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OPERATION MANUAL

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Patent Notice: Some characteristics of the scanning techniques used in *Persona*

are protected by U.S. Patent Number 4,558,315 issued to ZYGO

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NOTICE: ZYGO Industries, Inc. reserves the right to make improvements or

changes in the product described in this manual at any time without

notice.

Table of Contents		
INTRODUCTION		
Included Items	7	
REGISTRATION	7	
Icon Reference	8	
SECTION 1 GETTING STARTED		
Unpacking	9	
NETBOOK PRO		
Sound Output Volume Controls	9	
SECTION 2 Using the Polyana		
POLYANA'S MEMORY RESOURCES		
Memory Description		
Memory Management	12	
Memory Clear		
Battery Indicators	14	
Battery and Memory Indicators (Preferences)		
SECTION 3 USING PERSONA IN KEYBOARD MODE		
Keyboard Mode Screen Layout	17	
Keyboard Commands	18	
Edit	18	
Selection		
Movement	18	
Miscellaneous Commands	19	
MENUS	21	
FILE	21	
Exit (the Persona program)	22	
Edit Menu	23	
Speak Button	24	
Instant Speak	24	
VOLUME (Loudness)	25	
Sticky Keys Indicator		
Selection Mode	27	
Using Phrases	29	
Creating Phrases		
Changing Phrases		
Deleting Phrases		
Copying Phrases		

Using Abbreviation-Expansions (AbEx)	33
Creating AbEx	
Changing AbEx	36
DELETING ABEX	36
USING SPEECH EXCEPTIONS (SPEX)	37
Creating SpEx	37
Changing SpEx	39
Deleting SpEx	39
Printing	41
SECTION 3 Using Persona in Scan Mode	
SCAN MODE	
SCREEN LAYOUT	
Connecting Switches	
Standard Keyboards	
Optimized (Frequency of Use)	
Alphabetical (A $EIOU$)	
QWERTY	
Key Descriptions	
OFF KEY	
Volume (Loudness)	
Selection Modes	
USER SCAN ADJUST MODE	
OPENING AND SAVING DOCUMENTS	
Phrases	
Abbreviation-Expansions (AbEx)	
Speech Exceptions (SpEx)	
List Boxes	
Happy Birthday Song	
Printing	
Keyboard Commands	73
SECTION 5 Preferences	
Restore Factory Defaults	
Input Options	
Input Options—Scan Mode	76
Customizing On-screen Keyboards	77
Key Captions	78
Scan Color	80
Scanning Methods	80
Com According Com as	0.1

Scan Timing	81
Start Delay	81
Scan Rate	81
Acceptance Delay	81
Advanced Scan Options	82
Long Hold	82
Alarm	82
Adjust Scan Rate	82
DISABLE	82
HOLD TIME	82
Аито Off	84
Auditory Prompt	84
Enabled	85
Earphone	85
LOUDNESS	85
Speech Options	87
Voice Settings	87
Auto-Speak	88
General Options	89
Auto Functions	89
Word Prediction and Word Completion	90
Word Prediction / Word Completion Features	
Utility	92
Backup/Restore	92
Print Setup	93
Appearance Options	95
SECTION 6 SOFTWARE UPGRADES	
Upgrading Persona from a Compact Flash (CF) Card	97
) 1
SECTION 7 Solving Problems	
RESTORING PERSONA AFTER A DEAD BATTERY OR HARD RESET	
Trouble Shooting	
Error Messages	
RESETTING THE POLYANA	101
SECTION 8 MAINTENANCE	
REPLACING THE POLYANA'S RACKUP RATTERY	103



IMPORTANT: READ THIS FIRST

The *Polyana*⁴ with *Persona* is shipped from ZYGO Industries, Inc. complete with the following items:

• *Polyana*⁴ Psion Teklogix Netbook Pro Computer modified by ZYGO

• Includes: > *Persona* Software, installed

> AC Adapter/Battery Charger

> PC Connect Cable > NETBOOK PRO CD

> NETBOOK PRO Quick Start Guide

• 262-0540-00 CM-40 Lolly Switch with Cable

• 334-5008-00 Key Label Set

• 333-5091-11 Keyboard Glove with Key Labels

• 016-0026-00 Carrying Case

• 016-0021-00 Accessory Pouch

• 061-0010-04 ZYGO's Warranty Registration Card

• 070-0064-25 *Polyana*⁴ with *Persona* Operation Manual

Optional accessories and replacement parts are available from ZYGO Industries, Inc.

To assure full warranty of the ZYGO *Polyana* with *Persona*, please review the ZYGO WARRANTY REGISTRATION CARD procedures and return the mail-back section to ZYGO Industries, Inc. TODAY!

ICON REFERENCE

The following icons may appear on the Polyana's labels.

<u>lcon</u>	<u>Meaning</u>
(€	Indicates that the units bearing this mark have met the European Community's Declaration of Conformity.
*	Indicates that the units bearing this mark meet the Medical Device Directives for electrical equipment.
\triangle	Indicates a CAUTION to a General Hazard condition.
	Indicates that the port is NOT to be used for telephones.
[0]0]	Notation for a data port such as an RS-232C Serial Communications connector.
9 V === (DC) 3A MAX	Notation for Direct Current (DC).
C	Indicates an item that can, and should be recycled.
	Power Switch to ON position.
\circ	Power Switch to OFF position.

The following icons appear in this manual.

<u>lcon</u>	<u>Meaning</u>
	Indicates a notation about a CAUTIOUS situation.
and)	Indicates IMPORTANT information that should be read and understood.

Unpacking

NETBOOK PRO

The *Polyana* is a Psion Teklogix Inc. NETBOOK PRO consumer computer that has been modified to function as an augmentative communication device. The modification consists of the addition of an amplifier package underneath the NETBOOK PRO. In most respects, the characteristics of the NETBOOK PRO are intact and the instruction manuals and flyers that are provided with the unit should be followed.

Follow the instructions in the flyer titled, "NETBOOK PRO Quick Setup, Setting Up The NETBOOK."

One exception to the setup instructions relates to the battery installation. The *Polyana* is shipped from ZYGO Industries, Inc. with the battery installed and fully charged.

For assistance, consult ZYGO's Customer Service Department or your local dealer or agent.

ZYGO CUSTOMER SERVICE

Toll Free (U.S.A./Canada): (800) 234-6006

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Sound Output Volume Control

Polyana's amplifier module has a slider volume control in the front. The slider volume control is the standard mechanical volume adjustment. Slide the control to the right to increase loudness, or slide it to the left for decreased loudness.



Polyana's Memory Resources

Polyana is the name given to the physical package that includes the Netbook Pro and the amplifier module underneath.

Memory Description

Polyana is a Windows CE device. Windows CE devices have limited amounts of internal memory available for storing and running programs.

There are 2 types of memory used in the *Polyana*:

RAM (Dynamic Memory) The *Polyana* comes with 128 MB of battery-backed memory, which means that if the battery is allowed to drain completely, the contents of this memory will be lost.

Flash (Flash Disk) There is 10.5 MB of Flash memory in the *Polyana*. Unlike the RAM, this memory does not lose it's contents when the battery is depleted. You can add more Flash memory by purchasing Compact Flash (CF) cards.

Please know that the *Persona* program files are stored on the Flash memory in the folder "\Flash Disk\Persona". It is advised that this folder and it's contents should not be altered—otherwise the program may become inoperable and the device would have to be returned to ZYGO Industries, Inc. for service.

Memory Management

Polyana ships with 128 MB of internal System RAM. This memory is used for program storage space and is used by programs that are running. 40 MB should be reserved for use with **Persona** in order for it to function properly.



Adjust the slider so the allocated Program Memory is at least 40,000 KB (40 MB).

If you intend to install other software applications onto the *Polyana*, try to install them externally onto a CF card instead of in the typical "Program Files" location. The "Program Files" is part of the dynamic RAM that the operating system and *Persona* use.

If this memory is allowed to become full, there will be no more room to add new applications, and the loss of memory space could adversely impact the performance of *Persona*. If the memory has become full, files may need to be removed.

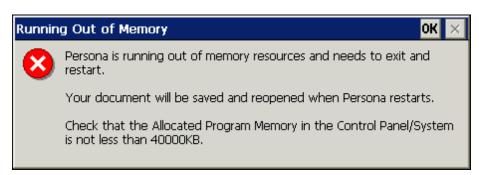
- Clear the Recycle Bin.
- Use the Settings/Control Panel/Remove Programs to remove unwanted programs.
- If you are knowledgeable, use the Windows Explorer to look for programs and files that can be removed. If you are unsure of the process, call ZYGO's Customer Service or your local dealer for help.

Please ensure that there are no other programs running prior to starting *Persona* or while *Persona* is running. If other programs are running, *Persona*'s performance may be degraded.

To see if other programs are running, press Alt+Tab to bring up the Task Manager. Press End Task to close everything except for *Persona*.

Memory Clear

If *Persona* is left running for a long period of time (weeks or months) without being exited from, there is a chance of it running out of memory and not performing properly. In such instances, *Persona* will force an exit and restart of the program. By doing so, the memory resources are restored.

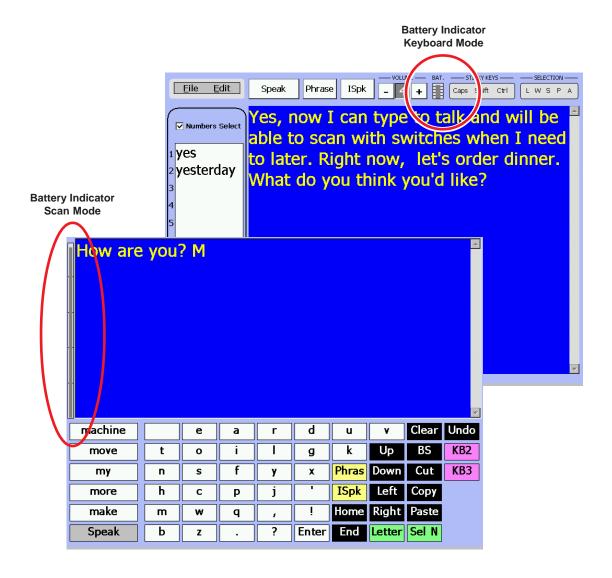


If **Persona** needs to do a memory clear, a message box, like to one shown above, will be displayed. Tap the OK button to continue. The current document will automatically be backed up and restored when *Persona* restarts. As *Persona* exits, you will be given an opportunity to save learned prediction words.

Refer to Memory Management in this Section for information about increasing the available memory.

Battery Indicator (Keyboard and Scan modes)

The Battery Indicator shows the remaining charge of the battery. When it drops to about 20% capacity, the system will post messages about it being time to recharge the device.

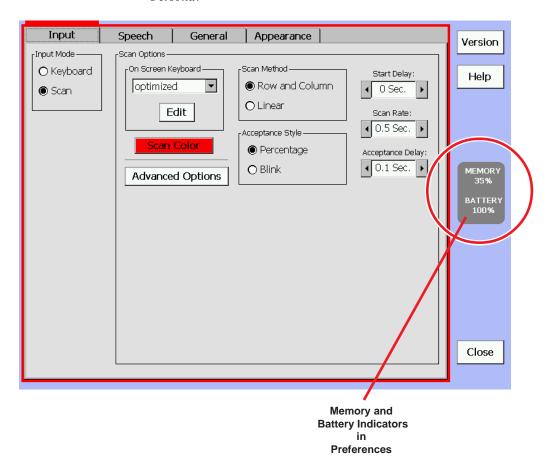


Battery and Memory Indicators (Preferences)

This Battery Indicator is functionally the same as the ones in Scan and Keyboard modes, except that it shows the value in text.

