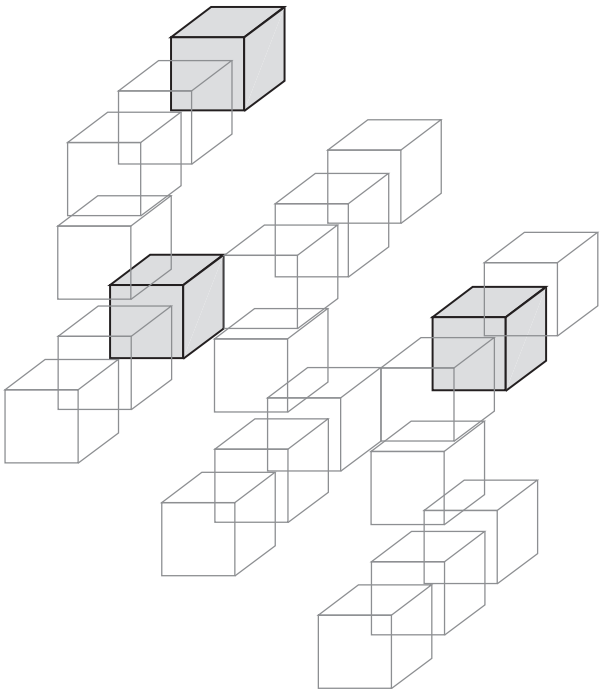
DSG TECHNOLOGY

IM1200 User Manual

IP-Enabled Voice Mail System



Version 1.2

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CHAPTER 1

System Overview

This chapter introduces the main features of IM1200.

- ◇ New Generation Voice Mail
- ◇ System Features
- ◇ Auto Attendant Features
- ◇ Voice Messaging Features

New Generation Voice Mail

InterMail IM1200 is a new generation voice mail system that combines the Internet with voice processing technologies to provide a robust, dynamic, and user friendly voice messaging system that meets your office communication needs today. Designed with small-and-medium size business customers in mind, its features and functionality nonetheless rival those used by Fortune 500's.

System Features

- **Easy PBX Integration** Integrating with PBX has never been easier. Simply pick the PBX from the PBX list and then select the call transfer method. The call transfer methods include Supervised, Non-Supervised, Semi-Supervised, and Call Pickup.
- **Built in VoIP Gateway** Saves money by routing calls over the Internet through the built in VoIP gateway. A user definable dialing plan can link remote offices with virtual extensions.
- **Network Based Voicemail Management Software (VMS)** Gives you an easy graphical user interface to maintain the system via local and wide area network. With the ubiquity of Internet, you can have full control of the system from wherever the network is available.
- **System Report** Offers the system administrator easy overview of call statistics, mailbox usage, system status and performance.
- **Incoherent Configuration Report** Keeps track of all system configurations that are incoherent to other settings. This is very useful when the administrator is trouble shooting the system configuration.
- **Live System Monitoring** All system activities can be monitored through the network using the VMS utility program. The DTMF inputs and outputs at each voice channel can be captured by a built-in line monitor (digit grabber).
- **Voice-Guided System Configuration** IM1200 allows you to do the system setup and configuration changes using a simple touch-tone phone instead of running a PC. It makes the process easy by providing comprehensive voice prompts that guide you through every step of the way.
- **System Configuration Backup** The system parameters and mailbox configurations can be backed up to the system administrator's local hard drive. This enables you to keep records of various installations and expedite disaster recovery process.
- **Dedicated Hardware and Software** IM1200's integrated, all-in-one, non-PC based architecture makes it a stable, secure, and reliable product.
- **Multilingual System Announcement** Users and callers can select the language they prefer to hear in the system greetings and announcements.
- **Name Directory** Gives the caller a quick and easy way to locate the person they are trying to reach by entering their first or last name.
- **Holiday Greetings** The administrator can set up a holiday calendar containing single or a range of dates each capable of holding its own holiday greeting.

Auto-Attendant Features

- **Custom Automated Attendant Menu** Up to 300 different Auto Attendant Menus (AA Menus) can be designed and used to handle calls differently per different time of day, day of week, and line of the system.
- **Operator & Extension Groups** Extensions can be grouped together to form a team of operators, a department, or for other purposes. Different operator teams can be selected for Business Hours, Break Hours, After Hours, and Closed Days.
- **Call Distribution** Calls can be distributed among group members in linear, circular, or ACD fashion.
- **Automatic Call Forward & Do-Not-Disturb** These are convenient call answering options that can be individually set for each extension.
- **Conference Call** If supported by your PBX, IM1200 can transfer calls to an external phone number when the called party is not at his/her extension.

Voice Messaging Features

- **Unified Messaging System** Your voice message can be delivered to your e-mail address as a Wave file attachment. The messages can be categorized as new or old message after its delivery.
- **Virtual and Multi-Tenant Mailboxes** Aside from Real mailboxes, IM1200 provides Virtual and Multi-Tenant mailboxes for messaging-only or extension sharing applications.
- **Personal Distribution Lists** Each mailbox can define up to 9 personal message distribution lists. Messages can be sent to multiple recipients with a simple selection of a list.
- **Automatic Message Forward** Lets you forward all messages to a co-worker's mailbox or a distribution list when you are away. Messages can be easily shared this way without any of them being overlooked.
- **Versatile Message Notification** You can receive notification of incoming messages via extension, message lamp, pager, regular phone, mobile phone, and E-mail. You can also schedule the time you want the notification to be in effect, retry interval, and retry count.
- **Urgent and Private Message Tags** Messages can be marked with different tags to indicate the nature of the messages. The playback of the messages can also be prioritized based on the tag.
- **Message Play Control** A comprehensive set of commands including Replay, Save, Delete, Time Stamp, Forward, Skip, Rewind, Fast Forward, and Volume Adjustment, offers the user a convenient and efficient way of playing back messages.

CHAPTER 2

Installing IM1200

This chapter explains the environmental requirements and the installation steps of IM1200.

- ◇ Unpacking IM1200
- ◇ Environmental Requirements
  - Telephone System
  - Network Environment
  - UMS E-Mail Server
- ◇ Installing IM1200

Unpacking IM1200

The package you received for IM1200 should be a standard IM1200 package; however, the content may vary depending on the location and the dealer you have purchased the unit from. Report any damage or missing items in the package to your dealer right away.

Items in your package include:

- IM1200 Unit
- Power Supply (12V DC)
- Installation Manual (CD)
- Battery Charger Cable
- Telephone Cords
- Line Boxes
- RJ-45 Network Cable

Note: *The RS-232 Null Modem Serial Cable can be acquired from your local dealer. Please note the 2nd, 3rd, 4th and 6th, 7th, 8th pins has been switched. Please use only the cable provided by your dealer.*

Environmental Requirements

The IM1200 should be located in a dust-free environment that is near the trunk lines from your existing telephone system. The IM1200 must have access to your network wiring if you plan to access IM1200 through your LAN (Local Area Network) or WAN (Wide Area Network), or if you plan to use the Internet telephony features of IM1200.

It is highly recommended that you use an Uninterruptible Power Supply (UPS) in conjunction with the IM1200 to protect against power surges and failures.

Telephone System

IM1200 is compatible with most major brands of Telephone Systems/PBX, including:

Manufacturer	Model (examples)
Alcatel	4200/4400, OmniPCX Office
Avaya	Partner, Merlin/Definity
NEC	ICS7400/EDK, NDK, M80, M100, MCI140
Nortel	Mercator, Norstar, Option 11
Panasonic	KXTD-1232/500, KXTA-308/824
Philips	D120, SOPHO FVM 805/810/300, DS-1000
Siemens	Hicom 300, Hipath 4000

Figure 2-1

IM1200 comes with 4 or 8 voice channels, and the same number of analogue ports is required from the Telephone System. In most cases, the VM ports from the Telephone System are the preferred ones to be connected to IM1200.

Network Environment

It is highly recommended that you provide a permanent Internet connection for IM1200, such as that from a Leased Line, xDSL (excluding PPPoE) or Cable Modem, and assign a Static IP address (Real IP address if applicable) to IM1200.

Your LAN can be in the DHCP network environment. If you assign a pseudo (private) IP address to IM1200, either static or dynamic IP address, you need to open the TCP and UDP ports for the IP address assigned to IM1200 and the network equipment connected to WAN.

- For 4-channel IM1200, open TCP port 1100 and UDP ports 1101-1104.
- For 8-channel IM1200, open TCP port 1100 and UDP ports 1101-1108.

UMS E-Mail Server

IM1200 can automatically send an e-mail with the voice message attachment to a designated e-mail address whenever a mailbox receives a new voice message. In order for this to work, a standard SMTP e-mail server with a valid e-mail address is required.

Installing IM1200

The following is a schematic for the line configuration of IM1200 with other hardware.

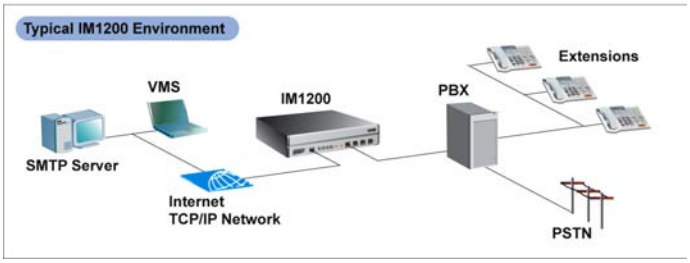

Figure 2-1

The following is a schematic for the front panel of IM1200:

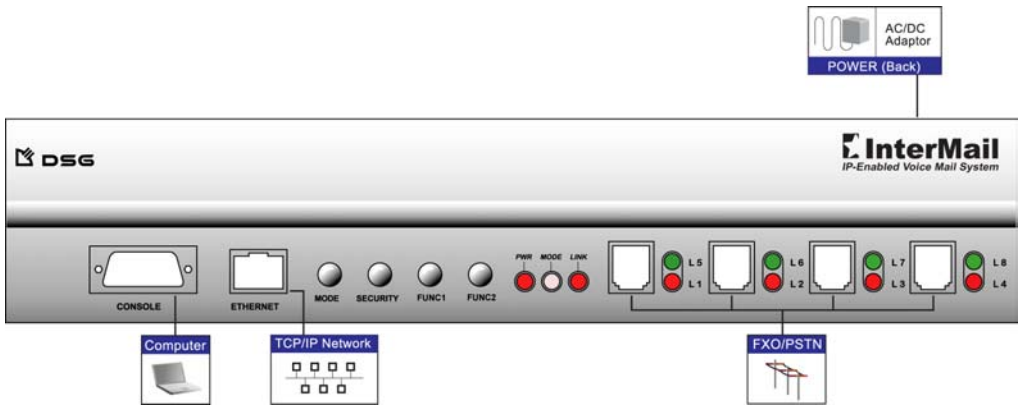

Figure 2-2

- **Mode Button** The Mode Button switches the Operation Mode of the IM1200. The Operation Mode will switch from Business Hours → Break Hours → After Hours → Closed Day → Business Hours→…, with each push of the button. The Operation Mode will automatically switch according to the Business Schedule, if it is set to Auto mode. (For Business Schedule, see page 5-10)
- **Security Button** When the button is pressed down, all access to the system programming, including DTMF and VMS programming, will be blocked. Note: this is the only button that has a locking mechanism. Be sure to toggle it back to normal position to allow system programming.
- **FUNC1 Button** Holding down the FUNC1 Button while turning on the power of IM1200 until it finishes the system booting cycle will restore the system IP address and administration password to the factory default. (For IP Settings, see page 3-2)
- **FUNC2 Button** Holding down the FUNC2 Button while turning on the power of IM1200 until it finishes the system booting cycle will restore the system IP address and administration password and other system parameters to the factory default.
- **Power Indicator** The Power Indicator will be lit when the IM1200 has power connected and is turned on.
- **Mode Indicator** The Mode Indicator will indicate which Operation Mode the system is in at the moment.
- **Link Indicator** The Link Indicator will be lit when there is a live Ethernet connection to the system.
- **L1-L8 Line Indicators** The Line Indicator will be on when the indicated channel is being used.

Follow these steps to install IM1200:

1. Use the 2- or 4-wire phone cords to connect your phone system's station ports to the jacks labeled L1 to L4 on the IM1200 front panel. If your IM1200 is an 8-port system, use the RJ14-to-RJ11 line splitters and have the joined ends connected to the jacks labeled L1/L5 to L4/L8 on the IM1200 front panel, and the split ends to your phone system's station ports.
2. Connect your Ethernet network with IM1200 using a standard Ethernet (UTP CAT-5e) cable to the RJ45 jack labeled ETHERNET on the IM1200 front panel.
3. Connect your power adaptor to the socket labeled PWR on the back panel of IM1200.
4. Connect the Battery cable to a 12-volt battery if you wish to use a battery for emergency power.
5. Turn on the power switch at the back of IM1200. Allow about 1 minute for it to finish the boot cycle.

CHAPTER 3

Using VMS

This chapter describes the installation and usage of the Voicemail Management Software to set up and manage IM1200.

- ◇ Connecting VMS to IM1200
  - Installing VMS
  - Turning on IM1200
  - Logging on IM1200
- ◇ Using Setup Wizard
- ◇ Programming IM1200
- ◇ System Backup & Restore

Connecting VMS to IM1200

The Voicemail Management Software (VMS) is a network based program that is your best tool to set up, maintain and restore IM1200 parameters and settings. Before you use the VMS, you need to have a computer operating on the Microsoft Windows operating system that is connected to the Ethernet network. If the IP address assigned to IM1200 is a private IP, then the computer running VMS needs to be in the same private network (with the same first 3 bytes of the IP address) as the IM1200. (For the Network Environment, see page 2-3)

Installing VMS

You should find the latest VMS version from the Installation CD that came with your package.

Once you have located the program installation file, you can double click on it to start the installation.

Follow the instruction to finish the installation.

Turning on IM1200

To turn on the IM1200 for the first time, make sure you have all the proper lines connected to the system. (For the Environment Requirements, see page 2-2) IM1200 has a factory default IP setting of:

Factory Default IP Setting

Field	Setting
IP	192.168.1.200
Gateway	192.168.1.254
Subnet Mask	255.255.255.0
DNS	168.95.1.1

Table 3-1

You may start logging on to the IM1200 if the factory default IP is available for the system in your network. You can change the IP setting later using VMS if you prefer. If the factory default IP is not available in your network, you can change the IP setting via DTMF Programming to one that is available in your network, so you can logon to IM1200 using VMS. (For DTMF Programming, see Chapter 9)

Note: *The IP address MUST be available for the IM1200 in order for the VMS to logon to the system.*

Logging On IM1200

You can start the VMS by choosing it from your program menu. The VMS will open as:

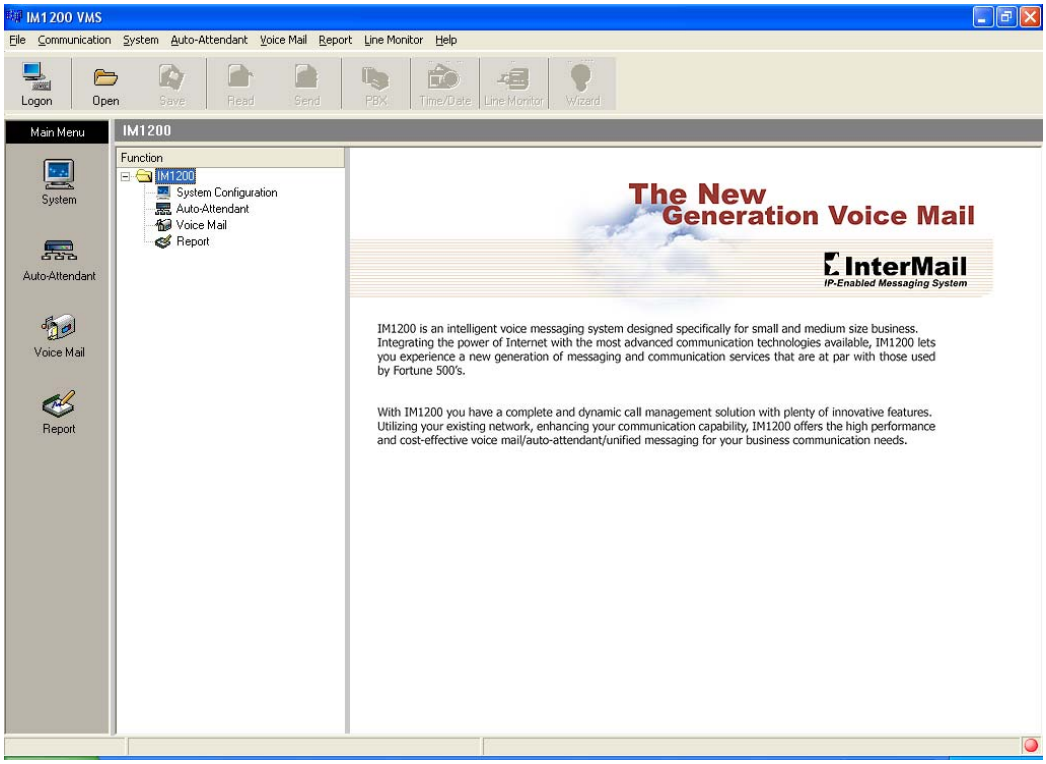

Figure 3-1

To log on a system, you will need to know:

- **IP Address for IM1200** (Default: 192.168.1.200)
- **Password** (Default: 1234)

Logging on IM1200:

1. Click the **Logon** icon. A Logon dialog box opens.
2. Enter the IP Address and the Password for the IM1200 and click **OK**.
3. A new dialog box saying "Logon OK" will appear if you enter the correct IP address and password. Click OK to close the box. You are now successfully logged on to IM1200. You can now select and run any operations that are available from the menu.

You will stay connected for as long as there are actions on the VMS. If the VMS stays idle for 5 minutes, you will be automatically logged off from IM1200.

Using Setup Wizard

It is strongly advised to use the VMS Setup Wizard for first time configuration of the system. The Setup Wizard will guide the Administrator through all the steps of how to configure the system in detail. Click the **Wizard** icon and follow the steps to configure the system.

Programming IM1200

VMS provides user-friendly ways to program the IM1200, which include:

- **PBX Setup**

- **System Configuration**
- **Auto-Attendant Menus**
- **Voice Mail Parameters**

These data can be manipulated between the administrator's computer and the IM1200 system.

- **Read** The Programming Data will be downloaded from the IM1200 to the VMS, including the Current Time and Date.
- **Send** The Programming Data displayed in the VMS will be uploaded to the connected IM1200 and replacing all the Programming Data on the IM1200
- **Save** The Programming Data will be saved in the local computer, available for future references.
- **Open** The saved Programming Data will be retrieved from the computer and made available for modifications and can be sent back to the IM1200.

System Backup & Restore

You can backup and restore system data including:

- **PBX Setup**
- **System Configuration**
- **Auto-Attendant Menus**
- **Voice Mail Parameters**
- **Individual Mailbox Settings**
- **AA-Menu Greetings**

To Backup the System Data:

1. Choose **Communication > Backup.** A dialog box appears.

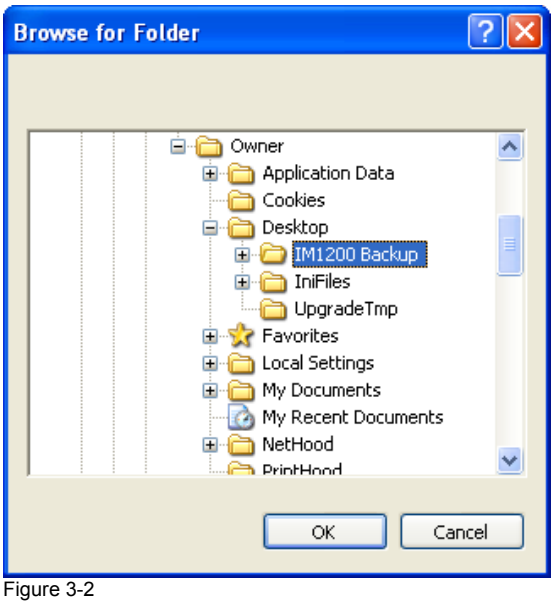

Figure 3-2

2. Select the folder you want to back up your data to, then click OK.
3. A new dialog box will appear. Press the **Start** button to start the backup.

To Restore the System Data:

1. Choose **Communication > Restore.** A new dialog box appears.
2. Select the folder you want to restore your data from, then click OK.
3. A new dialog box will appear. Press the **Start** button to start the restore.

Warning: *If any of the files being restored cannot be recognized by the system or is corrupted, it might cause system failure. Do not tamper with files in the backup folder.*

CHAPTER 4

Integration with PBX

This chapter includes the details of the integration of IM1200 and PBX.

- ◇ Selecting Your PBX
- ◇ Call Transfer
- ◇ Setting Up IM1200 in Non-Supervised Mode
  - In-Band DTMF String
  - Busy Time Lag
- ◇ Setting Up IM1200 in Supervised Mode
  - Call Progress Tone
  - Automatic Call Progress Learning
  - DTMF Signal
- ◇ Setting Up IM1200 in Semi-Supervised Mode
  - Busy Recall, Ring Release
  - Call Pickup

Selecting Your PBX

IM1200 provides a PBX list for you to select to integrate your IM1200 with your PBX the fastest and easiest way possible. The IM1200 will be updated with the latest models of PBX periodically. Please contact your dealer for the latest PBX information. The default data and parameters are suitable for general conditions, and might be different from the specific and regional settings of your PBX. Check with the PBX dealer for the most accurate settings.

To Select a PBX

1. Click **PBX** tab. A PBX list is displayed after VMS finishes reading data from IM1200.

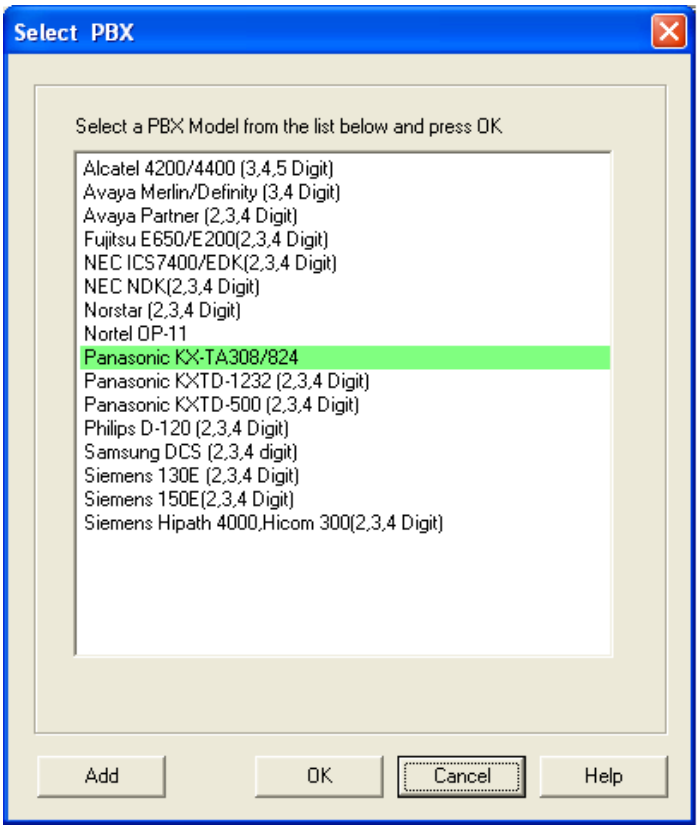

Figure 4-1

2. Choose one PBX model by clicking on the name of the PBX. And click **OK**.

To Add a PBX Selection

1. Click **PBX** tab. A PBX list is displayed.
2. Click **Add** button. A dialog box opens with folders for you to choose.
3. Choose the folder and the PBX file that you want to add, then click **Open**.

Call Transfer

Depending on the PBX, the IM1200 can support and adapt to the specific call transfer method supported by the PBX. The possible call transfer modes are:

- **Non-Supervised** The line is released when IM1200 transfers a call under Non-Supervised Mode. The PBX should be configured to forward the call back to the VM port when the extension is not available. This mode allows IM1200 to untie its resource and provides the best performance. This is the recommended call transfer mode. There are two ways Non-Supervised call transfer can be achieved:
  - **In-Band DTMF String** IM1200 will check the In-Band DTMF String sent by the PBX for the reason (Busy or Ring/No-Answer) the call is sent back. This method requires the PBX be capable of sending In-Band DTMF Strings with condition codes when forwarding calls back to IM1200.
  - **Busy Time Lag** Some PBXes send the same In-Band DTMF strings for both Busy and No-Answer Call Forward. This method uses the time lag between receiving the Busy and No-Answer Call Forward when the call is bounced back from the PBX to determine the extension is Busy or No-Answer. This method is only recommended for certain PBX models.
- **Supervised** In contrast to Non-Supervised Mode, Supervised Mode does not release the line when transferring the call. It instead holds and monitors the line for the extension's response. It then retrieves the call if the extension is not available, or releases the line if the call has been picked up by the extension. This mode will take up the most resource of IM1200's, but will be the only mode possible if the PBX does not provide any extension status information when calls are transferred. There are two things IM1200 can use to monitor the call transfer:
  - **Call Progress Tone** IM1200 monitors the Call Progress Tones (CPT) when transferring a call, and retrieves the call when the defined number of Busy or Ringback tones are received, then proceeds to take the call to the corresponding call flow.
  - **DTMF** Instead of Call Progress Tone, IM1200 looks for the DTMF Signal sent by the PBX when transferring the call. It will retrieve the call and process it according to the DTMF Signal it receives. Not all PBXes provide DTMF Signals for extension status.
- **Semi-Supervised** In the case the PBX provides an incomplete set of In-Band DTMF Strings, Semi-Supervised Mode can be used instead of Supervised Mode to free up some system resource.
  - **Busy Recall, Ring Release** IM1200 will first operate under Supervised Mode to determine and retrieve the call if the extension is Busy. If the extension is not Busy, the line will be released in the Non-Supervised Mode. This mode requires the Busy CPT parameters in the Supervised mode and the In-Band DTMF String for the No-Answer condition in the Non-Supervised mode be set properly first.
  - **Call Pickup.** Similar to Busy Recall, Ring Release method, the call is retrieved if it is Busy and released otherwise. IM1200 will then use the Call Pickup function of the PBX to retrieve the call in a definite amount of time, assuming the call is not answered.

