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GCA 70-070

Installation and Operating Instructions

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INTRODUCTION

The *Voice Express 41C* telephone is an electronic, full-featured speakerphone and automatic dialer all in one unit. It can operate on either central office (CO) or private branch exchange (PBX) telephone lines. Multiline access is made available to the *Voice Express 41C* telephone with the addition of an optional *Voice Express* multiline keystrip.

Some of the features which the *Voice Express 41C* provides are as follows:

FORTY-ONE MEMORY LOCATIONS - Includes eight primary, thirty-two secondary, and one security location. Twenty-three digits per location can be stored.

CHAIN DIALING - Allows dialing of more than one memory location in succession for extended dialing requirements. One memory location selection can be buffered ahead. Manual and automatic dialing can be freely intermixed.

TWELVE-DIGIT VACUUM FLUORESCENT DISPLAY - Displays time of day, timer, and scrolls across all twenty-three digits of a dialed number. Information is shown on a soft green display.

LND (LAST NUMBER DIALED) - Automatically dials the last number manually dialed from the telephone keypad.

AUTO REDIAL - Automatically redials a busy or unanswered number up to ten times.

TWO-WAY SPEAKERPHONE - Provides handsfree communications ability.

MIC MUTE - When enabled, prevents distant party from hearing. Can be used as a "hold" feature.

PULSE TO TONE CHANGE - Allows user to access DTMF tone services from a telephone configured to operate in the pulse mode.

PROGRAMMABLE AUTOMATIC PAUSE - Stored number may be programmed to include a pause to automatically detect dial tone and computer generated control tones.

PROGRAMMABLE TIMED PAUSE - Stored number may be programmed to include a timed two second pause wherever it is needed.

TIMED HOOK FLASH - A hookswitch flash interval of 600 msec. may be manually enabled or programmed as part of a stored number.

ELECTRONIC LOCK - Prevents unauthorized use of the keypad and security code location and disallows all number storage. Allows auto dialing but disables display.

CLOCK - Shows time of day in twelve-hour format with an AM or PM indication, or in a twenty-four hour format (mode is user programmable).

ALARM - Programmable timed alarm.

TIMER - Elapsed time indicator with minutes and seconds indication.

POWER FAIL OPERATION - During AC power failure, user can operate the *Voice Express 41C* as an industry-standard tone-dial telephone. Memory dialing is not possible during a power failure unless the optional batteries have been installed. Stored numbers are retained during a power failure by circuitry which will hold the stored information for approximately twenty-four hours.

OPTIONAL BATTERIES - Four AA-type batteries can be installed in the *Voice Express 41C*. During an AC power failure, the batteries will provide power for the pulse (rotary) dialing mode and for automatic dialing capability for a period of five minutes. (Speakerphone operation is not provided for.) An additional five minutes of operating time is provided each time the reset switch is pressed. Additionally, these batteries will retain stored numbers for approximately one year without AC power.

LOW BATTERY INDICATION - The display will indicate when the optional batteries require replacement.

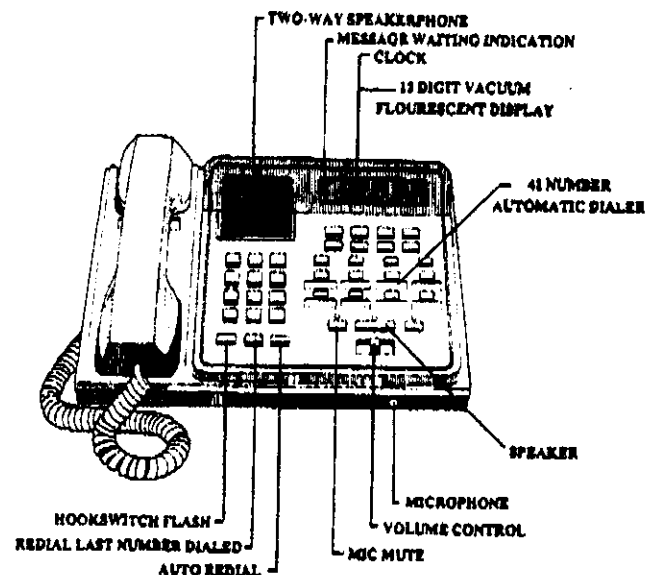


Figure 1. Controls and Indicators

INSTALLER/USER INFORMATION REGARDING FCC RULES AND REGULATIONS

This telephone complies with Federal Communications Commission (FCC) Rules Part 68.

