VOICEPAL MAX

INSTRUCTIONS

Please Read This Manual
Before Operating

The World at a Touch

ADAPTIVATION
INCORPORATED

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CONTENTS

INTRODUCTION

Congratulations on purchasing your VoicePal Max. It is one of the most affordable and functional digital communication aids available. Adaptivation strives to offer our clients products and follow-up support that meets the highest quality standards in the assistive technology field. Feel free at any time to contact our offices for assistance on using your new VoicePal Max.

These instructions begin with a Quick Start Guide for those who want to use the VoicePal Max right out of the box. Only the essentials are covered so you can operate the VoicePal Max in its most basic configuration. Detailed Operating Instructions follow to configure your VoicePal Max for a specific application. Illustrative examples are given.

The VoicePal Max can record and playback up to 10 natural voice messages for a total recording time of 60 or 90 seconds. Messages can be activated in any of three ways: 1) Directly by the keypad on top of the VoicePal Max, 2) Directly by plugging in external switches, and 3) Through scanning input, both visual and auditory.

SUMMARY OF FEATURES

- Total of 60 or 90 seconds of speech generation, depending on model.
- User selectable 2, 3, 4, or 10 messages.
  - 2 messages, 30 or 45 seconds each
  - 3 messages, 20 or 30 seconds each
  - 4 messages, 15 or 23 seconds each
  - 10 messages, 6 or 9 seconds each
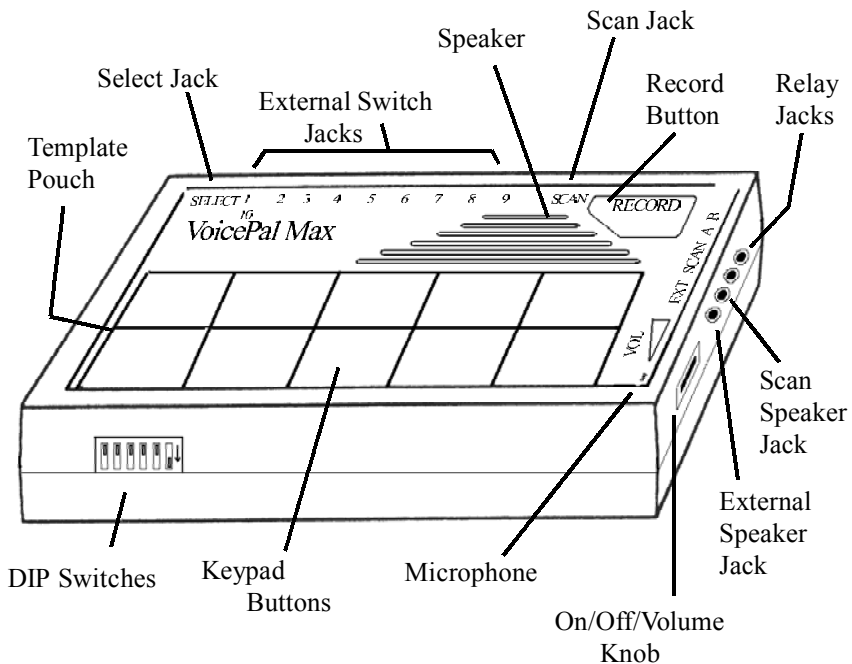- 10 front panel buttons select prerecorded natural voice messages.

- Message selection using external switches including Adaptivation's Taction Pads and Pal Pads.
- Front pouch allows insertion of customized overlays.
- When 2, 3, or 4 message selection is used, front panel buttons are combined to form physically larger buttons.
- Variable delayed activation of messages.
- Automatically goes to "sleep" after a message repeats 10 consecutive times to save batteries.
- Scanning allows selection of a message from a choice of 2, 3, 4, or 10 messages, using a single button.
- Four modes of initiating scanning and selecting a message: Inverse scanning, Positive scanning, Step scanning, and Two Switch scanning.
- Visual and Auditory scanning.
- Sequential messaging.
- Three visual scan rates.
- A "pillow speaker" or headphones (included), or external auditory amplifier is activated during auditory scanning.
- Standard and Cue Word auditory scanning.
- Interauditory Pause: 4 auditory scan rates.
- VoicePal Max can be programmed so after a message has played, scanning will stop, restart automatically with message 1, or continue with the next message.
- Scanning will stop if a message is not selected by the time 4 or 8 scanning cycles are completed.
- Four AA alkaline batteries last up to 6 months with normal use. Heavy use in auditory scanning will result in a shorter battery life.
- Internal microphone to record messages.
- Internal amplified speaker with volume adjustment.

- External speaker jack for use with headphones, speaker or audio amplifier.
- Two programmable relays control external battery operated devices when messages are selected.

VoicePal Max Diagram

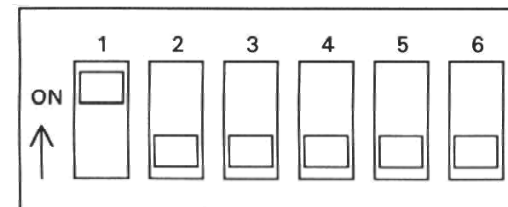Diagram 1 shows the VoicePal Max with each of the major features identified.

Diagram 1.

This document uses the word "button" to refer to a specific physical button on the keypad. Any action involving buttons one through ten can also be performed by plugging in an external switch to the corresponding jack on the top edge of the VoicePal Max. DIP Switches refer to the small slide switches numbered 1 through 6 located on the lower edge of the VoicePal Max. "LED" is short for light emitting diode. It refers to the small red lights on the VoicePal Max.

1. Blank 10 message templates are included with your VoicePal Max. Make an overlay with symbols appropriate for your application, then insert it into the pouch on the top of the VoicePal Max. If you have a scanning version, punch holes in the overlay so the LEDs show through. Boardmaker, by Mayer-Johnson, Inc. can also be used to create overlays for the VoicePal Max. See the section on Overlays for more information.
2. Insert four AA alkaline batteries included with your VoicePal Max. Make sure the batteries are installed correctly.
3. Configure the VoicePal Max to supply 10 messages. Set the DIP switches as shown below.

