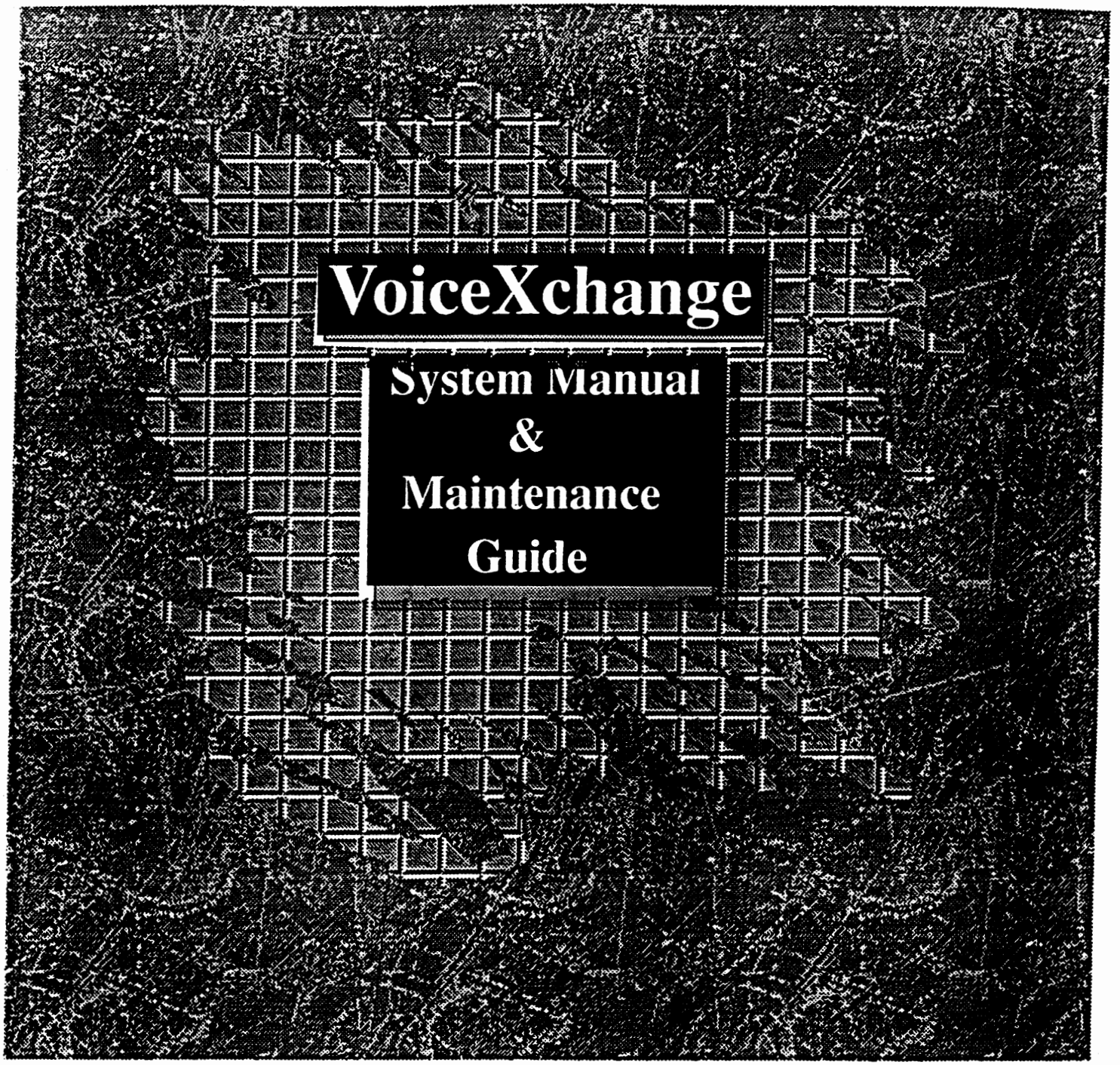
Table of Contents



DIALOGIC
ØPEN™
Development Program

VoiceXchange

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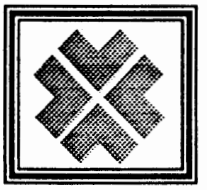


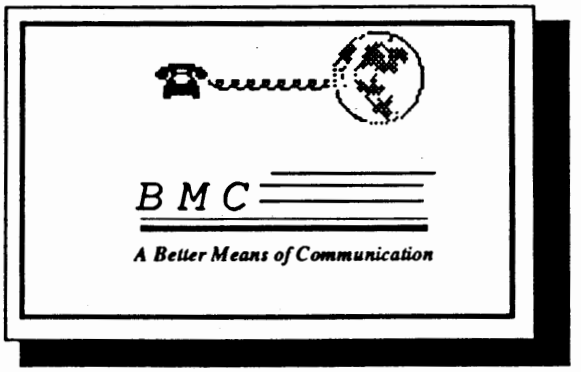
Introduction to the VoiceXchange

The **VoiceXchange** system is a feature rich, PC-based system that is easy to install, user friendly, and flexible to meet a variety of voice applications. Both **Auto Attendant** and **Voice Mail** capabilities are included in the basic software package and provide the installer all of the tools neccesary to extend to the end user the capabilities that are most desirable for their communication needs.

This manual is designed to help guide you through the installation of the **VoiceXchange** hardware and software. The step-by-step instructions were developed for installers with little to no knowledge of computer based systems or the commands which control them.

In this way, the manual becomes extremely useful as a learning tool and as a reference source for users, administrtors, service technicians and system trainers.

In addition to providing technical information such as, step-by-step instructions, this manual will also present a glossary of terms at the begining of each new section. It is recommended that you become familiar with the terminology. Taking the time to read over the terms before you start each section will greatly enhance and accellerate your understanding of the system dynamics.



Section 1

VoiceXchange System Overview

Terms to Know

1.) Automated Attendant- an automated system that is interfaced or intergrated to a PBX or Key system that answers calls and allows callers to be transferred to a desired extension without operator assistance.

2.) call screening - A feature of voice mail which allows a user to monitor their incoming calls.

3.) Central Office (CO)- In telephone operations, the facility housing the switching system and related equipment that provides telephone service for customers in the immediate geographical area.

4.) Direct Inward Dialing (DID) - A feature of PBXs and Centrex systems which allows callers to dial from the public network straight to a wanted extension without intervention by an operator.

5.) do-not-disturb- A feature of voice mail where a caller is automatically transferred to a voice mailbox unavailable greeting.

6.) Dual Tone Multi-Frequency (DTMF) - Push button dialing; touch-tone.

7.) flash hook - The duration of an on-hook state required to indicate to a phone system(PBX) whether to transfer a caller or to place them on hold.

8.) hard drive - A read/write memory system, usually self-contained, based on rotating disks coated with a magnetic recording medium.

9.) Private Branch Exchange (PBX) - Small local telephone office, either automatic or manually operated, serving extensions in a business complex and providing access to the public network.

10.) ring cycle - The total duration of a ring and a pause = 1 ring cycle. Period between non-silence and silence.

11.) rotary phone - A non-touch tone telephone which communicates to the CO using pulse dialing protocal.

12.) salutation - The opening message heard by a caller accessing the voice mail system in Auto Attendant mode.

13.) time-out - A specified period of time allowed to elapse in a system before a specified event takes place; normally, a request for DTMF input and no response was given.

14.) voice mail - A continuation of automated attendant that incorporates several features related to voice messaging including but not limited to: unavailable messaging; call forwarding; time forwarding; do-not-disturb; outcall notification; holding messages for later playback; forwarding messages and more.

15.) voice mailbox - The code number determining the store in which incoming voice messages have been placed for later retrieval. The code(usually equal to the users extension number) allows access to voice mail functions.

16.) VoiceXchange - The patented trademark of the BMC Group, Inc., for the system which incorporates the hardware and proprietary software for voice messaging and automated attendant functions.

Table of Contents

SECTION 1 SYSTEM OVERVIEW

How the VoiceXchange System Works

In the following example, you will be introduced to a basic description of how the **VoiceXchange** software runs under a pratical application.

In relation to telephone calls, the **VoiceXchange** understands what you or an outside caller wants by *listening* to the tones the telephone keys make. When the **VoiceXchange** hardware detects one of its extensions ringing, it performs the equivalent of lifting the telephone handset, reads a speech file and then converts the speech file into an audio signal which is played to the caller over the telephone. The system may greet the caller with:

"Thank you for calling our company."

At this point, some callers will not know how to use the system, so the **VoiceXchange** explains how. For example, the system can respond with:

"If you have a touch-tone phone, and know the extension of the person you are trying to reach, enter that extension now. Enter 9 for directory assistance, or you may hold for an operator."

The **VoiceXchange** has the ability of distributing information, such as providing departmental or personnel directories and other commonly reapeated information.

Frequent callers need not listen to these messages. If the caller knows the extension they wish to speak with or the directory they wish to hear, and they are familar with using this type of system, they may enter the extension immediately after the **VoiceXchange** answers. Callers with rotary phones can simply hold the line for an operator.

As mentioned above, the **VoiceXchange** listens for callers to make a touch-tone entry. When **Dual-Tone Multi-Frequency (DTMF)** tones are entered on the telephone touch pad, these numbers are registered within the system and are translated into commands that the **VoiceXchange** can understand. When the touch-tones correspond to a command for the system to play a directory or announcement, the appropriate message which has been selected will be heard by the caller.

When the touch-tones correspond to a command to transfer to an extension, the **VoiceXchange** first checks to see if the desired extension is set to **call forward do-not-disturb or call screening.** If the extension is set to **do-not-disturb,** the **VoiceXchange** automatically plays the appropriate unavailable message associated with the selected extension. If the extension is set to **call screening**, the system will automatically ask the name of the calling party prior to attempting to ring the selected

When the touch-tones correspond to a command to transfer to an extension which is not set to **do-not-disturb** or **call screening**, and is also not currently busy, the **VoiceXchange** will ask the caller to hold and then perform the equivalent of a flash or switch hook transfer to place the caller on consultation hold, and then play the appropriate extension as **DTMF** signals which the **PBX** can understand.

When a valid extension has been communicated to the **PBX**, the telephone switch then takes over and attempts to ring the desired extension. If the extension is not busy, the telephone will ring. The **VoiceXchange** will *listen* for the ring cycle it is tuned to listen to, and if it is broken by an answer, will announce that a call is being transferred, and then do an equivalent of another flash or switch hook transfer, and then hang up, connecting the callers.

If the extension is not busy, and the telephone rings without an answer, the **VoiceXchange** will **time-out** after a predetermined number of rings, and then will do the equivalent of a flash or switch hook transfer to take the call back from the consultation hold, to play either the system default or personal unavailable message.

If the extension is busy, the telephone will register a busy signal that the **VoiceXchange** will recognize as an occupied telephone. The **VoiceXchange** again does the flash or switch hook transfer to reclaim the caller off of the consultation hold, and *informs* the caller that the extension is busy, and gives them the option of holding, trying another extension or leaving a message.

VoiceXchange System Features and Benefits

The **VoiceXchange** can be utilized as a fully Automated Attendant or stictly as a Voice Mail Messaging system or incorporate various features of both, simultaneously.

Call Processing As An Automated Attendant

BASIC FEATURES

* Answer all calls professionally on the first ring.
* Uses Central Office (CO) lines to give all extensions Direct In-Ward Dial (DID) access without the associated charges for DID service from your Phone Company.
* Line access may selectively be denied by extension and time of day, allowing for automatic denial of incoming and outgoing calls processed by the voice system
* Incoming rotary callers are automatically routed to the switchboard operator Switchboard Voice Mailbox in the event the operator is busy or unavailable (after hours)
* Extension staus reported to incoming caller with options to hold, enter another extension, or leave a voice message on Ring-No-Answer or Busy
* Default (switchboard) extension may be changed automaticallty by time of day, to route operator assisted calls from the daytime console to a different extension (such as a night

CUSTOM SALUTATION FEATURES

* Multiple (999) number of salutations per day based on an internal clock/calander which changes the recorded salutation number automatically by time of day, day of week, or specified start an d stop date and time
* Salutations and voice prompts can easily be recorded through a touch-tone telephone or recorded professionally on request
* Salutations may be recorded for playback at a future time, allowing for holiday messages
* Custom Salutation by individual ports, if desired
* Salutations can be re-recorded as often as needed

MENU PROMPTING FEATURES

*User defined menu prompts for often-called departments, such as,"Press 1 for Sales, 2 for
*Customer Service,...etc."

*User defined menu prompts for employee directory listings and/or Dial By Name directory function

*Information bulletin board capabilities

*Customized main menu to provide 9 sub-menus per level, 9 or more levels

*Menus are repeated if no response is received within an administrative predetermined time

* After a menu is repeated and the system is still not responded to within a predetermined time, the caller will automatically default to an operator, or if desired, disconnect

CALL PROCESSING FEATURES

* Each port may act independantly, like a switchboard, making a 16 port system appear as 16 separate operators

* With call monitoring, the voice system directs callers to an extension, and if that extension is busy or not answered, provide the caller the opportunity to try another extension, reach the operator or leave a voice message.

* Off premises call forwarding which allows the system to speed dial access codes, area codes, and telephone numbers, then attempt to connect the caller (if trunk-to-trunk transfers are permitted by the PBX)

* Account numbers, area codes, zip codes and state abbreviations may be translated into appropriate extensions via the departmental mapping

* Call hunting within the voice system, allows extension hunt groups independant from PBX hunt groups that give caller options to hold, enter another extension, dial the operator, or leave a voice message in the event of a Ring-No-Answer or All Busy status

ADMINISTRATIVE FEATURES

* System level features can be set from the PC or any touch tone phone
* Administrator functions are master password protected
* Real - Time Analysis with on-screen, printer or file output
* Statistics for reporting extension, port and messaging activity

EMERGENCY FEATURES

* If all ports are busy or if the system is not in service, all calls will be automatically routed to the switchboard operator (PBX dependant function)
* Automatically self-restoring in the event of a power failure
* Internal tape drive backup allows quick recovery of all messages and data (optional)

VoiceXchange Voice Messaging System

BASIC SYSTEM FEATURES

- Simultaneous call processing
- Unlimited menus
- Skip message box greeting
- Time of day routing
- Remote access
- Management Information Reports
- Integration with most PBX's and Hybrid Key systems
- Hunt group capabilities
- Easy administration from any touch-tone telephone
- System level features can be set from the keyboard
- Administrator functions are password protected
- Audio feedback
- Automatically self-restoring
- Floppy disk backups allow quick recovery
- Message playback controls (skip, pause, replay)
- Automatic reply
- Message receipt confirmation
- Wake - Up Service
- D.I.D Integration
- Offsite Notification

VoiceXchange

Technical Specifications And Requirements

System Requirements

Basic Requirements

386 AT Computer 33Mhz (Desktop or Minitower, dependant on port size)

2Mb RAM Memory

Keyboard (84 or 101)

Hard Drive w/Controller

Monochrome Monitor w/I.O Card (with parallel port)

1.2 Mb Floppy Disk Drive or 1.44 Mb Floppy Disk Drive

Voice Controller Board (s)

Software Sentinel (a.k.a. dongle)

MS-DOS version 5.0

Specific Requirements

VoiceXchange System		Computer/Speed	Hard Drive	RAM	DOS
2 - 6 ports		386 SX/ 33 Mhz	40 mls +	2Mb	5.0
8 - 24 ports	*	386 SX/ 33 Mhz	28 mls +	2Mb	5.0 +
24 - 32 ports	#	386 SX/ 33 Mhz	28 mls +	2Mb	5.0 +

* recommended with eight expansion slots

recommended with ten expansion slots

NOTE: The above configurations are recommended for optimum performance

System Specifications

Class of Service

Configurable per user; restrictions apply for call holding, call processing and messagebox capabilitiy

Number of Users

Maximum of 9,999 per PC.

Hard Disk Storage

A minimum of 10Mb is required for exclusive Automated Attendant functions; 40Mb is required for combined Automated Attendant and Voice Messaging functions, providing for approximately 3.5 hours of message capacity.

Messaging Disk Storage Rate

Approximately 6 minutes per megabyte.

Dialing Protocal

Embarks DTMF tone.

Number of Ports

2 / 4 per audio board

Maximum Number of Ports per System

32

Section 2

Installation Manual

TABLE OF CONTENTS

Section 1

VoiceXchange Hardware Installation

Hardware Configurations With Turn-Key Systems

When you receive your **VoiceXchange** system or the **MiniXchange** system from the manufacturer, normally, the unit will already be configured, built and ready to use. This section will detail hardware configurations of the **Dialogic Audio Boards** used with the **VoiceXchange** and **MiniXchange** systems for the purpose of reference and orientation for technical as well as non-technical personnel wishing to upgrade systems or for non-turn-key systems.

Dialogic D4xD Audio Controller Boards and the VoiceXchange System

The **VoiceXchange** system incorporates a product manufactured by the **Dialogic Corporation** called the **D\4xd voice communication board**. This product is responsible for collecting, digitizing and compressing audio signals, playing back recorded messages and connecting the PC unit to the telephone system.

The types of boards currently used in the **VoiceXchange** and **MiniXchange** are:

D21 Model B, D	-	2-Port Board
D41 Model B, D	-	4-Port Board
D42-SX	-	4-Port Board (Mitel)

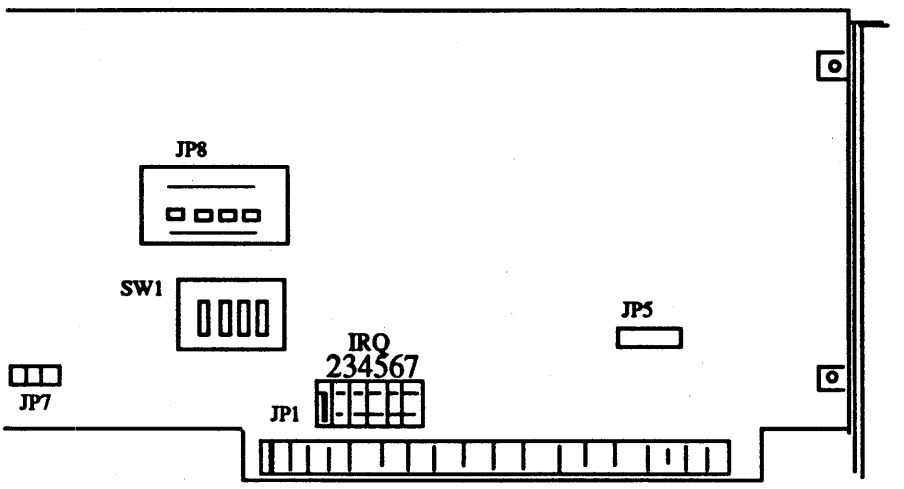
The D4x and the D2x boards can be configured in combinations to operate within the same system. The D42-SX is a specific audio board used to work with telephone equipment manufactured by the Mitel Corporation. The D2x and D4x will not function with the D42-SX board.

A combination of up to eight D4x and D2x boards may be attached to a single PC. In a multi-board system, each board must use the same jumper-selectable hardware interrupt level but a different switch selectable base memory address.

Getting Started

If you are installing a Dialogic board for the first time or if you are upgrading your present turn-key system with an additional board(s), proceed to the diagram on the following page for a discussion of the board switch and jumper settings.

Dialogic Board Jumper And Switch Settings



The following jumper settings are required to be set in order for your board to operate correctly with the VoiceXchange system.

Jumper	Description
JP1	Sets interrupt vector (IRQ)
JP5	Sets base address
JP7	Interrupt terminating jumper
SW1	Sets shared physical RAM address

Jumper JP1

JP1 sets the interrupt level for the Dialogic board. The VoiceXchange software normally looks for the interrupt level to be set at (5). First locate the small jumper which sets the level at JP1. The board is usually set from the factory at IRQ 2. This interrupt level is set on the first set of pins on the left if you are looking straight on at the board, like the figure above.

Move the jumper from the far left, over to the right (4) places. This position is interrupt level (5). Be sure that the board is set at IRQ 5.

Jumper JP5

The default base address used by the Dialogic board is D0000. This address may be jumper selectable to the A0000 segment.

JP5 is a two pin jumper that will allow you to set the alternate base memory address at A0000 in order to support up to 16 D/4x's in a system. However, this setting is rarely used in the VoiceXchange systems. Only under certain conditions would this base setting be selected. One such condition would be if the D0000 block was in conflict with some other device in your systems configuration (Systems other than turn-key systems purchased through The BMC Group).

Proper settings for this jumper are as follows:

JP5	Base Address
out	D0000 (Factory default)
in	A0000

Jumper JP7

JP7 is a two-pin jumper which sets the terminating interrupt on the Dialogic board(s). If you have have only one board installed on your system, this jumper should be closed(Short). If you are adding a board or boards, JP7 should be out (Open) on every board execpt your first board.

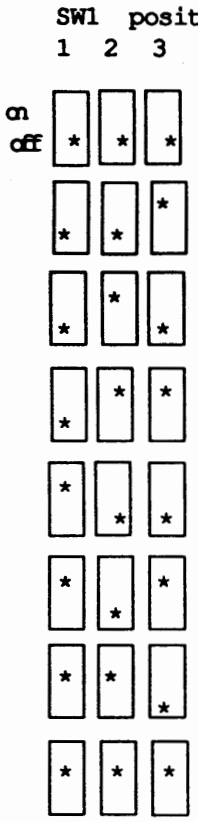
Switch SW1

The PC and the Dialogic board communicate with each other through a shared memory block which resides within the memory address space of the PC. The physical address offset where this memory block is located can be modified by three dip switches on SW1. These switches are set at the factory and if you have a single Dialogic board in your system, they will generally not have to be touched.

If, however, you happen to have another board that uses one of these addresses, or if you are installing multiple boards, it will be necessary to configure the switches.

Refer to the diagram on the following page for the proper settings of the SW1 dip switches for multiple board installations.

SW1 Switch Settings For Multiple Board Configurations



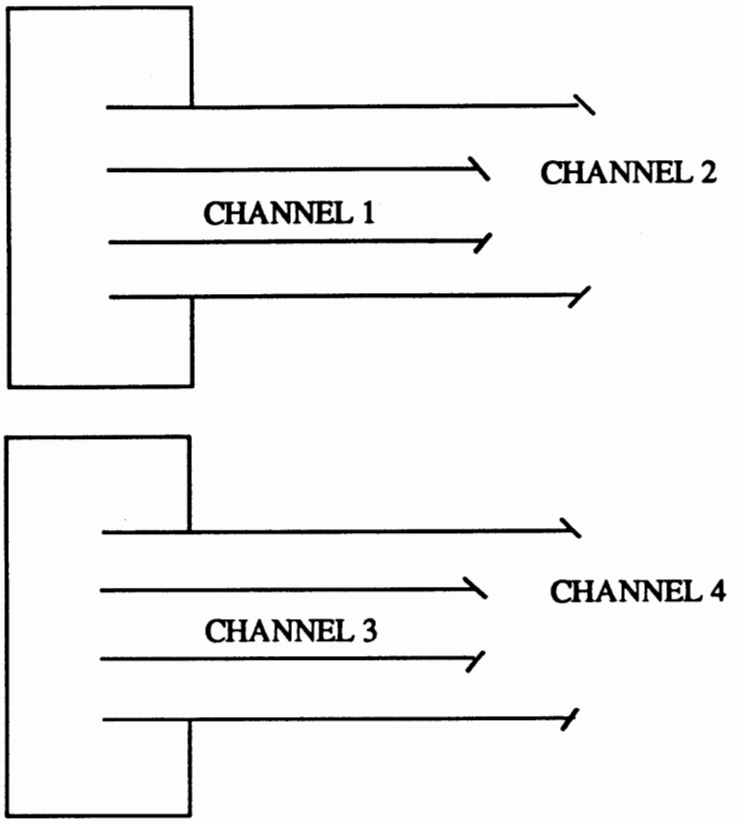
Board #	Offset Address From BASE (Hex)	
1	0000	Factory setting
2	2000	
3	4000	
4	6000	
5	8000	
6	A000	
7	C000	
8	E000	

Please review the above settings for the Dialogic board(s). Use this chart as a reference when adding boards to your VoiceXchange system. Notice that the switch position (4) is not used to configure the offset base address. This switch setting is discussed in the next section.

Default Line State (SW1 Position 4)

A Dialogic board can be started or stopped via software without affecting the operation of any other Dialogic board in the system. The state of the telephone lines on a stopped Dialogic board can be configured to be either "on-hook" or "off-hook" using position 4 of SW1.

Switch 4	Line State	
	"on - hook"	(no answer) factory setting
	"off - hook"	(busy)



- If you have single line telephone line terminations (RJ11 type) you will need RJ11 to RJ14 splitting cables which are available for a nominal cost from most electronics stores. Each splitting cable consists of an RJ-14 female jack and a "Y" cable terminated with 2 RJ-11 plugs. Examples of this type of cable are Radio Shack catalog number 279-401 and Fordham Radio (Hauppauge, NY) part number TA01343. A standard 4 wire modular cable can be used to connect each splitter cable to the Dialogic/4x RJ-14 jacks.

- If you have the RJ-14 terminations for your telephone lines then you need a pair of standard 4 wire modular cables.

- For other types of telephone line terminations, you will need the proper adapters and/ or cables which will terminate in the RJ-14 modular plugs.

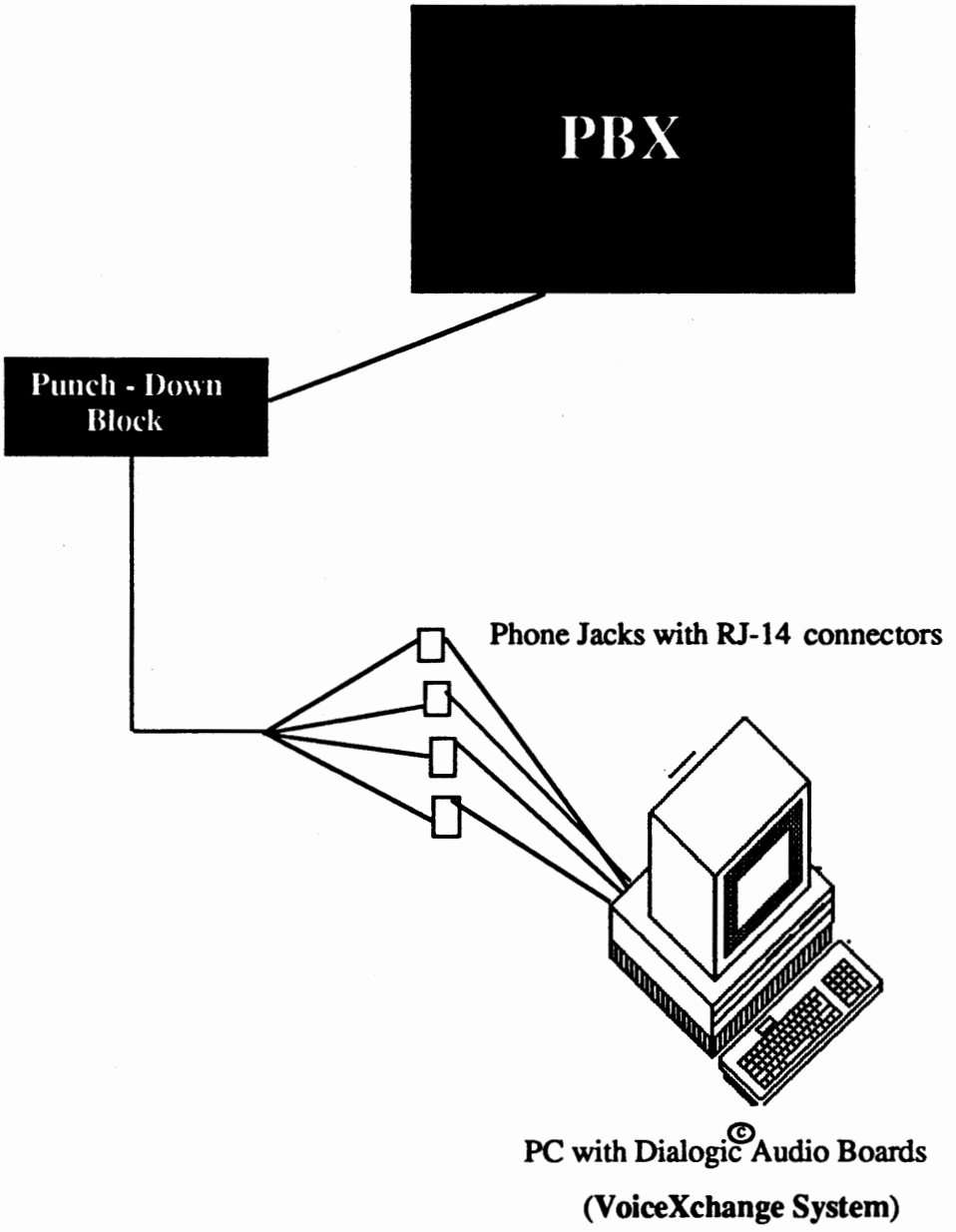
With the gold contacts facing the left side of the machine (as viewed from the rear), connect the RJ-14 end of the modular telephone cable to any of the phone connectors on the back of the audio board. The cable will slide in easily and snap in place when the connection is made.

Next, connect the remaining end, or ends, of the telephone cable to your telephone line terminations.

Note 1
A standard telephone will not function when directly attached to a Dialogic/4x jack.

Note 2
To connect the Dialogic/4x to a single telephone line terminated with an RJ-11 jack, a standard two wire modular cable will allow connection to line 1 or 3 when inserted into the RJ-14 jack on the VEX/ 4x board.

Simple Connectivity Diagram of PBX system And PC-Based VoiceMail System



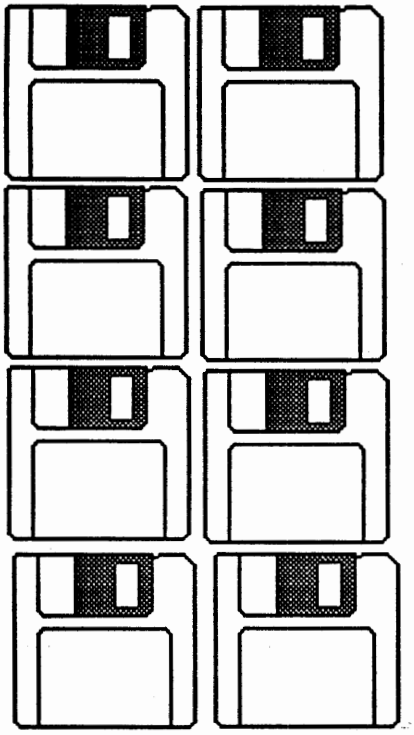
The above diagram is an over-simplified representation of the connectivity involved between a PBX system and a PC based Voice Mail/Autoattendant.

Section 2

VoiceXchange Software Installation

SETVEX

INSTALLATION PROGRAM FOR THE VOICE XCHANGE SYSTEM

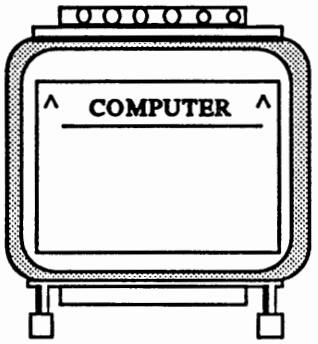


Included with your system manual, you will find a set of eight diskettes labeled as follows:

Install
Message 1
Message 2
Message 3
Message 4
Update
D4XD Supplemental
Utility

If you have purchased the **Multi-Lingual Feature Package,** you will have a set of additional Message Disks for the language of your choice.

In addition to your System Manual and the diskettes, you will also find included with your order a device which looks like this:



This device is called a **Sentinnel Protector** or **"Dongle".** It is extremely important that you install this device onto your computers parallel port (printer port) **Before** you attempt to run the voice mail program. The software requires that this "dongle" is attached or you will receive errors.

However, for installation of the software, it is not necessary that this be installed yet.

Getting Started

Take the diskette labeled, **INSTALL DISK**, and place it in the floppy drive (A or B Drive).

The **INSTALL DISK** is the diskette which contains the primary installation program called **SETVEX**. Also, the INSTALL DISK is formatted as a *Boot -Disk*.. A Boot-Disk gives the user the ability to load the DOS operating system from diskette when you first turn the computer on with the diskette in the floppy disk drive.

Installation From Drive A

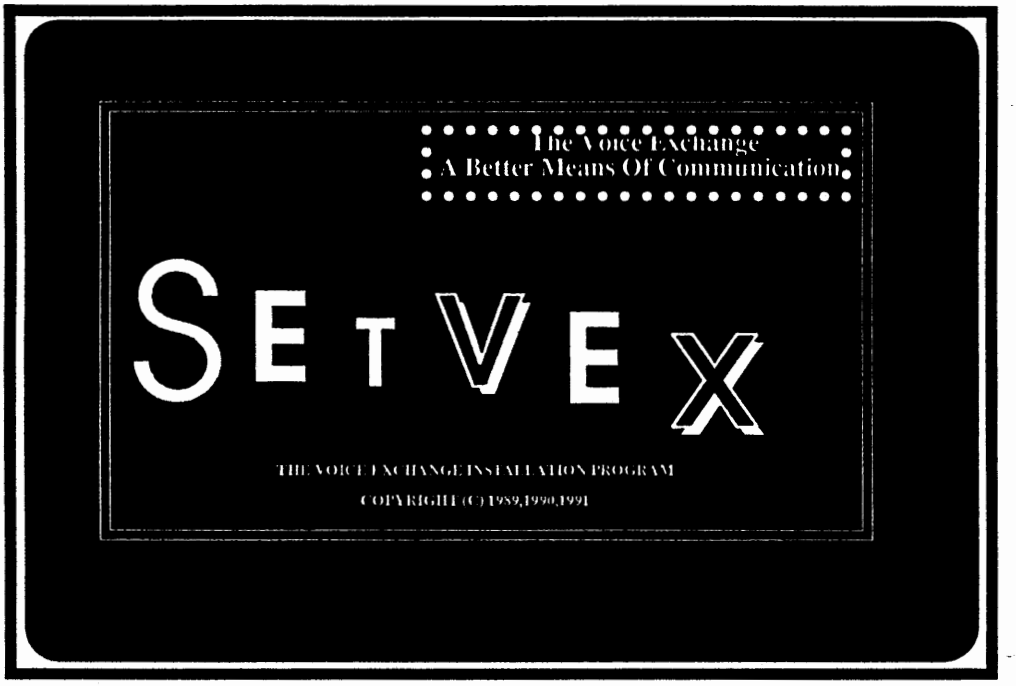
With the INSTALL DISK in the floppy disk drive, at the DOS command prompt, type :

A: **[return]**

From the A:\ command prompt, type **SETVEX** and return. As the SETVEX program begins to load, you will be prompted to indicate from which drive you will be installing the program FROM. The screen will look like this:

Type the letter (A or B) depending on which drive you are installing from. The program will note the drive you selected and will continue to load.

The installation program continues to the opening screen which looks like this:



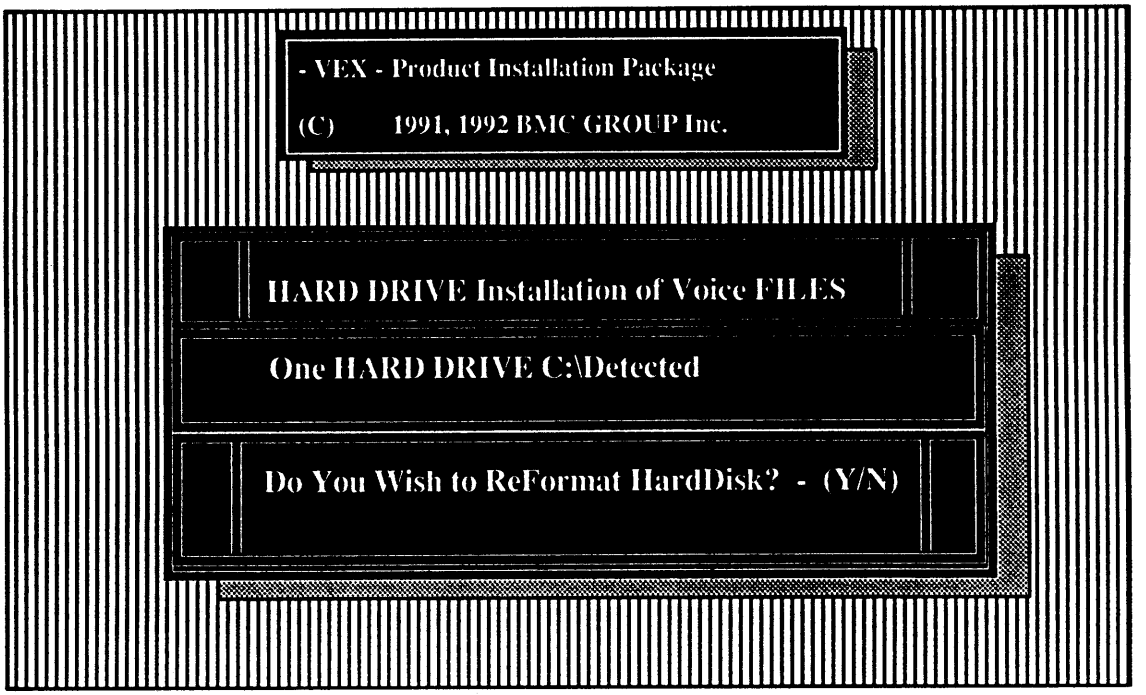
Once this screen appears, after a few seconds you will hear an audible ringing. This is only part of the opening program and has no bearing on the installation. For future installations, you may by-pass this screen by pressing any key or the space bar .

The following screen will appear:

Press any key to continue.

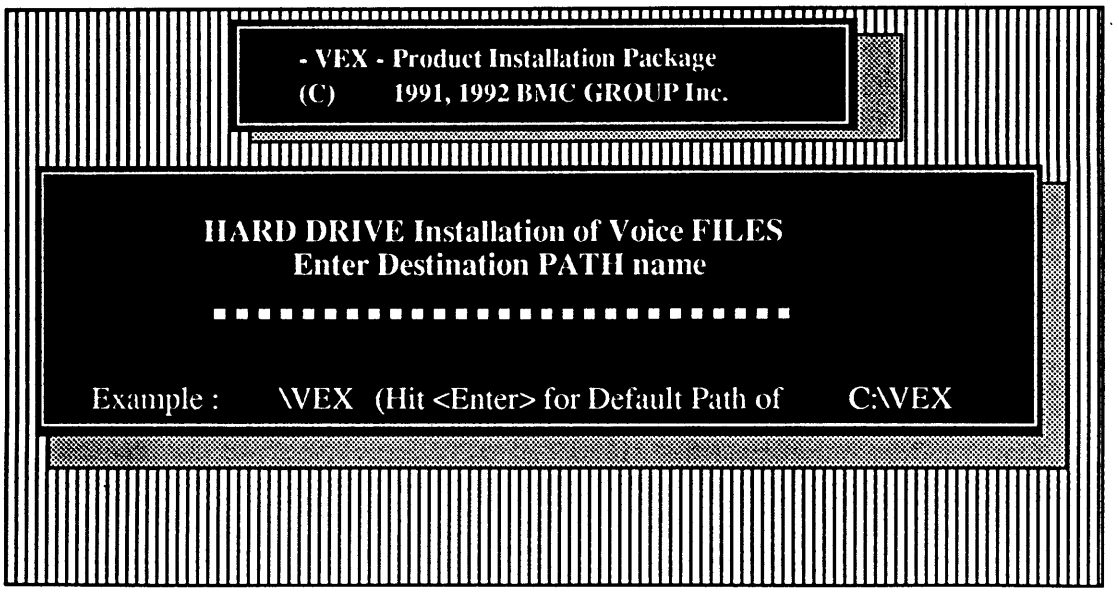
The following screen will appear.

As the SETVEX program loads, it looks at your computer systems hard disk drive and determines if it has been partitioned into logical sectors (C: , D:, E: , etc...). If you have already formated your drive using MS -DOS version 5.0, then please select "N" for NO.

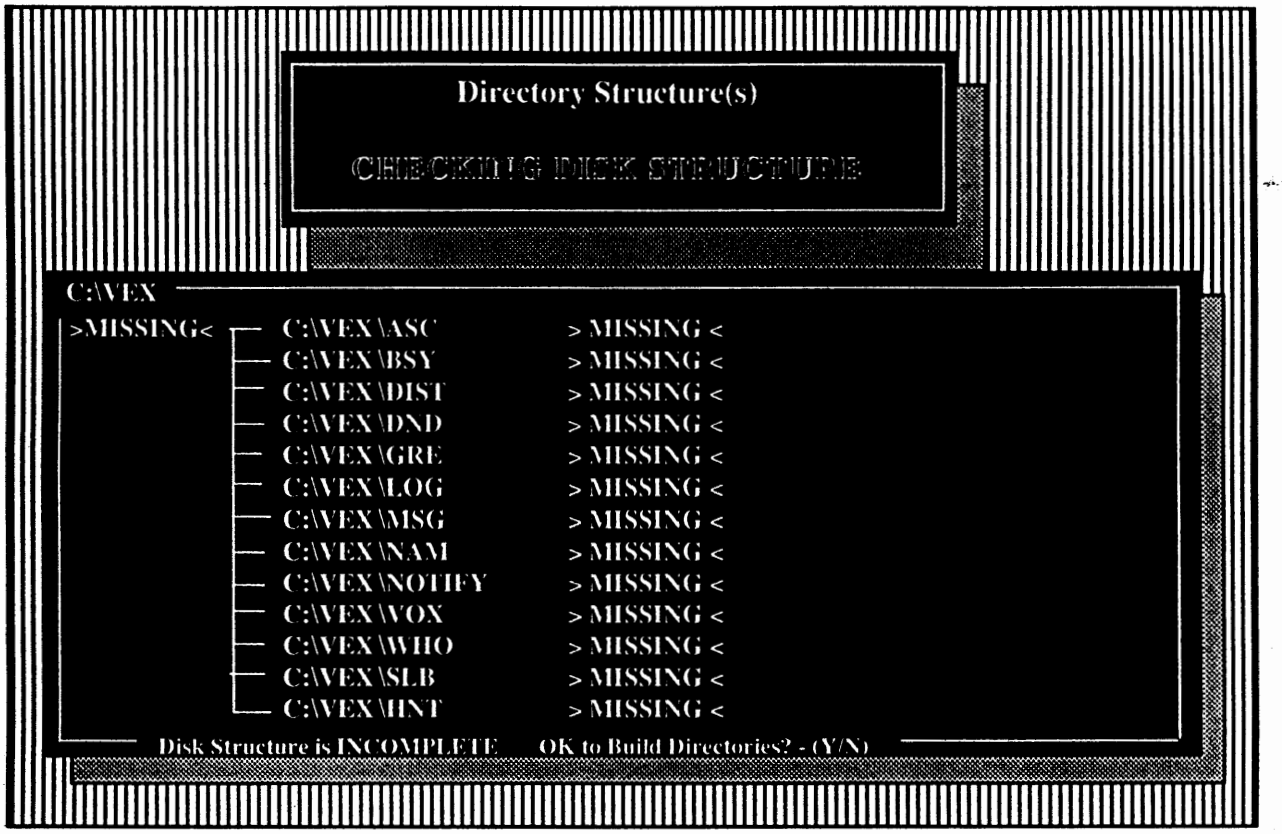


If you have formated your drive using the disk utility called DISK MANAGER, then you may answer "Y" for YES, if you do wish for any reason to re-format your hard disk drive.

Otherwise, the default answer would be "N" for NO. (recommended (1) single partition (C:\))

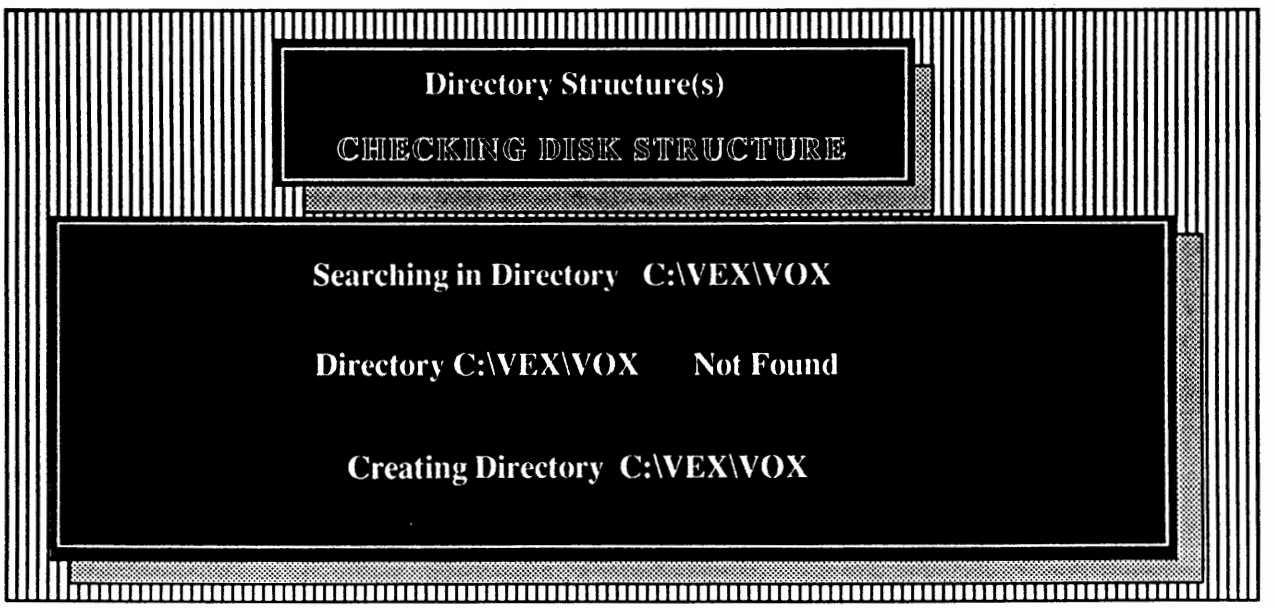


The following screen will ask to set the path to install the VoiceXchange program files. You may press ENTER to accept the default path of C:\VEX.

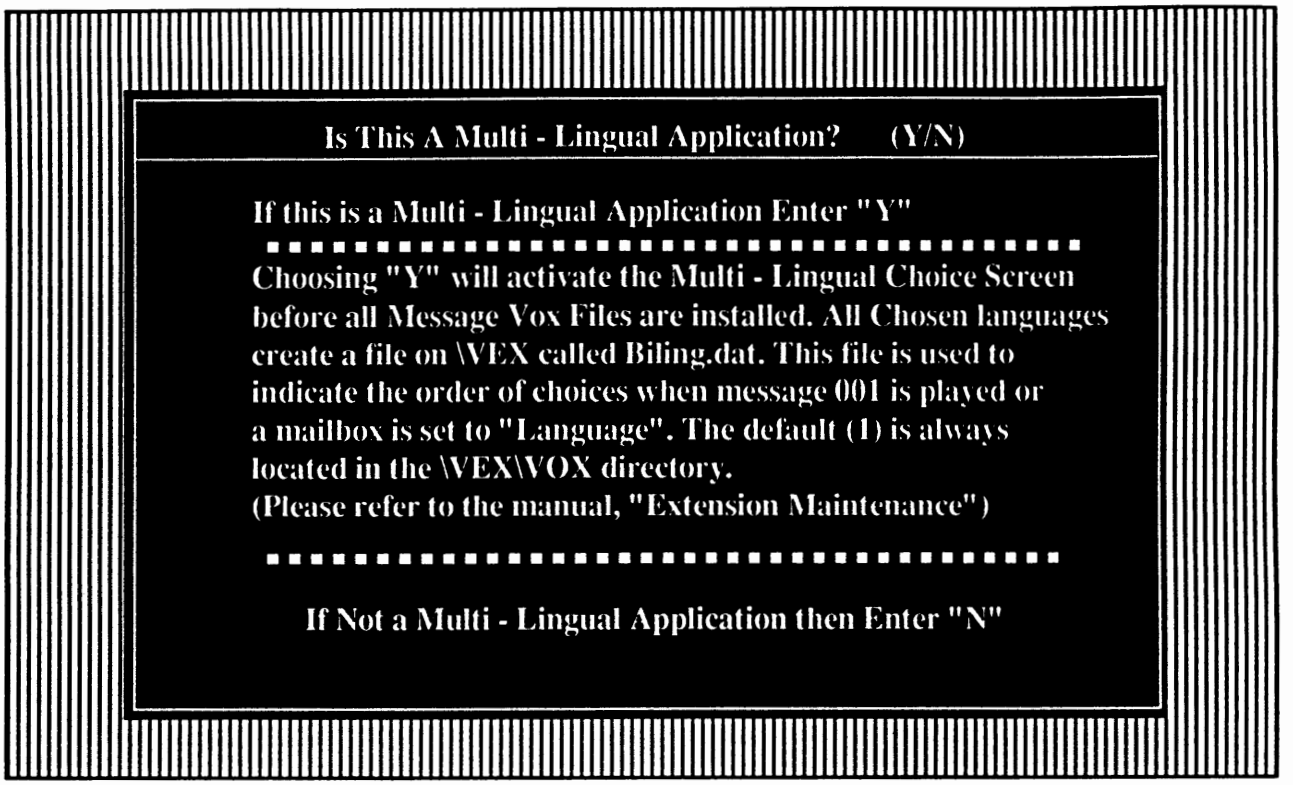


SETVEX will attempt to locate the subdirectories of the VoiceXchange program. Upon an initial installation, they will not be found. SETVEX will prompt you to give permission to build the program subdirectories. You may select "Y" for YES.

Selecting "Y" for YES, SETVEX will begin adding all of the subdirectories to the hard disk drive in the path which you selected earlier (C:\VEX). The following screen will appear similiar to the following:



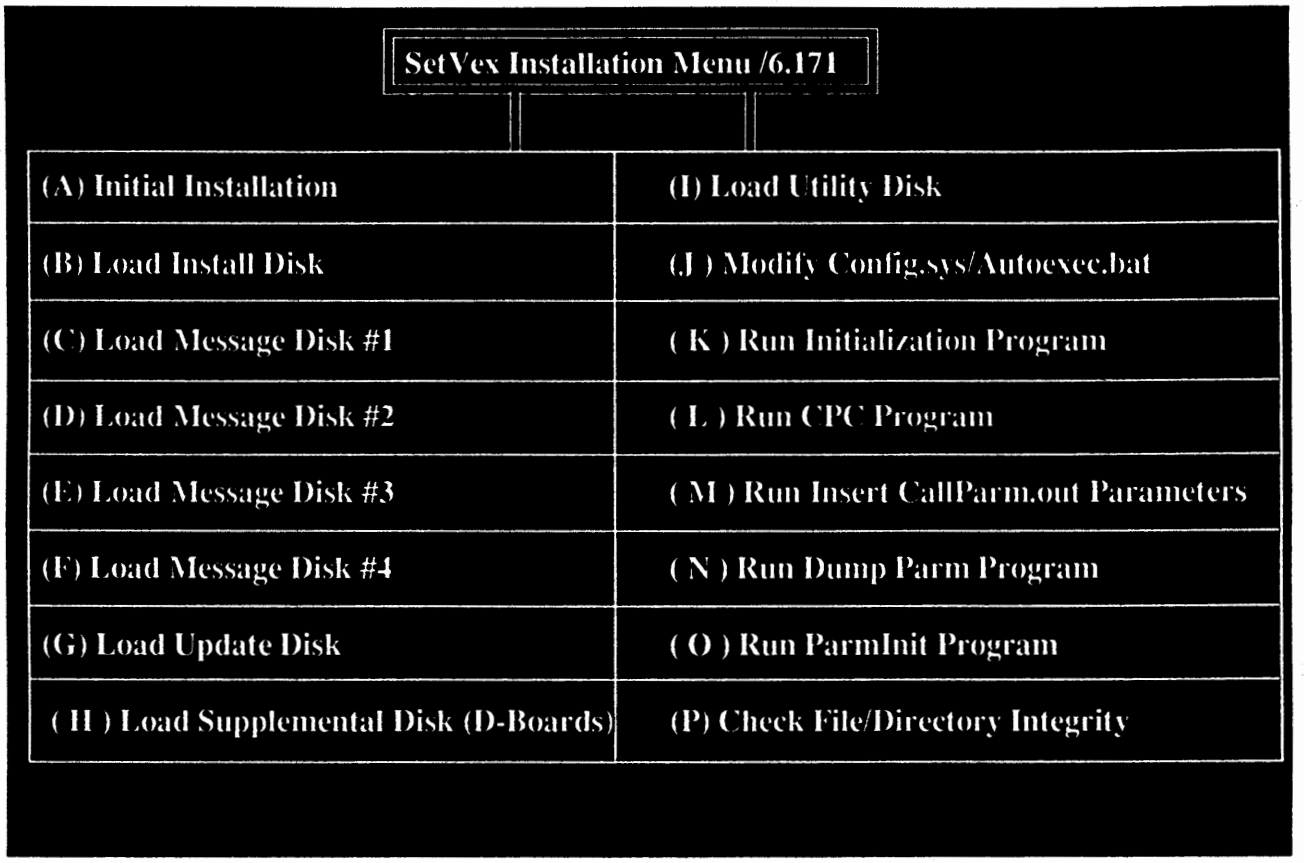
The next screen will appear as follows:



If you are installing and have purchased the Multi -Lingual software, then you may select "Y" for YES. Otherwise, please accept "N" for NO.

This screen will always appear when you go into SETVEX even after you have completed the installation. Always answer accordingly, depending on the type of software and application that you are subscribing to.

For more information about this screen, please refer to the supplemental document, "**Getting Started With The VoiceXchange Multi - Lingual Feature.**"



The SETVEX Installation Menu

If you are installing the **VoiceXchange** program for the first time, the option labeled "A" will be pulsating. By pressing the "A" key on your keyboard, you will initiate an *Auto Installation.* In the Auto Installation mode you will be prompted automatically to place the proper diskettes into the floppy disk drive (Drive A or B) so that program files will be copied to the proper directories.

Auto Installation

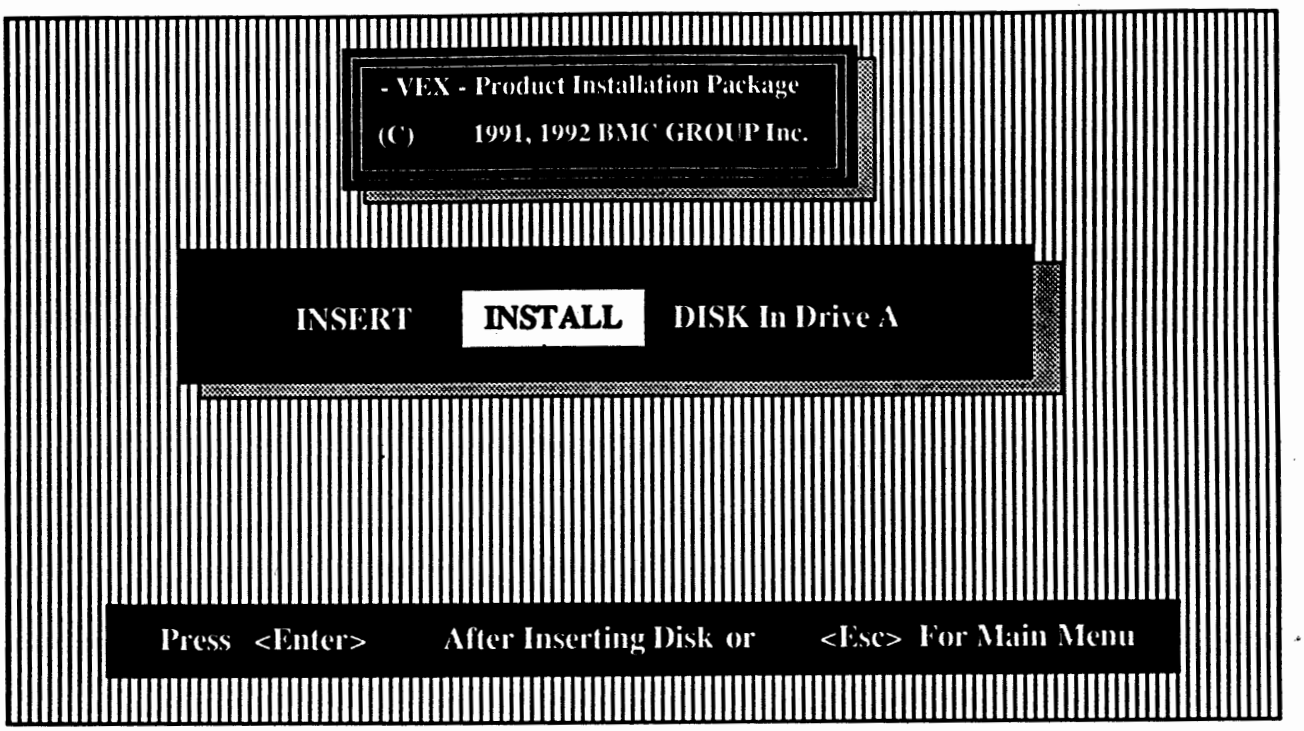
Once you have typed an "A" to begin the auto installation, you will be prompted to load the following diskettes in order:

Install Disk
Message Disk 1
Message Disk 2
Message Disk 3
Message Disk 4
Update Disk
Supplemental Disk
Utility

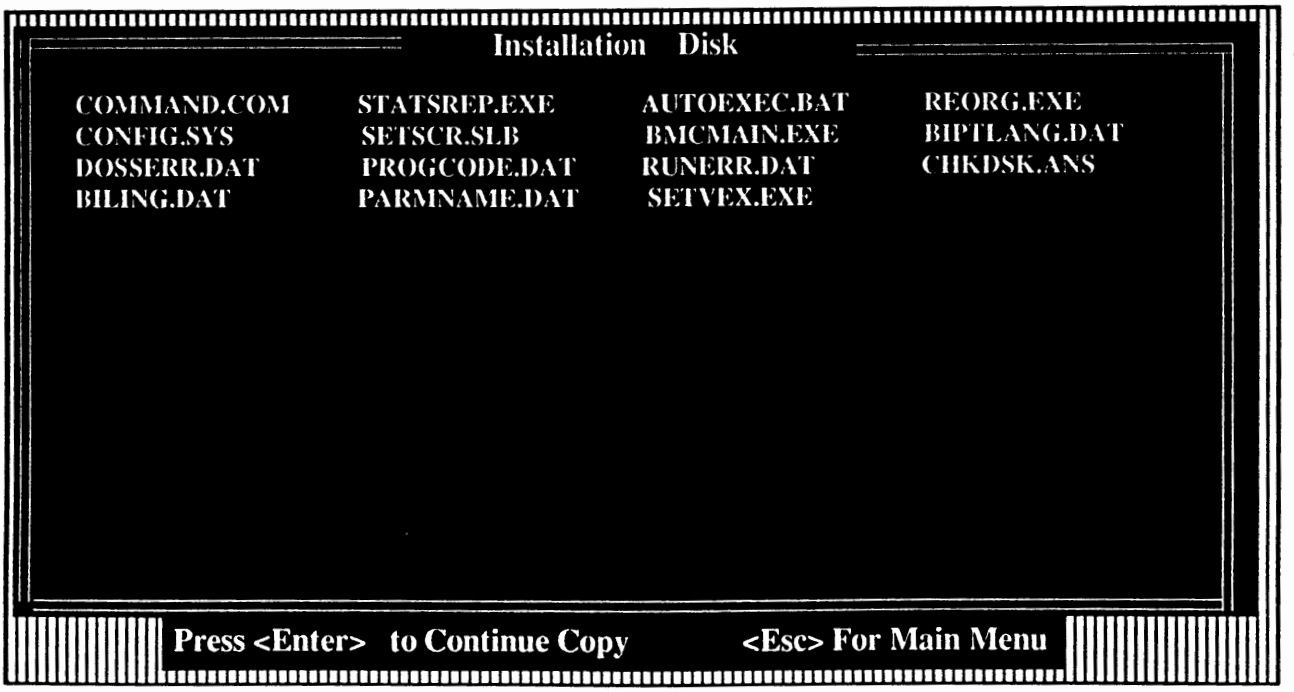
After program files are copied from the diskettes, the SETVEX program will immediately prompt you to load the next diskette. By following the program prompts on the screen, loading the program should be fast and trouble free.

Auto Installation - Loading the INSTALL DISK

In the example below, the user has pressed "A" on the keyboard to initiate the Auto Install. The next screen which is shown prompts the installer to insert the INSTALL disk in the floppy drive which was indicated at the very beginning after first typing SETVEX. For the example, the floppy drive is drive A.



Press the ENTER key to continue installation. The Following screen will appear.



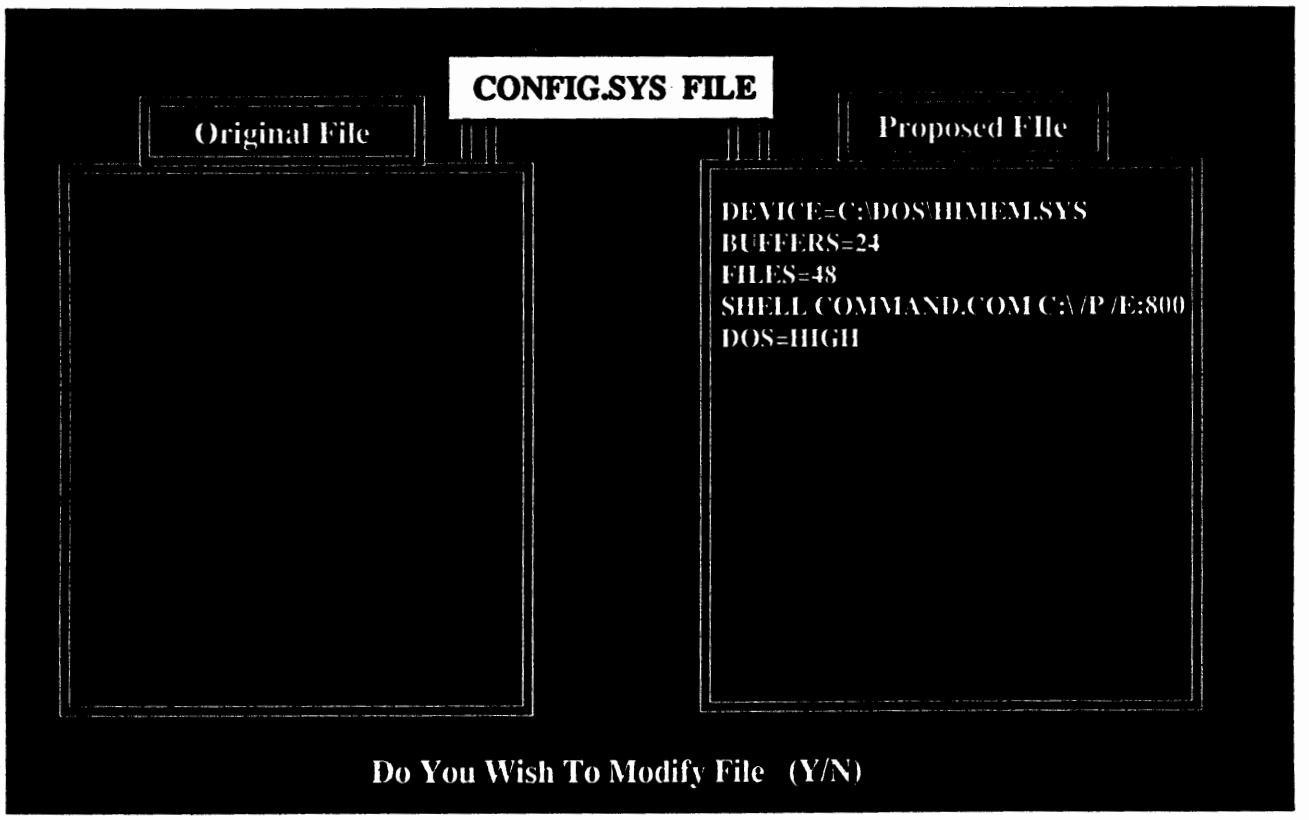
Press ENTER to continue. Files which are being copied will be momentarily highlighted.

Auto Installation Continued

The screens will contine to prompt you to input diskettes until you finish the UTILITY disk. After which you will be prompted to re-insert the INSTALL Disk.

Modifying Your Config.sys And Autoexec.bat Files

After you re-insert your INSTALL disk you will be prompted by the following screen to modify your config.sys file.



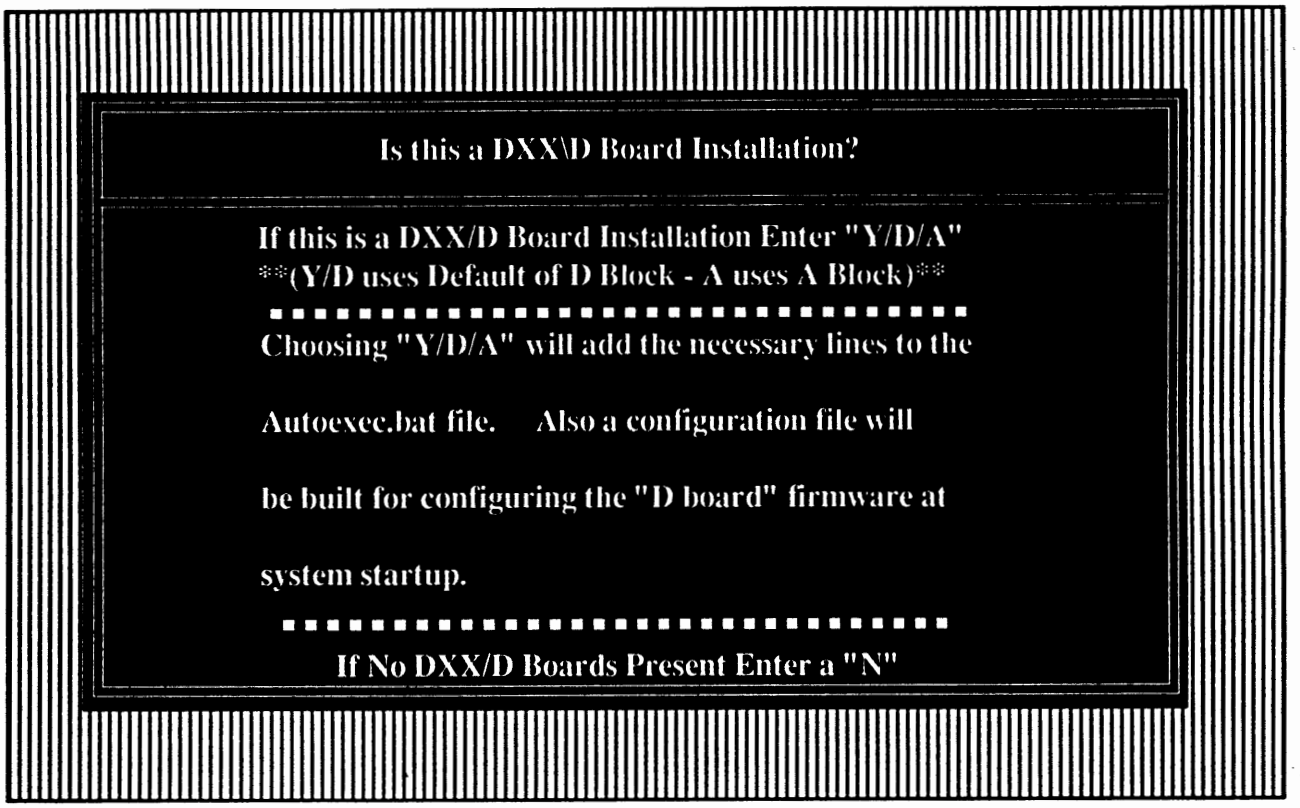
In the example screen above, the Config.sys file is shown as it might exist on your present computer which you are installing to and the proposed file which SETVEX will overwrite from. In the case of the example, there is currently no Config.sys file to overwrite. Responding with a "Y" for YES to modify, SETVEX will move the information from the Proposed FIle to the Original File located on your hard disk drive.

Type a "Y" for yes to modify.

NOTE:	**If for some reason you DO NOT want to modify the Config.sys file and you choose "N" for NO, the Automatic Install Program will stop and you must finish the installation manualy.** **For an Initial Installation, it is best to choose "Y" for Yes.**

Modifying Your Config.sys and Autoexec.bat Files Continued

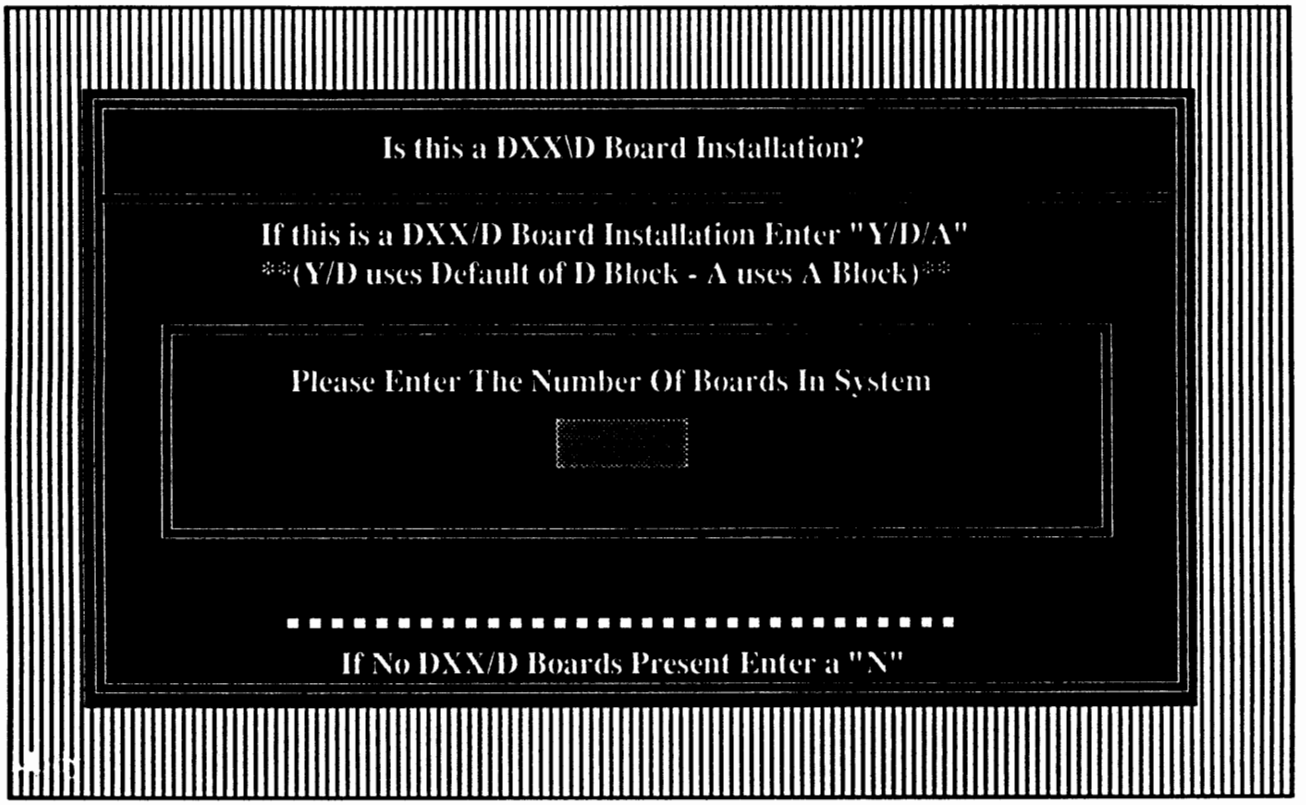
After selecting "Y" for YES to modify the Config.sys file, the next screen will appear as follows.



