

Models VP-P & VP-S

Instructions

Please Read Before Operating

Introduction

These instructions begin with a Quick Start Guide for those who want to use the VoicePal Plus right out of the box. Only the essentials are covered so that you can operate the VoicePal Plus in its most basic configuration. A Summary of Features and Detailed Operating Instructions follow for those who wish to configure their VoicePal Plus specific to their particular application. Illustrative examples are given. A troubleshooting guide is provided on Page 19.

The VoicePal Plus can record and play back up to 10 natural voice messages for a total recording time of 60, 90 or 120 seconds. Messages can be activated in any of three ways; 1) Directly by the keypad on top of the VoicePal Plus, 2) Directly by plugging in external switches including Adaptivation's exclusive Taction Pads" and 3) Through the scanning input, both visual and auditory (VoicePal Plus w/ scanning only).

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 button or Taction Pad to the corresponding jack on the top edge of the VoicePal Plus. "Switch" refers to the small slide switches (called DIP switches) numbered one (1) through six (6) located on the lower edge of the VoicePal Plus. "LED" is short for light emitting diode. It refers to the small red lights on the VoicePal Plus.

Quick Start Guide

Use one of the blank 10 message templates included with your VoicePal Plus to make an overlay with symbols appropriate for your application, then insert it into the pouch on the top of the VoicePal Plus. If you have a scanning version, punch holes in the overlay so that the LED's show through. Boardmaker, by Mayer-Johnson, Inc., can also be used to create overlays for the VoicePal Plus using standard picture symbol sets. Contact Adaptivation for more information.

Insert the four AA batteries included with your VoicePal Plus. Adaptivation recommends commercial (not industrial grade) alkaline or rechargeable alkaline batteries. Rechargeable NiCad batteries will work but battery life will be shorter. Make sure the batteries are installed correctly.

Note that Button 1, on the keypad, 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. See the picture on Page 8.

Recording messages

Press and hold the Record button firmly until the Record LED lights up (about two seconds), then release. The VoicePal Plus is now in record mode.

Get ready to talk, then:

Press and hold Button #1 then speak clearly about one to two feet away from the VoicePal Plus microphone (MIC). When you are done talking release Button #1. (NOTE: As long as you are touching the button or external switch, the VoicePal Plus will be recording whether you are talking or not.)

Repeat Step 2 to record other messages, if desired. (The messages can be recorded in any order. Also you can rerecord one message without having to rerecord any other messages.)

Press the Record button firmly. The Record LED will turn off. Release your finger. The VoicePal Plus is no longer in record mode. Do not turn the VoicePal Plus off while in Record mode.

Playing messages: direct selection

Make sure the Record LED is not lit. If it is, press the Record button so that the Record LED turns off. Make sure the volume is turned up.

Press a button on the keypad, an external button, or a Taction Pad plugged into the desired jack where a message was previously recorded. The message will continually repeat until the button is released.

Repeat Step 2 to play other messages.

Playing messages: scanning selection (scanning version only)

Connect an external switch or Taction Pad to the Scan jack.

Press and release the scan switch to activate scanning.

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.

Repeat steps 2 and 3 to select more messages.

Configure the VoicePal Plus to supply only two messages.

Draw or paste two 2" x 2" pictures or symbols on a piece of paper using the enclosed template as a guide. Punch holes in the overlay so the LED's show through if you have a scanning VoicePal Plus. Insert the overlay into the pouch on the top of the VoicePal Plus.

Set the DIP switches as shown below.

Recording and playing messages can be performed as described above. Buttons #1, #2, #6 & #7 act as one large button activating message 1. Likewise, message 2 is selected by pressing Buttons #4, #5, #9 or #10. When switching between 2, 3, 4 & 10 message modes you should rerecord the messages since the VoicePal Plus reconfigures its memory each time.

Additional

If you don't want messages to repeat when a button or external switch is held down, flip Switch 5 to the ON position.

Also, if Switch 5 is ON, scanning is initiated by touching the external scan switch. Messages are then selected by releasing your hand (Inverse scanning). If Switch 5 is OFF, touching and releasing the scan switch initiates scanning. Touching the scan switch again selects the message (Positive scanning).

Taction Pads

[Taction Pads](#)* (short for "tactile action") are clear, adhesive-backed, touch-sensitive patches that can turn nearly any object or surface into a touch-sensitive 'switch'. Simply touching the object where the Taction Pad is placed causes a message to play back. Taction Pads let the teacher or therapist make the choice for what the best target object should be.

Voice messages can be 'attached' to existing picture boards or object boards. For example, when a picture of a client's parents is touched, a message such as, "This is my mom and dad." could play. Or, when a glass is touched, the message, " I would like something to drink." plays to a care provider. Taction Pads are not switches but act like switches when connected to the VoicePal Plus or other Adaptation touch activated

products. They will not work in other manufacturers' devices. You should not cover Taction Pads up as they will not be able to sense your touch.