Recording messages

1. Press and hold the record button firmly. The Record

LED will begin to flash. Continue holding the Record button until the Record LED goes solid (about two seconds), then release. The VoicePal Max is now in record mode. **If the LED for button #10 is lit, press and immediately release the Record button to turn LED #10 off.** When LED #10 is lit, the VoicePal Max will record cue words for auditory scanning, which is discussed later in this manual.

2. Get ready to talk, then press and hold button #1. Speak clearly about 12 inches away from the VoicePal Max microphone (MIC).
3. When you are done talking, release button #1. (Note: As long as you touch the button or external switch, the VoicePal Max will be recording whether you are talking or not.)
4. Repeat step 2 and 3 to record other messages. (The messages can be recorded in any order. Also you can rerecord one message without having to rerecord any other messages.)
5. Press and hold the Record button firmly. The Record LED will begin to flash. Continue holding the Record button until the Record LED goes out (about two seconds), then release. The VoicePal Max is no longer in record mode.
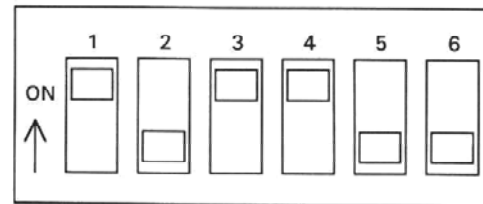
PLAYING MESSAGES

DIRECT SELECTION

1. Make sure the Record LED is not lit. If it is, press and hold the Record button until the Record LED turns off.
2. Make sure the volume knob is turned up.
3. Press button #1 on the keypad or external switch plugged into Jack #1. The message will play.
4. Repeat step 3 with other keypad buttons.

SCANNING SELECTION

1. Connect an external switch into the Scan jack.
2. Press and release the switch to activate scanning.
3. When the LED corresponding to the desired message is lit, press the scan switch again. The selected message will play on the built-in speaker.
4. Repeat steps 2 and 3 to select more messages.

CONFIGURE TO SUPPLY ONLY TWO MESSAGES

1. 2 message templates are included with the VoicePal Max. Make an overlay with appropriate symbols or pictures and slide it into the pouch.
2. Set the DIP switches as shown below.

3. Buttons #1, #2, #6 & #7 act as one large button activating message 1. Likewise buttons #4, #5, #9, and #10 activate message 2. There is a natural "dead space" in the area of buttons #3 and #8.
4. Record new messages as described earlier on page 6.

   <u>Note</u>: When switching between 2, 3, 4, and 10 message modes, it is best to rerecord the messages since the VoicePal Max re-configures its memory each time.

   Please remember the Quick Start Guide is only intended to let you begin using the VoicePal Max. To become familiar will all the features and use it to its full potential you must read the "Detailed Operating Instructions."

DETAILED OPERATING INSTRUCTIONS

BASIC FEATURES

The VoicePal Max provides a total of 60 or 90 seconds of recording time, depending on the version. The recording time can be divided among two, three, four, or ten messages. There are two main methods of selecting messages for playback: direct selection and scanning selection.

With direct selection, the ten front panel buttons are used to select the desired message. Button 1 is in the upper left corner. Button 2 is the second one from the left on the top row and so on. Button 10 is in the lower right corner. There are ten jacks corresponding to Buttons 1 through 10 that accept either external switches or Adaptivation's Taction Pads. Messages can be directly selected using these external switches in addition to the front panel buttons. Scanning capabilities are described later in this manual.

You can custom create your own symbol or picture overlays and slip them in the VoicePal Max's pouch. Templates are provided for each configuration to help you position pictures and punch out holes in your overlays so the LEDs are visible.

BATTERIES

The VoicePal Max operates on four AA batteries. Alkaline, rechargeable alkaline or rechargeable NiMH batteries are recommended. Under normal use, alkaline batteries can be expected to last up to 6 months using direct selection and up to four months when using scanning.

DIP Switches

There are six DIP switches on the VoicePal Max, designated as SW1 through SW6. These switches are used to configure various features on the VoicePal Max. The meanings of these features are summarized on page 35 of this manual. The VoicePal Max can be in one of two states: Setup state, and Active state. The Setup state is used to program various options that affect the way the VoicePal Max operates. The VoicePal Max is placed in the Active state by placing SW1 in the ON position. **To record messages or to play them back, the VoicePal Max must be in the Active state.** The VoicePal Max is placed in the Setup state by placing SW1 in the OFF position.

The following chart contains DIP switch settings and can be found on the back of your VoicePal Max. This chart can be used as a quick reference guide to programming.

ACTIVE STATE Switch1 = ON

	SW2	Two Button Scanning
ON		ON
OFF		OFF

SW3	SW4	Keypad Configuration
ON	ON	2 messages
ON	OFF	3 messages
OFF	ON	4 messages
OFF	OFF	10 messages

SW5	Repeat message?
ON	No
OFF	Yes

SW5	Scanning Selection
ON	INVERSE (touch-release)/STEP
OFF	POSITIVE(touch-touch)

SW6	Auditory Scan
ON	ON
OFF	OFF

* Factory Default Settings
[1] To memorize settings in SETUP STATE press REC button until it lights up.
[2] Press button 1-10 to disconnect all relays from corresponding messages.
[3] Press button 1-10 to attach selected relay to corresponding message. Press REC to detach selected relay from all messages.
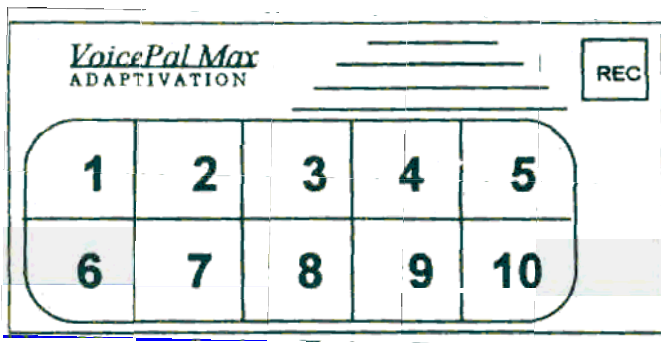
SETUP STATE: Switch1 = OFF[1]

