



PanaVOICE™

Integrated Voice Processing System

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Version 2.0

Technician's Guide

Panasonic®

DBS™

Digital Business System

Using the Technician's Guide

The *Technician's Guide* is designed to take you through the process of installing and setting up a voice messaging system. The guide is divided into three main sections:

- This section of the *Technician's Guide* explains how to install a new PanaVOICE™ system at a customer site and how to update an existing voice messaging system.
- **Setting Up the Application.** The chapters in this section take you through the process of planning and configuring a new voice messaging system so that it will meet the specific requirements of the people using it.
- **Installing and using Remote Maintenance.** This section describes how to set up and use the Remote Maintenance program so you can maintain and troubleshoot a voice messaging system using a remote computer.

Additional sections and appendices provide information about specific hardware.

What is new in this version?

PanaVOICE 2.0 introduces a digital voice board, as well as other system enhancements.

Digital voice board support

PanaVOICE 2.0 supports a new digital voice board. The new board allows digital lines to connect to the voice messaging system.

On-site key reprogramming

When you need to add voice ports to PanaVOICE 2.0, Panasonic® will send you instructions for reprogramming your system key. You do not need to install a new key.

Auto-apply

This feature safeguards changes you make at the console. When you make changes, auto-apply automatically saves them when you move to another screen, even if you forget to choose the Save button. If you do not want to save changes, you can press the Reset button to restore the original information before you move to another screen.

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Installing the PanaVOICE system

Install the PanaVOICE system

This chapter will lead you step-by-step through the process of installing PanaVOICE at the installation site.

The six steps involved in completing the installation for a voice messaging system are covered in the following topics:

Install the system key

Test the system

Make a boot disk

Connect the telephone system

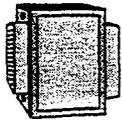
Configure the application

Back up the system

Note If you are installing the Panasonic DBS™ OAI Integration package as part of your voice messaging system, read the OAI Integration section of the *Technician's Guide* **before** you begin this installation.

Note Throughout this section, the term Panasonic DBS refers to both the Panasonic DBS and DBS 824 unless explicitly stated otherwise.

Install the system key



System Key

The system key must be properly installed before PanaVOICE can answer calls. The system will only operate as a demonstration unit without the system key.

The system key connects to the **parallel port** of your computer. Any device that also plugs into the parallel port (for example, a printer) must be plugged into the key. The computer's parallel port, also called the printer port, is a 25-pin, female, D-shaped connector on the back of the computer.



Figure 1 Parallel port for system key

To connect the system key:

1. Locate the system's parallel port.
2. Plug the male end of the system key (the end with 25 pins) into the female socket of the parallel port. Tighten the screws to firmly attach the key to the socket.
3. If applicable, plug any cable that also plugs into the parallel port (such as a printer cable) into the female end of the system key. The system key will not interfere with the normal operation of a printer or other peripheral plugged into the parallel port.

Test the system

You should test the system to ensure the system key is installed on the correct port and the system starts properly.

To test the system:

1. Turn on the system. Watch as several messages display on-screen and the voice messaging software starts.
2. Check that the key is properly installed:

If the words DEMONSTRATION COPY, SYSTEM KEY NOT FOUND appear on the system's Banner screen, the system key is not properly installed.

If the system starts as a demonstration copy:

1. Check that the label on your system key matches the number of ports (if any) installed on your system.
2. Check that the system key is fully plugged into the parallel port.
3. Exit to DOS by choosing Shut Down on the Banner screen. Press **Ctrl-Alt-Del** to restart the system. If the system starts as a regular (non-demo) unit, then continue with the next step in the installation.
4. If the system still starts as a demonstration copy, look for another parallel port on the voice messaging computer. If there is more than one parallel port, put the system key on that port and start the system again. If PanaVOICE now starts **without** the DEMONSTRATION COPY, SYSTEM KEY NOT FOUND message, the key is installed correctly.

If the system still starts as a demonstration copy, contact Technical Support.

Make a boot disk

If your hard disk should fail, it is important to have a way to start the computer without using the hard disk. You can do this with a disk that contains essential MS-DOS system software copied from the hard disk. This disk is called a boot disk because it can be used to restart (or "reboot") your computer. This procedure also copies other system utilities.

To make a boot disk:

1. Insert a blank, high-density disk in the A:\ drive.
2. If necessary, exit the voice messaging software and type Y when asked if you would like to access the Toolkit Menu. If you are already at a DOS prompt, type C:\AVUTILS\MENU .
3. At the Toolkit Main Menu, select Maintenance Tools.
4. At the Maintenance Tools Menu, select Make a System (Boot) Disk.
5. Press to begin making the boot disk. Wait until the system finishes. The Toolkit Main Menu automatically reappears.
6. Exit to DOS.
7. Test the boot disk as described below.

To test the boot disk:

1. With the boot disk in the A:\ drive, press -- to restart the computer. The computer should restart normally, without running the voice messaging software. You will see the DOS prompt (for example, A:\>).
2. If the computer does not restart normally, remove the boot disk from the A:\ drive. Again press -- to restart the computer from the hard disk. Repeat the steps to create a boot disk.
3. When you are satisfied that the boot disk works properly, remove it from the A:\ drive. Press -- to restart the voice messaging software.

Always keep the MS-DOS disk set and the boot disk close to the computer. If you cannot guarantee this, take a copy of these disks with you to use for future maintenance and recovery.

Connect the telephone system

In order to install PanaVOICE, the Panasonic DBS telephone system must be configured with a CPC-AII, CPC-B card (Version 8.1 or higher), or CPC-EX (version 1.1 or higher) and a DEC card. The DBS 824 system requires Version 2.1 or higher for the CPC card (CPC-M only). In both systems, the API card is required for the OAI Integration. CPC-S is not supported.

Voice mail integration features

PanaVOICE offers several voice mail features that take advantage of special capabilities found on your Panasonic DBS telephone system:

- Message Waiting Indication via message waiting lamps or special dialtones
- Automatic Call Forwarding to your personal greeting
- Easy Message Access via programmable keys at each extension

Program the telephone system

Program the telephone system before you connect it to PanaVOICE.

- **Define the hardware.** You must tell the DBS software which boards and other special telephone system hardware you have added or enabled (such as a DEC or API card).
- **Assign the extension numbers and hunt groups.** Program which extension numbers will ring PanaVOICE through the digital ports.

When programming the hunt group, we recommend a terminal hunt rather than a circular or call distribution hunt group. This is because voice mail ports are typically set up so that the first ports handle incoming calls while the last port handles tasks which require the voice mail to dial out (for example, lighting lamps and delivering messages). With this setup, a terminal group assists the ports in performing their jobs effectively and efficiently, because incoming calls will usually go to the first few ports, leaving the last port open to handle outdialing tasks.

When programming, you must also assign a "hunt group access code" or "group hunting code" for PanaVOICE. This code is the number, dialed in-house, that rings PanaVOICE.

Program what you want to happen to calls when all voice messaging ports are busy. Incoming calls may be forwarded to an attendant or operator, or may get a busy signal or ringback until one of the ports becomes available.

PanaVOICE can also use pooled ringing. To activate pooled ringing, set the Rings to answer field for all ports to 0 on the Application Setup: Port Settings page. Then, program all lines that PanaVOICE will answer to ring **all** of PanaVOICE ports. That way, when a call comes in, PanaVOICE answers, which signals the DBS to stop sending ring voltage to the other ports.

- **Program trunk routing.** Program which trunks (if any) will route to PanaVOICE via the telephone system's analog ports. Specify the hunting order, or, if you are using "pooled ringing" as described above, ring all trunks to all voice messaging ports. Use the Panasonic DBS FF4 programming addresses for this purpose.
- **Define the voice mail extension ports.** If you are using voice mail integration, you may program the voice messaging ports as voice mail extensions. (See *Installing PanaVOICE with an OAI Integration* in this guide.) Otherwise, program them as single-line extensions.

Special Telephone System Programming for Non-Integrated Systems

This section details the minimum necessary programming for DBS and DBS 824 systems with a non-integrated PanaVOICE system. (For instructions on programming an integrated system, see *Installing PanaVOICE with an OAI Integration* in this guide.) Use caution when setting other Panasonic DBS options to avoid conflicts which may affect how the voice messaging system works.

To program the "Voice Mail Tone" parameter to return busy tone to PanaVOICE:

1. Press **FF1**.
2. For Panasonic DBS, dial 2# 1# 21#. You see SYSTEM 021: 0 VOICE MAIL TONE.
For Panasonic DBS 824, dial 2# 1# 20#. You see SYSTEM 020: 0 VOICE MAIL TONE.
3. Dial 1# (to choose "Return Busy Tone").

To assign a terminal type to each voice mail extension port:

1. Enter programming mode.
2. Press **FF3**.
3. Dial the first voice mail extension port number (DBS CPC-All range 9-72) (DBS CPC-B range: 9-144) (DBS 824 range: 3-24). You see: **EXT XXX PROGRAM (SELECT PROGRAM)**.
4. Dial 2#. You see: **EXT XXX 002: 1 (TEL SET TYPE)**.
5. For both Panasonic DBS and DBS 824, dial 10 (for Third-Party Voice Mail).
6. Press HOLD to go to the next port number.
7. Repeat steps 5-6 above for each voice mail extension port to be programmed.

To configure voice mail extension ports for digital connection:

1. Press **FF3**.
2. Dial the voice mail extension port number (DBS CPC-All range: 9-72) (DBS CPC-B range: 9-144) (DBS CPC-EX range: 9-144) (DBS 824 range: 3-24). You see **EXT XXX PROGRAM (SELECT PROGRAM)**.

3. For the DBS, dial 47#. You see **EXT XXX 047: 0 VAU/VM Port.**
For the DBS 824, dial 46#. You see **EXT XXX 046: 0 VAU/VM Port.**
4. Dial 1 to enable the voice mail port confirmation.
5. Press **HOLD** to go to the next port number.
6. Repeat steps 4 & 5 for each extension.

To set call forward ID codes for individual extensions

1. At any extension, dial: **ON/OFF PROG AUTO ***
2. Dial the extension number to be forwarded.
3. Dial the voice mailbox ID code. These are the digits required by PanaVOICE to identify the DBS extension and allow it to retrieve messages. The ID code can be up to 16 digits long. Press the **REDIAL** key to insert a pause between digits.
4. Press **HOLD**.
5. Repeat for each extension to be programmed with Call Forward ID codes.

Connect the telephone leads

The telephone leads are plugged into the jacks at the back of the voice boards. For details, see the *Voice Board Note* in *Appendix A: Hardware Documentation*.

For Remote Maintenance, connect an additional extension to PanaVOICE's modem.

Test the PanaVOICE system

Using a telephone near the PanaVOICE console, call each extension connected to PanaVOICE. Go to the Banner screen (Figure 2) and watch the port status indicator to verify which voice messaging system port answers your calls.

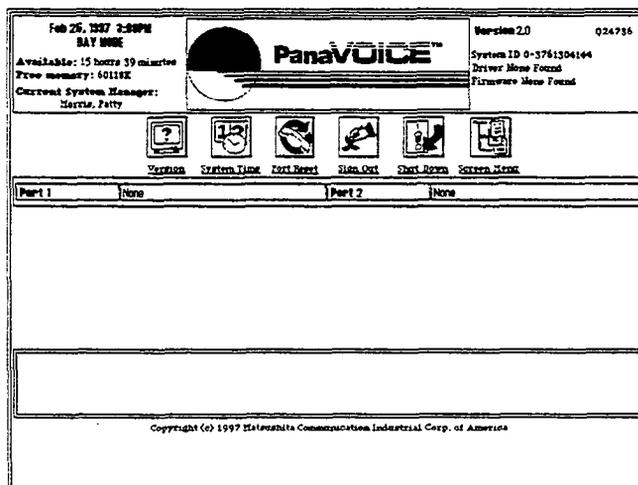


Figure 2 Banner screen

Configure the application

You have now installed the hardware and software for PanaVOICE and are ready to configure the system application. This includes:

- Configuring PanaVOICE for the DBS
- Selecting features, adding special greetings, adding subscribers, and programming any special call routing applications for this installation

The *Setting up the application* section of this guide contains easy, step-by-step procedures for configuring your application, along with worksheets you can fill out and use to enter data on-screen. **To continue the installation process, see *Setting up the application now*.**

After you have finished setting up your application, continue the installation by backing up PanaVOICE. For details, see *Back up the system* on page 1-11.

Back up the system

Once you have completed configuring the application, **you must back up the system**. A backup is a copy of the system configuration stored on a separate set of disks or tapes. We recommend using tapes. The system backup contains a copy of all the greetings, custom voice prompts, and system database information installed on your system. This includes all the subscriber's message box names and options, as well as any transaction boxes or interview boxes you have created for this application.

If for some reason your computer or hard disk fails, a system backup can save you hours of work reconstructing the application, including reentering all the names of subscribers, setting up all the directories, and setting system parameters. For details, see the *System Manager's Guide*.

We strongly recommend that you establish a regular backup schedule—monthly, weekly, etc. This will preserve any of the system updates made by a System Manager since the previous backup, such as the addition of new subscribers. All backups should be kept in a safe place separate from the system computer. PanaVOICE's Toolkit Main Menu makes it easy to do backups and to schedule unattended backups. The Toolkit Main Menu is available when you exit the voice messaging software.

Warning You must exit the voice messaging software to perform a backup.

Updating the voice messaging software

This chapter explains how to upgrade an existing voice messaging system to PanaVOICE 2.0. This chapter also provides an overview of the changes that occur to the voice mail computer's configuration during an update.

Check the system requirements

Prepare for the update

Update the software

Minimum system requirements

Updating your system to this software version requires the following:

- MS-DOS 6.22 or higher
- DFI DX4/100 computer with at least 4MB of memory on the mother board
- Serial ports as needed with 16550 or higher UART support
- Remote Maintenance disk version 6.1j or higher
- The system must **not** be using the MS-DOS DoubleSpace or DriveSpace utilities

PanaVOICE requires a mouse. Panasonic supports the following mouse devices for use on PanaVOICE systems:

- PanaVOICE 1.0 requires a bus mouse
- PanaVOICE 2.0 requires a serial PS/2 mouse

Note All required mouse device drivers are already installed on the PanaVOICE system. Do not install any other mouse device drivers onto the system.

Prepare for the update

After you have verified that your current system meets all the requirements for a successful update, prepare the system by following these steps:

1. Check that your system has at least 70 minutes (approximately 12MB) of free recording time. The available recording time is displayed in the upper-right corner of the Banner screen. You need at least 70 minutes of recording time for the software update, plus enough free recording time to store messages, boxes, names, and greetings. If there is not enough space available on the hard disk, the install program will not let you update the voice mail software.

Note If you want to free up disk storage space, follow the procedure on the next page to delete old messages from the system.

2. Exit to the DOS prompt by pressing **[Esc]** then **[Y]** at the Banner screen. If prompted, type a System Manager ID **[Enter]**.
3. Make a complete backup of the system, including any system prompts you have created for your unique situation. For information explaining how to back up your system, see the documentation which came with the earlier version of the software.
4. Optimize the system's hard disk, if necessary. This can significantly speed the system's performance and speed up installation. If the system is currently using the Toolkit, select Hard Disk Tools from the Toolkit Main Menu, then select Optimize Hard Disk NOW. Otherwise, supply your own optimization utility and run it before you perform the update.

Update the software

To update the software:

1. Insert the disk labeled Install Disk - Update in the A:\ drive.
2. Check that you are in the voice mail system directory (typically C:\VMAIL). Type A:INSTALL . (You must install the software from the A:\ drive.)
3. Choose to update an existing system.
4. Follow the on-screen instructions and insert disks as prompted.
5. Once the process is complete, choose the option to restart the voice mail software.

Tips After updating the software, verify that PanaVOICE is still detecting hangup supervision (GTD) and call progress signals accurately. If the system is not detecting these signals correctly, refer to *Appendix C: Resolving tone detection problems*.

Installation notes

Troubleshooting steps as well as tips for moving a voice messaging computer or the software are covered in the following topics of this chapter:

Troubleshoot the hardware

Moving the system

Troubleshoot the hardware

Troubleshooting PanaVOICE

If you experience trouble while installing a PanaVOICE system, check the following:

- Check that you received all the hardware on the bill of materials.
- Check that all cables are correctly connected.
- Check all installation steps, starting with *Test the system* on page 1-5.

If you believe the hardware is defective

All requests for returned material authorization (RMA) should be made from the site where the system is being installed. When you call Technical Support from on-site, we can check what has failed and what may need to be replaced. In addition, the technician can suggest additional tests for you to try.

Technical Support needs the following information before issuing an RMA on any hardware which you purchased from Panasonic:

- The serial numbers of the part needing to be replaced. On the PanaVOICE system, look at the tag attached to the fan on the back of the computer to determine a part's PCL number.
- The date the system was installed.
- A description of the problem and what troubleshooting has already been attempted.

Moving the system

Moving the software

If you are moving PanaVOICE from one computer to install it on another computer, you can take these approaches:

- Remove all voice boards, the system key, modem and any other required hardware from the current computer and install them on the new computer. Remove the hard disk from the current computer and install it on the new computer.
- Remove all voice boards, the system key, and any other required hardware from the current computer and install them on the new computer. Use the MS-DOS Interlink utility and an Interlink cable to transfer PanaVOICE software to the new computer. For details, see *MS-DOS Online Help*.

Whether or not you are moving the hard disk, **you should back up the current application before moving it to a new computer.** Use the backup to restore the current application on the new computer.

Moving the computer

If you are moving the voice messaging computer to a new location, it is possible to leave the software, voice boards, and any other required hardware installed in the computer during the moving process.

Before moving the computer, back up the current application. Use the backup to restore the current application in case the computer's hard disk becomes damaged in transit.

Note Always exit PanaVOICE before turning off the computer.

To exit PanaVOICE:

1. From the Banner Screen, choose the Shut Down button.

Installing PanaVOICE with an OAI Integration



About OAI Integration

The Panasonic DBS OAI (Open Application Interface) Integration Package may be used with two Panasonic telephone systems:

- Panasonic Digital Business System (DBS), equipped with a CPC-AII, CPC-B card Version 8.1 or higher, or a CPC-EX Version 1.1 or higher; an DEC card; and an API card
- Panasonic Digital Business System 824 (DBS 824), equipped with a CPC-M card Version 2.1 or higher; and an API card

Most of the installation procedures for the OAI Integration Package are identical for both telephone systems. Only steps described in *Preparing the Panasonic DBS* are significantly different for each type of telephone system. The differences are clearly noted.

Note Throughout this section of the *Technician's Guide*, the term Panasonic DBS will refer to both telephone systems unless explicitly stated otherwise.

This section of the *Technician's Guide* describes how to install the OAI Integration Package. It is designed to be used with the *System Manager's Guide* and other sections in the *Technician's Guide*. The material in this section assumes you are familiar with the Panasonic DBS telephone system's features and configuration.

- *Integration Overview* describes the integration, the steps to take before installation, and the hardware required.
- *Preparing the Panasonic DBS* guides you through installing telephone hardware and programming the telephone system.
- *Preparing the Voice Messaging System* details the steps for configuring the voice mail software.
- *Mailbox Builder* describes how to use the feature that adds subscriber mailboxes based on information programmed in the telephone system.
- *Testing the Integration* covers how to test the integration.
- *Training Subscribers* describes what subscribers should know about using the integrated systems.
- *Troubleshooting* gives advice on locating and solving problems that may occur in the integration.

Integration Overview

Call Forward to Personal Greeting	Any incoming calls that are routed to an unanswered or busy extension are automatically forwarded to the subscriber's mailbox in the voice messaging system, where the caller can leave a message.
Constant Message Count	The voice messaging system indicates the number of new and urgent messages on LCD display telephones.
Visual Menus	The voice messaging system displays menu options on LCD display telephones which correspond with options from the system's conversation. Subscribers may press a button to choose a voice messaging system option from the menu on the large LCD display telephone. A message list allows playback of messages in any order.
Message Waiting Indicators	The voice messaging system updates the constant message count on LCD display telephones and lights message waiting lamps on the subscriber's extension when new messages are pending.
Easy Message Access	The subscriber may retrieve messages automatically, without entering a Personal ID. To prevent forbidden message access, the subscriber may have a security code that must be entered before message playback.
Mailbox Builder	The voice messaging system can add subscriber mailboxes using extension information programmed in the telephone system. This feature simplifies installation and reduces errors.
Trunk Mapping	The voice messaging system routes incoming calls to specific message boxes, based on the trunk they come in on.

How the Integration Works

The Integration Package uses the Panasonic DBS telephone system's Open Architecture Integration (also known as an Open Application Interface) to communicate directly with the telephone system through an RS-232 serial link (Figure 3).

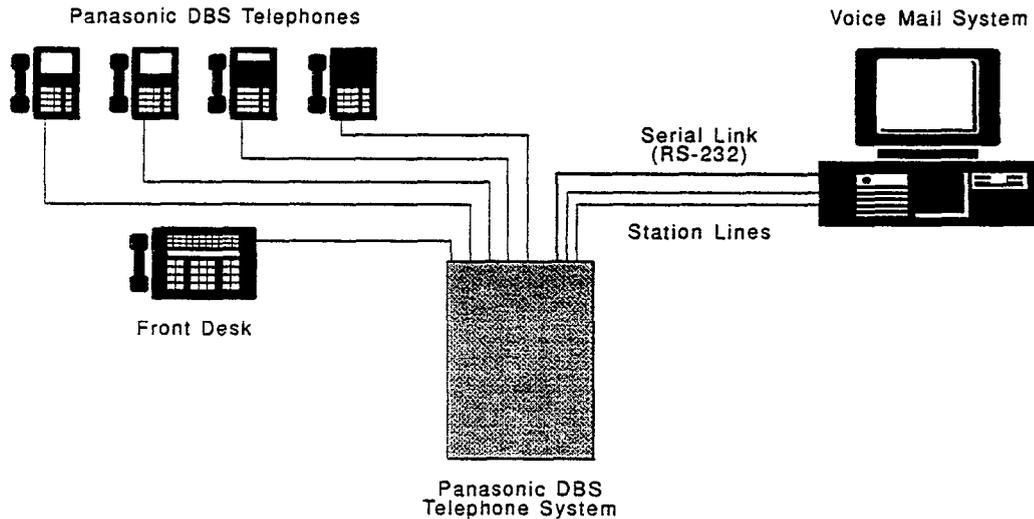


Figure 3 Panasonic DBS OAI integration

The Integration Package provides new features and extensive subscriber benefits through enhanced use of the Panasonic DBS display phones, particularly those telephones with large LCDs. When a subscriber's extension is busy or ring-no-answer, the Panasonic DBS telephone system forwards any call, along with the call information, to the voice messaging system via the serial link. The call information includes the extension number called, the caller's extension number (if an internal call), and also the telephone type (such as a display telephone, with a large or a small LCD, or an analog telephone). The voice messaging system answers the call with the appropriate subscriber's greeting.

If the Panasonic DBS telephone system does not forward the call to the voice messaging system with the call information, the voice messaging system answers the call with the opening greeting.

Integration Features for Telephones

The Integration Package works with different telephones supported by the Panasonic DBS telephone system:

- Large LCD display phones
- Small LCD display phones
- Single-line telephones (no LCD)

The Integration Package automatically determines the telephone type (for example, large LCD or small LCD), then provides the appropriate feature support for that type of telephone. Figure 4 shows which integration features each type of telephone supports.

	Message Waiting Indications	Constant Message Count	Visual Menus
Large LCD Display Telephone	✓	✓	✓
Small LCD Display Telephone	✓	✓	
Single-line Telephones	✓		

Figure 4 Feature support based on Panasonic DBS telephone type

Constant Message Count

The voice messaging system displays the number of new and urgent messages on both small and large LCD Panasonic DBS display phones using a feature called **constant message count**.

With constant message count, the subscriber simply looks at the display telephone's LCD to determine how many new and urgent messages, if any, there are to check.

The voice messaging system updates constant message count regardless of whether the telephone is off-hook or on-hook. The refresh interval is configurable on the voice messaging system. Note that the message waiting indication works as usual with constant message count.

Examples of Constant Message Count

The constant message count appears on the **second** line of the LCD. The first line displays the time, day, and date as programmed on the telephone system. For a display telephone with a large LCD, these examples represent the top two lines only. For a display telephone with a small LCD, these examples represent what would appear on the entire display.

New Messages, including Urgent Messages

08:30 Tue MAY 09

7 MSGS 1 URG

The voice messaging system displays the total number of new messages (7 MSGS), and how many of these are urgent (1 URG). The voice messaging system also activates the message waiting indication.

New Messages, No Urgent Messages

08:30 Tue MAY 09

7 NEW MSGS

The voice messaging system displays new message information, and activates the message waiting indication.

No New Messages

08:30 Tue MAY 09

Yale, Hugh 101

The Panasonic DBS telephone system, not the voice messaging system, controls the display. The state of the telephone determines what appears on the second line of the LCD.

Other Displays

In some cases, the telephone system may temporarily control the display area where the constant message count usually appears. Such a display appears until the voice messaging system updates the constant message count. For details on the update interval, see page 2-25.

Display of Touchtone Entry

Note that whenever a touchtone is pressed, the Panasonic DBS display phone replaces whatever appears on the first line with the touchtone's number. This occurs for **any** touchtone entry from Panasonic DBS display phones.

For example, if the voice messaging system has displayed the constant message count on a subscriber's telephone:

08:30 Tue MAY 09

7 NEW MSGS

If a subscriber picks up the handset and presses the 9 touchtone, the Panasonic DBS display phone displays 9 on the first line:

9

7 NEW MSGS

Large LCD Display Phones & Constant Message Count

When a subscriber with a Panasonic DBS large-display phone finishes using voice mail functions, the LCD lists options for use specifically with the Panasonic DBS telephone system. PERSONAL DIAL, SYSTEM DIAL, and the others shown in Figure 5 are **not** voice messaging system options.

08:30 Tue MAY 09

7 MSGS 1 URG

PERSONAL DIAL

SYSTEM DIAL

EXTENSION

FUNCTION

HELP

Figure 5 Example of non-voice messaging system options on the large LCD

Once the subscriber dials his or her voice mailbox, voice messaging system options replace the Panasonic DBS telephone system options. Non-voice messaging system options may vary based on programming used with the Panasonic DBS telephone system.

Visual Menus

When subscribers access their mailboxes, the voice messaging system provides them with a menu to choose from. Subscribers using small-display or analog telephones will hear these menu options through the voice mail conversation. Those subscribers with Panasonic DBS large-display phones will see these same voice mail choices as visual options on the display telephone's LCD.

The visual menus that appear on the large LCD are very similar to audio menu choices the subscriber hears when using a small LCD or analog telephone. For example, a subscriber with a small-display telephone dials the voice messaging system and the voice mail conversation provides a main menu of options:

- Check the new messages a subscriber has waiting
- Leave messages
- Review old messages
- Access setup options

Similarly, a subscriber with a large-display telephone dials the voice messaging system and the system displays a menu visually instead of through audio conversation :

```
MAIN MENU
7 MSGS 1 URG
CHECK NEW MSGS
LEAVE MESSAGES
REVIEW OLD MSGS
SETUP OPTIONS
CALL EXTENSION
```

Occasionally, LISTEN FOR OPTIONS appears as a visual menu when the subscriber must perform a voice mail function more complex than choosing an option, such as recording a message.

```
LISTEN
FOR OPTIONS
```

1 = Yes

2 = No

Using Keys on the Large Display Telephone

Subscribers choose options from visual menus on the Panasonic DBS large-display phone by pressing a **soft key**. This telephone has a total of ten soft keys, five each on the left and right sides of the LCD.

Using soft keys with visual menus is simple and intuitive. Most options on visual menus may be chosen by pressing the soft key on either side of the LCD. However, when a visual menu displays options using two columns, options must be chosen by pressing the soft key on the appropriate side of the LCD.

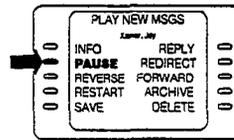
One Column of Options

Press the soft key on either side of the option.

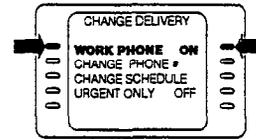


Two Columns of Options

Press the soft key next to the option.



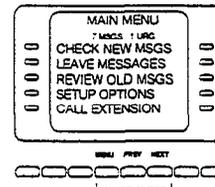
Options that may be set to ON or OFF may be “toggled” by pressing the soft key for that option. For example, if an option is set to ON, pressing the soft key sets it to OFF. In some cases, changing a setting from OFF to ON activates additional options on a display menu:



In addition to the soft keys on the Panasonic DBS large-display phone, the Integration Package supports additional keys located below the LCD. Note that these **fixed function keys** are labeled on the phone’s case, rather than on the LCD.

The fixed function keys and their functions are listed below:

- MENU - Go to the Main Menu.
- PREV - Either:
 Go to the previous visual menu.
 Display the previous messages on the message list.



- **NEXT** - Either:
Display any additional messages on the message list.
Stop playing the current message and play the next one.

Tip for Subscribers

While a subscriber listens to a message, pressing the **NEXT** key on the Panasonic DBS large-display phone stops playing the current message and begins playing the next one in the message list. When a subscriber presses the **NEXT** key while listening to:

- A new message, the first one becomes an old message.
- An old message, the first one remains as an old message.

The Message List

As a subscriber receives new messages, PanaVOICE regularly updates the constant message count on the subscriber's display telephone. While constant message count lets the subscriber know there are new messages, the **message list** on the display telephone allows the subscriber to play them back in any order desired (Figure 6). If there are more messages than can appear on the display, subscribers can use the **NEXT** and **PREV** keys on the Panasonic DBS large-display phone to scroll through them.

```
CHECK NEW MSGS
7 MSGS 1 URG
* XAVIER, JAY
  AARONSON, CHRI
  YEOMAN, MIKE
MAY 09,08:30AM
***END***
```

Figure 6 The message list on the large LCD

Below the menu title and constant message count, the message list displays information about the subscriber's messages. This lets the subscriber review messages, then listen to them in any order desired.

The message list includes this information:

- **Message codes:** PanaVOICE identifies the message type using a one-letter code in the first column:
Urgent messages
Public messages, left for subscribers with public message access

Return receipts, identifying each message the subscriber explicitly marked for return receipt. This is different than a receipt summary (RECEIPT), which is described below.

The message list sorts messages in the same order as what is heard through the system conversation.

In a subscriber's list of old messages, the system uses this code:

- **Archived messages**, including the archive period. For example, A2 identifies an archived message that will be kept for two additional days. A9 indicates the archive period is nine days or greater. A Ø (zero) indicates the message will be deleted today at midnight.
- **Caller:** The message list identifies messages from a subscriber by including the subscriber's spelled name. The list identifies a message from an unknown caller with the date and time the message was left (example: MAY Ø9,Ø8:3ØAM).

RECEIPT identifies a receipt summary, which provides summary information about messages a subscriber sent to subscribers, guests, or message groups.

- **End of the List:** The message list displays *****END***** after the last message listed.

Message Waiting Indicators

When integrated with the Panasonic DBS telephone system, PanaVOICE tells the DBS when to light and extinguish message waiting indicators (lamps) on the display telephones.

The System Conversation and Visual Menus

In addition to providing visual support for using PanaVOICE, the OAI Integration Package affects the system conversation through how a subscriber uses visual menus and through special prompts used with visual menus.

How a Subscriber Uses Visual Menus

The subscriber uses a combination of the system conversation and visual menus when working with the voice messaging system through the Integration Package. Using these menus is simple and intuitive. Subscribers will appreciate the flexibility provided through visual access to many voice mail features. If subscribers have used this voice messaging system before but are using it for the first time with the Integration Package and their display telephones, they will quickly learn to use visual menus in combination with the already familiar system conversation.

While the voice messaging system traditionally guides users through the conversation, using visual menus combines the options available on the LCD with those available through the conversation. How much the subscriber hears and how much the subscriber sees can vary depending on the voice mail function. Here are some examples:

- **Both the Conversation and Visual Menus Used:** When a subscriber plays a new message, he or she listens to the message and sees a visual menu of playback controls, including PAUSE, INFO (for message information), and REPLY.
- **Visual Menus Used:** When a subscriber accesses setup options, the voice messaging system does not use the conversation for most steps. Instead, the subscriber sees a visual menu for setup options, including CHANGE GREETINGS and PERSONAL OPTIONS. In such a case, the visual menu remains until the subscriber chooses an option. If the subscriber does not press any keys or touchtones on the display telephone, the main menu reappears on the LCD after a brief period (up to thirty seconds).
- **Conversation Used:** When a subscriber records a reply to a subscriber-to-subscriber message, he or she uses instructions through the system conversation, and sees LISTEN FOR OPTIONS on the LCD.

The following example shows how a subscriber would typically interact with visual menus and the conversation. This example describes what the voice messaging system displays through visual menus on the display telephone's LCD and what it says through the system conversation.

LARGE LCD	PanaVOICE	Subscriber
<pre> 10:00 Tue MAY 09 7 MSGS 1 URG </pre>		<p>The subscriber picks up the handset and dials voice mail (usually through a programmable speed dialing key).</p>
<pre> MAIN MENU 7 MSGS 1 URG CHECK NEW MSGS LEAVE MESSAGES REVIEW OLD MSGS SETUP OPTIONS CALL EXTENSION </pre>	<p>The conversation pauses for the subscriber to choose an option.</p>	<p>The subscriber presses the CHECK NEW MSGS soft key.</p>
<pre> CHECK NEW MSGS 7 MSGS 1 URG U Wu, Pat Bronson, Denis Donaldson, Ray Fuller, Roger Nguyen, Brenda </pre>	<p>"To play a message, press the one touch key. To look through your message list, press the Next or Previous key."</p>	<p>The subscriber decides to list additional messages and presses the fixed function key labeled NEXT.</p>
<pre> CHECK NEW MSGS 7 MSGS 1 URG Xavier, Jay MAY 09,09:30AM ---END--- </pre>		<p>The subscriber sees Xavier, Jay in the message list and decides to listen to Jay's message before the others. He presses a soft key next to Jay's name.</p>
<pre> PLAY NEW MSGS Xavier, Jay INFO REPLY PAUSE REDIRECT REVERSE FORWARD RESTART ARCHIVE SAVE DELETE </pre>	<p>"Hi, Hugh. Remember, our meeting today is at 3 PM. Make sure you bring..."</p>	<p>As the message plays, the subscriber decides to find out how long this message is and when it was left. He presses the INFO soft key.</p>
<pre> MSG INFORMATION FROM: Xavier, Jay MAY 09, 08:30AM 25 Seconds EXIT </pre>	<p>"...you bring the results from last quarter. Everyone on the team wants to hear..."</p>	<p>As the message plays, the subscriber reviews the information, then presses the EXIT soft key.</p>
<pre> PLAY NEW MSGS Xavier, Jay INFO REPLY PAUSE REDIRECT REVERSE FORWARD RESTART ARCHIVE SAVE DELETE </pre>	<p>"...wants to hear how your division did..."</p>	<p>As the message plays, the subscriber decides to save it and listen to the rest later. He presses the SAVE soft key.</p>

LARGE LCD	PanaVOICE	Subscriber
<p>CHECK NEW MSGS 7 MSGS 1 URG U Wu, Pat Bronson, Denis Donaldson, Ray Fuller, Roger Nguyen, Brenda</p>		<p>The subscriber wants to check Pat Wu's message and presses the fixed function key labeled PREV.</p>
<p>PLAY NEW MSGS U Wu, Pat INFO REPLY PAUSE REDIRECT REVERSE FORWARD RESTART ARCHIVE SAVE DELETE</p>		<p>Hugh is expecting a message from Pat about his business trip later that day, and decides to listen to Pat's message. He presses a soft key next to Pat's name.</p>
<p>LISTEN FOR OPTIONS 1 = Yes 2 = No</p>	<p>"Hugh, your flight leaves at 5 PM. A taxi will pick you up right after the meeting."</p>	<p>The subscriber listens to most of the message. Hugh expected this and decides to send a quick reply. He presses the REPLY soft key.</p>
<p>PLAY NEW MSGS U Wu, Pat INFO REPLY PAUSE REDIRECT REVERSE FORWARD RESTART ARCHIVE SAVE DELETE</p>	<p>"OK, I'll record your message now..."</p>	<p>The subscriber records the message: "Pat, thanks for all your help with the arrangements. See you next week." He presses the star (*) when he finishes.</p>
<p>CHECK NEW MSGS 3 NEW MSGS Bronson, Denis Donaldson, Ray Fuller, Roger Nguyen, Brenda Xavier, Jay</p>		<p>The subscriber decides to delete Pat's message and presses the DELETE soft key.</p>
		<p>The subscriber replaces the handset.</p>
	<p>"...wants to hear how your division did..."</p>	<p>As the message plays, the subscriber decides to save it and listen to the rest later. He presses the SAVE soft key.</p>

Additional Benefits for Large LCD Users

With the Integration Package, subscribers using Panasonic DBS large-display phones have both:

- A special system conversation
- Flexibility of using touchtone keys with menu mode

The system conversation includes additional prompts for subscribers using Panasonic DBS large-display phones. Subscribers using small-display phones or analog telephones will not hear these additional prompts.