Taction Pads are sensitive to the amount of moisture in the skin. If the skin is dry, the VoicePal Plus will not sense that someone is touching the Taction Pads. Apply hand lotion to remedy this (Adaptivation uses Nutrogenar Hand Cream). Normally the skin on the fingers and the palm of the hand is the only skin moist enough to consistently activate the VoicePal Plus. If it is not possible to touch the Taction Pad with some part of the hand, yet you still want your client to be able to use Taction Pads, Adaptivation offers adhesive-backed, conductive, foam patches. When touched to a Taction Pad, it will activate the VoicePal Plus. The conductive foam can be stuck to, for example, a wrist band then placed around your clients wrist. Your student or client can touch the foam patch onto the Taction Pad, activating the VoicePal Plus. A mouth stick could activate a VoicePal Plus when a piece of conductive foam is stuck to its end, then touched to a Taction Pad

There are three different shapes of Taction Pads, suitable for different shaped objects; two rectangular (2" x 4") Taction Pads (shapes A and A2), one large rectangular (3" x 5") Taction Pad (shape D), and one skinny strip (24" x 0.1") Taction Pad (shape C). The rectangular shapes are useful for glasses, mugs, picture boards, and most flat surfaces. Shape C is suitable for utensils, markers, and odd-shaped objects. Shape A2 is made especially for small fingers.

If a Taction Pad is too large for the surface or object you want to adhere it to, you can trim it to size with scissors. The Taction Pads should be cut on the side farthest from the cord and parallel to the thin lines. You must, however, leave at least two lines on the Taction Pad for it to continue working. The illustration below shows how to trim the Taction Pads.

Taction Pads are resistant to saliva, urine, and other grime but should be cleaned with mild soap and water as necessary. If a Taction Pad has standing liquid on it, the VoicePal Plus will sense this and think someone is holding their hand on the Taction Pad. Wipe the Taction Pad dry to avoid this.

Once a Taction Pad is stuck to a clean surface, it may be difficult to peel off and stick somewhere else. Taction Pads are extra thick to resist tearing when peeling them off, but they also have extra sticky adhesive to reduce the risk of inadvertent removal. Residue will stick to the Taction Pad if it was originally adhered to clothing or paper products and, therefore, may not stick to another surface or object. Adaptivation does not recommend adhering Taction Pads directly to skin.

If you wish to repetitively peel up and reapply the Taction Pad, you may consider the following. Peel the backing off and stick the Taction Pad to a piece of clear material such as from a photo album or overhead sheets, then trim off the excess clear material around the edges. Finally, use small pieces of sticky-back Velcro on each corner to stick it to your surface or object of choice. The Taction Pad remains transparent yet can still be

stuck to surfaces or objects with the Velcro.

Summary of Features

VoicePal Plus - direct select version

Total of 60, 90 or 120 seconds of speech generation depending on the model.

User selectable 2, 3, 4 or 10 messages.

- 2 messages, 30, 45 or 60 seconds each
- 3 messages, 20, 30 or 40 seconds each
- 4 messages, 15, 23 or 30 seconds each
- 10 messages, 6, 9 or 12 seconds each

10 front panel buttons select prerecorded natural voice messages.

Message selection using external buttons supplied by user, or using Adaptivation's touch sensitive Taction Pads.

Front pouch allows insertion of customized symbol or picture overlays.

When 2, 3 or 4 message selection is used, front panel buttons are combined to form physically larger virtual buttons for easier message selection.

Variable delayed activation of messages (0, «, 1, 1« sec).

Internal microphone to record messages.

Internal amplified speaker with volume adjustment.

External speaker jack for use with headphones, speaker or audio amplifier.

Three programmable relays control external battery operated devices when messages are selected. Any relay can be programmed to activate when any message is selected. Each relay can be activated by any two messages at the same time.

Messages can set to activate a relay for the duration of the message, immediately following the message, or 2, 4 or 6 seconds after the end of the message ("Reinforcement delay").

With normal operation, four AA alkaline batteries last up to five months when using direct message selection.

Messages are retained even when batteries are removed and replaced years later.

Automatically goes to sleep after a message repeats 10 consecutive times to save batteries.

VoicePal Plus - scanning version

All features listed above apply to the VoicePal Plus - scanning version also.

Scanning allows selection of a message from a choice of 2, 3, 4 or 10 messages, using a single button.

Scanning is activated using an external button, or by using Adaptation's touch sensitive Taction Pads.

Three modes of initiating scanning, and selecting a message.

-Positive scanning selection : Touch scan button to begin scan. Touch again to select message.

-Inverse scanning selection : Touch and hold scan button to begin scan. Release button to select message.

-Step scanning selection : Scanning advances as fast as operator can tap scanning button.

Visual and auditory scanning.

Sequential Messaging

Programmable scan speed (three choices) for visual scanning.

A "pillow" speaker or headphone (included), or external auditory amplifier is activated during auditory scanning. Each message plays quietly from this speaker during scanning. When the desired message is selected, it is heard over the built-in amplified speaker.