The FCC registration label attached to the bottom housing contains the FCC registration number, the ringer equivalence number, the model number, and the serial number or production date. The telephone operating company can request that they be provided with the telephone number of the telephone line involved, the FCC registration number, and the ringer equivalence number of this telephone.

The ringer equivalence number (REN) is a measure of the load a telephone device will place on the ringing generator of a central office telephone company line. In general, a REN of 1 is equivalent to the load provided by one standard telephone ringer. FCC rules state that the total REN load on a line shall not exceed five (5.0). When contacted, the telephone company

will provide information on the maximum number of telephones or ringers that can be connected to one line, as well as any other applicable technical information. Some message waiting configurations of this telephone have an REN of Z. The telephone company regulations which govern the installation of telephones with an REN of Z vary from location to location.

Any problem with this equipment that causes improper operation of the telephone network may require the telephone company to discontinue service to the trouble site. If possible, advance notice of the disconnect will be given. If advance notice is not practical, notice will be given as soon as possible. The telephone company will inform the user of the right to file a complaint with the FCC.

The telephone company can temporarily discontinue service and make changes which could affect the operation of this equipment; however, they must provide advance notice of any change to give the user the opportunity to maintain uninterrupted telephone service.

FCC regulations do not permit repair of this telephone by anyone except the manufacturer or its authorized agent. Return a defective telephone to the place of purchase or send it prepaid to the address shown at the end of this publication.

Connection of this equipment to a telephone company line must be through a universal service order code (USOC) outlet jack. The USOC jack code number for a single line desk telephone is RJ11C. When A-leads are provided, the USOC jack code number is RJ13C. If the installation site does not have the proper jack(s) and inside wiring, it is the responsibility of the user/installer to arrange for the installation of it. The correct outlet jack for this equipment is an industry standard type 625A2-6 jack wired per the USOC jack code number RJ11C or RJ13C.

Local telephone company regulations may not permit connections to party lines and coin lines by anyone except the telephone operating company.

RADIO FREQUENCY INTERFERENCE

It is possible for a telephone employing a tone dial to generate radio frequency (RF) energy while it is being dialed. This action may cause interference to radio and TV reception. This telephone has been tested and found to comply with radiation limits for a class B computing device, pursuant to FCC Rules and Regulations Part 15 Subpart J. These regulations are designed to provide reasonable protection against RF interference.

There is no guarantee that interference will not occur in a particular installation. If a telephone does cause interference to radio or TV reception (which can be determined by unplugging

the telephone), the user should try to correct the interference as follows:

- Reorient the receiving antenna.
- Relocate the receiver or the telephone.
- Plug the receiver into a different outlet.

If necessary, consult an experienced radio/telephone technician or the manufacturer of the telephone for additional suggestions. You may find the following booklet prepared by the Federal Communications Commission helpful: "How To Identify And Resolve Radio-TV Interference Problems".

This booklet is available from the Government Printing Office, Washington D.C. 20402. Stock number 004-000-00345-4.

INSTALLATION

POWER CONSIDERATIONS

POWER-FAIL OPERATION

The *Voice Express 41C* can provide basic telephone service (manual DTMF dialing and incoming call answering with ringing) during a power-fail condition.

EXTERNAL POWER TRANSFORMER

An external AC transformer is supplied with the *Voice Express 41C* telephone. When it is connected to the telephone and plugged into the AC outlet, all available operating features are available for use.

MEMORY RETENTION

Circuitry is included within the *Voice Express 41C* which will maintain the stored contents of the memory dialing features while the telephone is disconnected from the telephone line and from the AC power transformer. The memory contents are retained by this circuitry for approximately twenty-four hours.

OPTIONAL BATTERIES

As an option, four AA-size batteries can be installed in the *Voice Express 41C*. These optional batteries will supply power to the telephone during a power-fail condition to power the automatic dialing features and provide for pulse (rotary) dialing where needed. While power is not provided for the speaker-

phone operation or display, the other operating features are maintained for a full five minutes by these batteries. An additional five minutes of operation can be obtained by pressing the **RESET** button on the rear of the housing. When the five minute operating period ends, the operating conditions described in the paragraph headed **Power-Fail Operation** are provided.

To install the batteries, slide open the compartment door on the bottom housing, and place the cells as shown in Figure 2.

IMPORTANT NOTE

To insure proper operation of the *Voice Express 41C*, always connect the power transformer to the AC outlet, and connect the line cord between the transformer and the telephone before installing the batteries in the battery compartment.