To configure the Transfer Mode:

1. Choose **System Parameters > PBX Parameters.** A PBX Parameters dialog box opens. Choose the **Transfer Mode** Tab.

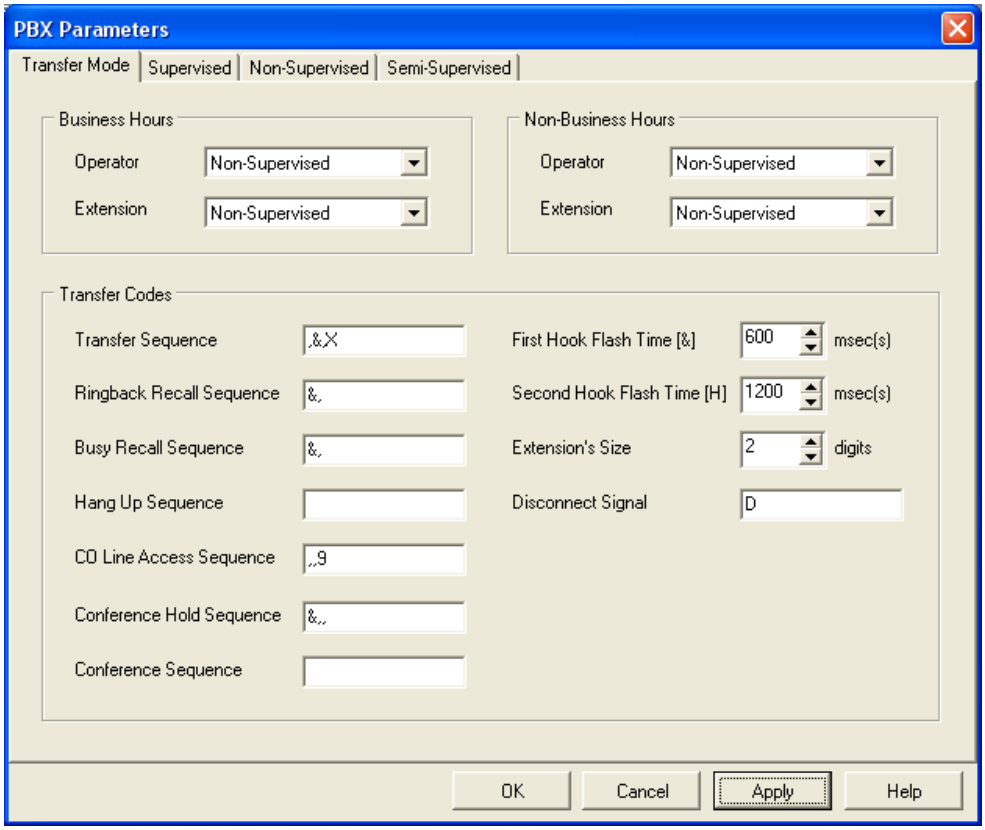

Figure 4-2

2. Different Transfer Modes can be selected for Business Hours and Non-Business Hours. Non-Business Hours includes Break Hours, After Hours and Closed Days defined in Business Schedule. (For Business Schedule, see page 5-10) Further, the operator extension can select a different Transfer Mode than the rest of the extensions for the Business and Non-Business Hours. Note: The Operator & Extension Group function can only be supported in the Supervised Mode. (For Operator & Extension Group function, see page 5-3) Select the Transfer Mode you wan to use for your operator extension, the rest of the extensions, for your business hours and non-business hours, accordingly then.

3. Define the call transfer sequences using the codes in Table 4-1:

DTMF and Action Codes

Code	Action
0~9, ∗,#,A~D	DTMF Signal
&	First Hook Flash
h	Second Hook Flash
,	Pause for 1 second
;	Pause for 0.5 second
x	Extension Number

Table 4-1

Transfer Sequence Transfer Sequence transfers the call to the targeted extension. An example would be: [**& , x**].

Ringback Recall Sequence Ringback Recall Sequence retrieves a call when the extension status is No-Answer. An example would be: [**&**].

Busy Recall Sequence Busy Recall Sequence retrieves a call when the extension status is Busy. An example would be: [**&**].

Hang Up Sequence Hang Up Sequence is used to disconnect the call. An example would be: [**h**].

CO Line Access Sequence CO Line Access Sequence hunts for an available CO line to make an external call.

Conference Hold Sequence Conference Hold Sequence puts the caller on hold while connecting the third party for a conference call.

Conference Sequence Conference Sequence connects the caller who was put on hold by Conference Hold Sequence to the third party that is reached through the External Conference Call Number defined in the mailbox.

First Hook Flash [&] IM1200 provides two Hook Flash times for PBX programming. First Hook Flash is usually used for transferring calls. "**&**" is the symbol used to represent First Hook Flash time.

Second Hook Flash [h] Most PBXes only uses one Hook Flash time for all operations, while some PBXes require an alternative Hook Flash time to retrieve a call on hold. Second Hook Flash is usually longer than First Hook Flash. "**h**" is the symbol used to represent Second Hook Flash time.

Extension's Size This is the length (number of digits) of your PBX's extension.

Disconnect Signal In cases when the PBX wishes to notify IM1200 that the call should be disconnected, the PBX will send a Disconnect Signal to IM1200. One such case is when the caller hangs up the phone during the call transfer. IM1200 will disconnect the call upon receiving this signal. The first digit of the Disconnect Signal should be one of DTMF tones A, B, C, or D.

4. Click **OK** or **Apply** once you are done with the editing.

Setting Up IM1200 in Non-Supervised Mode

Some PBXes have the capability of sending call status information when the call is being transferred. IM1200 can make use of this information and determine what action should follow. In Non-Supervised mode, calls are released immediately after the transfer is initiated and the PBX has to enable the Busy/No-Answer Forward to the voice mail port.

In-Band DTMF Strings

Examples of PBXes supporting Non-Supervised Call Transfer with In-Band DTMF Strings

Manufacturer	Model
Alcatel	4200, 4400, OmniPCX Office
Samsung	DCS
Fujitsu	9600 Series
Avaya	Partner
Mitel	SX Series
NEC	MCI
Nortel	Norstar
Nortel	Option 11
OKI	SR
Siemens	Hi-Com 300, Hi-Path 4000
Panasonic	KX-TA/KXTD

Table 4-2

To Set Up Non-Supervised Mode Using In-Band DTMF Strings

1. Choose **System Parameters > PBX Parameters.**
2. Click **Edit** tab, a **PBX Parameters** dialog page appears.
3. Choose the **Non-Supervised** tab.

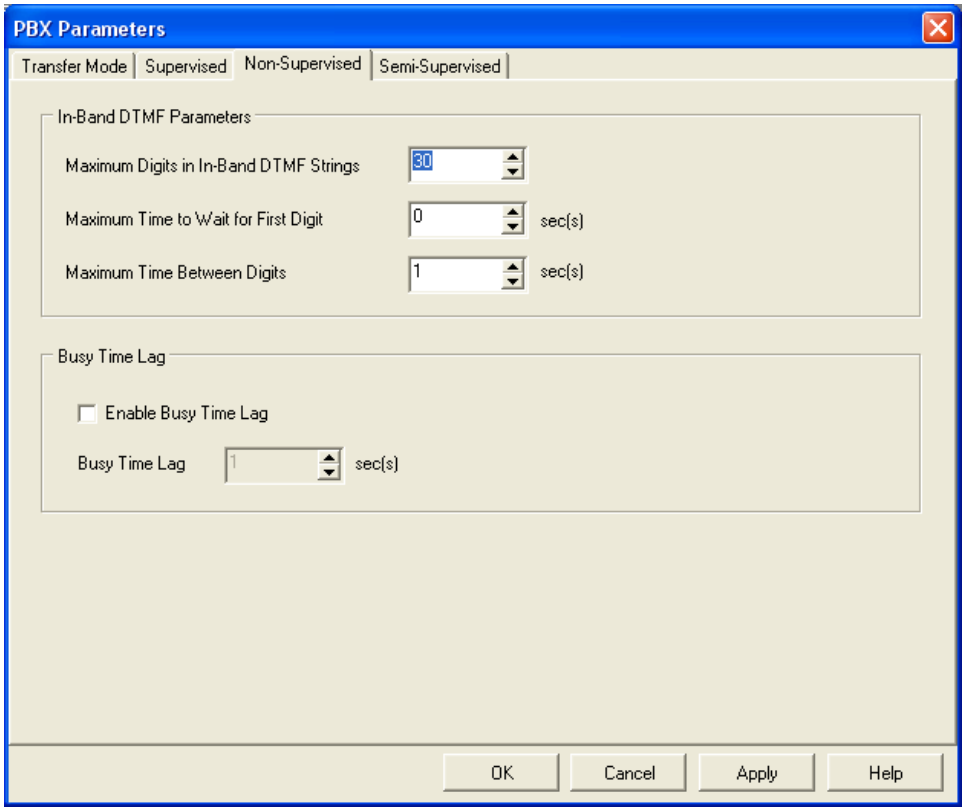

Figure 4-3

4. Define the following parameters:

   Maximum Digits in In-Band DTMF Strings The number of digits in the In-Band DTMF Strings will be different depending on the PBX models. This parameter will limit the maximum number of digits that can be received by IM1200. Digits exceeding this number will be ignored.

   Maximum Time to Wait For First Digit This parameter sets the maximum time to wait for the first digit of the In-Band DTMF String sent by the PBX to arrive when a call is answered. If no digit is received at the end of this time, the call will be taken to the channel's main AA menu greeting.

   Maximum Time Between Digits This parameter defines the timeout between digits in the In-Band DTMF String sent by the PBX. If no further digit is received after this timeout, IM1200 will stop the waiting and use the string received thus far to determine the status of the extension.

To Define the In-Band DTMF Protocol

5. Choose **System Parameters > In-Band DTMF Protocol.**
6. Click **Edit** tab, an **In-Band Protocol Details** dialog box appears.
7. Select the row of the string you want to edit.

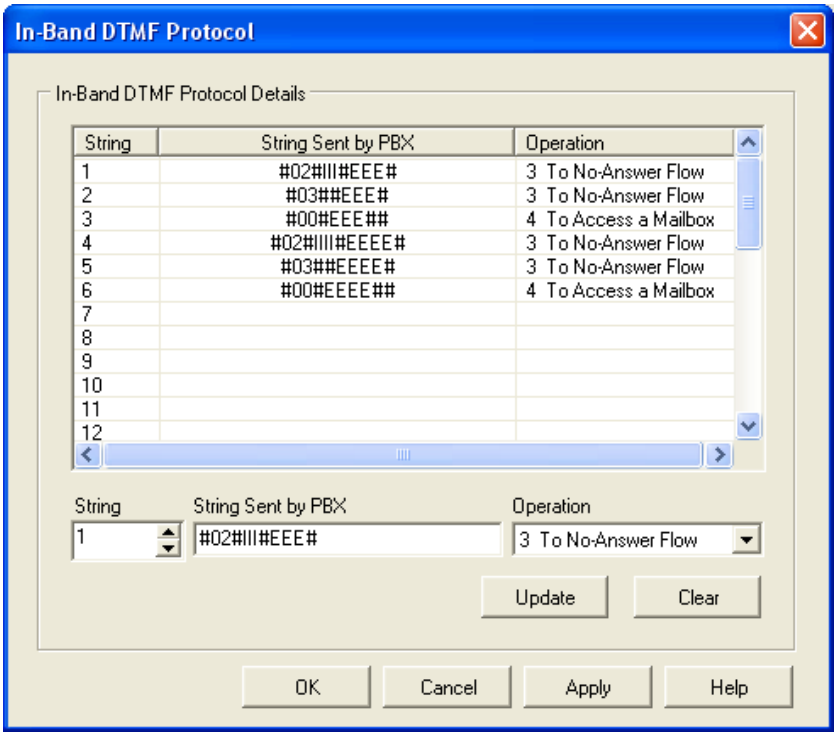

Figure 4-4

8. Fill in the following fields:

String Sent by PBX In-Band DTMF String sent by the PBX should be entered in this field for the IM1200 to determine the status of the call transfer. The EXACT number of digits should be entered. IM1200 will compare the actual string received from the PBX against the defined string here. The following codes should be used to compose the String Sent by PBX.

In-Band DTMF Codes

Code	Definition
0~9, ∗,#,A~D	Represents one digit of DTMF.
E	Represents one digit of the extension number.
I	Represents this digit should be ignored.

Table 4-3

Operation Select one of the following operations you want IM1200 to execute when the actual DTMF string from the PBX matches the one defined in String Sent by PBX:

- **To Main AA-Menu.** IM1200 will take the call to the prevailing AA-Menu and play that AA-Menu's greeting defined for the channel. (For AA-Menu, see page 5-6) This operation will be activated in the case when no strings in the String Sent by PBX fields can be found matching the actual string from the PBX.
- **To Busy Flow** The caller will be taken to the call path that handles the Busy situation for the extension, i.e., playing a personal busy greeting and asking the caller to leave a message.

- **To No-Answer Flow** The caller will be taken to the call path that handles the No-Answer situation for the extension, i.e., playing a personal not-available greeting and asking the caller to leave a message.
- **To Access a Mailbox.** The caller will be taken to the mailbox whose number is encoded in the string. This is usually used when the mailbox owner wishes to retrieve his/her messages and calls the voicemail from the extension directly.

9. Click **Update** for every String defined or modified.
10. Click **OK** or **Apply** when done with all the modifications.

Busy Time Lag

Busy Time Lag is most useful when the PBX does not send No-Answer In-Band DTMF String or sends the same string for No-Answer and Busy situations. In such case, a countdown parameter is used to determine if the extension status is Busy or No-Answer. After the call is released, the countdown will start. If the call is bounced back during the countdown, the extension status will be identified as Busy. If the call is bounced back after the countdown, the extension status will be identified as No-Answer.

To set up Non-Supervised Mode using Busy Time Lag

1. Choose **System Parameter > PBX Parameters.**
2. Click **Edit** tab, a **PBX Parameters** dialog page appears.
3. Choose the **Non-Supervised** tab.
4. Define the following parameters:

   Enable Busy Time Lag Checking this box tells IM1200 to start the timeout counter for every transferred call.

   Busy Time Lag This parameter sets the timeout value for the count down.
5. Click **OK** or **Apply** when done with all the modifications.

Setting Up IM1200 in Supervised Mode

The Supervised Mode will be the only transfer mode available for some PBXes. In Supervised mode, the line is not released while the call is being transferred. IM1200 will monitor and decipher the signals sent back by the PBX and perform proper operation accordingly. If the call is picked up by the extension, the line will be released. This transfer mode will take up the most resource of IM1200. There are two types of signals IM1200 can monitor: Call Progress Tone (CPT), and DTMF Signal.

Call Progress Tone

Most PBXes send Call Progress Tones while transferring calls to indicate the status of the transfer.

To set up Supervise Mode using Call Progress Tone Signal

1. Choose **System Parameters > PBX Parameters.**
2. Click **Edit** tab, a **PBX Parameters** dialog page appears.
3. Choose the **Supervised** tab.

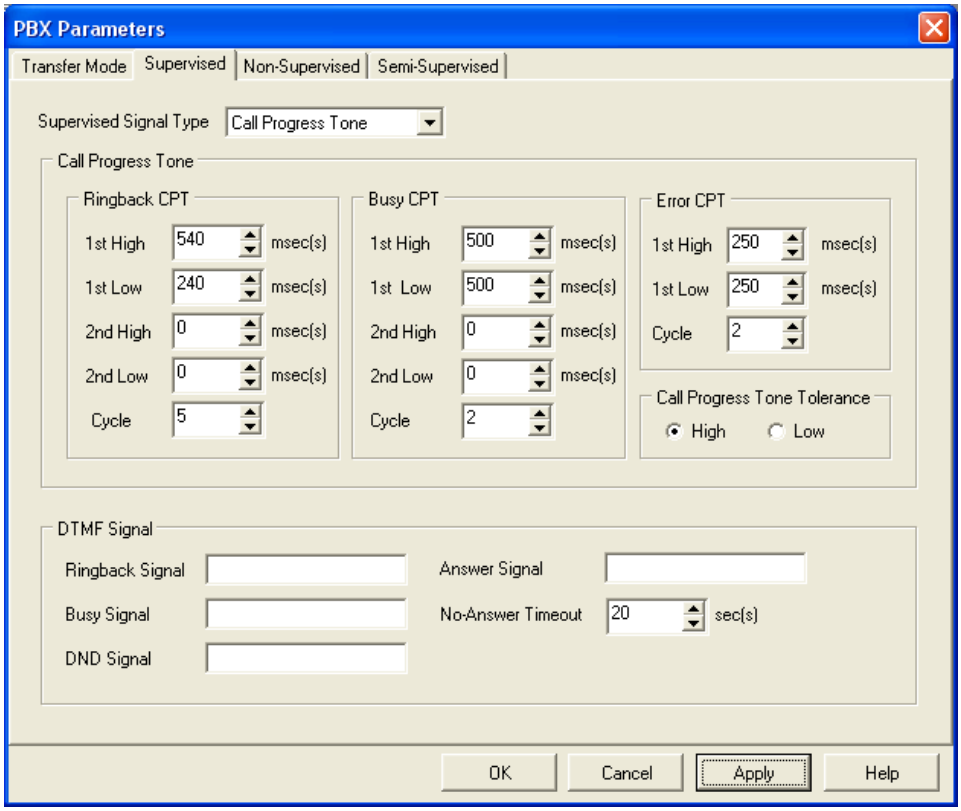

Figure 4-5

4. Select **Call Progress Tone** as the **Supervised Signal Type.**

5. Define the following parameters:

Ringback CPT Ringback CPT may vary depending on the PBX model. Ringback CPT is usually composed of 1 ringing pulse, and 1 silence pulse.

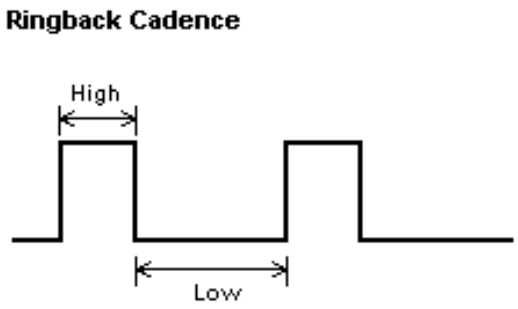

Figure 4-6

Some PBX sends Ringback CPT with 2 ringing pulses and 2 silence pulses.

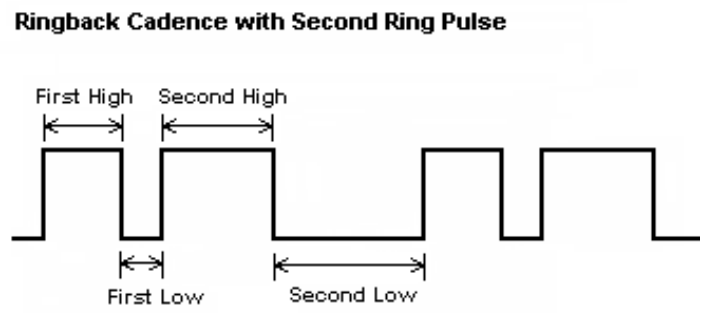

Figure 4-7

Define Ringback First High and Ringback First Low in milliseconds. If the PBX sends Ringback CPT with 2 ringing pulses, define the Ringback Second High and Ringback Second Low, or else set the two parameters to 0 milliseconds.

Ringback CPT Cycle This parameter defines how many times the Ringback Call Progress Tones from an extension should be received before the extension status is identified as No-Answer. IM1200 will retrieve the call when the status has been confirmed.

Busy/Error CPT Similar to Ringback CPT, Busy and Error Call Progress Tones are composed of First High, First Low, Second High and Second Low parameters. Busy CPT is sent by the PBX to indicate the extension status is Busy, and Error CPT usually indicates the extension is not legal. Define these parameters, and leave Second Low and Second High as 0 if not needed.

Busy/Error CPT Cycle Similar to Ringback CPT Cycle, Busy and Error CPT Cycles define how many times the call progress tones should be received before the extension status is identified as busy or error. IM1200 will retrieve the call when the status has been confirmed.

Call Progress Tone Tolerance This parameter tells how much deviation the actual call progress tones sent from the PBX can be from the set values. Select High or Low for the setting.

6. Click **OK** or **Apply** when done with all the modifications.

Automatic Call Progress Learning

Instead of manually entering the call progress tone parameters, IM1200 provides an alternative way of capturing and learning and assigning those parameters to itself, called Automatic Call Progress Learning (ACPL) method. This method requires DTMF System Programming (For DTMF System Programming, see Chapter 9).

Once you are in DTMF System Programming Mode, follow these steps:

1. Enter Function Code [242] and set up the extension you want to use for ACPL.

2. Make sure the phone of the ACPL extension is on-hook.

3. Enter Function Code [214] (Ringback CPT 1st High). Press [1#] when it prompts you to "Press 1 to edit, 2 to save, 3 to replay". This will force IM1200 to call the ACPL extension.

4. After ringing the ACPL extension a few times, it will reconnect to you and announce the value it has calculated and set for Ringback CPT 1st High based on the ringback pattern it just heard.

   Note: *It also has calculated and set other Ringback CPT parameters such as Ringback CPT 1st Low, Ringback CPT 2nd High/Low (when available), and Ringback CPT Cycle.*

5. Press 2 to save the parameter.

6. Take the phone of the ACPL extension off-hook, to create the Busy condition.

7. Enter Function Code [219] (Busy 1st High). Press [1#] when it prompts you to "Press 1 to edit, 2 to save, 3 to replay". This will force IM1200 to call the ACPL extension.

8. It will analyze the Busy Call Progress Tone coming from the ACPL extension and announce the value it has determined and set for the Busy 1st High parameter

   Note: *It also has determined and set other Busy CPT parameters such Busy CPT 1st Low, Busy CPT 2nd High/Low (when available), and Busy CPT Cycle.*

9. Press 2 to save the parameter.

10. You have completed the Automatic Call Progress Learning process and assigned all the right values for the Ringback and Busy Call Progress Tone parameters to IM1200.

DTMF Signal

Some PBX sends DTMF Signals as well as Call Progress Tones to indicate call transfer status. Similar to the CPT, the DTMF Signal will convey the current extension status.

To set up Supervised Mode using DTMF Signal

1. Choose **System Parameters > PBX Parameters.**
2. Click **Edit** tab, a **PBX Parameters** dialog page appears.
3. Choose the **Supervised** tab.
4. Select **DTMF Signal** as the **Supervised Signal Type.**
5. Define the following parameters using the codes in the DTMF and Action Code Table (Table 4-1):

   Ringback Signal Ringback Signal indicates the extension is ringing back.

   Busy Signal Busy Signal indicates the extension status is busy.

   DND Signal DND Signal indicates the extension status is Do-Not-Disturb.

Answer Signal Some PBX provides the Answer Signal when the call is picked up by the extension. When this signal is received, the call will be released.

No-Answer Timeout Some PBX does not send Ringback Signal when transferring the call. In such case IM1200 will hold the call for the No-Answer Timeout period and retrieve the call after the timeout.

6. Click **OK** or **Apply** when done with all the modifications.

Setting Up IM1200 in Semi-Supervised Mode

This mode is the most commonly used when the PBX does not send a complete set of In-Band DTMF Strings. In order for Semi-Supervised Transfer to function properly, certain parameters from the Supervised Transfer and Non-Supervised Transfer Modes need to be set correctly first. The best way to set up Semi-Supervised Mode is to select the PBX in question from the PBX list first (For Select PBX, see page 4-2), then proceed to select and modify the Semi-Supervised Mode parameters as needed.

Busy Recall, Ring Release

Calls will initially be handled in the Supervised Mode when transferred, and IM1200 will monitor for the Busy CPT or the Busy DTMF Signal. If the Busy CPT or the Busy DTMF Signal is not detected right away, the transfer is changed to Non-Supervised mode and the line released. It then relies on the In-Band DTMF String from the PBX to tell if the call has been No-Answered.

It is essential then, the Busy CPT or the Busy DTMF Signal in Supervised mode, and the In-Band DTMF parameters in Non-Supervised mode, as well as the In-Band DTMF String for the No-Answer situation, need to be well defined before this operation can work.

Call Pickup

Similar to Busy Recall, Ring Release operation, the call is retrieved if it is detected Busy right away and released if not. But instead of relying on the In-Band DTMF String from the PBX to tell the call is not answered, IM1200 will automatically use the Call Pickup function of the PBX to retrieve the call if the call is not answered by the extension after a pre-defined amount of time.

To set up Semi-Supervised Mode using Call Pickup:

1. Choose **System Parameters > PBX Parameters.**
2. Click **Edit** tab, a **PBX Parameters** dialog page appears.
3. Choose the **Semi-Supervised** tab.
4. Define the following parameters:

   Enable Call Pickup Check this box to enable the Call Pickup operation.

