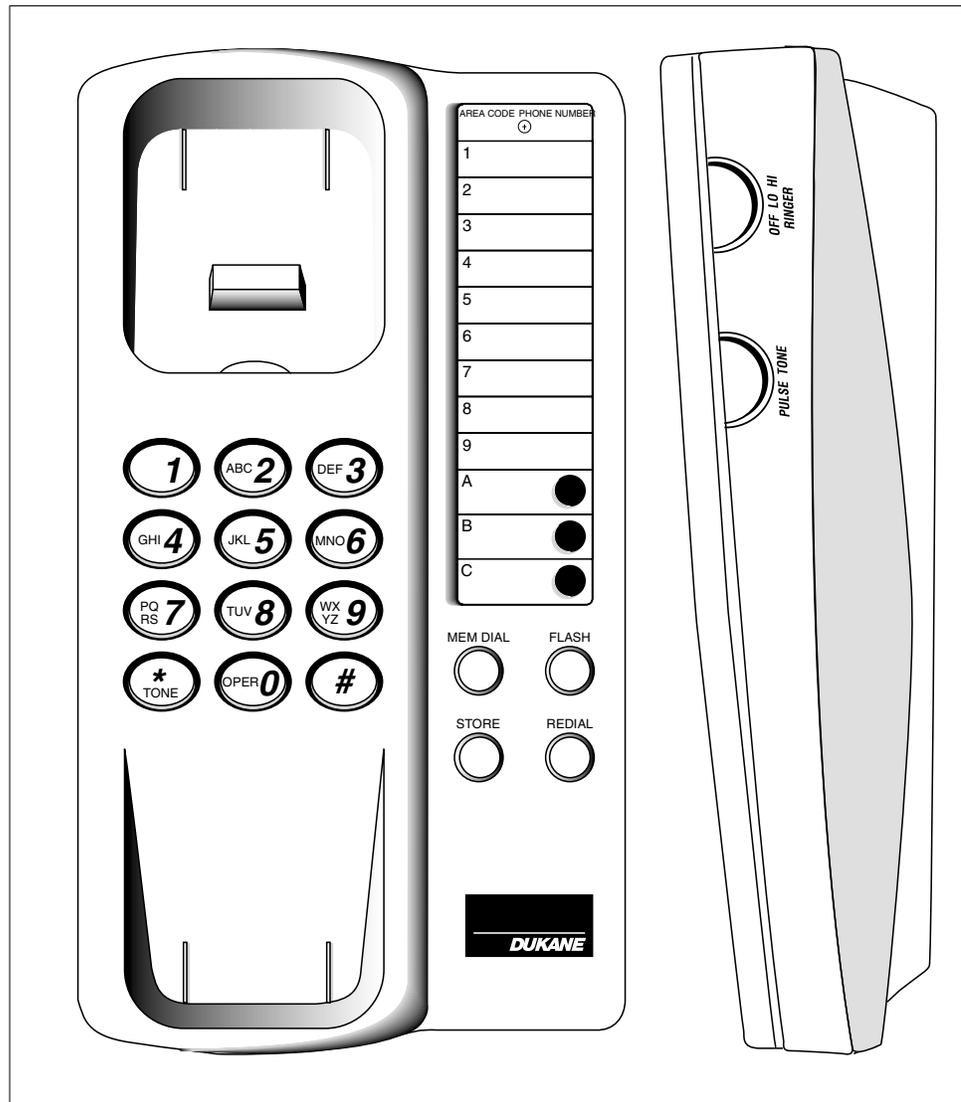


Figure 2: Model 7A1111 Standard Telephone (STEL)

Placing a Call-In

Instead of a call-in switch, you can use an STEL, DTMF telephone, or CTEL to place a call-in to the call-in location (e.g., school office, nurse station) with the incoming response heard on the speaker. Follow the directions below.

1. Lift the handset.
2. Press the desired speed dial key (if the phone is so equipped and one of the buttons is so programmed) or dial 743, select the call-in switch number (1, 2, or 3), and press #. Call-in switch numbers 1, 2, and 3 correspond to the three call-in switches that can be configured for the associated speaker station.
 - 1—Default Normal Call-In Switch
 - 2—Default Emergency Call-In Switch
 - 3—Default Call-In Cancel
3. Hang up the handset.
4. When the call-in is answered, the response is routed to the speaker associated with the calling telephone.

Note:

A speaker with the same architectural number as the telephone must exist in the System for the response to be routed to the associated speaker.

Off-Hook Duress Call-In

A System telephone port can be programmed to initiate a duress call-in to a pre-determined location with a preset call priority (these settings are the same for all telephones) if the handset is left off-hook for a configurable length of time with no activity. The audio response to such calls is automatically routed to the loudspeaker associated with the calling telephone.

Note:

This feature may not apply to your System. It requires the optional Model 437-00124 Security Feature Package 1 and the optional Model 437-00122 Classroom Telephone Feature Package 1.

Off-Hook Direct Telephone Call

A System telephone port can be programmed to initiate a direct telephone call to a configurable telephone extension when the handset is lifted. By default this option is disabled. If it is enabled, follow the directions below.

Note:

This feature may not apply to your System. It requires the optional Model 437-00124 Security Feature Package 1.

1. Lift the handset.
2. After hearing the called party answer, speak normally into the handset.
3. Listen to hear the reply from the extension. Communication is full duplex, so you may speak while listening.
4. Hang up the handset to end the call.

Off-Hook Intercom Option

A System telephone port can be programmed to initiate a direct telephone call to a particular remote speaker station when the handset is lifted. By default this option is disabled. If it is enabled, follow the directions below.

Note:

This feature may not apply to your System. It requires the optional Model 437-00122 Classroom Telephone Feature Package 1 and the Model 437-00124 Security Feature Package 1.

1. Lift the handset.
2. After hearing the connection tone, speak into the handset.
3. Stop speaking to hear the reply from the remote speaker station.
4. Hang up the handset to end the call.

Off-Hook Page

A System telephone port can be programmed to initiate a page to programmed zones when the handset is lifted. Phones programmed in this way cannot be used to make calls to other System extensions or outside lines.

1. Lift handset.
2. After hearing connection tone, speak into handset.
3. Hang up the handset to end the page.

Error Codes

If there are no ATEs in the system, error codes are displayed by flashing four LEDs on the CPC. If an error code appears, contact your system administrator or authorized Dukane distributor for assistance.

Notes

Calling a Speaker Station

All speaker stations have a three-, four-, or five-digit alphanumeric extension. The star key (*) is used to dial alpha characters. See the examples below.

Note:

ATELs do not display the alpha characters when dialing.

103*2 = 103A
103**2 = 103B
103***2 = 103C
103*3 = 103D

When dialing, press each character within 15 seconds. If no dialing activity occurs within this time, a reorder tone sounds to alert you to hang up and redial.

If your System has been networked to other Systems using a NIC, you can call any speaker station in the networked Systems. If your System has not been networked, you can only call the speaker stations in your own System.

1. ATEL: Lift the handset for a private conversation or press SPKR PHONE for a speaker/microphone push-to-talk conversation.

STEL, DTMF telephone, or CTEL: Lift the handset.

2. ATEL: Press and release #, then dial the extension number.

STEL, DTMF telephone, or CTEL: Same as ATEL.

3. ATEL ONLY: The display shows the extension. (P appears on the left side of the display when a speaker station is in privacy mode and there is no listen audio from the remote speaker station.)

4. ATEL: After hearing the connection tone, speak into the handset to switch to talk mode. If you are using the speaker/microphone, press TALK and speak into the microphone.

STEL, DTMF telephone, or CTEL: After hearing the connection tone, speak into the handset.

5. ATEL: Stop speaking or release TALK to listen for a reply from the speaker station. (You will not hear one if the speaker station is in privacy.)

STEL, DTMF telephone, or CTEL: Stop speaking to listen for a reply from the speaker station. (You will not hear one if the speaker station is in privacy.)

continued

6. ATEL ONLY: When using the handset, pressing the MUTE function (F6 factory default) will alternately mute and unmute both the talk and listen operation of the handset.
7. ATEL ONLY: When using the speaker/microphone, you can adjust the speaker listen volume by pressing the VOL up/down key as needed. The intercom listen volume level is independent of telephone listen or background music volume settings.
8. ATEL: Hang up the handset to end the call, or press SPKR PHONE to cancel the intercom connection.

STEL, DTMF telephone, or CTEL: Hang up the handset to end the call.

Answering Speaker Station Calls

Each speaker station can be equipped with up to three call-in switches. Each call-in switch is programmed with a priority level. Priority 1 is the highest, 6 is the lowest, and priority 7 is used to cancel the call. The priorities are listed below.

- | | |
|-----------------------|-------------------------|
| 1. Emergency 1 (E1) | 5. Normal Priority (NP) |
| 2. Emergency 2 (E2) | 6. Low Priority (LP) |
| 3. Emergency 3 (E3) | 7. Cancel |
| 4. High Priority (HP) | |

By default, call-in switch 1 is programmed as a normal call (priority 5), call-in switch 2 is programmed as emergency 2 (priority 2), and call-in switch 3 is programmed as call cancel (priority 7).

When a call-in switch assigned a priority from 1 to 6 is pressed, the resulting call-in is routed to a call-in destination group. (A call-in group contains one or more phones to which call-in activity is routed.) The call-in groups were programmed using the RAPID or MDS software during System installation. By default, STELs, DTMF telephones, and CTELEs are not assigned to any call-in designation group. By default, ATELEs are assigned to call-in destination group 1. To receive a call-in from a room speaker call-in switch, a phone must be configured as part of one of the call-in destination groups. A System that includes NICs can configure call-in destination groups to include any ATEL, STEL, or CTEL in the networked System.

If your System has been networked to other Systems using a NIC, your phone can be assigned to any call-in group in the networked Systems. In networked Systems, only speakers assigned to zones 17 through 32 can receive emergency call-ins from other Systems in a network.

Using the System priority defaults as an example, if call-in switch 1 is pressed, an ATEL receiving the call-in would display the calling room number and the call-in queue position. All phones (ATELs, STELs, DTMF telephones, or CTELEs) in the call-in destination group for that call-in switch announce the call using a constant triple burst ring until answered.

Again using the System priority defaults, pressing call switch 2 would yield the same results as described for call-in 1 switch above. All emergency call-ins (priorities 1 through 3) create a quintuple burst ring with a cadence of 1.5 seconds on and 18.5 seconds off.

The call-in tone for priorities 4 through 6 is a triple burst ring with a cadence of 1.5 seconds on and 18.5 seconds off.

Auto Answering a Call-In

In order to auto-answer a loudspeaker call-in, the extension's intercom off-hook answer class of service attribute must be enabled (default is disabled). If this attribute is not enabled, see *Manually Answering a Call-In* on page 28. For both manually and automatically answering call-ins, the extension must have the intercom access class of service attribute enabled.

If more than one call is in the queue, the calls are automatically sorted by priority, followed by the order in which they are received.