Subscribers using large-display phones hear changes in the system conversation in two places:

1. Main menu

After the subscriber accesses his or her voice mailbox, the voice messaging system displays the main menu.

```
MAIN MENU
7 MSGS 1 URG
CHECK NEW MSGS
LEAVE MESSAGES
REVIEW OLD MSGS
SETUP OPTIONS
CALL EXTENSION
```

After the subscriber presses the CHECK NEW MSGS soft key, the system conversation plays the Integration Package prompt "To play a message, press the one touch key. To look through your message list, press the Next or Previous key."

This prompt tells the subscriber to use the appropriate One Touch key on the left and right sides of the LCD to play a message. It also tells the subscriber to use the appropriate fixed function key (labeled NEXT or PREV on the Panasonic DBS large LCD display phone) to display the next or previous messages on the message list.

CALL EXTENSION lets the subscriber quickly dial an internal extension. When the subscriber presses the CALL EXTENSION soft key, the system plays a standard system conversation prompt "If you'd like to try an extension, you may do so now (pause). See you later!"

2. Pause during message playback

After the subscriber pauses a message during playback (either by selecting the PAUSE option from the large LCD display telephone or pressing the 8 touchtone), the voice messaging system displays the pause menu:

```
PLAYBACK PAUSED
U Yale, Hugh
RESUME
PAUSE
EXIT
```

The system conversation plays the Integration Package prompt *"Press Pause to continue pausing or Resume to continue playing."* This prompt tells the subscriber how to resume from this pause, to either:

- Continue the pause by selecting the PAUSE option from the large LCD display telephone.
- Resume message playback by pressing the 8 touchtone key again.

Subscribers using large-display phones also have available these touchtone keys during menu mode:

- 4 through 7 touchtone keys to choose options
- * to return to the Main Menu
- # to step back one level to the previous menu

These large-display telephone subscribers see visual menus, rather than hear a menu-based conversation. These subscribers do not require menu mode conversation preference on the Subscribers and Guests: Conversation screen in order to use these touchtone keys with the Integration Package.

Voice Mail Call Handling Features

The OAI Integration Package supports PanaVOICE's automated attendant features for call holding, the call transfer and screening options (which are listed on the Subscribers and Guests: Call Handling screen), and message delivery to an internal extension (Figure 7).

Voice Mail Features	Description
Call holding	The voice messaging system regularly tells a caller on hold his or her status in the holding queue and offers options to (1) transfer to another extension or the subscriber's voice mailbox or (2) continue holding.
Call transfer options	The call transfer options control how calls are transferred, and what the person answering the telephone hears before a call is connected.
Message delivery to an extension	The voice messaging system calls a subscriber's extension to deliver new messages.

Figure 7 Voice mail call handling features supported through the OAI integration

Avoiding Call Forwarding Conflicts

PanaVOICE offers call handling features that rival those on many telephone systems. Sometimes, the call forwarding features of the telephone system can conflict with the call handling features of the voice messaging system, unless you configure both systems to avoid overlapping features.

Figure 8 shows two different ways to configure both the voice messaging system and the Panasonic DBS telephone system to prevent the DBS's call forwarding features from conflicting with features provided by the voice messaging system. You will want to choose the method which works best for your situation.

To Use:	Program the DBS Telephone System	Program PanaVOICE	Features Not Available
Call Forward-Busy or Call Forward-All Calls on Extensions	Set extensions to call forward on busy, no answer, or busy/no answer.	Set the default call transfer type to Wait for Ringback.	Voice mail features for Call Holding, Call Transfer Options, Message Delivery to an extension.
Voice Mail Call Holding, Call Transfer Options, or Message Delivery to an Extension	Disable Call Forward Busy and Call Forward All Calls on station sets.	Set the call transfer type to Await Answer.	The telephone system features for call forward busy or call forward all calls to a subscriber's personal greeting.

Figure 8 How to program the Panasonic DBS telephone system and PanaVOICE for call transfer

Setting Rings to Wait

To use the voice mail call holding, call transfer options, or message delivery to an extension, set the call transfer type to **Await Answer** on the Subscribers and Guests: Call Handling screen. Set the number of rings to wait to at least two rings less than the number of rings configured in the Panasonic DBS telephone system for forwarding on a ring-no-answer condition. **We recommend 3 rings for the voice messaging system and 5 rings for the Panasonic DBS telephone system.** This prevents the situation where the voice messaging system calls an unanswered extension and is then forwarded back to itself by the telephone system.

Installation Summary

These are the installation steps you will perform:

- Check the pre-installation requirements (page 2-39).
- Install the API card and API serial port connector in the main cabinet of the telephone system.
- Check station name information on the Panasonic DBS for completeness and accuracy.
- Program the Panasonic DBS.
- Reprogram the system key.
- Configure the voice messaging system.
- Connect the Panasonic DBS and voice messaging system by serial link.
- Test the Integration Package.

Pre-Installation Checklist

The following lists everything you need before installing the Integration Package:

Telephone System

If you are using the Panasonic Digital Business System 824:

- Panasonic DBS 824 CPC-M software release 3.1 or higher

If you are using the Panasonic Digital Business System:

- Panasonic DBS CPC-AII or CPC-B software release 8.1 or higher or CPC-EX Version 1.1 or higher

For both Panasonic DBS and DBS 824 you will need:

- An API (Application Program Interface) Card and API Serial Port Connector (VB-43940) installed in the main cabinet of the telephone system
- RS-232 serial link (the gray null modem cable with 9-pin female and 25-pin male connectors)

Order these from your Panasonic representative. Install the telephone system hardware and software according to the Panasonic Digital Business System telephone system documentation.

Voice Messaging System

- 12MB minimum free disk space (at least 70 minutes in the Available field in the upper-left hand corner of the Banner screen)
- A modem connected to a SLT extension for use with the Remote Maintenance software
- One 3 1/2 inch (1.44MB capacity) high density floppy disk drive
- Serial port with 16550 or higher UART support
- Parallel port for the system key

Additional Items

- Access to the Panasonic DBS telephone system and system administration terminal to configure the Panasonic DBS telephone system for the integration
- A complete and accurate telephone directory for station users, including the extension number and first/last names (for example, "101, Hugh Yale")
- A six-outlet power strip
- Extra blank floppy disks for system backup and copying files
- A phillips screwdriver

Preparing the Panasonic DBS

This chapter details the options you must program on the telephone system for the Panasonic DBS OAI Integration Package to work correctly. These options directly affect the integration. You should use caution when you are setting additional options in the Panasonic DBS to avoid conflicts which may affect how PanaVOICE works.

Before integrating PanaVOICE with the Panasonic DBS, you need to:

- Install additional telephone system hardware.
- Complete telephone system programming.

Installing Additional Telephone System Hardware

Panasonic DBS telephone systems require the following cards for voice messaging system integration. These cards must be installed in the **main cabinet** of the telephone system prior to installing the Integration Package:

Panasonic Digital Business System 824 Panasonic Digital Business System

API Card and API Serial Port Connector API Card and API Serial Port Connector (VB 43940)
(VB 43940)

Figure 9 Telephone system hardware for the DBS 824 and DBS

To obtain these cards, contact your Panasonic representative. Install them according to the *Panasonic DBS Manual, Section 300-Installation*.

Panasonic DBS System Programming

Check that you have programmed the Panasonic DBS for:

- Station information
- Special telephone system programming

Station Information

Check that each telephone system port is programmed to include the extension number and the name. Mailbox Builder uses this station information to set up default subscriber voice mailboxes. For details, see *Mailbox Builder* on page 2-62.

Note Mailbox Builder uses station names exactly as programmed on the telephone system. It is a good idea to program names as you would like to have them on both systems, whether it is "LASTNAME FIRSTNAME" or "FIRSTNAME LASTNAME." We recommend using the format "LASTNAME FIRSTNAME."

To assign extension names using attendant telephone:

1. Press **PROG** #2. You see: ** EXT. NAME **.
2. Press XXX, where XXX is the port number of the individual extension.
3. Press **AUTO** until you erase the default name.
4. Using the touchtone keypad, spell the name of the person using the extension. Use the "LAST FIRST" format. Press the corresponding key the appropriate number of times for the letter's position on the key. Examples:
5. For A, press 2; for B, press 22; for C, press 222.
For K, press 55.
For Q, press 1. For Z, press 11. For a space, press **HOLD**.
6. Press **FLASH** after each letter to input the next letter.
7. Press **HOLD** upon completion.
8. Repeat steps 2-6 for each extension.

To assign a terminal type to the voice mail extension ports:

1. Press **FF3**.
2. Dial the voice mail extension port number (DBS CPC-AII range: 9-72) DBS CPC-B range: 9-144) (DBS CPC-EX 9-144) (DBS 824 range: 3-24). You see: EXT XXX PROGRAM (SELECT PROGRAM).
3. Dial 2#. You see: EXT XXX 002: 1 (TEL SET TYPE).

4. Dial XX# (to replace the "1" in the display) where XX is the Terminal Type number (range: 41-48) of the integrated voice mail port. Program the first voice mail port as Type 41; the second voice mail port as Type 42; and so on.

Important You must program the Terminal Type for each voice mail port used.

To configure voice mail extension ports for digital connection:

1. Press **(FF3)**.
2. Dial the voice mail extension port number (DBS CPC-AII range: 9-72) (DBS CPC-B range: 9-144) (DBS CPC-EX range: 9-144) (DBS 824 range: 3-24). You see **EXT XXX PROGRAM (SELECT PROGRAM)**.
3. For the DBS, dial 47#. You see **EXT XXX 047: 0 VAU/VM Port**.
For the DBS 824, dial 46#. You see **EXT XXX 046: 0 VAU/VM Port**.
4. Dial 1 to enable the voice mail port confirmation.
5. Press **HOLD** to go to the next port number.
6. Repeat steps 4 & 5 for each extension.

Special Telephone System Programming

This topic explains how to program DBS and DBS 824 systems so that the OAI Integration Package will work correctly. Use caution when setting other Panasonic DBS options to avoid conflicts which may affect how the voice messaging system works.

System Program Settings

1. Program the API:
 - a. Press **(FF1)**.
 - b. Dial 2#1#. You see: SYSTEM GENERAL.
2. Program API/DEC Slot (DBS only):
 - a. Press 20# You will see: SYSTEM 020 : 0 (API/EC SLOT).
 - b. Enter slot number of the DEC card (range: 2-18) followed by #.

Note The main cabinet holds slots 2 through 9. the secondary cabinet holds slots 10 through 18. In the main cabinet, 2=slot "EC2"; 3="EC3"; ... 8="EC8"; and 9="EC/TRK". In the secondary cabinet, 10=slot "EC1"; 11="EC2"; 12="EC3"; ... 17="EC8"; and 18="EC/TRK".

3. Program API /PORT (DBS 824 only):
 - a. Press 19# You will see: SYSTEM 019 : 1 (API/PORT).
 - b. Enter the lowest-numbered extension port used for the API connection, followed by #.
4. Program the "Voice Mail Tone" parameter to return busy tone to PanaVOICE:
 - a. Press FF1.
 - b. For Panasonic DBS, dial 2# 1# 21#. You see SYSTEM 021: 0 VOICE MAIL TONE.
For Panasonic DBS 824, dial 2# 1# 20#. You see SYSTEM 020: 0 VOICE MAIL TONE.
 - c. Dial 1# (to choose "Return Busy Tone").
5. For the Panasonic DBS only, verify that the voice mail API port is set for standard API protocol and 9600 baud:
 - a. Dial [FF1] 2# 1# 41# (for API port 1) 1#
or: [FF1] 2# 1# 42# (for API port 2) 1#
 - b. Dial 0# (to select "standard API protocol").
 - c. Dial 0# (to select "9600 bps").

Note If a TSAPI connection is already present on the API card, program the voice mail port by selecting the API port that is not being used for TSAPI. If TSAPI is present, both ports must be set to 9600 baud. If TSAPI is not present, be sure to use API port 1 for the voice mail connection.

System Timer Settings

1. Program the Call Forward No Answer Timer:
 - a. For Panasonic DBS, press [FF1]. Dial 3#, 19#. You see: TIMER 019 : 02 (CFWD NO-ANS TIM). Dial 4# for 20 seconds.
 - b. For Panasonic DBS 824, press [FF1]. Dial 3#, 17#. You see: TIMER 017 : 02 (CFWD NO-ANS TIM). Dial 4# for 20 seconds.

Ringling and Hunt Group Programming

1. Program Day Ring Assignments for Hunt Group Pilot Numbers:
 - a. Press [FF4].
 - b. Dial 1#. You see: Day ring program (SELECT PORT #).
 - c. Dial XXX# where XXX is the hunt group number. You see: Day Ring PortXXX (SELECT TRUNK NUMBER).

Note Hunt group numbers vary based on the version of the Panasonic DBS telephone system. For example, the CPC-All version uses hunt group numbers 79-86. The CPC-B version uses hunt groups 151-158 and the CPC-M version uses 31-34.

- d. Dial TTT# where *TTT* is the trunk number that should ring the voice messaging system. You see: PORT XXX-TTT : 0 (DAY RING PROG.).
 - e. Dial 1#. You see: PORTXXX-TTT : 0 where *TTT* is the next trunk number.
 - f. Repeat step "e" for each trunk that should ring the voice messaging system in Day Mode.
2. Program Night Ring Assignments for Hunt Group Pilot Numbers:
- a. Press **(FF4)**.
 - b. Dial 2#. You see: Night ring prog. (SELECT PORT#).
 - c. Dial XXX# where XXX is the hunt group number.
You see: Night Ring P.XXX (SELECT TRUNK#).

Note Hunt group numbers may vary based on the version of the Panasonic DBS telephone system. See previous note.

- d. Dial TTT where *TTT* is the trunk number that should ring the voice messaging system. You see: PORT XXX-TTT : 0 (NIGHT RING PROG).
 - e. Dial 1#. You see: PORTXXX-TTT : 0 where *TTT* is the next trunk number.
 - f. Repeat step "e" for each trunk that should ring the voice messaging system in Night Mode.
3. Program the Voice Mail Hunt Group for Terminal Hunting:
- a. Press **(FF4)**.
 - b. Dial 3#. You see: Hunting Group (SELECT HUNT-G#).
 - c. Dial HH# where *HH* is the hunt group number you wish to assign the voice messaging system. You see: HUNT-GHH PROGRAM (SELECT PROGRAM).
 - d. Dial 1#. You see: HUNT-GHH 001:*** (PILOT EXT. #).
 - e. Dial PPP, where *PPP* is the pilot number for the voice messaging system hunt group. You see: HUNT-GHH 002: 0 (HUNTING MODE).
 - f. Dial 0 for terminal hunting.
 - g. Press # until you see: HUNT-GHH 005:*** (MEMBER EXT. #).
 - h. Dial XXX# where XXX is the extension number of the first voice messaging system port. You see: HUNT-GHH 006:*** (MEMBER EXT. #).

- i. Dial XXX# where XXX is the extension number of the next voice messaging system port.
- j. Repeat step "i" for the remaining voice messaging system extensions.

Program the Individual Stations for Call Forwarding

1. From a Key Telephone:
 - a. Press **ON/OFF**.
 - b. Dial 72. You see: Enter FWD Mode.
 - c. Dial 1 for busy/no-answer. You see: Enter FWD Ext#.
 - d. Dial the pilot number of the voice messaging system hunt group.
 - e. Press **ON/OFF**.
2. From a Single Line Telephone:
 - a. Go off-hook.
 - b. Dial 721 for busy/no-answer.
 - c. Hang up.

Direct-Inward-Dial (DID)

The Integration Package supports direct-inward-dial (DID) call forwarding capabilities. To use DID, go to the Ringing section of the DBS programming. Set up the DID numbers to ring the voice messaging system pilot number. The voice messaging system will then transfer the call into the corresponding mailbox or transaction box. For details on programming, see the Panasonic Digital Business System telephone system documentation.

Resetting the Panasonic DBS Telephone System

You **must** reset the telephone system after changing programming in order to activate changes.

Note If you experience difficulty configuring the Panasonic DBS telephone system or station sets for integration with the voice messaging system, contact Panasonic Technical Support.

Preparing the Voice Messaging System

This chapter describes the voice messaging system configuration you must perform in addition to the normal configuration of the customer's application. You will need to perform these steps:

- Connect the voice messaging and telephone systems.
- Configure the PanaVOICE system.

Connecting the Voice Messaging and Telephone Systems

Connecting the systems involves:

- Connecting the analog station lines to the voice messaging system
- Installing the serial link between the systems

Connecting the Station Lines to the Voice Messaging System

Connect the digital station lines from the Panasonic DBS telephone system to the appropriate RJ-14 jacks on each voice board, following the instructions in the *Installing the PanaVOICE System* section of the *Technician's Guide*. Figure 10 shows that there are four modular jacks per voice board. Each jack on a 4-port voice board carries **one** port.

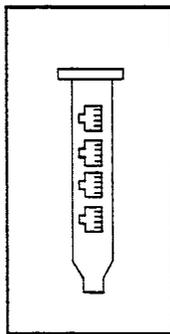


Figure 10 4-port voice boards

Installing the Serial Link between the Systems

To install the serial link:

1. Remove the cover from the Panasonic DBS telephone system.
2. Connect the serial cable to either the CN101 or CN201 connector inside the Panasonic DBS telephone system.
3. Replace the cover on the Panasonic DBS telephone system.
4. Connect the other end of the serial link to the voice messaging system's COM1 serial port. The COM1 port is either a 9-pin or 25-pin, D-shaped, male connector.

New Fully-Assembled PanaVOICE System

If you purchased this Integration Package as part of a new fully-assembled PanaVOICE system, the hardware and software for the integration have already been installed on your system. Simply install the system key and configure the voice messaging system software as described in *Configuring the Voice Messaging System*.

Upgrading an Existing Voice Messaging System

If you purchased this Integration Package to upgrade your existing voice mail and telephone systems, you must reprogram the system key before configuring the voice messaging system software. The reprogramming instructions are on the Upgrade Card shipped with the Integration Package.

Testing the system

You should test the system to confirm the system key is installed on the correct port and the system starts properly.

To test the system:

1. Turn on the system. Watch as several messages display on-screen and the voice mail software starts.
2. Check that the key is properly installed:

If the words "DEMONSTRATION COPY, SYSTEM KEY NOT FOUND" appear on the system's Banner screen, the system key is not properly installed.

If the System Starts as a Demonstration Copy

- Check that the label on your system key matches the number of ports and optional packages installed on your system.
- Check that the system key is fully plugged into the parallel port.

Exit to DOS by choosing Shut Down on the Banner screen. Press **Ctrl-Alt-Del** to restart the system. If the system starts as a regular (non-demo) unit, then continue with the next step in the installation.

If the system still starts as a demonstration copy, look for another parallel port on the voice mail computer. If there is more than one parallel port, put the system key on that port and start the system again. If the voice messaging system now starts **without** the "DEMONSTRATION COPY, SYSTEM KEY NOT FOUND" message, the key is installed correctly.

If the system still starts as a demonstration copy, contact Technical Support.

Checking the COM Port and Voice Boards Using SYSCHK

After you install the integration software, you must test the voice messaging system computer's data port to verify that it is configured correctly for the integration. Do this with the software utility SYSCHK and a loopback connector. You must restart the system after running SYSCHK.

Using the COM1 Port

Your integration uses the COM1 port on the voice messaging system computer to share data with the Panasonic DBS telephone system. If you have an internal modem installed on your existing voice messaging system for use with the Remote Maintenance package, that modem may currently be using COM1. **You must use the COM1 serial port for the integration with the Panasonic DBS telephone system, and reconfigure the modem to use COM2.**

Running SYSCHK

The SYSCHK utility is stored in the voice mail directory (for example, C:\VMAIL). SYSCHK can test:

- The internal modem
- The serial port

If any of these items is configured incorrectly, the integration may fail. Test the serial port with a loopback connector plugged into the COM port you want to test.

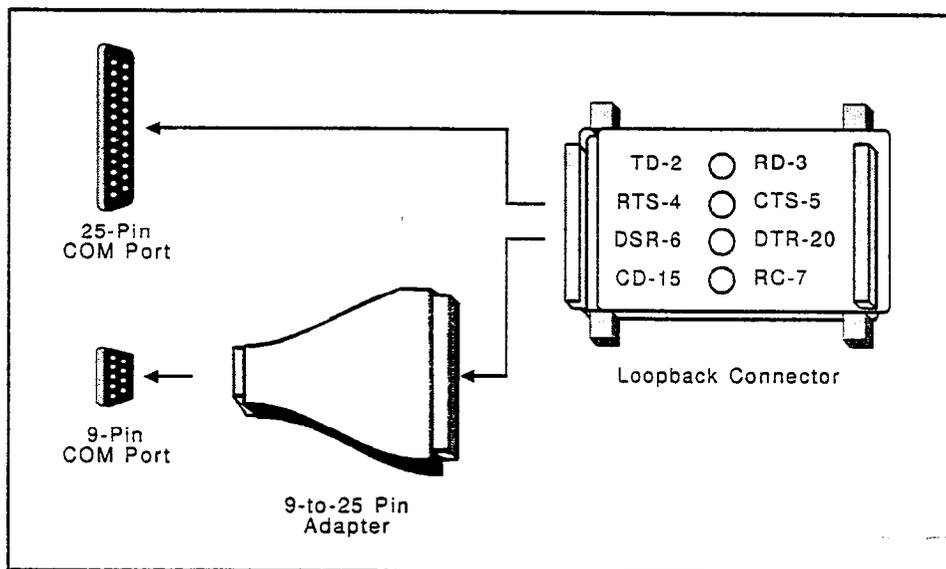


Figure 11 Loopback connector

If SYSCHK finds no problems, it displays a summary of its findings. If the system fails any of the configuration tests, SYSCHK displays a chart showing the correct configuration settings.

If the system has:	Both serial integration and Remote Maintenance	Remote Maintenance only
Voice board	IRQ5	IRQ5
Modem	COM2, IRQ3, 2F8	COM2, IRQ3, 2F8
Serial port	COM1, IRQ4, 3F8	XXXXXXXX

To run the SYSCHK utility:

1. Plug the loopback connector into the COM1 serial port.
2. From the voice mail directory (for example, C:\VMAIL), type SYSCHK and press ENTER. Follow the on-screen instructions.
3. When the system asks if you want to test the modem, press Y.
SYSCHK reports whether or not the modem is configured correctly. If the modem is configured incorrectly, SYSCHK displays the chart shown on the previous page. Note any changes you need to make.
4. Press any key to continue. When the system asks if you want to test the serial port, press Y.
SYSCHK reports whether or not the port is configured correctly. If the port is configured incorrectly, SYSCHK displays the chart shown above. Note any changes you need to make.
5. Press any key to restart the system. Make the required configuration changes and run SYSCHK again.

Configuring the Voice Messaging System

To integrate the voice messaging system with the DBS, you need to set several parameters on the voice messaging system screens.

Application Setup

Application Setup	
Site Information	
Site name	
Contact	Phone
Trunk pilot number	Total trunks answered
Alternate trunk numbers	
Voice mail pilot number	

Figure 12 Application Setup: Site Information screen

1. Go to Application Setup: Site Information (Figure 12). This screen keeps important telephone traffic and contact information in one place.
2. **Specify the Pilot Number.** This is the number subscribers will use to dial the voice messaging system internally. This is also called the *master hunt group number*. Go to the Station pilot number field and type the pilot number (Figure 12).

Note The Station pilot number field must use a single extension number with the Integration Package. It cannot be a range of extensions.

3. Go to Application Setup: Port Settings (Figure 13).

Port	Status	Rings	Schedule	Day Opening ID	Night Opening ID
DEFAULT				205-206	205-206
1	1. Answer only				
2	2. Answer/dial out				

Voice mail extension numbers: 201, 203, 205-206

Figure 13 Application Setup: Port Settings

4. **Enter the Voice Mail Extension Numbers.** In the Port station numbers field, type the extension numbers for the ports connected to the voice messaging system. Specify extensions individually or in a range. The example in Figure 13 shows individual voice mail extensions separated by commas and spaces (201, 203) and a range of extension numbers (205-206). In, the first voice mail port is connected to station 201, the second to station 203, and the third and fourth ports to stations 205 and 206.
5. **Dedicate one port to controlling message waiting indicators.** To avoid system conflicts, set only one port to dial message waiting indicators.

Default Subscriber

PanaVOICE creates new subscribers using the settings defined for the default subscriber. This method saves you time because you do not have to configure each subscriber individually. You can always customize settings for individual subscribers at any time.

Default Subscriber	
Transfer Action <input checked="" type="checkbox"/> Transfer calls to [redacted] Transfer type 1. Queue answer [redacted] <input checked="" type="checkbox"/> Rings	Holding <input type="checkbox"/> Allow holding when line is busy <input checked="" type="radio"/> Touchtone holding <input type="radio"/> Voice-detect holding
Transfer Options (Action) <input checked="" type="checkbox"/> Beep when connected <input type="checkbox"/> Confirm before connecting <input type="checkbox"/> State who the call is for <input checked="" type="radio"/> Don't ask for identification <input type="radio"/> Ask for name <input type="radio"/> Ask for name, save with message <input checked="" type="radio"/> Use transfer options <input type="radio"/> Use screening options	Screening Options <input type="checkbox"/> Beep when connected <input type="checkbox"/> Confirm before connecting <input type="checkbox"/> State who the call is for <input checked="" type="radio"/> Don't ask for identification <input type="radio"/> Ask for name <input type="radio"/> Ask for name, save with message

Figure 14 Subscriber and Guests: Default Subscriber: Call Handling

To configure settings for the default subscriber:

1. Go to Subscriber and Guests: Default Subscriber: Call Handling. This screen is where you set the call handling defaults for your default subscriber (Figure 14).
2. **Configure the Default Call Transfer type.** Go to the Transfer type field and press **←Enter**. Choose Wait for ringback. Type 2 **←Enter** in the Rings field.

Note If an individual subscriber wants to use the voice messaging system's features for call holding, the call transfer options, or message delivery to an internal extension, first finish configuring the default subscriber, then go to step 3 in the *Subscribers and Guests* topic below.

3. Go to Subscribers and Guests: Default Subscriber: Notification (Figure 15).

Default Subscriber Notification						
Screen Menu	Local Connect	Select List	Print Add	Mail	Help	
Subscriber	Call Transfer	Forward and On Key Dial	Action After Greeting	Notification and Delivery	Conversation	Access Options
Default Subscriber						
Message Waiting Indication						
<input checked="" type="checkbox"/> Use message lamp		Message lamp extension <input type="text" value="X"/>				
Message Delivery						
<input type="checkbox"/> Work Phone	From <input type="text" value="XXXXXX"/>	Until <input type="text" value="XXXXXX"/>	<input type="checkbox"/> Rings every <input type="text" value="1"/> minutes	2. Each		
	<input type="checkbox"/> M <input type="checkbox"/> T <input type="checkbox"/> W <input type="checkbox"/> Th <input type="checkbox"/> F <input type="checkbox"/> S <input type="checkbox"/> Su		Batch delay <input type="text" value="1"/> minutes			
<input type="checkbox"/> Home Phone	From <input type="text" value="XXXXXX"/>	Until <input type="text" value="XXXXXX"/>	<input type="checkbox"/> Rings every <input type="text" value="1"/> minutes	1. Batch		
	<input type="checkbox"/> M <input type="checkbox"/> T <input type="checkbox"/> W <input type="checkbox"/> Th <input type="checkbox"/> F <input type="checkbox"/> S <input type="checkbox"/> Su		Batch delay <input type="text" value="1"/> minutes			
<input type="checkbox"/> Pager Phone	From <input type="text" value="XXXXXX"/>	Until <input type="text" value="XXXXXX"/>	<input type="checkbox"/> Rings every <input type="text" value="1"/> minutes	1. Batch		
	<input type="checkbox"/> M <input type="checkbox"/> T <input type="checkbox"/> W <input type="checkbox"/> Th <input type="checkbox"/> F <input type="checkbox"/> S <input type="checkbox"/> Su		Batch delay <input type="text" value="1"/> minutes			
<input type="checkbox"/> Spare Phone	From <input type="text" value="XXXXXX"/>	Until <input type="text" value="XXXXXX"/>	<input type="checkbox"/> Rings every <input type="text" value="1"/> minutes	3. Urgent		
	<input type="checkbox"/> M <input type="checkbox"/> T <input type="checkbox"/> W <input type="checkbox"/> Th <input type="checkbox"/> F <input type="checkbox"/> S <input type="checkbox"/> Su		Batch delay <input type="text" value="1"/> minutes			

Figure 15 Subscribers and Guests: Subscriber Defaults: Notification

4. **Check the Default Message Waiting Indications.** Verify that the Use message waiting indication box is selected. Check that X appears in the Message lamp extension field (Figure 15).
5. **Configure the Default Message Notification.** Typically, the Work Phone extension is configured with a telephone number of X for the subscriber's extension. Leave the Work Phone box cleared (Figure 15). You may select it for individual subscribers on the Subscribers and Guests: Subscribers: Notification screen.

Subscribers and Guests

If you purchased this Integration Package to add to your existing voice messaging system, you must make sure that certain settings are configured correctly for all subscribers who were set up before the Integration Package was added.

To configure settings for individual subscribers:

1. To change an individual subscriber's settings, first go to Subscribers and Guests: Subscribers and select the name of the subscriber from the list.
2. Configure the Subscriber Conversation for subscribers with Panasonic DBS large-display phones. Go to the individual's Subscriber and Guests: Conversation screen and clear the Play new messages hands-free box. Go to the Subscriber and Guests: Permissions screen and clear the Use original version conversation box.

Note Visual menus will **not** appear on the subscriber's display telephone if the Play new messages hands-free box or the Use original version conversation box is checked. However, constant message count will still function properly.

3. Configure the Call Transfer type.
 - If you are using the voice messaging system as an Automated Attendant, go to the Subscribers and Guests: Call Handling screen for **each current subscriber**. For **each subscriber**, go to the Transfer Type field and choose Wait for Ringback. For each current subscriber, type 2 in the Rings field to specify the number of times the voice messaging system rings the line before releasing the call.
 - If you are using the voice messaging system's features for call holding, call transfer options, or message delivery to an internal extension, go to the Subscribers and Guests: Call Handling screen for **each current subscriber**. For **each subscriber**, go to the Transfer Type field and choose Await Answer. If you use Await Answer, you must also set the number of rings that the voice messaging system waits for an answer to be at least **two rings fewer** than the number of rings configured in the Panasonic DBS system for forwarding on ring-no-answer. **We recommend 3 rings for the voice messaging system and 5 rings for the Panasonic DBS telephone system.**

For individual subscribers using the system's call holding, call transfer or message delivery options, you will need to disable the Panasonic DBS system's call forward on busy. For details on voice messaging system features and call forwarding, see page 2-37.
4. Go to the Subscribers and Guests: Notification screen.
5. **Check the Message Waiting Indicators.** Make sure that the Use message waiting indication box is selected. Check that X appears in the Message lamp extension field.

Note If the Message lamp extension field is configured with @ and an actual extension number (for example, @251), then the extension's message waiting indicator would be activated for this subscriber. This field overrides the @,X in the Message waiting indicators fields of the Telephone System Setup: Message Integration screen.

6. **Configure Message Notification.** Typically, a subscriber's Work Phone extension is set up with a telephone number of X, to call and deliver messages to his or her extension. For **each current subscriber who wants this feature**, set the number in the Rings field for any internal extension listed in the Message Delivery section to be at least **two rings less** than the number of rings configured in the Panasonic DBS telephone system for forwarding on ring-no-answer. **We recommend 3 rings for the voice messaging system and 5 rings for the Panasonic DBS.** This lets the voice messaging system cancel a Message Delivery call to an internal extension if the extension is ring-no-answer. For each message delivery telephone number and schedule to be activated, verify that the Work Phone extension is selected.

Note You must disable call forwarding on busy in the Panasonic DBS system to use this feature.

Telephone System Setup

Telephone System Setup		Integration Options		Message Waiting and Call Holding		Call Progress	
Telephone System Programming Help		Reset		Save		DEFAULTS	
Outdial access [9]						DEFAULTS DEFAULTS	
Transfer Settings							
Transfer initiate	[6.X]	Recall	[*]				
Connect	[0]	Busy recall	[*]				
Incoming Call Settings							
Answer on ring low	[4]	Off-hook delay (cs)	[25]				
Ring-on time (cs)	[20]	Ring-off time (cs)	[48]				
Pooled delay (cs)	[450]						
Timings and Delays							
TT (cs) Prompt	[4]	Msg	[4]	Record	[7]	Release on LCR	<input type="checkbox"/>
Dialout pause (cs) comm.	[100]	Hookflash (cs) ampersand	[50]				
Dialout pause (cs) semi-colon	[300]	Hookflash (cs) percent	[200]				
Dialout DTMF duration (cs)	[10]	DTMF interdigit delay (cs)	[5]				
Dialtone delay (cs)	[100]						

Figure 16 Telephone System Setup: Telephone System Integration

1. Go to Telephone System Setup: Telephone System Integration (Figure 16).
2. **Initialize the telephone system parameters.** Choose the Select button and type PAN in the field where you are prompted to enter the first letters of the telephone system. Press **[Enter]**.
3. If you are using the D/42-PA digital voice board, choose Panasonic DBS/API-DEC. If you are using an analog board, choose Panasonic DBS/API-AEC. Choose Yes when asked whether you want to initialize all telephone system parameters.
4. Release on LCR ? is set to No.
5. Go to the Banner screen and choose Shut Down. If prompted, type a System Manager ID **[Enter]**. Then choose the Begin System Shutdown button.
6. At the DOS prompt, press **[Ctrl]-[Alt]-[Del]** to restart the voice messaging system. Sign in to the system.
7. Go back to Telephone System Setup: Telephone System Integration (Figure 16).
8. Note that on this screen the voice messaging system automatically sets up the following fields for OAI integration. **Do not change or delete the settings shown in Figure 16 for these fields:**

Transfer Initiate. The sequence the voice messaging system dials to put an unknown caller on hold and ring an extension.

Recall. The sequence the voice messaging system dials to return to the unknown caller if an extension does not answer.

Busy Recall. The sequence the voice messaging system dials to return to the unknown caller if an extension is busy.

9. Go to Telephone System Setup: Integration Options (Figure 17).
10. Note that the voice messaging system automatically enables the OAI integration through the Integration option string field which is located at the bottom of the Telephone System Setup: Integration Options screen.

Note also that the voice messaging system automatically enables dialtone detection.

Telephone System Setup		Integration Options		Message Waiting and Call Holding		Call Progress	
Back		Forward		PANASONIC DCS w/DEC		PANASONIC PANDBS0	
Subscriber Access Options <input type="radio"/> Easy Message Access and auto subscriber-to-subscriber messaging <input checked="" type="radio"/> Easy Message Access only <input type="radio"/> Use neither				General Tone Detection Options <input checked="" type="checkbox"/> Enable general tone detection Delay to detect tone: [] seconds			
Other Options <input checked="" type="checkbox"/> Pause before opening greeting (secs): [] <input type="checkbox"/> Confirm return sequence = [] <input type="checkbox"/> Override outdial length default / Digits: []				Trunk Mapping Trunk numbers [] thru [] route to ID [] Trunk numbers [] thru [] route to ID [] Trunk numbers [] thru [] route to ID [] Trunk numbers [] thru [] route to ID []			
Edit Integration Option String: RDNM=1 DT DT8=1 DT9=1 F2							

Figure 17 Telephone System Setup: Integration Options

11. **Trunk mapping option.** If desired, configure the system to route trunk calls to specific message boxes. Trunks must be programmed to ring directly to the voice messaging system ports to use this feature. (Otherwise, the trunk identification codes may not be sent to the voice messaging system.)

Note No check is made on the validity of the System ID specified when you enter it on the voice messaging system screen. If an invalid System ID is specified for a given trunk, the system answers with the opening greeting.

Go to Telephone System Setup: Integration Options. In the fields under the Trunk Mapping section, type the trunk numbers and the System ID to which the trunk(s) should route (←Enter). For example, in calls on trunks 1 through 5, route to box number 700.

Note that the entries you make in the Trunk Mapping section display in the Integration Option String field in the format TMn-m=ID, where n is the first trunk number in

a group, m is the last trunk number in the group, and ID is the System ID which will receive calls from that trunk group. For example, TM1-5 = 700 displays to show that calls on trunks 1 through 5 route to box number 700.

To specify over five trunk mapping options, go to the Edit Integration Option String field . On the Edit integration option string screen, place the cursor at the end of all existing codes and type the code for the additional trunk mapping option . Use the format TMn-m=iD. For example, specifying TM22-26=206 would route calls on trunks 22 through 26 to box number 206.

12. **Least cost routing (LCR).** This feature works as usual with the Panasonic DBS telephone system, but the Integration Package cannot use it. You must disable LCR for the voice messaging system ports. Go to Telephone System Setup: Telephone System Integration (Figure 16). Type the trunk group access code in the Outdial access field .

How to Turn Visual Menus On or Off

Occasionally, you may want to turn off the visual menu feature for display telephones. You may turn it off for individual subscribers on their subscriber screens. Do this with either or both of the features below:

- **Hands-free** controls whether a subscriber uses hands-free message retrieval.
- **Original Version Conversation** controls whether a subscriber hears the traditional conversation.