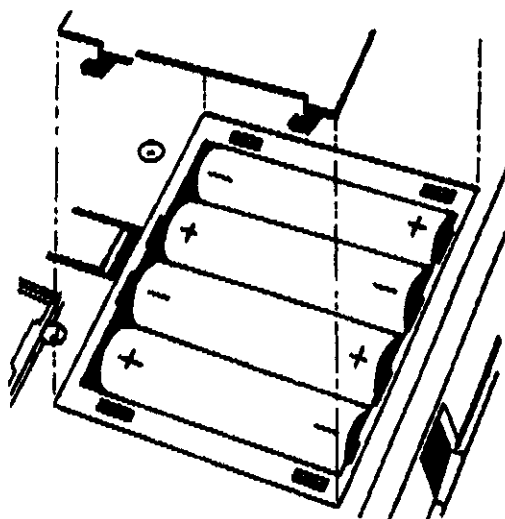


Figure 2. Battery Installation

During normal operation, the display panel will indicate when the batteries become weak by displaying **LO BATT**.

INSTALLATION DETAILS

- Locate the *Voice Express 41C* within six feet of a standard 117VAC electrical outlet and make the installation shown in Figure 3a or 3b.
- A 4-conductor line cord, a wall plug power transformer and cable assembly are included with the *Voice Express 41C* telephone.
- Keystrips which support two-line and multiline operation are sold separately.
- The batteries may be obtained locally if they are needed at a particular site.

FUNCTION SWITCH SETTINGS

RINGER CONTROL

To control the loudness of the tone ringer, set the **RINGER** switch (located on the rear of the housing) to the desired **LO** or **HI** setting.

TONE/PULSE DIALING

The *Voice Express 41C* can operate in environments which require **DTMF** or **PULSE** (rotary) dialing modes. To match the telephone to the local dialing requirements set the **TONE/PULSE** switch (located on the rear of the housing) to the required setting.

MESSAGE WAITING AND A-LEAD CONTROL

The *Voice Express 41C* is equipped to receive either high or low voltage message waiting signals from a host system; however, it is shipped from the factory with the message waiting option disabled. Also, A-lead control leads are available at the line jack, and can be enabled or disabled as the site needs dictate. To enable the telephone to respond to a message waiting signal or to provide for A-lead control, configure it as detailed in Table 1. Figure 4 details the configuration switch locations. Some message waiting configurations cause the **REN** of the telephone to change. Note the **REN** of the various configurations as detailed on Table 1. (See Page 13)