1. ATEL: Lift the handset or press SPKR PHONE.
STEL, DTMF telephone, or CTEL: Lift the handset.
2. ATEL: Speak clearly into the handset or press the TALK key and speak clearly into the microphone. When the handset is used, your voice automatically triggers the talk mode to the calling room.
STEL, DTMF telephone, or CTEL: Speak clearly into the handset.
3. ATEL: Stop speaking into the handset or release the TALK key and listen for the reply from the calling room.
STEL, DTMF telephone, or CTEL: Stop speaking into the handset and listen for the reply from the calling room.
4. ATEL ONLY (handset): Pressing the MUTE button (F6 factory default) will alternately mute and unmute both the talk and listen operation of the handset.
5. ATEL ONLY (push to talk): Press the VOL up/down key to adjust the listen volume.
Note:
The MUTE function is not available in this mode of operation.

continued

6. ATEL: Hang up the handset or press SPKR PHONE to end the call. Failure to replace the handset in the cradle will cause the ATEL to switch to an on-hook mode of operation after a preset duration. If the ATEL converts to an on-hook mode, it still rings as if the handset is in the cradle, therefore no calls are missed.

STEL, DTMF telephone, or CTEL: Hang up the handset to end the call.

Note:

The handset must be on-hook for a minimum of two seconds to end the call.

Manually Answering a Call-In (Auto Answer Disabled)

If auto answer has been disabled in your System, you can manually answer calls.

1. ATEL: Lift the handset or press SPKR PHONE.

STEL, DTMF telephone, or CTEL: Lift the handset.

2. ATEL: Dial 742# or press the function key programmed to dial that sequence (F8 factory default).

STEL, DTMF telephone, or CTEL: Dial 742#.

3. ATEL: Speak clearly into the handset or press the TALK key and speak clearly into the microphone. When the handset is used, your voice automatically triggers the talk mode to the calling room.

STEL, DTMF telephone, or CTEL: Speak clearly into the handset.

4. ATEL: Stop speaking into the handset or release the TALK key and listen for the reply from the calling room.

STEL, DTMF telephone, or CTEL: Stop speaking into the handset and listen for the reply from the calling room.

5. ATEL ONLY (handset): Pressing the MUTE button (F6 factory default) will alternately mute and unmute both the talk and listen operation of the handset.

6. ATEL ONLY (push to talk): Press the VOL up/down key to adjust the listen volume.

Note:

The MUTE function is not available in this mode of operation.

7. ATEL: Hang up the handset or press SPKR PHONE to end the call. Failure to replace the handset in the cradle will cause the ATEL to switch to an on-hook mode of operation after a preset duration. If the ATEL converts to an on-hook mode, it still rings as if the handset is in the cradle, therefore no calls are missed.

STEL, DTMF telephone, or CTEL: Hang up the handset to end the call.

Note:

The handset must be on-hook for a minimum of two seconds to end the call.

Answering the Highest Priority System Call-In

To answer the highest priority call-in follow the steps below.

1. ATEL: Lift the handset or press SPKR PHONE.

STEL, DTMF telephone, or CTEL: Lift the handset.

2. ATEL: Dial 745#, or press the function key programmed to dial that sequence. You are automatically connected to the first highest priority call-in, regardless of the call's origin or programmed destination.

STEL, DTMF telephone, or CTEL: Dial 745#. You are automatically connected to the first highest priority call-in, regardless of the call's origin or programmed destination.

3. ATEL: Speak clearly into the handset. Your voice triggers the talk mode to the calling room. If you are using the speaker/microphone, press TALK and speak into the microphone.

STEL, DTMF telephone, or CTEL: Speak clearly into the handset.

4. ATEL: Stop speaking into the handset or release the TALK key to listen for the reply from the calling room.

STEL, DTMF telephone, or CTEL: Stop speaking to listen for the reply from the calling room.

5. ATEL ONLY (handset): Pressing the MUTE button (F6 factory default) will alternately mute and unmute both the talk and listen operation of the handset.

6. ATEL ONLY (push to talk): Press the VOL up/down key to adjust the listen volume.

Note:

The MUTE function is not available in this mode of operation.

7. ATEL: Hang up the handset or press SPKR PHONE to end the call. Failure to replace the handset in the cradle will cause the ATEL to switch to an on-hook mode of operation after a preset duration. If the ATEL converts to an on-hook mode, it still rings as if the handset is in the cradle, therefore no calls are missed.

STEL, DTMF telephone, or CTEL: Hang up the handset to end the call.

Note:

The handset must be on-hook for a minimum of two seconds to end the call.

Canceling All Normal Call-Ins in the System

When a number of call-ins occur at the same time (e.g., a hallway accident, bathroom spill), or a building-wide challenge where groups race to call in with the correct answer, all normal call-ins in the System can be canceled at once by doing the following:

1. ATEL: Lift the handset or press SPKR PHONE.

STEL, DTMF telephone, or CTEL: Lift the handset.
2. ATEL: Dial 749# or press the function key programmed to dial that sequence.

STEL, DTMF telephone, or CTEL: Dial 749#.
3. ATEL: Hang up the handset or press SPKR PHONE.

STEL, DTMF telephone, or CTEL: Hang up the handset.

Transferring Intercom Calls Between Room Speakers and Associated System Phones

Intercom calls can be transferred from the room speaker to an associated ATEL, STEL, DTMF telephone, CTEL, or vice-versa. A System phone is associated with a speaker when both have the same extension number.

Notes:

- Transferring from speaker to an associated ATEL is a standard option.
- Transferring from speaker to STEL, DTMF telephone, or CTEL requires the optional Model 437-00122 Classroom Telephone Feature Package 1 and Model 437-00123 Classroom Telephone Feature Package 2.

Transferring from Speaker to Associated System Phone

To transfer a call from the room speaker to a System telephone follow the steps below.

1. ATEL: Lift the handset. Your System may be programmed to require a dial command before speaker audio is transferred to the telephone. If so, dial 740#.

STEL, DTMF telephone, or CTEL: Lift the handset. Your System may be programmed to require a dial command before speaker audio is transferred to the telephone. If so, dial 740#.
2. ATEL: Call audio transfers to the room telephone.

STEL, DTMF telephone, or CTEL: Call audio transfers to the room telephone.

Transferring from System Phone to Associated Speaker

To transfer a call from a System phone to the associated room speaker follow the steps below.

1. ATEL: Press and release the hookswitch or press and release the function key programmed as FLASH.

STEL, DTMF telephone, or CTEL: Press and release the hookswitch or press and release FLASH.

2. ATEL: Dial 741#. Call audio transfers to the speaker.

STEL, DTMF telephone, or CTEL: Same as ATEL.

3. ATEL: Hang up the handset.

STEL, DTMF telephone, or CTEL: Same as ATEL.

Calling a Telephone

All speakers, ATELS, STELS, CTELS, and standard DTMF telephones have a three-, four-, or five-alphanumeric dial number that can be either a room number or an extension number. (The terms “room number” and “extension number” are used interchangeably throughout this manual.) The star key (*) is used to dial alpha characters. See the examples below.

103*2 = 103A

103**2 = 103B

103***2 = 103C

103*3 = 103D

When dialing, press each character within 15 seconds. If no dialing activity occurs within this time, a tone sounds to alert you to hang up and redial.

Note:

A System phone (STEL, DTMF telephone, or CTEL) can be programmed to automatically call a particular extension when the handset is lifted. System phones programmed in this way cannot be used to call any other extension.

Calling a System Telephone Extension

A System telephone is a Dukane-supplied ATEL or STEL; or an “off-the-shelf” DTMF telephone or CTEL. If your System has been networked to other Systems using a NIC, you can call any telephone in the networked Systems. If your System has not been networked, you can only call the telephones in your own System.

Note:

An extension can only be called if its telephone ring access class of service attribute is enabled. If this attribute is disabled and the telephone is associated with a speaker, the caller will be directly connected to the speaker. If the telephone is not associated with a speaker then the caller will hear the reorder tone in the handset.

1. ATEL: Lift the handset for a private conversation or press SPKR PHONE for speaker/microphone conversation.

STEL, DTMF telephone, or CTEL: Lift the handset.
2. ATEL: Dial the extension number.

STEL, DTMF telephone, or CTEL: Same as ATEL.
3. ATEL: After hearing the called party answer, speak normally into the handset or toward the microphone.

STEL, DTMF telephone, or CTEL: After hearing the called party answer, speak normally into the handset.
4. ATEL ONLY: If you are using the speaker phone function, stop speaking to listen for a reply from the other extension.
5. ATEL ONLY: Pressing the MUTE function (F6 factory default) will alternately mute and unmute both the transmitter and receiver in handset operation, or mute and unmute the panel microphone in speaker/microphone operation.
6. ATEL ONLY: If push-to-talk speaker/microphone operation is desired, press and release TALK to manually control the audio direction. The MUTE function is not available in this mode of operation.
7. ATEL ONLY: If you are using the speaker/microphone, you can adjust the speaker listen volume by pressing the VOL up/down key.
8. ATEL: Hang up the handset or press SPKR PHONE to end the call. Failure to replace the handset in the cradle will cause the ATEL to switch to an on-hook mode of operation after a preset duration. If the ATEL converts to an on-hook mode, it still rings as if the handset is in the cradle, therefore no calls are missed.

STEL, DTMF telephone, or CTEL: Hang up the handset to end the call.

Note:

The handset must be on-hook for a minimum of two seconds to end the call.

Busy Station Intercom (Fusion feature set only)

If a called extension is busy, you can transfer the call to a room speaker associated with that extension by pressing 2 while the busy signal sounds. You can then communicate with the room without interrupting the telephone conversation in progress.

Note:

The extension trying to initiate busy station intercom cannot have a call on hold at the time or busy station intercom will not be enabled.

Call Back (Fusion feature set only)

If a called extension is busy, you can request call back by pressing 1 while the busy signal sounds. When the called extension is free, the System rings the originating extension. When the originating extension picks up, a call is automatically placed to the requested extension.

Note:

If the originating extension is busy when the call back occurs, the call back will not be completed.

Calling a PBX/KSU Telephone Extension

A PBX/KSU extension is a phone connected to a phone switch. Calling a PBX/KSU telephone extension requires the optional Model 437-00127 Call Management Feature Package 1. This function also requires proper setup of both the PBX/KSU and the System. If this function does not work, contact your Dukane distributor.

1. ATEL: Lift the handset for a private conversation or press SPKR PHONE for speaker/microphone conversation.

STEL, DTMF telephone, or CTEL: Lift the handset.

2. ATEL: Dial the PBX/KSU extension number.

—OR—

Dial the access code assigned to the PBX/KSU (e.g., 81), then dial the PBX/KSU extension number when the dial tone is heard.

STEL, DTMF telephone, or CTEL: Same as ATEL.

3. ATEL: After hearing the called party answer, speak normally into the handset or toward the microphone.

STEL, DTMF telephone, or CTEL: After hearing the called party answer, speak normally into the handset.

4. ATEL ONLY: If you are using the speaker phone function, stop speaking to listen for a reply from the other extension.

continued

5. ATEL ONLY: Pressing the MUTE function (F6 factory default) will alternately mute and unmute both the transmitter and receiver in handset operation, or mute and unmute the panel microphone in speaker/microphone operation.
6. ATEL ONLY: If push-to-talk speaker/microphone operation is desired, press and release TALK to manually control the audio direction. The MUTE function is not available in this mode of operation.
7. ATEL ONLY: If you are using the speaker/microphone, you can adjust the speaker listen volume by pressing the VOL up/down key.
8. ATEL: Hang up the handset or press SPKR PHONE to end the call. Failure to replace the handset in the cradle will cause the ATEL to switch to an on-hook mode of operation after a preset duration. If the ATEL converts to an on-hook mode, it still rings as if the handset is in the cradle, therefore no calls are missed.