The Memory Indicator shows how much System RAM is being used while *Persona* is running. Ideally, the value should be less than 70% in order for *Persona* to have enough memory resources. If the number is greater than 70% then you should adjust the Memory Slider in the Control Panel/System Properties. Move the slider to the left to make more room for *Persona* while it is running.

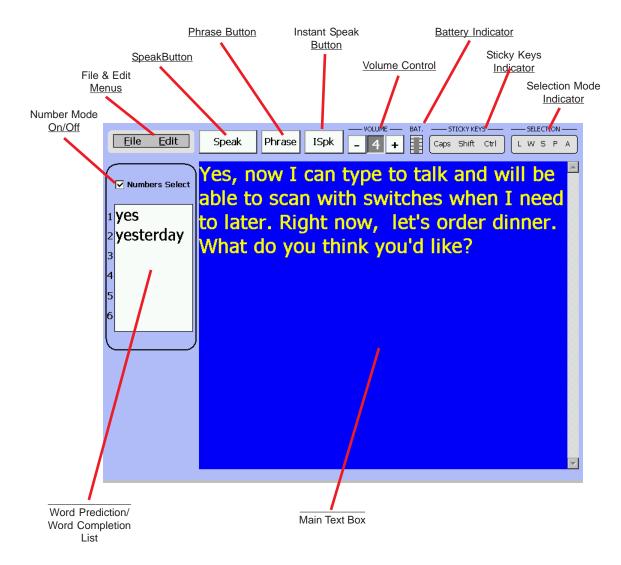
NOTE: If other applications are running at the same time as *Persona*, please end them. This will free up memory and may improve the performance of Persona.





Keyboard Mode

Keyboard Mode Screen Layout



KEYBOARD COMMANDS

All commands are accessible through the keyboard. The display does not need to be touched. Use the Tab key to move to each button, or the Alt key to access the menus.

EDIT

Ctrl + C = Copy selected text Ctrl + X = Cut selected text

Ctrl + V = Paste copied text at caret position

Ctrl + U = Undo, redo (press once to undo, press again to redo)

Ctrl + A + Del = Clear text box

SELECTION

 Ctrl + L
 = Letter

 Ctrl + W
 = Word

 Ctrl + S
 = Sentence

 Ctrl + P
 = Paragraph

 Ctrl + A
 = All

Letters, **Words**, **Sentences** and **Paragraphs** can be highlighted. Use the Arrow keys to move the highlight.

Toggle the Selection modes on or off by consecutive presses of the Control key combinations.

Note: When ALL is selected, pressing the Delete key will clear the text box.

MOVEMENT

Left Arrow = Move caret left in increments determined by selection

keys. When Selection mode is inactive, the default

increment is letter.

Right Arrow = Move caret right in increments determined by selection

keys. When Selection mode is inactive, the default

increment is letter.

Up/Down Arrows = Move caret to the next line above or below

Ctrl + Tab = Tab in text box

Ctrl + B = Beginning of document

Ctrl + E = End of document

MISCELLANEOUS COMMANDS

Alt = File/Edit Menu

Esc = Speak (while text box or AbEx, SpEx, Phrase list box has focus)

Esc = Stop speaking (while speaking)

Esc = Return to text box (when focus is not in a text box), escape from

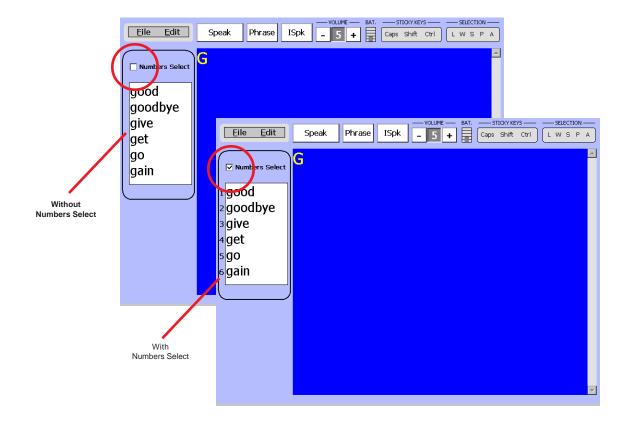
dialog boxes

Shift + Esc = Spell highlighted text

Tab = move the focus from control to control

Shift + Tab = reverses the focus direction

Number Keys 1 - 6 select words from the Word Prediction/Word Completion list when Word Prediction is enabled, there is a word associated with a number, and the "Numbers Select" checkbox is checked. If no word is associated with a number, or Word Prediction is disabled, or the "Numbers Select" checkbox is unchecked, then numbers will be entered into the text.



Space Bar, when the caret is not in a text box, selects or toggles the values of most controls such as command buttons and list boxes.

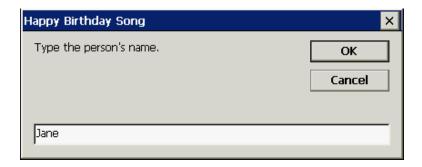
 $\mathbf{Ctrl} + \mathbf{N} = \mathbf{Enable}$ or disable the use of number keys for selecting Word Prediction words.

Ctrl + K = Show keyboard commands

Ctrl + T = Show current time and date

Ctrl + O = Sing Happy Birthday song

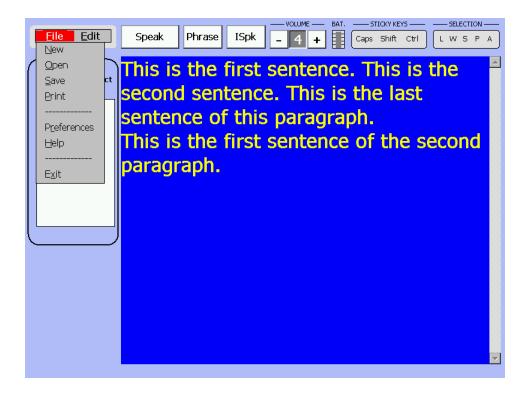
The Happy Birthday song is accessed by pressing the Ctrl key
and the O key at the same time. If a person's name is already in the
Speech Exceptions, the name will be pronounced accordingly when
the song is sung.



MENUS

There are 2 drop-down menus on the display, File and Edit. Press the Alt key (or touch the File button on the display) to open the File Menu. Then use the right-arrow key (or touch the Edit button on the display) to open the Edit Menu. Use the arrow keys to navigate through the menu items, or use direct touch to the display.

File Menu



New

Starts a new document. You should save your current document first (if wanted) because the text will be replaced. However, the action can be undone by selecting Undo immediately following the creation of a new document.

Open

Opens a saved document.

Save

Saves the current document to the "Persona Documents" folder located on the internal "Flash Disk" memory. It is possible to choose a different location to save a document, but the Backup/Restore function will only backup and restore documents to and from the "Persona Documents" folder.

Print

Prints the current document. Refer to Printing in this Section and Printer Setup in the Preferences Section for more details.

Preferences

Go to Preferences to make changes to the settings or to go to Scan mode.

Help

Go to Keyboard help.

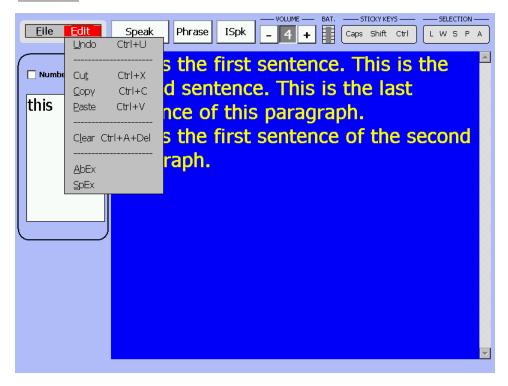
Exit

End and exit the *Persona* program.



NOTE: The File menu is disabled while in ISpk and when adding or changing Phrases, AbEx, or SpEx.

Edit Menu



Undo (Redo)

Undoes or Redoes the last word or action (Back Space, Cut, Delete, Paste, AbEx, Word Prediction insert).

Cut

Removes the selected (highlighted) text and copies it to the Clipboard.

Copy

Copies the selected (highlighted) text to the Clipboard.

Paste

Inserts Clipboard text into text box at the caret position.

Clear

Clears all text within the textbox. This action can be immediately undone by selecting Undo.

AbEx

Goes to Add Abbreviation Expansion screen.

SpEx

Goes to Add Speech Exception screen.

Speak Button

Press the Speak button when you want to speak. Pressing the Esc key on the keyboard produces the same results as the Speak button.

When the Speak button has been pressed (or when text is automatically spoken at the end of a sentence or paragraph), the caption of the button changes to "Stop". If you press the button or the Esc key while the caption says Stop, *Persona* will stop speaking.

If no text is highlighted when the Speak button is pressed, the sentence where the text caret is located is spoken.

If a portion of text is highlighted, the highlighted portion of text is spoken.

If a portion of text is highlighted and the Shift key is engaged, the highlighted text is spelled.

Instant Speak (ISpk)

Tap on the ISpk button to open Instant Speak. Instant Speak provides a communication alternative for those occasions when the Main text box is being used for typing a document. For example: You are writing a letter and someone comes into the room and asks a question. Instead of using the Main text box for your reply, you can use the Instant Speak text box instead. What's typed in Instant Speak cannot be saved except by copying and pasting it to the Main text box first.

By default, the Instant Speak text box automatically clears the text when you begin a new sentence. In order for this to work, the preceding sentence must end with a period, exclamation point, question mark or Enter. This behavior is also available in the Main text box when the Clear Text Box option is enabled (Preferences/General Options).

VOLUME (Loudness)

The loudness of the voice can be adjusted by selecting the - or + buttons.

- decreases the loudness
- + increases the loudness

When the value is set to 0 the speech output is disabled.

The Loudness buttons can be accessed in 2 ways.

- 1) Press the on-screen buttons with a finger or stylus
- 2) Use the Tab key to navigate to them. Once selected, use the Space key to change values. The Space key can be held down to automatically step through the values. Once the Space key is released, the focus is automatically returned to the text box.

The Loudness settings are saved should you exit the program and return.

Remember that there is also a volume slide-control on the bottom front of the *Polyana*. The settings shown above are affected by the position of the volume slide control. Adjust both for optimum sound level.

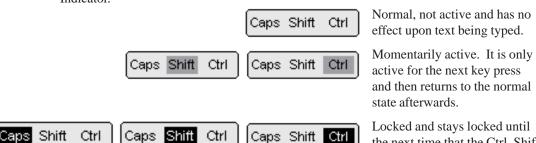


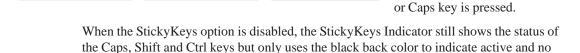
Sticky Keys Indicator

back color to indicate inactive.

This indicator shows whether or not the Shift, Control or Caps keys are engaged. The Caps key is technically not a StickyKey but it merits being displayed within the same group.

When the StickyKeys option is enabled (Preferences/General Options), there are 3 possible states that the Shift and Ctrl keys can be in as represented by the StickyKeys Indicator.



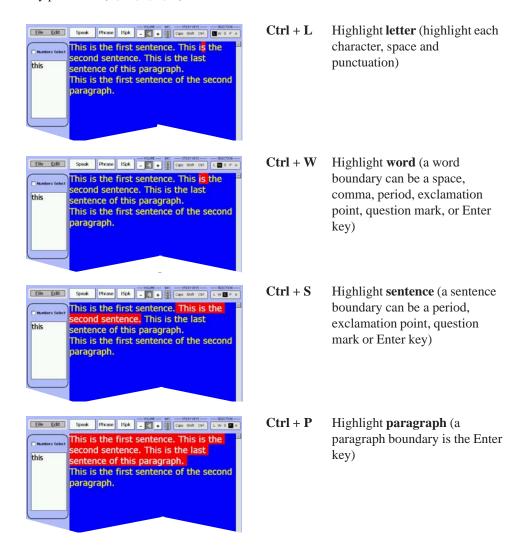


the next time that the Ctrl, Shift

Selection Mode

The Selection Mode provides a flexible means of highlighting portions of text for the purposes of speaking, copying or deleting, when used in conjunction with the arrow keys. This is especially useful when you want to control the flow of spoken text, such as: speaking sentence-by-sentence or paragraph-by-paragraph. Or, perhaps you want to repeat a portion of text that someone did not understand.