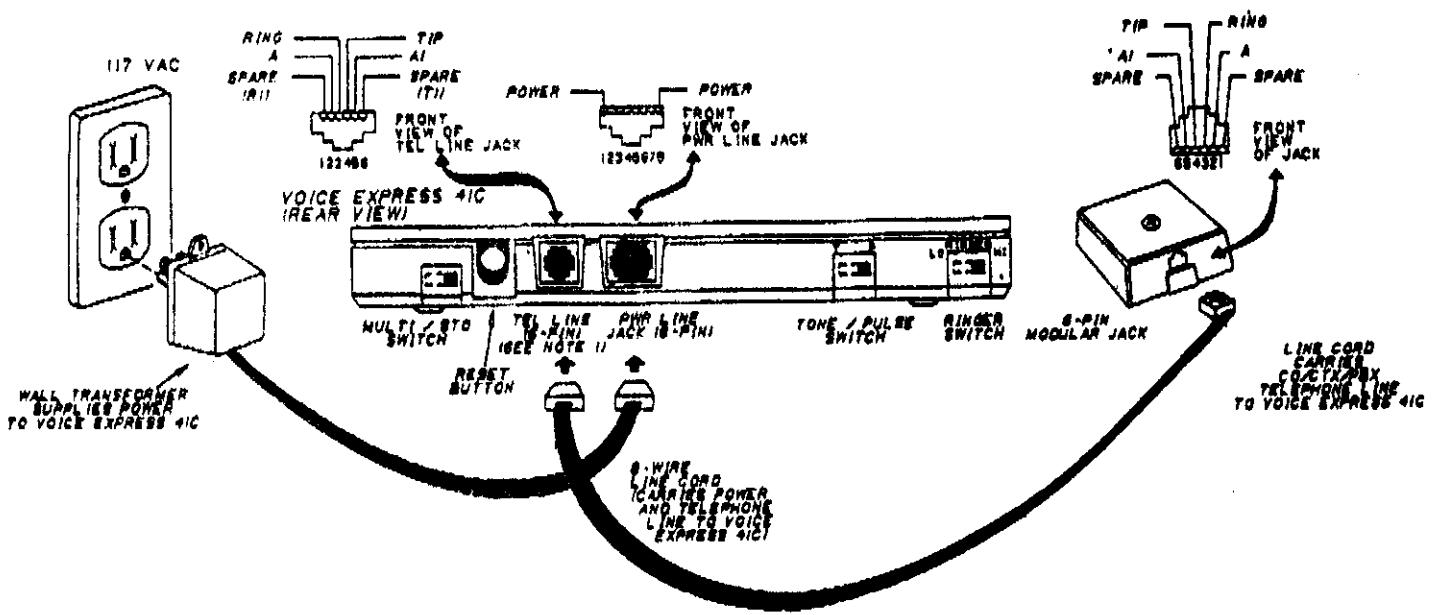


Figure 3a. Voice Express 41C Standard Installation

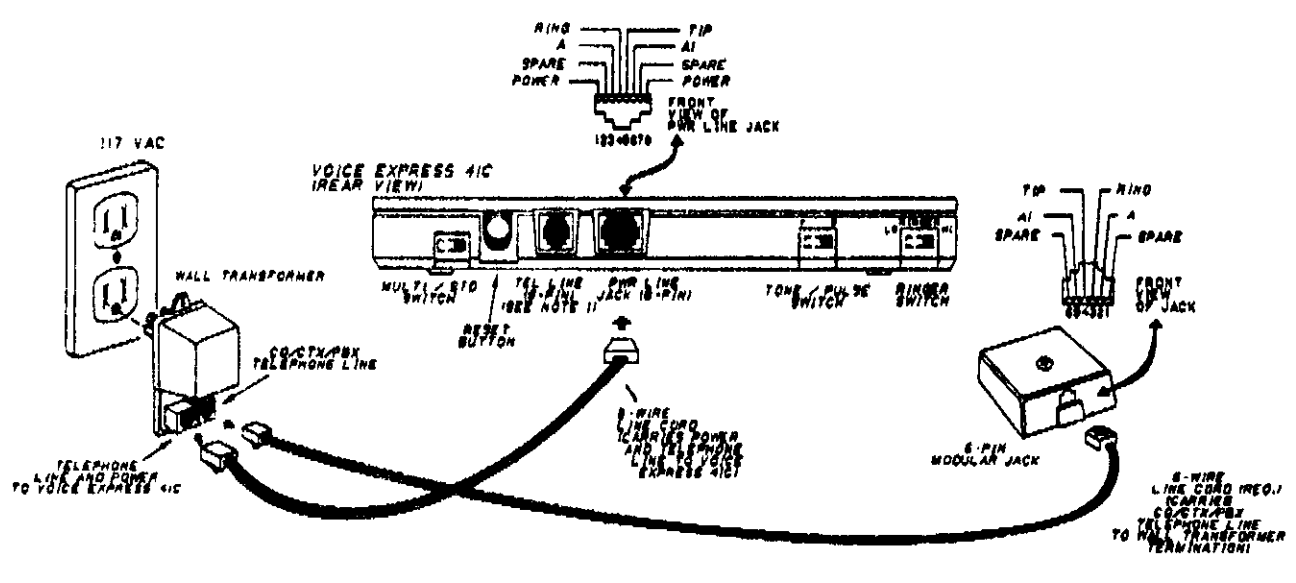


Figure 3b. Voice Express 41C Installation with Wall Transformer Accessory Kit (Provides single cord wiring to telephone for electrical power and telephone line.)