   Call Pickup Sequence The sequence to pick up the call that is ringing the extension which is not answering to announce the No-Answer status to the caller.

   Call Pickup No-Answer Timeout IM1200 will attempt to pick up the call after this timeout, and announce to the caller the extension is not available.

   Call Pickup Channels IM1200 will use the selected channels to do Call Pickup operation.

5. Click **OK** or **Apply** when done with all the modifications.

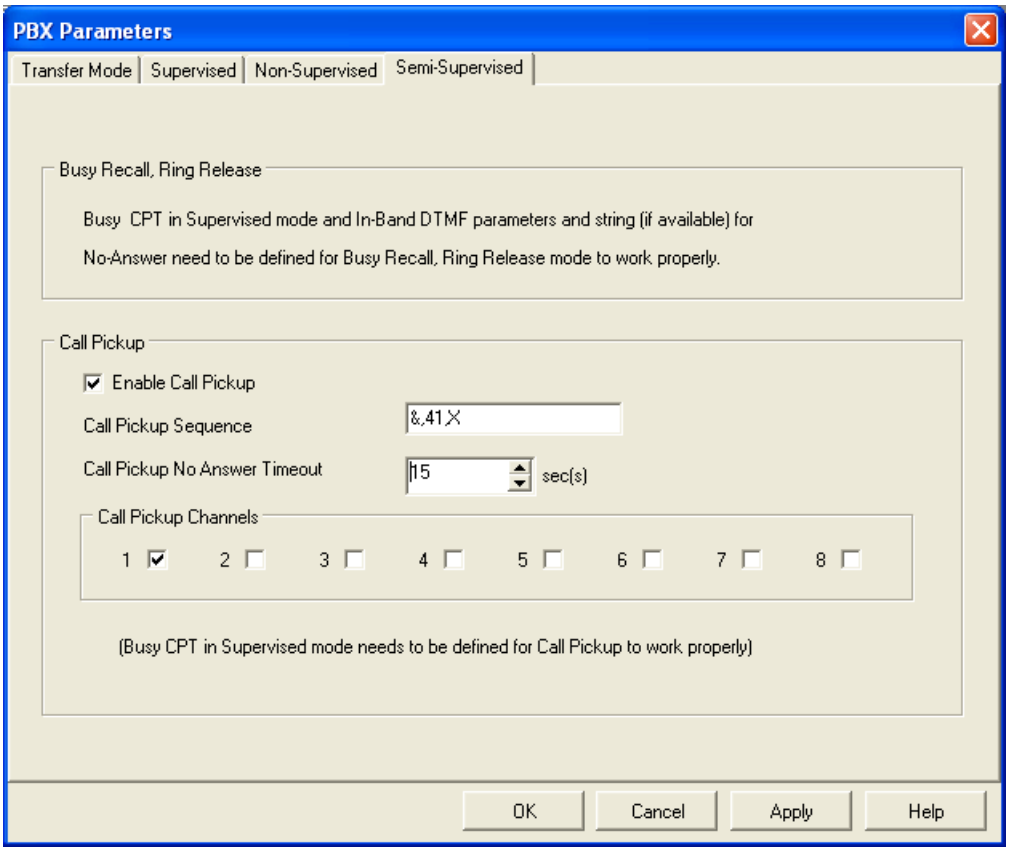
PBX Parameters
Transfer Mode
Supervised
Non-Supervised
Semi-Supervised
Busy Recall, Ring Release
Busy CPT in Supervised mode and In-Band DTMF parameters and string (if available) for
No-Answer need to be defined for Busy Recall, Ring Release mode to work properly.
Call Pickup
Enable Call Pickup
Call Pickup Sequence
&,41X
Call Pickup No Answer Timeout
15
sec(s)
Call Pickup Channels
1
2
3
4
5
6
7
8
(Busy CPT in Supervised mode needs to be defined for Call Pickup to work properly)
OK
Cancel
Apply
Help

Figure 4-8

CHAPTER 5

Auto Attendant

This chapter explains how to set up the Automated Attendant for IM1200.

- ◇ Designing Your Auto-Attendant
- ◇ Creating Extension Blocks
- ◇ Creating Operator/Extension Groups
- ◇ Setting Up Voice Channel Parameters
- ◇ Designing an AA-Menu
  - Recording AA-Menu Greetings
  - Transfer Options
- ◇ Defining Work Schedule
- ◇ Defining Holiday Calendar

Designing Your Auto-Attendant

The Auto-Attendant in IM1200 is very flexible and easy to configure. It is highly recommended that you prepare a draft for the Auto-Attendant flow that you want to use VMS to set up before hand.

Sample Draft for the Auto-Attendant Setup

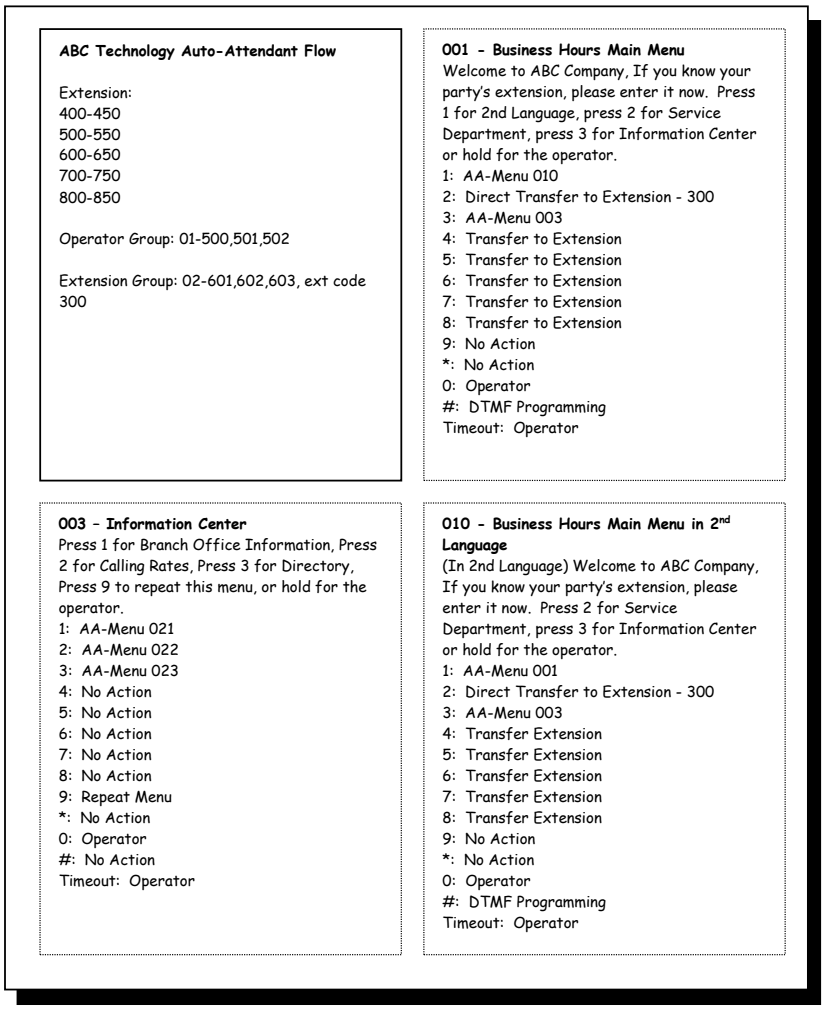

Figure 5-1

Creating Extension Blocks

To create the Extension Blocks is the first step of the Auto Attendant setup. IM1200 will transfer calls to an extension that falls in a Extension Block. Total of 99 sets of Extension Blocks can be created.

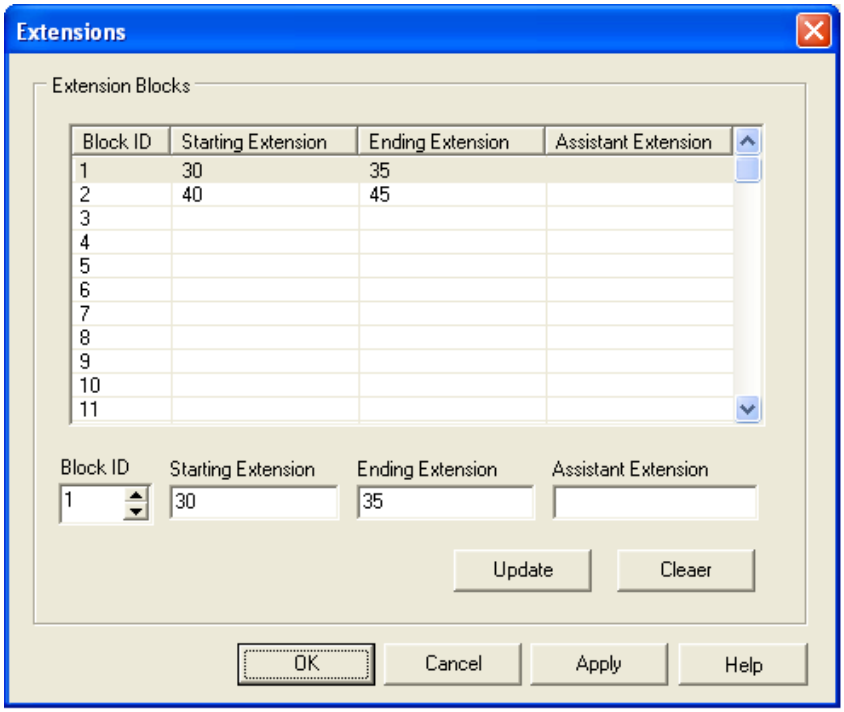

Figure 5-2

To Create/Edit Extension Blocks

1. Choose **Auto Attendant > Extensions.**
2. Click the **Edit** tab. An Extension Block dialog box opens.
3. Specify the following information for the block:

   Starting Extension The starting extension number of the block. All extensions between the Starting and Ending Extension will be available for call transfer. The Starting Extension number must be smaller than the Ending Extension number and have the same number of digits as the Ending Extension number.

   Ending Extension The Ending Extension number specifies where the extension block ends.

   Assistant Extension When an extension in is not answering or busy, the call will be redirected to the Assistant Extension of that block. This is an optional attribute for each Extension Block, and is only supported in the Supervised Transfer Mode. (For Supervised Transfer Mode, see page 4-8)
4. Click **Update** after setting up one block, then continue to define the next block.
5. Click **OK** or **Apply** once you are done with all the Extension Blocks setup you want.

Creating Operator/Extension Groups

An Operator/Extension Group is a group of related extensions. With IM1200 Operator/Extension Groups you can perform simple ACD tasks, and maximize the productivity of your Auto Attendant. You can also create a mailbox and record a greeting for each group and access the group via Name Directory. It is very useful when you wish to use IM1200 for call distribution management.

Note: *Operator/Extension Groups are public. IM1200 also provides a Personal Distribution List for personal applications.* *(For Distribution List, see page 6-8)*

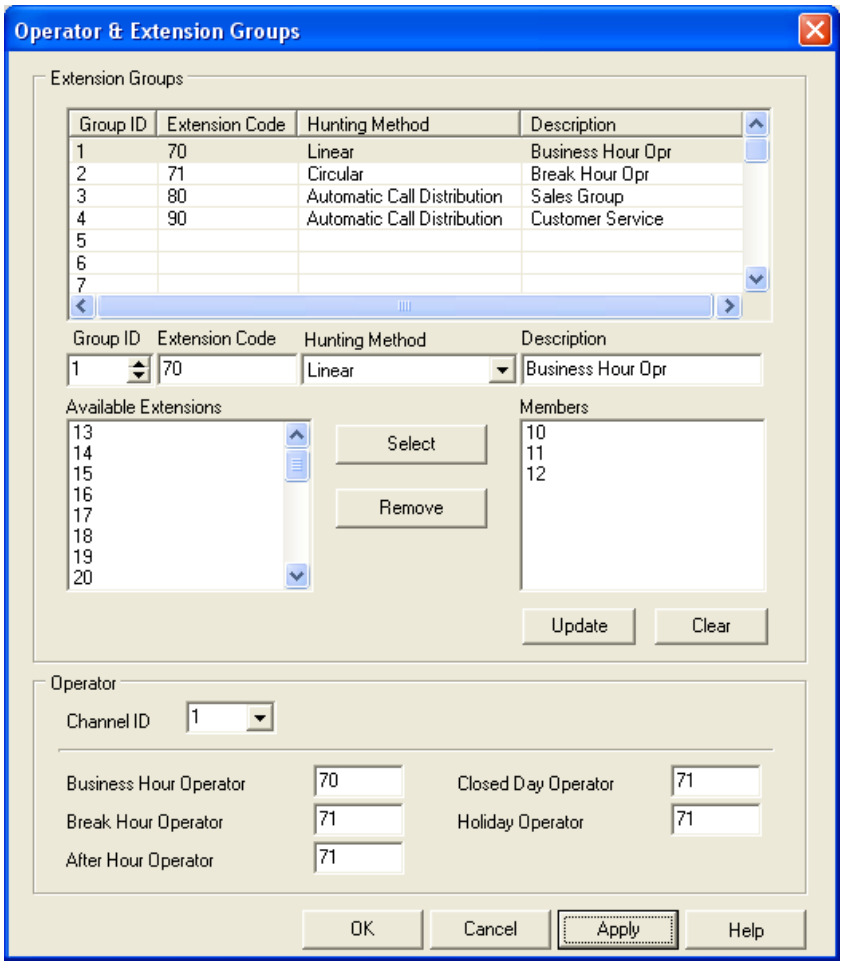

Figure 5-3

To Create Operator/Extension Groups

1. Choose **Auto Attendant > Operator/Extension Groups.**
2. Click the **Edit** tab. An Operator/Extension Group dialog box opens.
3. Specify the following information for the group:

   Extension Code Assign an Extension Code that the callers can dial to reach the Operator/Extension Group. When no Extension Code is entered, the group cannot be reached by the AA-Menus or other commands. Treat this code as a real extension number for the group.

   Note: *Do not use an Extension Code that is the same as one already used for an "ordinary" extension. In that case, the group will have higher call transfer priority over the "ordinary" extension.*

   Description Description is an optional field for the administrator's own reference. Fill in helpful information about the group, for example, "Sales Department", or "Business Hours Operators"

Hunting Method You can determine how calls should be distributed among the group with the following Hunting Methods:

- **Linear** IM1200 will always transfer the call to the first member of the group. If the extension is not available, IM1200 will transfer the call to the next member in the group.
- **Circular** IM1200 will transfer the first call to the first member of the group and the second call to the next member down the list. IM1200 will keep track of which member should be the target for the next incoming call.
- **ACD** IM1200 will track the number of calls successfully transferred to each member of the group. The member with least number of calls answered will be the target for the next incoming call transfer.

4. Use mouse to select and highlight the extensions in the **Available Extensions** box and click the **Select** tab to move them to the **Members** box. Reverse the process and click the **Remove** tab if you want to remove some extensions from the group. Click and hold and move an extension within the **Members** box to alter the order of the members in the member list. The order in which the members appear in the **Members** box will be used by the Hunting Method to decide the call transfer order among the members.
5. Click **Update** for every group created or edited.
6. Click **OK** or **Apply** once you are done with all the modification of all groups.

To Define Operators for Individual Channels

1. Select the channel you want to specify **Operators** for in the Channel ID box.
2. Enter the extension number or the **Extension Code** of the **Extension Group** you want to use as the **Operator(s)** for **Business Hours**, **Break Hours**, **After Hours**, **Closed Days**, and **Holidays**.
3. Click **Update** for every group created or edited.
4. Click **OK** or **Apply** once you are done with all the modification of all channels.

Setting Up Voice Channel Parameters

IM1200 has 4 Voice Channels (Upgradeable to 8 channels), and each channel can be programmed independently.

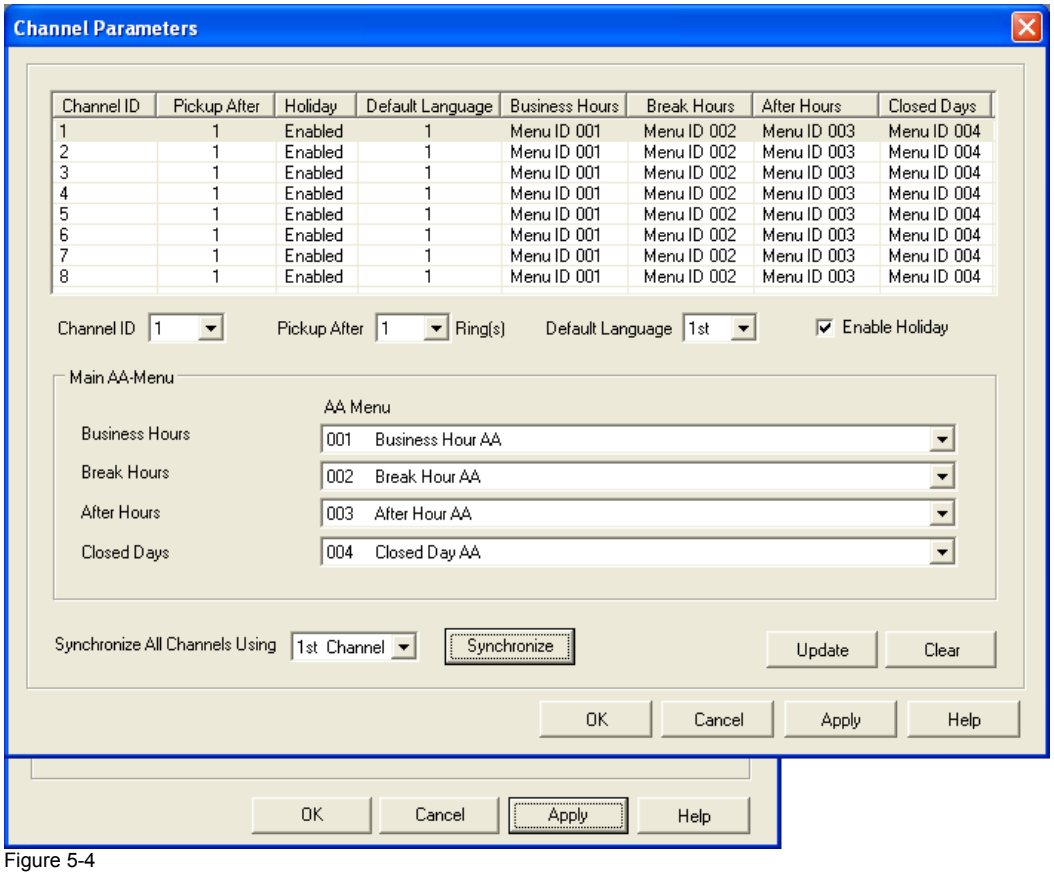

Figure 5-4

To set up Channel Parameters

1. Choose **Auto Attendant > Channel Parameters.**
2. Click the **Edit** tab. A Channel Parameters dialog box opens.
3. Specify the following information for the channel:

   Pickup After The channel will pick up incoming calls after the set number of rings.

   Default Language IM1200 supports up to 4 languages in one system. (The languages vary depending on your location and installation. Check with your dealer for the languages installed in your system.) If you set your default language to English, for example, all of your call transfer announcements will be in English.

   Holiday Each channel can enable or disable the Holiday Mode. If the Holiday Mode is disabled, this channel will ignore the Holiday Calendar. (For Holiday Calendar, see…)

   AA Menu for Business Hours/Break Hours/After Hours/Closed Days Different AA menus can be assigned to accommodate different call handling at different hours of the day and different days of the week. The assigned AA-menu's greeting will be the one heard by the callers when it's in effect.
4. Click **Update** for every channel edited.
5. Use the **Synchronize** option when you finish editing one channel and wish to configure all other channels with the same parameters.
6. Click **OK** or **Apply** once you are done with all the modification of all channels.

Designing an AA-Menu

IM1200's Auto Attendant is constructed with independent scripts called AA-Menus. Each AA-Menu has its own greeting and customized action keys. From the menu, the caller can be guided to the extensions, service groups, operators, information bulletin, etc..

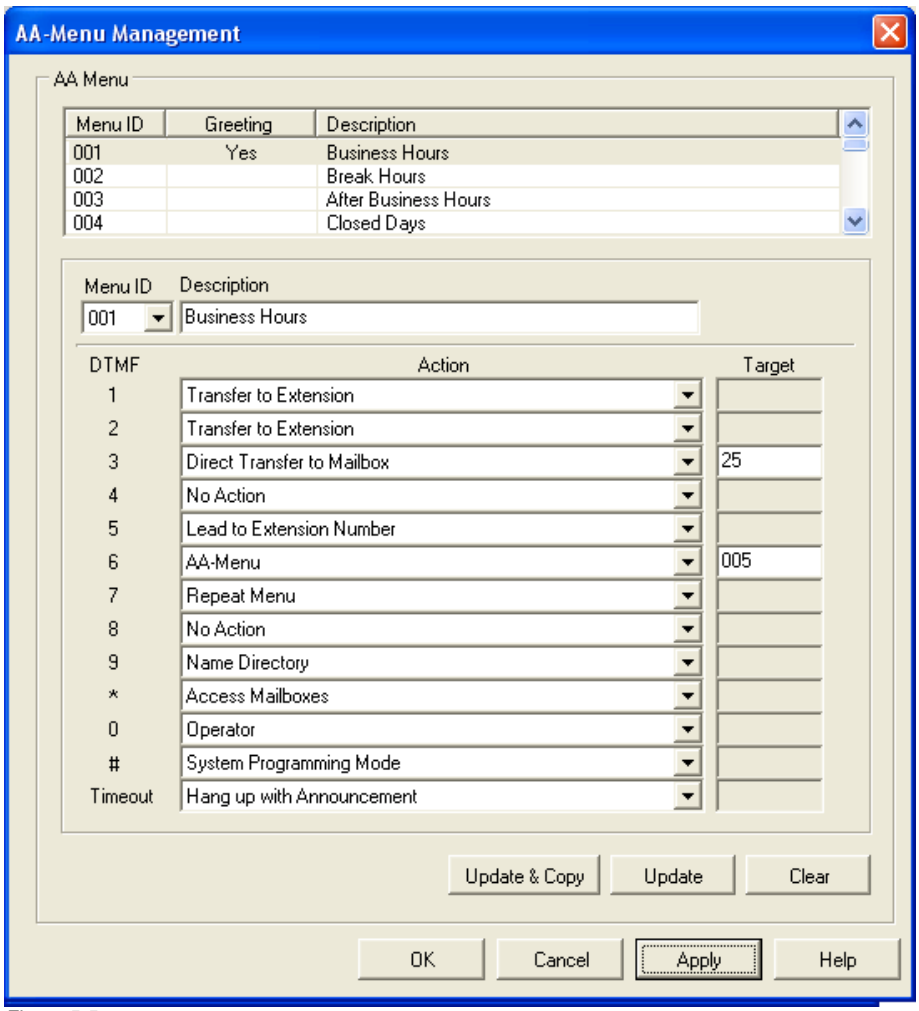

Figure 5-5

To Set up an AA-Menu

1. Choose **Auto-Attendant > AA-Menu Management.**
2. Click the **Edit** tab. An AA-Menu Management dialog box opens.
3. Customize the following parameters:

   Description Description is an optional field for the administrators own reference. Fill in helpful information about the menu, for example, "Business Hours Main Menu"

   Assign each DTMF tone (0-9,*,#) with one specific **AA-Menu Action**. Possible actions are:

   - **No Action** IM1200 will play an error announcement then repeat the Menu.
   - **Repeat Menu** The Menu will be repeated without the error announcement.
   - **AA-Menu** The call will be transferred to the target AA-Menu.

- **AA-Menu in 1st/2nd/3rd/4th Language** The call will be transfer to the target AA-Menu in language specified.
- **Lead to Extension Number** The call will be transferred to the desired extension by pressing the assigned DTMF digit followed by the desired extension number. For example, if digit "5" is set for such action, and the caller wishes to reach extension "31", he/she should press "531" to reach that extension. This is useful in the case when the first digit of the desired extension has been used for other AA menu action.
- **Transfer to Extension** The assigned DTMF digit is the first digit of an extension. For example, if the action is set on "1", and the caller wishes to reach extension "100", he/she should press "100" to reach that extension.
- **Direct Transfer to Extension** The call will be transferred to the target extension directly. For example, if the action is set on "6" with the target set to "100", the caller can press "1" to reach extension 100 right away.
- **Transfer to Mailbox** The assigned DTMF digit is the first digit of the mailbox the call will be transferred to. For example, if the action is set on "2", the caller can dial "200" to leave a message directly at mailbox 200.
- **Direct Transfer to Mailbox** The caller can leave a message directly at the target mailbox. For example, if the action is set on "7" with the target set to "200", the caller will be taken directly to mailbox 200 by pressing "7".
- **Operator** The caller will be transferred to the Operator.
- **Name Directory** IM1200 will ask the caller to enter the first few letters of the last/first name of the person they want to reach.
- **Hang Up** The call will be disconnected.
- **Hang Up with Announcement** The call will be disconnected after a disconnect announcement is made.
- **Access Mailboxes** IM1200 will ask the caller for the mailbox number and the password.
- **System Programming Mode** This allows the caller to enter System Programming Mode where touch tone programming and announcement recording can be done.

4. Click **Update** or **Update & Copy** for every AA-Menu created or edited. If you click **Update & Copy** you will be asked to enter the destination AA Menu number you want to copy the current AA Menu to. Select the destination AA Menu number and then click **OK**.
5. Click **OK** or **Apply** once you are done with all the modification of all the AA-Menus.

