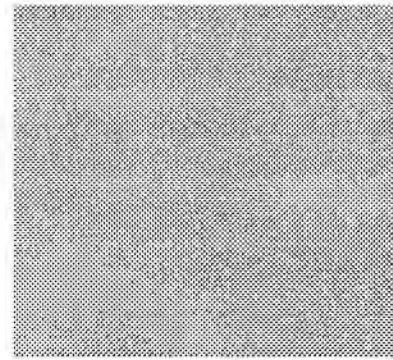
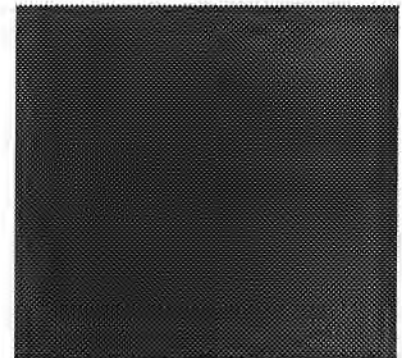


# The Voice Saver™

Voice Messaging System



*System User's Guide*



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This manual provides you with an introduction to the Voicesaver(tm) Voice Messaging System. Included are instructions for installing the product in your operating environment and also on how to administer the system. This guide is intended for the System Administrator. It also has a section that describes how the system can be used by the general public users.

This manual has six sections and two appendixes:

- |            |   |
|------------|---|
| Section 1  | <i>System Overview</i> contains a brief overview of the capabilities of the Voicesaver(tm) Voice Messaging System hardware and software.            |
| Section 2  | <i>Installation Instructions</i> describes how to connect Voicesaver(tm) to your telephone lines and optionally to the host computer.               |
| Section 3  | <i>Theory of Operations</i> outlines the basic concepts behind the Voicesaver(tm) Voice Messaging System.   |
| Section 4  | <i>System Administrator's Guide</i> contains the information for the system administrator.  |
| Section 5  | <i>System Programmer's Guide</i> contains the information needed to customize the Voicesaver(tm) software.  |
| Section 6  | <i>User's Guide</i> has information for the end users of this system.   |
| Appendix A | <i>System Parameters Manual</i> describes the parameters that can be changed to handle the telephone environment or other call processing features. |
| Appendix B | <i>System Prompts Script</i> provides the script of the system prompts.   |



The Voicesaver™ Voice Messaging System is a general purpose system that may be used by many industries such as the voice mail service bureaus, radio paging companies, news service bureaus, hospitals, hotels, politicians, real estate agencies, trucking companies, and others.

In Spanish speaking countries, this software is marketed and used under the Privaphone™ name. For Spanish documentation and support, please contact Digital Technologie de Espana, Madrid, Spain.

The Voicesaver™ software is customizable and allows the buyers of the system to tailor it exactly to their own needs. If the users are accustomed to other call processing systems, Voicesaver™ could be customized to look like the system that they are used to.

The Voicesaver™ Voice Messaging System has the following basic features:

- Supports up to 24 telephone lines, 10,000 users and provides access to 2G bytes of storage.
- Allows a caller to use a Touch-Tone telephone as remote terminal for data entry and speech response.
- Allows a caller to record a message for any subscriber of the system.
- Allows the subscribers of the system to read their messages.
- Call a pager or transfer the call to another subscriber through an extension.
- Collect data for billing purposes.
- Provide communication with other computers through RS232C ports at 1200, 2400, or 9600 baud rates.
- Supports a parallel printer.
- The day to day operation of the system is very simple — one just powers it on!

***Please read this manual carefully before you power on the system!***



The purpose of this guide is to describe the procedures that must be followed to install the Voicesaver™ Voice Messaging System in your operating environment.

### Hardware

1. The local telephone company must be notified that the Voicesaver™ Voice Messaging System is being installed. This requires that you notify the telephone company of the telephone numbers to which you will connect. The FCC registration number is EBZ6FN-71693-MA-E. The ringer equivalence is 0.5B. The Voicesaver™ uses RJ-14 connector types. Each RJ-14 connector accommodates two telephone lines. If your telephone company has any questions, please ask them to call Parwan Electronics Corporation at (201) 536-7500.
2. 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 board. The cable will slide in easily and snap in place when the connection is made.
3. Connect the power cord at the rear of the machine. Make sure the power switch is off. Connect the other end of the power cord to a power outlet.
4. Connect the monitor. The monitor has two cables. One connects to the rear of the system and the other connects to a power outlet.
5. Connect the Keyboard. It connects to the rear of the system.
6. Connect the RS-232C cable if you are connecting your system to your host computer. There is a special RS-232 adaptor cable provided with the system that connects the 9-pin male at the rear of the computer to the standard 25-pin male.
7. Connect your printer to the system's printer connector labeled as LPT1: and connect the power cord to the power outlet.

8. Put paper in the printer.
9. Power on the system.

## **Software**

You should not have to load any operating system software on the system; the system comes ready to be used. If we deliver new versions of the software, follow the following instructions.

### **1. MS-DOS Consideration:**

The MS-DOS version of your software must be Release 3.3 or higher. The CONFIG.SYS file should specify:

*FILES = 40*

### **2. Utilities:**

To improve the performance, use the hard disk compact utilities.

The Voicesaver™ Voice Messaging System software comes on two diskettes:

#### **1. The Voicesaver™ Voice Messaging System Programs:**

This diskette contains all the programs and the basic data files for proper operation. To install this diskette insert the diskette in drive A: and enter:

*A:INSTALL*

This should install the programs and data files from your floppy to hard disk and create the necessary sub-directories.

#### **2. The Voicesaver™ Voice Messaging System Prompts:**

This diskettes contains all the canned voice prompt files. To install this diskette insert the diskette in drive A: and enter:

*A:INSTALL*

This installs all the voice prompt files from the diskette to the hard disk voice directory. Please note the prompt files supplied to you are for testing purposes only. You must arrange to have your own prompt files produced.



The purpose of this section is to describe the theory of operation of the hardware and software of the Voicesaver™ Voice Messaging System.

### Computer Speech Processing

The Voicesaver™ Voice Messaging System uses a hardware board that digitizes voice in real time and stores it in a data file. It also reads the voice data file and reconstructs the voice from it.

The voice is sampled at 6 KHz per second and then compressed with a compression algorithm. This allows one to store more voice in less disk space compared to uncompressed voice.

At present the speech recognition hardware is not feasible for widespread use, however the Touch Tone decode and generation is very successful. The Voicesaver™ Voice Messaging System makes great use of this available technology. Whenever a caller presses a Touch Tone key, the voice board converts it into an ASCII digit and passes it to the program.

### Voicesaver™ Software

The Voicesaver™ software is composed of three parts:

#### **Executive**

This part of the software is the heart of the system. It provides basic services, such as recording voice, playing a voice file, handling the host interface, collecting DTMF digits, handling the printer and so on. One can use this basic executive to write other application programs.

#### **Application**

This part of the software is designed specifically for the voice service bureaus. It uses all the services of the Executive to carry out its work. This software can be easily ported to other systems that require different types of voice board.

## **Utilities**

The utilities are provided to help you maintain the system off-line. The utilities can be used to generate the billing raw file, compress voice message files, and create the subscriber list from the internal data file. Each utility program will be described in the appropriate section.

### Introduction

The Voicesaver™ Voice Messaging System administrator has the responsibility to administer Voicesaver™ and contact the Parwan Electronics Corporation if the system encounters problems.

When you power on the system, enter:

VT

The system should come up and Voicesaver™ should be operational.

### Directories

The Voicesaver™ Voice Messaging System makes use of the following hard disk sub-directories:

- |          |   |
|----------|---|
| \PEC     | All the Voicesaver™ Voice Messaging System programs reside here. The system prompt voice files and data files such as VTLIST.DAT are located in this directory. The file VTP.VAP contains the prompts, and the file VTS.VAP contains the numbers, months and other phrases, and VTS.VAP contain the messages for calling out. |
| \D40     | This directory contains the voice board driver D40DRV.EXE which gets executed during the system start-up. PEC has written a program called PECANSR.EXE which can be used to basically test your system.   |
| \PEC\MSG | All voice messages are stored in this sub-directory. The file name MSGnnnn.VOX corresponds to voice message box nnnn. (e.g., MSG2343.VOX is for box 2343.)  |

<b>\PEC\INT</b>	All greeting messages are stored in this sub-directory. The file name INTgggg.VOX greeting message is for the user with the ID gggg. (e.g., INT2341.VOX contains the greeting message for user 2341.)
<b>\PEC\NAME</b>	All name messages are stored in this sub-directory. The file name format is namNNNN.vox. (e.g., NAM2323.VOX contains the name for user 2323.)
<b>\PEC\GRP</b>	All group messages are stored in this sub-directory. The file name does not correspond to any message box number. It has the format HHHHHHHH.VOX.