Interauditory pause: (variable: 0, 1, 2 or 4 seconds) between each message during auditory scanning.

VoicePal Plus can be programmed so that after the message is 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 (selectable).

Four AA alkaline batteries last up to four months with scanning selection. Heavy use in auditory scan mode will result in a shorter battery life than this.

Detailed Operating Instructions

These instructions are divided into two main categories. Basic operation involves recording messages, direct selection playback of recorded messages, special features and miscellaneous information. Scanning operation involves those features implemented only on the VoicePal Plus scanning version.

Basic Operation

General: The VoicePal Plus provides a total of 60, 90 or 120 seconds of recording time depending on the version. This 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 Adaptation's Taction Pads. Messages can be directly selected using these external switches in addition to the front panel buttons. With scanned selection, a single external switch is used to start scanning, and to select the desired message. Scanning is available only on the VoicePal Plus scanning version. Both auditory scanning and visual scanning are supported. See the section on scanning operation later in this manual.

You can custom make your own symbolic or pictorial overlays and slip them in the VoicePal Plus' pouch. Templates are provided to help you punch out holes in your overlays so that the LED's are visible in the scanning version of the VoicePal Plus.

Batteries: The VoicePal Plus 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 5 months using direct message selection and up to four months when using scanning selection. Heavy use in auditory scan mode will result in shorter battery life.

DIP Switches: There are six DIP switches on the VoicePal Plus, SW1 through SW6. These switches are used to configure various features on the VoicePal Plus. The meanings of the various switch settings are summarized on the last page of this manual. The VoicePal Plus can be in one of two states: Setup state, and Active state. The

VoicePal Plus is placed in the Active state by placing SW1 in the ON position. **To record messages or to play them back, the VoicePal Plus must be in the Active state.** The VoicePal Plus is placed in the Setup state by placing SW1 in the OFF position. The Setup state is used to program various options that affect the way the VoicePal Plus operates. SW2 and SW6 have no function in the Active state for direct message selection of the VoicePal Plus. SW3 and SW4 are used to configure the keyboard for 2, 3, 4, and 10 message modes. SW5 turns message repeat mode on and off as well as switches between positive scanning selection and inverse scanning selection.

Message Configuration: The VoicePal Plus can be configured to supply either two, three, four or ten messages, depending on the operator's cognitive and physical abilities. 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 since the VoicePal Plus reassigns the same 60, 90 or 120 second memory block each time. For beginning operators, it may be necessary to configure the VoicePal Plus to supply only two messages. As the operator becomes proficient with two messages, the VoicePal Plus can be configured to supply three messages, then four, then ten.

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, more with some models. Message one can be longer than 30 seconds, but it will record over message two, losing the previous message two. If message two is then selected, the VoicePal Plus will play message one starting at the 30-second mark. If a new message #2 is then recorded, it will record over message one starting at the 30-second mark. If message one is then selected, it will play the first 30 seconds of message one, then continue by playing the new message two. If this is undesirable, rerecord message one, being careful not to go past 30 seconds. This concept of message overlap also applies when the VoicePal Plus is configured for three, four or ten messages. The space in-between the two halves is intentional dead space providing a natural barrier between button area 1 and area 2.

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. You can make an overlay with three symbols or pictures corresponding to each of the three messages. Each message can be up to 20 seconds, more with some models. Message one can actually be up to 60 seconds, and message two can be up to 40 seconds, but messages will overlap as explained in the paragraph above. You must limit each message to 20 seconds or less if you want to use all three messages (30 or 40 seconds in some models). The space between 1, 2 and 3 is intentional dead space.

Four Messages: SW1=ON (Active state), SW3=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. You can make an overlay with four symbols or pictures corresponding to each of the four messages. Each message can be up to 15 seconds, more with some models. Message one

can actually be up to 60 seconds, message two up to 45 seconds and message three up to 30 seconds, but messages will overlap as explained above. You must limit each message to 15 seconds or less if you want to use all four messages (23 or 30 seconds in some models). The space between the left and right halves is intentional dead space.

Ten Messages: SW1=ON (Active state), SW3=OFF, SW4=OFF. Pressing button #1 selects message one. Pressing button #2 selects message two, etc. You can make an overlay with ten symbols or pictures corresponding to each of the ten messages. Each message can be up to six seconds, more with some models. Message one can actually be up to 60 seconds, message two up to 54 seconds, message three up to 48 seconds, etc., but messages will overlap as explained in the paragraph describing Two-Message operation. You may make messages in any combination of 6 seconds long (9 or 12 seconds for some models), however, if one or more messages are longer than 6 seconds you will not be able to record all ten messages. For example, if you wish the first message to be up to 12 seconds long, record the message as described in the "Recording Messages" section. Since message one now occupies memory reserved for message one and message two, you will skip programming any messages using button #2 or jack #2. In play mode, you activate message one by pressing button #1. Since part of message one uses memory assigned to message two, you won't be able to use button #2 or jack #2. If you press button #2, the tail end of message one will play. Recording messages longer than 6 seconds in Ten Message Mode works best when using external buttons or Taction Pads since you can completely restrict access to, in this case message two, by simply not plugging the button into jack #2.