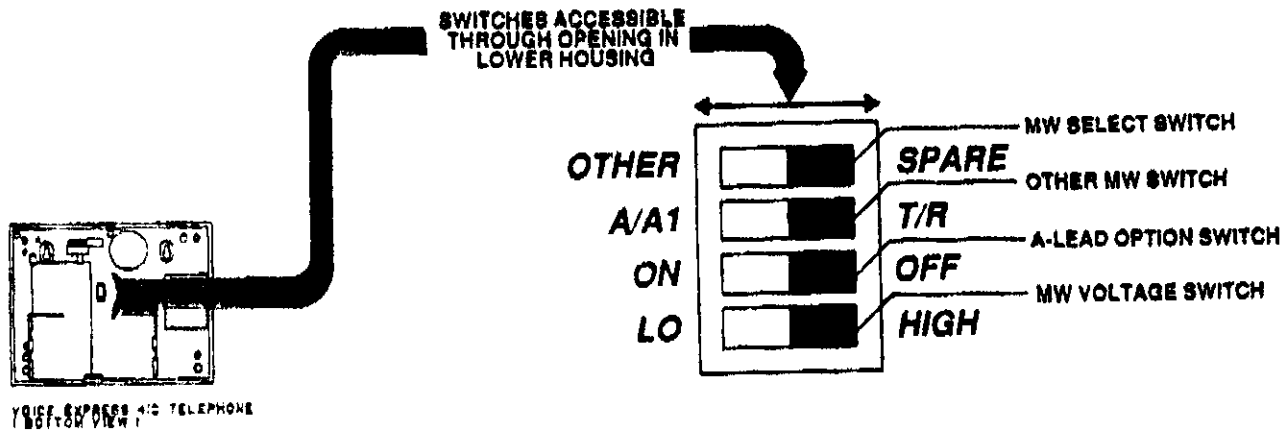


Figure 4. Message Waiting and A-Lead Switches

CONFIGURATION	SWITCH SETTINGS	MESSAGE LOUVR. IND.
90 VOLT MW ON SPARE PAIR WITHOUT A-LEAD CONTROL		0.98
90 VOLT MW ON SPARE PAIR WITH A-LEAD CONTROL (6-WIRE LINE CORD REQUIRED)		0.99
90 VOLT MESSAGE WAITING ON T&R PAIR WITHOUT A-LEAD CONTROL		Z
90 VOLT MESSAGE WAITING ON A-LEAD PAIR WITHOUT A-LEAD CONTROL		0.98
LOW VOLT MW ON A-LEAD PAIR WITHOUT A-LEAD CONTROL		0.98
LOW VOLT MW ON A-LEAD PAIR WITH A-LEAD CONTROL		0.99
LOW VOLT MW ON SPARE PAIR WITH A-LEAD CONTROL (6-WIRE LINE CORD REQUIRED)		0.98
LOW VOLT MW ON SPARE PAIR WITHOUT A-LEAD CONTROL		0.98
90 VOLT MESSAGE WAITING ON T&R PAIR WITH A-LEAD CONTROL		Z

NOTE: Low volt message waiting voltage = 5 - 50 volts AC or DC.

Table 1. Message Waiting And A-Lead Configurations

OPERATION

The Voice Express 41C telephone is operational as soon as installation is successfully completed and a dial tone is heard. Calls can be received and originated and the automatic dialer keys can be programmed.

BASIC OPERATION

To make basic handset call,

- Lift handset. Hear dial tone.
- Dial desired number on keypad.

-or-

Press the desired redial or automatic dialer key(s).

- Hang up handset to end call.

To answer call using handset,

- Hear ringing and lift handset.

SPEAKERPHONE OPERATION

To make speakerphone call,

- Press **SPEAKER**. The light above the key will turn on.
- Adjust volume with slide control located below the key.
- Dial numbers from keypad, redial, or automatic dialer keys.
- When party answers, begin conversation.

To answer speakerphone call,

- Hear ringing, press **SPEAKER**, begin conversation.

To disconnect speakerphone call,

- Press **OFF**. Light will turn off.

To use handset during speakerphone call,

- Lift handset and continue call.

To return to speakerphone from handset use,

- Press **SPEAKER**. Speaker light will turn on.
- Hang up handset.

MUTE

The microphone in both the handset and the speakerphone can be muted to prevent the distant party from overhearing a local conversation.

To mute the microphone,

- Press **MIC MUTE**. The light above the key will flash.

NOTE

If on handset call, do not hang up handset in cradle during mute condition. To do so will disconnect call.

To remove mute,

- Press **MIC MUTE**. The light will turn off.

FEATURES OPERATION

DISPLAY

While the *Voice Express 41C* can store and use numbers of up to twenty-three digits in length, the display will only show twelve digits at a time (normally the last twelve). The remaining digits scroll to the left.

To view scrolled digits or to recall number to display after showing another feature,

- Press **DISPLAY**.

REDIALING

LND (Last Number Dialed)

To redial the last manually dialed number,

- Press **LND**. The number will be redialed automatically.

Auto Redial

This feature will redial the last busy or unanswered number dialed (either manually or automatically). If the redialed number is busy or unanswered, the telephone will hang up and try again in sixty seconds. It will repeat this action ten times.

To engage auto redial,

- Dial number, hear busy or no answer.
- Hang up (Press **OFF** if on speakerphone).
- Press **AUTO REDIAL**. Display will show number dialed. During periods between dialing, display will show **Auto rdL** alternating with time display.