### **The Parameter File**

The PARM.DAT file contains the parameters that guide the operation of the system. The detailed description of each parameter is contained in Appendix A.

As a system installer you should become familiar with the meaning of each parameter and what effects it has on the system performance.

### **The Prompt Files**

The prompt files are maintained by the VAP.EXE program from Stok, Inc. of New York. You may buy the software from Dialogic Corporation or Stok, Inc. directly. The following prompt files must be produced or you may buy them from American Digital Voice, Inc. of Holmdel, NJ.:

<b>VTP.VAP</b>	This prompt file contains the system prompts, such as "please enter your message box number".
<b>VTN.VAP</b>	This prompt file contains the number, months, a.m., and p.m.
<b>VTS.VAP</b>	This prompt file is used for reach out calling to deliver a message. The prompt number in this file corresponds to the message number to be delivered.

Please see Appendix B for the VTP.VAP and VTN.VAP scripts. The scripts are approximate scripts; you may change them to suit your needs.



## File Maintenance

This section describes the data files Voicesaver™ uses. Most of the files are in the ASCII format and can be maintained by a simple ASCII editor. The files are described below:

### 1. VTLIST.DAT

This file contains the names of the subscribers and other information. The format is:

*M NNNN PPPP MMM SSS RR BBB NAME Y A TTTT WWWW D EEEE*

M = R	Allow general public to read, but record needs Password.
M = W	Allow general public to record, but read needs password.
M = V	Supervisor Box, Generally the first box in the list.
M = D	Name directory mail box. Generally the box 411 should be a D-type mail box. If you want to support this type of mail box, please make sure the parameter ppp47 is set to 1.
M = T	This identifies a tree type message box. The corresponding data file that contains the group members must exist.
M = K	Bulletin Board Box. Generally this box is 998 or 9998.
NNNN	Message box number.
PPPP	Message box Password.
MMM	Maximum number of messages allowed.
SSS	Maximum slot size in seconds for record.
RR	Pager retry count

BBB	Pager number if supported, otherwise put zero.
NAME	Box identification Name.
Y	Pager Type.
A	Pager Action Code.
TTTT	Notification Time (Enter 00-1 to Cancel).
WWWW	Wake Up Time (Enter 00-1 to cancel).
D	Number of Days to keep messages.
EEEE	PBX Extension number if any.

for example;

*W 0134 2121 09 20 1 2874321 Gibson,Robert*

corresponds to box 0134, password 2121, maximum of 9 messages, each message no longer than 20 seconds, belonging to Bob Gibson. If the caller wishes, the system will dial 2874321 to page the subscriber. If will retry the pager one more time.

## 2. MASTER.DAT

This file is generated from the data contained in the VTLIST.DAT file. Once the system comes up, the system changes the name of VTLIST.DAT to VTLIST.SAV. The system administrator can manipulate the contents of MASTER.DAT from a telephone. To generate the VTLIST.DAT file from the MASTER.DAT file, please run the program VTLIST.EXE.

## 3. TRAN.DAT

This file contains all the transaction data, and also contains the records to be paged. The records in this file are generated by the system, or by the CONTACT.EXE program. You may copy the TRAN.DAT file to the floppy diskette on drive A: by entering ALTF8. The floppy diskette must be formatted. Once the system copies the file TRAN.DAT to the floppy, the system renames the files as follows:

*TRAN.DAT to TRAN.SAV*

*TRAN.SAV to TRAN.BAK*

*TRAN.BAK to TRAN.BA2*

and deletes the file TRAN.BA2.

#### 4. CONTACT.DAT

This file contains the phone numbers to be dialed and message numbers to played. The message numbers correspond to the prompt numbers in the VTS.VAP file. Each record in the CONTACT.DAT file has the following format:

*NNNNNNN NN HHMM*

where;

NNNNNNN        phone number to be called.

NN              message to be played. (Default 1)

HHMM           Hour and Minute to pronounce.

Run the CONTACT.EXE program to append the records to the TRAN.DAT file.

#### 5. CLOG.DAT

This file contains the phone numbers the were successfully called out and the date and time of the call.

#### 6. CBUSY.DAT

This file contains the phone numbers that were busy. The format of the record of this file is the same as CONTACT.DAT.

7. CNOANSR.DAT

This file contains the phone numbers that had no answer to them.

8. TRAN.ASC

This file contains the raw data needed to generate the bills. This file is generated by running the TRAN.EXE program. The TRAN.EXE program reads the TRAN.DAT file and generates the TRAN.ASC file. Each record of the TRAN.ASC file has the following format:

*B NNNN L, T, Mo, D, H, Mn, Pager*

where;

B is the billing code. (See Parameter bill in Appendix A)

NNNN is the box number.

L Message length in bytes.

T is the charged time in seconds.

Mo is the month.

D is the day.

H is the hour.

Mn is the minute.

Pager is the Number dialed.

for example;

*0 2341, 31243, 21, 9, 20, 14, 31, 5367500*

corresponds to a recording for box 2341, 21 seconds, on September 20, 14:31, Pager number 5367500, Storage is 31243 bytes billing code of 0.

## 9. UBASE.LST

Run the program UBASE.EXE to generate this file. The file has the record number, mail box number, pass word, and other information lined up in columns.

## 10. TRAN.LST

Run the program UTRAN.EXE to generate this file, and print the results. The columns are lined up properly to make it readable.

## 11. VTP.DAT

This file contains the list of prompts that must be present in the VTP.VAP prompt file. Each line gives the prompt number along with the script. The script is provided as a general guideline. You may record your own prompt to satisfy the needed situation.

## 12. VTN.DAT

This file contains the list of prompts that must be present in the VTN.VAP prompt file. Each line gives the prompt number along with the script. The recording in the VTN.VAP file must exactly correspond to the script in this file.

## Utility Programs

The utility programs enable you to manipulate the data files for different reasons.

### 1. COMPRESS.EXE

This program compresses a voice message file. To invoke the program enter:

```
COMPRESS <file name>
```

### 2. VTLIST.EXE

This program extracts the VTLIST.DAT file from MASTER.DAT(Binary) file. To invoke the program enter:

## VTLIST

### 3. TRAN.EXE

This program generates the TRAN.ASC file to be used by any billing program. It uses the TRAN.DAT( Binary) as source. To invoke the program enter:

*TRAN*

Please note that PEC does not provide billing software. PEC will help you buy the right software from other sources.

### 4. CONTACT.EXE

This program reads a raw ASCII data file and appends the data to the TRAN.DAT file. For reach out calling Voicesaver™ reads the TRAN.DAT and calls the phone numbers from the TRAN.DAT. To invoke the program enter:

*CONTACT <file name>*

The <file name> contains the phone numbers and the message numbers to be played.

### 5. CHECK.EXE

This program checks the VTLIST.DAT against the current PARM.DAT. If there are errors, it displays them on the screen. To invoke this program enter:

*CHECK*

This program is constantly upgraded, so please make sure you have the latest version.

### 6. UBASE.EXE

This program extracts the data from the MASTER.DAT file and generates the UBASE.LST file. The UBASE.LST may be printed or displayed on the screen. To invoke the program, enter:

## *UBASE*

This program is constantly upgraded, so please make sure you have the latest one.

### 7. *UTRAN.EXE*

This program extracts the data from the *TRAN.DAT* file and generates the *TRAN.LST* file. The *TRAN.LST* file is similar to the *TRAN.ASC* file, but it is lined up for ease of reading. To invoke the program, enter:

*UTRAN*

### 8. *VTVAP*

This program checks the prompt files *VTP.VAP* and *VTN.VAP* against the *VTP.DAT* and *VTN.DAT*. If a prompt is missing from the prompt files, this program display the dcript and number of the missing prompt. You must make sure all the prompts are recorded. If a prompt is not recorded the system will not function properly.

Please note that the recording in the *VTN.VAP* prompt file must exactly match the script. The playing of time, date, and numbers depend on what has been recorded in the *VTN.VAP* file.

## **System Administration by Phone**

The system allows the supervisor to change the subscriber data record in the *MASTER.DAT* file. This feature eliminates the need to bring down the system to change subscriber records in the *VTLIST.DAT* file. The supervisor can change the following fields:

- Mail Box Type.
- Password.
- Maximum number of messages allowed for the box.
- Maximum seconds for the message.
- Pager Number.
- Pager Type.