Letters, Words, Sentences, Paragraphs and All can be highlighted with the use of the Ctrl key plus letter (L, W, S, P, A) combination.





Ctrl + A Highlight all

Selection Indicator

The Selection Indicator shows whether the Selection mode is active or not, and whether or not the text is going to be highlighted by Letter, Word, Sentence, Paragraph or All. When the Selection mode is active, use the arrow keys to move the highlight left, right, up or down. To speak the highlighted text, press the Speak button or the Esc key. Similarly, to delete the highlighted text, press the Del key. Or, select Cut/Copy/Paste from the Edit menu to perform edit operations on the highlighted text.

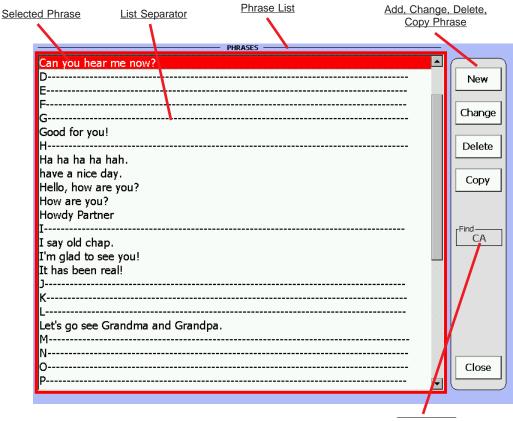
To disengage the Selection mode, press the Ctrl key plus the letter (L, W, S, P, A) that is highlighted in the Selection Indicator. For example:

Press the Ctrl and the L key to engage the select-by-letter mode.

Press the Ctrl and the L key again to disengage the selection mode.

W S P

You can change selection modes without having to first disengage Selection Mode. Just press the Ctrl + letter combination to select the desired mode.



Find Window

Phrases are used for storing commonly spoken passages of text.

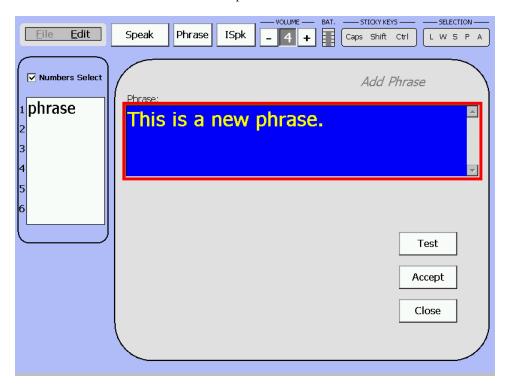
Select a phrase by choosing the Phrase button from the main screen. This opens the Phrase List. Once the list is open, start by typing the first letter of the phrase. Notice that the list highlight moves to the alphabetical list separator that matches the letter just typed. If there is a phrase in that alphabetical group, type the next letter of the phrase and the highlight will move to the next matching phrase. Continue typing the first few letters of the phrase until you have reached the phrase that you want to speak. Once the phrase is selected, press the Space, Esc or Enter keys to speak the phrase.

The Find window is provided for additional visual feedback. It shows which letters have been typed. After the first letter, if the next letter(s) typed does not match an existing phrase the letter will be rejected. Either type the correct next letter or press the Backspace key to remove the letters from the Find window.

Other keys that can be used to navigate the list are: arrow keys, PgUp, PgDn, Home and End.

Creating a Phrase

Create a new phrase by choosing the Phrase button from the main screen. This opens the Phrase List. Choose the New button to open the Add Phrase text box.

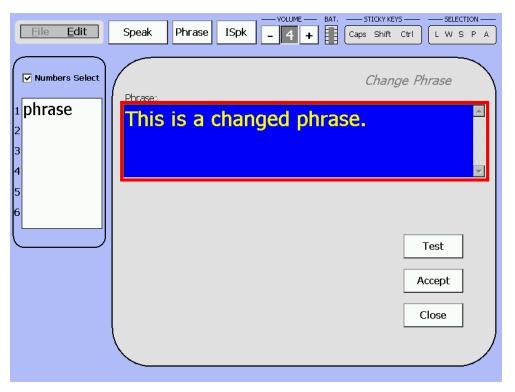


Type the phrase and then choose the Accept button when done, or choose Cancel if you decide not to keep the new phrase. A button called Test is provided so that you can hear how the phrase will sound before deciding to keep it.

Each phrase can contain up to 250 characters. Phrases are only spoken and do not get pasted into the text, like Abbreviation-Expansions do, unless it is copied and pasted.

Changing a Phrase

Change a phrase by opening the Phrase List. Select the phrase that you want to change (alphabetical list separators cannot be changed). Choose the Change button to show the Change Phrase text box.



The phrase that needs to be changed will be shown in the text box. Make your changes and choose Accept to keep the changes or choose Cancel if you change your mind.

Deleting a Phrase

Delete a phrase by opening the Phrase List. Select the phrase that you want to delete (alphabetical list separators cannot be deleted). Choose the Delete button or press the Delete key to delete the selected phrase.

Copying a Phrase

A phrase can be copied for the purpose of pasting it into the main text or for pasting it into other text boxes such as Add Phrase when you want to create a similar phrase.

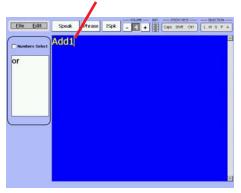
Copy a phrase by opening the Phrase List. Select the phrase that you want to copy (alphabetical list separators cannot be copied). Choose the Copy button to copy the phrase to the clipboard. Now go to the text box that you want the phrase copied to and choose Paste from the Edit menu or Ctrl + V from the keyboard.

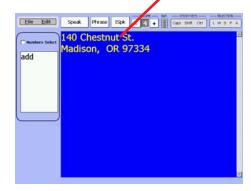
Using Abbreviation-Expansion (AbEx)

Abbreviation-Expansions significantly reduce the amount of typing required for commonly typed passages of text. They can also be used to automatically capitalize proper names.

As you're typing and you want to use an existing AbEx, just type the abbreviation followed by a space, comma, period, exclamation point, question mark, or Enter to see it expand. When an AbEx is used, it is remembered and stored in the Word Prediction list so that the next time that it is needed, it can be optionally selected from the Word Prediction list.

Abbreviation as typed.....and then.....expanded when followed by a space, punctuation, or Enter







NOTE: It is important not to use actual words for the abbreviation, the expansion would occur whenever the word was typed for normal use.

Creating an Abbreviation-Expansion (AbEx)

Create a new AbEx by selecting the Edit menu and then choosing the AbEx menu item. This will open the Add Abbreviation-Expansion text box.

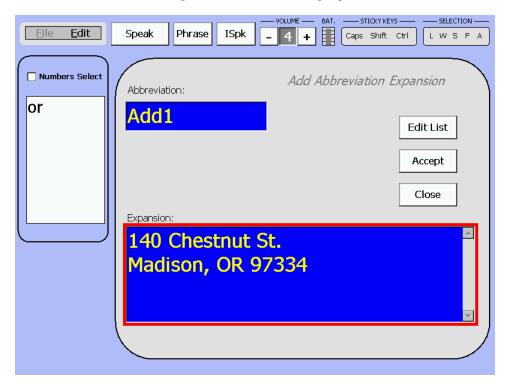
Before opening the Add Abbreviation-Expansion as just described, consider the following:

> If you know what the abbreviation is going to be, type it in the Main text box before opening the Add Abbreviation-Expansion text box, and the abbreviation will automatically be pasted into the Abbreviation text box.

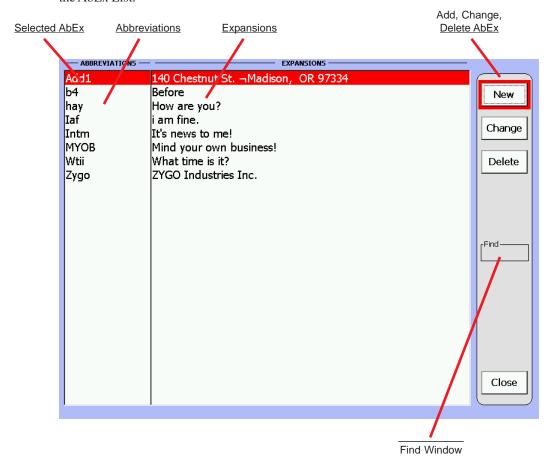
If you just typed a passage of text that you feel should be saved as an Abbreviation-Expansion, highlight it first and then open the Add Abbreviation Expansion text box, and it will automatically be pasted into the Expansion text box.

Once the Add Abbreviation-Expansion text box is open, edit the text as desired and choose the Accept button to keep the AbEx, or choose Close to cancel the operation.

The Abbreviation text box will only accept letters and numbers (so long as the number is not the first character). The Expansion text box can accept up to 250 characters.



If you want to modify an AbEx or view all of them, choose the Edit List button to open the AbEx List.



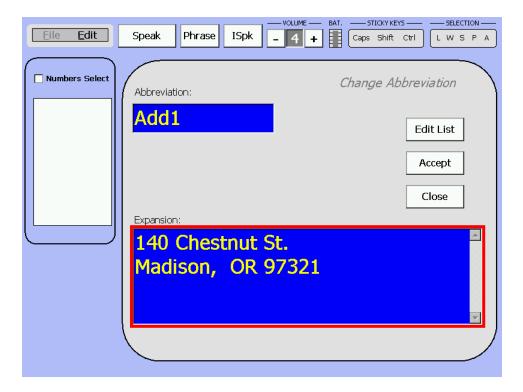
When the AbEx List is open, you can select an AbEx by typing the first letter of the abbreviation. Notice that the list highlight moves to the first abbreviation that matches the letter just typed. If there is more than one abbreviation that begins with the same letter, then type the next few letters until the desired AbEx has been highlighted. Once highlighted, choose the New, Change or Delete button. You can also press the Space, Esc or Enter keys to speak the AbEx.

The Find window is provided for additional visual feedback. It shows the letters that have been typed. If the letter typed does not match an existing AbEx, the letter will be rejected. Either type the correct letter or press the Backspace key to remove letters from the Find window.

Other keys that can be used to navigate the list are: arrow keys, PgUp, PgDn, Home and End.

Changing an Abbreviation-Expansion

Change an AbEx by selecting it from the AbEx list and then choosing the Change button to open the Change Abbreviation text box. Make your changes and choose Accept to keep the changes, or choose Cancel to disregard the changes.



Deleting an Abbreviation-Expansion

Delete an AbEx by selecting it from the AbEx list and then choose the Delete button or press the Delete key to delete the selected AbEx.

Using Speech-Exceptions (SpEx)

Speech Exceptions are created when you want to change how *Persona* pronounces certain words, such as people's names and places.

Creating a Speech-Exception (SpEx)

As you're typing, if you want to change the way a word is pronounced, select the Edit menu and choose the SpEx menu item to open the Add Speech Exception text box.