Recording AA-Menu Greetings

Each AA-Menu has an associated greeting that should be recorded to announce the greeting and options it wants the callers to hear. If an AA-Menu does not have a greeting recorded, a system default greeting will be played instead.

To Record a Greeting for an AA-Menu:

1. Call into IM1200 and enter the System Programming Mode. (For System Programming Mode, see Chapter 9)
2. Enter the Recording Password. The recording password will allow the caller to only enter the recording functions of IM1200. Because the recording is usually done by a

person other than the administrator, this will prevent blunder operations by either party.

3. Enter Function Code [330] for AA-Menu Management.
4. Enter the AA-Menu ID.
5. Follow the voice guide and record the greeting.

Transfer Options

IM1200 provides multiple choices for the caller to continue the call when the extension it tried to transfer for the caller is not available.

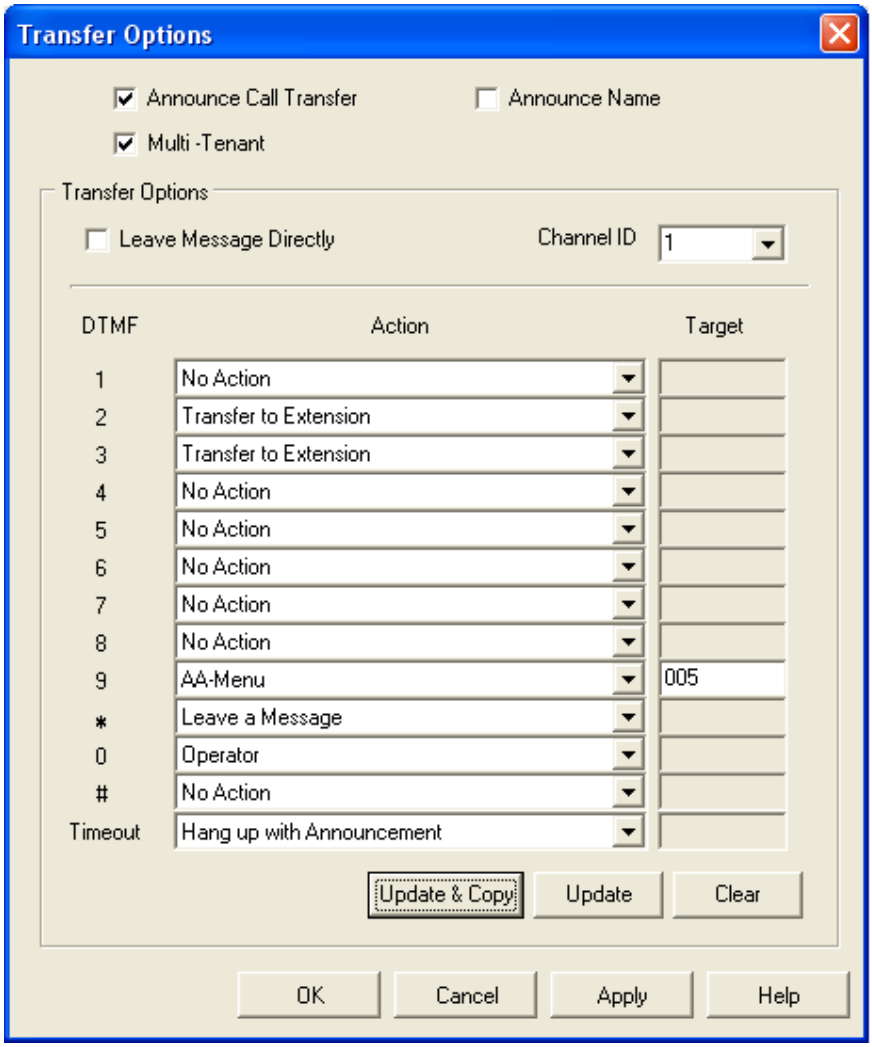

Figure 5-6

To set up Transfer Options:

1. Choose **Auto Attendant > Transfer Options.**
2. Click the **Edit** tab. A Transfer Options dialog box opens.
3. Define the following parameters:

Announce Call Transfer If enabled, IM1200 will announce the call transfer prompt, "Please hold, while I transfer you to.." When this option is disabled, IM1200 will transfer the call without this announcement.

Announce Name If enabled, IM1200 will announce the extension number or the name recorded in the personal mailbox for the extension it tries to transfer the call to.

Multi-Tenant If enabled, IM1200 will allow you to design different Transfer Options per individual channel. nnounce the extension number or the name recorded in the personal mailbox for the extension it tries to transfer the call to.

Leave Message Directly If enabled, IM1200 will take the call directly to the mailbox of the extension it tried to transfer and ask the caller to leave a message, without offering the caller the transfer options.

Channel ID If Multi-Tenant is enabled, this field allows you to select the channel you want to design the Transfer Options for.

Set the **Transfer Options** with the desired keys. The available options are as follows:

- **Leave a Message** The caller will be taken to the mailbox of the extension and asked to leave a message.
- **Hold for Busy** This option is applicable only when the extension status is busy. IM1200 will put the caller on hold and attempt to transfer the caller to the extension again.
- **Conference** The caller will be connected with the predefined external phone number. This function is applicable if your PBX supports external call conference, and the Conference Hold Sequence and the Conference Sequence in the PBX Parameters setup, and the External Conference Call Number in the mailbox setup are done correctly.
- **AA-Menu Actions** Some of the AA-Menu actions are also available as transfer options. They include: Repeat Menu, AA-Menu, Lead to Extension Number, Transfer to Extension, Operator, Hang Up, etc. (For AA-Menu Actions, see page 5-7)

4. Click **Update** or **Update & Copy** once you are done with defining the Transfer Options. If you click **Update & Copy**, you will be asked to enter the destination channel number where you want to copy the current Transfer Options to. Enter it and click **OK**.
5. Click **OK** or **Apply** once you are done with the modifications for all the options.

Defining Work Schedule

IM1200 offers very flexible work hour and work day scheduling.

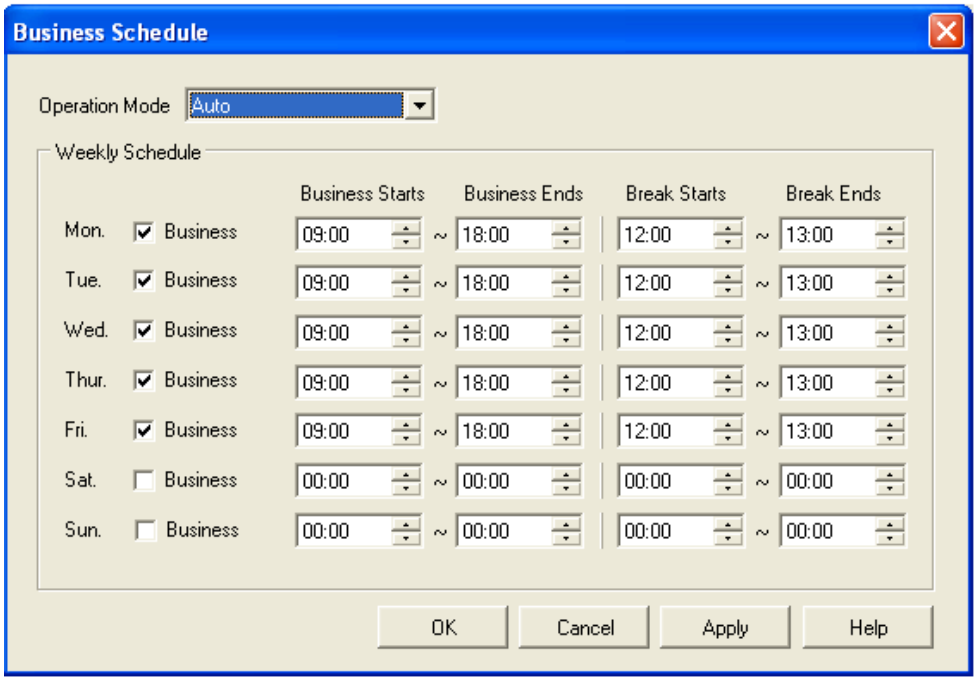

Figure 5-7

To Set up a Business Schedule:

1. Choose **System Configuration > Business Schedule.**
2. Click the **Edit** tab. A Business Schedule dialog box opens.
3. Define the following parameters for IM1200:

Operation Mode Select one of the following Operation Modes you prefer:

- **Business Hours** This tells IM1200 to use the Business Hours AA-Menu to handle the incoming calls, no matter what the time of day is.
- **After Hours** This tells IM1200 to use the After Hours AA-Menu to handle the incoming calls, no matter what the time of day is.
- **Break Hours** This tells IM1200 to use the Break Hours AA-Menu to handle the incoming calls, no matter what the time of day is.
- **Closed** This tells IM1200 to use the Closed Day AA-Menu to handle the incoming calls, no matter what the time of day or the day of the week is.
- **Auto** This tells IM1200 to use the respective Business Hours/Break Hours/After Hours/Close Day AA-Menus according to the time of day and day of the week to handle the incoming calls. This is the normal mode of operation.

Business Starts Enter the start of the business hours of the work day.

Business Ends Enter the end of the business hours of the work day. It should be later than the Business Start hour.

Break Starts Enter the start of the break hours during the work day.

Break Ends Enter the end of the break hours during the work day. It should be later than the Break Start hour.

Business When this box is checked, the day is designated as a work day, in opposite to a Closed day.

4. Click **OK** or **Apply** once you are done with the modifications for all the options.

Defining Holiday Calendar

In addition to the work week schedule, IM1200 also offers a Holiday Calendar. The administrator can assign up to 100 sets of Holidays and corresponding Holiday AA-Menus per system.

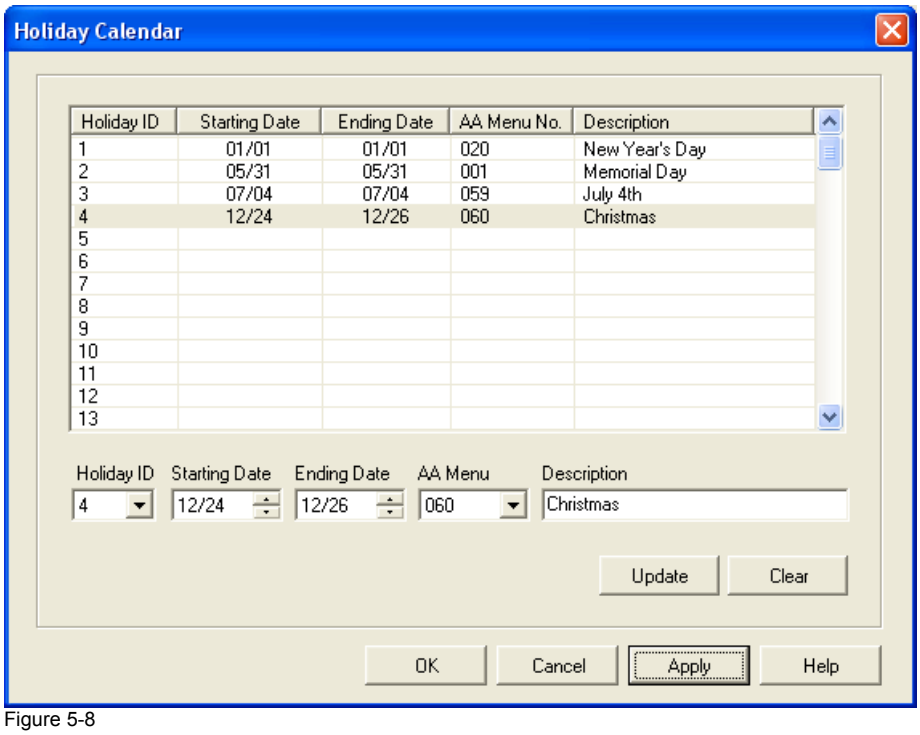

Figure 5-8

To Set up Holiday Calendar:

1. Choose **System Configuration > Holiday Calendar.**
2. Click the **Edit** tab. A Holiday Calendar dialog box opens.
3. Define the following parameters for IM1200:

   Starting Date Starting Date specifies the start of the holiday.

   Ending Date Ending Date specifies what date the holiday ends. To set a holiday to only one day, set the Starting Date and the Ending Date to be the same date. The Ending Date must be later than the Starting Date.

   AA-Menu No. Each holiday can have its own AA-Menu and greeting. Select the AA-Menu that was predefined for the specific holiday. (For AA-Menu, see page 5-6)

   Note: *You can set all the holidays to the same AA-Menu, and record a general holiday greeting for them.*

4. Click **Update** for every Holiday created or edited.
5. Click **OK** or **Apply** once you are done with all the editing.

CHAPTER 6

Voice Messaging

This chapter describes the details of the Voice Messaging of IM1200.

- ◇ Defining Voice Massaging Parameters
- ◇ Setting Up Message Notifications
  - Internal Notifications
  - External Notifications
- ◇ Mailbox Management

Defining Voice Messaging Parameters

The voice messaging features provided by IM1200 is comprehensive and dynamic and can be tailored to your specific needs.

To Set Up Voice Mail Parameters

1. Choose **Voice Mail > Voice Mail Parameters.**
2. Click the **Edit** tab. A Voice Mail Parameters dialog opens.

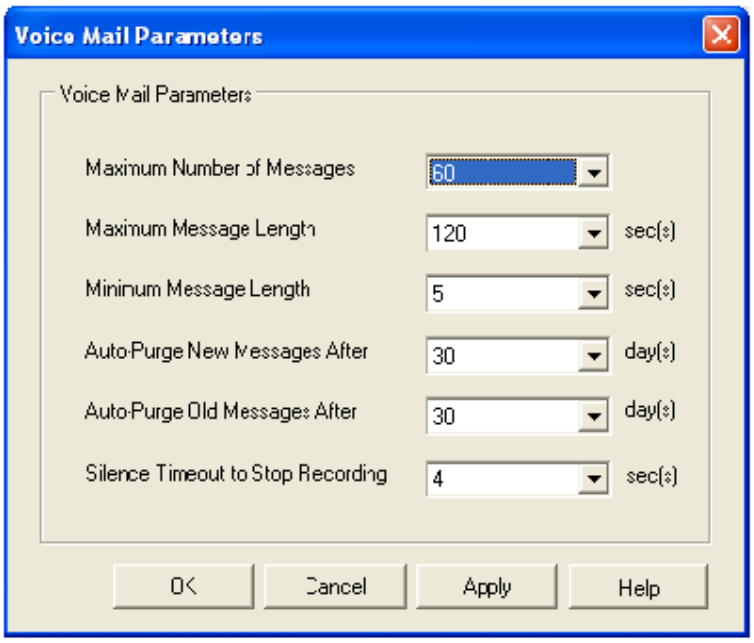

Figure 6-1

3. Define the following parameters:

Maximum Number of Messages This defines the maximum number of new and old messages combined each mailbox can hold. When a mailbox reaches this limit, the caller will be offered the transfer options without the voice mail option.

Maximum Message Length This defines the maximum message recording length allowed. When this limit is reached, the caller will be prompted to review the message, re-record the message or save the message.

Minimum Message Length This defines the minimum recording length required for the message to be considered legitimate and saved by IM1200 if the caller hangs up at the end of the message recording without hitting any key. This limit will not apply in the case the caller ends his/her recording and saves the message manually.

Auto-Purge New Messages After There is a New Folder and an Old Folder that store messages for each mailbox. The messages in the New Folder will be purged after they have been there for the number of days defined here. To disable Auto-Purge of new messages, select "0" for this parameter.

Note: *Purged New or Old Messages will be permanently deleted and cannot be recovered.*

Auto-Purge Old Messages After This parameter defines how many days the messages in the Old Folder should be kept. To disable Auto-Purge of old messages, select "0" for this parameter.

Silence Timeout to Stop Recording When IM1200 detects continued silence for the defined length of time, IM1200 will stop the recording and disconnect the call.

Note: *If the recording is stopped by this function, and the recording time is less than the Minimum Message Length, the message will not be saved.*

Setting Up Message Notifications

IM1200 has the ability to notify the mailbox owner when a new voice message is received.

To Set Up Internal Notification Parameters

1. Choose **Voice Mail > Notification.**
2. Click the **Edit** tab. A new Notification dialog box opens.

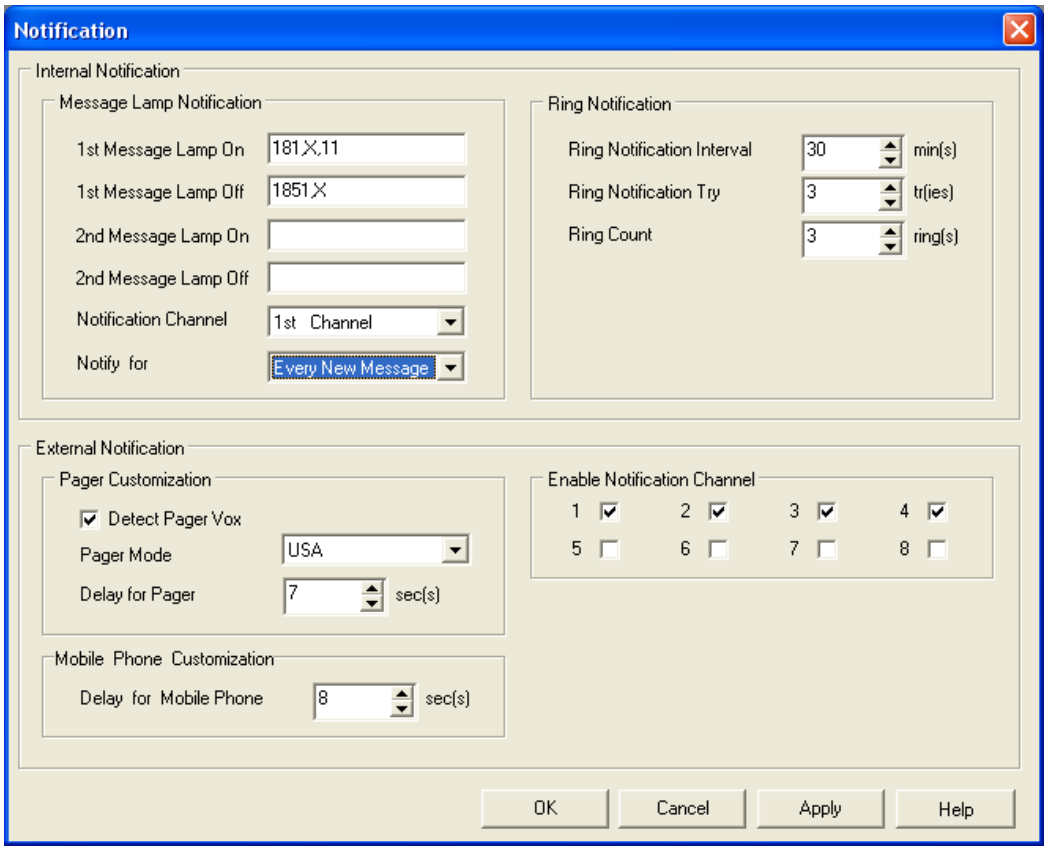

Figure 6-2

3. Define the following parameters:

Message Lamp On/Off There are 2 sets of Message Lamp On/Off Sequences. Most PBXes will only use one set of Message Lamp On/Off Sequences, while some other PBXes provide two sets of sequences. When both sets are entered, IM1200 will initiate the first sequence, then the second sequence consecutively.

Internal Notification Channel The internal notification can be assigned to one channel of IM1200. The assigned channel will notify the extension of new messages when it is unoccupied. It is recommended to assign the Internal Notification Channel to a channel that's least often occupied.

Notify for To conserve the resource of IM1200, the Internal Notification can be selected to operate in two different modes:

- **First New Message Only** IM1200 will only send notification for the first new message when more than one message is received by a mailbox. IM1200 will start to notify again after the mailbox owner has checked his/her voice mail and a new message is received.
- **Every New Message** IM1200 will notify for every new messages received. This will take up more resource of IM1200.

Ring Notification Interval Ring Notification Interval defines the interval between attempts to call the extension for notification.

Ring Notification Retry Ring Notification Retry defines the number of attemps M-1200 will make until the notification is successful. The attempts will stop if the owner checks his/her voice mail.

Ring Count The Ring Count defines the maximum number of rings IM1200 should try for the notification. If the call is not answered at the end of the ring count, the attempt will be deemed unsuccessful.

To Set Up External Notification Parameters:

1. Choose **Voice Mail > Notification.**
2. Click the **Edit** tab. A new Notification dialog opens.
3. Define the following parameters:

   Pager Customization These parameters are designed to meet specific requirements for pager operations in certain regions of the world. Consult your local dealers regarding the setup of these parameters.

   Delay for Mobile Phone Some mobile phone network needs extra time to connect a call. The IM1200 will wait for a certain time defined here after the number has been dialed to avoid misjudgment of the call status.

   Enabled Notification Channel Multiple channels can be designated for external notification. IM1200 will use enabled channels that are not occupied to do external notification.

Mailbox Management

IM1200 provides personal, customizable mailbox features such as personal distribution lists, message playback options, Do-Not-Disturb mode, etc. These features are administrated through the Mailbox Management.

To Create a Mailbox:

1. Choose **Voice Mail > Mailbox Management.**
2. Click the **Edit** tab. A new Mailbox Management dialog page opens.

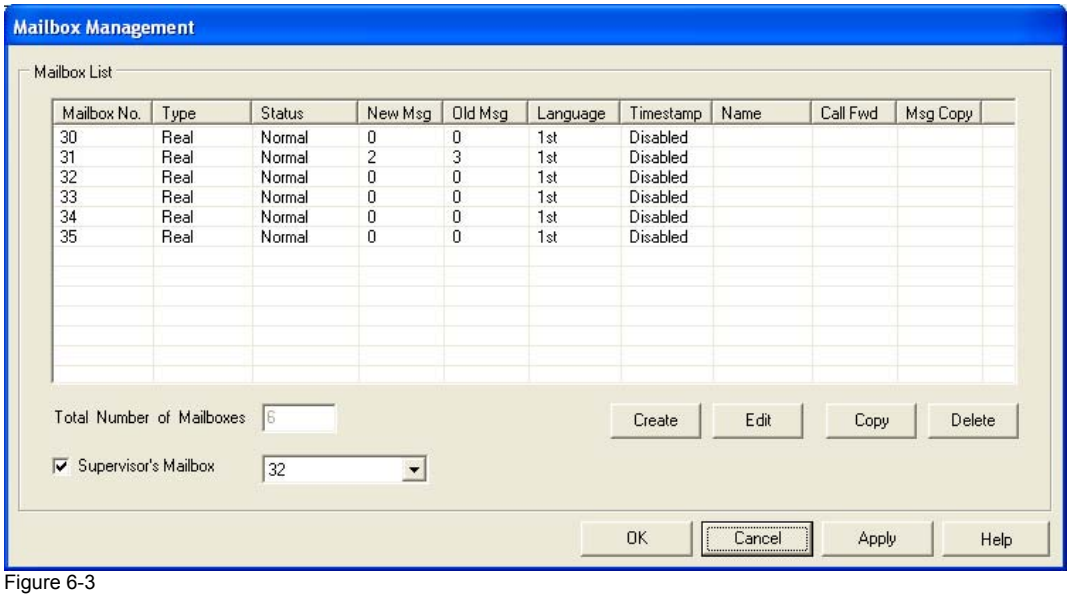

Figure 6-3

3. Click **Create** and a new MailBox dialog opens, with default values in the fields.

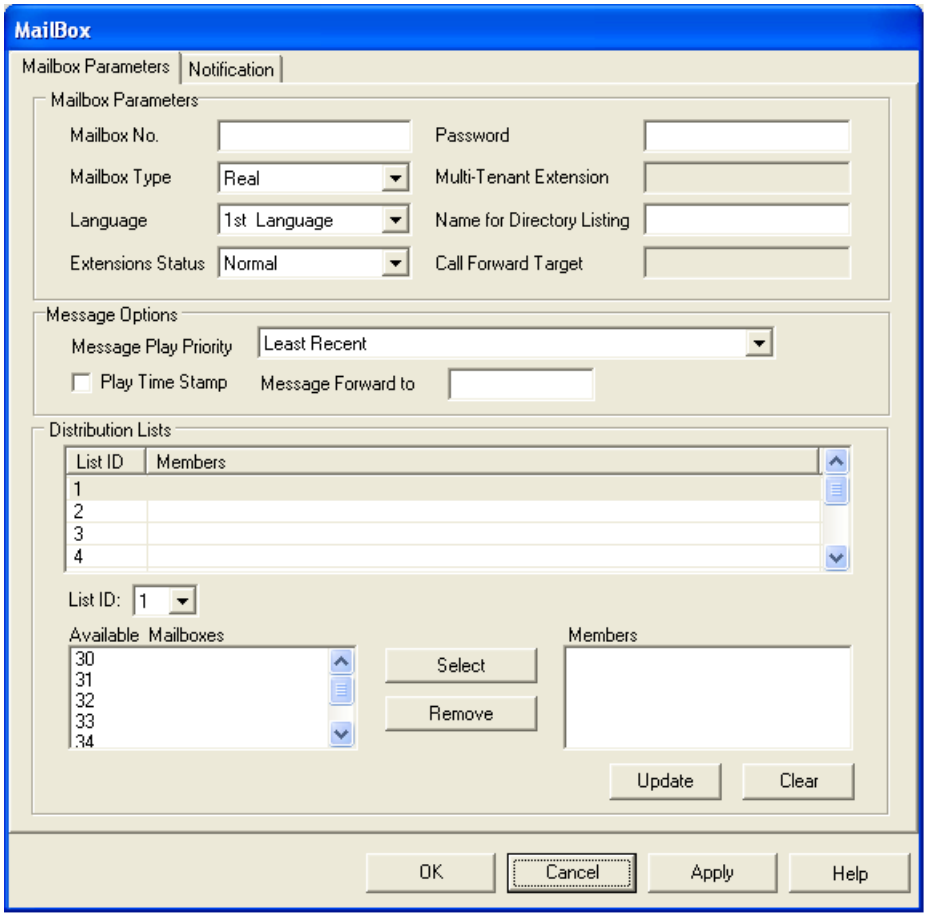

Figure 6-4

4. Modify and edit the fields with the setting you want for this new mailbox.

5. Click OK to finish creating the mailbox.

To Copy a Mailbox (and To Create a Range of Mailboxes):

1. Choose **Voice Mail > Mailbox Management.**
2. Click the **Edit** tab. A new Mailbox Management dialog page opens.
3. Click **Copy** and a new Copy Mailbox dialog opens.