- Pager retry count.
- Pager action code.
- Mail box name.
- Privilege.
- PBX extension number.

To access this feature, the supervisor calls the system and in response to the "please enter the extension number" enters 04121#.

The system prompts the supervisor to enter the message box number of the record to be modified. If the message box number is valid, the system will prompt the caller for each data field and wait 8 seconds for the response.

The supervisor should start entering the data within 8 seconds, otherwise the system prompts him for the next data field. If the entered data is correct, the system prompts the supervisor for the next data field.

### **Mail Box Number**

Each subscriber must have a mail box number. It is identified by a unique 3 or 4 digits number. See the "mboxsize" parameter.

### **Mail Box Type**

Each mail box must have a mail box type. From the phone you may set the mail box type to Write (W), Read (R), or Tree (T) type. To set the box to W type press 9 on your telephone key pad, for R type press 7 on your telephone key pad, and for T type press 8 on your telephone key pad. From your telephone you can not change a mail box type to Supervisor (V), Broadcast (K), or Directory (D). The V, K, and D mail boxes must be set at system set up time.

### **Password**

To retrieve messages or change the greeting message or the name, the subscriber must know his password. It is 4 to 5 digits number and may be changed by the supervisor or the subscriber. Please see the "passsize" parameter.

### **Maximum Number of Messages**

This defines the maximum number of messages allowed for the subscriber. The maximum number allowed is 200. If each message is 30 seconds, then 200 messages will use one hour and forty minutes of storage.



### **Maximum Seconds Per Message**

The maximum size of the message for the subscriber is defined by this field. The system will cut off the caller one his recording exceeds this number.

### **Pager Number**

This field defines the phone number that will be dialed for paging, wake up call, or notification. You should enter \*1 for "," and \*2 for "&" while entering the pager number.

### **Pager Type**

This field defines the pager or phone number type. The system allows the subscriber to retrieve his messages after notifying him that he has messages. The subscriber does not have to make a separate call to retrieve his messages.

The parameter ppp38 must be set to 1 to activate this feature. The system also looks at the pager type of the pager number. The following codes are supported:

- |   |  |
|---|--|
| 0 | Telephone that will be called, and after notification should allow the subscriber to retrieve his messages.  |
| 1 | Telephone that will be called, but will not allow the subscriber to pick up his messages. (Default)  |
| 2 | Tone Beeper that will be dialed only. Nothing will be played to it.  |
| 3 | Display Beeper that will be dialed, and after the call connection, the phone number of the system will be entered.   |
| 4 | Hospital Paging system - uses the string defined by the "P4Prefix" parameter to dial out and uses the pager number as the access code. The access code is entered right after the P4Prefix number is dialed. The system does not check for busy, connect , or no answer. |
| 5 | Hospital Paging system - uses the string defined by the "P5Prefix" parameter. It call this number and after detecting connect, it enters the access code. The access code is the pager number.   |

- 6                    Venezuelan Display Pager - This is used in Spanish speaking countries. The pager number for this type of pager should have 12 digits for the phone number and 4 digits for the access code. If the phone number is less than 12 digits, the number should be appended by commas.
- 7                    Voice Pager - This type of pager is very common in Spanish speaking countries. The pager number for this type of pager should have 12 digits for the phone number and 4 digits for the access code. If the phone number is less than 12 digits, the number should be appended by commas. The system calls the number specified by pager number and after detecting connect, reads the name of the mail box, the access code and plays prompt 1 of the VTP.VAP.

### **Retry Count**

This field is used by the paging subsystem. This instructs the system on how many times to page the subscriber. If the subscriber reads his messages the system will not page him again.

### **Pager Action Code**

This informs the system how the subscriber should be paged. It may have one of the following values:

- 0                    Ask the caller if he wishes the subscriber to be paged. If the caller enters 1, the system will page. (Default)
- 1                    Do not ask any questions - just page. After the caller records his message, the system will page the subscriber.
- 2                    Do not ask any questions and do not page.

For distributive type messages, please use the parameter ppp45. If ppp45 is set to 1, then the system will ask the composer of the distributive type message if he wishes to invoke the pager. If ppp45 is not defined, the system will not ask any questions and will no page.

### **Mail Box Name**

At this point the supervisor may enter the 4 digits to correspond to the last name spelling of the subscriber. Please refer to the Touchtone keypad of the telephone. The system directory look up feature make use of this field.

**Privilege Code**

The system allows the supervisor to enter or change the privilege code for a subscriber. A privilege code is a number from 1 to 9. 1 is the lowest privilege, and 9 is the highest.

**PBX Extension Number**

This field defines the PBX extension number of the subscriber. More than one message box may have the same extension number. When the system receives a call from a line defined as 1-type by the "function" parameter, the system asks the caller to enter the message box number. If the message box number is valid, then it transfers the call to the extension defined by this field.



This section describes the tables TREE.DAT and KEYPAD.TAB and their structures. The software uses the TREE.DAT table to provide you the multi-level bulletin and uses the KEYPAD.TAB table to provide the functions needed by the subscriber.

These two customization tables should enable you to tailor the system to satisfy your exact need.

### The TREE.DAT Table

You can define a line to be a T type line. You should modify the "function" parameter and change the field corresponding to the line that you want to be T type. The system uses the TREE.DAT to process the calls from the T-type lines.

Each record or line in the TREE.DAT file has the following format:

*Step Action Extension Prompt Timeout 0 1 2 3 4 5 6 7 8 9*

where:

Step	The numeric specifier, like an address.
Action	The action to take at this step; the codes are: <ul style="list-style-type: none"> <li>W Wait for an event for line.</li> <li>P Play the Introduction of Extension.</li> <li>T Transfer the Call to Extension.</li> <li>D Dial Extension and disconnect.</li> <li>R Record for a Box number.</li> </ul>
Extension	It is the string used by the system; the codes are:

- W All or an individual line number.
- P The Introduction part of Message Box.
- T The phone number to dial.
- R The box number to be recorded for.

- Prompt Prompt number to play after this step.
- Timeout The next step to go for Timeout.
- 0 The next step to go after receiving 0.
- 1 The next step to go after receiving 1.
- ...
- 9 The next step to go after receiving 9.

Please see the example TREE.DAT supplied with this package.

The prompt numbers specified by the ppp11 to ppp26 parameters must be set properly to provide the initial greetings to the callers on different lines. If you do not want any prompt to be played, you should specify the silence prompt which is prompt number 17 in the VTP.VAP file.

For example if you set the ppp13 to 53 in the PARM.DAT file, the system will play prompt 53 for line 3 when it receives a call. If prompt 53 is a silent prompt, then the caller will hear no sound.

The system supports up to 99 steps. If you need more, please contact Parwan Electronics. As an example, the following tree is provided.

0	W	ALL	51	20	20	1	2	3	4	5	6	7	8	9	Wait
0	W	1	51	2	20	1	2	3	4	5	6	7	8	9	Wait
0	W	2	51	3	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	Wait
1	P	331	15	20	20	0	21	-1	-1	-1	-1	-1	-1	-1	Play
2	P	332	15	20	20	0	21	-1	-1	-1	-1	-1	-1	-1	Play
3	P	333	15	20	20	0	21	-1	-1	-1	-1	-1	-1	-1	Play
4	P	334	15	20	20	0	21	-1	-1	-1	-1	-1	-1	-1	Play
5	P	335	15	20	20	0	21	-1	-1	-1	-1	-1	-1	-1	Play
6	P	336	15	20	20	0	21	-1	-1	-1	-1	-1	-1	-1	Play
7	P	337	15	20	20	0	21	-1	-1	-1	-1	-1	-1	-1	Play
8	P	338	15	20	20	0	21	-1	-1	-1	-1	-1	-1	-1	Play
9	P	339	15	20	20	0	21	-1	-1	-1	-1	-1	-1	-1	Play
20	T	&40	15	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	CALL
21	T	67811	15	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	CALL

### The Tree Type Mail Boxes

A T-Type mail box allows the callers to access its branch mail boxes. The branch mail boxes of a T-type mail box is defined in the distribution list 1 of the T-Type mail box. The first member of the list must be the T-Type mail box, the second member will correspond to the key "1", third member will correspond to the key "2", and the 10th member will correspond to the key "9" of the telephone key pad.

For each T-Type mail box you should record a greeting message. The greeting message should inform the caller what key to press to access a particular branch mail box. If the caller does not press any key, the same greeting message will be read again. You should also create the distribution list 1 file for the T-Type mail box.