SW2	SW3	SW4	SW5	SW6	Function
					Delayed Activation
ON	ON	ON	ON	ON	0 Sec *
ON	ON	ON	OFF	ON	½ Sec
ON	ON	OFF	ON	ON	1 Sec
ON	ON	OFF	OFF	ON	1½ Sec
					Scan Speed - Visual Scanning
ON	ON	ON	ON	OFF	Sequential Messaging
ON	ON	ON	OFF	OFF	1 Sec *
ON	ON	OFF	ON	OFF	2 Sec
ON	ON	OFF	OFF	OFF	4 Sec
					Inter-auditory Pause
ON	ON	ON	ON	OFF	0 Sec
ON	ON	ON	OFF	OFF	1 Sec *
ON	ON	OFF	ON	OFF	2 Sec
ON	ON	OFF	OFF	OFF	4 Sec
					After Message Activity
ON	OFF	ON	ON	OFF	Stop scanning *
ON	OFF	ON	OFF	OFF	Cont scan w/ mess one
ON	OFF	OFF	ON	OFF	Cont scan w/ next mess
					No. of Scanning Cycles BeforeShutdown
OFF	OFF	ON	ON	OFF	4 cycles *
OFF	OFF	ON	OFF	OFF	8 cycles
					Clear all relays from selected message(s) [2]
ON	OFF	OFF	OFF	OFF	
					Relay A Control [3]
OFF	ON	ON	ON	ON	Duration of Message
OFF	ON	ON	OFF	ON	0 sec delay
OFF	ON	OFF	ON	ON	2 sec delay
OFF	ON	OFF	OFF	ON	4 sec delay
					Relay B Control [3]
ON	OFF	ON	ON	ON	Duration of message
ON	OFF	ON	OFF	ON	0 sec delay
ON	OFF	OFF	ON	ON	2 sec delay
OFF	OFF	OFF	OFF	ON	6 sec delay
OFF	ON	ON	ON	OFF	Cue Word Scanning
OFF	ON	ON	OFF	OFF	Standard Scanning

MESSAGE CONFIGURATION

The VoicePal Max can be configured to supply either two, three, four, or ten messages, depending on the operator's needs. Message configuration is adjusted in the Active state. If you wish to switch between 2, 3, 4, and 10 message modes you should record new messages. For beginning operators, it may be necessary to configure the VoicePal Max to supply only two messages. As the operator becomes proficient with two messages, the VoicePal Max can be configured to supply three messages, then four, then ten.
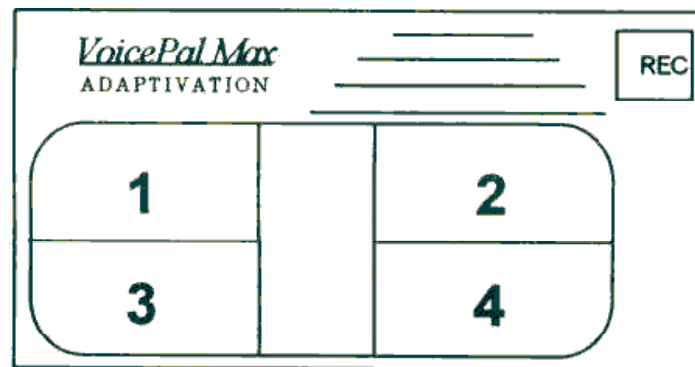
TEN MESSAGES

SW1= ON (Active state), SW3= OFF, SW4= OFF. Pressing Button 1 selects message one. Pressing Button 2 selects message two, etc. Each message can be up to 6 seconds (9 seconds with the 90 second model).

FOUR MESSAGES

SW1= ON (Active state), SW 3= OFF, SW4= ON. Pressing button 1 or 2 selects message one. Pressing button 4 or 5 selects message two. Pressing button 6 or 7 selects message three. Pressing button 9 or 10 selects message four. Each message can be up to 15 seconds (22 seconds with the 90 second model). The space between

the right and left halves is intentional dead space.

THREE MESSAGES

SW1= ON (Active state), SW3= ON, SW4= OFF. Pressing button 1 or 6 selects message one. Pressing button 3 or 8 selects message two. Pressing button 5 or 10 selects message three. Each message can be up to 20 seconds (30 seconds for the 90 second model). The space between 1, 2, and 3 is intentional dead space.
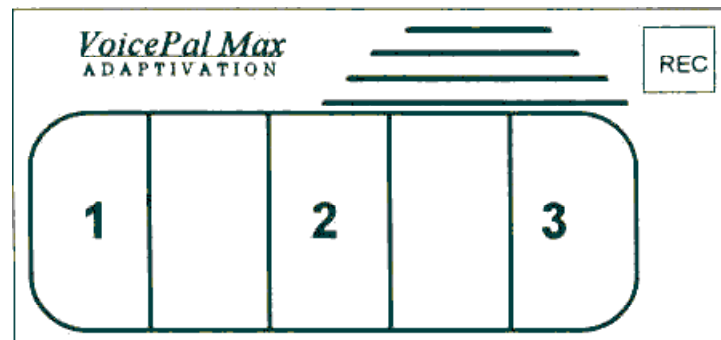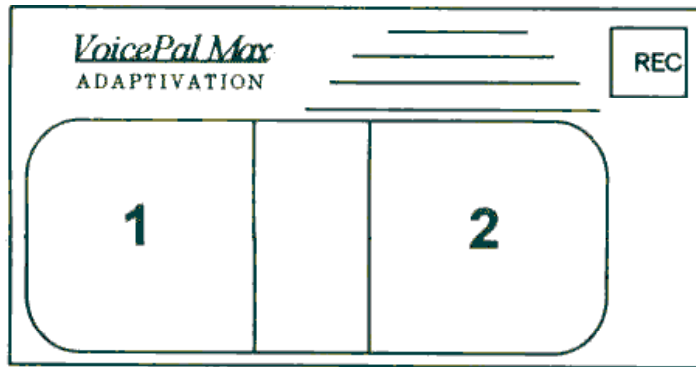

TWO MESSAGES

SW1= ON (Active state), SW3= ON, SW4= ON. Pressing button 1, 2, 6, or 7 selects message one. Pressing button 4, 5, 9, or 10 selects message two. Each message can be up to 30 seconds (45 seconds with the 90 second model). The space between messages 1 and 2 is

intentional dead space.