STEL, DTMF telephone, or CTEL: Hang up the handset to end the call.

Note:

The handset must be on-hook for a minimum of two seconds to end the call.

Outside Line Access (Fusion feature set)

An outside line is a telephone line that comes from the central office directly into a building. These lines can be accessed either directly from the STARCall system through a COC (Central Office Card) within the system or via a PBX system connected to STARCall.

Inbound calls connected through the COC card with the optional TCM (Trunk Caller-ID Module) will display Caller ID information on telephones so equipped.

Outside line access for every extension is controlled by the class of service assigned. Contact your System Administrator for details concerning the availability of outside line access based on class of service assignments in your System.

Calling an Outside Line Connected Directly to STARCall

1. ATEL: Lift the handset for a private conversation or press SPKR PHONE for speaker/microphone conversation.

STEL, DTMF telephone, or CTEL: Lift the handset.

2. Dial the outside line prefix number (usually 9 or 80 to 89) to access an outside line. To select a specific outside line, use the line pickup code (79XX) to select the desired line (for example, 7902 will access line 2 for dialing if it is currently idle). See *Using Telephone Call Pickup* on page 38 or more information.

ATELs display "CO" and a second dial tone is heard when the System is ready for outbound dialing.

3. Dial the desired telephone number, then wait. After 3 to 5 seconds the System will assume you have completed dialing the number.
4. If you hear a double tone burst, the number dialed is toll restricted and this extension's toll restriction and permit level do not allow calling this number. Enter an account code or password to proceed. If no double tone burst is heard, go to step 5.

ATEL: If the account code is not authorized for this use or the password is wrong "INVALID SEQUENCE" is displayed and the reorder tone sounds and the call is not placed.

STEL, DTMF telephone, or CTEL: If the account code is not authorized for this use or the password is wrong the reorder tone sounds and the call is not placed.

5. The System dials the number.

ATEL: The display is updated to show which outside line is being used.

6. ATEL: When the called party answers, speak normally into the handset or toward the microphone.

STEL, DTMF telephone, or CTEL: When the called party answers, speak normally into the handset.

7. ATEL ONLY: Stop speaking to listen for a reply.
9. ATEL ONLY: Pressing the MUTE function (F6 factory default) will alternately mute and unmute both the transmitter and receiver in handset operation, or mute and unmute the panel microphone in speaker/microphone operation.
10. ATEL ONLY: If push-to-talk speaker/microphone operation is desired, press and release TALK to manually control the audio direction. The MUTE function is not available in this mode.
11. ATEL ONLY: If you are using the speaker/microphone, you can adjust the speaker listen volume by pressing the VOL up/down key.
12. ATEL: Hang up the handset or press SPKR PHONE to end the call. Failure to replace the handset in the cradle will cause the ATEL to switch to an on-hook mode of operation after a preset time. When in the on-hook mode, the ATEL will ring as if the handset is in the cradle to prevent missing any calls.

STEL, DTMF telephone, or CTEL: Hang up the handset to end the call.

Note:

The handset must be on-hook for a minimum of two seconds to end the call.

Calling an Outside Line Connected via a PBX

For STARCall, STARCall Plus and STARCall Fusion systems connected to outside lines through a PBX from another manufacturer.

1. ATEL: Lift the handset for a private conversation or press SPKR PHONE for speaker/microphone conversation.

STEL, DTMF telephone, or CTEL: Lift the handset.
2. Dial 9 to connect to the PBX (may also be any number 80 through 89).
3. When the dial tone is heard, dial 9 again to access an outside telephone line through the PBX.
Note:
The System may automatically dial the second 9 for outside line access.
4. If this is a toll call and a double tone burst is heard, enter a four-digit account number.
5. After hearing the called party answer, speak normally into the handset or toward the microphone.
6. ATEL ONLY: Stop speaking to listen for a reply.
7. ATEL ONLY: Pressing the MUTE function (F6 factory default) will alternately mute and unmute both the transmitter and receiver in handset operation, or mute and unmute the panel microphone in speaker/microphone operation.
8. ATEL ONLY: If push-to-talk speaker/microphone operation is desired, press and release TALK to manually control the audio direction. The MUTE function is not available in this mode.
9. ATEL ONLY: If you are using the speaker/microphone, you can adjust the speaker listen volume by pressing the VOL up/down key.
10. ATEL: Hang up the handset or press SPKR PHONE to end the call. Failure to replace the handset in the cradle will cause the ATEL to switch to an on-hook mode of operation after a preset time. When in the on-hook mode, the ATEL will ring as if the handset is in the cradle to prevent missing any calls.

STEL, DTMF telephone, or CTEL: Hang up the handset to end the call.

Note:

The handset must be on-hook for a minimum of two seconds to end the call.

Placing an Outside Call Connected via a PBX on Hold

1. ATEL: Press and release the function key programmed as FLASH (default is F7) or press and release the hookswitch.

STEL, DTMF telephone, or CTEL: Press and release FLASH (if present) or press and release the hookswitch.

2. ATEL: Dial 759# to put the outside call on hold.

Note:

To remove the call from hold, dial the pickup code of the PBX, following the outside line equipment manufacturer's instructions.

Transferring an Outside Call Connected via a PBX to Another Outside Extension

1. ATEL: Press and release the function key programmed as FLASH (default is F7) or press and release the hookswitch.

STEL, DTMF telephone, or CTEL: Press and release FLASH (if present) or press and release the hookswitch .

2. Dial 759# to put the outside call on hold.
3. Dial the other phone extension and hang up.

Answering Telephone or Outside Line Calls

Answering a Call From Another Telephone or Outside Line

If your System has been networked to other Systems using a NIC, you can receive calls from any other telephone in the networked System. If your System has not been networked, you can only receive calls from telephones in your own System.

ATEL: Lift the handset for normal private phone communication or press SPKR PHONE to communicate through the speaker/microphone.

STEL, DTMF telephone, or CTEL: Lift the handset.

Using Call Group Pickup

To pick up a System call from another extension, follow the steps below.

1. ATEL: Lift the handset or press SPKR PHONE.

STEL, DTMF telephone, or CTEL: Lift the handset.

2. ATEL: To pick up a telephone call by group, dial 761 followed by the group number (01–32) and the # key.

Note:

Call groups are defined during System programming using RAPID or MDS. Default is all ATELS in group 01.

STEL, DTMF telephone, or CTEL: Same as ATEL.

Note:

Call groups are defined during System programming using RAPID or MDS. By default phones are not assigned to any call destination group.

Using Telephone Call Pickup

1. ATEL: Lift the handset or press SPKR PHONE.

STEL, DTMF telephone, or CTEL: Lift the handset.

2. To pick up a telephone call by extension, dial 762 followed by the extension number and the # key.

Note:

The 762 command also allows an outside line calling a System telephone to be answered by entering the ringing telephone's extension in the 762 command.

Call Holding (Telephone and Outside Line)

Placing a Call on Hold

To place a call on hold, follow the steps below.

1. **A TEL:** If using the handset or speaker/microphone, while engaged in a call, press and release the function key programmed as **FLASH** (default is **F7**). If using the handset, you can also press and release the hookswitch.

STEL, DTMF telephone, or C TEL: While engaged in a call, press and release the hookswitch or press and release **FLASH** (if present).

2. Listen for a distinct three-burst tone followed by the dial tone. The call is now on hold. The calling party placed on hold hears music or silence.

Note:

You can now press and release **FLASH** to retrieve the holding call or perform another function (e.g., call another extension).

3. If the call on hold is not retrieved by another party or the party which placed the call on hold within a programmed time, the call rings back to the extension which placed the call on hold.

Removing a Call From Hold

To remove a call from hold, follow the steps below.

A TEL: If the handset is on-hook, lift the handset. The call is removed from hold and conversation can be resumed.

—OR—

If the handset was left off-hook, press and release the function key programmed as **FLASH** (default is **F7**). The call is removed from hold and conversation can be resumed.

STEL, DTMF telephone, or C TEL: Press and release the **FLASH** key (if present) or press the hookswitch long enough to send an on-hook signal, then release it. The call is removed from hold and conversation can be resumed.

Outside Line Call Park (Fusion feature set only)

You can park a call by first placing the call on hold (see *Placing a Call on Hold* on the preceding page) and dialing 763#. Your extension is now free to perform other operations. A parked call can be picked up from any extension using the Line Pick-Up feature (see below).

Note:

If the parked call is not picked up within a programmed time, the call rings back to the extension which originally parked the call.

Line Pick-Up (Fusion feature set only)

This feature lets you access a specific outside line under certain conditions.

To use this feature from a System telephone lift the handset or go into speakerphone mode and dial 79XX (where XX is the desired outside line number 01 – 32).

The table below lists the results when an outside line is selected under various conditions.

Line State	Results
Idle	Telephone receives dial tone and line can be used for outbound dialing.
Ringing	Outside line is connected to the telephone and conversation can begin.
Parked	Outside line is connected to the telephone and conversation can begin.
On Hold	Outside line is connected to the telephone and conversation can begin.
Camped onto extension	Outside line is connected to the telephone and conversation can begin.
Waiting for Attendant or DIL extension	Outside line is connected to the telephone and conversation can begin.
Talking to another telephone	Telephone receives reorder tone. Outside line cannot be used if in active conversation.

If the trunk is equipped with the optional Caller ID module and enabled to receive Caller ID, ATEL displays are updated with outside line number and caller's caller ID information.

Outside Line Camp On (Fusion feature set only)

If a system user transfers a call to a busy extension and the caller wants to wait for that busy extension to become free, the call can be “camped-on” that extension by dialing 765[extension number]#. A camped-on call rings the selected extension as soon as that extension is free.

Note:

If the camped call is not picked up within a programmed time, the call rings back to the extension which originally camped the call.

Recall Timers (Fusion feature set only)

The recall timers listed below are configured using RAPID. When a recall timer expires, the call is sent back to the System extension which originally placed the call into the timed state. If the originating extension is busy when the recall timer expires, the call state is maintained until the call is picked up by another extension or the originating extension is idle.

Call Park Timeout

The call park timer is started when an outside line call is parked. Timeout length can be between 1 and 10 minutes.

Camp On Timeout

The camp-on timer is started when an outside line is camped onto an extension. Timeout length can be between 1 and 10 minutes.

Hold Timeout

The hold timer is started when a System telephone or outside line is placed on hold. Timeout length can be between 30 seconds and 10 minutes.

Transfer Timeout

The transfer timer is started when a System telephone or outside line is transferred (the point at which ringback is heard after being placed on hold). Timeout length can be between 30 seconds and 10 minutes.

Call Transferring (Telephone and Direct Outside Line)

When an extension is engaged in a telephone conversation with either another System telephone or an outside line, the call can be transferred to another System extension.

1. ATEL: Press and release the function key programmed as FLASH (default is F7), or press and release the hookswitch (if using handset), or press SPKR PHONE twice (if using speaker/ microphone).

STEL, DTMF telephone, or CTEL: Press and release the hookswitch or press and release FLASH (if present).

2. Listen for the dial tone, then dial the extension to which you want the call transferred.
3. Hang up the handset to do a blind transfer,

—OR—

Wait for the called extension to answer and announce the transferred call before hanging up.