Please make sure that each branch mail box is properly defined in the master list. Please also note that a subscriber can access a branch mail box directly.

For example:

*T 2330 2222 1 120 0 0 TreeType*

in the VTLIST.DAT specifies a T-Type message box. and the file:

.\INT\INT2330.VOX

is the corresponding greeting file. The distribution list 1 file:

G233001.LST

with the contents:

2330  
6781  
6783  
6784

assigns branch box 6781 to key 1, box 6783 to key 2, and box 6784 to key 3. The box 2330 is for timeout or an invalid key. In this example, it is the original T-Type mail box.

The best use of the T-Type mail box is with DID trunks. It allows the subscriber to have multiple mail boxes under the same DID number.

### The KEYPAD.TAB Table

The table KEYPAD.TAB defines the way the subscriber interacts with the system. It is a very powerful feature of the software and allows you to customize the look of the software from the subscribers or outside caller point of view. The following is an example of the KEYPAD.TAB table:

LVL	TYPE	BOX	T-OUT	0	1	2	3	4	5	6	7	8	9	*	#
1	P	999	23	0	1	2	3	4	5	6	7	8	-1	2	2
		-1	30	-1	30	30	30	30	30	30	30	30	37	30	30
		-1	1	1	1	1	1	1	1	1	1	1	1	1	1
		-1	1	1	1	1	1	1	1	1	1	1	2	1	1
2	P	999	23	0	10	-1	-1	-1	-1	11	20	-1	-1	-1	-1
		-1	37	-1	37	37	37	27	37	27	37	88	30	37	37
		-1	1	1	1	1	1	1	1	1	1	2	1	1	1
		-1	2	1	2	2	2	2	2	3	2	68	1	2	2

Each level has four lines and the lines have the following format:



Line 1: Level Type Box f(Timeout) f(0) ... f(9) f(\*) f(#)

where:

Level the level ( 1 - 4)

Type Set to P.

Box Set to 999.

f(Timeout) Function to perform in response to Timeout.

f(0) Function to perform in response to Key 0.

...

f(9) Function to perform in response to Key 9.

f(\*) Function to perform in response to Key \*

f(#) Function to perform in response to Key #.

Please see section 5.3 for a list of valid functions.

Line 2: This line specifies the prompt number that will be played after the function is performed. Please see Appendix C for the prompts.

Line 3: This line specifies the number of digits to expect from the caller.

Line 4: This line specifies the next level to take after the work had been done. You may have up to four levels. The system comes with the standard KEYPAD.TAB file. You may customize the file to satisfy your needs.

The actions allowed by the outside caller to perform is governed by the Level 9 and 10 of the KEYPAD.TAB. You must make sure the KEYPAD.TAB is set properly.

It should be noted that the parameter ppp01 must be set to 5 to activate the work based on the definition in the KEYPAD.TAB. (See the description of the ppp01 parameter.)

### **Basic Functions and Features**

- |     |                 |   |
|-----|-----------------|---|
| 0.  | Reset Call      | This is the same as making a new call. You may tie this function to key 0.                |
| 1.  | Play Next       | Play the next message from the message box.   |
| 2.  | Play Same       | Play the same message just played.  |
| 3.  | Discard         | Discard the message just played.  |
| 4.  | Keep            | Keep the message just played.   |
| 5.  | Erase           | Erase all the messages from the box.  |
| 6.  | Restore         | Restore the discarded messages.   |
| 7.  | Transfer        | Transfer the read message to another box. The system will ask for the message box number. |
| 8.  | Play Time       | Play the current time   |
| 9.  | Next Level      | Do nothing, but jump to the next level.   |
| 10. | Play Greeting   | Play the greeting message associated with the box.  |
| 11. | Record Name     | Record the name for the box.  |
| 12. | Record Greeting | Record the greeting message.  |
| 13. | Erase Greeting  | Erase the Greeting Message.   |

- |     |                 |  |
|-----|-----------------|--|
| 14. | Make Message    | Make a message. The system will ask you to enter the destination mail box number.  |
| 15. | Append          | Append to the current message just recorded.   |
| 16. | Send            | Send the message just made.  |
| 17. | Play Message    | Play the message which was just made by function 14.   |
| 18. | Erase Message   | Erase the message that was made by function 14.  |
| 19. | Answer          | Answer the message played by function 1.   |
| 20. | Password        | Change the password. The system will prompt you to enter the new pass word.  |
| 21. | User Options    | Say user options. This simply plays the prompt number 28.  |
| 22. | Disconnect      | Disconnect the line. This will cause the line to be disconnected, and the line will become free to receive other calls.  |
| 23. | Try Counter     | Increment the "try counter" and disconnect the line if the "try counter" matches the value set by the "discount" parameter.  |
| 24. | Open List File  | Create or open a distribution list file. The system will ask for the 2 digit list ID. It should start with 0. A subscriber may have up to 9 (01 to 09) distribution lists. |
| 25. | Close List File | Closes the distribution list file and puts all the changes requested.  |
| 26. | Add to List     | This allows the subscriber to add a member to the distribution list. Each distribution list may have up to 100 members.  |

- 27. **Delete from List** This allows the subscriber to delete a member from the distribution list.
- 28. **Record List Name** Record a name for the distribution list. The system plays this name whenever a subscriber wishes to send a message to this list.
- 29. **Play List** Plays the list member ID's. It plays one member at a time.
- 30. **Delete Record** Deletes the message and allows the caller to re-record his message.
- 31. **Set Reminder Time** Set the Daily Message Reminder time. The system will call the subscriber at this time every day if he has received new messages.
- 32. **Set Wake Up Time** Set the Daily Wake Up time. The system will call the subscriber at this time of the day and give him the message "This is your wake up call."
- 33. **Mark Certified** This function marks a function certified. The second issuance of this function for the same message decertifies the message.
- 34. **Mark Private** This function marks a message private. The second issuance of this function for the same message removes the private mark.
- 35. **Play Read List** Play the list of subscribers who have read the certified or distributive message.
- 36. **Play Unread List** Play the list of subscribers who have not read the certified or distributive message.
- 37. **Move Forward** This function allows the subscriber to move the play position of his message forward by 5 seconds. However if the 5 second forward move causes the position to go beyond the end of the message, then the position of the message is reset to the beginning of the message.

38. **Move Backward** This function allows the subscriber to move the play position of the current message backward by 5 seconds. The subscriber If more users wish can not move the play position before the beginning of the message.
39. **Pause** This function allows the subscriber to pause the message and play it. The first execution of this function causes to pause the play, and the next issuance of this function causes the play resume.
40. **Page the Party** This function causes the system to queue a request to page the subscriber. The paging or notification takes place based on the provisioned information of the subscriber.
41. **Delete Rerecord** Delete the message just recorded by the outside caller and rerecord the message.
42. **Append to Message** Append to the message that was recorded by the outside caller for the subscriber.
43. **Review Message** Allow the outside caller to review his message.
44. **Delete Message** Delete the message which was recorded by the outside caller and exit.
45. **Check In** This function enables the mail box, so outside or others can leave messages. This function is used by hotel managers or others who wish to use it.
46. **Check Out** This function allows the supervisor or the subscriber to check out. Once the box is checked out, no one can leave messages for that box.
47. **Set Pager 1** This functions allows the subscriber to set his primary pager. He should enter the pager number, type, action code, and the retry count. The pager number could be a phone number

or a phone number with access code. If the pager number is set to "0", the entire pager setting is cleared.

- 48. **Set Pager 2** This function functions like the function 47, but only applies to the secondary pager.
- 49. **Set PBX Number** This allows the subscriber to set his PBX extension number. The extension number must be a valid number, otherwise system will take messages for the subscriber instead of transferring the call.
- 50. **Transfer Out** This function transfers the call to the supervisor. The transfer is a dump transfer. It will not monitor for busy or no answer.
- 51. **Timeout Counter** Play the prompt just played and increment the Time-out counter. If the counter reaches the value set by the "discount" parameter, just disconnect.
- 52. **Tutorial** Play prompt 43, which is the tutorial prompt which provides information on the use of the system. It could be the prompt to lead the subscriber into other activities.
- 53. **Directory Look Up** Play the list of mail box numbers that correspond to the last name spelling of a subscriber. Up to 4 letters may be entered. The system will play the names along with the mail box numbers of the subscribers whose last names' spelling match the data entered. The user must enter at least 2 letters. If a name is not recorded for a subscriber, his mail box number will be omitted from the play list.
- 54. **Set Pager** This allows the subscriber to set his pager number. It must be local number. It will not him for pager type or action code.

