

## The VOICE Operation Manual

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## TRADEMARKS

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## INTRODUCTION

The Voice is a solid state digital announcer designed for continuous maintenance free operation. The VOICE provides high quality recorded messages for telephone applications including ACD, UCD, DID intercept, after hours, hotel wake up and general public information announcements.

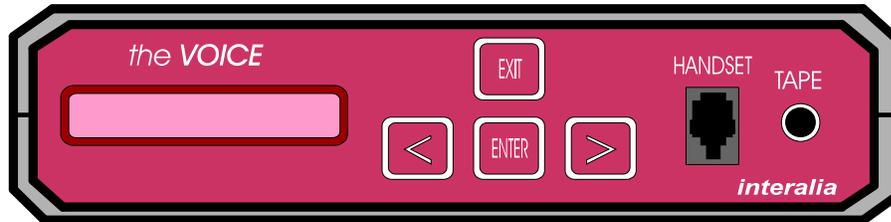
A large backlit LCD display and four-button touch pad allow the user to easily program and perform system administration functions as well as see the system's status. The user can record up to 9 different messages. Each message can be assigned to any line or to all 4 lines. Within the programming the user can link any two messages together. (e.g., the same message in two languages).

An internal clock and calendar allow the VOICE user to assign time and date stamps to different messages. The VOICE user can program up to 20 holiday dates, which will override the standard outgoing message with a holiday message. The VOICE user can also enable the daylight savings feature and, when activated, the VOICE will automatically adjust the system time.

The VOICE is be equipped with 4 minutes of recording time. The messages can be recorded from a handset, remotely via touch-tone telephone or downloaded from a tape deck. The VOICE uses non-volatile FLASH based memory that will retain all messages during power interruptions.

The VOICE is easy to install and operate and it interfaces well with all major telephone systems.

## FRONT PANEL



The VOICE has a four-button touch pad on the front panel. The buttons are used to:

- Navigate through the Menu Tree Hierarchy
- Edit the VOICE parameters

### NAVIGATING

When the VOICE is in navigation mode:

Button Name	Function
<b>Left or Right (&lt; / &gt;)</b>	<ul style="list-style-type: none"> <li>• Scroll left or right to locate the menu item to be configured.</li> </ul>
<b>Enter</b>	<ul style="list-style-type: none"> <li>• Move down into the next level of the Menu Tree Hierarchy/accept option.</li> </ul>
<b>Exit</b>	<ul style="list-style-type: none"> <li>• Move back to the previous level of the Menu Tree Hierarchy/accept option.</li> </ul>
<b>Handset</b>	<ul style="list-style-type: none"> <li>• The VOICE handset (used for message recording / playback) is connected to the Handset Input.</li> </ul>
<b>Tape</b>	<ul style="list-style-type: none"> <li>• A tape deck can be used to record messages to the VOICE. Connect the tape deck to the Tape Input.</li> </ul>
<b>LCD Display</b>	<ul style="list-style-type: none"> <li>• Displays the system Time &amp; Date</li> <li>• Displays the Line Status. Press EXIT to return to the Time &amp; Date.</li> <li>• Displays the different menus as the user navigates through the VOICE's Menu Tree Hierarchy.</li> </ul>
<b>Line Status</b>	<ul style="list-style-type: none"> <li>• 'Y' - Line Idle</li> <li>• 'R' - Line "X" is ringing</li> <li>• 'C' - Line "X" is connected</li> <li>• 'N' - Line "X" is OFFLINE</li> </ul>

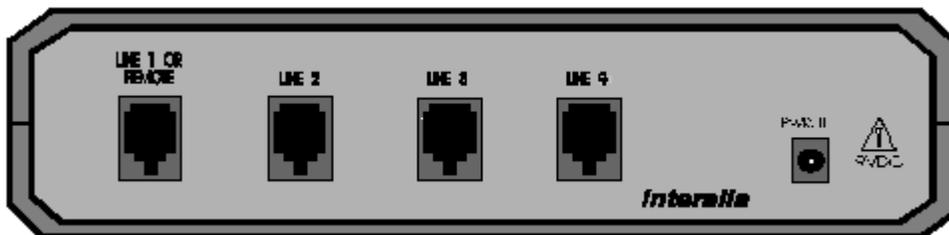
Familiarize yourself with Appendix A - Menu Tree Hierarchy before attempting to make changes to the VOICE. This will allow you to locate the parameter that you want to change more easily.

## EDITING

Follow these steps to change a VOICE parameter. Use Menu Tree Hierarchy flowcharts to locate the parameter that must be changed.

Step	Action
1	<ul style="list-style-type: none"> <li>Use the Arrow and ENTER buttons to navigate to the desired menu tree. Press ENTER</li> </ul>
2	<ul style="list-style-type: none"> <li>To change the selected parameter, press ENTER. This will cause the parameter to blink.</li> <li>Use the arrow buttons to scroll to the desired parameter (Record, Play, Line # etc).</li> </ul>
3	<ul style="list-style-type: none"> <li>Press ENTER to acknowledge the selected parameter. This will cause the parameter to stop blinking.</li> </ul>
4	<ul style="list-style-type: none"> <li>Press EXIT to accept the edit. <b>OR</b></li> <li>Press ENTER to change the parameter.</li> </ul>
5	<ul style="list-style-type: none"> <li>Repeat steps 1 through 4 as necessary.</li> </ul>

## REAR PANEL



Line Connectors & Power Input	Description
Line 1 or Remote, Line 2, Line 3 or Line 4	<ul style="list-style-type: none"> <li>The incoming telephone lines are connected to the Phone Line jacks.</li> <li>The Remote Telephone Access Line is connected to Line 1</li> </ul>
Pwr In	<ul style="list-style-type: none"> <li>Connect the power adapter that came with the VOICE to the Pwr In Connector.</li> </ul>

## MENU CATEGORIES

The following table outlines the VOICE's four main menu categories. Refer to Appendix A - Menu Tree Hierarchy for a complete overview of the VOICE's various menus.

Menu Category	Items included in this menu
<b>Message</b>	<ul style="list-style-type: none"> <li>• Play, Record, Replace, Delete Message, Turn a Message ON or OFF</li> </ul>
<b>Line</b>	<ul style="list-style-type: none"> <li>• Assign the Day, Time, Holiday Configurations, &amp; Operation Mode to each line</li> </ul>
<b>System</b>	<ul style="list-style-type: none"> <li>• Set the message playback Volume (High or Low)</li> <li>• Set the System Time &amp; Date</li> <li>• Activate the Daylight Savings Time feature</li> <li>• View Statistics ( Calls received on each line)</li> <li>• View the VOICE Firmware version</li> <li>• Execute a series of Diagnostic tests</li> </ul>
<b>Remote Line</b>	<ul style="list-style-type: none"> <li>• Set the Remote Telephone Access Code</li> <li>• Select the Remote Telephone Access Language</li> </ul>

### MESSAGE MENU

In order to configure a message, it must be selected. Once the message has been selected, one of the following message attributes can be selected.

**Play:** Navigate to this point to play / listen to a message.

**Record:** Navigate to this point to record a message. When a message is recorded, an asterisk “\*” will appear beside the message number.