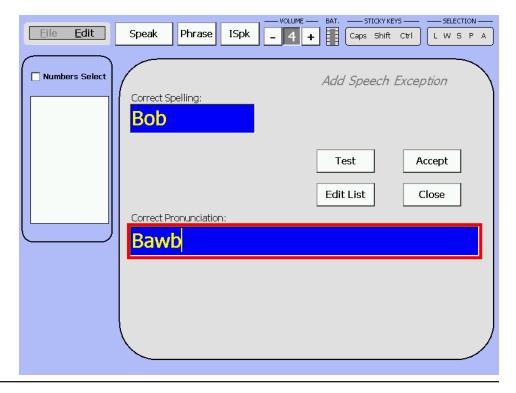
Before opening the Add Speech Exception text box as just described, consider the following:

If you want to change the word that was just typed, follow the steps described above.

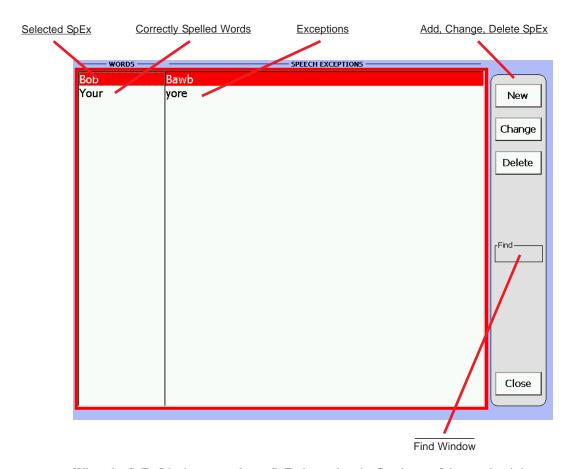
If you have gone past the word, move the text caret so that it is located within the word before following the steps above.

Once the Add Speech Exception text box is open, edit the text and choose the Test button to hear how the SpEx sounds. You will need to experiment with different spellings in order to get the word to speak as desired. Once satisfied, choose the Accept button to keep the SpEx, or choose Close to cancel the operation.

The Correct Spelling text box will only accept letters and numbers (so long as the number is not the first character). The Correct Pronunciation text box can contain up to 50 characters.



If you want to modify a SpEx, or view them all, choose the Edit List button to open the SpEx List.



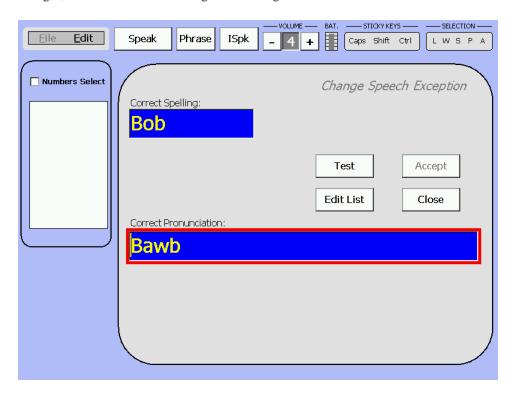
When the SpEx List is open, select a SpEx by typing the first letter of the word as it is correctly spelled. Notice that the list highlight moves to the first SpEx that matches the letter just typed. If there is more than one SpEx that begins with the same letter, then type the next few letters until the desired SpEx has been highlighted. Once highlighted, choose the New, Change or Delete button. You can also press the Space, Esc or Enter keys to speak the SpEx.

The Find window is provided for additional visual feedback. It shows the letters that have been typed. If the letter typed does not match an existing SpEx, the letter will be rejected. Either type the correct letter, or press the Backspace key to remove the letters from the Find window.

Other keys that can be used to navigate the list are: arrow keys, PgUp, PgDn, Home and End.

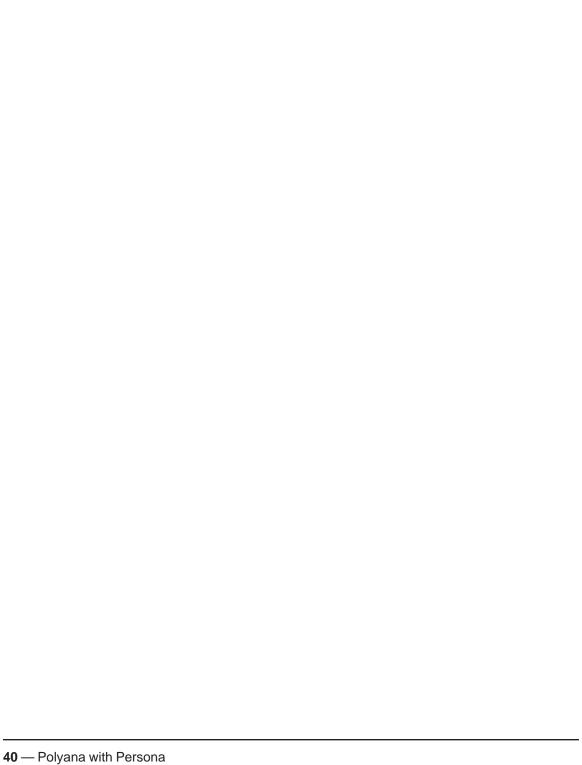
Changing a Speech-Exception

Change a SpEx by selecting it from the SpEx list and then choose the Change button to open the Change Speech Exception text box. Make your changes and choose the Test button to hear how the changes sound. Once satisfied, choose Accept to keep the changes, or choose Cancel to disregard the changes.



Deleting a Speech-Exception

Delete a SpEx by selecting it from the SpEx list and choose the Delete button, or press the Delete key to delete the selected SpEx.



PRINTING

Persona uses the **Polyana**'s Infrared (IR) port for sending text documents to the printer. The effective distance between the printer and the *Polyana* is 1 to 5 feet. It is important to have a clear line-of-sight between the printer's IR port and the *Polyana*'s IR port. Try not to move the *Polyana* or the printer while printing.

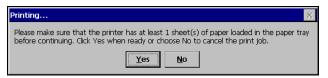
Please make sure that a printer has been selected, and that the printer is set up and ready to print before continuing. Refer to Print Setup in the Preferences section of this manual for more information.

When ready to print, tap on the File menu and then the Print menu item. The following messages will be seen...

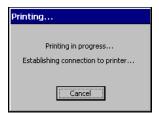
The first message simply lets you know that you are about to begin printing. Make sure that the printer is ready before tapping on the Yes button, or tap the No button if you decide not to print.



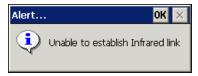
The following message only appears if you are using the Canon BJC-85 printer. It lets you know how many sheets of paper are required for the print job. Tap Yes to continue, or tap No to cancel the print job.



This message reports the status of the print job.



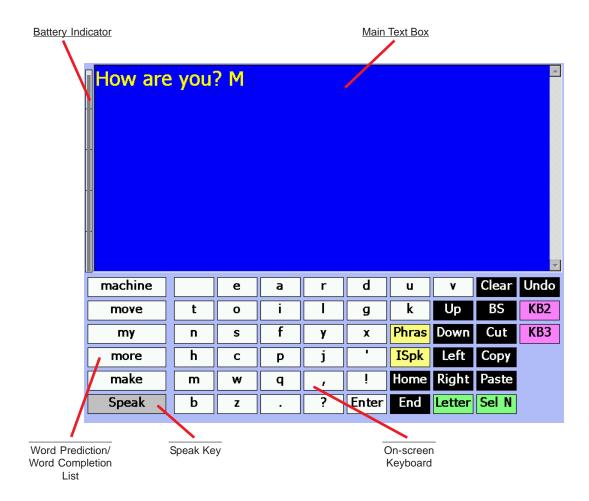
This message will be displayed if there was an error.



Check to make sure that the printer is set up correctly, that there is enough paper and ink, and that the printer and *Polyana* are less than 5 feet apart. Also, make sure that the appropriate printer has been selected in Preferences.

Scan Mode

Scan Mode Screen Layout



Connecting Switches

Single switches are connected to the Polyana through mini-phone jack in the back of the amplifier module.



Standard Keyboards

Persona ships with 3 standard on-screen keyboard layouts: Optimized, Alphabetical and QWERTY. Optimized, a frequency-of-use layout, is the most efficient.

Each keyboard consists of 3 keyboard layouts, KB1, KB2, and KB3. KB1 and KB2 are the primary layouts providing upper and lower case letters and common editing commands. KB3 offers numbers, special characters and system functions.

Persona provides a Keyboard Edit function to allow for customizing of the on-screen keyboard.

Optimized Keyboard—KB1



Optimized Keyboard—KB2

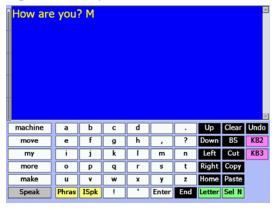


Optimized Keyboard—KB3

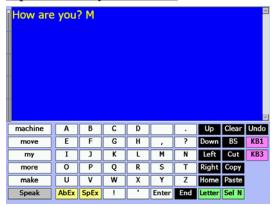


Notice that the Alphabetical keyboard uses the versatile A E I O U layout in the first column. It allows easy verbalization of the rows and columns by listeners. This is useful for direct interaction without using the electronic system.

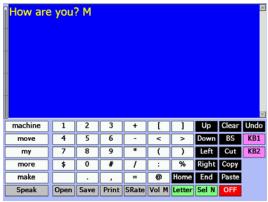
Alphabetical Keyboard—KB1



Alphabetical Keyboard—KB2

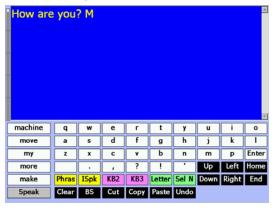


Alphabetical Keyboard—KB3



Although not as efficient as the Optimized keyboard layout, the Q W E R T Y layout is helpful for those who have experience with computer keyboards and are more comfortable with it.

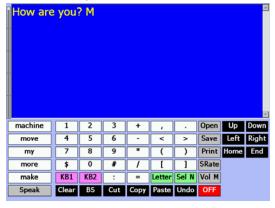
QWERTY Keyboard—KB1



QWERTY Keyboard—KB2



QWERTY Keyboard—KB3





KEY DESCRIPTIONS

Toggle = The key caption changes according to the function selected. **Repeat** = The key's function can be repeated by holding the switch closed.

Key	Toggle	Repeat	Description
Clear	N	N	Clears entire document.
BS	N	Y	Backspace. Deletes one character at a time from right to left. Hold the switch closed to Backspace multiple times.
Cut	N	Y	If a portion of text is highlighted before single tapping the scan switch, that portion of text is deleted and copied to the clipboard.
			If no text is highlighted and the scan switch is held down, the caret will move from right to left highlighting the text as it goes. When the switch is let go the highlighted portion of text is deleted and copied to the clipboard.
Сору	N	Y	If a portion of text is highlighted before single tapping the scan switch, that portion of text is copied to the clipboard.
			If no text is highlighted and the scan switch is held down, the caret will move from right to left highlighting the text as it goes. When the switch is let go the highlighted portion of text is copied to the clipboard.
Paste	N	N	If a portion of text is highlighted before tapping the scan switch, that portion of text is replaced by the contents of the clipboard.
			If no text is highlighted then the contents of the clipboard are pasted at the caret position.
Undo	Y	N	Undoes last operation. Key becomes Redo until the next operation occurs.

$\underline{\textbf{KEY DESCRIPTIONS}} \text{ (Continued)}$

Key	Toggle	Repeat	Description
Sel N	Y	N	Sel N means that text will not be highlighted in conjunction with the Left, Right, Up, or Down keys.
			Sel Y means that text will be highlighted in conjunction with the Left, Right, Up, and Down keys.
Letter (Selection Key)	N	N	There are 5 possible modes: Letter Word Sentence Paragraph All
			Each mode determines the step size that occurs when the Left, Right, Up and Down keys are used.
			Word Prediction keys are replaced by Selection-related functions.
Left	N	Y	If Sel N is set, only the caret moves left in increments determined by the Selection key.
			If Sel Y is set, the caret and highlighted text move left in increments determined by the Selection Key.
			If Sel Y is set and the switch is closed briefly (single tap), then the caret/highlight moves left and the highlighted portion of text is spoken.
Right	N	Y	If Sel N is set, only the caret moves right in increments determined by the Selection key.
			If Sel Y is set, the caret and highlighted text moves right in increments determined by the Selection Key. If Sel Y is set and the switch is closed briefly (single tap) then the caret/highlight moves right and the highlighted portion of text is spoken.
Up	N	Y	A single tap of the scan switch moves the caret to the next line above.
			A long hold continues to move up one line at a time.