- |                     |   |
|---------------------|---|
| 55. Record Next     | This function allows the outside caller to make another recording for the called party. This function should be used at the level 9 or 10 of the KEYPAD.TAB   |
| 56. Remove Marking  | This function removes the private and certified markings from the message. This function removes the markings whether they are set or not. After the function is performed, it will play "Certified Mark Removed" and "Private Mark Removed". |
| 57. Play Previous   | This function plays the previous message that was played. You may use this function in instead of function 1 to play in the order of first in first out. You may use function 1 and 57 in designing your KEYPAD.- TAB.                        |
| 58. Play Arch File  | This function allows a subscriber to read his defective voice file. If the system encounters inconsistent voice data, it creates a defective voice file that the subscriber can read.   |
| 59. Play Voice File | This function allows the subscriber to read his entire voice data file from beginning to the end. Those messages marked as deleted, but not removed will be played.   |

Please note that this list will be updated as PEC adds new features and capabilities. Make sure you have the latest documentation and software.

### **Setting Name Directory Look Up**

To invoke the directory look up feature of the system you must do the following:

1. Set the ppp47 parameter in the PARM.DAT to 1.
2. Designate a mail box as a D type mail box. You should edit your VTLIST.DAT file and set the 411 mail box to D type. The default setting for the 411 is D.

3. For every mail box that you wish to be included in the directory enter the 4 digits of the last name in the name field of the record. You may perform this step by editing the VTLIST.DAT or through administration by phone.
4. For every mail box that should be included in the directory, record a name. To record a name, you must call the system and log in as the mail box subscriber.

The function 53 is the directory look up function, you may assign it to one of the keys in the KEYPAD.TAB.

If the outside callers call and instead of the mail box number enter 411, the system will instruct the callers to enter the 4 digits corresponding to the last name. The callers will hear the number of entries that match the entered data, and then play the entries from the directory one at a time. The caller may interrupt the playing of the list. The system will ask the caller to enter the mail box number that he wants to reach.

### **Setting Up Direct Inward Dialing (DID)**

To set up your system to support the Direct Inward Dialing (DID), you have to do the following:

1. Call your local telephone company and ask for Wink Start DID trunks. The telephone company can provide you the DTMF, Pulse of Multi-frequency trunks. Ask for the DTMF type, and if they do not have the DTMF type then ask for the pulse type. Also ask the telephone company to provide your system with the last four digits of the DID phone number. The telephone company should provide you all the DID numbers.
2. Order your DID interface unit from Dialogic Corporation or whoever sells it. Read the DID interface unit manual carefully, and make sure to set the jumpers for the Wink Start trunks. If you have any questions, please call Parwan Electronics Corporation.
3. Those ports on the voice board that connect to the DID unit must be designated as D-type in the trunk parameter. The trunk parameter is set by editing the PARM.DAT file. All other lines that are not connected to the DID unit must be set to L-type. Please note the case of the letter is capital.
4. If you are one of those unlucky ones that could not get the DTMF type DID trunks, you must also set the xxx62 parameter to 1. Please see the description of this parameter.



5. Make sure your VTLIST.DAT consists the mail box numbers for the DID numbers assigned to you by the telephone company.

### Setting Up for the Pulse to Tone Converter

The Pulse to Tone Converter (PTC) allows your callers to use their rotary telephones to access Voicemaker™. Each PTC manufactured by PEC supports four telephone lines and has the RJ-14 connections. The PTC listens to the sound of the pulses generated by the rotary telephone and generates the equivalent DTMF. The PTC is an adjunct device and connects in parallel with the telephone line. In order to support rotary and Touch Tone telephones at the same time you must install the PTC. The following steps must be followed:

1. Connect the telephone line to the PTC and connect the PTC to your voice board. For details please see the PTC user's guide.
2. Set your parameter ppp48 in the PARM.DAT file to 1 to indicate that the PTC has been connected.
3. Set the trunk parameter in the PARM.DAT file for the channel that has the PTC connected to it to P. For example if you have the PTC connected to channels 5 and 6, the trunk parameter should look like:

```
trunk 0LLLLPPLLLLLLLLLLLLLLL /* Trunk Types */
```

4. Make sure your VTP.VAP prompt file contains the prompt 64 to turn on the PTC, and the prompt 63 to turn off the PTC. Those prompts are provided to you by PEC.
5. The PTC works best with the digits 3, 4, ..., to 0. The digits 1 and 2 are less accurate.
6. Compose all your mail box numbers with the digits 3 to 0. Avoid the use of digits 1 and 2.
7. For setting wake up time and notification time, change your prompt 76 to say: "Press 4 for AM, 5 for PM, and 6 to cancel".



This section describes the use of the system from users' point of view. There are three classes of users — the outside callers, the subscribers to the service, and the system manager. This section describes the keypad provided with this software. If you have made your own keypad, then please ignore this section.

### **Outside Caller**

1. Pick up the phone and dial the phone number.
2. Listen for the message "Please enter your message box number.
3. Press the keys corresponding to the message box number and wait.
4. If you want the pager to be invoked, press one, otherwise wait.
5. Speak after the beep tone, and to terminate press any Touch-Tone key.
6. Wait until you hear the phrase "Your message has been recorded"

### **Subscriber Caller**

1. Pick up the phone and dial the phone number.
2. Listen for the message "Please enter your message box number."
3. Enter your message box number with the password, wait until you hear the menu message.
4. Press:
  - 1 To read the current message.

- 2 To repeat the current message.
- 3 To erase the message just read
- 4 To clear the erase marks
- 5 To delete all the messages.
- 6 To undo the effect of the delete.
- 7 To transfer to other box message to other box.
- 8 Toggle the time and date reading.
- 9 To maintain your greeting message.

The system will give you proper messages when you enter erroneous data.

5. If you have pressed 9, wait until you hear the menu message and then press:

- 1 To review your greeting/name message.
- 5 To delete your greeting/name message.
- 6 To enter your wake up call time.
- 7 To record your greeting/name message.
- 8 To record your name.
- 9 To go back to step 4.

6. If you have pressed 6, wait and enter:

- 1 for a.m., 2 for p.m., and 3 to cancel.
- The hour in response to the prompt (From 00 to 23).
- The minute in response to the prompt. (From 00 to 59).

The system will go back to step 4.

## **System Manager**

The system manager is the only person who can change the internal record for a subscriber. Please follow the following steps:

1. Pick up the phone and dial the phone number.
2. Listen for the message "Please enter your message box number."
3. Enter 04121 ( 0 is the supervisor box number defined by the "superbox" parameter, and 4121 is the manager's password defined by the "mgrpwd" parameter), and wait.
4. In response to the "Please enter the message box to be updated" prompt, enter the message box number followed by the # key.

For steps 5 through 9, press the # key if you do not want the field in the record to be changed.

5. In response to the "Please enter the new password" prompt, enter the new password followed by the # key.
6. In response to the "please enter the new maximum number of messages" prompt, enter the 3 digit maximum number of message allowed for the box followed by the # key.
7. In response to the "please enter the new maximum number of seconds per message", enter the 3 digit number that specifies the maximum message length in seconds allowed followed by # key.
8. In the response to the "please enter the new pager number", enter the pager number followed by the # key.
9. In response to the "please enter the new retry count" prompt, enter the retry count for paging retrying.



This appendix describes the parameters of the system. It will be constantly upgraded, so please ask for the newest. The parameters are defined in the PARM.DAT file.:

## Startup Parameters

### Parwan Electronics Corporation

This is title line. It must be the first line of the PARM.DAT file.

intlevel            5

Interrupt Level - The interrupt level the D/4x board is set to.

channels           4

Number of Channels (lines) To Support - This should correspond to the number of boards and phone lines you have. Since each board supports 4 phone lines, you may specify 4, 8, 12, 16, or 20 for this parameter.

function           00000000000000000000

Function Mask; 0=Voice Mail, 1=AA, C=Caster's Line, T=Multi-Level Bulletin. For example:

001001C000T0000000000

sets lines 2 and 5 as Automated attendant,  
line 6 as Casters's,  
line 10 as Multi-Level Bulletin, and  
all other lines as Voice Mail.