Note (Fusion feature set only):

If the extension to which you transfer an outside line call is busy you can camp the call on the extension if the caller wants to wait. See *Outside Line Camp On* on the preceding page.

Call Conferencing

The System can support two simultaneous three-party conference calls. Conferences can include three System telephones or two System telephones and one outside line. Speaker stations cannot be used in conferencing.

Note:

Conference calling requires the Expanded Audio Routing Card (ARC-E, Model 110-3524B) in the System card shelf and the optional Model 437-00122 Classroom Telephone Feature Package 1.

Initiating a Three-Party Conference Call

1. ATEL: While engaged in a conversation with another telephone or outside line, press and release the hookswitch or press and release the function key programmed as FLASH (default is F7).

STEL, DTMF telephone, or CTEL: While engaged in a conversation with another telephone or outside line, press and release the hookswitch or press and release FLASH (if present).

2. Dial the third extension or trunk when you hear the dial tone.

3. ATEL: When the third party answers, press and release the function key programmed as FLASH (default is F7), CONFERENCE, or press and release the hookswitch to begin a three-way conference call.

If the third party is busy or does not answer, press and release the function key programmed as FLASH (default is F7) or press and release the hookswitch to restore the original two-party call.

STEL, DTMF telephone, or CTEL: When the third party answers, press and release the hookswitch or press and release FLASH (if present) to begin the three-way conference call.

If the third party is busy or does not answer, press and release the hookswitch or press and release FLASH (if present) to restore the original two-party call.

Terminating a Conference Call

Any party in a three-way conference call can hang up to end their participation. The remaining parties are still connected and can continue the call.

Call Forwarding

Call forwarding lets you send calls routed to one extension to another extension or hunt group.

Forwarding Restrictions

A System extension cannot forward calls when:

- It does not have call forward access class of service enabled.
- It is already forwarded to another extension.
- It is already the destination for another extension which has its calls forwarded.
- It is part of a hunt group currently having calls forwarded to it.
- It is trying to forward to its own hunt group.
- It has alpha characters in its number (e.g., A101) and it is trying to forward to a voice mail port.
- The destination extension does not have telephone ring class of service enabled.
- The destination extension is in a hunt group that has extension(s) which are already forwarded.
- The System maximum of 32 extensions is already forwarded.

Forwarding a Call

1. ATEL: Lift the handset or press SPKR PHONE.

STEL, DTMF telephone, or CTEL: Lift the handset.

2. Dial 756.

Note:

If your System is equipped with a CPC-E or CPC-B (contact your System Administrator), skip step 3 and go to step 4.

3. Dial a forward code from the following choices:

1—forward always

2—forward when this phone is busy

3—forward when there is no answer

4—forward when this phone is busy and when there is no answer

4. Dial the extension or hunt group phantom extension to which calls are to be forwarded, then press #. An interrupted dial tone is heard in the handset.

Note:

The interrupted dial tone is heard until forwarding is canceled.

Forwarding Calls to Voice Mail (Fusion feature set only)

1. ATEL: Lift the handset or press SPKR PHONE.

—OR—

Press the Do Not Disturb function key (skip the steps below).

STEL, DTMF telephone, or CTEL: Lift the handset.

2. Dial 7561XXX# (XXX is the extension number of the Voice Mail hunt group).

“Follow Me” Call Forwarding (v. 5.00 system software or later)

1. ATEL: Lift the handset or press SPKR PHONE.

STEL, DTMF telephone, or CTEL: Lift the handset.

2. Dial 766.

3. Dial a forward code from the following choices:

1—forward always

2—forward when this phone is busy

3—forward when there is no answer

4—forward when this phone is busy and when there is no answer

4. Dial the extension from which calls are to be forwarded to this extension, then press #. An interrupted dial tone is heard in the handset.

Note:

The interrupted dial tone is heard until forwarding is canceled.

Canceling Call Forwarding

To cancel call forwarding, follow the steps below.

1. ATEL: Lift the handset or press SPKR PHONE at the forwarded extension.

STEL, DTMF telephone, or CTEL: Lift the handset at the forwarded extension.

2. Dial 757# to cancel call forwarding, 767# to cancel “Follow Me” call forwarding. Forwarding is canceled and the standard dial tone is heard in the handset.

Audible Forwarding Indicators

There are several audible indications that are used to indicate the forwarding status of a System extension.

When an extension has been successfully forwarded to another extension, the forward dial tone is heard. This tone consists of a 1-second confirmation tone followed by the normal dial tone. An ATEL displays “Calls Forwarded.”

When a forwarded telephone goes off-hook or receives a dial tone, a 1-second confirmation tone is heard, followed by the normal dial tone.

When the destination extension for forwarded calls goes off-hook or receives a dial tone, a quick stutter tone (4 quick tones) is heard, followed by the normal dial tone. This indicate that this extension is receiving calls forwarded from another extension (system software v 5.00 or newer).

If an extension is part of a hunt group that is a destination for forwarded calls, the normal dial tone is heard since this extension may not be receiving any forwarded calls.

Forwarding Conditions in a Hunt Group

- An extension in a hunt group may forward to another extension or hunt group only if its hunt group is not already the forwarding destination of another extension.
- An extension cannot forward to a hunt group if that hunt group has extensions which are already forwarded to other extensions.
- Forwarding is never more than one hunt group deep.

Example:

Extension 601 belongs to hunt group 1 as an attendant. Extension 601 is forwarded to hunt group 300, the voice mail group. An extension in the 300 hunt group cannot be forwarded to another extension or hunt group for the forward to complete successfully.

Message Waiting Indicator

Manually Setting the Message Waiting Indicator

The call assurance LED in a room can flash to act as a message waiting indicator. This flash pattern (three rapid flashes, three seconds off) shows a message is waiting to be retrieved by calling some predetermined extension. The Message Waiting Indicator feature requires the optional Model 437-00127 Call Management Feature Package 1.

1. ATEL: Lift the handset or press SPKR PHONE.

STEL, DTMF telephone, or CTEL: Lift the handset.

2. ATEL: To activate the message indicator in a room, dial 7601, followed by the room number and the # key.

STEL, DTMF telephone, or CTEL: Same as ATEL.

3. ATEL: To deactivate the message waiting indicator in a room, dial 7600, followed by the room number and the # key.

Note:

After the message is received, the indicator must be deactivated, either by the person receiving the message or by the person delivering the message, using step 3 above.

STEL, DTMF telephone, or CTEL: Same as ATEL.

Automatic Message Waiting Indicator Operation (Fusion feature set only)

The message indicator for an extension (the call assurance LED) will flash when a new voice mail message for that extension is received. If this extension is connected to a CTEL equipped with a voice mail indicator, that indicator will also be activated when a new voice mail message is received for that extension.

Paging

Paging from an STEL, CTEL, or DTMF telephone phone requires the installation of optional feature packages. The Model 437-00122 Classroom Telephone Feature Package 1 must be present. When the Model 437-00123 Classroom Telephone Feature Package 2 is added, the following paging features are provided:

- All call
- Zone page including zones
- Zone page excluding zones
- Room page including selected rooms
- Room page excluding selected rooms
- Program tone distribution

The Model 437-00124 Security Feature Package 1 adds the following paging features:

- Emergency all call
- Emergency zone page including zones
- Emergency zone page excluding zones
- Off-hook emergency zone page
- Off-hook zone page

Your System could be equipped with one or both feature packages. Contact your system administrator for details.

Emergency Paging All Rooms and Zones

To make an emergency page to all rooms and zones, follow the steps below. If your System has been networked to other Systems using a NIC, you can make an emergency page to all rooms and zones in the networked Systems. If your System has not been networked, you can only page rooms and zones in your own System.

1. ATEL: Lift the handset or press SPKR PHONE and dial 70#.

—OR—

Press EMERGENCY, then press #.

STEL, DTMF telephone, and CTEL: Lift the handset and dial 70#.

Note:

A double tone burst after pressing # indicates restricted access to this feature from this phone. You must enter a four-digit password after the tone to complete this operation. See *Password Control* on page 3.

2. ATEL: Speak clearly into the handset or microphone to make a page announcement.

STEL, DTMF telephone, and CTEL: Speak clearly into the handset to make a page announcement.

3. ATEL ONLY: If muting is also desired while using the microphone, press TALK to change from hands-free to push-to-talk paging. Thereafter, pushing TALK allows the page audio, and releasing TALK mutes the microphone. The MUTE button can also be used to toggle between mute and unmute.
4. ATEL: Hang up the handset or press SPKR PHONE to end the page.
STEL, DTMF telephone, and CTEL: Hang up the handset to end the page.

Emergency Paging Selected Zones

To make an emergency page to selected zones, follow the steps below. If your System has been networked to other Systems using a NIC, you can make a selective emergency page to certain zones in all networked Systems. If your System has not been networked, you can only page zones in your own System.

1. ATEL: Lift the handset or press SPKR PHONE.
STEL, DTMF telephone, and CTEL: Lift the handset.
2. ATEL: Press EMERGENCY then press 1, or dial 701.
STEL, DTMF telephone, and CTEL: Dial 701.
3. ATEL: Enter the zone numbers (01–32) to be paged. Press #.
STEL, DTMF telephone, and CTEL: Same as ATEL.
Notes:
 - Zones 1 through 9 must be preceded by a 0 (entered as 01 through 09).
 - In networked Systems, only speakers assigned to zones 17 through 32 can receive selective emergency pages from other Systems in a network. Speakers assigned to zones 1 through 16 CANNOT receive such pages from other Systems in a network. All 32 zones in a local System receive selective emergency pages originating in their own system.
 - A double tone burst after pressing # indicates restricted access to this feature from this phone. You must enter a four-digit password after the tone to complete this operation. See *Password Control* on page 3.
4. ATEL: Speak clearly into the handset or microphone to make a page announcement.
STEL, DTMF telephone, and CTEL: Speak clearly into the handset to make a page announcement.
5. ATEL ONLY: If muting is also desired while using the microphone, press TALK to change from hands-free to push-to-talk paging. Thereafter, pushing TALK allows page audio through, while releasing TALK mutes the microphone. The MUTE button can also be used to toggle between mute and unmute.
6. ATEL: Hang up the handset or press SPKR PHONE to end the page.
STEL, DTMF telephone, and CTEL: Hang up the handset to end the page.

Emergency Paging All But Excluded Zones

To make an emergency page that excludes selected zones, follow the steps below. If your System has been networked to other Systems using a NIC, you can make an exclusionary emergency page to certain zones in all networked Systems. If your System has not been networked, you can only page zones in your own System.

1. ATEL: Lift the handset or press SPKR PHONE.

STEL, DTMF telephone, and CTEL: Lift the handset.

2. ATEL: Press EMERGENCY then press 2, or dial 702.

STEL, DTMF telephone, and CTEL: Dial 702.

3. ATEL: Enter the zone numbers (01–32) to be excluded and press #.

STEL, DTMF telephone, and CTEL: Same as ATEL.

Notes:

- Zones 1 through 9 must be preceded by a 0 (entered as 01 through 09).
 - In networked Systems, only speakers assigned to zones 17 through 32 can receive exclusionary pages from other Systems in a network. Speakers assigned to zones 1 through 16 CANNOT receive exclusionary pages from other Systems in a network. All 32 zones in a local System can receive exclusionary emergency pages originating in their own system.
 - A double tone burst after pressing # indicates restricted access to this feature from this phone. You must enter a four-digit password after the tone to complete this operation. See *Password Control* on page 3.
4. ATEL: Speak clearly into the handset or microphone to make a page announcement.