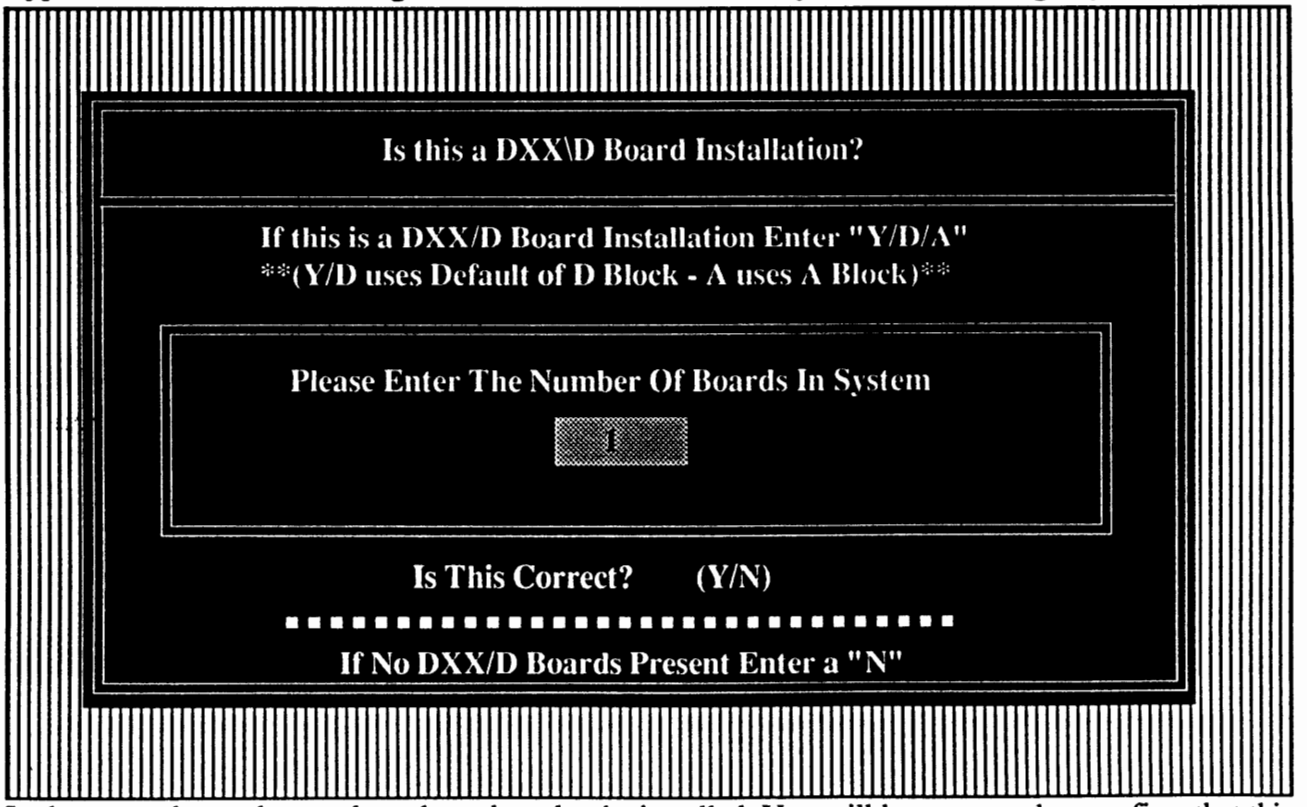
This screen will prompt you to enter a "Y" or "N" for installation of the **Dialogic** Audio Voice Boards. If you enter a "Y" for YES, you will be prompted to enter the number of physical boards that will be installed into the system. The information which you provide at this screen will be written to a configuration file called SBLOAD.CFG. This file is used to download firmware to the Dialogic board(s).

If you enter "Y" at the prompt, the SETVEX program will assume that you want the **Dialogic** board set to the default base memory address (D000). If instead, you choose "A", the SETVEX program will set the configuration file SBLOAD.CFG to look for the **Dialogic** Board(s) in the "A" Block of base memory. Normally, you should always select "Y" and accept the base memory default address. Reasons for using the "A" block of memory are discussed in the **Dialogic Hardware Installation** portion of the VoiceXchange System & Maintenance Manual.

Modifying Your Config.sys & Autoexec.bat Files Continued



Type in the number of Dialogic "D" boards that will be in your VoiceXchange System.



In the example, we have selected one board to be installed. You will be prompted to confirm that this is correct. **Press "Y" if YES.**

Modifying Your Config.sys & Autoexec.bat Files Continued

The following screen will appear after select "Y" to confirm the number of boards that you are installing:

This screen simply confirms what it is that you have input into the configuration file SBLOAD.CFG. **To continue with the modifications, press any key.**

NOTE:	Changes will also be made to your autoexec.bat file using the information you have input at the previous screens concerning the Dialogic audio board(s).

Statistic Report

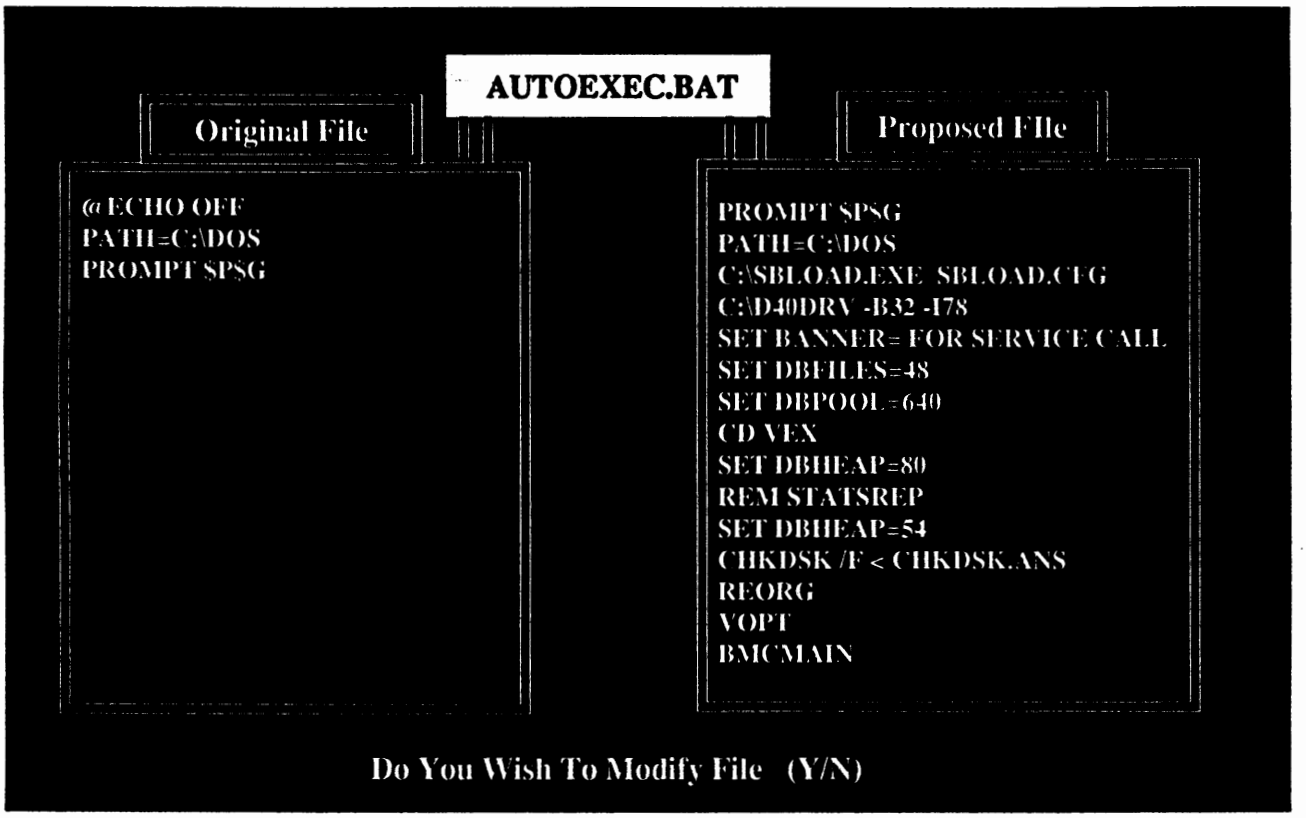
The next screen will display a message which looks like the following:

You may select "N" for NO at this screen prompt. The statistic report need not be run at this time. This offers a print out to a line printer of the changes made to your files.

Select "N" for NO.

Modifying Your Config.sys & Autoexec.bat Files Continued

Modifying The Autoexec.bat File



In the example above, the original autoexec.bat file contains only a few lines. The new file proposed by the SETVEX program is more extended and is necessary in order to run the VoiceXchange system software. Please accept "Y" for Yes to modify the Autoexec.bat.

When you type in a "Y" for YES, you will see the contents of the proposed file spill over into the Original file and overwrite the autoexec.bat file on the hard disk drive with the new information.

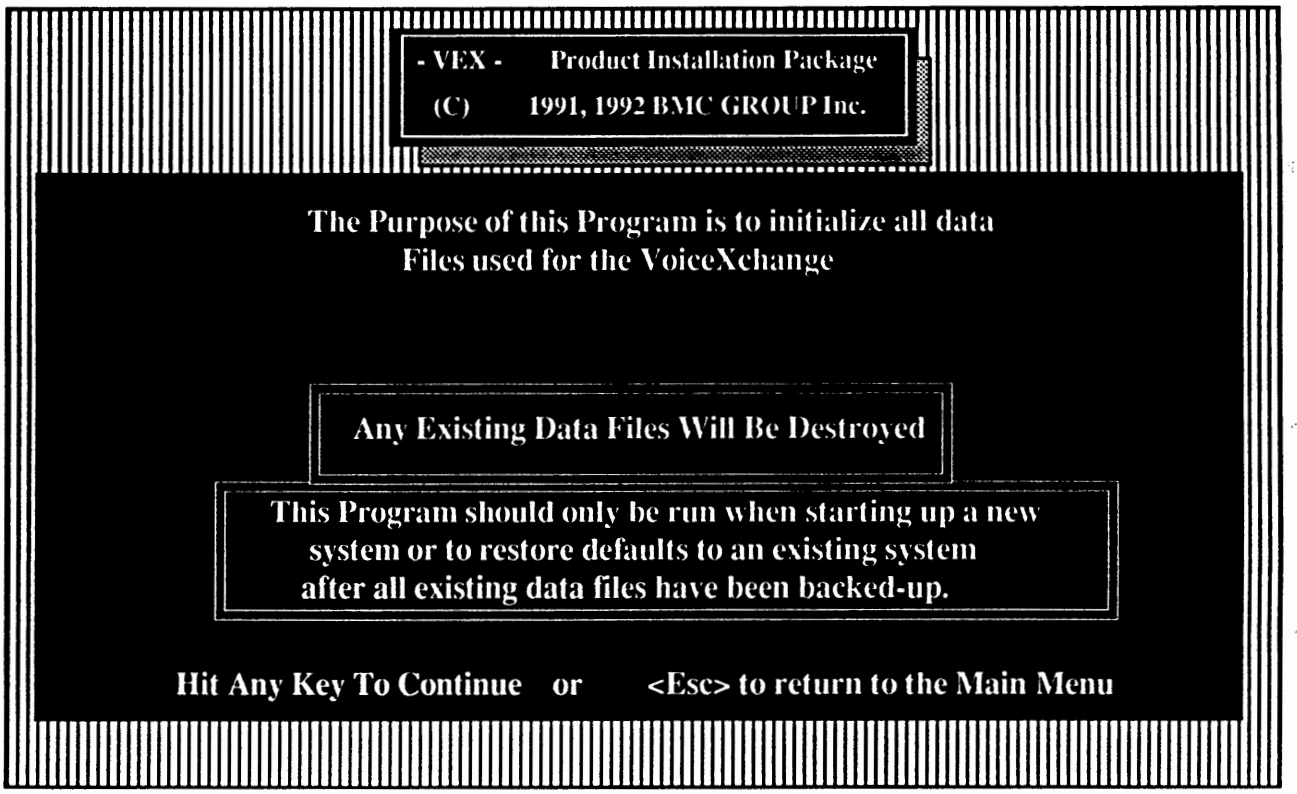
These modifications to the Config.sys and the Autoexec.bat files are necessary in order to properly run the VoiceXchange system software.

The Initialization Program

The next phase of the Installation program is the BMCINIT program or the Initialization program. This portion of the installation program will setup and initialize or prepare the VoiceXchange systems database.

The Database consists of all of the basic system parameter settings as well as preparing the datafields for the extension and mailbox data which you will input later when the program is loaded and running.

The first screen which you will encounter after modifying your Config.sys and Autoexec.bat files will appear like the following:



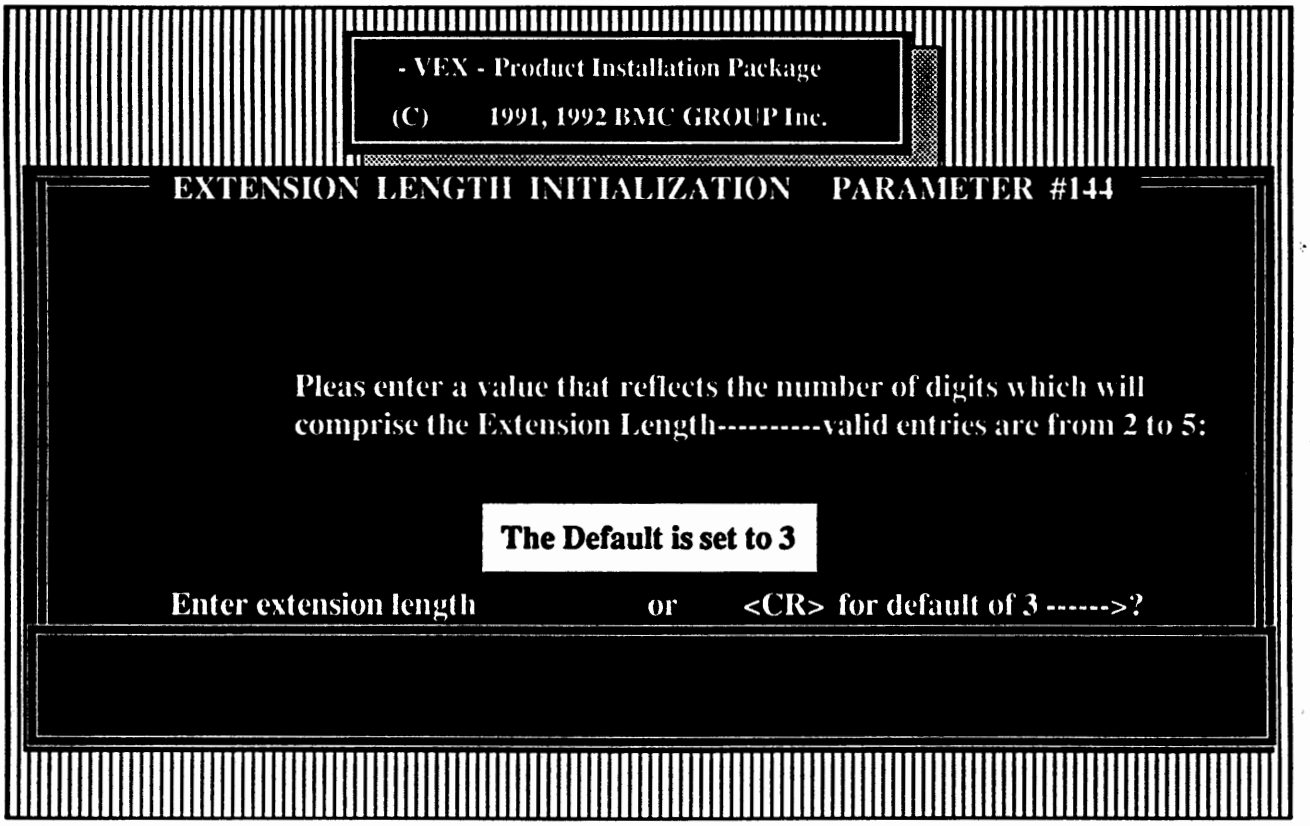
Press any key to continue the installation and the initialization of the database. **Please note the warnings available in the above screen for future references.**

NOTE: If running the Initialization Program AFTER you have installed system files, please be sure to have backed-up all information contained in the database (See Section 9 of the System Manual entitled "BACKUP" for more detailed information.)

The Initialization Program Continued

The following screens will all prompt you to input values for basic parameter settings. For all of these screens it is recommended that you accept the default values. Default values can be accepted simply by pressing the <ENTER> key until you have cleared one screen and proceeded to the next one, repeating the same process until you can go no further **(You will see a screen which contains the names and models of different PBX or Hybrid Key systems - - You may stop here. Explainations of this screen will be given later in this document.)**

The first parameter screen that you will encounter will look like the following:



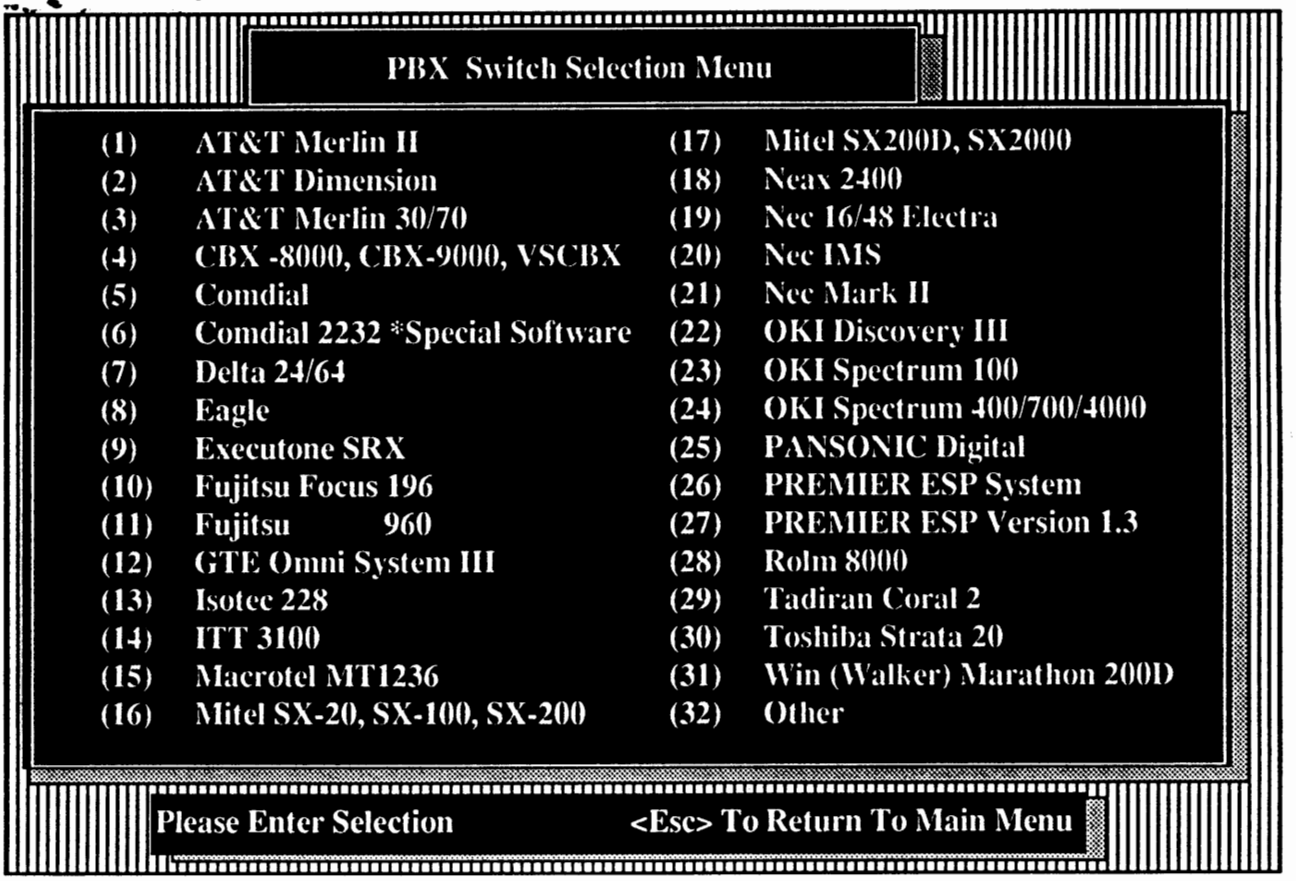
This screen will be typical of the parameter initialization screens which you will encounter. If you do not know what value should be input for your particular phone system or PBX or Hybrid Key System, then you may simply choose the default value by pressing the <ENTER> key. If you have documentation concerning the proper value or setting for any of the parameter screens, you may set these now, otherwise it is strongly recommended that you accept the default values.

Press the <ENTER> key or input your known value.

The Initialization Program Continued

Encountering The PBX Selection Screen

After you have moved through each of the initialized parameter screens and input or selected the default values, you will come to a screen which looks like the following:



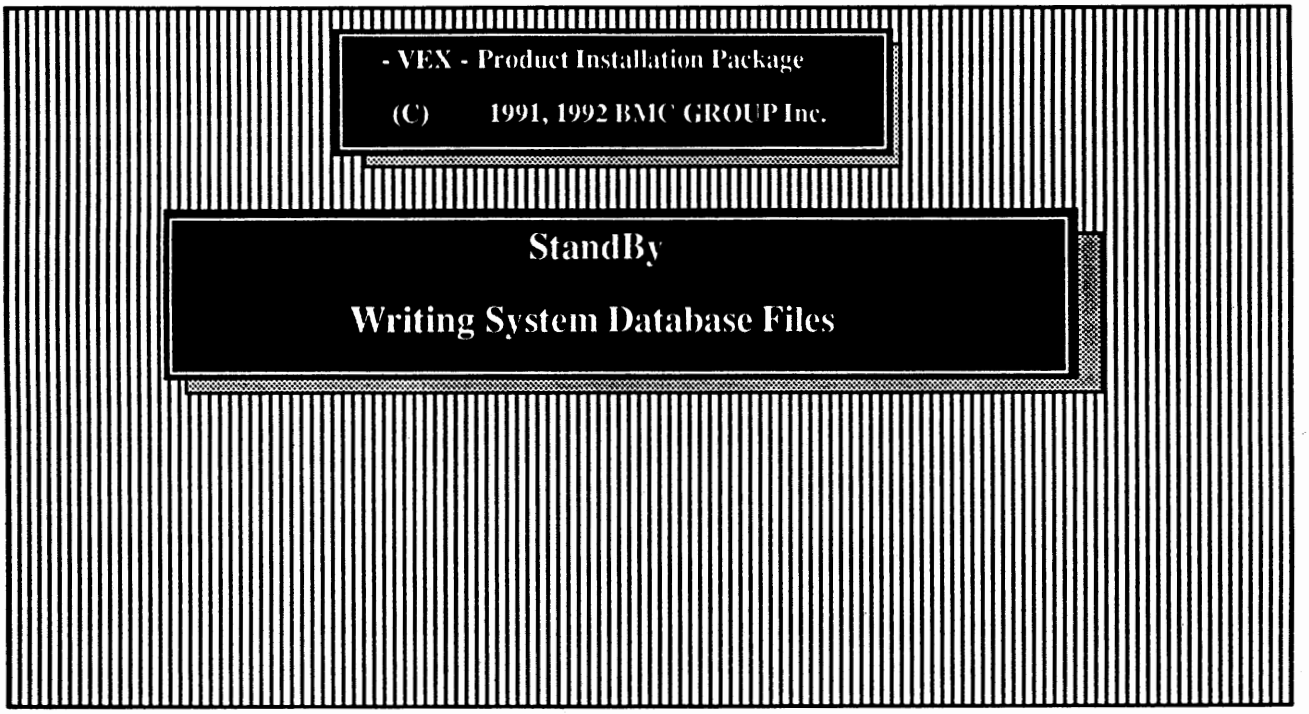
If you see the switch that you are installing the **VoiceXchange** system on, please select the number corresponding to the switch.

If you **DO NOT** see the model or type of PBX that you are installing the **VoiceXchange** system to, please select **option 32.**

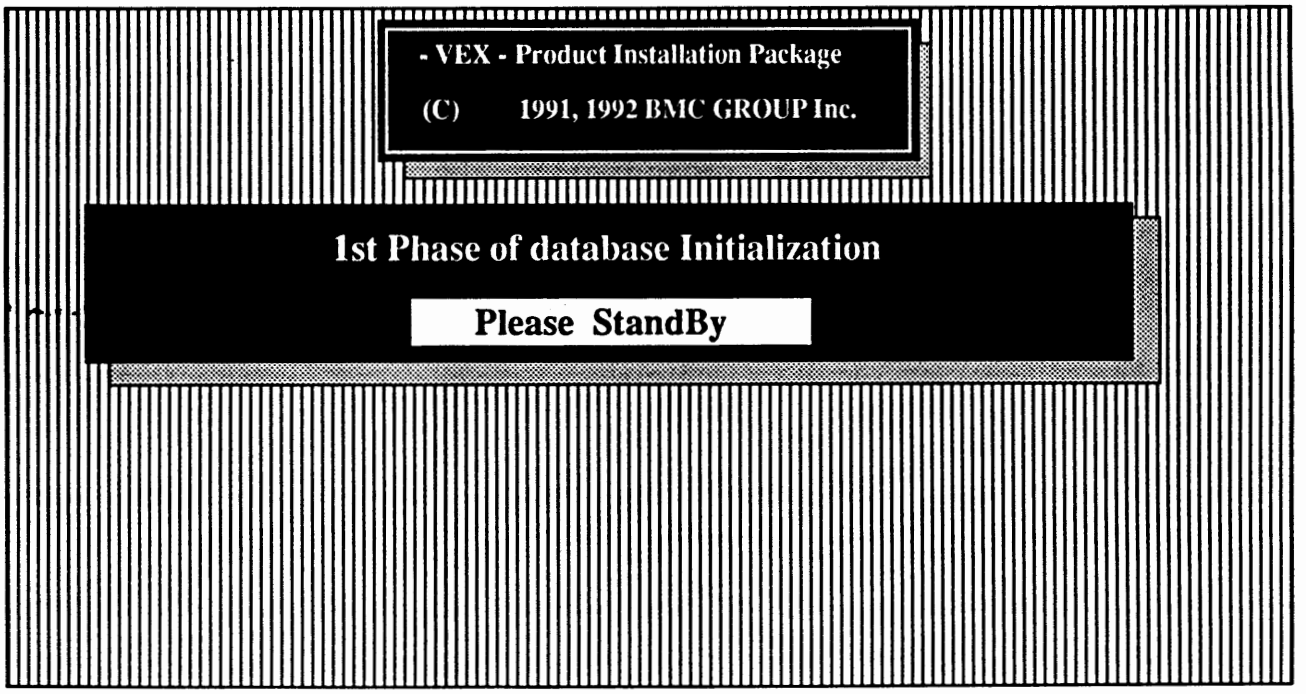
Type in the number of your selection and press the <Enter> key.

The Phases Of Initialization

After selecting the number choice for the PBX selection screen, you will be prompted with a message which looks like the following:



And Then, a few seconds later, you should see the following screen:



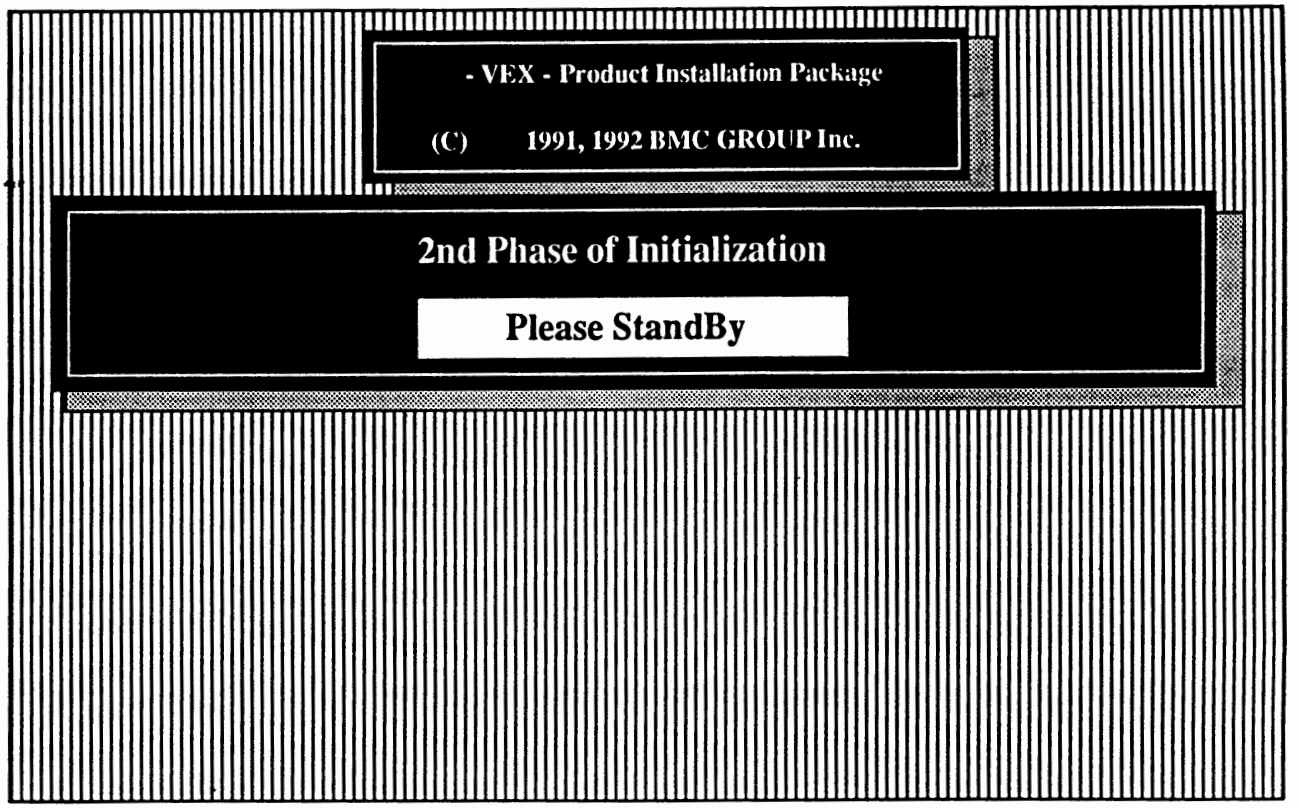
The Phases Of Initialization

After The **1st Phase Of Initialization** is complete, you will be dropped back into the SETVEX Main Menu where you began the installation.

From the SETVEX Main Menu you must **immediately** type an "**X**" to **EXIT** the Menu. ***This action will initiate the 2nd Phase of initialization.***

> **WARNING:** IF YOU DO NOT COMPLETE THE 2ND PHASE INTIALIZATION YOU WILL EXPERIENCE ERRORS WHEN ATTEMPTING TO LOAD THE PROGRAM CALLED **BMCMAIN.EXE.** BMCMAIN IS THE MAIN EXECUTABLE PROGRAM THAT IS THE VOICEXCHANGE PROGRAM.

Typing an "X" from the SETVEX Main Menu Screen should bring you to the following screen:



After this screen, you will be dropped back into the DOS environment at the prompt where you originally loaded the INSTALL disk from (Drive A or B).

If you are installing the Multi - Lingual Feature, Please refer to the documentation provided with your system software.

If you are installing on the basic set of VoiceXchange software you may proceed to the CPC test.

Running Additional Options From The SETVEX Main Menu

CPC CADENCE MEASUREMENTS

L. Run CPC Program -(Call Progress Characterization)

The next step in initializing the software to the PBX or Hybrid Key System is to run the CPC cadence measurement program. This program will take cadence measurements and save them to a file called CALLPARM.OUT. These values will be entered during the next installation option **J.** (Run Insert CallParm.out Parameters) or if re-installing the Voice system this option may be run separately. The parameters may also be entered manually at a later time when the system is functional.

• IF RE-INSTALLING SYSTEM and/or Re-runing CPC test make sure old test data is erased •

To erase old cpc data TYPE IN: **erase *.out** **<R>** this must be done each time test is redone or test fails and is repeated

TO RUN CPC: (Ring and Busy test)

Choosing option I. (Run CPC Program) or during the CPC portion of option A. (Initial Installation / Format Disk) the user will be prompted with a Cpc/ring Cadence Checklist that will prompt the installer to check the system to make sure the requirements for CPC testing are present.

Dialogic D40 Boards are in system and installed properly
Phone Lines are connected to the D40 Boards
A phone is available to be called without anyone answering
Enter Number of rings to be tested
Rings are set to 2 -- interrupt level at 5

Follow the prompts until the tests are completed.

M. Run Insert CallParm.out Parameters

The next option to run will insert the results of the CPC measurements into the VoiceXchange Parameter file (Parms.dat). These values are taken from the file created during the CPC test called CALLPARM.OUT. The results of this test and the subsequent values inserted will be displayed on the screen and the option to print these values can be selected by pressing <P> for print. If you do not have a printer, it is advisable that you copy these values to a page that should be kept with all information relating to this installation.

N. Run Dumpparm Program

Dumpparm is an Off-Line utility program that can be run to examine or print a hard copy of all parameter data. This may be used to document all parameter settings for an installation. (This option should normally be run only after the system has been tested and parameters adjusted accordingly)

O. Run Parminit Program

Parminit is an Off-Line utility program that may be used for future updates to initialize new parameters as they are added.

G. Load files from Update Disk

This option should be chosen only if you are updating a previously installed system and have received a single disk labeled "Update".

P. Check File Directory Integrity

This option is included as a troubleshooting utility and is not necessary when installing a new system. This option is automatically run before the initial installation during Setvex.

SYSTEM REBOOT

REBOOT SYSTEM WITH - CTRL-ALT-DEL. (Hold Control-Alt-Delete keys down at the same time)
If re-booting system after changing config.sys file press the **RESET** button or turn system OFF.

ALWAYS HALT THE VOICE SYSTEM BEFORE TURNING POWER OFF
(This is done by pressing the Escape <ESC> key follwed by the master password 9999 and then option (1) HALT SYSTEM.

Upon reboot, if the system fails to load, please check the following:

ERROR MESSAGE: Could not activate! Retcode= 1 Please note Return Code if reporting problem

1) Make sure the device drive for the audio boards has successfully loaded (D40DRV.EXE)

You may temporarily insert a *pause* at the begining of the autoexec.bat file to interrupt the progress of the boot sequence by using the DOS command EDLIN.

2) If driver is loading and system fails to boot you may need to change the interrupt level on ALL the system audio boards (Refer to APPENDIX B(2)- JUMPER and SWITCH LOCATIONS)

ERROR MESSAGE: ERROR opening DistFile.DBF (any .DBF or .NDX file)

3) Reduce DBHEAP= command in autoexec.bat file by 8K increments till system boots

4) Reduce BUFFERS= command in config.sys file if using 80/120/300 MB hard disk

Configuring The Computer Memory For Multiple Dialogic D41D Boards Using DOS Version 5.0

Before attempting any memory re-configuration, please refer to the Installation Manual for default memory configurations

After successfully installing the **VoiceXchange** Installation software, the system memory will be defaulted to a configuration that is sufficient for one (1) four port Dialogic D41/D board (4 channels).

The CONFIG.SYS File

After installation, the CONFIG.SYS file located on the root directory (C:\) should appear as follows:

```
DEVICE=DMDRVR.BIN
FILES=48
BUFFERS=24
SHELL C:\COMMAND.COM C:\/P/E:800
```

The first line, DEVICE=DMDRVR.BIN, is used only for MS-DOS versions 3.3 or earlier which used the utility DISK MANAGER by ONTRACK SYSTEMS. Please change this line to read:

```
DEVICE=C:\DOS\HIMEM.SYS
```

This will make available to your system the memory area normally reserved for the DOS 5.0 system commands and the computer operating system between the 640K and 1024K memory area.

To make use of this area, another command must be added to the end of the config.sys file:

```
DEVICE=C:\DOS\HIMEM.SYS
FILES=48
BUFFERS=24
SHELL C:\COMMAND.COM C:\P/E:800
DOS=HIGH
```

These two additions will free up enough memory to add additional boards to the VoiceXchange system.

The AUTOEXEC.BAT File

Although making more memory available through commands in the CONFIG.SYS file will increase system performance, changes must also be madeto the AUTOEXEC.BAT file which is located on your root directory (C:\). The addition of more boards (or more specifically, *ports*)will require more **buffer space** allocated to each channel in order to optimize the system performance. A **buffer** is used to set the amount of RAM that DOS reserves for information transferred to and from the hard disk.

These buffers are normally allocated in the AUTOEXEC.BAT file on the line:

C:\D40DRV -b40

"-b" = 640K RAM Memory
"40" = 40K total buffer memory for all ports

The default setting of 40K is sufficient for a four (4) port system, but will barely suffice for an eight (8) port system and will severly affect any system greater in port size than this.

Ideally, this value should be a minimum of 8K per port or a maximum of 32K per port. The optimum value is 32K per port. For example, an eight port system should be configured to have a value of 64K per port.

8K x 8ports = 64K

Glossary Of New Terms

HIMEM.SYS - **Manages the use of *extended* memory. The High Memory Area between 640K and 1024K**

DOS=HIGH - **Enables DOS to load COMMAND.COM in the High Memory Area.**

Creating Memory For Channel Buffers For Multiple Dialogic D41/D Boards

The following options are **ONLY** available on 386-SX systems or greater machines with a **minimum** of 2Mb of memory.

The CONFIG.SYS File and the 386-SX Computer

To create memory that can be used for additional channel buffers, the following line must be added to your CONFIG.SYS file:

```
DEVICE=C:\DOS\HIMEM.SYS
DEVICE=C:\DOS\EMM386.EXE 256 FRAME=E000
FILES=48
BUFFERS=24
SHELL C:\COMMMAND.COM C:\/P/E:800
DOS=HIGH
```

This will make available 256K of the computer memory above 1 Megabyte for use as Expanded Memory. 256K was allocated in the example for an eight (8) port system where:

8 (Number of ports) **X** **32** (Max buffers per port) **=** **256** — Total buffers allocated for 8 port system

Glossary Of New Terms

EMM386.EXE - **Converts portion of extended memory to expanded which can be used for D40 drivers.**

Expanded Memory - **Memory above 1Mb that has been converted to expanded memory using emm386.exe**

FRAME=E000 - **Designates location for 64K page frame used with Emm386.exe.**

Extended memory - **A memory region above the 1024K region.**

The AUTOEXEC.BAT File And The 386-SX Computer

To make use of the expanded memory, a line must be changed in the AUTOEXEC.BAT file located on the root directory (C:\). To load the channel (port) buffers into the *expanded* memory, change the line indicated below:

C:\D40DRV -e256

"-e" = expanded memory and "256K" = Total Buffers
This value of 256 must equal to the value set in the
CONFIG.SYS file

This will greatly improve the system performance in two ways:

1.) **The buffers per channel will no longer reside in the "-b" (640K) block of computer memory-- this makes available more memory for the program and database.**

2.) **The buffer size per channel (port) can be increased to the maximum 32K per port without using additional 640K memory - which increases efficiency and hard drive access time.**

< F10 > Function Key Memory Configuration Display

All of the previous changes in memory configurations may be directly observed using the <F10> function key on the keyboard while the VoiceXchange program is booted and active. Pressing the <F10> function key will display the following values for a typical eight (8) port system with the above memory configuration (see previous pages) and with a database of one hundred extensions:

LoopCntStack	Stacks	BegMem	FarMem$	Near$	Temp$	Arrays	DbLib	Filesize
(xxxxx)	2204	170192	20252	13404	13404	35186	114704	28124

LoopCnt = Value expressed as the number of loops per minute the system loops through BMCMAIN.

Stack = Internal memory available for Stack varibles - set internally and does not vary.

BegMem = The beginning memory available after BMCMAIN.EXE is loaded for all environment variables and database allocations. This is the memory available to the program and is directly affected by all memory re-configurations.

FarMem$ = Memory variable available for far memory string storage. Should be between 10 - 25K. If below 10K then increase the DBHEAP allocation in the AUTOEXEC.BAT.

Near$ = Memory variable available for Near memory string storage. Should be between 10 - 20K. If below 10K then increase the DBHEAP allocation in the AUTOEXEC.BAT.

Temp$ = Memory variable for Temp memory string storage. Should be between 10-20K. If below 10K then increase the DBHEAP allocation in the AUTOEXEC.BAT.

Arrays = Memory allocated by the system for Array storage - set internally and does not vary.

DbLib = Memory available for the database and related files. Should be between 56 - 120K. If below 56K then create more memory for database by decreasing DBHEAP variable or re-configuration of the memory as outlined previously.

FileSize = Memory allocated by the database and is directly related to the number of extensions installed on the sytem. May vary from 10K to 900K or more. To view current database memory configuration, press the <F11> function key for DBLIB memory display.

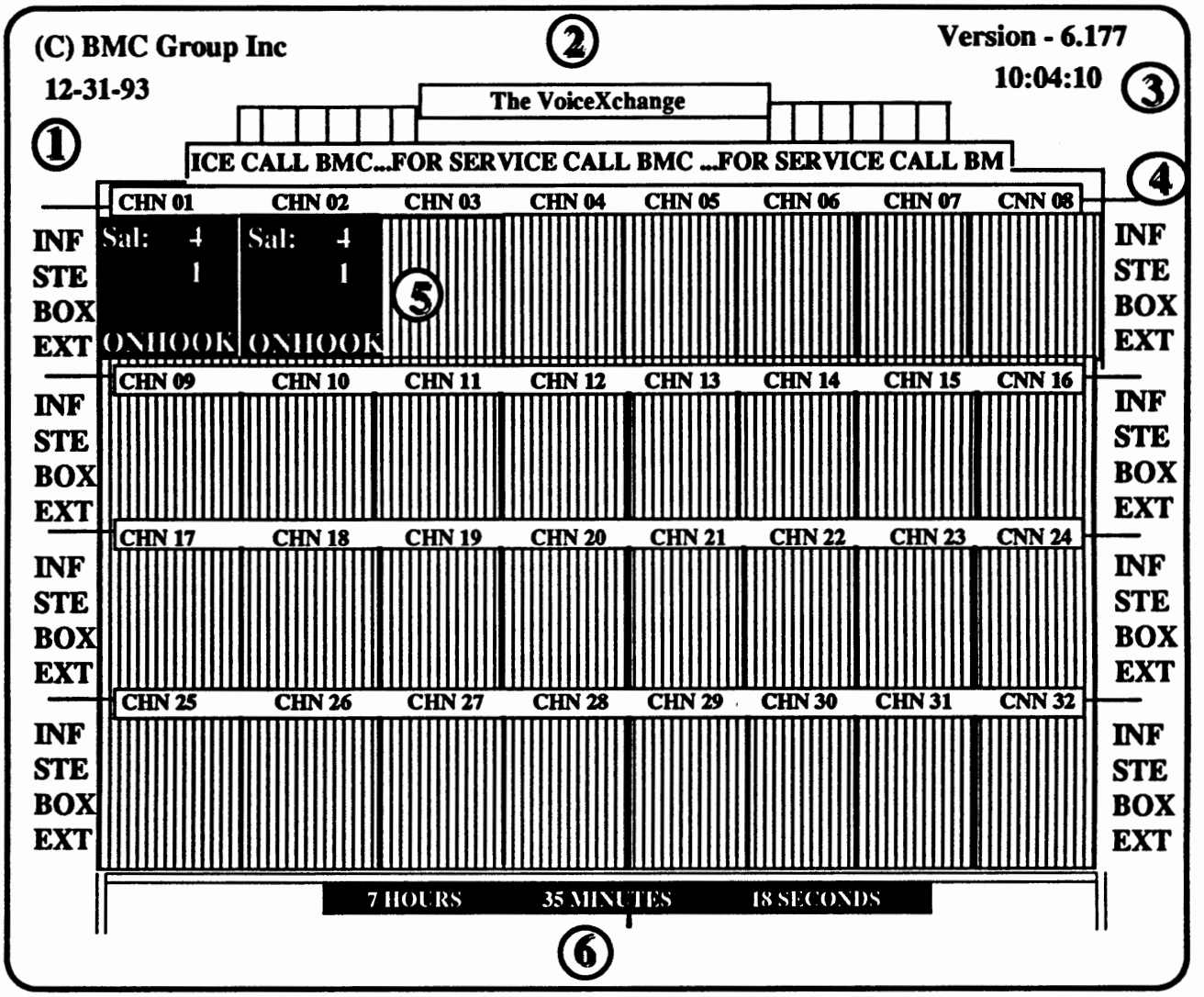
SeqNum = The Highest sequence number currently in use by the message database. Maximum = 999,999

Section 3

Keyboard Maintenance

Keyboard Maintenance Table of Contents

The VoiceXchange Main Program Screen



① **Date - This area of the screen shows the current system date (mm/dd/yy). Above the date, copyright information appears.**

② **Top Text & Banner - This area of the program shows the top text (Name of Program) and an area below that which contains the banner. The banner is configured through the AUTOEXEC.BAT file and should reflect information concerning service to the user.**

③ **Version & System Time - This portion of the program screen contains the software version of the VoiceXchange program (6.177). Below the version number, current time is indicated.**

④ **Channel Status Info - This portion of the screen shows four areas of program information which is used primarily by technical personnel to track incoming calls:**

Channel Status Info

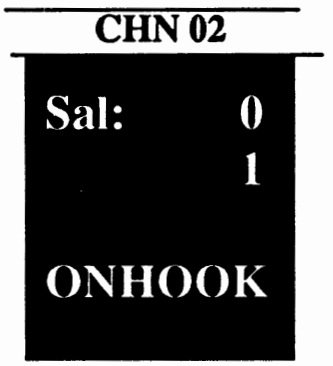
INF = This provides detailed information on program events such as Maximum Digits Received, Record, Play , etc.; This information will appear next to this abbreviation.

STE = This provides information concerning the particular state in which the program is currently under going. Program States relate to specific areas of the VoiceXchange program and the various modules that control particular aspects of that programming. This function is used to track calls being processed and to verify the operation of the program.

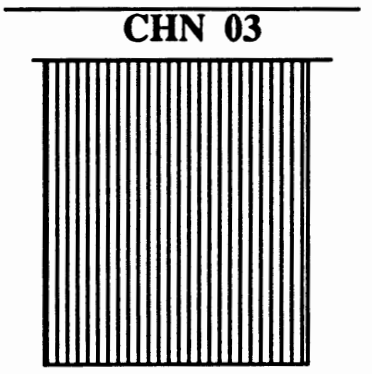
BOX = This area shows the mailbox number that is being accessed or transfered to by the auto-attendant or the voice mail.

EXT = This area shows ther extension number that is being accessed or transfered to by the auto-attendant or the voice mail. Often, the mailbox and extension number of the user is generally the same. There are some instances, by application, where extension and mailbox numbers would not correspond to each other.

⑤ Voice Port (Active / Inactive) - This area of the program is a graphical representation of the voice port that is located on the Dialogic board. So, depending on how many voice ports that you have on the voice boards in your system, they will be represented on the program screen as follows:



ACTIVE VOICE PORT



INACTIVE VOICE PORT

The active port will display the current salutation ("Thanks for calling our company...") that is programmed to play and below that, the current state (STE) of the program. On an idle state, that is, where no calls are currently being processed, the state will normally show as a " 1 " and the "ONHOOK" will be displayed at the bottom of the port. "ONHOOK" refers to a condition where the port is ready to receive ring voltage. Once ring voltage is received, the port will be "OFFHOOK" and ready to process the call. The "OFFHOOK" will NOT appear at the bottom of the port during call processing.

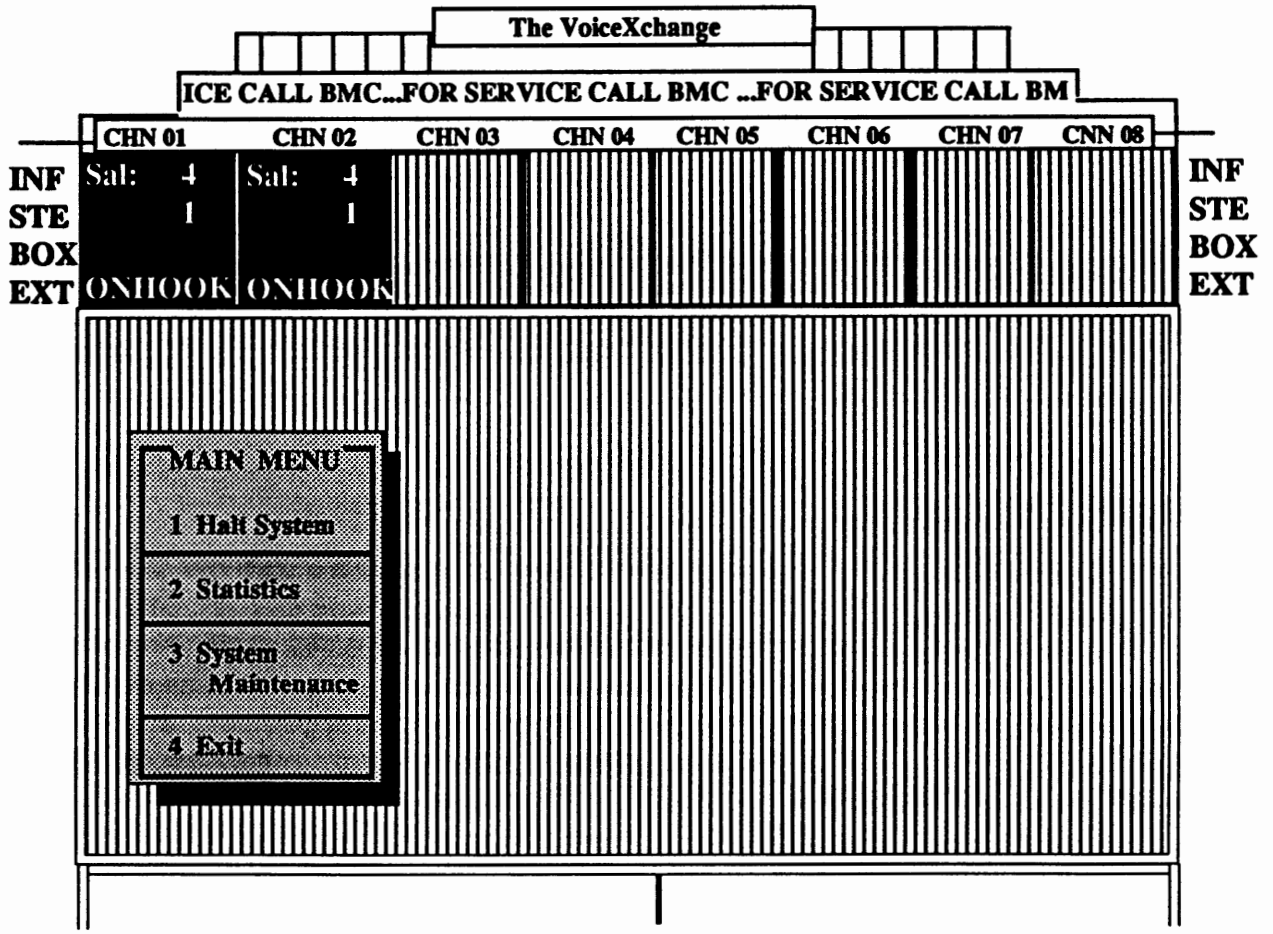
⑥ **Messaging Indication** - This area of the program screen indicates the amount of space left on the hard disk drive for message storage. To understand the time designations, you must calculate every 1 megabyte of disk space to equal 6 minutes of message storage. For instance, if you are using an 80 megabyte disk drive using the above conversion, you will have approximately 7 hours of message storage.

EXAMPLE

6 minutes X 80 Megs = 480 minutes 480 divided by 60 = 8 hours

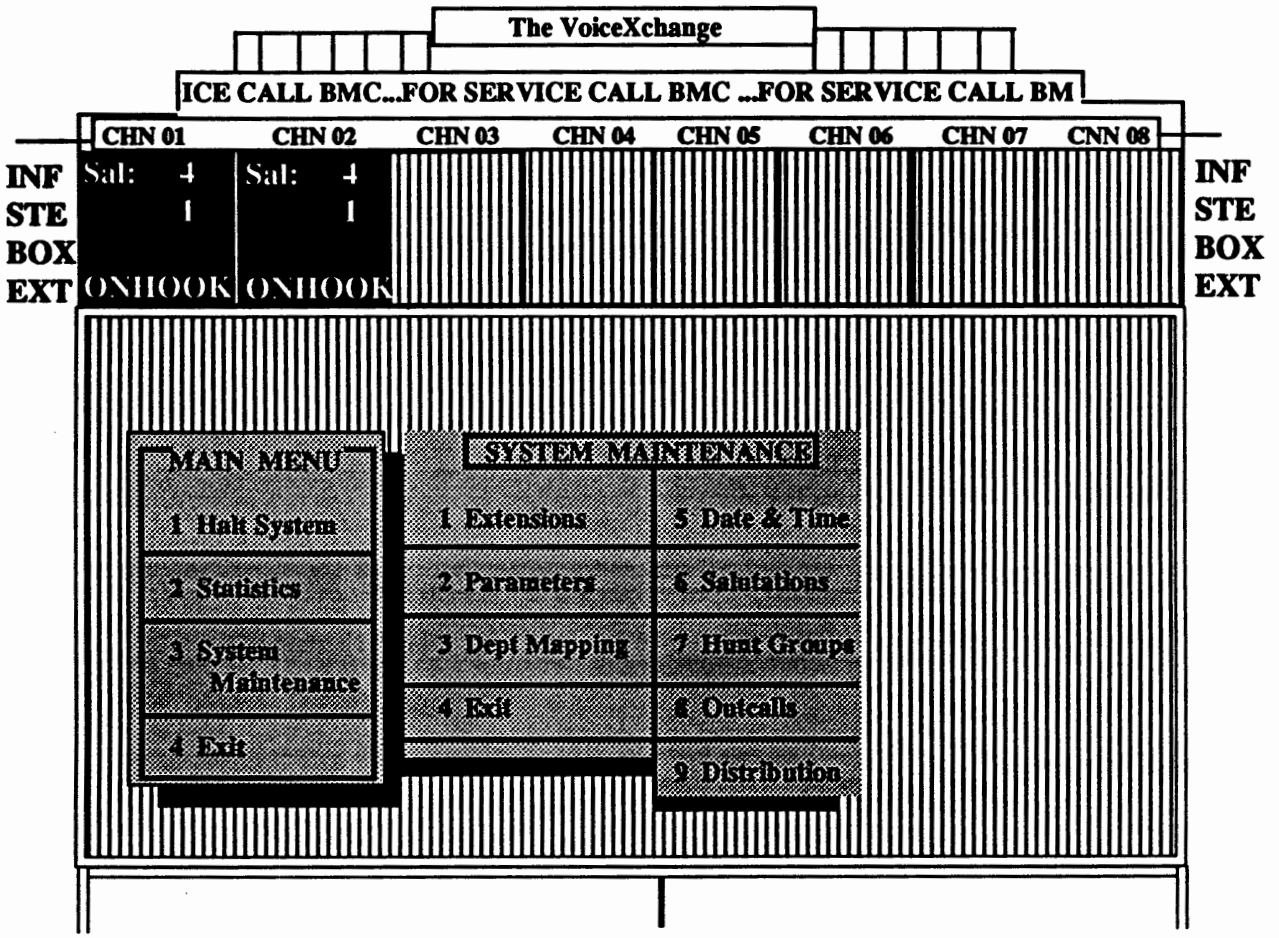
Minus 1 megabyte for DOS & Voice Program Files = 7 hours

Halting the Program



To stop the program, it is always recommended that you first "HALT" the system before turning the computer off. To HALT the system, you must first press the <ESC> key and enter the MASTER PASSWORD (defaulted at "9999" or parameter 146). A small window will appear at the bottom of the screen which allows you access to the program MAIN MENU. From the main menu, you may elect to press "1" to HALT the system. Halting the system will insure that the program is properly shut down and ready until the next time that it is needed. **Simply cutting power to the computer or turning the computer off while the program is running may cause errors unless using this method described above.**

Entering System Maintenance



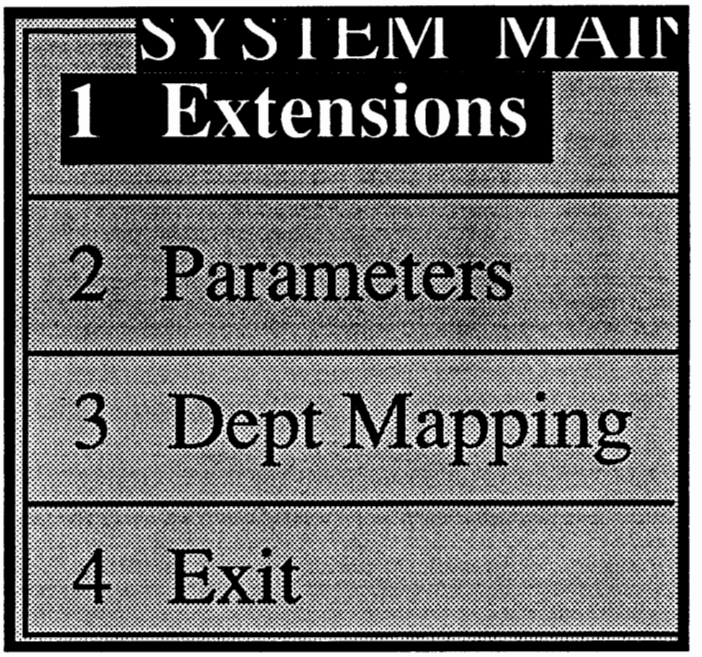
What is System Maintenance?

System Maintenance is a utility that is built into the program to allow the user to configure or change any information contained in their database or parameter settings. In addition, certain feature programming is allowed through the use of this utility such as salutation and hunt group programming. The VoiceXchange is flexible in that System Maintenance can be accessed by using a Touch Tone phone or a computer keyboard for programming. Telephone keypad programming is covered in the MAINTENANCE section of this manual (See Section 3 of the VoiceXchange System Manual & Maintenance Guide for further details). This particular section (ADMINISTRATION) will cover System Maintenance programming from the keyboard.

Starting System Maintenance

To enter SYSTEM MAINTENANCE from the keyboard, you must first press the <ESC> key and enter the MASTER PASSWORD. From the MAIN MENU, press a " 3 " for System Maintenance. The System Maintenance Menu will appear beside the Main Menu. Options from the main menu allow you to change or add extensions, system and feature parameters, department mapping, date and time, salutations, voice hunt groups, outcalls and distribution lists.

Keyboard Maintenance

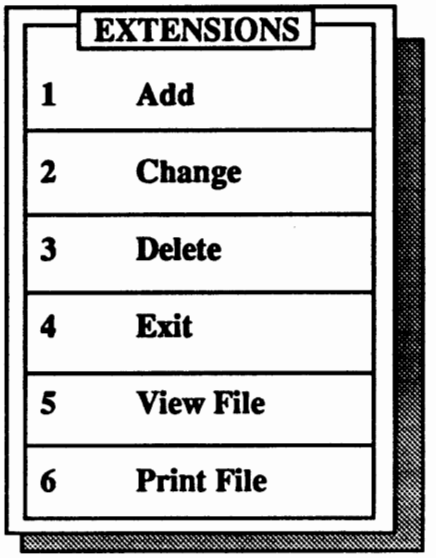


What is Extension Maintenance?

Extension Maintenance is the utility from the System Maintenance Main Menu which allows you to Add, Change, Delete, View or Print extension or mailbox information in your VoiceXchange System. Typically, the extension numbers that are added to this database are the same extension numbers defined on your PBX or KSU Phone Switch Programming. Extension information must be the same for the voice mail system in order for forwarded calls and monitored calls to be routed correctly from the voice mail / auto-attendant to the phone system.

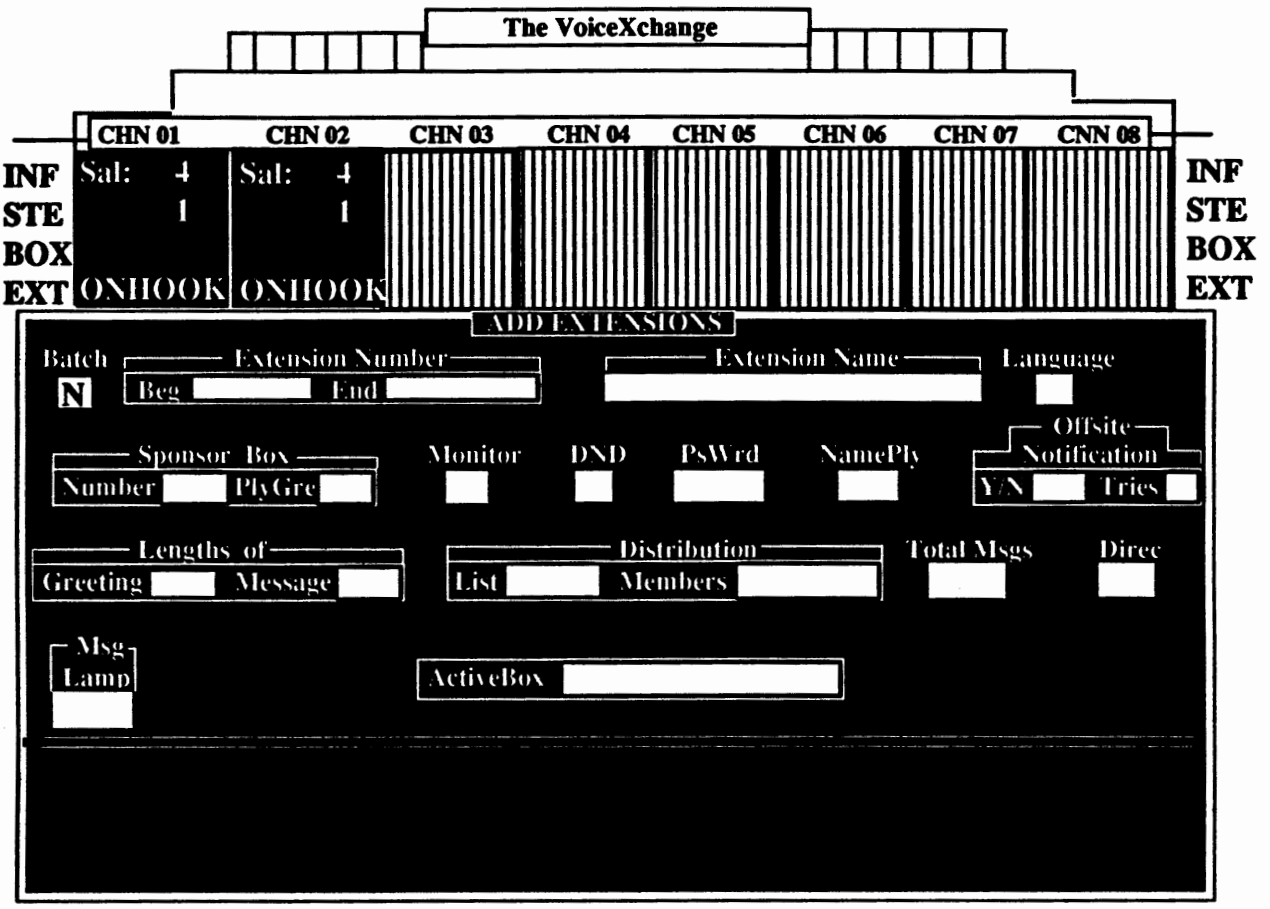
The Extension Maintenance Menu

From the System Maintenance Menu, choose option 1 for Extension Maintenance. After selecting this option, you will encounter the following Extension Maintenance Menu.



From this menu, you can select utilities which allow you to make changes to the extension / mailbox database on the VoiceXchange system. For this section, we will be demonstrating the ADD utility.

Choosing option 1, to ADD an extension, you should now see the following screen:

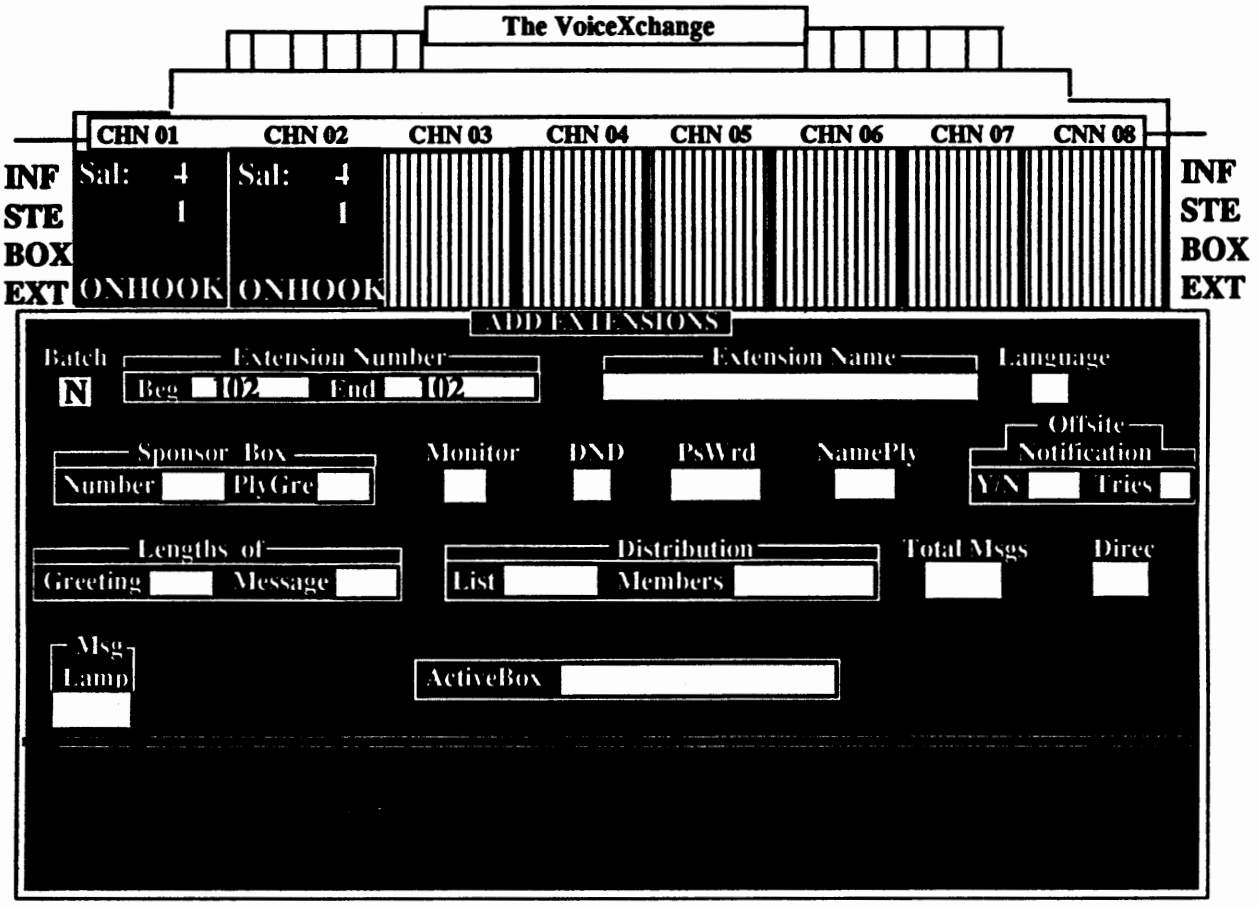


As we progress with our exercise in adding an extension, we will go step-by-step through each of the fields and explain the help screens which are available.

The Extension Maintenance screen is divided into two screens. The upper portion of the screen contains 20 boxes or *fields* where information can be entered into. The lower portion of the screen displays help information that you may use as a guide for entering information. The help information relates directly to the box or field which you are currently in.

For instance, in the above screen, the first field entitled,"Batch," is highlighted. On your actual system, the field will be blinking wherever the cursor appears. Notice the help screen at the bottom. Enter NO if you are adding a single extension or YES if you are adding several extensions. To add several extensions, *they must be in sequential order with the same information.* If you are using batch mode to create or add extensions, you must be sure that your ports are not busy if you are adding more than 20 entries. The reason for this has to do with the slowing of the disk drive to respond to the batch mode operation. This slowing can interfere with activity occuring inside the channels or ports.