The autodial feature will cause the telephone to,

- Turn on the speaker.
- Automatically dial number. The **MIC MUTE** light will turn on to indicate muted condition.

If called party answers within sixty seconds,

- Pick up handset (press **MIC MUTE** if on speakerphone).

If redialed call is not picked up within sixty seconds, it will be cancelled.

To cancel auto redial,

- With telephone idle, press **OFF**.

NOTE

Other station usage will cause auto redial to wait for that action to be completed before it resumes. Any last number dialed (LND) action is disabled during an auto redial sequence.

AUTOMATIC DIALING

INTRODUCTION

The *Voice Express 41C* supports the storage of up to forty-one numbers for automatic dialing. Each stored number can be up to twenty-three digits in length. There are eight primary locations (numbered 1 through 8), thirty-two secondary locations (number keys prefixed with color keys), and one security code location.

A number longer than twenty-three digits can be stored in two parts in adjacent memory locations. It then can be chain-dialed from these two locations.

Record the numbers to be programmed on the following chart. The telephone has a pull-out directory which can be filled out and used to provide a convenient reference for the stored auto dial numbers (see Figure 5).

1 _____	2 _____	3 _____	4 _____
5 _____	6 _____	7 _____	8 _____
BLUE	WHITE	RED	GREEN
1			
2			
3			
4			
5			
6			
7			
8			

PROGRAMMING THE AUTOMATIC DIALER

To store a number either while the telephone is idle or active on a call,

- Press **STORE**. The display will show a period at the bottom of each digit location.
- Press memory key for primary location (1 - 8)
- or-
- For secondary location (color key plus memory key 1 - 8).

A currently stored number will be shown on the display. If correct, select next location.

- Dial new number for storage if desired.

Number will scroll across display from right to left as dialed.

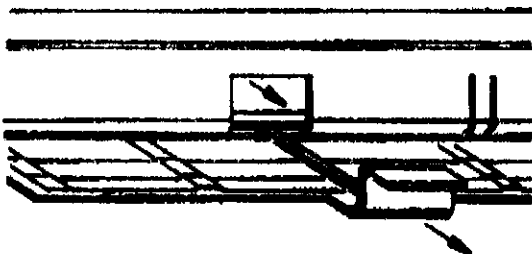


Figure 5. Pull Out Directory

NOTE

The **AUTO PAUSE** key can be pressed to store a wait for dial tone detection. The **TIMED PAUSE** key can be pressed to store a timed two-second pause. Each auto pause or timed pause occupies one digit of storage space. The auto pause is shown as a P on the display and the timed pause is shown as a . . Refer to separate discussion for complete details.

If the telephone is being operated in the pulse (rotary) dialing mode, the # and * keys can be stored as part of a number to cause a switch to DTMF tone dialing to occur at the point in the number where the # or * is encountered.

- Repeat until all desired locations are programmed.
- Press **STORE** to end procedure.

Security Code Programming.**NOTE**

Use this location for a dialing sequence which must be kept private.

To store a number at the **SECURITY CODE** location,

- Press **STORE**.
- Press **SCTY CODE** to select location.
- Dial number.
- Press **STORE** again.

Any currently stored number will not show on the display. A newly stored number will show on the display for verification but cannot be recalled for later viewing.

Using The Automatic Dialer.

To dial a number from one of the memory locations,

- Lift handset or press **SPEAKER**.
- Press memory key 1 - 8.
- or-
- Press color key plus memory key 1 - 8.
- or-
- Press **SCTY CODE**.

NOTE

If the electronic lock feature is active, the security code will be blocked from use until unlocked.

The *Voice Express 41C* will,

- Turn on the speakerphone (if the handset is on hook).
- Automatically dial number. The dialing sequence will be heard and the number will show on the display (except the security code number).

When called party answers,

- Continue with speakerphone conversation or lift handset for private conversation.

To dial a second number as part of same dialing code (chain dialing),

- Press that memory location key immediately after pressing first memory location key.
- or-
- Wait until first number has finished then manually dial second number from keypad.

HOOKFLASH

A hookflash signal is used by many host systems for custom calling features.

To cause a 600 msec. (+/- 10 msec.) hookswitch flash signal to be sent on the line,

- Press **HOOK FLASH**.

AUTOMATIC PULSE TO TONE SWITCHING

When the *Voice Express 41C* is set to operate in a pulse (rotary) dial mode, an automatic shift to DTMF tone dialing can be effected for the current number being pulse dialed. Pressing the # or * key at the point in a number where the shift is to take place causes the remainder of that number to be dialed using DTMF tones. The telephone will remain in the DTMF tone dialing mode until hang-up occurs.