STEL, DTMF telephone, and CTEL: Speak clearly into the handset to make a page announcement.
 5. ATEL ONLY: If muting is also desired while using the microphone, press TALK to change from hands-free to push-to-talk paging. Thereafter, pushing TALK allows page audio through, while releasing TALK mutes the microphone. The MUTE button can also be used to toggle between mute and unmute.
 6. ATEL: Hang up the handset or press SPKR PHONE to end the page.

STEL, DTMF telephone, and CTEL: Hang up the handset to end the page.

Off-Hook Emergency Zone Page (STEL, DTMF Telephone, and CTEL Only)

A System telephone port can be configured to initiate an automatic emergency page to any combination of zones when the telephone handset is lifted. By default this option is disabled. If this option is enabled:

1. Lift the handset.
2. Speak clearly into the handset to make the page announcement.
3. Hang up the handset to end the page.

Paging All Rooms and Zones

To make a page to all rooms and zones, follow the steps below. If your System has been networked to other Systems using a NIC, you can make a page to all rooms and certain zones in the networked Systems. If your System has not been networked, you can only page rooms and zones in your own System.

1. ATEL: Lift the handset or press SPKR PHONE.

STEL, DTMF telephone, and CTEL: Lift the handset.

2. ATEL: Press PAGE then press #, or dial 72#.

STEL, DTMF telephone, and CTEL: Dial 72#.

Notes:

A double tone burst after pressing # indicates restricted access to this feature from this phone. You must enter a four-digit password after the tone to complete this operation. See *Password Control* on page 3.

3. ATEL: Speak clearly into the handset or microphone to make a page announcement.

STEL, DTMF telephone, and CTEL: Speak clearly into the handset to make a page announcement.

4. ATEL ONLY: If muting is also desired while using the microphone, press TALK to change from hands-free to push-to-talk paging. Thereafter, pushing TALK allows page audio through, while releasing TALK mutes the microphone. The MUTE button can also be used to toggle between mute and unmute.

5. ATEL: Hang up the handset or press SPKR PHONE to end the page.

STEL, DTMF telephone, and CTEL: Hang up the handset to end the page.

Paging Selected Zones

To make a page to selected zones, follow the steps below. If your System has been networked to other Systems using a NIC, you can page certain selected zones in all networked Systems. If your System has not been networked, you can only page zones in your System.

1. ATEL: Lift the handset or press SPKR PHONE.

STEL, DTMF telephone, and CTEL: Lift the handset.

2. ATEL: Press PAGE then press 1, or dial 721.

STEL, DTMF telephone, and CTEL: Dial 721.

3. ATEL: Enter the zone numbers (01–32) to be paged and press #.

STEL, DTMF telephone, and CTEL: Same as ATEL.

Notes:

- Zones 1 through 9 must be preceded by a 0 (entered as 01 through 09).
 - In networked Systems, only speakers assigned to zones 17 through 32 can receive pages from other Systems in a network. Speakers assigned to zones 1 through 16 CANNOT receive any pages from other Systems in a network. All 32 zones in a local System receive pages originating in their own system.
 - A double tone burst after pressing # indicates restricted access to this feature from this phone. You must enter a four-digit password after the tone to complete this operation. See *Password Control* on page 3.
4. ATEL: Speak clearly into the handset or microphone to make a page announcement.

STEL, DTMF telephone, and CTEL: Speak clearly into the handset to make a page announcement.

5. ATEL ONLY: If muting is also desired while using the microphone, press TALK to change from hands-free to push-to-talk paging. Thereafter, pushing TALK allows page audio through, while releasing TALK mutes the microphone. The MUTE button can also be used to toggle between mute and unmute.

6. ATEL: Hang up the handset or press SPKR PHONE to end the page.

STEL, DTMF telephone, and CTEL: Hang up the handset to end the page.

Paging All But Excluded Zones

To make a zone page that excludes selected zones, follow the steps below. If your System has been networked to other Systems using a NIC, you can page zones in all networked Systems. If your System has not been networked, you can only page zones in your own System.

1. ATEL: Lift the handset or press SPKR PHONE.

STEL, DTMF telephone, and CTEL: Lift the handset.

2. ATEL: Press PAGE then press 2, or dial 722.

STEL, DTMF telephone, and CTEL: Dial 722.

3. ATEL: Enter the zone numbers (01–32) to be excluded and press #.

STEL, DTMF telephone, and CTEL: Same as ATEL.

Notes:

- Zones 1 through 9 must be preceded by a 0 (entered as 01 through 09).
- In networked Systems, only speakers assigned to zones 17 through 32 can receive pages from other Systems in a network. Speakers assigned to zones 1 through 16 CANNOT receive any pages from other Systems in a network. All 32 zones in a local System receive pages originating in their own system.
- A double tone burst after pressing # indicates restricted access to this feature from this phone. You must enter a four-digit password after the tone to complete this operation. See *Password Control* on page 3.

4. ATEL: Speak clearly into the handset or microphone to make a page announcement.

STEL, DTMF telephone, and CTEL: Speak clearly into the handset to make a page announcement.

5. ATEL ONLY: If muting is also desired while using the microphone, press TALK to change from hands-free to push-to-talk paging. Thereafter, pushing TALK allows page audio through, while releasing TALK mutes the microphone. The MUTE button can also be used to toggle between mute and unmute.

6. ATEL: Hang up the handset or press SPKR PHONE to end the page.

STEL, DTMF telephone, and CTEL: Hang up the handset to end the page.

Paging Selected Rooms

To make a page to selected rooms, follow the steps below. Regardless of whether or not your System is networked to other Systems, you can only page selected rooms in your own System.

1. ATEL: Lift the handset or press SPKR PHONE.

STEL, DTMF telephone, and CTEL: Lift the handset.

2. ATEL: Press PAGE then press 3, or dial 723.

STEL, DTMF telephone, and CTEL: Dial 723.

3. ATEL: Enter the room numbers to be paged and press #.

STEL, DTMF telephone, and CTEL: Same as ATEL.

Note:

A double tone burst after pressing # indicates restricted access to this feature from this phone. You must enter a four-digit password after the tone to complete this operation. See *Password Control* on page 3.

4. ATEL: Speak clearly into the handset or microphone to make a page announcement.

STEL, DTMF telephone, and CTEL: Speak clearly into the handset to make a page announcement.

5. ATEL ONLY: If muting is also desired while using the microphone, press TALK to change from hands-free to push-to-talk paging. Thereafter, pushing TALK allows page audio through, while releasing TALK mutes the microphone. The MUTE button can also be used to toggle between mute and unmute.

6. ATEL: Hang up the handset or press SPKR PHONE to end the page.

STEL, DTMF telephone, and CTEL: Hang up the handset to end the page.

Paging All But Excluded Rooms

To make a page to all rooms excluding those selected, follow the steps below. Regardless of whether or not your System is networked to other Systems, you can only page rooms in your own System.

1. ATEL: Lift the handset or press SPKR PHONE.

STEL, DTMF telephone, and CTEL: Lift the handset.

2. ATEL: Press PAGE then press 4, or dial 724.

STEL, DTMF telephone, and CTEL: Dial 724.

3. ATEL: Enter the room numbers to be excluded and press #.

STEL, DTMF telephone, and CTEL: Same as ATEL.

Note:

A double tone burst after pressing # indicates restricted access to this feature from this phone. You must enter a four-digit password after the tone to complete this operation. See *Password Control* on page 3.

4. ATEL: Speak clearly into the handset or microphone to make a page announcement.

STEL, DTMF telephone, and CTEL: Speak clearly into the handset to make a page announcement.

5. ATEL ONLY: If muting is also desired while using the microphone, press TALK to change from hands-free to push-to-talk paging. Thereafter, pushing TALK allows page audio through, while releasing TALK mutes the microphone. The MUTE button can also be used to toggle between mute and unmute.

6. ATEL: Hang up the handset or press SPKR PHONE to end the page.

STEL, DTMF telephone, and CTEL: Hang up the handset to end the page.

Distributing Tones

The ATEL can be used to manually distribute tones to selected zones or rooms. The table on the next page lists which numbers must be dialed to initiate particular tones. The System has 26 available tones, all of which have a programmable duration, volume, and tone type. Contact your System administrator for details.

The tone distribution features require the optional Model 437-00123 Classroom Telephone Feature Package 2.

Distributing Tones to All Speakers

To distribute tones to all speakers, follow the steps below. Even if your System is networked, you can only distribute tones in your own System.

1. ATEL: Lift the handset or press SPKR PHONE.

STEL, DTMF telephone, or CTEL: Lift the handset.

2. ATEL: Press TONE then press 0, or dial 710.

STEL, DTMF telephone, or CTEL: Dial 710.

continued

3. ATEL: Enter the tone number (01–26) (see *Table 1* below) and press #.

STEL, DTMF telephone, or CTEL: Same as ATEL.

Notes:

- Tones 1 through 9 must be preceded by a 0 (entered as 01 through 09).
- A double tone burst after pressing # indicates restricted access to this feature from this phone. You must enter a four-digit password after the tone to complete this operation. See *Password Control* on page 3.

NUMBER	TONE	NUMBER	TONE
01	Event tone 1	14	Event tone 14
02	Event tone 2	15	Event tone 15
03	Event tone 3	16	Event tone 16
04	Event tone 4	17	Privacy
05	Event tone 5	18	Intercom pre-announce
06	Event tone 6	19	Door
07	Event tone 7	20	Custodian
08	Event tone 8	21	Normal reminder
09	Event tone 9	22	Page pre-announce
10	Event tone 10	23	Emergency reminder
11	Event tone 11	24	Auxiliary alarm

Table 1: Programmable Tone Types

4. ATEL: The selected tone sounds until you cancel it (see *Canceling Tone Distribution*, page 59), or until the tone duration expires.

STEL, DTMF telephone, or CTEL: Same as ATEL.

5. ATEL: Hang up the handset or press SPKR PHONE.

STEL, DTMF telephone, or CTEL: Hang up the handset.

Distributing Tones to Selected Zones

To distribute a tone to selected zones, follow the steps below. Even if your System is networked, you can only distribute tones in your own System.

1. ATEL: Lift the handset or press SPKR PHONE.

STEL, DTMF telephone, or CTEL: Lift the handset.

2. ATEL: Press TONE then press 1, or dial 711.

STEL, DTMF telephone, or CTEL: Dial 711.

3. ATEL: Enter the tone number (01–26) (see *Table 1* on page 56), then enter the zone numbers to be included (01–32), and press #.

STEL, DTMF telephone, or CTEL: Same as ATEL.

Notes:

- Tones 1 through 9 must be preceded by a 0 (entered as 01 through 09).
- Zones 1 through 9 must be preceded by a 0 (entered as 01 through 09).
- A double tone burst after pressing # indicates restricted access to this feature from this phone. You must enter a four-digit password after the tone to complete this operation. See *Password Control* on page 3.

4. ATEL: The selected tone sounds until you cancel it (see *Canceling Tone Distribution*, page 59), or until the tone duration expires.

STEL, DTMF telephone, or CTEL: Same as ATEL.