Extension Number Field



In this field, you must enter in the extension which you want to add or create. For this particular example, the extension number is 102. The Extension Number field is partitioned into two fields:

1.)" Beg" or Beginning Extension

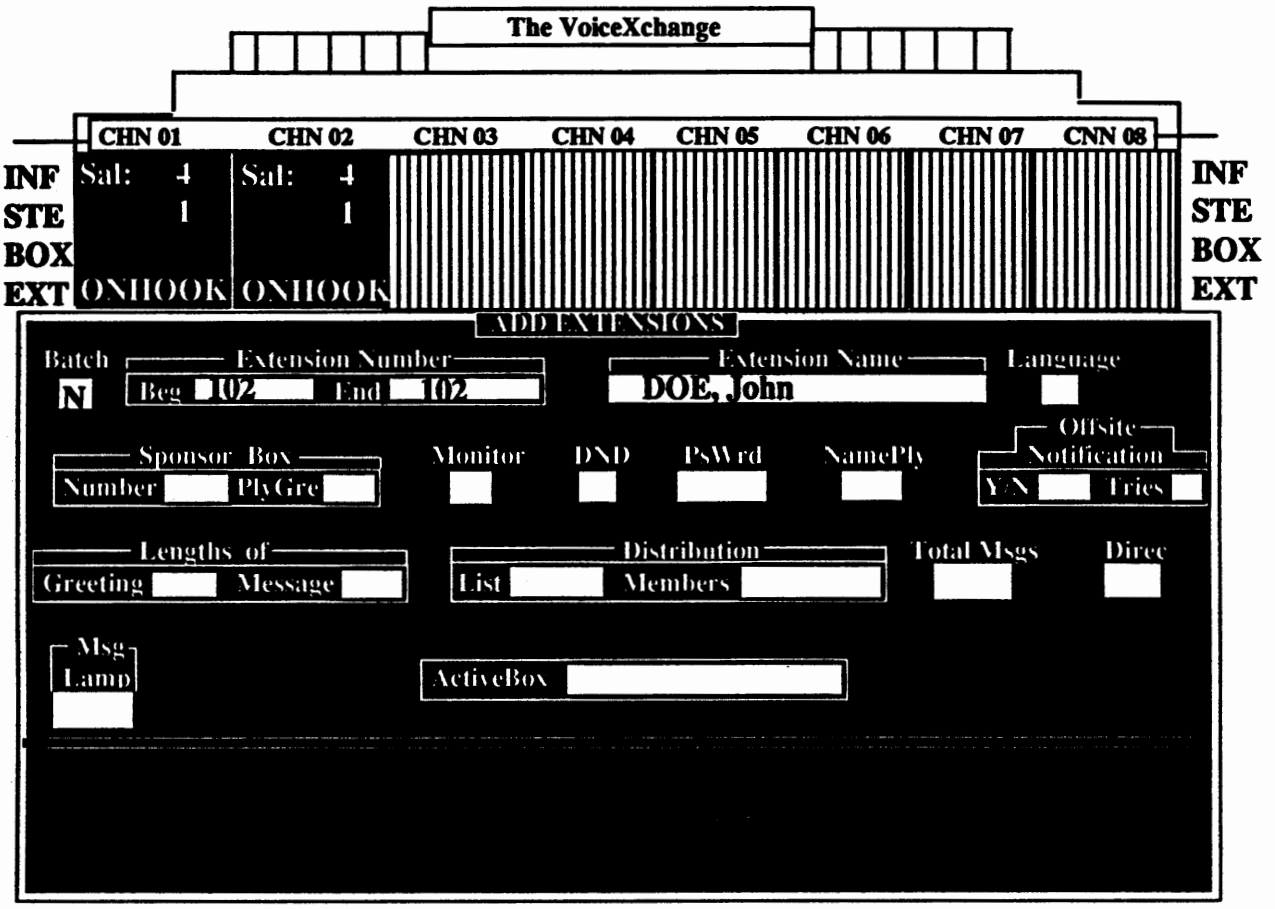
2.)" End" or the Ending Extension

The "Beg" field requires that you input the extension that you wish to add or create. The "End" field requires that you input an extension only if you are adding a range of extensions such as in the Batch Mode. If you answered "Y" in the "Batch" field, then you would be required to input the last extension in the range of extensions which you wish to add or create.

In the case of the example, we are only adding one extension, so we would put the same extension number in the "End" field as we put in the "Beg" field, or simply press the <Enter> key.

Once you enter the extension number in the Extension Field, the extension number will appear in the Active Box field in the lower portion of the screen.

Extension Name Field

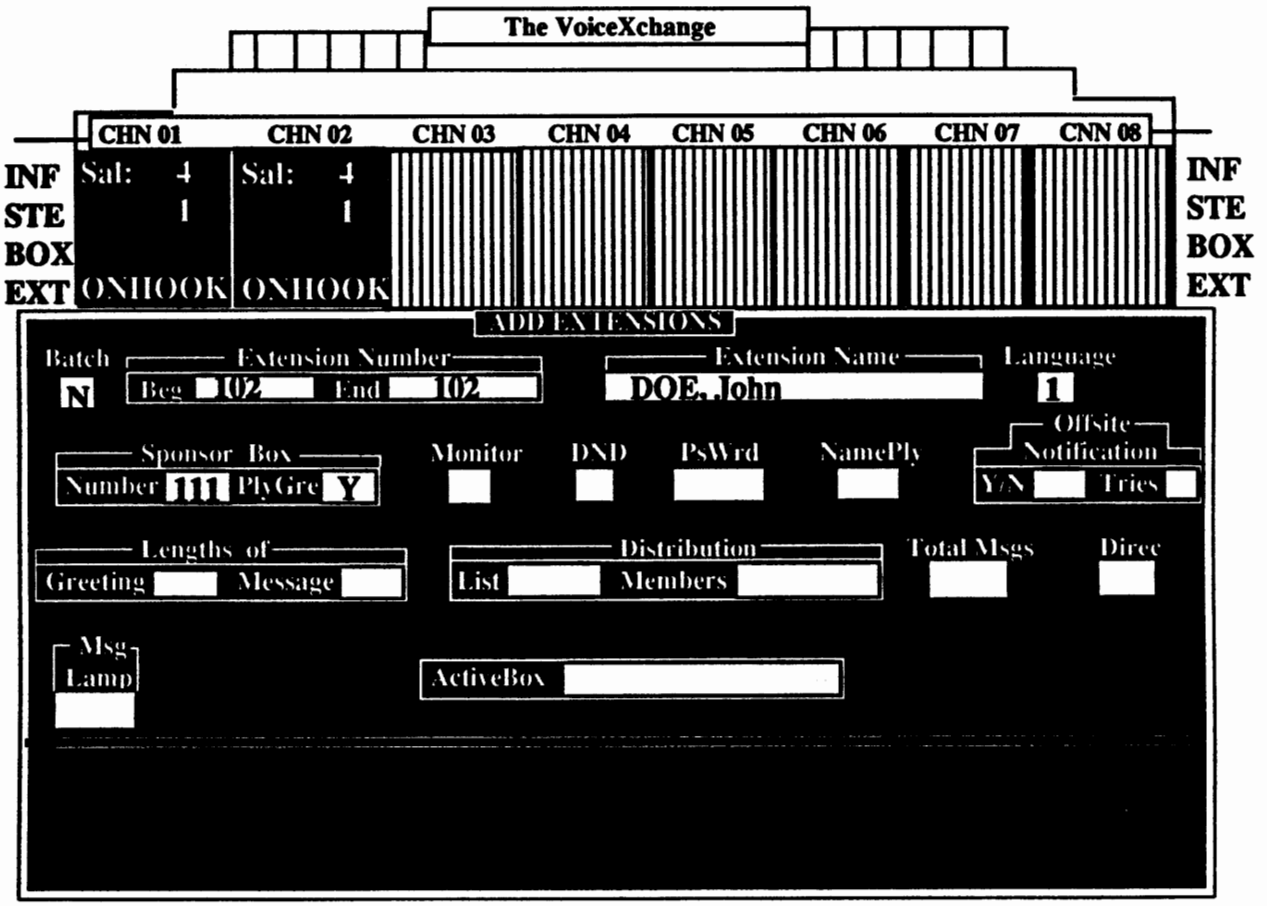


The Extension Name field requires that you input a users name or a reference name for the extension shown in the Active Box field at the bottom of the screen. A users name may be entered in two ways. First, if you are using the Directory Function of the VoiceXchange, that is, if you have the ability for a caller to use a directory of last names to reach the party that they are calling, then you must enter the users LAST NAME first in the name field. The last name must also be entered in all capital letters. Then you must insert a comma then enter their first name. The first name does not need to be in capital letters. The other way to enter a user name is simply enter the name as it is spoken: First name Last name. However, entering this way , you will not be able to use your directory feature enabled by parameter 223, DirDig.

A reference name can be entered in place of a user name if the extension is assigned to other than an individual. For example, " conference room" or "break room" are reference names which are acceptable.

If you do not wish to enter anything, press the <enter> key and the default will be the extension number only.

Language And Sponsor Box Field



Language Field

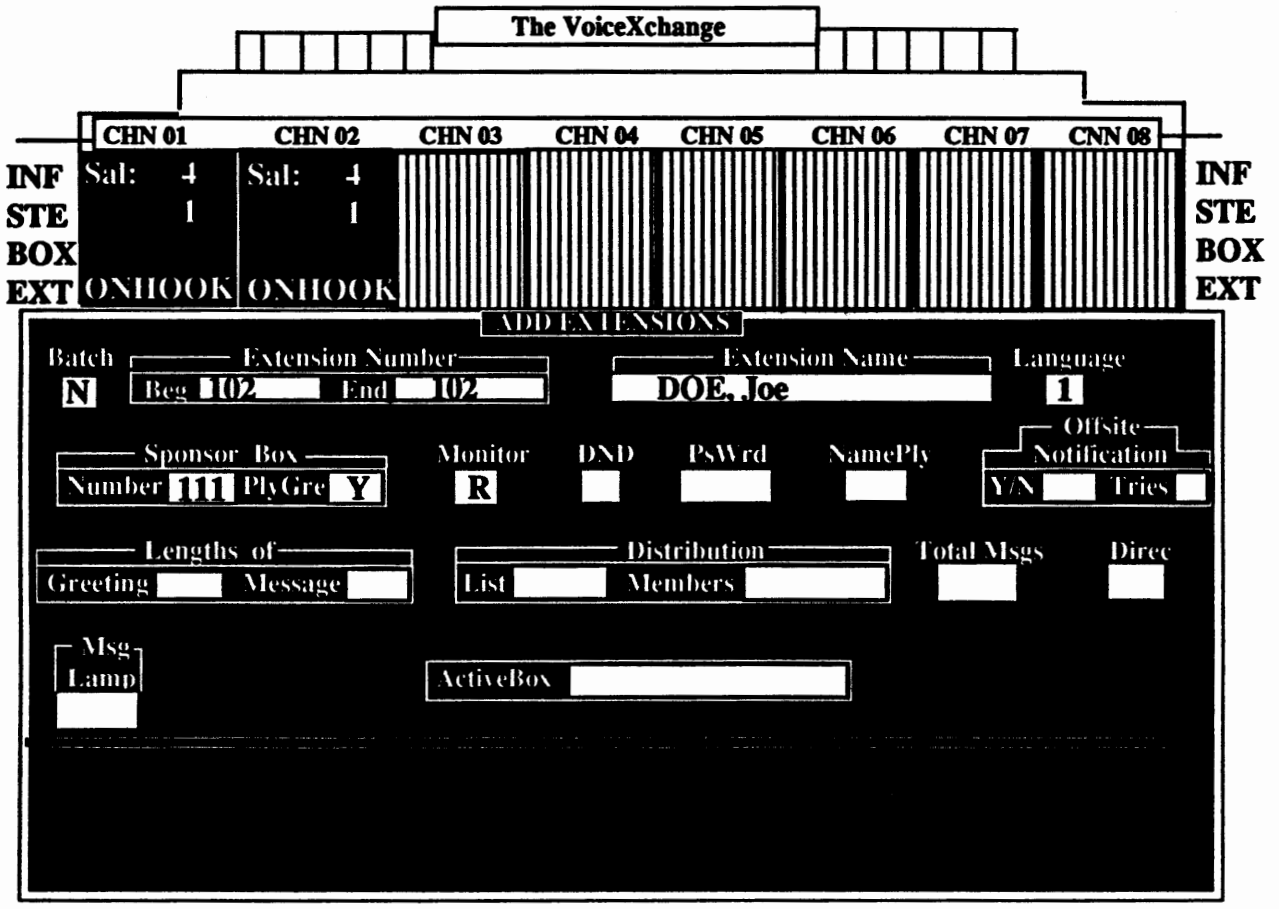
There is no help screen for the Language field. There will be a default value of (1) for this field. The (1) indicates that this extension will play the default language of the program. A number (2) would indicate any other language other than the default language which would play for this extension. You may enter up to (6) in this field provided that you have the languages in a BILING.DAT file and that you have the Multi-Lingual software package to support them.

Sponsor Box Field

The Sponsor box field is divided into two fields: Number and Playgre. The Number field will indicate the extension that you wish to use as your sponsor box. The Sponsor Box is an alternative mailbox where messages can be sent or pooled from your extension. The Playgre field will determine if you need your extension greeting to play or if you wish to have the sponsor box greeting to play. Enter "y" to play the sponsor box greeting, "n" to resume your extensions greeting.

In the example above, we have chosen box 111 as the sponsor box and "Y" to play the sponsor box greeting.

Monitor, DND, Pswrd And Namply Fields



The above name fields will be discussed along with their individual help screens:

Monitor Field

<A> Anouncement Only	<N> No Monitoring	<K> Guest Mailbox
<B> Busy Only	<R> Ring & Busy	<X> Extension Only
<C> Busy Only / No Mailbox	<L> Limited Type K	<E> Emergency Box

Enter in one of the monitor types listed in the help screen above. Refer to the following page for details on monitor types.

For the example above, we have chosen "R", Ring & Busy, as the monitoring type. Type R boxes allow the most available features.

Extension Monitor Types

Type R - Ring and Busy - An extension set to type R will be monitored by the voice system during an attempt to ring the extension. If there is no answer, the caller will hear either a Personal Unavailable message or the default unavailable message (Mess070). If the extension is busy, the voice system will give the caller the option to hold, enter another extension or press a digit to leave a message.

Type X - Extension Only - An extension set to type X will be monitored by the voice system during an attempt to ring the extension. If there is no answer, the caller will be told that no one is available at the extension at that time (Mess016) and that they may enter another extension or call back later. If the extension is busy, the caller will be told that the extension is currently busy and that they may enter another extension or call back later (Mess015). There is no messaging for this type.

Type N - No Monitoring (Blind Transfer) - An extension set to type N will NOT be monitored by the voice system. The caller will be transfered to the extension and regardless of the extension status (busy / no-answer), they will not be returned to a mailbox or given any further instructions by the voice system.

Type B - Busy Only W/Mailbox - An extension set to type B will only be monitored by the voice system when a busy signal is detected. The caller will hear Mess050. Otherwise, the call will be processed as a Blind Transfer.

Type C - Busy Only W/Out Mailbox - Same as type B without a mailbox. Caller will hear Mess015 when the extension is busy, otherwise call will be processed as a Blind Transfer.

Type A - Announcement Only - An extension set to type A will play the personal or default unavailable greeting upon a no answer and disconnect immediately.

Type K - Guest Mailbox - Calls are monitored and upon a no-answer, the caller will hear either a personal unavailable message or the default unavailable message (Mess072). If the extension is busy, the voice system will give the caller the option to hold, enter another extension or press a digit to leave a message (Mess050). The default unavailable message for a type K mailbox is Mess072.

Type L - Same as type K with a limited mailbox menu. Parameter controled (Parm 218)

DND (Do-Not-Disturb) Field

Enter (Y) es for Calls to be held or (N) o for not. Default is "N (o)"

Choosing "Y" will enable your extension for Do-Not-Disturb. This means that calls coming to your extension will be sent directly into the extensions mailbox, without attempting to ring the extension.

For the example, we have chosen "N".

Pswrd (Password) Field

Enter the password to be used by the Extension (Number) to enter User's Mailbox and Maintenance areas. The password can be varible length from 1 to 4 digits and may include an "*" Character. Fill with spaces if no Password.

Password protection for your mailbox can now be set from the keyboard. This option was previously only available through programing over the phone. Entering your password, if applicable, you should choose a password unique to you or your user. It is helpful to remember to set the password to any number (4 digits) with exception to the system Master Password. If no password is desired, then you must fill this field with blank spaces or press the <enter> key for default password(9876).

For the example, we have chosen the password "1234".

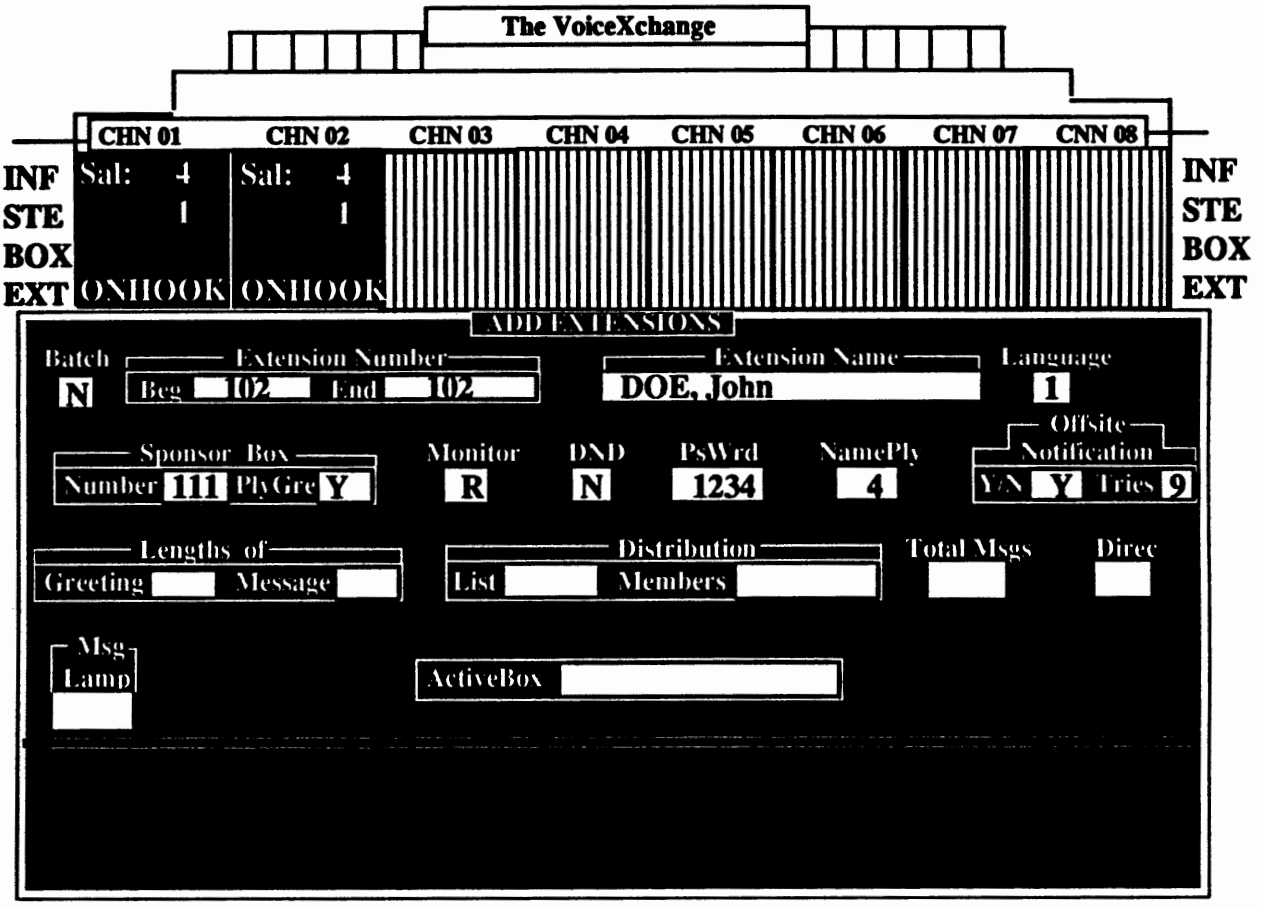
Namply (Name Play) Field

Extension NamePlay is used to determine what options are included on the Mailbox during directory search/playback and Extension Number access modes.
1 = No Name/Ext Play 2 =Ext Only Play 3 =Name Only Play 4 =Name & Ext Play

This field is used to determine what a caller would hear upon dialing an extension from the autoattendant. A typical illustration of this would be when a caller wants to dial extension 102, the autoattendant would respond with the message,"Box 102...John Doe." If this was the case, then the Namply field would be set with option (4). NOTE: To have the name of the user played for option 3 and 4, the Name Tag must be recorded in the users mailbox through message box maintenance.

For the example, we have chosen option (4).

Notification Field



Offsite Notification (Y/N Field)

Y = Notification Allowed N = Notification Disallowed

This Field is used to Allow the Extension Number to have notification of messages received available. (Message Lights & Offsite OutDialing)

This portion of the Notification Field requires that you input either a "Y" or a "N". Choosing a "Y" will allow your extension the ability to receive notifications for new messages. "N" will disallow reception of notifications and preclude further entry of information in the next Notification field.

Offsite Notification (Tries Field)

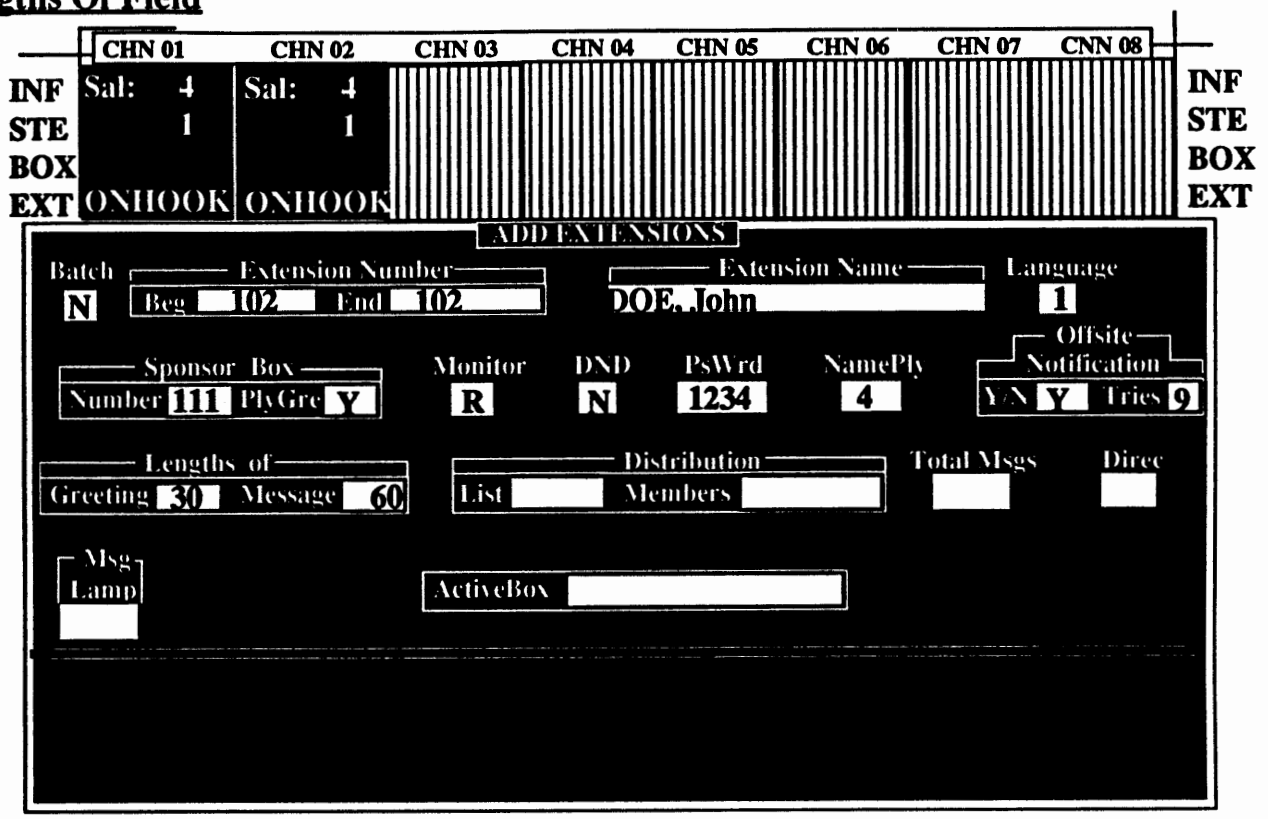
Enter Number of Tries that will be attempted for a Message received before the Notification record is deleted from file and Outdialing cancelled. A "Try" consists of one complete scan through all Offsite/Outdial Entries.

Default value for this field is (9). You may exceed this number, but keep in mind that the higher you set notification tries; the chances are greater that you could tie up your last port with notification outdials. In addition, if you are using notifications with a beeper, additional charges from your beeper company may be incurred from excessive notifications.

In the example, we have selected each of the default values.

(This Portion Intentionally Left Blank)

Lengths Of Field



Lengths Of Greeting Field

Enter the Allowable Length of ALL Greetings (Unavailable/Busy/Dnd/NameTag) before automatic termination. --- (User may not Append to Greetings)
Valid values are from 1 to 999 Seconds. Default Parms.MaxRecordTime/ #161

This field controls the length of time a user is allowed to record an unavailable greeting. This is an administrative control function to limit the time for users in recording greetings which might be too long. This is especially helpful for Service Bureau applications where economizing disk drive I/O operations are concerned.

Valid values given to be entered in this field are 1 - 999 seconds. If no values are given in this field, then the default value will be the same as the value stated for parameter 161, MaxRecordTime.

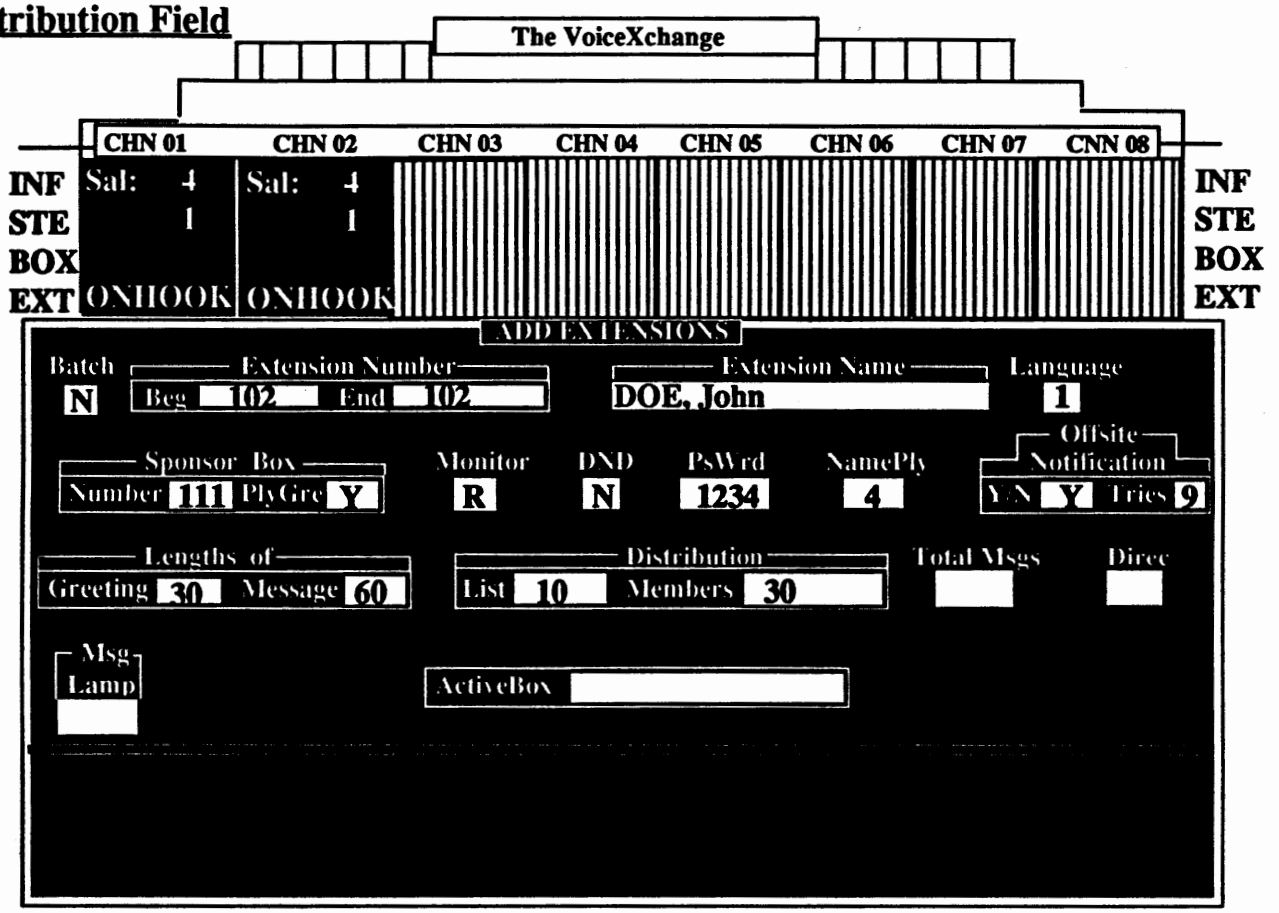
Length Of Message Field

Enter the Allowable Length for Messages left for Extension Number before Automatic Termination of Message. -- (User May Append Message if Desired) Valid Values are from 1 to 999 Seconds. Default Parms.MaxRecordTime/ #161

This field determines the length of messages (measured in seconds) which can be left in a users mailbox. All values and defaults are the same as the previous field (Length Of Greeting).

In the example above, we have selected the default values, which in this case are 30 and 60, respectively.

Distribution Field



Distribution List Field

Enter the Number of Distribution Lists Allowed for Extension Number. Valid values are from 0 to 128 Lists per Extension. 0 = No List , Default value is Parms.ExtListNum/ #276

Values entered in this field determine the number of personal Distribution Lists allowed per mailbox. This is another administrative controlled function which is useful in keeping disk drive I/O operations free and clear by setting a limitation on the number of lists a user can have. No input in this field defaults to the value stated in parameter 276, ExtListNum.

Distribution Members Field

Enter the Number of Members Allowed per List for Extension Number. Valid values are from 1 to 128 Members per List. Default value is Parms.ExtListMem / #277.

Values entered in this field determine the number of personal Distribution List Members allowed per mailbox. Defaulted value is stated in parameter 277, ExtListMem.

In the example, we have chosen the default values which are 10 and 30, respectively.

Total Msgs And Direc Fields

Total Msgs Field

Enter the Number of Total Messages Allowed for Extension Number. If Total Number of Messages exceeded then Caller is not allowed to leave Message for Extension and returned to opening salutation. (Default = 50)

Values entered in this field determine the number of messages an extension is allowed to have per mailbox. The maximum number of messages allowed per box is 99. This includes both old and new messages currently residing in the users mailbox.

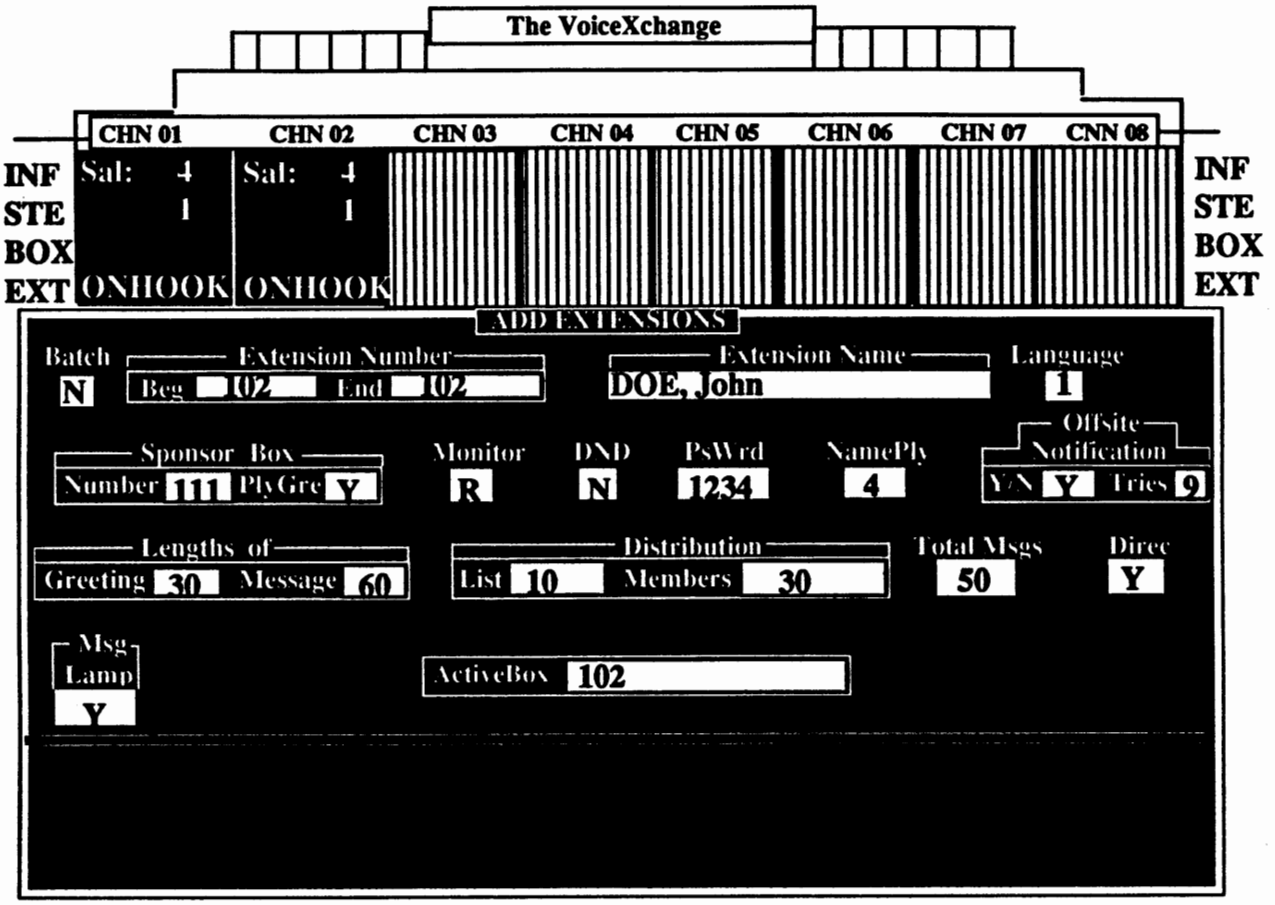
Direc Field

Y = Include in Directory Search	N = Disallow inclusion in Directory
Used to allow whether or not Extension Number/Name is included in the Directory Search. (NameTag File must be Recorded if inclusion desired).	

Values entered in this field determine if the extension being created or added will be included in the Directory function of the AutoAttendant or Voice Mail. The only stipulation to this field is that the NameTag Greeting must be recorded in the mailbox before it will become active.(Default = Y)

For the example, we have accepted the default values for Total Msgs and Direc Fields.

Lamp Notification and Reserved Fields



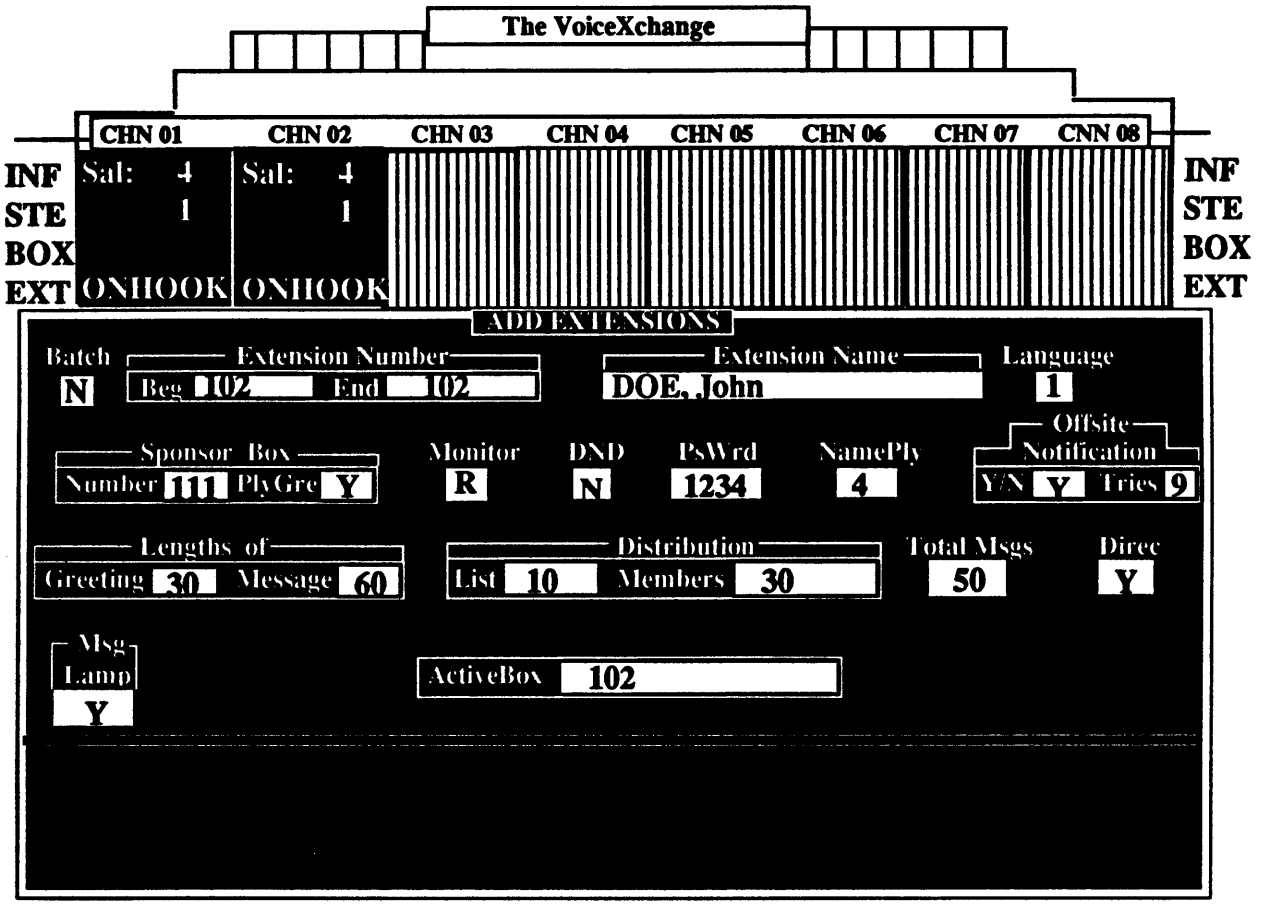
Lamp Notification Field

Y = Allow message Lamp Notification to this extension
N = Disallow mesaage Lamp Notification to this extension
Used to allow or disallow message lamp notification per extension.

Values entered in this field determine whether receiving a new message in a mailbox will activate a message Lamp Notification by the voice system to the extension user who received the message It is neccessary that parameters 178 (LampOn) and 179 (LampOff) contain a value before any message Lamp notifications are attempted.

Final Step To Adding An Extension

The last screen that you should see after you have entered all information into the appropriate fields should look like the example below.



Once you have entered data into the last field on the screen and you have pressed the <Enter> key, you will see the above screen. You may press the <Esc> key at any time during the input process to abort the Extension Add utility.

Before you hit any key to continue, verify that all of the information you have input is correct. Pressing any key will drop you back into the Extension Maintenance window where you may continue to add extensions, choose another maintenance option or exit the menu.

Additional Options In Extension Maintenance

Option 2: Change Extension

This option allows an administrator to make changes to any of the data fields in an extension which already exists or is created in the VoiceXchange database. The screen which you will encounter when selecting this option is identical to the screen which you used to add an extension. This screen will allow you to enter new information into any previously created or existing extension.

Option 3: Delete An Extension

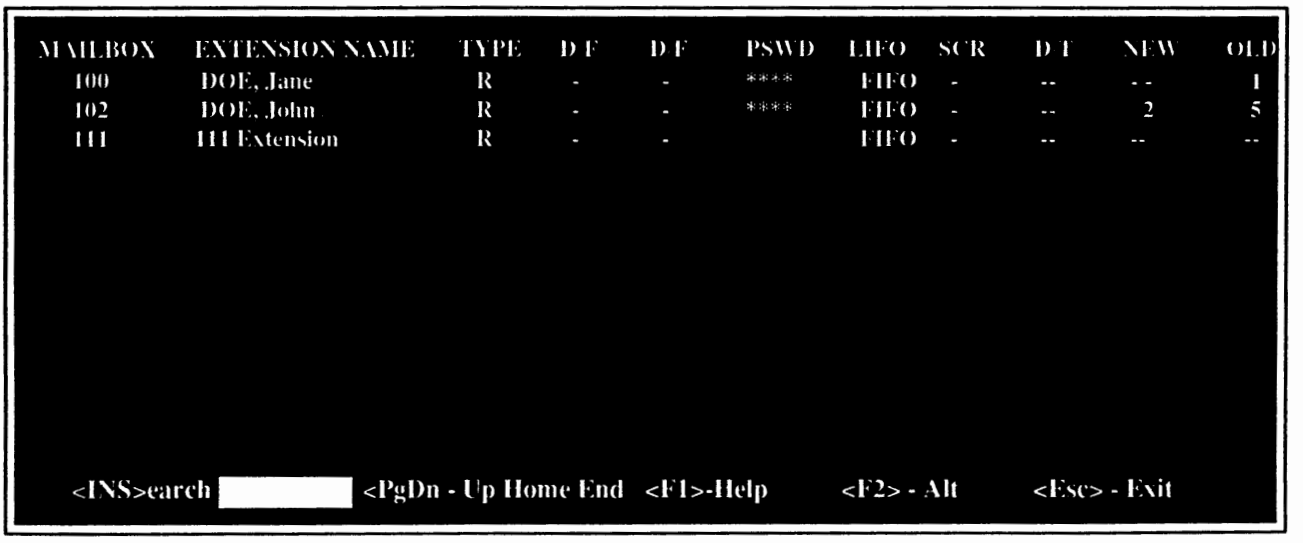
This option will allow an administrator to delete any extension which exists in the VoiceXchange database. The screen which you will encounter is identical to the screen which you used to add an extension. First, you will be prompted whether or not you wish to delete in Batch Mode. Depending on your response to the Batch Mode, you will then be prompted to enter the extension that you wish deleted from the database. Pressing the <enter> key twice after typing in the extension you want deleted, will complete the delete sequence. You then may have the option to enter another extension to delete or exit the menu.

Option 4: Exit

This option allows you to leave the Extension Maintenance window and back up to the System Maintenance Options window where you may select another maintenance option or continue to exit to the Main Menu window.

Option 5: View File

This option allows you to view "at a glance" all of the records in the extension / mailbox database. Upon selecting this option, you will see the following screen:



The above screen shows information concerning the status of each extension / mailbox configured on the VoiceXchange system. At the bottom of the screen, "Hot Keys" are displayed which allow you to access the following functions:

The <INS> Key : Search

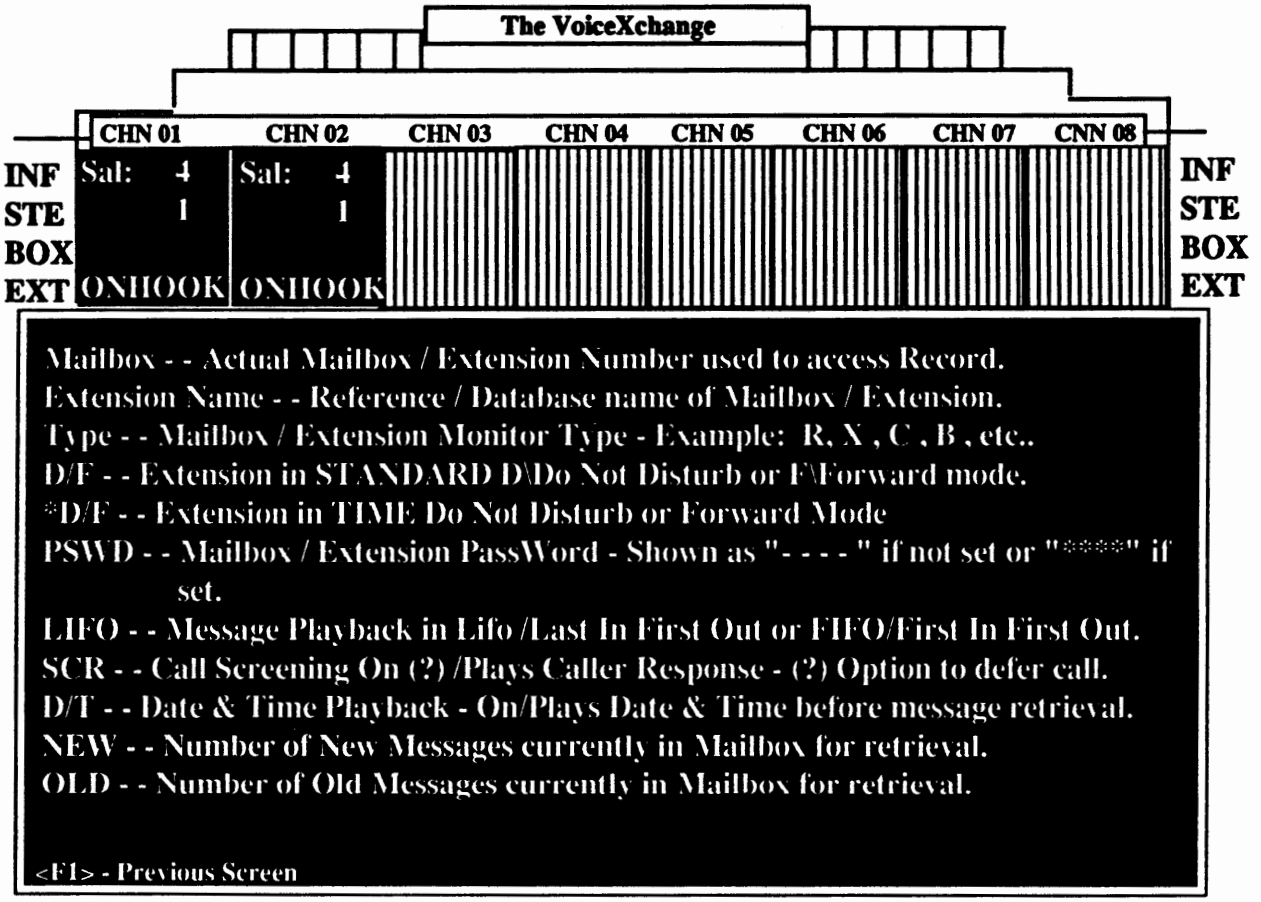
Pressing the <INS> key from the view screen will activate a search window. In this window, you may type in the extension number or mailbox number that you specifically want to view. This feature is especially useful when the extension database contains hundreds of records.

The PgDn Home End & Arrow Keys: Movement Keys

The Page Down, Page Up, Home, End and Arrow Keys allow you to scroll through the database records either by one record at a time or by blocks of records.

The <F1> Key: Help

Pressing the <F1> key will activate a help screen which will enhance your understanding of the View Screen layout. Specifically, this help screen will describe the meaning of the View Screen Headers.



The <F2> Key: Alternative View

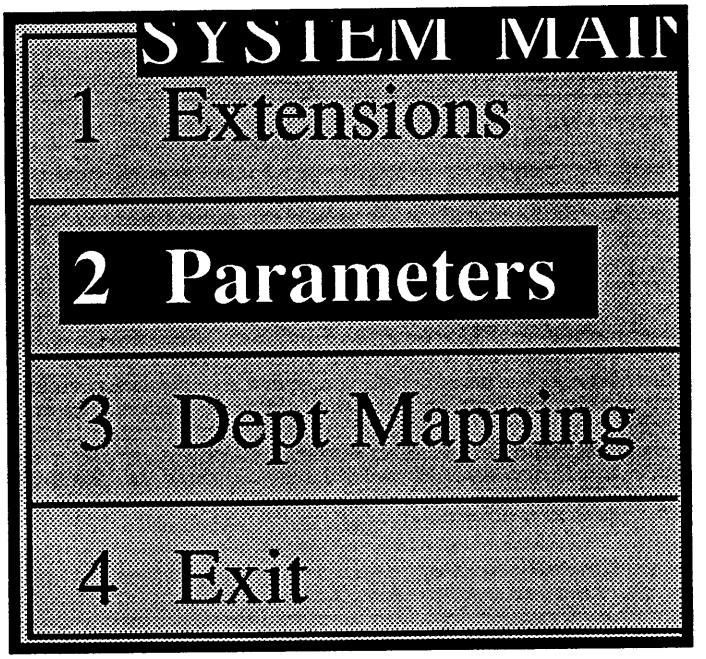
From the View Screen , you may move your highlight bar down to a particular record in the database and press the <F2> key. This will activate a screen which allows you to see the record in its entirety as it was created in the Add mode. This method of viewing allows the adminstrator a more enhanced view of the extension/mailbox record without having to first back out and enter the Change Mode from the Extension Maintenance Menu.

Option 6 : Print Database

Option 6 from the Extension Maintenance Menu allows you to send the extension / mailbox database information to a print device. You will not be shown a specific screen once selecting this option. Before selecting Option 6, please verify that you have a printer connected to the computer.

Note: A print device cable can be attached directly to the back of the Sentinnel Proctection device(Dongle) located in the rear of your system. The Sentinnel Protector should always be attached to your computer's Parallel Port. If this device is not in place, you will receive errors when you initially run the program.

Keyboard Maintenance



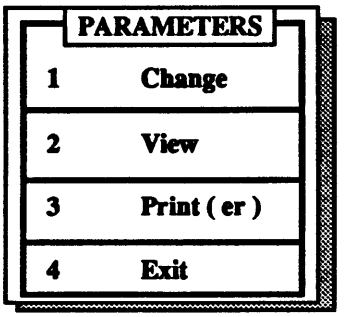
Parameter Maintenance

System Parameters are responsible for system performance in terms of adjusting the voice system to work with telephone equipment and the toggling of voice system features.

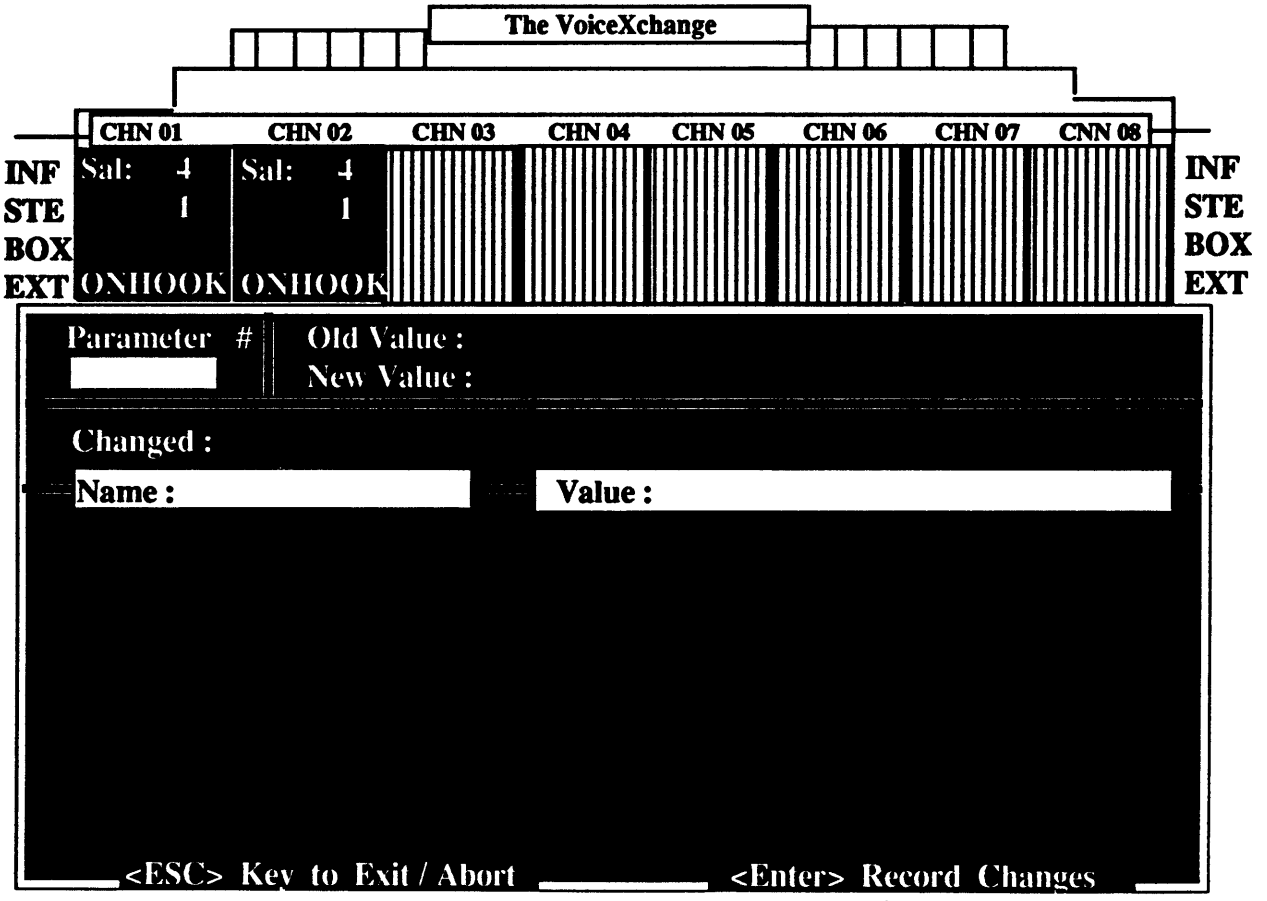
From the System Maintenance Menu, select option 2 for Parameter Maintenance. This feature allows you access to change, view or send parameter information to a print device.

After selecting option 2 for Parameter Maintenance, you will see another menu appear to the right of the System Maintenance Menu:

Select option 1 to **"Change"** a parameter setting.



Option 1: Change Mode

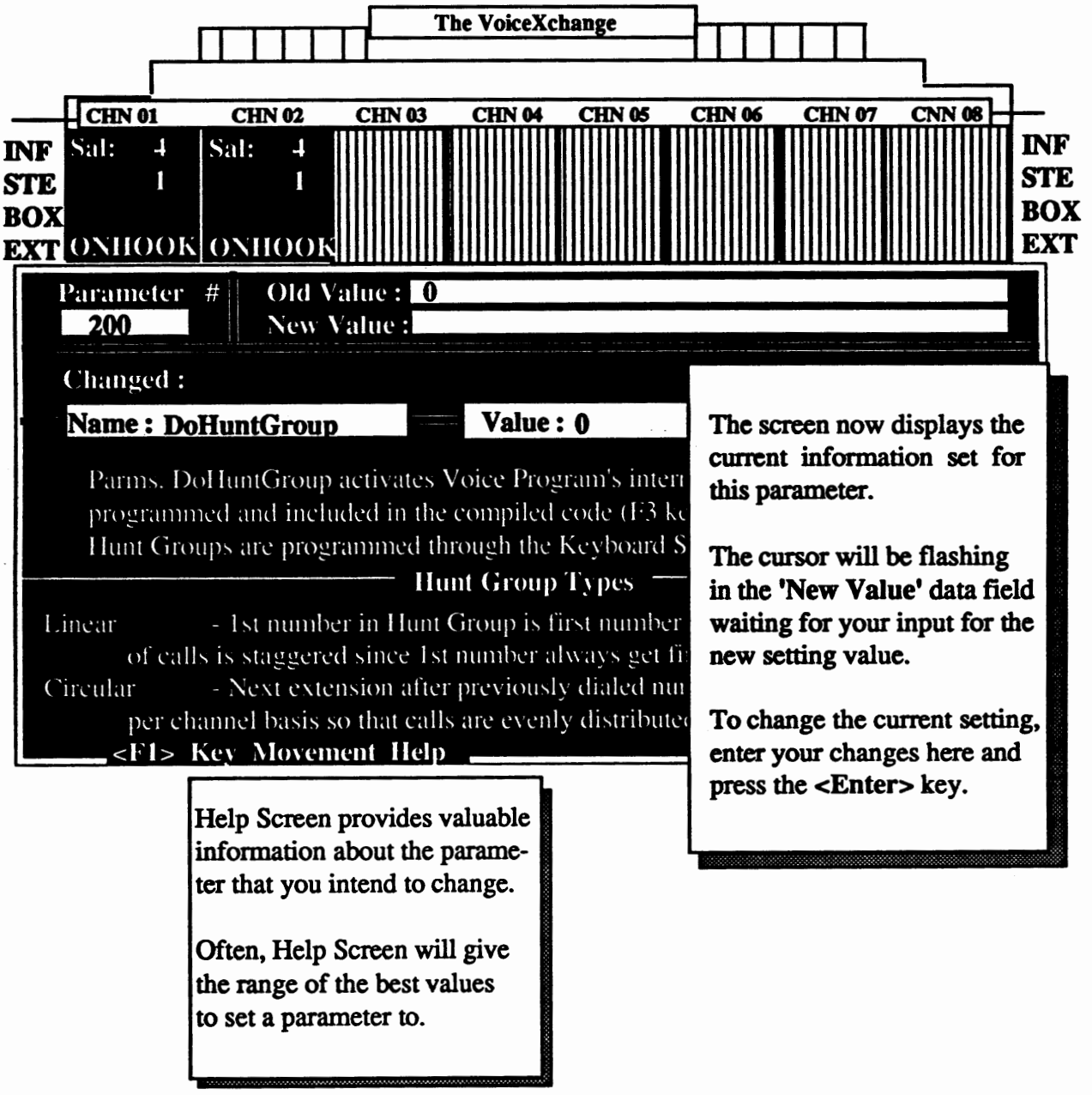


The above screen will appear. This screen allows you to input the parameter number that you want to work with. After entering the parameter number, the Name and Value data fields will display any information concerning the current settings of the parameter selected. Also, additional help information will appear on the middle portion of the screen.

Entering New Information to Update a Parameter Setting

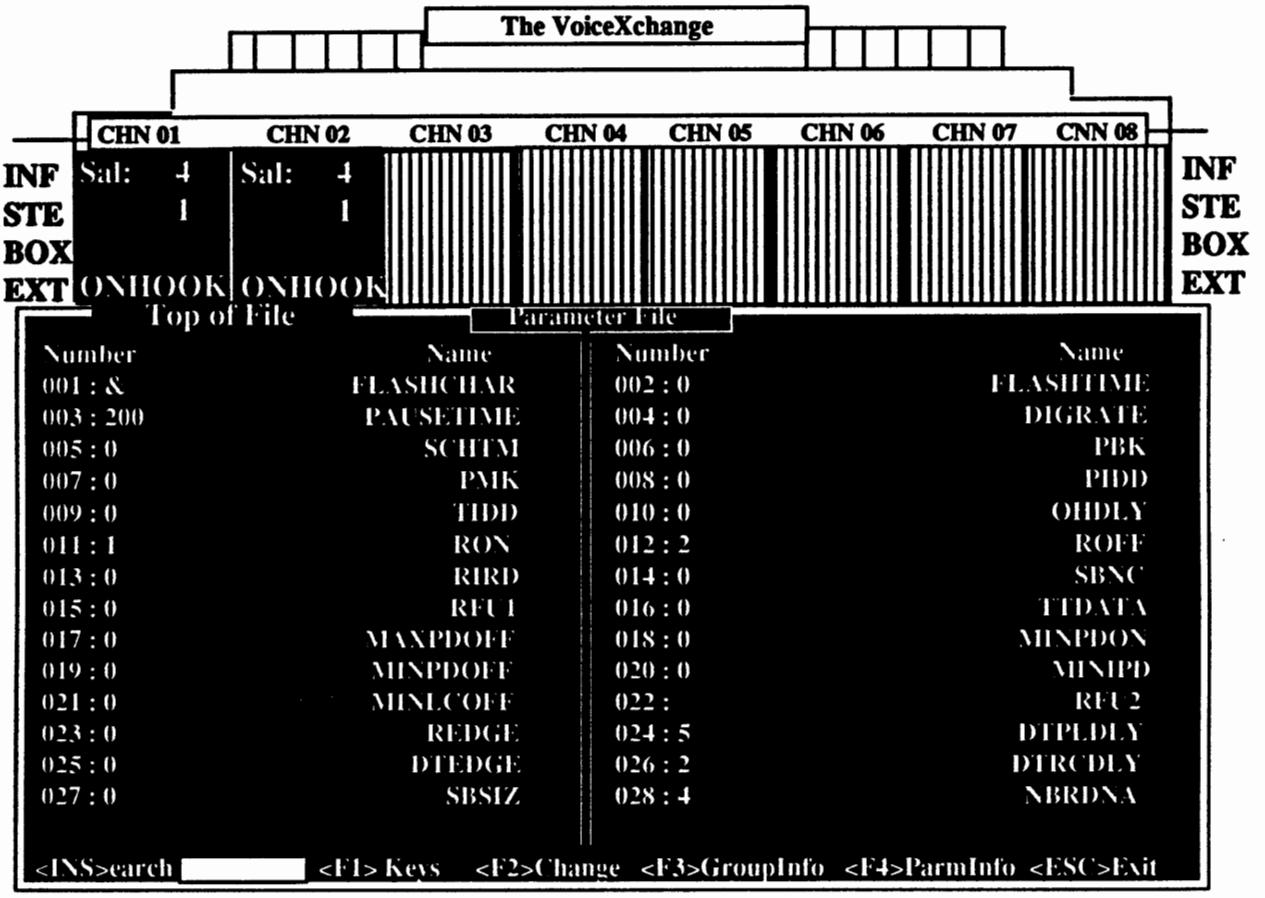
For the example shown, we will enter changes to parameter number 200 (DoHuntGroup). This particular parameter is responsible for activiating the portion of the VoiceXchange program that acknowledges voice mail hunt groups.

In the **Parameter #** data field, we have typed '200'. The screen should look similar to the one below:



Option 2 : Viewing Parameter Settings

Selecting option 2 from the Parameter Maintenance Menu will allow you to view the current settings for all of the system parameters on the VoiceXchange system.



The above screen displays a listing of all of the system parameter settings. You may use the <PG DN> , <PG UP>, and the up and down arrow keys to scroll through the settings.

Below this, you are given options to press different keys that provide different functionswithin the parameter maintenance screen. The following descriptions apply to those functions.

The <INS> Key

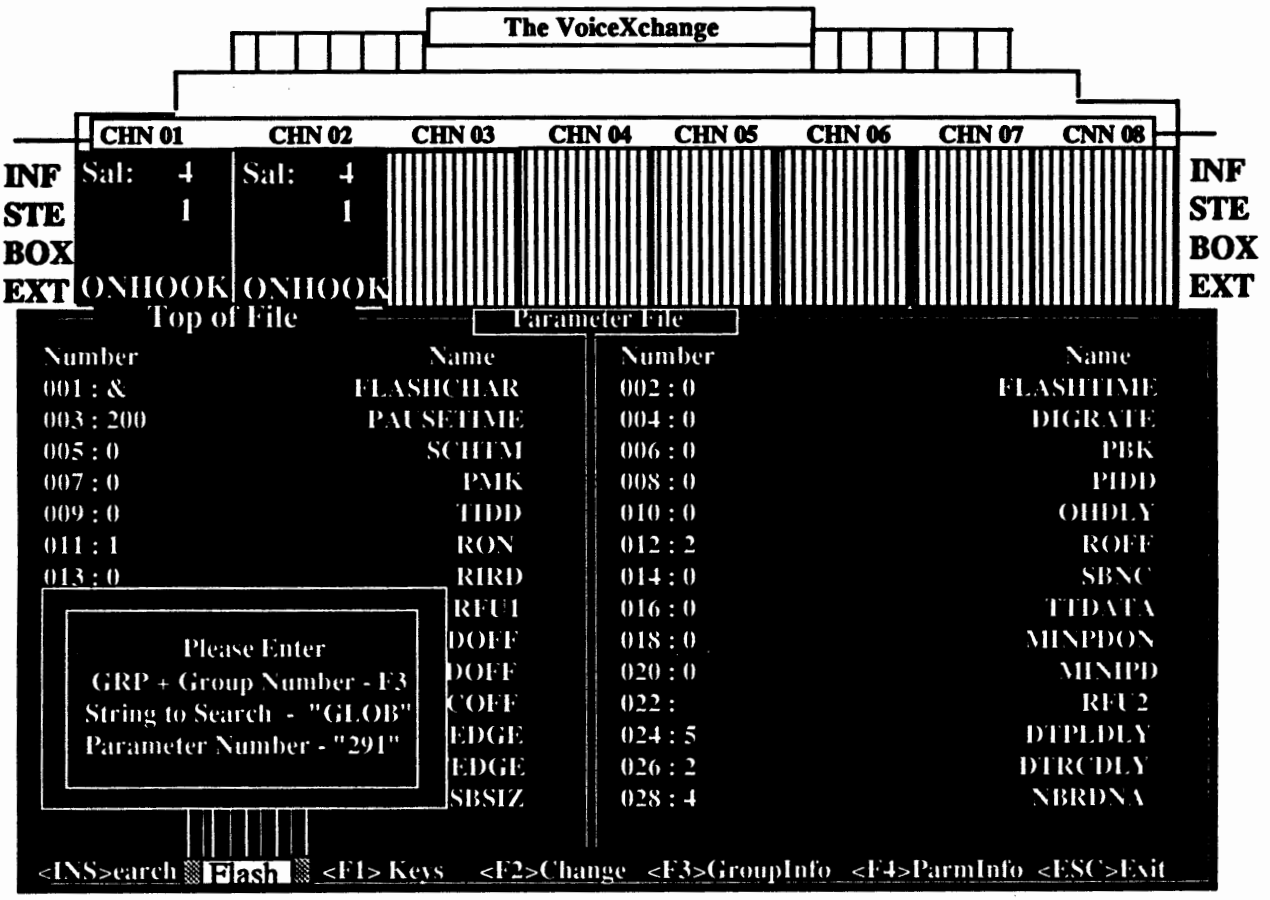
Pressing the Insert Key on your keyboard will activate a parameter search window. This window appears to the right of the "<INS>earch" on the parameter view screen. You may search for parameters using the following:

GRP + Group Number - F3 - This "looks" for the parameter or group of parameters by a coded group or group number. Group info can be accessed by pressing the <F3> key (To be discussed later).

String to Search - If you don't know the entire parameter name you may enter a "partial name" to search on. Ex: type in "GLOB" to search for all parameters that begin with "GLOB".

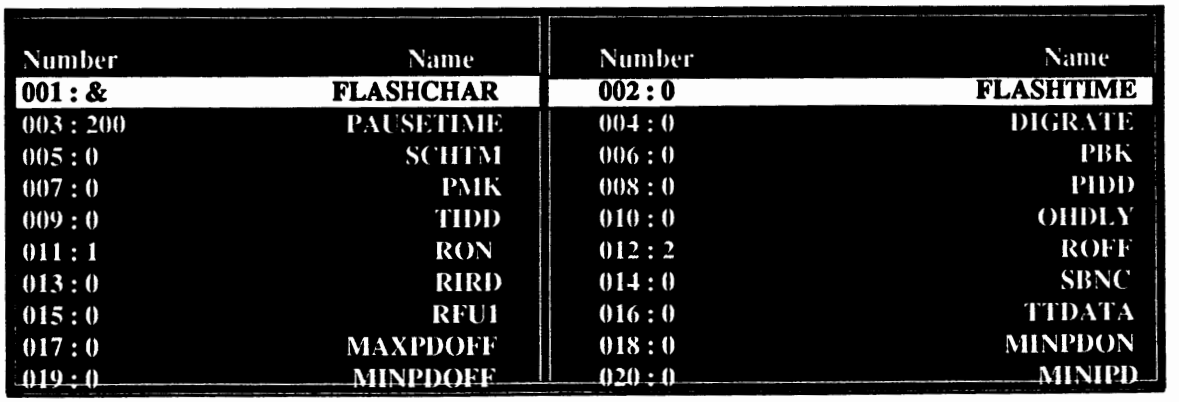
Parameter Number - You may also search for parameters using the actual parameter numbers if you don't know the parameter name.

Below is an example of the screen display when the <INS> key has been depressed.