To turn off the visual menu feature for a subscriber:

1. Check with the subscriber to determine which method to use to turn off the visual menus.
2. If you are using the hands-free method, go to Subscriber and Guests: Conversation **for the individual subscriber** and select the box next to Play new messages hands-free.
3. If you are using the original version conversation method, go to Subscriber and Guests: Permissions **for the individual subscriber** and select the box next to Original version conversation.

To reactivate the visual menu feature for a subscriber, clear the appropriate box depending on which method you used to turn off the visual menu feature.

Mailbox Builder

The Integration Package's mailbox builder feature can automatically build subscriber voice mailboxes on the voice messaging system using information about the extensions programmed in the Panasonic DBS telephone system. This feature saves time and simplifies installation, particularly first-time setup of a Panasonic DBS telephone system and a voice messaging system.

How Mailbox Builder Works

When the mailbox builder feature is started, the voice messaging system checks the programming on the Panasonic DBS telephone system's ports. For each port, the Panasonic DBS telephone system sends an extension number and a station name to the voice messaging system. For example, a port is programmed on the Panasonic DBS telephone system to use extension 101. This port is programmed with the station name "Yale, Hugh." Here is an example of what mailbox builder does with this.

If the port is programmed with...	Mailbox Builder adds a mailbox with...
101 as the extension number	#101 as the System ID, where # is the digit used in the default numbering scheme for Personal IDs 101 as the Extension ID
"Yale Hugh" as the name	Yale Hugh as the spelled name

The voice messaging system uses the defaults entered on the Subscribers and Guests: Subscriber Defaults screen when building a new mailbox for each subscriber.

The process is complete after mailbox builder has checked each DBS port. At the end of the process, the voice messaging system produces the Mailbox Builder Report, which lists the extensions which were added or changed. The report also lists any System IDs for mailboxes that were not added because of a numbering conflict. In addition, the voice messaging system records mailbox builder activities in the Call Log Report (REPLUG).

Note Mailbox Builder adds only subscribers, not guests.

Using Mailbox Builder to Update the Voice Messaging System

Mailbox builder is often run to create mailboxes for a newly installed PanaVOICE system. However, you can also rerun mailbox builder to update the voice messaging system if the programming changes on a telephone system's ports.

Rerunning mailbox builder adds or changes mailboxes depending on how programming has changed for each port. For example, if a port is programmed with a new extension and name, a new mailbox will be created (assuming no system ID conflict exists). If programming has not changed on telephone system ports, mailbox builder will skip the corresponding mailboxes. Running mailbox builder does not delete mailboxes.

If mailbox builder changes a voice mailbox, it changes only the subscriber's spelled name. The recorded name, security code, greeting, or setup options for the mailbox are not changed. If you rerun mailbox builder to apply telephone system port reprogramming of different subscriber names, it is a good idea to review the voice mailboxes afterward and confirm the names appear correctly.

Before Using Mailbox Builder

For mailbox builder to operate properly, you must first indicate which extensions the voice messaging system uses on the telephone system. Mailbox builder will then skip these extensions and not create voice mailboxes based on those extensions. Earlier in the installation, you should have specified the voice mail extension numbers on the Application Setup: Port Settings screen (Figure 13). It is a good idea to check that these numbers are entered correctly.

After Using Mailbox Builder

After you use mailbox builder to add voice mailboxes, you should:

- Review the new voice mailboxes using the Quick Edit feature. If needed, complete the subscribers' spelled names. It is important that the names be correctly and completely spelled, whether the system uses names in the "LASTNAME FIRSTNAME" format or the "FIRSTNAME LASTNAME" format. The format used depends on whether the system is set up to ask callers to enter the first letters of subscribers' last names or first names.
- Tell new subscribers their Personal IDs.

If you did not set up the Subscribers and Guests: Subscriber Defaults page to use the special first-time enrollment conversation for new subscribers, you will need to:

- Check that new subscribers have recorded names. Either remind new subscribers to use their setup options to record a voice name, or record them yourself through a local connection at the console.
- Complete other settings as needed for the new voice mailboxes using the Subscribers and Guests screens for individual subscribers.

Mailbox Builder Uses Telephone System Information

The following describes what the voice messaging system does on receiving information from a Panasonic DBS telephone system port. The system records mailbox builder actions in reports. For details, see *Mailbox Builder Log Report Data* on page 2-70.

Note Mailbox builder uses station names exactly as programmed on the telephone system. It is a good idea to program names as you would like to have them on both systems, whether it is "LASTNAME FIRSTNAME" or "FIRSTNAME LASTNAME."

Information Sent & Mailbox Status	Action
<p>New Extension, No Mailbox The extension number does not conflict with any other System ID on the voice messaging system.</p> <p>There is no corresponding mailbox on the system.</p>	<p>Mailbox Built The voice messaging system adds a subscriber voice mailbox, using the extension number to create the System ID and Extension ID, and the programmed name as the subscriber's spelled name.</p>
<p>Name, but No Extension The port is programmed with a name, but no extension number.</p>	<p>No Mailbox Built The voice messaging system does not add a voice mailbox because there is no extension number to use.</p>
<p>Mailbox Exists, with Different Name There already is a corresponding mailbox on the voice messaging system.</p> <p>The name programmed on the port is different than the subscriber's spelled name.</p>	<p>Mailbox Changed The voice messaging system changes the subscriber's spelled name for the mailbox, and retains any messages, recorded name, security code, greeting, or setup options.</p>
<p>System ID Conflict The extension number conflicts with another System ID on the voice messaging system.</p> <p>There is no corresponding mailbox on the system.</p>	<p>No Mailbox Built The voice messaging system disregards the information received from the Panasonic DBS telephone system about this port, but continues with information about other Panasonic DBS telephone system ports.</p>
<p>Mailbox has Same Extension, Name The extension number does not conflict with any other System ID on the voice messaging system.</p> <p>The name programmed on the port is the same as the subscriber's spelled name on the voice messaging system.</p>	<p>Mailbox Remains As Is The voice messaging system determines there are no changes, so the subscriber mailbox is unaffected.</p>
<p>Invalid Information Sent For example: The Panasonic DBS telephone system sends data in an incorrect format.</p> <p>There is no connection between the systems.</p>	<p>Mailbox Builder Terminates The voice messaging system immediately stops mailbox builder.</p>

Starting Mailbox Builder

Use the following procedure either for the initial installation of the Integration Package, or if the Panasonic DBS telephone system programming has been changed. Use mailbox builder when there is little call traffic on the system.

Note Allow adequate time for mailbox builder to operate. It takes one to two seconds for the voice messaging system to check and receive information from each Panasonic DBS telephone system port. If all of the telephone system's ports are programmed, mailbox builder may take approximately four minutes to operate. If the telephone system includes one or more additional cabinets, allow additional time.

To use mailbox builder:

1. Check that all changes in extensions and subscriber names are complete on the Panasonic DBS telephone system.
2. **It is a good idea to busy out all voice mail ports and transfer calls to the operator.** Mailbox builder may run with the voice messaging system operating as usual. However, busying out voice mail ports reduces the possibility that a currently-enrolled subscriber may be accessing a voice mailbox. If mailbox builder tries to change an existing voice mailbox, the system will prevent it but will record the attempt in the Mailbox Builder Report.
3. Go to Subscribers and Guests and choose Add.
4. From the Add menu, choose Start Mailbox Builder. When the Add Subscribers screen appears, choose Start.
5. It takes one to two seconds for the voice messaging system to check for port information, receive it, then add a voice mailbox. After the voice messaging system checks all telephone system ports, mailbox builder is finished.
6. When Mailbox Builder is complete, Mailbox Builder Report automatically displays. For details regarding this report, see page 2-68.

Note It is a good idea to review the report every time you use the feature.

If mailbox builder terminates prematurely because the serial link stops responding or the telephone system sends invalid information, PanaVOICE adds an error message to the Mailbox Builder report and the Call Log Report (REPLUG).

7. Select Back to return to the Subscribers and Guests screen.
8. Choose the Quick Edit button and select Account from the Quick Edit Menu to review the newly created mailboxes. Check that each subscriber name is satisfactory. The Panasonic DBS telephone system programming sends names of up to 10 characters to the voice messaging system. If needed, complete the name and change any other settings for each subscriber.
9. If you busied out the voice mail ports, reset each one to answer calls.

Note Each time you run Mailbox Builder, the new Mailbox Builder Report (BOXBUILD.LOG) overwrites the previous BOXBUILD.LOG report. If you want to save a Mailbox Builder Report, you must copy the report using a different name before running Mailbox Builder again.

Mailbox Builder Reports

The voice messaging system provides these reports to use with mailbox builder:

- The Mailbox Builder Report
- The Call Log Report

The Mailbox Builder Report

Immediately after mailbox builder finishes or is prematurely terminated, the voice messaging system creates and displays the **Mailbox Builder Report (BOXBUILD.LOG)**. You can copy this report to a disk file or print it to a printer connected to the voice messaging system. The report contains:

- **Mailbox Builder Status**
The top of the report indicates the date and time the process was run, whether the process ran successfully, if there were any conflicting System IDs, or if the process terminated by a serial link error.
- **Mailbox Information**
The body of the report lists each mailbox added, including the Panasonic DBS telephone system port number, the extension number, and the name programmed for that port. If an error occurs when mailbox builder attempted to add a mailbox, the report adds an asterisk (*) next to the mailbox information and adds a line detailing the error (see Sample Mailbox Builder Report below).
- **Mailbox Builder Errors (if applicable)**
The bottom of the report includes an error message if mailbox builder did not run successfully.

The table on page 2-70 provides a detailed description of the report data.

Sample Mailbox Builder Report

MAILBOX BUILDER, LOG FILE FOR 1-Jan-96 6:58pm

Status: Successful. 1 numbering conflict.

PORT 01, EXT# 101, Yale Hugh

Name changed from Briggs, Tom

PORT 02, EXT# 102, Yeoman Mik

PORT 03, EXT# 103, Aaronson C

PORT 04, EXT# 104, Xavier Jay

PORT 05, EXT# 105, Zeller Nel

*PORT 06, EXT# 106, Ying Sue

ID conflicts with Sales Dept ID: 106

PORT 07, EXT# 107, Zaftig Pat

PORT 08, EXT# 108, Zink Jay

Port	Extension #	Name
------	-------------	------

Mailbox Builder Log Report Data
Top of Report: Mailbox Builder Status

Field	Description
Operator ID	The ID entered by the person who turned on the billing log. You can change the Operator ID when you disconnect from the host computer.
Name	The name of the host computer. The name is taken from the remote computer's Phone Book Entry for the host computer.
Description	A 40-character field used for comments. Initially, the description is taken from the remote computer's Phone Book Entry for the host computer. You are asked to edit the description when you disconnect from a host computer. This field is useful for keeping notes about the session.
Telephone Number	The host computer's telephone number. The telephone number is taken from the Phone Book Entry for the host computer. You may edit the telephone number when you disconnect from the host computer.
Direction of the Connection	Whether the remote computer made or received the call. ORIG indicates that the remote computer made the call. RCVD indicates that the remote computer received the call.
Date	The date the call occurred, in MMDDYY format.
Day-of-Week	The day of the week the call occurred, where 1 equals Monday, 2 equals Tuesday, and so on.
Start Time	The time the connection started.
End Time	The time the connection ended.
Elapsed Time	The amount of time the connection lasted.

Mailbox Information

Field Name	Length	Description
Details	74	<p>If there is a change to a mailbox or an error occurs, the report adds a second line of mailbox information consisting of one of the following:</p> <p>Changes to Mailboxes:</p> <p>Name Change. The voice messaging system changed the spelled name on the voice mailbox to match the name programmed for that extension on the Panasonic DBS telephone system.</p> <p>Errors:</p> <p>Possible values are:</p> <p>ID Conflicts with <Entity/System ID>. The voice messaging system attempted to add a mailbox, but could not because the new System ID would conflict with the entity and its System ID. For example, if the existing System ID is for a transaction box, the line in the report includes the transaction box's name and System ID.</p> <p>No extension number programmed for the telephone system port. The voice messaging system attempted to add a mailbox, but could not because the Panasonic DBS telephone system port was not programmed with an extension number. The voice messaging system uses this extension number to create a new mailbox's System ID.</p> <p>Record Locked Error The voice messaging system attempted to change a setting in the subscriber's mailbox because of change(s) to Panasonic DBS telephone system programming, but could not complete it because the mailbox was locked. The system locks a mailbox when the subscriber accesses it.</p>

Bottom of Report: Mailbox Builder Errors - If there is an error that prevents mailbox builder from running successfully, the report adds one of the following error messages.

Field Name	Length	Description
Errors	74	<p>Possible values are:</p> <p>Serial Link Not Responding. The serial link connecting the voice mail and Panasonic DBS telephone systems failed to respond. This is usually due to a loose connection.</p> <p>Telephone System Sending Bad Data Packets. The Panasonic DBS telephone system transmitted bad data packets to the voice messaging system.</p> <p>Terminated by User before Completion. The user manually stopped mailbox builder by pressing (Esc).</p> <p>Voice Mail Database Error. A voice mail database error occurred or the voice messaging system did not have enough memory.</p>

The Call Log Report

The Call Log Report is the standard report of system activity. Mailbox builder adds information to the Call Log Report, so even if you rerun mailbox builder and overwrite a Mailbox Builder Report, you may still obtain basic information for the procedure in the Call Log Report. For details on this report, see the *System Manager's Guide*.

Sample

This sample from the Call Log Report shows mailbox builder entries in bold.

Port, Date, Time	Telephone System Port, System ID Origin, Type of Call, Status of Call	Name of Subscriber or Box
00,"96/01/10","06:57:40",	1,"B","BoxBuild","BoxBuilt", "101	","Yale Hugh"
00,"96/01/10","06:57:41",	2,"B","BoxBuild","BoxBuilt", "102	","Yeoman Mi"
00,"96/01/10","06:57:42",	3,"B","BoxBuild","BoxBuilt", "103	","Aaronson"
00,"96/01/10","06:57:43",	4,"B","BoxBuild","BoxBuilt", "104	","Xavier Ja"
00,"96/01/10","06:57:44",	5,"B","BoxBuild","BoxBuilt", "105	","Zeller Ne"
00,"96/01/10","06:57:45",	6,"B","BoxBuild","BoxBuilt", "106	","Ying Sue"
00,"96/01/10","06:57:46",	7,"B","BoxBuild","BoxBuilt", "107	","Zaftig Pa"
00,"96/01/10","06:57:47",	8,"B","BoxBuild","BoxBuilt", "108	","Zink Jay"
00,"96/01/10","06:57:48",	9,"B","BoxBuild","BoxBuilt", "109	","Morris, P"
00,"96/01/10","06:57:49",	10,"B","BoxBuild","BoxBuilt", "110	","Nguyen Br"
00,"96/01/10","06:57:50",	11,"B","BoxBuild","BoxBuilt", "111	","Fuller Ro"
00,"96/01/10","06:57:51",	12,"B","BoxBuild","BoxBuilt", "112	","Donaldson"
01,"96/01/10","06:59:41",	42,"A","Msgbox","Complete", "156	","Box of St"
07,"96/01/10","06:59:33",	84,"A","Msgbox","Complete", "\$PM	","Public In"
16,"96/01/10","07:01:57",	4,"D",",#16,164", "Complete", "43164	","Yeoman Mi"
06,"96/01/10","07:08:51",	171,"A",",Owner", "Complete", "45198	","Xavier Ja"
05,"96/01/10","07:25:58",	30,"A",",Owner", "Complete", "4178	","Zaftig Pa"
01,"96/01/10","07:28:29",	19,"A",",Msgbox", "Complete", "174	","Box of Ph"
06,"96/01/10","07:28:58",	39,"A",",Owner", "Complete", "43155	","Ying Sue"
18,"96/01/10","07:29:42",	15,"A",",Msgbox", "Complete", "\$1800	","TS - Open"
06,"96/01/10","07:41:22",	98,"A",",Owner", "Complete", "4142	","Zeller Ne"
01,"96/01/10","07:54:29",	9,"C",",Msgbox", "Complete", "158	","Box of Xa"
03,"96/01/10","08:09:13",	12,"A",",Bad ID", "No msg", "62	"," "
01,"96/01/10","08:14:32",	7,"A",",Xfer id", "Complete", "0	","System Op"

Call Log Report Data

Field Name	Length	Description
Port	2	Voice mail system port answering this call.
Date	10	Date of call in YY/MM/DD format.
Time	10	Time of call in HH:MM:SS format.
Length of Call or Telephone System Port	4	Duration of call in seconds or, when Mailbox Builder is run, the number of the Panasonic DBS telephone system port checked for extension number and name.
Origin	3	Origin of call: A - Answered incoming call/Collision B - Mailbox builder operation C - Continued (call restarted) D - Dialed out
Type of Call	8	Possible values are: Owner - Call from a subscriber. Guest - Call from a guest. Int Box - Call for an interview box. Tran Box - Call for a transaction box. Msgbox - Call for a message box. Public - Public call. Xfer op - Transfer to operator. Xfer ID - Operator ID transfer. Remote - Network call. Restart - Voice mail software restarted. Shutdown - Voice mail software stopped. <Telephone #> - Voice mail system placed a call but did not contact anyone, or dialed out to activate a message waiting indication. FAILURE - System failure occurred, fail codes in the next three fields. Complete - Call completed successfully. Transfer - Caller transferred successfully. Bad SC - Subscriber entered an invalid security code. BoxBuild - Mailbox builder run from the voice messaging system. Change - Mailbox builder changed mailbox information for an existing subscriber. ID Conf - Mailbox builder could not add a mailbox because the new System ID based on the extension number from the Panasonic DBS telephone system port conflicts with an existing System ID. Locked - Mailbox builder could not change mailbox information for an existing subscriber because the mailbox was locked. The system locks a mailbox when the subscriber accesses it. No Ext - Mailbox builder could not add a mailbox because the Panasonic DBS telephone system port was not programmed with an extension number.

Field Name	Length	Description
Status of Call	10	Possible values are: Busy - Dial out reached a busy tone. Complete - Call completed successfully. No answer - Dial out resulted in no answer. No connect - Dial resulted in no connection. Intercept - Dial out resulted in intercept tone. Incomplete - Dial out interrupted by local connect. No ID - Dial out resulted in answer but no ID. No msg. - Unknown caller hung up. Error - Error during call or ** pressed. Bad ID - Caller entered an invalid ID. Bad SC - Invalid security code. Locked - Caller ID locked out. BoxBuilt - Mailbox builder added a mailbox for subscriber.
System ID	10	ID of caller (blank if unknown caller or the extension number programmed on the Panasonic DBS telephone system).
Name	9	Name of caller (blank if unknown caller, if transfer to operator, or, for mailbox builder, the name programmed on the Panasonic DBS telephone system).

Reviewing the Mailbox Builder Report or Call Log Report

The system stores the contents of the reports you run in disk files located in the directory containing the voice messaging system software. You can display, copy, or print a report at a later time.

To view a report you have already run:

1. Type **Ctrl-U** and choose Reports.
2. At the Reports Menu, highlight Previous report **Enter**.
3. Specify the output type by selecting Display, Print or Copy to file. If you want to save an existing report using a different file name, use the Copy to file option.
4. Type the file name of the previous report you want to view. System generated report filenames appear in Figure 18.

Report Type	Filename
Mailbox Builder Report	BOXBUILD.LOG
Call Log Report	REPLOG.PRN

Figure 18 Filenames for reports

Warning Each time you run a report, the system uses the same filename for that report type, and **replaces** the last report of the same type. To save information in a particular report, copy it to a file with a different name immediately after the report is run (see step 3 above).

Testing the Integration

Test the following after you have completed all of the installation steps:

- The connection between the telephone system and the voice messaging system
- The wiring of the voice mail ports to the voice messaging system
- Correct operation of the voice messaging system for taking messages

To perform these tests, you will need at least one Panasonic DBS extension in addition to the voice mail ports going to the voice messaging system. Add this extension as a subscriber (with a voice name) in the voice messaging system, using the subscriber name TEST.

To test the integration:

1. Check the Panasonic DBS integration serial link.
2. Call the voice messaging system:
 - If the serial link is active, the main menu appears on the large LCD display telephone.
 - If the serial link is down, you will hear a ring no answer or a fast busy. See Troubleshooting on page 2-80.
3. **Check visual menus.** For this test, use a display telephone. Call the voice messaging system. Check that the main menu appears on the display telephone. Try using voice messaging system functions, like subscriber setup options.
4. **Check automated attendant operation of the voice messaging system.** If you are using the voice messaging system as an automated attendant, call into the system through the primary trunk. Enter an extension number, and check that the transfer is completed correctly.
5. **Check call forwarding operation of the voice messaging system.** Use another telephone and call the forwarded extension as an unknown caller. Check that the voice messaging system plays the correct personal greeting, then leave a message and hang up. Check that the message waiting indication is activated on the forwarded extension.

Training Subscribers

You can make it much easier for subscribers to use new features available with the Integration Package if you provide some brief training and are yourself familiar and comfortable with using these features.

This chapter covers topics you should discuss with subscribers so they will get the best benefit from the Integration Package.

How to Train for Upgrade Installations

For sites using the Integration Package with an existing voice messaging system, part of training subscribers consists of pointing out what features are the same as in the existing system.

What Is the Same

If the Integration Package has been installed at a site that already used the voice messaging system, you should remind subscribers of what existing features are still available with the Integration Package:

- **Standard conversation:** When subscribers use LCD display telephones, they still hear the voice messaging system conversation while using visual menus. At times, the conversation pauses to allow subscribers to choose an option. Subscribers with Panasonic DBS large-display phones will hear additional prompts only when using certain options from visual menus. For details, see page 2-27.
- **Menu mode:** Subscribers using LCD display telephones may still use menu mode keys.
- **Message waiting indications:** Subscribers still have message waiting indications, in addition to the constant message count feature provided through the Integration Package.
- **Security codes:** It is a good idea to remind all subscribers to use a security code. The Integration Package's constant message count lets the subscriber know the number of new and urgent messages. A subscriber's security code protects messages and prevents callers from illegally gaining access. For maximum security, System Managers cannot change or set a subscriber's security code at the console. The system never displays the security code on screen or reads it over the telephone, even to the subscriber. Only the subscriber may set the code, and only by telephone.

If the Integration Package has been installed at a site that already uses the Panasonic DBS display phones, you should remind subscribers that the telephones' user programmable features work properly and are still available, alongside the new features provided through the Integration Package.

How to Train for New Features

Train subscribers about new features available with the Integration Package based on what type of telephone they have.

Analog Telephones (No LCD)

Subscribers with these telephones should learn that they will benefit from a smoother operating connection between the voice messaging system and their telephone system.

Panasonic DBS Small Display Phones

Subscribers with these telephones should learn about the **constant message count** feature, which constantly displays the number of new and urgent messages.

Panasonic DBS Large-Display Phones

Subscribers with these telephones should learn that:

- The **constant message count** feature constantly displays the number of new and urgent messages.
- **Visual menus** on display telephones provide voice mail menu options, in addition to the constant message count. The voice messaging system provides menus corresponding with options from the system's conversation. Subscribers may choose a voice messaging system option from a menu by pressing a corresponding soft key on the telephone.

The diagrams beginning on page 2-32 show the visual menus used with Panasonic DBS large-display phones.

Tips for Subscriber Training

- Conduct training sessions in small groups.
- Set up a "help" message box on the voice messaging system.
- Designate a System Manager as the person subscribers can contact to get help.
- Give subscribers time to become familiar with the new features of the Integration Package.

One Week After Training

After a week of operation, leave a group voice message for all subscribers asking them to report any additional questions or problems. Check messages on a daily basis and promptly answer any questions.

Troubleshooting

This chapter describes procedures to follow if you encounter problems with the Integration Package. If problems persist or if the problem is not described here, contact Technical Support.

Problem	Solution
No communications between the telephone system and the voice messaging system.	<p>Software: Check for the correct voice messaging system software. Exit to the Banner screen and choose the Version button to display version information. Look for OAI, which indicates the Integration Package is installed and enabled.</p>
The voice messaging system does not answer calls.	<p>Check the serial data traffic at the voice messaging system console. Press Alt-8 to display data packets. Look for regular addition of packets to the display. If you see only a 7<ENQ> packet appear every 3 or 4 seconds, continue with the hardware troubleshooting steps below. Press Alt-8 again to turn off the packet display after checking, to avoid pausing or slowing the system.</p> <p>Check that the voice messaging system hunt group is entered correctly on the Application Setup: Site Information screen. Check that station numbers are entered correctly in the Application Setup: Port Settings screens.</p> <p>Hardware: Check that the system key is properly plugged into the parallel port on the voice messaging system computer.</p> <p>Check that the serial link is firmly connected to the COM1 serial port.</p> <p>If you are using a different cable than that supplied with the Integration Package between the voice messaging system and the telephone system, a null modem adapter may be required.</p> <p>Try using a replacement serial link cable to test whether your cable is defective.</p>

Problem	Solution
<p>Callers hear reorder tone when calling the voice messaging system or the voice messaging system does not answer when called.</p>	<p>Check the serial link connections between the voice messaging system and the Panasonic DBS telephone system.</p> <p>Check that the voice messaging system is programmed with the correct integration options. Go to the Telephone System Setup: Integration Options screen. Check the Integration options string for the correct code for the integration option.</p> <p>For the DBS only: Check that the API and DEC cards are correctly installed in the main cabinet of the Panasonic DBS telephone system.</p> <p>For the DBS 824 only: Check that the API and DEC cards are correctly installed.</p> <p>Check that you reset the telephone system after changing programming. You must reset it to activate changes.</p>
<p>Caller hears from the voice messaging system that the subscriber is on the telephone, even though the subscriber is not, and the voice messaging system places the caller on hold. The subscriber uses call holding.</p>	<p>This may result from the DND/ABSENT or FORWARD ALL CALLS setting programmed on the Panasonic DBS telephone system for the extension. A with the Integration Package.</p>
<p>Callers get disconnected.</p>	<p>This may result from the DND/ABSENT setting for the extension. Set Transfer Type to Wait for Ringback and type 2 <input type="button" value="↵ Enter"/> in the Rings field on the Application Setup: Subscriber Defaults: Call Handling screen AND on each subscriber's Call Handling screen. The number of times the voice messaging system rings the line before releasing the call is specified by the 2 in the Rings field.</p>
<p>Callers from outside get camped on an extension.</p>	<p>This results from the DND/ABSENT setting for the extension. Set Transfer Type to Wait for Ringback and type 2 <input type="button" value="↵ Enter"/> in the Rings field on the Application Setup: Subscriber Defaults: Call Handling screen AND on each subscriber's Call Handling screen. The number of times the voice messaging system rings the line before releasing the call is specified by the 2 in the Rings field.</p>

Problem	Solution
Dialouts are not dialing out.	If you are using least cost routing (LCR), go to the Outdial Access field on the Telephone System Setup: Telephone System Integration screen and type the trunk group access code (←Enter). This configuration disables LCR dialouts for the voice messaging system.
Intermittent communications between the telephone system and the voice messaging system.	Check that the serial link cable is firmly connected to the telephone system and the voice messaging system. Try using a replacement serial link cable to test whether your cable is defective.
Message waiting indicator does not work, although constant message count appears.	Go to Application Setup: Site Information. Check the Station pilot number field. The field must use a single extension number with the Integration Package. It cannot be a range of extensions. Try changing the pilot number used by the voice messaging system. Go to Application Setup: Site Information. Go to the Station pilot number field and replace the pilot number with one of the station numbers. Contact Technical Support.
Pager notification not working.	Include 3 or more commas (,) in the number to increase the pause between the telephone number and the pager digits. Each comma represents 2 seconds. For example: 555-1234,,,,555-5678,#,123
Subscriber name is misspelled on the LCD. In some cases, three letters appear that are not necessarily the first three letters of the subscriber's name.	Correct the spelling on the subscriber's Account screen. The misspelling of subscriber names may be introduced through the programming of the telephone system port, rerunning mailbox builder, the subscriber spelling his or her name through setup options, or a combination of these.
Trunk call disconnects when the telephone system transfers it to a busy extension programmed to Forward on Busy to the voice messaging system.	Set Transfer Type to Wait for Ringback and type 2 (←Enter) in the Rings field on the Application Setup: Subscriber Defaults: Call Handling screen AND on each subscriber's Call Handling screen. The number of times the voice messaging system rings the line before releasing the call is specified by the 2 in the Rings field.

Problem	Solution
<p>Trunk call disconnects when the telephone system transfers it to a busy extension programmed to Forward All Calls to the voice messaging system.</p>	<p>Set Transfer Type to Wait for Ringback and type 2 <input type="button" value="↵ Enter"/> in the Rings field on the Application Setup: Subscriber Defaults: Call Handling screen AND on each subscriber's Call Handling screen. The number of times the voice messaging system rings the line before releasing the call is specified by the 2 in the Rings field.</p>
<p>A trunk call transferred to another extension that forwards to the voice messaging system, logs in the caller as the subscriber for the first extension.</p>	<p>Turn off automatic subscriber-to-subscriber messaging. Go to Telephone System Setup: Integration Options. Choose Use easy message access only in the Subscriber Access section.</p>
<p>A trunk call transferred by the operator to the voice messaging system logs in the caller as the subscriber for the extension.</p>	<p>Do one of the following:</p> <p>Use the Transfer to Voice Mail key.</p> <p>The System Manager can change the Extension ID on the subscriber's Account screen so it does not match the actual extension number. Also, change the transfer telephone number to the actual extension number, and change the lamp code to @EXT (for example, for extension 100, change the Extension ID to 3100, the Transfer extension from x to 100, and the Message lamp extension field to @100).</p> <p>The operator can handle transfers to the voice messaging system as follows:</p> <p>Press the Transfer to Voice Mail key, then the Extension ID (or the DSS key), and then disconnect.</p> <p>Place the call on hold, dial the voice messaging system, dial *2# then Extension ID, and then dial 2.</p>
<p>Visual menus do not appear on the subscriber's display telephone.</p>	<p>See Page 2-27 for details regarding Visual Menus.</p>

Refresh Interval for Constant Message Count

The Integration Package allows control of the interval at which the voice messaging system refreshes (updates) the constant message count on LCD display telephones. The refresh interval determines how frequently the voice messaging system checks subscriber mailboxes for new messages, then changes the constant message count as needed on the appropriate subscribers' LCD display telephones. This interval affects the constant message count only. Unless you experience problems with delays with constant message count, you do not need to change this value. The default setting should be satisfactory in most cases. On busy telephone systems, more frequent refresh intervals may slow some system operations. We recommend a shorter interval only for telephone systems with comparatively light traffic.

To change the refresh interval for constant message count:

1. Go to Telephone System Setup: Message Integration.
2. Go to the Message refresh interval field.
3. Type the refresh interval . Use a setting from 4 to 10 seconds.
4. To turn off constant message count for all subscribers, type .

Note	When constant message count is turned off, the subscriber's LCD telephone displays a message count each time the subscriber receives a new message. However, once the LCD clears, the voice messaging system does not update it.
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LCD Display Reference

This chapter documents what the Integration Package displays on the LCDs of the Panasonic DBS large LCD display phones.

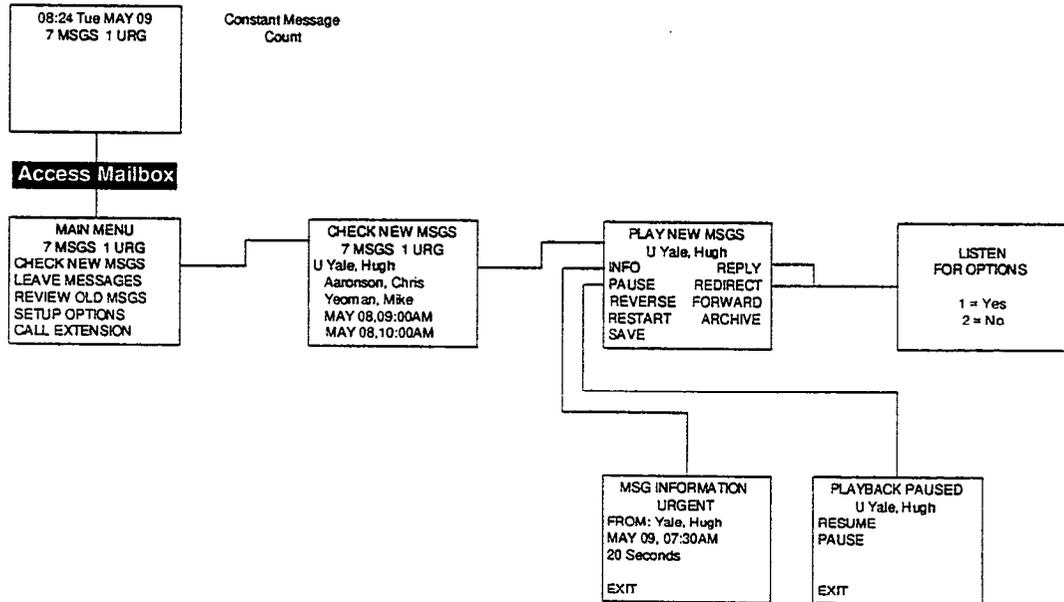


Figure 19 Visual menus for large-display phones when reviewing messages

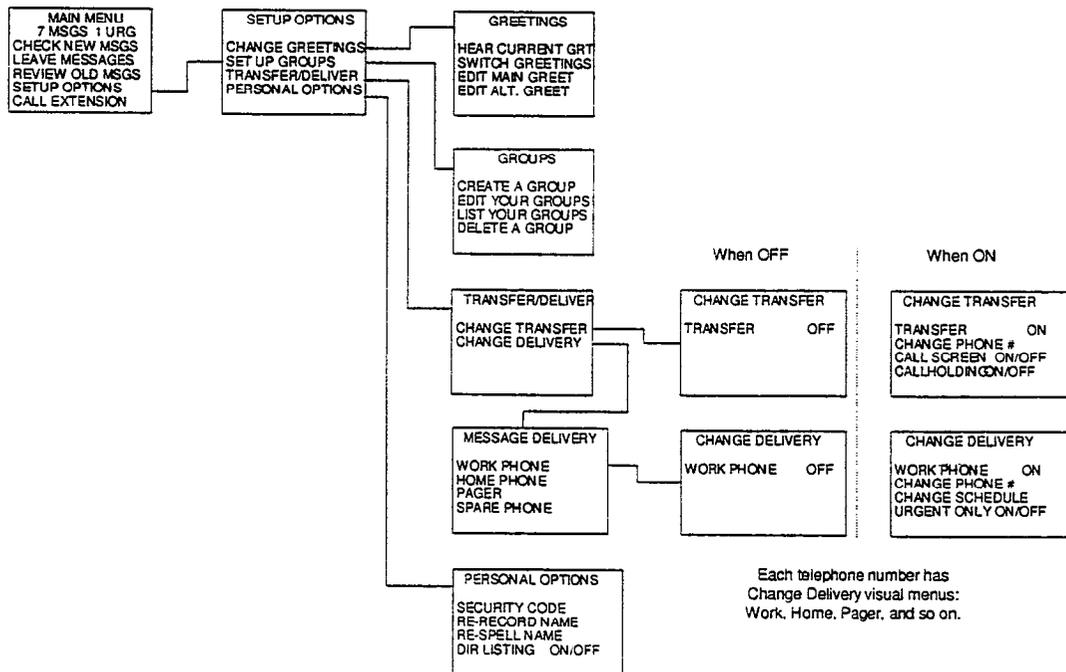


Figure 20 Visual menus used when accessing setup options using large-display phones

Prompts Included with OAI Integration Package

This chapter documents the prompts included with the Panasonic DBS OAI Integration Package. When you install the Integration Package, these prompts are added to the voice messaging system's prompts. For details on re-recording prompts, see the *System Manager's Guide*.

Note These prompts only affect the conversation for subscribers using large LCD display phones through the Panasonic DBS OAI Integration Package. For details, see page 2-34.

Integration Package Prompts

Prompt #	Disk	Prompt Text	Phrase
IN001	7	To play a message, press the soft key. To look through your message list, press the Next or Previous key.	PH_OAI_SelectMessage
IN002	7	Press Pause to continue pausing or Resume to continue playing.	PH_OAI_PlayPause
	Serial port	COM1, IRQ4, 3F8	XXXXXXXX

Setting Up the Application

Using the application worksheets to set up the system

Setting Up the Application is designed to be used in conjunction with the extensive online help and the other documents that accompany PanaVOICE. These materials have been designed to help give you the information and tools you need to assemble the initial information and get the system up and running quickly.

Using *Setting Up the Application* to configure a system involves three sets of tasks:

Planning the system.

Ideally, customers will have a good idea of what they want their system to do. Sometimes, however, you may have to interview them to clarify their needs and decide which features best suit their needs and wants. You can gather most of the information through interviews with your customers. Determine how simple or complex a system your customer wants, identify the desired features, and then integrate each to work effectively.

Completing the worksheets.

After you have identified the features you want to include, complete the worksheets. You can quickly skip those worksheets that do not apply, but if you want a written record of the system that you and your customer agreed upon, review each page and cross off those areas that do not require entries. Included with the worksheet instructions are tips for completing the sheet and a copy of a worksheet filled out with sample data. Blank worksheets for photocopying are in the back of the book. Some worksheets may require more than one copy. For example, if the site needs more than one schedule, you need more than one copy of Worksheet 6: System Schedules.