To store a pulse-to-tone shift as part of an autodial, LND, or auto redial number,

- Press # or *.

Automatic shift to tone dialing can be effected while manually dialing a number.

- Begin dialing number (in pulse mode).
- Press # or * when the shift to tone is required.
- Complete dialing sequence (in tone mode).

SPECIAL PURPOSE OPERATING FEATURES

CLOCK

After an AC power failure, the time of day display will blink when the power is restored.

To restore a blinking (but still correct) time display,

- Press **STORE, CLOCK, STORE**.

The display will return to a steady on condition.

To program a new time,

- Press **STORE**.
- Press **CLOCK**. The display will show a dot in each digit location.

- Use the dial pad to enter the correct time. (Previously pressed digits scroll to the left.)

NOTE

Press the * key to change from a 12-hour format to a 24-hour format. A 12-hour format is indicated by a lighted bar next to the AM/PM designation in the rightmost display digit. The 24-hour format is indicated by a displayed E during the clock programming. Press the # key to select AM or PM when in the 12-hour format.

- Press **STORE**. The new time will show on the display.

An incorrect entry will cause the display to blink 0-00 AM.

To view the time during telephone operation,

- Press **CLOCK**. The time display will be shown.

TIMER

Events can be timed up to 99999 minutes and 59 seconds.

To reset the timer to zero and start the call timer,

- Press **TIMER**. The timer will start running and be shown on the display.

To stop timer,

- Press **TIMER** again.

NOTE

The timer will automatically stop when call is disconnected.

Elapsed time will remain showing on the display for 15 seconds. To remove it sooner,

- Press **CLOCK** or **ALARM**.
- or-
- Engage manual or automatic dialing.

NOTE

Answering a call during a timer operation will not stop the timer.

ALARM

The *Voice Express 41C* has a 24-hour appointment alarm with a distinct tone sound.

To set the alarm,

- Press **STORE ALARM**. The current setting is set to 0-00.
- Dial the alarm setting. A 12-hour or 24-hour format is determined by the current clock format.
- Press **STORE**. A stored alarm is indicated by an A next to the time display.

To view an alarm,

- Press and hold **ALARM**. The display will show the current alarm time.

To clear an alarm time,

- When idle, press **STORE, ALARM, STORE**.
- While sounding, press **ALARM**.

To allow alarm to remain set,

- Allow tone to sound for full twenty seconds. Alarm will turn off and reset for same time.

AUTO PAUSE

An automatic pause can be stored with the **AUTO PAUSE** key into a memory dial location or as part of an LND or auto redial number. Each pause occupies one digit of storage and shows as a P in the display. When stored as part of a number, an auto pause will cause a wait to occur until a dial tone is detected to cause the automatic dialing to continue. This is useful when storing numbers to be used with host systems that require a digit(s) to be dialed to obtain outside dial tone before a number code can be dialed. Normally, dialing continues automatically after the tone is detected; however, if line conditions prevent reliable dial tone detection by the auto pause digit, continued dialing after the auto pause can be forced.

To store an automatic pause as part of a stored number,

- Press **AUTO PAUSE** during number programming.

To force a continued dialing after an auto pause,

- Press memory location key again.

TIMED PAUSE

A timed two-second pause can be stored with the **TIMED PAUSE** key into a memory dial location or as part of an LND or auto redial number. Each pause occupies one digit of storage and shows as a - in the display. More than one timed pause can be stored if needed. When stored as part of a number, a timed pause will cause a two second wait to occur before dialing is automatically resumed.

To store a timed pause as part of a stored number,

- Press **TIMED PAUSE** during number programming.

ELECTRONIC LOCK

The *Voice Express 41C* has an electronic lock which provides the following protection:

- Prevents manual dialing.
- Prevents security code dialing.
- Disables display during auto dialing.
- Prevents auto dial storage.

To lock the telephone,

- Press **STORE, DISPLAY**.
- Dial any three-digit code.
- Press **STORE**. Lock combination is stored and shown on display for reference.
- Press **DISPLAY** twice. Reference is erased.

To unlock the telephone,

- Press **STORE, DISPLAY**.
- Dial three-digit code (lock combination).
- Press **STORE, DISPLAY**.

CAUTION

If a lock combination is forgotten, it can not be retrieved. To unlock a unit under these conditions, default per the instructions on the following page.