Recording Messages: Recording messages is done while in the Active state (SW1=ON). To place the VoicePal Plus in record mode, firmly press and hold the RECORD button for about two seconds until the Record light turns on, then release. To record a message, press and hold the desired front panel button or external button, and begin speaking. Release the button when the message is complete. For example, when the VoicePal Plus is configured for two message mode, pressing button #1, #2, #6 or #7 will record message one. After all messages have been recorded, press the record button again to return the VoicePal Plus to 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, one of two things can happen depending upon the position of SW5. If SW5=ON, the VoicePal Plus will play messages only once, then do nothing until the button is released. If SW5=OFF, the VoicePal Plus will continue to repeat the message up to 10 times until the button is released. Messages will repeat no more than ten times. After 10 repeats, the unit goes to sleep to preserve battery life. Repeat mode is selected while in the Active state.

Delayed Activation: Typically when a keypad or external button is pressed, the corresponding message plays back immediately. A ½, 1, or 1½ second delay can be added. This means that the keypad or external button must be held down for the delay period before a message plays. This is particularly helpful for two reasons. First, in the

case of Taction Pads stuck to objects, it gives the operator time to identify the object being touched before the message plays. 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, at which time the VoicePal Plus activates. Delayed activation is also helpful if a person drags his or her 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 is adjusted while in the Setup state (SW1=OFF).

The following example shows how to configure the VoicePal Plus for a « second delay. The same procedure would be used for configuring the VoicePal Plus for 1 or 1½ second delay.

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

Step 1: Note the current settings of SW2 through SW6 for later use.

Step 2: Set SW1 = OFF

Places VoicePal Plus in the Setup state

Step 3: Set SW2 through SW6= ON ON ON OFF ON

Press Record button once. Sets delayed activation to 1/2 second.

Step 4: Set SW1 = ON

Returns VoicePal Plus to Active state.

Step 5: Return SW2 through SW6 to their previous settings.

Press and hold a button for at least ½ second to activate a message.

Relay Operation

General: The VoicePal Plus has three internal relays (A, B and C), that act as switches that can be used to turn external battery operated devices on and off. The relays can be set to activate when the desired message is selected. The relays can be activated for the duration of the message or for a short momentary pulse immediately after the message or up to 6 seconds following the end of the message. For example, one could touch a picture of a stereo, initiating a message such as, "Let's listen to music now." Immediately after the message plays, the VoicePal Plus could activate an environmental control unit turning

on the stereo. The relay outputs are not capable latching or timing. Use a switch-latch-timer box like Adaptation's LinkSwitch to add these capabilities.

Each relay can be activated by up to two messages, and any given message can activate all three relays simultaneously, if desired. The VoicePal Plus remembers the last two messages attached to a given relay. To attach relays to messages, the VoicePal Plus must be placed in the Setup state.

Reinforcement Delay: The VoicePal Plus also features reinforcement delay. Relays can be activated 2, 4 or 6 seconds after the message ends. Reinforcement delay is important when the teacher or therapist wishes to teach a more natural cause-effect relationship between asking for something and receiving it. Normally one does not receive an instantaneous response when asking for something. Rather, there is typically a short response time before acting on the person's request.

Clearing Relays: Relays can be deactivated so that previous programming no longer has an effect on them. There are three ways to clear the relays.

1) Clear any relays 'attached' to a given message:

- a) While in the Setup state, set SW2 through SW6 = ON OFF OFF OFF OFF.
- b) Press the button corresponding to the desired message. This message will no longer activate any relays until you re-configure it.

2) Disconnect a selected relay from all messages:

- a) While in the Setup state, set SW1 through SW6 to any one of the four settings corresponding to the desired relay.
- b) Press the RECORD button. The relay will be completely cleared and not activated by any messages.

3) Clearing all relays:

Remove the batteries for at least 15 seconds and press any button a few times. This will clear all relays for all messages.

Programming Relays: To program relays to activate when a message is pressed, the VoicePal Plus must be in the Setup state (SW1=OFF). The table on the last page of this manual and on the back of the VoicePal Plus shows the required switch settings to program each of the relays. The next three examples show a number of ways the VoicePal Plus can be configured with relay activation and reinforcement delay.

Example 2 : In this example we will configure two relays to be operated by two separate messages. Message 1 will activate an environmental control unit (e.g. Adaptation's FreeSwitch) which will activate a clock radio immediately after the message. Message 2 will activate a battery operated toy for the duration of the message.

Pretend we have a battery operated environmental control unit (ECU) plugged into relay A with a clock radio plugged into an appropriate receiver module. Also pretend we have a battery operated toy plugged into relay B.

Step 1 : Note the current settings of SW1 through SW6 for later use.