You must have a proper TREE.DAT file for the lines defined as T type.

bill 00000000000000000000

Billing Code:

0=Normal Line  
8=800 line AT&T  
9=800 line MCI  
I=800 line international

For example:

00000008800000000000

defines lines 7 and 8 to be 800 lines and all the other lines as local lines.

trunk LLLLLLLLLLLLLLLLLLLLLL

The trunk type connected to the Dialogic port. The second character corresponds to Line 1, third character to line 2, and so on. The trunk could be one of the following:

D - Direct Inward Dialing (DID), DTMF type.  
W - DID, Pulse type, Wink Start.  
M - DID, Multi-frequency type 2.  
L - Loop Start line.  
P - Loop Start Line with PTC Connected.  
G - Ground Start line.  
T - T1 Digital line.  
I - ISDN line.

Flash time 50

Flash on-hook duration in increments of 10 milliseconds. For example 50 corresponds to 500 msec.



Max sil	4	Maximum seconds of silence which cause a recording session to be terminated.
Max secs	90	Maximum seconds allowed for recording. This parameter takes effect when the maximum record time for a mail box has not been specified. This value is also used for messages left for the supervisor, messages for distribution, and messages by the casters.
dtmfstr	24	Maximum seconds allowed to read a DTMF string.
mboxsize	3	Maximum number of digits allowed to identify a Mail Box. This parameter should not be set to larger than 5. For example if mboxsize is set to 3, the mailbox numbers 34, 6, and 676 are valid mailbox IDs. Mailbox 5646 is invalid, because it is four digits long.
passsize	4	Password size in digits. This value should always be equal or larger than mboxsize.
Comport	0	Communication port - 0=No and 1=Yes. If this is set to 1, you must have the serial port in the system.
Printer	0	Printer 0=No, 1=Yes. If this parameter is set to 1 and the printer does not exist, the system will not operate.

Vbase 1

Vbase - The format of voice files supported:

- 0 No special format.
- 1 format similar to the VAP format.
- 2 long tape format.

discount 2

Disconnect Counter - This parameter controls the number of chances the user gets to enter his Touch-Tone™ data. After the number of tries have been exhausted, the system will disconnect the line.

loopsig 0

Loop Signal, 0=Ignore 1=Consider - The Central Office ( CO ) switch generates a loop signal to indicate the calling party has hung up. Please note that many CO's do not generate the loop signal. It is very difficult to detect disconnects.

intrdig 3

Maximum inter-digit delay time in seconds entering DTMF digits. If the caller fails to enter at the pace specified by their parameter, the system will prompt his to reenter the entire string of DTMF digits. It gives the caller the number of chances as specified by the discount parameter.

superext 100

Supervisor Extension - This specifies the supervisor or operator PBX extension. It is used by the Automated Attendant feature if the caller does not enter the extension number.

superbox 0

Supervisor Message Box - This is the message box for the supervisor or operator. This is the only mail box where all the callers can leave message at the same time.

superpwd 4151

Super Password, Used for Distributing Messages to a Group. The operator uses this to retrieve his messages.

mgrpwd 4121

Managers Password, Used for updating records, and changing fields.

Phone 2015367500

The system supports the display pager. It asks the callers for the number to be displayed on the display of the pager. If the caller did not enter any number, the system sends the System Phone number to the pager.

The parameter "Phone" in the PARM.DAT file must have the phone number of the system. It must contain the area code along with the number.

trprefix &

Call Transfer Prefix String - This string is prepended to the extension number before the call gets transferred through the PBX. It is also used by the Paging feature to access the outside line.

outdialpr	,	PBX Out Dial Prefix - This string is prepended to the phone number before it is dialed out. For example if a PBX requires that you dial 9 to call outside - you should set this string to ,9.
busysufx	,&,&	Busy Suffix String - This string is sent to the CO or the PBX after the extension has been detected as busy.
noanswer	,&,&	No Answer Suffix String - This string is sent to the CO or the PBX after the extension or line has been detected as no answer.
msgboxdir	.\msg	Message Box Directory - This sub-directory is used to store all the voice mail/message boxes.
intboxdir	.\int	Introduction Msg Directory - All the subscriber greeting messages are stored in the sub-directory specified by this parameter.
promptdir	.\	Current Directory for VTP.VAP and VTN.VAP - If you encounter performance degradation, move the prompts to a RAM disk.
speachdir	.\	Directory that contains the VTS.VAP

P4Prefix 0000

This is the phone number or the extension to be dialed for invoking pager type 4. The system will use the access codes to page the party.

P5Prefix 0000

This is phone number of the extension to be dialed for invoking pager type 5. After the system detects a connection, it uses the access codes to page the party.

mgrpwd2 4122

This is the managers pass word to invoke changing records based on the record number.

ppp01 1

Loop Back Control -

- 0 - Allow outside callers to leave message for another mailbox after recording complete.
- 1 - Disconnect after the caller has left a message.
- 5 - Use the Level 9 and 10 of KEYPAD.TAB to decide.

ppp02 2

Retry Control

- 0 - Allow the caller to re-enter Box ID. If nothing entered default to superbox.
- 2 - If nothing entered start music and allow the operator to intercept. If no operator than default to the supervisor box.

	3 -	If nothing entered transfer to superbox extension.
ppp03	38	Prompt to Play After Record Complete. This is the prompt number that will be played when the recording is completed. If 0, no prompt will be played.
ppp04	40	Prompt to Play at the Beginning. This is the prompt number that gets played when the system picks up the phone. This prompt must be a valid prompt in the VTP.VAP file. If 0, no message will be played.
ppp05	41	Prompt for Beeper. This is the prompt number that will be played to ask the caller if he wishes to invoke the pager. The prompt number specified by this parameter must be recorded in the VTP.VAP file.
ppp06	2	Start maintenance chores after this hour - The system will start compressing the voice message boxes after this hour of 24-hour cycle. The value of 2 indicates the system will start maintenance after 2 at night. If the value is 0, then there will not be automatic maintenance.
ppp07	900	Base Box Number for Line broadcast. This allows one to have separate broadcast messages for each line. The broadcast for line 1 should be recorded in the Introduction part of Box 901. The broadcast for line 2 should be recorded in the Introduction part of Box 902. If nothing is recorded the system will play the General broadcast message which is generally recorded in the introduction part of Box 998.

ppp08	0	
		The date and Time play flag. If set to 1, the system plays the date and time stamp of the message each time the subscriber reads his messages.
ppp09	0	
		Message transfer paging option.
	0 -	Operate based on the action code of the receiver.
	1 -	Page the receiver of the transferred message without looking at the receiver's action code.
ppp10	15	
		The re-paging interval expressed in minutes. The system visits all the mail box records and re-pages those that have to be re-paged. The retry count of the mail box record determines how many times the pager must be re-paged. If the subscriber reads his messages before he is re-paged, the re-page counter for the subscriber will be cleared.
ppp11	51	
		Prompt to play at beginning for Line 1 This is the prompt number that will be played for line 1. If this parameter is not defined it will play the prompt number as specified in parameter ppp04.
ppp12	52	
		Prompt to play at beginning for Line 2. See the description for ppp11.

ppp26	66	Prompt to play at beginning for Line 16.
ppp30	10	Number of days - Delete messages older than the value set by this parameter. If this parameter is set to zero, then no messages will be deleted. Please note that this parameter may be overridden by the number of days parameter of the mail box record field.
ppp31	1500	Sound generator value - This number is used by the system to generate the sound. The sound is generated when the caller does not know the mail box number of is calling from a rotary phone. The operator should pick up the phone and press the * key from his phone. After talking to the caller, he should enter the correct mail box number.
ppp32	60	The number of seconds for busy queue. It retries the pager that was previously busy. If you do not want to retry after busy set this to 30000.
ppp33	0	If set to '1', will disconnect the line after you press "*" to handle the operator intercept condition.
ppp34	2	Number of lines to use for reach out calling. This includes the lines needed for paging. The system will not use the lines as defined a C type for reach out calling.



ppp35	0	If set to "1", the system will play the broadcast message after it calls out a phone number.
ppp36	5	This is the wake up timer increment expressed in minutes. Every ppp36 minutes the system revisits all the boxes and checks the wake times. If the wake up time of a subscriber matches the current time, he will get paged.
ppp37	1800	This is the time when the system reads the CONTACT.DAT file and starts paging the numbers contained in the file. It is expressed in military time. You should make sure the system time is set accurately.
ppp38	0	If this parameter is set to 1, the system will allow the subscriber to read his messages when he is notified.  Maximum Silence in seconds for read DTMF, the maximum silence after the DTMF read has started .
ppp39	0	If this parameter is set to 1, the system will delete all the messages of a subscriber after he has read them all. The deletion of the messages take place after the subscriber hang up. If the subscriber has not read the last message in his box, the system will not delete any messages.
ppp40	0	You should set this parameter to 1 to use the Check In and Check Out features of the system.

ppp41

20

Busy Retry Limit for Paging or Notification - This parameter instructs the system to retry the busy pager as many times as set by this parameter. This parameter only applies for the situations when outside callers leave a message for the subscriber. (Default = 20 )

ppp42

3

No Answer Retry Limit for Paging or Notification - This parameter instructs the system to retry the pager with no answer as many times as set by this parameter. This parameter only applies to the outside callers leaving a message for the subscriber. (Default = 3)

ppp43

0

Status Files Generation Control -

1 = Generate CLOG.DAT, CBUSY.DAT, and CNOANSR.DAT.