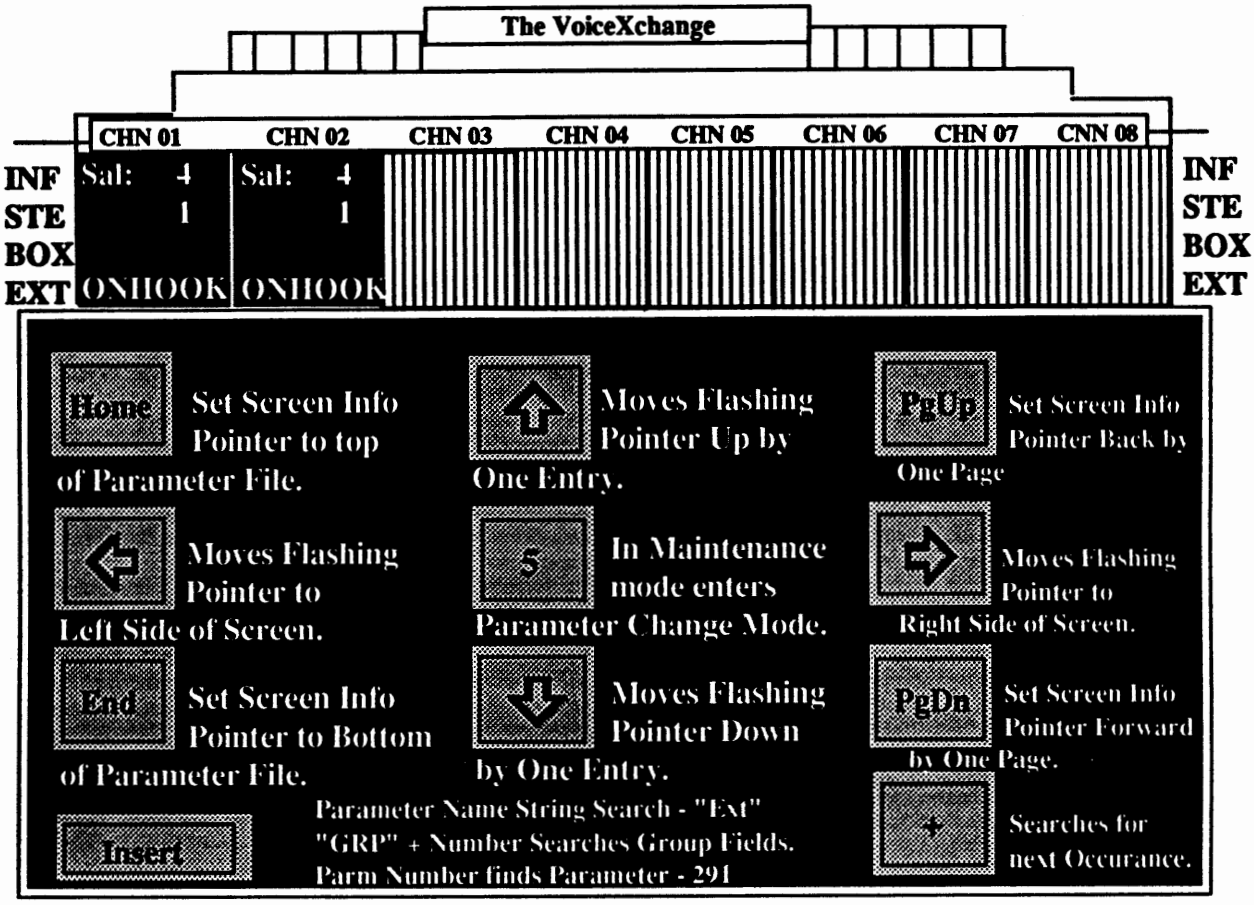
To begin the search, enter any of the methods of search described above. For this example, we will search using the string "FLASH".

Entering "FLASH" and pressing the <ENTER> key, the search will identify all of the parameters which contain "FLASH" in the first part of the name. Parameters that have been identified will be highlighted with a light bar across the screen, similar to the example shown below.



The <F1> Key

Pressing the <F1> key from the view screen will bring up the following help screen.



This screen provides help information with keys that are encountered inside of the Parameter Maintenance menus. Specifically, these keys are used in the option 2 screen: View Parameter Settings.

Pressing the <F1> key again, from this menu, will exit back to the option 2 View screen.

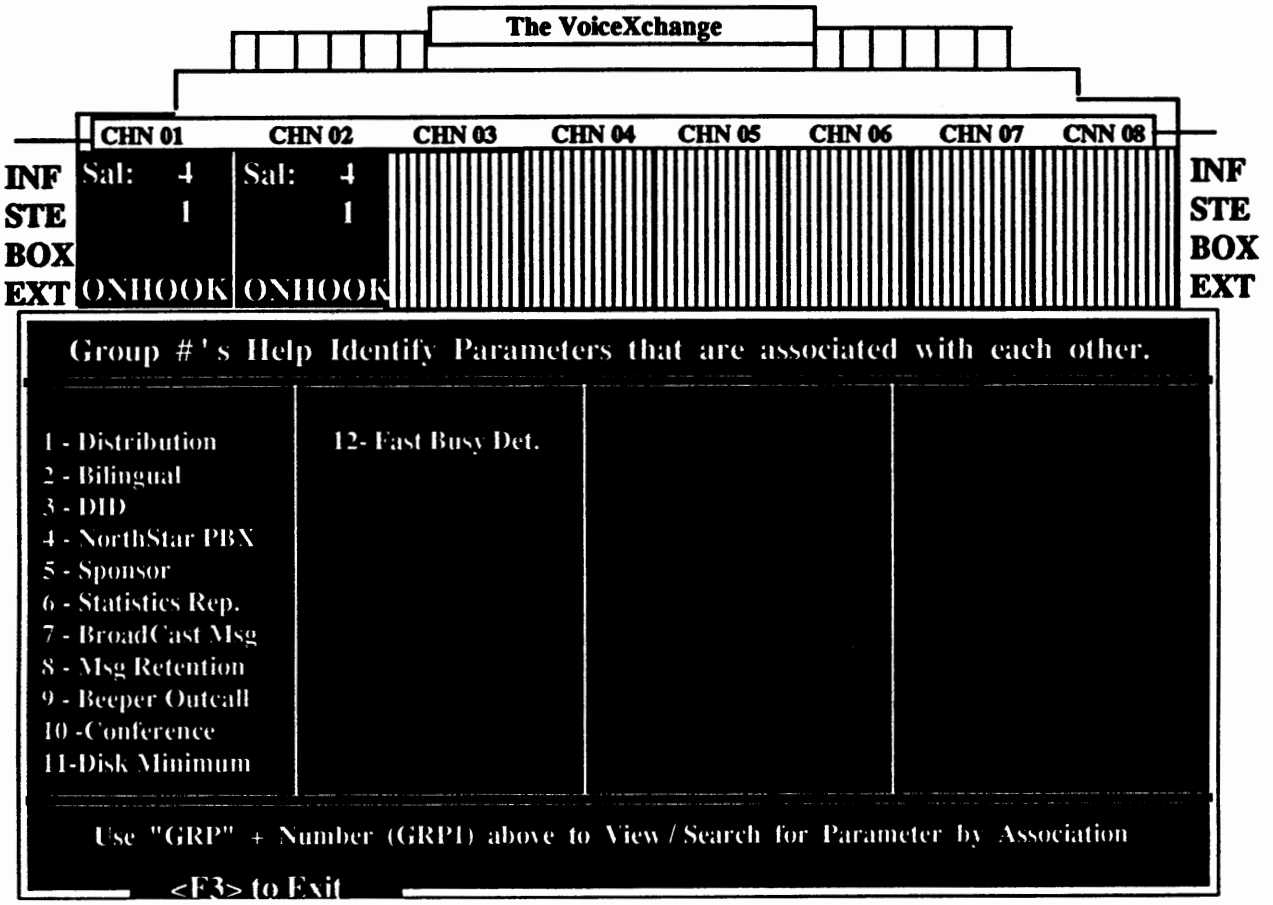
The <F2> Key

The <F2> key will allow you to enter into the parameter Change screen, as shown earlier in this document. To use this feature inside of the View screen, use the arrow keys to highlight the parameter that you wish to change. After highlighting, press the <F2> key. This will place you in the Change mode for the parameter indicated from the highlighter.

Note: This function is only available through the Parameter Maintenance Menu. Viewing the parameters through the <F8> key will not allow this function. This is done to maintain security for the Administrator or technician only.

The <F3> Key

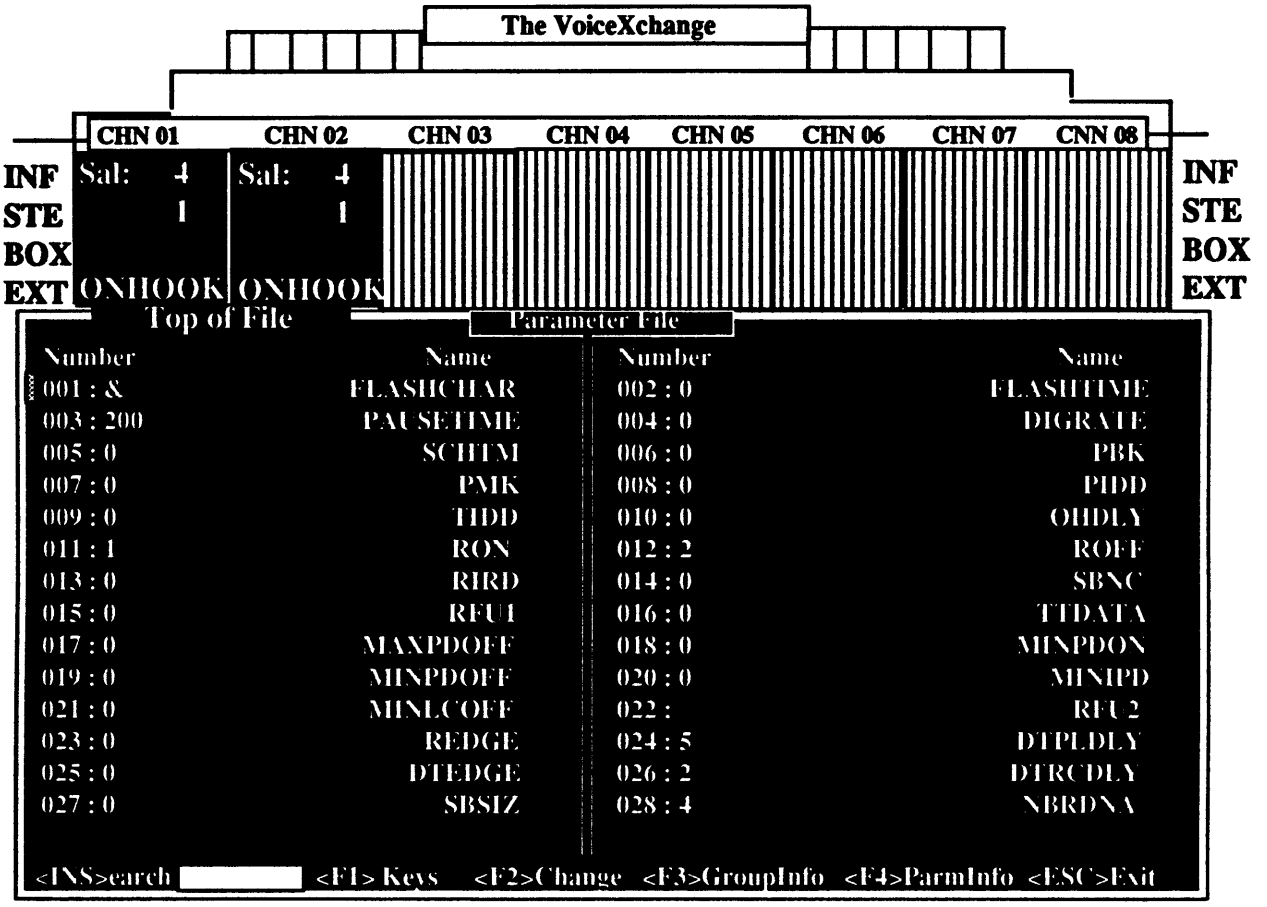
Pressing the <F3> key from the View Parameters Screen allows you to access an information screen for Group Numbers. Group Numbers are used to aide in searching for a string of related parameters while in the Parameter Search Mode (<INS> key). The screen that you will encounter will look similar to the following:



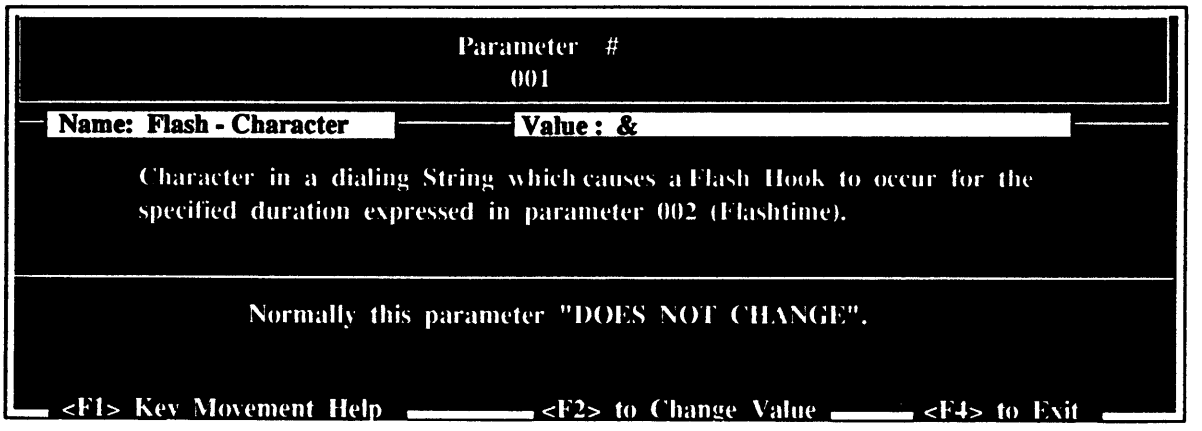
The above screen gives a list of Group Numbers which, when input into the Search Mode, will highlight all parameters associated with the group description. This is an informational screen only. It is to be used in conjunction with the Search Mode Function activated by pressing the <INS> key, as described earlier in this section.

The <F4> Key : ParmInfo

To find out additional information concerning a parameter, position the cursor with your arrow keys on a particular parameter number.



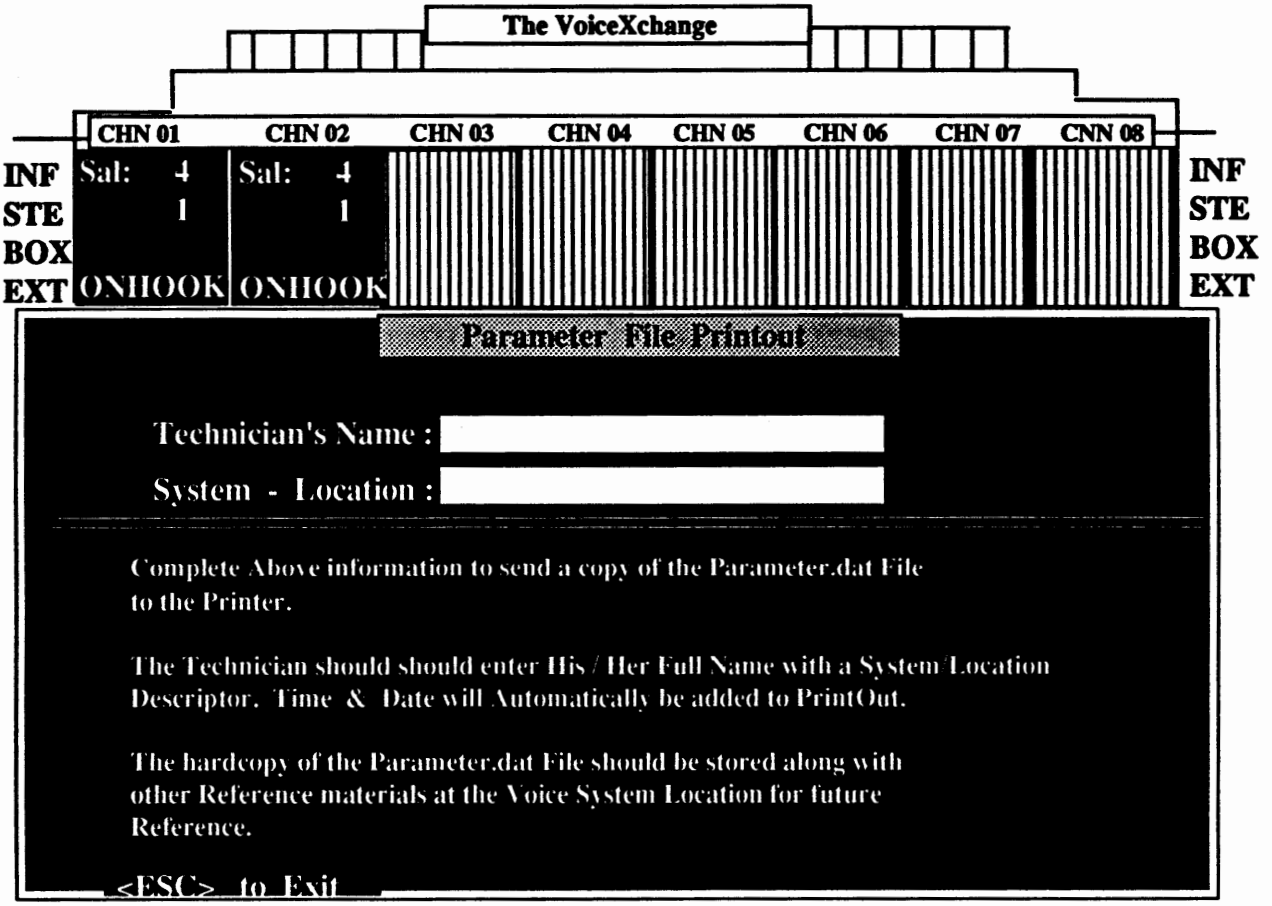
Once you have selected the parameter that you want, press the <F4> key. This will activate an additional help screen which will provide information on the parameter that you have selected.



For the examples above, we have selected parameter 001 (FLASHCHAR). The parmsinfo screen that resulted from pressing the <F4> key shows detailed information concerning the use of this parameter and recommended settings. In addition, you are given the <F1> key to show key movement, <F2> key to enter change mode and the <F4> key to exit from this screen.

Option 3 : Print (er)

From the Parameter MaintenanceMenu, you have the option to send a list of your parameter listings to a print device that will generate a hard copy of the parameter settings for diagnostic or record keeping purposes. Selecting Option 3 from the Parameter Maintenance Main Menu, you will encounter the following screen:

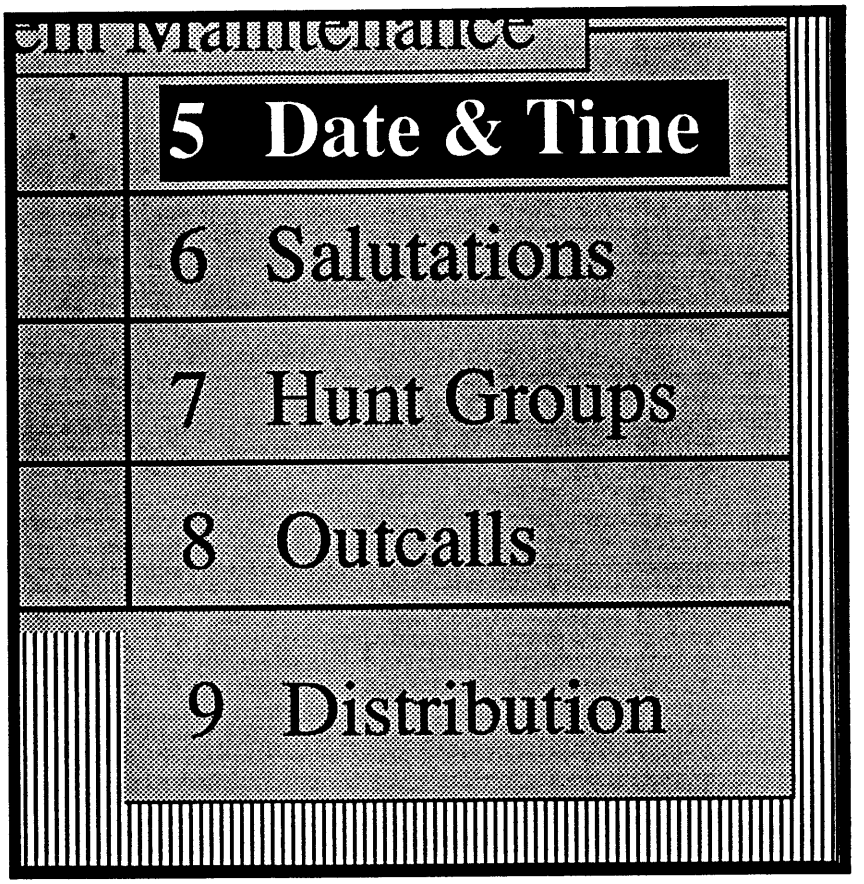


From this screen you are prompted by the cursor to input the name of the Technician entering in this information. This is simply done to identify the person initiating the print out for future reference. After entering your name, you will be prompted to identify the site in which you are generating this report from. Again, this information is used only for future reference.

After entering the System & Site location, the parameter list file will be sent to the print device for copying.

Note: Be sure you have installed a print device to the computer before attempting this option. Your printer can be connected directly to the Voice System's Sentinnel Protector or Dongle. The Dongle has a connector located on the back for this purpose. The Dongle should always be located attached to your system's Parallel Port.

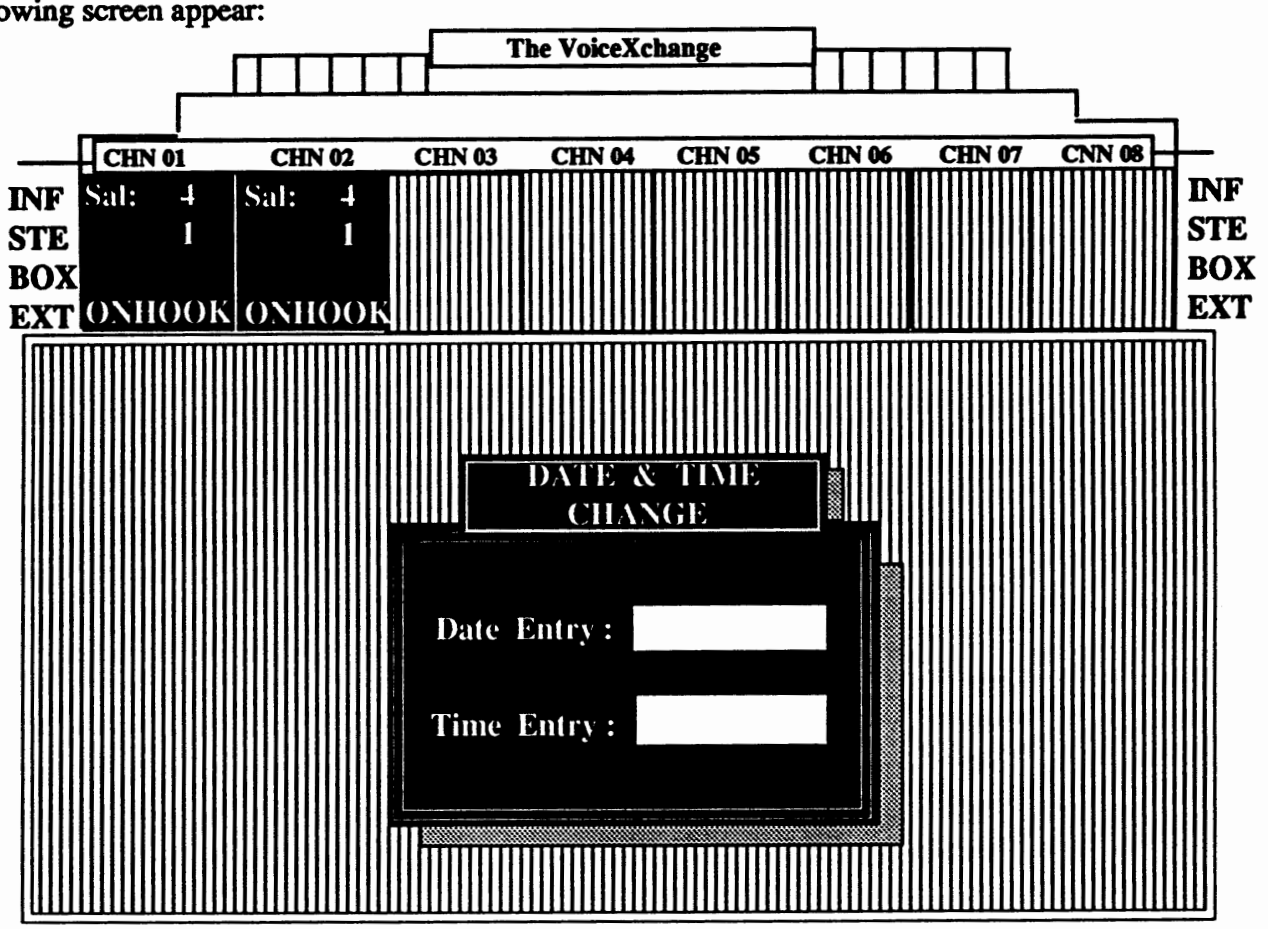
Keyboard Maintenance



Date & Time Maintenance

Many of the maintenance features available through the VoiceXchange system allow the user to make changes to a variety of functions without having to first take the system off-line. This not only saves time for the technician or system adminstrator but also insures that calls are not being interrupted during peak business hours and system performance is not compromised.

The adminstrator has the ability to change the system date and time settings through the System Maintenance Menu. Selecting option 5 from the System Maintenance Menu, you will see the following screen appear:

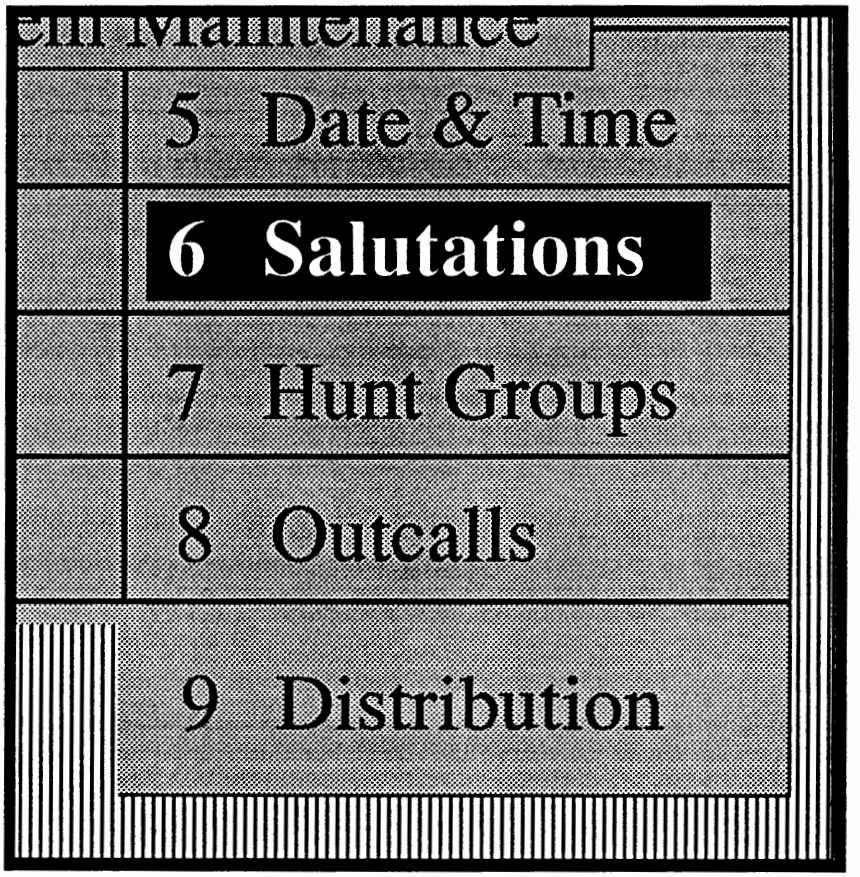


Changing the Date & Time

In the screen above, the cursor will be waiting in the Date Entry field for you to input the new date that you want to add to your system. As you complete changes to your Date Field, the cursor will automatically flow to the Time Entry Data Field. If you do not wish to make changes to your Date Field but only to your Time, you may press the <Enter> key in the Date Entry Field to accept the current settings. This will place you in the Time Entry Field immediately so you can make your changes. The <Enter> key accepts all changes made to these fields.

As with all time entries made in the VoiceXchange system, please use Miltary Time Formats for making time changes.

Keyboard Maintenance



What is a Salutation?

A salutation is a recorded opening greeting that is initially heard by a caller when first dialing into the voice mail system. Salutations are customized through Salutation Recording Maintenance and can be programmed to play by time and date through the telephone keypad as well as through the computer keyboard. Salutations are one of the most important aspects of setting up your voice system in that it represents the first impression the caller receives of your company when calling for the first time.

Salutation Programming Options

Programming By Port

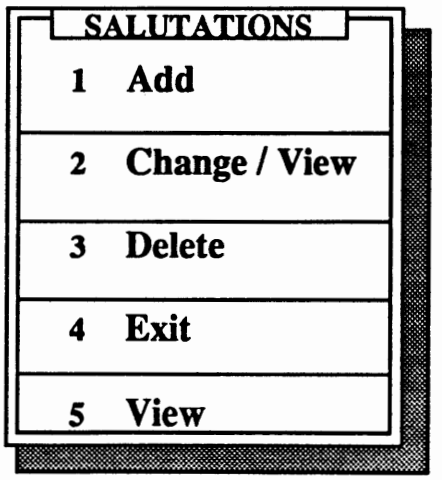
Salutations can be programmed to play throughout the day and night, according to the needs of your application. Programming is also available by **voice port** or **voice channel**. This means that, depending on the way you might have configured lines to ring into voice ports from your PBX or KSU (Direct-In-Line), you may provide voicemail service for a multi-company application all within the same voice mail system.

Programming By Date & Time

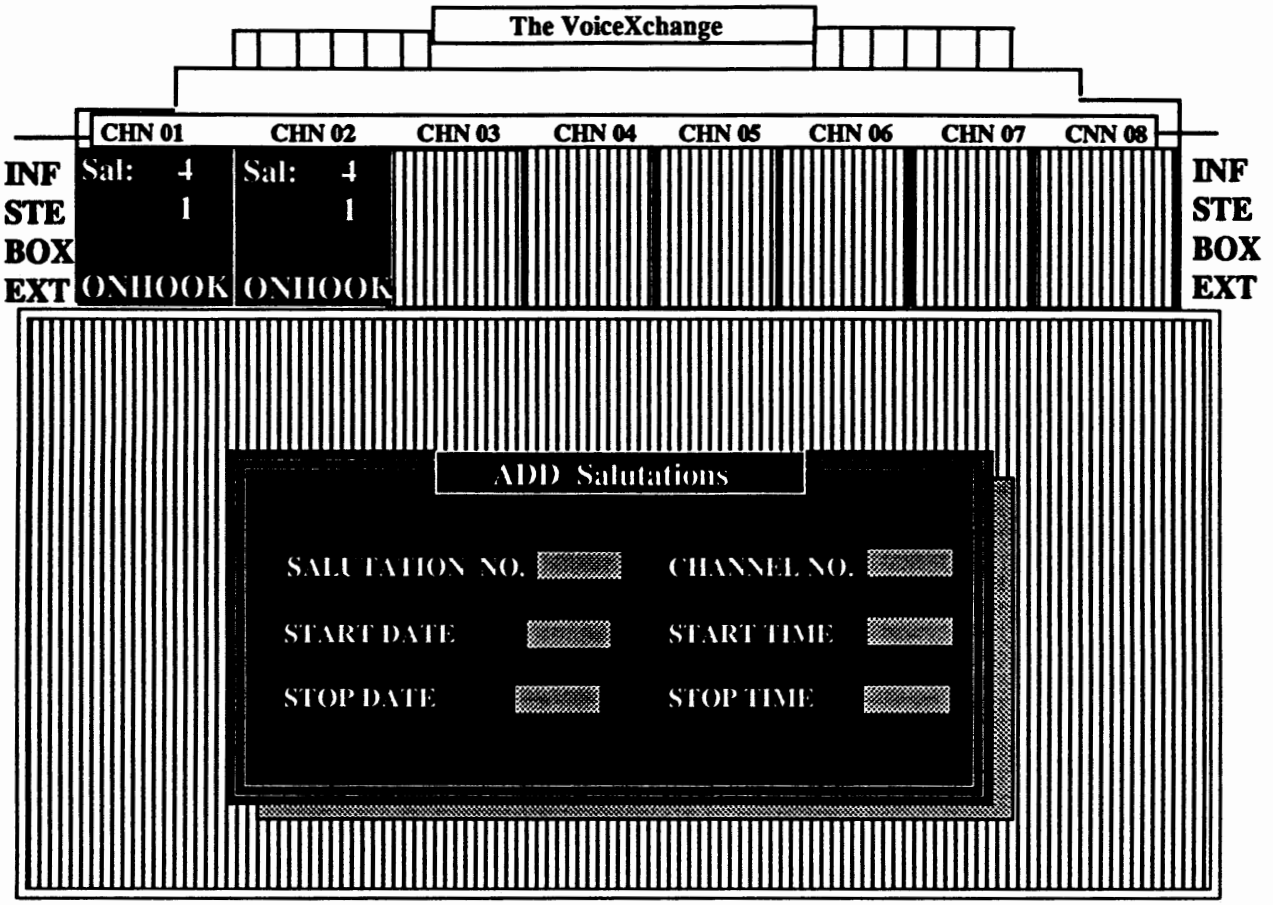
As we will demonstrate further in this document, programming a salutation is typically done by first identifying the salutation that you want to program, specifiy which channel you want to program it in (or you can program for all channels), and indicate the date and time that you want the salutation to begin and end playing.

Adding A Salutation

From the System Maintenance Menu, after you select option 6 for Salutations, you will be given another menu for Salutation Maintenance. From this menu you have the ability to 1.) Add 2.) Change/View 3.) Delete or 5.) Review (View) salutations.



Choose option 1 to ADD a salutation.



After selecting option 1 to ADD a salutation, a screen similar to the one shown above should appear. The ADD screen contains six data entry fields which are described as follows:

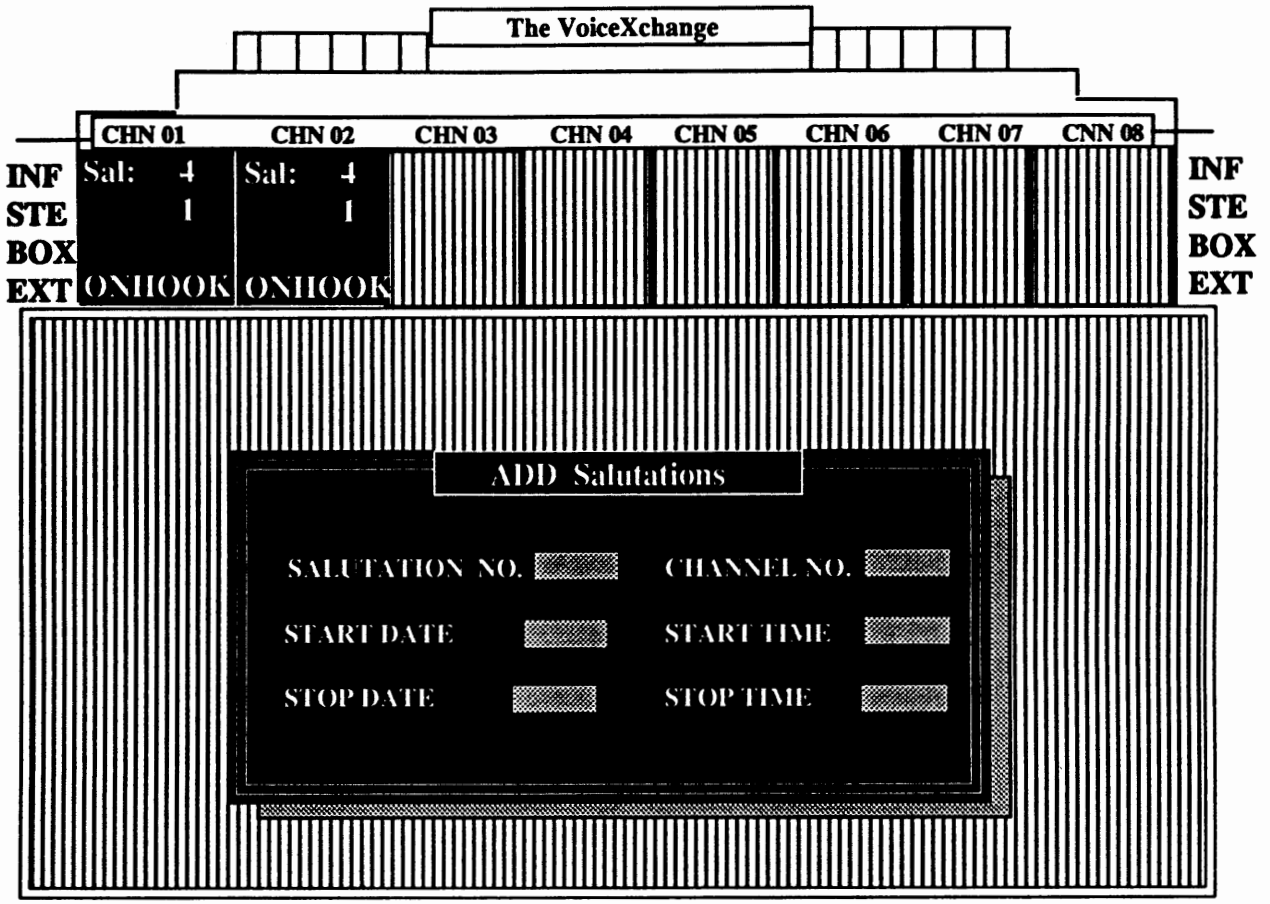
Salutation No.

In this field you would enter the salutation number that is to be programmed to play at a specific time of day, day of the week and/or channel. Salutation numbers are assigned in Salutation Recording Maintenance (see Phone Maintenance, "Salutation Maintenance-Recording Salutations", page 3.28 for instructions on recording salutations) at the time of recording the customized salutation.

Before you enter the salutation number in this field, be sure that the salutation that you have chosen has already been recorded. If the salutation is not recorded, you will be notified by the program that the salutation does not exist.

A Special Note About Salutation 000 "The Default Salutation"

Salutation number "000" is a specialized salutation that is set inside the program to play by **default**. This means that it automatically plays when nothing else is programmed to play. Typically, this salutation is used as a nighttime or after hours salutation on auto-attendant voice mail systems. There are system parameters (parameter 208[Night Operator]) and system messages (message 002) which are directly related to this salutation when it plays. It is important that you understand that salutation 000 is **never to be programmed using the above screen or through Phone Maintenance programming**. You should, instead, program **around** this salutation.



In the example screen above, we have selected salutation 001 as the salutation to program. The spinning cursor will now be located in the data field called Channel No.

Channel No.

This data field is used to input the channel or port that the salutation will be programmed to play on. For example, if you have a four port voice mail system, then you can program a different salutation for each channel (channel 001 - 004) or you can program a salutation to play for all channels (000).

To program a salutation for a specific channel ⇨ **Enter Channel Number [xxx]**

To program a salutation for all channels ⇨ **Enter - 000**

In the example for the screen above, we will select channel number "000" for all channels.

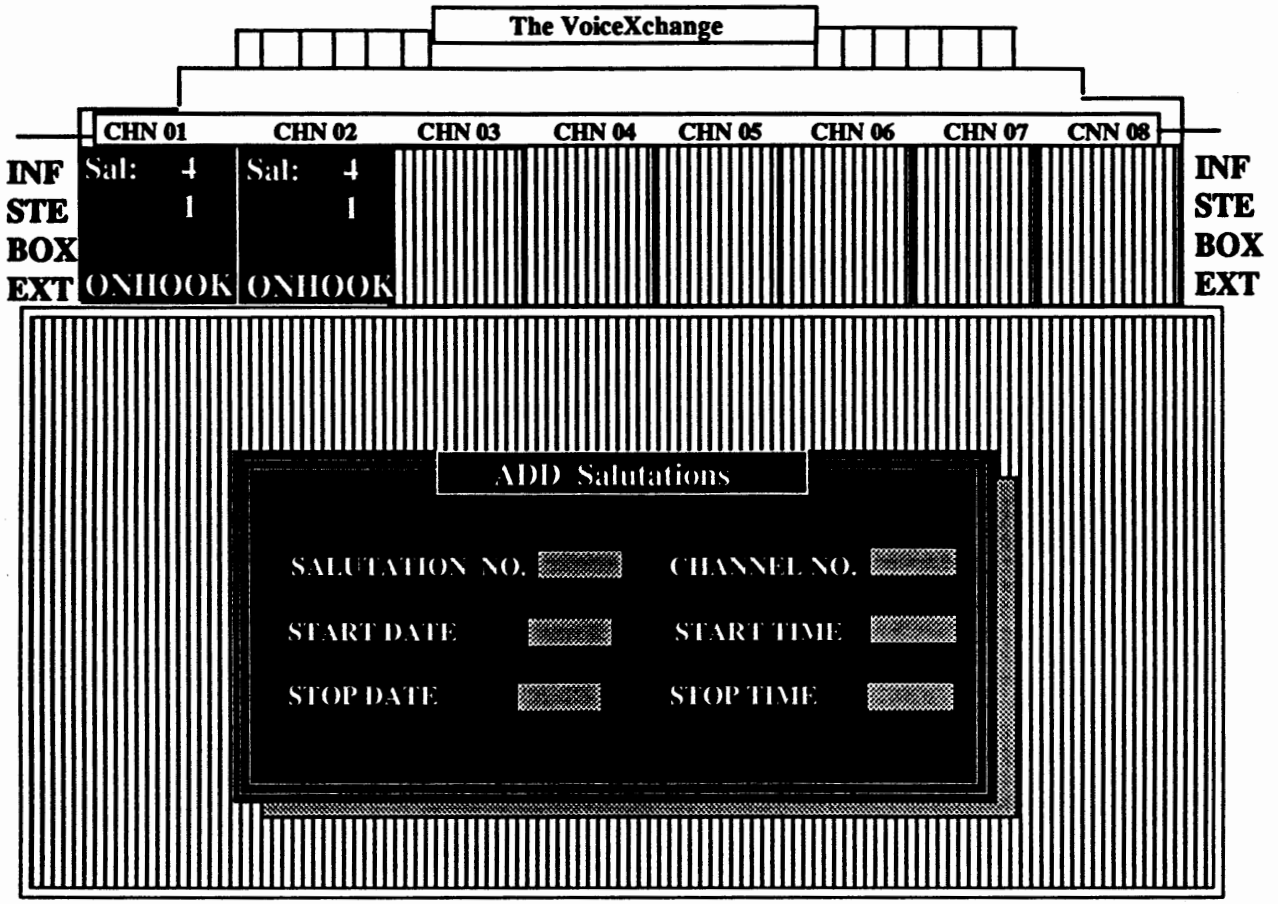
Startdate

This data field is used to input the starting date of when the salutation will begin to play. The format for this entry is MMDD (ex: 0117) for specific day programming or by the following format for year round startday:

Startdate / Stopdate Codes

***100 = Sunday** ***200 = Monday** ***300 = Tuesday** ***400 = Wednesday**

***500 = Thursday** ***600 = Friday** ***700 = Saturday**



In the example above, we have selected "*200" for the Startdate field. This means that the salutation will begin playing every Monday, always.

Startime

This data field is used to input the starting time that you want the salutation to begin playing. You should use the HHMM time format in Military Time. **It is important that you program the start time to be less than the stop time.** For this reason, we have chosen the Military Time Format for inputting time variables in system programming.

For the example above, we will select "0800" for the Startime data field.

Stopdate

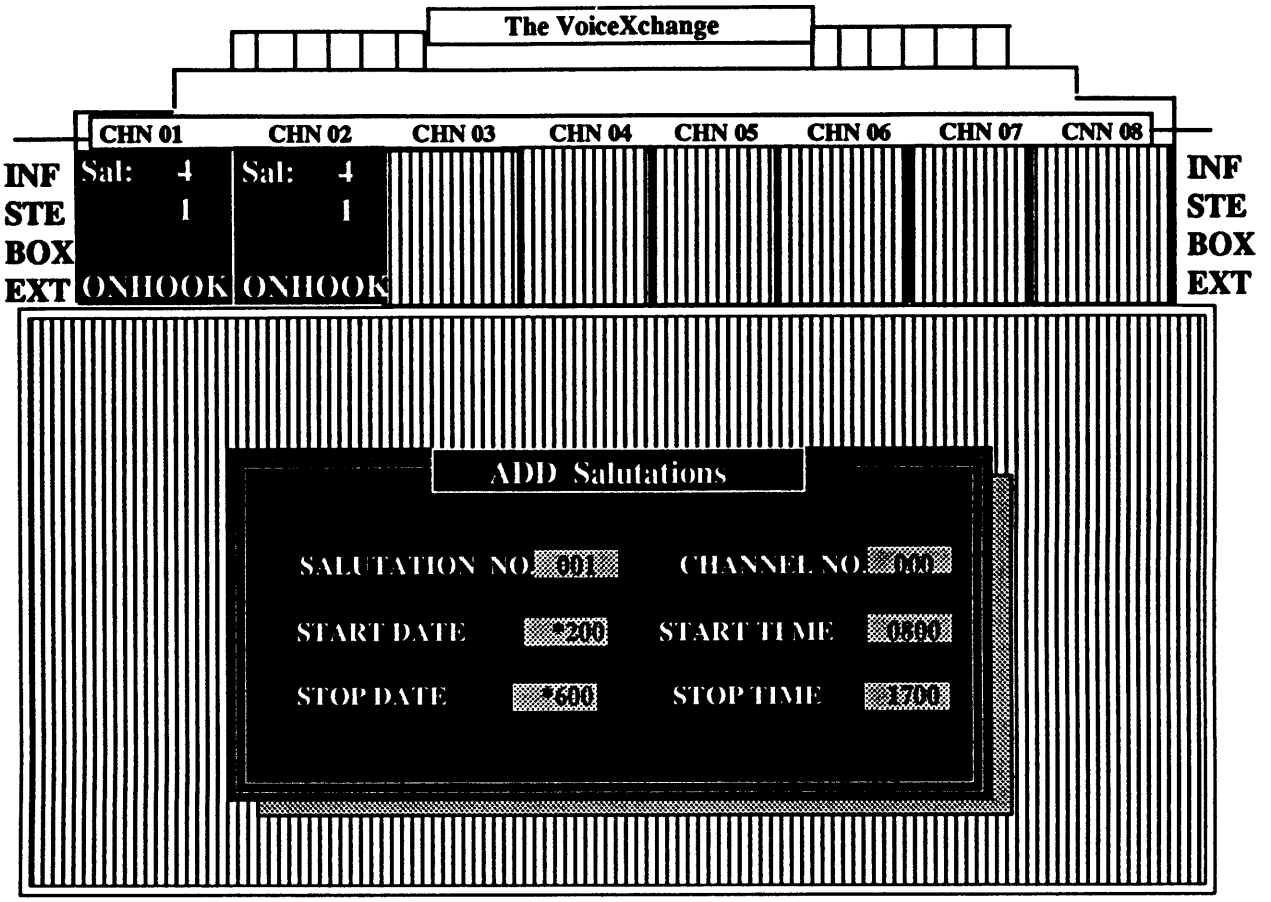
This data field is used to input the date that you want the salutation to stop playing. You may select the specific date as MMDD (0101) or use the Startdate / Stopdate Codes that are shown on the previous page for the Startdate field.

For the example above, we will select "*600" for Friday, always.

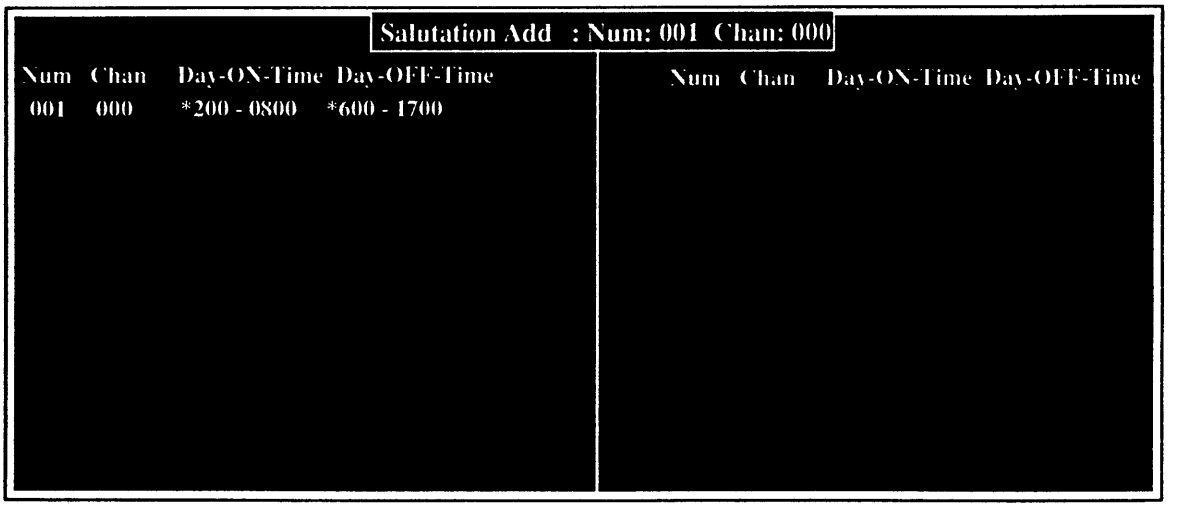
Stoptime

This data field is used to input the time that you want the salutation to stop playing. You should use the HHMM format in Military Time.

For the example above, we will select "1700" for the Stoptime.



In the above example, we have successfully entered programming for salutation 001. According to our programming, salutation 001 will play for all channels, Monday through Friday, from 08:00 am to 17:00 pm (5 o'clock). Afterwhich, the default salutation (Salutation 000) will take over and play until the next day until 0800 hours.



The screen above will appear to confirm your newly added salutation programming. This same screen can also be viewed by selecting option 5 to View from the Salutation Maintenance Menu.

Other Salutation Maintenance Options

In addition to Adding salutations to your systems configuration, you also have the following options from the Salutation Maintenance Menu:

Option 2: Change / View

Selecting this option will allow you to change the current programming on an existing salutation. In older versions of software, this option was used to view the settings of existing salutation programming.

Option 3: Delete

Selecting this option will allow you to delete programming for a particular existing salutation.

Option 5: View

Option 5 allows you to view all programming currently set for your salutations. This screen is exactly the same as the confirmation screen which appears after you first added your salutation programming.

Other System Areas Which Affect Salutations

There are other areas and features of the VoiceXchange program which relate to or directly affect the way in which salutations are configured for your system that you need to be aware of:

Parameter 208 (NightOpr) & Salutation 000 (Default Salutation)

Parameter number 208 is set when a different operator drop extension is desired for after hours callers to connect with. If salutation 000 is set to play after hours, then whatever extension is entered as the value for paramter 208 becomes the night drop extension. When the day time salutation begins to play the next morning, the system then looks for Parameter 147 (DropExt) for the extension to send callers to upon a non-DTMF response. If using salutation 000 and parameter 208 is not set, then callers will be sent to the extension number found in parameter 147.

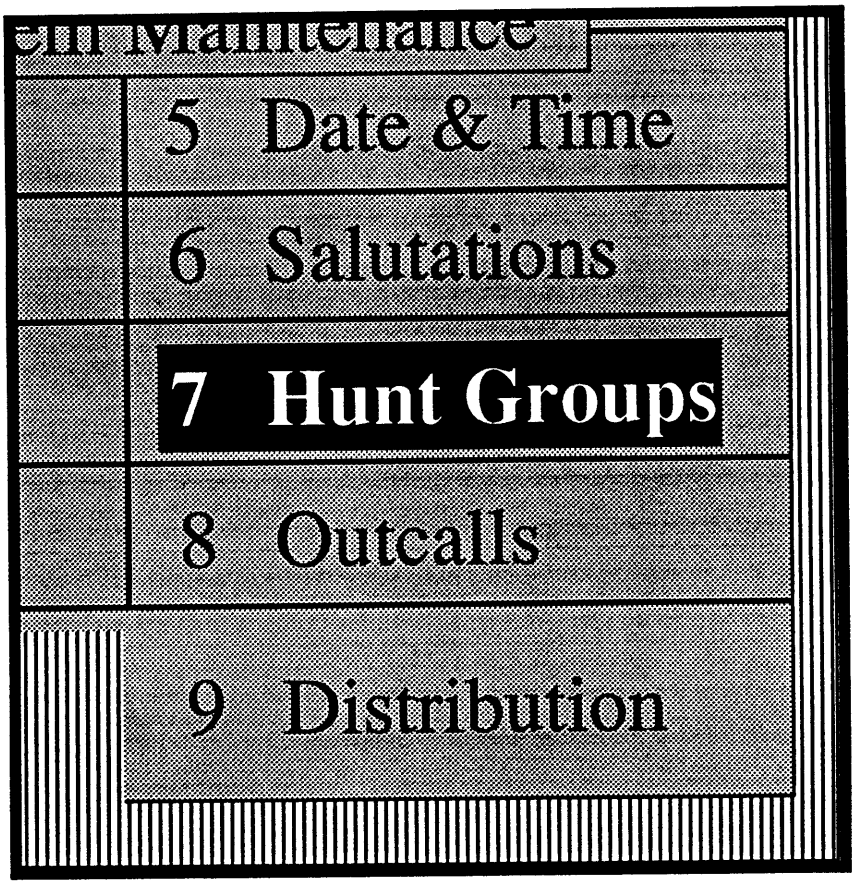
System Message Number 002 & Salutation 000

System Message 003 & 002 are what is known as "What-to-do" messages. Typically, these messages are recorded to provide a caller with additional instructions after completing some task inside of the voice mail system, such as, leaving a message in a subscribers mailbox and, afterwhich, still wanting to select some other option from the system before hanging up. Message 003 & 002 are set up to play recorded (and customized) instructions to the caller at this point. Message 003 & 002 differ in that message 002 is used only when Salutation 000 is playing. Otherwise, the system will always play Message 003 for instructions. Message 002 is provided for when the Night Time salutation is playing and instructions to the caller may need to be different then instructions given during the day time or business hours. These messages are different from your instructions which may be recorded in your salutations. In addition, these messages can be appended to your salutations, if desired, through parameter settings (see parameter 189 [Play003]).

Recording Salutations 900 - 999

Salutation recording using the numbers 900 through 999 allow for a specialized type of salutation that can be recorded for holiday greetings which can be programmed to play at night and still use the Night Time Drop Operator extension (Parameter 208). As you might recall from the previous page, Salutation 000 controled the function of the Night Drop Operator parameter. In this way, users can still use their default salutation and program additional salutations which still function for their after hours applications.

Keyboard Maintenance

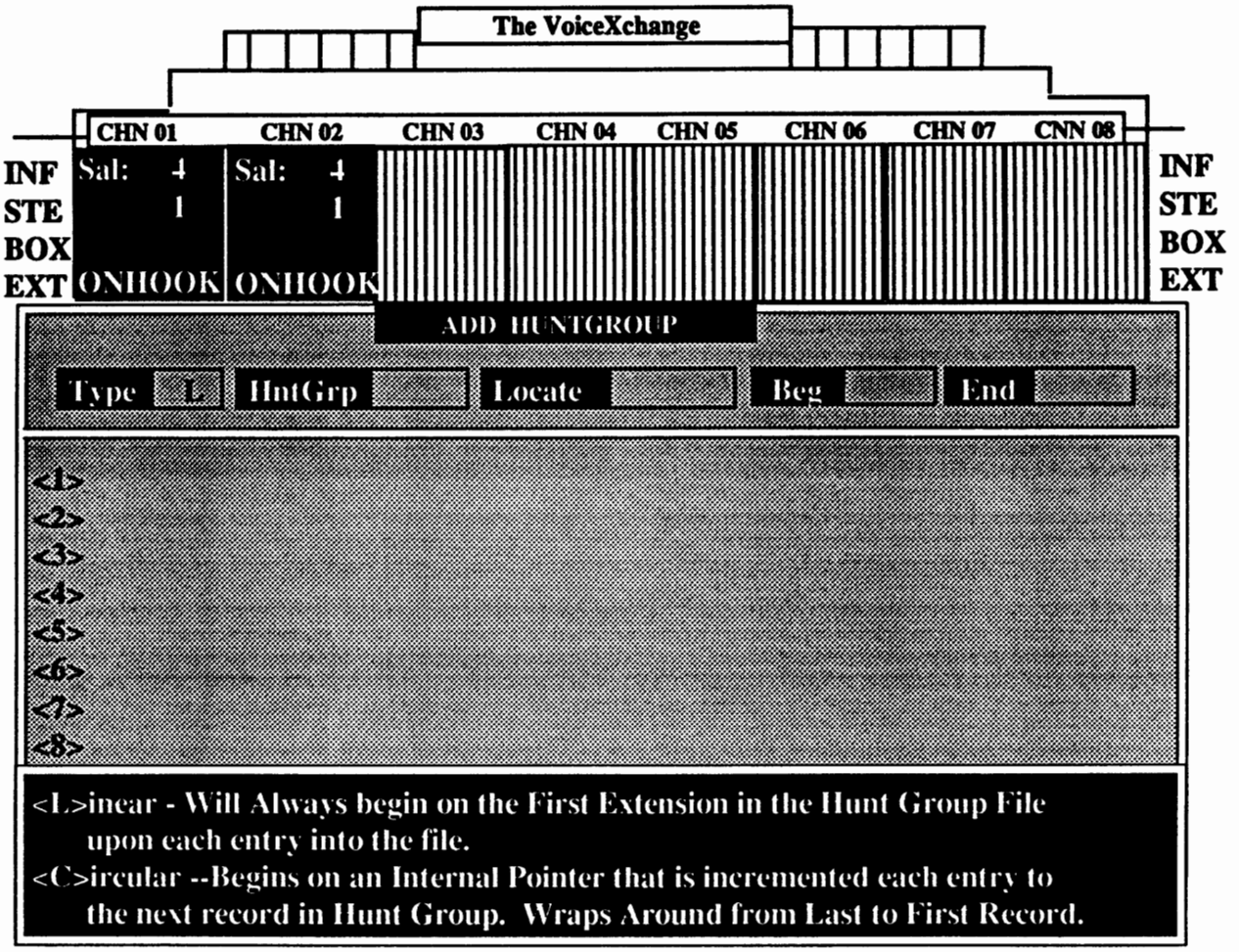


What is a Voice Hunt Group?

A Hunt Group is a list of extension numbers that are grouped together in such a way that when a single extension from that list is accessed, it will activate a search throughout the list. Normally, hunt groups are assigned through the phone system (PBX or KSU), however, the VoiceXchange system has the ability to program it's own hunt groups within the auto-attendant.

A **voice hunt group** is entirely restricted to the domain of the voice mail / auto-attendant system. Voice hunt group numbers will not function independantly from the voice mail/auto-attendant system. PBX or KSU system hunt groups are not related to voice mail groups.

Creating Voice Hunt Groups from the Keyboard



Entering option 7 from the System Maintenance Menu will allow you access to the Hunt Group Menu. From this menu, you have the options to : 1.) Add Records 2.) Delete Records 3.) View Files and 5.) Swap Type(s). For the examples to follow, we will demonstrate **adding** a voice hunt group record.

In Adding a record, you will be shown a screen similar to the one above. The top portion of the screen contains the data entry fields. The middle portion of the screen will contain the actual records (or extensions) that you will be adding. The lower portion is reserved for help information as you move through the data fields.

Hunt Group Type

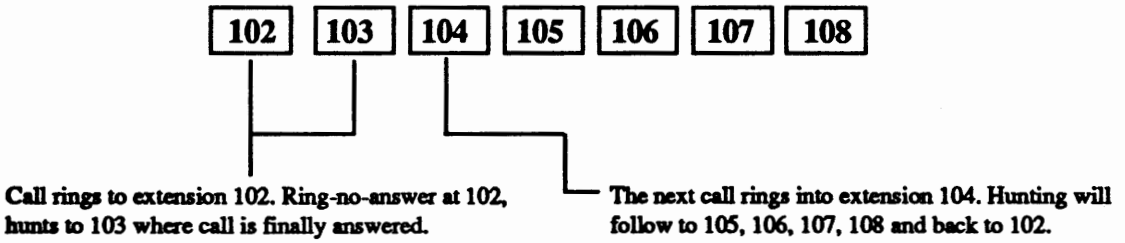
The first data entry field will prompt you to input the "type" of hunt group that you want to create. At the bottom of the screen, you are given a description of the hunt group types available.

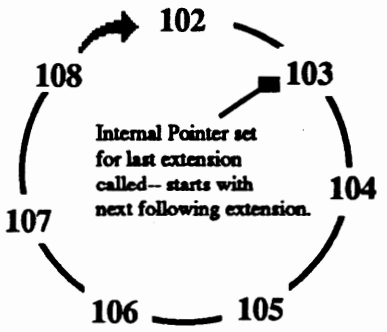
Linear Hunt Group -- Will always begin on the first extension in the hunt group file upon each entry

Linear hunt groups work in a single succesion until the end of the file is reached. The hunting begins with the first record in the group and hunts to the ending record.

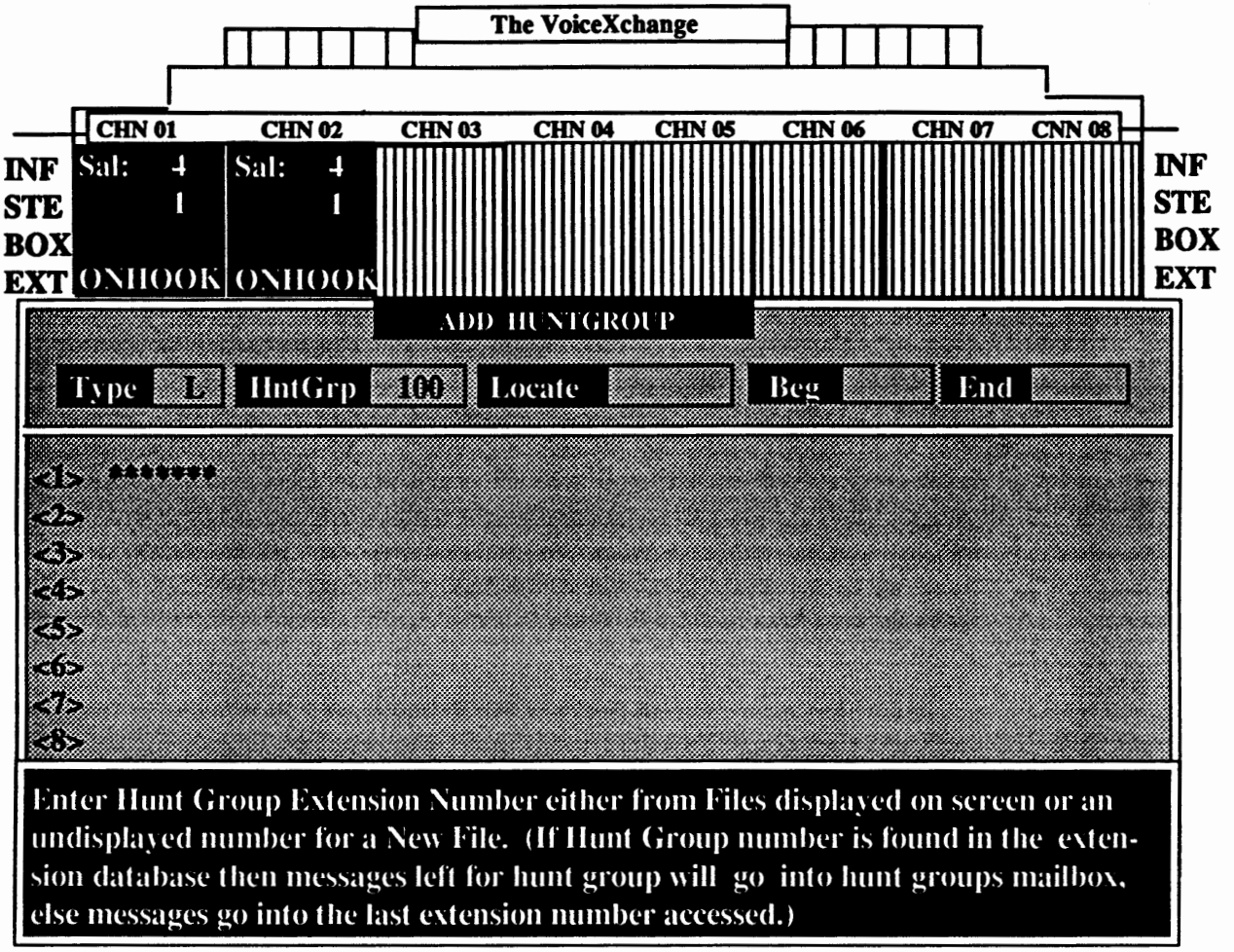
Circular Hunt Group -- Begins hunting on an internal pointer that is incremented each entry to the next record in the hunt group. Wraps around from last record to first record.

Circular hunting is provided for under the following example:





Typically, when entering new voice hunt groups, it is not uncommon to select " L " for Linear hunting. This type of hunt group is normal for most voice mail / auto-attendant applications.



After entering the hunt group type, you will be prompted to enter the hunt group number. This number is related to the overall hunt group in two ways.

The hunt group files that are created are stored in a sudirectory on the \VEX called \HNT. The files created have the following file format:

<number>.HNT

Where the **number** is usually a valid extension number (a number contained in the extension database) or an arbitrary number selected only to identify the hunt group. If the number you choose is a valid extension number in the database and if that number is contained in the hunt group record as a member, then on a ring-no-answer / busy throughout the hunt group, messages will be left in the extensions mailbox which is contained in the hunt group name.

See an example on the following page.

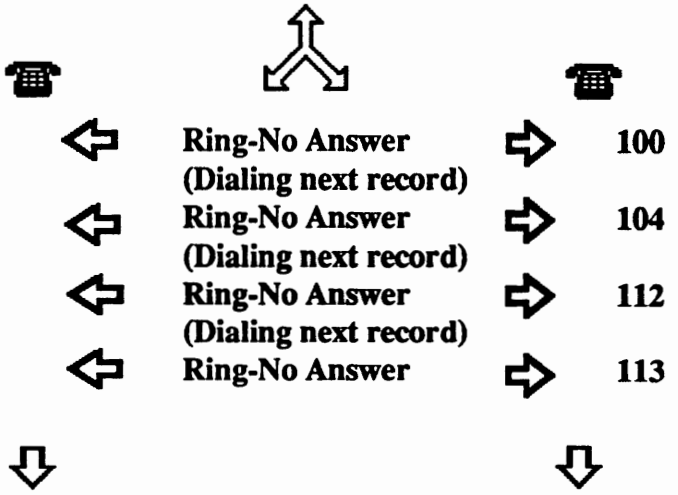
EXAMPLE: Hunt Group Number 100 (100.HNT)

Hunt Group 100 is NOT an extension	Hunt Group 100 IS an extension
102	100
103	104
104	112
105	113

In the example above, a hunt group file was created using "100" as the hunt group number. In the two examples shown, one file does not include "100" as a record or member of the hunt group and the other file named "100" does include "100" as a valid member or record (an arbitrary number).

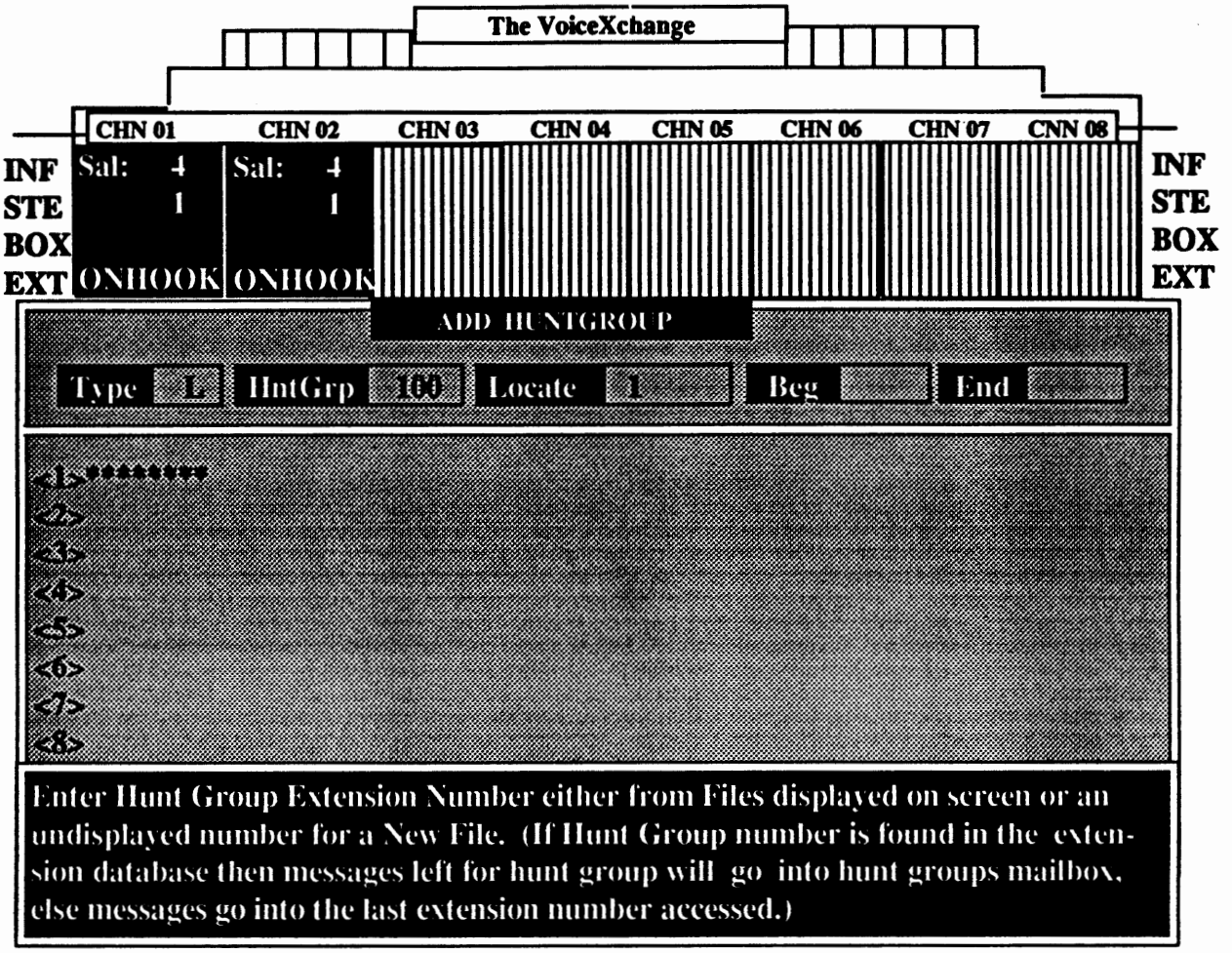
In the following dialing scheme, a call is directed to the hunt group number "100". In the examples listed above, you will note how the hunting differs through the records or members.