RECORDING MESSAGES

Recording messages is done while in the Active state (SW1= ON). To place the VoicePal Max in record mode:

Step#	Action to Take	Result
Step 1	Firmly press and hold REC button.	Led will begin to flash. After about two seconds of pressing the REC button, the LED turns solid.
Step 2	Release the REC button.	You are now in record mode.
Step 3	To record a message press and hold the desired front panel button and begin speaking.	Release the button when the message is complete.
Step 4	Press and hold the REC button until the flashing LED turns off.	The VoicePal Max is now in playback mode.

REPEAT MODE

When a message is selected, usually one releases the button once the message begins playing. If the operator holds the button through the end of the message, the message will continue repeating. The repeat mode is controlled by SW5 in the Active state. SW5= ON, the message will repeat only once whether the button or switch is continually held or released. SW5= OFF, the message will continue to repeat (up to 10 times) until the button or switch is released.

DELAYED ACTIVATION

Typically when a keypad or external switch is pressed, the corresponding message plays back immediately. A 1/2, 1, or 1 1/2 second delay can be added. This means the keypad button or external switch must be held down for the length of the delay before a message plays. This is particularly helpful for two reasons. First, in the case of Taction Pads stuck to objects, the person has time to feel each object to identify if it is the one of choice. When the desired object is found, the person holds his or her hand on it for the predetermined delay period. Delayed activation is also helpful if a person drags their hand across the keypad before reaching the button of choice. A message will play only if the person's hand stays on the button for the delay period. Delayed activation has no effect in Record mode. Delayed activation is adjusted while in the Setup state (SW1= OFF).

The following example shows how to configure the VoicePal Max for a 1/2 second delay.

Example 1: Set delayed activation for 1/2 second.

Step#	Action to take	Result

Step 1	Note the current settings of SW2 through SW6 for later use.	
Step 2	Set SW1= OFF	Places Max in the Setup state.
Step 3	Set SW2 through SW6 =ON ON ON OFF ON	
Step 4	Press the Record button once. The LED will flash.	Sets delayed activation to 1/2 second.
Step 5	Return SW2 through SW6 to previous settings.	Returns Max to Active state.

Press and hold a button for at least 1/2 second to activate a message. The same procedure would be used to configure for other delayed activation times.

SCANNING OPERATION

Scanning allows the user to select any message with the touch of a single external switch. Two-message, three-message, four-message, and ten-message scanning can be selected. See page 35 above for message configuration. There are two kinds of scanning: visual and auditory scanning. Related to scanning is sequential messaging which is discussed later. There are four ways to select messages when using scanning: Positive scanning selection, Inverse scanning selection, Step scanning selection, and Two Button scanning selection. An external switch must be plugged into the jack marked SCAN to activate scanning.

SCANNING SELECTION

Scanning selection is adjusted while in the Active state.

POSITIVE SCANNING SELECTION

SW5= OFF. Scanning begins when the external scan button is pressed and then released. When the scan button is pressed again, a message is selected.

INVERSE SCANNING SELECTION

SW5= ON. Scanning begins when the scan switch is pressed and held. When the scan switch is released, a message is selected.

STEP SCANNING SELECTION

SW5= ON. Scanning begins when the scan button is pressed. Repetitively tapping the scan switch causes the VoicePal Max to cycle to the next message. To select a message, release the scan button for at least 3/4 of a second. Step scanning works best with visual scanning.

TWO SWITCH SCANNING

SW2= ON. An external switch must be plugged into the jack marked SCAN and also another switch must be plugged into the jack marked SELECT. Scanning begins by pressing the scan switch and tapping the switch until the desired LED is lit. The message is selected by touching the select switch.

VISUAL SCANNING

SW6= OFF, (SW2= OFF for single button scanning). During visual scanning, there is an LED associated with each keypad button. These LEDs light up, indicating that the corresponding message can be selected. In two message mode, there are four LEDs lit at one time. LEDs 1, 2, 6, and 7 are lit when message one can be selected, and LEDs 4, 5, 9, and 10 are lit when message two can selected.

Scan Speed

One of three visual scan speeds can be selected. Scan speed is set while in the Setup state.

Scan Speed	DIP switch settings				
	SW2	SW3	SW4	SW5	SW6
1 second= fast	ON	ON	ON	OFF	OFF
2 seconds= medium	ON	ON	OFF	ON	OFF
4 seconds= slow	ON	ON	OFF	OFF	OFF

Example 2: Set visual scan rate to two seconds per message (medium speed).

Step#	Action to Take	Result
Step 1	Memorize the current settings of SW1 through SW6.	
Step 2	Set SW1= OFF	Places Max in the Setup state.
Step 3	Set SW2 through SW6 =ON ON OFF ON OFF	
Step 4	Press Record button. The Record LED will flash.	Sets scan rate to 2 seconds per message.
Step 5	SW1= ON	Returns the Max to Active state.
Step 6	Return SW2 through SW6 to previous settings.	

Scanning Cycle Mode (After message activity)

Scanning cycle mode (after message activity) controls the activity of the VoicePal Max after a scanning message has played.

In Positive Scanning, the after message activity can either restart scanning with message 1, continue scanning with the next message, or stop scanning.