0 = Do not generate any status files.

ppp44

0

Loop Control for read type messages:

0 - Allow the caller to enter another mail box number.

1 - Disconnect after reading the first mail box.

ppp45

0

Paging Control for Distributive type Messages:

- 0 - Do not ask any questions and do not page.
- 1 - Ask the subscriber and if he enters "1", then distribute the message and page. If the subscriber does not press any key, then only distribute the message.

ppp46

0

TRAN.DAT file control:

- 0 - Do not delete the TRAN.DAT file at maintenance time.
- 1 - Delete the TRAN.DAT file at maintenance time.

ppp47

0

Directory look up based on the spelling of last name:

- 0 - Do not support the directory look up feature.
- 1 - Support the directory look up feature. If the caller accesses this feature, allow the caller to key in the 4 digits corresponding to the last name spelling. The system will give the number of matches, and then play the subscriber name with the corresponding extension.

ppp48

0

Pulse to Tone Converter (PTC) support:

- 0 - No PTC connected to the system.
- 1 - PTC is connected to the telephone line.

ppp49

0

**Certified Message support.**

- 0 - Play the certified message and indicate if received.
- 1 - Do not play the message, but play the receipt note.

ppp50

0

**Multiple Messages for the Same Box.**

- 0 - Do not allow multiple messages to be recorded for the same box at the same time.
- 1 - Allow multiple messages to be recorded for the same box on different lines at the same time.

ppp51

0

- 0 - Allow Mail Box number and Pass code to be entered at the same time.
- 1 - Do not allow Mail Box number and Pass Code to be entered at the same time.

ppp52

0

- 0 - Discard the message that has been transferred.
- 1 - Retain the message that has been transferred.

ppp53	0	
	0 -	Do not simulate 9 on hang up.
	1 -	Simulate 9 before hanging up.
xxx02	0	
		1=Disconnect 0=Timeout Max Sil DTMF Read When Maximum silence is reached automatically disconnect. This means there is no activity on the line.
xxx03	1	
		Play AM and PM for Time When set to 1, the system will give the AM and PM when playing the messages. If it is 0, then it will play the date and time as military time.
xxx04	0	
		Record Mode 0=Compressed, 1=Normal The system records in compressed mode, i.e., it suppresses the silences. However if very good quality is desired, set this variable to 1. It will use more space, but the quality will be great.
xxx05	0	
		Compression Value from 1 - 400 Bytes This controls the Compression. If the value is set to 0, the compression length will be 200 bytes. If xxx04 is set to 1, then this value is ignored.
xxx06	0	
		Minimum message size in bytes for playing. For example if you set this to 6000, only those message longer than 6000 bytes will be played.

xxx07	0	
		Ignore input from Keyboard if set If this parameter is set, the system will ignore all the input from keyboard. The <ESC> will be deactivated. The default value is zero.
xxx08	0	
		Number of Rings before System answers This is the parameter that controls how many times it should ring before the system answers a call. The default is 0. It means immediately after the first ring.
xxx09	0	
		Enable loop signal detect during Record If this is set to 1, the system will end recording if loop signal is detected. 0 is the Default. It will correspond to the loopsig parameter.
xxx10	10	
		Time in Seconds for Timer. This is the basic unit of time for visiting different queues for retries. This is also used for paging. The time update on the screen is controlled by this parameter.
xxx11	0	
	0 -	Ignore Touch Tone while Recording.
	1 -	Stop Recording when Touch-Tone is entered.
xxx21	2000	
		CPB cnosig - The upper limit on the length in the initial silence in 10 msec.

xxx22	650	CPB cnosil - The upper limit on the length of initial nonsilence periods in 10 milliseconds
xxx23	4	CPB nbrdna - The number of rings before checking for no answer. This is used for reach out caller. Please note that
xxx24	5	CPB dtrc dly - DTMF receiver guard time in 10 millisecond units, The DTMF tone must be on for this duration, before the system accepts it.
xxx25	2	CPB intflg - Enable(1)/disable(2) operator intercept detection. Default is enable.
xxx26		CPB intfltr - Minimum intercept tone duration in 10 msec units for detection.
xxx27		CPB frqmin - Lower limit for frequency of tone detectable as intercept. Default = 45.
xxx28		CPB frqmax - Upper limit for frequency of tone detectable as intercept. Default = 50.
xxx29		CPB devmax - Upper limit for frequency deviation of tone detectable as intercept. Default=100.
xxx30		CPB lo1bmax - Maximum time for 1st low interval in 10 millisecond units to allow detection as busy. Default = 90.
xxx31		CPB lo2bmax - Maximum time for 2nd low interval in 10 msec units to allow detection as busy. Default = 90.

xxx32	CPB hi1bmax - Maximum time for high interval in 10 msec units to allow detection as busy. Default = 90.
xxx33	CPB loglitch - Time below which a silence interval in 10 msec units is considered a noise spike. Default = 15.
xxx34	CPB higlitch - Time below which a sound interval (in 10 msec units) is considered a noise spike. Default = 19.
xxx35	CPB lo1rmax - Maximum time for short low interval (in 10 msec units) detected as part of double ring. Default = 90
xxx36	CPB lo2rmin - Minimum time for long low interval (in 10 msec units) detected as part of double ring. Default = 225.
xxx37	CPB ansrdgl - Answer deglitch is the minimum silence interval (in 10 ms units) that will indicate the end of the answer. If the value is set to -1, it indicates that any silence interval is end of the answer. Default = -1
xxx38	CPB dtpl_dly - Playback DTMF delay time. Default = 5.
xxx40	200
	DCB Pause_time - dialing pause duration in 10 msec unit increments.
xxx41	5
	DCB T idd - Tone dialing inter digit delay, expressed in 10 msec intervals. Please set this to higher values for older PBX's or Centrex.



xxx42	5	DCB p idd - Pulse dialing inter digit delay, expressed in 10 msec intervals.
xxx43	6	DCB p bk - Pulse dialing break interval in 10 msec.
xxx44	4	DCB p mk - Pulse dialing make interval in 10 msec.
xxx45	25	DCB minipd - Minimum interdigit pulse time
xxx46	3	DCB r on - Minimum ringing ON interval to detect an incoming ring, expressed in 100 msec intervals.
xxx47	5	DCB r off - Minimum ringing OFF interval to detect if an incoming ring is no longer present, expressed in 100 msec intervals.
xxx48	0	Language to be supported: 0 - English 1 - Spanish 2 - French 3 - German 4 - Hindi

xxx49	25	CPB stdely - Delay after dialing before call analysis starts, expressed in 10 msec intervals.
xxx50	13	CPB lo1tola - Acceptable tolerance above nominal 1st low interval, expressed in percent. Range is 1 to 255. Please use the CPC program to find out the percent changes.
xxx51	13	CPB lo1tolb - Acceptable tolerance below nominal 1st low interval, expressed in percent. Range is 1 to 255. In Spanish speaking countries, please set this to 35.
xxx52	13	CPB lo2tola - Acceptable tolerance above nominal 2nd low interval, expressed in percent. Range 1 - 255.
xxx53	13	CPB lo2tolb - Acceptable tolerance below nominal 2nd low interval, expressed in percent. Range 1 - 255.
xxx54	13	CPB hi1tola - Acceptable tolerance above nominal high interval expressed in percent. Range 1 - 100.
xxx55	13	CPB hi1tolb - Acceptable tolerance below nominal high interval expressed in percent. Range 1 - 100.

xxx56

10

CPB lcdly - The delay after dial complete before a drop in loop current is considered a connect. This is expressed in 10 millisecond units. If you want to ignore the loop signal to signify connect, set this to a high value.

xxx57

-1

DCB minlcoff - Minimum time loop current must be off before a loop current drop CST message is sent. If the switch you are connected is an old switch, you may have to set this to a higher number. For DID trunks, set this to 30, and for older switches set this to 2.