5. ATEL: Hang up the handset or press SPKR PHONE.

STEL, DTMF telephone, or CTEL: Hang up the handset.

Distributing Tones to All But Excluded Zones

To distribute a tone to all zones excluding those selected, follow the steps below. Even if your System is networked, you can only distribute tones in your own System.

1. ATEL: Lift the handset or press SPKR PHONE.

STEL, DTMF telephone, or CTEL: Lift the handset.

2. ATEL: Press TONE then press 2, or dial 712.

STEL, DTMF telephone, or CTEL: Dial 712.

continued

3. ATEL: Enter the tone number (01–26) (see *Table 1* on page 56), then enter the zone numbers (01–32) to be excluded, and press #.

STEL, DTMF telephone, or CTEL: Same as ATEL.

Notes:

- Tones 1 through 9 must be preceded by a 0 (entered as 01 through 09).
 - Zones 1 through 9 must be preceded by a 0 (entered as 01 through 09).
 - A double tone burst after pressing # indicates restricted access to this feature from this phone. You must enter a four-digit password after the tone to complete this operation. See *Password Control* on page 3.
4. ATEL: The selected tone sounds until you cancel it (see *Canceling Tone Distribution*, page 59), or until the tone duration expires.

STEL, DTMF telephone, or CTEL: Same as ATEL.

5. ATEL: Hang up the handset or press SPKR PHONE.

STEL, DTMF telephone, or CTEL: Hang up the handset.

Distributing Tones to Selected Rooms

To distribute a tone to selected rooms, follow the steps below. Even if your System is networked, you can only distribute tones in your own System.

1. ATEL: Lift the handset or press SPKR PHONE.

STEL, DTMF telephone, or CTEL: Lift the handset.

2. ATEL: Press TONE then press 3, or dial 713.

STEL, DTMF telephone, or CTEL: Dial 713.

3. ATEL: Enter the tone number (01–26) (see *Table 1* on page 56), then the room numbers, and press #.

STEL, DTMF telephone, or CTEL: Same as ATEL.

Notes:

- Tones 1 through 9 must be preceded by a 0 (entered as 01 through 09).
 - A double tone burst after pressing # indicates restricted access to this feature from this phone. You must enter a four-digit password after the tone to complete this operation. See *Password Control* on page 3.
4. ATEL: The selected tone sounds until you cancel it (see *Canceling Tone Distribution*, page 59), or until the tone duration expires.

STEL, DTMF telephone, or CTEL: Same as ATEL.

5. ATEL: Hang up the handset or press SPKR PHONE.

STEL, DTMF telephone, or CTEL: Hang up the handset.

Distributing Tones to All But Excluded Rooms

To distribute a tone to all rooms excluding those selected, follow the steps below. Even if your System is networked, you can only distribute tones in your own System.

1. ATEL: Lift the handset or press SPKR PHONE.

STEL, DTMF telephone, or CTEL: Lift the handset.

2. ATEL: Press TONE then press 4, or dial 714.

STEL, DTMF telephone, or CTEL: Dial 714.

3. ATEL: Enter the tone number (01–26) (see *Table 1* on page 56), then the room numbers to be excluded, and press #.

STEL, DTMF telephone, or CTEL: Same as ATEL.

Notes:

Tones 1 through 9 must be preceded by a 0 (entered as 01 through 09).

A double tone burst after pressing # indicates restricted access to this feature from this phone. You must enter a four-digit password after the tone to complete this operation. See *Password Control* on page 3.

4. ATEL: The selected tone sounds until you cancel it (see *Canceling Tone Distribution*, page 59), or until the tone duration expires.

STEL, DTMF telephone, or CTEL: Same as ATEL.

5. ATEL: Hang up the handset or press SPKR PHONE.

STEL, DTMF telephone, or CTEL: Hang up the handset.

Canceling Tone Distribution

This operation cancels a tone currently being distributed, whether it has been programmed with a fixed or continuous duration.

1. ATEL: Lift the handset or press SPKR PHONE.

STEL, DTMF telephone, or CTEL: Lift the handset.

2. ATEL: Press TONE then press 5, or dial 715#.

STEL, DTMF telephone, or CTEL: Dial 715#.

3. ATEL: Hang up the handset or press SPKR PHONE.

STEL, DTMF telephone, or CTEL: Hang up the handset.

Distributing Audio Programs

Distributing an Audio Program to All Speakers

To distribute an audio program to all speakers, follow the steps below. Regardless of whether or not your System is networked to other Systems, you can only distribute audio programs in your own System.

1. ATEL: Lift the handset or press SPKR PHONE.

STEL, DTMF telephone, or CTEL: Lift the handset.

2. ATEL: Press PROGRAM then press 0, or dial 730.

STEL, DTMF telephone, or CTEL: Dial 730.

3. ATEL: Enter the audio program source (01 or 02) and press #.

STEL, DTMF telephone, or CTEL: Same as ATEL.

Notes:

- If only one audio program source is available, 01 will be the only source you can select.
- A double tone burst after pressing # indicates restricted access to this feature from this phone. You must enter a four-digit password after the tone to complete this operation. See *Password Control* on page 3.

4. ATEL: The audio program continues until you cancel it (see *Canceling Audio Program Distribution*, page 65).

STEL, DTMF telephone, or CTEL: Same as ATEL.

5. ATEL: Hang up the handset or press SPKR PHONE.

STEL, DTMF telephone, or CTEL: Hang up the handset.

Distributing an Audio Program to Selected Zones

To distribute an audio program to selected zones, follow the steps below. Even if your System is networked, you can only distribute audio programs in your own System.

1. ATEL: Lift the handset or press SPKR PHONE.

STEL, DTMF telephone, or CTEL: Lift the handset.

2. ATEL: Press PROGRAM then press 1, or dial 731.

STEL, DTMF telephone, or CTEL: Dial 731.

3. ATEL: Enter the audio program source (01 or 02), then the zone numbers (01–32), and press #.

STEL, DTMF telephone, or CTEL: Same as ATEL.

Notes:

- If only one audio program source is available, 01 will be the only source you can select.
 - Zones 1 through 9 must be preceded by a 0 (entered as 01 through 09).
 - A double tone burst after pressing # indicates restricted access to this feature from this phone. Enter a four-digit password after the tone to complete this operation. See *Password Control* on page 3.
4. ATEL: The audio program continues until you cancel it (see *Canceling Audio Program Distribution*, page 65).

STEL, DTMF telephone, or CTEL: Same as ATEL.

5. ATEL: Hang up the handset or press SPKR PHONE.

STEL, DTMF telephone, or CTEL: Hang up the handset.

Distributing an Audio Program to All But Excluded Zones

To distribute an audio program to all zones excluding those selected, follow the steps below. Even if your System is networked, you can only distribute audio programs in your own System.

1. ATEL: Lift the handset or press SPKR PHONE.

STEL, DTMF telephone, or CTEL: Lift the handset.

2. ATEL: Press PROGRAM then press 2, or dial 732.

STEL, DTMF telephone, or CTEL: Dial 732.

3. ATEL: Select the audio program source (01 or 02), then enter the zone numbers (01–32) to be excluded, and press #.

STEL, DTMF telephone, or CTEL: Same as ATEL.

Notes:

- If only one audio program source is available, 01 will be the only source you can select.
- Zones 1 through 9 must be preceded by a 0 (entered as 01 through 09).
- A double tone burst after pressing # indicates restricted access to this feature from this phone. You must enter a four-digit password after the tone to complete this operation. See *Password Control* on page 3.

continued

4. ATEL: The audio program continues until you cancel it (see *Canceling Audio Program Distribution*, page 65).

STEL, DTMF telephone, or CTEL: Same as ATEL.

5. ATEL: Hang up the handset or press SPKR PHONE.

STEL, DTMF telephone, or CTEL: Hang up the handset.

Distributing an Audio Program to Selected Rooms

To distribute an audio program to selected rooms, follow the steps below. Regardless of whether or not your System is networked to other Systems, you can only distribute audio programs in your own System.

1. ATEL: Lift the handset or press SPKR PHONE.

STEL, DTMF telephone, or CTEL: Lift the handset.

2. ATEL: Press PROGRAM then press 3, or dial 733.

STEL, DTMF telephone, or CTEL: Dial 733.

3. ATEL: Select the audio program source (01 or 02), then enter the room numbers, and press #.

STEL, DTMF telephone, or CTEL: Same as ATEL.

Notes:

- If only one audio program source is available, 01 will be the only source you can select.
 - A double tone burst after pressing # indicates restricted access to this feature from this phone. You must enter a four-digit password after the tone to complete this operation. See *Password Control* on page 3.
4. ATEL: The audio program will continue until you cancel it (see *Canceling Audio Program Distribution*, page 65).

STEL, DTMF telephone, or CTEL: Same as ATEL.

5. Hang up the handset or press SPKR PHONE.

STEL, DTMF telephone, or CTEL: Hang up the handset.

Distributing an Audio Program to All But Excluded Rooms

To distribute audio programming to all rooms excluding those selected, follow the steps below. Even if your System is networked, you can only distribute audio programs in your own System.

1. ATEL: Lift the handset or press SPKR PHONE.
STEL, DTMF telephone, or CTEL: Lift the handset.
2. ATEL: Press PROGRAM then press 4, or dial 734.
STEL, DTMF telephone, or CTEL: Dial 734.
3. ATEL: Select the audio program source (01 or 02), then the room numbers to be excluded, and press #.
STEL, DTMF telephone, or CTEL: Same as ATEL.

Notes:

- If only one audio program source is available, 01 will be the only source you can select.
 - A double tone burst after pressing # indicates restricted access to this feature from this phone. You must enter a four-digit password after the tone to complete this operation. See *Password Control* on page 3.
4. ATEL: The audio program continues until you cancel it (see *Canceling Audio Program Distribution*, page 65).
STEL, DTMF telephone, or CTEL: Same as ATEL.
 5. ATEL: Hang up the handset or press SPKR PHONE.
STEL, DTMF telephone, or CTEL: Hang up the handset.

Adding Rooms to Audio Program Distribution in Progress

To add rooms to an audio program currently being distributed, follow the steps below. Even if your System is networked, you can only distribute audio programs in your own System.

1. ATEL: Lift the handset or press SPKR PHONE.
STEL, DTMF telephone, or CTEL: Lift the handset.
2. ATEL: Press PROGRAM then press 5, or dial 735.
STEL, DTMF telephone, or CTEL: Dial 735.

continued

3. ATEL: Enter the audio program source (01 or 02), then the room numbers, and press #.

STEL, DTMF telephone, or CTEL: Same as ATEL.

Notes:

- If only one audio program source is available, 01 will be the only source you can select.
 - A double tone burst after pressing # indicates restricted access to this feature from this phone. You must enter a four-digit password after the tone to complete this operation. See *Password Control* on page 3.
 - To add only the speaker associated with the ATEL you are calling from, do not enter a room number.
4. ATEL: Hang up the handset or press SPKR PHONE.

STEL, DTMF telephone, or CTEL: Hang up the handset.

Removing Rooms from Audio Program Distribution in Progress

To remove rooms from an audio program currently being distributed, follow the steps below. Even if your System is networked, you can only distribute audio programs in your own System.

1. ATEL: Lift the handset or press SPKR PHONE.

STEL, DTMF telephone, or CTEL: Lift the handset.