KEY DESCRIPTIONS (Continued)

Key	Toggle	Repeat	Description
Down	N	Y	A single tap of the scan switch moves the caret to the next line below.
			A long hold continues to move down one line at a time.
Home	N	N	Moves the caret to the beginning of the text box.
End	N	N	Moves the caret to the end of the text box.
Speak	Y	N	If a portion of text is highlighted, it will be spoken when the switch is pressed.
			If no text is highlighted, the sentence where the caret is located will be spoken.
			The key caption is renamed to "Stop" while speaking. When done speaking the caption returns to "Speak".
			Speaking can be stopped by selecting Stop.
Phrase	N	N	Opens the Phrase List and Edit mode.
			Word Prediction keys are replaced by Phrase related functions.
Ispk	N	N	Opens the auxiliary text box.
AbEx	N	N	Opens the Add Abbreviation text boxes.
			If a portion of text is highlighted before selecting AbEx, the text is copied to the Expansion text box. Otherwise, the word preceding the caret is copied to the Abbreviation text box.
			Word Prediction keys are replaced by AbEx-related functions.
SpEx	N	N	Opens the Add Speech Exception text boxes.
			If a portion of text is highlighted before selecting SpEx, the text is copied to the Exception text box. Otherwise, the word preceding the caret is copied to the Spelling text box.
			Word Prediction keys are replaced by SpEx-related functions.

KEY DESCRIPTIONS (Continued)

	Key	Toggle	Repeat	Description
	KB1,	N	N	Opens one of three keyboard layouts.
	KB2, KB3			KB1 is the primary layout with lower case letters.
				KB2 provides upper case letters.
				KB3 contains numbers, special characters and miscellaneous functions.
	Open	N	N	Opens a list of documents that can be brought into the Main text box.
				Word Prediction keys are replaced by Open-related functions.
	Save	N	N	A text box appears for entering the name of the document to be saved.
				Word Prediction keys are replaced by Save-related functions.
	Print	N	N	A dialog box appears asking if you are sure that you want to print. If you do want to print, you are expected to have your printer setup and ready.
				Word Prediction keys are replaced by Print related functions.
	SRate	N	N	Opens the Scan Adjust mode.
				Word Prediction keys are replaced by Scan-related functions.
Power Properties Battery Power Schemes	Off	N	N	Puts device into Suspend mode for conserving power when it is not going to be used for several minutes, hours or days. Press the Scan Switch to wake it up.
Switch off when case Switch on when case Switch on when scree Switch on when seria	is <u>o</u> pened [en is <u>t</u> apped [.llow suspend witt ✓ Active network in ─ Active device con nnected	terface	For this feature to work, a setting needs to be made in the Power Properties located in the Control Panel. Make sure the "Switch on when serial or USB sync cable connected" checkbox is checked.

$\underline{\textbf{KEY DESCRIPTIONS}} \text{ (Continued)}$

Key	Toggle	Repeat	Description
Vol M	N	N	VOL M key has 4 possible states. VOL O = Off No speech output VOL L = Low Low volume VOL M = Medium Medium volume VOL H = High Full volume
			Word Prediction keys are replaced by Volume- related functions.
			Try different settings in conjunction with the Volume Slider in the front of <i>Polyana</i> .
Song	N	N	Happy Birthday Song mode.
			Word Prediction keys are replaced by Song-related functions.

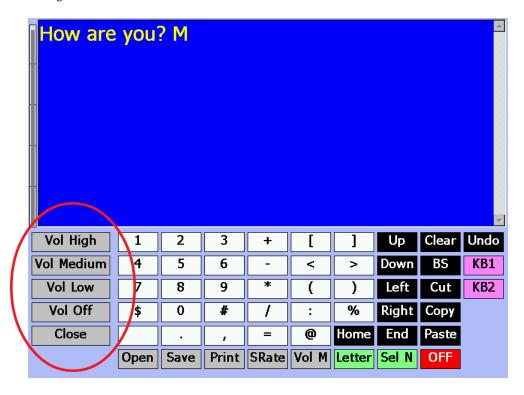


VOLUME (Loudness)

The user can adjust the volume by selecting the VOL M key. The VOL M key has 4 possible states.

VOL O Off No speech output **VOL L** Low volume Low VOL M =Medium Medium volume VOL H Full volume High

When the Vol M key is selected, the Word Prediction keys are replaced by the volume settings.



There is also a volume slider on the bottom front of the *Polyana*. The settings shown above are affected by the position of the slider. Adjust both for optimum sound level.



SELECTION MODES

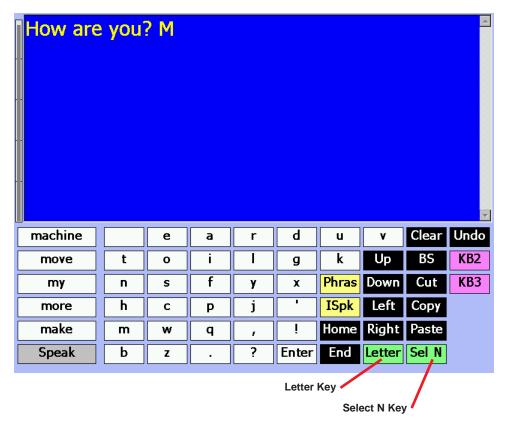
The selection modes provide a means of selecting (highlighting) **letters**, words, sentences, paragraphs or all of the text. Portions of text can be highlighted for the purpose of speaking, deleting or copying. The keys that are responsible for this mode are as follows.

Sel N

This key has 2 possible states (Sel N and Sel Y).

Sel N means that text will <u>not</u> be highlighted when used in conjunction with the Left and Right keys. The Left and Right keys move the caret in increments based upon the value of the Letter key.

Sel Y means that text will be highlighted when used in conjunction with the Left and Right keys. The Left and Right keys move the caret and the highlight in increments based upon the value of the Letter key.



Letter

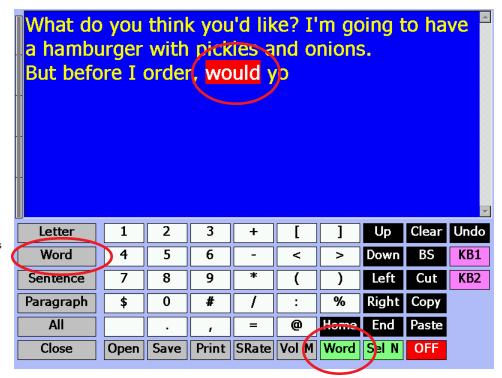
This key has 5 possible states that can be selected.

Letter = move caret from letter to letter Word = move caret from word to word

Sent = move caret from sentence to sentence
Para = move caret from paragraph to paragraph

All = select all (the Sel Y does not have to be selected)

When the Letter key is pressed, the Word Prediction keys are replaced by the selection keys (Letter, Word, Sentence, etc.) as shown in the table.



Word Select is shown in the example

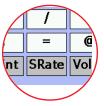
The default state when *Persona* begins is Letter. This means that the Left and Right keys will move the caret one letter (character) at a time. When the other modes are selected, the caret will move accordingly. For example, if Para is selected and the Left key is selected, the caret will move one paragraph to the left.

If the scan switch is held down while selecting the Left, Right, Up or Down keys, the caret (and highlight) will continue to move until the switch is released.

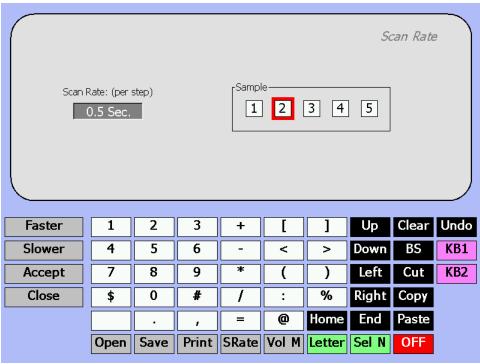
Press the switch once to move the caret (and highlight) once.

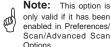
USER SCAN ADJUST MODE

Users can adjust the scan rate themselves by entering the Scan Adjust mode. There are 2 ways to enter the Scan Adjust mode.



SRate Select this key to open the Scan Adjust window.





Hold Switch for the Hold Time to open the Scan Adjust window. This option is provided as a fail-safe means of gaining access to the Scan Adjust mode when the Scan Rate has been set too fast. The Scan Rate is automatically set to a slow speed (1.5 seconds/step) so that the user can make adjustments. The Hold Time can be set from 5 to 60 seconds (see Preferences/Advanced Scan Options/Hold Time).

When the Scan Adjust window is open, there is a numeric readout and a visual sample to indicate the adjusted Scan Rate. The adjusted scan rate does not affect the actual scan rate until it has been accepted.

Use the Faster and Slower keys to adjust the speed. The Faster and Slower keys can be held down in order to repeat the selection. When satisfied, choose Accept or Close to end operation.

NOTE: When the Accept key is selected, the new value is saved. The Scan Rate can also be adjusted from the Preferences where there are more scan options.

Scan Rate Keys

Key	Toggle	Repeat	Description
Faster	N	Y	Increase the Scan Rate.
Slower	N	Y	Decrease the Scan Rate.
Accept	N	N	Save changes and return to the Main text box using the modified Scan Rate.
Close	N	N	Don't save changes and return to the Main text box.

OPENING and SAVING DOCUMENTS



Open Keys

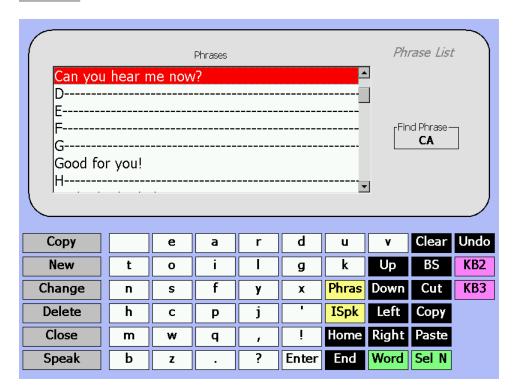
Key	Toggle	Repeat	Description
Open	N	N	Open the selected document.
Delete	N	N	Delete the selected document.
Close	N	N	Close and return to Main text box.



Save Keys

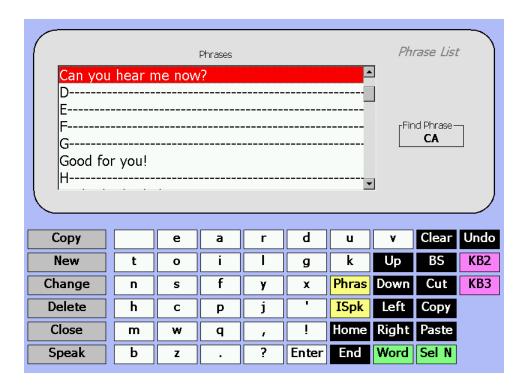
Key	Toggle	Repeat	Description
Save	N	N	Save document as shown in text box.
Close	N	N	Close and return to Main text box.