Call Directed to Hunt Group Number 100



Caller is placed in mailbox of last record in the hunt group.

Caller is placed in extension 100 mailbox (or the mailbox of the hunt group number).



Locate Field

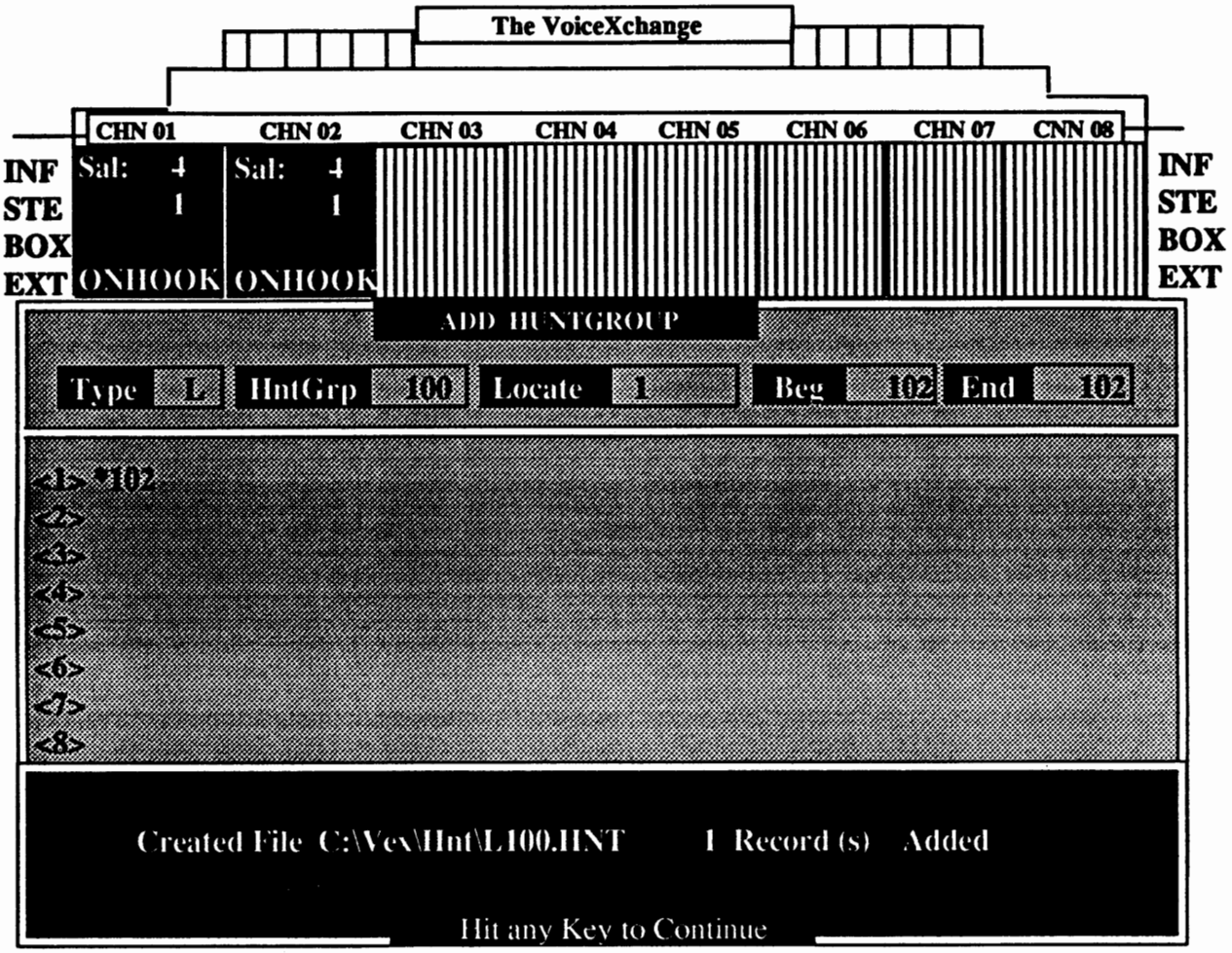
The Locate Field is used to indicate the number of the record that is to added to the hunt group file. Normally, when you initally create a hunt group, the locate field will be defaulted to a "1" which simply indicates that you are going t add the first record in the hunt group. When changing or deleting records in a hunt group, you may opt to change the number in this field to isolate or change a particular member or record.

Beg Field & End Field

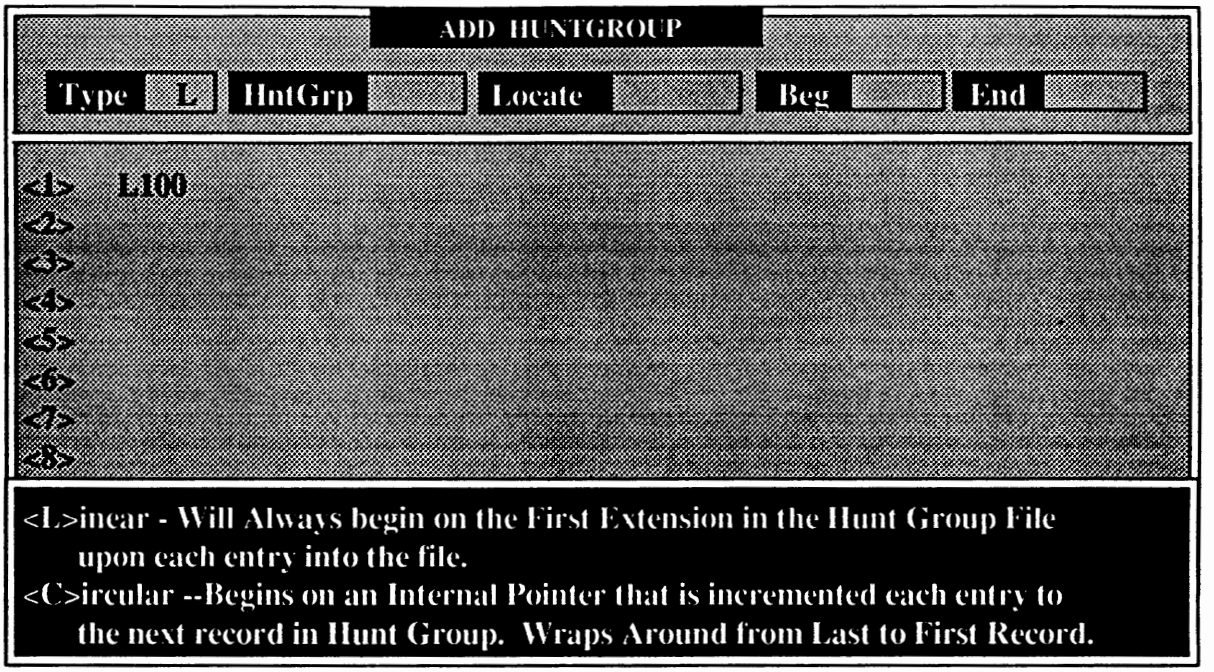
After the Locate Field the cursor will be blinking in the Beg Field. The Beg Field is short for the "Beginning" record and immediately after this is the End Field, or the "Ending" record. At the Beg Field, you will input the first (see Locate Field) record or extension number that you want to add to your hunt group file.

After entering through the Beg Field the cursor will move to the End Field. If you are entering in **more than one extension** and those extensions are in **sequential order**, then you may put the last record or extension in your hunt group in the End Field. This will create a **Batch of new records in sequential order**. If you are **not** putting in a range of sequential extensions or records, then enter the same number that you entered in the Beg Field for the End Field.

For the example, we will input extension 102 for the Beg Field and the End Field. Extension 102 will then become our first hunt group record.



After entering through the End Field you should see a screen similar to one shown above. The newly added extension record is added to the hunt group and appears in the middle of the screen next to the number "1" in the column. Below in the message field, the system confirms this change by indicating the name of the new hunt group file which was created and the directory in which it was created in and the number of records that it contains. To continue adding records, repeat the process of adding records previously demonstrated.



Returning to the ADD option in the Hunt Group Maintnenance Menu will give you access back to the initial hunt group screen shown earlier in this document. On the screen above, you will note that the hunt group number will be listed in the middle of the screen. Choose the hunt group that you wish to continue working in or, if you had more than one hunt group, you may select any one of those by inputting the hunt group number in the **Hunt Group** Data Field.

Deleting Hunt Group Records

To delete a hunt group or records in a hunt group, select option 2 from the Hunt Group main menu. A screen similar to the one above will appear only the top heading of the screen will read:

Delete A Hunt Group

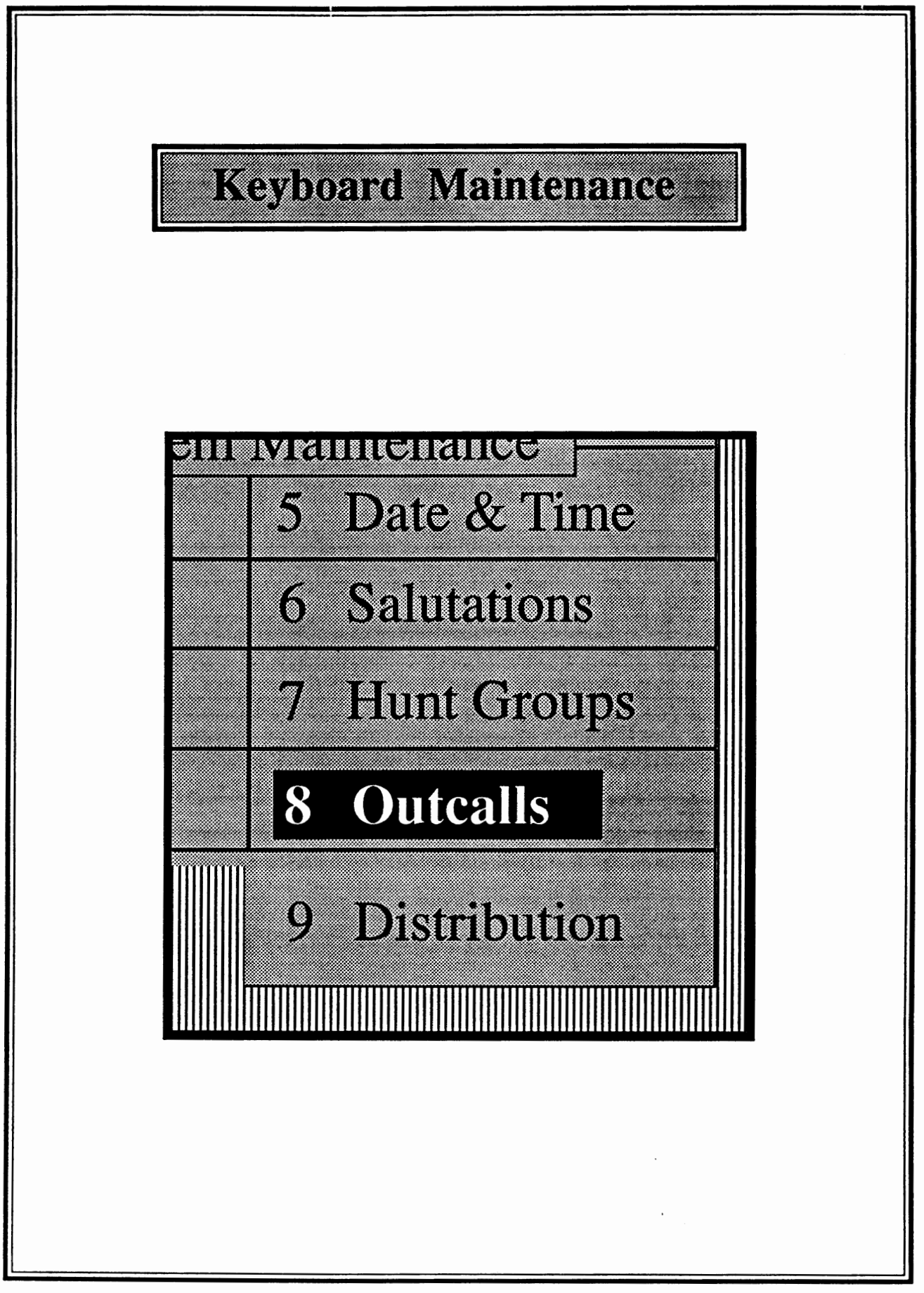
Choose the hunt group that you wish to remove or remove records from. After choosing the group, the records of that group will be displayed in the same way that they were displayed when you created them. In your **Locate** Data Field, indicate by column number, which record you wish to delete. Deletions will occur after confirmation of the record number is made. The records of the hunt group will be adjusted when you confirm your deletion entries.

Viewing a Hunt Group File

To view a hunt group file without affecting changes to the records of that file, select option 3 form the Hunt Group Maintenance Menu.

Swaping Hunt Group Types

To swap the hunt group type or change the designation of the hunt group type from Circular to Linear (or vice-versa), select option 5 from the Hunt Group Maintenance Menu. Choose the hunt group that you wish to make your changes to and modify the **Type** Data Field.


Keyboard Maintenance
5 Date & Time
6 Salutations
7 Hunt Groups
8 Outcalls
9 Distribution

What are Offsite/Outcall Notifications?

Offsite/Outcall notifications are defined as any attempt by the voice mail system to ring another station, outside phone line or pager service for the purpose of notifying the user of a pending new message left in their mailbox. The VoiceXchange system has the ability to set up to six different outcall notifications per user mailbox. These outcalls are assigned by means of a Touch Tone phone or through the computer keyboared.

Overview: Phone Input

Outcall Maintenance By Phone

Each subscriber has the ability to set outcall notifications from their own mailboxes by accessing their mailbox menu and choosing option five for "Outcall Maintenance." After selecting option five, then press :

[1] - **To review - notification entries**

[2] - **To Proceed**

- [1] - **Add** an outcall entry - (Follow voice prompts)
- [2] - To **change** your outcall entry - (Follow voice prompts)
- [3] - To **delete** - enter outcall entry number to be deleted.

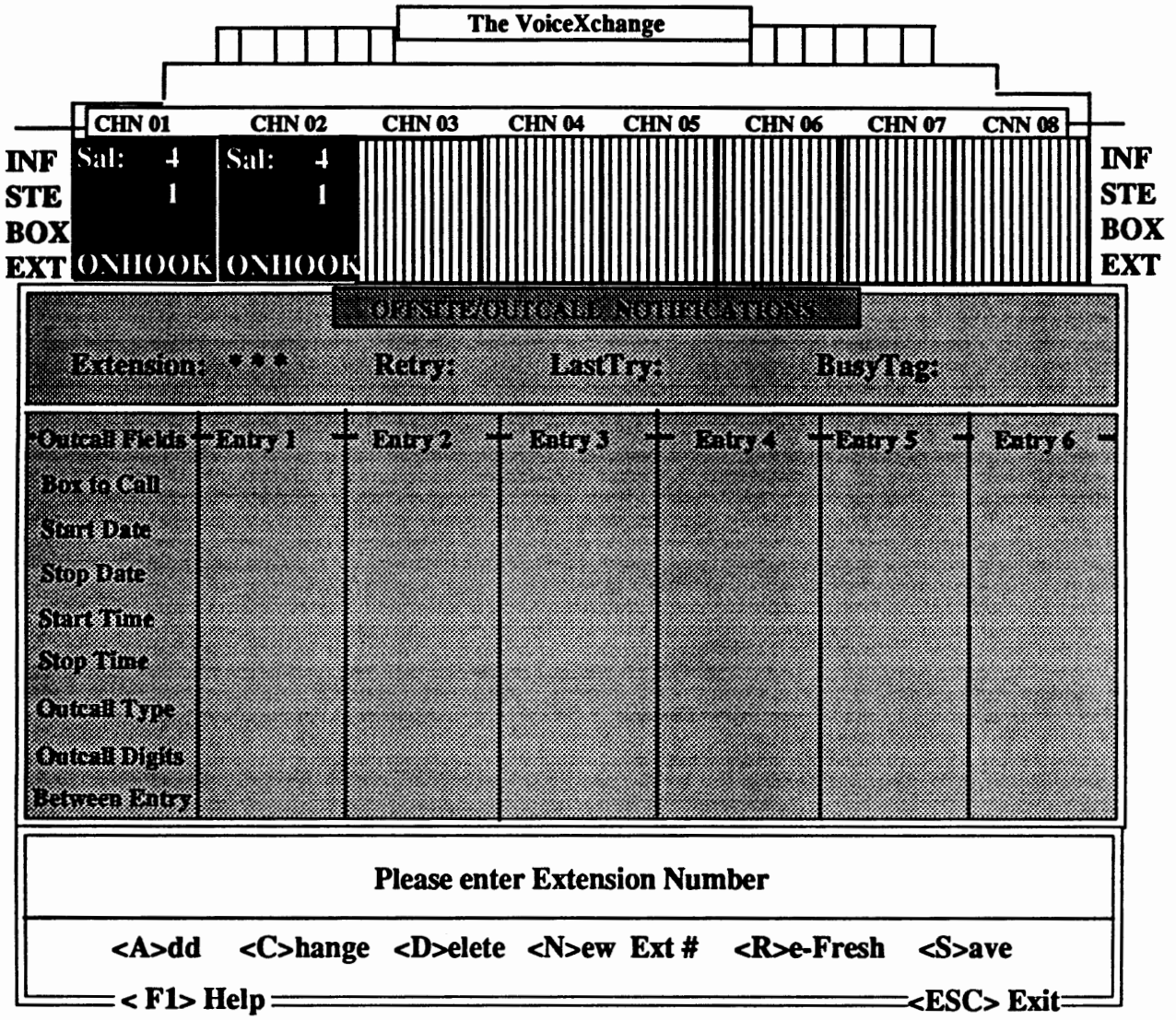
Default Settings & Recording Voice Notification Prompts for Outcall's

A user can program up to six notification entries per mailbox by time of day or the default setting of twenty fours hours a day. To use the default setting, simply enter the " # " sign when prompted for start time, start date, stop time and stop date. A user also has the option to define the outcall as a Voice or Beeper notification. If "Voice" is selected, the user has the option to record a personal notification prompt, or if no prompt is recorded, the default prompt will play to the answering party, "You have a message. Please enter your extension number." If a "Beeper" notification is chosen, the user will be prompted to enter the number to be sent to the beeper service when notifying.

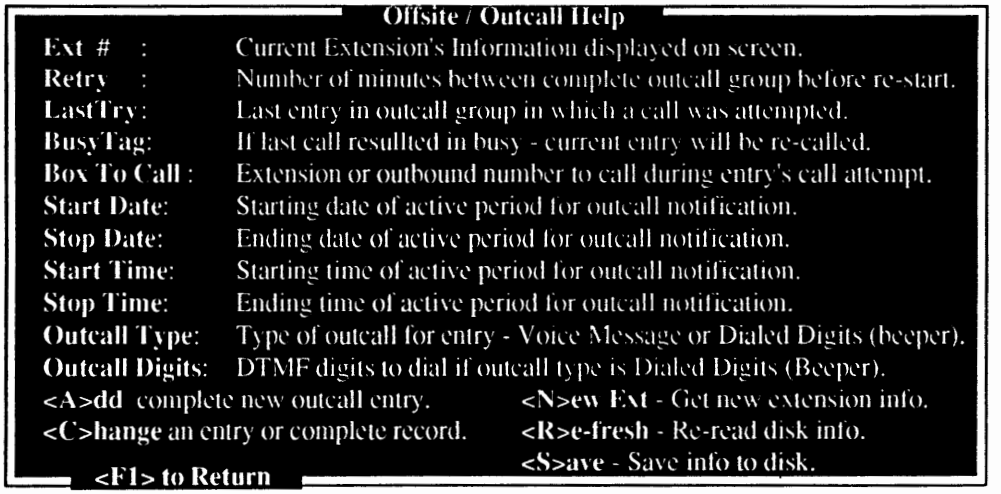
Notification Retrys

The user also has the option to enter the number of minutes between outcall notifications. The VoiceXchange system will retry the notification in intervals of this input until such time as the user has heard at least **one new** message. If multiple outcall's are programmed by the user for the same time period, then the system will attempt each notification entry in the active group in intervals of the retry specified until all current entries have been tried or until the user has heard a new message. If all entries have been attempted and the user has not listened to a new message, the the system will initiate all current entries to attempt notification again when the retry input has expired for the last entry.

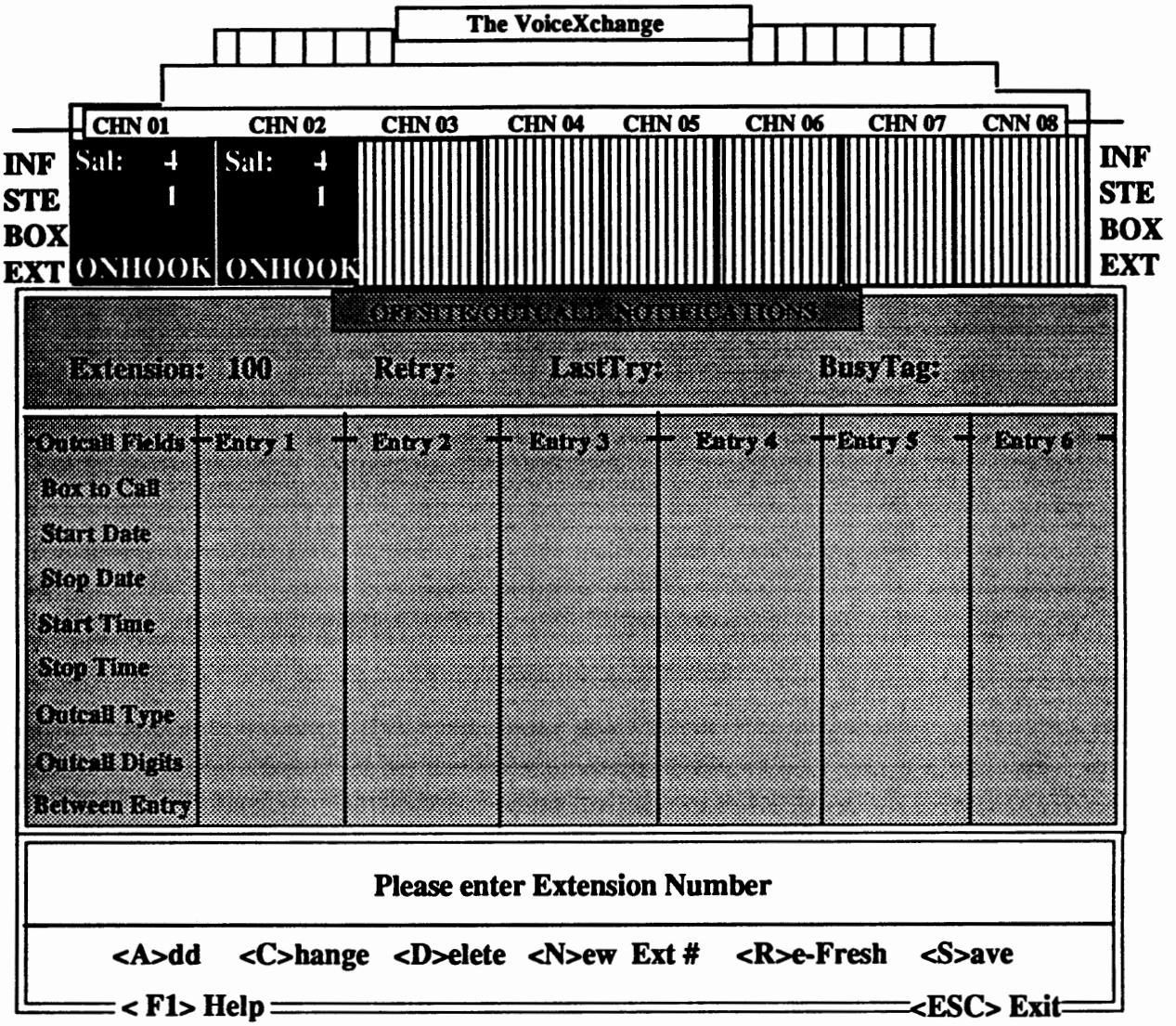
Offsite/Outcall Notification Maintenance By Keyboard



Selecting option 8 from the System Maintenance Menu, the above screen will appear. Press <F1> to view screen attributes (as shown below).

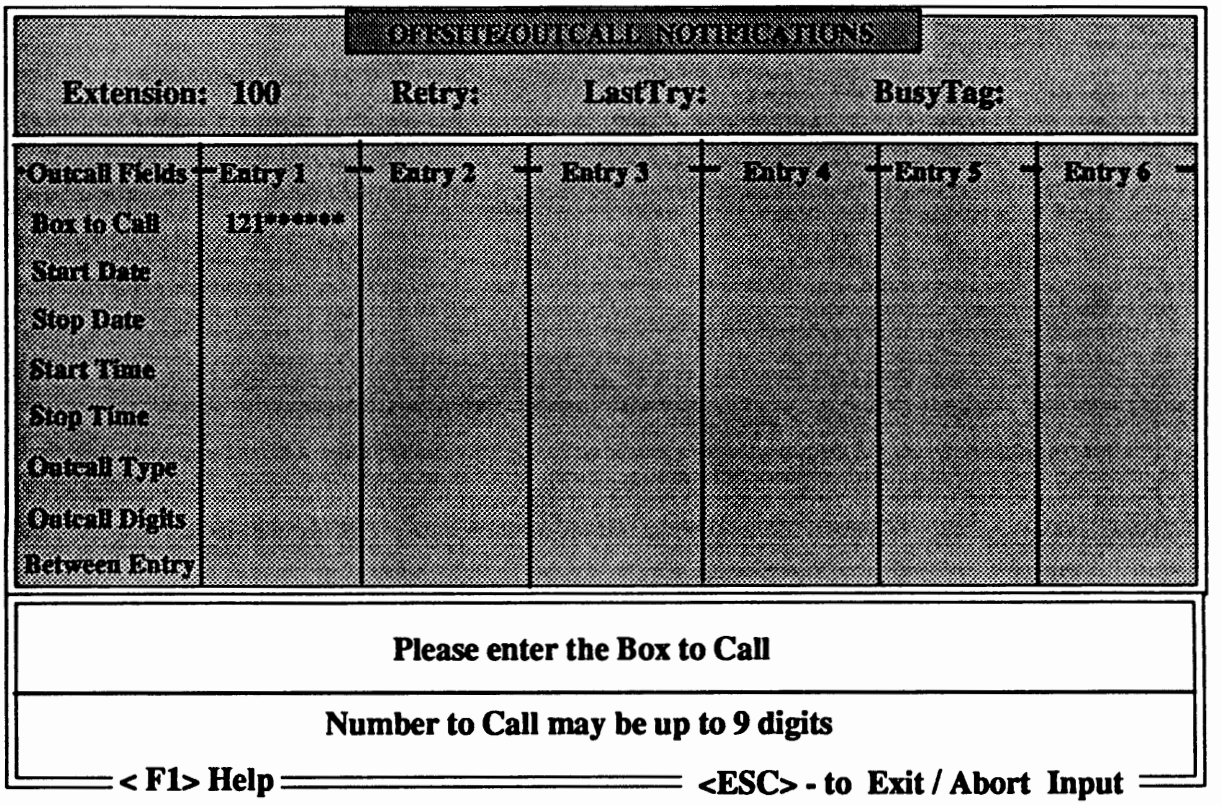


Adding An Offsite/Outcall Notification

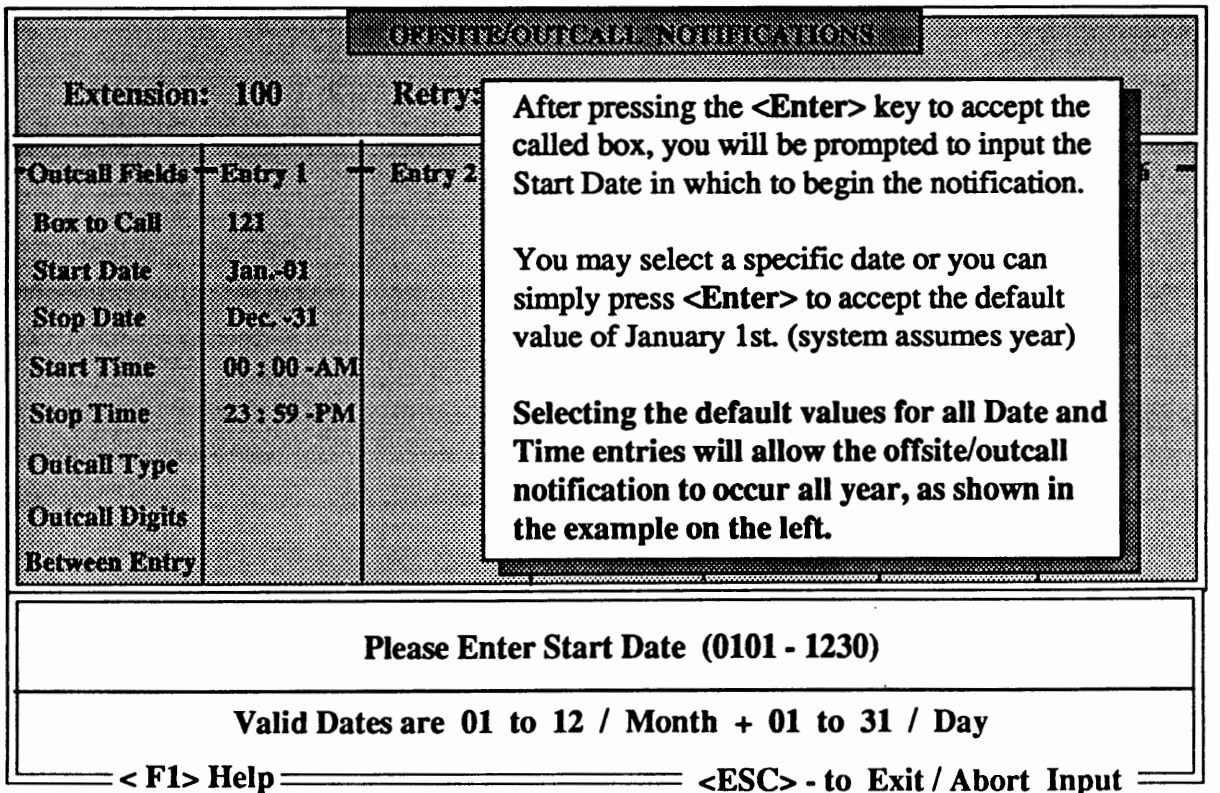


From the above screen, you have the ability to enter offsite/outcall notifications for any valid extension or mailbox contained within the voice system database. In the example showing, we have selected extension number 100 to build the first offsite/outcall notification entry. After entering the extension number, the program searches for existing entries in the offsite record file for the extension that you chose. The OFFSITE.DAT file is the record file that contains all information concerning offsite/outcall notifications for all extensions or mailboxes in your database. If the program reports no current entries for the extension which you selected, you will be prompted by the following message.

No Records found in Offsite file for 100

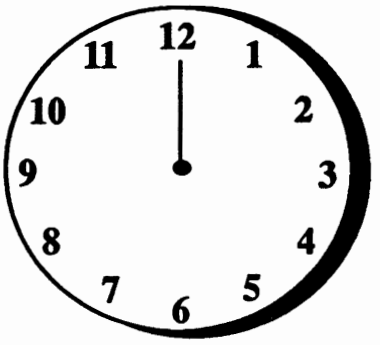


Pressing an "A" to Add an entry, you will then be prompted to "Please enter the Box to Call." You may select any valid extension number or offsite telephone number that does not exceed 9 digits. In the example shown, extension 121 was chosen as the box to outcall when a new message is left in extension 100's mailbox. Press <CR> or <Enter> to accept all entries. <ESC> to exit or abort entry.

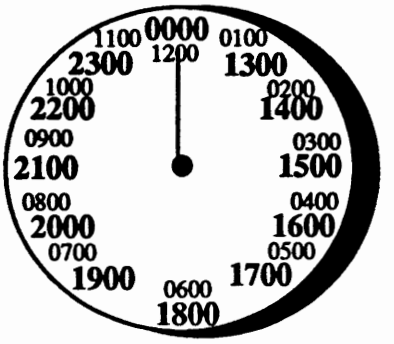


A Brief Note About Time Entries

When adding entries concerning Time Specifications, other than defaulted values, it is important to note that all entries must be made in military time format. Military Time is entered by starting at 00:00 hours (12 O'Clock AM or Midnight) and ending with 23:59 hours (11:59 PM). Time periods in betwwen are entered from a 24 hour count.



Normal Time Designation



Military Time Designation

Time designations are made when marking normal time compared to military time in the following manner. Starting at 12:00 AM(**Midnight**) and counting off the hours, both clocks make similar references to the passage of time:

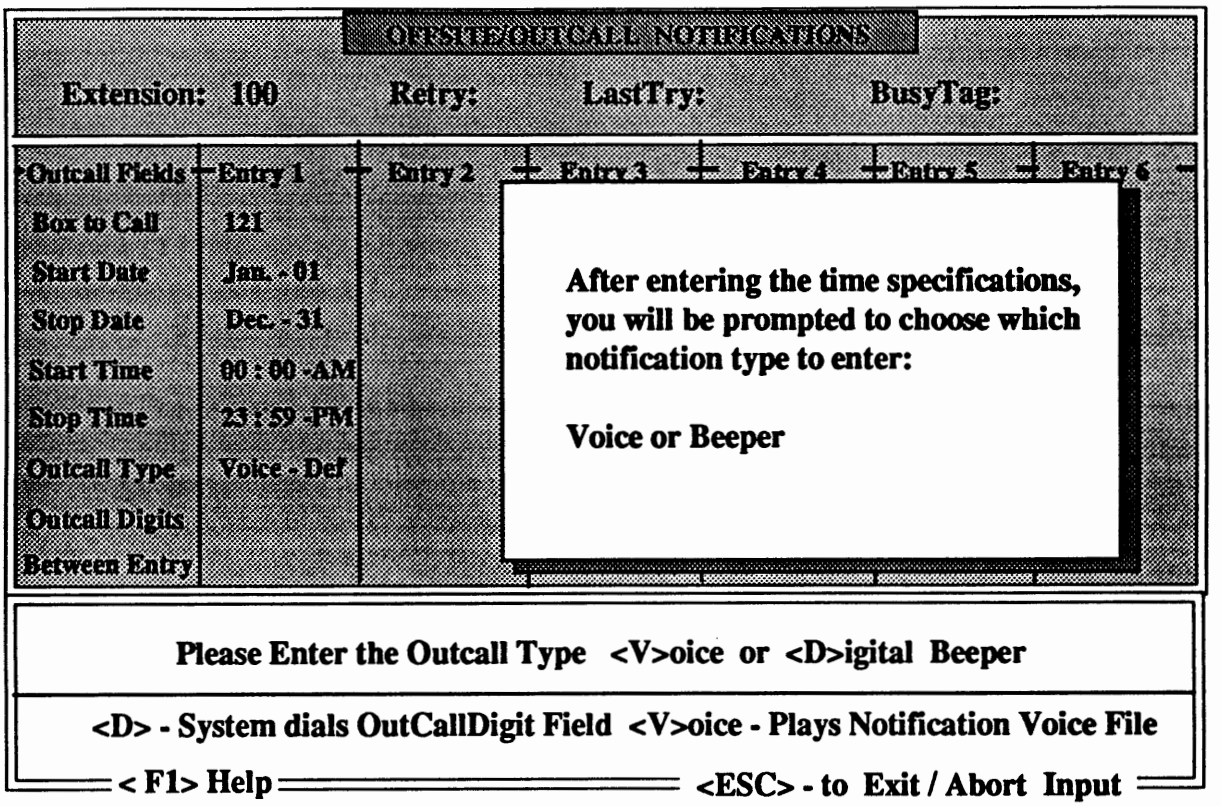
1:00 (AM)	**01:00 (AM)**
2:00 (AM)	**02:00 (AM)**
Normal Time Designation	**Military Time Designation**

After 12:00 PM (**Noon** or Past Meridian), the hours are denoted in the following manner:

1:00 (PM)	**13:00 (PM)**
2:00 (PM)	**14:00 (PM)**
Normal Time Designation	**Military Time Designation**

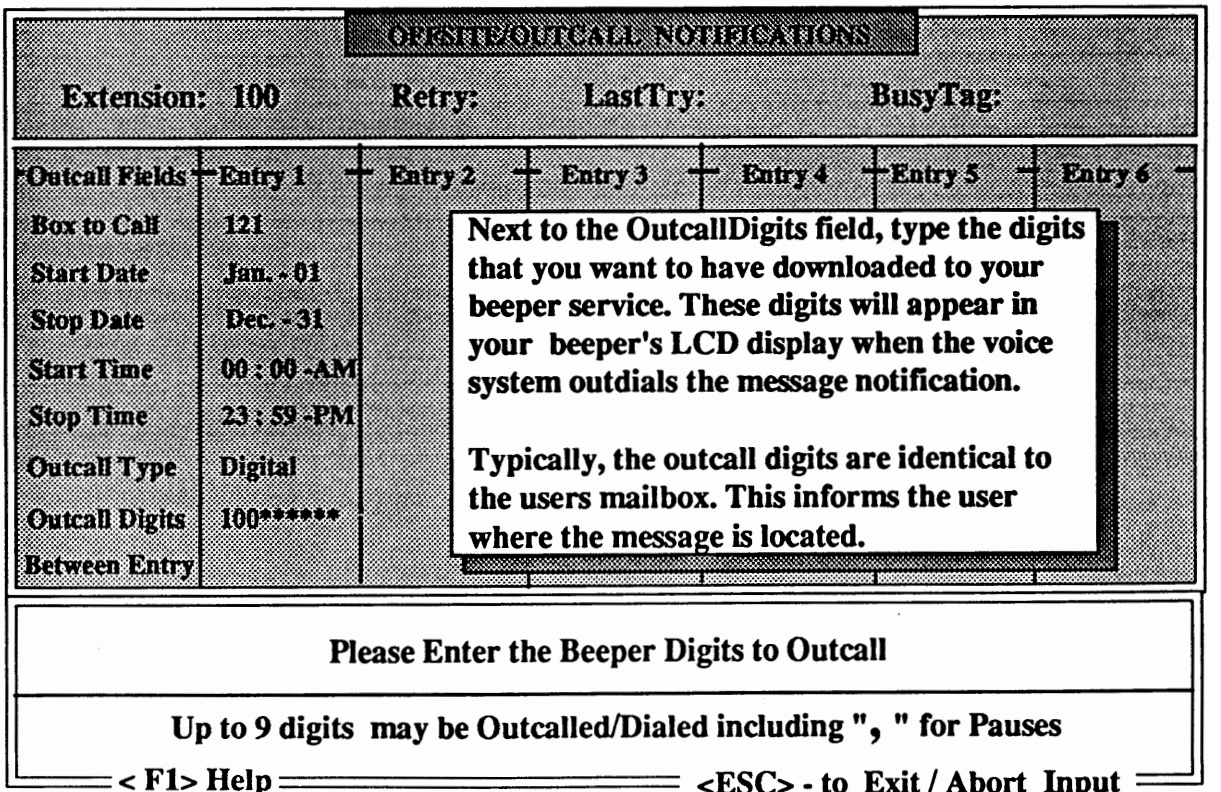
Time Entries & the VoiceXchange

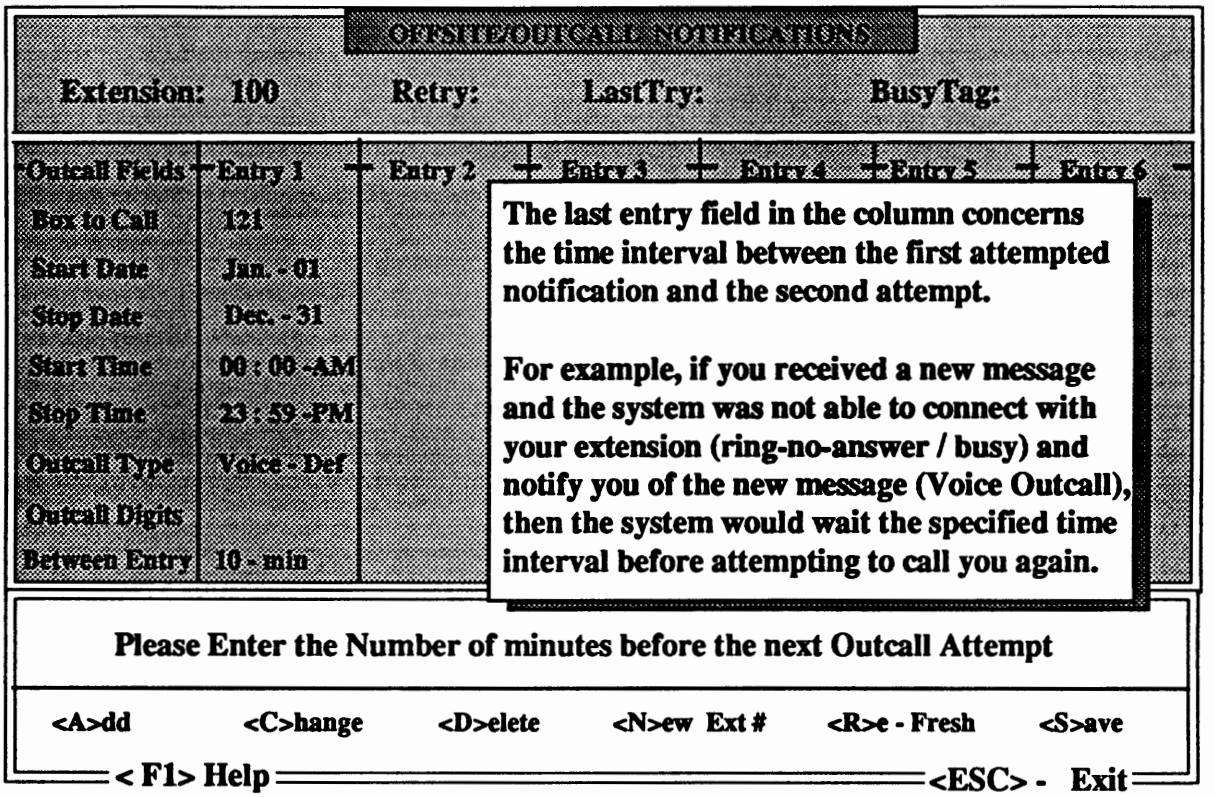
The VoiceXchange system uses military time designations in all programming functions involving time entries. It is important to note that programming errors can occur if Start Times are greater than Stop Times.



In the example above, we have selected "V" for Voice Notification. When new messages are left in extension 100, then the voice system will outcall to extension 121. When 121 is answered, the voice system will play the message "You have a message. Please enter your extension number."

Below, the example shown is for selection of Outcall Type "D" for Beeper.



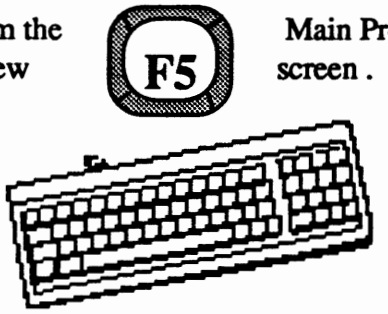


After you have completed the last entry in the column, the " S " on the "SAVE" function of the menu bar will be flashing. If all of the above information is correct, you may choose the " S " to save all of this data to a file record. You may elect to add up to six outcall entries per mailbox (as denoted by the six columns on the screen).

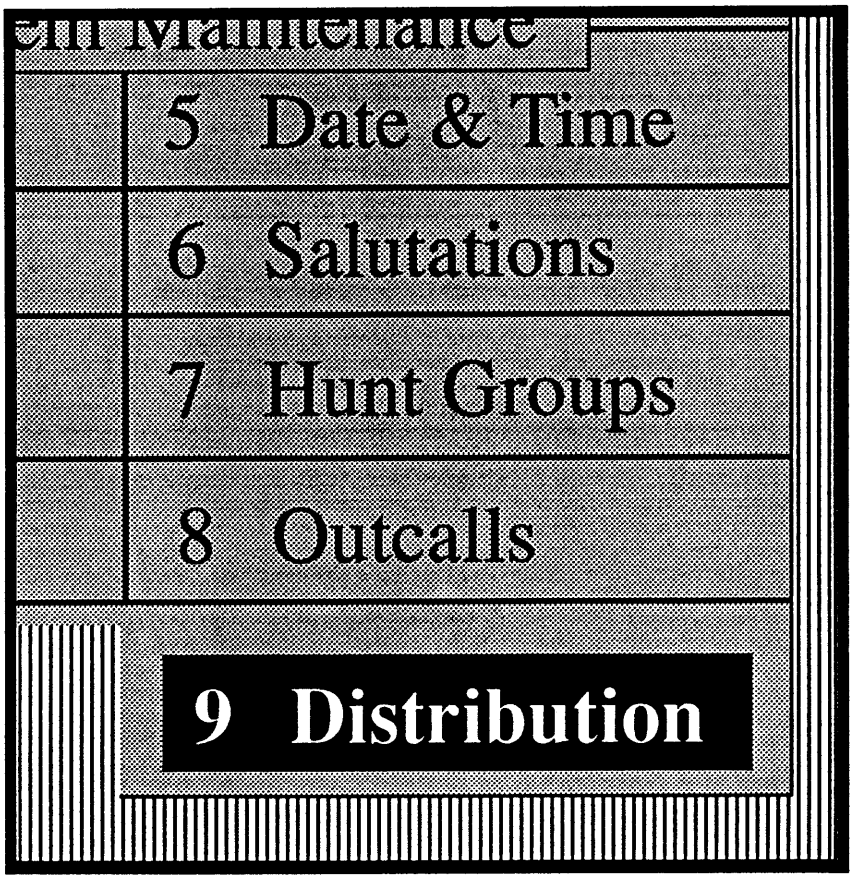
Additional Options

The <F5> Key

The <F5> key, when pressed from the Main Program screen, will allow access to an Offsite/Outcall notification view screen . This screen lets the system administrator view entries currently set in a particular mailbox. It should be noted, however, that no changes can be made to any data contained on this screen. Changes to actual data can only be accomplished through System Maintenance.



Keyboard Maintenance

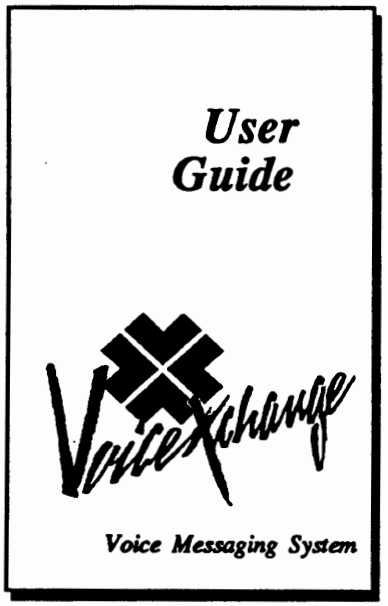


What is Distribution List Maintenance?

Distribution lists are created for the purpose of sending an identical message to more than one user without additional input for each user or without re-recording the same message. Distribution lists can be created by individual users per mailbox or by a system administrator from the system keyboard. Distribution List Maintenance is defined as the utility or group of utilities which allows for the creation and adminstration of distribution lists and messages.

Distribution Maintenance by Mailbox

Each mailbox subscriber or user has the ability to set their own private distribution lists. The number of lists and members are controled by system parameters (276 & 277) and are defaulted as a maximum of 10 lists and 30 members. The maximum number of lists and members can be changed per mailbox through extension maintenance from the keyboard or by changing the above parameters.



The VoiceXchange User Guide: *Voice Messaging System,* contains step by step details on how to access the Distribution List maintenance area of the User Menu Options inside of a subscribers mailbox using a Touch Tone® phone.

Choosing option 6 from the Mailbox User will access the Distribution List Options. From this menu, you are given the choice to press 1 to send a message to a distribution list or press 2 for Distribution List maintenance.

Pressing 2 for "Distribution List Maintenance", you are given the options to press:
1 - to hear existing lists
2 - to modify lists
3 - to add a list
4 - to delete a list

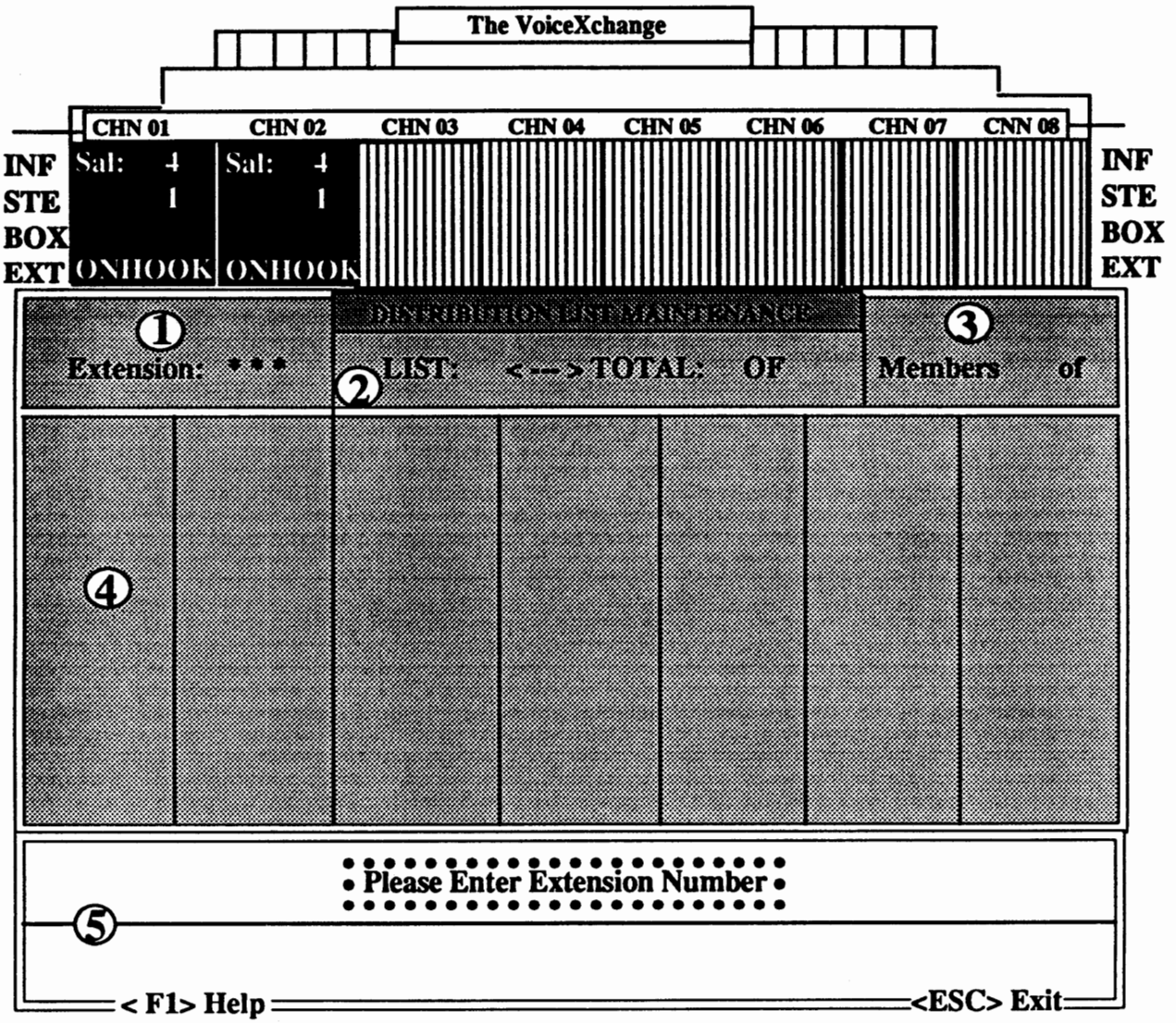
From this menu you also have the ability to personnally record or re-record list names in your own voice. Obviously, recording list names can only be accomplished while using Distribution List maintenance from a Touch Tone® phone.

Distribution Maintenance by Keyboard

Setting up Distribution lists and members is also available from the system computer keyboard. This feature is accessed from the System Maintenance utility in the system software. The following pages will cover the specifics of using this feature from the keyboard.

Distribution List Maintenance

Selecting Option 9 from the System Maintenance Menu will allow you access to the Distribution List Maintenance screen. The following diagram labels the screen areas and gives descriptions of the area functions.



① **Extension Field** - Shows the current extension to receive lists or members.

② **List / Total / Of Fields** - Shows the current List to be modified and the maximum lists allowed.

③ **Members / Of Fields** - Shows the current list members status and maximum members allowed.

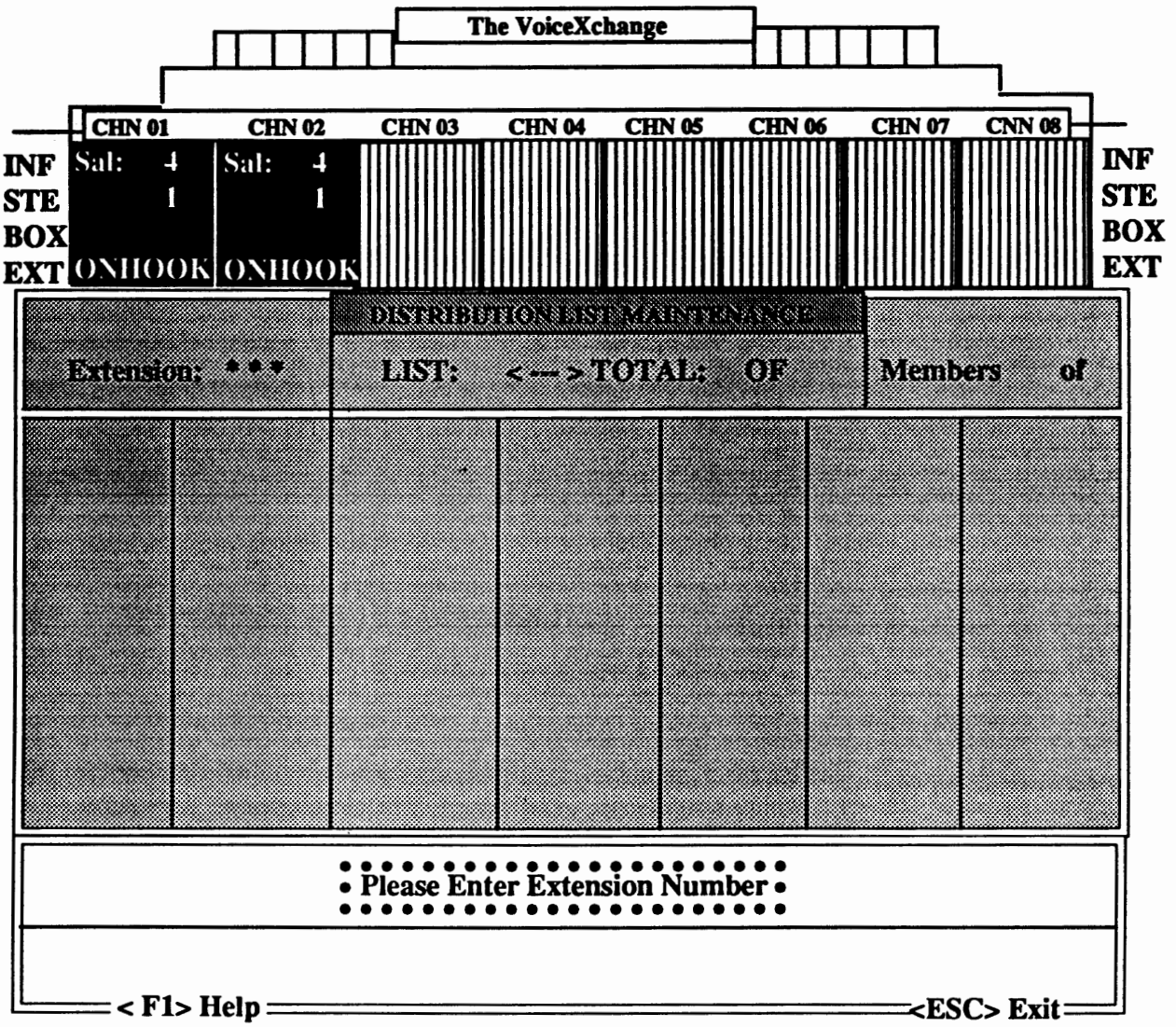
④ **Members / Lists Column** - Each Column shows the member and List data which is input.

⑤ **Message Fields** - Area where program messages or prompts are displayed for guidence.

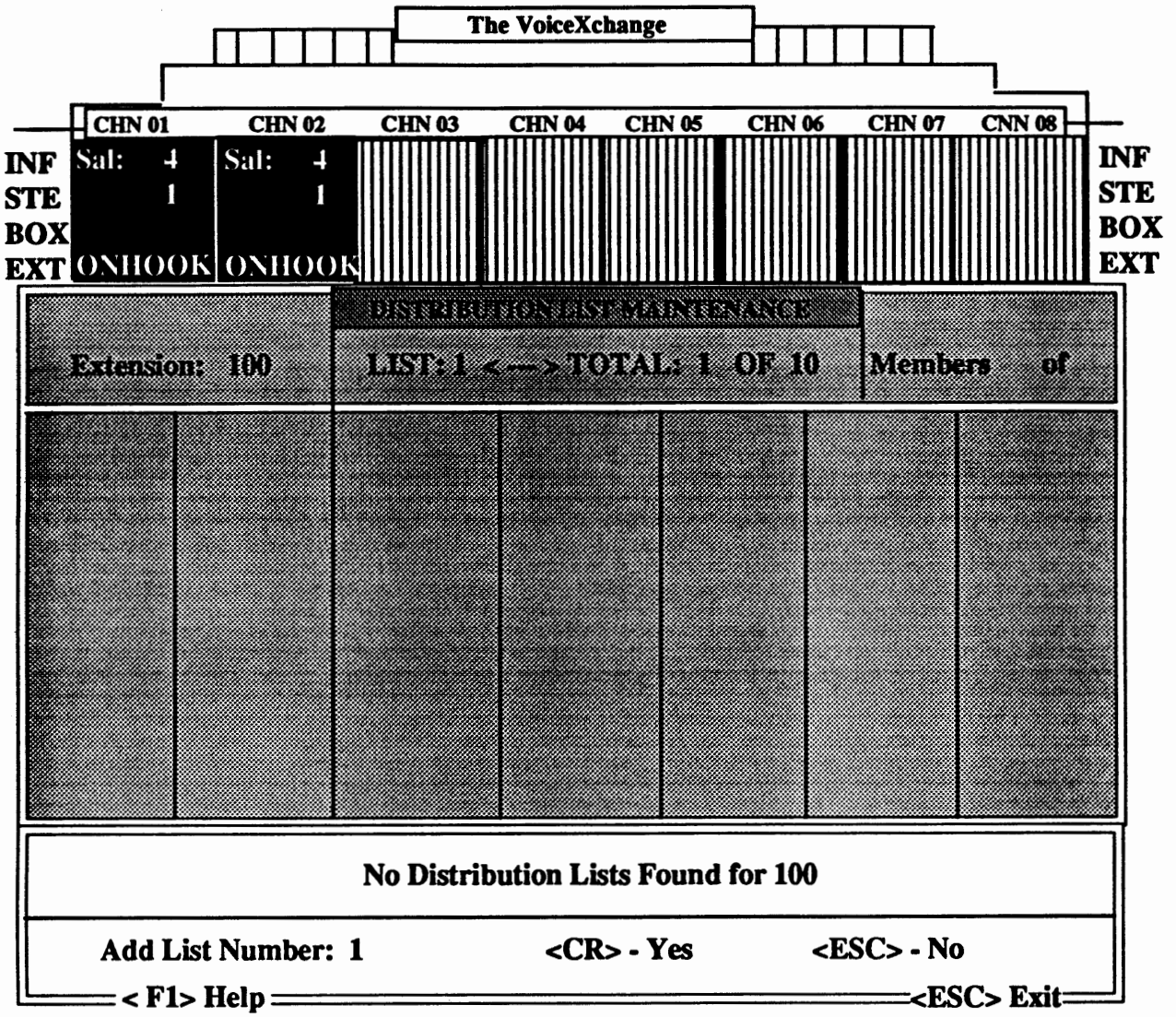
Entering an Extension to Create Lists or Members

The initial screen in Distribution Maintenancewill prompt you at the bottom of the screen to enter the extension number that you want to create the list and the members in. You must choose an extension that currently exists in your voice mail system extension database.

If you are uncertain about your extensions, you may press the <F6> key on your keyboard from the main voice mail program screen to view your current database.



For the example, we will choose to enter extension number 100. Pressing 1-0-0 , the numbers will appear next to the Extension Field at the top left portion of the screen. The asterisks will be overwritten when you enter the extension number. The number of asterisks (*) which appear on your screen is determined by the length of your database extension numbers set in your voice mail system.

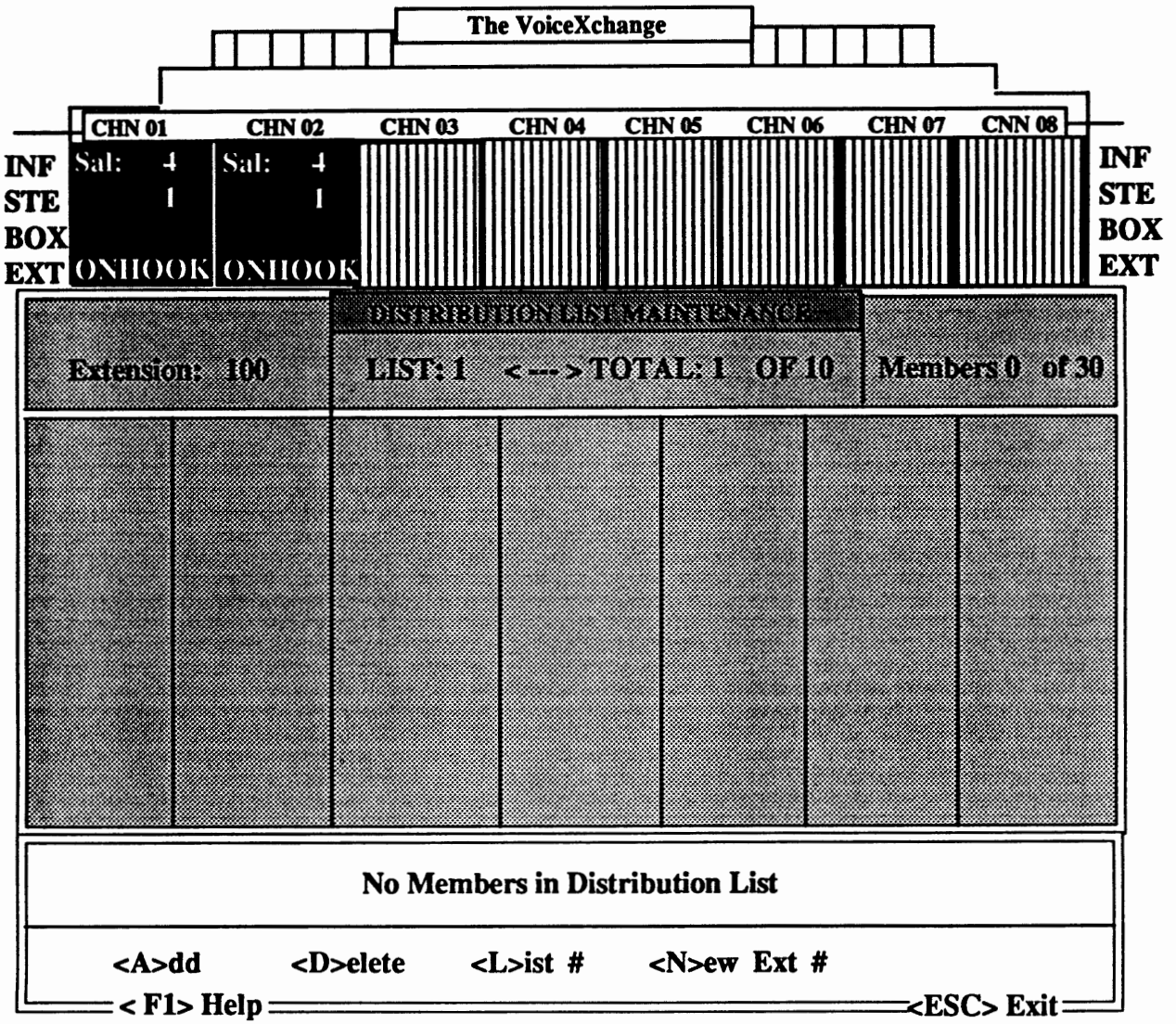


After entering extension 100, the system checks for any current distribution lists. If you are creating the lists for the first time, then you will see the information that is shown on the screen above. The message appears, **"No Distribution Lists Found for [extension number]"**. Below this, the program will confirm the list number that you wish to create and will prompt you to press **<CR>** or **<ENTER>** for YES or press the **<ESC>** key for NO.

Adding Members to the Distribution List

After confirming that you wish to add one list by press the <ENTER> or <CR> key, the following screen will appear.

Press "A" to Add a Member.



In the example shown, you will be adding a member to your new distribution list. A member is defined as any valid extension or mailbox which exists on your current voice system database. The screen shows that you have a total of "1" list pending with a maximum of 10 lists. Members currently added is "0" with a maximum of "30" members per list.

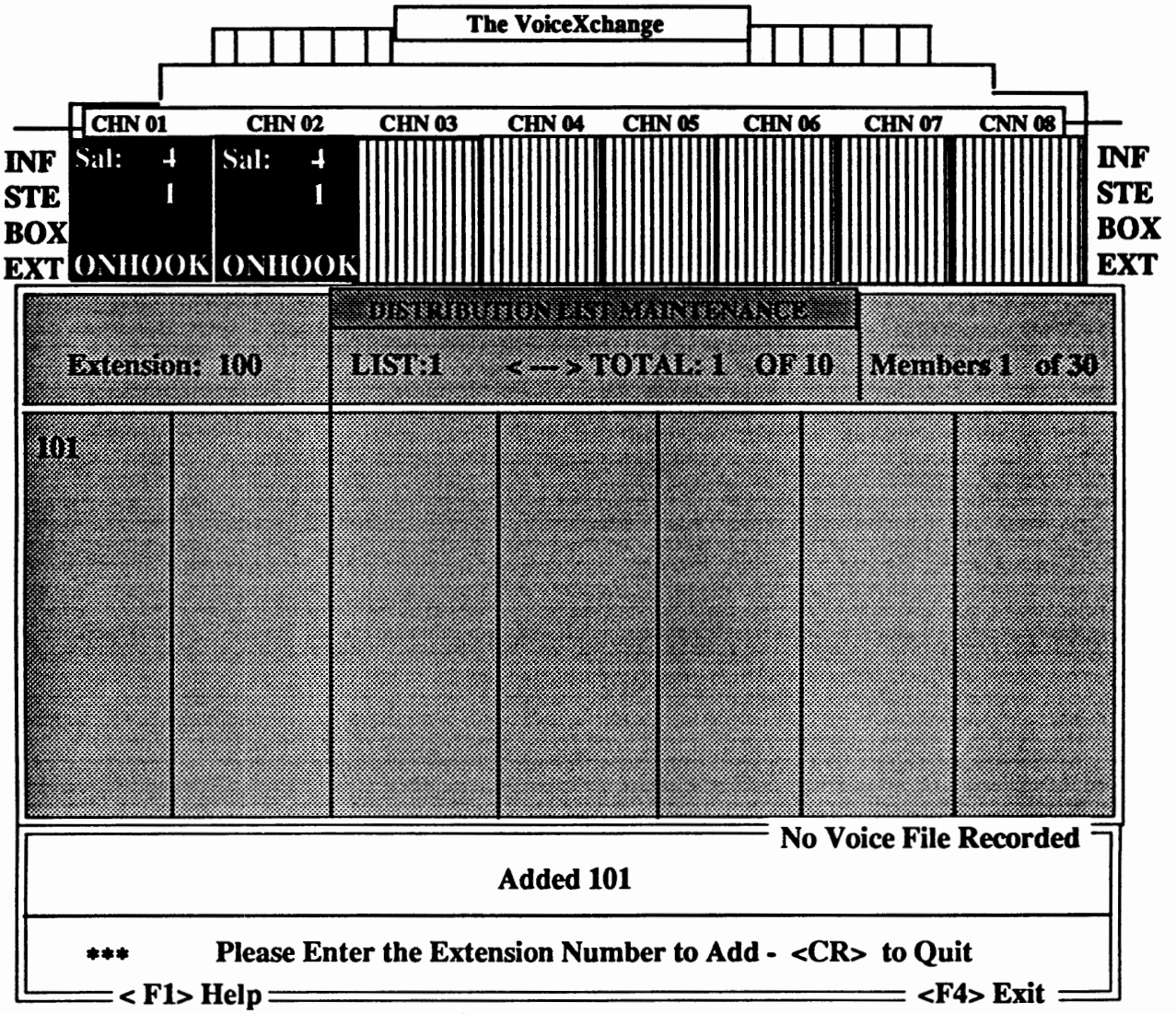
Special Note:	Maximum lists and members are normally controlled in two areas -- Parameters 276 (ExtListNum) and 277 (ExtListEle) provide system wide control. The other area is a data field in the extension maintenance screen which can be controled per extension. Extensions which are added to the above screens will show maximum lists and members through information contained in the data fields per mailbox in the Extension Maintenace database screens. Global parameters are over-ridden in this way.

Adding Distribution List Member continued...