**Replace:** Navigate to this point to replace a message. In order to replace a message the standby message must be recorded and then a selected message can be replaced with the standby message.

**Delete:** Navigate to this point to delete a message. If a message is not needed it can be selected and deleted. A message does not have to be deleted in order to be re-recorded.

**Turn ON / OFF:** Navigate to this point to turn a recorded message on or off. Messages that are needed from time to time can be recorded and turned off until needed. When a message is turned “off” the message number appears in brackets.

**Example:** The message, “Our office is closed due to an emergency. Please call again.” can be recorded and programmed to play before the main greeting message. Under regular operating conditions the emergency message will be turned OFF. When the message is needed, it can be turned ON so that it will play before the main greeting message.

## LINE MENU

In order to answer incoming calls, each line on the VOICE must be configured individually. Select the line # and configure the following parameters for each line.

**Select line:** Select the line to be configured (1 through 4).

**Day:** Select the day of the week that the line will play the message.

- **Time:** Set the time of day that the VOICE will play message “X”.
- **Holiday:** The VOICE can be configured to play a “Holiday” message on 20 user-configured holidays. The holiday mode overrides the regular operation for the duration of the holiday.

**Config:** Configure the number of rings and the operation mode of the VOICE.

- **Number of rings:** Set the number of rings the caller will hear before the VOICE answers an incoming call. This setting only applies to applications configured in a Ring Start operation mode.
- **Operating Mode:** Select a mode of operation that will allow the VOICE to interface with the CO / PBX / Phone system.

## SYSTEM MENU

The System menu contains the VOICE’s system parameters. The system time, date, and line statistics are the important features of this menu.

**Volume:** Set the message playback volume to HI or LOW.

**Set Time / Date:** Set the VOICE system time and date.

**Daylight:** Configure the VOICE to recognize Daylight Savings Time.

**Statistics:** Display and/or Reset the VOICE statistics on a “per line” basis.

**Diagnostics:** Perform various VOICE diagnostics tests and view the system firmware version. This branch of the Menu Tree Hierarchy contains the VOICE Firmware version number and both the soft and hard reset options.

## REMOTE MENU

The VOICE has four Remote Access languages and an Access Code for system security. When the VOICE intercepts a call on the Remote Line the VOICE will prompt the caller in the selected language.

**Select Language:** Select the language of the remote telephone access prompts. The remote access languages include English (default), French, German, Spanish and Portuguese.

**Access Code:** Set the Remote Telephone Access code. The VOICE prompts the caller to enter the access code before gaining access to the VOICE. The Remote Telephone Access code must be 4 to 8 digits.

## INSTALLATION

**WARNING! Use caution when installing or modifying telephone lines.**

### Remember:

- Never install telephone wiring during a lightning storm.
- Never install telephone jacks in wet locations.
- Never touch uninsulated telephone wires or terminals unless the telephone line has been disconnected.

Follow these steps to install the VOICE:

1. Connect the incoming telephone lines to the LINE 1, 2, or all of the (RJ-11) connectors.
2. Connect power to the VOICE using the adapter supplied by Interavia.
3. Connect the handset or tape deck to the Handset / Tape input.

**NOTE:** *The incoming telephone line used for the Remote Telephone Access must be connected to the Line 1 / Remote port.*

## DEFAULT SETTINGS

The VOICE ships from the factory with the following default settings:

### System time and date:

- 12:00 / January 1, 1999

### Message to line assignment:

- Line one plays message one
- Line two plays message two
- Line three plays message three
- Line four plays message four

### Operation Mode:

- Ring Start / With Loop Current detection
- Answers incoming calls on the first ring

### Remote Modes:

- Remote / System Access Code = 8615
- Remote Telephone Access Language = English

### Using the VOICE's default settings:

If the default settings are not changed, the VOICE will:

- Play message one to line one
- Play message two to line two
- Play message three to line three
- Play message four to line four

If the default settings are not changed, the VOICE must be:

- Connected to a PBX, phone system, or CO trunk that is configured in a Ring Start / With Loop Current Detection operation mode.

**NOTE:** *The default settings must be changed if the VOICE is used for any other type of application.*

## CONFIGURING THE VOICE

### Typical configuration

1. Set system time (see the Time section of the System Menu).
2. Set system date (see the Date section of the System Menu).
3. Record a message (see the Record section of the Message Menu).
4. Play the message to verify content (see the Play section of the Message Menu).
5. Select line 1, 2, 3 or 4 (see the Select Line section of the Line Menu).
6. Select a day of the week (see the Day section of the Line Menu).
7. Configure the time of day the message should play (see the Time section of the Line Menu).
8. Configure the message to play at the pre-configured time.

\* Each line has five (5) time stamps (per day) that can be assigned to different messages.

### Holiday configuration

1. Record the Holiday message (a re-useable holiday message works well).
2. Play the message to verify content.
3. Select a line 1, 2, 3 or 4 (see the Select Line section of the Line Menu).
4. Configure the date that the holiday message should play (see the Holiday section of the Line Menu).
5. Configure the message number to play on the pre-configured holiday.

### Number of rings

The VOICE can be configured to answer incoming calls after a specified number of rings (1 through 4). (See Menu Categories, Line Menu, Config. section.)

## **RECORD A MESSAGE**

Before you start:

The VOICE front panel should display the system time and date. If the VOICE front panel does not display the system time and date, use the EXIT and/or Left Arrow button (<) to locate the system time and date.

When the system time and date are displayed:

1. Press the right arrow button until the display shows MESSAGE.
2. Press ENTER. The display shows Play MSG.
3. Press the right arrow key until the display shows Record MSG "X".
4. Press the ENTER button. The display shows Select MSG.
5. Press the arrow button to select the desired message number.
6. Press ENTER. The VOICE gives a short beep. Speak the message after the beep.
7. Press EXIT to stop recording. An asterisk will appear beside the message number. This indicates that the message is recorded.

## **PLAY A MESSAGE**

When the system time and date are displayed:

1. Press the right arrow button until the display shows MESSAGE.
2. Press ENTER. The display shows Play MSG.
3. Press ENTER. The display shows Select MSG #.
4. Press the arrow button to select the desired message number.
5. Press ENTER to start message playback.
6. Press EXIT to stop message playback.

## REMOTE TELEPHONE ACCESS

In order to use the Remote Telephone Access port the user needs a:

- Dedicated phone line
- Touch Tone phone

The Remote Telephone Access port is used to perform the following activities:

• Record & Play messages	• Change the Remote Access Language
• Change the system Access Code	• Retrieve / Reset Line statistics
• Replace a message using the Standby message	• Turn messages on / off

### ACTIVATING THE REMOTE TELEPHONE ACCESS PORT

Follow these steps to activate Line 1 as the Remote Telephone Access port.

1. Navigate to the Operating Mode section of the Line menu.
2. Press ENTER.
3. Press ENTER. The Operating Mode will blink.
4. Navigate to REMOTE.
5. Press ENTER / EXIT to accept the Operating Mode.

### CHANGING THE ACCESS CODE ON THE REMOTE ACCESS PORT

The Remote Telephone Access Port is protected by an access code. The default access code is 8615. These instructions will allow you to change the Remote Telephone Access Code so that it is unique to your system.