2. ATEL: Press PROGRAM then press 6, or dial 736.

STEL, DTMF telephone, or CTEL: Dial 736.

3. ATEL: Enter the room numbers, and press #.

STEL, DTMF telephone, or CTEL: Same as ATEL.

Notes:

- A double tone burst after pressing # indicates restricted access to this feature from this phone. You must enter a four-digit password after the tone to complete this operation. See *Password Control* on page 3.
 - To remove only the speaker associated with the phone you are calling from, do not enter a room number.
4. ATEL: Hang up the handset or press SPKR PHONE.

STEL, DTMF telephone, or CTEL: Hang up the handset.

Canceling Audio Program Distribution

To cancel an audio program currently being distributed, follow the steps below.

1. ATEL: Lift the handset or press SPKR PHONE.
STEL, DTMF telephone, or CTEL: Lift the handset.
2. ATEL: Press PROGRAM then press 7, or dial 737.
STEL, DTMF telephone, or CTEL: Dial 737.
3. ATEL: Enter the audio program source (01 or 02) currently in use, and press #.

STEL, DTMF telephone, or CTEL: Same as ATEL.

Notes:

- If only one audio program source is available, 01 will be the only source you can select.
 - A double tone burst after pressing # indicates restricted access to this feature from this phone. You must enter a four-digit password after the tone to complete this operation. See *Password Control* on page 3.
4. ATEL: Hang up the handset or press SPKR PHONE.
STEL, DTMF telephone, or CTEL: Hang up the handset.

Monitoring Audio Program Sources

To monitor an audio program from a System phone, follow the steps below.

1. ATEL: Lift the handset or press SPKR PHONE.
STEL, DTMF telephone, or CTEL: Lift the handset.
2. ATEL: Press PROGRAM then press 8, or dial 738.
STEL, DTMF telephone, or CTEL: Dial 738.
3. ATEL: Select the audio program source (01 or 02) currently in use, and press #. You will hear the audio source through the handset or speaker.

STEL, DTMF telephone, or CTEL: Same as ATEL.

Notes:

- If only one audio program source is available, 01 will be the only source you can select.
 - This function uses a telephone link. Do not use it to provide background music. See *Setting the ATEL Background Music* on page 18.
4. ATEL: Hang up the handset or press SPKR PHONE.
STEL, DTMF telephone, or CTEL: Hang up the handset.

Selecting a Source for Music-on-Hold and ATEL Background Music

This feature lets you select one of the two available audio program sources to provide System-wide music-on-hold and background music for ATELS. Both features share the same programming. At least one audio program source must be connected to the System for this feature to work. You can also select no source.

When a call is placed on hold, or when an ATEL selects background music, the selected source is heard. If no source is selected, no audio is heard during hold or when background music is selected.

1. ATEL: Lift the handset or press SPKR PHONE.
STEL, DTMF telephone, or CTEL: Lift the handset.
2. ATEL: Dial 758.
STEL, DTMF telephone, or CTEL: Same as ATEL.
3. ATEL: Enter the audio program source (see below) and press #.
00—no source; 01—source 1; 02—source 2
STEL, DTMF telephone, or CTEL: Same as ATEL.
4. ATEL: Hang up the handset or press SPKR PHONE.
STEL, DTMF telephone, or CTEL: Hang up the handset.

Temporarily Excluding Rooms

This function temporarily excludes the specified speakers from receiving any audio events except emergency page and intercom. Even if your System is networked, you can only exclude rooms in your own System. This exclusion can be manually canceled, or is automatically canceled at midnight. The Temporary Room Exclusion feature requires the optional Model 437-00126 Enhanced Intercom Feature Package 1.

Excluding Rooms

To exclude rooms from receiving any audio events except emergency page and intercom, follow the steps below.

1. ATEL: Lift the handset or press SPKR PHONE.
STEL, DTMF telephone, or CTEL: Lift the handset.
2. ATEL: Dial 746 and enter all room numbers to be excluded.
STEL, DTMF telephone, or CTEL: Same as ATEL.

3. ATEL: Press # after entering the last room number.
STEL, DTMF telephone, or CTEL: Same as ATEL.
4. ATEL: Hang up the handset or press SPKR PHONE.
STEL, DTMF telephone, or CTEL: Hang up the handset.

Clearing Selected Temporary Room Exclusions

To allow selected rooms to again receive audio events, follow the steps below.

1. ATEL: Lift the handset or press SPKR PHONE.
STEL, DTMF telephone, or CTEL: Lift the handset.
2. ATEL: Dial 747, enter all room numbers to be restored from exclusion, then press #.
STEL, DTMF telephone, or CTEL: Same as ATEL.
Note:
If you are only restoring the speaker associated with the phone you are calling from, do not enter a room number.
3. ATEL: Hang up the handset or press SPKR PHONE.
STEL, DTMF telephone, or CTEL: Hang up the handset.

Clearing All Temporary Room Exclusions

To allow all excluded rooms to receive audio events again, follow the steps below.

1. ATEL: Lift the handset or press SPKR PHONE.
STEL, DTMF telephone, or CTEL: Lift the handset.
2. ATEL: Dial 748, then press #.
STEL, DTMF telephone, or CTEL: Same as ATEL.
3. ATEL: Hang up the handset or press SPKR PHONE.
STEL, DTMF telephone, or CTEL: Hang up the handset.

Setting the Time of Day

To set the time of day at your phone or local System, follow the steps below. If your System has been networked to other Systems using a NIC, the time you set will only be valid until a new time is set in the primary System, or until 2:58 a.m., when the primary System updates all secondary Systems.

1. ATEL: Lift the handset or press SPKR PHONE.

STEL, DTMF telephone, or CTEL: Lift the handset.

2. ATEL: Dial 750 and enter the time:

- a. For 24-hour format enter the four-digit time (e.g., 1355 for 1:55 p.m.) and press #.
- b. For 12-hour format enter the four-digit time (e.g., 0955 for 9:55 a.m.), press 0 for a.m. or 1 for p.m., and press #.

STEL, DTMF telephone, or CTEL: Same as ATEL.

Note:

A double tone burst after pressing # indicates restricted access to this feature. You must enter a four-digit password after the tone to complete this operation. See *Password Control* on page 3.

3. ATEL: Hang up the handset or press SPKR PHONE.

STEL, DTMF telephone, or CTEL: Hang up the handset.

Setting the Date

To set the correct date for your phone or local System, follow the steps below. If your System has been networked to other Systems using a NIC, the date you set will only be valid until a new date is set in the primary System, or until 2:58 a.m., when the primary System updates all secondary Systems.

1. ATEL: Lift the handset or press SPKR PHONE.

STEL, DTMF telephone, or CTEL: Lift the handset.

2. ATEL: Dial 751 and enter the date (seven digits, weekday/mm/dd/yy, e.g., 1 09 16 01, which translates to Sunday, September 16, 2001), then press #.

STEL, DTMF telephone, or CTEL: Same as ATEL.

Notes:

- Days of the week are represented by a single digit, 1–7.
- Months 1–9 must be preceded by a 0 (entered as 01 through 09).
- Dates 1–9 must be preceded by a 0 (entered as 01 through 09).
- A double tone burst after pressing # indicates restricted access to this feature. You must enter a four-digit password after the tone to complete this operation. See *Password Control* on page 3.

3. ATEL: Hang up the handset or press SPKR PHONE.

STEL, DTMF telephone, or CTEL: Hang up the handset.

Activating and Deactivating the Schedules

The System can be configured with up to 16 time event schedules that determine what time tone events occur. These schedules are programmable and can be changed through System programming. Contact your system administrator for details.

1. ATEL: Lift the handset or press SPKR PHONE.

STEL, DTMF telephone, or CTEL: Lift the handset.

2. ATEL: Dial 752, enter the desired schedules (01–16) to be activated, or enter 00 to deactivate all schedules, then press #.

STEL, DTMF telephone, or CTEL: Same as ATEL.

Notes:

- A double tone burst after pressing # indicates restricted access to this feature. You must enter a four-digit password after the tone to complete this operation. See *Password Control* on page 3.
- The schedules selected in step 2 will be the only active schedules.

3. ATEL: Hang up the handset or press SPKR PHONE.

STEL, DTMF telephone, or CTEL: Hang up the handset.

Controlling I/O System Outputs

This feature lets you control I/O System outputs connected to external devices such as lights, bells, or door locks. Output assignments are programmable and can vary, so contact your system administrator for details.

1. ATEL: Lift the handset or press SPKR PHONE.

STEL, DTMF telephone, or CTEL: Lift the handset.
2. ATEL: Dial 754, enter the desired output activity (see below), enter the I/O output number (01 through 08), then press #.
0—output off
1—output on
2—output momentarily on for 1 second

STEL, DTMF telephone, or CTEL: Same as ATEL.
3. ATEL: Hang up the handset or press SPKR PHONE.

STEL, DTMF telephone, or CTEL: Hang up the handset.

Controlling OCC System Outputs

This feature lets you control OCC System outputs connected to external devices such as lights, bells, or door locks. Output assignments are programmable and can vary, so contact your system administrator for details.

1. ATEL: Lift the handset or press SPKR PHONE.

STEL, DTMF telephone, or CTEL: Lift the handset.
2. ATEL: Dial 764, enter the desired output activity (see below), enter the I/O output number (e.g., 001, 002), then press #.
0—output off
1—output on
2—output on 1 second
3—output cycles continuously, 1 second on, 1 second off
4—toggle or switch states (e.g., high to low)

STEL, DTMF telephone, or CTEL: Same as ATEL.
3. ATEL: Hang up the handset or press SPKR PHONE.

STEL, DTMF telephone, or CTEL: Hang up the handset.

Overriding Night Mode

This feature lets you override the System's night mode configuration. The night mode allows speaker station call-ins to be directed to particular extensions at certain times, such as at night when staff levels are reduced. The night mode override lets you temporarily override this System-wide redirection of call-ins, turn the night mode on early, or cancel previous choices and allow the night mode to begin at its programmed time. Any night mode override ends automatically on the midnight after the override is initiated.

Note:

The night mode feature requires both the optional Model 437-00125A Master Clock Feature Package 1 and the optional Model 437-00126 Enhanced Intercom Feature Package 1.

1. ATEL: Lift the handset or press SPKR PHONE.

STEL, DTMF telephone, or CTEL: Lift the handset.

2. ATEL: Dial 755, then enter your selection:

0 for night mode off. After the next midnight, the System returns to its original night mode start time programming. For example, if the night mode normally begins at 9:00 p.m. and you cancel it using this command at 10:00 p.m., night mode will return to its original programming at 12:00 a.m. (midnight), but remain off until 9:00 p.m. the following night since that is the programmed night mode start time.

1 for night mode on. Regardless of the programmed night mode start time, night mode will begin as soon as you hang up, continuing until the programmed night mode end time. After the next midnight, the System returns to its original night mode start time programming.

2 for auto mode on. The current night mode selection is canceled and night mode will begin at its programmed start time.

STEL, DTMF telephone, or CTEL: Same as ATEL.

3. ATEL: Press #.

STEL, DTMF telephone, or CTEL: Same as ATEL.

4. ATEL: Hang up the handset or press SPKR PHONE.

STEL, DTMF telephone, or CTEL: Hang up the handset.