Transferring the information to the console.

After you have completed the worksheets, type in the information at the console. The worksheets correspond to a specific console screen, so transferring the information from the worksheet is simple. At the top left corner of each worksheet is the name of the console screen where you will enter the information. If you have questions about how to select or enter information in a field or box, refer to the online Help screen for the specific console screen.

Note After you have finished setting up your application, continue the installation by backing up PanaVOICE. For details, see ***Back up the system*** on page 1-11.

Planning the system

Before you configure PanaVOICE at the console, it is crucial that you spend time identifying the needs of the system's users as well as determining which of the system functions you want to use to meet their needs. This will save you considerable time during the initial setup and minimize maintenance problems.

In the following topics, this chapter covers options to consider as you and the customer plan the system:

Identify a System Manager

Visualize the system

Determine which system features you want to use

Determine how PanaVOICE ports will be used

Plan the organization of System IDs

Decide who owns a group or box

Plan opening greeting strategies

Set schedules

Plan message groups

Plan how the system will provide directory assistance

Design transaction boxes

Plan interview boxes

Identify a System Manager

Before you continue with the installation, identify the site's System Manager. The organization may have already selected a System Manager for you to work with. If not, ask your primary site contact to select one using the following criteria.

The System Manager should:

- Be familiar with the staff's voice messaging needs
- Be familiar with the organization's voice messaging needs
- Have basic computer skills
- Be willing and have adequate time to take on the System Manager role

Once you have identified a person to be a System Manager:

- At the voice messaging console, assign System Manager status on the person's Subscriber Summary screen (see *Set up a System Manager*).
- Discuss special system requirements for the site, and plan system architecture.
- Orient the System Manager to PanaVOICE's features and capabilities.
- Answer any questions the System Manager has about using, maintaining, or updating the system.

Determine the primary users of the system

Before setting up the system, it is important to evaluate the needs of the organization's callers. Determine who will be using the system most frequently and how it can be organized to let them accomplish their tasks quickly.

Use the following questions to gain a clearer understanding of how to set up the system:

- **Who will be using the system?**

External callers (outside callers). Do they lack expertise in use of the system? Do callers have touchtone telephones?

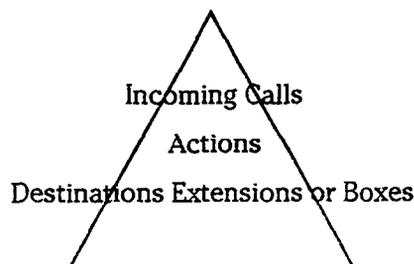
Internal callers (subscribers). Will they use any features of the system besides having a mailbox? Will there be internal users located offsite?

- **Who will answer incoming calls?** Will an operator answer all incoming calls, or will calls be handled by the automated attendant?
- **Can callers route their own calls, or do they need assistance from an operator?** Will you provide directory assistance by the spelled names of subscribers, or by their extension number?
- **What kind of information do you want to provide users?** Do you need audiotext to convey information? Do you want to collect information with an interview box?
- **Do you need to restrict access to portions of the system?** Will trunk lines be dedicated to a specific extension or group of extensions? Do you want to use one-key dialing menus to limit access to specific departments? For example, you can set up an incoming toll-free line to access a one-key dialing menu which offers a limited selection (such as to members of the sales order department), preventing callers from accessing other departments (such as technical support).

Visualize the system

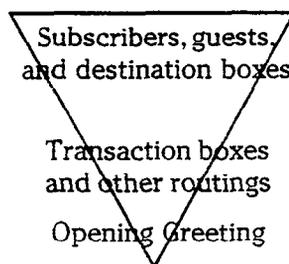
Before you build the system, take some time to envision how incoming calls are handled. Plan the routes for each type of call that the organization receives: voice, fax, after hours calls, and so on.

As you plan, it might be helpful to think of the system as a pyramid, like the figure below. A call arrives, the caller decides which route to take, and the call ends up at a System ID, whether it is an extension, voice mail box, or transaction box.



When you build the system, however, you will build it as an inverted pyramid. First build all of the System IDs of the destination extensions: Personal IDs, message groups, interview boxes, and so on. Build the subscriber System IDs first, as each subscriber, guest, and box needs a unique System ID, and each box must be owned by a subscriber.

Next create one-key dialing menus, transaction boxes, and other boxes that a caller can use to route the call to a destination. Finally, create or complete the opening greeting transaction box and, if necessary, record the greetings.



Determine which system features you want to use

The voice messaging system is made up of the automated attendant, voice mail, and audiotext.

- **Automated attendant.** Acts as a receptionist by handling and routing incoming calls. You set up the automated attendant feature in Application Setup: Port Settings, and configure the opening greeting transaction box in Call Handling: Transaction Boxes.
- **Voice mail.** Allows outside callers to leave recorded messages for subscribers, and subscribers to leave messages for each other. Voice mail can be used both when an operator is on duty to answers calls and when calls are handled by the automated attendant. You set up voice mail for subscribers in Subscribers and Guests: Subscribers.
- **Audiotext.** Uses recorded messages to deliver or collect information 24-hours-a-day. You set up audiotext messages and menus in Call Handling: Transaction Boxes.

Each of the three parts has a variety of features you can use to build a system tailored to the unique needs of each organization.

Determine how PanaVOICE ports will be used

The number of incoming lines and ports is an important factor when planning a voice messaging system. Some of the questions you may ask include:

- **Which trunks will PanaVOICE answer?** Are all trunks dedicated to the system, so that all callers first hear the opening greeting and use it to transfer to the correct subscribers or groups.
- **Will the operator or receptionist answer incoming calls?** You can configure the system to answer all calls, or to answer calls whenever the operator or receptionist is busy with other calls.
- **Are there enough ports to allow call holding?** The port is busy while a caller is holding. Are there enough ports so that all incoming calls can be received? Callers who reach the system when all ports are busy receive a busy signal and cannot access the system to leave or retrieve a message.
- **How many ports will be dedicated to answering incoming calls or dialing out?** Are there adequate ports to ensure that incoming callers can call in while PanaVOICE dials out to activate message waiting indicators and deliver messages?

Plan the organization of System IDs

Each subscriber, guest, group, and box requires a unique System ID. Before you assign System IDs, estimate what kind of, and how many, System IDs you will need. Then design an easy-to-remember numbering scheme that best meets these needs.

- **How many System IDs do you need?** The number of digits in the System ID determine the number of unique IDs available. For example, a 3-digit ID plan yields 900 unique System IDs; a 4-digit ID plan yields 9000; and a 5-digit ID plan allows 90,000. Consider an organization's future growth to ensure that the system has an adequate number of unique System IDs.
- **What is the Operator ID?** Typically, the operator has the System ID of 0. This prevents any other System ID from beginning with a zero.
- **Should you assign a range of IDs to a particular purpose?** For example, you may want to assign 9200 - 9399 for Personal IDs, and 6200 - 6399 for subscribers' guests.
- **Do you want System IDs that callers cannot manually select?** If so, you can assign a System ID beginning with a symbol that is not accessible from a telephone keypad. For example, \$VOICE is assigned to the voice detect box.
- **Can you match Personal IDs with extension numbers?** Subscribers find it much easier to remember their Personal ID if it corresponds to their extension number. For example, assign the Personal ID 9233 to extension 233.

As you create System IDs, keep in mind these specific rules:

- Each System ID must be unique.
- Each System ID can contain up to 10 characters. A voice messaging system can have System IDs of varying length.
- A shorter System ID cannot duplicate the beginning numbers of another, longer System ID. For example, 234 and 2345 are conflicting to the system because the system reads IDs digit by digit until it finds the first match.
- System IDs that contain letters are translated into their corresponding touchtones for lettered keypad maps. For example, *Randy* and *Sandy* both correspond to the System ID of 72639.
- Message group numbers do not conflict with System IDs. Group numbers do not have to be unique.

Decide who owns a group or box

When you create a box or a group, you must assign an owner to it. Once the owner of a transaction box has been assigned, however, the System Manager cannot change who owns it.

Owning a group or box has certain benefits:

- **Message groups.** Owning a group allows telephone access to the group. Only an owner can leave messages to a private group, for instance; and only the owner of an open group can add or remove group members over the telephone. (A System Manager can add or remove open group members at the console.)
- **Transaction boxes.** Messages sent to a transaction box are available only to the owner. Only the owner can record the transaction box greeting over the telephone.

Deleting a subscriber who owns a message group or transaction box has the following additional consequences:

- Private groups are deleted.
- Open groups are transferred to SYSTEM and become system-owned. A System Manager can then add or remove members only at the system console.
- The transaction box is also deleted. A transaction box cannot be reassigned to another subscriber.

If the message group is an open group, or if a box is used for transferring calls, you may want to create a *virtual subscriber* and assign ownership of the group or box to it. That way, a box or group will be unaffected by personnel changes. A virtual subscriber is not a person, but is instead a System ID that can be accessed by one or more people. A virtual subscriber typically has a System ID but not an extension.

For example, you can create a transaction box for the Sales group, which can be maintained by the sales receptionist, regardless of who actually occupies that position. The sales receptionist uses his or her own Personal ID to access personal mailbox messages, but he or she can also use the Personal ID of the virtual subscriber to maintain or access messages left in a particular transaction box. If the receptionist leaves that position, the new receptionist can simply use the virtual subscriber's Personal ID to maintain the transaction box.

Tip Use a virtual subscriber to own all transaction boxes that are automated attendant routing points.

Plan opening greeting strategies

An opening greeting transaction box (\$GREETING) is included when you install a new voice messaging system. All voice mail ports are automatically set to use this opening greeting transaction box. The box is set up with pre-recorded day and night greetings. If the caller presses no touchtones during the greeting, then in Day Mode, the box transfers incoming calls to the operator (0). In Night Mode the box transfers incoming calls to the public interview box (\$PM). You can easily reconfigure settings in the opening greeting transaction box (\$GREETING) to meet your organization's needs.

If you use the automated attendant to answer incoming calls, the opening greeting will be a caller's first contact with the organization. Therefore, it is important to consider callers' needs and limitations when you configure the opening greeting transaction box. Do all of the callers have touchtone telephones? If not, you are limited in the types of routing actions you can provide. Also provide a way to transfer a call to the operator if no touchtones are pressed during the opening greeting.

If the opening greeting contains a one-key dialing menu, limit the choices to four items, and pause after the last option to give the caller time to decide which number to press. When wording the menu, state the destination first, followed by the touchtone to reach it. Organize the menu so that the most frequent destination is listed first. The final menu choice can be an option to repeat the menu or a statement telling where the caller will be routed if no touchtones are pressed.

To avoid trapping a caller in a loop, ensure that each one-key dialing choice in the opening greeting transaction box ends in a valid destination, whether it is an interview box, telephone extension, message box, or the operator. Use a voice detect box to help callers who do not have touchtones or who want to speak with a live operator. After you have created the opening greeting transaction box, call the organization and test each of the opening greeting choices.

Tips The opening greeting should sound professional, since it represents the company to callers. You may want to encourage the organization to hire a professional speaker or announcer to record the day and night greetings.

Set schedules

If you want the system to handle calls differently depending on the day or time, you can use schedules. You set schedules on the Application Setup: Schedules screen. The system lets you define up to four schedules. The schedule determines whether the system operates in Day or Night Mode:

- **Day Mode.** The days and hours when your organization is open or standard telephone service is available. Day Mode hours do not have to be normal daylight hours.
- **Night Mode.** The days or hours when your organization is closed or standard telephone service is unavailable.

You can also specify up to 18 holidays per year, during which the system remains in Night Mode for 24 hours. (If the holiday's date varies, you will need to set it each year.)

You can assign different schedules to specific system ports or transaction boxes. For example, an organization with departments that work different hours could create one schedule for the general office hours (Schedule 1), one for extended customer service hours (Schedule 2), and one for the 24-hour order-taking department (Schedule 3). Calls for the customer service department, for example, are handled by a port that you set up for Schedule 2, while calls for the order-taking department are handled by another port that you set up for Schedule 3.

You can also use a schedule (Schedule 4) that is in a particular mode 24 hours a day, 365 days a year. Because Schedule 4 does not switch automatically between modes, you set the desired mode at the console. When you do, all boxes or ports using Schedule 4 switch to the new mode.

Plan message groups

Message groups let users send the same message to a group of people. PanaVOICE comes with the *ALL system users* group, which automatically includes all subscribers. You can create additional groups as you set up the system. Subscribers can also create groups over the telephone once the system is installed.

You add message groups on the Groups: Message Groups screen. When adding a message group, you need to decide if the group will be:

- **Accessed by spelled name or numbered group system ID.** To reach a spelled name group, subscribers spell the first three letters of the name on the telephone keypad; for numbered groups, subscribers press a special System ID for numbered groups, plus the three-digit group number. Use numbered groups in situations where callers to the organization may not have letters on their keypads.
- **Private or open.** Only the owner of a private group can send messages to the group. Any subscriber can send messages to an open group. Guests cannot be members of groups, except as members of a private group owned by their host.
- **Broadcast or dispatch.** With dispatch distribution, the first member to listen to the message is the only person who receives it. This is useful when a group of subscribers is equally responsible for a task, such as customer support. Each member of a broadcast group, however, receives every message sent to the group. This is useful for announcements that each individual needs to hear.

In most cases, the person who creates a message group owns it, and that person can make changes to it by telephone. However, a System Manager can make changes to any group at the console.

A group can also be owned by PanaVOICE. Groups owned by the system can only be changed by a System Manager, and only at the console.

Tips Instead of setting up a message group, you can leave a message to yourself and then redirect the message to others.

If a message group is owned by a subscriber, that subscriber can edit the group by telephone, without a System Manager's help.

Plan how the system will provide directory assistance

People who call an office may not know the extension number of the person they are trying to reach. In these cases, a caller must find out the extension by speaking to the operator or by looking up the extension in a directory. PanaVOICE offers two kinds of online directory assistance:

- **Automatic directory assistance.** Provides a simple, alphabetic listing of subscribers by name. Use this type of directory assistance for telephone keypads with letters. No special programming is required to use it, and subscribers can set up or change their listing in the directory by telephone.
- **Numeric directory assistance.** Requires special setup and maintenance on the console, but accommodates telephone keypads without letters. The structure is user-defined, flexible, and based on groupings of subscribers. Subscribers cannot change their listing in the numeric directory by phone.

You may use one type of directory assistance or both.

Design transaction boxes

A transaction box is a key building block of the system that you use to set up call routing, create menus, or provide announcements of recorded information. A transaction box can be set up with two different operating modes: Day Mode and Night Mode.

The applications for transaction boxes can be as simple or complex as you wish. Some organizations use transaction boxes to route callers to different departments, or to provide morning, afternoon, and evening greetings. Other organizations use transaction boxes to play detailed audiotext messages or route callers to certain menus or interview boxes.

You set up transaction boxes on the Call Handling: Transaction Boxes screen. Each box has an owner, a name, and a unique System ID. The console screen shows which schedule the box follows, and you can specify the call transfer, greeting, and action after greeting details for the box.

You can set up several transaction boxes and link them with one-key dialing menus, allowing callers to move throughout PanaVOICE without help from an operator or receptionist. Callers can access audiotext information, complete interview boxes, and perform other automated functions no matter what time they call.

Tips When recording menu greetings for outside callers, provide the destination first and then the key.

Plan interview boxes

You can set up interview boxes to solicit information from callers. For example, use the interview box to ask for names and addresses, take sales orders, etc.

Each interview box is owned by a subscriber. The owner receives all messages left in the interview box. Questions must be recorded using a local connection at the console.

The box can ask up to 20 questions. Before setting up an interview box, you should write the text of the questions. For each question, decide the number of seconds a caller's response can last. The questions may include introductory statements or other information.

If you need to collect information that needs to be available to more than one person, use the Public Interview Box. The Public Interview Box is an interview box with messages available to all subscribers with public message access.

Tips Use the first question as a greeting for the interview and then set the reply time to zero.

Callers can press the star (*) touchtone to jump to the next question or the pound (#) key to repeat a question. Include this tip on the interview box greeting.

Provide adequate time for callers to think about and respond to questions.

Setting up the basic system

Once you are done planning what your system will do, you must implement this plan by determining and entering specific parameters for the voice messaging system.

The decisions you make regarding these parameters will ensure that your voice messaging system is set up to meet your site's individual needs.

In this chapter, you will find information and worksheets to help you:

Set up the telephone system hardware parameters

Assemble the site information

Define the port settings

Set up the operator box: System IDs and transfer options

Set up the operator box: greetings and messages

Specify public settings and public fax box settings

Specify the system schedules

Specify general system-wide settings

Set up the telephone system hardware parameters

The first step in preparing the basic system is to set up the parameters that work best with the Panasonic DBS/DBS 824. The parameters are included in PanaVOICE's switch library. Simply select the correct choice from the switch library.

When entering this information on the screens, choose Select from the Telephone System Setup screen and choose the appropriate telephone system. Choose Yes when asked whether you would like to initialize all parameters.

Worksheet #1: Telephone System Setup
Console Screen - Telephone System Setup: Telephone System Integration
<input type="checkbox"/> Panasonic DBS/API-DEC (digital board with integration)
<input type="checkbox"/> Panasonic DBS W/DEC (digital board without integration)
<input type="checkbox"/> Panasonic DBS/API-AEC (analog board with integration)
<input type="checkbox"/> Panasonic DBS W/AEC (analog board without integration)

Assemble the site information

Use this worksheet to collect basic information about the site and the telephone system that may be helpful to a service technician in the future. Although only information in the Station Pilot Number affects how PanaVOICE operates, filling in this worksheet is a good way to keep the information in one place.

Site Name

Write the name of the site where PanaVOICE is installed.

Contact and Phone

Write the name of the contact person at the site, usually the System Manager. Write down the work telephone number of the contact person, including his or her extension number.

Trunk Pilot Number

Write the telephone number outside callers will use to reach PanaVOICE. Leave this field blank if PanaVOICE will only answer forwarded calls.

Total Trunks Answered

Write the number of trunks that PanaVOICE will answer.

Alternate Trunk Numbers

Write in other published telephone numbers that outside callers will use to reach the system, such as 800 numbers and service numbers.

Voice Mail Pilot Number

Write the extension or telephone number subscribers will use to dial PanaVOICE internally. This is also called the *master hunt group number*.

Worksheet #2: Site Information	
Console Screen - Application Setup: Site Information	
Site name (your company name) The Franklin Shipping Company	
Contact <u>Jonathan Winter</u>	Contact Phone <u>206-555-1000</u>
Trunk pilot number <u>206-555-1000</u>	Total trunks answered <u>4</u>
Alternate trunk numbers	<u>206-555-1001</u>
Voice mail pilot number	<u>71</u>

Define the port settings

For each voice messaging port, you can define how the system answers calls, routes calls, and dials out to notify subscribers of new messages.

Status

Select one of the 9 port status options:

- **Answer Only.** Sets the port to answer incoming calls only.
- **Answer/Dial Out.** Sets the port to answer incoming calls. When there are no incoming calls, the port dials out to activate message waiting indicators and deliver new messages.
- **Answer/Lamps.** Sets the port to answer incoming calls. When there are no incoming calls, the port dials out only to activate message waiting indicators.
- **Answer/Messages.** Sets the port to answer incoming calls. When there are no incoming calls, the port dials out only to deliver new messages.
- **Busy.** Sets the port to remain off-hook when you are testing the port or temporarily have it off line.
- **Dial Out Only.** Sets the port to dial out to activate message waiting indicators and to deliver new messages.
- **Lamps Only.** Sets the port to dial out only to activate message waiting indicators.
- **Messages Only.** Sets the port to dial out only to deliver new messages.
- **DID (n) Digits.** Sets the port to answer direct-inward-dial (DID) calls, where the n represents the number of DID digits expected on the port.

Note To avoid system conflicts, set only one port to dial message waiting indicators.

Rings

Write the number of rings you want each port to wait before answering a call.

Schedule

Write the schedule number each port will use. You define schedules on Worksheet #6.

Day/Night Opening ID

Write the System IDs for the transaction box containing opening greetings to be used during Day Mode and Night Mode for each port. If nothing is entered for a given port, the default value will be used.

Special Options

Select any special options for each port.

Port Station Numbers

Write all the telephone system's extension numbers that are connected to PanaVOICE ports. Specify extensions individually or in a range.

Tips Incoming calls are handled more quickly if you set up the least busy port to activate message waiting indicators or for message delivery. Typically, this is the highest numbered port on PanaVOICE.

Worksheet #3 Port Settings						
Console Screen - Application Setup: Port Settings						
Port	Status	Rings	Schedule	Day Opening ID	Night Opening ID	Special Options
Default				\$GREETING	\$GREETING	
1	1. Answer only	1	1			4. None
2	1. Answer only	1	1			4. None
3	2. Answer/dial out	1	1			4. None
4	2. Answer/dial out	1	1			4. None
Voice mail extension numbers: <u>201, 203, 205-206</u>						
Status (choose one per port): 1. Answer only 2. Answer/dial out 3. Answer/lamps 4. Answer/messages 5. Busy 6. Dial out only 7. Lamps only 8. Messages only 9 - 18. DID n digits (n is a number between 1 and 10)				Special Options (choose one per port): 1. Digit-Trap 2. Forwarded calls 3. Both 4. None		

Set up the operator box: System IDs and transfer options

During your normal business hours, it is important that callers have easy access to an operator. Use the operator box to transfer calls to the operator and handle calls when the operator is not available.

Operator System Information

Write the System ID and Voice Name for the operator.

Alternate Operators for Ports

You can route callers who press 0 (or the System ID used for the operator, if different than 0) to different operators depending on which system port received the call. To indicate these alternate operators, use the format P=n, where P is the number of the port assigned to the alternate operator and n is the system ID of the alternate operator's box.

Day/Night Availability and Extension

Indicate whether an operator will be available to answer calls during normal business hours and/or night mode hours. If an operator will be available, write the operator's extension number for both day mode and night mode.

Transfer Type

Select one of the three ways PanaVOICE can transfer a call to the operator.

- **Await Answer.** If the operator's extension is busy or does not answer within the specified number of rings, PanaVOICE plays the operator's greeting and then takes the action specified in the Action After Greeting field.
- **Wait for Ringback.** When the call transfer type is Wait for Ringback, PanaVOICE puts the caller on hold and dials the operator's extension. If the extension rings the number of times specified in the Rings field, PanaVOICE releases the call to the telephone system.
If the extension is busy, PanaVOICE plays the operator greeting and takes the specified action. With the Wait for Ringback call transfer type, the operator **cannot** use call screening features.
- **Release.** When the call transfer type is Release, PanaVOICE puts the caller on hold, dials the extension and then releases the call to the telephone system.

Release is the most common method for transferring to the operator.

Rings

Write the number of rings PanaVOICE will wait for a call to be answered. The minimum number of rings is 3. We recommend that you use 3 or 4 rings. This does not apply to Release call transfers.

Transfer Options

Select the type of transfer options you would like to activate. This does not apply to Release call transfers.

Transfer Introduction

Record what callers will hear before their call is transferred.

Holding

Select whether callers should be able to hold if the operator's extension is busy. To use call holding, you must use the Await Answer or Wait for Ringback call transfer type. Choose the type of call holding you would like to use. There are two types:

- **Touchtone.** Use if callers should press a touchtone to hold.
- **Voice-detect holding.** Use if callers should say "Yes" to hold.

Worksheet #4a: Operator Box		
Console Screen - Application Setup: Operator Box		
System ID <u> 0 </u>	Voice name _____	
Alternate System IDs for Special Operators on each Port <u> 1=131 </u> <u> 2=132 </u>		
Call Transfer	Greeting	Action After Greeting
Day <input checked="" type="checkbox"/> Transfer to <u> 0 </u> Night <input type="checkbox"/> Transfer to _____ Transfer type (choose one): <input checked="" type="checkbox"/> Await answer <input type="checkbox"/> Wait for ringback <input type="checkbox"/> Release Rings <u> 3 </u>	Day [Record Greeting] Night [Record Greeting] Alternate [Record Greeting] <input type="radio"/> Use Day/Night Greeting <input type="radio"/> Use Alternate Greeting	Day [Choose one] Route to ID _____ Night [Choose one] Route to ID _____



Transfer Action	Holding
Day <input checked="" type="checkbox"/> Transfer to <u> 0 </u> Night <input type="checkbox"/> Transfer to <u> 0 </u> Transfer type [Choose one] Rings _____ Transfer Introduction _____	<input checked="" type="checkbox"/> Allow holding when line is busy Holding Type (choose one): <input checked="" type="radio"/> Touchtone holding <input type="radio"/> Voice-detect holding
Transfer Options	
Select any transfer options which apply: <input checked="" type="checkbox"/> Beep when connected <input type="checkbox"/> Confirm before connecting <input type="checkbox"/> State who the call is for	Screening options (choose one) <input type="radio"/> Don't ask for identification <input type="radio"/> Ask for name, save with message

Set up the operator box: greetings and messages

Greeting

Write in the Day, Night, and Alternate greetings for the operator box.

Use Day/Night Greeting or Use Alternate Greeting

Select which greeting you want to use for the operator box. If you choose Day/Night greeting, PanaVOICE will automatically use the Day Greeting or Night Greeting based on the schedule defined for PanaVOICE port which takes the call.

Action After Greeting

Select how you would like the system to handle callers after they listen to the operator box greeting. Choose actions for Day Greeting and Night Greeting.

- **Take message.** The system takes a message for the caller. This message is a public message that can be retrieved by subscribers with public message access.
- **Say good-bye.** The system says "If you need further assistance, press the pound key now. Thank you and good-bye." and then disconnects.
- **Disconnect.** The system disconnects, without saying good-bye.
- **Restart.** The system returns the caller to the opening greeting.
- **Route to ID.** The system routes the caller to another System ID. Indicate the System ID if you choose this option.

Action After Taking Message

Select how you would like the system to handle callers who leave a message for the operator.

Message Options

Indicate any message options you would like to use.

Worksheet #4b: Operator Box		
Console Screen - Application Setup: Operator Box		
Day Greeting _____		
Night Greeting _____		
Alternate Greeting _____		
System ID _____		Voice name _____
Alternate System IDs for Special Operators on each Port		
Call Transfer	Greeting	Action After Greeting
Day <input checked="" type="checkbox"/> Transfer to <u>0</u> Night <input type="checkbox"/> Transfer to _____ Transfer type (choose one): <input checked="" type="checkbox"/> Await answer <input type="checkbox"/> Wait for ringback <input type="checkbox"/> Release Rings <u>3</u>	Day [Record Greeting] Night [Record Greeting] Alternate [Record Greeting] <input checked="" type="radio"/> Use Day/Night Greeting <input type="radio"/> Use Alternate Greeting	Day [Choose one] <input checked="" type="checkbox"/> Take message <input type="checkbox"/> Say good-bye <input type="checkbox"/> Disconnect <input type="checkbox"/> Restart <input type="checkbox"/> Operator <input type="checkbox"/> Route to ID Route to ID _____ Night [Choose one] <input type="checkbox"/> Take message <input type="checkbox"/> Say good-bye <input type="checkbox"/> Disconnect <input type="checkbox"/> Restart <input type="checkbox"/> Operator <input checked="" type="checkbox"/> Route to ID <u>SPM</u>



Action After Greeting	Action After Taking Message
Choose one Day setting and one Night setting: Day (Choose one) Night (Choose one) Transfer Introduction _____ _____ _____	Choose one: <input checked="" type="checkbox"/> Say good-bye <input type="checkbox"/> Disconnect <input type="checkbox"/> Restart <input type="checkbox"/> Operator <input type="checkbox"/> Route to ID Route to ID
Message Options	
Maximum message length <u>90</u> Seconds <input checked="" type="checkbox"/> Caller can edit/review message	Choose one option below <input type="radio"/> All outside caller messages are marked urgent <input checked="" type="radio"/> No outside caller messages are marked urgent <input type="radio"/> Ask caller whether to mark messages urgent

Specify public settings and public fax box settings

Public messages are messages left in the Public Interview Box or the Operator Box. These messages are available only to subscribers who are given access to public messages.

Public Message Hold Time and Archive Time

Write the number of days you would like the system to hold or archive public messages. Hold time is the number of days the system will hold messages that have been heard but not archived.

Public Fax Box

With the Public Fax Box feature, PanaVOICE can detect incoming faxes and route them to a fax machine. The Public Fax Box is quite flexible. For details on the various options available, refer to the *System Manager's Guide*. If you plan to use this feature, complete this portion of the worksheet.

Note For PanaVOICE to recognize incoming fax tones, you must also enter the value CNG in the Startup Options field of the Application Setup: General Settings screen.

Fax ID

Write the System ID for the Public Fax Box. You can choose an ID that allows callers to manually dial the fax machine extension, or an ID that makes it accessible only when a fax machine calls the system or when you route a call through one-key dialing from another box.

PanaVOICE has a default System ID \$_FAXBOX for the Public Fax Box. If the System ID begins with the \$ symbol, callers will not be able to manually dial the fax machine. Thus, the system will only be able to route automatic faxes sent directly from a fax machine or take faxes when you route a call to the fax box through one-key dialing or a "Route to ID" action.

Voice Name

The default for the Public Fax Box's recorded name is "The Public Fax Box". If you want a different recording, write in the name to use.

Transfer to Fax Machine

Select Transfer to Fax Machine and write in the telephone extension that the fax machine is connected to. Select Don't Transfer if you do not want to automatically transfer incoming fax calls to a fax machine.

Transfer Type

Select the transfer method that PanaVOICE will use for the Public Fax Box.

- **Await Answer.** PanaVOICE reminds the caller to press the Start button on the fax machine when he or she hears the fax tone, puts the caller on hold, then dials the fax extension. If the extension is answered within the number of rings specified in the Rings field, PanaVOICE puts the fax through.

If the extension is busy or does not answer within the specified number of rings, and call holding for the fax extension is turned off, PanaVOICE takes the alternate action.

- **Wait for Ringback.** PanaVOICE puts the caller on hold and dials the fax extension. If the extension rings the number of times specified in the Rings field, PanaVOICE releases the call to the telephone system. The number of rings should be set to at least three.

If the fax extension is answered while PanaVOICE is counting rings, PanaVOICE puts the call through. If the extension is busy and call holding for the fax extension is turned off, PanaVOICE takes the alternate action.

- **Release.** PanaVOICE puts the caller on hold, dials the fax extension and then releases the call to the telephone system. With the Release call transfer type, the caller cannot hold for the fax machine.

Number of Rings

Write the number of rings PanaVOICE will wait for a call to be answered. This field does not apply if the transfer type is Release.

Action

Select how you would like the system to handle the caller if the transfer to the fax extension is unsuccessful and call holding is not allowed. The most common choice for manual fax calls is transfer to operator.

- **Say Good-bye.** The system says "If you need further assistance, press the pound key now. Thank you and good-bye," and then disconnects.
- **Disconnect.** The system disconnects, without saying good-bye.
- **Restart.** The system returns the caller to the opening greeting.
- **Operator.** The system transfers the caller to the operator.
- **Route to ID.** The system routes the caller to another System ID. Write down the System ID if you choose this option.

Announcement

PanaVOICE can ask any caller who sends a manual fax to record a voice message (voice annotation) about the fax and who it is for. PanaVOICE can also send a public notice to announce all faxes or only those that are annotated. You control these features by selecting Ask For Voice Annotation or Announce Fax If No Annotation.

Public Fax Box Holding

Select whether callers should be able to hold if the fax extension is busy. To use call holding, you must use the Await Answer or Wait for Ringback call transfer type. Choose the type of call holding you would like to use. There are two types:

- **Touchtone.** Use if callers should press a touchtone to hold.
- **Voice-detect holding.** Use if callers should say "Yes" to hold.

Worksheet #5: Public Settings and Public Fax Box	
Console Screen - Application Setup: Public Settings and Public Fax Box	
Public Messages	
Public Message Hold Time <u> 3 </u> (days)	
Public Message Archive Time <u> 7 </u> (days)	
Public Fax Box	
Fax ID _____ (if different than \$_FAXBOX)	Voice Name _____ Write the voice name you will use if different than "The Public Fax Box."
Transfer	Action
<input checked="" type="checkbox"/> Transfer to fax machine at <u> 345 </u> Transfer type (choose one) <input checked="" type="checkbox"/> Await answer <input type="checkbox"/> Wait for ringback <input type="checkbox"/> Release Rings <u> 3 </u>	Action (choose one): <input type="checkbox"/> Say good-bye <input type="checkbox"/> Disconnect <input type="checkbox"/> Restart <input checked="" type="checkbox"/> Operator <input type="checkbox"/> Route to ID Route to ID _____ <input checked="" type="checkbox"/> Ask for voice annotation <input type="checkbox"/> Announce fax if no annotation
Public Fax Box Holding	
<input checked="" type="checkbox"/> Allow holding when line is busy	Choose one: <input type="radio"/> Touchtone holding <input checked="" type="radio"/> Voice-detect holding

Specify the system schedules

You can define the hours and days that your voice messaging system will operate in Day Mode and Night Mode as well as whether the system will automatically adjust for Daylight Savings Time. You can set up to 4 different schedules to apply to different components of PanaVOICE. One schedule can be set for continual Day Mode or Night Mode.

Daytime Schedule

Write down the organization's regular business hours.

Each working schedule you define for a site can be specified in three different ranges of hours. These ranges (1, 2, 3) define the hours defined as Day Mode. For any hours *not* specified, PanaVOICE operates in Night Mode.

Typically, you specify only one range, such as 8:00am - 5:00pm Monday through Friday. However, if the organization has different weekend hours, you may specify ranges for Saturday and Sunday. In the sample worksheet, the schedule is completed for a business that is open from 9:00am to 8:00pm Monday through Friday; from 10:00am to 5:00pm on Saturday, and 11:00am to 3:00pm on Sunday.

If the organization closes for lunch hour, you can specify two ranges for Day Mode with 8:00am to 12:00pm in range (1) and 1:00pm to 5:00pm in range (2). PanaVOICE will then be in Night Mode from noon to 1:00pm.

Ignore Holidays

If the organization is closed on holidays, you will want PanaVOICE to operate in Night Mode for 24 hours on those days. This is the default setting for PanaVOICE. If you would like Schedule 1 to operate in Night Mode for 24 hours on official holidays, then select No for Ignore Holidays and specify holiday dates in the Holiday section. If you want the system to follow your regular Day and Night schedule on holidays, select Yes for Ignore Holidays and skip the Holidays section of the worksheet.

Schedule 4

Select whether you would like Schedule 4 to stay in Day Mode or Night Mode. The mode will not change unless you change it at the console. This field has no effect on Schedules 1, 2 or 3.

Holidays

Write the dates that you want the system to recognize as holidays. Use MM/DD format. On these dates, PanaVOICE operates in Night Mode for 24 hours. You must update the holiday schedule each year to cover holidays which fall on a different date each year.

Automatically Adjust to Daylight Savings Time?

Select whether you would like PanaVOICE to automatically adjust its internal clock for Daylight Savings Time. If you select No, you may still manually reset the computer's clock twice a year for Daylight Savings Time.

Daylight Savings Start Time, End Time, and Hour Adjustment

Write the dates on which you want the system to start and end Daylight Savings Time. Indicate the hour adjustment to make for Daylight Savings Time.

Worksheet #6: System Schedules	
Console Screen - Application Setup: System Schedules	
Current Day Mode Schedule #1: (Make copies of this worksheet for Schedules #2 and #3)	
Range 1: From <u>8:00</u> am / pm	Until <u>5:00</u> am / pm
M <input checked="" type="checkbox"/> T <input checked="" type="checkbox"/> W <input checked="" type="checkbox"/> Th <input checked="" type="checkbox"/> F <input checked="" type="checkbox"/> S <input type="checkbox"/> Su <input type="checkbox"/>	
Range 2: From <u>10:00</u> am / pm	Until <u>5:00</u> am / pm
M <input type="checkbox"/> T <input type="checkbox"/> W <input type="checkbox"/> Th <input type="checkbox"/> F <input type="checkbox"/> S <input checked="" type="checkbox"/> Su <input type="checkbox"/>	
Range 3: From <u>11:00</u> am / pm	Until <u>3:00</u> am / pm
M <input type="checkbox"/> T <input type="checkbox"/> W <input type="checkbox"/> Th <input type="checkbox"/> F <input type="checkbox"/> S <input type="checkbox"/> Su <input checked="" type="checkbox"/>	
Ignore Holidays? <input type="radio"/> Yes <input checked="" type="radio"/> No	
Schedule 4 <input checked="" type="radio"/> Day <input type="radio"/> Night	
Holidays [24 hour night mode] Use MM/DD format.	
<u>1/1</u> <u>7/4</u> <u>11/24</u> <u>12/25</u> _____	

Automatically adjust to Daylight Savings Time? <input type="radio"/> Yes <input checked="" type="radio"/> No	On now? N/A
Daylight Savings Time starts on <u>04/07</u>	Ends on <u>10/27</u> Hour adjustment <u>1</u>

Specify general system-wide settings

This worksheet helps you gather information about general system settings such as message life, system maintenance schedules, crucial System IDs and recording settings. Although not all fields are discussed here, complete each field that applies to your application.

Maximum message life

Write the maximum number of days you want new messages to be saved before the system automatically deletes them. Write 999 days if you want the system to save messages indefinitely.