Step 2 : Set SW1 = OFF

Places VoicePal Plus in the Setup state

Step 3 : Set SW2 through SW6= ON OFF ON ON ON

Sets up relay A for 0 second delay.

Step 4 : Press button #1 twice.

'Attaches' relay A to message 1.

Step 5 : Set SW2 through SW6= OFF ON ON ON ON

Sets up relay B for duration of message.

Step 6 : Press button #2 twice.

'Attaches' relay B to message 2.

Step 7 : Set SW1 = ON

Returns VoicePal Plus to the Active state

Step 8 : Return SW2 through SW6 to their previous settings.

*** Since the VoicePal Plus remembers the last two messages connected to a relay, pressing the button twice will disconnect any previous messages from activating the selected relay.**

In this example, when message 1 is activated, first it will play in its entirety, then relay A will activate the ECU turning the radio on. When message 2 is activated, the toy will turn on for as long as the message is playing

When playing back messages, pressing button #2 does not necessarily activate relay B. Activating message 2 will activate relay B.

A distinction is made between message number and button number. When you were in the Setup state, you pressed **button #1** and **button #2** to tell the VoicePal Plus to attach relays A and B to **message one** and **message two**, respectively. If the VoicePal Plus is configured to supply three messages, then in Active mode pressing buttons #3 or #8 will select message two and subsequently activate relay B. The same behavior applies to all other messages and buttons.

If your VoicePal Plus is configured for two, three, or four message mode, then individual buttons combine to form larger buttons. Therefore, relays 'attached' to messages 5 through 10 will never activate since there are less than five messages available in these three keyboard modes. However, in 10 message mode, buttons 1 through 10 do in fact correspond to messages 1 through 10. ***Just remember, messages activate relays not buttons or external switches.***

Reinforcement Delay:

Example 3 : In this example message 1 will be set 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 . Output A will be used.

Pretend we have a battery operated environmental control unit (ECU) plugged into output A (relay A) with a clock radio plugged into an appropriate receiver module.

Step 1 : Note the current settings of SW1 through SW6 for later use.

Step 2 : Set SW1 = OFF

Places VoicePal Plus in the Setup state

Step 3 : Set SW2 through SW6= ON OFF ON ON ON

Sets up relay A for 0 second delay.

Step 4 : Press button #1 once.

'Attaches' relay A to message 1.

Step 5 : Set SW2 through SW6= ON OFF OFF ON ON

Sets up relay A for a 4 sec delay.

Step 6 : Press button #2 once.

'Attaches' relay A to message 2.

Step 7 : Set SW1 = ON

Returns VoicePal Plus to the Active state.

Step 8 : Return SW2 through SW6 to their previous settings.

In this example, when message 1 is activated it will play in its entirety, then relay A will activate the ECU turning the radio on. When message 2 is activated, first it will play in its entirety, then four seconds after the message is over, relay A will activate the ECU turning the radio on. If you also performed the previous example, keep in mind relay B is still 'attached' to message 2. Relay B is set to activate for the duration of message 2. In Example 5 we will learn how to disconnect relays from messages and messages from relays.

NOTE: The VoicePal Plus keypad and any external buttons or Taction Pads are deactivated during the four second reinforcement delay. No other messages can be played during the delay period.

Example In this example message 4 will be used to turn on an adapted toy immediately after the message ends, then off 6 seconds later. Output B will be used for this and first connected to any commercially available latch box (e.g.. Adaptation's LinkSwitch). The latch box would then be connected to the adapted toy.

Step 1:Pretend we have output B (relay B) connected to the input of a latch box which in turn is connected to our adapted toy.

Step 2 : Note the current settings of SW1 through SW6 for later use.

Step 3 :Set SW1 = OFF

Places VoicePal Plus in the Setup state

Step 4 :Set SW2 through SW6 = ON OFF ON OFF ON

Sets up relay B for 0 second delay.

Step 5 :Press button #4 once.

'Attaches' relay B to message 4.

Step 6 :Set SW2 through SW6 = ON OFF OFF OFF ON

Sets up relay B for a 6 sec delay.

Step 7 :Press button #4 once.

'Attaches' relay B to message 4.

Step 8 :Set SW1 = ON

Returns VoicePal Plus to the Active state

Step 9 :Return SW2 through SW6 to their previous settings.

When message 4 is selected, relay B will pulse on at the end of the message. This turns the latch box on which turns the toy on. Six seconds later relay B will pulse again turning the latch box off and consequently the adapted toy. Remember, the VoicePal Plus keypad and any external buttons are disabled for the six second delay period.

In this example we simulated a six second timer. We just as well could have plugged in a timer box (or switched the LinkSwitch to timer mode) and set it to 6 seconds then activated it once following the end of the message.

Clearing Relays:

Example: In this example we will clear any relays attached to message 2 and 'disconnect' or clear relay B so that no messages will activate it. This will undo the relay programming just performed in the preceding two examples.

Step 1 :Note the current settings of SW1 through SW6 for later use.