1. Navigate to the Remote Line section of the Main menu.
2. Press ENTER.
3. Navigate to Access Code
4. Press ENTER.
5. Press the ENTER key. This will cause the first digit of the access code to blink.
6. Use the arrow key to select the desired number. Press ENTER to accept the number.
7. Repeat steps 5 & 6 until the new access code is configured (4 to 8 digits).
8. When the desired access code has been set press EXIT to accept the new access code.

\* The Remote Telephone Access Code can also be changed using the Remote Telephone Access Port. See Using the Remote Telephone Access Port section of this manual for more details.

## TEST THE REMOTE TELEPHONE ACCESS PORT

This is a quick test to verify that the incoming phone line and phone number are both functional.

1. Connect the incoming phone line to Line 1 / Remote.
2. Dial the phone /extension number assigned to the Remote Line.
3. The VOICE will respond with “Enter Access Code”

## USING THE REMOTE TELEPHONE ACCESS PORT

Every time the Remote Access Port answers an incoming call it will respond with the following prompt:

- “Enter Access Code”

The following table outlines the different VOICE features that can be accessed using the Remote Telephone Access port.

Feature	Command #	Action
Delete Message	6 + Message # “X”	Delete message # “X”
Record Message	7 + Message # “X”	Record message # “X”
Play Message	8 + Message # “X”	Play message # “X”
Replace a Message	9 + Message # “X”	Replace message # “X”
Record Standby Message	7 + Message # “0”	Record Standby message
Replace Access Code	1 + Access Code. Repeat to confirm	Access Code is changed
Line Statistics	2 + Line number (1–3)	Plays line statistics information
Reset line statistics	29	Resets all line statistics
Turn a message OFF	30 + Message # “X”	Message # “X” OFF
Turn a message ON	31 + Message # “X”	Message # “X” ON
English Remote	41	Responds in English
French Remote	42	Responds in French
German Remote	43	Responds in German
Spanish Remote	44	Responds in Spanish
Portuguese Remote	45	Responds in Portuguese
End Remote	0	Disconnects Remote port

**NOTE:** In order to replace a message (Command #9) the user must:

1. Record the Standby message (message #0).
2. Play message # “X” to verify that the message was replaced.

The memory used for the standby message is taken from the VOICE’s total message memory time. Therefore, the standby message cannot exceed the amount of recording time remaining on the unit. To record a 20 second standby message, the VOICE must have at least 20 seconds of recording time in its memory.

## OPERATION MODES

The VOICE can interface with a CO line, Key System, or PBX. This section describes the different line operation modes supported by the VOICE. The VOICE's operation mode is configured in the Line / Config / Operating Mode menu of the VOICE's Menu Tree Hierarchy.

**NOTE:** CP = Control Pulse.

- **Ring Start Loop Current Check (R)**

The message plays in response to a Loop or Ground Start signal. The message will stop playing before completion if the loop current is removed from the line.

- **Ring Start without Loop Current Check (RN)**

The message plays in response to a Loop or Ground Start signal. The message will not stop playing if loop current is removed from the line.

- **Continuous Play with Control Pulse Relay (CP NO) \***

The message plays continuously to the line. The CP contacts toggle position for approximately 250 msec. at the start of the message.

- **Continuous Play without Control Pulse Relay (CP)**

The message plays continuously to the line. The CP contacts do not toggle their position at the start of the message.

- **Pulse Start / Level Return (PS / LR NO) \***

The message plays in response to a start signal. The CP contacts toggle position while the message is playing.

- **Pulse Start / Pulse Return (PS / PR NO) \***

The message plays in response to a start signal. The CP contacts toggle position for approximately 250 msec. at the end of the message.

- **Level Start / Pulse Return – Single Play (LS / PR SP NO) \***

The message plays in response to a start signal. The CP contacts toggle position for approximately 250 msec. at the start and end of the message. The message stops playing if the start signal is removed.

- **Level Start / Pulse Return - Multiple Play (LS / PR MP NO) \***

The message plays in response to a start signal. The CP contacts toggle position for approximately 250 msec. at the start and end of the message. The message stops playing if the start signal is removed. The message plays repeatedly until the start signal is removed.

- **Level Start / Level Return – Single Play (LS / LR SP NO) \***

The message plays in response to a start signal. The CP contacts toggle position while the message is playing. The message stops playing if the Start signal is removed.

- **Off Line**

The Offline operation mode can be used when the selected line is not needed to answer any incoming calls.

- **Remote**

The operation mode of line one must be set to Remote if line one is going to be used as a Remote Telephone Access Port.

\* NO (Normally Open) changes to NC (Normally Closed) when the CP contacts are set to Normally Closed operation.

## TROUBLESHOOTING

If the VOICE is not working properly, please review the following troubleshooting steps. If the problem persists, see APPENDIX D – TECHNICAL SUPPORT AND REPAIRS.

<b>Problem</b>	<b>Verify the following...</b>
VOICE does not power up	<ul style="list-style-type: none"> <li>• Is the power adapter connected between the VOICE and the power outlet?</li> </ul>
VOICE does not answer calls	<ul style="list-style-type: none"> <li>• Is the message recorded?</li> <li>• Is the Operation Mode set correctly? See Operation Mode.</li> <li>• Is the telephone line / port working?</li> </ul>
Poor recording quality from the handset	<ul style="list-style-type: none"> <li>• Is the handset the Interalia handset that came with the VOICE?</li> <li>• Speak directly into the handset while recording.</li> </ul>
Partial message recorded	<ul style="list-style-type: none"> <li>• Is the message(s) longer than the total recording time (2 to 8 minutes) of the VOICE?</li> </ul>
Unable to record from the Handset?	<ul style="list-style-type: none"> <li>• Is the handset the Interalia handset that came with the VOICE?</li> <li>• Verify that a tape deck is not connected to the Tape jack.</li> </ul>
Message playback volume is too high or too low.	<ul style="list-style-type: none"> <li>• Refer to the Volume setting of the System menu.</li> </ul>
Remote line not working	<ul style="list-style-type: none"> <li>• Verify that the Remote port has been activated in the Operation Mode section of the Line menu.</li> </ul>

## DIAGNOSTICS TOOLS

The VOICE has a few diagnostic tools that can be used to help troubleshoot different problems that might arise during the life of a VOICE unit. This section outlines three of the diagnostic tools that will be useful for troubleshooting.

These diagnostic tools are found in the System / Diagnostics menu of the VOICE's Menu Tree Hierarchy.