Call Report Aging

Write the number of days you want the system to store data about call traffic and system activities.

Daily, Weekly, and Monthly Operating System (OS) Surrender

The OS surrender settings let you schedule when the voice mail will automatically go off-line to run utility programs or back up the system. You must use the Toolkit utility program which comes with PanaVOICE to specify the activities that you want to occur for each schedule.

ID for Alphabetical Directory

Alphabetical directory assistance provides a list of subscriber names and extensions. (An Alphabetical directory is also known as an Automatic Directory.) Outside callers find out a subscriber's extension by spelling the first three letters of the subscriber's name. The default System ID for alphabetical directory assistance is 555. If you will be using a different System ID, write this System ID on the worksheet.

System ID for Numbered Groups

If you plan on using numbered message groups, write the System ID a caller will enter to access these message groups.

Maximum ID Attempts

Identify the number of times a caller is allowed to misdial before the system takes an action. This includes the number of times an outside caller can try entering a valid System ID to route his or her call, and the number of times a subscriber is allowed to try to enter a valid Personal ID.

Route Bad ID Attempts

Identify how the system handles a caller who exceeds the maximum ID attempts. At most sites, the system is set to hang up on callers who misdial the number of times specified. However, the system can also route callers to another System ID for additional help. For example, you could route these callers to the operator.

Worksheet #7: General Settings		
Console Screen - Application Setup: General Settings		
Global Settings		
Maximum message life <u>30</u> days	Call report aging <u>14</u> days	Keypad Map (choose one) <input checked="" type="checkbox"/> Default (Q=7, Z=9) <input type="checkbox"/> QZ on the 0 key <input type="checkbox"/> Numbers only keypad <input type="checkbox"/> Swedish keypad <input type="checkbox"/> QZ on the 1 key

Operating System Settings		
Daily OS surrender at _____	Weekly OS surrender at <u>1:00 am</u> on (choose one) <input type="checkbox"/> Sunday <input type="checkbox"/> Monday <input type="checkbox"/> Tuesday <input type="checkbox"/> Wednesday <input type="checkbox"/> Thursday <input type="checkbox"/> Friday <input checked="" type="checkbox"/> Saturday	Monthly OS surrender at _____ on _____ (day of the month)

System IDs		
ID for Alpha Directory <u>555</u>	<input type="checkbox"/> Auto transfer to extension when only one match	System ID for numbered groups <u>77</u>

Recording Settings		
Maximum screening recording <u>7</u> seconds	Maximum ID attempts <u>3</u>	Route bad ID attempt to <u>697</u>
<input checked="" type="checkbox"/> Beep when recording begins	Time to wait for recording to begin <u>4</u> seconds	Maximum subscriber to subscriber message <u>120</u> seconds
Amount to skip back/forward on rewind/fast-forward <u>4</u> seconds	Pause length to end messages shorter than 30 seconds <u>2</u> seconds	Pause length to end messages longer than 30 seconds <u>3</u> seconds
Disk full warning when <u>20</u> minutes left		

Miscellaneous Settings	
Startup options <u>CNG</u>	Voice error notices to Personal ID(s) <u>9456, 9636</u>

Disk Full Warning

To prevent the system from running out of storage space, the system asks subscribers to delete unnecessary messages when space is getting low. Identify the minimum number of minutes of available message storage space the system requires before asking subscribers to delete unnecessary messages. Most systems set the minimum amount to 15 minutes. You should not decrease this amount. However, you may increase it for larger systems with many subscribers or ports.

Startup Options

Write the code for any special options you would like to apply to the system. Options include:

- **CNG.** Sets the system to recognize incoming fax tones.
- **Fn.** Sets the rate at which the system flushes the call report log. "n" stands for how many lines at a time will be written to the call report log.
- **MK.** Sets the system to pause for additional touchtones before routing calls in a directory assistance menu. MK1 sets the pause at 1 second. MK0 will not let callers enter a System ID during directory assistance menus.
- **OK.** Sets the system to pause a certain number of seconds for additional touchtones before routing the call to a transaction box's one-key dialing menu. OK1 sets the pause at 1 second.
- **^# T51 and ^# T52.** Sets the system to show more detail on message retrieval and dial out functions for troubleshooting.

Voice Error Notices to Personal ID(s)

Write the Personal ID for each person the system should notify when certain system errors occur. For example, if a system error occurs during the disk maintenance process, you can specify that PanaVOICE leave a message for a System Manager.

Adding subscribers, guests, and groups

Before people in your organization can begin using PanaVOICE, you must add subscribers to the system. By first specifying conversation, call handling, notification, and permission settings for the default subscriber and then adding new subscribers based on these default settings, you can quickly create mailboxes for each subscriber. Settings and options can always be customized for an individual subscriber after his or her mailbox is created.

Additionally, guests and message groups can be set up as needed by telephone.

In this chapter, you will find information and worksheets to help you:

Specify the default subscriber Personal ID information

Specify the default subscriber call transfer settings

Specify the default subscriber action settings

Specify default subscriber notification settings

Specify the default subscriber conversation settings

Specify default subscriber access options settings

List the system subscribers

Set up a System Manager

List the system guests

Set up message groups

Specify the default subscriber Personal ID information

The Subscriber Default worksheets help you plan the default settings that will be used to set up each new subscriber.

PanaVOICE makes adding subscribers with standard features quick and easy. All you have to do is fill in the Subscribers and Guests: Subscriber Defaults screens with the settings you want for each subscriber. Then, every new subscriber you add will have the settings you specified on these default screens. You can later change any setting for a particular subscriber who wants settings different from the default.

Personal ID

First, write down the convention you want the system to use when creating Personal IDs for the subscribers.

The system creates a Personal ID for each new subscriber by adding a default number, such as 9, to the beginning of the subscriber's Extension ID. This convention is written as 9X where X stands for the extension number. For example, a new subscriber with extension number 211 would have a Personal ID of 9211.

Using this type of convention for creating Personal IDs does not make mailboxes less secure because a subscriber can always set a security code for his or her mailbox.

Note Although you do not have to base the Personal IDs on extension numbers, this makes it easier for users to remember their Personal ID.

If you want to change the default convention, enter the new convention on the worksheet. For more details about IDs, see the *System Manager's Guide*.

Worksheet #8: Default Subscriber Personal ID	
Console Screen - Subscribers and Guests: Default Subscriber (Summary)	
Name:	Default Subscriber
Personal ID:	_____
	(Write the convention you will use to create Personal IDs if different from the default convention.)

Call Transfer	Greeting and One Key Dialing	Action After Greeting
<input type="checkbox"/> Transfer calls to extension X Type [Choose one] Rings _____		Action [Choose one] Route to ID _____ _____ Save old messages _____ Save archive messages

Notification and Delivery	Conversation	Access Options
<input checked="" type="checkbox"/> Use Message Lamp Current Lamp Status <input checked="" type="radio"/> Off <input type="radio"/> On	<input checked="" type="radio"/> 1 for YES - 2 for NO <input type="radio"/> Menu Mode	<input checked="" type="checkbox"/> First time enrolment

Specify the default subscriber call transfer settings

Select default settings for the way you would like PanaVOICE to handle calls that are routed to a subscriber's message box.

Transfer calls to subscribers?

Select whether you want PanaVOICE to ring calls through to a subscriber's extension or if you want the system to send calls directly to the subscriber's voice mailbox.

PanaVOICE sets a default of X in the Rings Call Through field. The X stands for the subscriber's extension.

Transfer type

Select the call transfer method that will be applied to the default subscriber.

- **Await Answer.** When the call transfer type is Await Answer, PanaVOICE puts the caller on hold and dials the extension. If the extension is answered within the number of rings specified in the Rings field, PanaVOICE puts the caller through.

If the extension is busy or does not answer within the specified number of rings, PanaVOICE plays the extension's greeting and then takes an action (usually "take message").

- **Wait for Ringback.** When the call transfer type is Wait for Ringback, PanaVOICE puts the caller on hold and dials the extension. If the extension rings the number of times specified in the Rings field, PanaVOICE releases the call to the telephone system.

If the extension is busy, PanaVOICE plays the extension's greeting and takes the specified action. With the Wait for Ringback call transfer type, the subscriber **cannot** use call screening features.

- **Release.** When the call transfer type is Release, PanaVOICE puts the caller on hold, dials the extension and then releases the call to the telephone system. With the Release call transfer type, the subscriber **cannot** use the call holding or call screening features.

Rings

Write the number of rings PanaVOICE will wait for a call to be answered. This does not apply to Release call transfers.

Holding

Select whether callers should be able to hold if the extension is busy. To use call holding, you must use the Await Answer or Wait for Ringback call transfer type. Choose the type of call holding you would like to use. There are two types:

- **Touchtone.** Use if callers should press a touchtone to hold.
- **Voice-detect holding.** Use if callers should say "Yes" to hold.

Transfer Options and Screening Options

Choose the call transfer options which you would like as defaults for new subscribers. These apply only to subscribers with the Await Answer call transfer type.

Each subscriber can have two sets of call transfer options and the subscriber can switch between these two transfer option sets by telephone. There are typical combinations of options. For example, if two subscribers share the same telephone extension, you could use the "State who the call is for" and "Confirm before connecting" options.

Choose call transfer options for both sets and specify which option set should be active at first for new subscribers.

Tips If you select the option to send calls directly to the voice mail, callers may leave a message in a subscriber's voice mailbox, but they cannot directly reach a subscriber's extension without going through the operator.

Worksheet #9: Default Subscriber Call Transfer	
Console Screen - Subscribers and Guests: Default Subscriber: Call Handling	
Transfer Action	Holding
<input checked="" type="radio"/> Transfer calls through to <u>713</u> <input type="radio"/> Send calls directly to voice mail Transfer type (choose one): <input checked="" type="checkbox"/> Await answer <input type="checkbox"/> Wait for ringback <input type="checkbox"/> Release <u>3</u> Rings	<input checked="" type="checkbox"/> Allow holding when line is busy Holding Type (choose one): <input checked="" type="radio"/> Touchtone holding <input type="radio"/> Voice-detect holding
Transfer Options (Active)	Screening Options
Select any transfer options which apply: <input checked="" type="checkbox"/> Beep when connected <input type="checkbox"/> Confirm before connecting <input type="checkbox"/> State who the call is for Choose one: <input checked="" type="radio"/> Don't ask for identification <input type="radio"/> Ask for name <input type="radio"/> Ask for name, save with message	Select any transfer options which apply: <input type="checkbox"/> Beep when connected <input checked="" type="checkbox"/> Confirm before connecting <input type="checkbox"/> State who the call is for <input type="checkbox"/> Detect dial tone/hang-up calls Choose one: <input type="radio"/> Don't ask for identification <input checked="" type="radio"/> Ask for name <input type="radio"/> Ask for name, save with message
Choose the option which will be active: <input checked="" type="radio"/> Use transfer options <input type="radio"/> Use screening options	

Specify the default subscriber action settings

Action After Greeting

Select how you would like the system to handle callers after they listen to the subscriber's personal greeting. The possible actions are:

- **Take message.** The system takes a message for the subscriber.
- **Say good-bye.** The system says "If you need further assistance, press the pound key now. Thank you and good-bye." and then disconnects.
- **Disconnect.** The system disconnects, without saying good-bye.
- **Restart.** The system returns the caller to the opening greeting.
- **Operator.** The system routes the caller to the operator box.
- **Route to ID.** The system routes the caller to another System ID. Write down the System ID if you choose this option.

Action after Message

Select how you would like the system to handle the caller after he or she has left a message for the subscriber.

Message Options

Indicate any message options you would like to set up for the default subscriber.

Message Life

Write in the number of days the system will save old messages and archived messages. If you enter 0, messages will be saved until midnight on the day they are listened to.

Worksheet #10: Default Subscriber Greeting and Message Settings	
Console Screen - Subscribers and Guests: Default Subscribers: Action After Greeting	
Action after Greeting	Action after Message
Action (choose one): <input checked="" type="checkbox"/> Take message <input type="checkbox"/> Say good-bye <input type="checkbox"/> Disconnect <input type="checkbox"/> Restart <input type="checkbox"/> Operator <input type="checkbox"/> Route to ID Route to ID _____	Action (choose one): <input type="checkbox"/> Say good-bye <input type="checkbox"/> Disconnect <input type="checkbox"/> Restart <input checked="" type="checkbox"/> Operator <input type="checkbox"/> Route to ID Route to ID _____
Message Options	Action after Message
<input checked="" type="checkbox"/> Caller can edit / review message Maximum message length <u>120</u> seconds Choose one: <input type="radio"/> Mark all messages urgent <input type="radio"/> Do not mark messages urgent <input checked="" type="radio"/> Ask to mark messages urgent	Days to save old messages <u>2</u> Days to save archived messages <u>30</u>

Specify default subscriber notification settings

PanaVOICE can notify subscribers when they have messages pending by activating a message waiting indicator such as a lighted lamp or an LCD display at the subscriber's work telephone.

Message Waiting Indication

Select Use Message Lamps if you want to use this feature.

Message lamp extension

Write an X in this box if you want the lamp at the subscriber's extension to light when messages are pending. The X is a default variable which stands for a subscriber's extension.

Message Delivery

PanaVOICE can call a subscriber at up to 4 different telephone numbers to notify him or her of pending messages. You can specify how often and to what phone number the system will deliver messages. However, message delivery is usually set up for individual subscribers rather than for the default subscriber account.

Worksheet #11: Default Subscriber Notification

Console Screen - Subscribers and Guests: Default Subscriber Notification and Delivery

Message Waiting Indication

Use message lamp Message lamp extension X

Message Delivery			
<input type="checkbox"/> Work Phone	From _____	Until _____	_____ Rings every _____ minutes
	<input type="checkbox"/> M <input type="checkbox"/> T <input type="checkbox"/> W <input type="checkbox"/> Th <input type="checkbox"/> F <input type="checkbox"/> S <input type="checkbox"/> Su		Batch delay _____ minutes
<input type="checkbox"/> Home Phone	From _____	Until _____	_____ Rings every _____ minutes
	<input type="checkbox"/> M <input type="checkbox"/> T <input type="checkbox"/> W <input type="checkbox"/> Th <input type="checkbox"/> F <input type="checkbox"/> S <input type="checkbox"/> Su		Batch delay _____ minutes
<input type="checkbox"/> Pager Phone	From _____	Until _____	_____ Rings every _____ minutes
	<input type="checkbox"/> M <input type="checkbox"/> T <input type="checkbox"/> W <input type="checkbox"/> Th <input type="checkbox"/> F <input type="checkbox"/> S <input type="checkbox"/> Su		Batch delay _____ minutes
<input type="checkbox"/> Spare Phone	From _____	Until _____	_____ Rings every _____ minutes
	<input type="checkbox"/> M <input type="checkbox"/> T <input type="checkbox"/> W <input type="checkbox"/> Th <input type="checkbox"/> F <input type="checkbox"/> S <input type="checkbox"/> Su		Batch delay _____ minutes

Message code

(Choose one)

Batch

Urgent

Specify the default subscriber conversation settings

You can define the conversation that subscribers will hear when they call PanaVOICE to send or retrieve messages. You can also determine the type of receipt subscribers will receive for the messages they send.

Conversation Preference

Indicate whether the system will use Yes/No conversation or Menu Mode conversation.

Message Playback

Select any Message Playback options you want. Choose the Play New Message Hands-free option if you want subscribers to be able to hear messages without pressing confirmation touchtones.

Message Addressing

Select whether you want the subscriber to address messages by spelled name or by extension number.

Receipts

Select the type of receipt the subscriber will receive for messages sent. There are three Receipt types:

- **Receipt summary.** The system automatically creates a summary of the messages sent by the subscriber. The summary tells you whether the recipient has heard any or all of your messages, and whether the person left you any messages. It does not tell you which messages were received, nor when they were received.
- **Explicit receipts as requested.** This option allows a subscriber to request a more detailed receipt, which includes the time a message was delivered and read.
- **All messages with explicit receipts.** The system provides the subscriber with detailed receipt information for every message sent.

Worksheet #12: Default Subscriber Conversation

Console Screen - Subscribers and Guests: Default Subscriber: Conversation

Conversation Preference

Choose one:

- 1 for "Yes", 2 for "No" conversation
- Menu mode conversation

Message Playback

Choose any options which apply:

- Play new messages hands-free
- Announce message length

Message Addressing

Choose one:

- By spelled name
- By extension

Receipts Preference

Choose one:

- Receipt summary
- Explicit receipts as requested
- All messages with explicit receipts

Specify default subscriber access options settings

For a default subscriber, you can define particular features such as specific delivery options, public message access, and setup privileges. This worksheet helps you define the settings you would like to apply to your default subscriber.

New Account Setup

To allow subscribers to enroll from their own telephone the first time they call the voice messaging system, select the Enroll When Calling option.

Public Message Access

Select whether subscribers can receive public messages and whether they will be notified when one has been left.

Setup Options

Select which Setup Options subscribers can change by telephone.

Addressing Options

Select the Addressing options you want the default subscriber to have. You can provide more basic voice messaging service by limiting the options you select here.

- Return receipts tell the subscriber explicitly when the recipient heard the message.
- Urgent messages are placed first in a subscriber's message stack.
- Private messages cannot be redirected.
- Future delivery messages are sent at a time the subscriber specifies.
- Redirect lets the subscriber forward messages to others.

Sending Options

Select the type of sending options that you want to apply for the default subscriber.

Miscellaneous Options

Select any miscellaneous options for the default subscriber. Select Use Original Version Conversation to enable the subscriber to hear the system conversation in the following order: (1) check new messages, (2) leave messages, (3) change greetings, (4) review old messages.

Worksheet #13: Default Subscriber Access Options**Console Screen - Subscribers and Guests: Default Subscriber: Access Options**

For the 6 sections below, choose any options which you would like to apply to the default subscriber.

New Account Setup	Public Message Access	Setup Options
<input checked="" type="checkbox"/> Enroll when calling for the first time	<input type="checkbox"/> Receives public messages <input checked="" type="checkbox"/> Notified of public messages	<input type="checkbox"/> Restricted from changing setup <input checked="" type="checkbox"/> Greeting changes allowed <input type="checkbox"/> Call holding changes allowed

Addressing Options	Sending Options	Miscellaneous Options
<input checked="" type="checkbox"/> Return receipt request allowed <input checked="" type="checkbox"/> Urgent messages allowed <input type="checkbox"/> Private messages allowed <input type="checkbox"/> Future delivery allowed <input checked="" type="checkbox"/> Redirection of messages allowed	<input type="checkbox"/> Restrict from sending messages <input checked="" type="checkbox"/> Subscriber messaging allowed <input checked="" type="checkbox"/> Open group messages allowed	<input type="checkbox"/> Use original version conversation <input checked="" type="checkbox"/> List in automatic directory <input type="checkbox"/> Message review allowed

Adding system subscribers

Subscribers must be added to PanaVOICE before the system can take messages for them or transfer calls to them.

There are two different ways to add subscribers to the system: one-by-one and by range.

- **One-by-one.** A System Manager can enroll all the subscribers at the console by entering each subscriber's Extension ID, Personal ID, and spelled name, recording a name, and setting any special options.
- **By range.** A System Manager can add a range of subscriber mailboxes. These mailboxes may have the Enroll When Calling For The First Time option set to On in the Subscribers and Guests: Subscribers: Access Options screen. Subscribers can then enroll in the system from their own telephones. Or if you prefer, you can enter names and record voice names and greetings at the console as part of installation.

Worksheet #14: Subscriber List				
Console Screen - Subscribers and Guests: Subscribers				
Complete this section only if adding by range.				
Range 1	Start _____	Stop _____	Constant Prefix _____	Constant Suffix _____
Range 2	Start _____	Stop _____	Constant Prefix _____	Constant Suffix _____
Range 3	Start _____	Stop _____	Constant Prefix _____	Constant Suffix _____

If adding subscribers one-by-one, complete the subscriber list below. Make copies of this worksheet, if needed.

Extension	Last Name	First and Middle Name	Unlisted?
210	Wood	Pat	<input type="checkbox"/>
211	Wong	Terry	<input type="checkbox"/>
212	Husseine	Sandy	<input type="checkbox"/>
213	El-Armale	Salome	<input type="checkbox"/>
214	Cole	Troy	<input type="checkbox"/>
215	Sato	Kim	<input type="checkbox"/>
216	diDonato	Lee	<input type="checkbox"/>
217	Beaudette	Leslie	<input type="checkbox"/>
218	Hoffe	Jan	<input type="checkbox"/>
219	Olsen-Lee	Taylor	<input type="checkbox"/>
220	Jablinske	Alex	<input type="checkbox"/>
221	Goldberg	Brett	<input checked="" type="checkbox"/>
_____	_____	_____	<input type="checkbox"/>
_____	_____	_____	<input type="checkbox"/>
_____	_____	_____	<input type="checkbox"/>

Before you fill in Worksheet 14, decide which method you would like to use. Then fill out the worksheet accordingly.

Notes Be sure to set up the Default Subscriber before enrolling other subscribers.

The System Manager can also add/delete subscribers by using the System Manager telephone conversation.

Extension ID Ranges

If you decide to add subscribers by range, write down the first and last Extension ID of each range. If you want to add a number before or after each Extension ID specified in the range, write the number(s) in the Constant Prefix or Constant Suffix boxes.

Extension / Last Name / First and Middle Names

Write down the names of the subscribers you want to add to your system, in ascending order of their extension number.

Unlisted

Indicate if any subscribers should **not** be listed in alphabetic directory assistance.

Some subscribers may want to be left out of the directory assistance, so that outside callers cannot find out the subscriber's extension number without asking the operator. If the site uses automatic directory assistance, subscribers can change their automatic directory listing by telephone at any time, by accessing their setup options. If the site uses numeric directory assistance, only a System Manager can add or remove subscribers.

List the system guests

Some subscribers may wish to provide more personal call handling for special clients, contacts, friends, or family. Rather than accessing the system as outside callers, these individuals can be enrolled as guests of a particular subscriber. Each guest receives a Personal ID. The system greets guests by name and gives them immediate access to their host subscriber's voice mailbox.

A guest can leave messages for the host subscriber and receive messages from the host subscriber the same way other subscribers leave two-way messages.

Use this worksheet to list each guest on the system, and the guest's host subscriber.

Host Subscriber

List the name of the subscriber who will host the guest. This is the only subscriber who can leave messages for the guest. This is also the only subscriber who will receive messages from the guest.

Guest Name

Write the guest's name. There is no limit to the number of guests a subscriber may host. If the system uses a lettered keypad, the subscriber can use the first three letters of the guest's last name to leave messages for the guest. Otherwise, the subscriber can use the guest's Personal ID.

Guest Personal ID

Write down the Personal ID the guest will use to access his or her messages from the host subscriber. Like any other System ID, the guest's Personal ID must be unique.

Send Urgent?

Specify whether the guest will be able to send urgent messages to the host subscriber.

Set up message groups

This worksheet helps you plan the message groups created at the console. Make a copy of the worksheet for each message group you plan to add.

Spelled Names or Numbered Names

Indicate whether the message groups on the system will be accessed alphabetically or numerically. If message groups will begin with numbers, also indicate the System ID subscribers press before leaving group messages.

It is best if the System ID is short (two or three digits), to speed the flow of the conversation (the system prompts a subscriber for the System ID each time a subscriber leaves a message).

Note If you decide to use numbered message groups, remember to enter the System ID for numbered groups on the Application Setup: General Settings screen.

Group Owner

Write down the name of the subscriber who will own this message group. Only the owner of the group can change the group by telephone.

Message Group Name

Write the name or 3-digit number of the message group. Remember that subscribers will use the message group's name or number to leave messages for the group.

For sites using spelled name groups, give careful consideration to the names you give open groups. Subscribers use the first three letters of the group name to send messages to it, so the name you choose should be easy to remember. For example, it would be easy to remember that entering A-L-L sends a message to a group containing "all staff". However, it may be more difficult to remember to enter E-M-P for the same group which was named "employees".

For sites using numbered groups, note that a 3-digit group number is not a System ID, so it does not have to be unique.

Note It is best not to use your system's wildcard character (usually 1 or 0) in any group number.

You can have more than one message group with the same spelled name or group number. If this occurs, subscribers choose the correct group by listening to the group's recorded name, just as they do when choosing between subscribers with the same last name.

Private or Open Group?

Indicate whether the message group is private or open. Private groups allow only the group's owner to send a message to the group.

Deliver the message only to the first person to hear it?

Select whether the group will have dispatch distribution. If you leave this box unchecked, every member of the group will receive it.

Voice Name

Write down the recorded name for the group.

Group Members

List the names of the subscribers who will be included in the group. A guest can be a member only of his or her host's private message groups.

Worksheet #16: Message Groups	
Console Screen - Groups: Message Groups	
Copy this form for every Message Group you want to set up.	
Choose One <input type="checkbox"/> Use Spelled Names <input checked="" type="checkbox"/> Use Numbered Message Groups	System ID for numbered message groups <u>77</u> (Fill in System ID only if using numbered message groups. Remember to enter System ID in the Application Setup: General Settings screen.)
Group Owner	<u>Jonathan Winter</u>
Message Group Name	<u>255 Sales</u>
Choose one <input type="radio"/> Private Group <input checked="" type="radio"/> Open Group	
Choose whether you want to use dispatch distribution. <input type="checkbox"/> Dispatch Distribution	
Voice Name	<u>"The Sales Department"</u>
Group Members	<u>Taylor Jablinske</u> _____ <u>Lee diDonato</u> _____ <u>Jan Olsen-Lee</u> _____ <u>Troy Cole</u> _____

Set up a System Manager

After adding subscribers to the system, assign at least one of them System Manager status (see *Identify a System Manager*). This status enables a subscriber to sign in to the system at the console and to access the System Manager Conversation from their voice mailbox.

To assign System Manager status:

1. Go to the Subscriber and Guests Summary screen of the subscriber who has been designated as the System Manager.
2. Under Access Options, select System Manager.
3. Choose Save.

Subscribers and Guests Summary

Screen Menu Local Connect Select List Dnark Edit Add Delete Help

ext: 9636

Name: [Redacted]	Voice name: 0:12
Personal ID: [Redacted]	Security code has not been set.
Extension ID: [Redacted]	New messages 2 = 0:11 Total messages 2 = 0:11

Call Transfer	Greeting and One Key Dialing	Action After Greeting
<input checked="" type="checkbox"/> Transfer calls to extension [Redacted] Type: 3 - Release Rings: [Redacted]	<input checked="" type="radio"/> Use Standard Greeting <input type="radio"/> Use Alternate Greeting	Action: 1 - Take message Route to ID: [Redacted] <input checked="" type="checkbox"/> Save old messages (days) <input type="checkbox"/> Save archive messages (days)

Notification and Delivery	Conversation	Access Options
<input checked="" type="checkbox"/> Use message lamp Current lamp status: <input checked="" type="radio"/> On <input type="radio"/> Off	<input checked="" type="radio"/> 1 for YES - 2 for NO <input type="radio"/> Menu mode	<input type="checkbox"/> First time enrollment <input checked="" type="checkbox"/> System Manager

Owned Groups: [Redacted] Owned Guests: [Redacted]

Figure 21 Assigning System Manager status to a subscriber

Setting up advanced features

To get the most out of the advanced features, you will want to create transaction boxes. If the site is using the automated attendant feature, create an opening greeting transaction box that can provide one-key routing, directory assistance, and a link to an operator or receptionist. You can also use transaction boxes to create a hierarchy or decision tree that routes callers automatically to the correct destination, even if they do not know extension numbers.

Whenever you create a transaction box, it is important to design or map out what you want the box to do, including destination IDs, one-key dialing menus, and what happens when a caller does not press a touchtone.

In this chapter, you will find information and worksheets to help you:

Map transaction box menus and call transfer actions

Set up transaction boxes, part 1

(General settings and Call Transfer options)

Set up transaction boxes, part 2

(Greeting and Action After Greeting options)

Set up interview boxes

Worksheet #17: System and Box Planner																						
Copy this form for each transaction box you want to create.																						
Type of Box	Owner																					
<input checked="" type="checkbox"/> Transaction Box ID <u>\$GREETING</u> <input type="checkbox"/> Interview Box ID _____ <input type="checkbox"/> Voice Detect Box ID _____	<input type="checkbox"/> Virtual Subscriber ID _____ <input checked="" type="checkbox"/> System Manager ID <u>Patty</u> <input type="checkbox"/> Subscriber ID _____																					
Primary Purpose																						
<input checked="" type="checkbox"/> Routing calls <input type="checkbox"/> Message Taking <input type="checkbox"/> Audiotext <input type="checkbox"/> Other																						
<div style="border: 1px solid black; width: 300px; height: 40px; margin: 0 auto;"></div>																						
<p>If the caller presses:</p> <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="text-align: center; width: 33%; border: 1px solid black; padding: 5px;">1</td> <td style="text-align: center; width: 33%; border: 1px solid black; padding: 5px;">2</td> <td style="text-align: center; width: 33%; border: 1px solid black; padding: 5px;">3</td> </tr> <tr> <td style="text-align: center; border: 1px solid black; padding: 5px;">100 Sales Department</td> <td style="text-align: center; border: 1px solid black; padding: 5px;">200 Support Department</td> <td style="text-align: center; border: 1px solid black; padding: 5px;">300 Accounting Department</td> </tr> </table> <p style="margin-left: 20px;">If the caller presses:</p> <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 33%; border: 1px solid black; padding: 2px;">1 Sales rep, x101</td> <td style="width: 33%; border: 1px solid black; padding: 2px;">1 Support rep, x210</td> <td style="width: 33%; border: 1px solid black; padding: 2px;">1 Account rep, x310</td> </tr> <tr> <td style="border: 1px solid black; padding: 2px;">2 Receptionist, x155</td> <td style="border: 1px solid black; padding: 2px;">2 Support rep, x211</td> <td style="border: 1px solid black; padding: 2px;">2 Account rep, x311</td> </tr> <tr> <td style="border: 1px solid black; padding: 2px;">3 Fax machine, x199</td> <td style="border: 1px solid black; padding: 2px;">3 Support rep, x212</td> <td style="border: 1px solid black; padding: 2px;">3 Account rep, x312</td> </tr> <tr> <td style="border: 1px solid black; padding: 2px;">4 Product interview, x144</td> <td></td> <td></td> </tr> <tr> <td style="border: 1px solid black; padding: 2px;">5 Order interview, x123</td> <td></td> <td></td> </tr> </table>		1	2	3	100 Sales Department	200 Support Department	300 Accounting Department	1 Sales rep, x101	1 Support rep, x210	1 Account rep, x310	2 Receptionist, x155	2 Support rep, x211	2 Account rep, x311	3 Fax machine, x199	3 Support rep, x212	3 Account rep, x312	4 Product interview, x144			5 Order interview, x123		
1	2	3																				
100 Sales Department	200 Support Department	300 Accounting Department																				
1 Sales rep, x101	1 Support rep, x210	1 Account rep, x310																				
2 Receptionist, x155	2 Support rep, x211	2 Account rep, x311																				
3 Fax machine, x199	3 Support rep, x212	3 Account rep, x312																				
4 Product interview, x144																						
5 Order interview, x123																						

Map transaction box menus and call transfer actions

Before you create the transaction box—or other advanced call handling devices such as interview and voice detect boxes—decide the purpose of the box and the best way to achieve that purpose.

You can link several boxes to create as complex an application as you want. If you use the automated attendant features to answer incoming calls, you will most likely create several boxes to take advantage of the power the system provides.

For example, the opening greeting for an organization can be a transaction box that uses a one-key dialing menu to route callers to several other transaction boxes. One of those, the Sales Department transaction box, also uses a one-key dialing menu, which allows callers to quickly transfer to a sales representative's extension, a sales receptionist, a fax machine located in the sales department, an interview box that describes new products, or an interview box used for taking sales orders 24 hours a day.

As you design the system, you need to identify and plan each box that you will use. Consider who will be the box owner, which system schedule it follows, if it uses a one-key dialing menu, and what actions you want it to perform. Should it take a message, transfer to another extension, play a message and then disconnect, or route back to the operator?

It helps to have an overall map of how the boxes interact with each other, so that you can see the structure of your advanced call routing at a glance.

Make a copy of Worksheet 17 for each box that routes to others or for which you need to see additional details. The sample on the following page shows one way of mapping the overall incoming call structure of an organization. Complete a copy of Worksheet 17 for each box that you want to create. Then, use Worksheets 18a and 18b to list the specifics for each transaction box, and Worksheet 19 to write the text for each interview box.

Set up transaction boxes, part 1 (General settings and Call Transfer options)

Adding a transaction box requires that you first determine who will own it. After you identify the owner, you need to assign a System ID and a descriptive name. Then you can complete the remainder of the information. Like other system features, you can specify call transfer, greeting, and action after greeting options—at overview and detail levels.

You add transaction boxes on the Call Handling: Transaction Boxes screen. To review and plan which transaction box options you want to set, fill in the appropriate options on Worksheets 18a and 18b. Worksheet 18a contains general transaction box settings and *Call transfer* detail options; Worksheet 18b contains the *Greeting* and *Action after greeting* overview and detail options.

Transaction box information

Specify the box owner, the box System ID and name, and which system-schedule it follows. If the box is used primarily for routing, you may want to assign ownership of the box to a *virtual subscriber*.

Call Transfer overview information

Specify the general call transfer actions that occur when a call is routed to the box:

- **Day.** Select On and type an extension in the box to route a call during Day Mode hours.
- **Night.** Select On and type an extension in the box to route a call during Night Mode hours.
- **Transfer type.** Specify the transfer method that the system uses.
- **Rings.** Specify the number of times PanaVOICE rings the extension before it gives up on the call transfer.

Transfer Details

If you select Transfer Details, you see a detail screen of call transfer options. Specify the actions you want.

- **Intro for transfer.** Write what callers will hear before they are transferred to the transaction box.
- **Transfer Actions.** You can review and change the options you entered in the transfer overview. You can also record a greeting that will play after the call is transferred.
- **Transfer Options.** Choose the transfer options you want. The system will use these options whenever it transfers calls from the transaction box.
- **Holding.** You can choose to allow call holding for the box, and specify if the system listens for touchtones or uses voice-detect to determine if the caller is still holding. (Call holding is unavailable for Release call transfer type.)

Worksheet #18a: Transaction Boxes	
Console Screen - Transaction Boxes: Call Transfer	
Copy this form for every Transaction Box you want to set up.	
Owner of Box	<u>Kim Sato</u>
Transaction Box Name	<u>Product Information Box</u>
Transaction Box System ID	<u>400</u>
Voice name	<u>"The Product Information Box"</u>
Schedule No.	<u>1</u>

Call Transfer	Greeting and One Key Dialing	Action After Greeting
Day: <input type="checkbox"/> Transfer to _____ Night: <input type="checkbox"/> Transfer to _____ Transfer type (choose one): <input checked="" type="checkbox"/> Await answer <input type="checkbox"/> Wait for ringback <input type="checkbox"/> Release Rings <u>3</u>	Day [Record Greeting] Night [Record Greeting] Alternate [Record Greeting] <input type="radio"/> Use Day/Night Greeting <input type="radio"/> Use Alternate Greeting	Day (choose one) Route to ID _____ Night (choose one) Route to ID _____



Transfer Action	Transfer Options
Day: <input type="checkbox"/> Transfer to _____ Night: <input type="checkbox"/> Transfer to _____ Transfer type (choose one): <input checked="" type="checkbox"/> Await answer <input type="checkbox"/> Wait for ringback <input type="checkbox"/> Release Rings <u>3</u> Intro for transfer: _____ _____	Select any transfer options which apply: <input checked="" type="checkbox"/> Beep when connected <input checked="" type="checkbox"/> Confirm before connecting <input type="checkbox"/> State who the call is for Screening options (choose one) <input type="radio"/> Don't ask for identification <input type="radio"/> Ask for name <input type="radio"/> Ask for name, save with message
Holding	
<input checked="" type="checkbox"/> Allow holding when line is busy	Holding Type (choose one): <input type="radio"/> Touchtone holding <input checked="" type="radio"/> Voice-detect holding

Set up transaction boxes, part 2

(Greeting and Action After Greeting options)

Transaction boxes can have greetings for Day and Night Modes, as well as an alternate greeting. The Day/Night Mode greetings alternate according to the associated system schedule; the alternate greeting stays in effect 24-hours a day. Like other boxes, they can also offer one-key dialing menus to quickly route callers to destinations. You specify greeting options in the Greeting area of the Call Handling: Transaction Boxes screen, and in an associated Greeting Details screen.

You can also specify the actions a box performs after the greeting plays. For example, the box can transfer to another System ID during Day Mode hours and take a message and disconnect for calls arriving after normal business hours. You specify these options in the Action After Greeting area of the Call Handling: Transaction Boxes screen, and in an associated Action Details screen.

Write the settings you want for the greeting and subsequent actions on Worksheet 18b. The options include:

Greeting options

Write down the text for the recordings you will use for Day, Night, and Alternate greetings. You can also specify if the box will follow the system schedule or use the Alternate greeting. You can record greetings at the console with a local connection, or the box owner can record greetings over the telephone.

To use one-key dialing menus, complete the One Key Dialing section of the worksheet.