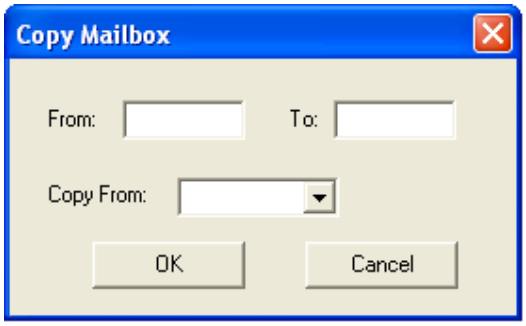

Figure 6-5

4. Enter the range of mailboxes you want to create. For example, **From** 100 **To** 130. Select the mailbox you want to **Copy From**. You should have some predefined mailboxes for this operation.
5. Click **OK** to finish copying/creating the mailboxes.

To Delete a Mailbox:

1. Choose **Voice Mail > Mailbox Management.**
2. Click the **Edit** tab. A new Mailbox Management dialog page opens.
3. Highlight the mailbox you wish to delete.
4. Click **Delete**. A confirmation box will open. Click **Yes** to finish deleting the mailboxes.

To Edit a Mailbox:

1. Choose **Voice Mail > Mailbox Management.**
2. Click the **Edit** tab. A new Mailbox Management dialog page opens.
3. Highlight the mailbox you wish to edit.
4. Click **Edit**. The selected MailBox dialog page opens.

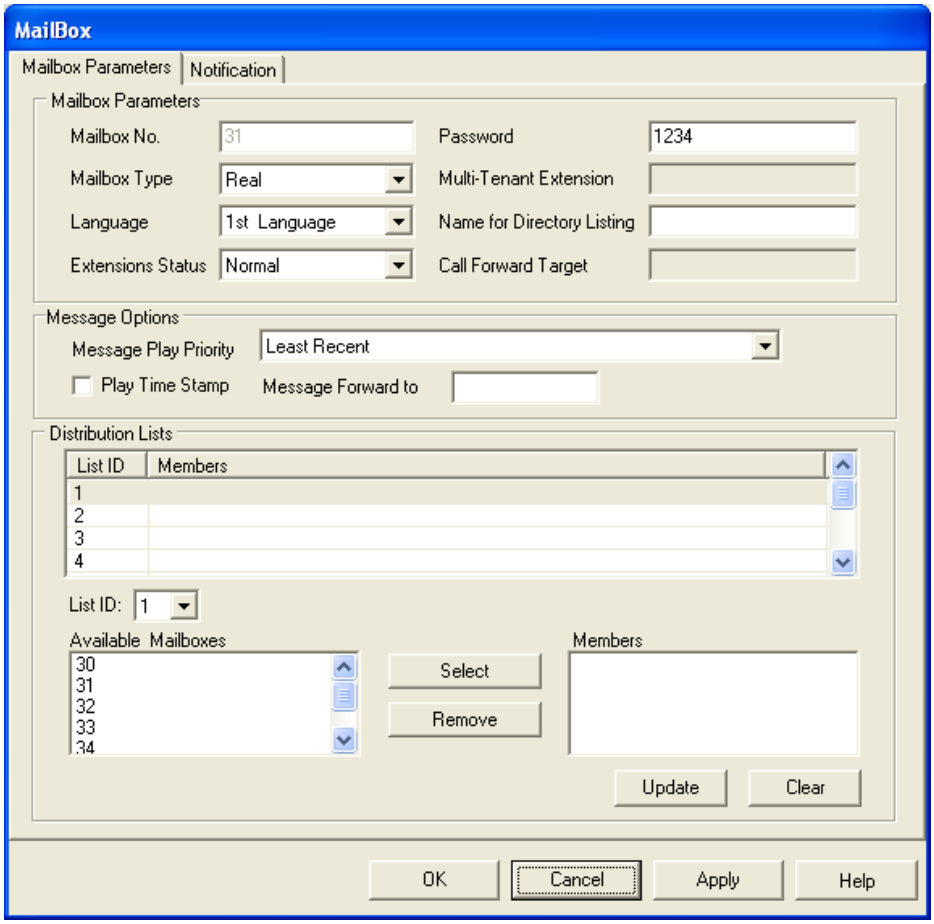

Figure 6-6

5. Edit the following Mailbox Settings:

Mailbox Password The Mailbox Password is the single keyword needed for the box owner to retrieve and manage his/her voice mail over the phone. It can be made up of numbers up to 8 digits. When the Mailbox Password is forgotten, other than viewing and editing it from VMS, the administrator can reset it to "1234" by pressing the FCN button while powering up the system—however, such process will also reset other system parameters to default.

Mailbox Type There are three different Mailboxes Types:

- **Real** Real Mailboxes are regular mailboxes with extensions. If the extension is not available to answer the call, with the right setting, the call will be directed to the mailbox for the caller to leave a message.
- **Virtual** A Virtual Mailbox does not have a real extension associated with it and cannot answer the calls. However, the Virtual Mailbox number still needs to be within an existing Extension Block to be valid. Virtual mailboxes are usually created for people who need voice messaging only.
- **Multi-Tenant** A Multi-Tenant Mailbox shares an extension with other Multi-Tenant Mailboxes. When a caller dials the Multi-Tenant Mailbox number, IM1200 will transfer the call to the extension specified in the Multi-Tenant Extension field. If that extension is not available, it will send the call to the Multi-Tenant Mailbox. Thus, several Multi-Tenant Mailbox owners can share the same extension yet each has his/her own mailbox for messaging. A multi-tenant mailbox needs to fall in an existing Extension Block. A multi-tenant

mailbox is only supported in Supervised Transfer Mode. (For Supervised Transfer Mode, see page 4-8)

Multi-Tenant Extension When the mailbox type is Multi-Tenant, a Multi-Tenant Extension must be defined. The extension number needs to fall in an available Extension Block.

Mailbox Language This is the language of the prompts the box owner hears when they access their mailbox. The available languages for your IM1200 will be different depending on your location and installation. Please check with your dealer for the available mailbox languages.

Message Play Priority The mailbox owner can specify the preferred Message Play Priority when retrieving messages. The options are:

- **Least Recent** Messages will be played in chronological order. Voice mail received least recently will be played first.
- **Most Recent** Messages will be played in counter chronological order. Voice mail received most recently will be played first.

Note: *Messages marked Urgent will always be played ahead of regular messages, in the order selected. For example: In Least Recent mode, the least recent Urgent message will be played first, then after the most Urgent message is played, the least recent regular message is played, and so on, until the most recent regular message is played.*

Play Time Stamp When Play Time Stamp function is enabled, the time the message was recorded will be announced before each message.

Message Forward To IM1200 can automatically copy a new message received in one mailbox to another mailbox. When this function is enabled, the targeted mailbox must be defined.

Distribution List The Mailbox owner can forward and broadcast messages to members in his/her personal Distribution List. Each mailbox can define up to 9 Distribution Lists and each list can hold up to 5 members. Highlight the mailboxes in the **Available Mailboxes** area and click **Select** to add them to the **Members** area of a list. Click **Update** after finish editing a list.

6. Click the **Notification** tab to continue to the Notification settings.

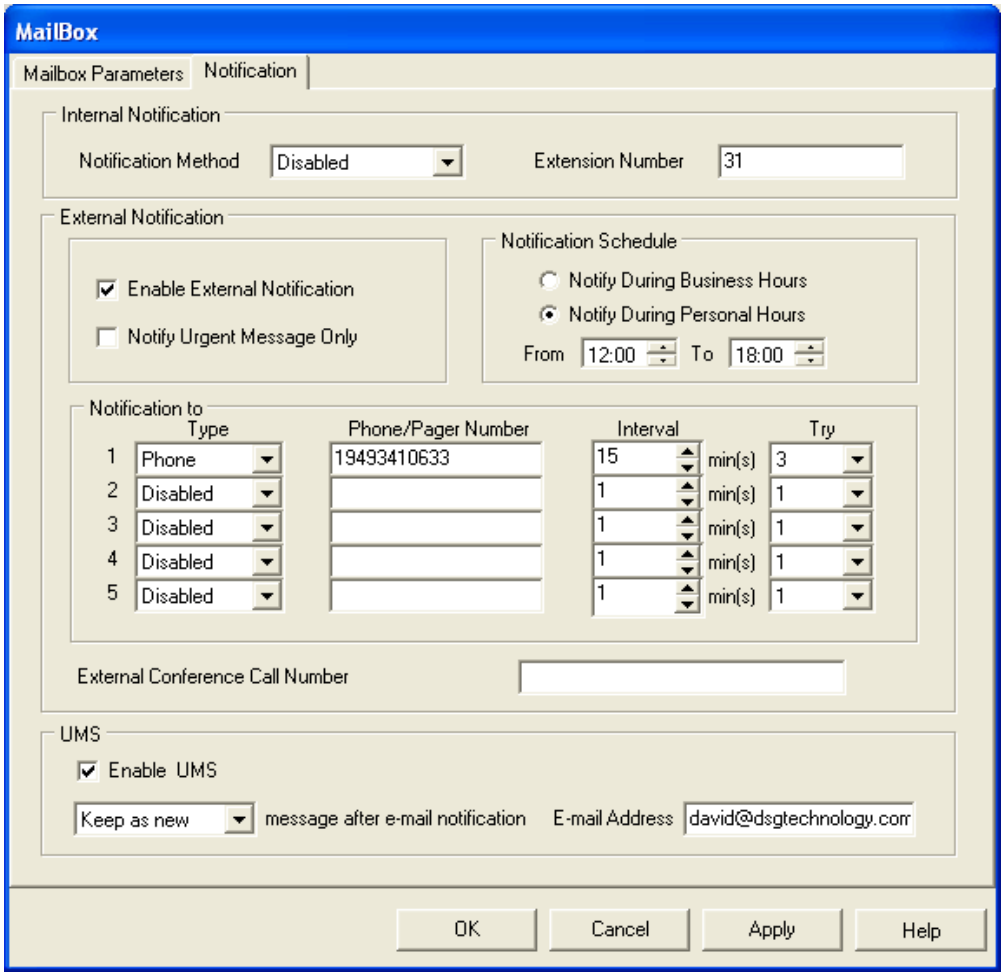

Figure 6-7

7. Edit personal mailbox notification functions:

Internal Notification Method Each mailbox can select its own method of Internal Notification. The methods include the following:

- **MsgLamp1** The Internal Notification will be done via the Message Lamp on the phone set. The Message Lamp On/Off Sequences must be properly defined for the Message Lamp Notification to function correctly. (For Message Lamp On/Off Sequence, see page 6-3)
- **MsgLamp2** Some PBX has more than 1 set of Message Lamp On/Off Sequences. This allows you to use the second Message Lamp On/Off Sequences for the Message Lamp Notification to work.
- **Extension** IM1200 will call the extension and inform the mailbox owner of the new messages and guide him/her to retrieve new messages. (For Ring Notification Parameters, see page 6-4)
- **Disabled** The Internal Notification can be disabled.

Internal Notification Extension Number A real extension must be defined for the internal notification. This extension is usually the same as the mailbox number.

Enable External Notification External Notification can also be enabled or disabled. Once it is disabled, the mailbox owner cannot enable it again from the extension. It can only be re-enabled through VMS.

Notify Urgent Message Only To conserve the system resource, IM1200 can do External Notifications only for messages marked as urgent. When this function is enabled, regular massages will not be notified externally.

External Notification Schedule The External Notification can be selected to be in effect during the following hours:

- **Notify During Business Hours** The External Notification will be performed only during the Business Hours defined by the Business Schedule. (For Business Schedule, see page 5-10)
- **Notify During Personal Hours** The External Notification will be performed only during the hours specified in the **From** and **To** fields.

Phone Notification Enter the phone number you want the system to dial for external notification. It can be your mobile phone, home phone, another office phone, etc. Be sure to enter the necessary area and country codes.

Pager Notification Enter the pager number you want the system to dial for external notification. Be sure to enter the necessary area and country codes.

Interval Enter the time (in minutes) IM1200 should wait before it makes another attempt for the external notification.

Try Enter the total number of times IM1200 should attempt to do the external notification.

External Conference Call Number If the PBX supports external conference call, the mailbox owner can enter the phone number he/she wishes the system to call when their extension is not available and the caller chooses the conference call option. The Conference Hold Sequence and the Conference Sequence in the PBX Parameters need to be set up correctly for this function to work.

Enable UMS When this box is checked, IM1200 will send an E-mail with the message in WAVE file for mat as an attachment to the E-mail address assigned by the mailbox owner.

Message after E-Mail Notification After the message has been sent via E-mail, IM1200 can automatically categorize the voice message with the following options:

- **Keep as New** The message will be kept as a new message after it is sent via E-mail.
- **Save as Old** The message will be moved to the old folder after it is sent via E-mail.

E-Mail Address This field is for the mailbox owner's E-mail address from which they wish to receive the message.

8. Click **OK** to save the new settings.

CHAPTER 7

Unified Messaging System

This chapter describes the setup and general function of the Unified Messaging of IM1200.

- ◇ Connecting to E-mail Server
- ◇ Setting Up E-mail Account in IM1200
- ◇ When Are E-mails Sent

Connecting to E-Mail Server

IM1200 provides the Unified Messaging function that allows the mailbox owner to receive their voice mail as a WAVE file attachment to their e-mail.

In order for this to work, a valid SMTP e-mail server with a valid email address is required. And the IM1200 must be set up in a network environment that has access to the e-mail server. (For Network Environment, see Chapter 2)

Setting Up E-mail Addresses in IM1200

The E-mail addresses can only be entered through VMS, not through DTMF Programming. The following settings are required:

- **UMS E-mail Address** This is the address of the e-mail account IM1200 uses to send out the e-mail. It must be a valid address in the specified SMTP server.
- **SMTP Server** This is the name of the SMTP Server that the UMS E-mail Account uses to send out the e-mail.
- **Mail Server Authentication** Some mail server requires authentication of the user account before it is allowed to send out e-mails. IM1200 has provided the Account Name and Password fields for such purpose.
- **Mailbox E-mail Address** This is the e-mail address defined in each mailbox to receive the e-mail from IM1200.

Remember to enable the UMS function in each mailbox. (For mailbox UMS enabling, see page 6-10)

When Are E-mails Sent

E-mails will be sent to the designated e-mail address when

- **A New Message Is Received** The message will be attached to the e-mail as a WAVE file. After sending it, IM1200 can then save the message as an old message, or keep it as a new message in the system. (For message status after e-mail notification, see page 6-10)
- **A Warning Situation Arises** When a critical situation, such as memory storage full, occurs, IM1200 will send out a warning message to the supervisor's e-mail address.

CHAPTER 8

User Operations

This chapter describes the end-user operations on IM1200.

- ◇ Access Your Personal Mailbox
- ◇ Retrieving Your Messages
- ◇ Sending a Message
- ◇ Editing Your Personal Mailbox Options

Accessing Your Personal Mailbox

IM1200 offers up to 9,999 personal mailboxes. Each mailbox can be defined to be: (For Mailbox Type, see page 6-7)

- **Real**
- **Virtual**
- **Multi-Tenant**

All mailboxes can be accessed through the following steps:

1. Call into the system and press the Access Mailboxes action key defined by the AA-Menu. (For AA-Menu Actions, see page 5-7)
2. Follow the system prompts, and enter your Mailbox Number. The Mailbox Number is the extension number if the mailbox is a Real Mailbox. If the mailbox is a Virtual or Multi-Tenant Mailbox, the Mailbox Number will be user-defined.
3. Follow the system prompts, and enter your Mailbox Password.
4. When you hear the system announces the number of new/old messages you have, you are inside your mailbox already.

Retrieving Your Messages

After you have successfully entered your mailbox, you can retrieve your messages. Messages are divided into two categories:

- **New Messages** New Messages are messages that you have not listened to.
- **Old Messages** Old Messages are messages that you have already listened to.

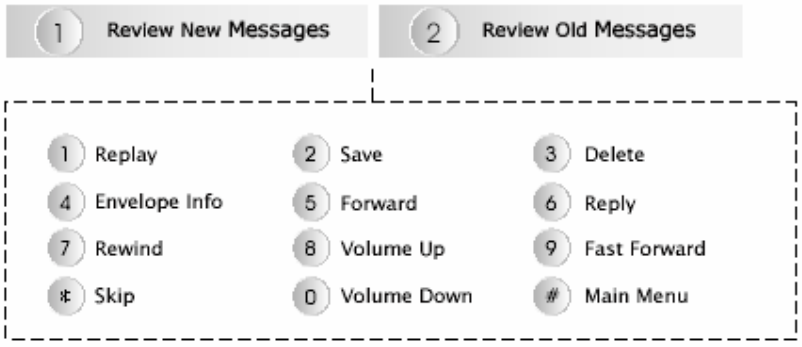

Figure 8-1

To Retrieve Your Messages:

1. Enter your mailbox.
2. The system will announce the number of new and old messages in your mailbox. Enter 1 if you wish to listen to the new messages, or 2 if you wish to listen to old messages.

While you are listening to the messages, you can use the following functions to assist you to review your messages.

- **Replay** To play your message from the beginning again.

- **Save** To save the message and play the next message in the same category.
- **Delete** To delete the message permanently.
- **Envelope Info** To play the time of day when the message was recorded.
- **Forward** To send this message to a mailbox or all mailboxes in a Personal Distribution List.
- **Reply** This option will only be available when the message was sent by another mailbox. It will record and send a message to the sender of the original message. The original message will be appended to your reply message.
- **Rewind** To rewind the message by 5 seconds, then continue to play the message.
- **Volume Up** To turn up the volume by 1 level for the current message. The play volume will be automatically reset to default level for the next message.
- **Fast Forward** To fast forward the message by 5 seconds, then continue to play the message.
- **Skip** To skip this message.
- **Volume Down** To turn down the volume by 1 level for the current message. The volume will be automatically reset to default level for the next message.
- **Main Menu** To stop listening to the message, and go back to the previous level.

Sending a Message

When you are in your mailbox, you can record and send a message to a target mailbox or to a distribution list. The recipient will be able to reply to this message.

Figure 8-2

To Send a Message:

1. Enter your mailbox.
2. Press 3 to send a message.
3. Press 1 to send a message to single mailbox, or press 2 to send a message to a predefined distribution list.
4. Follow the system prompts, record and send your message.

Editing Your Personal Mailbox Options

When you are in your mailbox, you can modify the setting of your mailbox to have it perform the tasks you wish , in the way you wish.

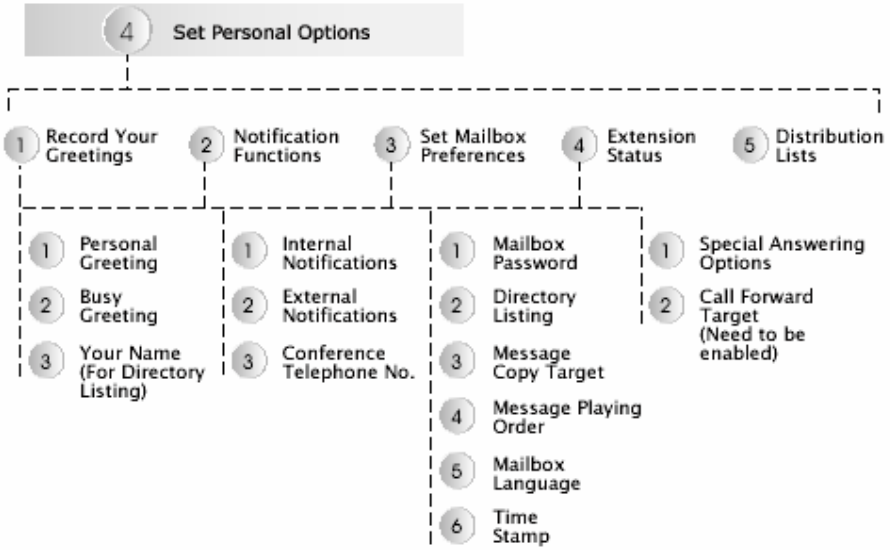

Figure 8-3

To Record/Re-record your Mailbox Greetings:

1. Enter your mailbox.
2. Pres 4 to enter the Personal Options.
3. Press 1 to record/re-record your greetings.
4. Select the greeting you wish to record/re-record. There are 3 types of Mailbox Greetings.
5. Press 1 for Personal Greeting. This is the general mailbox greeting, and will be played when the extension is not available, status set on DND, or the mailbox type is virtual.

   Press 2 for Busy Greeting. This greeting will be played when the extension is busy.

   Press 3 for Your Name recording. This will be played during the Directory announcement, and during call transfer if the Announce Name function is enabled. (For Announce Name option in Call Transfer, see page 5-9)
6. Follow the system prompts, and record/re-record or delete your greetings.

Note: *When there are no user-recorded greetings available, IM1200 will play the system default greetings.*

To Modify the Notification Function:

1. Enter your mailbox.
2. Pres 4 to enter the Personal Options.
3. Press 2 to modify the Notification Function.
4. Press 1 for Internal Notification Function. The Internal Notification options include Message Lamp 1, Message Lamp 2, and Extension Notification. Follow the system prompts to select the option you want for the internal notification.

   Press 2 for External Notification Function. There are up to 5 External Notification phone numbers to be set. The numbers can be of regular phone, mobile phone, or pager. Follow the system prompts to enter the phone number and the type of phone. You need to set minimum 1 set of number and phone type to receive External Notification.

Press 3 for Conference Telephone Number. When the extension is not available, the caller can choose to connect to the Conference Telephone Number defined here. IM1200 will use the conference call function of the PBX to connect the caller to the external telephone. Follow the system prompts to modify the Conference Telephone Number. To disable this function, simply delete the telephone number.

To Set Mailbox Preferences:

1. Enter your mailbox.
2. Pres 4 to enter the Personal Options.
3. Press 3 to Set Mailbox Preferences.
4. Press 1 for Mailbox Password. It will announce your current mailbox password. Follow the system prompts to change and save the new password as you wish.

   Press 2 for Directory Listing. This function contains the mailbox owner's name in numeral representation for the Directory Listing. Enter your name following the system prompts and using the numeral/alphabet conversion as shown in Figure 8-4.

Figure 8-4

Press 3 for Message Copy (Forward). This function will forward all new messages to the selected mailbox. Follow the system prompts to enter the mailbox number you wish to forward all the messages to.

Press 4 for Message Play Order. You can choose for the system to play the latest message first, or the oldest message first. Follow the system prompts, and select your preferred Message Play Order.

Press 5 for Mailbox Language. IM1200 supports mailboxes access with multiple languages. Once the language has been selected all the system prompts for the mailbox management will be in the selected language. Follow the system prompts, and select the Mailbox Language you prefer for your mailbox access. Check with your dealer for the mailbox languages available for your system

Press 6 for Time Stamp. You can select to play or not the Time Stamp information when listening to the message. If you wish not to play the Time Stamp information, simply disable this function. Follow the system prompts to enable or disable the Time Stamp.

To Change the Extension Status:

1. Enter your mailbox.
2. Pres 4 to enter the Personal Options.
3. Press 4 to Set Mailbox Preferences.

4. Press 1 for Special Answering Options. There are two Special Answering Options, Do Not Disturb (DND) and Call Forward. When the Mailbox is in the DND mode, the call will not be transferred to the extension, but taken directly to the mailbox greeting instead. When the Mailbox Type is Virtual, the DND mode will be automatically enabled. When the mailbox is in the Call Forward mode, the call will be transferred directly to the Call Forward Target. Follow the system prompts to modify the Special Answering Options. Select Normal mode to answer the call normally.

   Press 2 for Call Forward Target. The Call Forward Target is needed when the mailbox Special Answering Options is set to Call Forward. Enter the target extension number you wish to forward the call to.

To Modify your Personal Distribution List:

1. Enter your mailbox.
2. Pres 4 to enter the Personal Options.
3. Press 5 to Modify your Personal Distribution List. There can be up to 9 Personal Distribution Lists in each mailbox; each list can hold up to 15 members. Follow the system prompts to add and remove members from the list.

CHAPTER 9

DTMF Programming

There is an alternative way of programming IM1200 to using a computer based utility program. Through a touch-tone telephone, you can set up or modify the system from anywhere.