Notes

Call-In Priorities

Each speaker in a room can be equipped with up to three call-in switches. Each call-in switch is programmed with a priority level. Priority 1 is the highest, 6 is the lowest, and 7 is used to cancel the call. By default, call-in switch 1 is programmed as a normal call (priority 5), call-in switch 2 is programmed as emergency 2 (priority 2), and call-in switch 3 is programmed as call cancel (priority 7). The priorities are listed below.

1. Emergency 1 (E1)
2. Emergency 2 (E2)
3. Emergency 3 (E3)
4. High Priority (HP)
5. Normal Priority (NP)
6. Low Priority (LP)
7. Cancel

Placing a Call-In

Placing a Normal Call-In

Press and release the CALL button on a non-emergency priority call-in switch.

Placing an Emergency Call-In

Press and release the CALL button on a designated emergency call-in switch.

—OR—

Rapidly press and release the CALL button twice on a non-emergency priority call-in switch (this must be enabled by System programming).

Upgrading a Normal Call-In to Emergency

Press and release the CALL button on a designated emergency call-in switch associated with the call-in switch that originated the normal call-in.

—OR—

Rapidly press and release the CALL button twice on the same normal call-in switch that originated the call (this must be enabled by System programming).

Canceling a Call-In

Press and release the designated CANCEL button. This will cancel all call-ins from that call-in switch EXCEPT those of Emergency 1 priority. An Emergency 1 priority call-in can only be canceled by being answered.

Call Confirmation

The optional call assurance LED on the speaker station flashes at a slow, steady rate when a normal call has been registered. The LED flashes at a rapid rate for an emergency priority call. The LED goes out when the call is answered or canceled.

Message Waiting

The optional call assurance LED on the speaker station can be used as a message waiting indicator. This requires the Model 437-00127 Call Management Feature Package 1. The message waiting flash pattern (three rapid flashes, three seconds off) begins in response to a command from a telephone. The message waiting indication can only be removed in response to a command from a telephone. See *Message Waiting Indicator* on page 47.

Privacy Indication

The optional call assurance LED on the speaker station can be used as a privacy indicator. When the System is configured in this way, the LED will flash the privacy pattern (1.2 seconds on, 1 second off) if the associated speaker is currently in intercom.

Appendix A

700 Codes Quick Reference

The 700 codes are used to access the system functions listed in the charts. They can be dialed from ATELS, STELS, DTMF telephones, and CTELS. You must go off-hook and wait for a dial tone before using any of the codes below, except when using the ATEL's preprogrammed EMERGENCY, TONE, PAGE, PROGRAM, or F keys. You may need to press and release FLASH to receive a dial tone. The numbers in brackets [], when not entered, apply the function only to the speaker associated with the extension.

Dial sequence references that are italicized require you to enter the appropriate number from the corresponding list.

PAGE FUNCTION	DIAL SEQUENCE	DEFAULT ATEL DIAL SEQUENCE
Emergency All Call Page	70, #	EMERGENCY, #
Emergency Zone Page, Including Zones	701, zone nos., #	EMERGENCY, 1, zone nos., #
Emergency Zone Page, Excluding Zones	702, zone nos., #	EMERGENCY, 2, zone nos., #
All Call Page	72, #	PAGE, #
Zone Page, Including Zones	721, zone nos., #	PAGE, 1, zone nos., #
Zone Page, Excluding Zones	722, zone nos., #	PAGE, 2, zone nos., #
Room Page, Including Rooms	723, room nos., #	PAGE, 3, room nos., #
Room Page, Excluding Rooms	724, room nos., #	PAGE, 4, room nos., #

AUDIO PROGRAM FUNCTION	DIAL SEQUENCE	DEFAULT ATEL DIAL SEQUENCE
Audio Program to All Rooms	730, source no., #	PROGRAM, 0, source no., #
Audio Prog. Including Zones	731, source no., zone nos., #	PROGRAM, 1, source no., zone nos., #
Audio Prog. Excluding Zones	732, source no., zone nos., #	PROGRAM, 2, source no., zone nos., #
Audio Prog. Including Rooms	733, source no., room nos., #	PROGRAM, 3, source no., room nos., #
Audio Prog. Excluding Rooms	734, source no., room nos., #	PROGRAM, 4, source no., room nos., #
Audio Prog., Add Rooms	735, source no., room nos., #	PROGRAM, 5, source no., [room nos.], #
Audio Prog., Subtract Rooms	736, [room nos.], #	PROGRAM, 6, [room nos.], #
Audio Program Cancel	737, source no., #	PROGRAM, 7, source no., #
Audio Program, Monitor Source	738, source no., #	PROGRAM, 8, source no., #
ATEL "Music On Hold" and Background Music Source Selection	758, source no., #	758, source no., #

continued

TONE DISTRIBUTION FUNCTION	DIAL SEQUENCE	DEFAULT ATEL DIAL SEQUENCE
Tone to All	710, tone no., #	TONE, 0, tone no., #
Tone, Including Zones	711, tone no., zone nos., #	TONE, 1, tone no., zone nos., #
Tone, Excluding Zones	712, tone no., zone nos., #	TONE, 2, tone no., zone nos., #
Tone, Including Rooms	713, tone no., room nos., #	TONE, 3, tone no., room nos., #
Tone, Excluding Rooms	714, tone no., room nos., #	TONE, 4, tone no., room nos., #
Tone Cancel	715, #	TONE, 5, #

INTERCOM FUNCTION	DIAL SEQUENCE	DEFAULT ATEL DIAL SEQUENCE
Speaker-to-Telephone Intercom Transfer	740, #	740, #
Telephone-to-Speaker Intercom Transfer	741, #	741, #
Intercom Call-In Answer	742, #	742, #
Intercom Call-In Pickup Code	745, #	745, #
Call-In for Associated Speaker	743, <i>switch no.</i> , # (See ATEL at right for switch definitions.)	743, <i>switch no.</i> (see below), # 1—call-in switch 1, default normal 2—call-in switch 2, default emergency 3—call-in switch 3, default cancel
Cancel All Normal Call-Ins in System	749, #	749, #

TELEPHONE FUNCTION	DIAL SEQUENCE	DEFAULT ATEL DIAL SEQUENCE
Call Forward	756, <i>forward type</i> , extension no., # (see ATEL at right for forward types)	756, <i>forward type</i> (see below), extension no., # (only with CPC2) 1—forward always 2—forward on busy 3—forward on no answer 4—forward on busy or no answer
Cancel Call Forward	757, #	757, #
Telephone Call Pickup (Group)	761, group, #	761, group, #
Telephone Call Pickup (Extension)	762, extension no., #	762, extension no., #
Trunk Call Park	763, #	763, #
Trunk Call Camp-On to Extension	765, extension no., #	765, extension no., #

Follow Me	766, <i>forward type</i> , extension no., # (see ATEL at right for forward types)	766, <i>forward type</i> (see below), extension no., # 1—forward always 2—forward on busy 3—forward on no answer 4—forward on busy or no answer
Remove Follow Me	767, #	767, #
Trunk-on-Hold Pickup	79, trunk no., #	79, trunk no., #
Hookswitch Flash on Trunk	759, #	759, #
Message Waiting Indicator (Off)	760, 0, extension no., #	760, 0, extension no., #
Message Waiting Indicator (On)	760, 1, extension no., #	760, 1, extension no., #

TEMPORARY ROOM EXCLUSION FUNCTION	DIAL SEQUENCE	DEFAULT ATEL DIAL SEQUENCE
Temporary Room Exclusion	746, [room nos.], #	746, [room nos.], #
Clear Temporary Room Exclusion	747, [room nos.], #	747, [room nos.], #
Clear All Temporary Room Exclusions	748, #	748, #
Note: Temporary room exclusion prevents a room from receiving all audio events, except emergency pages, audio programs, and tone activities for the remainder of the day. Normal settings are restored at midnight.		

SYSTEM FUNCTION	DIAL SEQUENCE	DEFAULT ATEL DIAL SEQUENCE
Set Time of Day (12-Hour Format)	750, hhmm (e.g., 0155), 0 (a.m.)/1 (p.m.), #, password	750, hhmm (e.g., 0155), 0 (a.m.)/1 (p.m.), #, password
Set Time of Day (24-Hour Format)	750, hhmm (e.g., 1355), #, password	750, hhmm (e.g., 1355), #, password
Set Date	751, day (1–7, Sunday = 1), mmddy, #, password	751, day (1–7, Sunday = 1), mmddy, #, password
Activate Schedules	752, schedule nos., #, password	752, schedule nos., #, password
Deactivate All Schedules	752, 00, #, password	752, 00, #, password
Night Mode Override	755, <i>command</i> , # (See ATEL at right for command definitions.)	755, <i>command</i> (see below), # 0—night mode off 1—night mode on 2—return to night mode programming

continued

I/O Output Control	754, <i>command</i> , output no., # (See ATEL at right for command definitions.)	754, <i>command</i> (see below), output no., # 0—off 1—on 2—momentary (one second)
OCC Output Control	764, <i>command</i> , OCC output no., # (See ATEL at right for command definitions.)	764, <i>command</i> (see below), OCC output no., # 0—off 1—on 2—momentary (one second) 3—cycle (one second on, one second off, continuous) 4—toggle (switch states)
Clear Error Codes	753, #, password	753, #, password

Notes:

Zone numbers—1 or more zones (01–32)

Room numbers—1 or more rooms entered according to the number of System digits (3, 4, or 5)

Source number—01–10

Tone number—01–32

Schedule numbers—1 or more schedules (01–32)

I/O output number—01–08 (if no entry, assumes all)

OCC output number—001, 002, 003, etc.

Password—4-digit System password

Appendix **B**

Programmable Function Keys Reference

Record any changes to the default function key settings in the table below for future reference.

KEY NAME	NEW FUNCTION/SPEED DIAL NUMBER
F1	
F2	
F3	
F4	
F5	
F6	
F7	
F8	
EMERGENCY	
TONE	
PAGE	

Notes

This manual reflects the operations and features available with the following software:

System Embedded Software

Software versions 5.00 or later are required for:

- Model 110-3524B ARC-E main node only
- Models 110-3527 and 110-3527A ATC-E4 main and secondary nodes
- Models 110-3531 and 110-3513A STC-E
- Models 110-3533A and 110-3533B ASC-B
- Models 110-3534 and 110-3534A ASC-E
- Models 110-3551 and 110-3551A TIC-E4
- Models 110-3552A and 110-3552B TIC-E8
- Model 110-3763A CPC2
- Models 110-3775 and 110-3775A BTC-E
- Models 110-3823 and 110-3823A ICC
- Models 110-3824, 110-3824A, and 110-3824B OCC
- Models 110-3889 and 110-3889A NIC
- Models 110-3851 and 110-3851A main and secondary nodes
- Models 110-3852 and 110-3852A main and secondary nodes
- Model 110-4001 COC-4
- Model 110-4002 COC-8
- Model 7A1110 ATEL
- Model SP2057-00 APC

System Configuration Software

- Model 437-00120 Rapid Programming and Diagnostics (RAPID) version 5.00 or later
- Model 437-00131 Remote Maintenance Utility (RMU) version 3.00 or later

Note:

Model 437-00144 Monitoring and Diagnostic Software (MDS) is no longer available. Its additional functionality over RAPID has been incorporated into RAPID starting at version 5.00.

Notes

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