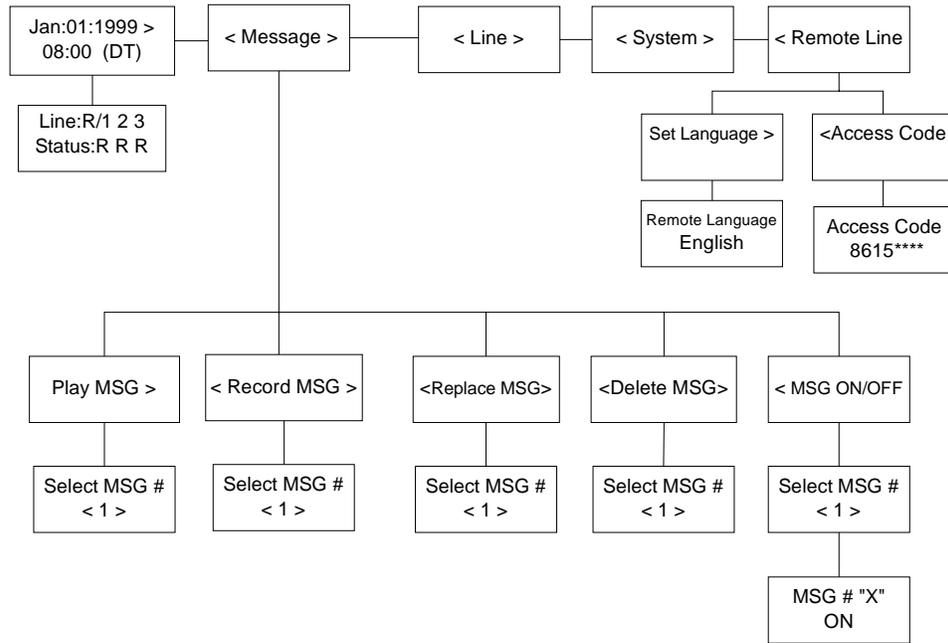
**Version:** This displays the firmware version of the VOICE. This helps the Technical Support Group to track the unit and search for troubleshooting information based on the version of firmware.

**Soft Reset:** A soft reset initializes the VOICE. If the VOICE is not responding, a soft reset initializes the unit and this will usually get the VOICE up and running again.

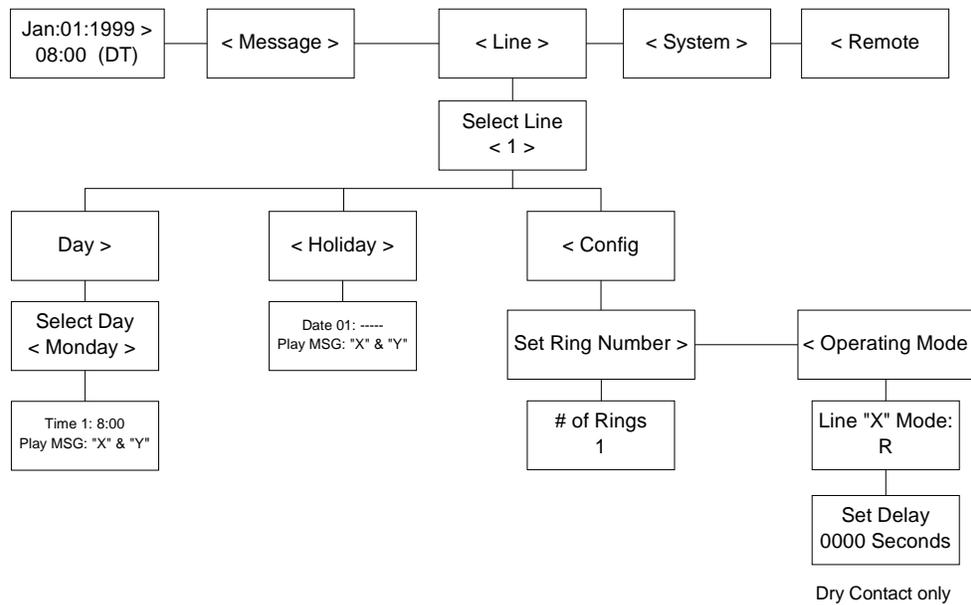
**Hard Reset:** A hard reset re-boots the VOICE. **The Hard Reset completely resets the VOICE and erases all messages and configurations.** The hard reset can be used when the VOICE will be used for a new application. A hard reset will erase everything stored in the unit and it can be reconfigured from the system default settings.