In Inverse scanning, after the message has played one of two things will happen. If the operator is not pressing the scan switch, the VoicePal Max will stop scanning. If the operator is pressing the scan switch before the end of the message, the VoicePal Max will either start with message 1 or continue with the next message.

Example 3: Set scanning cycle mode so scanning will continue with the next message.

Step#	Action to Take	Result
Step 1	Note the current settings of SW1 through SW6.	
Step 2	Set SW1= OFF	Places Max in Setup state.
Step 3	Set SW2 through SW6 =ON OFF OFF ON OFF	
Step 4	Press the Record button.	Sets Scanning Cycle Mode to
	Record LED will flash.	"Continue scanning with next message."
Step 5	Set SW1= ON	Returns Max to Active state.
Step 6	Return SW2 through SW6 to previous settings.	

Press and release the scan button to begin scanning. Press the scan button again to select a message. After the message is done playing, scanning will continue with the next message. You can stop the scanning by selecting a message, doing nothing and letting the unit go to "sleep," or by pressing the keypad.

Inactivity shutdown

Once scanning begins, the VoicePal Max will wait for the operator to select a message. If the operator does not select a message, scanning will continue for either 4 or 8 complete cycles.

Example 4: Set inactivity cycling to scan up to 4 times when a user does not select a message.

Step #	Action to Take	Result
Step 1	Note the current settings of SW1 through SW6.	
Step 2	Set SW1= OFF	Places Max in Setup state.
Step 3	Set SW2 through SW6 =OFF OFF OFF ON OFF	Sets inactivity cycling to 4 cycles.
Step 4	Press Record button. Record LED will flash.	
Step 5	Set SW1= ON	Returns Max to Active state.
Step 6	Return SW2 through SW6 to previous settings.	

Activate scanning, but do not select a message. The VoicePal Max will cycle through all the messages 4 times, then stop without playing a message.

TWO BUTTON SCANNING

Two button scanning allows two switches to be used. One switch for initiating scanning and the other switch for selecting the desired message. It is often used where the two phases of scanning (initiation and selection) need to be broken up whether for cognitive or physical reasons. Two button scanning works with visual scanning, both types of auditory scanning and with sequential messaging. Two button scanning is turned on while in the Active state using SW2. If SW2= ON, two button scanning is on. An external switch must be plugged into the SCAN jack and another switch plugged into the jack marked SELECT. The switch plugged into the SCAN jack will start the scan and also advance the scan to the next message by repetitively tapping the switch. The switch plugged into the SELECT jack will stop the scan and activate the desired message.

AUDITORY SCANNING

SW6= ON, (SW2= OFF- Single button scanning). There are two types of auditory scanning: whole message or standard and cue word. Auditory scanning type is selected in the Setup state (SW1= OFF).

STANDARD AUDITORY SCANNING

With standard auditory scanning, each message plays one-by-one, quietly, privately through a headphone or pillow speaker (included with your VoicePal Max). The headphones or pillow speaker plug into the jack marked SCAN SPK. The volume level played through the headphones cannot be adjusted using the Volume knob. When the operator hears the desired message, he or she can then select it by pressing the external scan switch. This causes the message to play loudly over the built-in amplified speaker. The LEDs illuminate during scanning as each message plays.

INTERAUDITORY PAUSE

This feature applies only to auditory scanning. The VoicePal Max can be programmed with a pause between each message, thus changing the scan speed. This gives the operator more time to select a message. The interauditory pause can be 0, 1, 2, or 4 seconds.

Example 5: Set interauditory pause to four seconds.

Step#	Action to Take	Result
Step 1	Note currents settings of SW2 through SW6.	
Step 2	Set SW1= OFF	Places Max in Setup state.
Step 3	Set SW2 through SW6 =ON ON OFF OFF OFF	
Step 4	Press Record button. Record LED will flash.	Sets interauditory pause to 4 seconds.

Step 5   Set SW1= ON   Returns Max to Active state.
Step 6   Return SW2 through SW6
            to previous settings.
Note: SW6 must be ON in auditory scan mode.

Activate auditory scan, and there will be a four second pause between messages.

Interauditory Pause Speed	Settings				
	SW2	SW3	SW4	SW5	SW6
0 seconds	ON	ON	ON	ON	OFF
1 seconds	ON	ON	ON	OFF	OFF
2 seconds	ON	ON	OFF	ON	OFF
4 seconds	ON	ON	OFF	OFF	OFF

CUE WORD AUDITORY SCANNING

With cue word auditory scanning, each message has a separate cue word or phrase associated with it. When the external scan switch is pressed, each cue word plays one-by-one, quietly, privately through a headphone or pillow speaker. When the user hears the desired cue word, he or she can then select it by pressing the scan switch. This will cause the entire message associated with the cue word to play loudly over the built-in speaker. It is best to rerecord your messages and cue words when using cue word auditory scanning.

Example 6: Configuring for Cue Word Scanning

Step#	Action to Take	Result
Step 1	Note current settings of SW2 through SW6.	
Step 2	Set SW1= OFF	Places Max in Setup state.
Step 3	Set SW2 through SW6 =OFF ON ON ON OFF	
Step 4	Press the Record button. Record LED will flash.	Sets Max to cue word scanning.
Step 5	Set SW1= ON	Returns Max to Active state.

Step 6   Return SW2 through SW6
            to previous settings.
Step 7   Make sure SW6 is ON.   Continue on next page for
                                           recording.

RECORDING CUE WORDS

The VoicePal Max re-configures its memory to reserve space just for cue words. To eliminate any message confusion when switching from Standard to Cue Word scanning, it is best to rerecord your messages and cue words. The chart below shows various message lengths based on model and configuration.