Step 2 :Set SW1 = OFF

Places VoicePal Plus in the Setup state

Step 3 :Set SW2 through SW6 = ON OFF OFF OFF OFF

Set up for clearing relays from messages.

Step 4 :Press button #2

All relays cleared from message 2.

Step 5 :Set SW2 through SW6 = ON OFF ON ON ON

Set up for clearing relay B.

Step 6 :Press Record button

Relay B disconnected from all messages

Step 7 :Set SW1 = ON

Returns VoicePal Plus to the Active state

Step 8 :Return SW2 through SW6 to their previous settings.

Message 2 will play but no relays will activate. Relay B was connected to a latch box and an adapted toy in the previous examples. We cleared relay B from all messages so these devices won't activate no matter what buttons we press. If you properly performed the previous three examples in order, only relay A is still attached to message 1.

Scanning Operation

Scanning is available only for the VoicePal Plus-scanning version

General: Scanning allows the user to select any message with the touch of a single external button or Taction Pad. Two-message, three-message, four-message or ten-message scanning can be selected. See the section above on Basic Operation, to configure the VoicePal Plus for two, three, four or ten message mode. There are two main kinds of scanning: visual and auditory. Related to scanning is sequential messaging which is discussed later. There are three ways to select messages when using scanning: positive scanning selection, inverse scanning selection, and step scanning selection.

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 button is pressed and held. When the scan button is released for at least $\frac{3}{4}$ of a second, a message is selected.

Step Scanning Selection: SW5=ON. Scanning begins when the scan button is pressed. Repetitively tapping the scan button causes the VoicePal Plus to cycle to the next message. To select a message, release the scan button for at least $\frac{3}{4}$ of a second. Step scanning selection works best with visual scanning.

Visual Scanning

Visual Scanning: SW6=OFF, During visual scanning, there is an LED associated with each keypad button. These LED's light up, indicating that the corresponding message can be selected. In two-message mode, there are four LED's lit at one time. LED's #1, #2, #6 and #7 are lit when message one can be selected, and LED's #4, #5, #9 and #10 are lit when message two can be selected.

Scan Speed: One of three visual scanning speeds can be selected. LED's will be lit for 1, 2 or 4 seconds per message (i.e.. Fast, Medium, Slow). Scan speed is set while in Setup state (SW1=OFF).

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

Step 1 : Memorize the current settings of SW1 through SW6 for later use.

Step 2 : Set SW1 = OFF

Places VoicePal Plus in the Setup state

Step 3: Set SW2 through SW6 = ON ON OFF ON OFF

Step 4: Press Record button.

Sets scan rate to 2 seconds per message.

Step 5 : SW1 = ON

Returns VoicePal Plus to the Active state

Step 6 : Return SW2 through SW6 to their previous settings.

The LED's for each message will be lit for two seconds when scanning is activated. Changing the scan rate to four seconds per message or back to one second per message is similar. NOTE: Visual scan rate and interauditory pause share the same codes. If You change the visual scan rate to 2 seconds (medium speed), then interauditory pause also changes to 2 seconds.

Auditory Scanning

Standard Auditory Scanning: SW6=ON. With standard auditory scanning, each message plays one-by-one, quietly, privately through a headphone or pillow speaker (included with your VoicePal Plus) the first time the external scanning button is pressed. When the operator hears the desired message, he or she can then select it by releasing or

touching (depending on the selection mode) the external scanning button. This causes the message to play loudly over the built-in amplified speaker. The LED's illuminate during scanning as each message plays.

Programming for Scanning Options: There are a number of special scanning options that can be selected by placing the VoicePal Plus in the Setup state, SW1=OFF. These special features are described in the following paragraphs.

Interauditory Pause: This feature applies only to auditory scanning. The VoicePal Plus can be programmed with a pause inserted between each message. This gives the operator more time to select a given message. As the user becomes increasingly proficient with selecting messages, the interauditory pause can be decreased. The interauditory pause can be zero, one, two or four seconds.

Example :Set interauditory pause to four seconds.

Step 1 :Memorize the current settings of SW1 through SW6 for later use.

Step 2 : Set SW1 = OFF

Places VoicePal Plus in the Setup state

Step 3: Set SW2 through SW6 = ON ON OFF OFF OFF

Step 4: Press Record button.

Sets interauditory pause to 4 seconds

Step 5 : SW1 = ON

Returns VoicePal Plus to the Active state

Step 6 : Return SW2 through SW6 to their previous settings.

Activate auditory scan. There will now be a four second pause between each message during auditory scanning. **NOTE: interauditory pause and visual scan rate share the same codes. If you change the interauditory pause to 4 seconds, then visual scan rate also changes to 4 seconds per message (slow speed).**

Scanning Cycle Mode: After a message has played when selected by scanning, the VoicePal Plus will do one of three things, stop scanning, restart scanning with message one, or continue scanning with the next message. This feature works slightly differently

for positive scanning selection than for inverse scanning selection. For positive scanning selection, after the selected message has played, scanning will restart either with message 1 or continue with the next message. For inverse scanning selection, after the selected message has played, one of two things will happen. If the operator is not pressing the scan switch, the VoicePal Plus will stop scanning. If the operator replaces his or her hand back on the scan switch before the end of message, the VoicePal Plus will restart the scan either with message one or continue with the next message, depending on the scanning cycle mode chosen. When the external scan switch is released the current message will play loudly.