# APPENDIX A – MENU TREE HIERARCHY

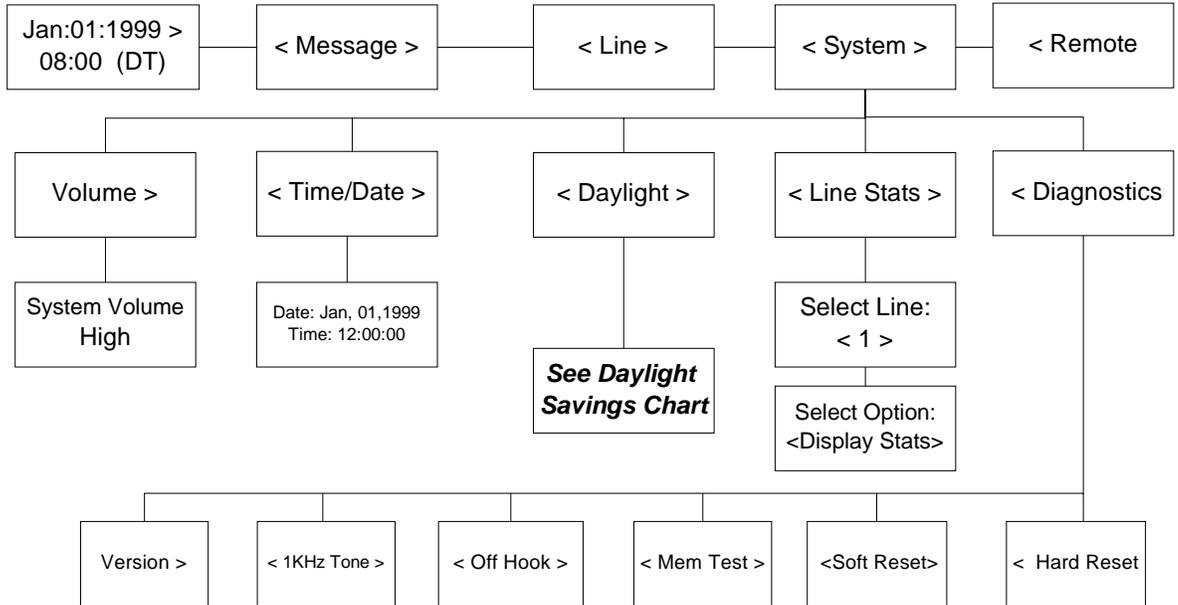
## MESSAGE AND REMOTE LINE MENUS



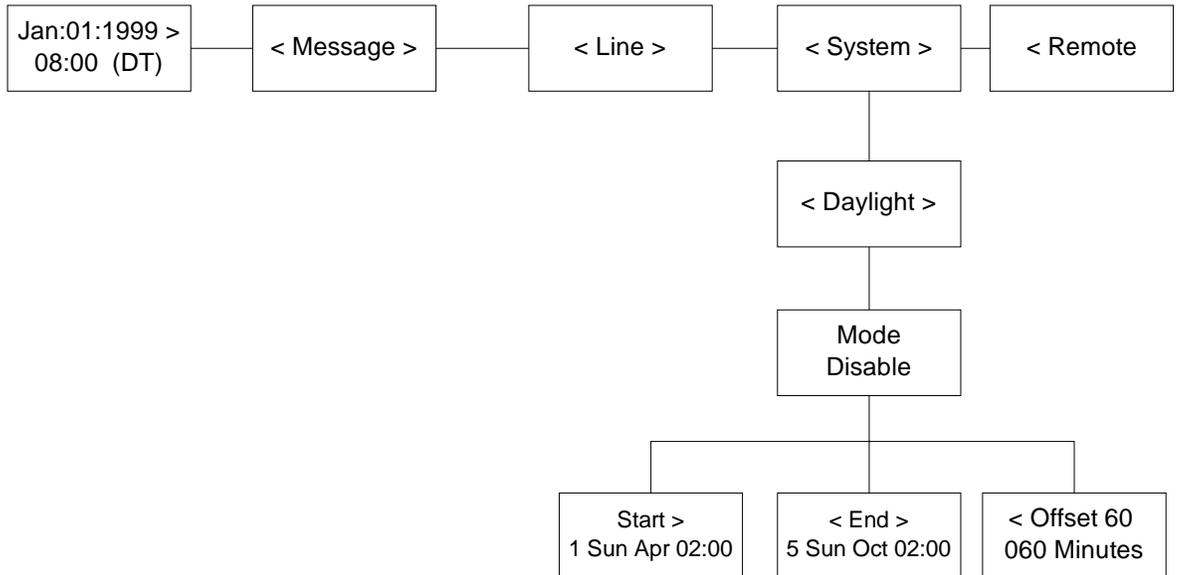
## LINE MENU



## SYSTEM MENU



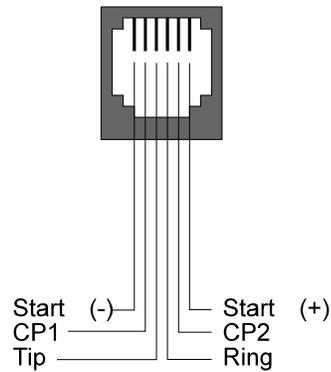
## DAYLIGHT SAVINGS TIME



## APPENDIX B – RJ-11 LINE CONNECTOR PIN-OUT

The diagram below represents the pin-out of the RJ-11 line input connector on the back of the VOICE.

Use this pin-out diagram as a reference when connecting the VOICE to the Public Telephone Network or any of the PBXs listed in **Appendix C – Telephone Network / PBX Connections**



**The Voice Line input connector**

**NOTE:** *Installation of the equipment is the sole responsibility of the purchaser. The manufacturer, its agents and distributors accept no responsibility for malfunction or damage caused by improper connection of the unit.*

## APPENDIX C – TELEPHONE NETWORK / PBX CONNECTIONS

The following tables represent how the VOICE connects to most Public Telephone Networks and / or PBXs.

Switch Type	Public Network, PBX Analog Station, Analog Centrex Line		Lucent G2, G3, Definity (option 1)		Lucent G2, G3, Definity (option 2)	
<b>Operation Mode</b>	Ring Start		Pulse Start / Level Return (NO)		Level Start / Pulse Return (NO)	
	<b>VOICE</b>	<b>PBX</b>	<b>VOICE</b>	<b>PBX</b>	<b>VOICE</b>	<b>PBX</b>
	Ring	Ring	Ring	Ring	Ring	Ring
	Tip	Tip	Tip	Tip	Tip	Tip
			Start -	Battery *	Start -	Battery *
			Start +	S	Start +	SZ1
			CP 1	AL1	CP 1	S
			CP 2	Ground	CP 2	S1
<p><b>NOTES:</b></p> <p><i>NO = Normally Open</i>  <i>NC = Normally Closed</i></p>			<ul style="list-style-type: none"> <li>Use a SN231 card</li> <li>The ground must come from the circuit pack</li> </ul>		<ul style="list-style-type: none"> <li>Use a TN 763C Card</li> <li>The ground must come from the Circuit pack</li> <li>Strap the SZ lead to the ground of the external power supply</li> <li>Strap the -48VDC to the Start – on the VOICE</li> </ul>	

*NOTE: An asterisk (\*) Identifies the signal from the PBX power supply or the System Ground.*

Switch Type	AT&T System 75 / 85		AT&T Dimension 2000		Ericsson MD 110									
<b>Operation Mode</b>	Pulse Start / Level Return (NC)		Pulse Start / Level Return (NC)		Pulse Start / Level Return – Single Play (NO)									
	<b>VOICE</b>	<b>PBX</b>	<b>VOICE</b>	<b>PBX</b>	<b>VOICE</b>	<b>PBX</b>								
	Ring	Ring	Ring	Ring	Ring	T-Rec								
	Tip	Tip	Tip	Tip	Tip	R-Tx								
	Start -	Battery *	Start -	Battery *	Start -	M								
	Start +	S	Start +	S2	Start +	Aux GND								
	CP 1	AL1	CP 1	AL1	CP 1	S – GND								
	CP 2	Ground	CP 2	Battery *	CP 2	E								
<p><b>NOTES:</b></p> <p><i>NO = Normally Open</i>  <i>NC = Normally Closed</i></p>	<ul style="list-style-type: none"> <li>Ground must come from the circuit pack</li> </ul>		<ul style="list-style-type: none"> <li>Connect the VOICE to the LC13 Circuit Pack, Recorded Announcement Interface</li> <li>Set the switches on the LC13 as follows:  <table style="margin-left: 40px; border: none;"> <tr> <td style="padding-right: 20px;">Circuit 0</td> <td>Circuit 1</td> </tr> <tr> <td>4 – Open</td> <td>1 – Open</td> </tr> <tr> <td>5 – Closed</td> <td>2 – Closed</td> </tr> <tr> <td>6 – Open</td> <td>3 – Open</td> </tr> </table> </li> </ul>		Circuit 0	Circuit 1	4 – Open	1 – Open	5 – Closed	2 – Closed	6 – Open	3 – Open	<ul style="list-style-type: none"> <li>Var. = 00, Type = RA1</li> <li>Connect S Bat from PBX to Aux. Bat.</li> </ul>	
Circuit 0	Circuit 1													
4 – Open	1 – Open													
5 – Closed	2 – Closed													
6 – Open	3 – Open													

Switch Type	Harris 20 / 20 LH & M		Hitachi EDX / MDX / LDX		Hitachi HCX – 5000	
Operation Mode	Level Start / Pulse Return – Single Play (NO)		Level Start / Pulse Return – Single Play (NO)		Level Start / Pulse Return – Single Play (NO)	
	<b>VOICE</b>	<b>PBX</b>	<b>VOICE</b>	<b>PBX</b>	<b>VOICE</b>	<b>PBX</b>
	Ring	Ring	Ring	Ring	Ring	Ring
	Tip	Tip	Tip	Tip	Tip	Tip
	Start -	M	Start -	Battery *	Start -	M
	Start +	Ground *	Start +	SSL0	Start +	SG
	CP 1	E			CP 1	E
	CP 2	Ground *			CP 2	SG
<p><b>NOTES:</b></p> <p><i>NO = Normally Open</i>  <i>NC = Normally Closed</i></p>	<ul style="list-style-type: none"> <li>Connect the VOICE to a 2 or 4 wire E&amp;M Trunk Card</li> <li>Configure E&amp;M Trunk Card for Type 1 E&amp;M signaling</li> </ul>		<ul style="list-style-type: none"> <li>Connect the VOICE to the Hitachi card number 4SRBWT</li> <li>Connect SS0 lead to the system ground</li> </ul>		<ul style="list-style-type: none"> <li>HCX programming: Specify one or two announcements played to the caller</li> <li>Trunk type = OGT</li> <li>Connection type =TKTH</li> <li>Set the strapping on the 4ANIF card as follows:  TM00 1-2    TM02 3-4  TM01 1-2    TM03 1-2</li> </ul>	