		Keyboard Configuration			
Total Record	Cue	2	3	4	10
Time	Word	Mes	Mes	Mes	Mes
60 Seconds	2	28	18	13	4
90 seconds	2	42	27	20	6

Follow these steps to record cue words.
1. Press and hold the record button. The Record LED will flash. Continue to hold the Record button until the Record LED goes solid (about 2 seconds), then release. The VoicePal Max is now in record mode. Now press the Record button once and LED #10 lights up. When LED #10 is on, the VoicePal Max will record cue words. When it is off, it will record regular messages.
2. Record cue words the same way you recorded messages as described in the "Recording Messages" section.
3. You will need to rerecord the actual messages as well. Press the Record button once and LED #10 will turn off, but still leaving the Record LED on. You may now record actual messages.
4. Turn the Record LED off by pressing and holding the Record button. The Record LED will flash. Continue holding until the LED goes out, then release.

Plug an external headphones or pillow speaker into the jack marked SCAN SPK. Plug an external switch into the jack marked SCAN. Press the external switch to start scanning. Each cue word will play into the headphones. When the unit plays the desired cue word, press the scan switch and the actual message will play loudly through the built-in speaker.

Direct selection of messages still works when cue word scanning is turned on.

Example 7: Returning the VoicePal Max to Standard Auditory Scanning.

Step#	Action to Take	Result
Step 1	Note current settings of SW2 through SW6	
Step 2	Set SW1= OFF	Places Max in Setup state.
Step 3	Set SW2 through SW6 =OFF ON ON OFF OFF	
Step 4	Press Record button. Record LED will flash.	Sets Max to standard auditory scanning.
Step 5	Set SW1= ON	Returns Max to Active state.
Step 6	Return SW2 through SW6 to previous settings.	
Step 7	Make sure SW6= ON	
Step 8	Rerecord your messages.	

SEQUENTIAL MESSAGING

Sequential Messaging allows each message to be played one after another each time the scan button is pressed. It can be used in the 2, 3, 4, or 10 message configurations. It is very useful in many activities where the special needs student administers a math or spelling test, participates in book or theatrical reading, or participates in other oral turn taking activities. Sequential Messaging is set while in the Setup state (SW1= OFF).

Example 8: Turn Sequential Messaging on.

Step#	Action to Take	Result
Step 1	Note current settings of SW2 through SW6.	
Step 2	Set SW1= OFF	Places Max in Setup state.
Step 3	Set SW2 through SW6 =ON ON ON ON OFF	
Step 4	Press the Record button. Record LED will flash.	Turns Sequential Messaging on.
Step 5	Set SW1= ON	Returns Max to Active state.
Step 6	Return SW2 through SW6 to previous settings.	
Step 7	Plug external switch into jack marked SCAN.	

Now press the scan switch once. Message one plays. Press it again. Message two plays, then three, and four and so on. After the last message plays, it starts over with message one.

The keypad buttons are still active during sequential messaging. You must get out of Sequential Messaging before returning to any other scan functions. To return to a scanning mode, program the VoicePal Max to a scan speed in the Setup state.

TWO BUTTON SEQUENTIAL MESSAGING

SW2= ON. With two button Sequential Messaging, the SCAN jack activates the next message, and a switch plugged into the SELECT jack will repeat the last message played. This is useful in a setting such as a classroom where the disabled student is administering an oral math or spelling test. The question can be repeated if a student in the class taking the test asks to have the

question again.

RELAY OPERATION

GENERAL

The VoicePal Max has two internal relays that act as switches to turn battery operated devices on and off. These relays can be set to activate in any message configuration, and utilizing any mode (direct selection, external switches, scanning, and sequential messaging.) The relays can be set to activate devices while the message plays, immediately following the message, or after a preset delay following the message (reinforcement delay).

Environmental control units such as the FreeSwitch, FreeHand, and switch, latch, timing devices such as the Linkswitch can be used to give the relays latch and timing capabilities.

NOTE:

A distinction is made between button number and message location number. Button number refers to the 10 active areas on the keypad used for assigning messages to the relay. Message location number refers to the area on the keypad in which the message can be found when activating the relay. This will vary depending on the message configuration (2, 3, 4, 10) of the VoicePal Max.

It may be helpful to know what message configuration you intend to use before you begin programming. This will aid in correctly matching the button number to the message location you intended. If the message configuration is changed, the VoicePal Max will automatically re-assign the relay to its new location in that configuration. The diagrams under "Message Configuration" show the message location number for each

configuration.

CLEARING RELAYS

It is a good idea to clear relays before you begin to program. This will ensure that all previous programming is eliminated and won't interfere with your attempts to program the relays.

To clear the relays:
1. Place the Max in the Setup state (SW1= OFF)
2. Set SW2 through SW6= ON OFF OFF OFF OFF
3. Press all the buttons (1-10) once.

REINFORCEMENT DELAY

This refers to the amount of time between the end of the message played and the activation of the device. The delay can be set for 2, 4, or 6 seconds.

If no delay is desired, the relay can be set to activate the device immediately as soon as the message starts, or as soon as the message ends. The table at the end of this manual and on the back of your VoicePal Max will show the correct settings for programming the relays.

CONNECTING EXTERNAL DEVICES

The upper right hand corner of the VoicePal Max has two jacks labeled "A" and "B." Plug the device which you intend to activate utilizing a standard 1/8" (3.5mm) plug into the jack corresponding to the relay being utilized.

Remember the FreeSwitch, FreeHand, and Linkswitch can be used to enhance timing and latching capabilities.

The following diagram illustrates a typical relay setup using the VoicePal Max hooked into a LinkSwitch, and also plugged into a battery adapted toy.

PROGRAMMING RELAYS

The order in which features are programmed does not make a difference. The following examples assume that the VoicePal Max has been configured, a mode of operation (direct selection, scanning, external switch) has been programmed, and the messages are recorded.

Example 9: Program Relay A to be activated by message 1. The relay will activate an adapted toy for the duration of the message.