After pressing "A" to add the member, you will be prompted in the message field by the following:

***	Please Enter the Extension Number to Add - <CR> to Quit

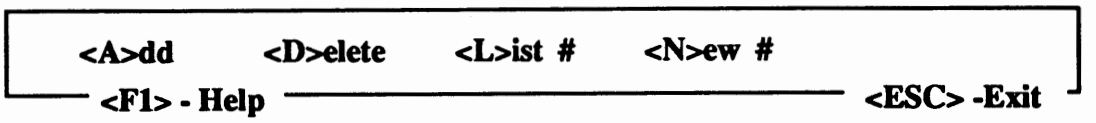
For the example, we will add extension 101. Typing "101" will appear were the astericks are flashing. After this, the following screen will appear:



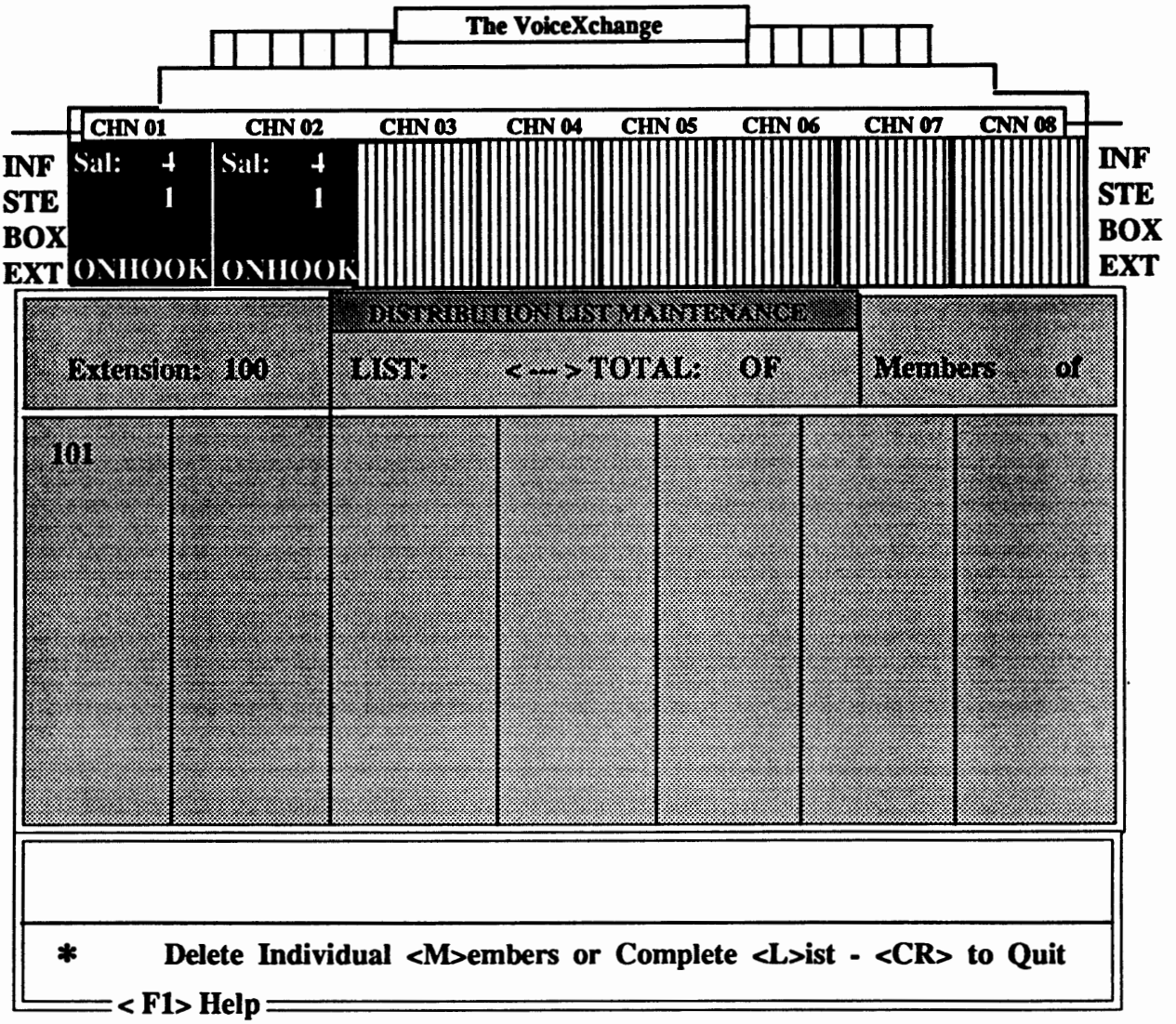
After typing in the extension number of your choice (in the case of the example, extension 101), then the new member will appear at the top of the first column. You will then be prompted again to enter the extension number to add. You may continue to add other members or you may press the <ENTER> key or the <CR> key to quit.

Deleting Lists or Members

To delete lists or members of lists, you will choose the delete option from the menu bar at the bottom of the screen which looks like this:



Type a " D " to continue. The following screen will appear.



The message area of the screen gives you the options to delete individual members <M> or complete lists <L>. To delete a member , press <M>. You will be prompted to:

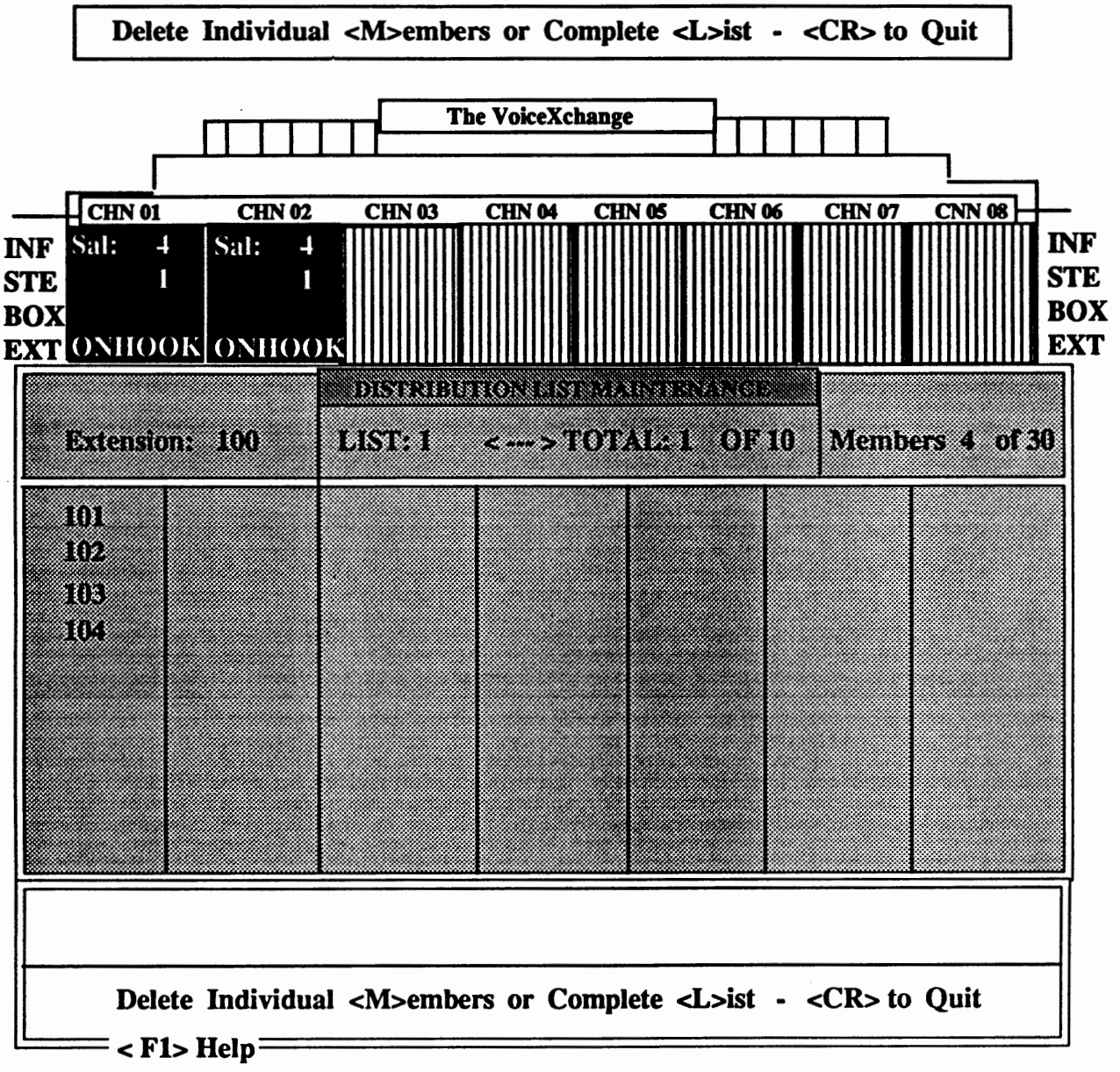
***	Please Enter the Member to Delete - <CR> to Quit

In the example above, you might choose to delete member 103. Type 103 and the number will be removed from the column and you will see the message:

Deleted 103 - List Empty

Deleting Lists or Members continued...

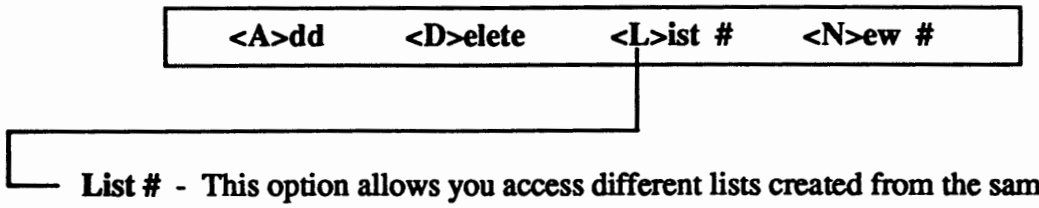
To delete an entire list, choose <L> from the following menu:



The screen above will appear. Let us assume, for the example, that you have four members in your first list for extension 100. If you have chosen to delete the entire list, then every member in that list will be removed from the column and the following message will appear:

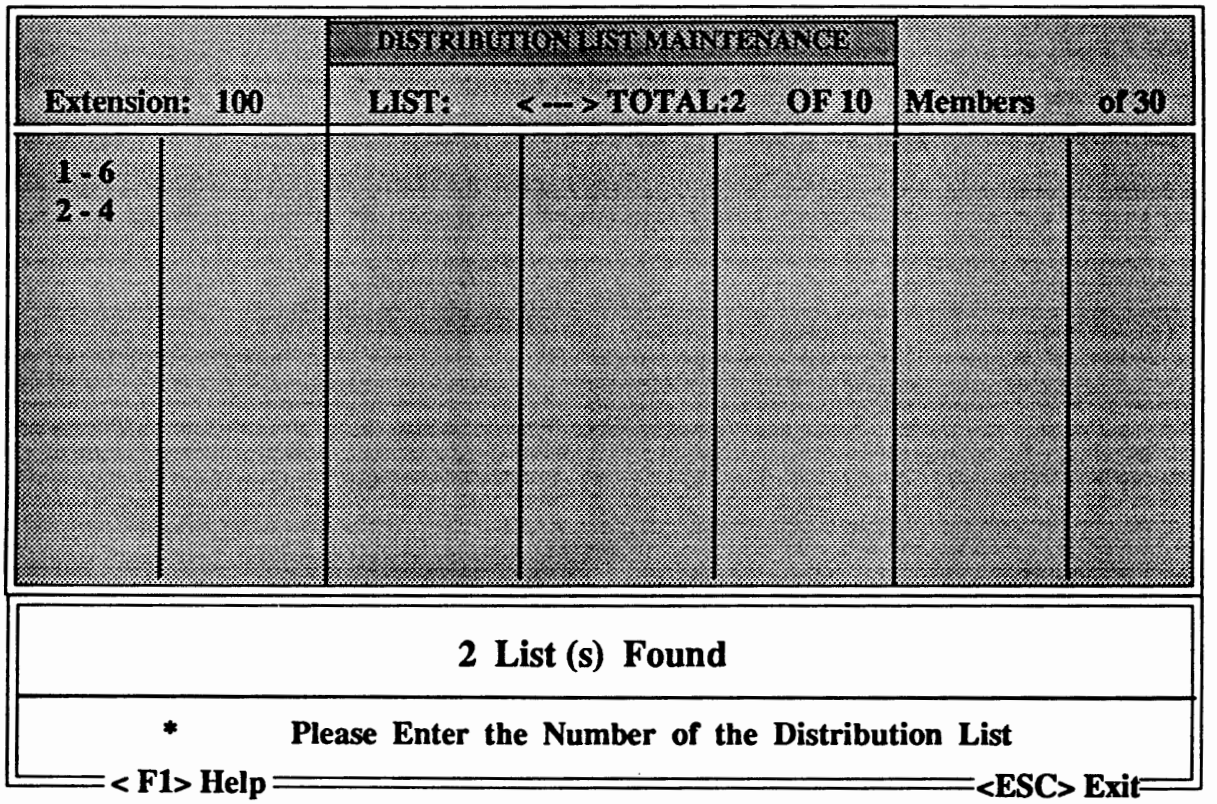
Additional Options in Distribution Maintenance

Besides Adding or Deleting lists or list members from the menu bar, you also have the following options:



List # - This option allows you access different lists created from the same extension.

Choosing this option will place you back to the screen which shows the list numbers in the columns. Please view the following example screen:

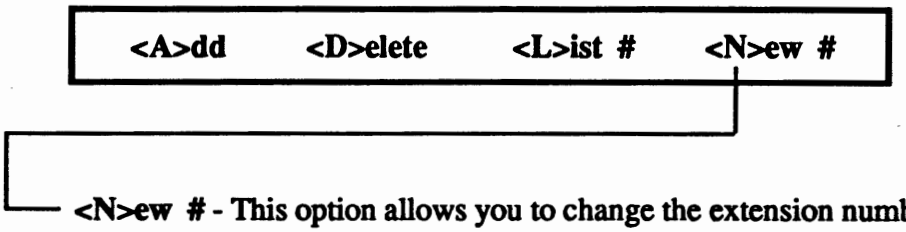


In the example screen above, extension 100 has a total of two distribution lists assigned. List number one has a total of six members and list number two has a total of four members. The message area of the screen reports that (2) lists were found. Below this, you are prompted to choose the number of the list that you want to work or make changes in.

Entering a " 1 " or " 2 " will place you in a screen that shows the actual members for the list that you have selected.

Additional Options Continued...

In addition to changing the List you have chosen to work in, you also have the ability to change the extension number in which to build or modify your distribution lists.

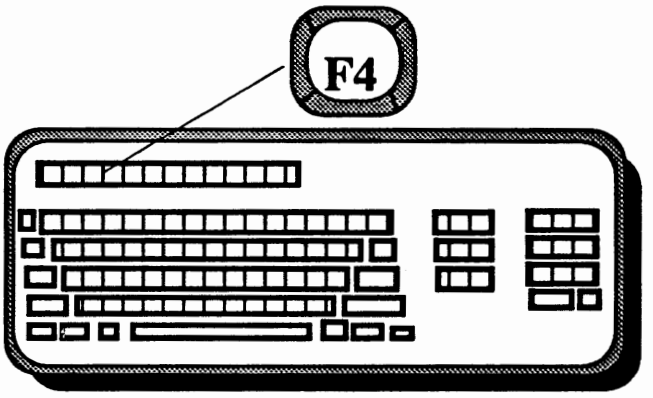


<N>ew # - This option allows you to change the extension number in which you are currently working in.

You may enter any other extension number to build distribution lists as long as that extension is a *valid* number in your voice system extension database.

The <F4> Key

The <F4> key provides you with a quick way to view your distribution lists from the main program screen without first going into system maintenance.



From the main program screen, press the <F4> key. You will see the first screen shown for Distribution List Maintenance in this document. Press <F4> again to deactivate.

You will NOT be able to effect any changes from this screen. Although it is exactly like the first screen that you encountered in Distribution Maintenance where you could proceed to add or delete members or lists, this screen allows you to *view only*.

Keyboard Function Keys

From the main program screen of the VoiceXchange system, you may select the following Function Keys to view different areas of the program while the system is currently processing calls without having to stop the program operation.

This key allows the user to view Information Topics - an on-line database of information which will provide additional onformation on program features.

The< F3> key is used as a diagnostic tool which allows a technician to view the feature modules currently compiled in their VoiceXchange software.

The< F4> key allows viewing and entry for Distribution List Maintenance from the keyboard. Inside of this screen, the <F1> key provides a help screen.

The< F5> key allows viewing and entry for Offsite/Outcall Notification from the keyboard. Inside of this screen, the< F1> key provides a help screen.

Pressing this key will activate the Mailbox Directory. This will view the current extension / mailbox database programmed for your system. You may use the Page Up / Down, Home and End keys, Arrow Up / Down , Insert key for Search, <F1> for Help, <F2> to view specific database info and <F6> to exit.

Outcall Notifications that are pending may be viewed by pressing the <F7> key. All entries are in Real Time and include: Extension or Mailbox which is currently attempting to be notified, the time of the notification and the status of the Lamp Field. The Lamp Field will contain one of the following:

L - Light Lamp X - Turn off lamp U - Update lamp if new message
N - New outcall, update to "A" A - Outcall active wW - Wakeup Notify
H - Day change - Update past 12pm
! - Outcall time became active outcall on temporary hold.
[upside down "!"] - Distribution lamp only - Immediate delete after notify

Also, the <F1> provides a help screen and the <F7> key exits.

The <F8> key allows viewing and changing the Parameter Settings of your system. Page Up/Down, Home and End, Arrow keys, <F1> Help, <F2> Change, <F3> Group, <F4> Parms Info, Insert to Search and the< F8> key to Exit.

<F9> is used as a diagnostic tool for Channel Analysis on processed calls. <F1> for help and <F9> to Exit.

Press <F10> once to view System Memory Utilization (See Installation Section)
Press <F10> twice to enable Fast Busy Analysis Test.

<F11> allows the user to view the Database Memory usage and the Database memory variable. Diagnostic purposes only.

Section 4

Phone Maintenance

TABLE OF CONTENTS

(listed in alphabetical order)

SECTION

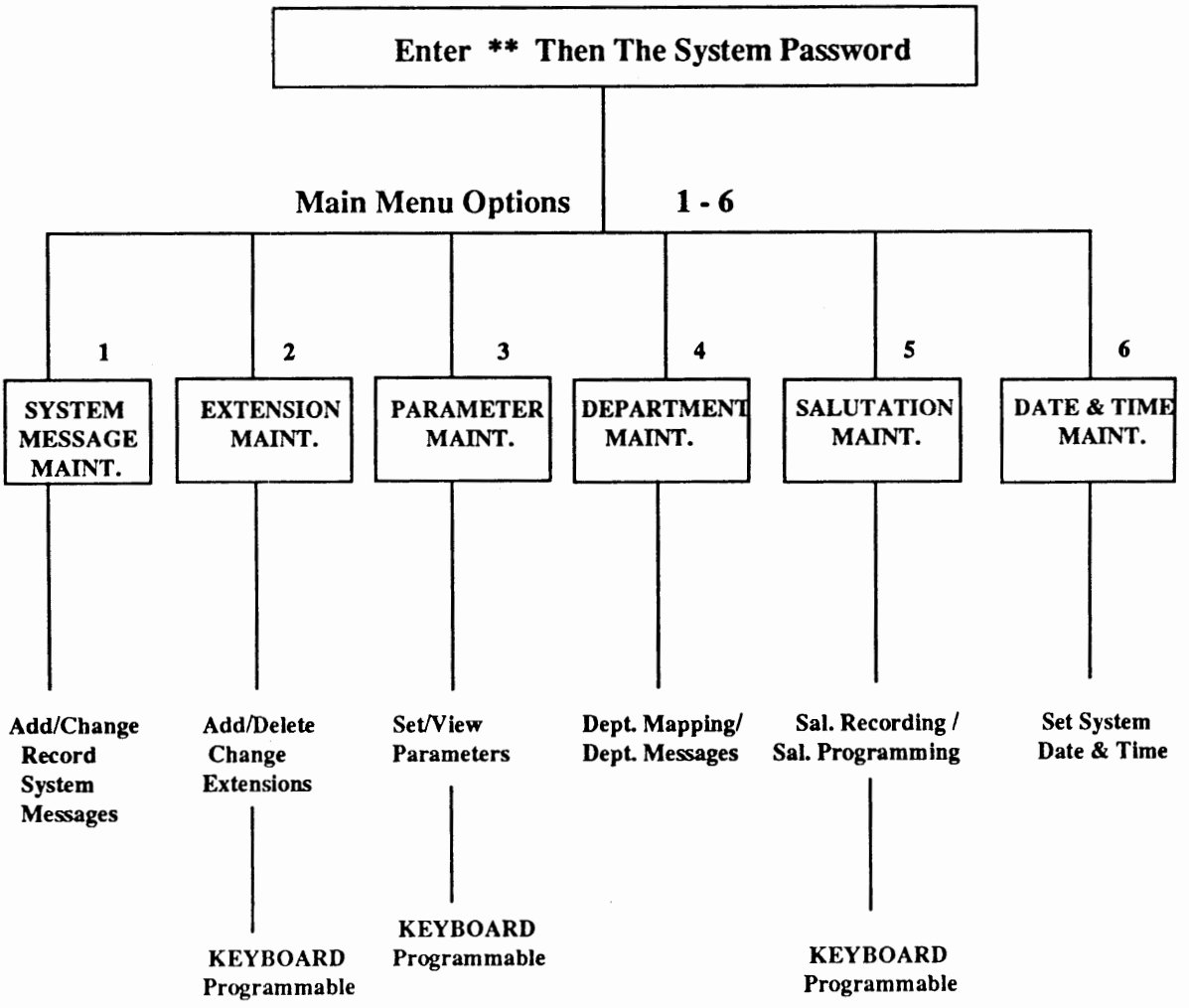
IV PHONE MAINTENANCE

SYSTEM MAINTENANCE

For ease of remote programming and system maintainence all administration functions are accessable from a touch-tone phone by entering a programmable password during the initial greeting. In addition, many features are accessable from the keyboard of your PC and can be programmed while the Vex system is On-line unless otherwise notated. This manual is designed so that updates may be inserted without disrupting the ability of the administrator to implement new features as they are added. In addition to text instructions, a flow chart follows many sections as an aid to understanding the administration procedures described.

VOICE EXCHANGE SYSTEM MAINTENANCE

DIAL INTO VOICE EXCHANGE



System Maintenance - Department Mapping All Channels

1. Call the system number_____, you will hear your salutation:

   "Thank you for calling xxxxxxxx . . . . . ."

2. Press the star (*) key twice, you will hear:

   "Enter the master password."

3. Enter your system master password_____

4. You will then hear:

   "Please select a maintenance function. Press 1 for messages, 2 for extensions, 3 for parameters, 4 for departments, 5 for salutations or 6 to set system time and date. Press the pound (#) key to exit."

5. Enter the "4" key. You will then hear:

   "Please enter the channel number for this department mapping. Press 00 for all channels or press (#) key to exit."

6. Enter "00" for all channels, you will then hear:

   "Press 1 for department message maintenance or press 2 for depart ment mapping. Press the pound (#) to exit."

7. Enter the "2" key, you will then hear:

   "To add a terminating set, enter the department number followed by the terminating digit and the terminating type. Press 2 for Announcement, 3 for Extension, or 6 for Menu followed by the department or menu number to direct the caller to.Press the pound (#) key to exit.

8. Upon completing your maintenance, you will be returned to step 5.

9. To exit the system, press the pound (#) key four (4) times.

PLEASE NOTE: The Root Directory is always Department 000.

For Example: You wish to establish a departmental directory and have it played to callers when they access a single digit during the salutation. The Root Directory is Department 000. You want the Accounting Department to be 100 from the root, Service to be Department 200 and Sales to be Department 300.

To map this portion you would enter: 00016100#

Dept #	Menu Digit	Type	Destination	Description
000	1	6	100	Accounting

This entry sets up Department 100 as a Department Message from The Root Directory. The caller will be directed to Department message 100 if they press"1" at the Root Directory.

To map the next department you would enter: 00026200#

Dept #	Menu Digit	Type	Destination	Description
000	2	6	200	Service Dept.

This entry sets up Department 200 as a Department Message from The Root Directory. The caller will be directed to Department message 200 if they press "2" at the Root Directory.

To map the department for Sales you would enter: 00036300#

Dept #	Menu Digit	Type	Destination	Description
000	3	6	300	Sales Dept.

This entry sets up Department 300 as a Department Message from The Root Directory. The caller will be directed to Department message 300 if they press "3" at the Root Directory.

You now want to establish the extensions for each department. One example will be given. The same procedure is true for each one. Let's say Tom, Dick and Mary work in the Accounting Department. Tom's extension is 46, Dick - 47, and Mary - 48. Your department message for 100 may say: "Welcome to the Accounting Department. For Tom press 1, for Dick press 2 and for Mary press 3. To reach the operator press 0.

To map this portion you would enter: 1001346#

Dept	Menu Digit	Type	Destination	Description
100	1	3	46	Tom's extension

This entry sets up to ring Tom's extension to ring when a caller presses "1" from Department Message 100.

To map the next extension (Dick) you would enter: 1002347#

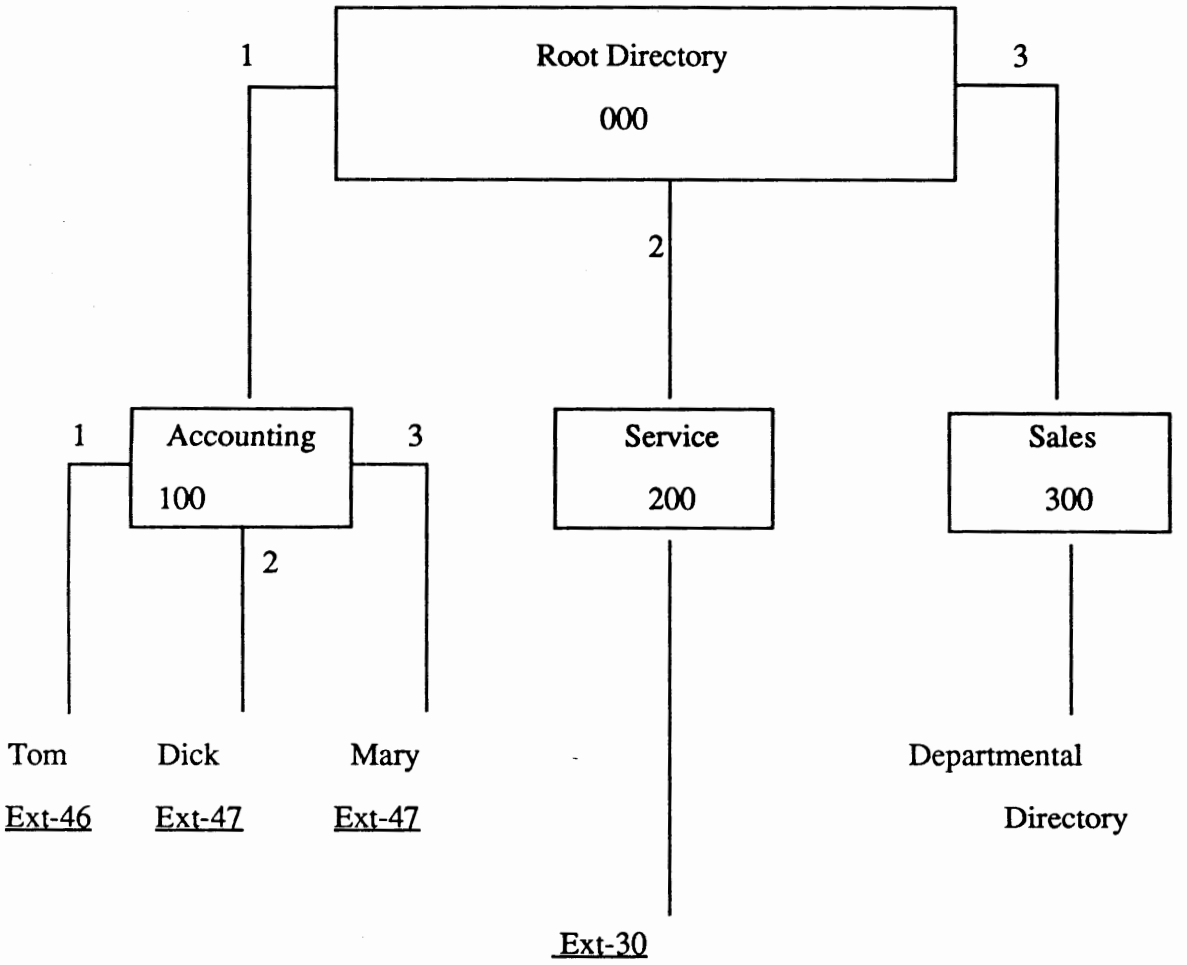
Dept	Menu Digit	Type	Destination	Description
100	2	3	47	Dick's extension

This entry sets up Dick's extension to ring when a caller presses "2" from Department 100.

To map the next extension (Mary's) you would enter: 1003348#

This entry sets up Mary's extension to ring when a caller presses "3" from Department 100.

Dept	Menu Digit	Type	Destination	Description
100	3	3	48	Mary's extension



These choices off the main (root dir. 000) Department Directorycan be sent to the appropriate extensions or to a hunt group programmed through the phone system.

For example:

If you desired callers who press "2" for Service off the Root directory to be sent to a hunt group extension you would enter: 0002330#

Dept	Menu Digit	Type	Destination	Description
000	2	3	30	Service hunt group

Department Mapping & Terminating Set Worksheet

Dept. No.	Menu Digit	Type	Destination Ext. No. or Next Dept. No.	Press # to end	Description
000	1	6	100	#	Selection 1 off Root Directory.
000	2	3	30	#	Selection 2 off Root Directory.
000	3	6	300	#	Selection 3 off Root Directory.
100	1	3	46	#	Selection 1 off Accounting Dept.
100	2	3	47	#	Selection 2 off Accounting Dept.
100	3	3	48	#	Selection 3 off Accounting Dept.

Dept. No. - The dept. from which a menu digit will be selected by the caller for transfer to another dept. map or actual extension

Type - 2 = announcement; 3 = extension; 6 = Menu

Department Mapping & Terminating Set Worksheet

Dept. No.	Menu Digit	Type	Destination Ext. No. or Next Dept. No.	Press # to end	Description

Dept. No. - The dept. from which a menu digit will be selected by the caller for transfer to another dept. map or actual extension

Type - 2 = announcement; 3 = extension; 6 = Menu

System Maintenance - Department Mapping By Channel

Same as "Department Mapping All Channels" except for step 6.

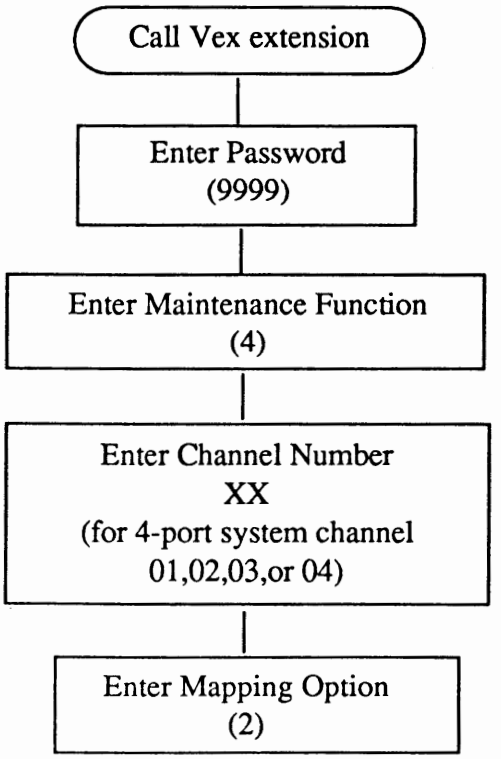
6. Enter "xx" for the channel you want to map, you will then hear:

> "Press 1 for department message maintenance or press 2 for department mapping.
>
> Press the pound (#) key to exit."
>
> "xx" is the individual channel you want the department mapping programmed for (01,02,03,or 04 for 4 port board)

For Example:

You have configured your system to have a separate salutation on channel 2 (see procedure "Salutation Maintenance - Port, Date and Time").

You now want to develop a separate departmental map for this channel. You enter "02" for "xx" in step 6 and continue with the procedure.



Enter your mapping information from your worksheet then press '#" to exit

System Message Maintenance - Department Messages By Channel

1. Call the system number _____, you will hear The initial salutation

   "Thank you for calling xxxxxxxx . . . . . ."

2. Press the star (*) key twice, you will hear:

   "Enter the master password."

3. Enter your system master password _____.

4. You will then hear:

   "Please select a maintenance function. Press 1 for messages, 2 for extensions, 3 for parameters, 4 for departments, 5 for salutations or 6 to set system time and date. Press the pound (#) key to exit."

5. Enter the "4" key. You will then hear:

   "Please enter the channel number for this department mapping. Press 00 for all channels or press the pound (#) key to exit."

6. Enter "XX" for an individual channel you will then hear:

   "Press 1 for department message maintenance or press 2 for department mapping.

   Press the pound (#) key to exit."

7. Enter the "1" key, you will then hear:

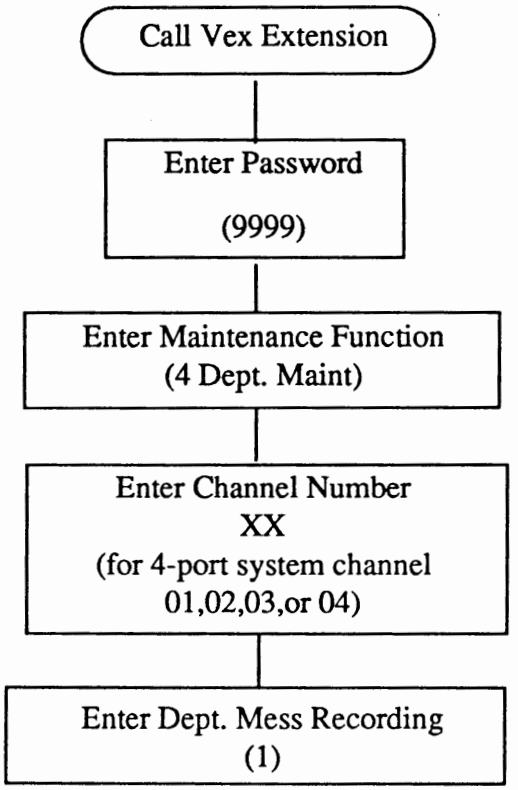
   "To listen to a department message, enter the department number followed by a star (*). To record a new department message, enter the department number followed by the pound (#) key. Begin recording at the tone. Press the pound key to end.

For Example: You wish to record the Accounting Department's greeting.

The department is part of a division which has its own direct line (telephone number). So, you have a separate salutation and department map when callers phone that number. For example, the channel this direct line is assigned to is number 03. You would enter "03" in step 6 of the procedure. From the department mapping maintenance, you have assigned the Accounting Department terminating set number 100 for channel 03. You would enter "100 # " and begin recording at the tone. You will be returned to step 7 after recoding and entering the pound (#)

Note: See procedure "System Maintenance - Department Mapping By Channel" for assigning departments by channel.

Example above: Assigning the Accounting Department (100) to channel 03.



To listen to a department message, enter the department number followed by a star (*). To record a new department message, enter the department number followed by the pound (#) key. Begin recording at the tone. Press the pound key to end.

System Message Maintenance - Department Messages For All Channels

1. Call the system number_____, you will hear your salutation:

   "Thank you for calling xxxxxxxxx . . . . . ."

2. Press the star (*) key twice, you will hear:

   "Enter the master password."

3. Enter your system password _____.

4. You will then hear:

   "Please select a maintenance function. Press 1 for messages, 2 for extensions, 3 for parameters, 4 for departments, 5 for salutations or 6 to set system time and date. Press the pound (#) key to exit."

5. Enter the "4" key. You will then hear:

   "Please enter the channel number for this department mapping. Press 00 for all channels or press the pound (#) key to exit."

6. Enter "00" for all channels, you will then hear:

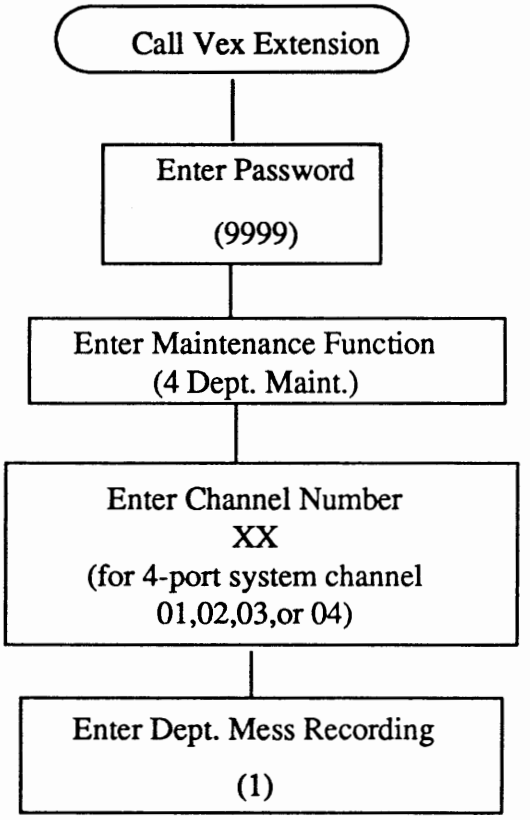
   "Press 1 for department message maintenance or press 2 for department mapping.

   Press the pound (#) key to exit."

7. Enter the "1" key, you will then hear:

   "To listen to a department message, enter the department number followed by a star (*). To record a new department message, enter the department number followed by the pound (#) key. Begin recording at the tone. Press the pound key to exit."

For Example: You wish to record the Accounting Department's greeting. From the department mapping maintenance, you have assigned the Accounting Department terminating set number 100. You would enter "100 #" and begin recording at the tone. You will be returned to step 7 after recoding and entering the pound (#) key.



To listen to a department message, enter the department number followed by a star (*). To record a new department message, enter the department number followed by the pound (#) key. Begin recording at the tone. Press the pound key to end.

Note - Department messages are played only through the mapping function and relate directly to the numbers assigned in the Destination or Next Dept No. column of the Mapping worksheet. Department Messasges are different and separate from regular or salutation messages. A Department message may have the same number as a regular or salutation message.

Extension Maintenance - Adding a Range of Extensions
(Keyboard Programmable)

CAUTION: Be sure parameter # 144 EXTLEN (Extension Length) is set to the proper length.

1. Call the system number _____, you will hear your salutation:

   "Thank you for calling xxxxxxxxx . . . . . ."

2. Press the star (*) key twice, you will hear:

   "Enter the master password."

3. Enter your system master password _____.

4. You will then hear:

   "Please select a maintenance function. Press 1 for messages, 2 for extensions, 3 for parameters, 4 for departments, 5 for salutations or 6 to set system time and date. Press the pound (#) key to exit."

5. Enter the "2" key. You will then hear:

   "Please select an extension maintenance function. Press 1 to add an extension, 2 to change, 3 to delete, 4 to time forward, 5 to default forward or the pound (#) key to exit."

6. Press "1" and you will hear:

   "Please press 1 to add a single extension or press 2 to add a range of extensions."

7. Press "2" to add a range of extensions and you will hear:

   "To add a range of extensions enter the lowest extension number first followed by the highest extension followed by the type of monitoring for that range of extensions. Press 2 for busy only, 7 for ring and busy or 6 for no monitoring at all (dead drop).

   Press the pound (#) key to exit."

8. When the extension range, valid monitoring and the pound (#) key are entered, you will hear:

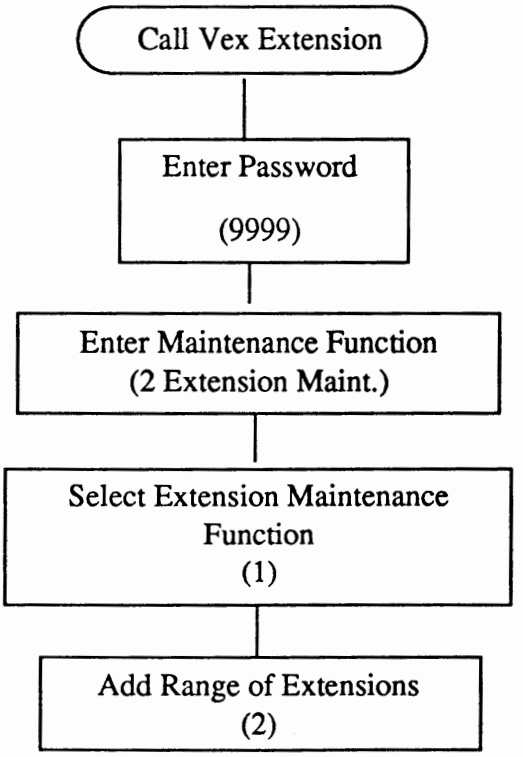
"Extension number xxx through xxx added."

9. At this point you will be taken back to step 5.

10. To exit the system, press the pound (#) key four (4) times then hang up.

For Example: To add extension range 120 through 150 with ring and busymonitoring, you would enter: 1201507 pound (#) key.

You would then returned to step 5.



Enter the lowest extension number followed by the highest extension number followed by the type of monitoring for that range of extensions. Press the pound (#) key to exit.

2 - Busy Only will only return to caller if extension is busy.
Otherwise call is a blind transfer

7 - Ring and Busy will return to caller if extension is busy or is not answered

6 - No Monitoring drops call upon transfer (blind transfer)

Extension Maintenance - Adding a Single Extension
(Keyboard Programmable)

CAUTION: Be sure parameter # 144 EXTLEN (Extension Length) is set to the proper length.

1. Call the system number _____, you will hear your salutation:

   "Thank you for calling xxxxxxxx . . . . . ."

2. Press the star (*) key twice, you will hear:

   "Enter the master password."

3. Enter your system master password _____.

4. You will then hear:

   "Please select a maintenance function. Press 1 for messages, 2 for extension, 3 for parameters, 4 for departments, 5 for salutations or 6 to set system time and date. Press the pound (#) key to exit."

5. Enter the "2" key. You will then hear:

   "Please select an extension maintenance function. Press 1 to add an extension, 2 to change, 3 to delete, 4 to time forward, 5 to default forward or press the pound (#) key to exit."

6. Press "1" and you will hear:

   "Please press 1 to add a single extension or press 2 to add a range of extensions."

7. Press "1" to add a single extension and you will hear:

   "To add a single extension enter the extension number followed by the type of monitoring for that extension; 2 for busy only, 7 for ring and busy or 6 for no monitoring at all (dead drop). Press the pound (#) key to exit."

8. When an extension, valid monitoring and the pound (#) key are entered, you will hear:

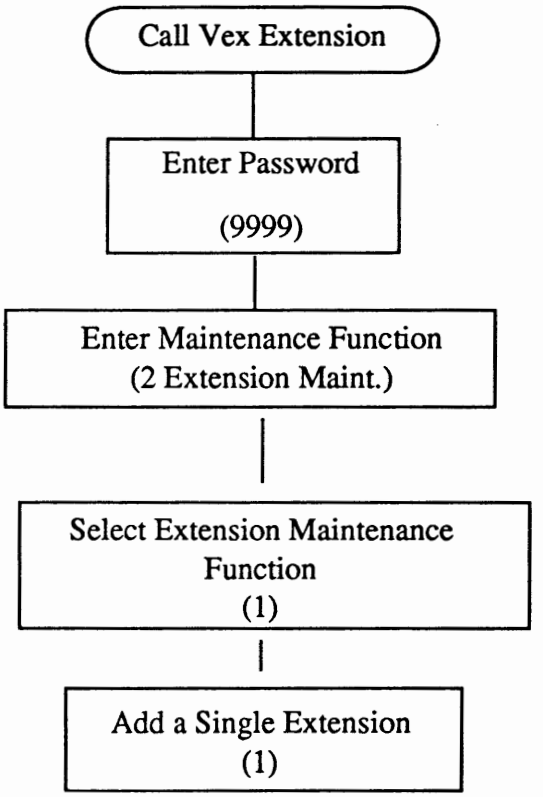
   "Extension number xxx added."

9. At this point you will be taken back to step 5.

10. To exit the system, press the pound (#) key four (4) times then hang up.

For Example: To add extension 120 with ring and busy monitoring, you would enter:

1207 pound (#) key. You would then be returned to step 5.



Enter the extension number followed by the type
of monitoring for that range of extensions.
Press the pond (#) key to exit.

2 - Busy Only will only return to caller if extension is busy.
Otherwise call is a blind transfer

7 - Ring and Busy will return to caller if extension is busy or is not answered

6 - No Monitoring drops call upon transfer (blind transfer)

Extension Maintenance - Changing a Range of Extensions
(Keyboard Programable)

1. Call the system number _____, you will hear your salutation:

   "Thank you for calling xxxxxxxxx . . . . . ."

2. Press the star (*) key twice, you will hear:

   "Enter the master password."

3. Enter your system master password _____.

4. You will then hear:

   "Please select a maintenance function. Press 1 for messages, 2 for extensions, 3 for parameters, 4 for departments, 5 for salutations or 6 to set system time and date. Press the pound (#) key to exit."

5. Enter the "2" key. You will then hear:

   "Please select an extension maintenance function. Press 1 to add an extension, 2 to change, 3 to delete, 4 to time forward, 5 to default forward or the pound (#) key to exit.

6. Press "2" and you will hear:

   "Please press 1 to change a single extension or press 2 to change a range of extensions."

7. Press "2" to change a range of extensions and you will hear:

   "To change monitoring for a range of extensions enter the lowest extension numberfirst and then the highest number followed by the type of monitoring for those extensions. Press 2 for busy only, 7 for ring and busy or 6 for no monitoring at all. Press the pound (#) key to exit."

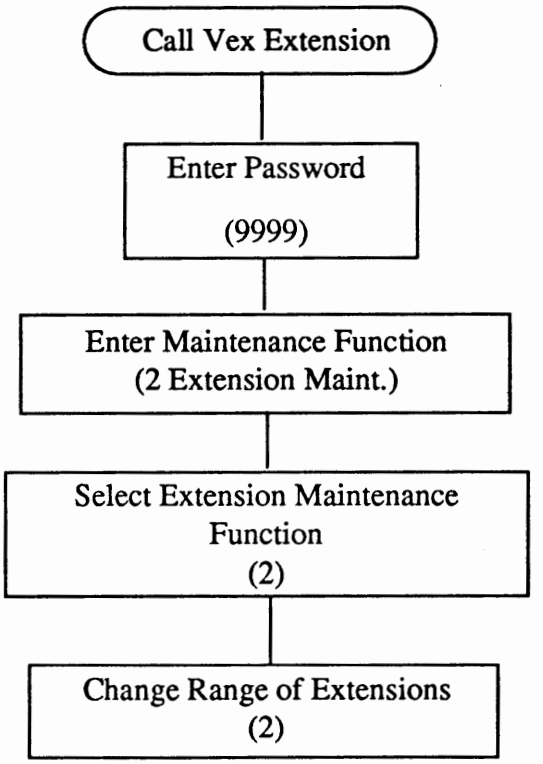
8. When the extension range, valid monitoring and the pound (#) key are entered, you will be returned to step 5.

9. To exit the system, press the pound (#) key four (4) times then hang up.

For Example: To change the monitoring for extension range 120 through 150 with ring and busy monitoring to no monitoring at all you would enter:

1201506 pound (#) key.

You would then be returned to step 5.



Enter the lowest extension number followed by the highest extension number followed by the type of monitoring for that range of extensions.
Press the pound (#) key to exit.

2 - Busy Only will only return to caller if extension is busy.
Otherwise call is a blind transfer

7 - Ring and Busy will return to caller if extension is busy or is not answered

6 - No Monitoring drops call upon transfer (blind transfer)

Extension Maintenance - Deleting a Range of Extensions
(Keyboard Programmable)

1. Call the system number_____, you will hear your salutation:

   "Thank you for calling xxxxxxxxx . . . . . ."

2. Press the star (*) key twice, you will hear:

   "Enter the master password."

3 Enter your system master password _____.

4. You will then hear:

   "Please select a maintenance function. Press 1 for messages, 2 for extensions, 3 for parameters, 4 for departments, 5 for salutations or 6 to set system time and date. Press the pound (#) key to exit."

5. Enter the "2" key. You will then hear:

   "Please select an extension maintenance function. Press 1 to add an extension, 2 to change, 3 to delete, 4 to time forward, 5 to default forward or the pound (#) key to exit."

6. Press "3" and you will hear:

   "Please press 1 to delete a single extension or press 2 to delete a range of extensions."

7. Press "2" to delete a range of extensions and you will hear:

   "To delete a range of extensions enter the lowest extension number first followed by the highest number. Press the pound (#) key to exit."

8. At this point, you will be taken back to step 6.

9. To exit the system, press the pound (#) key four (4) times then hang up.

System Maintenance - Parameter Maintenance

1. Call the system number _____, you will hear your salutation:

   "Thank you for calling xxxxxxxxx . . . . . ."

2 Press the star (*) key twice, you will hear:

   "Enter the master password."

3. Enter your system master password _____

4. You will then hear:

   "Please select a maintenance function. Press 1 for messages, 2 for extensions, 3 for parameters, 4 for departments, 5 for salutations or 6 to set system time and date. Press the pound (#) key to exit."

5. Enter the "3" key. You will then hear:

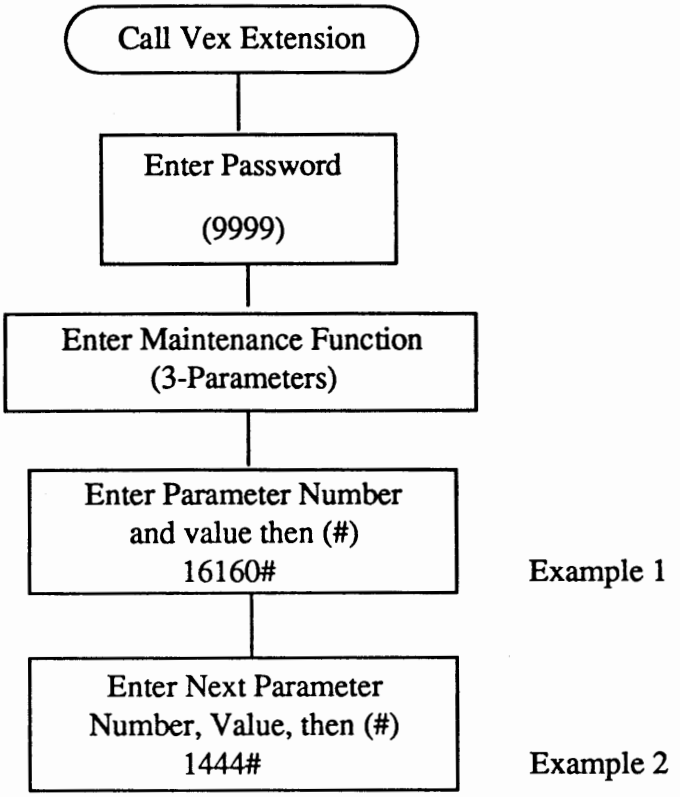
   "Enter the parameter number and the new value for that parameter followed by the pound key. If the parameter requires a pause, press star one (1). If it requires a flash hook, press star zero (0). To cancel enter "999" and the pound key. To reset a parameter to it's default value enter "000" and the pound key."

For Example:

1) You want to allow your callers a maximum of sixty (60) seconds recording time when they leave a message. Parameter number 161 would need to be set -------(consult the Parameter Table). If you want to see what the current value of the parameter is, enter 161#. The system will audio feedback the parameter number and its current value. For reference, the parameter and its new value is also displayed in the lower left portion of the computer screen. To change its value to sixty (60) seconds, enter 16160#. Once again you will hear audio feedback and will be information displayed on the computer screen.

2) When you initially install a system, one of the critical parameters is extension length (parameter 144). To set this value to four (4) digits, you would enter:

   1444# (the default value is 3).



Note:

Consult the Parameter Table for full definitions.

During the process of using the messaging systems, message boxes will be added and deleted and messages will be left and deleted. This activity will cause the hard disk in your computer to become fragmented. To ensure maximum efficiency and speed from this device, it is necessary to do "housekeeping" and reorganize the space. Parameter 172 (expressed in time - default 03:00 a.m.) is designed to execute the program that reorganizes the hard disk. For example (using the default), at 03:00 a.m. the system will go into automatic reorganization mode. The process will normally take sixty (60) to one hundred twenty (120) seconds, depending on the system size. If there happens to be any callers on the system, they will be disconnected. If the value of "0000" is set into parameter 172, reorganization is disabled.

Critical Parameters To Check

Default Values Show as a zero (0)

Parameter No.	Definition & Consideration	Default Value
002	Flashtime-Set below PBX	50 (.5 sec)

Troubleshooting:

Normally the Flashtime is set just below the PBX or Key Set Flashtime. (example-Pbx Flashtime = 800mls; Set Vex Flashtime to 70 (700mls)) Flashtime too long,(high) - Vex system hangs up upon transfer of call. Flashtime too short,(low) - Vex system will lose caller in State 11.

011	Minimum Ring On interval	3

Troubleshooting:

If Vex system does not answer incoming call quickly set parameter to (1).

033	Specify Signaling Connect	2

Troubleshooting:

If there is prolonged delay between Transfer of message (Mess013) is played and actual connect then set parameter to (1) = Leading edge

035-048	Parameters from CPC test	See Paramter Table
058-059	(See Installation Manual-CPC)	

Troubleshooting:

If Vex system does not recognize a ring and/or busy extension then the parameters from CPC testing may be invalid. Re-run test or use defaults.

044	States required for busy detect	255

Troubleshooting:

On "Premier ESP" set Camp-On to 4 or 5 to allow Busy detect

144	Extension Length	3

Troubleshooting:

If this parameter does not match the number of digits in an extension number then Vex system will not ring extension and will go directly to mailbox (Guest Mailbox)

146	System Password	9999

Troubleshooting:

System Administrator sets this parameter to access system functions

147	Drop Extension	000

Troubleshooting:

Caller who has rotary phone or does not enter DTMF will be sent here

148	Ring No Answer	4

Troubleshooting:

Number of rings befor Vex System determines no answer gives caller option to leave a message or enter another extension

Parameter No.	Definition & Consideration	Default Value
155	RingNo	1
156	Fast Connect	0

Determines if call transferring message (Mess013) is played to called extension. To play message set parameter to 1. If a beep (DTMF Tone) is desired set parameter to 0 and parameter 183 TRANPROT to any DTMF digit number.

161	Maximum Record Time	60

Maximum recording time allowed for each message. System wide parameter with maximum setting 999 (16 minutes; 30 seconds)

163,164	Maximum Silence, Maximum Noise	3,4

If Vex system is hanging up during prompt recording or playing, raise Maximum noise. If Vex hanging up during Silence (pause) raise Silence.

168	Inter digit delay	2

Determines maximum delay in seconds allowed by Vex system between entering DTMF.

172	Hard Disk Reorg Time	0300

Hard Disk reorganization auto start time. (0300 = 3:00 AM in Military time.

184	Music or Add play	0

Determines if caller will hear pre-recorded (Messages 700-999) music or adds during hold for a busy extension.
0 = No play (Regular PBX hold);
1= Random play; 2 = Circular Play; 3 = Reverse Circula.

185	Beggining Message for Music on hold	800
186	Ending Message for Music/Add on hold	805
217	RecPound	10
275	NoPassMsg	blank

System Message Maintenance - Recording System Messages

Note:

Refer to the "Message Table" for all system pre-recorded messages listed in numerical order.

1. Call the system number _____, you hear your salutation:

   "Thank you for calling xxxxxxxxx . . . . . ."

2. Press the star (*) key twice, you will hear:

   "Enter the master password."

3. Enter your system master password _____.

4. You will then hear:

   "Please select a maintenance function. Press 1 for messages, 2, for extensions, 3 for parameters, 4 for departments, 5 for salutations or 6 to set system time and date. Press the pound (#) key to exit."

5. Enter the "1" key. You will then hear:

   "To listen to a message, enter the message number followed by a star (*). To return to the previous menu, press the pound (#) key. To record a message, enter the message number followed by the pound key. Begin recording at the tone. When finished press the pound key."

6. If you wish to listen to message number 50 (MESS050), enter "050 ." (star).
   You will then hear the message played and be returned to step 5.

7. If you wish to re-record message number 50 (MESS050), enter "050 #".
   You will hear a tone, start recording and press the pound (#) key when finished.
   You will then be returned to step 5.

Salutation Maintenance - Day Specific All Channels
(Keyboard Programmable)

1. Call the system number _____, you will hear your salutation.

   "Thank you for calling xxxxxxxxx . . . . . ."

2. Press the star (*) key twice, you will hear:

   "Enter the master password."

3. Enter your system master password _____.

4. You will then hear:

   "Please select a maintenance function. Press 1 for messages, 2 for extensions, 3 for parameters, 4 for departments, 5 for salutations or 6 to set system time and date. Press the pound (#) key to exit."

5. Enter the "5" key. You will then hear:

   "Press 1 for salutation recording maintenance. Press 2 for salutation by port, date and time. Press 3 for salutations on specific days. Press the pound key to exit."

6. Enter the "3" key. You will then hear:

   "Enter the salutation number then the channel number it is to be played on. For all channels enter 000. Next enter a star (*) followed by the numbered day of the week you want the salutation to play followed by two zeros and the start time. Next enter a star (*) followed by the numbered day of the week you want the salutation to stop followed by two zeros and the stop time. Press the pound (#) key to exit."

For Example: If you want salutation 005 to start play Monday at 08:00 a.m. and end on Friday at 5:00 p.m., you would enter 005 000 *200 0800 *600 1700 #.

*200 is for Monday - *600 is for Friday

Salutation Maintenance - Port, Date and Time

1. Call the system number _____, you will hear your salutation.

   "Thank you for calling xxxxxxxxx . . . . . ."

2. Press the star (*) key twice, you will hear:

   "Enter the master password."

3. Enter your system master password _____.

4. You will then hear:

   "Please select a maintenance function. Press 1 for messages, 2 for extensions, 3 for parameters, 4 for departments, 5 for salutations or 6 to set system time and date. Press the pound (#) key to exit."

5. Enter the "5" key. You will then hear:

   "Press 1 for salutation recording maintenance. Press 2 for salutation by port, date and time maintenance.

6. Enter the "2" key. You will then hear:

   "Enter the salutation number then the channel number it is to be played on. For all channels enter 000 then enter the month, day and time it is to start followed by the month, day and time it is to end."

7. Upon completion of your entry, press the pound (#) key.

8. To exit the system, press the pound (#) key four (4) times then hang up.

For Example: If you wanted salutation 001 to play on channel 002 starting on December 25 at 08:30 in the morning and stop at 17:00 on December 31, you would enter: 00100212250830123117 00 pound (#) key.

Sample

SALUTATION WORKSHEET

DAY SPECIFIC ALL CHANNELS / PORT, DATE AND TIME

Examples from previous pages

SAL. NO	CHANNEL NO.	START DATE	START TIME	STOP DATE	STOP TIME
005	000	*200	0800	*600	1700#
001	002	1225	0830	1231	1700#

Salutation Maintenance - Recording Salutations

1. Call the system number _____, you will hear your salutation:

   "Thank you for calling xxxxxxxxx . . . . . ."

2. Press the star (*) key twice, you will hear:

   "Enter the master password."

3. Enter your system master password _____.

4. You will then hear:

   "Please select a maintenance function. Press 1 for messages, 2 for extensions, 3 for parameters, 4 for departments, 5 for salutations or 6 to set system time and date. Press the pound (#) key to exit."

5. Enter the "5" key. You will then hear:

   "Press 1 for salutation recording maintenance. Press 2 for salutation by port, date and time maintenance."

6. Enter the "1" key. You will then hear:

   "Please enter the three (3) digit salutation number to be modified followed by a star (*) to hear that salutation or a pound (#) key to record it."

7. If you enter the three (3) digit number of a previously recorded salutation and the star (*) key, you will hear that recording and then be returned to step 6.

8. If you want to record a new salutation, enter the three (3) digit number for the new salutation then the pound (#) key. Record at the tone and press the pound (#) key when finished.

9. If you wish to exit the system, press the pound key (#) three (3) times then hang up.

System Date and Time Maintenance
(Keyboard Programmable)

1. Call the system number _____, you will hear your salutation:

   "Thank you for calling xxxxxxxxx . . . . . ."

2. Press the star (*) key twice, you will hear:

   "Enter the master password."

3. Enter your system master password _____.

4. You will then hear:

   "Please select a maintenance function. Press 1 for messages, 2 for extensions, 3 for parameters, 4 for departments, 5 for salutations or 6 to set system time and date. Press the pound (#) key to exit."

5. Enter the "6" key. You will then hear:

   "To set the system date press 3 followed by a 6 or 8 digit date. To set the system time press 8 followed by a 4 or 6 digit time."

6. After entering a correct date or time format, the date or time will be changed in the system and you will be returned to step 5.

7. If you enter an incorrect date or time format, you will hear:

   "I'm sorry you have entered an invalid date or time format or possibly you have entered to few or to many digits. For a single digit month, day, hour or second, precede them with a zero (0)."

   You will then be returned to step 5.

8. To exit the system, press the pound (#) key four (4) times then hang up.

For Example: If you wanted to change the system time to 09:28:05 you would enter:

8092805 pound (#) key

Section 5

Message Table

MESSAGE TABLE

Need to RECORD

SAL000: [Night-time or default Salutation - Will play on any channel when no other Salutation is programmed to play.]

SAL001-999: [Programmable by time of day; day of week; per channel]

MESS001: [Multilingual Introduction Message (Press 1 for English etc...)]

OPTIONAL MESSAGE
Need to RECORD

MESS002: *[Action To Take or What To Do Message When Current Salutation on Channel = 000]*

Need to RECORD

MESS003: *[Action To Take or What To Do Message]*

If you know the number of the person you are calling you may enter it now. For a company directory please press "9" or stay on the line and the switchboard operator will assist you.

MESS007: Please hold while I transfer you to the switchboard operator.

MESS008: Please hold while I try that extension for you

MESS009: Thank you for calling. Goodbye.

MESS010: I'm transferring your call to (ver 6.17 +)

MESS011: (DID Toll Saver) -"ringing" or "tone" (Not a voice message)

MESS012: I am transferring your call now. (Customized for type K, L)

MESS013: I am transferring your call now.

MESS014: I'm sorry, I did not understand your request. Please try again.

MESS015: I'm sorry, that extension is busy. Please try another extension, press 0 for the switchboard operator or call back later.

MESS016: I'm sorry, there is no answer at that extension. Please try another extension, press 0 for the switchboard operator or call back later.

MESS018: *Default message for Type "X" on time_D0-Not-Disturb*
(Only when parameter X18Global (220) set to 1

MESS019: *This call is being recorded*

MESS020: *I'm conferencing your call now*

MESS022: Let me repeat your choices, so you may start over.

MESS023: I'm sorry, that number is an invalid choice. Please try again.

MESS024: Please enter another extension, press 0 for the switchboard operator or call back later.

MESS026: Please enter the extension number

MESS028: Valid extension, goodbye

MESS035: Whom may I say is calling? Please state your name at the tone.

MESS040: Please press "2" to accept this call or "7" to refuse it.

MESS041: Press any Key to leave a message

MESS050: Your call will be processed next. Press star to remain on hold, enter another extension, press the pound sign to exit or 9 to leave a message.

MESS051: That extension is busy.

MESS052: That extension is still busy.

MESS070: *(Unavailable greeting for type "R" mailbox)*
The person you are trying to reach is unavailable. You may leave a message at the tone, dial "0" for the operator or enter another ext.

MESS071: *Default unavailable message for Type "A"*
Need to RECORD

MESS072: *Default unavailable message for Type "K"*
Need to RECORD

MESS080: Record at the tone, end with a pound sign.

MESS081: Record at the tone. You may hang up when finished or press "#" for additional options.

MESS082: Please enter a "1" to review your message, "2" to change your message, "3" to send this message or "4" to cancel this message, "5" to append to this message or press the pound sign to exit.

MESS083: Maximum record time has expired. Please press "*" to continue recording or any other digit to end your message

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MESS085: Are you on hold? If so, please say yes after the tone.

MESS086: Access Denied

MESS087: Access Denied (Can customize for parameter NoMessage)

MESS088: Press any key to continue, the "#" pound to exit

MESS089: Press any key to continue, the "#" pound to exit or hold for the operator.

MESS090: Thank you. Your message has been sent.

MESS102: Press "1" to hear your messages, "2" to leave a message, "3" for message box maintenance, 4 for extension maintenance, "5" for outcall maintenance, "6" for distribution list maintenance or the pound sign to exit.

MESS103: Press 1 to hear your message, 2 to send a message, 3 to record your unavailable greeting or press the pound sign to exit. (Type "K")

MESS110: You have.

MESS111: This mailbox is full. Please try to leave your message again later.

MESS112: New messages.

MESS113: New message.

MESS114 Old messages.

MESS115: For old messages press "1", for new message press "2".

MESS116: Old message.

MESS117: Please press 2 to hear next message, 3 to review this message or the # sign to exit.

MESS120: You have no more new messages.

MESS121: You have no more old messages.

MESS122: Press "1" to delete this messages, "2" to hold it, "3" to review it, or the pound sign to exit.

MESS123: Press "1" to delete this messages, "2" to hold it, "3" to review it, "4" to hear date and time, "5" to forward this message, "6" to send a reply to this message or the pound sign to exit.

MESS124: That message is currently being heard by another user.

MESS130: Please enter the destination box number to send a reply message to.

MESS131: Your message reply will be sent to

MESS132: That is an invalid reply mailbox number - please try again.

MESS133: Thank you - your reply message has been sent

MESS134: What would you like to do with the original message?

MESS135: Your reply message has been canceled.

MESS140: Please enter the box number that you wish to send this message to.

MESS142: That is an invalid message box, please try again.

MESS147: Nothing Recorded

MESS152: Notification entries, Press "1" to review, or "2" to proceed. Press the pound sign to exit.

MESS153: Notification entry, Press "1" to review, or "2" to proceed. Press the pound sign to exit.

MESS158: Outcall type is voice.

MESS159: Outcall type is beeper.

MESS160: Please press "1" to add an outcall entry, "2" to change, "3" to delete or press the pound sign to exit.

MESS162: Your outcall notification table is full.

MESS163: Please enter the outcall telephone number for notification followed by the pound sign.

MESS166: Is this correct? Press "1" if yes, or "2" if no.

MESS168: Please enter the number of minutes between outcall retries.

MESS170: Please record your notification prompt at the tone. Press the pound sign to exit. If no notification prompt is desired, simply press the "#" sign

MESS172: Please enter the 4 digit notification start time. Hour and minute.

MESS173: Please enter the 4 digit notification start date. Month and day.

MESS174: Please enter the 4 digit notification stop time. Hour and minute.

MESS175: Please enter the 4 digit notification stop date. Month and day.

MESS176: Please enter the outcall entry to be changed.

MESS177: That is an invalid outcall entry.

MESS178: Please enter the outcall entry to delete. Press * (star) to delete all entries or the pound sign to exit.

MESS186: You Have a Message, Please enter your extension number

MESS187: Good Morning. This is your wake-up call. Please press the star "*" to acknowledge, or I'll call back in (5 minutes.) -delete time 6.172+

MESS188: The hard disk is approaching capacity storage time, please check.

MESS191: Enter the type of outcall, 1 for voice, or 2 for beeper

MESS195: Please enter the beeper notification number. End with the pound sign

MESS200: Please enter the destination message box for this message.

MESS202: I'm sorry that is an invalid message box.

MESS203: Do you wish to add comments. Press "1" if yes, "2" if no.

MESS204: I'm sorry that message has already been forwarded to that extension

MESS205: Your message request has been forwarded, what would you like to do with the original message?

MESS222: Please enter the Distribution List number

MESS225: Press "1" to send a message to a distribution list, press "2" for distribution list maintenance.

MESS227: Please enter the distribution list password.

MESS230: Press 1 to hear existing list, 2 to modify a list, 3 to add a list or 4 to delete a list, 5 for List status. Press the "#" sign to exit.

MESS233: There is no distribution list at this time.

MESS235: End of lists.

MESS240: Enter the list number to modify.

MESS242: I'm sorry there is no such list.

MESS245: Press "1" to hear list members, "2" to add members, "3" to delete members, "4" to change the list name, "5" for member status or the pound sign to exit.

MESS248: End of list

MESS255: Enter the message box number to be added.

MESS260: Please enter the message box to be deleted.

MESS265: The next Available list number is.

MESS267: Please record the list name at the tone, end with the pound sign.

MESS270: Press "1" to re-record, or "2" to accept this recording.

MESS272: Do you wish to add members to this list now, press "1" if YES, "2" if NO or the pound sign to exit.

MESS275: Enter the list number to be deleted.

MESS278: Press "1" to hear existing lists, or press "2" to record your message. End with a pound sign.

MESS280: Enter the list number to send this message to.

MESS285: Your message has been distributed

MESS286: Press "1" to send this message to another list or Press "2" to record and distribute another message or the pound sign to exit.

MESS292: Your message is being distributed

MESS300: Please enter the master password.

MESS305: Please select a maintenance function. Press "1" for messages, "2" for extensions, "3" for parameters, "4" for departments, "5" for salutations, "6" to set system date and time or the pound sign to exit.

MESS308: To listen to a message, enter the message number followed by a star. To return to the previous menu, press the pound sign. To record a message, enter the message number followed by the pound sign. Begin recording at the tone. When finished press the "#" sign.

MESS310: I'm sorry there is no such message.

MESS311: Please select an extension maintenance function. Press "1" to add an extension, "2" to change, "3" to delete, or press the pound sign to exit.

MESS314: Press "1" to add a single extension or press "2" to add a range of extensions.

MESS315: To add a single extension, enter the extension number followed by the type of monitoring for that extension. Press "2" for extension only, "7" for ring and busy or "6" for no monitoring at all. To set an extension for ring and busy monitoring without messaging press "9". Press the pound sign to exit.

MESS316: To add a range of extensions, enter the lowest extension number first followed by the highest extension followed by the type of monitoring. Press "2" for busy only, "7" for ring and busy or "6" for no monitoring at all. To set a range of extensions for ring and busy monitoring without messaging press "9". Press the pound sign to exit.

MESS317: Press "1" to change a single extension or press "2" to change a range of extensions.

MESS318: To change the monitoring of a range of extensions, enter the lowest extension first then the highest extension number followed by the type of monitoring. Press "2" for busy only, "7" for ring and busy or "6" for no monitoring at all. To change the monitoring of an extension to ring and busy without messaging press "9".