PHRASES



Phrase List Keys

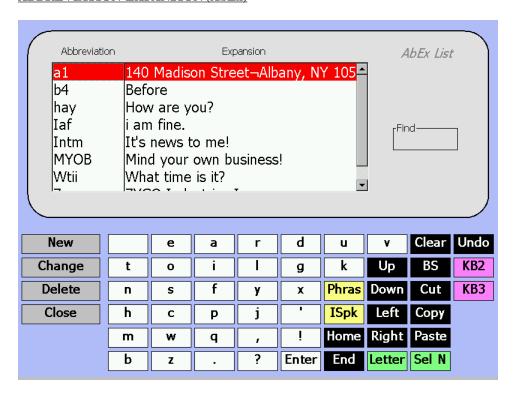
Key	Toggle	Repeat	Description
New	N	N	Opens the New Phrase text box which is used for adding new Phrases.
Change	N	N	Opens the Change Phrase text box which is used for modifying an existing Phrase.
Delete	N	N	Deletes selected Phrase.
Сору	N	N	Copies the selected Phrase to the clipboard so that it can be pasted to the Main or ISpk text boxes.
Speak	N	N	Speak the selected Phrase.
Close	N	N	Close the Phrase List and return to Main text box.



Phrase New/Change Keys

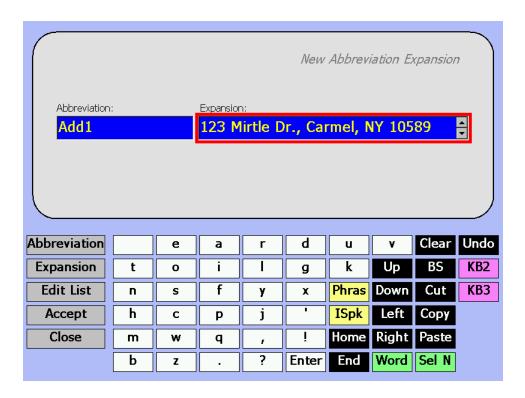
Key	Toggle	Repeat	Description
List	N	N	Return to Phrase List.
Accept	N	N	Accept new or changed Phrase and return to the Main text box.
Close	N	N	Don't accept and return to Main text box.

ABBREVIATION-EXPANSION (AbEx)



AbEx List Keys

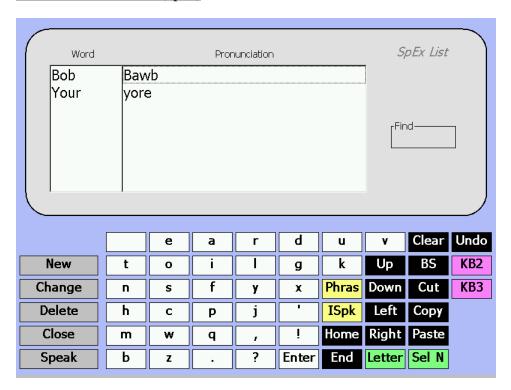
Key	Toggle	Repeat	Description
New	N	N	Opens the New Abbreviation Expansion text box which is used for adding new Abbreviation Expansions.
Change	N	N	Opens the Change Abbreviation Expansion text box which is used for modifying an existing Abbreviation Expansion.
Delete	N	N	Deletes selected Abbreviation Expansion.
Close	N	N	Close AbEx List box and return to Main text box.



AbEx New/Change Keys

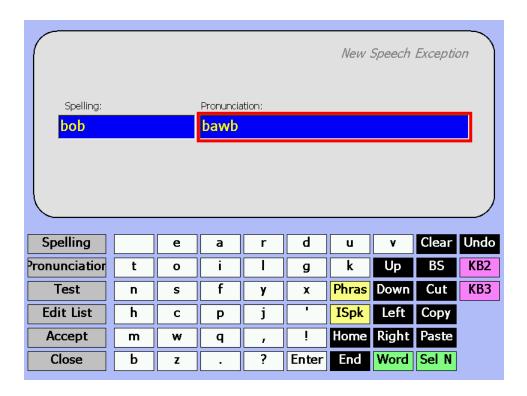
Key	Toggle	Repeat	Description
Abbreviation	n N	N	Move caret to the Abbreviation text box.
Expansion	N	N	Move the caret to the Expansion text box.
List	N	N	Show the AbEx List.
Accept	N	N	Accept the proposed Abbreviation Expansion and return to the Main text box.
Close	N	N	Don't accept and return to Main text box

SPEECH EXCEPTIONS (SpEx)



SpEx List Keys

Key	Toggle	Repeat	Description
New	N	N	Opens the New Speech Exception text box which is used for adding new Speech Exceptions.
Change	N	N	Opens the Change Speech Exceptions text box which is used for modifying an existing Speech Exception.
Delete	N	N	Deletes the selected Speech Exception.
Speak	N	N	Speak the selected Speech Exception.
Close	N	N	Close SpEx List and return to Main text box.



SpEx New/Change Keys

Key	Toggle	Repeat	Description
Spelling	N	N	Move caret to the Spelling text box.
Pronunciation	n N	N	Move caret to the Pronunciation text box.
Test	N	N	Speak the proposed Speech Exception.
List	N	N	Show the SpEx List.
Accept	N	N	Accept the proposed Speech Exception and return to the Main text box.
Close	N	N	Don't accept and return to the Main text box.

LIST BOXES Use these keys to interact with list boxes (Phrases, AbEx, SpEx, Open)

Key	Toggle	Repeat	Description
A – Z	N	N	Select a letter that matches the 1 st letter of a list item that you are looking for. If there is a match, that list item will be highlighted and will come into view. The Find window shows the search string.
			If the 1 st list item that matches is not the one you want, you can select more letters to refine your search.
BS	N	N	Removes the last letter from the search string as shown in the Find window.
Clear	N	N	Clears the search string and Find window.
Up	N	Y	Move up through the list items. A single tap selects the next list item above.
			A long hold moves the highlight continuously up the list.
Down	N	Y	Move down through the list items. A single tap selects the next list item below.
			A long hold moves the highlight continuously down the list.
Home	N	N	Selects the top list item.
End	N	N	Selects the bottom list item.

HAPPY BIRTHDAY Song

The Happy Birthday song can be accessed by selecting the Song key from the on-screen keyboard if it has been added to it. If the person's name is already in the Speech Exceptions, the name will be pronounced accordingly when the song is sung. The Sing key starts the song. The Test key lets the user listen to the name prior to singing the song in case changes are needed.



Happy Birthday Keys

Key	Toggle	Repeat	Description
Sing	Y	N	Sing Happy Birthday song.
Test	N	N	Listen to person's name before singing song
Close	N	N	Cancel and return to main text box

PRINTING

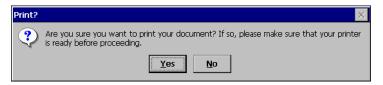
Persona uses the **Polyana**'s Infrared (IR) port for sending text documents to the printer. The effective distance between the printer and the *Polyana* is 1 to 5 feet. It is important to have a clear line-of-sight between the printer's IR port and the *Polyana*'s IR port. Try not to move the *Polyana* or the printer while printing.

Please make sure that a printer has been selected, and that the printer is set up and ready to print before continuing. Refer to the Printing section in the Preferences section of this manual for more information.

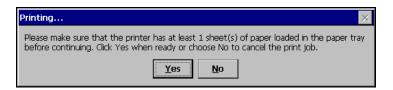
When you are ready to print, select the Print key from the on-screen keyboard.

During printing, the following messages will be seen.

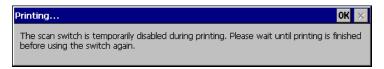
The first message simply let's you know that printing is about to begin. Make sure that the printer is ready before selecting the Yes button, or select the No button if you decide not to print.



The following message only appears if the BJC-85 printer is being used. It estimates the number of sheets of paper required for the print job. Select Yes to continue, or select No to cancel the print job.



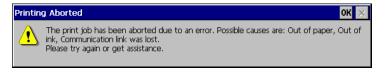
This message informs you that the scan switch is going to be inoperable during printing. The message will disappear after a few seconds, or it can be made to disappear by actuating the scan switch. After the message goes away, the scan switch will be inoperative until the print job is finished or a print error has been encountered. At that time, the scan switch will become operable again.



This message reports the status of the print job.

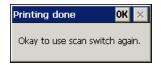


If you see this message, there was a print error.



Check to make sure that the printer is set up correctly, that there is enough paper and ink, and that the printer and *Polyana* are less than 5 feet apart. Also, make sure that the appropriate printer has been selected in Preferences.

The last message states that it is okay to use the scan switch again. At this point, you can tap on the scan switch to clear the message or wait a few seconds for it to go away.



KEYBOARD COMMANDS

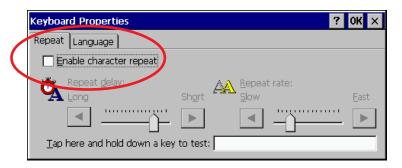
Ctrl + Q = Quit program (scan mode)

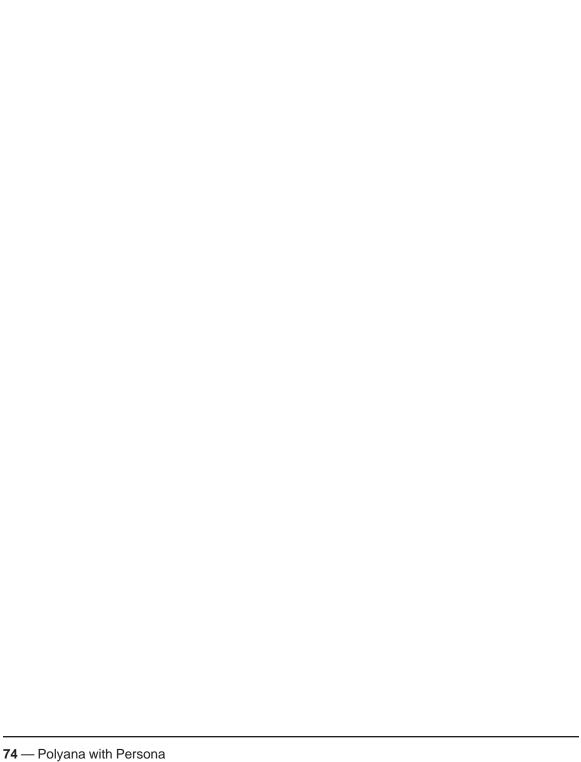
= Show Preferences Ctrl + P

Ctrl + S= Show Scan Mode Help

Esc

= Scan from keyboard without using an external switch. In order for this function to work properly, the Enable Character Repeat check box must be unchecked. The check box is located in the Control Panel/Keyboard properties.





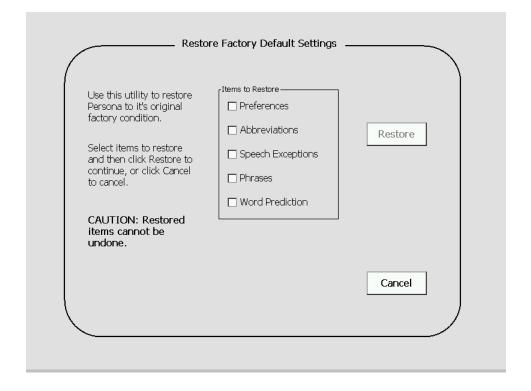
Preferences

Preferences is where you set up the program to suite an individual's needs. Settings are saved and *Persona* uses them each time it is started.

RESTORE FACTORY DEFAULTS

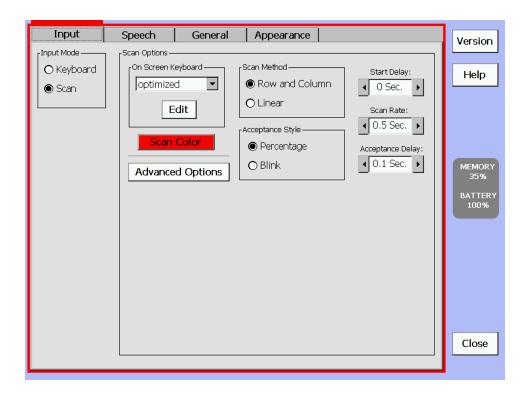
In Preferences, press (and hold) Ctrl + R R R to gain access to the Restore Factory Defaults window. This utility is provided for the purpose of restoring your settings or libraries to their original factory condition.