Switch Type	NEC NEAX 2400		Northern Telecom SL 1 (Option 1)		Northern Telecom Meridian 1 (Option 1)	
Operation Mode	Level Start / Pulse Return – Single Play (NO)		Continuous Play (NO)		Continuous Play (NO)	
	<b>VOICE</b>	<b>PBX</b>	<b>VOICE</b>	<b>PBX</b>	<b>VOICE</b>	<b>PBX</b>
	Ring	Ring	Ring	Ring	Ring	Ring
	Tip	Tip	Tip	Tip	Tip	Tip
	Start -	M				
	Start +	Ground *				
			CP 1	CP/ E	CP 1	CP/ E
			CP 2	Ground *	CP 2	Ground *
<p><b>NOTES:</b></p> <p><i>NO = Normally Open</i>  <i>NC = Normally Closed</i></p>	<ul style="list-style-type: none"> <li>Connect the VOICE to the NEC 4TLT – Loop and Tie Line Interface Circuit Card</li> <li>Set the TLT Circuit Card as follows:  Switch 00, 01, 02, 03 – EM  Switch 10, 11, 12, 13 – 600 ohms  Switch 20, 21, 22, 23 – Ground  Idle</li> </ul>		<ul style="list-style-type: none"> <li>Connect the VOICE to the QPC74 Recorded Announcement Circuit Pack</li> <li>Configure the SL-1 for an Audiochron Announcer</li> </ul>		<ul style="list-style-type: none"> <li>Connect the VOICE to the NT8D14 UTC, NT5K19, or the Nt5K72AA</li> <li>Configure the Meridian 1 for an Audiochron Announcer</li> <li><b>DO NOT CONNECT THE MB LEAD</b></li> <li>Download software by disabling then enabling the card</li> </ul>	

Switch Type	DMS 100 (CENTREX)		Northern Telecom SL 1 (Option 2)		Northern Telecom Meridian 1 (Option 2)	
Operation Mode	Continuous Play (NO)		Pulse Start / Level Return (NO)		Pulse Start / Level Return (NO)	
	<b>VOICE</b>	<b>PBX</b>	<b>VOICE</b>	<b>PBX</b>	<b>VOICE</b>	<b>PBX</b>
	Ring	Ring	Ring	Ring	Ring	Ring
	Tip	Tip	Tip	Tip	Tip	Tip
			Start -	Battery *	Start -	Battery
			Start +	Start / MB	Start +	Start / MB
	CP 1	CP/ E	CP 1	CP	CP 1	CP
	CP 2	Ground *	CP 2	Ground *	CP 2	Ground *
<b>NOTES:</b>  <i>NO = Normally Open</i> <i>NC = Normally Closed</i>	<ul style="list-style-type: none"> <li>Connect the VOICE to the NT2X72AA Card.</li> <li>Configure the DMS for an Audiochron Announcer</li> <li>Connect the VOICE's Tip and Ring to the NT2X72AA Tip 1 &amp; Ring 1</li> </ul>		<ul style="list-style-type: none"> <li>Connect the VOICE to the QPC74 Recorded Announcement Circuit Pack</li> <li>Configure the SL 1 for a Cook Electric 201 Announcer</li> </ul>		<ul style="list-style-type: none"> <li>Connect the VOICE to the QPC 74 Recorded Announcement Card, the NT8D14BA UTC, the NT5K19, or the NT5K72AA</li> <li>Configure the Meridian 1 for a Cook Electric 201 Announcer</li> <li>Download software by disabling then enabling the card</li> </ul>	

Switch Type	Microtel GTD 5		Microtel Omni		Rolm 9200	
Operation Mode	Level Start / Pulse Return – Multiple Play (NO)		Pulse Start / Level Return – (NO)		Level Start / Pulse Return – (NO)	
	<b>VOICE</b>	<b>PBX</b>	<b>VOICE</b>	<b>PBX</b>	<b>VOICE</b>	<b>PBX</b>
	Ring	Ring	Ring	Ring	Ring	Ring
	Tip	Tip	Tip	Tip	Tip	Tip
	Start -	Battery *	Start -	M	Start -	M
	Start +	E	Start +	Ground *	Start +	SG
	CP 1	SSG	CP 1	E	CP 1	E
	CP 2	E	CP 2	Ground *	CP 2	Battery
<b>NOTES:</b>  <i>NO = Normally Open</i> <i>NC = Normally Closed</i>	<ul style="list-style-type: none"> <li>Connect the SSG lead to the system ground</li> </ul>				<ul style="list-style-type: none"> <li>Strap the SB lead to the Battery</li> </ul>	

Switch Type	Siemens Saturn		Solid State Junior Executive		Solid State Senior Executive	
Operation Mode	Pulse Start / Level Return (NC)		Synchronized Continuous Play (NC)		Synchronized Continuous Play (NC)	
	<b>VOICE</b>	<b>PBX</b>	<b>VOICE</b>	<b>PBX</b>	<b>VOICE</b>	<b>PBX</b>
	Ring	Ring	Ring	Ring	Ring	Ring
	Tip	Tip	Tip	Tip	Tip	Tip
	Start -	Battery *				
	Start +	EB & MB				
	CP 1	EA	CP 1	M Sync	CP 1	M Sync
	CP 2	Ground *	CP 2	Ground	CP 2	Ground
<b>NOTES:</b>  <i>NO = Normally Open</i> <i>NC = Normally Closed</i>	<ul style="list-style-type: none"> <li>Connect the VOICE to the E &amp; M Trunk Card</li> </ul>					

Switch Type	Siemens Hicom 150E Office Pro		Siemens Hicom 150 / 300 Series		Siemens 9005 & 9006	
Operation Mode	Pulse Start / Level Return (NC)		Ring Start		Ring Start	
	<b>VOICE</b>	<b>PBX</b>	<b>VOICE</b>	<b>PBX</b>	<b>VOICE</b>	<b>PBX</b>
	Ring	Ring	Ring	Ring	Ring	Ring
	Tip	Tip	Tip	Tip	Tip	Tip
	Start -	Battery *				
	Start +	EB & MB				
	CP 1	EA				
	CP 2	Ground *				
<b>NOTES:</b>  <i>NO = Normally Open</i> <i>NC = Normally Closed</i>	<ul style="list-style-type: none"> <li>Connect the VOICE to the TIEL Module</li> </ul>		<ul style="list-style-type: none"> <li>CP relay not applicable</li> </ul>		<ul style="list-style-type: none"> <li>CP relay not applicable</li> </ul>	