Example ;Set Scanning Cycle Mode so that scanning will continue with the next message.

Step 1: Note the current settings of SW1 through SW6 for later use.

Step 2: Set SW1 = OFF

Places VoicePal Plus in the Setup state

Step 3: Set SW2 through SW6 = ON OFF OFF ON OFF

Step 4: Press Record button.

Set Scanning Cycle Mode to "Continue scanning with next message".

Step 5: Set SW1 = ON

Returns VoicePal Max to the Active state.

Step 6: Return SW1 through SW6 to their previous settings.

Press and release scan button to begin scanning. Press the scan button again to select a message. After that message is done playing, scanning will continue with the next message. You can stop the scanning by doing nothing and letting the unit go to sleep (see Inactivity Shutdown) or by pressing a keypad button or external button plugged into jacks 1 through 10.

Inactivity Shutdown: Once scanning begins, the VoicePal Plus will wait for the operator to select a message. If the operator does not select a message, scanning will not continue indefinitely. It will stop after repeating the scan either four or eight times depending on the setting. To reactivate scanning the operator must depress the scan button again.

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

Step 1: Note the current settings of SW1 through SW6 for later use.

Step 2 : Set SW1 = OFF

Places VoicePal Plus in the Setup state

Step 3 : Set SW2 through SW6 = OFF OFF OFF OFF OFF

Step 4: Press Record button.

Sets Inactivity Cycling to 8 cycles.

Step 5 : Set SW1 = ON

Returns VoicePal Plus to the Active state

Step 6 : Return SW1 through SW6 to their previous settings.

Activate scanning but do not select a message. The VoicePal Plus will cycle through all available messages 8 times then stop without playing a message. We recommend the four cycle setting be used when possible to optimize battery life. This is particularly applicable when using auditory scanning and/or 10 message mode.

Sequential Messaging

Sequential Messaging allows each message to be played one after another each time the scan button is pressed. It is very useful in the school setting where the special needs student: administers a math or spelling test to the rest of the class, participates in book or theatrical reading or participates in other oral turn-taking activities. Sequential Messaging is set while in the setup mode (SW1=OFF).

Example 8:Turn Sequential Messaging on.

Step 1:Note the current settings of SW1 through SW6 for later use.

Step 2 :Set SW1 = OFF

Places VoicePal Plus in the Setup state

Step 3 :Set SW2 through SW6 = ON ON ON ON OFF

Step 4: Press Record button

Turns Sequential Messaging on.

Step 5 : Set SW1 = ON

Returns VoicePal Plus to the Active state

Step 6 : Return SW1 through SW6 to their previous settings.

Now press the scanning button 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. Sequential messaging starts with the message following the last message selected using direct selection. For Example, in 10 message mode, if you press button #3, message three plays. Now, if you press the scan button, first message four plays. Press it again and message five plays, then six and so on. If you press button #10, then the first message to play in sequential messaging will be message one.

Example: If your student is administering a spelling test to the other students in a class and they want the last question repeated (say message four), the teacher can press button #4 directly to replay question number four. The next time the special needs student presses the scan button while in sequential messaging, question number five will play.

If the unit is in, say four message mode, sequential messaging starts out with message one, then goes to two, then three, then four and back to one. **NOTE: Sequential Messaging and interauditory pause 'off' share the same codes. If You turn sequential messaging on, then interauditory pause will turn off or be 0 seconds.**

Factory Settings

General:

You may program as many of these features at a time as you wish. You don't have to take the VoicePal Plus out of Setup state for each feature you wish to configure. While remaining in Setup state, simply set SW2 through SW6 to their proper setting for the features you wish to configure and press the appropriate buttons.

When the batteries are removed, all options programmed while in the Setup state will revert to factory defaults. However, messages will not be lost.

The factory defaults are as follows.

- Visual scan rate: 1 second per message.

- Standard Auditory Scanning (VoicePal Plus scanning version only)
- Interauditory pause : 1 second
- Scan cycle mode : Stop scanning after message has played.
- All relays cleared for all messages
- Inactivity Cycling : Repeat scan four times.
- All recorded messages will remain intact while the batteries are removed.

Trouble Shooting

·VoicePal Plus records but does not play back.