Please be advised that once an item has been restored, the action cannot be reversed.



INPUT OPTIONS

There are 2 option buttons (Keyboard and Scan) on the left side of the screen that determine whether the program will be used in keyboard (typing) or scanning mode. Depending upon which option is selected, the frame on the right will change accordingly.



INPUT OPTIONS—Scan Mode

Customizing On-screen Keyboards

The On-Screen Keyboard combo box lets you choose a scanning keyboard. *Persona* comes with 3 keyboards (aeiou, optimized, qwerty). The optimized arrangement is recommended because it's the most efficient.

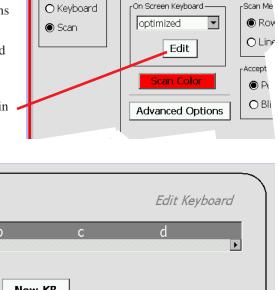
Customizing On-screen Keyboards

The 3 keyboard layouts provided with *Persona* can be modified to suit an individual's needs.

Input

Input Mode

- In Preferences, tap on the Input 1) tab. Tap on the Scan option button so that the Scan Options are visible.
- 2) From the drop-down keyboard list, select the keyboard that you want to modify.
- 3) Tap on the Edit button to begin the editing process.



Speech

Scan Options

General

Ap



The keyboard edit functions are shown above the keyboard. The functions include: choosing a key caption, fore-color, back-color and keyboard layout (KB1, KB2 and KB3).

There's also a button called New KB that lets you create a keyboard from scratch.

To edit a key, the key must be selected first. Select a key by touching it on the display with your finger or stylus. A selected key has a highlighted border to indicate that it is selected. Any editing that you do now will only affect the key that is highlighted. Only one key can be edited at a time.

By default, KB1 layout is displayed whenever scan mode is started. So, any keyboard that is created should include KB1.

It's possible to make a simple keyboard that consists of a single keyboard layout which just has letters and a few other functions. A single layout keyboard should always be KB1 so that it will always be displayed. Keyboards can have up to 3 layouts.

Each of the keyboard that ships with Persona includes 3 layouts. KB1 is used for lower case letters and common editing functions. KB2 is used for upper case letters and common editing functions. KB3 is used for numbers, special characters and less-common functions.

Key Captions

The function of the keys is determined by their captions. Select captions from the Caption list located in the top left area of the screen. Some keys are considered to be mandatory from the standpoint of providing a minimum level of communication. At the very least, every keyboard should include: each letter of the alphabet, a space, punctuation and a speak button.

Following is a list of the keyboard captions and their functions:

" a " through " z "	Lower case letters	
" A " through " Z "	Upper case letters	
" 0 " through " 9 "	Numbers	
" "	Space (first character in the list)	
""	Period	
"!"	Exclamation mark	
" ? "	Question mark	
""	Comma	
« f «	Apostrophe, used in place of letters (I'm) and in	
DECtalk syntax		
" \$ "	Dollar (Money)	
" @ "	@	
"#"	#	
" % "	Percent	
"("	Can be used in DECtalk syntax	
")"	Can be used in DECtalk syntax	
"["	Begin DECtalk syntax	
"]"	End DECtalk syntax	

" < " " > " " - " " + " " * " " = " " : "	Can be used in DECtalk syntax Can be used in DECtalk syntax + * Can be used in DECtalk syntax = Can be used in DECtalk syntax
"AbEx" "SpEx" "Phras" "ISpk" "SRate" "Vol M" "Open" "Save" "Print"	Open Abbreviation Expansions Open Speech Exceptions Open Phrases Open Instant Speech Adjust scan rate Adjust volume Open a saved document Save the current document Print the current document
" KB1 " " KB2 " " KB3 " " Off "	Show KB1 layout Show KB2 layout Show KB3 layout Go into Suspend mode
"Up" "Down" "Left" "Right" "Home" "End" "Enter" "Letter"	Move caret up one line Move caret down one line Move caret left Move caret right Move caret to the beginning of document Move caret to the end of document Begin a new paragraph Change Selection type (Letter, Word, Sentence,
"Sel N" "BS" "Clear" "Cut" "Copy" "Paste" "Undo" "Song" "XXXX"	Paragraph or All) Changes the Selection mode (Sel Y or Sel N) Backspace Clears current document Clear selected text and hold it in the clipboard Copies the selected text to the clipboard Paste the contents of the clipboard into document Undo/Redo last action Sing Happy Birthday song Blank key (blank keys are not scanned)

Scan Color

Tap on the "COLOR" label to change the Scan Color. This also changes the highlight color used in conjunction with tabbing from control to control in the Main mode and Preferences.

NOTE: The highlight color used for menus and list boxes is not affected by the Scan Color. Menu and List box highlight colors can be changed from the Control Panel/Display/Appearance.

Scanning Methods

Row and Column

Scan rows from top to bottom and columns from left to right.

- 1) Press the switch to start the row scan
- 2) Press the switch again to start the column scan
- 3) Press the switch again to accept the selection
- Press the switch again, before the acceptance period has elapsed, to cancel the selection

Linear

Scan each key from top to bottom, left to right.

- 1) Press the switch to start the linear scan
- 2) Press the switch again to accept the selection
- Press the switch again, before the acceptance period has elapsed, to cancel the selection

In both scan methods...

Scanning begins at a rate that is slower than the actual Scan Rate. This gives the user time to adjust to the change in scan activity (ZYGO Patent #4,558,315).

Rows and columns are scanned 3 times before stopping. Press the switch again to restart the scan.

Scan Acceptance Styles

Percentage

The selected key is highlighted progressively from left to right. This provides a visual indication of remaining time before the key is accepted. If the switch is pressed before the key has been fully highlighted, the selection will be cancelled and scanning will begin again.

The Acceptance Delay determines the amount of time taken to complete the selection.

Blink

The selected key outline blinks to indicate that it is selected.

If the switch is pressed before the final blink, the selection will be cancelled and scanning will begin again.

The Acceptance Delay determines the amount of time taken to complete the selection.

Scan Timing

Start Delay

Start Delay determines how long the switch must be closed before it will be accepted as a valid switch closure.

Scan Rate

Scan Rate determines the amount of time it takes to move from row to row or key to key.

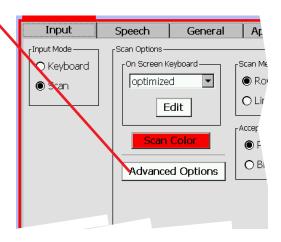
Initially, each time the switch is closed, the Scan Rate begins slower than the actual Scan Rate and gradually reaches the Scan Rate after a few scan steps have occurred (ZYGO Patent #4,558,315).

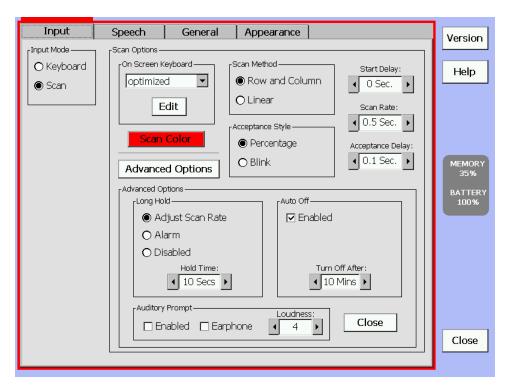
Acceptance Delay

The Acceptance Delay determines how long the scan highlight will wait at the selected key before it is accepted.

Advanced Scan Options

Tap on the "Advanced" button to access the Advanced Scan Options.





Long Hold

The Long Hold function can be used to activate an alarm or adjust the scan rate. The function is initiated by holding the external scan switch closed for a specified period of time.

Alarm

Use the alarm to get someone's attention.

Adjust Scan Rate

If the Scan Rate is set too fast or too slow, the user can adjust it by holding the switch closed until the Scan Rate window appears.

Disable

Choose this option when the Long Hold function is not wanted.

Hold Time

The Hold Time slider determines how long the switch must be held closed in order to activate the Long Hold function. It can be adjusted from 5 to 60 seconds.

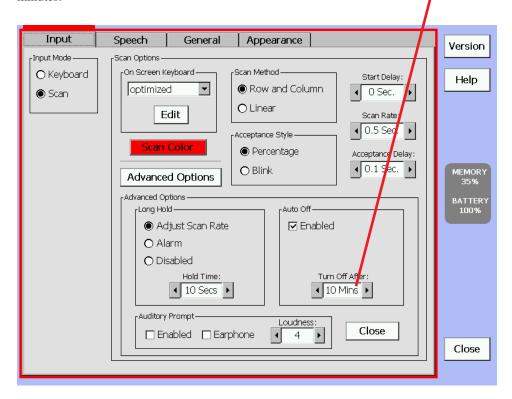
Auto Off

The Auto Off feature automatically turns off (suspends) the *Polyana* when *Persona* is in Scan Mode.

The Auto Off feature senses when the unit is not being used and shuts it down after a period of time in order to conserve battery power. The device can be turned on again by pressing the Scan Switch.

Check the Enable checkbox to enable the Auto Off or uncheck it to disable it.

The amount of time that the device needs to be inactive before shutting down is determined by the "Turn Off After" slider. The slider can be adjusted from 1 to 15 minutes.



Auditory Prompt

Key captions and rows are spoken in a soft voice to help reinforce the scan/selection process. Rows are spoken as "Row 1" through "Row 6". Keep in mind that scanning can be faster than the time it takes DECtalk to speak, and as a result, some captions will not speak completely. Best results are achieved when the scan rate is greater than 0.75 second.

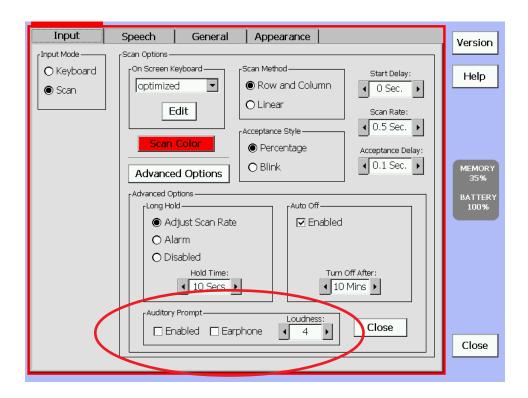
Enabled

The Auditory Prompt features have been enhanced to take advantage of the separate (left and right) audio channels on the new *Polyana*, thus providing a separate audio path for the user (earphone) and a separate audio path for the listener (loudspeaker).

The Auditory Prompt features are only available when the Input mode is set for Scan. To show the Auditory Prompt options, click on the Advanced button within the Scan Options.

There are 3 Auditory Prompt controls.





Enabled checkbox

If the Enabled checkbox is checked, auditory prompting will occur when the Scan Rate is 0.5 seconds or longer.

Earphone checkbox

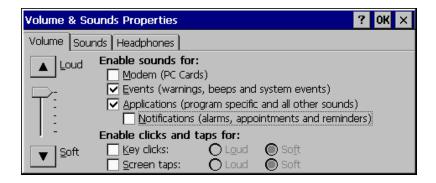
If the Earphone checkbox is checked, the auditory prompts will be heard only through the earphone. Spoken system messages will also be routed through the earphone.



CAUTION:

Please be advised that the *Polyana* can produce very loud sounds through the earphone. Normally this is not an issue when it is speaking text, but the system beeps, message box sounds and alarms can be very loud.