MESS319: To change the monitoring of a range of extensions, enter the lowest extension first then the highest extension number followed by the type of of monitoring for those extensions. Press "2" for busy only, "7" for ring and busy or "6" for no monitoring at all. To change a range of extensions for ring and busy monitoring without messaging press "9". Press the pound sign to exit.

MESS320: Press "1" to delete a single extension or press "2" to delete a range of extensions. Press the pound sign to exit.

MESS321: To delete a single extension, enter the extension number followed by the pound sign.

MESS322: To delete a range of extensions, enter the lowest extension number followed by the highest extension number, then pound sign to exit.

MESS323: Enter the parameter number and the new value for that parameter followed by the pound sign. If the parameter requires a pause, press star and one. If it requires a flash hook, press star and zero. To cancel enter "999" and the pound sign. To reset the parameter to its default value enter "000" and the pound sign.

MESS326: Press "1" for department message maintenance or press "2" for department mapping. Press the pound sign to exit.

MESS327: To listen to a department message, enter the department number followed by a star. To record a new department message, enter the department number followed by the pound sign. Begin recording at the tone. Press the pound sign to exit.

MESS328: To add a terminating set, enter the department number followed by the terminating digit and the terminating type. Press "2" for Announcement, "3" for extension or "6" for menu followed by the department or menu number to direct the caller to. End with "#"

MESS329: Please enter the three digit salutation number to be modified followed by a star "*" to hear that salutation or a pound sign to re-record it.

MESS330: Press"1" for salutation recording maintenance.
Press "2" for salutation by port, date and time maintenance.

MESS331: Please enter "1" to listen to this salutation, "2" to record a new salutation, "3" to change the time, "4" to change the date or "5" to change the port assignment. Press the pound sign to exit.

MESS332: Enter the salutation number then the channel number it is to be played on. For all channels enter "000." Next, enter the month, day and the time it is to start followed by the month, day and time it is to end.

MESS333: Enter the salutation number then the channel number it is to be played on. For all channels enter "000". Next, enter a star (*) followed by the numbered day of the week you want the salutation to play followed by two zeros and a start time. Next, enter a star (*) followed by the numbered day of the week you want the salutation to stop followed by two zeros and stop time. Press the pound sign to exit.

MESS340: To hear the current system date press "1", the current system time press "2". To set the system date, press "3" followed by a six or eight digit date. To set the system time, press "8" followed by the four or six digit time. Press the pound sign to exit.

MESS343: I'm sorry, you have entered an invalid date or time. Possibly you have entered too few or too many digits. For a single digit month, day, hour, minute or second, precede them with a zero. Press pound to exit.

MESS349: "Press 1 for Index Record/Play or 2 for Length Adjustment."

MESS350: Please enter the number of the segment to be recorded.

MESS351: "Please enter the new segment length."

MESS358: "Please enter the Message Segment Number Length to change. Press "*" to review or "#" to change."

MESS360: Please enter the channel for this departmental mapping.
Press a "0" for all channels.

MESS400: Please enter your extension number.

MESS404: I'm sorry, that extension is invalid. Please try again.

MESS405: Please enter your password.

MESS408: Enter "1" for time forwarding, "2" for call forwarding, "3" for call screening, or Press the pound sign to exit.

MESS411: Your mailbox has been entered by using the Master Password

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MESS412: To set extension time forwarding, press "3" for Do Not Disturb, "6" to remove time forwarding or "9" to set time forwarding. Enter the four or six digit start time followed by the four or six digit stop time. Next, enter the forwarding extension number.
Press the pound sign to exit.

MESS413: Enter "1" to acknowledge or any other key to replay Date/Time info.

MESS415: To call forward your extension, press "9" followed by the new extension destination. To set Do Not Disturb, press "3". To remove call forwarding or Do Not Disturb, enter "6". Press the pound sign to exit.

MESS417: Call screening is currently turned off.

MESS418: Call screening is currently turned on.

MESS419: To set call screening for your extension, press "1" for OFF, "2" for ON or "3" for Non-Record Call Screening or "4" for Call Screening Announce

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MESS420: Call Screening - Non Record is currently on

MESS421: Call Screening Announce is currently on (Future release)

MESS422: Please enter your new four digit password, press pound sign to exit.

MESS425: Your password has been removed.

MESS431: Do-Not-Disturb has been set for.

MESS432: Do-Not-Disturb or Call Forwarding has been removed for.

MESS433: Call Forwarding has been set for.

MESS450: Enter "1" to record your unavailable message, "2" to hear your message box status, "3" to change your current password, "4" to set date/time playback or "5" to set message retrieval to FIFO or LIFO. Press the pound sign to exit.

MESS452: Press 1 to review your greeting, 2 to add/change your greeting, 3 to delete your greeting or the # sign to exit.

MESS453: Please make a notation, your password is.

MESS454: Blank

MESS455: The number of days your messages will be held is.

MESS456: Date and time will not be announced.

MESS457: Date and time will be announced.

MESS458: Your messages will be played in LIFO order.

MESS459: Your message will be played in FIFO order.

MESS462: Your greeting is currently being accessed by an outside caller; Please try again later.

MESS468: Press 1 to add a password, 2 to delete your password or the pound sign to exit.

MESS470: Please enter your new password.

MESS600: Please enter your room number

MESS601: Please enter the room number for wake-up.

MESS606: Press 1 to add a wake-up call or 2 to delete a wakeup call

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MESS610: Please enter the four digit wake-up time.

MESS618: Press 1 to delete messages, 5 to delete Greetings or 9 to delete both.

MESS701: Enter up to 3 digits of the person's Last Name. Use Zero "0" for Letter Q or Z, press the pound "#" sign to exit.

MESS702: A Press "1", B Press "2", C Press "3"

MESS703: D Press "1", E Press "2", F Press " 3"

MESS704: G Press "1", H Press "2", I Press "3"

MESS705: J Press "1", K Press "2", L Press "3"

MESS706: M Press "1", N Press "2", O Press "3"

MESS707: P Press "1", R Press "2", S Press "3"

MESS708: T Press "1", U Press "2", V Press "3"

MESS709: W Press "1", X Press "2", Y Press "3"

MESS710: Q Press "1", Z Press "2"

MESS712: I'm Sorry, You have entered an invalid digit. Please listen carefully and try again.

MESS713: If the First Letter of the last name is

MESS714: While listening, you may press star "*" to dial the current entry, dial the extension number or press the pound sign "#" to skip to the next entry.

MESS715: No matches found. Press star "*" to re-enter directory, dial an extension number directly or press the pound sign "#" to exit.

MESS716: There are no more entries. Press star to re-enter directory, dial an extension number or press the pound sign "#" to exit.

MESS900: " Press 1 to send message with Receipt."

MESS901: " Press 2 to send message with Priority."

MESS902: " Press 3 to send message with Receipt and Priority."

INDEX PLAY PHRASES

Message 000 = 0
Message 001 = 1
Message 002 = 2
Message 003 = 3
Message 004 = 4
Message 005 = 5
Message 006 = 6
Message 007 = 7
Message 008 = 8
Message 009 = 9
Message 010 = 10
Message 011 = 11
Message 012 = 12
Message 013 = 13
Message 014 = 14
Message 015 = 15
Message 016 = 16
Message 017 = 17
Message 018 = 18
Message 019 = 19
Message 020 = 1st
Message 021 = the
Message 022 = of
Message 023 = o'clock
Message 024 = one
Message 025 = and
026 = invalid
027 = members
028 = file
029 = thousand
030 = maximum
031 = empty
032 = Record Silence
033 = AM
034 = PM
035 = Seconds
036 = Minutes
037 = Hours
038 = Month
039 = Day
040 = Year
041 = January
042 = February
043 = March
044 = April
045 = May
046 = June
047 = July
048 = August
049 = September
050 = October
051 = November
052 = December
053 = Star
054 = Pound
055 = Flash Hook
056 = Comma
057 = Number
058 = Oh
059 = Message
060 = Less Than
061 = Equal
062 = > Gr/Than
063 = Question
064 = At
065 = A
066 = B
067 = C
068 = D
069 = E
070 = F
071 = G
072 = H
073 = I
074 = J
075 = K

INDEX PLAY PHRASES

Message 076 = L
Message 077 = M
Message 078 = N
Message 079 = O
Message 080 = P
Message 081 = Q
Message 082 = R
Message 083 = S
Message 084 = T
Message 085 = U
Message 086 = V
Message 087 = W
Message 088 = X
Message 089 = Y
Message 090 = Z
Message 091 = Extension
Message 092 = Added
Message 093 = Changed
Message 094 = Deleted
Message 095 = Salutation
Message 096 = Messages
Message 097 = Through
Message 098 = From
Message 099 = Range
Message 100 = Parameter
Message 101 = Time

102 = Date
103 = Yes
104 = No
105 = Entry
106 = Telephone
107 = Box
108 = List
109 = Held
110 = Duplicate
111 = Do-Not-Disturb
112 = Busy
113 = Name Tag
114 = Greeting
115 = Unavailable
116 = cancelled
117 = Error
118 = Department
119 = Saved
120 = twenty
121 = twenty one
122 = twenty two
123 thru 199 etc...
200 = one hundred
201 = one hundred and
202 = two hundred
203 = three hundred

204 = four hundred
205 = five hundred
206 = six hundred
207 = seven hundred
208 = eight hundred
209 = nine hundred
210 = minute
211 = level
212 = digit
213 = line
214 = record (Data)
215 = cleared
216 = received
217 = calling
218 = old
219 = new
220 = english
221 = Spanish
222 = French (3rd lang)
223 = 4th language
225 = thank you
226 = or
227 = with
228 = priority
229 = non-urgent (normal del)
230 = receipt

INDEX PLAY PHRASES

Message 231 = and

Message 232 = hour

Message 233 = hours

Message 234 = Day

Message 235 = Days

Message 236 = Minute

Message 237 = Minutes

Message 238 = Time Forward

Message 239 = Transfer

Message 240 = Reply

Message 241 = As

Message 242 = Sent

Message 243 = Send

Message 244 = Options

Message 245 = Your

Message 246 = Are

Message 247 = For

Message 248 = Help

Message 249 = Operator

Message 250 = Internal

Message 251 = External

Message 252 = Distribution

Section 6

Parameter Table

Parameter Control Keys and Functions

When working with parameter maintenance, star (*) serves as a control key for entering non-digit characters into a parameter field.

Example: *Parameter Number 149 = Hold*
*Possible setting is *0*1 (flash hook pause)*

Control Key & Control Digit	Character Result or Function
*0	Flash Hook
*1	, (pause)
*2	E (extension to follow)
*3	Blanks Parameter Field
*4	<ESC> (character)
*5	\ (mailbox number)
*9	# (character)
**	* (character)

PARAMETER TABLE

No.	Name	Default	Description
001	FLASHCHAR	*0	Character in a dialing string that causes a flash hook to occur (&).
002	FLASHTIME	50 (.5 sec)	Duration of time on-hook required to generate a flashook in increments of 10 milliseconds.
003	PAUSETIME	200 (2 sec)	Duration of pause time to send a pause in a dialing string in increments of 10 milliseconds.
004	DIGRATE	6053	Digitalized rate in hz.
005	SCHTM	20 (1 sec)	Scheduler time slice, expressed as the maximum number of timer ticks before the driver must return control to the program.
006	PBK	6 (60 msec)	Pulse dialing break interval in 10 millisecond increments.
007	PMK	4 (40 msec)	Pulse dialing make interval in 10 millisecond increments.
008	PIDD	10 (100 msec)	Pulse dialing interdigit delay in 10 millisecond increments.
009	TIDD	5 (50 msec)	Tone dialing interdigit delay in 10 millisecond increments.
010	OHDLY	50 (.5 sec)	Off-hook delay interval in 10 millisecond intervals. This is the timer after an off-hook function until the off-hook complete event.
011	RON	1 (.1 sec)	Minimum ring ON interval to detect an incoming ring in 100 millisecond intervals.
012	ROFF	5 (.5 sec)	Minimum ringing OFF interval to detect an incoming ring in 100 millisecond intervals.
013	RIRD	80 (8 sec)	Delay after which ring count is reset in 100 millisecond intervals.
014	SBNC	4 (40 msec)	Silence message debounce interval in 10 millisecond intervals.

Note: Parameters 001 - 013 are switchboard interface parameters.

PARAMETER TABLE

No.	Name	Default	Description
015	RFUL	0	Reserved: must be set to 0.
016	TTDATA	10 (100 msec)	Duration of dialed DTMF tone in 10 millisecond intervals.
017	MAXPDOFF	50 (500 msec)	Maximum time for PD make in 10 millisecond intervals.
018	MINPDON	2 (20 msec)	Minimum make interval for valid loop pulse digit in 10 millisecond intervals.
019	MINPDOFF	4 (40 msec)	Minimum break interval for valid loop pulse digit in 10 millisecond intervals.
020	MINIPD	30 (300 msec)	Minimum interdigit pulse time in 10 millisecond increments.
021	MINLCOFF	30 (300 msec)	Minimum time loop current must be off before loop current CST can be generated. 10 millisecond intervals.
022	RFU2	-	-
023	REDGE	-	-
024	DTPLDLY	5 (80 msec)	Playback DTMF filter time in 10 millisecond intervals. 0 = 30msec
025	DTEDGE	2	DTMF event edge selection. 2 specifies event detected on leading edge of tone; 1 specifies event detected on trailing edge of tone.
026	DTRCDLY	2 (50 msec)	DTMF receiver guard time in 10 milli-intervals. (0 = 30 msec detection)
027	SBSIZ	200	Silence compression delay expressed in bytes with a possible range from 1 to 400 bytes.
028	NBRDNA	4	Number of ring cycles before no answer is returned.
029	STDELY	25	Delay after dialing before call analysis begins in 10 millisecond intervals.
030	CNOSIG	4000	Time out delay when no signal is detected in 10 millisecond intervals.

Note: Parameters 024 - 063 are in reference to inside calls.

PARAMETER TABLE

No.	Name	Default	Description
031	LCDLY	20000	Delay after dialing before loop signal is recognized as connect in 10 millisecond intervals.
032	LCDLYL	20000	Delay after loop signal before connect is signaled in 10 millisecond intervals.
033	HEDGE	2	Specify signalling connect on leading or trailing edge of Hello 1 = leading edge: 2 = trailing edge.
034	SNOSIL	650	Time-out delay when continuous signal is present in 10 millisecond intervals.
035	LO1TO1A	13	Acceptable tolerance above nominal first low interval expressed as a percent. Range is 1 - 255.
036	LO1TO1B	13	Acceptable tolerance below nominal first low interval expressed as a percent. Range is 1 - 255.
037	LO2TO2A	13	Acceptable tolerance above nominal second low interval expressed as a percent. Range is 1 - 255.
038	LO2TO2B	13	Acceptable tolerance below nominal second low interval express as a percent. Range is 1 - 255.
039	HI1TO1A	13	Acceptable tolerance above nominal high interval expressed as a percent. Range is 1 - 255.
040	HI1TO1B	13	Acceptable tolerance below nominal high interval expressed as a percent. Range 1 - 255.
041	LO1BMAX	90	Maximum time for first low interval to allow detection as busy in 10 millisecond intervals.
042	LO2BMAX	90	Maximum time for second low interval to allow detection as busy in 10 millisecond intervals.

Note: Parameters 024 - 063 are in reference to inside calls.

PARAMETER TABLE

No.	Name	Default	Description
043	HI1BMAX	90	Maximum time for high interval to allow detection as busy in 10 millisecond intervals.
044	NSBUSY	0	Number of additional states required for busy detect.
045	LOGLITCH	15	Time below which a silence interval is considered a noise spike in 10 millisecond intervals.
046	HIGLITCH	19	Time below which a sound interval is considered a noise spike in 10 millisecond intervals.
047	LO1RMAX	90	Maximum time for short low interval detected as part of a double ring in 10 millisecond intervals.
048	LO2RMIN	225	Minimum time for long low interval detected as part of a double ring in 10 millisecond intervals.
049	INTFLG	1	Operator intercept detection 1 = enable; 2 = disable.
050	INTFLTR	10	Minimum duration of intercept tone for detection in 10 millisecond intervals.
051	FRQMIN	45	Lower limit for frequency of tone detectable as intercept.
052	FRQMAX	50	Upper limit for frequency of tone detectable as intercept.
053	DEVMAX	100	Upper limit for frequency deviation of tone detectable as intercept.
054	SMPSIZ	300	Number of samples used in frequency analysis.
055	CPBRFUL	0	Reserved for future use: must be zero.
056	SPDEB	-	Trailing edge silence pointer debounce.

Note: Parameters 024 - 063 are in reference to inside calls.

PARAMETER TABLE

No.	Name	Default	Description
057	HISIZ	90	Used in comparison with previous first high.
058	ALOWMAX	700	If previous high > hicond use this value.
059	BLOWMAX	530	If previous high < hicond use this value.
060	NBRBEG	1	This ring on which to bebin the analysis.
061	HI1CEI1	78	If first high < second high use this value.
062	LO1CEI1	78	If first learned low < this use this value.
063	CPBRFU2	0	Reserved for future use: must be zero.
064	DPTLDLY	5 (80 msec)	Playback DTMF filter time in 10 millisecond intervals.
065	DTEDGE	2	DTMF event edge selection. 2 specifies event detected on leading edge of t one: 1 specifies event detected on trailing edge of tone.
066	DTRCDLY	0	DTMF receiver guard time in 10 millisecond intervals. (30 msec detection)
067	SBSIZ	200	Silence compression delay, expressed in bytes with possible range from 1-400 bytes.
068	NBRDNA	4	Number of ring cycles before a No Answer is returned.
069	STDELY	25	Delay after dialing before call analysis begins, in 10 millisecond intervals.
070	CNOSIG	4000	Time out delay when no signal is detected, in 10 millisecond intervals.

Note: Parameters 064 - 103 are in reference to outside calls.
(Not used at this time for Call progress monitoring)

PARAMETER TABLE

No.	Name	Default	Description
071	LCDLY	400	Delay after dialing before loop signal is recognized as connect, in 10 millisecond intervals.
072	LCDLYL	10	Delay after loop signal before connect is signaled, in 10 millisecond intervals.
073	HEDGE	2	Specify signalling connect on leading or trailing edge of Hello. 1 = leading edge; 2 = trailing edge.
074	CNOSIL	650	Time out delay when continuous signal is present, in 10 millisecond intervals.
075	LO1TO1A	13	Acceptable tolerance above nominal first low interval, expressed as percent. RANGE is 1 - 255.
076	LO1TO1B	13	Acceptable tolerance below nominal first low interval, expressed as a percent. Range is 1 - 255.
077	LO2TO1A	13	Acceptable tolerance above nominal second low interval, expressed as a Range is 1 - 255.
078	LO2TO1B	13	Acceptable tolerance below nominal second low interval, expressed as a percent. Range 1 - 255.
079	HL1TO1A	13	Acceptable tolerance above nominal high interval, expressed as a percent. Range is 1 - 255.
080	HI1TO1B	13	Acceptable tolerance below nominal high interval, expressed as a Range is 1 - 255.
081	LO1BMAX	90	Maximum time for first low interval to allow detection as busy, in 10 millisecond intervals.
082	LO2BMAX	90	Maximum time for second low interval to allow detection as a busy, in 10 millisecond intervals.

Note: Parameters 064 - 103 are in reference to outside calls.
(Not used at this time for Call progress monitoring)

PARAMETER TABLE

No.	Name	Default	Description
083	HL1BMAX	90	Maximum time for high interval to allow detection as busy, in 10 millisecond intervals.
084	NSBUSY	0	Number of additional states required for busy detect.
085	LOGLITCH	15	Time below which a silence interval is considered a noise spike, in 10 millisecond intervals.
086	HIGHLITCH	19	Time below which a sound interval is considered a noise spike in 10 millisecond intervals.
087	LO1RMAX	90	Maximum time for short low interval detected as part of a double ring, in 10 millisecond intervals.
088	LO2RMIN	225	Minimum time for low interval detected as part of a double ring, in 10 millisecond intervals.
089	INTFLG	1	Operator intercept detection. 1 = enable; 2 - disable.
090	INTFLTR	10	Minimum duration of intercept tone for detection, in 10 millisecond intervals.
091	FRQMIN	45	Lower limit for frequency of tone detectable as intercept.
092	FRQMAX	50	Upper limit for frequency of tone detectable as intercept.
093	DEVMAX	100	Upper limit for frequency deviation of tone detectable as intercept.
094	SMPSIZ	300	Number of samples used in frequency analysis.
095	CPBRFUL	0	Reserved for future use must be zero.
096	SPDEB	-	Trailing edge silence pointer debounce.

Note: Parameters 064 - 103 are in reference to outside calls.
(Not used at this time for Call progress monitoring)

PARAMETER TABLE

No.	Name	Default	Description
097	HISIZ	90	Used in comparison with previous first high.
098	ALOWMAX	700	If previous high > hicond, use this value.
099	BLOMAX	530	If previous high < hicond, use this value.
100	NBRBEG	1	The ring on which to begin the analysis.
101	HI1CEI1	78	If first high < second high use this value.
102	LO1CEI1	78	If first learned low < this, use this value.
103	CBRFUW	0	Reserved for future use; must be zero.
104	DTPLDLY	5 (80 msec)	Playback DTMF filter time, in 10 millisecond intervals.
105	DTEDGE	2	DTMF event edge selection, 2 event detected on leading edge of tone; 1 specifies event detected on trailing edge of tone.
106	DTRCDLY	0	DTMF receiver guard time, in 10 millisecond intervals. (30 msec detection)
107	SBSIZ	200	Silence compression delay, expressed in bytes, with a possible range from 1 - 400 bytes.
108	NBRDNA	4	Number of ring cycles before No Answer is returned.
109	STDELY	25	Delay after dialing before call analysis begins in 10 millisecond intervals.
110	CNOSIG	4000	Time-out delay when no signal is detected, in 10 millisecond intervals.

Note: Parameters 104 - 143 are in reference to busy calls.
(Not used at this time for Call progress monitoring)

PARAMETER TABLE

No.	Name	Default	Description
111	LCDLY	400	Delay after dialing before loop signal is recognized as connect, in 10 millisecond intervals.
112	LCDLYL	10	Delay after loop signal before connect is signaled, in 10 millisecond intervals.
113	HEDGE	2	Specify signalling connect on leading or trailing edge of Hello 1 = leading edge; 2 = trailing edge.
114	CNOSIL	650	Time-out delay when continuous signal is present, in 10 millisecond intervals.
115	LO1TO1A	13	Acceptable tolerance above nominal first low interval, expressed as a percent. Range is 1 - 255.
116	LO1T01B	13	Acceptable tolerance below nominal first low interval, expressed as a percent. Range is 1 - 255.
117	LO2TO1A	13	Acceptable tolerance above nominal second low interval, expressed as a percent. Range is 1 - 255.
118	LO2TO1B	13	Acceptable tolerance below nominal second low interval, expressed as a percent. Range is 1 - 255.
119	HI1TO1A	13	Acceptable tolerance above nominal high interval, expressed as a percent. Range is - 1 255.
120	HI1TO1B	13	Acceptable tolerance below nominal high interval, expressed as a percent. Range is 1 - 255.
121	LO1BMAX	90	Maximum time for first low interval to allow detection as busy, in 10 millisecond intervals.
122	LO2BMAX	90	Maximum time for second low interval to allow detection as busy, in 10 millisecond intervals.

Note: Parameters 104 - 143 are in reference to busy calls.
(Not used at this time for Call progress monitoring)

PARAMETER TABLE

No.	Name	Default	Description
123	HI1BMAX	90	Maximum time for high interval to allow detection as a busy, in 10 millisecond intervals.
124	NSBUSY	0	Number of additional states required for busy detect.
125	LOGLITCH	15	Time below which a silence interval is considered a noise spike, in 10 millisecond intervals.
126	HIGHLITCH	19	Time below which a sound interval is considered a noise spike, in 10 millisecond intervals.
127	LO1RMAX	90	Maximum time for short low interval detected as part of a double ring, in 10 millisecond intervals.
128	LO2RMIN	225	Minimum time for long low interval detected as part of a double ring, in 10 millisecond intervals.
129	INTFLG	1	Operator intercept detection. 1 = enable; 2 = disable.
130	INTFLTR	10	Minimum duration of intercept tone for detection, in 10 millisecond intervals.
131	FRQMIN	45	Lower limit for frequency of tone detectable as intercept.
132	FRQMAX	50	Upper limit for frequency of tone detectable as intercept.
133	DEVMAX	100	Upper limit for frequency deviation of tone detectable as intercept.
134	SMPSIZ	300	Number of samples used in frequency analysis.
135	CPBRFUL	0	Reserved for future use; must be zero.
136	SPDEB	-	Trailing edge silence pointer debounce.

Note: Parameters 104 - 143 are in reference to busy calls.
(Not used at this time for Call progress monitoring)

PARAMETER TABLE

No.	Name	Default	Description
137	HISIZ	90	Used in comparison with previous first high.
138	ALOWMAX	700	If previous high > hicond, use this value.
139	BLOWMAX	530	If previous high < hicond, use this value.
140	NBRBEG	1	The ring on which to begin analysis.
141	HI1CEI1	78	If first high < second high, use this value.
142	LO1CEI1	78	If first learned low < this, use this value.
143	CPBRFU2	0	Reserved for future use; must be zero.
144	EXTLEN	3	Extension length; maximum number of digits in extension number.
145	TIMOUT	8	Number of seconds before disconnect upon no response.
146	PASSWORD	9999	Master system password (4 digit).
147	DROPEXT	000	Extension calls go to upon no DTMF response.(length same as ext. length)
148	RNGNOANS	4	Number of rings before system determines no answer.
149	HOLD	&,	Sequence needed to place caller on hold (*0*1).
150	NOANSRTN	&,	Sequence returned to caller after no answer (*0*1).
151	BUSYRTN	&,	Sequence returned to caller after busy (*0*1).
152	NAMVERIFY		Reserved for future use.
153	POUNDOUT	0	Timing for exiting the system w/ # Also used to eliminate playing of mailbox number upon transfer of caller to mailbox greeting using the pound sign "#" + "ext" when set to 128

Note: Parameters 144 - 160 are system-wide control parameters.
(064-143 Not used at this time for Call progress monitoring)

PARAMETER TABLE

No.	Name	Default	Description
154	MSGIN		Reserved for future use.
155	RINGNUM	1	The number of rings recieved before The voice system will go Off-hook
156	**FCNT** (If set to 0 set parameter 183=1)	1	Determines if call transferring message is played, (1 = ON message will be played, or 0 = OFF message will not be played).
157	MSGFORWARD		Reserved for future use.
158	CALLSCREEN	N	Call screening may be set by individual extension (1 = ON; 0 = Off).
159	MESSAGING	N	Determines if caller x-ferred to mailbox on a BUSY return (2 = yes)
160	DEPTDIGIT	9	Must be reserved - Does **not** wait for interdigit delay - Digit dialed to access audio text. (Dept Mess 000)
161	MAXRCDTM (Type "K" or "L"	60 see parameter 247)	Maximum recording time allowed for each message. Can continue 1 time.
162	AUDIOFDBK	2	Audio feedback settings. 0 = off; 1 = visual; or 2 = audio & visual.
163	**MAXSILENCE**	**5**	Maximum length of silence to be considered a disconnect.
164	**MAXNOISE**	**6**	Maximum length of noise to be considered a disconnect.
165	MSGRET (Type "K" or "L"	9 see parameter 233)	Sets the number of days **old** messages will be held, prior to auto system purge. (During Reorg)
166		0	Not used at this time.
167		0	Not used at this time.
168	INTERDIGIT	2	Delay in seconds between entering DTMF.
169	**FSTBUSYH**	**32**	Fast busy detect high. (set in 10mls intervals) For Disconnect supervision

Note: Parameters 144 - 206- are system-wide control parameters.

PARAMETER TABLE

No.	Name	Default	Description
170	**FSTBUSYL**	**20**	Fast busy detect low. (set in 10mls intervals) For Disconnect supervision
171	PRTERRNOTE	0	Printer error notification extension number. (Not currently used)
172	HDREORG	0300	Hard disk reorganization auto start Military time. (0300 = 3:00 AM)
173	OUTLOCAL	9,	7 Digits for local outcall.
174	OUTLOTOLL		8 Digits for local toll outcall.
175	OUTARTOLL	9,1	10 Digits for out of area outcall.
176	OUTCRETRY	15	Number of minutes between outcall re-trys.
177	DLISTGLOPSWD	9998	Distribution list password (4 digit).
178	MSGWTLTON		Message waiting light, PBX dial string sequence to light on.
179	MSGWTLTOFF		Message waiting light, PBX dial string sequence to light off.
180	AREYOUST	State 7 - Drop to Operator	State 80's - Record Mode
	Parameter 180 = 0	No Voice/Digit Detect	No Digit
	Parameter 180 = 1	Voice Detect enabled	No Digit
	Parameter 180 = 2	Digit Detect Enabled	No Digit
	Parameter 180 = 3	No Voice/Digit Detect	Digit
	Parameter 180 = 4	Voice Detect enabled	Digit
	Parameter 180 = 5	Digit Detect Enabled	Digit
	Parameter 180 = 6	No Voice/Digit	Digit + STE 15/16
181	THRESHOL	500	Threshold for are you there?
182	DIGITRAP	0	Allows use of the DIGITRAP product (0 = OFF, All other entries = ON.)
183	TRANPROT		Call completion protocol.
184	MUSIC	0	Music or Adds play back for caller on hold. 0 = No Play, 1 = Random Play, 2 = Circular Play

Note: Parameters 144 - 206- are system-wide control parameters.

PARAMETER TABLE

No.	Name	Default	Description
185	BEGBLCK	900 (Example)	Starting Message Block for Music or Adds to play (any Mess 800 - 999)
186	ENDBLCK	905 (Example)	Ending Message Block for Music or Adds to play (any Mess 800 - 999)
187	NoRingCount	2	Number of times (+ 1) a call is attempted upon NO Ringback before exit message, Mess016
188	SCREENBACK	&, (Code)	Protocal to return a transferred call after a connect (Example - &,#1)
189	**PLAY003**	**0**	Determines whether Mess003 is appended to the Salutation message 0 = not appended, 1 = is appended
190	LINKLAMP		Added to Parameter 178 when code contains code +extension number + additional code.
191	LINKLmpOFF		Same as 190 For Parameter 179.
192	EXPANDED	0	Toggle use of expanded memory 0 = OFF, 1 = ON **(Not Used)**
193	RS232	0	Toggle to use Seriel Port for Message waiting lights.(Must be software set)
196	Scrnblank	0	When set to (2) will blank the screen after 15 minutes. Hit any key to reset
198	NotifyChan	1	The number of ports to use for notification beginning with last port.
199	DoStats	0	Statistics options (must set autoexec) 0 = Off, 1 = Maunal Print (F5 x 5) 128 = Full system analysis to file
200	DoHuntGroup (6.17 see update notes)	0	Toggle to use VEX hunt group 0 = OFF, 1 = ON (Use copy con)
201	OperSpcl	blank	Alternate path to transfer call to mailbox.
202	Beeppause	blank	Number of pauses before number played to service
203	**TooShort**	**2**	Number of seconds needed for valid message to be saved.

PARAMETER TABLE

No.	Name	Default	Description
204	NSpecial	0	Drop Extension when set to "N" 0,2 = No mailbox STE 3/11 -busy 1,3 = Mailbox STE 3/11 -busy 4 = Blind Transfer (same as "N")
205	NCount	8	Drop Extension parameter ONLY. Number of rings added before Ring no answer on operator's extension
206	SpeedCod	0	Togle for use of speedcode file for lighting messagage lamps (Merlin)
207	BeepDigts	Blank	Default setting for DTMF tones to play upon a beeper notification
208	**NightOpr**	**Blank**	The drop extension when SAL = 000
209	Dumfil	Blank	Future Use
210	Guest Mailbox	Blank	Alternate path for type K mailboxes
211	WakeUp	Blank	Digits to input wakeup or call reminder.
212	Kprefix	Blank	Prefix for type K or L extensions (0 will send caller to operator)
213	Duplit	0	Set to 1 to light message lamp for every new message.
214	Offhold	&,	Protocol to return caller from hold
215	FbusyCnt (Set to 8 for fbusy.dat file)	5	Number of Fastbusys required for Fbusy cuttoff. When set to 8 will create fbusy.dat file on hard drive
216	FBusyClutch	0	Adjust the length of Fbusy Tone to save at the end of a recorded Fbusy termination.
217	RecPound	10	Number of bytes (x 100) to cutt off from message when terminated with the pound sign
218	Klevel	0	0 = "K" type - hear messages ONLY 1 = Limited Menu (1 to hear, 2 to send, 3 to record unavailable gre

PARAMETER TABLE

No.	Name	Default	Description
219	NameBox	1	1 = No name/ No ext play 2 = Ext Only 3 = Name only 4 = Name and Ext To determine what options to include on mailbox during directory and xfers
220	X18Global	0	When set to 1 all type "X" mailboxes on **Time** Do-Not-Disturb will play system Mess018.
222	TermBeepDg	#	The terminating digit sent to beeper service after the number to expedite beeper notification.
223	**DirDig**	blank	**Single** DTMF Digit for Directory Access (Must be Reserved).
224	Mitel	0	Set to 2 for Analouge Switch 217 Set to 3 for 200D digital Switch
225	MitelTime	20	Time to wait for IC/26 event.
226	MitelKey	[FROM]	The Mitel String to indicate call forward to mailbox.
227	Conference	&,	Conference Protocal (*0*1).
228	ConSavDel	0	0 = Do Not Save Recorded File 1 = Save Recorded File
229	DidTime (See 6.16+ update)	0	Time period in 10 milliseconds to determine whether DTMF entered a) go to mailbox (prior to # of mls.) b) go to extension (after # of mls.) 10=1000 mls./ 1 Sec. 0=off
230	DiskBox	blank	Extension to call when available messaging is less than parameter 231
231	DiskMin	blank	The minimum amount of avaialable messaging on the hard disk drive before an outcall is initiated to the extension listed in parameter 230.
232	QuesEnd	0	Caller is returned after last question to 0 = Return State = 30 (HangUp) 1 = Return State = 3 (Mess003) 2 = Return State = 70 (Mailbox)
233	KRetent		Number of days **old** messages purged for type "K" \ "L" mailboxes.

PARAMETER TABLE

No.	Name	Default	Description
234	BroadcastType	blank	Type of mailboxes to send Broadcast possible choices (ABCKLNRX)
235	BroadcastLight	blank	Activate lights for broadcast message in these types (ABCKLNRX)
236	OperatorFlag	0	Determines if Busy STE is activted for operators extension. 0 = STE 70/16 on BUSY 1 = STE 50/15 on BUSY
237	BegPBT	blank	The beginning hour for zoom option on Report #3 (Utilization by hour)
238	EndPBT	blank	The ending hour for zoom option on Report #3 (Utilization by hour)
239	dRepSel	blank	Daily Report(s)Selection 1 - 255
240	dRepDay	blank	The Day(s) of the week to print the selected daily Reports
241	wRepSel	blank	Weekly Report(s)Selection 1 - 255
242	wRepDay	blank	The Day(s) of the week to print the selected weekly Reports
243	mRepSel	blank	Monthly Report(s)Selection 1 - 255
244	mRepDay	blank	The Day(s) of the week to print the selected weekly Reports

REPSELECT Controls which reports are generated

To Set output for each Report, total each report code for the parameter value.

ie: All reports = 255

1 = Daily Auto Attendant Report
2 = Daily Port Utilization Report
4 = Daily Utilization Report by Hour
8 = All Ports Busy Tottals
16= Daily User Report - Messaging
32= Daily User Report - Ext Activity
64= Daily User Report - Sign On
128= Report Summary Page

REPDAY Controls when reports are generated

To Set output for each Report, total each report code for the parameter value.

ie: Every Day = 127

0 = No Days Selected
1 = Sunday
2 = Monday
4 = Tuesday
8 = Wednessday
16= Thursday
32= Friday
64= Saturday

PARAMETER TABLE

No.	Name	Default	Description
245	RepDelay	1	Delay for reports to be sent to printer
246	Parms.kstub	0	Set to 1 for type "K" to hear new messages only.
247	KRecordTime	60	Default message time for type "K"
248	Biling	blank	Set to 1 to activate Bilingual Code (must re-boot system to activate)
249	PrtContrl	blank	Printer control charater(s) for Top of Page (Refer to Printer manual)
250	NoMessaging	blank	Extension Monitor types to dissallow messageing for sending, forwarding, replying etc...i.e.(ABCNRKX)
251	ClearBox	blank N/A	Access DTMF digits for quick clearing of type "K" & "L" boxes (if N/A Hotel Code is not included)
252	ITT	blank N/A	Set to 2 for ITT integration package (if N/A ITT Code not included)
253	HearMsg	blank	Togle for message retrieval 1 = "press 1 to hear messages" 2 = immediately to "you have"
254	(Not used at this time)		(Ver 6.17 +)
255	DirExt	blank	number or numbers to add to parameter 223 for directory access
256	DefLang	blank N/A	Multilingual setting for defaut language (Ver 6.17)
257	PWLckAmt	blank N/A	Password Lockout (Version 6.17)
258	DropHunt	blank	Hunt Group Drop Extension (Service Code only-Ver 6.17 +)
259	OnHoldTimer	12	Timer for On hold - currently 12 sec (Ver 6.17 +)
260	SerNoCkIn	blank N/A	Service Code Check-in number (Service Code only-Ver 6.17 +)
261	SerExtPsword	blank N/A	Service Code password for ext (Service Code only-Ver 6.17 +)

PARAMETER TABLE

No.	Name	Default	Description
262	NoisyGrunt	blank N/A	set to number of bytes to disconnect if greater > than (Ver 6.17 +)
263	SerDropHunt	blank N/A	Service Hunt Group Drop Ext (Service Code only-Ver 6.17 +)
264	SerPoolBox	blank N/A	Service Message Pool Box (Service Code only-Ver 6.17 +)
265	SerMaintPswd	blank N/A	Master password for Service code (Service Code only-Ver 6.17 +)
266	NewRetent	blank N/A	Number of days new messages held (Reorg.EXE -Ver 6.166 +)
267	NewKRetent	blank N/A	Number of days new messages held for type "K"&"L" box (Ver 6.166 +)
268	PlayRec	blank	Determines where message "record at the tone..." played Value / STE 80 / STE143 0 / play / play 1 / play / no-play 2 / no-play / play 3 / no-play / no-play
269	MaxSilClutch	blank	Number of bytes X 100 to adjust message terminated on Silence
270	MaxNosClutch	blank	Number of bytes X 100 to adjust message terminated on Noise
272	ReToOper	blank	Used in STE 89 to return caller to operator if no DTMF response after "press any digit to continu.."
273	BepExtTack	blank	When using sky pagers, set number to download as pin number and set parameter to ,#\# to dial mailbox num (*5 is control code for "\" = mailbox)
274	DupMsg	blank	When set to 1 system will outcall notify every new message received regardless of retry parameter.
275	NoPassMsg	blank	Mailbox types to disallow Master Password Entry Notification

PARAMETER TABLE

No.	Name	Default	Description
276	ExtListNum	blank	The number of Distribution List allowed per mailbox (maximum)
277	ExtListEle	blank	The number of members allowed per mailbox Distribution List (maximum)
278	DlistGloBox	blank	The Mailbox assigned for access to System Wide (Global) Distribution List - (max 128 List, 128 members
279	LowChanRings	blank	The value entered in each position to control the number of rings before the voice system answers (1st 16 ch)
280	HighChanRings	blank	The value entered in each position to control the number of rings before voice system answers (2nd 16 ch)
281	DiDMsgOut	blank	Enter the Monitor Types to disallow dialing DTMF from greeting - (See 6.166 Release Notes)
282	MaxNotify	blank	Maximum number of notifications allowed for each system user
283	PlaySponsor	blank	Default setting for unavail. greeting 0 = Play original mailbox greeting 1 = Play Sponsor mailbox greeting
284	VoiceBridge	blank (1)	AT&T Integration w/VoiceBridge
285	MsgDesk	blank (1)	Number of MsgDesk identifiers
286	Aging	blank (2)	Time variable for AT&T/Voicebridge
287	MsgPad	blank (0000000)	Format for MsgDesk Interface
288	Ntelecom	blank (1)	Northern Telecom SL1 integration
289	NteleTime	blank (10)	Time to wait for IC/26 event (bootup)
290	MitelNfTime	blank	Mitel Notification feature
291	DListCntrlProt	blank	Bit controlled options for Distribution 0,1,Blank - No Lamp/Outcall Notifica 2 - Allow Lamp Notification for Distribution List messages 4 - Allow Offsite/Outcall Notification for Distribution List messages

PARAMETER TABLE

No.	Name	Default	Description
292	KLSkipProt	blank	Determines whether password is required for type "K" & "L" boxes 0 or blank = Password required 1 = No password required/prompted 2 = Password prompted if it exist
293	BoxLimit	blank	The number of ports one mailbox is allowed to occupy at any moment
294	DetLoopSig	blank	Enables LoopSignal disconnect 0 or blank =
295	NotifySame	blank	Enables multiple traking notification
296	NtelHntGrp	blank (500)	Northern Telecom Voice mail group
297	SayDigLck	blank	Determines Playback of numbers 0 or blank = one hundred eleven 1 = playback (111) as one, one,
303	TransferMsg	Blank	0 =Hold while I try ext<number> + Tag 1 ="Please hold while I try that ext. for you." 2 =Mapping Transfer 4 =Call Screening Transfer 8 =On Hold Transfer (Press*..) 16 =Huntgroup Transfer
304	WakePause	5	Sets the time between wake up retries. Appended to message 187 (Wake Message).
305	WakeLogEvent	0	Add the values for the desired result: 0 - No output to file/printer 1 - Add on new entry 2 - Change if new time 4 - Write call outdialed 8 - Act on change of w to W on boot - up 16 - Output to printer 32 - Select 2nd printer
306	WakeWindow	5	Window of time to search for Wakeup Notifications from the current time when entered. Does not Notify if current time plus this setting until next day

PARAMETER TABLE

No.	Name	Default	Description
307	WakeDigitLength	Blank	Controls the max digits for entering an outdialed wakeup call. Default for this parameter is parameter # 144 (Extension Length)
308	WakePassWord	Blank	Allows entry of multiple wakeup entries. Must be 4-digit number.
309	WakeGlobal	0	Global parameter which controls wakeup entry during the Mail-box User Menu. 0 = Wakeup in mailbox denied 1 = Wakeup allowed only for mailbox number outdialed 2 = Wakeup allowed for Mail-box and external calls
310	OperDigitTrap	Blank 1 = Activate	Activates the ability to accept ZERO "0" as a valid 1st digit for extensions This value also reflects the interdigit delay when dialing the operator "0"
311	SponsorPsw	Blank	Password for Sponsor Mailbox programming over the phone
312	Hicom	Blank	Activates Hicom Integration Code-Value also expresses number of seconds to wait for inband DTMF Normally 3 to 7 seconds
313	StaHistChan	Blank	Activates Statistic History for a specific channel only
314	HiComExtLen	Blank	Sets the length of the Calling Party field in the Packet received from Hicom 130/300 swtches
315	ExtDBFDef	Blank	Bit controlled for **default** settings in extension database when adding 1 = Do-Not-Disturb = "Y"es
316	OffHkPort	Blank	Activates a port(s) to a default state of **OffHook**. Used for quick Operator transfer when directy linked Bit controlled for program by port. 1= 1 2= 2 3= 4 4= 8 5= 16 x= y x= port number , y = value
317	DListGloCntrl	Blank	Bit Contrls for Global Distribution Box and Emergency Distribution (See Emergency Box document)

PARAMETER TABLE

No.	Name	Default	Description
318	DListEEmgPswd	Blank	Numeric Entry for caller to access the GlobalNEmergency Dist. List if Password Protection set (See Emergency Box document)
319	DigitTech	Blank	Activates the DigitTech PBX code if included in the compiled code <F3>
320	NStar	Blank	Activates the code for the Norstar PBX when set greater than "0" +64 - Norstar buffer shown to screen +128 -buffer to disk <NStar.log>
321	NStime	Blank	Maximum amount of time each voice mail port will wait for initialization
322	MultCompany	Blank	Used to assign separate Salutation tags for multiple companies using one voice system (See Multicompany Documentation)
323	NSHntGroup	Blank	Contains the extension number of the 1st voice mail port when using Nstar
324	SponsorCntrl	Blank	Contrls the activation of the Sponsor box feature in three messaging areas of the program - External, Send and Reply. Also controls playing of warning tone before record. (See SponsorBox documentation)
325	SampleTypeCntrl	Blank (4 Bit Resolution) Activate by adding values Bit controlled - (8 Bit Resolution)	Controls the Resolution of recorded voice files. Higher Sampling rate and resolution give better voice quality, but use more disk storage space 1 - Gre - Unavailable Greetings 2 - Bsy - Busy Greetings 4 - Dnd - Do Not Disturb Greetings 8 - Nam - Name Tag / Directory 16 - Dpt - Department Messages 32 - Dpl - Distribution List 64 - Sal - Salutation Messages 128 - Msg - Mailbox Messages

PARAMETER TABLE

No.	Name	Default	Description
326	SampleRateCntrl	Blank (6 Khz Sampling) Activate by adding values Bit controlled - (8 Khz Sampling)	Controls the Sampling Rate of recorded voice files. Higher Sampling rate and resolution give better voice quality, but use more disk storage 1 - Gre - Unavailable Greetings 2 - Bsy - Busy Greetings 4 - Dnd - Do Not Disturb Greetings 8 - Nam - Name Tag / Directory 16 - Dpt - Department Messages 32 - Dpl - Distribution List 64 - Sal - Salutation Messages 128 - Msg - Mailbox Messages
327	SampleTypeCntrl2	Blank (4 Bit Resolution) Activate by adding values Bit controlled - (8 Bit Resolution)	Controls the Resolution of recorded voice files. Higher Sampling rate and resolution give better voice quality, but use more disk storage space 1 - Who - Call Screening Response 2 - Sht - Grunt Response 4 - Nof - Notification - Voice 8 - Vox - System Vox Messages 16 - Idx - System Index Prompts
328	SampleRateCntrl2	Blank (6 Khz Sampling) Activate by adding values Bit controlled - (8 Khz Sampling)	Controls the Sampling Rate of recorded voice files. Higher Sampling rate and resolution give better voice quality, but use more disk storage 1 - Who - Call Screening Response 2 - Sht - Grunt Response 4 - Nof - Notification - Voice 8 - Vox - System Vox Messages 16 - Idx - System Index Prompts
329	NSHntGrp2	Blank	Used to define the last port number when using Northern Telcom Norstar
330	NotifyDelay	Blank	Used to Cascade notifications when using multiple notification ports, set to value less than time required for the shortest notification period (Lamps)
331	ExtPadField	Blank	Used to pad zero's "00" in front of valid extension numbers when zero is a valid extension in PBX environment. Set to 1 to activate number of digits in extension number (i.e. Extensions 001 thru 099 set Parms.Extlen (144) to value of 3)

Section 7

Updates

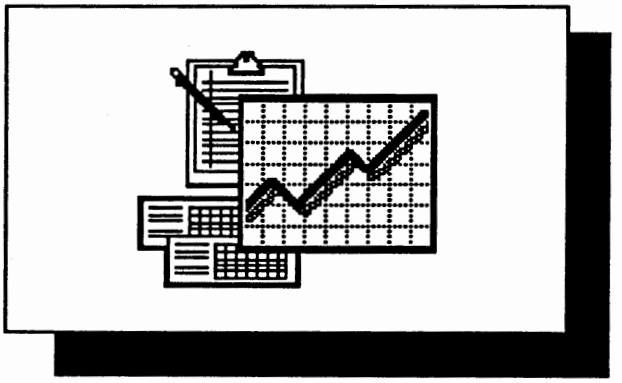
VoiceXchange

System Manual Supplemental

Technical Tips And Release Notes

for

Software Version 6.173



BMC

"A Better Means Of Communication"

BMC Group Inc
February 1, 1991
UPDATE 6.166
Message Light Notification

The following guidelines apply to specific variables used for message light notification:

There are three basic formats for message light notifications-

1. (Extension number) + (Message light code)
2. (Message light code) + (Extension number)
3. (Partial Code) + (Extension number) + (Code)

The first method is the most common; the second method allows the system to initiate a message light without ringing the telephone. (this is common on many Hybrid Key Sets); the third method requires sending a code followed by the extension number and then an additional code that initiates the ON or OFF protocol. The above methods may be accomplished in the following examples using parameters 178 (MsgWtLtOn), 179 (MsgWtLtOff), 190 (LinkLamp, 191 (LinkLmpOff).

178	MSGWTLTON	Message waiting light, PBX sequence to turn light on.
179	MSGWTLTOFF	Message waiting light, PBX sequence to turn light off.
190	LINKLAMP	Added to Parameter 178 when sequence contains code + extension number + code.
191	LINKLmpOFF	Same as 190 For Parameter 179.

Please refer to the following table for converting non-DTMF control characters into the parameters used for message light notification: (178,179,190,191)
(As listed in front of the PARAMETER TABLE)

Parameter Control Keys and Functions

When working with parameter maintenance, star (*) serves as a control key for entering non-digit characters into a parameter field.

Example: Parameter Number 178 = MsgWtLtOn
*Possible setting is *91 = #1*

Control Key & Control Digit	Character Result or Function
* 0	Flash Hook
* 1	, (pause)
* 2	E (extension to follow)
* 3	Blanks Parameter Field
* 4	<ESC> (character)
* 5	\ (mailbox number)
* 9	# (character)
* *	* (character)

continued...

To set the parameters for method one, insert the sequence needed to turn the light on in parameter 178 and the sequence needed to turn the light off in parameter 179 (Up to 10 characters per parameter) ***( ) - parenthesis not included in code***

1. (Extension number) + (Message light code)
   (Extension number) + *(parameter 178,179)*

phone input

Example: ***178 = (*9)(1) = #1 = Turn Message Light ON***
179 = (#9)(2) = #2 = Turn Message Light OFF

In the above example the voice system would dial (Extension Number)(#)(1) to turn a message light ON and (Extension)(#) (2) to turn a message light OFF.

Single "E" as first character in parameter 178,179 designates

2. (Message light code) + (Extension number)
   (parameter 178,179) + *(Extension number)*

phone input

Example: ***178 = (*2)(*9)(1) = E#1 = Turn Message Light ON***
Example: ***179 = (*2)(*9)(2) = E#2 = Turn Message Light OFF***

In method two the voice system would dial (#)(1) (Extension number) to turn a message light ON and (#)(2) (Extension number) to turn the light OFF.

Double "EE" as first two characters in parameter 178,179 designates

3. (Partial Code) + (Extension number) + (Code)
   (parameter 178,179) + *(Extension number)* + *(parameter 190,191)*

phone input

Example: ***178 = (*2)(*2)(*9) = EE# = Turn Message Light ON***
Example: ***190 = (1) = 1 = Turn Message Light ON***

Example: ***179 = (*2)(*2)(*9) = EE# = Turn Message Light OFF***
Example: ***191 = (2) = 2 = Turn Message Light OFF***

In method three the voice system would dial (#) (Extension number)(1) to turn the light ON and (#) (Extension number)(2) to turn the light OFF

****

Some systems do not require the voice system to be programmed in one of the above methods, but instead is static (non-changeable) in the system software or dependant on a separate parameter value used for specific integration packages, or in the MITEL 200D integration software a double "EE" is not required to specify method three but is defaulted to this format when Parameter 224 (Mitel) = "3".
The following parameters set message light notification for integrated packages:

ITT3100	**Parameter 178,179 = (any character) i.e. (E)**	
Mitel217	**178 = (,)(Esc)(O)**	**= ON**
	179 = (,)(Esc)(F)	**= OFF**
Mitel 200D	**178 = (Esc)(K7)(,)(4)(,)**	**= ON**
	190 = (Esc) (K3)	**= ON**
	179 = (Esc)(K7)(,)(4)(,)	**= OFF**
	191 = (Esc) (K4)	**= OFF**

IMPORTANT

Please refer to the file -autoexec.new on the D4XD Supplemental Disk for proper installation of autoexec.bat after initial installation

The autoexec.bat file should be edited to include:

```
Prompt $p$g
Path=C:\Dos
C:\SBLOAD.EXE                >(If using D40(D) Board)
C:\D40DRV -B40 -i78          >(must include -i78 for versions
                               6.169 and above)
Set Banner = For Service.....
```

Failure to make the above changes will result in the following error messages-

1. **D40Drv not loaded**
2. **No Dialogic D40 Boards found**
3. **Computer Lockup at the BMCMAIN prompt**
4. **System does not answer incomming call**

If you have further questions and/or require assistance, please contact BMC Group, Inc.

404-985-6609 ext 142 (Voice Support)

IMPORTANT

CPC Cadence Parameter Characterization-

BMCMAIN.EXE now sets the software interrupt level depending on the computer hardware system.

Option <I> - (Run CPC Program) of the SETVEX installation program will not run after booting the BMCMAIN executable program if the interrupt level has been reset to -i78 in the autoexec.bat file.

You may either:

1) Run Option <I> - (Run CPC Program) of the SETVEX installation program *BEFORE* booting the BMCMAIN.exe program.

2) Manually Run The CPC program using the following format:

From the \Vex Directory type:

C:\VEX> ***cpc -i5 -r4*** **--Ring Test**

C:\VEX> ***cpc -i5 -b4*** **--Busy Test**

Running these test successfully will create a file on the \VEX directory called *callparm.out*. The results of these test can be updated to the parameter data file by running Option <j> - (Run Insert CallParm.out Parameters) of the SETVEX installation program.

If a failure should result from any CPC test it is neccessary to re-initialize the *callparm.out file.* before attempting to run the test again.
From the \VEX directory type > *Del *.out* <R>eturn

IMPORTANT

Please refer to the file -autoexec.new on the D4XD Supplemental Disk for proper installation of autoexec.bat after initial installation

The autoexec.bat file should be edited to include:

```
Prompt $p$g
Path=C:\Dos
C:\SBLOAD.EXE                >(If using D42-SX Board)
C:\D40DRV -B40 -i78          >(must include -i78 for versions
                               6.169 and above)
C:\D4XDNLD D42SX
Set Banner = For Service.....
```

Failure to make the above changes will result in the following error messages-

1. **D40Drv not loaded**
2. **No Dialogic D40 Boards found**
3. **Computer Lockup at the BMCMAIN prompt**
4. **System does not answer incoming call**

If you have further questions and/or require assistance, please contact BMC Group, Inc.

6.168 RELEASE NOTES

1. Master Password Entry Correction

A software change has been made to correct the following scenario

A Multiple Password Entry Notification (when parameter 275 = blank [enabled])

1) A Caller's mailbox is set identical to the master password
2) Administrator enters mailbox using Master Password and changes mailbox password to another password value
3) The voice system then notifies the mailbox user that his/her mailbox has been entered by someone using the master password, the new password, etc...
4) The mailbox user enters "1" to acknowledge the message and the notification record is deleted by the voice system.
5) **when mailbox user re-enters mailbox at a later time, system re-writes notification record and begins notification process.**

B. This feature will now be defaulted to disabled
Other settings are as follows

Parameter 275 (NoPassMsg) = blank	DISABLED
Parameter 275 (NoPassMsg) = RX	DISABLED (for monitor types "R" "X" only)
Parameter 275 (NoPassMsg) = Z	Enabled for ALL monitor types

*** If parameter 275 (NoPassMsg) contains ANY character, the Master Password Entry Feature is ENABLED for all monitor types not specified in the parameter setting.

2. Reorg.Exe - Version 6.166

Two Options have been added to enhance the REORG program when run in manual mode:

1) <C>ount Message - will re-count all message tags that exist in the mailbox .ndx file and reflect an accurate tally when the mailbox records are viewed from the F6 key.

2) <D>etail log Reports - will create a more detailed file located in the \vex\log directory called **reorg.log.**

3) <B>egin Reorg - will engage the normal default mode that runs during the re-boot process at the time indicated in parameter 172 (ReorgTime). This mode is *Time* efficient and does not create a detailed reorg.log nor will it re-count the message tags contained in the mailbox data files.

3. Message 121 "You have no more messages"

The message 121 normally heard after reviewing ALL "Old" or "New" messages has been altered to include two separate messages that will reflect the path previously chosen under the "Press 1 to hear messages" prompt.

Mess120.vox = "You have no more NEW messages"	[on Message Disk 4]
Mess121.vox = "You have no more OLD messages"	[on Message Disk 1]

6.169 RELEASE NOTES

4. Message 124 "That message is currently being heard by another user".

The message 121 is necessary when two or more users are attempting to hear or review the identical message from the **same mailbox number.** Previously, In this occurrence, if one of the user's presses (1) to delete the message before the second or additional user has finished hearing the message; a DOS level error may result, causing the system to malfunction.

6.17 RELEASE NOTES

5. Message 111 "This mailbox has currently surpassed it's limit. Please try to leave your message again later.

This message will play to an outside caller when attempting to leave a message if the total message count (New **and** Old exceeds the limit specified in the TOTAL Messages field of the extension DATABASE.

6. Message 462 "Your Greeting is currently being played on another channel to another user- please try recording your greeting later".

The message 462 is necessary when a user is attempting to record his or her unavailable greeting **while** the greeting is being played to another user on a separate channel. Previously, In this occurrence, attempting to record an unavailable greeting while the greeting is playing on another channel could cause a DOS level error, causing the system to malfunction.

6.168 RELEASE NOTES

1. Master Password Entry Correction

Subject: Master Password Entry 6.166+

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Mess120.vox = "You have no more NEW messages" [on Message Disk 4]
Mess121.vox = "You have no more OLD messages" [on Message Disk 1]

4. Notification Change - messages from previous date in box

Occasionally, BMC will get information from Distributors and/or End users that a message from a previous date has suddenly and for no apparent reason entered a user's mailbox. Since the mailbox owner had checked his/her messages previously, it appears that the message now in the box with a previous date had been mysteriously lost for a period of time before making it's presence known as a new message. After extensive research and literally hours of analysis it has been discovered that all occurrences of this nature may be explained by one of the following scenarios:

1.) Multiple new messages not all cleared - Upon entering a mailbox the user will retrieve new messages and upon hearing the first or second new message will either hang up or "pound" out of the system *without* reviewing the remainder of the new messages.When this occurs the new message or messages not heard remain in the user's mailbox as new messages till heard. The user then, at a later time or a later *date* ,will attempt to retrieve new messages and is surprised to learn that one or several new messages now exist in their mailbox that have a previous date and time then the last retrieval period. This occurrence is compounded by the fact that upon retrieving their first new message the message light notification is turned off and any active notifications for that mailbox are immediately suspended till such time a new message is left for that mailbox user.

SOLUTION: The Voice system will now be programmed to continue a notification outcall and will not initiate a message light **OFF** notification until **all new** messages have been heard by the mailbox user.

2.) User hearing Old message quantity instead of New messages - As users become acclimated to the voice system it is natural to learn and use "shortcuts" that expedite the process of retrieving and leaving messages. Also, it is very common that users may be retrieving messages while engaged in activities that divide the attention given the voice prompts during retrieval. The voice system will currently repeat the number of OLD messages first followed by the number of NEW messages. This was designed specifically to remind users that they still have messages that otherwise may be automatically deleted by the system after a specified amount of time and they should periodically review and maintain them. If a user desires to keep a message longer than the specified amount of time for auto-purge, he or she may forward any **OLD** message back to the original box to re-save the message as a NEW message. At this time the date/time stamp for this message is re-written to reflect the new date and time the message was sent. This is true of any messages forwarded. A user is not allowed to forward a **NEW** message to themselves as this would create a conflict in the data storage area. It also may be noted that a user can only forward an old message to themselves if it was not previously sent from their own box. This restricts the abuse of this option and confines it to a one time only option.
To return to our original occurrence, users will occasionally not hear the system correctly or will "pound" out or hang up and assume that they have no NEW messages when in fact the system had attempted to indicated that they have **no OLD** messages. At this time it is being discussed by the development dept. if this feature would be more easily understood if NEW messages were indicated to the user before OLD messages. Your comments on this matter and any other you may have in the voice systems application area would be greatly appreciated.

5. Notification to a Sky-Pager

Sky Paging requires the voice system to be able to accomplish the following:

1) Dial the Sky-Paging Number (normally 1-800-xxx-xxxx)
2) After recognizing a connect, the system must dial a 7 digit *PIN* number **(A *PIN* number indicates to the beeper service which Sky-Pager customer to send the notification digits to)**
3) The system must then enter a "#" to signify the end of the *PIN* number entry
4) The system will then dial an identifying number that will be displayed on the recipients beeper to indicate a new message and again end with a "#"

This is not possible on versions 6.165 or earlier mainly because of the 10 digit limitation for the beeper notification number (This is the number downloaded to the beeper service) At best it might be possible to display a 2 digit number when outdialing to a Sky pager with version before 6.166. This would be accomplished by entering the 7 digit *PIN* number followed by a "," (pause) then followed by the 2 remaining digits to be displayed:

EXAMPLE: In programming an outdial to a sky pager when prompted for the beeper notification number you might enter 7174549,99

WHERE:

7174549	=	*PIN* number
,	=	wait 2 secs. for connect (for phone entry *1 = wait 2 secs.)
99	=	number dialed to sky-pager to display on beeper

This is not the most effective method and can easily result in a TONE ONLY notification.

SOLUTION: A parameter has been added to allow the system to dial an identifying number to the sky-pager to be displayed on the user's beeper LED display (This number will normally be programmed as the user's mailbox number)

273	BepExtTack	blank (for phone entry *5 = \ (mailbox #)	When using sky pagers, set number to download as pin number and set parameter to #,\# to dial mailbox num.

The user programming an outcall to a Sky-Pager would simply program the *PIN* number as beeper notification number (the number to be downloaded to the beeper service). The voice system will then dial the sequence entered in parameter 273 (BepExtTack). This does not affect a normal notification since the "#" (pound sign) will cause the beeper service to disconnect (or time out) before the dialing of parameter 273.

EXAMPLE: For programming an outcall notification to Sky-Pagers enter the following:

"please enter the outcall telephone number for notification followed by the pound sign"

18003245959 # (Sky-Pager telephone number)

"please enter the beeper notification number "

7174549 # (*PIN* number used by pager service to identify beeper user)

BMC's New Hotel/Motel Special Feature Package

Applications that require a large group of extensions with special requirements should consider the Hotel/Motel option package of BMC's Voice Exchange software. In addition to 1-32 calls answered simultaneously and single digit directing of all calls either to an extension, menu directory or announcement, this option package offers customized features not normally found in voice messaging products. Features for the Hotel/Motel package include:

- •Guest Mailboxes
- •Password Confidentiality
- •Wake-Up Notifications
- •Message Lights
- •Do-Not-Disturb
- •Broadcast Messaging
- •Room Service Options
- •Prefix Dialing

Type "K" or Guest Mailboxes. This class of service was created where messaging is desirable for Guests who are transitional and/or temporary. An extension assigned this class of service will have full monitoring for incoming calls including RingNo Answer directly to voice mail and Busy options to hold or leave a message after playing a default unavailable greeting (unique to a Guest Mailbox) or a personal unavailable greeting if so desired. Type "K" extensions have the **option for an assigned "password"** for confidentiality and are limited to retrieval of their messages only or may be assigned type "L" (Limited Menu- 1 to hear, 2 to send, 3 to record a personal greeting). Upon hearing a new message the user can delete, save or review their message. Time and Date stamp may accompany each message. Upon checkout, the guest can be informed of any new messages. **Wake-Up Notifications** may be entered for any extension including type "K" up to 24 hours in advance for a "wake-up" call. When programmed, BMC's voice messaging system will call the appropriate extension when time has elapsed and announce to the party"This is your wake-up call, press * (star) to acknowledge, or I'll call back in 5 minutes." Since any available port may be programmed for notification and several wake-up calls can be performed each minute per port, the system is capable of processing several dozen wake-up calls at a given minute depending on response time and number of ports installed in the system. **Message Waiting Lights.** Message lights can be incorporated with the hotel PBX to light message waiting lights on guest room phones and integration may allow call forward to the mailbox on busy or no answer conditions to inform the guest that they have a new message. **Do-Not-Disturb** may be set by default or time variable so that incoming callers may be restricted access to specific guest or all calls may be intercepted by a "live" attendant. **Broadcast Messaging** may be used to record and send a single message to all guest type mailboxes or an administrative defined distribution List. **Room Service Options** may include single digit access to a variety of services including food orders, laundry service, housekeeping and more. Audio text may be used for convenient access to information regarding hotel services, recreational facilities, dining locations and area attractions. **Prefix Dialing** is the abilitiy to add a digit or digits to a transferred call. Many times in the hotel/motel environment the room numbers are an abbreviated form of the PBX extension number. In this instance, it may be neccessary to dial (5)777 in order to ring the extension in room 777. For ouside callers this would normally cause confusion. Prefix dialing solves this delima by inserting the appropriate prefix before transferring the call, therby eliminating the neccessity for the ouside caller to dial the prefix. For further information call BMC Group Inc. at 404-934-7613.

BMC GROUP INC.

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Parameters which affect type K & L Mailboxes/Extensions

The following parameters are responsible for setting up type K & L mailboxes/extensions to work with Hotel type applications.

Parameter	Values and Description
218 (Klevel)	Determines whether type K has message only access or limited menu access. 0 = hear messages only 1 = Limited menu (1 - hear, 2 - send, 3 - record unavailalbe)
246 (KStub)	Determines whether type K boxes can hear both type messages (new & old) or just *new only* 0 = New and Old messages 1 = New only
251 (ClearBox)	Access DTMF digits for quick message clearing of type "K" and "L" boxes. Value= Any three digit number.
292 (KLSkipProt)	Determines whether password is required for type K & L mailboxes. 0 = password required 1 = No password required or prompted

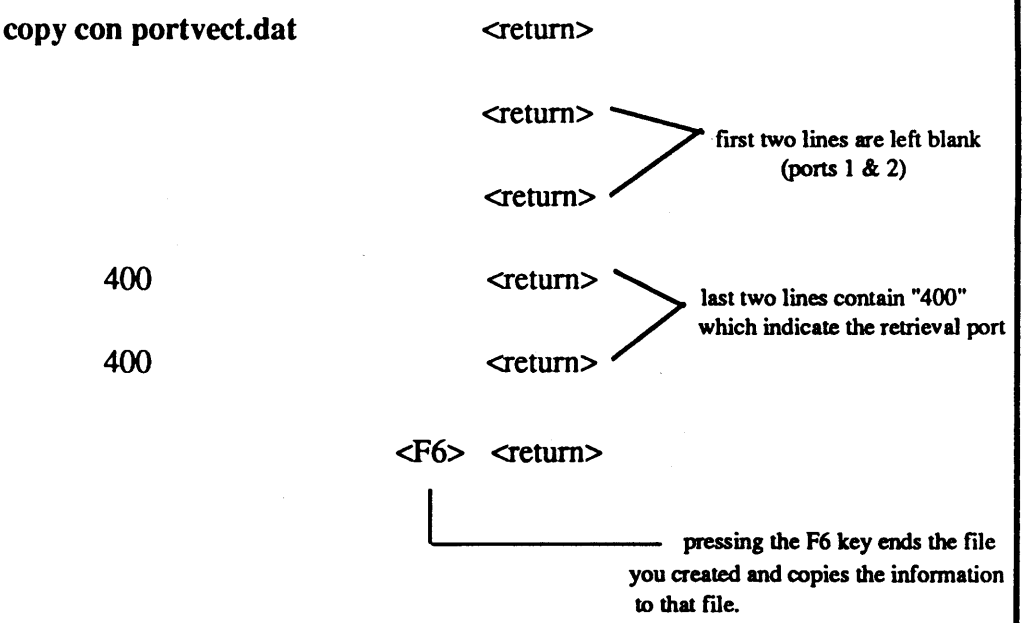
Creating the PORTVECT.DAT file

The portvect.dat file is created using the DOS copy con command. This file resides on the VEX directory and is used for applications requiring Hotel Code.

In the portvect.dat file, each line created in the file corresponds to a port on the VoiceXchange system. If you want the port to answer a caller with "Enter your extension number..", then you must input "400" on the corresponding line in the portvect.dat file.

EXAMPLE

On a four port system, you desire to make the last two ports "retrieval ports." Your portvect.dat file would look like this:



In the example above, the system would then reserve the last two ports in the system as retrieval ports and answer all calls coming through them with "Enter your extension number.."

Setting Up Your 800Block.dat File

This particular feature involves blocking 1-800 callers from accessing certain ports from certain extensions. This is important for customers who are applying the VoiceXchange software under Hotel / Motel Applications.

Situations have made it possible for some callers to "hack" the 1-800 numbers, used primarily for reservations, to call guests or to make other personal calls which result in unwarrented expense to the hotel management.

This situation can be alleviated through the following procedure:

Create a file called 800Block.dat

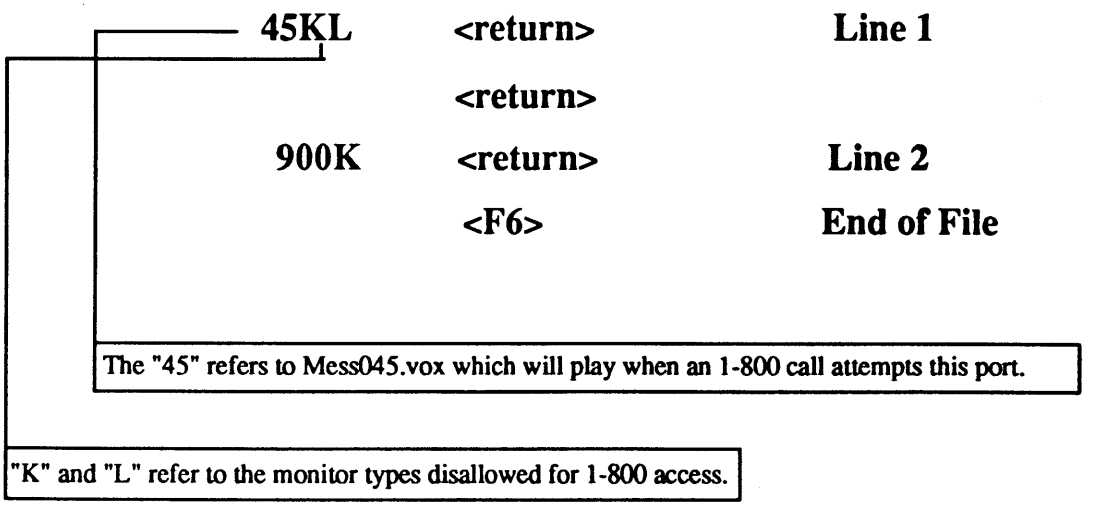
Use DOS command, COPY CON, to create the file 800Block.dat. This file should reside on your \VEX directory. Use the example below to get started.