Switch Type	Rolm 9751		Mitel SX 50 / 200 / 2000		ITT 3100	
Operation Mode	Ring Start		Ring Start		Ring Start	
	<b>VOICE</b>	<b>PBX</b>	<b>VOICE</b>	<b>PBX</b>	<b>VOICE</b>	<b>PBX</b>
	Ring	Ring	Ring	Ring	Ring	Ring
	Tip	Tip	Tip	Tip	Tip	Tip
<b>NOTES:</b>  <i>NO = Normally Open</i> <i>NC = Normally Closed</i>	<ul style="list-style-type: none"> <li>CP relay not applicable</li> </ul>		<ul style="list-style-type: none"> <li>CP relay not applicable</li> </ul>		<ul style="list-style-type: none"> <li>CP relay not applicable</li> </ul>	

Switch Type	CBX 8000 & 9000		Tadiran Coral		Toshiba Perception	
Operation Mode	Ring Start		Ring Start		Ring Start	
	<b>VOICE</b>	<b>PBX</b>	<b>VOICE</b>	<b>PBX</b>	<b>VOICE</b>	<b>PBX</b>
	Ring	Ring	Ring	Ring	Ring	Ring
	Tip	Tip	Tip	Tip	Tip	Tip
<b>NOTES:</b>  <i>NO = Normally Open</i> <i>NC = Normally Closed</i>	<ul style="list-style-type: none"> <li>CP relay not applicable</li> </ul>		<ul style="list-style-type: none"> <li>CP relay not applicable</li> </ul>		<ul style="list-style-type: none"> <li>CP relay not applicable</li> </ul>	

Switch Type	GPT isdx & Realitis	
Operation Mode	Ring Start	
	<b>VOICE</b>	<b>PBX</b>
	Ring	Ring
	Tip	Tip
<b>NOTES:</b>  <i>NO = Normally Open</i> <i>NC = Normally Closed</i>	<ul style="list-style-type: none"> <li>CP relay not applicable</li> </ul>	

## **APPENDIX D – NOTES FOR UK SYSTEMS**

The VOICE is suitable for connection to Direct Exchange Lines (DELs) and Private Branch Exchange (PBX) extensions providing loop disconnect or multi-frequency signaling. The VOICE is not suitable for use as an extension to a pay phone.

The VOICE is designed to be plugged into a standard UK Line Jack Unit. One Line Jack Unit is required for each channel on the VOICE.

Pay tone may be received after the VOICE answers a call from some types of pay phones and may persist for up to 13 seconds. The announcements should be constructed to ensure the announcement containing the identity of the called line will be heard by pay phone callers after the pay tone has ceased.

## **APPENDIX E - SPECIAL APPLICATIONS**

The VOICE can be configured to deliver a message or Music on Hold in an endless loop. The VOICE can be used in this application as an alternative to a Music on Hold device.

Use the instructions below to configure the VOICE to deliver a message or Music on Hold in an endless loop.

### **Endless Loop / Music on Hold configuration**

1. Record a message (see the Record section of the Message Menu)
2. Play the message to verify content (see the Play section of the Message Menu)
3. Select line 1, 2, 3 or 4 (see the Select Line section of the Line Menu)
4. Select the CP operation mode (see the Config / Operating Mode section of the Line Menu)
5. Configure the day the message should play (see the Day section of the Line Menu)
6. Configure the time of day the message should play (see the Day / Time section of the Line Menu)
7. Configure the message number to play at the desired time

## APPENDIX F – TECHNICAL SUPPORT AND REPAIRS

Please consult the Trouble Shooting section of this user guide if the VOICE is experiencing a problem. If the problem persists or the VOICE is in need of repairs, please contact one of the following Interalia offices.

### Canada, Asia Pacific, Latin America

403 288-2706 (phone)

Interalia Inc.  
4110 – 79<sup>th</sup> Street NW  
Calgary, AB  
Canada  
T3B 5C2

403-288-5935 (fax)

### United States

952 942-6088 (phone)

Suite 135, 10340 Viking Drive  
Eden Prairie, Minnesota  
USA  
55344

952 942-6172 (fax)

### Europe, Middle East & Africa

+44 (0) 1476 594207 (phone)

Interalia Communications Limited  
Bridge End Road  
Grantham, Lincolnshire  
NG31 7TS

+44 (0) 1476 594208 (fax)

Visit **interalia** Technical Support on the Web at [www.interalia.com](http://www.interalia.com).

## APPENDIX G – APPROVALS

The following information must be read before the announcer is connected.

### FCC INFORMATION

This equipment complies with Part 68 of the FCC rules. On the rear of the VOICE is a label that contains, among other information, the FCC registration number and ringer equivalence number (REN) for this equipment. If requested, this information must be provided to the telephone company.

The ringer equivalence number (REN) is used to determine the quantity of devices which may be connected to the telephone line. Excessive RENs on the telephone line may result in the devices not ringing in response to an incoming call. In most, but not all areas, the sum of the RENs should not exceed five (5.0). To be certain of the number of devices that may be connected to the line, as determined by the total RENs contact the telephone company to determine the maximum REN for the calling area.

If the VOICE causes harm to the telephone network, the telephone company will notify you in advance that temporary discontinuance of service may be required. But if advance notice isn't practical, the telephone company will notify the customer as soon as possible. Also, you will be advised of your right to file a complaint with the FCC if you believe it is necessary.

The telephone company may make changes in its facilities, equipment, operations, or procedures that could affect the operation of the equipment. If this happens, the telephone company will provide advance notice in order for you to make the necessary modifications in order to maintain uninterrupted service.

If trouble is experienced with the VOICE, please contact Interalia Communications Inc. in Minneapolis, Minnesota, 1-800-531-0115, for repair and warranty information. If the trouble is causing harm to the telephone network, the telephone company may request you remove the equipment from the network until the problem is resolved. All repairs must be carried out by Interalia at their repair facility located in Minneapolis, Minnesota.

This equipment cannot be used on public coin service provided by the telephone company. Connection to Party Line Service is subject to state tariffs. Contact the state public utility commission, public service commission or corporation commission for information.

**FCC Registration Number:** F4PCAN-16694-AN-N

**Ringer Equivalence Number:** 0.6

***NOTE:** This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.*

## **DOC**

The Canadian Department of Communications label identifies certified equipment. This certification means that the equipment meets certain telecommunications network protective, operational and safety requirements. The Department does not guarantee that the equipment will operate to the user's satisfaction.

Before installing this equipment, users should ensure that it is permissible to be connected to the facilities of the local telecommunications company. The equipment must also be installed using an approved method of connection. In some cases, the company's inside wiring associated with a single line individual service may be extended by means of a certified jack-plug-cord ensemble (telephone extension cord). The customer should be aware that compliance with the above conditions may not prevent degradation of service in some situations. Existing telecommunications company requirements do not permit their equipment to be connected to customer provided jacks, except where specified by individual telecommunications company tariffs.

Repairs to certified equipment should be made by an authorized Canadian maintenance facility designated by the supplier. Any repairs or alterations made by the user to this equipment, or the equipment malfunctions, may give the telecommunications company cause to request the user to disconnect the equipment.

Users should ensure for their own protection that the electrical ground connections of the power utility, telephones lines and internal metallic water pipe system, if present, are connected together. This precaution may be particularly important in rural areas.