- ◇ DTMF Programming Mode
- ◇ Entering and Exiting the DTMF Programming Mode
- ◇ DTMF Programming Procedure

DTMF Programming Mode

When you are without a computer or the proper network environment, you can use the DTMF Programming to set up or administrate the IM1200 from any touch-tone phone. IM1200 CAN continue to take calls and operate normally when the system is in the DTMF Programming Mode.

Entering and Exiting the DTMF Programming Mode

The IM1200 allows only one administrator in the Programming Mode at a time. This counts both DTMF Programming and VMS Programming Modes. Thus if there is one administrator logged on to the DTMF Programming mode, no other administrators will be able to log on to the DTMF Programming Mode or the VMS Programming Mode.

Note: *When the Security button is pressed down, IM1200 will not be able to enter any programming mode, including the DTMF Programming Mode.*

To Enter the DTMF Programming Mode

1. Call from a touch tone phone to the IM1200.
2. Press the key that is predefined for entering the DTMF Programming Mode by the AA menu that is playing the greeting. The default main AA menu (ID 000) has the key for "DTMF Programming Mode" set to "#".
3. You will be prompted to enter the Administrator's Password. The default password is "1234".

   Note: *Depending on the region, your default Administrator's Password may be different.*
4. If you have entered the correct password, you will be prompted to enter the function you wish to edit.

To Exit the DTMF Programming Mode

Press "#" when the system asks you to enter the function you wish to edit.

DTMF Programming Procedure

All DTMF Programming will be guided by voice prompts. The following are the general DTMF Programming procedure:

1. After you have entered the correct password, you will be prompted to enter the 3-digit Function Code.
2. Enter the 3-digit Function Code for the setting you wish to modify.
3. Follow the system prompt's instruction, and refer to the 3-digit Function Code Table for the modifications you want to make. In general, the system will first announce the current setting of the function selected, and ask you to press 1 to edit, 2 to save, and 3 to replay the current setting.

Note: *Some functions require several steps to enter the parameter, while some only need one step.*

4. The new setting will be played back to you and followed by the standard options (1 to edit, 2 to save, 3 to replay) mentioned in Step 3 above.
5. Follow the system prompts to confirm the setting and remember to SAVE when you finish editing the setting.

DTMF and Action Code Table

A 2-digit code table representing all DTMF signals (0-9, *, #, A,B,C,D), as well as actions such as Pause and Hook Flash, etc., is devised to facilitate the data entry for DTMF Programming:

DTMF and Action Code Table

Code	Signal	GUI
01	DTMF 1	1
02	DTMF 2	2
03	DTMF 3	3
04	DTMF 4	4
05	DTMF 5	5
06	DTMF 6	6
07	DTMF 7	7
08	DTMF 8	8
09	DTMF 9	9
10	DTMF *	*
11	DTMF 0	0
12	DTMF #	#
13	First Flash	&
14	Second Flash	h
15	0.5 sec Pause Time	,
16	Extension	x
17	1 sec Pause Time	;
18	Time Out	
19	DTMF A	A
20	DTMF B	B
21	DTMF C	C
22	DTMF D	D
23	Extension Digit	E
24	Ignore	I
25	New Message Number	M

3-Digit Function Code Table

All the function and parameter settings that can be done through the graphical user interface of VMS can also be done through the 3-Digit Function Code of DTMF Programming. The following is a full listing of the 3-Digit Function Codes for your programming reference.

Func. Code	Description	Input	Notes
100	System Password	X + #	X = 0~8-digt password
101	Greeting Recording Password	X + #	X = 0~8-digt password
102	IP Address	XXX + * + XXX + * + XXX + * + XXX + #	XXX = 000 ~ 255
103	Default Gateway Address	XXX + * + XXX + * + XXX + * + XXX + #	XXX = 000 ~ 255
104	Subnet Mask	XXX + * + XXX + * + XXX + * + XXX + #	XXX = 000 ~ 255
105	DNS	XXX + * + XXX + * + XXX + * + XXX + #	XXX = 000 ~ 255
106	DTMF Send On Time	X + #	X = 10, 20, 30, ~ 400 msec(s)
107	DTMF Send Off Time	X + #	X = 10, 20, 30, ~ 400 msec(s)
108	DTMF Send Gain	X + #	X = 1 ~ 10 level(s)
109	DTMF Inter-Digit Timeout	X + #	X = 1 ~ 10 sec(s)
110	DTMF AA-Menu Timeout	X + #	X = 1 ~ 10 sec(s)
111	Recording Gain	X + #	X = 1 ~ 10 level(s)
112	Play Gain	X + #	X = 1 ~ 10 level(s)
113	Dial Tone Duration	X + #	X = 0 (disable), 1 ~ 10 sec(s)
114	External Busy Tone Counter	X + #	X = 1 ~ 10 count(s)
115	Loop Current Drop Duration	X + #	X = 0 (disable), 100, 200, 300, ~ 9000 msec(s)
116	Enable RS-232 Message Light	X + #	X = 0 (disable), 1 (enable)

Func. Code	Description	Input	Notes
117	Baud Rate	X + #	X = 1200, 2400, 4800, 9600
118	Parity Check	X + #	X = 0 (none), 1 (odd), 2 (even)
119	Data Bits	X + #	X = 5 ~ 8
120	Stop Bits	X + #	X = 1, 2
121	IM1200 Version Number		Read only
122	Echo Cancellation Tail Length	X + #	X = 0 ~ 5
123	Calibration TX Gain	X + #	X = 0 ~ 50
124	Calibration RX Gain	X + #	X = 0 ~ 50
125	Name Directory Listing	X + #	X = 0 (first name), 1(last name)
126	Reduce Calibration TX Gain for CPT Detection	X + #	X = 0 (disable), 1(enable)
127	DTMF Hold Off Limit	X + #	X = 0 ~ 26
128	Transfer Option Time out	X + #	X = 1 ~ 10 sec(s)
129	Receive DTMF Level	X + #	X = 0 ~ 128
130	Limitation for Error Message Counter	X + #	X = 1 ~ 30 count(s)
131	Extension Number of Fax Machine	X + #	X = 1 ~ 6 digits
200	Business Hour Operator Transfer Mode	X + #	X = 1 (Supervised), 2 (Non-Supervised), 3 (Semi-Supervised)
201	Business Hour Extension Transfer Mode	X + #	X = 1 (Supervised), 2 (Non-Supervised), 3 (Semi-Supervised)
202	After Hour Operator Transfer Mode	X + #	X = 1 (Supervised), 2 (Non-Supervised), 3 (Semi-Supervised)

Func. Code	Description	Input	Notes
203	After Hour Extension Transfer Mode	X + #	X = 1 (Supervised), 2 (Non-Supervised), 3 (Semi-Supervised)
204	Transfer Sequence	X… + #	X… = DTMF & Action Code String
205	Ringback Recall Sequence	X… + #	X… = DTMF & Action Code String
206	Busy Recall Sequence	X… + #	X… = DTMF & Action Code String
207	Hang Up Sequence	X… + #	X… = DTMF & Action Code String
208	CO Line Access Sequence	X… + #	X… = DTMF & Action Code String
209	Conference Hold Sequence	X… + #	X… = DTMF & Action Code String
210	Conference Sequence	X… + #	X… = DTMF & Action Code String
211	First Hook Flash Time	X + #	X = 0,10,20,30~4500
212	Second Hook Flash Time	X + #	X = 0,10,20,30~4500
213	Supervised Signal Type	X + #	X = 1 (Call Progress Tone), 2 (DTMF Signal)
214	Ringback CPT 1st High	X + #	X = 0,10,20,30~4500
215	Ringback CPT 1st Low	X + #	X = 0,10,20,30~4500
216	Ringback CPT 2nd High	X + #	X = 0,10,20,30~4500
217	Ringback CPT 2nd Low	X + #	X = 0,10,20,30~4500
218	Ringback CPT Cycle	X + #	X = 1 ~ 20
219	Busy CPT 1st High	X + #	X = 0,10,20,30~4500
220	Busy CPT 1st Low	X + #	X = 0,10,20,30~4500
221	Busy CPT 2nd High	X + #	X = 0,10,20,30~4500
222	Busy CPT 2nd Low	X + #	X = 0,10,20,30~4500
223	Busy CPT Cycle	X + #	X = 1 ~ 20

Func. Code	Description	Input	Notes
224	Error CPT 1st High	X + #	X = 0,10,20,30~4500
225	Error CPT 1st Low	X + #	X = 0,10,20,30~4500
226	Error CPT Cycle	X + #	X = 1 ~ 20
227	Call Progress Tone Tolerance	X + #	X = 1 (high), 2 (low)
228	Ringback Tone DTMF Signal	X… + #	X… = DTMF & Action Code String
229	Busy Tone DTMF Signal	X… + #	X… = DTMF & Action Code String
230	DND DTMF Signal	X… + #	X… = DTMF & Action Code String
231	Answer Call DTMF Signal	X… + #	X… = DTMF & Action Code String
232	Disconnect Call DTMF Signal	X… + #	X… = DTMF & Action Code String
233	No Answer Time out for DTMF Signal	X + #	X = 1 ~ 60 sec(s)
234	Maximum Digits in In-Band DTMF Strings	X + #	X = 1 ~ 30 digit(s)
235	Maximum Time to Wait for First Digit	X + #	X = 0 ~ 30 sec(s)
236	Maximum Time Between Digits	X + #	X = 1 ~ 10 sec(s)
237	Busy Time Lag	X + #	X = 0 (disable) ~ 20 sec(s)
238	Call Pickup No Answer Time out	X + #	X = 0 (disable) ~ 60 sec(s)
239	Call Pickup Sequence	X… + #	X… = DTMF & Action Code String
240	Call Pickup Channel(s)	X + #	X = 1 ~ 8, in concatenation. Example: 1234 selects channels 1,2,3,4.
241	PBX Model	X + #	X = 0 (default PBX) ~ 999
242	Automatic Cadence Learning Extension	X + #	X = 1 ~ 6 digit(s)
243	Extension Size	X + #	X = 1 ~ 6 digit(s)
300	In Band DTMF Protocol	Step 1. String ID + #	String ID = 01~30
		Step 2. Operation + * + String + #	Operation: 1 = To Main AA-Menu 2 = To Busy Flow

Func. Code	Description	Input	Notes
			3 = To No Answer Flow 4 = To Access a Mailbox String = DTMF & Action Code String *See Figure 9-1 for full flowchart*
310	Business Schedule		*See Figure 9-2 for full flowchart*
311	Operation Mode	X + #	X = 1 (Auto), 2 (Business Hour), 3 (Break Hour), 4 (After Hour), 5 (Closed Day)
312	Current Date	YY + MM + DD + #	YY = year MM = month DD = day
313	Current Time	HH + MM + SS + #	HH = hour in 24 hour format MM = minute SS = second
320	Holiday Calendar		*See Figure 9-3 for full detail*
330	AA-Menu Action	Step 1. AA-Menu ID	AA-Menu ID = 001-300
		Step 2. DTMF + * + Action (+ * + Target) + #	DTMF: 01 = DTMF 1 02 = DTMF 2 03 = DTMF 3 04 = DTMF 4 05 = DTMF 5 06 = DTMF 6 07 = DTMF 7 08 = DTMF 8 09 = DTMF 9 10 = DTMF * 11 = DTMF 0

Func. Code	Description	Input	Notes
			12 = DTMF #
			Action:
			00 = No Action
			01 = AA Menu
			02 = AA Menu in 1st Language
			03 = AA Menu in 2nd Language
			04 = AA Menu in 3rd Language
			05 = AA Menu in 4th Language
			06 = Lead to Extension Number
			07 = Transfer to Extension
			08 = Direct Transfer to Extension
			09 = Transfer to Mailbox
			10 = Direct Transfer to Mailbox
			11 = Access Mailbox
			12 = Name Directory
			16 = Operator
			17 = System Programming Mode
			18 = Repeat Menu
			19 = Hang Up
			20 = Hang Up with Announcement
			Target = straight numbers
			See Figure 9-4 for full flowchart
340	Channel Parameters	Step 1. Channel ID	Channel ID = 1~ 8
		Step 2. Parameter ID	Parameter ID:
			1 = Ring Number
			2 = Language
			3 = Enable Holiday Calendar
			4 = Business Hour AA-Menu
			5 = Break Hour AA-Menu
			6 = After Hour AA-Menu
			7 = Closed Day AA-Menu
			8 = Copy All Channels from Channel 1

Func. Code	Description	Input	Notes
		Step 3. X + #	Ring Number = 1~ 9 Language = 1 ~ 4 Enable Holiday Calendar: 0 = disable 1 = enable AA-Menu = 1 ~ 300 Copy all channels from channel 1: 0 = disable 1 = enable *See Figure 9-5 for flowchart*
350	Transfer Options	DTMF + * + Action (+ * + Target) + #	DTMF: 01 = DTMF 1 02 = DTMF 2 03 = DTMF 3 04 = DTMF 4 05 = DTMF 5 06 = DTMF 6 07 = DTMF 7 08 = DTMF 8 09 = DTMF 9 10 = DTMF * 11 = DTMF 0 12 = DTMF # Action: 00 = No Action 01 = AA Menu 06 = Lead to Extension Number 07 = Transfer to Extension 08 = Direct Transfer to Extension 09 = Transfer to Mailbox 10 = Direct Transfer to Mailbox 11 = Access Mailbox 13 = Leave a Message

Func. Code	Description	Input	Notes
			14= Hold for Busy 15= Conference 16 = Operator 17 = System Programming Mode 18 = Repeat Menu 19 = Hang Up 20 = Hang Up with Announcement Target = straight numbers
351	Announce Call Transfer	X + #	X = 0 (disable), 1 (enable)
352	Announce Name	X + #	X = 0 (disable), 1 (enable)
353	Leave Message Directly	X + #	X = 0 (disable), 1 (enable)
360	Extension Block	Step 1. Extension Block ID	Extension Block ID = 01~ 99
		Step 2. Starting Extension + * + Ending Extension (+ * + Assistant Extension) + #	Starting Extension, Ending Extension, Assistant Extension = 1-digit ~ 6-digit *See Figure 9-6 for full flowchart*
370	Extension & Operator Group	Step 1. Group ID	Group ID = 01~ 30
		Step 2. Extension Code + * + Hunting Method + #	Extension Code = 1-digit ~ 6-digit Hunting Method: 1 = linear 2 = circular 3 = ACD *See Figure 9-7 for full flowchart*
371	Business Hour Operator Extension	X + #	X = 1 ~ 6-digits
372	Break Hour Operator Extension	X + #	X = 1 ~ 6-digits
373	After Hour Operator Extension	X + #	X = 1 ~ 6-digits
374	Closed Day Operator Extension	X + #	X = 1 ~ 6-digits
375	Holiday Operator Extension	X + #	X = 1 ~ 6-digits
400	1st Message Lamp On Sequence	X… + #	X… = DTMF & Action Code

Func. Code	Description	Input	Notes
401	1st Message Lamp Off Sequence	X… + #	X… = DTMF & Action Code
402	2nd Message Lamp On Sequence	X… + #	X… = DTMF & Action Code
403	2nd Message Lamp Off Sequence	X… + #	X… = DTMF & Action Code
404	Internal Notification Channel(s)	X + #	X = 1 ~ 8, in concatenation. Example: 1234 selects channels 1,2,3,4.
405	Notify for	X + #	X: 1 = First New Message Only 2 = Every New Messages
406	Ring Notification Interval	X + #	X = 1 ~ 300 min(s)
407	Ring Notification Try	X + #	X = 1 ~ 9 min(s)
408	Ring Count	X + #	X = 1 ~ 9 ring(s)
409	Pager Mode	X + #	X: 0 = USA, 1 = Singapore
410	Detect Pager Vox	X + #	X = 0 (disable), 1 (enable)
411	Delay for Pager	X + #	X = 1 ~ 20 sec(s)
412	Delay for Mobile Phone	X + #	X = 1 ~ 20 sec(s)
413	External Notification Channel(s)	X + #	X = 1 ~ 8, in concatenation. Example: 1234 selects channels 1,2,3,4.
414	Maximum Number of Messages	X + #	X = 1 ~ 255 message(s)
415	Maximum Message Length	X + #	X = 10 ~ 600 sec(s)
416	Minimum Message Length	X + #	X = 1 ~ 9 sec(s)
417	Auto Purge New Messages	X + #	X = 0 (disable), 1 ~ 30 day(s)
418	Auto Purge Old Messages	X + #	X = 0 (disable), 1 ~ 30 day(s)
419	Silence Time out to Stop Recording	X + #	X = 1 ~ 60 sec(s)
420	Supervisor’s Mailbox	X + #	X = valid mailbox number

Func. Code	Description	Input	Notes
421	Digits of New Message	X + #	X = 1 ~ 3 digit(s)

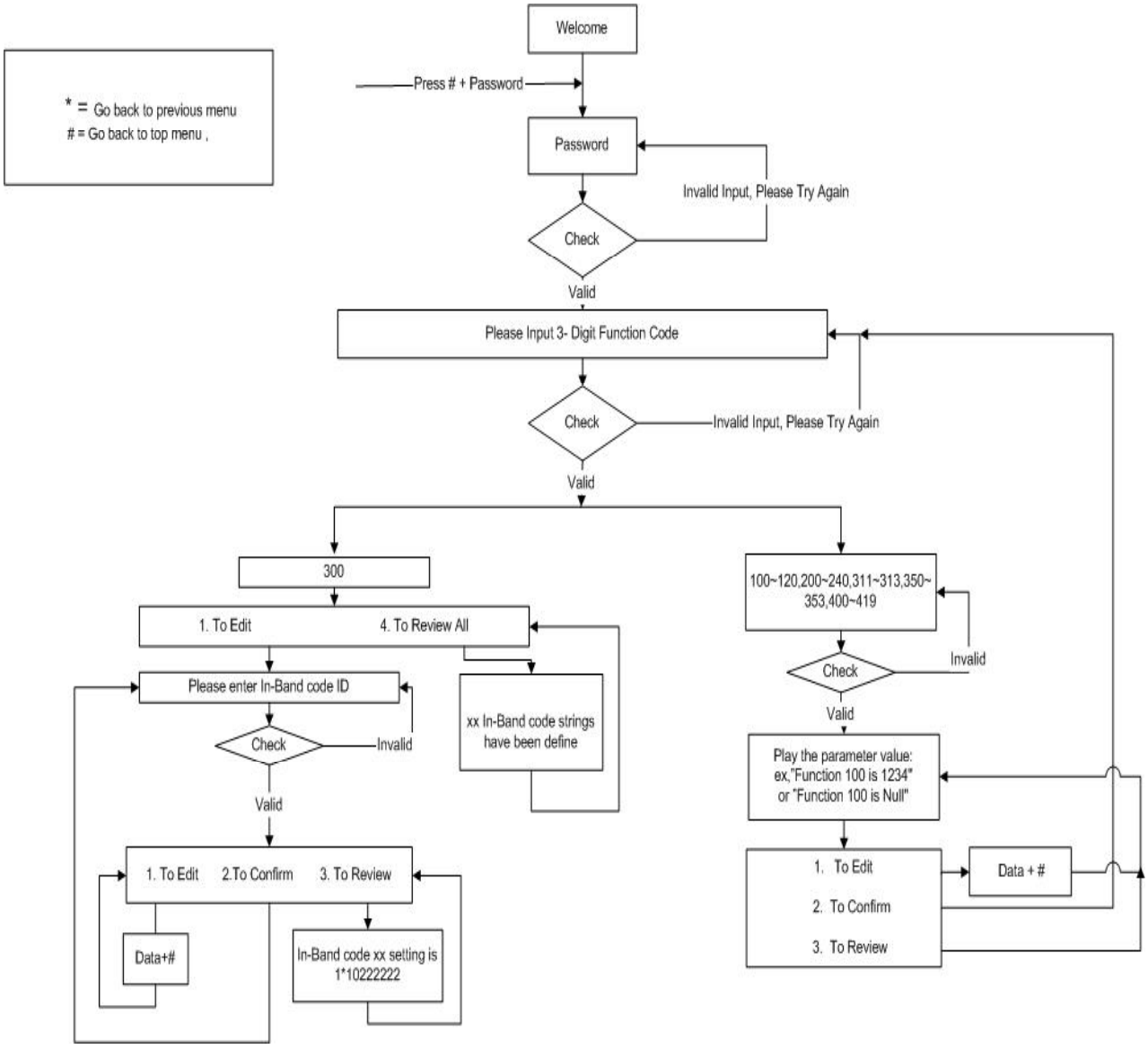

Figure 9-1

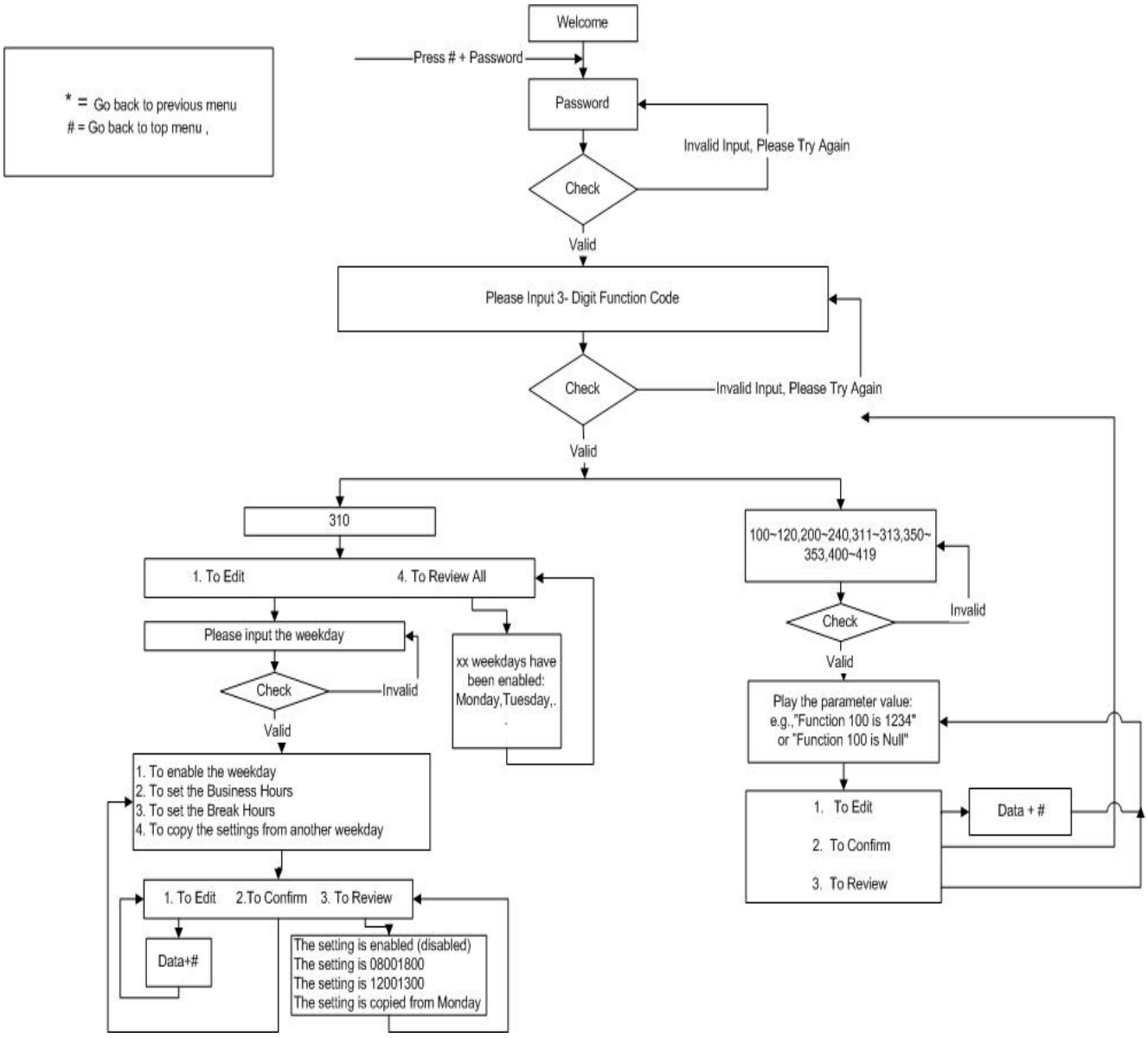
* = Go back to previous menu
# = Go back to top menu ,
Welcome
Press # + Password
Password
Invalid Input, Please Try Again
Check
Valid
Please Input 3- Digit Function Code
Check
Invalid Input, Please Try Again
Valid
310
1. To Edit
4. To Review All
Please input the weekday
Check
Invalid
Valid
xx weekdays have been enabled: Monday,Tuesday,..
1. To enable the weekday
2. To set the Business Hours
3. To set the Break Hours
4. To copy the settings from another weekday
1. To Edit
2.To Confirm
3. To Review
Data+#
The setting is enabled (disabled)
The setting is 08001800
The setting is 12001300
The setting is copied from Monday
100~120,200~240,311~313,350~353,400~419
Check
Invalid
Valid
Play the parameter value: e.g.,"Function 100 is 1234" or "Function 100 is Null"
1. To Edit
2. To Confirm
3. To Review
Data + #