One Key Dialing menu options

If you use a one-key dialing menu, write down the destination System ID next to the touchtone the caller will press. Include the destination and its associated touchtone in the greeting, and pause between options to give callers a chance to decide.

Action After Greeting

Select how you would like the system to handle callers after they listen to the greeting. You can choose different options for Day Mode and Night Mode hours.

If you want to set advanced Action After Greeting options, complete the following sections on the worksheet.

Action after Message

Select how you would like the system to handle callers after they leave a message for the transaction box.

Message Options

Indicate any message options you would like to set up for the transaction box.

Worksheet #18b: Transaction Boxes		
Console Screen - Transaction Boxes: Call Transfer		
Day Greeting <u>Thank you for calling the Product Information Line. For business products press 1; for residential products, press 2; to reach a Product Information Specialist, press 3. Thank you.</u>		
Night Greeting _____		
Alternate Greeting _____		
Call Transfer	Greeting and One Key Dialing	Action After Greeting
Day <input type="checkbox"/> Transfer to _____ Night <input type="checkbox"/> Transfer to _____ Transfer type (choose one): <input checked="" type="checkbox"/> Await answer <input type="checkbox"/> Wait for ringback <input type="checkbox"/> Release Rings <u>3</u>	Day [Record Greeting] Night [Record Greeting] Alternate [Record Greeting] <input checked="" type="radio"/> Use Day/Night Greeting <input type="radio"/> Use Alternate Greeting _____ One Key Dialing 1 _____ 5 _____ 2 _____ 6 _____ 3 _____ 7 _____ 4 _____ 8 _____	Day [Choose one] <input checked="" type="checkbox"/> Take message <input type="checkbox"/> Say good-bye <input type="checkbox"/> Disconnect <input type="checkbox"/> Restart <input type="checkbox"/> Operator <input type="checkbox"/> Route to ID _____ Night [Choose one] <input type="checkbox"/> Take message <input checked="" type="checkbox"/> Say good-bye <input type="checkbox"/> Disconnect <input type="checkbox"/> Restart <input type="checkbox"/> Operator <input type="checkbox"/> Route to ID _____



Action After Greeting	Action After Taking Message
Choose one Day setting and one Night setting: Day <u>Take Message</u> Route to ID _____ Night <u>Say good-bye</u> Route to ID _____	Choose one: <input type="checkbox"/> Say good-bye <input type="checkbox"/> Disconnect <input type="checkbox"/> Restart <input checked="" type="checkbox"/> Operator <input type="checkbox"/> Route to ID _____
Message Options	
Maximum message length <u>120</u> seconds <input checked="" type="checkbox"/> Caller can edit/review message	Choose one option below: <input type="radio"/> All outside caller messages are marked urgent <input type="radio"/> No outside caller messages are marked urgent <input checked="" type="radio"/> Ask caller whether to mark messages urgent

Set up interview boxes

If you want to collect information from callers no matter what time of day they call, set up an interview box. You can create as many interview boxes as you want. Use Worksheet 19 to plan the interview questions, and set up the box on the Interview Boxes screen.

The PanaVOICE system includes one interview box: the Public Interview Box. This special interview box is owned by the system. It can be used to collect messages from callers when no operator is on duty. Messages left in the Public Interview Box are available to all subscribers with public message access.

System ID

Assign a System ID to the interview box you create. Do not change the System ID of the Public Interview Box (\$PM).

Voice Name

Write the voice name for the interview box.

Interview Questions

Write the text for up to 20 interview questions. A "question" can actually be a statement. For example, the first question could be a greeting, introducing the interview, and the last question could thank the caller.

The Public Interview Box comes with six pre-recorded questions; you can change these questions by recording over them.

Reply Time

Specify the maximum length of reply a caller may leave, in seconds. For questions that normally have short replies, such as "What is your phone number?" a reply time of 6 to 10 seconds is usually enough. For each question or statement that does not require a reply, fill in a reply time of zero.

Mark Interview Box Messages Urgent?

Select whether or not PanaVOICE will automatically mark messages left in the interview box as urgent, or whether the system will provide callers with the option to mark messages urgent.

Worksheet #19: Interview Boxes	
Console Screen - Interview Boxes	
Owner of Box	<u>Jan Carlson</u>
Interview Box Name	<u>Interview Box</u>
Interview Box System ID	<u>3456</u>
Voice name	_____

Interview Questions	Reply Time (in seconds)
1. Who is calling, please?	<u>6</u>
2. Whom are you trying to reach?	<u>9</u>
3. What is this in reference to?	<u>9</u>
4. At what number can you be reached?	<u>9</u>
5. What additional message would you like to leave?	<u>45</u>
6.	_____
7.	_____
8.	_____
9.	_____
10.	_____
11.	_____
12.	_____
13.	_____
14.	_____
15.	_____
16.	_____
17.	_____
18.	_____
19.	_____
20.	_____

Message Options	
Mark Interview box messages urgent? (choose one)	Action after completing questions (choose one)
<input checked="" type="radio"/> All	<input checked="" type="checkbox"/> Say good-bye
<input type="radio"/> None	<input type="checkbox"/> Disconnect
<input type="radio"/> Ask	<input type="checkbox"/> Restart
	<input type="checkbox"/> Operator
	<input type="checkbox"/> Route to ID _____

**Installing and using
Remote Maintenance**



Remote Maintenance overview

Remote Maintenance lets you use an off-site computer and modem to control a customer's voice messaging system, monitor its operation, and transfer files back and forth as needed. Remote Maintenance allows you to solve problems on a voice mail computer without visiting a customer's site.

The host and remote computers

The off-site computer controlling PanaVOICE is called the **remote computer**. The computer running the voice mail at the customer site is called the **host computer**. As the term implies, the host computer allows the remote computer to "visit" and use the host computer's facilities. Figure 22 shows how the remote and host computers are connected.

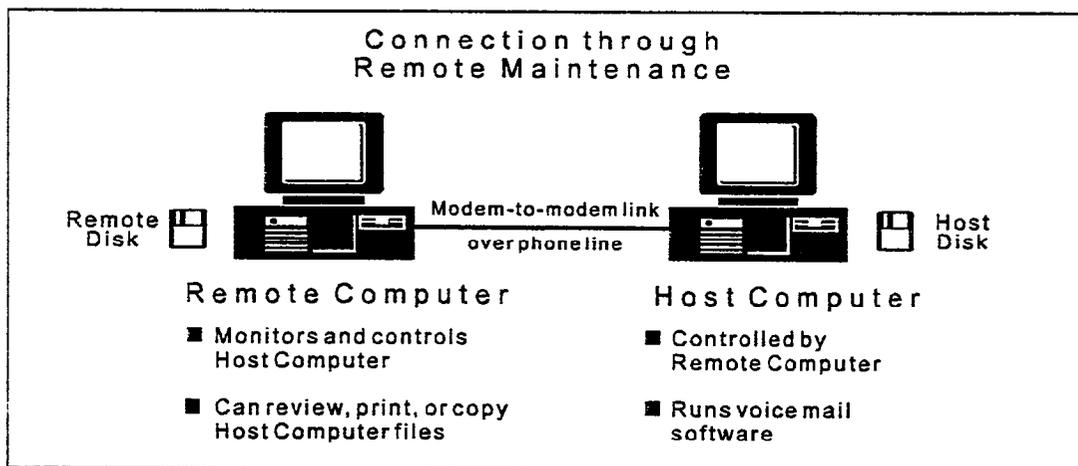


Figure 22 The connection between the host and remote computers

When you make a connection between the two computers, the remote computer's screen reflects any on-screen changes for the host computer. In addition, the keyboard on the remote computer can remotely control the host computer. Keystrokes from the host computer's keyboard, however, affect only the host computer, **not** the remote computer.

Two disks for Remote Maintenance

The PanaVOICE system already has the **host** version of the Remote Maintenance software installed on it. The **remote** version of the software must be purchased separately. See your Panasonic Representative for details.

Note A host computer can run the host version of Remote Maintenance and the voice mail software at the same time. However, you should **not** install the remote version of Remote Maintenance on any computer that is also used for voice mail.

Storing phone numbers, names, and modem settings

Each computer that has Remote Maintenance installed has a Remote Maintenance Phone Book. This online Phone Book contains the settings for that particular computer's COM port, modem, login, and password. On remote computers, the Phone Book also contains the name, telephone number, and other information necessary to complete a connection to each host computer it is set up to contact.

What you need for each computer

The following items are required for each computer before you can make a connection:

- A Hayes-compatible modem, 14,400 baud or faster
- A telephone line for the modem
- The Remote Maintenance software

Note A host computer can run the host version of the Remote Maintenance and the voice mail software at the same time. However, you should not install the remote version of Remote Maintenance on any computer that is also used for voice mail.

Note Panasonic does not support Remote Maintenance for use with anything other than a Hayes-compatible modem, 14,400 baud or faster, which is supplied with PanaVOICE.

Where to Start

Installing and using Remote Maintenance explains how to install or update Remote Maintenance software on the host and remote computers. It also explains how to use the software to perform system maintenance and transfer files.

You will need to perform these tasks:

- Set up the Remote Maintenance software on the host computer. The modem and host version of the Remote Maintenance software are already installed on the host computer.
- Install a modem on the remote computer.
- Install and set up the Remote Maintenance software on the remote computer.

Set up the host software

The host software is already installed and configured on the host computer. Follow these steps if you want to change any of the default settings.

To set up the host software:

1. At the DOS prompt in the directory used by PanaVOICE, type CD HOST to go to the directory for the Remote Maintenance software.
2. Type PHONE to run the host Remote Maintenance Phone Book Setup program. The Phone Book Menu with a Phone Book directory appears (Figure 23).

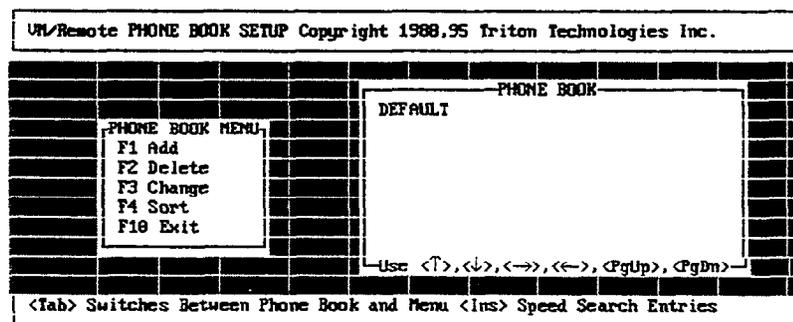


Figure 23 Phone Book menu for the host version of Remote Maintenance

3. Use the arrow keys to select the DEFAULT Phone Book entry.
4. Press to select the Change option. The Phone Book Entry Screen appears (Figure 24). The NAME field should read DEFAULT. If this screen does not appear, press to return to the Phone Book menu. Repeat steps 3 and 4.

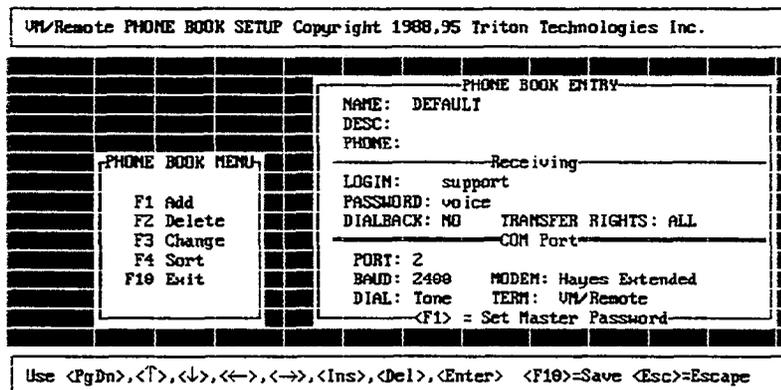


Figure 24 Default Phone Book entry for the host version of Remote Maintenance

5. Use the down arrow to move the cursor to LOGIN. If you want to use a login name other than the default login name, type it in and press .

6. If you want to use a password other than the default, type it in and press **←Enter**.

Note The login and password are case sensitive. They must be typed exactly the same on the host and the remote versions of the software.

7. Press **PgDn** to move the cursor to the COM Port section.
8. Look at the PORT field. The number should be the same as the COM port you specified during the installation procedure (for example, 2 for COM2). If the number is incorrect, press the **P** key to change the value until it shows the correct number.
9. Look at BAUD. The number in this field should be 19,200. Remote Maintenance software uses this higher baud rate for 14,400 modems to provide higher throughput whenever possible. If you are using a 14,400 baud modem, you do not need to adjust the field and should proceed to the next step.

If you are using a modem of a different speed than 14,400 (for example, 28,800 baud), adjust this number by repeatedly pressing the **B** key until you display the modem's speed.
10. Look at the MODEM field to the right of the BAUD field. Press **M** to see a list of supported modems (Figure 25).
11. Use the **PgDn** and **PgUp** keys to view the entire list. Press the arrow keys to highlight the modem's brand and press **←Enter**. If you do not see your modem in the list, and your modem is 100% Hayes compatible, select Hayes Extended.
12. Press **F10** to save your changes and return to the Phone Book Menu.

Note To avoid losing your changes, do not press **Esc** to exit the Phone Book Entry Screen.

13. Press **F10** again to return to the DOS prompt.
14. Restart the computer by pressing **Ctrl-Alt-Del**.

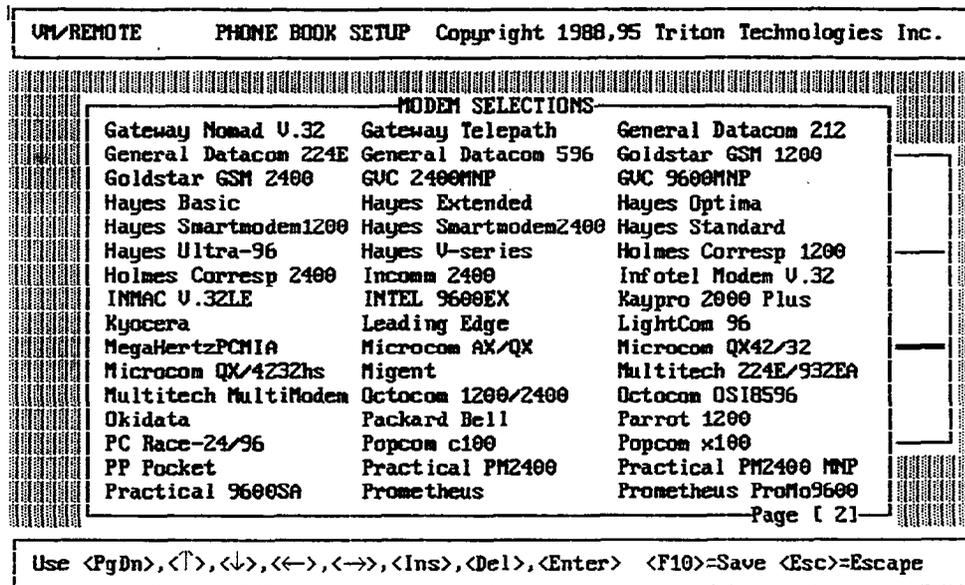


Figure 25 List of supported modems

Checking that the host software is loading correctly

To check that the host version of the remote software is loaded successfully, restart the computer by pressing (Ctrl-Alt-Del). The message Please wait 20 seconds for remote to load will display. If the host software is installed correctly, this message will be followed by the words Wait Dial-in Set, which appear briefly at the bottom of the screen. If the words Unsuccessful Wait Dial-in Set appear instead, the host software is not installed correctly. Refer to *Problems with the host version* on page 4-185 to troubleshoot the problem.

Other than the slight delay which occurs while the host software loads, there should be no other visible effect on the day-to-day operation of the host computer after installing the Remote Maintenance software.

Solving host software problems

If either the modem or Remote Maintenance has been installed improperly, a variety of problems can occur. The following items may be signs of improper installation:

- **The computer doesn't respond shortly after restarting.** This may be the result of a COM port conflict. The modem has probably been assigned to a COM port which is already in use or is incompatible with other hardware in the computer.
- **The computer freezes for about 15 seconds** every minute or so, during which time all keystrokes are ignored. This may occur because the modem is installed incorrectly or because the host software has not been set up correctly.

For details on resolving these problems, see *Problems with the host version*.

Install the remote computer's software

Note These instructions explain how to install the Remote Maintenance software on the **remote** computer.

Before you install the remote version of Remote Maintenance software:

- Make sure a modem has been correctly installed on the remote computer.
- Find out which COM port the modem uses.

To install the remote version of Remote Maintenance software:

1. Make sure the DOS prompt shows the drive where you want to install Remote Maintenance, for example C:\>.
2. Insert the **remote** Remote Maintenance Disk in the A:\ drive and type A:INSTALL .
3. Type Y to confirm that you want to continue, or type N to cancel.
4. When the system asks if you have installed a modem, type Y . If you have not installed a modem, type N to cancel.
5. When the system asks if you know the modem's COM port, type Y . If you do not know the COM port, type N to cancel.
6. Identify the modem's COM port (1, 2, 3, or 4).
7. Once you identify the modem's COM port, the program copies Remote Maintenance onto the computer's hard disk. It also creates a batch file (RR.BAT) in the root directory of the hard disk. This batch file allows you to start Remote Maintenance any time by simply typing RR .
8. Once Remote Maintenance is installed, you must set up the remote software as described in the next topic.

Set up the remote software

Before using the remote software, you must set up your online Phone Book. Create one entry for each host computer you plan to access. The phone book entry stores important information about the host computer which the remote computer needs to know before it can make a connection (information such as the telephone number of a host computer's modem, the host computer's login name and password, and COM settings).

First, set up a default Phone Book entry and then add additional entries. To make adding additional entries faster, the default settings are automatically copied to each new Phone Book entry for you. All you have to add is the host computer's name and telephone number.

Setting the default phone book entry

The DEFAULT Phone Book entry contains the basic communications (or COM) settings used by your modem. Since the entry is so important, the software does not let you rename or delete the DEFAULT Phone Book entry.

To make sure the default settings are correct:

1. At the DOS prompt, run the Remote Maintenance software. Change to the root directory of the C:\ drive (or the drive where you installed the software). Type RR **[Enter]**. A Banner screen appears; then the DOS prompt re-appears.
2. Press **[Alt-Left-Shift]**. Make sure you use the **[⇧Shift]** key on the left-hand side of the keyboard. The right-hand **[⇧Shift]** key does not work for this. **[Alt-Left-Shift]** is the default key combination for quick access to Remote Maintenance. When you press these two keys simultaneously, the Main Menu appears (Figure 26).

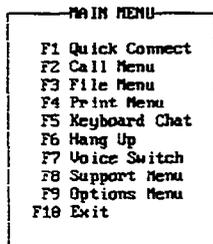


Figure 26 Main Menu

3. Press **[F2]** to select the Call Menu option. The Call Menu appears.
4. If you press the wrong function key and want to try again, press **[Esc]** to return to the Main Menu.
5. Press **[F3]** to select the Phone Book Menu option. The Phone Book Directory appears (Figure 27).

UN/Remote 6.1j Remote	INACTIVE	COPYRIGHT 1986,95 TRITON TECHNOLOGIES, INC. DISCONNECTED	4:39:22 PM 0:00:00
--------------------------	----------	---	--------------------

<table border="1"> <tr> <td>MAIN MENU</td> <td>PHONE BOOK ENTRY</td> </tr> <tr> <td>CALL MENU</td> <td>NAME: DEFAULT</td> </tr> <tr> <td>PHONE BOOK MENU</td> <td>DESC:</td> </tr> <tr> <td>F1 Add</td> <td>PHONE: _____</td> </tr> <tr> <td>F2 Delete</td> <td>_____ Sending</td> </tr> <tr> <td>F3 Change</td> <td>LOGIN: support</td> </tr> <tr> <td>F4 Sort</td> <td>PASSWORD: voice</td> </tr> <tr> <td>F10 Exit</td> <td>_____ COM Port</td> </tr> <tr> <td></td> <td>PORT: 2</td> </tr> <tr> <td></td> <td>BAUD: 2400 MODEM: Hayes Extended</td> </tr> <tr> <td></td> <td>DIAL: Tone TERM: UN/Remote</td> </tr> <tr> <td></td> <td><F1> = Set Master Password</td> </tr> </table>	MAIN MENU	PHONE BOOK ENTRY	CALL MENU	NAME: DEFAULT	PHONE BOOK MENU	DESC:	F1 Add	PHONE: _____	F2 Delete	_____ Sending	F3 Change	LOGIN: support	F4 Sort	PASSWORD: voice	F10 Exit	_____ COM Port		PORT: 2		BAUD: 2400 MODEM: Hayes Extended		DIAL: Tone TERM: UN/Remote		<F1> = Set Master Password	
MAIN MENU	PHONE BOOK ENTRY																								
CALL MENU	NAME: DEFAULT																								
PHONE BOOK MENU	DESC:																								
F1 Add	PHONE: _____																								
F2 Delete	_____ Sending																								
F3 Change	LOGIN: support																								
F4 Sort	PASSWORD: voice																								
F10 Exit	_____ COM Port																								
	PORT: 2																								
	BAUD: 2400 MODEM: Hayes Extended																								
	DIAL: Tone TERM: UN/Remote																								
	<F1> = Set Master Password																								

Use <PgDn>, <↑>, <↓>, <←>, <→>, <Ins>, , <Enter> <F10>=Save <Esc>=Escape

Figure 27 Phone Book Directory

- Make sure the DEFAULT entry in the Phone Book directory is selected. If necessary, use the arrow keys to highlight it.
- Press **F3** again to select the Change option. The Phone Book Entry Screen appears (Figure 28). The NAME field on this screen should read DEFAULT. If this screen does not appear, press **Esc** until you return to the Main Menu, and try again from step 3.

UN/Remote 6.1j Remote	INACTIVE	COPYRIGHT 1986,95 TRITON TECHNOLOGIES, INC. DISCONNECTED	4:39:22 PM 0:00:00
--------------------------	----------	---	--------------------

<table border="1"> <tr> <td>MAIN MENU</td> <td>PHONE BOOK ENTRY</td> </tr> <tr> <td>CALL MENU</td> <td>NAME: DEFAULT</td> </tr> <tr> <td>PHONE BOOK MENU</td> <td>DESC:</td> </tr> <tr> <td>F1 Add</td> <td>PHONE: _____</td> </tr> <tr> <td>F2 Delete</td> <td>_____ Sending</td> </tr> <tr> <td>F3 Change</td> <td>LOGIN: support</td> </tr> <tr> <td>F4 Sort</td> <td>PASSWORD: voice</td> </tr> <tr> <td>F10 Exit</td> <td>_____ COM Port</td> </tr> <tr> <td></td> <td>PORT: 2</td> </tr> <tr> <td></td> <td>BAUD: 2400 MODEM: Hayes Extended</td> </tr> <tr> <td></td> <td>DIAL: Tone TERM: UN/Remote</td> </tr> <tr> <td></td> <td><F1> = Set Master Password</td> </tr> </table>	MAIN MENU	PHONE BOOK ENTRY	CALL MENU	NAME: DEFAULT	PHONE BOOK MENU	DESC:	F1 Add	PHONE: _____	F2 Delete	_____ Sending	F3 Change	LOGIN: support	F4 Sort	PASSWORD: voice	F10 Exit	_____ COM Port		PORT: 2		BAUD: 2400 MODEM: Hayes Extended		DIAL: Tone TERM: UN/Remote		<F1> = Set Master Password	
MAIN MENU	PHONE BOOK ENTRY																								
CALL MENU	NAME: DEFAULT																								
PHONE BOOK MENU	DESC:																								
F1 Add	PHONE: _____																								
F2 Delete	_____ Sending																								
F3 Change	LOGIN: support																								
F4 Sort	PASSWORD: voice																								
F10 Exit	_____ COM Port																								
	PORT: 2																								
	BAUD: 2400 MODEM: Hayes Extended																								
	DIAL: Tone TERM: UN/Remote																								
	<F1> = Set Master Password																								

Use <PgDn>, <↑>, <↓>, <←>, <→>, <Ins>, , <Enter> <F10>=Save <Esc>=Escape

Figure 28 Default Phone Book Entry

- Press **PgDn**. This moves the cursor from NAME to highlight the COM Ports section.
- Look at the PORT field. The number should be the same as the COM port you specified during the installation procedure (for example, 3 for COM3).
- If the port number is incorrect, repeatedly press the **P** key to change the value until it shows the correct number.
- Look at the BAUD field immediately below the PORT field. The number in this field should be 19,200. Remote software uses this higher baud rate for 14,400 modems to provide higher throughput whenever possible. If you are using a 14,400 baud

modem, you do not need to adjust the field and should proceed to the next step.

12. If you are using a modem of a different speed (for example, 28,800 baud), adjust this number by repeatedly pressing the **(B)** key until you display the modem's speed.
13. Look at the MODEM field to the right of the BAUD field. Press **(M)** to see a list of supported modems. (Figure 29).

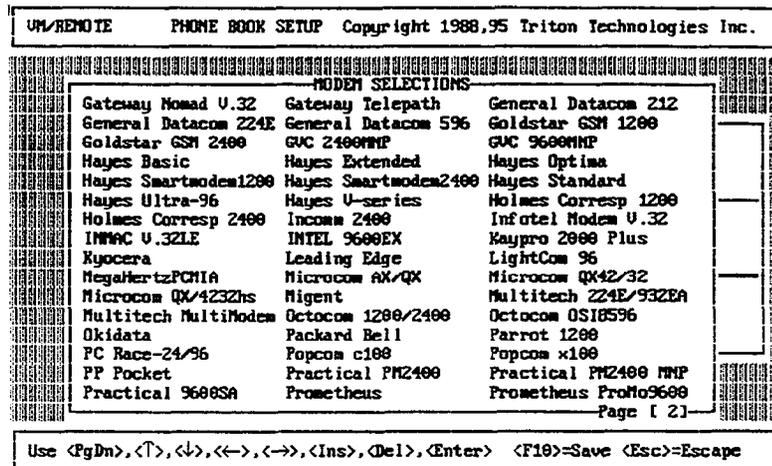


Figure 29 List of supported modems

14. Use the **(PgDn)** and **(PgUp)** keys to view the entire list. Press the arrow keys to highlight the modem's brand and press **(Enter)**. If you do not see your modem in the list, and your modem is 100% Hayes compatible, select Hayes Extended.
15. Press **(F10)** four times to redisplay the Main Menu.

Note To avoid losing your changes, do not press **(Esc)** to exit from the Phone Book Entry Screen.

16. Press **(F10)** again to return to the DOS prompt.

Adding a phone book entry for each host computer

Once you set the default Phone Book entry, you should add a Phone Book entry for each host computer you plan to access. The COM port, baud rate, modem type, login name, and password are automatically copied to each Phone Book entry you add. All you have to do is add each host computer's name and telephone number.

To add Phone Book entries:

1. Press **[Alt]-[Left-Shift]** to display the Main Menu.
2. Press **[F2]** to select the Call Menu option. The Call Menu appears.
3. Press **[F3]** to select the Phone Book Menu option. The Phone Book Directory appears.
4. Press **[F1]** to select the Add option. A pop-up labeled NEW NAME appears (Figure 30).

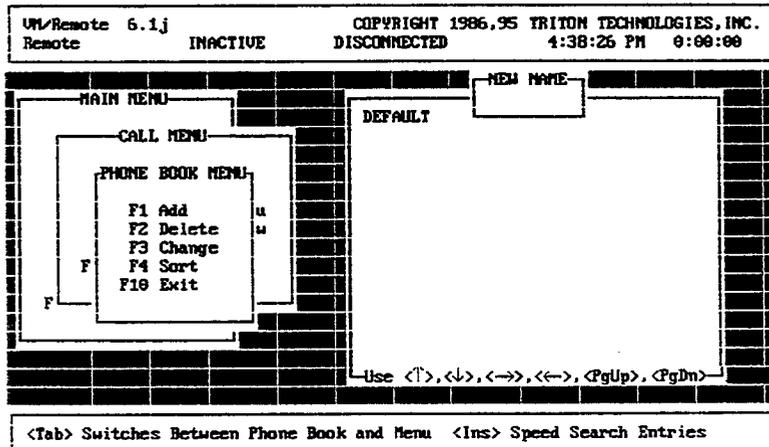


Figure 30 Adding Phone Book Entries

5. Type a name for the host computer **[Enter]**. (Usually, this is the name of the company that purchased PanaVOICE.) The Phone Book Entry Screen appears.
6. Type the telephone number to dial to reach the host computer. If needed, change the login name and password to match the login name and password that is set on the host computer. Keep these guidelines in mind:

Telephone Numbers. The Phone Book entry's PHONE field stores the telephone number to dial for a particular host computer's modem. Enter up to 35 characters. You can use all the special characters accepted by Hayes-compatible modems. Hyphens are ignored during dialing. The chart in Figure 31 summarizes the format used.

Login Name and Password. Since the host Remote Maintenance is set up to use a particular login name and password, leave these entries at the defaults, unless you have changed them on a particular host computer. The login name and password are case-sensitive and must exactly match those on the host computer.

7. Save the entry by pressing **[F10]**.
8. Add an additional Phone Book entry for each host computer you plan to call. To do this, repeat steps 4 through 7.
9. When you are finished, press **[F10]** repeatedly to exit.

Sample Phone Number Format: 9,2061234567,,,,987

Example	Meaning
9	The number used to dial out. For most telephone systems, this is 9 or 8.
,	Inserts a two-second delay.
2061234567	The number dialed. In this example, 206 is the area or city code, 1234567 the telephone number.
,,,,987	Adds a delay before dialing an extension. Four or five commas add an eight- to ten-second pause prior to dialing 987.

Figure 31 Sample telephone number format

Solving problems after installation

When the Remote Maintenance software has been installed correctly, there should be no visible effect during routine operation of the remote computer.

If the remote computer freezes or stops responding for 10-15 seconds every minute, during which all keystrokes are ignored, the modem is installed incorrectly. Check that the modem is installed at the COM port specified in the Port field of the Phone Book.

If you have difficulty connecting with a host computer, see *Problems with the host version* on page 4-185.

Using Remote Maintenance

After both the remote and host computers have been set up to run the Remote Maintenance software, you are ready to establish a connection between the two computers to transfer files and resolve customer problems without having to visit the customer site.

In this chapter you will find information about the following topics:

Understand the basics of a Remote Maintenance session

Recommended operating system configurations for the remote computer

Prepare for file transfers

Transfer files between host and remote computers

Call other computers

Remote Maintenance advanced features

Understand the basics of a Remote Maintenance session

This topic covers the basic procedures used to establish a connection from the remote computer to the host computer. Typically this is done to control or change a customer's voice messaging system from a remote location.

The host version of Remote Maintenance automatically loads on the host computer when PanaVOICE is started. The host version of Remote Maintenance runs at the same time as the voice mail software and is ready for a remote session any time that PanaVOICE is running. The remote version, however, must be explicitly started using a specific command.

Starting the remote version

The first step in establishing a connection between the two computers is loading the Remote Maintenance software on the remote computer.

To start Remote Maintenance on the remote computer:

1. From the DOS prompt, change to the root directory of the C:\ drive (if this directory is part of the current DOS search path, this step is optional). Type `CD C:\` **[Enter]**.
2. Type `RR` **[Enter]** to load the software. This command loads the remote version of the software, making it resident in the computer's memory. A Banner screen appears. Then, you are returned to the DOS prompt.

You may continue to use DOS to run other programs on the remote computer, but the Remote Maintenance Main Menu is now accessible as well. The remote software remains resident and accessible until you restart the remote computer.

Accessing Remote Maintenance menus

Since Remote Maintenance is a terminate-and-stay resident (TSR) program, it remains loaded in your computer's memory while you use DOS or run other applications. It is accessed by pressing **[Alt-Left-Shift]**. When you simultaneously press these two keys, the Remote Maintenance Main Menu appears. The Main Menu includes several submenus.

Note You must use the **[Left-Shift]** key on the **left-hand side** of the keyboard. The right-hand **[Right-Shift]** key does **not** work for this.

To select from the Main Menu or any of its submenus, either:

Press the function key listed next to the desired selection.

Use the arrow keys to highlight your selection and press **[Enter]**.

To return from any submenu to a previous menu, press **[F10]**. To escape from a submenu or a selected function, you can also press **[Esc]**. Note that when you press **[Esc]**, any changes you have made are not saved.

Returning to DOS

To return to DOS from the Remote Maintenance Main Menu, press **(F10)**. This action returns you to DOS, but leaves the Remote Maintenance Main Menu accessible. You may then run other DOS programs and later return to the Main Menu by pressing **(Alt-Left-Shift)**.

You do **not** need to reload the remote software with the RR command unless you restart the computer or unload Remote Maintenance using the SUNLOAD command. For details, see *Unloading Remote Maintenance from memory* on page 4-168.

Calling a host computer

You can call a host computer in two different ways:

- **Using the Call Menu.** Appropriate for technicians working with multiple host computers and/or different COM settings (modem, baud rate, etc.).
- **Using Quick Connect.** Appropriate if you have only one host computer to support or prefer to manually enter the telephone number. This option uses data from the DEFAULT Phone Book Entry, including the login, password, COM port and baud rate. If you have only one host computer to support, you may even enter the telephone number in the DEFAULT entry.

To call a host computer from the Call Menu:

1. From the Main Menu, press **(F2)** to access the Call Menu.
2. Highlight the Phone Book entry you wish to call. Use the arrow keys to move from name to name.
3. Press **(F1)** to start dialing. A pop-up appears, identifying both the host and the calling parameters in use: COM port, baud rate, and so on. Note the Dialing! message that appears at the bottom of the screen.
4. Wait approximately thirty seconds for a connection. The wait period may vary based on how busy the host system is. Whatever is on the host computer's screen should appear on your screen.

To call a host computer using the Quick Connect option:

1. From the Main Menu, press **(F1)** to select the Quick Connect option.
2. At the ENTER TELEPHONE NUMBER pop-up that appears, either:
Specify the telephone number. Use the appropriate format described in Figure 31 on page 4-163.
Use the telephone number from the DEFAULT Phone Book Entry. To use this, continue to step 3.
3. Press **(←Enter)**. A pop-up appears, identifying both the host and the calling parameters in use: COM port, baud rate, and so on. Note the Dialing! message that appears at the bottom of the screen.
4. Wait approximately thirty seconds for a connection. The wait period may vary based on how busy the host system is. Whatever is on the host computer's screen should appear on your screen.

Accessing menus during a connection

You can access the Remote Maintenance Main Menu any time during a connection by pressing **Alt-Left-Shift**, just as you did to access the menus from DOS. This allows you to access various functions, such as the File Menu to transfer the host computer's REPROG file to your computer. The program running on the host computer is not affected and operates normally.

When you are finished using the Remote Maintenance menus, press **F10** from the Main Menu to redisplay the screen from the host computer and regain control of it.

Restarting a host computer

At times, you may want to restart the host computer. This applies particularly if you have changed the AUTOEXEC.BAT or CONFIG.SYS files and want the new changes to take effect. The restart is equivalent to a cold boot.

Note When using the Host Reboot option, the host computer should be at the DOS prompt. In other words, the voice mail software should not be running on the host computer.

To restart a host computer:

1. Confirm that the host computer is at the DOS prompt.
2. Press **Alt-Left-Shift** to display the Main Menu.
3. Press **F8** to select the Support Menu.
4. At the Support submenu, press **F3** to select the Host Reboot option.
5. Type Y **←Enter** to confirm. The host computer restarts. You will lose the connection to the host computer.
6. Press **F10** to exit.

Note Before re-establishing a connection with the host computer, wait about two minutes or more for the host computer to restart and load the voice mail software.

Ending a connection

When you have finished a Remote Maintenance session, you must disconnect properly. If you do not properly disconnect from the host computer, the telephone line the host computer used for the connection is not released.

Warning If you do not disconnect from the host computer correctly, or if you accidentally lose your connection, the host computer will immediately restart. This is a safety feature which prevents the host computer from being left in an inaccessible state. To avoid disconnecting anyone currently calling the host system, always disconnect according to these instructions.

To disconnect from the host computer:

1. Press **[Alt]-[Left-Shift]** to display the Main Menu.
2. Select the Hangup option by pressing **[F6]**. This ends the connection and releases the telephone line.
3. Either return to DOS by pressing **[F10]**, or make a connection to another host computer using the Quick Connect option.

Unloading Remote Maintenance from memory

The following procedure unloads Remote Maintenance from the computer's memory. It does not unload other TSR (terminate-and-stay) programs.

To unload Remote Maintenance from the remote computer's memory:

1. Make sure you are at the DOS prompt in the directory used by the Remote Maintenance software, generally C:\REMOTE.
2. Type SUNLOAD **[←Enter]**.

Recommended operating system configurations for the remote computer

The table below lists possible operating system configurations used on the remote computer. Each configuration is rated according to stability.

Operating system and Remote Maintenance software	Stability rating
DOS system running Remote Maintenance 6.1j with no mouse driver installed.	Recommended. The most stable configuration of the three.
Window 3.X or WIN95 running the Windows version of Co-session Remote Version 2.0h.	Recommended.
Windows 3.x or WIN95 running Remote Maintenance 6.1j in a DOS window.	Not recommended.

Prepare for file transfers

Remote Maintenance allows you to transfer files from the host computer to the remote computer, including the call report log file (the REPROG file). Related file transfer features let you change the current directory, view, delete, rename, or copy files, or print a file from the host computer on a printer attached to the remote computer.