**CAUTION: Users should not attempt to make such connections themselves, but should contact the appropriate electrical inspection authority, or electrician, as appropriate.**

**DOC CERTIFICATION NUMBER:** 577 10139A

**LOAD NUMBER:** 0.6

The Load Number (LN) assigned to each terminal device denotes the percentage of the total load to be connected to a telephone loop which is used by the device, to prevent overloading. The termination on a loop may consist of any combination of devices subject only to the requirement that the total of the Load Numbers of all the devices does not exceed 100.

***NOTE: THIS CLASS A DIGITAL APPARATUS MEETS ALL REQUIREMENTS OF THE CANADIAN INTERFERENCE CAUSING EQUIPMENT REGULATIONS.***

## **BABT INFORMATION**

Too many devices plugged into a socket simultaneously will overload the exchange line and as a result the VOICE will not answer calls. The VOICE should operate satisfactorily if the sum of the Ringer Equivalence Numbers (REN) marked on each device is 4 or less. The REN of each line on the VOICE is “1”.

Warning: Interconnection directly, by way of other apparatus, of ports marked “WARNING: CONNECT ONLY APPARATUS COMPLYING WITH EN 41003 TO THIS PORT” with ports not so marked may produce hazardous conditions on the BT network and should be obtained from a competent engineer before such a connection is made.

## APPENDIX H - SAMPLE APPLICATION

This sample application is designed to give the user an idea of how the VOICE is configured to answer incoming calls. This example is a *tutorial* and is not meant to represent how the VOICE should be used.

In this application, the VOICE will be used in an office that plays two-day time messages, a night message, and a weekend message.

### MESSAGES

**MSG 1:** “Thank you for calling ABC company. All our agents are now busy. Please stay on the line and we will answer your call shortly.”

**MSG 2:** “Thank you for calling ABC company. Our regular office hours are 9 –5, Monday to Friday. Please call again.”

### CONFIGURATION

Setting the System Time & Date

1. When the LCD shows Time & Date...
2. Scroll to SYSTEM. Press ENTER.
3. Scroll to Time/Date. Press ENTER.
4. Use the ENTER and ARROW buttons to set the time and date.
5. Press EXIT when done.

Record the Messages

1. When the LCD shows Time & Date...
2. Scroll to MESSAGE. Press ENTER.
3. Scroll to RECORD. Press ENTER.
4. Scroll to SELECT MESSAGE. Press ENTER.
5. After the tone, record the message. Press EXIT to stop recording.
6. Repeat steps 3 – 5 until all the messages are recorded.
7. Press Exit and scroll left to PLAY MSG. (See step 2 of Play the messages).

### Play the Messages

1. When the LCD shows Time & Date...
2. Scroll to MESSAGE. Press ENTER.
3. Scroll to PLAY. Press ENTER.
4. Scroll to select the desired message. Press ENTER.
5. The selected message will play to the handset.
6. Repeat steps 3 & 4 until all the messages have been played back.

### Setting the message to line assignment.

1. When the LCD shows Time & Date...
2. Scroll to Line. Press ENTER.
3. Scroll to Select Line # "X". Press ENTER.
4. Scroll to Select Day. Press ENTER.
5. Scroll to select the desired day of the week. Press ENTER.
6. Use the ENTER and ARROW buttons to set the time that message "X" should play to incoming calls.
7. Use the ENTER and ARROW buttons to select the message number. Press EXIT to accept.
8. Repeat steps 5 – 6 if more than one message will play at different times on the same day.
9. Repeat steps 4 – 6 to set the message to line assignment for each day of the week.

### Setting the Mode of Operation

1. When the LCD shows Time & Date...
2. Scroll to Line. Press ENTER.
3. Scroll to Select Line. Press ENTER.
4. Scroll to Config. Press ENTER.
5. Scroll to Operating Mode. Press ENTER.
6. Press ENTER. The Operating Mode will blink.
7. Scroll to select the desired Operating Mode. Press EXIT to accept the Operating Mode.

### Setting up the Remote Telephone Access Line

- See the Activating the Remote Access Port section of this manual.

## APPENDIX I - TECHNICAL SPECIFICATIONS

### Recording Time

- 4 minutes

### Number of Lines

- Model V-24: 2 lines
- Model V-34: 3 lines
- Model V-44: 4 lines

### Number of Messages

- 1 to 9 user configured messages

### Telephone Line Interface

- Connector: RJ-11C modular jack
- Line Activation: loop, ground, battery, E&M, continuous play
- Off hook impedance: 600 $\Omega$  nominal
- Output level: High, -10dBm; Low, -16dBm

### Audio Storage

- Voice encoding / decoding: Pulse Code Modulation (PCM)
- Storage medium: FLASH
- Sampling rate: 8kHz, 8 bits / sample
- Frequency response: 300Hz to 3.4kHz (+/-3 dB)

### Audio Inputs

- Handset: 90mV to 600mV @ 220 $\Omega$  impedance
  - Tape: 150mV to 1000mV @ 10K $\Omega$  impedance
- Note:** The tape port is set to receive line level inputs between 150mV – 1000mV. Do not use a speaker amplifier to connect to the tape port as it is capable of over driving the input and causing distortion.

### Power Supply

- Input: 110 / 120VAC or 220 / 240VAC, 50 / 60Hz 20W
- Output: 9VDC @ 1A

### Dimensions

- 1.75 in. (4.5 cm) H x 8 in. (20.3 cm) W x 8 in. (20.3 cm) D

### Weight

- 3.3 lbs. (1.5 kgs)

### Approvals

- FCC, CS\_03, NRTL / C, BABT, CE

\* - Specifications are subject to change without notice.

## LIMITED WARRANTY

Interalia warrants this equipment to be free of defects in materials and workmanship for a period of one year from the date of shipment. All defects will be repaired without charge upon return of the unit to the factory.

This warranty is null and void if any modifications have been made to the unit or the unit has been subjected to physical or electrical stress as determined by the manufacturer.

This warranty covers parts and labour only and does not include shipping costs, travel expenses, or travel time.

Installation of the equipment is the sole responsibility of the purchaser. The manufacturer, its agents or distributors, accept no responsibility for malfunction or damage caused by improper connection of the unit.

THE MANUFACTURER, ITS AGENTS OR DISTRIBUTORS, ARE NOT LIABLE FOR ANY LOSSES INCURRED THROUGH THE USE OF THE EQUIPMENT OR BY THE MALFUNCTION OF THE EQUIPMENT IN ANY MEANS WHATSOEVER.

THIS WARRANTY IS LIMITED TO THE REPAIR OF THE EQUIPMENT TO ITS ORIGINALLY PUBLISHED SPECIFICATIONS.

THIS WARRANTY IS COMPLETE AS STATED AND ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED, ARE NOT VALID.

**Interalia Inc.**  
4110 – 79<sup>th</sup> Street NW, Calgary, Alberta  
CANADA T3B 5C2  
Telephone: (403) 288-2706 Fax: (403) 288-5935

**Interalia Communications Inc.**  
Suite 135, 10340 Viking Drive, Eden Prairie, Minnesota  
USA, 55344  
Telephone: (952) 942-6088 Fax: (952) 942-6172

**Interalia Communications Limited**  
Bridge End Road, Grantham, Lincolnshire  
NG31 7TS  
Telephone: (01476) 594207 Fax: (01476) 594208