DEFAULT

A default condition will erase the clock time and ALL memory dial locations and unlock a telephone for use.

To default a *Voice Express 41C* telephone,

- If optional batteries are installed, remove them.
- Disconnect power transformer from AC outlet.
- Press and hold **TIMER**, **DISPLAY**, **CLOCK**, and **ALARM** keys simultaneously.
- Plug transformer back into AC outlet.
- Release held keys.

MULTILINE KEYSTRIP INFORMATION

INTRODUCTION

The *Voice Express 41C* telephone can be combined with matching multiline keystrips for direct connection to two CO/PBX lines or for connection to 1A2-type key systems as a full-featured key telephone set. The addition of a multiline keystrip does not affect the operating features of the *Voice Express 41C*; however, the keystrip does add enhancements such as: multiline pickup, call hold, and line termination operations common to key systems. The operation of a key system is not affected by the connection of a *Voice Express 41C* and multiline keystrip.

Voice Express keystrips are available in three-key (two-line), six-key (five-line), and ten-key (nine-line) models. Each keystrip is shipped with thorough, easy-to-use installation and operating instructions.

Up to four *Voice Express 41C* telephones equipped with three-key keystrips can be combined to form a two-line, non-private, system configuration. Such a system does not require a key service unit. The three-key keystrips will provide line status indication to the equipped stations.

KEYSTRIP INSTALLATION

Refer to the keystrip installation instructions, included in the keystrip carton, for complete installation details.

During installation, the six-key and ten-key, 1A2-type keystrips can be modified to allow conference line capability if it is needed. Additionally, unused line keys can be modified so that they can be used for signalling and switching functions. A signalling buzzer can be mounted inside the keystrip housing if desired. Complete instructions for using these options are provided in the keystrip installation instructions.

RINGING SELECTION

COMMON AUDIBLE

When installing a multiline keystrip on the *Voice Express 41C*, the MULTI/STD switch on the rear housing of the telephone must be set to the MULTI position. This setting insures that the lines will ring at the station according to the common audible ringing arrangement of the system. An incoming ring causes the line key light of the ringing line to flash.

SELECTED RINGING

When a six-key or ten-key keystrip is installed and the MULTI/STD switch is set to the STD position, the only line that will ring is the one that is preselected by a latched-down line key. While this is not the normal mode of operation, it does provide a simple "prime line only" ringing assignment for a preselected line. This switch setting also provides a "do not disturb" mode if all of the keystrip keys are left in the unlatched position (no ringing will occur). Visual indication of incoming

ringing is not affected by the MULTI/STD switch setting. Incoming ringing always causes the line key light of the ringing line to flash.

KEYSTRIP OPERATION

To answer a call with a multiline keystrip, press the line key of the ringing line to select it, and answer the call using the available *Voice Express 41C* features. To make a call, select a line with a keystrip key, and use the available *Voice Express 41C* features to place the call.

CONFERENCING

If the six-key or ten-key keystrip is arranged to allow the conferencing option (per the keystrip instruction sheet), two line keys can be pressed simultaneously to join the lines in a simple conference call. Since this is a simple mechanical conference connection, only two lines can be conferenced at one time using this method, and transmission levels on the conferenced lines may not always be completely adequate because of line

conditions. When the conference call is complete, one or both line keys should be unlatched to prevent possible line interference at this telephone or at any other telephone connected to the same line.

Conferencing using a three-key keystrip is not recommended.

SIGNALLING

If one or more of the keys on a six-key or ten-key keystrip have been arranged to provide switching or signalling action instead of line selection (according to the keystrip instruction sheet) press and release the arranged key to activate the arranged ac-

tion when it is desired. If a buzzer is included in the keystrip for signalling purposes, it should be adjusted for sufficient volume as required.

Switching and signalling options are not available with the three-key keystrip.

REPAIR SERVICE

FCC regulations do not permit repair of this telephone by anyone except the manufacturer or their authorized agent. Return a defective telephone to the place of purchase or send it prepaid to the address shown below.

Comdial will, at its option, either repair a defective telephone or replace it with a remanufactured unit. Out of warranty repairs will be done at a fixed charge to the purchaser. For information on this charge, please call or write Comdial at the address listed below.

When returning the telephone for repair or exchange, please be sure to pack it carefully to prevent damage. Any damage to the telephone during shipment will be the responsibility of the purchaser. The telephone should be shipped freight or postage prepaid.

COMDIAL

1180 Seminole Trail
Charlottesville, VA 22906-7266
Attention: Repair Department
Telephone: (804) 978-2400

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