To use any of the file functions, first access the Main Menu by pressing **Alt-Left-Shift**. From the Main Menu, press **F3** to select the File Menu option and the File submenu appears and offers a number of options.

Set file transfer options

Before transferring files, you may want to set one or more of the applicable options regarding how file transfers are conducted. The available options are:

- **File Compression.** (Inapplicable option. Do not reset File Compression. Leave it at its OFF default setting.)
- **Overwrite Verify.** With this option in effect, you are asked to confirm any file transfer that would replace an existing file with the transferred file. If set to OFF, you are not asked before the file transfer. The default is ON.
- **Overwrite Duplicate Files.** This option helps to reduce unnecessary or accidental duplication of files. Settings are the default ALWAYS (always replace duplicate files), OLDER (only replace when the destination file is older than the source file you are transferring), and NEVER (never replace the destination file).

To set file transfer options:

1. From the Main Menu, press **F3** to select the Files option.
2. Press **F2** to select the File Menu expanded menu.
3. Press **F8** to select Options.
4. At the Options Menu, reset an option as needed by highlighting it then pressing the **SpaceBar**. Settings toggle between ON and OFF.

Note Be sure to leave the File Compression option at the default setting OFF.

5. Press **F10** to save entries and exit to the File Menu.

The file menu screen

The File Menu Screen (Figure 32) lets you transfer files between the host and remote computers. You can also use the File Menu Screen to copy, delete, or view files, and make new directories on either the host or remote computer.

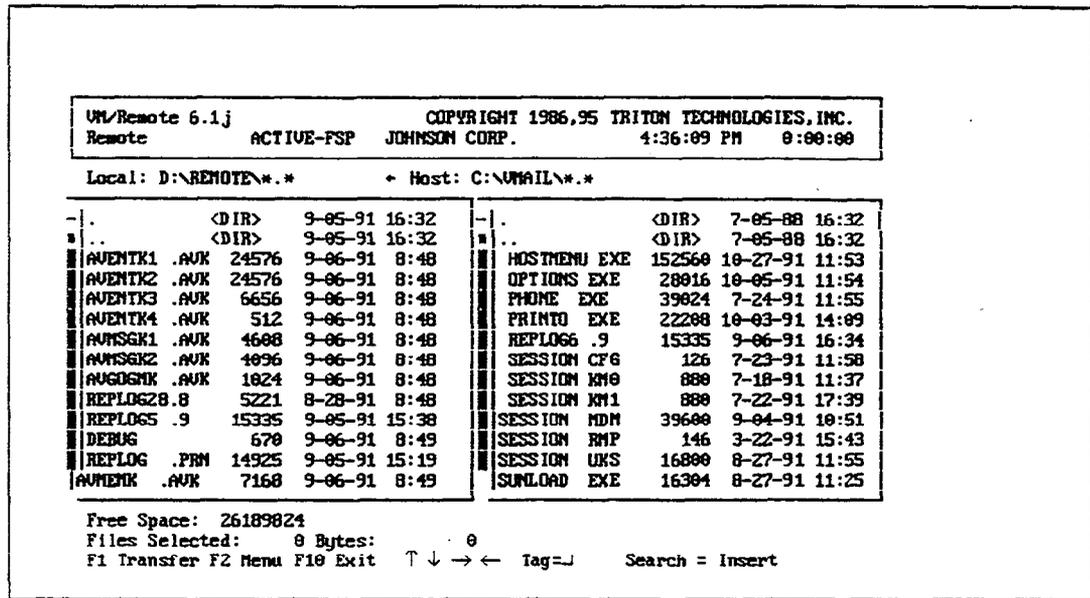


Figure 32 File Menu Screen

File Lists

The File Menu Screen is divided into two separate windows. The left window lists files and directories on your local computer (the computer you are sitting at). The right window lists files and directories on the computer you are connected to by modem (in this example, the host computer). The directory you are in is listed at the top of each window. To move between the two windows, press the left or right arrow key.

Status Box

In the example above, Remote and ACTIVE-FSP appear at the top left, below the product name and version number. Remote indicates the Remote version of the Remote Maintenance software is in use. ACTIVE indicates a connection exists to a host computer, with -FSP indicating that the host software is using the Full-Speed Mode option.

Phone Book ID

When a connection is established, the host computer's name or ID from the Phone Book appears. JOHNSON CORP. appears in the example above. When there is no connection, DISCONNECTED appears.

Local/(Arrow)/Host

The arrow centered above the file list windows (← or →) indicates the direction that files will be transferred. In Figure 32, the left-pointing arrow (←) indicates the file

transfer is from the host computer to the local computer.

Scroll Bars

Whenever there are more files than can appear in a file list window at once, the scroll bars show you the relative position in the file lists.

Highlight Bar

On this screen, the cursor appears as a bar. It is used for highlighting various files. The window where the highlight bar is placed is the active window.

Message Line

Watch the line just below the label Files Selected for prompts and advisory messages.

Functions Line

The bottom of the screen lists the functions available at this window by function key and abbreviated name. Note that these may vary slightly depending on whether the highlight bar is in the local or host window.

Transfer files between host and remote computers

You may transfer files from one computer to the other during a Remote Maintenance connection. Transferred files are copied to the other computer, so the files on the source computer are not erased. There are three main steps for transferring files:

- Select the destination directory.
- Tag the files you want to transfer.
- Start the file transfer.

Warning! You should **not** transfer or view PanaVOICE's database files (AV*.*) , executable files (*.EXE), or the current day's REPROG file while the voice mail software is running on the host computer. The host computer must be at the DOS prompt before you can transfer these files.

To transfer files:

1. From the Main Menu, press **F3** to select the Files option.
2. Select the destination directory. Placement of the highlight bar designates which window is active. The active window is the source from which files will transfer. The other window is automatically the **destination**.
3. To move through the directory list(s), use the following keys:

Key	Movement in List
→	Move to right-hand list
←	Move to left-hand list
↑	Up one file
↓	Down one file
PgUp	Up one screen page
PgDn	Down one screen page
Home	Top of list
End	Bottom of list

To change directories, either:

- **Use a listed directory.** First move the highlight bar to the directory's name, to the current directory (.), or to the parent directory (..). Then press **←Enter** to list the files in that directory.
 - **Specify a directory.** Press **F2** to display the File Menu expanded menu. Press **F3** to select Change Drive/Directory. At a dialogue box, indicate the drive, directory, and any subdirectories. Press **←Enter** to list.
4. Tag the files to transfer. To select a file, highlight it, then press either **←Enter** or the

SpaceBar. A selected (or tagged) file appears with a small triangle appearing to the right. To transfer more than one file, you may repeat this highlighting to tag the desired files.

Optionally, you may list and select files using DOS wildcard characters (* or ?). Press **F1** to display the FILENAMES box, then specify. For example, if REP*. * is typed, every file beginning with REP is selected.

5. Check your choices before the file transfer. Confirm that:
 - The arrow centered above the windows is pointing toward the destination computer directory.
 - The directory you want the files transferred to is listed correctly over the destination file list window.
 - A small triangle appears to the right of each file you selected.
 - The total number of files to be transferred is correct.
6. Press **F1** to start the file transfer.

During the file transfer

While performing a file transfer, a status window provides information about the transfer. For most users, the most important piece of information is the percentage of the file which has been transferred. This figure increases as the transfer proceeds and can be used to estimate when the file transfer will finish.

It is not possible to perform other activities with Remote Maintenance until the file transfer is complete. However, transferring files does **not** interfere with the voice messaging system on the host computer. PanaVOICE continues to answer calls while the file transfer is in progress.

If the file transfer fails

Under some circumstances, the system may fail to transfer a file. This can occur if there is a poor telephone connection between the host and remote computers.

If an error occurs during a file transfer, Remote Maintenance attempts to correct it several times. If the problem persists, the transfer is eventually aborted. The number of errors which have occurred appears in a status window. If problems persist with a transfer, try disconnecting and calling again to establish a better connection.

Other file menu functions

Additional functions at the File Menu include:

- Make Directory
- View Files
- Delete Files

To use any of these, start from the File Menu. The function line at the bottom of the screen lists some functions by function key and abbreviated name.

To make a directory under the current directory in the active list:

1. Press **F2** to display the File Menu's expanded menu.
2. Press **F4** to make a directory.
3. Type the directory's name (you do not need a backslash) **↵Enter**.

To view a file's contents:

1. Select a file by moving the cursor to the filename and pressing either **↵Enter** or the **SpaceBar**.
2. Press **F2** to display the File Menu's expanded menu.
3. Press **F9** to view file contents. The file automatically scrolls. Press the **SpaceBar** to pause or restart scrolling.
4. To return to the File Menu, press **Esc**.

To delete files from the active list:

1. Select a file by moving the cursor to the filename and pressing either **↵Enter** or the **SpaceBar**.
2. Press **F2** to display the File Menu's expanded menu.
3. Press **F6**. When asked if you want to confirm deleting each file before it is deleted, press **Y** to individually confirm or **N** to delete selected files without confirming.

REPLOG files

PanaVOICE keeps a record or log of every call it answers, dials, or transfers. When the system handles a call, a line is added to a DOS file called REPLOG on the system's hard disk. Each day a new REPLOG file is created. The REPLOG files are named as follows:

REPLOG d . m

where d is the day and m is the number of the month. For example, the REPLOG for March 20, is named REPLOG20.3; the REPLOG for November 6 is named REPLOG6.11.

REPLOG files are standard ASCII text files. Any word processor or spreadsheet program may be used to display or print the report's contents.

Call other computers

The Remote Maintenance package includes an additional program called TOPTIONS that gives your computer the ability to emulate an asynchronous terminal. The TOPTIONS program lets you connect with mini- or mainframe computers or bulletin board services (BBS).

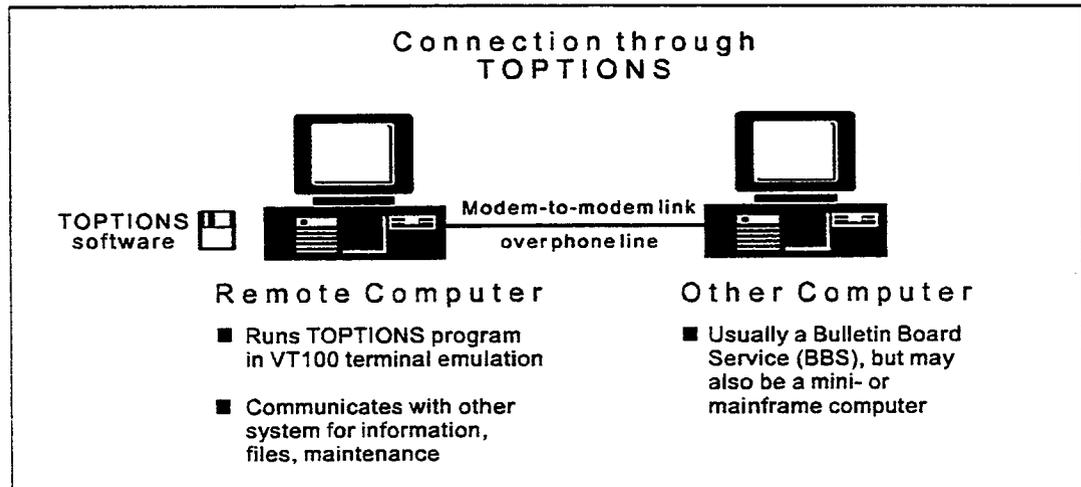


Figure 33 Remote computer connected to BBS or other computer through TOPTIONS program

Checking TOPTIONS settings

Generally, you will not have to modify the TOPTIONS settings. To contact some BBSs, you may need to check and adjust settings.

To check TOPTIONS settings:

1. Make sure you are at the DOS prompt in the directory used by the remote software.
2. Type TOPTIONS . The Terminal Emulation Options Screen appears (Figure 34).
3. To access a field, type the corresponding letter. For example, to access Terminal Emulated, press **A**.
4. To change an entry, repeatedly press the corresponding letter.

5. Press **F10** to save entries and exit to DOS.

UM/Remote	TERMINAL SETUP	Copyright 1995 Triton Technologies Inc.
----- TERMINAL EMULATION OPTIONS -----		
<A>	Terminal Emulated:.....	VT100
	Duplex:.....	FULL
<C>	CR translation	- In:....CR
<D>	CR translation	- Out:....CR
<E>	Backspace translation	- In:....DESTRUCTIVE
<F>	Backspace translation	- Out:....BS
<G>	Line wrap:.....	OFF
<H>	Screen scroll:.....	DN
<I>	Enquiry (CTRL-E):.....	OFF
<J>	Enquiry response:.....	
<K>	Keyboard Mapping Def initions.....	

<A-K>=Option	<F10>=Save+Exit	<Esc>=Escape

Figure 34 Terminal Emulation Options Screen

Setting up a phone book entry

To make a connection using TOPTIONS, you will use a Phone Book entry set up specially for the purpose. This entry must be set to use a VT100 terminal type.

To set up a TOPTIONS Phone Book entry:

1. Access the Phone Book Entry Screen. Use the same procedure as in *Adding a phone book entry for each host computer* on page 4-161.
2. In the entry's NAME field, enter the name of a BBS.
3. Continue completing the rest of the entry as usual.
4. Enter the COM Port section of the screen. Press **T** for the TERM field.
5. Press **T** repeatedly to display VT100.
6. Save the entry by pressing **F10**.

Making a call using TOPTIONS

To make a call to a BBS or other computer using TOPTIONS:

1. Start Remote Maintenance if it is not already running. Make sure you are at the DOS prompt in the directory used by the Remote Maintenance software.
2. Type RR **[Enter]**.
3. Press **[Alt]-[Left-Shift]** to display the Main Menu.
4. Press **[F2]** to access the Call Menu.
5. Highlight the Phone Book entry you set up in the previous section.
6. Press **[F1]** to start dialing. A pop-up appears, identifying both the host and the calling parameters in use: COM port, baud rate, and so on. Note the Dialing! message that appears at the bottom of the screen.
7. Wait approximately thirty seconds for a connection. Note the message Connect 14,400 that appears at the bottom of the screen.
8. Follow the directions presented from the host computer.

Using TOPTIONS functions

The procedures below cover the most commonly used functions available when connected in a TOPTIONS session:

- Accessing the terminal menu
- Transferring files to another computer
- Transferring files to your computer
- Ending a connection

To access the terminal menu:

1. During a connection using TOPTIONS, press **[Alt]-[M]**.
2. The Terminal Menu appears (Figure 35).

```
-----UT100 MENU-----
F1 Send XMODEM
F2 Receive XMODEM
F3 Clear Screen
F4 Insert Line Feed Toggle
F5 Local Echo Toggle
F6 Hang Up
F7 Transmit Break
F8 Disk Capture
F10 Exit
```

Figure 35 Terminal Menu Screen

To transfer files to the other computer from yours:

1. During the connection, complete any steps needed to prepare the other computer to receive the transfer.
2. Press **Alt-M** to access the Terminal Menu.
3. Press **F1** to select the Send XMODEM option.
4. At the pop-up that appears, type the file name **↵Enter**. If the file is not in the current directory, enter a full DOS path. For example, type C:\VMAIL\REPLOG6.9 **↵Enter**.

To transfer files from the other computer to yours:

1. During the connection, complete any steps needed to prepare the other computer to send.
2. Press **Alt-M** to access the Terminal Menu.
3. Press **F2** to select the Receive XMODEM option.
4. At the pop-up that appears, type the file name **↵Enter**. If the file is not in the other computer's current directory, enter a full DOS path. For example, type C:\REMOTE\NEWFILE.EXE **↵Enter**.

Note File transfer through TOPTIONS uses the XMODEM protocol.

To disconnect from the other computer:

1. Press **Alt-M** to access the Terminal Menu.
2. Press **F6** to select the Hang Up option and disconnect.

Remote Maintenance advanced features

Remote Maintenance provides several additional features you may find useful for advanced applications. This chapter explains how to:

- Suspend and resume a remote session, without ending the connection. This feature is useful if you want to perform operations on the remote computer without disconnecting from the host computer.
- Use the billing log to keep track of calls made and answered by the remote computer. You can use this information to bill customers for your time, or for other reporting purposes.
- Restart the host computer from the remote computer. You should only restart the host computer after exiting the voice mail software.

You can access many of the advanced features from the Support Menu (Figure 36). To view the Support Menu, press **[F8]** at the Remote Maintenance Main Menu.

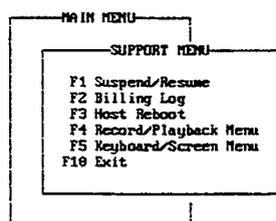


Figure 36 Support Menu

Suspending and resuming a session

You can suspend a remote session without disconnecting from the host computer. When you suspend a remote session, the remote computer no longer controls the host computer. A suspended session allows you to run other programs on the remote computer as if you were not connected to a host computer. Later, you can quickly resume the remote session without having to call the host computer again to re-establish a connection.

Note When you suspend a session, you remain connected to the host computer. If you have been connected via a long distance call, you will continue to incur long distance charges.

If you do suspend a remote session, check that you return to it later and disconnect properly from the host computer. This will avoid triggering an abrupt restart on the host computer.

To suspend a session:

1. At the Remote Maintenance Main Menu, Press **(F8)** for Support Menu.
2. At the Support Menu, press **(F1)** to select Suspend/Resume. The session is suspended. The remote computer no longer controls the host computer.

To resume a session:

1. At the Remote Maintenance Main Menu, press **(F8)** for Support Menu.
2. At the Support Menu, press **(F1)** to select Suspend/Resume. The host computer's display appears on the computer screen. The remote computer once again controls the host computer.

Using the billing log

In some cases, you may want to keep track of the number and length of calls made or received by the remote computer. To do this, you can turn on the **billing log**. When the billing log is turned on, the information about a session is saved as a single record in a text file. You can print this file on a printer, or use it in database, spreadsheet, or word processing programs. The information is useful if you want to bill a customer for the time you spend maintaining a voice messaging system, or for other reporting purposes.

Each record in the billing log file is separated by a carriage return. Each record contains these fields:

To turn on the billing log:

1. At the Remote Maintenance Main Menu, press **F8** for Support Menu.
2. At the Support Menu, press **F2** to select Billing Log.
3. Select a name for the billing log file. Press **Enter** to accept the default name SESSION.LOG, or type a new name and press **Enter**.
4. When prompted, type an Operator ID **Enter**. An Operator ID is a special ID for tracking who ran a particular remote session. You may use up to three characters. For example, use your initials or your extension number.

The billing log remains on until you turn it off. Each time you disconnect from a host computer, you have the opportunity to change the Operator ID, phone book entry, and description.

To turn off the billing log:

1. At the Remote Maintenance Main Menu, press **F8** for Support Menu.
2. At the Support Menu, press **F2** to select Billing Log. This turns off the billing log.

Using a mouse

Mouse operation on the remote computer is not supported over modem connections. You must turn off mouse operation by setting Remote Mouse operation to No on the remote computer. This is required because using remote mouse support may cause instability on the host computer.

To turn off mouse operation:

1. From the Main Menu, press **F9** to select Options Menu.
2. Press **F1** to select Hardware Menu.
3. Use the **space bar** to change Remote Mouse Operation to No.
4. Press **F10** twice to save the entry and return to the Main Menu.

Editing files during a Remote Maintenance session

Some DOS editing programs may not be functional during a Remote Maintenance session. This is because the PanaVOICE system is configured so special function keys, such as the ALT key, can be used when viewing a host computer's DOS window remotely.

Note The ALT key can be used to navigate in a host computer's voice messaging screens when connected remotely.

An alternative editing tool that does not require special function keys is included in

the host computer's path. This tool is an executable called TED.EXE. To access help on using this tool, type TED from any directory on the host computer.

To edit a file using TED.EXE during a remote session:

1. Go to the directory of the file you want to edit on the host computer.
2. Type TED FILENAME.XXX. Press .
3. Edit the file as needed and save changes.

Note Special Keyboard Handling is a field on the host computer that controls whether the host computer recognizes when special function keys are pressed on the remote computer while in the DOS window. This field should always be set to No.

Troubleshoot Remote Maintenance

Problems with the remote version

Problem	Solution
During a restart, the computer stops responding completely.	There is a COM port conflict. Try removing or disabling any mouse or expansion boards such as a serial I/O board or a voice board which may be using the same COM port as the modem. If this is not possible, try assigning the modem to another COM port by reconfiguring the software. For details, see Set up the remote software.
Unsuccessful connection attempt message appears when attempting to establish a connection.	There are several possible sources for this. Check the telephone number used in the Phone Book entry. Make sure it is correct. A bad telephone line may have been used. The host computer may have the telephone line installed in the wrong jack on the modem. The host computer may have a defective modem.

If none of these describes the problem, see *Problems with either version* on page 4-186.

Problems with the host version

Problem	Solution
The computer stops responding completely during a restart. While restarting the voice mail software, the computer freezes after displaying the copyright message.	There is a COM port conflict. Try removing or disabling any expansion boards such as an SIO board or a voice card which may be using the same COM port as the modem. If this is not possible, try assigning the modem to another COM port by reconfiguring the software. If a serial integration is involved, try running the SYSCHK utility.
Connection not established.	A modem must be installed and properly working for the system to function. If you are using an internal modem, make sure that a modem is correctly installed in the computer. If you are sure a modem is correctly installed, check the modem's COM port assignment to ensure that it is correct. If you are using an external modem, make sure it is turned on. Look for indicator lights and check the On/Off switch. Also, make sure the telephone number you are using on the remote computer to dial the host computer is correct. Check that other information in the remote computer's Phone Book entry for this host computer is accurate. Check the baud rate, COM port, modem type, and so on.
Unsuccessful Wait-Dial-In Setup message appears when system starts up.	No modem is installed, or it is installed incorrectly. The host software has not been set up correctly. For details, see Checking the default phone book entry.

If none of these describes the problem, see *Problems with either version* on page 4-186.

Checking the default phone book entry

1. Exit to the DOS prompt. Type CD HOST .
2. Type PHONE . Check that all COM port settings, Login and Password match those set up in the Remote version's phone book entry for the host (Figure 37).

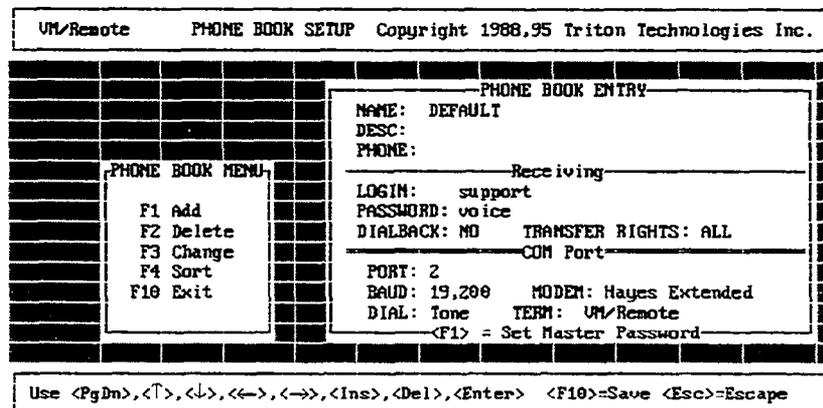


Figure 37 Default Phone Book entry for the host version of Remote Maintenance

Problems with either version

Problem	Solution
Remote Maintenance acts as though no modem were installed.	The modem is not assigned to the correct COM port. If you are using an internal modem and are sure it is installed, check the modem's COM port assignment to ensure that it is correct.
File transfer fails.	There is a poor telephone connection between the host and remote computers. Check that phone cord connections are not loose and call again to establish a better connection.
The computer freezes for about 15 seconds every minute or so, during which time all keystrokes are ignored.	No modem is installed, or it is installed incorrectly. The host computer's Remote Maintenance software has not been set up correctly. For details, see <i>Checking the default phone book entry</i> on page 4-185.
Still experiencing problems, even though the modem is installed and set to the correct COM port.	You may have chosen the wrong COM port when you set up Remote Maintenance. Make sure the PORT field of the DEFAULT Phone Book Entry specifies the same number as the modem's COM port. Check the Phone Book entry for accuracy: baud rate, modem type, and so on.

Still having problems?

If you still have problems, see the troubleshooting section in the documentation accompanying the modem or contact Technical Support.

Appendix A: Hardware documentation

Add voice ports

If you are adding voice ports to your existing voice messaging system, and are using the same type of voice board as used previously, follow the instructions below.

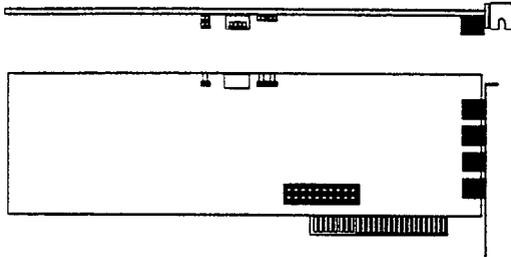
To add voice ports:

1. Turn off the voice messaging computer.
2. Install the new voice board. Refer to the appropriate voice board note in this appendix to complete this step.
3. Turn on the voice messaging computer.
4. Reprogram the system key. The reprogramming instructions are on the card shipped with the new voice board.
5. Go to the directory where the voice messaging software is installed (usually C:\VMAIL). Type RECONFIG and follow the on-screen prompts.



VOICE BOARD NOTES

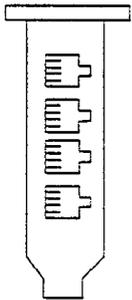
D/42PA



Warning! The voice board is easily damaged by static electricity.

Wear an anti-static wrist strap whenever you handle the voice board or other components. You can cause damage even without feeling a spark.

1. To Install or Replace Voice Boards
2. Turn off the system and any peripherals (printers, etc.), but do not unplug them.
3. Check that you are using an anti-static wrist strap.
4. **If you are replacing a voice board:** Disconnect the telephone leads from the old voice board. Keep track of the order in which the leads were connected, so you can reconnect them correctly.
5. **If you are replacing a voice board:** Remove the old voice board from the computer. Do not touch the dip switch (SW1) or jumper block (JP5/JP6) when you remove the board.
6. Take the new voice board from its anti-static cover.
7. **If you are replacing a voice board:** Check that the dip switch and jumper settings on the new voice board match the settings on the old voice board. The dip switch and jumpers may be at different locations on older voice boards.
8. **If you are adding a voice board:** Configure the dip switch and jumpers following the instructions in *Configure the Voice Board*.
9. Carefully insert the voice board into a slot of the system and screw the voice board down. Do not touch the dip switch (SW1) or jumper block (JP5/JP6) when you insert the board.
10. Connect the telephone leads to the new voice board.
11. Repeat steps 3 through 8 for each new voice board.
12. Replace the cover and turn on the system.
13. **If you are replacing a voice board:** Return any old voice board to Panasonic, using the RMA number that came with the new board.



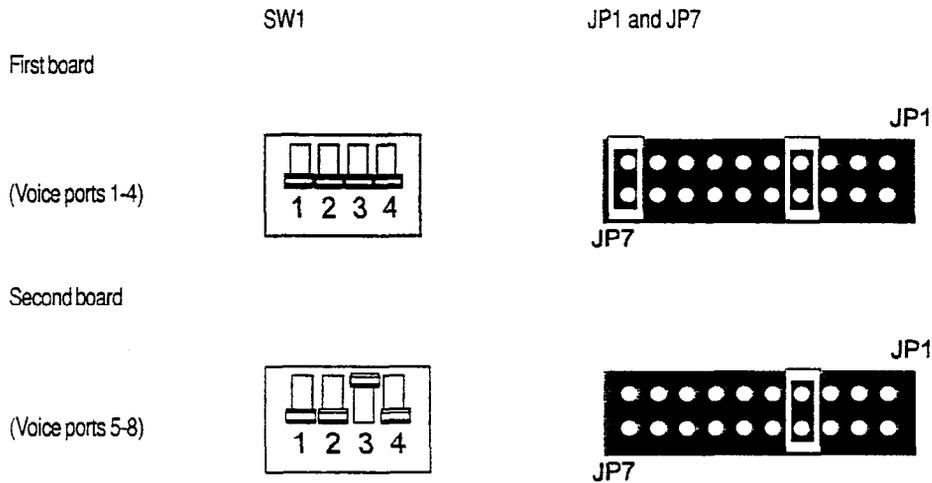
Lead Connections

This voice board connects to your telephone system as a series of single-line devices. Connect each modular jack on the voice board to your telephone system with a modular lead. This board has four modular jacks to connect four voice ports. Each modular lead connects **one** port or channel. Each plug is one port.

Configure the Voice Board

Each D/42PA voice board in the system must have a unique memory address. The board's dip switch and jumpers set this address. The board diagram (on the other side of this sheet) shows where to find the dip switch and jumpers.

1. Set the new board's dip switch SW1 according to the figures below, based on how many voice boards are in the system.
2. Locate jumper JP7. The first voice board installed in the system must have JP7 on. Any additional voice boards must have jumper JP7 off.
3. Locate jumper JP1 on the new voice board. JP1 sets the board's hardware interrupt (IRQ). Place a jumper on the pair of pins for IRQ 5 (see figure).
4. Check that jumpers JP5 and JP6 are set to Off. This sets the voice board to use the D memory segment.
5. Install the voice board.



Special Notes

The voice messaging system automatically downloads the correct firmware to the voice board each time the system is restarted.

Statutory Information

The voice/telephone board is registered with the U.S. Federal Communications Commission, which places several restrictions on its use. It cannot be connected to a party line. It cannot be connected to a pay telephone. The local telephone company must be notified that this registered device is being installed prior to its installation. This requires notifying the telephone company of: the telephone number(s) to which you will be connecting, the FCC registration number; the ringer equivalence; and the type of jack being connected to. This information is printed on the outside bracket of each voice board. You must also notify the telephone company when you permanently disconnect the voice/telephone board from its phone line(s). Any repairs to the voice/telephone board must be carried out by Panasonic or our designated agent. This applies both before and after the warranty period. If you experience any trouble with the telephone or telephone line during or after installation, disconnect the voice/telephone board from the telephone line to determine if it is causing difficulties. If it is, do not reconnect the board until after it has been repaired as defined above.

Appendix B: Application worksheets

Worksheet #1: Telephone System Setup**Console Screen - Telephone System Setup: Telephone System Integration**

- Panasonic DBS/API-DEC (digital board with integration)
- Panasonic DBS W/DEC (digital board without integration)
- Panasonic DBS/API-AEC (analog board with integration)
- Panasonic DBS W/AEC (analog board without integration)

Worksheet #2: Site Information	
Console Screen - Application Setup: Site Information	
Site name (your company name) _____	
Contact _____	Contact Phone _____
Trunk pilot number _____	Total trunks answered _____
Alternate trunk numbers _____	
Voice mail pilot number _____	

Worksheet #3 Port Settings						
Console Screen - Application Setup: Port Settings						
Port	Status	Rings	Schedule	Day Opening ID	Night Opening ID	Special Options
Default				\$GREETING	\$GREETING	
1						
2						
3						
4						
Voice mail extension numbers: _____						
Status (choose one per port): 1. Answer only 2. Answer/dial out 3. Answer/lamps 4. Answer/messages. 5. Busy 6. Dial out only 7. Lamps only 8. Messages only 9 - 18. DID n digits (n is a number between 1 and 10)			Special Options (choose one per port): 1. Digit-Trap 2. Forwarded calls 3. Both 4. None			

Worksheet #4a: Operator Box		
Console Screen - Application Setup: Operator Box		
System ID _____	Voice name _____	
Alternate System IDs for Special Operators on each Port _____		
Call Transfer	Greeting	Action After Greeting
Day <input type="checkbox"/> Transfer to _____ Night <input type="checkbox"/> Transfer to _____ Transfer type (choose one): <input type="checkbox"/> Await answer <input type="checkbox"/> Wait for ringback <input type="checkbox"/> Release Rings _____	Day [Record Greeting] Night [Record Greeting] Alternate [Record Greeting] <input type="radio"/> Use Day/Night Greeting <input type="radio"/> Use Alternate Greeting	Day [Choose one] Route to ID _____ Night [Choose one] Route to ID _____



Transfer Action	Holding
Day <input type="checkbox"/> Transfer to _____ Night <input type="checkbox"/> Transfer to _____ Transfer type [Choose one] Rings _____ Transfer Introduction _____	<input type="checkbox"/> Allow holding when line is busy Holding Type (choose one): <input type="radio"/> Touchtone holding <input type="radio"/> Voice-detect holding
Transfer Options	
Select any transfer options which apply: <input type="checkbox"/> Beep when connected <input type="checkbox"/> Confirm before connecting <input type="checkbox"/> State who the call is for	Screening options (choose one) <input type="radio"/> Don't ask for identification <input type="radio"/> Ask for name, save with message

Worksheet #4b: Operator Box		
Console Screen - Application Setup: Operator Box		
Day Greeting _____		
Night Greeting _____		
Alternate Greeting _____		
System ID _____	Voice name _____	
Alternate System IDs for Special Operators on each Port		
Call Transfer	Greeting	Action After Greeting
Day <input type="checkbox"/> Transfer to _____ Night <input type="checkbox"/> Transfer to _____ Transfer type (choose one): <input checked="" type="checkbox"/> Await answer <input type="checkbox"/> Wait for ringback <input type="checkbox"/> Release Rings _____	Day [Record Greeting] Night [Record Greeting] Alternate [Record Greeting] <input type="radio"/> Use Day/Night Greeting <input type="radio"/> Use Alternate Greeting	Day [Choose one] <input type="checkbox"/> Take message <input type="checkbox"/> Say good-bye <input type="checkbox"/> Disconnect <input type="checkbox"/> Restart <input type="checkbox"/> Operator <input type="checkbox"/> Route to ID _____ Night [Choose one] <input type="checkbox"/> Take message <input type="checkbox"/> Say good-bye <input type="checkbox"/> Disconnect <input type="checkbox"/> Restart <input type="checkbox"/> Operator <input type="checkbox"/> Route to ID _____



Action After Greeting	Action After Taking Message
Choose one Day setting and one Night setting: Day [Choose one] Night [Choose one] Transfer Introduction _____ _____ _____	Choose one: <input type="checkbox"/> Say good-bye <input type="checkbox"/> Disconnect <input type="checkbox"/> Restart <input type="checkbox"/> Operator <input type="checkbox"/> Route to ID _____
Message Options	
Maximum message length _____ Seconds <input type="checkbox"/> Caller can edit/review message	Choose one option below <input type="radio"/> All outside caller messages are marked urgent <input type="radio"/> No outside caller messages are marked urgent <input type="radio"/> Ask caller whether to mark messages urgent

Worksheet #5: Public Settings and Public Fax Box	
Console Screen - Application Setup: Public Settings and Public Fax Box	
Public Messages	
Public Message Hold Time _____ (days)	
Public Message Archive Time _____ (days)	
Public Fax Box	
Fax ID _____ (if different than \$_FAXBOX)	Voice Name _____ Write the voice name you will use if different than "The Public Fax Box."
Transfer	Action
<input type="checkbox"/> Transfer to fax machine at _____ Transfer type (choose one) <input type="checkbox"/> Await answer <input type="checkbox"/> Wait for ringback <input type="checkbox"/> Release Rings _____	Action (choose one): <input type="checkbox"/> Say good-bye <input type="checkbox"/> Disconnect <input type="checkbox"/> Restart <input type="checkbox"/> Operator <input type="checkbox"/> Route to ID _____ <input type="checkbox"/> Ask for voice annotation <input type="checkbox"/> Announce fax if no annotation
Public Fax Box Holding	
<input type="checkbox"/> Allow holding when line is busy	Choose one: <input type="radio"/> Touchtone holding <input type="radio"/> Voice-detect holding

Worksheet #6: System Schedules	
Console Screen - Application Setup: System Schedules	
Current Day Mode Schedule #1: (Make copies of this worksheet for Schedules #2 and #3)	
Range 1: From ___ am / pm	Until ___ am / pm
M <input type="checkbox"/> T <input type="checkbox"/> W <input type="checkbox"/> Th <input type="checkbox"/> F <input type="checkbox"/> S <input type="checkbox"/> Su <input type="checkbox"/>	
Range 2: From ___ am / pm	Until ___ am / pm
M <input type="checkbox"/> T <input type="checkbox"/> W <input type="checkbox"/> Th <input type="checkbox"/> F <input type="checkbox"/> S <input type="checkbox"/> Su <input type="checkbox"/>	
Range 3: From ___ am / pm	Until ___ am / pm
M <input type="checkbox"/> T <input type="checkbox"/> W <input type="checkbox"/> Th <input type="checkbox"/> F <input type="checkbox"/> S <input type="checkbox"/> Su <input type="checkbox"/>	
Ignore Holidays? <input type="radio"/> Yes <input type="radio"/> No	
Schedule 4 <input type="radio"/> Day <input type="radio"/> Night	
Holidays [24 hour night mode] Use MM/DD format.	
_____	_____
_____	_____
_____	_____
Automatically adjust to Daylight Savings Time?	On now?
<input type="radio"/> Yes <input type="radio"/> No	
Daylight Savings Time starts on _____	Ends on _____ Hour adjustment _____

Worksheet #7: General Settings		
Console Screen - Application Setup: General Settings		
Global Settings		
Maximum message life __ days	Call report aging __ days	Keypad Map (choose one) <input type="checkbox"/> Default (Q=7, Z=9) <input type="checkbox"/> QZ on the 0 key <input type="checkbox"/> Numbers only keypad <input type="checkbox"/> Swedish keypad <input type="checkbox"/> QZ on the 1 key

Operating System Settings		
Daily OS surrender at _____	Weekly OS surrender at _____ on (choose one) <input type="checkbox"/> Sunday <input type="checkbox"/> Monday <input type="checkbox"/> Tuesday <input type="checkbox"/> Wednesday <input type="checkbox"/> Thursday <input type="checkbox"/> Friday <input type="checkbox"/> Saturday	Monthly OS surrender at _____ on _____ (day of the month)

System IDs		
ID for Alpha Directory ____	<input type="checkbox"/> Auto transfer to extension when only one match	System ID for numbered groups ____

Recording Settings		
Maximum screening recording ____ seconds	Maximum ID attempts ____	Route bad ID attempt to ____
<input type="checkbox"/> Beep when recording begins	Time to wait for recording to begin ____ seconds	Maximum subscriber to subscriber message ____ seconds
Amount to skip back/forward on rewind/fast-forward ____ seconds	Pause length to end messages shorter than 30 seconds ____ seconds	Pause length to end messages longer than 30 seconds ____ seconds
Disk full warning when ____ minutes left		

Miscellaneous Settings	
Startup options _____	Voice error notices to Personal ID(s) _____

Worksheet #8: Default Subscriber Personal ID	
Console Screen - Subscribers and Guests: Default Subscriber (Summary)	
Name:	Default Subscriber
Personal ID:	_____
	(Write the convention you will use to create Personal IDs if different from the default convention.)