EXAMPLE

At the C:\VEX prompt, type the following:

COPY CON 800BLOCK.DAT **<RETURN>**

This will allow you to input what the file will contain. Set up your file to match the example below.



Note: Line 1 and Line 2 relate to the channel number on the VoiceXchange system (Port 1 and Port 2)

Overwriting the 800Block.dat File

If you wish to have this DAT file in place yet still wish to have some extensions able to call out, you may insert a colon (:) in the Name Field of an extension in the database of the VoiceXchange system. The colon will inform the program that, even though the 800block.dat file is active, any extension with a colon in the Name Field is *exempt* from being blocked.

EXAMPLE

DOE, John :

Extension Name

BMC Group Inc
January 1, 1991
Update 6.165

Subject: DID Environment 6.165+

Discussion: DID environment includes any and all systems that use a DID number or a similar access code whereby the caller is transferred directly to a user's mailbox upon the initial call into the voice system. In this way services are set up to provide "mailbox owners" with a message center to collect messages and answer their DID number with a customized greeting. The forwarding to a mailbox is normally accomplished through a third party vendor such as Exocom, Nicolet, or the Dialogic DID40 card. These stand-alone devices collect and store the last three or more often, four digit numbers of the DID telephone number. It then forwards the caller to the voice system and repeats the stored numbers as the *identifying* box to send the caller to. The caller then hears the personalized greeting for this box and if desired, is given the option to dial additional numbers to access other boxes and/or audiotext scripts; or they may be instructed to leave a message at the tone.

These systems work well in the described scenario, but several additions have been made to the voice system to provide a better service for the "mailbox owner". For instance, currently if a mailbox owner wants to retrieve his/her messages using a DID number (their own), they would upon hearing their own unavailable greeting enter a pound "#" to return to the opening level greeting (Mess003) and then enter a star "*", their mailbox number and password before they could retrieve their messages. This has been simplified and several other options improved. In order to remain consistent with earlier versions of software and other applications, these changes are parameter selective. The parameter that controls the DID environment in parameter number 229 (DIDTime). As it appears in the Parameter Table:

229	DidTime	0	Time period in 10 milliseconds to determine whether DTMF entered will a) go to mailbox (prior to # of mls.) b) go to extension (after # of mls.) 10=1000 mls./ 1 Sec. 0=off

Normally, in a **total** DID environment it is not necessary to use this parameter since all the mailboxes are set on Do-Not-Disturb status where the caller is transferred directly to the mailbox number repeated by the third party DID interface equipment. However, this parameter was originally added to make possible an Auto-Attendant environment with a DID environment. The parameter would be set to a value that would determine whether a caller was a DID interface call or a normal outside caller. A typical setting would be be 10 which equals 1000 milliseconds or 1 second. This would tell the voice system that if it receives a DTMF tone **before** 1 second after going off-hook then this call is a DID caller and needs to be transferred directly to a mailbox. Otherwise, an outside caller would normally enter a DTMF digit sometime **after** 1 second and the voice system would recognize the call as a normal outside call and would attempt to transfer the call to an extension.

Why do you need to know this?

** The reason for the discussion is so you will understand the basis for the DID environment and more importantly ; <u>If you want to take advantage of the added DID features you must set this parameter 229 (DIDTime) to a value greater than the time it takes for the DID interface equipment to send the first DTMF digit after the voice system has received ring voltage and gone off-hook.</u> Otherwise the following features will <u>NOT</u> be enabled. Normally set 229 = 10 or 20

New Features:

The following features are enabled when a call is received by the voice system and the first DTMF tone is received before the time in parameter 229 has expired. Otherwise a call will be treated as a normal outside caller.

*** ALL features are enabled only when the first DTMF digt is received***
before the DIDTime parameter

I. TOLL SAVER - The toll saver is a message (Mess011.vox) that will play before an unavailable greeting when there are currently no **new** messages. This message should contain a distinct ring or a tone that will signify to the mailbox user that he/she has no new messages. The normal outside caller leaving a message should not be confused by the ring message and will hear the normal unavailable greeting immediately thereafter. The mailbox owner however, can immediately hang up and possibly save toll charges that would be unnecessarily incurred while entering additional digits to check messages.

II. Entering "*" at unavailable greeting - When a mailbox owner wants to access his mailbox using his DID number he will hear his unavailable greeting. If the DIDTime parameter is enabled and the first DTMF digit was received within the timer then he/she may enter a star "*" and the system will prompt "please enter your password". At this time he/she may enter the correct password and retrieve their messages. A caller wishing to "skip" the unavailable greeting and go directly to the record prompt should now enter a "7" which has an "S" on the key for skip. A normal call would still function as previous - Star "*" to skip greeting.

III. Restricted Access for DID callers - When selling mailboxes to DID user's it has been noted that some users are confused and can inadvertently cause a malfunction by setting options on their type "R" boxes that would normally be used for auto-attendant functions (Call Screening, Call Forwarding, Removing DND) Also it has been expressed that the administrator have more control over the features enabled for a type "R" box. The following can now be accomplished by enabling the DIDTime parameter:

A mailbox user accessing the system by a DID number will be restricted from gaining access to the following features and will be prompted "access denied if attempting to access them.

From the initial user menu "Press 1 to hear you messages, 2 to leave a message, etc..."

4 , 5, 6, 7, 8

4 - Extension Maintenance
5 - Outcall Maintenance
7 - Broadcast messaging (Not currently in prompt- must know password)
8 - Time messaging (Not currently in prompt)

If an administrator requires access to one of these options (Outcall Maintenance) or desires an individual access to any of these options then they would simply access the system using an internal number or a DID number that is not a mailbox in the voice system. In either case the voice system would answer with the normal Salutation message. They would simply wait for the DIDTime parameter to expire (1-2 seconds) and enter the appropriate digits to access the needed mailbox feature in any mailbox. In this way an administrator can enable features and/or access on a per mailbox basis without restricting by monitor type (Type "K" or "L")

IV. DID Caller Dialing Access Options- Since this function may be used in an environment where auto-attendant functions are also enabled, it is desirable that a caller who is forwarded from an extension directly to a mailbox have the option to enter another extension number ,(i.e. the operator) and be transferred to the extension as a normal monitored call. In other words, because the first DTMF digit was received by the voice system before the DIDTime parameter (229) had expired: This indicates to the voice system that this call is a forwarded call from the PBX. Since the first digit was received before the value expressed in the DIDTime parameter, the caller should be transferred directly to the mailbox with no further attempts to ring the extension.

However, if this caller now decides to dial another extension the call will be treated as a new call and any transfers to another extension (including the operator) will attempt to ring the extension before going to the mailbox. This is the default setting for this feature.

Caller rings extension ----------> Extension Busy or No answer

Extension forwards call to voice system ----------> Voice system answers first DTMF received
Extension forward code dials mailbox number -------> before value in parameter 229 (DIDTime)

Voice system sends caller to unavailable greeting ----> caller enters extension number during greeting

Voice system attempts to ring the extension entered and monitors call as non DID

It may be desirable in a Service Bureau application to restrict callers from being able to dial additional mailbox numbers from their personal unavailable greeting. (i.e. 800 access to DID mailbox) In this instance, a caller may be restricted from entering any other mailbox on the system from their DID number.

This is accomplished by setting the parameter 281 (DIDMsgOut) to any and all monitor types that require restriction from dialing another mailbox number from their personal unavailable greeting. In this way the caller is limited to their mailbox functions only and may not travel from mailbox to mailbox by entering additional DTMF digits. They may enter 7 to skip the greeting, or "*" to enter their password to retrieve messages and perform normal mailbox functions, but upon exiting their mailbox or after leaving a message they will be disconnected form the system with the prompt "Thank you for calling, goodbye".

281	DiDMsgOut	blank	Enter the Monitor Types to disallow dialing DTMF from greeting - (See 6.166 Release Notes)

It may be desirable for an individual mailbox to have the ability to enter other mailboxes on the system even though the monitor type for that particular mailbox is restricted by parameter 281 (DIDMsgOut) i.e. audiotext that directs a caller from mailbox to mailbox. This may be accomplished by entering a "+" character in the name field of the mailbox user. This would indicate to the system that this mailbox user's personal unavailable greeting may accept DTMF digits which allow the caller to be transferred to another extension and/or mailbox.

For example: If the administrator decides that system user John Doe's mailbox should be allowed to accept additional DTMF digits to transfer callers either to other message mailboxes; or to a live extension; then in the name field of John Does's mailbox would be included the "+" sign.

extension number 100 John Doe+

Subject: Distribution List - Version 6.165 + (See Instructions for recording Phrases)

Discussion: Distribution List have previously been system wide (Global) list with 99 possible List and unlimited members per list. List can now be added per mailbox as well as System Wide (Global). However, since the database has been reconstructed for these List it will be necessary to rebuild **all** list . The **new** Distribution List limit per mailbox is 128 List with 128 members. This may be set to a lower value system wide and per mailbox as will be discussed. For Global List it will be necessary to designate a mailbox as the Global Distribution List mailbox (See parameter 278 below)

The following parameters must be set to allow individual Distribution List per mailbox. System Wide Global List are automatically defaulted to the Maximum List and Maximum members (128 each).

276	ExtListNum	blank	The number of Distribution List allowed per mailbox (maximum)
277	ExtListEle	blank	The number of members allowed per mailbox Distribution List (maximum)
278	DistListNum	blank	The Mailbox assigned for access to System Wide (Global) Distribution List - (max 128 List, 128 members

All mailbox list may be individually controlled for maximum distribution List allowed and maximum members per list by adding a control character (^) and decimal digit (6.12) to the name field of the mailbox you wish to customize.

Gary Bussey ^6.12

In the above example the mailbox for Gary Bussey would have a maximum of 6 List and a maximum of 12 members per List.

Important - If you lower the maximum members allowed either globally or individually *ALL Distribution List* for that any mailbox with members/list greater than the new limit will be deleted.

This is possible to allow the administrator to quickly clear List from unused mailboxes

New Features:

The following options are available to the user when reviewing Distribution List members

4 5 6

7 8 9

*** 0 #**

While Listening to list members entering one of the **bold** digits 5,7,8,9,0 will cause the following:

5 - Goto the top of the current List
7 - Goto the previous list member (backup)
8 - Go forward 10 list members at a time
9 - Go forward one list member
0 - Goto bottom of current list - (long beep indicates last member in list)
* - Pause entry for up to 3 minutes - (will beep every 10 seconds as reminder)

BMC Group Inc
January 15, 1991
Update 6.166

Subject: Master Password Entry 6.166+

Discussion: Master Password Entry refers to the ability of the Administrator to supersede a mailbox user's normal password with the Master password. This is a useful feature and allows an administrator the ability to review various settings that are user activated. In this way the administrator can monitor and control the voice system and the users on the system.

However, it has come to the attention of some user's and administrators that this may cause a drop in security confidence and a request was submitted to provide a means to account when a user's mailbox is entered using the system Master Password. This feature was added in the following manner:

A notification record is created for the mailbox entered with a calltime of the current system time plus 5 minutes. This delay is to allow the person using the Master Password to complete the reason for entering the user's mailbox.(If the system attempted to notify the user immediately the user may enter the mailbox before the Master Password entry person had changed any status of that mailbox) Upon notification (voice system will dial extension number) the mailbox user will hear the prompt

"Please enter your password"

and if no DTMF entered the prompt

"Please enter your extension number".

Upon entering the correct mailbox and/or password the system will then prompt the mailbox owner with the message **new** system message (Mess411.vox)

"Your mailbox has been entered by someone using the Master Password"

The system will then play the date and time the mailbox was entered followed by the **new** system message (Mess413.vox)

"Enter "1" to acknowledge or any other key to Replay Date/Time information"

If the mailbox user's mailbox was changed the system will inform the user of the new mailbox password previous to message 413.

If there is not an extension number on the PBX or Hybrid Key Set that is associated with a voice system mailbox then the mailbox user will be informed in the above manner at the first access of their mailbox after the Master Password entry.

In some cases it may be desirable to disable this function for certain types of mailboxes (Type "K","L" - guest mailboxes) This may be accomplished using the following parameter number 275 (NoPassMsg) All types included will **not** be notified when their mailbox has been accessed using the Master Password

275	NoPassMsg	blank i.e. XNKL	Mailbox types to disallow Master Password Entry Notification

If the notification is not successful then the voice system will update the notification to redial the extension in the amount of time in parameter 176 (OutRetry)

' THe following rules apply to outcall notification

'To control the delay time for individual mailboxes during a 'notification attempt,,add a control character and value to 'the name field:

'shift 7' 'For Beeper outcalls (type "D") add the "&" character and a SINGLE 'digit value to the name field of the mailbox user program the 'number of pauses (normally 2 secs. each) to delay from the 'DIAL COMPLETE untill the download beeper digits function

'i.e. MARK FARMER &4

'would tell the system to pause 4 X the setting in parameter 'nu 003 (PAUSETIME) after dialing before downloading the 'numbers displayed on the beeper when notifying the box ' for MARK FARM

'shift 2' 'For Voice outcalls (type "V") add the @ character to the name field 'of the mailbox user. In this case it is not neccessary to add a value 'after the "@ the system will immediately start playing the voice 'notification prompt upon a COMPLETE, therefore it is important that 'this notification prompt is sufficient to allow time for the 'mailbox user to answer the phone and hear the message (c is MESS186).

'i.e. Matt Farmer @

'would indicate to the system to dial the voice notification 'entry for MAtt Farmer and immediately start playin his notification ' prompt or the defau notification prompt (mess186.vox) upon ' completion of dialing . It may be desirable to add as many pauses

' to the outcall entry as possible for voice notifications

'ALSO it is now possible to tell the system to outdial any 'notification entries one time only (or once only every new message) 'if parameter 274(?) (DUPMSG) is set 1. This is accomplished by setting 'the number of minutes for outcall retry to 99 that particular 'outcall entry. The system will attempt the initial outcall and 'REGARDLESS of the status (connect, ring, busy) will immediately delete 'the outc entry and will not attempt again untill the message has been 'retrieved.

Dialogic Teriminating Events

0	=	No Termination Received
1	=	Maximum DTMF digits received
2	=	Terminating DTMF digit received
3	=	Rec/Play/Getdtmf stopped
4	=	DOS error
5	=	Max bytes reached on Play or Rec
6	=	Hardware failure
7	=	Rec/Play/Getdtmf timed out
8	=	Off-Hook complete
9	=	Dialing Complete
10	=	Maximum Silence received
11	=	End of File reached on Playback
12	=	Terminate by drop in Loop Signal
13	=	Disk Full
14	=	On-Hook complete
17	=	AMX/8x disconnect Termination
18	=	Call analysis Termination
20	=	Loop Signal Drop Event
21	=	Rings Received
22	=	Silence Off
23	=	Silence On
24	=	AMX/8x channel connect
25	=	AMX/8x channel disconnect
26	=	Loop Signal on Event
27	=	Max Rings reached on AMX/81 con
28	=	Rings Terminated by AMX/8x connect
29	=	Terminated by masked DTMF digit
30	=	Interdigit delay exceeded
31	=	Terminated by Max Non-Silence
32	=	Termination from EMS buffer full
33	=	Termination from EMS buffer empty
34	=	Termination by EMS error
35	=	EMS buffer low
36	=	EMS buffer high
37	=	Parameter updated
38	=	Wink Protocol Complete
39	=	Wink Received
40	=	DTMF digit Received

Extension Maintenance Addendum

For

Software Version 6.172

TransferMsg Parameter 303

And The

Effect of its Setting In Other Areas of the Program

10. TransferMsg Parameter (303)

An addition of parameter number 303 to the program allows the adminstrator to choose the way in which the transfer message is played under certain conditions. Specifically, the way in which a caller hears the transfer message from the opening salutation or any directory function.

Setting parameter 303 to a value of 1 will cause the message "please hold while I try that extension for you" to play. This value will over-ride all values set in parameter 219 (NameBox) and in the NamePlay Field in the Extension Database Additions.

If the value for parameter 303 is 0, then , depending on thevalue of parameter 219 (NameBox) and thevalue of the Name Play field in the Extension Database, these will prevail over parameter 303.

Settings Ïor Parameter TransferMsg (303)

The following settings hold true for parameter 303:

Value	Result or Area Affected
0	"Please hold while I try"<Name Tag>,<Extension>
1	"Please hold while I try that extension for you."
2	Transfer inside of Department Mapping
4	Transfer inside of Call Screening Feature
8	On hold transfer ("Press * to remain on hold..")
16	Transfer inside a Voice Mail Hunt Group

The value of this parameter shouldbe set by adding all desired values until you reach the value intended. As an example, let us suppose that you wish to toggle the paramter express the transfer message "Please hold while I try that extension for you" inside Call Screening. The end value would be 4. Setting the value to 4 would Enable the transfer message "Please hold while I try that extension for you" to work inside of Call Screening **ONLY**. All other NamePlay and or Name Box parameters aresubject to the values expressed within each .

The Other Name Play Areas

Parameter 219 (NameBox) and the Name Play Field in the Extension Add area of Maintenance relate in the following way:

1.) Parameter NameBox (219) will always over-ride the NamePlay field if the value in the NamePlay Feild is less than 2

2) If the NamePlay feild of the extension datasbase has a value of 2, 3 or 4 then this feild will over-ride the value in the NameBox (219) parameter feild.

3.) If a personalized unavailable greeting exists in the mailbox being transferred to, then no Box Number is played before the greeting regardless of parameter settings.

4.) If a Name Tag does not exist for the mailbox or extension transferred to, then the mailbox will play extension number on the transfer.

Quick Review

To better facilitate your understanding of this function, let us review the parameter settings for(219) NameBox:

Value	Result
1	No Name No extension play
2	Extension Only will play
3	Name Play only
4	Name and Extension will play

Call Wake-Up Feature For Software Version 6.172

With the release of software version 6.172, the Call Wake-Up feature, used primarily for **Hotel Package Applications**, has been modified to include some additional system parameters which aide in enhancing this feature.

Parameter #304 WakePause

The WakePause parameter is used to set the number of minutes between Wake-Up retries. If a connect is detected and the called party does not enter a "*" to acknowledge the wake-up call, then the time between the next attempt to call is dependant on this parameter. **Default is five minutes.**

Parameter #305 WakeLogEvent

The WakeLogEvent parameter is set when a record of the wake-up entries and outcall notifications are needed for later review. These records can be sent to a file on the hard disk or to a line printer. The file can later be viewed using the REPORTS option from the system MAINTENANCE MENU. The default output is to a file on the hard disk. **Default setting is zero (0).**

In order to properly set the parameter for the result that you want, you must add the number of the option(s) together. **The sum of the options equals the parameter setting.**

Parameter# 305 Option Settings

0 - No output to file/line printer

1 - Add on a new entry

2 - Change if new time

4 - Write call when outdialed

8 - Activate if change of w to W on Boot-Up *

16 - Output to line printer

32 - Select line printer 2 * *

Example: Adding Options

options 1 + 2 + 4 + 16 = 23

So then..

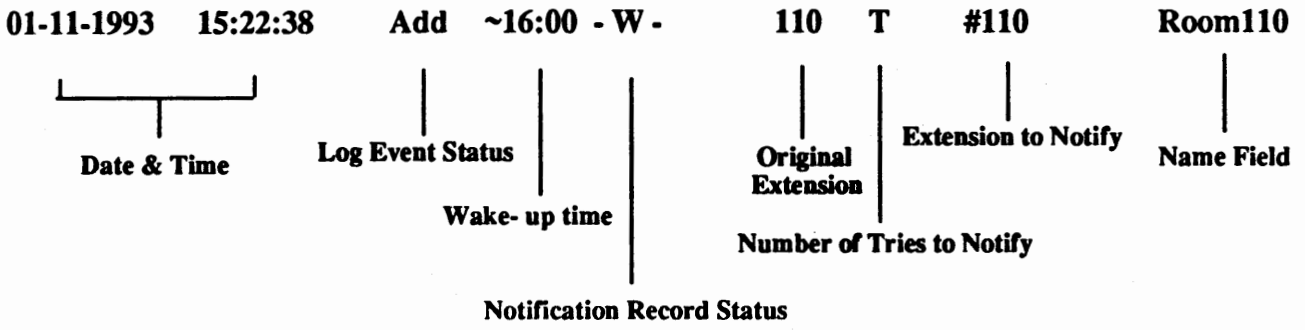
Parameter # 305 = 23

[*] If the wake-up call is set to a time which conflicts with the current system time, then the notification record (viewed through the F7 key) will write a "w" next to the extension number due to be notified with a wake-up call. Depending on the time setting for parameter WakeWindow (see further), the system will "pick up" the out-of-sequenced wake-up call ("w") and write a "W" in its place.

[* *] Option 32 allows you to select a printer designated as LPT2 (Lpt1 is the default for a single printer). You must select either option 32 or option 16. **Both cannot be selected.**

Printer Informarion

When parameter #305 is activatedto print information about wake-up notifications, a typical output line might look like the following:



Log Event Status

In the example above, the Log Event Status field is representative of certain options which you might have selected in setting the value for parameter 305. The above example is showing the word "Add" in the status field. This indicates that a caller has "added" a wake-up call to the system.There are four possible states which will be indicated in the Log Event Status field.

Possible Status Field States

If you selected option...	Then	Status is...
1		Add
2		Change
4		Call
8		Act

Depending on which options that you selected for parameter 305, whatever condition the wake-up call passes through is reported to the printer or to the hard disk file. **The condition of the wake-up call is the *status* of the call.**

Wake - Up Acknowledgement

When the wake-up call has been initiated, the system message will prompt the person being called with, "**Good morning. This is your wake up call. Press "*" to acknowledge or I'll call back in [x] minutes.**" When the called party presses the " *" key, the printer will indicate that the call was received by printing an "**ACK**" next to line showing the outdialed information.

Parameter # 306 WakeWindow

During an outcall notification if a wake-up call is active, the call may not be able to go out due to port activity.The WakeWindow parameter is used to "look backwards" from the current outcall time and pick up "stranded" wake-up entries within the window allowed by the **value** of WakeWindow.

On most systems, **the default value is five(5) minutes.** A maximum of fifteen (15) minutes can be set.

Parameter # 307 WakeDigitLength

The WakeDigitLength parameter controls the maximum number of digits allowed for an external wake-up call outdial. In older versions of the VoiceXchange software, this was not limited. However, with the possibility of system hackers and those who might choose to abuse this feature, this is now controlled by a system adminstrator.

The Default for this parameter is *another* parameter: parameter # 144 (Extension Length).

Parameter # 308 WakePassWord

The WakePassWord parameter was created primarily with the Hotel Feature Package in mind. WakePassWord offers a short-cut when entering multiple wake-up entries. This is used when entering the Wake-Up Call Menu through the Main Greeting (Salutation). When prompted to enter a password by the system messages, the WakePassWord value should be entered. Three features will be noted:

1.) After one completed Wake-Up entry, one does not have to re-enter the passsword for each and every wake-up entry during a sequence of entries.

2.) Prompts can be interrupted by entering a DTMF digit.

3.) At the prompt, "Thank you for calling," a "*" DTMF digit will return to the beginning of Wake-up Entry Codeprompt, "Please enter Wake-Up Box Number..".

Default is blank. Number must be chosen (4-digit).

Parameter # 309 WakeGlobal

The WakeGlobel parameter is a system wide parameter that controls mailbox wake-up entry during the Mailbox User Menu. Typically, the user would hear the following message once they have entered their mailbox, "Press 1 to hear your messages, 2 to leave a message...". It is during this menu prompt that the user may enter a "*" to access the Wake-up Menu from their mailbox menu.

Parameter WakeGlobel controls whether a wake-up entry is allowed and if an outside extension number (7-didgit) can be entered as a wake-up notification number.

The default setting for parameter WakeGlobal is 0. The following are additional settings:

0 - Wake-up through Maibox User Menu is **denied.**

1 - Wake-up entries **allowed** with outdial number being the mailbox number.

2 - Wake-up entries **allowed** with Mailbox or Optional External Outdial.

System Administrator Override For Parameter # 309 WakeGlobal

To override parameter WakeGlobal on a per extension basis, the adminstrator would enter in the Extension Namefield a "<", which would allow Mailbox outdial or a "<<" which would allow Mailbox/Optional External Outdial.

Setting Wake-Up Calls From The Opening Salutation

Call into the voice mail system and, at the salutation, enter the **Wake-Up** number (parameter 211).

1. A system message will prompt, "**Please enter the room number for wake-up.**"
2. Enter an extension number (valid on the system extension database)
3. The system will repeat the digits that you have input and will prompt, "**Is this correct? Press 1 if yes or 2 if no.**"
4. If "Yes", press 1. If "No", press 2. (If NO, re-enter correct extension number when you are prompted to do so).
5. If "Yes", you will be prompted, "**Please enter your password.**"
6. Enter Master Password (Default 9999)
7. You will be prompted, "**Press 1 to add a wake-up call or 2 to delete a wake-up call.**"
8. Press "1".
9. You will be prompted, "**Please enter the 4 - digit wake-up time.**" (Use military time)
10. Enter military time
11. The system will repeat the time that you have entered. You will be prompted, "**Is this correct? Press 1 if yes or 2 if no.**" If it is correct, press "1".
12. You will be prompted, "**Please enter the extension number.**"
13. You may enter an extension number from the database or a 7-digit number since you used the Master Password.
14. You will be prompted, "**Is this correct? Press 1 if yes or 2 if no.**"
15. If correct, press "1".
16. You will be prompted, "**Added entry, Box < number >...Thank you for calling. Goodbye.**"
17. Your Wake-Up call has been set.

Setting Wake - Up Calls From The User Mailbox

Enter your mailbox as if you were going to check your messages. Wait for the message,"**Press 1 to hear your messages; 2 to send a message; 3 for Message Box Maintenance..**". When you hear this message, do the following:

1. Press the " * " key. (Star or Asterick)

2. The message, "**Press" 1" to add a wake-up call, Press "2" to delete a wake-up call**," will play.

3. Press " 1" to ADD.

4. The message, "**Please enter the 4-digit wake-up time**," will play.

5. Enter in the time which you want the wake-up call to take place. (Enter time in Military Time)

6. The message, "**Is this correct? Press 1 if yes, 2 if no**," will play.

6. If the time you entered is correct, then press" 1" for yes. If no, press" 2" and re-enter time.

7. The message, "**Please enter your extension number**," will play.

8. Enter your extension number or a 7-digit phone number if applicable (see documentation).

9. The message, " **Is this correct? Press "1" if yes; "2" if no**," will play.

10. Press "1" if the extension number that you have input is correct. If not, press "2" and re- enter.

11. The system will respond with the following message, "**Entry added box[number] ...Thank you for calling. Goodbye.**"

Using the Sponsor Box Feature

The Sponsor Box feature is an option which is normally set when creating the individual mailboxes in Extension Maintenance (*see the Administration Manual, Section 7, in the VoiceXchange System Guide & Maintenance Manual for more details*). Enabling the Sponsor Box feature allows the User to have messages left in another mailbox instead of their own mailbox. Although there are a wide variety of applications where this feature can be utilized as it is, additional programming enhancements have been included to broaden this feature.

Setting Parameter #324 (SponsorCntrl)

Limitations in previous versions of software would only allow the sponsor box feature to function if a caller were calling from an external line into the voice mail. Utilizing parameter 324 will provide control for the activation of the Sponsor Box in three messaging areas: **External, Send** and **Reply** functions. This control appears under the following conditions:

Setting the Parameter to:	Result
0	This setting allows the sponsor box feature to work as it did in previous versions of software. (Only external calls)
1	*Disallows* the Sponsor Box feature. This turns the feature **off**. No Sponsor Box available throughout the system. External Calls ONLY.
2	Allows for internal messages to be left inside a Sponsored Box. (From "2" to Send a message or from mailbox to mailbox)
4	Allows a Reply message to go into a Sponsored Box. (After hearing a message, you are given the options to delete, to hold, to review, to hear date/time, forward or REPLY to a message)
8	Allows for a "warning tone" to be issued before the tone heard at the prompt, "record at the tone, end with the # sign." For External Messages.
16	Allows for a "warning tone" to be issued for an internal call.
32	Allows for a "warning tone" to be issued for a reply message.

Setting Parameter #324 Continued

To set this parameter, you need to add the number(s) of the bits (0,1,2,4,8,16.32) to obtain the desired value. For example, if you wish to include the functions of bits 2, 4 and 8-- you must add the numbers of the bits:

2
4
+ 8
16

This is the value to input for parameter 324.

What is the purpose of the "Warning Tone?"

Bits 8, 16 and 32 provide for setting a *warning tone* which plays for the caller just *before* the tone which prompts the caller to begin recording their message. This "warning tone" is used to alert trained callers that the person that they are leaving a message for is currently activated to have their messages transferred to a sponsor box. This option allows the experienced caller to know that their message will be heard by someone other than the person that the message is intended.

Emergency Message Box Feature

The Emergency Message Box is a feature which allows the user to have the ability to leave important messages to pre-programmed distribution lists quickly and effectively. This feature is actually an enhancement of another feature called Distribution Lists which is available to the user per mailbox or through a Global Distribution List.

Emergency Message Box & Global Distribution List Box

The Emergency Message Box is created by modification of the Global Distribution Message Box. This message box is unique and seperate from the distribution lists that can be created per mailbox. Normally, the Global Distribution Message Box is used by management personnel to distribute company wide messages rather than though individual mailboxes or specific lists.

Control Parameters

To set the Emergency Message Box, you must first become familiar with a few parameters:

Parameter	Name	Description
278	DListGloBox	The Mailbox assigned for access to System Wide (Globel) Distribution List - (max 128 lists, 128 members)
317	DListGloCntrl	This parameter controls the way in which the Distribution Global List Box is set up. This parameter will determine if whether or not you have a Global Distribution List Box or an Emergency Message Box.
318	DListEmgPswd	Password protects the Emergency Message Box from unauthorized access.

Setting Up the Emergency Message Box

Setting Parameter 278 (DListGloBox)

To set up the Emergency Message Box, you must first enable parameter number 278 (DListGloBox) to a value which is equal to a mailbox already configured in your systems database. You may choose to create a special mailbox for the Emergency Message Box. Remeber: a mailbox need NOT be an actual extension off of the phone switch. A mailbox can be configured as a *virtual box* which only exists on the hard disk drive.

Once you have selected the mailbox to dedicate to the Global Distribution List Box, you may access the mailbox menu and choose option 2 for "Distribution List Maintenance". From the Distribution List Maintenance menu, you may choose to configure your list for the Emergency Message Box. Follow the prompts inside of the maintenance menu to create a list and add members (mailboxes).

Setting Parameter 317 (DListGloCntrl)

This parameter is Bit Controled to allow the user to modify and enhance as the need arrises. The following bits control the enhancement of this parameter:

1 - Password at initial entry of Global/Emergency List - The default setting is for a password to be required after caller selects "2 to modify list" from the Distribution List Maintenance menu.

2 - Allows for Lamp Notifications (message Lights) if the Lamp Field in the Extension Database is not set to "N". In the Emergency Mode, this bit has priority over what is set inside the extension database.

4 - Allows for Outcall/Offsite Notifications if the Notify Field in the Extension Database is not set to "N". In the Emergency Mode, this bit has priority over what is set inside the extension database.

8 - Sets the ability to use the maintenance function of the Globel List Box to record the unavailable greetings, adding and deleting lists and members, etc.

16 - Sets the Emergency Message Box Mode. The user is allowed to record and send a message only. There is no maintenance allowed if this is the only value which is input for this parameter.

32 - In Emergency Mode - No message which says "record at the tone" - (Only if the Emergency Box has a recorded unavailable greeting).

Setting Parameter 317 Continued..

To properly set this parameter, you must select the number of the bit value which you want included for the configuration of you Emergency Message Box. Add the bit value together with the other values that you might select. **The sum of the bit values is the value which you would input for the parameter value.**

Example: **Select bit values 4, 8, 16, 32.**

4 + 8 + 16 + 32 = 60

Parameter 317 = 60

Setting Parameter 318 (DListEmgPswd)

To set this parameter, you need to select a four digit number which will be unique to serve as a password. This will enable a password to be placed in front of the Emergency Message Box to prohibit unauthorized access.

How Does the Application Work?

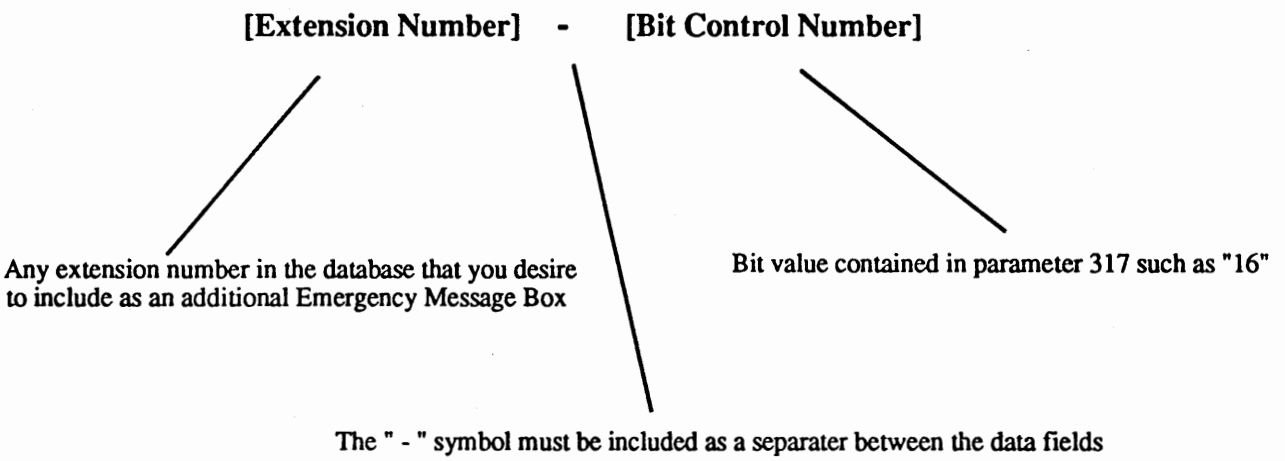
After the above criteria for setting the parameters and dedicating the Emergency Message Box has been completed, a caller desiring to leave an Emergency Message would call into the Voice Mail System (usually by calling from the external access number or by calling the internal voice mail port extension numbers) and upon hearing the opening salutation or opening greeting (Or after selecting the language mode of the Voice Mail system for the Multi-Lingual feature users)they should enter a "*" and the Emergency Message Box extension or mailbox number.

Depending on how the system adminstrator has decided to set the control values in parameter 317, then the caller would be told to leave a message or they would just hear the "beep tone" to begin recording their message. When the caller is finished, all they need to do is hang up and the message will be distributed to all of the mailboxes listed in the Emergency Message Box distribution list.

Additional Programming Considerations for the Emergency Message Box

For customers that require more than one Emergency Message Box for their application, there is an additional enhancement which is available to the adminstrator. To set more than one Emergency Message Box, use any file editor such as COPY CON or EDIT (DOS Commands) to create a file called **DLISTGLO.DAT**

The DLISTGLO.DAT file should contain the following file structure information:



You may select as many Emergency Message Boxes as needed for you r particular application. Just add the line under the previous line in your DLISTGLO.DAT file to include another box.

The DLISTGLO.DAT file must reside in the C:\VEX directory. The program will look for this file each time the system is re-booted.

Using the file format listed above, we will create an example using the file editor COPY CON to add another Emergency Message Box. For the example, we will use extension 200.

Example:

C:\COPY CON DLISTGLO.DAT	[enter]
200 - 16	[enter]
[press the F6 key to end]	[enter]

Section 8

Backup

Updating your voice system with VoiceXchange Version 6.17+

BMC

a Better Means of Communication
Publication

1992

Backing Up your Current System

Version 6.17 has many additional features available to the voice system user and Administrator. It is always important to make a Backup of all system data and messages *before* any update is attempted. This insures the integrity of the system information and provides a failsafe against any unforseen occurrances.

There are several methods and/or Third Party Utilities available that will accomplish the task of creating a backup for your VoiceXchange system. The steps provided in this document are only a suggested method and can be modified to include or exclude certain data depending upon you application and the size and availability of backup Floppy disk or like media.

Complete Backup

The first step in a backup procedure is to determine which files are neccessary and unique to your VoiceXchange system. It is possible and simple to create a backup of the entire VoiceXchange hard drive by using the following DOS command **BACKUP**:

from the \VEX prompt type> `BACKUP C:\VEX\*.* A: /s` <R>eturn

This will tell the computer to copy all files from the \VEX directory **and** subdirectories (/s) to the formatted disk in Drive A:

When the disk in drive A: has become full the computer system will prompt you for additional disk untill all files have been copied form the hard Drive \Vex directories.

Though this is the easiet method to create a backup, it is also the most time consuming and disk intensive. You will need anywhere from twelve to fifty- 1.2 floppy disk depending on the size of the hard drive and the amount of information stored on it.

To restore a BACKUP created by this method you must use the DOS command **RESTORE**:

from the \VEX prompt type> `RESTORE A: C: /s` <R>eturn

This will replace all files that were backed up using the BACKUP command to the \Vex directories. It is **important** to replace the floppy disk in the same order they were backed up so it would be wise to label these disk during the backup procedure.

Completing the UPDATE to version 6.17

If using the above method to backup your current system you will need to run the SETVEX installation program to install the new files **AFTER** the RESTORE command, however this method will erase any Message prompts that had been re-recorded previously including Sal000 and Message 003. To save these files and your data information please see the next page - **DATA BACKUP**

Data and Custom Backup

It is more disirable to backup only that data that is unique and neccessary to your VoiceXchange system. In this way a system may be updated by erasing all existing information and installing the New VoiceXchange software version 6.17 **before** re-installing any and all data required for your application. The easiest method to accomplish this task is to build a DOS .bat command that will copy all DATA files and unique message prompts to a backup disk. This can be done with any text editor, however DOS provides an excellent program called **EDIT**

Building a backup file using Edit

If you are not familiar with the DOS Edit command, you should be able to learn the basic functions within a short period untill you become comfortable. In the edit environement simply type the following commands as sentences:

from the \VEX prompt type>

Type in:	**Explanation**
`Path=c:\dos`	<This insures path is set to dos for BACKUP>
`Md C:\VEX\BACK`	<Creates a Directory called BACK for files>
copy c:\vex*.ndx c:\vex\back	<Index files copied to back directory >
copy c:\vex*.dbf c:\vex\back	<Database files copied to back directory>
copy c:\vex*.dat c:\vex\back	<Data x files copied to back directory>
copy c:\vex*.cpb c:\vex\back	<Call progress files copied to back directory>
copy c:\vex\vox\sal*.* c:\vex\back	<Salutation messages copied to back directory>
copy c:\vex\vox\dpt*.* c:\vex\back	<Departmnt messages copied to back directory>
copy c:\vex\vox\mess002.vox c:\vex\back	<unique system message>
copy c:\vex\vox\mess003.vox c:\vex\back	<unique system message>
copy c:\vex\dist*.* c:\vex\back	<Distribution List Files>
copy c:\vex\notify*.* c:\vex\back	<Notification mailbox prompts>
copy c:\vex\hnt*.* c:\vex\back	<Hunt Group Files 6.17+ only>

for grettings and outside messages add the following lines: (OPTIONAL)

copy c:\vex\gre*.* c:\vex\back	<Unavailable Greetings>
copy c:\vex\bsy*.* c:\vex\back	<Busy Greeting Files>
copy c:\vex\dnd*.* c:\vex\back	<Do-Not-Disturb Files>
copy c:\vex\nam*.* c:\vex\back	<Name Signiature Files>
copy c:\vex\msg*.* c:\vex\back	<Outside Message Files>

You should add any and all **customized** system messages to this file- example i.e.

copy c:\vex\vox\mess050,vox c:\vex\back <Customized System Message>

The **LAST LINE** of this file should read:

backup c:\vex\back a: **<Backup all files from C:\vex\back to A:>**

Continued.....

Building a backup file using Edit continued...

The Final Step to creating a BACKUP .bat file is to save the information you have created by exiting the DOS program EDIT. To save the .bat file and exit the EDIT environment hold down the <ALT> key and then press the <F> key. This will cause EDIT to display a menu. From the menu choose option <X> to exit and then press the Return Key <R> to save the .bat file you have created. You must choose a name for your .bat file which may be any name not currently used as a DOS level command followed by the extension <.bat> We suggest a simple name that you will easily recall such as *Backvex.bat* or *Goback.bat*. The name Backup.bat may **not** be used as this is the DOS command we will use to copy the \VEX\BACK directory to our floppy disk in drive A:

Using the backvex.bat file to create a backup

The backup procedure may be instigated at any time after the creation of the backvex.bat file, however it will be neccessary to Halt the system any time such a backup is desired. After halting the system or after creating the backvex.bat file;

from the \VEX prompt type> `BACKVEX` <R>eturn

The computer system will immediately begin to copy the files indicated by the sentences in the file BACKVEX.BAT andwill then attempt to use the DOS **BACKUP** command to place the contents of the \VEX\BACK directory to a disk in the floppy A: drive. It will be neccessary to have at your disposal several Disk as may be required depending on the contents of the BACK directory and depending on the files you have chosen to include in the backvex.bat file. Again, it is **important** to RESTORE these disk in the order they were backed up so it is wise to Label These Disk

Completing the Update and Restoring the Backup Files

Upon completion of the Backup procedure in the backvex.bat file, you should install the VoiceXchange version 6.17 using the file SETVEX on the Installation Diskette. Place the Installation Disk in Drive A: and type>

from the \VEX prompt type> `A:SETVEX` <R>eturn

This will start theinstallation process- follow the prompts and choose either option <A> for a prompted installation or you may choose each option <B thru H> and install each DIsk seperately.

After completing the Installation program SETVEX choose option <X> to exit the MAIN MENU

To restore a BACKUP created by this method you must use the DOS command **RESTORE**:

from the \VEX prompt type> `RESTORE A: C: /s` <R>eturn

This will replace all files that were backed up using the BACKUP command to the \Vex\Back directory. You must then re-copy all files from the /vex/back directory to the appropriate directories. For assistance call BMC at 404-985-6609 during daytime hours

Section 9

Technical Support

BMC Technical Support

BMC Group offers to its **authorized dealers** a program of free technical support between the hours of 8:00 am to 5:00 pm **Eastern Standard Time** Monday through Friday. All dealer end-user or non-dealer end user direct support is billable according to the rate schedule provided below. All after hours support is billable for Dealers and End-Users.

Before you call BMC Tech Support...

In the event that you are experiencing trouble with your VoiceXchange system, please follow these simple guidlines which will greatly assist you in determining the nature of the complaint.

Investigate

Always try to fully investigate the nature of the complaint in which you are presented with. If the complaint is associated with a user, try to see the problem from their perspective. What may appear to the untrained technical person as a cause may not be the entire reason for the problem. Try to correctly investigate to identify the symptom of the complaint reported. Taking this first step is essential to goodtroubleshooting procedures and technique.

Duplicate

After investigating and clearly defining the reported complaint you must now try to duplicate the occurance of that complaint. Repeat the steps in which the user experienced the problem. If the problem is computer related, try to repeat the occurance which caused the failure. Duplicating the complaint allows you, the trained trouble-shooter, to further explore the reasons for the occurance reported. Also, duplicating the complaint will sometimes allow you to see if the problem is software or hardware related. In addition, it will allow you to determine if the complaint reported is a voice mail system or telephone system occurance.

Documentation

Document any and all information relating to the complaint reported. Report any information on the computer screen including error messages and port information if applicable. Retain this information should you need to call BMC Tech Support for assistance. A support engineer will most likely ask for this information when assisting you over the telephone. To save time, please have this available.

When calling BMC Tech Support, please observe the following...

When the need arises for you to call BMC Tech Support, after following the previous trouble shooting procedures, please adhere to the following guidelines. This will insure that you receive the most effective support available.

During Business Hours (8:00 am to 5:00 pm EST)

Dealers

When speaking to a support engineer, please have the following information ready:

1. Your Name.
2. Name of the company you represent.
3. Telephone number where you can be reached.
4. The version number of your VoiceXchange software.

The support engineer will ask you to describe the nature of the complaint that you are reporting. Please report only applicable information concerning the complaint you are calling about. Report any information that you may have aquired while troubleshooting previous to calling for support (See guidelines for "**Before you call BMC Technical Support..**").

If you are reporting more than one occurance or complaint, please inform the support engineer of this and work with the engineer to list your occurances and to handle one occurance at a time. While it is possible that the occurances are related, it will be best to let the engineer determine this.

If all support engineers are currently helping other customers and are not available to handle your call, you will be asked to leave the above information and the next available engineer will call you back as soon as possible in the order in which your call was taken.

End-Users

All end-users will be billed at the schedule rate for technical support during business hours. If you are an end-user, please have a Purcahse Order number availble for the support engineer. All information above also applies here.

After Business Hours (Dealers & End-Users)

All calls received after business hours (8:00 am to 5:00 pm EST monday through Friday) will be considered after hours. All calls received on weekends (Saturday and Sunday) will be treated as after hours calls. All after hours calls are billable at the rates listed in the Rates Schedule For BMC Tecnical Support. When calling after hours, you will be directed to an Emergency Voice Mailbox. In this mailbox, you will be asked to leave the following information:

1. Your name and company name
2. A phone number where you can be reached.
3. The nature of your complaint
4. A Purchase Order number to bill the support call to.

No calls will be returned by engineering personnel without a purchase order given For After Hours Support.

SERVICE RATES FOR VOICE DEALERS/END-USERS

PRICES EFFECTIVE 01/01/94
All Times Eastern Standard Time

TELEPHONE SUPPORT: VOICE (minimum 1/4 hour)

Dealers :

Monday - Friday :	8:00 AM - 5:00 PM	**No Charge**
All Other hours:		**$70.00 / hour**

End Users :

All Hours:	**$70.00 / hour**

MODEM SERVICE: VOICE (minimum 1/4 hour)

Dealers and End Users :	**$70.00 / hour**

SITE SUPPORT: VOICE, Local (minimum 1 hour) 50 mile radius
PLUS ALL EXPENSES

Dealers :

Installation/Training Assistance	**$450.00 per day**
	or
All Times:	$70.00 per hour

End Users :

Installation/Training Assistance	**$450.00 per day**
	or
All Times:	$70.00 per hour

SITE SUPPORT: VOICE, OUT OF LOCAL AREA) over 50 miles

The above rates plus all expenses including Transportation /Milage, Lodging and Meals

Section 10

Statistical Reports

Section 5

Statistical Reports

1. Introduction

The VoiceXchange Automated Attendant/Voice Mail system has a complete statistical reporting package that offers a series of detailed and summary reports on a daily, weekly or monthly basis. These reports may be displayed on the screen, stored to a file, or directed to a printer. Any or all of the reports may be printed on a scheduled or demand basis, or displayed on the screen at any time.

This document describes the reports, explains what information is contained in them, provides instructions on installing the reports package in both new installations and as an upgrade to an existing installation, and provides details as to how to administer the report package once it is installed.

2. The Reports

Purpose

The VoiceXchange collection of statistical reports is designed to give the system administrator a complete picture of system usage, allowing him or her to make intelligent decisions regarding configuration of ports and trunks, mailbox and message time usage, and to identify the need for and institute user training when conditions warrant.

There are eight reports, including seven detailed reports and one summary report. Each of the reports is available on a daily, weekly or monthly basis, and any or all of the reports can be run on any schedule.

The information about system usage, traffic and messages is accumulated as each call takes place or message is left or retrieved. This data is stored in a series of data registers in a temporary file. During the system reorganization that takes place every night at 3:00 a.m., the information in these data registers is transferred to a permanent data base that has the complete information for the previous day, and these values are added to the accumulations for the week and the month.

Reports can be scheduled to be printed as part of the system reorganization every night, or can be printed on a demand basis at any time. All reports are compiled from the permanent data base. This means that when a daily report is requested, it contains the complete data for the previous day, from midnight to midnight. Requested weekly and

reports include the summation of the last seven days of data, and monthly reports include the last 30 days of data. For example, requesting a daily report at 2:00 p.m. on Thursday, December 20, 1990 would result in a printout of the data for the complete previous day, Wednesday, December 19, from 12:01 a.m., until 12:00 midnight. The requested weekly report would contain the accumulated daily data that has been transferred to the weekly files; that is, data from Thursday, December 13 through Wednesday, December 19. Similarly, the requested monthly report would include the accumulated daily data that has been transferred to the monthly files, covering the thirty day period from November 20 through December 19.

Scheduled Reports

Scheduled daily reports are automatically printed as part of the overnight reorganization at 3:00 a.m. Scheduled weekly reports can be automatically printed as part of the overnight reorganization on Saturday nights including the complete daily data accumulated from the previous Sunday. Scheduled monthly reports can be automatically printed as part of the overnight reorganization on the last day of the month, including the complete daily data accumulated from the first of the month. Each day, each of the scheduled reports is updated with data from the preceding 24 hours, so that whenever a report is printed, it has the appropriate accumulations of data.

The following pages contain descriptions of the data contained in each report, and include samples of the reports as well. The reports available are listed here.

- Auto Attendant. Report #1.
- Port Utilization. Report #2.
- Utilization by Hour. Report #3.
- All Ports Busy Totals. Report #4.
- User Messaging. Report #5.
- User Extension Activity. Report #6.
- User Sign On. Report #7.
- Summary Report Sheet. Report #8.

Report #1 - Auto Attendant Report

This report contains detailed data about the number of calls handled by each port, and the disposition of those calls by the VoiceXchange for the time period indicated. It includes:

- Calls answered by the port
- Calls transferred to an extension by the port
- Calls transferred blind - for extensions with no associated mailbox
- Calls dropped to operator - no digits dialed and on timeout goes to operator
- Calls to operator request - caller dialed 0 for operator
- Messages left - total messages left by calls on this port
- Calls where caller hung up before doing anything
- Calls where user accessed a mailbox
- Calls generated by system for notification

In addition to the calls per port data in this report, there is a summary line that totals each count for all ports. The format of the report is identical for daily, weekly and monthly reports.

The Auto Attendant Report appears as in Figure 1. The summary information in this report is also included in Report #8.

WEEKLY AUTO ATTENDANT — REPORT #1
Period: 01/09/1991 01/16/1991

Port	Calls Answered	Transfer to Ext	Transfer Blind	Operator Drop to	Operator Request	Messages Left	Caller HangUp	Mail Acess	Ext. Notify
1	834	291	——	92	91	112	86	255	——
2	181	77	——	21	18	28	25	78	——
3	48	14	——	18	5	4	3	18	——
4	532	5	——	5	——	2	5	26	519
Total	1587	387	——	128	114	138	119	361	519

Figure 1 Weekly Auto Attendant Report

Report #2. Port Utilization

This report contains time usage data for each port in the VoiceXchange for the time period indicated. It includes:

- Total in use time - total hours, minutes and seconds the port was in use during measured period
- Total calls - calls handled by the port
- Shortest call - length of the shortest call during the measured period
- Longest call - length of the longest call during the measured period
- Average call - length of the average call during the measured period
- Last date - date of the last call handled by this port during measured period
- Last time - time of the last call handled by this port during measured period

The format of the Port Utilization Report is identical for daily, weekly and monthly reports.

The Port Utilization Report appears as in Figure 2. The summary information in this report is also included in Report #8.

DAILY PORT UTILIZATION — REPORT #2
Period: 01/09/1991 08:59:38

Port	Total in use Time	Total Calls	Shortest Call	Longest Call	Average Call	Last Date	Last Time
1	01:21:41	98	00:00:05	00:02:43	00:00:52	01-16	14:16:56_PM
2	00:25:30	31	00:00:02	00:03:29	00:00:53	01-16	14:15:29_PM
3	00:05:19	10	00:00:00	00:01:07	00:00:32	01-16	13:19:08_PM
4	00:11:06	30	00:00:07	00:01:33	00:00:21	01-16	14:00:59_PM

Figure 2 Daily Port Utilization Report

Report #3. Utilization by Hour

This report contains an accumulation, hour by hour, of the amount of time each port is busy during the period indicated (day, week or month). Each block of the report includes a column for the detailed data for four ports, and a column for the summary data for those four ports. The information in each field is as follows:

- Time - This column identifies the hour interval being measured
- Port n - These columns contain the duration, in hours, minutes and seconds during the measured hour that the indicated port was busy.

The format of the Utilization by Hour Report is identical for daily, weekly and monthly reports.

The Utilization by Hour Report appears as in Figure 3. The summary information in this report is also included in Report #8.

WEEKLY UTILIZATION BY HOUR — REPORT #3
Period: 01/09/1991 01/16/1991

Time	Port 1	Port 2	Port 3	Port 4	1 - 4
1:00 AM	- - - -	- - - -	- - - -	00:05:20	00:05:20
2:00 AM	00:03:00	- - - -	- - - -	00:04:11	00:07:11
3:00 AM	- - - -	- - - -	- - - -	00:02:36	00:02:36
4:00 AM	- - - -	- - - -	- - - -	00:02:32	00:02:32
5:00 AM	- - - -	- - - -	- - - -	00:03:20	00:03:20
6:00 AM	- - - -	- - - -	- - - -	00:03:44	00:03:44
7:00 AM	00:21:13	00:03:25	00:00:10	00:03:44	00:20:40
8:00 AM	00:40:52	00:07:50	00:01:20	00:09:47	01:00:03
9:00 AM *	01:10:30	00:16:30	00:00:42	00:12:09	01:39:57
10:00 AM *	01:11:22	00:12:22	00:02:47	00:10:41	01:37:12
11:00 AM *	00:55:30	00:12:10	00:00:47	00:15:35	01:24:10
12:00 PM *	01:10:32	00:11:53	00:01:57	00:10:00	01:40:30
13:00 PM *	01:24:04	00:24:29	00:03:02	00:11:53	02:03:20
14:00 PM *	01:05:52	00:13:59	00:02:34	00:00:15	01:30:40
15:00 PM *	00:50:52	00:13:50	00:02:20	00:09:39	01:24:47
16:00 PM *	00:57:24	00:22:10	00:00:20	00:09:22	01:29:24
17:00 PM *	01:02:49	00:19:59	00:07:54	00:14:22	01:45:04
10:00 PM	00:22:40	00:03:40	- - - -	00:12:49	00:30:15
19:00 PM	00:21:50	00:02:22	00:00:50	00:05:27	00:30:29
20:00 PM	00:20:53	00:02:12	- - - -	00:05:33	00:20:30
21:00 PM	00:10:05	- - - -	- - - -	00:05:01	00:15:06
22:00 PM	00:33:04	00:00:50	- - - -	00:06:01	00:30:55
23:00 PM	00:03:30	- - - -	- - - -	00:05:04	00:00:43
24:00 PM	- - - -	- - - -	- - - -	- - - -	—:—:—
Totals ->	13:00:31	02:40:03	00:24:57	02:57:13	19:10:44
9AM-17PM	10:03:09	02:27:30	00:22:23	01:42:04	14:35:12

Report #4. All Ports Busy Totals

This report contains an accumulation, hour by hour, of the amount of time that all ports were busy, and the total usage of the ports, in both hours, minutes and seconds, and percentages.

- Reference Time - This column identifies the hour interval being measured
- All Ports Busy - This column is the accumulation of time, in hours, minutes and seconds, over the measured interval, that all ports were busy.
- All Ports Percentage - This column contains the calculated percentage of the total available time during the measured interval that all ports were busy
- Total Port Usage - This column contains the accumulation of time that all ports were in use during the measured interval
- Total Port Percentage - This column contains the calculated percentage of the total available time during the measured interval that all ports were in use

Also included in this report are totals for each column, and totals for a user defined range of hours, for instance, 9:00 a.m. to 5:00 pm. See Section XXX for details on how to define this range. The user defined range is highlighted on the printout by asterisks (*) adjacent to the hours in the defined range.

For this report, the measured interval is the combination of the hour of the day and the number of days covered by the report. For instance, the total available time between 10:00 a.m. and 11:00 a.m on the weekly All Ports Busy Totals Report is seven hours. The percentage figure in the All Ports Percentage column is the All Ports Busy figure divided by seven hours. Similarly, the monthly numbers are based on the number of days in the month.

The format of the All Ports Busy Totals Report is identical for daily, weekly and monthly reports.

The Utilization by Hour Report appears as in Figure 4. The summary information in this report is also included in Report #8.

DAILY ALL PORTS BUSY TOTALS — REPORT #4
Period: 01/09/1991 00:59:37

Reference Time	All Ports Busy	All Ports Percentage	Total Port Usage	Total Port Percentage
1:00 AM	—:—:—	0.000%	- - - -	0.000%
2:00 AM	—:—:—	0.000%	- - - -	0.000%
3:00 AM	—:—:—	0.000%	- - - -	0.000%
4:00 AM	—:—:—	0.000%	- - - -	0.000%
5:00 AM	—:—:—	0.000%	00:00:22	0.153%
6:00 AM	—:—:—	0.000%	- - - -	0.000%
7:00 AM	—:—:—	0.000%	00:09:46	4.069%
8:00 AM	—:—:—	0.000%	00:15:41	6.535%
9:00 AM *	—:—:—	0.000%	00:15:03	6.271%
10:00 AM *	00:00:11	0.306%	00:27:22	11.403%
11:00 AM *	—:—:—	0.000%	00:07:43	3.215%
12:00 PM *	00:00:14	0.389%	00:09:49	4.090%
13:00 PM *	00:00:31	0.861%	00:34:29	14.368%
14:00 PM *	—:—:—	0.000%	00:03:21	1.396%
15:00 PM *	—:—:—	0.000%	- - - -	0.000%
16:00 PM *	—:—:—	0.000%	- - - -	0.000%
17:00 PM *	—:—:—	0.000%	- - - -	0.000%
18:00 PM	—:—:—	0.000%	- - - -	0.000%
19:00 PM	—:—:—	0.000%	- - - -	0.000%
20:00 PM	—:—:—	0.000%	- - - -	0.000%
21:00 PM	—:—:—	0.000%	- - - -	0.000%
22:00 PM	—:—:—	0.000%	- - - -	0.000%
23:00 PM	—:—:—	0.000%	- - - -	0.000%
24:00 PM	—:—:—	0.000%	- - - -	0.000%
Totals ->	00:00:56	0.065% 24 Hrs	02:03:36	2.146% 24 Hrs
9AM-17PM	00:00:56	0.173% 9 Hrs	01:37:47	4.527% 9 Hrs

Figure 4 Weekly All Ports Busy Totals

Report #5. User Messaging Report

The User Messaging Report contains details about the messages in each mailbox.

- User Name - This column identifies the mailbox number and the name associated with it.
- Last Received - These columns identify the time and date of the last message left in the mailbox.
- Source - These two columns identify the count of internal and external messages sent to the mailbox during the measured interval.
- Disp - These two columns identify the disposition of messages that are no longer in the user's mailbox. It includes a count of messages forwarded to other mailboxes as well as those discarded.
- Mailbox - These two columns contain the count at the end of the measured interval of the new and old messages in the mailbox. New messages are those that have not been listened to, while old messages are those that have been heard and saved.

The totals at the bottom of the report summarize the total number of messages in each category for the measured period.

The format of the User Messaging Report is identical for daily, weekly and monthly reports.

The User Messaging Report appears as in Figure 5. The summary information in this report is also included in Report #8.

WEEKLY USER MESSAGING — REPORT #5
Period: 01/09/1991 01/16/1991

User Name	Last Received Time	Last Received Date	Source External	Source Internal	Disp Sent	Disp Purg	MailBox New	MailBox Old
888	—:—:—	—/—	——	——	——	——	——	——
100 Farmer Richard	16:23:23	01-15	9	——	1	9	——	——
102 WAREHOUSE - BA	17:38:46	01-10	1	——	——	1	——	——
103 FRISONE BOB	12:57:12	01-16	15	4	——	20	——	——
104 MOHL GREG	13:00:32	01-16	12	——	2	10	——	11
105 TEST	10:54:05	01-15	6	——	1	5	——	1
106 OCONNER JOY	12:46:05	01-09	1	——	——	1	——	——
108 POOLE RANDALL	14:16:11	01-16	4	1	1	4	——	——
110 WAREHOUSE	—:—:—	—/—	——	——	——	——	——	——
120 RICHARD FARMER	—:—:—	—/—	——	——	——	——	——	——
121 SAMS KEVIN	14:02:11	01-16	8	——	——	7	——	——
122 BURNETT STEVE	—:—:—	—/—	——	——	——	——	——	——
123 Job Appliation	—:—:—	—/—	——	——	——	——	——	——
130 RICHARD FARMER	—:—:—	—/—	——	——	——	——	——	——
131 BOB FRISONE	—:—:—	—/—	——	——	——	——	——	——
134 WILSON BILL	14:04:02	01-10	2	——	——	2	——	——
225 tony g.	—:—:—	—/—	——	——	——	——	——	——
245 software ads	15:05:53	01-11	5	1	1	7	——	——
250 VEX BOX	13:20:40	01-16	5	——	——	——	——	5
256	—:—:—	—/—	——	——	——	——	——	——
400 TECHNICIANS/1	13:00:22	01-16	2	——	——	2	——	——
500 ORDER ENTRY	—:—:—	—/—	——	——	——	——	——	——
505	—:—:—	—/—	——	——	——	——	——	——
506	—:—:—	—/—	——	——	——	——	——	——
887 Victoria	17:54:42	01-15	1	——	——	——	1	——
888 Drake Kambitch	—:—:—	—/—	——	——	——	——	——	——
889 Bob Rolland	—:—:—	—/—	——	——	——	——	——	——
System Totals —>			129	9	9	122	2	19

Figure 5 Weekly User Messaging

Report #6. User Extension Activity

This report contains details about calls placed by the automated attendant to each extension. It includes details about the last call, and the number of completed and attempted calls. A description of each field follows:

- Last - These two columns identify the time and date of the last atte: connect to this extension by the automated attendant.
- Connect - This column contains a count of the number of calls that connected to the extension by the automated attendant during the measured period.
- Busy - This column contains a count of the number of calls that were completed because the extension was busy during the measured period.
- No Answer - This column contains a count of the number of calls tha were not answered by the extension during the measured period.
- Notify - This column contains a count of the number of calls that ... notification calls to the extension originated by the VoiceXchange during the measured period.
- Message Greeting - this column contains a count of the number of tim the greeting for a particular message box was played to callers who may or may not have left a message.

The totals at the bottom of the report summarize the total number of calls in each category for the measured period.

The format of the User Extension Activity Report is identical for daily, weekly and monthly reports.

The User Extension Activity Report appears as in Figure 6. The summary information n this report is also included in Report #8.

DAILY USER EXTENSION ACTIVITY — REPORT #6
Period: 01/09/1991 09:00:28

MailBox Name	Last Time	Last Date	Connect	Busy	No-Answer	Notify	Message Greeting
000	--:--:--	--/--	---	---	---	---	---
100 Farmer Richard	--:--:--	--/--	---	---	3	---	3
102 WAREHOUSE - BA	--:--:--	--/--	---	---	---	---	---
103 FRISONE BOB	--:--:--	--/--	---	---	1	---	2
104 MOHL GREG	10:37:11	01-16	2	---	3	7	3
105 TEST	--:--:--	--/--	---	---	---	---	2
106 OCONNER JOY	14:04:40	01-16	4	---	---	---	---
108 POOLE RANDALL	13:15:29	01-16	2	---	1	1	5
110 WAREHOUSE	--:--:--	--/--	---	---	1	---	---
120 RICHARD FARMER	--:--:--	--/--	---	---	---	---	---
121 SAMS KEVIN	11:17:59	01-16	2	---	2	---	3
122 BURNETT STEVE	--:--:--	--/--	---	---	---	---	---
123 Job Appliation	--:--:--	--/--	---	---	---	---	---
130 RICHARD FARMER	--:--:--	--/--	---	---	---	---	---
131 BOB FRISONE	--:--:--	--/--	---	---	---	---	---
134 WILSON BILL	12:50:19	01-16	1	---	---	---	---
225 tony g.	--:--:--	--/--	---	---	---	---	---
245 software ads	--:--:--	--/--	---	---	---	---	---
250 VEX BOX	--:--:--	--/--	---	---	---	2	1
256	--:--:--	--/--	---	---	---	---	---
400 TECHNICIANS/1	13:05:40	01-16	2	---	2	3	2
500 ORDER ENTRY	--:--:--	--/--	---	---	---	---	---
505	--:--:--	--/--	---	---	---	---	---
506	--:--:--	--/--	---	---	---	---	---
887 Victoria	--:--:--	--/--	---	---	---	---	1
888 Draske Kampbit	--:--:--	--/--	---	---	---	---	1
889 Bob Rolland	--:--:--	--/--	---	---	---	---	---
898 Centry 21	--:--:--	--/--	---	---	---	---	---
System Totals -->			38	1	19	24	39

Figure 6 Daily User Extension Activity

Report #7. User Sign On

This report contains details about each user's access to his mailbox, identifying the number of times the user signed on, and some details about the length of these calls. A description of each field follows:

- User Sign Ons - This column identifies for each mailbox holder, the ber of times he/she signed on during the measured period.
- Length - The next three columns identify the average length, the sho length, and the longest length, in hours, minutes and seconds of sign ons during the measured period.
- Last - These two columns identify for each mailbox, the time and dat the last sign on during the measured period.

The total at the bottom of the report summarize the total number of user sign ons during the measured period.

The format of the User Sign On Report is identical for daily, weekly and monthly reports.

The User Sign On Report appears as in Figure 7. The summary information in this report is also included in Report #8.

WEEKLY USER SIGN ON — REPORT #7
Period: 01/09/1991 01/16/1991

MailBox Name	User Sign Ons	Average Length	Shortest Length	Longest Length	Last Time	Last Date
000	———	—:—:—	—:—:—	—:—:—	—:—:—	—\—
100 Farmer Richard	14	00:04:32	00:03:18	00:56:58	15:45:37	01-15
102 WAREHOUSE - BA	13	00:37:03	07:57:41	00:00:49	19:26:47	01-15
103 FRISONE BOB	33	00:00:35	00:01:12	00:07:42	13:54:23	01-16
104 MOHL GREG	21	00:12:25	00:02:57	03:20:47	13:15:36	01-16
105 TEST	32	00:40:02	00:07:57	20:45:54	07:55:25	01-16
106 OCONNER JOY	7	00:00:26	00:00:58	00:02:03	00:49:10	01-16
108 POOLE RANDALL	16	00:00:27	00:03:01	00:05:56	14:17:02	01-16
110 WAREHOUSE	———	—:—:—	—:—:—	—:—:—	—:—:—	—\—
120 RICHARD FARMER	1	00:00:16	00:00:16	00:00:16	12:39:00	01-10
121 SAMS KEVIN	12	01:44:20	00:04:22	20:37:11	13:20:20	01-16
122 BURNETT STEVE	———	—:—:—	—:—:—	—:—:—	—:—:—	—\—
123 Job Appliation	———	—:—:—	—:—:—	—:—:—	—:—:—	—\—
130 RICHARD FARMER	———	—:—:—	—:—:—	—:—:—	—:—:—	—\—
131 BOB FRISONE	1	00:00:46	00:00:46	00:00:46	22:46:30	01-14
134 WILSON BILL	15	00:00:24	00:01:17	00:03:29	11:32:05	01-16
225 tony g.	———	—:—:—	—:—:—	—:—:—	—:—:—	—\—
245 software ads	13	00:00:35	00:00:16	00:02:49	16:26:40	01-15
250 VEX BOX	16	00:00:37	00:01:42	00:03:24	13:44:16	01-16
256	3	00:00:35	00:00:12	00:01:09	16:35:40	01-14
400 TECHNICIANS/1	14	00:00:09	00:00:36	00:01:20	14:13:25	01-16
500 ORDER ENTRY	———	—:—:—	—:—:—	—:—:—	—:—:—	—\—
505	———	—:—:—	—:—:—	—:—:—	—:—:—	—\—
506	———	—:—:—	—:—:—	—:—:—	—:—:—	—\—
007 Victoria	———	—:—:—	00:00:30	00:00:30	—:—:—	—\—
000 Draske Kanpbit	1	00:01:47	00:01:47	00:01:47	00:09:19	01-16
009 Bob Rolland	———	—:—:—	—:—:—	—:—:—	—:—:—	—\—
090 Centry 21	———	—:—:—	—:—:—	—:—:—	—:—:—	—\—
System Total ——>	361					

Figure 7 Daily User Sign On

Upgrades to Existing Installations

To add the VoiceXchange Statistical Reporting Package to an existing installation, you must first insure that you have VoiceXchange Operational Software Version 6.15 or higher running on your system. You will be adding an executable file to your hard drive, setting parameters for the reports and schedules you desire, and modifying the AUTOEXEC.BAT to enable the reporting process.

The following steps should be done in the sequence indicated.

1. Copy the file STATSREP.EXE from the installation disk to the \VEX directory.
2. Set parameter 199 (DoStats) to 1.
3. Modify the AUTOEXEC.BAT file as follows:

Using EDLIN or your favorite text editor delete the following lines

```
cd log
BMCSTATS
cd..
```

and replace them with the following line

```
STATSREP
```

4. Set the reports parameters (Parameter 237 - 244) according to the specific reports and the timing of the output that you desire.
5. Reboot your system. The new version of the statistical reports will be activated, and data will be accumulated in the appropriate report files.