Step#	Action to Take	Result
Step 1	Plug toy into relay A.	Use a cable connector if necessary.
Step 2	Note current settings of SW1 through SW6.	
Step 3	Set SW1= OFF	Places Max in Setup state.
Step 4	Clear relays by setting SW2 through SW6= ON OFF OFF OFF OFF Press each button (1-10)	Erases any previous relays.
Step 5	Set SW2 through SW6= OFF ON ON ON ON	Sets Relay A to duration of message.
Step 6	Press button 1. Record LED will flash.	Attaches Relay A to message 1.
Step 7	Set SW1= ON	Places Max in Active state.
Step 8	Return SW2 through SW6 to previous settings.	Returns Max to desired configuration.

When message 1 is activated, the device being used will activate until the message is completed, then stop.

Example 10: Program two relays to be operated by two separate messages. Message 1 will activate an environmental control (e.g. Adaptivation's FreeSwitch) which will activate a clock radio immediately after the message plays. Message two will activate a battery operated toy for the duration of the message.

Step#	Action to Take	Result
Step 1 and	Plug the Environmental control unit (ECU) into Relay A	
	also into the clock radio. Plug the battery operated toy into Relay B.	
Step 2	Note the current settings of SW2 through SW6.	
Step 3	Set SW1= OFF	Places Max in Setup state.
Step 4	Clear relays.	
Step 5	Set SW2 through SW6= OFF ON ON OFF ON	Sets Relay A for 0 second delay.
Step 6	Press button #1. Record LED will flash.	Attaches Relay A to message 1.
Step 7	Set SW2 through SW6= ON OFF ON ON ON	Sets Relay B for duration of message.
Step 8	Press button #2. Record LED will flash.	Attaches Relay B to message 2.
Step 9	Set SW1= ON	Returns Max to Active state.
Step 10	Return SW2 through SW6 to previous settings.	

When message 1 is activated, the message will play and immediately after Relay A will activate the ECU and turn the radio on. Message 2 will turn on the toy for as long as the message plays.

Example 11: Program message 1 to activate an ECU with a radio immediately following the message. Message 2 will also activate the same ECU only there will be a four second delay following the end of the message. Relay A will be used.

Step#	Action to Take	Result
Step 1	Plug an ECU into Relay A and ECU into the radio.	
Step 2	Note current settings of SW2 through SW6.	
Step 3	Set SW1= OFF	Places Max in Setup state.
Step 4	Clear Relays	
Step 5	Set SW2 through SW6= OFF ON ON OFF ON	Sets Relay A for 0 second delay.
Step 6	Press button 1. Record LED will flash.	Attaches Relay A to message 1.
Step 7	Set SW2 through SW6= OFF ON OFF OFF ON	Sets Relay A for a 4 second delay.
Step 8	Press button #2. Record LED will flash.	Attaches Relay A to message 2.
Step 9	Set SW1= ON	Places Max in Active state.
Step 10	Return SW2 through SW6 to previous settings.	

When message 1 is activated, the message will play, then Relay A will activate the ECU turning the radio on. When message 2 is activated, the message will play, then four seconds after the message is over Relay A will activate the ECU turning the radio on. From this example, you can see one relay can be assigned to two different messages.

Example 12: Program message 4 to turn on an adapted toy using a switch latch timer box (e.g. Adaptivation's Linkswitch) with a six second delay.

Step#	Action to Take	Result
Step 1	Plug the Switch latch timer into Relay B and also the adapted toy.	
Step 2	Note the current settings of SW2 through SW6.	
Step 3	Set SW1= OFF	Places Max in Setup state.
Step 4	Clear previous relays.	
Step 5	Set SW2 through SW6= ON OFF OFF OFF ON	Sets Relay B for 6 second delay.
Step 6	Press button #4. Record LED will flash.	Attaches Relay B to message 4.
Step 7	Set SW1= ON	Places Max in Active state.
Step 8	Return SW2 through SW6 to previous settings.	

When message 4 is selected, the message will play and 6 seconds later Relay B will activate the switch latch timer and the toy.

FACTORY SETTINGS

The factory defaults are as follows:
- Visual scan rate: 1 second per message.
- Standard Auditory Scanning
- Interauditory pause: 1 second
- Scan cycle mode: Stop scanning after message selected
- Inactivity shutdown: Repeat scan four times.

You may program as many of the features described at a time as you wish. When the batteries are removed, all options programmed in the Setup state will revert to factory defaults. Any recorded messages will not be lost.

EXTERNAL SPEAKER JACK

This jack will allow you to plug in an additional speaker. This may be an amplified speaker for situations when a very loud volume is needed, or a set of headphones when a quiet message is needed. The VoicePal Max's internal speaker will automatically shut off when an external speaker is used.

OVERLAYS

The VoicePal Max has a built-in pouch which enables you to easily slide in custom overlays with pictures or symbols. Included with the VoicePal Max are templates for the 2, 3, 4, and 10 message modes. These templates also have punch outs for the scanning LEDs. Boardmaker from Mayer-Johnson is a popular program which allows you to make custom overlays with many symbols to choose from. If you have Boardmaker, pre-sized templates are available. Use the following steps to open Adaptivation templates.

1. Open Boardmaker
2. Under File menu, Open
3. Open the Pre-made folder
4. Open the folder named "Adaptiv"
5. Choose the template you wish to use.

ADDITIONAL OPTIONS

KEYGUARDS

The VoicePal Max has keyguards available to help the operator zero in on the desired keypad button. The keyguard helps prevent inadvertent activation of the keypad. Keyguards are available in 2, 3, 4, and 10 message formats.

CARRYING CASE

The VoicePal Max has a custom designed carrying case available to help protect it from bumps, spills, and other hazards. The carrying case can be hung over the shoulder, worn around the waist to provide easy access.

EXTERNAL SCANNING OVERLAY

External visual scanning is possible with the VoicePal Max using the External Scanning Overlay. Objects such as glasses, toys, utensils, or large photos or symbols can be scanned by placing the four large LED lights on the objects to facilitate very concrete scanning capability.