Call Transfer	Greeting and One Key Dialing	Action After Greeting
<input type="checkbox"/> Transfer calls to extension X Type [Choose one] Rings _____		Action [Choose one] Route to ID _____ _____ Save old messages _____ Save archive messages

Notification and Delivery	Conversation	Access Options
<input type="checkbox"/> Use Message Lamp Current Lamp Status <input type="radio"/> Off <input type="radio"/> On	<input type="radio"/> 1 for YES - 2 for NO <input type="radio"/> Menu Mode	<input type="checkbox"/> First time enrollment

Worksheet #9: Default Subscriber Call Transfer	
Console Screen - Subscribers and Guests: Default Subscriber: Call Handling	
Transfer Action	Holding
<input type="radio"/> Transfer calls through to _____ <input type="radio"/> Send calls directly to voice mail Transfer type (choose one): <input type="checkbox"/> Await answer <input type="checkbox"/> Wait for ringback <input type="checkbox"/> Release ____ Rings	<input type="checkbox"/> Allow holding when line is busy Holding Type (choose one): <input type="radio"/> Touchtone holding <input type="radio"/> Voice-detect holding
Transfer Options (Active)	Screening Options
Select any transfer options which apply: <input type="checkbox"/> Beep when connected <input type="checkbox"/> Confirm before connecting <input type="checkbox"/> State who the call is for Choose one: <input type="radio"/> Don't ask for identification <input type="radio"/> Ask for name <input type="radio"/> Ask for name, save with message	Select any transfer options which apply: <input type="checkbox"/> Beep when connected <input type="checkbox"/> Confirm before connecting <input type="checkbox"/> State who the call is for <input type="checkbox"/> Detect dial tone/hang-up calls Choose one: <input type="radio"/> Don't ask for identification <input type="radio"/> Ask for name <input type="radio"/> Ask for name, save with message
Choose the option which will be active: <input type="radio"/> Use transfer options <input type="radio"/> Use screening options	

Worksheet #10: Default Subscriber Greeting and Message Settings	
Console Screen - Subscribers and Guests: Default Subscribers: Action After Greeting	
Action after Greeting	Action after Message
Action (choose one): <input type="checkbox"/> Take message <input type="checkbox"/> Say good-bye <input type="checkbox"/> Disconnect <input type="checkbox"/> Restart <input type="checkbox"/> Operator <input type="checkbox"/> Route to ID Route to ID _____	Action (choose one): <input type="checkbox"/> Say good-bye <input type="checkbox"/> Disconnect <input type="checkbox"/> Restart <input type="checkbox"/> Operator <input type="checkbox"/> Route to ID Route to ID _____
Message Options	Message Life
<input type="checkbox"/> Caller can edit / review message Maximum message length _____ seconds Choose one: <input type="radio"/> Mark all messages urgent <input type="radio"/> Do not mark messages urgent <input type="radio"/> Ask to mark messages urgent	Days to save old messages _____ Days to save archived messages _____

Worksheet #11: Default Subscriber Notification	
Console Screen - Subscribers and Guests: Default Subscriber: Notification and Delivery	
Message Waiting Indication	
<input type="checkbox"/> Use message lamp	Message lamp extension _____

Message Delivery				
<input type="checkbox"/> Work Phone _____	From _____	Until _____	___ Rings every ___ minutes	[Code]
	<input type="checkbox"/> M <input type="checkbox"/> T <input type="checkbox"/> W <input type="checkbox"/> Th <input type="checkbox"/> F <input type="checkbox"/> S <input type="checkbox"/> Su		Batch delay ___ minutes	
<input type="checkbox"/> Home Phone _____	From _____	Until _____	___ Rings every ___ minutes	[Code]
	<input type="checkbox"/> M <input type="checkbox"/> T <input type="checkbox"/> W <input type="checkbox"/> Th <input type="checkbox"/> F <input type="checkbox"/> S <input type="checkbox"/> Su		Batch delay ___ minutes	
<input type="checkbox"/> Pager Phone _____	From _____	Until _____	___ Rings every ___ minutes	[Code]
	<input type="checkbox"/> M <input type="checkbox"/> T <input type="checkbox"/> W <input type="checkbox"/> Th <input type="checkbox"/> F <input type="checkbox"/> S <input type="checkbox"/> Su		Batch delay ___ minutes	
<input type="checkbox"/> Spare Phone _____	From _____	Until _____	___ Rings every ___ minutes	[Code]
	<input type="checkbox"/> M <input type="checkbox"/> T <input type="checkbox"/> W <input type="checkbox"/> Th <input type="checkbox"/> F <input type="checkbox"/> S <input type="checkbox"/> Su		Batch delay ___ minutes	

↓

Message code
(Choose one)
<input type="checkbox"/> Batch
<input type="checkbox"/> Each
<input type="checkbox"/> Urgent

Worksheet #12: Default Subscriber Conversation
Console Screen - Subscribers and Guests: Default Subscriber: Conversation
Conversation Preference
Choose one: <input type="radio"/> 1 for "yes", 2 for "no" conversation <input type="radio"/> Menu mode conversation

Message Playback	Message Addressing
Choose any options which apply: <input type="checkbox"/> Play new messages hands-free <input type="checkbox"/> Announce message length	Choose one: <input type="radio"/> By spelled name <input type="radio"/> By extension

Receipts Preference
Choose one: <input type="radio"/> Receipt summary <input type="radio"/> Explicit receipts as requested <input type="radio"/> All messages with explicit receipts

Worksheet #13: Default Subscriber Access Options**Console Screen - Subscribers and Guests: Default Subscriber Access Options**

For the 6 sections below, choose any options which you would like to apply to the default subscriber.

New Account Setup	Public Message Access	Setup Options
<input type="checkbox"/> Enroll when calling for the first time	<input type="checkbox"/> Receives public messages <input type="checkbox"/> Notified of public messages	<input type="checkbox"/> Restricted from changing setup <input type="checkbox"/> Greeting changes allowed <input type="checkbox"/> Call holding changes allowed

Addressing Options	Sending Options	Miscellaneous Options
<input type="checkbox"/> Return receipt request allowed <input type="checkbox"/> Urgent messages allowed <input type="checkbox"/> Private messages allowed <input type="checkbox"/> Future delivery allowed <input type="checkbox"/> Redirection of messages allowed	<input type="checkbox"/> Restrict from sending messages <input type="checkbox"/> Subscriber messaging allowed <input type="checkbox"/> Open group messages allowed	<input type="checkbox"/> Use original version conversation <input type="checkbox"/> List in automatic directory <input type="checkbox"/> Message review allowed

Worksheet #16: Message Groups	
Console Screen - Groups: Message Groups	
Copy this form for every Message Group you want to set up.	
Choose One <input type="checkbox"/> Use Spelled Names <input type="checkbox"/> Use Numbered Message Groups	System ID for numbered message groups _____ (Fill in System ID only if using numbered message groups. Remember to enter System ID in the Application Setup: General Settings screen.)
Group Owner _____	
Message Group Name _____	
Choose one <input type="radio"/> Private Group <input type="radio"/> Open Group	
Choose whether you want to use dispatch distribution. <input type="checkbox"/> Dispatch Distribution	
Voice Name _____	
Group Members _____	_____
_____	_____
_____	_____
_____	_____

Worksheet #17: System and Box Planner	
Copy this form for each transaction box you want to create.	
Type of Box	Owner
<input type="checkbox"/> Transaction Box ID _____	<input type="checkbox"/> Virtual Subscriber ID _____
<input type="checkbox"/> Interview Box ID _____	<input type="checkbox"/> System Manager ID _____
<input type="checkbox"/> Voice Detect Box ID _____	<input type="checkbox"/> Subscriber ID _____
Primary Purpose	
<input type="checkbox"/> Routing calls	
<input type="checkbox"/> Message Taking	
<input type="checkbox"/> Audiotext	
<input type="checkbox"/> Other _____	

Worksheet #18a: Transaction Boxes	
Console Screen - Transaction Boxes: Call Transfer	
Copy this form for every Transaction Box you want to set up.	
Owner of Box	_____
Transaction Box Name	_____
Transaction Box System ID	_____
Voice name	_____
Schedule No.	_____

Call Transfer	Greeting and One Key Dialing	Action After Greeting
Day: <input type="checkbox"/> Transfer to _____ Night: <input type="checkbox"/> Transfer to _____ Transfer type (choose one): <input type="checkbox"/> Await answer <input type="checkbox"/> Wait for ringback <input type="checkbox"/> Release Rings _____	Day [Record Greeting] Night [Record Greeting] Alternate [Record Greeting] <input type="radio"/> Use Day/Night Greeting <input type="radio"/> Use Alternate Greeting	Day (choose one) Route to ID _____ Night (choose one) Route to ID _____



Transfer Action	Transfer Options
Day: <input type="checkbox"/> Transfer to _____ Night: <input type="checkbox"/> Transfer to _____ Transfer type (choose one): <input type="checkbox"/> Await answer <input type="checkbox"/> Wait for ringback <input type="checkbox"/> Release Rings _____ Intro for transfer _____ _____	Select any transfer options which apply: <input type="checkbox"/> Beep when connected <input type="checkbox"/> Confirm before connecting <input type="checkbox"/> State who the call is for Screening options (choose one) <input type="radio"/> Don't ask for identification <input type="radio"/> Ask for name <input type="radio"/> Ask for name, save with message

Holding	
<input type="checkbox"/> Allow holding when line is busy	Holding Type (choose one): <input type="radio"/> Touchtone holding <input type="radio"/> Voice-detect holding

Worksheet #18b: Transaction Boxes		
Console Screen - Transaction Boxes: Call Transfer		
Day Greeting _____ _____		
Night Greeting _____ _____		
Alternate Greeting _____ _____		
Call Transfer	Greeting and One Key Dialing	Action After Greeting
Day <input type="checkbox"/> Transfer to _____ Night <input type="checkbox"/> Transfer to _____ Transfer type (choose one): <input type="checkbox"/> Await answer <input type="checkbox"/> Wait for ringback <input type="checkbox"/> Release Rings _____	Day [Record Greeting] Night [Record Greeting] Alternate [Record Greeting] <input type="radio"/> Use Day/Night Greeting <input type="radio"/> Use Alternate Greeting One Key Dialing 1 _____ 5 _____ 2 _____ 6 _____ 3 _____ 7 _____ 4 _____ 8 _____	Day (Choose one) <input type="checkbox"/> Take message <input type="checkbox"/> Say good-bye <input type="checkbox"/> Disconnect <input type="checkbox"/> Restart <input type="checkbox"/> Operator <input type="checkbox"/> Route to ID _____ Night (Choose one) <input type="checkbox"/> Take message <input type="checkbox"/> Say good-bye <input type="checkbox"/> Disconnect <input type="checkbox"/> Restart <input type="checkbox"/> Operator <input type="checkbox"/> Route to ID _____



Action After Greeting	Action After Taking Message
Choose one Day setting and one Night setting: Day _____ Route to iD _____ Night _____ Route to iD _____	Choose one: <input type="checkbox"/> Say good-bye <input type="checkbox"/> Disconnect <input type="checkbox"/> Restart <input type="checkbox"/> Operator <input type="checkbox"/> Route to ID _____
Message Options	
Maximum message length _____ seconds <input type="checkbox"/> Caller can edit/review message	Choose one option below: <input type="radio"/> All outside caller messages are marked urgent <input type="radio"/> No outside caller messages are marked urgent <input type="radio"/> Ask caller whether to mark messages urgent

Worksheet #19: Interview Boxes	
Console Screen - Interview Boxes	
Owner of Box	_____
Interview Box Name	_____
Interview Box System ID	_____
Voice name	_____

Interview Questions	Reply Time (in seconds)
1.	_____
2.	_____
3.	_____
4.	_____
5.	_____
6.	_____
7.	_____
8.	_____
9.	_____
10.	_____
11.	_____
12.	_____
13.	_____
14.	_____
15.	_____
16.	_____
17.	_____
18.	_____
19.	_____
20.	_____

Message Options	
Mark interview box messages urgent? (choose one) <input type="radio"/> All <input type="radio"/> None <input type="radio"/> Ask	Action after completing questions (choose one) <input type="checkbox"/> Say good-bye <input type="checkbox"/> Disconnect <input type="checkbox"/> Restart <input type="checkbox"/> Operator <input type="checkbox"/> Route to ID _____

Appendix C: Resolving tone detection problems

Resolving tone detection problems

The parameters that define hangup supervision tones (GTD) and call progress parameters are automatically configured when you specify the telephone system on the Telephone System Setup screen. Occasionally, these parameters need to be adjusted for the telephone system you are using. Typical symptoms of a voice messaging system that is experiencing difficulty interpreting hangup supervision tones include:

- The system releases calls to a busy signal when transfer type is set to Await Answer or Await Ring.
- The system releases calls to a Ringback signal when transfer type is set to Await Answer.
- The system places callers on hold, does not connect them to a message box and drops the line.

Typical symptoms of a voice messaging system that is experiencing difficulty interpreting call progress include:

- The system does not detect when a caller disconnects before transferring to an extension.
- The system goes off-hook for message delivery or to activate message waiting indications, but instead of dialing out, it plays the opening greeting.

If your voice messaging system has problems interpreting tones, you can run a utility that automatically updates the voice messaging system with new tone parameters. Use the chart below to determine which utility you should use.

If you are using this type of voice board:	and the system is experiencing problems with the following:	use this utility to reconfigure the parameters:
Dialogic	Call progress	USECPC
Dialogic	Hangup supervision	GTDETECT
Bicom	Call progress or hangup supervision	CP

To run a utility, you need a telephone within reach of the system console. Make sure you know the extension number of this telephone. Also, verify that the voice board driver software is loaded into the computer's memory.

Note The voice messaging system will not be able to answer calls or take messages while you run these utilities.

To use the USECPC Utility:

1. Exit to DOS and go to the directory where the voice messaging software is installed (usually this is C:\VMAIL).
2. Type USECPC [Port] [Interrupt] [Repetitions], where [Port] is the number of the voice messaging system port that the utility will use to run the test, [Interrupt] is the voice board software interrupt, and [Repetitions] is the number of call repetitions used for the test. For example, to run USECPC on port 1, with voice boards that have an IRQ of 5, for 6 call repetitions, type USECPC 1 5 6 .
3. Follow the on-screen instructions for running the Ring Test or the Busy Test. These two tests set up the parameters the voice messaging system uses to detect a ringback or busy tone.

If you are performing the Ring Test, do not pick up the test telephone's receiver during the test.

If you are performing the Busy Test, be sure to take the test telephone off-hook before starting the test.

4. After completing the test cycles, USECPC displays a summary of the signals it analyzed.
5. If you want to automatically update the voice messaging system with the parameters determined from the test, select Yes when you see the prompt: "Do you want to update your AVSWITCH.AVD right now?"

To use the GTDETECT Utility:

1. Exit to DOS and go to the directory where the voice messaging software is installed (usually this is C:\VMAIL).
2. Type GTDETECT . After the computer reboots, a menu is displayed.
3. Select the tone you want the voice messaging system to learn. You can choose SwitchReOrder, SwitchBusy, or SwitchDialtone.
4. You will be prompted to type the extension number of the tone source.

If you are detecting SwitchReOrder tone, type an invalid extension number.

If you are detecting SwitchBusy tone, take the test telephone off-hook and then type the extension of the test telephone.

If you are detecting SwitchDialtone, do not type an extension.

5. The test is complete when the monitor displays the menu again. After a successful test, an option will be added to the menu that allows you to save the tone detection parameters to a file. If you want to automatically update the voice messaging system with the parameters determined from the test, choose the option to save the file.

Appendix D: Special considerations for dialing outside telephone numbers

Special considerations for dialing outside telephone numbers

When configuring specific fields that contain outside telephone numbers you may include the following special characters as part of the number.

Character	What the voice messaging system does
, (comma)	Pauses for 1 second during dialing.
; (semi-colon)	Pauses for 3 seconds during dialing.
& (ampersand)	Performs a hookswitch flash (go on hook for one-half second, then go off hook). This is commonly used to access special features on your telephone system.
% (percent sign)	Performs a long hookswitch flash (go on hook for 3 seconds, then off hook again). On most telephone systems, this is equivalent to hanging up and reinstating a call. On some telephone systems, this is used for recall.
P (letter P)	Switches to pulse dialing. The voice messaging system uses tone dialing by default. To use pulse dialing throughout your system, you must prefix all dialout telephone numbers with P .
T (letter T)	Switches to tone dialing. The T option is only used when a number must be dialed via pulse, then switched midstream to tone (for example, a credit card call on a pulse exchange).

Dialing outside telephone numbers

If the telephone number specified in a field contains six or more characters, including special characters, the voice messaging system assumes that it is an outside number and automatically dials the outdial access code before dialing the number. (The outdial access code is set up on the Telephone System Setup screen.) If you do not specify an outdial access code on the Telephone System Setup screen, you must include it in the field.

Glossary

A

ACTION

Any action the system takes when processing a call, for example, taking a message, routing to the operator, or saying good-bye.

ADDRESSING OPTIONS

Permission you give a subscriber to use certain message options. For example, the permission to label a message "urgent" or to forward a message to others.

ALTERNATE GREETING

A greeting for a voice mailbox, transaction box, or voice detect box that can be recorded and turned on over the phone. The alternate greeting can be used as a 24-hour-a-day greeting in place of the day greeting or night greeting. *See also* **box's greeting**.

ARCHIVED MESSAGE

Any message a subscriber listens to and then saves for a number of days. You set the number of days that messages are archived. All old or archived messages must be saved each time they are heard or they will be deleted. *See also* **new message, old message**.

AUDIOTEXT

Recorded information that is available to callers 24-hours-a-day about whatever your organization wants callers to hear. You can provide menus of information or other messages of your choosing, and you can use audiotext messages in transaction and interview boxes.

AUTOMATED ATTENDANT

A group of features that allows the voice messaging system to act as a receptionist to answer and route incoming phone calls.

AUTOMATIC DIRECTORY ASSISTANCE

With automatic directory assistance, callers reach a subscriber's Extension ID or a named message group by spelling the first three letters of the name on a touchtone keypad. *See also* **numeric directory assistance, directory assistance.**

AUTOMATIC FAX

Callers set their fax machines to send your organization a fax automatically. Callers do not monitor the call. When the voice messaging system answers the call and detects a fax tone, the system transfers the call to the fax extension automatically. *See also* **manual fax.**

AUTOMATIC ROUTING

A process set up through transaction boxes to route callers through the voice messaging system to a specific ID after they hear the opening greeting. Use transaction boxes to route callers to menus or to interview box one-key dialing.

AWAIT ANSWER

One of three types of call transfer. The system waits for the extension to be answered before completing a transfer to that extension. *See also* **release, wait for ringback.**

B**BATCH DELIVERY**

A message delivery process in which the voice messaging system collects messages and then calls subscribers at regularly scheduled intervals to let them know they have messages. You set up the delivery intervals. One of three types of message delivery methods. *See also* **each delivery, urgent delivery, message notification.**

BOX ID

The number a caller uses to reach a transaction box, interview box, operator box, or voice detect box. Also used for automatic routing of calls and in one-key dialing menus.

BOX'S GREETING

A recorded greeting or menu of options in a transaction box. The box owner is responsible for recording the box greeting. **Day greeting** plays during the days and times you have designated as normal business hours. **Night greeting** plays during the days and times outside of those specified in your day schedule. You can use an **alternate greeting** as a 24-hour-a-day greeting.

BUSY PORTS REPORT

Run Busy Ports report if you want to determine how often your ports are busy, whether your telephone ports are full or nearly full during peak times, and the average percentage of time the ports are busy during a specific time period. Run the report for an individual port or for all ports on the system.

C**CALL HOLDING**

You can set up the voice messaging system to let callers hold until the busy extension they are calling becomes free.

CALL ROUTING

Calls are routed through the voice messaging system without being transferred to the telephone system. *See also* **call transfer**.

CALL REPORT LOG

Run Call Report Log (on the System Reports screen) to get a record of every call, whether in or out, that the voice messaging system answers, dials, or routes. Create the report for the entire system, or for an individual subscriber or System ID. For further analysis, you can import the report into most database and spreadsheet programs.

CALL SCREENING

Allows a subscriber to either accept a call or forward it to their voice mailbox after hearing information about the caller.

CALL TRANSFER

Calls are transferred to the telephone system which takes control of connecting the call to an extension. *See also* **call routing**.

CONSOLE ENROLLMENT

You enroll subscribers by entering information about each subscriber at the system console, including the complete spelled name, recorded name, Personal ID, and Extension ID. *See also* **over-the-phone enrollment, enrollment conversation**.

CONVERSATION

The collection of pre-recorded questions, choices, and responses that the system plays to guide callers through the voice messaging system.

D**DAY GREETING**

Plays during the days and times you have designated as normal business hours. *See also* **alternate greeting, night greeting**.

DAY MODE

You can configure the system to handle calls differently during Day Mode and Night Mode hours. You define the days and hours when each mode operates. For example, you might define Day Mode as the hours when your organization is open. All other hours are assigned to Night Mode. *See also* **holiday schedule, schedule**.

DEFAULT

The option the system uses if you do not select another option.

DIALTONE DETECTION

Enables the voice messaging system to listen for a dialtone when initiating a dialout. Upon initiating a dialout for message waiting indication or message delivery, the system can listen to make sure a line is available. Dialtone detection is accomplished through a feature called General Tone Detection. *See* **General Tone Detection**.

DIRECTORY ASSISTANCE

Allows callers to reach a subscriber's Extension ID without speaking to an operator. Callers whose telephones have letters on their touchtone keys can use **automatic directory assistance**. Callers whose telephones do not have letters on their touchtone keys or who need other special directory assistance can use **numeric directory assistance**.

DIRECTORY GROUP

A group of subscribers listed in numeric directory assistance. You set up directory groups that list subscribers with a common characteristic, such as department, location, or schedule. When a caller requests numeric directory assistance, the system plays the names of the directory group members and their extensions.

DIRECTORY ID

Callers use the Directory ID to access numeric directory assistance.

DIRECTORY MENU

A directory menu lists the names of directory groups or sub-menus. Use directory menus to automatically create one-key dialing menus for numeric directory assistance.

DIRECTORY REPORTS

Run these reports to see the structure of the system: its subscribers, System IDs, message groups, and numeric directory assistance. Create the report for everyone enrolled in the system, for all Extension IDs, for message groups, or for numeric directory assistance.

DISPATCH

A message distribution option. If you select it, only the first member to hear the message receives it. If you do not select it, each member of the group receives the group message.

DTMF

Dual-tone multi-frequency. This is a technical term for true touchtones.

E**EACH DELIVERY**

A message delivery process in which the voice messaging system calls subscribers each time they have a new message. *See also* **batch delivery**, **urgent delivery**, **message notification**.

EASY MESSAGE ACCESS

Subscribers can press one touchtone to retrieve new messages without pressing their Personal IDs. Available only when the voice messaging system is integrated with your telephone system.

ENROLLMENT CONVERSATION

You can configure the system to play a special enrollment conversation for new subscribers that lets them enroll themselves the first time they call the voice messaging system. *See also console enrollment, over-the-phone enrollment.*

ERROR LOG REPORT

Run this report to see system errors, including the error code, the port on which the error occurred, and the date and time the error occurred. Use the Error Log Report to identify system problems.

EXTENSION

The actual telephone extension number of a telephone. An extension number may or may not be the same as its Extension ID. *See also Extension ID.*

EXTENSION ID

The number a caller uses to reach a subscriber's voice mailbox. The Extension ID is not always the same as the actual telephone extension number. For example, if two subscribers share the same extension, they will have different Extension IDs for their separate voice mailboxes. *See also extension.*

F**FAX DETECT**

The voice messaging system recognizes incoming fax tones. The system automatically delivers faxes to the Public Fax Box.

FAX ID

The voice messaging systems uses a Fax ID to route faxes to the Public Fax Box.

FUTURE MESSAGE DELIVERY

A subscriber can specify a future date and time for a message to be sent. This is often used to send automatic reminders to individuals or groups.

G**GENERAL TONE DETECTION (GTD)**

A feature in the voice mail system used to determine the correct frequencies for dial tone, reorder tone, and busy tone. GTD is useful for telephone systems that do not provide immediate disconnect signaling; when GTD is turned on, the voice mail system listens for dial tone, reorder tone, and busy tone.

GREETING

Any recorded announcement a caller hears. Greetings give information, welcome callers to the system, offer menu options, and offer a chance to leave a message. The **opening greeting** is what callers hear when they dial the main telephone number for your organization. A **subscriber's personal greeting** is what callers hear when they reach a subscriber's voice mailbox. A **box's greeting** is a recorded greeting or menu of options in a transaction box.

GROUP REPORT

Run this report to show all message groups, the members of a particular group, the owners of private groups, and the groups to which a particular subscriber or guest belongs. *See also* **directory reports**.

GUEST

A guest is an individual who is given limited subscriber privileges in the voice messaging system. A guest has a guest mailbox and can trade two-way messages with the subscriber who hosts him or her. A guest can be a member of the host's private message groups. Guests cannot be members of open message groups.

H**HOLIDAY SCHEDULE**

You can schedule up to 18 holidays per year, during which the system remains in Night Mode for 24 hours. *See also* **Day Mode, Night Mode**.

HOST

A subscriber who sponsors a guest in the voice messaging system. Some subscribers may want to give vendors or important customers special privileges within your organization by hosting them as guests.

I**INSTALLER**

The individual who installs the voice messaging system for your organization. Typically, the installer sets up many options for the system, including ports and telephone setup.

INTERNAL CALLER

An individual who can be identified by the voice messaging system using an ID. Subscribers and guests who call from within the voice messaging system, or who enter their Personal IDs when calling from outside the system, are internal callers.

INTERNAL ID

You can hide a System ID to prevent callers from dialing it directly. Hide a System ID by adding a prefix, such as a dollar sign (\$) character, that cannot be dialed.

INTERVIEW BOX

Interview boxes can contain up to 20 recorded questions. You can set the interview box to record responses to each of the interview questions. For example, a business could use interview boxes to take sales orders or do market research. *See also transaction box.*

L**LOCAL CONNECT**

In local connect mode, you can record prompts or greetings using an internal telephone extension. You establish the local connection on the system console, then use a nearby extension to complete your recordings.

M**MAILBOX**

The voice messaging system stores messages from callers in a subscriber's mailbox.

MANUAL FAX

Callers dial your organization's telephone number from their fax machine handset. They monitor the progress of the call and when the voice messaging system answers, they press the number for the fax extension. They can leave a message for the fax recipient before connecting to the fax machine. *See also automatic fax.*

MESSAGE GROUP

A list of subscribers and/or guests to whom a subscriber can send the same message. Any subscriber can be a member of any message group. Guests can only be members of private groups owned by their host subscriber. *See also private message group, open message group.*

MESSAGE NOTIFICATION

The voice messaging system can call subscribers at any phone number they specify when they have new messages. The system can also activate pagers and message waiting indicators.

MESSAGE STACK

The collection of new, unheard messages listed by source in a subscriber's mailbox.

MESSAGE WAITING INDICATOR

A feature on a telephone such as an indication light, a distinctive dialtone, or an LCD display that lets subscribers know when they have messages waiting.

N

NEW MESSAGE

A message that has not yet been heard by the recipient. *See also* **archived message, old message.**

NIGHT GREETING

Plays during all days and times except those specified in your Day Mode.

NIGHT MODE

You can configure the system to handle calls differently during Day Mode and Night Mode hours. You define the days and hours when each mode operates. For example, you might define Day Mode as the hours when your organization is open. All other hours are assigned to Night Mode. *See also* **holiday schedule, schedule.**

NUMBERED GROUP

Message groups that are identified by a three-digit group number instead of a name.

NUMBERED GROUPS ID

To reach a numbered group, subscribers must first press the Numbered Groups ID, then the three-digit group number.

NUMERIC DIRECTORY ASSISTANCE

Numeric directory assistance allows callers to identify a subscriber's Extension ID by pressing numbers to move through a directory of subscribers. You group subscribers into directory groups and directory menus to set up this feature. *See also* **automatic directory assistance, directory assistance, directory group, directory menu.**

O

OLD MESSAGE

A message that has been heard, but not deleted or archived. You decide how long old messages are saved. All old or archived messages must be saved each time they are heard or they will be deleted. *See also* **archived message, new message.**

ONE-KEY DIALING

A method by which you allow callers to press one touchtone to reach certain System IDs.

ONE-WAY MESSAGE

A message left by an unidentified caller. The recipient must dial the extension of the caller in order to reply. *See also* **two-way message.**

OPEN MESSAGE GROUP

A message group to which all authorized subscribers can send messages. Guests cannot be members of an open group.

OPENING GREETING

The greeting that callers hear when they dial the main telephone number for your organization.

OPERATOR BOX

A transaction box used exclusively for handling calls that go to your operator.

OUTSIDE CALLER

An outside caller is an individual calling from outside the voice messaging system. This may also be referred to as an unidentified caller. If a subscriber calls the system and does not enter a Personal ID, that subscriber is treated as an outside caller.

OVER-THE-PHONE ENROLLMENT

You can configure the system to play a special enrollment conversation for new subscribers that lets them enroll themselves in the voice messaging system the first time they call the system. *See also console enrollment, enrollment conversation.*

OWNER

A subscriber or System Manager who has control over a transaction box, voice detect box, interview box, or message group is its owner. If the owner is deleted, all transaction boxes, interview boxes, private message groups and guests that he or she owns are also deleted. Only the owner can record by phone a greeting for a transaction box or voice detect box.

P**PERSONAL ID**

A unique System ID that identifies a subscriber or guest to the system.

PERSONAL SECRETARY

If a subscriber is unavailable, the system can route callers automatically to another extension, such as the subscriber's secretary or assistant, or it can play a menu of other extensions that might be helpful to callers. This mechanism is called the personal secretary.

PORT

A telephone line coming into the voice messaging system.

PREVIOUS REPORT

Use the Previous Report screen to display, copy, or print reports you created earlier. This feature is useful when you display a report on screen and later decide to print it. You can also use Previous Report to view or print any text file without leaving the voice messaging system console.

PRIVATE MESSAGE GROUP

A private message group allows only the group's owner to send a message to the group.

PROMPT

A recording that is played at specific places in the system conversation.

PUBLIC FAX BOX

The voice messaging system's Public Fax Box provides fax detect, routing, and notification for incoming faxes.

PUBLIC INTERVIEW BOX

An interview box that handles callers who have not reached an operator or have not chosen any System ID. You may also choose to route other callers to this box. Messages collected here are public messages.

PUBLIC MESSAGES

Messages collected in the Public Interview Box or the operator box are public messages. These are distributed only to subscribers with public message access.

Q**QUICK OPTION MENU**

An alternative to the Yes/No conversation, in which subscribers select menu options using touchtones.

R**RECEIPT**

A record of a message one subscriber has left for another.

RECORDED NAME

The system plays the recorded name of a subscriber, guest, operator, or transaction box in prompts that require identification of the source or destination of a message or call. Also called voice name.

RELEASE

One of the three types of call transfer. The voice messaging system completes the transfer without checking whether the call is answered or whether there is a busy signal. *See also* **await answer**, **wait for ringback**.

REPLY TIME

The maximum time allowed to record an answer to an interview box question.

S

SCHEDULE

Schedules determine how calls will be handled at different times and/or different days. You can define up to three different schedules for the system. In addition, you can use Schedule 4, which remains in either Day Mode or Night Mode 24 hours a day. You can set up certain subscriber mailboxes, transaction boxes, or ports to function on a particular schedule. *See also* **holiday schedule, Day Mode, Night Mode.**

SECURITY CODE

Subscribers can set a security code so that no one else can access their message boxes.

SPELLED-NAME GROUP

Message groups that are identified by a name instead of a number. To reach a named group, subscribers select the group by spelling its name on the telephone keypad.

STATION NUMBER (EXTENSION NUMBER)

The number used by the telephone system to identify a particular physical extension. Same as Extension Number.

SUBSCRIBER

Anyone enrolled in the voice messaging system is a subscriber. *See also* **guest, System Manager.**

SUBSCRIBER'S PERSONAL GREETING

The greeting callers hear when they reach a subscriber's voice mailbox. *See also* **alternate greeting.**

SWITCH

The telephone system is sometimes called the switch.

SYSTEM GREETINGS

When callers first reach the voice messaging system, they hear the opening greeting. If you use schedules, you can have two opening greetings. The **day greeting** plays during the days and times you have designated as normal business hours. The **night greeting** plays during the days and times outside of those specified in the day schedule.

SYSTEM ID

You assign a unique System ID for each subscriber, guest, interview box, transaction box, voice detect box, directory group, and directory menu. System IDs can include numbers, letters, or symbols.

SYSTEM MANAGER

The individual in an organization who sets up and maintains the voice messaging system. The System Manager typically sets default options, adds and removes subscribers, controls access to certain parts of the system, trains operators, and backs up the system data. *See also* **installer, subscriber.**

SYSTEM MANAGER CONVERSATION

The collection of pre-recorded prompts, questions, choices, and menus that the system plays to the System Manager to allow the System Manager to maintain the system.

T**TOUCHTONE**

Pushbutton telephones or pushbutton telephone keys, or the sound they make.

TOUCHTONE CALL HOLDING

Allows callers to choose whether or not to hold by pressing a touchtone.

TRANSACTION BOX

A type of box that you use to set up call routing, create menus, or provide audiotext announcements. *See also* **voice detect box, interview box, Operator Box, Public Interview Box, Public Fax Box.**

TRANSFER

A physical connection of a call to a particular telephone.

TRANSFER-GREETING-ACTION

The three-part sequence by which every call routed to a message box is handled. **Transfer** determines if and how to physically connect a call to the destination telephone. If the transfer does not occur or the call is not answered, the **Greeting** plays recordings and offers new options to the caller. After the Greeting, the **Action** is what the system does next, for example, takes a message or says good-bye.

TWO-WAY MESSAGE

When both the sender and the recipient of a message are enrolled on the voice messaging system, the recipient can immediately reply to a message when prompted to do so by simply staying on the line. *See also* **one-way message.**

U**URGENT DELIVERY**

A message delivery process in which the voice messaging system calls subscribers to notify them of new messages only when an urgent message has arrived. One of three types of message delivery methods. *See also* **batch delivery, each delivery, message notification.**

URGENT MESSAGE

An urgent message is a message the caller has marked urgent. Urgent messages are listed first in a recipient's message stack.

USAGE REPORTS

Run these reports to see how much the voice messaging system is being used hour by hour. Create a usage report for an individual subscriber, guest, Extension ID, System ID, or the entire voice messaging system. You can display the information in a bar graph or table format.

V**VIRTUAL SUBSCRIBER**

You can create a virtual subscriber to serve as the owner of a collection of transaction boxes and/or message groups that you do not want to connect to a particular individual in your organization. Using virtual subscribers helps ensure that important boxes and groups are not inadvertently deleted.

VOICE DETECT

With voice detect, the voice messaging system listens for spoken sounds, not touchtones.

VOICE DETECT BOX

A kind of transaction box that allows callers to make choices or respond to prompts by saying "Yes" or by remaining silent for "No."

VOICE DETECT CALL HOLDING

Allows callers to choose to hold by saying "Yes" rather than by pressing touchtones.

VOICE FIELD

You record prompts, recorded names, or greetings in voice fields.

VOICE NAME

Recorded name. The system plays the recorded name of a subscriber, guest, operator, or transaction box in prompts that require identification of the source or destination of a message or call. *See also recorded name.*

W**WAIT FOR RINGBACK**

One of three types of call transfer. The voice messaging system waits for an extension to ring a certain number of times before transferring the call. *See also await answer, release.*

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