Figure 9-2

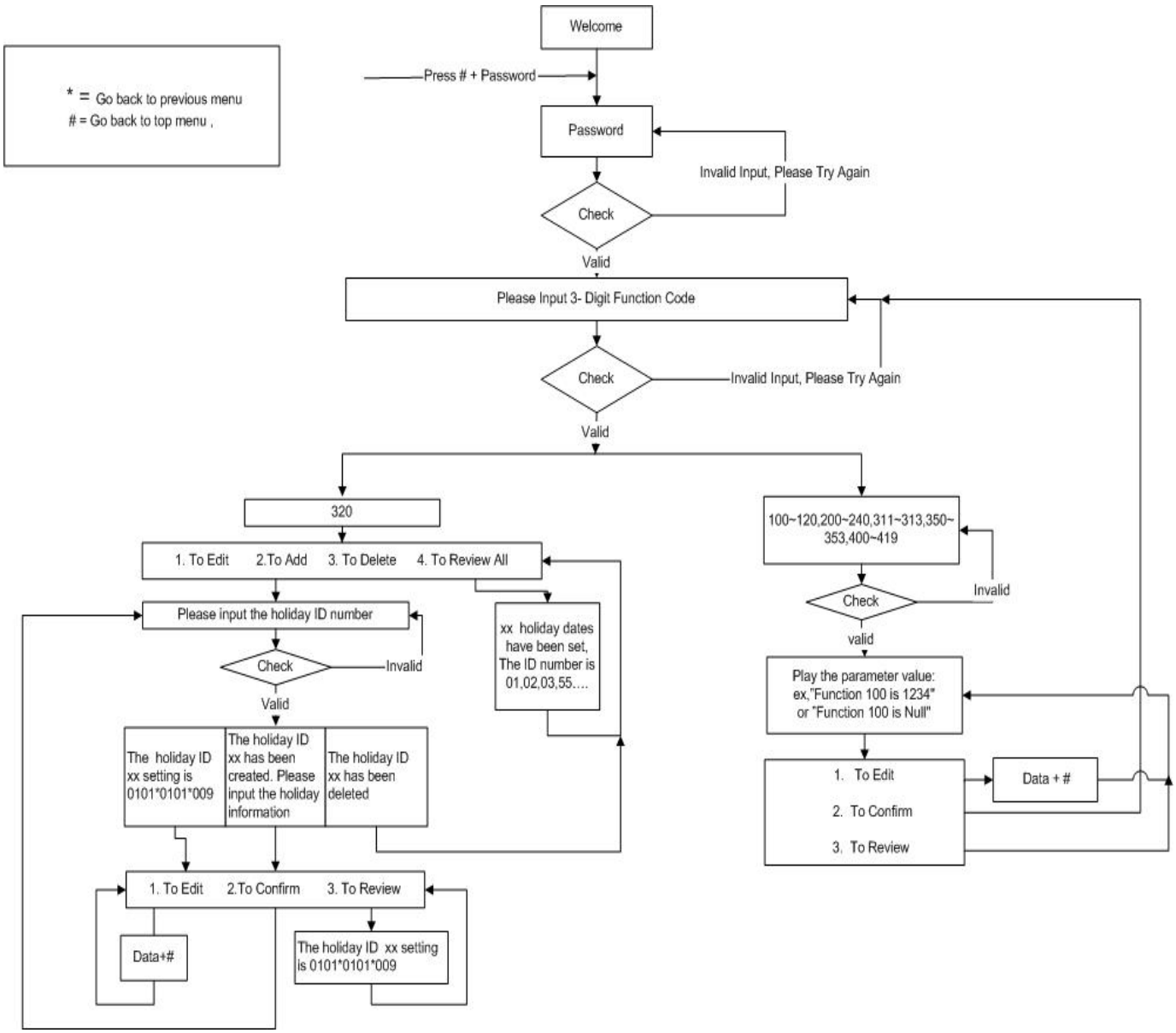
* = Go back to previous menu
# = Go back to top menu ,
Welcome
Press # + Password
Password
Invalid Input, Please Try Again
Check
Valid
Please Input 3- Digit Function Code
Check
Invalid Input, Please Try Again
Valid
320
1. To Edit 2.To Add 3. To Delete 4. To Review All
Please input the holiday ID number
Check
Invalid
Valid
The holiday ID xx setting is 0101*0101*009
The holiday ID xx has been created. Please input the holiday information
The holiday ID xx has been deleted
xx holiday dates have been set, The ID number is 01,02,03,55....
1. To Edit 2.To Confirm 3. To Review
Data+#
The holiday ID xx setting is 0101*0101*009
100~120,200~240,311~313,350~353,400~419
Check
Invalid
valid
Play the parameter value: ex,"Function 100 is 1234" or "Function 100 is Null"
1. To Edit
2. To Confirm
3. To Review
Data + #

Figure 9-3

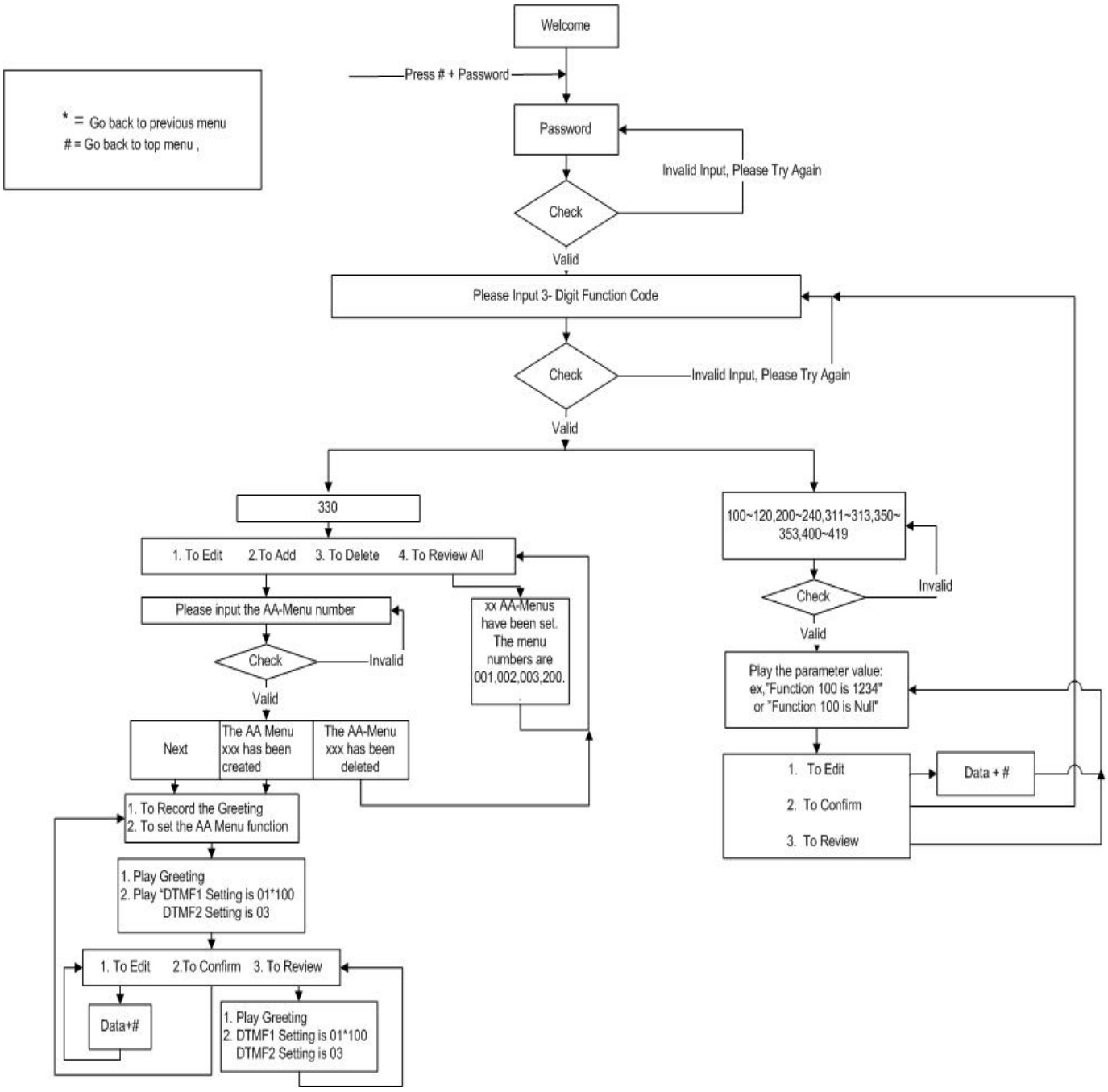
* = Go back to previous menu
# = Go back to top menu ,
Welcome
Press # + Password
Password
Invalid Input, Please Try Again
Check
Valid
Please Input 3- Digit Function Code
Check
Invalid Input, Please Try Again
Valid
330
1. To Edit 2.To Add 3. To Delete 4. To Review All
Please input the AA-Menu number
Check
Invalid
Valid
xx AA-Menus have been set. The menu numbers are 001,002,003,200.
Next
The AA Menu xxx has been created
The AA-Menu xxx has been deleted
1. To Record the Greeting
2. To set the AA Menu function
1. Play Greeting
2. Play "DTMF1 Setting is 01*100
DTMF2 Setting is 03
1. To Edit 2.To Confirm 3. To Review
Data+#
1. Play Greeting
2. DTMF1 Setting is 01*100
DTMF2 Setting is 03
100~120,200~240,311~313,350~353,400~419
Check
Invalid
Valid
Play the parameter value: ex,"Function 100 is 1234" or "Function 100 is Null"
1. To Edit
2. To Confirm
3. To Review
Data + #

Figure 9-4

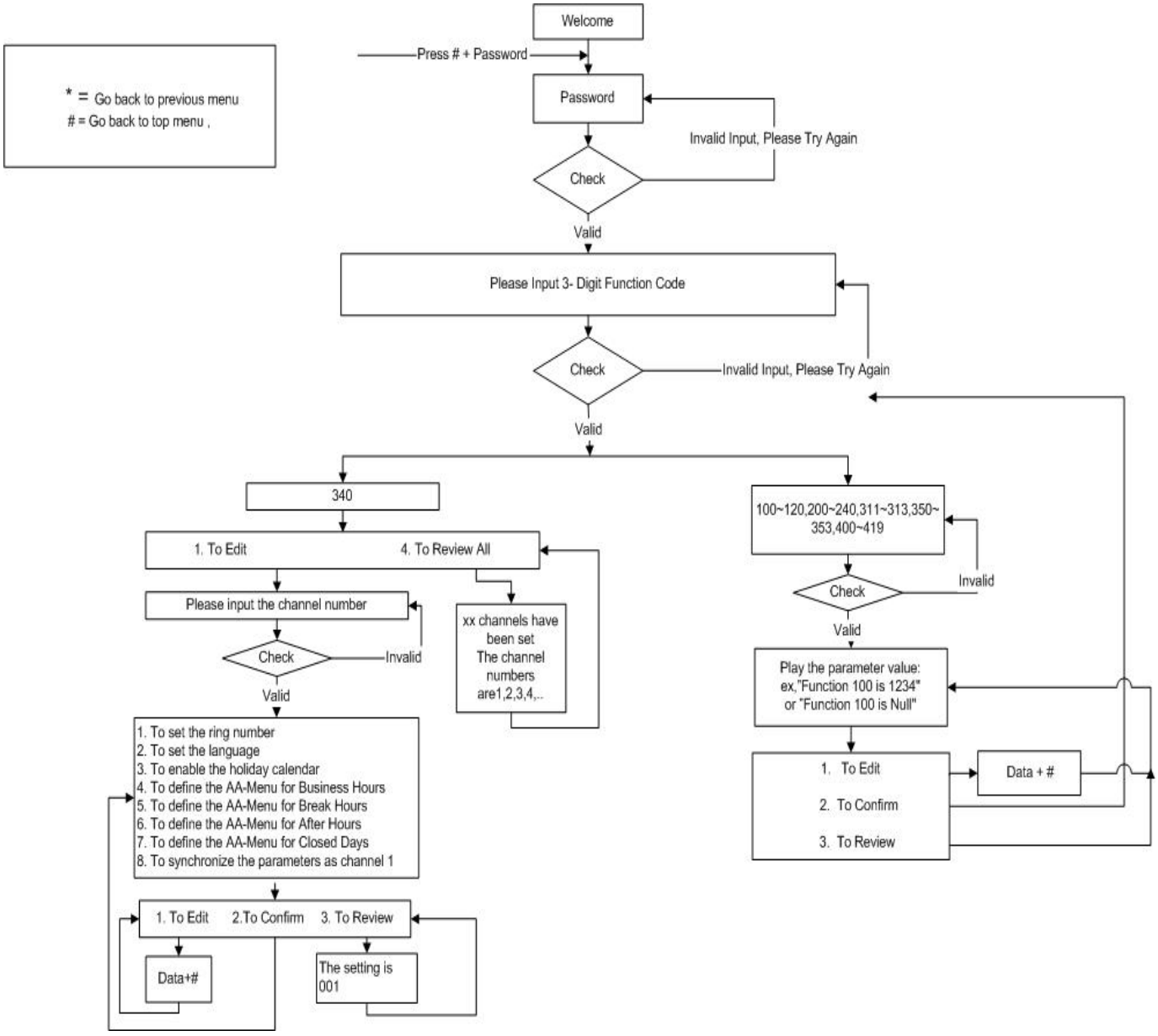
* = Go back to previous menu
# = Go back to top menu ,
Welcome
Press # + Password
Password
Invalid Input, Please Try Again
Check
Valid
Please Input 3- Digit Function Code
Check
Invalid Input, Please Try Again
Valid
340
1. To Edit
4. To Review All
Please input the channel number
Check
Invalid
Valid
xx channels have been set The channel numbers are1,2,3,4,..
1. To set the ring number
2. To set the language
3. To enable the holiday calendar
4. To define the AA-Menu for Business Hours
5. To define the AA-Menu for Break Hours
6. To define the AA-Menu for After Hours
7. To define the AA-Menu for Closed Days
8. To synchronize the parameters as channel 1
1. To Edit
2.To Confirm
3. To Review
Data+#
The setting is 001
100~120,200~240,311~313,350~353,400~419
Check
Invalid
Valid
Play the parameter value: ex,"Function 100 is 1234" or "Function 100 is Null"
1. To Edit
2. To Confirm
3. To Review
Data + #

Figure 9-5

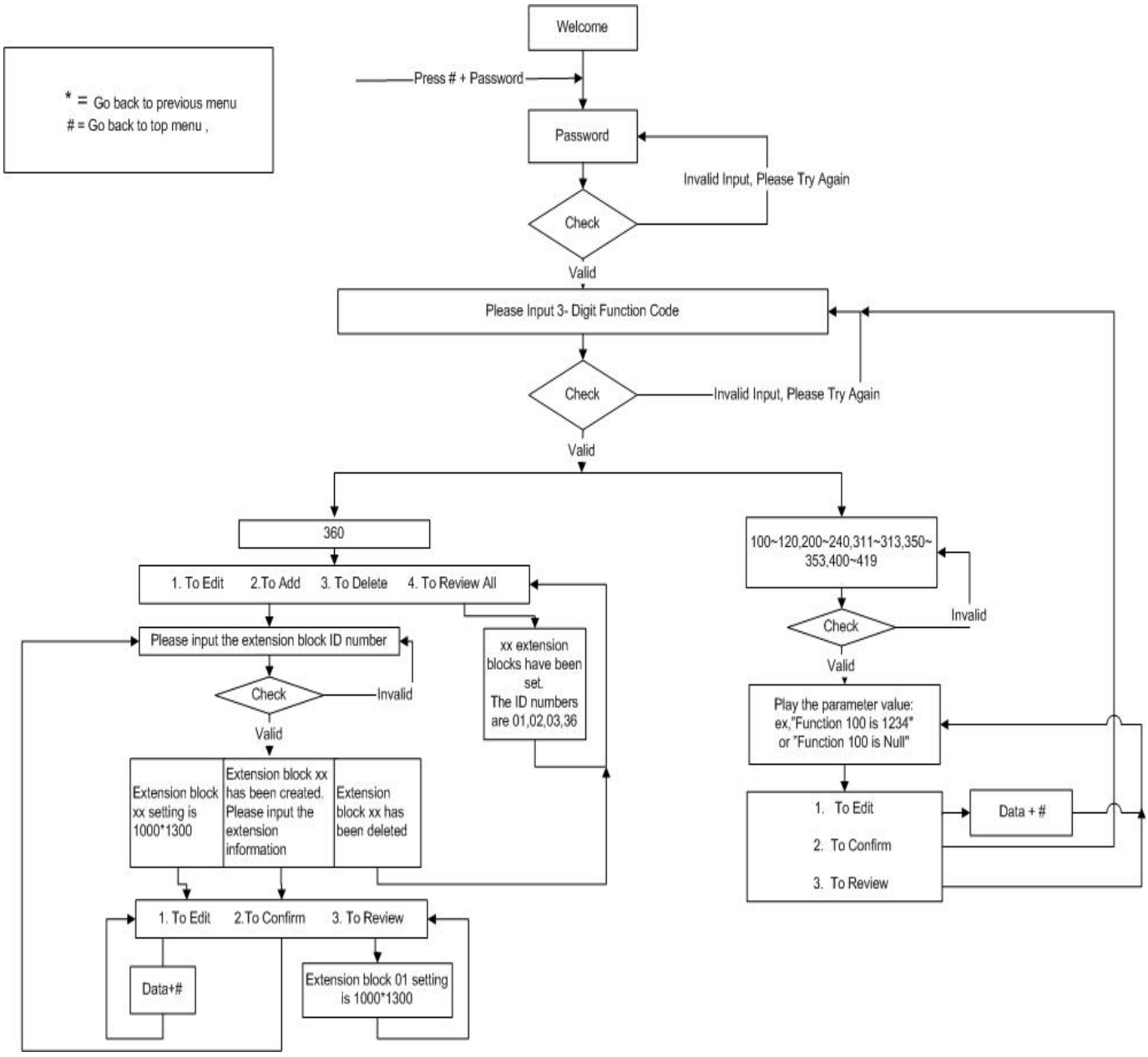
* = Go back to previous menu
# = Go back to top menu ,
Welcome
Press # + Password
Password
Invalid Input, Please Try Again
Check
Valid
Please Input 3- Digit Function Code
Check
Invalid Input, Please Try Again
Valid
360
1. To Edit 2.To Add 3. To Delete 4. To Review All
Please input the extension block ID number
Check
Invalid
Valid
Extension block xx setting is 1000*1300
Extension block xx has been created. Please input the extension information
Extension block xx has been deleted
xx extension blocks have been set. The ID numbers are 01,02,03,36
1. To Edit 2.To Confirm 3. To Review
Data+#
Extension block 01 setting is 1000*1300
100~120,200~240,311~313,350~353,400~419
Check
Invalid
Valid
Play the parameter value: ex,"Function 100 is 1234" or "Function 100 is Null"
1. To Edit
2. To Confirm
3. To Review
Data + #

Figure 9-6

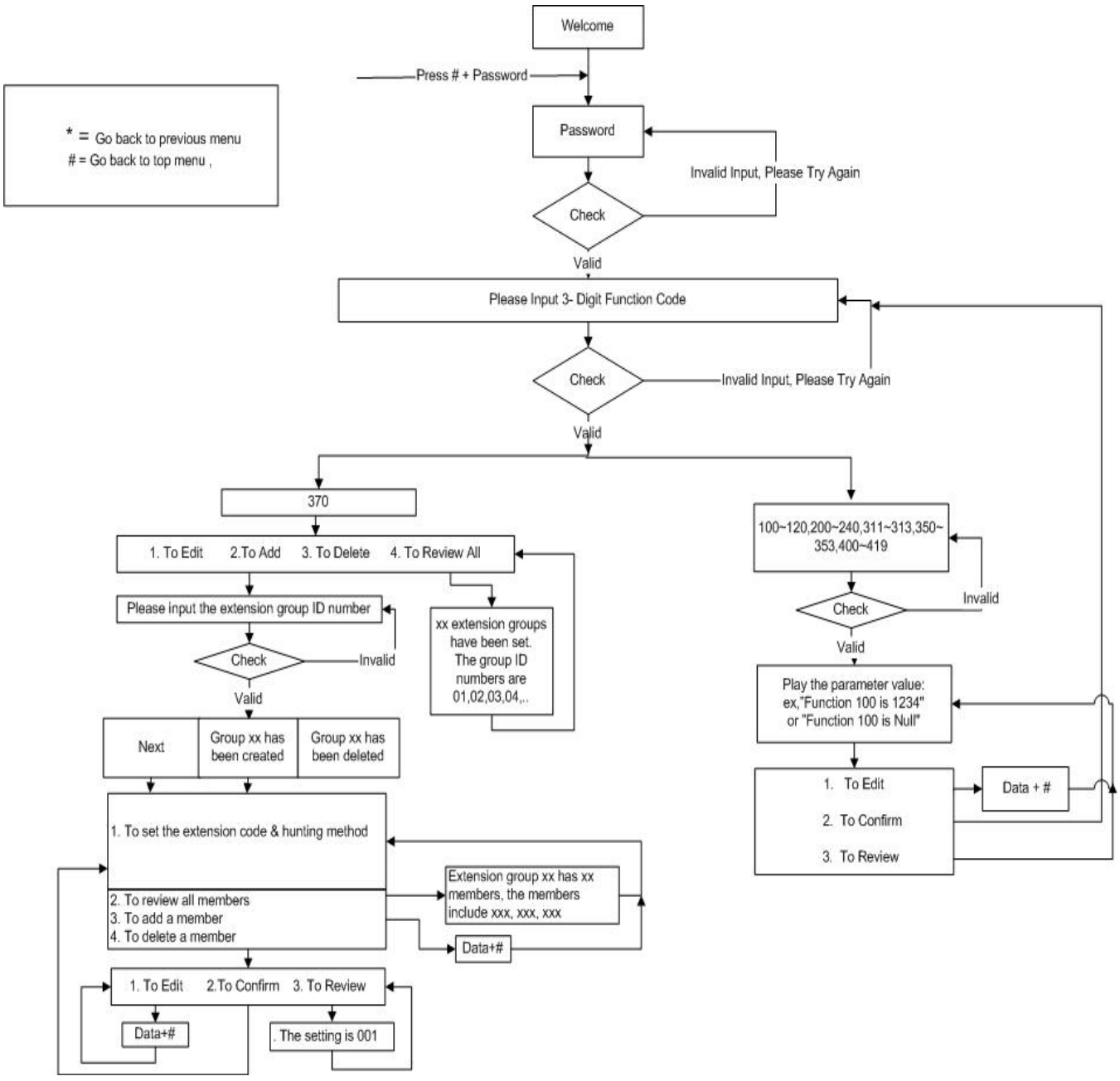
Welcome
Press # + Password
* = Go back to previous menu
# = Go back to top menu ,
Password
Invalid Input, Please Try Again
Check
Valid
Please Input 3- Digit Function Code
Check
Invalid Input, Please Try Again
Valid
370
1. To Edit 2.To Add 3. To Delete 4. To Review All
Please input the extension group ID number
Check
Invalid
Valid
xx extension groups have been set. The group ID numbers are 01,02,03,04,..
Next
Group xx has been created
Group xx has been deleted
1. To set the extension code & hunting method
2. To review all members
3. To add a member
4. To delete a member
Extension group xx has xx members, the members include xxx, xxx, xxx
Data+#
1. To Edit 2.To Confirm 3. To Review
Data+#
. The setting is 001
100~120,200~240,311~313,350~353,400~419
Check
Invalid
Valid
Play the parameter value: ex,"Function 100 is 1234" or "Function 100 is Null"
1. To Edit
2. To Confirm
3. To Review
Data + #

Figure 9-7

Appendix A - System Parameters

3-digit Func. Code	Description	Default
100	System Password	1234
101	Greeting Recording Password	5678
N/A	UMS E-mail Address	N/A
N/A	UMS SMTP Server	N/A
102	IP Address	192.168.1.200
103	Default Gateway Address	192.168.1.254
104	Subnet Mask	255.255.255.0
105	DNS	168.95.1.1
106	DTMF Send On Time	200 msec(s)
107	DTMF Send Off Time	200 msec(s)
108	DTMF Send Gain	2
109	DTMF Inter-Digit Timeout	2 sec(s)
110	DTMF AA Menu Timeout	3 sec(s)
111	Recording Gain	10
112	Play Gain	10
113	Dial Tone Duration	2 sec(s)
114	External Busy Tone Counter	3 cycle(s)
115	Loop Current Drop Duration	2000 msec(s)
116	Enable RS-232 Message Light	0 = disabled
117	Baud Rate	9600
118	Parity Check	0 = none
119	Data Bits	8
120	Stop Bits	2
121	IM200 Version Number	207
122	Echo Cancellation Tail Length	1
123	Calibration TX Gain	25
124	Calibration RX Gain	25
125	Name Directory Listing	0 = First Name
126	Reduce Calibration TX Gain for CPT Detection	0
127	DTMF Hold Off Limit	0
128	Transfer Option Time out	3 sec(s)
129	Receive DTMF Level	128

3-digit Func. Code	Description	Default
130	Limitation for Error Message Counter	15
131	Extension Number of Fax Machine	--