TROUBLESHOOTING

Voice Pal Max records but does not play back.
   Is volume turned up?
   Are batteries in correctly?
   Batteries may be too low. Try new ones.
   If external speaker is used, does it work?
   Is Delayed Activation being used? If so press the button for required length of time.
   Are you in Auditory scan mode without a scanning speaker plugged in?
   Do you have any relays programmed with reinforcement delay?
   Is the VoicePal Max programmed for 2, 3, or 4 message mode? Keep in mind that some keypad buttons and corresponding external switch jacks are intentional dead spaces and won't activate messages.

VoicePal Max will not go into RECORD mode.
   Firmly press the record button for two to three seconds until the flashing Record light comes on solid, then release.
   Make sure SW1= ON.
   Make sure batteries are fresh.
   Make sure ON/OFF Volume switch is on.

The VoicePal Max will not go into Record mode until the message currently playing ends.

You can get into record mode but messages won't record.
Are you in 2, 3, or 4 message mode? These modes have intentional dead spaces and will not record in those areas.
Release the Record button after the Record LED comes on. Do not press the Record button and the keypad buttons at the same time.
Are you recording cue words or regular messages?
When LED 10 is on while in record mode, you will be recording cue words.

Messages are quiet or have too much background noise.
Speak clearly and loudly, no less than 12 inches away from the unit.
Batteries may be too low.
Are you near a source of electrical noise? Such as: Power lines, automobiles, electrical motors, air conditioner. If so, increase the distance of the VoicePal Max from these sources.

While using relays, you hear the relay clicking but the battery operated device does not turn on.
Is your battery operated device turned on?
Are the batteries fresh in the battery operated device?
Does the device work if you plug a conventional switch directly into it?
Did you plug the battery operated device into the correct jack?

Record stays on when unit is off.
If the VoicePal Max is turned off while in record mode, the Record LED will not turn off. It will simply dim. Take the VoicePal Max out of record mode by pressing and holding the Record button until the flashing Record LED goes out. Then turn the VoicePal Max off.

Auditory scanning is not working.
Make sure SW6= ON.
Make sure the volume knob is turned up.
Make sure the headphones or pillow speaker are plugged into the jack marked SCAN SPK.

DIP Switch Settings

ACTIVE STATE Switch1 = ON

SW2	Two Button Scanning
ON	ON
OFF	OFF

SW3	SW4	Keypad Configuration
ON	ON	2 messages
ON	OFF	3 messages
OFF	ON	4 messages
OFF	OFF	10 messages

SW5	Repeat message?
ON	No
OFF	Yes

SW5	Scanning Selection
ON	INVERSE (touch-release)/STEP
OFF	POSITIVE (touch-touch)

SW6	Auditory Scan
ON	ON
OFF	OFF

* Factory Default Settings

    [1] To memorize settings in SETUP STATE
      press REC button until it lights up.

[2] Press button 1-10 to disconnect all
  relays from corresponding messages.

[3] Press button 1-10 to attach selected
  relay to corresponding message. Press
  REC to detach selected relay from
  all messages.

SETUP STATE: Switch1 = OFF'

SW2	SW3	SW4	SW5	SW6	Function
					Delayed Activation
ON	ON	ON	ON	ON	0 Sec *
ON	ON	ON	OFF	ON	½ Sec
ON	ON	OFF	ON	ON	1 Sec
ON	ON	OFF	OFF	ON	1½ Sec
					Scan Speed - Visual Scanning
ON	ON	ON	ON	OFF	**Sequential Messaging**
ON	ON	ON	OFF	OFF	1 Sec *
ON	ON	OFF	ON	OFF	2 Sec
ON	ON	OFF	OFF	OFF	4 Sec
					Inter-auditory Pause
ON	ON	ON	ON	OFF	0 Sec
ON	ON	ON	OFF	OFF	1 Sec *
ON	ON	OFF	ON	OFF	2 Sec
ON	ON	OFF	OFF	OFF	4 Sec
					After Message Activity
ON	OFF	ON	ON	OFF	Stop scanning *
ON	OFF	ON	OFF	OFF	Cont scan w/ mess one
ON	OFF	OFF	ON	OFF	Cont scan w/ next mess
					No. of Scanning Cycles Before Shutdown
OFF	OFF	OFF	ON	OFF	4 cycles *
OFF	OFF	OFF	OFF	OFF	8 cycles
					Clear all relays from selected message(s) [2]
ON	OFF	OFF	OFF	OFF	
					Relay A Control [3]
	OFF	ON	ON	ON	ON Duration of Message
OFF	ON	ON	OFF	ON	0 sec delay
OFF	ON	OFF	ON	ON	2 sec delay
OFF	ON	OFF	OFF	ON	4 sec delay
					Relay B Control [3]
ON	OFF	ON	ON	ON	Duration of message
ON	OFF	ON	OFF	ON	0 sec delay
ON	OFF	OFF	ON	ON	2 sec delay
ON	OFF	OFF	OFF	ON	6 sec delay
OFF	ON	ON	ON	OFF	Cue Word Scanning
OFF	ON	ON	OFF	OFF	Standard Scanning

VoicePal Max
1 Year Limited Warranty

Your Adaptivation *VoicePal Max* was carefully tested and inspected before it was shipped from the factory. We warrant this product to be free from defects in materials and workmanship under normal use and service for one (1) year from the date of purchase. In the event of a defect in materials or workmanship, we will either repair or replace without charge, at our option, any part which in our judgment shows evidence of such defect within one (1) year of purchase. Taction Pads are warranted for six months from the original date of purchase.

This warranty does not apply if the *VoicePal Max* or Taction Pads have been misused, abused, altered, or tampered with. At the end of the warranty period, Adaptivation shall be under no further obligation expressed or implied.

This warranty gives you specific rights, and you may also have other rights which vary from state to state.

For repair service, contact Adaptivation's technical dept. to receive a required RMA# (return material authorization number) prior to the return of the device.

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Please make sure your *VoicePal Max* is clean before returning it to Adaptivation for service.

> ***This is not a medical device. It should not be used where incorrect or faulty operation could reasonably be expected to result in injury or worse!***