xxx58

0

Parallel port to use for resetting the watch dog timer. If this is set to 0, nothing will be sent to the watch dog timer.

xxx59

0

Maximum No Silence in Seconds - This value is expressed in seconds. The recording will terminate if the system encounters the nonsilence expressed by this parameter. This is a useful parameter for PBX switches that do not provide loop signal and provide continuous sound to indicate disconnect.

xxx60

0

System Abort Time - The system will abort at the time specified by this parameter. For example if you set this parameter to 1830, the system will abort at 6:30 P.M. After this time, the control will be passed to operating environment of the system.

xxx61 0

**Start Time** - This is the start time for contact calling or in general calling out or maintenance work. For example if you have prepared your TRAN.DAT for contact calling and you want to start at 5:00 P.M., set this parameter to 1700. The system will start calling at this time and abort at the time specified by the xxx60 parameter.

xxx62 0

**DID Interface Type:**  
0 - DTMF Type  
1 - Pulse Type

xxx63 0

**DID Port Reset Time in Seconds** - This allows you to periodically reset the DID ports. You should only set this value to a non-zero value if you see that your DID lines are freezing up. The recommended value is 600 which corresponds to 10 minutes.

xxx64 0

**Loop Port Reset Time in Seconds** - This allows you to periodically reset Loop Start lines. If you see that your lines hang up due to reasons that you do not know, the system will reset these lines. The recommended value is 120 or every two minutes.

xxx65 250

**Maximum Messages Per Box** - This sets the limit for the maximum number of messages you can have per mail box. This is a global parameter, once you set it to a value you must not change it. All the header files of the mail boxes are build using this value. If you want to change it to another value, you must delete all the messages from the mail box message directory.

xxx66

0

### DNIS Support

0 - No DNIS support

1 - DNIS supported. The system will wink the CO before accepting the Dialed Number, and wink again after it receives a valid dialed number.

### Time Dependent Parameters

The system supports the time dependent parameter files. Initially the system uses the "PARM.DAT" files to bring up the system. Once the system is up and running, it uses the argument data from the original program execution command line. The first argument provides the time "P1.DAT", the second argument provides the time "P2.DAT", and the third argument specifies the time "P3.DAT" should be run.

For example:

```
PEC 0730 1530 0 1 1
```

will instruct the system to use "P1.DAT" at 7:30 A.M., "P2.DAT" at 5:30 P.M., and "P3.DAT" is not used.

If the first three arguments are set to zero, only the "PARM.DAT" will have the effect. Please also note that the data in "P1.DAT", "P2.DAT", and "P3.DAT" only override the information provided by "PARM.DAT". You should have only those parameters included in these files that you wish to change.



## Prompts For File VTP.VAP

These prompts apply to the VTP.VAP file. The script provides an overall idea what it should be. You should adjust them to make sure the callers respond to them properly.

PROMPT 1	Please contact Privaphone
PROMPT 2	That Extension # is busy
PROMPT 3	There is no answer at this extension
PROMPT 4	Please Hold a moment
PROMPT 5	Message Sent.
PROMPT 6	Added
PROMPT 7	Dropped
PROMPT 8	The Current Message Saved
PROMPT 9	The current Message Deleted
PROMPT 10	Private Message Can not be Transferred.
PROMPT 11	Message Marked Certified.
Prompt 12	Message Marked Private.
Prompt 13	Certified Mark Removed.
Prompt 14	Private Mark Removed.

PROMPT 15	You Have entered an Incorrect Message Box Number.
PROMPT 16	Your Message Has been Transferred.
PROMPT 17	Silence
PROMPT 18	Please hang up now
PROMPT 19	Please re-enter the number
PROMPT 20	Press 3 to Discard, 4 to Give , 2 to Answer, X to Exit.
PROMPT 21	Please leave your message after the tone
PROMPT 22	Thank you, please hold to verify your message
PROMPT 23	If you wish to change the message, press 7, otherwise please hold
PROMPT 24	Please enter the next extension number
PROMPT 25	You have messages to read - Please Call --- -- --
PROMPT 26	Please Wake Up Now.
PROMPT 27	Press R to Review, D to Discard, A to Append, and X to Save
PROMPT 28	User Options
PROMPT 29	Please Enter your security code.
PROMPT 30	1-play 2-repeat 3-erase 4-restore 5-delete all 6-restore all 7-record 8-date and time 9 greeting and wake up.
PROMPT 31	Begin your message after the tone.
PROMPT 32	You have received messages.



PROMPT 33 Mailbox in use, please make another selection

PROMPT 34 Please enter the extension number

PROMPT 35 You have no messages

PROMPT 36 This mailbox is full, please make another selection

PROMPT 37 For your greeting press 1-review 5-erase 6- Wake Up  
Time Set Up 7-Record Greeting 8-Record Name 9-end

PROMPT 38 The Message has been recorded, you may hang up  
now.

PROMPT 39 There are no more messages.

PROMPT 40 Thank you for calling

PROMPT 41 To have your party paged, press one and stay on the  
line to leave a message

PROMPT 42 Two Rings Sound.

PROMPT 43 Press 2 to mark Certified, 7 to mark Private, 3 to  
Remove Markings, 9 to Exit.

PROMPT 51 Beginning Prompt For Line 1

PROMPT 52 Beginning Prompt for Line 2

...

PROMPT 58 Beginning Prompt for Line 8.

PROMPT 63 Tone to turn off the PEC pulse to tone converter.

PROMPT 64 Tone to turn on the PEC pulse to tone converter.

PROMPT 67 Press 1 to Review, .. for Outside Caller

- PROMPT 68 This is a Message from an outside caller.
- PROMPT 71 Enter a Distribution List Number
- PROMPT 72 Modifying Distribution List
- PROMPT 73 Please Record a Name for this list
- PROMPT 74 Press 2 to Add - 3 to Drop - 6 to Record a Name 7 to Play - 9 to Save
- PROMPT 75 Enter the Mailbox Number to Add
- PROMPT 76 Enter the Mail Box Number to Drop
- PROMPT 77 Changes Complete
- PROMPT 78 Entries Found.
- PROMPT 79 Please Enter the 4 Letters of the Last Name.
- PROMPT 81 Message Box for Change.
- PROMPT 82 New Password.
- PROMPT 83 Maximum messages allowed.
- PROMPT 84 Maximum message length in seconds.
- PROMPT 85 New Pager Number.
- PROMPT 86 Retry Count.
- PROMPT 87 Please enter the Pager Action Code.
- PROMPT 88 Please Enter the Wake Up Hour
- PROMPT 89 Please Enter the Wake up Minute

- PROMPT 90      Press 1 for AM, 2 for PM, and 3 to Cancel
- PROMPT 91      Please enter the PBX extension number.
- PROMPT 92      Please Enter the Pager Type.
- PROMPT 93      Please Enter the Privilege Code.
- PROMPT 94      Please Enter the Number of Days Message must be Kept.
- PROMPT 95      Please Enter the Record Number.
- PROMPT 96      Please Enter the Mail-Box Type. 9 for Write 7 for Read.
- PROMPT 97      Please Enter the New Mail Box Number.
- PROMPT 98      Please Enter the Mail Box Name.

### **Prompts For File VTN.VAP**

This section defines the prompts that correspond to numbers, months, time, and other sounds that are fixed. Make sure all the prompts are recorded, otherwise the response will not be as desirable as you wish it to be.

- PROMPT 1      One
- PROMPT 2      Two
- PROMPT 3      Three
- PROMPT 4      Four
- PROMPT 5      Five
- ...
- PROMPT 59     Fifty Nine

PROMPT 62	Twenty
PROMPT 63	Thirty
PROMPT 64	Forty
PROMPT 65	Fifty
PROMPT 66	Sixty
PROMPT 67	Seventy
PROMPT 68	Eighty
PROMPT 69	Ninety
PROMPT 70	Pause 2
PROMPT 71	A.M.
PROMPT 72	P.M.
PROMPT 73	* Star
PROMPT 74	# Pound
Prompt 75	, Comma
PROMPT 81	January
PROMPT 82	February
PROMPT 83	March
PROMPT 84	April
PROMPT 85	May
PROMPT 86	June

PROMPT 87	July
PROMPT 88	August
PROMPT 89	September
PROMPT 90	October
PROMPT 91	November
PROMPT 92	December
PROMPT 93	Distributive Message
PROMPT 98	Masculine One
PROMPT 99	Masculine Twenty One
PROMPT 100	Zero



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