3-digit Func. Code	Description	Default
200	Business Hour Operator Transfer Mode	1 = Supervised
201	Business Hour Extension Transfer Mode	1 = Supervised
202	After Hour Operator Transfer Mode	1 = Supervised
203	After Hour Extension Transfer Mode	1 = Supervised
204	Transfer Sequence	&,,X
205	Ringback Recall Sequence	&,
206	Busy Recall Sequence	&,
207	Hang Up Sequence	--
208	CO Line Access Sequence	,,0
209	Conference Hold Sequence	&,,
210	Conference Sequence	--
211	First Hook Flash Time	500 msec(s)
212	Second Hook Flash Time	0 msec(s)
213	Supervised Signal Type	1 = Call Progress Tone
214	Ringback CPT 1st High	540 msec(s)
215	Ringback CPT 1st Low	240 msec(s)
216	Ringback CPT 2nd High	0 msec(s)
217	Ringback CPT 2nd Low	3840 msec(s)
218	Ringback CPT Cycle	5 cycle(s)
219	Busy CPT 1st High	540 msec(s)
220	Busy CPT 1st Low	450 msec(s)
221	Busy CPT 2nd High	0 msec(s)
222	Busy CPT 2nd Low	0 msec(s)
223	Busy CPT Cycle	2 cycle(s)
224	Error CPT 1st High	250 msec(s)
225	Error CPT 1st Low	250 msec(s)
226	Error CPT Cycle	2 Cycle
227	Call Progress Tone Tolerance	1 = high
228	Ringback Tone DTMF Signal	--
229	Busy Tone DTMF Signal	--
230	DND DTMF Signal	--
231	Answer Call DTMF Signal	--
232	Disconnect Call DTMF Signal	--
233	No Answer Time out for DTMF Signal	20 sec(s)
234	Maximum Digits in In-Band DTMF Strings	30
235	Maximum Time to wait for First Digit	0
236	Maximum Time Between Digit	1
237	Busy Time Lag	--
238	Call Pickup Function	0 = disabled
239	Call Pickup Sequence	--

3-digit Func. Code	Description	Default
240	Call Pickup Channel	--
241	PBX Model	0
242	Automatic Cadence Learning Extension	--
243	Extension Size	3
300	In-Band DTMF Protocol	--
310	1. To enable the weekday	--
	2. To set the Business Hours	--
	3. To set the Break Hours	--
	4. To copy the settings from another weekday	--
311	Operation Mode	1 = Auto
312	Current Date	YY MM DD (Present Date)
313	Current Time	HH MM SS (Present Time)
320	Holiday Calendar	--
330	AA-Menu Action (AA-Menu 001,002,003,004)	AA-Menu ID = 001-300
	DTMF 1 = 07	07 (Transfer to Extension)
	DTMF 2 = 07	07 (Transfer to Extension)
	DTMF 3 = 00	00 (No Action)
	DTMF 4 = 00	00 (No Action)
	DTMF 5 = 00	00 (No Action)
	DTMF 6 = 00	00 (No Action)
	DTMF 4 = 00	00 (No Action)
	DTMF 5 = 00	00 (No Action)
	DTMF 6 = 00	00 (No Action)
	DTMF 7 = 00	00 (No Action)
	DTMF 8 = 00	00 (No Action)
	DTMF 9 = 00	00 (No Action)
	DTMF 0 = 00	00 (No Action)
	DTMF * = 11	11 (Access Mailboxes)
	DTMF # = 17	17 (System Programming Mode)
	Timeout = 20	20 (Hang Up with Announcement)
340	Channel Parameters	Channel Number = 1~8
	1. Ring Number	1
	2. Language	1 (Default Language)
	3. Enable Holiday Calendar	0 = disabled
	4. Business Hour AA Menu ID	001

3-digit Func. Code	Description	Default
	5. Break Hour AA Menu ID	002
	6. After Hour AA Menu ID	003
	7. Closed Day AA Menu ID	004
	8. Synchronize all channels with Channel 1 parameters	0 = disabled
350	Transfer Options	
	DTMF 1 = 07	07 (Transfer to Extension)
	DTMF 2 = 07	07 (Transfer to Extension)
	DTMF 3 = 00	00 (No Action)
	DTMF 4 = 00	00 (No Action)
	DTMF 5 = 00	00 (No Action)
	DTMF 6 = 00	00 (No Action)
	DTMF 4 = 00	00 (No Action)
	DTMF 5 = 00	00 (No Action)
	DTMF 6 = 00	00 (No Action)
	DTMF 7 = 00	00 (No Action)
	DTMF 8 = 00	00 (No Action)
	DTMF 9 = 00	00 (No Action)
	DTMF 0 = 00	00 (No Action)
	DTMF * = 13	13 (Leave a Message)
	DTMF # = 00	00 (No Action)
	Timeout = 20	20 (Hang Up with Announcement)
351	Announce Call Transfer	1 = enabled
352	Announce Name	0 = disabled
353	Leave Message Directly	0 = disabled
360	Extension Blocks	Block ID = 01~ 99
	Block 01	10 ~ 26
	Block 02	--
	Block 03	--
370	Operator & Extension Group	Group ID = 01~ 30
	Group 01	--
	Group 02	--
	Group 03	--
371	Business Hour Operator Group	01
372	Break Hour Operator Group	01
373	After Hour Operator Group	02
374	Closed Day Operator Group	03

3-digit Func. Code	Description	Default
375	Holiday Operator Group	03
400	1st Message Lamp On Sequence	--
401	1st Message Lamp Off Sequence	---
402	2nd Message Lamp On Sequence	--
403	2nd Message Lamp Off Sequence	--
404	Internal Notification Channel(s)	1
405	Notify for	2 = Every New Message
406	Ring Notification Interval	30 min(s)
407	Ring Notification Try	3
408	Ring Count	5
409	Pager Mode	0 = USA
410	Detect Pager Vox	1 = enabled
411	Delay for Pager	7 sec(s)
412	Delay for Mobile Phone	7 sec(s)
413	External Notification Channel(s)	1
414	Maximum Number of Messages	30 message(s)
415	Maximum Messages Length	180 sec(s)
416	Minimum Messages Length	3 sec(s)
417	Auto Purge New Messages	0 = disabled
418	Auto Purge Old Messages	0 = disabled
419	Silence Time out to Stop Recording	5 sec(s)
420	Supervisor's Mailbox	--
421	Digits of New Message Count	2

Appendix B - System Prompts

General Greetings (Directory: Lang0\AA)

File Name	Content
GRT001	Thank you for calling, it is our business hour. If you know your party's extension, please enter it now, or hold for the operator.
GRT002	Thank you for Calling, it is our break hour. If you know your party's extension, please enter it now, or call back during our office hours.
GRT003	Thank you for calling, our office will be closed for the day. If you know your party's extension, please enter it now, or call back during our office hours.
GRT004	Thank you for calling, today is a national holiday, If you know your party's extension, please enter it now, or call back during our office hours.
GRT005	Your greeting has not been set. Please record your greeting.

AA Flow (Directory: Lang0\AA)

File Name	Content
FLW001	Thank you and good-bye.
FLW002	Invalid entry, please try again.
FLW003	Please hold while I transfer you.
FLW004	...to...
FLW005	...Extension…
FLW006	…Operator …
FLW007	Please enter…
FLW008	Mailbox number
FLW009	The first few letters of the last name of the person you'd like to call.
FLW010	Department.
FLW011	...The first few letters of the first name of the person you'd like to call.

Before Leaving Messages (Directory: Lang0\AA)

File Name	Content
BLM001	The extension you are trying to reach is busy.
BLM002	The extension you are trying to reach is not available.
BLM003	Please dial another extension number
BLM004	To transfer to the operator...
BLM005	To repeat this menu...
BLM006	To go to the main menu...
BLM007	To transfer to an extension...

File Name	Content
BLM008	...followed by your party's extension.
BLM009	To Hang Up…
BLM010	Please stay on the line.
BLM011	To leave a message…
BLM012	To retry the extension
BLM013	…or stay on the line for the operator
BLM014	If you want to transfer out to the person.

Please Press (Directory: Lang0\AA)

File Name	Content
PLPRS0	...please press 0
PLPRS1	...please press 1
PLPRS2	...please press 2
PLPRS3	...please press 3
PLPRS4	...please press 4
PLPRS5	...please press 5
PLPRS6	...please press 6
PLPRS7	...please press 7
PLPRS8	...please press 8
PLPRS9	...please press 9
PLPRSSTR	...please press "star" sign
PLPRSPND	...please press "pound" sign
PRS0	press zero
PRS1	press one
PRS2	press two
PRS3	press three
PRS4	press four
PRS5	press five
PRS6	press six
PRS7	press seven
PRS8	press eight
PRS9	press nine
PRSSTR	press star sign
PRSPND	press pound sign
DING	Ding.

Leave Message Flow (Directory: Lang0\AA)

File Name	Content
LMF001	Please leave your message after the tone, press any key to stop recording.
LMF002	To listen to your message.
LMF003	To save your message.
LMF004	To re-record your message.
LMF005	To select a message delivery option.
LMF006	To mark your message as urgent.
LMF007	To mark your message as private.
LMF008	To mark your message as urgent and private.
LMF009	Your message has been saved
LMF010	To delete
LMF011	Your message has been deleted.

Month, Day, Hour and Minutes (Directory: Lang0\Time)

File Name	Content
MTH001	January
MTH002	February
MTH003	March
MTH004	April
MTH005	May
MTH006	June
MTH007	July
MTH008	August
MTH009	September
MTH010	October
MTH011	November
MTH012	December
DAY001	First
DAY002	Second
DAY003	Third
DAY004	Fourth
DAY005	Fifth

File Name	Content
DAY006	Sixth
DAY007	Seventh
DAY008	Eighth
DAY009	Ninth
DAY010	Tenth
DAY011	Eleventh
DAY012	Twelfth
DAY013	Thirteenth
DAY014	Fourteenth
DAY015	Fifteenth
DAY016	Sixteenth
DAY017	Seventeenth
DAY018	Eighteenth
DAY019	Nineteenth
DAY020	Twentieth
DAY021	Twenty-first
DAY022	Twenty-second
DAY023	Twenty-third
DAY024	Twenty-fourth
DAY025	Twenty-fifth
DAY026	Twenty-sixth
DAY027	Twenty-seventh
DAY028	Twenty-eighth
DAY029	Twenty-ninth
DAY030	Thirtieth
DAY031	Thirty-first
HRS001	One O‘ clock
HRS002	Two O’ clock
HRS003	Three O’ clock
HRS004	Four O’ clock
HRS005	Five O’ clock
HRS006	Six O’ clock
HRS007	Seven O’ clock
HRS008	Eight O’ clock
HRS009	Nine O’ clock
HRS010	Ten O’ clock

File Name	Content
HRS011	Eleven O’ clock
HRS012	Twelve O’ clock
MIN001	One Minute
MIN002	Two Minutes
MIN003	Three Minutes
MIN004	Four Minutes
MIN005	Five Minutes
MIN006	Six Minutes
MIN007	Seven Minutes
MIN008	Eight Minutes
MIN009	Nine Minutes
MIN010	Ten Minutes
MIN011	Eleven Minutes
MIN012	Twelve Minutes
MIN013	Thirteen Minutes
MIN014	Fourteen Minutes
MIN015	Fifteen Minutes
MIN016	Sixteen Minutes
MIN017	Seventeen Minutes
MIN018	Eighteen Minutes
MIN019	Nineteen Minutes
MIN020	Twenty Minutes
MIN021	Twenty-one Minutes
MIN022	Twenty-two Minutes
MIN023	Twenty-three Minutes
MIN024	Twenty-four Minutes
MIN025	Twenty-five Minutes
MIN026	Twenty-six Minutes
MIN027	Twenty-seven Minutes
MIN028	Twenty-eight Minutes
MIN029	Twenty-nine Minutes
MIN030	Thirty Minutes
MIN031	Thirty-one Minutes
MIN032	Thirty-two Minutes
MIN033	Thirty-three Minutes
MIN034	Thirty-four Minutes

File Name	Content
MIN035	Thirty-five Minutes
MIN036	Thirty-six Minutes
MIN037	Thirty-seven Minutes
MIN038	Thirty-eight Minutes
MIN039	Thirty-nine Minutes
MIN040	Forty Minutes
MIN041	Thirty-one Minutes
MIN042	Thirty-two Minutes
MIN043	Thirty-three Minutes
MIN044	Thirty-four Minutes
MIN045	Thirty-five Minutes
MIN046	Thirty-six Minutes
MIN047	Thirty-seven Minutes
MIN048	Thirty-eight Minutes
MIN049	Thirty-nine Minutes
MIN050	Fifty Minutes
MIN051	Fifty-one Minutes
MIN052	Fifty-two Minutes
MIN053	Fifty-three Minutes
MIN054	Fifty-four Minutes
MIN055	Fifty-five Minutes
MIN056	Fifty-six Minutes
MIN057	Fifty-seven Minutes
MIN058	Fifty-eight Minutes
MIN059	Fifty-nine Minutes
AM	...AM
PM	...PM

Tone (Directory: Lan0\Tone)

File Name	Content
0	Zero
1	One
2	Two
3	Three
4	Four
5	Five

File Name	Content
6	Six
7	Seven
8	Eight
9	Nine
10	Ten
11	Eleven
12	Twelve
13	Thirteen
14	Fourteen
15	Fifteen
16	Sixteen
17	Seventeen
18	Eighteen
19	Nineteen
20	Twenty
30	Thirty
40	Forty
50	Fifty
60	Sixty
70	Seventy
80	Eighty
90	Ninety
STAR	Star Sign
POUND	Pound Sign
A	A
B	B
C	C
D	D
FLASH1	First flash time
FLASH2	Second flash time
PAUSE1	First pause time
PAUSE2	Second pause time
EXTNO	Extension number

Mailbox Prompts (Directory: Lang0\VM)

File Name	Prompt
MBP001	Welcome to the voice mail system.

File Name	Prompt
MBP002	Please enter your mailbox number.
MBP003	Please enter your password.
MBP004	Your mailbox is busy now, please dial another mailbox number.
MBP005	You have
MBP006	new message
MBP007	new messages
MBP008	old message
MBP009	old messages
MBP010	You have no message
MBP011	You have no more message
MBP012	To review new messages
MBP013	To review old messages
MBP014	To send a message
MBP015	To change personal options
MBP016	To replay the message
MBP017	To save the message
MBP018	To delete the message
MBP019	To forward the message
MBP020	To listen to the envelope information
MBP021	To reply to the message
MBP022	To skip the message
MBP023	This message was received on.
MBP024	marked as urgent.
MBP025	marked as private.
MBP026	marked as urgent and private.
MBP027	Please input target mailbox number.
MBP028	The mailbox you've dialed is not recognized.
MBP029	The mailbox is full.
MBP030	Please leave your note after the tone, press any key to stop recording.
MBP031	To review your note.
MBP032	To send this message.
MBP033	To Re-record your note.
MBP034	Message send complete.
MBP035	You have reached mailbox number.
MBP036	To send a message to a mailbox.

File Name	Prompt
MBP037	To send a message to a distribution list.
MBP038	This message has been
MBP039	Please select your distribution list from 1 to 9.
MBP040	Distribution list.
MBP041	has
MBP042	has no member
MBP043	members
MBP044	member
MBP045	To record your greetings.
MBP046	To edit notification function.
MBP047	To set mailbox preferences.
MBP048	To modify your personal distribution lists.
MBP049	To change the extension status.
MBP050	To record
MBP051	Your personal greeting
MBP052	Your busy greeting
MBP053	Your name
MBP054	is
MBP055	has not been recorded
MBP056	To review
MBP057	To save
MBP058	To re-record
MBP059	To delete
MBP060	Your recording has been saved.
MBP061	Your recording has been deleted.
MBP062	To edit internal notification functions.
MBP063	To edit external notification functions.
MBP064	To set your conference telephone number.
MBP065	Your internal notification function is now
MBP066	Disabled.
MBP067	Enable using message lamp.
MBP068	Enable using ring extension.
MBP069	To edit.
MBP070	To confirm.
MBP071	To enable message lamp notification.
MBP072	To enable ring extension notification.

File Name	Prompt
MBP073	To disable internal notification.
MBP074	To set your telephone and pager notification functions.
MBP075	To edit notify urgent message only function.
MBP076	To select external notification schedule.
MBP077	To specify personal notification schedule.
MBP078	Please select your notification entry from 1 to 5.
MBP079	Entry
MBP080	is using telephone mode.
MBP081	is using pager mode.
MBP082	is disabled.
MBP083	The number is.
MBP084	To review the entry.
MBP085	To change notification type.
MBP086	To edit the notification number.
MBP087	For telephone
MBP088	For pager
MBP089	To disable the entry
MBP090	Your notification number
MBP091	is
MBP092	has not been set.
MBP093	To review entry.
MBP094	To confirm.
MBP095	To edit.
MBP096	Please enter the notification number followed by a pound sign.
MBP097	Notify urgent message only function is now
MBP098	Enabled.
MBP099	Disabled.
MBP100	To edit.
MBP101	To confirm.
MBP102	To enable
MBP103	To disable
MBP104	External notification is now
MBP105	Using business schedule.
MBP106	Using personal notification schedule.
MBP107	To edit.

File Name	Prompt
MBP108	To confirm.
MBP109	To use business schedule.
MBP110	To use personal notification schedule.
MBP111	Your personal notification schedule
MBP112	is
MBP113	has not been defined.
MBP114	To review entry.
MBP115	To confirm.
MBP116	To edit.
MBP117	Please enter the time to start and stop external notification in twenty-four hour format followed by a pound sign. For example, from eight thirty AM to six o'clock PM. Enter zero, eight, three, zero, one, eight, zero, zero, pound.
MBP118	Invalid entry, please try again.
MBP119	Your conference telephone number
MBP120	is
MBP121	has not been defined.
MBP122	To review entry.
MBP123	To confirm.
MBP124	To edit.
MBP125	Please enter your conference telephone number followed by a pound sign.
MBP126	To change your mailbox password.
MBP127	To change your name in the directory listing.
MBP128	To set the message copy target.
MBP129	To select message playing order.
MBP130	To select message playing priority.
MBP131	To select mailbox language.
MBP132	To change time stamp control function.
MBP133	Your mailbox password.
MBP134	is
MBP135	has not been set.
MBP136	To review the entry.
MBP137	To confirm.
MBP138	To edit.
MBP139	Please enter your mailbox password followed by a pound sign.
MBP140	Your name in the directory listing.
MBP141	is

File Name	Prompt
MBP142	has not been set.
MBP143	To review the entry.
MBP144	To confirm.
MBP145	To edit.
MBP146	Please enter your name directory listing followed by a pound sign.
MBP147	Your target number.
MBP148	is
MBP149	has not been set.
MBP150	To review the entry.
MBP151	To confirm.
MBP152	To edit.
MBP153	Please enter your target number followed by a pound sign.
MBP154	Message playing order is
MBP155	most recent play first.
MBP156	least recent play first.
MBP157	To edit.
MBP158	To confirm.
MBP159	To select most recent play first.
MBP160	To select least recent play first.
MBP161	Message playing priority is
MBP162	urgent play first.
MBP163	disabled.
MBP164	To edit.
MBP165	To confirm.
MBP166	To enable.
MBP167	To disable.
MBP168	Your mailbox language is
MBP169	English.
MBP170	Spanish.
MBP171	3rd language.
MBP172	4th language.
MBP173	To review the entry.
MBP174	To confirm.
MBP175	To edit.
MBP176	For English.
MBP177	For Spanish.

File Name	Prompt
MBP178	For 3rd language.
MBP179	For 4th language.
MBP180	Time stamp control is
MBP181	enabled.
MBP182	disabled.
MBP183	To edit.
MBP184	To confirm.
MBP185	To enable.
MBP186	To disable.
MBP187	To review your personal distribution lists.
MBP188	To edit the members in a distributions list.
MBP189	To remove all members from a distribution list.
MBP190	Please select your distribution list from 1 to 9.
MBP191	Distribution list
MBP192	has
MBP193	has no member.
MBP194	members.
MBP195	member.
MBP196	The member include
MBP197	The members include
MBP198	To review the list members.
MBP199	To confirm.
MBP200	To add a member.
MBP201	To remove a member.
MBP202	Please input the mailbox number followed by a pound sign.
MBP203	To review the list members.
MBP204	To remove all members.
MBP205	All members have been removed from the list.
MBP206	To select special answering options.
MBP207	To set call forward target.
MBP208	The special answering option is now
MBP209	in do-not-disturb mode.
MBP210	in call-forward mode.
MBP211	disabled.
MBP212	To edit.

File Name	Prompt
MBP213	To confirm.
MBP214	To select do not disturb mode.
MBP215	To select call forward mode.
MBP216	To disable special answering option.
MBP217	The call forward target extension
MBP218	is
MBP219	has not been set.
MBP220	To review the entry.
MBP221	To confirm.
MBP222	To edit.
MBP223	Please input the call forward target extension number, followed by a pound sign.
MBP224	Your voice mail capacity has reached the defined maximum limit. Please proceed to resolve this issue.
MBP225	Enable using message lamp one.
MBP226	Enable using message lamp two.
MBP227	To enable message lamp one.
MBP228	To enable message lamp two.
MBP229	To Delete
MBP230	This message has been deleted

System Prompts (Directory: Lang0\SYS)

File Name	Prompt
SYS001	Welcome to the Voice-Mail system, please enter system password.
SYS002	Programming mode is not available now.
SYS003	Please enter three-digit function code.
SYS004	To edit.
SYS005	To add.
SYS006	To delete.
SYS007	To review all.
SYS008	Please input the AA-Menu number.
SYS009	has been created.
SYS010	has been created.
SYS011	has been deleted.

File Name	Prompt
SYS012	To record the greeting.
SYS013	To set the AA-Menu function.
SYS014	DTMF
SYS015	Timeout
SYS016	setting is
SYS017	To edit.
SYS018	To confirm.
SYS019	To review.
SYS020	AA-Menu has been set.
SYS021	AA-Menus have been set.
SYS022	The menu number is
SYS023	The menu numbers are
SYS024	ID.
SYS025	function
SYS026	is
SYS027	null
SYS028	To edit.
SYS029	To confirm.
SYS030	To review.
SYS031	To edit.
SYS032	To add.
SYS033	To delete.
SYS034	To review all.
SYS035	Please input the extension ID number.
SYS036	The extension ID
SYS037	has been created.
SYS038	has been deleted.
SYS039	setting is
SYS040	null
SYS041	To edit.
SYS042	To confirm.
SYS043	To review.
SYS044	Please input the extension information.
SYS045	extension ID has been set
SYS046	extension IDs have been set
SYS047	The ID number is

File Name	Prompt
SYS048	The ID numbers are
SYS049	ID.
SYS050	To edit.
SYS051	To add.
SYS052	To delete.
SYS053	To review all.
SYS054	Please input the group ID number.
SYS055	The group ID member
SYS056	has been created.
SYS057	has been deleted.
SYS058	To set the extension code and hunting method.
SYS059	To review the all members.
SYS060	To add the member.
SYS062	To delete the member.
SYS062	The setting is
SYS063	null
SYS064	To edit.
SYS065	To confirm.
SYS066	To review.
SYS067	extension group has
SYS068	member.
SYS069	members.
SYS070	the member include
SYS071	the members include
SYS072	extension group has been set.
SYS073	extension groups have been set.
SYS074	The group ID number is
SYS075	The group ID number are
SYS076	ID.
SYS077	To edit.
SYS078	To review all.
SYS079	Please input the weekday.
SYS080	To enable the weekday.
SYS081	To set the business hours.
SYS082	To set the break hours.
SYS083	To copy the settings from another weekday.

File Name	Prompt
SYS084	The setting is
SYS085	null
SYS086	enable
SYS087	disable
SYS088	The settings copy from
SYS089	To edit.
SYS090	To confirm.
SYS091	To review.
SYS092	weekday has been enabled.
SYS093	weekdays have been enabled.
SYS094	To edit.
SYS095	To add.
SYS096	To delete.
SYS097	To review all.
SYS098	Please input the holiday ID number.
SYS099	The holiday ID
SYS100	has been created.
SYS101	has been deleted.
SYS102	setting is
SYS103	null
SYS104	To edit.
SYS105	To confirm.
SYS106	To review.
SYS107	Please input the holiday information.
SYS108	holiday date has been set
SYS109	holiday dates have been set
SYS110	The ID number is
SYS111	The ID numbers are
SYS112	ID.
SYS113	To edit.
SYS114	To review all.
SYS115	Please input the channel number.
SYS116	To set the ring number.
SYS117	To set the language.
SYS118	To enable the holiday calendar.
SYS119	To define the AA-Menu for business hour.

File Name	Prompt
SYS120	To define the AA-Menu for break hour.
SYS121	To define the AA-Menu for after business hour.
SYS122	To define the AA-Menu for closed days.
SYS123	To synchronize the parameter as channel 1.
SYS124	To edit.
SYS125	To confirm.
SYS126	To review.
SYS127	The setting is
SYS128	null
SYS129	channels have been set.
SYS130	The channel numbers are
SYS131	enable.
SYS132	disable.
SYS133	To edit.
SYS134	To review all.
SYS135	Please enter the in-Band code number.
SYS136	To edit.
SYS137	To confirm.
SYS138	To review.
SYS139	In-Band code
SYS140	setting is
SYS141	null
SYS142	In-Band code has been set.
SYS143	In-Band codes have been set

Appendix C - Hardware Specifications

Voice Compression	G.726
LAN Port	Ethernet, 10BaseT, RJ45
Capacity	1250 Hrs.
Voice Ports	4 or 8 ports
Voice Port Interface	FXO, RJ11
COM Port (RS232)	9600 Baud
Internet Protocol	TCP/IP
Power Input	DC 12V
Temperature	0 C ~ 50 C (32 F ~ 122 F)
Humidity	10% ~ 90% (Non-condensing)
Internal RAM	8 MB
LED Indicators	8 voice port status, 3 system activity indicators
Buttons	Mode, Security, Func1, Func2 buttons
Dimensions	315 mm x 198 mm x 60 mm
Weight	3.5 KG