- Is volume turned up?
- Batteries may be too low to play back. Try new ones.
- If external speaker is used, does it work?
- Is Delayed Activation being used? If so, press button for required length of time, or set Delayed Activation to 0 seconds..
- Are you in auditory scan mode without a scanning speaker plugged in?
- Are you using reinforcement delay? If you are using reinforcement delay, the VoicePal Plus will disable the keypad and any external buttons until the delay is up and the corresponding relay(s) activate(s).
- {**NOTE:** Even though you may not be using relay activation or reinforcement delay, your VoicePal Plus may inadvertently be configured for those features. See , "Clearing Relays", to turn relay activation and reinforcement delay off.}
- Is the VoicePal Plus configured for 2, 3, or 4 message mode? Keep in mind that some keypad buttons and corresponding external buttons are intentional 'dead areas' and won't activate messages when configured in one of these modes (see "Message Configuration").

· VoicePal Plus will not go into RECORD mode.

- Firmly press the record button with your fingernail in the center for two to three seconds until the flashing Record light comes on solid, then release.
- Make sure the batteries are fresh. NOTE: Often industrial grade alkaline batteries are unreliable even when brand new.
- Is a message currently playing back? The VoicePal Plus will not go into RECORD

mode until the message currently playing ends. A message may still be playing internally

even if the volume is turned down. If you don't want to wait for the message to reach

the end, pull one of the batteries out then reinstall it.

- Is the On-Off switch turned on? It should be on to enter RECORD mode.

· **You can get into record mode but messages won't record.**

- Are you in 2, 3 or 4 message mode? 2, 3, and 4 message mode have intentional dead space and will not record in those areas.

- In 2, 3 and 4 message mode individual buttons combine to form larger buttons but there is still a small dead space separating each of the individual buttons.

Press the

buttons slightly off-center to avoid the dead spots.

- Release the record button after the record LED comes on. Do not depress the record button and the keypad buttons at the same time.

· **Message or sounds play for only a short pulse.**

- You may have inadvertently touched the keypad or external button for a brief moment while in RECORD mode. When you've finished recording your message, remove your hand from the keypad or external button quickly. Do not slide

or drag it off.

- Place VoicePal Plus in RECORD mode (see "Recording Messages").

The VoicePal Plus only records while you are touching the keypad or external buttons. Hold the keypad or button down until you are done talking, then release it and put the unit back into play mode. Now hit the button corresponding to the message

you just recorded.

· **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. Try new ones.

- Are you near a source of electrical noise? Such as:

Power lines, automobile engine, electrical motor, certain electronic equipment, air conditioners, etc.

If so, increase the distance of the VoicePal Plus from these sources of noise when recording your messages.

· **While using relay activation, you hear the relay clicking but the battery operated device you are trying to activate does not turn on.**

· Is your battery operated device turned on?

· Are the batteries fresh in your external battery operated device?

· Does your external battery operated device work if you plug a conventional switch directly into it?

· Did you plug the battery operated device into the correct relay jack?

• **A relay is activating twice even though the message was pressed once?**

- Any given relay will be activated by up to two messages based on the last two buttons pressed when configuring that relay. For example, message 1 and 2 could both activate relay A at the end of each message, or message 1 could activate relay A after a 2 second delay and message 2 could activate relay A after a 4 second delay.

Likewise, message 1 could activate the relay after a 2 second delay and again after the 4 second delay.

-If you want a message to activate the relay only once, go back into the Setup state, set the

DIP switches to the desired setting, then press the button corresponding to the desired

message twice. Now in Active mode, that message will activate the relay only once.

See pages on programming relays.

• **In scan mode, messages seem to jump rapidly from one to the next when the scan button is pressed.**

- Some adaptive switches have an idiosyncrasy called switch bounce. It has the effect of causing multiple switch closures when you actually depressed the switch only

once. Sometimes this happens with Taction Pads too. The VoicePal Plus tries to compensate for this with software input debouncing. Old or well used adaptive switches

that exhibit switch bounce should be replaced. If the problem occurs when using Taction

Pads, make sure the operators hands are sufficiently moist. Use lotion as necessary.

• **Record LED stays on when unit is turned off.**

- If the VoicePal Plus is turned off while still in record mode, the RECORD LED will not turn off. It will simply dim. Take the VoicePal Plus out of record mode by

pressing and holding record button until the flashing RECORD LED goes out.

Then,

turn the VoicePal Plus off.

- Turning the VoicePal Plus off while in record mode will cause the batteries to run down prematurely.

· To scan among actual objects instead of on-board symbols or pictures, add Adaptivation's [External Scanning Overlay](#), sold separately.

VoicePal Plus Warranty

1 Year Limited Warranty

Your Adaptivation VoicePal Plus 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 Plus 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, please call 1-800-723-2783 to speak with a technician and receive the required RMA # (Return Merchandise Authorization). If a return is required they will instruct you to return your device postage prepaid with a note describing the problem, providing a contact name and phone number, and address you would like it returned to after it has been repaired.

Adaptivation, Inc.
2225 W. 50th St., Suite 100
Sioux Falls, SD 57105

Phone: 1(800)-723-2783, (605) 335-4445

Fax: (605) 335-4446

e-mail: info@adaptivation.com

Please clean your VoicePal Plus 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!