The system sounds can be eliminated by going to the Control Panel and changing the settings of the Volume & Sounds Properties. Uncheck everything except for Applications (program specific...).



When the Earphone checkbox is unchecked, auditory prompts are routed to the loudspeaker built into the chassis below the *Polyana*, or to the External Speaker if it's connected.

Loudness

This controls the loudness of the auditory prompts.

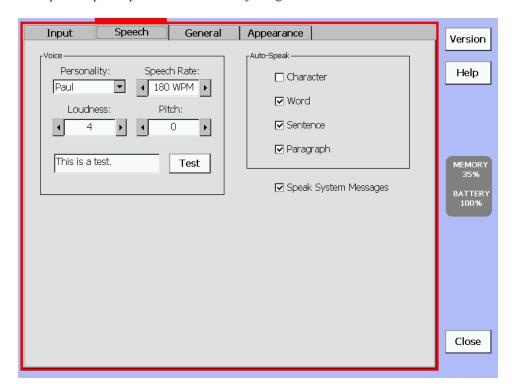


NOTE for Facilitator:

Test the sound level in the headphone yourself so as not to offend the user's hearing.

SPEECH OPTIONS

The Speech Options provide a means of adjusting the characteristics of the voice.



Voice Settings

Personality:

There are 9 personalities to choose from.

Speech Rate:

Speech Rate determines the speaking rate. 180 WPM (words per minute) is the default.

Loudness:

The Loudness control sets the loudness of the voice. It works in parallel with the Loudness control on the Main screen (Typing mode) or the Volume key (Scan mode). So, changing it in either place will affect the other. Setting the Loudness value to 0 silences the voice.

Pitch:

There are 11 possible settings. 0 is the default.

Test

Tap on the Test button to hear how the new voice settings will sound.

Auto-Speak

Character

When enabled, each letter will be spoken as it is typed.

Word

When enabled, each word will be spoken as it is completed. A word is considered complete if it is terminated by a space, comma, period, question mark or exclamation point.

The last word of a sentence is not spoken if Speak Sentence is enabled. Instead the entire sentence is spoken.

Sentence

When enabled, the entire sentence is spoken when a period, question mark or exclamation point is typed. To speak the sentence again, tap on the Speak button (Typing mode) or Speak key (Scan mode).

Paragraph

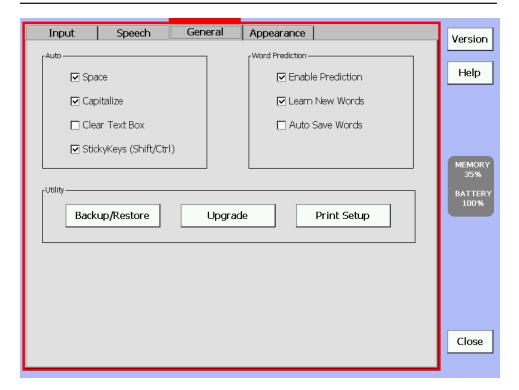
When enabled, the paragraph is spoken when the Enter key is pressed. To speak the paragraph again, tap on the Speak button (Typing mode) or Speak key (Scan mode).

System Msgs

When enabled, Message Boxes are spoken. Message boxes provide important information or ask for confirmation before changes are made to settings.

NOTE: Message boxes that do not require a response disappear after a few seconds.

In Scanning mode, Message Boxes that *do* require a response from the user, are scan enabled. The scan rate of the Message boxes is half that of the scan rate setting.



Auto Functions

Auto Space

Auto Space automatically adds a space after a comma, period, exclamation mark or question mark. Auto Space is ignored when typing numbers or DECtalk syntax.

Auto Caps

Auto Caps automatically capitalizes the first letter of the text box and/or the first letter of each new sentence. The first letter of a sentence must be preceded by a punctuation (period, exclamation mark or question mark) followed by a space.

Auto Caps also capitalizes the words "i", "i'll", "i'm", and "i'd".

Auto Caps preserves the case of the first letter of a partial word when it is completed by a predicted word.

Auto Clear

Auto Clear clears the entire text box when the first letter of a new sentence (following a period, exclamation mark or question mark, plus space) is typed. This option is useful if the main text box is to be used primarily for communication purposes.

The Instant Speak (ISpk) text box always clears itself in the manner described. It serves the purpose of providing instant communication when the Main text box is being used for typing a document.

StickyKeys

StickyKeys enable the Shift and Control keys to remain "pressed" without having to hold them down. This feature facilitates making combination key presses that otherwise require having to press and hold two keys at the same time.

Persona's main screen (Typing mode) has an indicator that shows the status of the Shift and Control locks. Each time that the Shift and Control keys are pressed, they cycle through 3 possible states of operation:

Shift or Control Key	Status Color	<u>Function</u>
No key press (normal)	No background	Not locked
1 key press	Medium background	Temporarily locked. Will return to normal (non-locked) upon next key press.
2 key presses	Black background	Locked. Will stay locked until the Shift or Control key is pressed again.

Word Prediction and Word Completion

Word Prediction greatly reduces the amount of time and effort required to create words and sentences. Word Prediction is comprised of 2 parts, Word Completion and Word Prediction. When talking in general terms, the 2 parts are mutually referred to as Word Prediction. For a deeper understanding of how Word Prediction is implemented in *Persona*, we need to discuss the 2 parts individually.

Word Completion

Word Completion is active when 1 or more letters have been typed and before the word has been completed by typing a space, comma, period, exclamation point, question mark or Enter. Word Completion suggests words that begin with the letters which have been typed thus far. If the word that the user wants to type is displayed, it can be selected and the partially typed word will be completed.

Word Prediction

When a word has been completed by typing a space, comma, period, exclamation point, question mark or Enter, Word Prediction words will be displayed, if there are any. The words that appear are words which have been previously used and have previously followed the word which was just typed.

In Scan mode, Word Prediction is only available in the Main and InstSpk text boxes. However, Word Completion is available in all of the Scan text boxes (except for AbEx Abbreviation and SpEx Spelling text boxes).

Word Prediction is not available in all text boxes because special modes (AbEx, SpEx, Phrase, etc.) have special keys which share the Word Prediction keys and are shown when there are no Word Completion words to display or when a word is completed.

Learning new words

Persona's Word Prediction engine remembers the words that are typed. The words are also prioritized. If a word is used frequently, it will move towards the top of the list so that the most frequently used words are the easiest to access. Less frequently used words will be bumped down and will eventually disappear. This is good to know because, if a word was typed by mistake, it will eventually be removed from the list. However, it may be a good idea to disable Learn New Words when first using the program, thereby preventing misspelled words from being saved.

Word Prediction / Word Completion Features

Enable Prediction

When enabled, Word Prediction suggests words that may be used to complete a partially typed word or suggest words that may follow a completed word. The Word Prediction library can contain up to 2,000 words.

Learn New Words

When Learn New Words is enabled, words that have not been used before are automatically added to the Word Prediction library so that they will become available the next time they are needed.

Auto Save Words

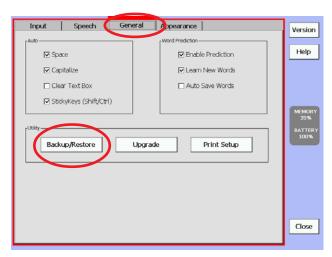
When enabled, new words are saved to **Persona**'s internal memory after 15 minutes of inactivity (typing or scanning). If you choose to end the program before new words have been saved, you will be prompted to save them.

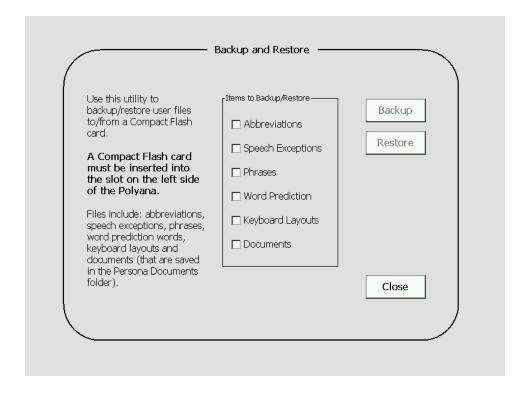
Utility

Backup/Restore

The Backup/Restore utility provides a means of backing up precious user files in the unlikely event that the *Polyana* was lost, stolen or damaged. It can also be used to transfer the files to and from another *Polyana* or PC.

Simply check the items you want to backup or restore and click the appropriate button or choose Close to cancel.





Print Setup

Persona presently supports the following printers...

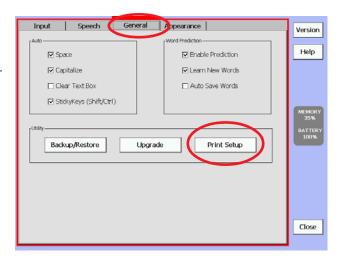
Canon BJC-85, a color ink jet printer that uses standard sheets of paper.

SiPix A6, a very small thermal printer that uses rolls of paper.

ExTech, a small impact printer that uses rolls of paper.

The ExTech printer is available from ZYGO Industries, Inc. The others are available from computer supply sources.

Determine which printer to use by tapping on the General options tab. Then, tap on the Print Setup button.



Select the printer that you want to use.



NOTE: The ExTech option is more generic than the other choices and may work with other printers not listed here.



The EXTECH portable impact 40-column printer uses small paper rolls similar to those in adding machines.

> Paper Width: 2-1/4" (5.7 cm) Roll Diameter: 1-1/2" (3.8 cm)

 Printer Size: 4-1/4" wide, 4-3/4" long, 2-3/4" high

(11 x 12 x 7 cm)

· Printer Weight: 1.2 pounds (0.54 Kg)

	Printer —
Persona prints through the IR window located on the back edge of the device. The IR window on the device and the printer should be aligned at a distance of less than 5 feet.	Choose a printer ExTech SiPix A6 Canon BJC-85
CAUTION: The user may require assistance when printing from Scan mode. For example, paper or ink may run out.	Close

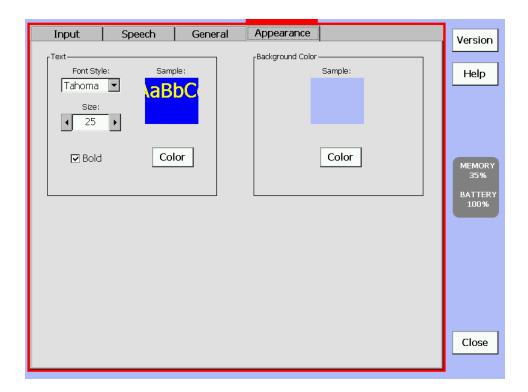
If the printer has enough paper and ink, and the distance between the *Polyana* and the printer is less than 5 feet, the scan user should be able to print without any help. But, if there is a problem (such as: Out of paper, Out of ink, Communication link was lost), the user will require assistance. However, if the scan user does encounter a problem while printing, control will be returned to the scan switch when the last message box disappears.

Control Panel Setup

A setting must be made to the Control Panel/Irda Switch in order for printing to work through the infrared port. Make sure that the "Enable Irda Switch transmit data polarity" checkbox is checked.

APPEARANCE OPTIONS

The Appearance Options provide the means for adjusting the look of the program to suite an individual's needs.



Text

All **textboxes** are affected by the following settings:

Font Style:

Choose from a variety of font styles.

Size:

Font Size adjusts the size of the text. The smaller textboxes used in AbEx, SpEx, Phrases and Scanning are limited to a maximum font size of 25 pt so that text will fit properly. Font sizes larger than 25 pt only affect the Main text box and the Instant Speak text box.

Color

Tap on the Color button to change the background color of the text boxes as well as the text (font) color.

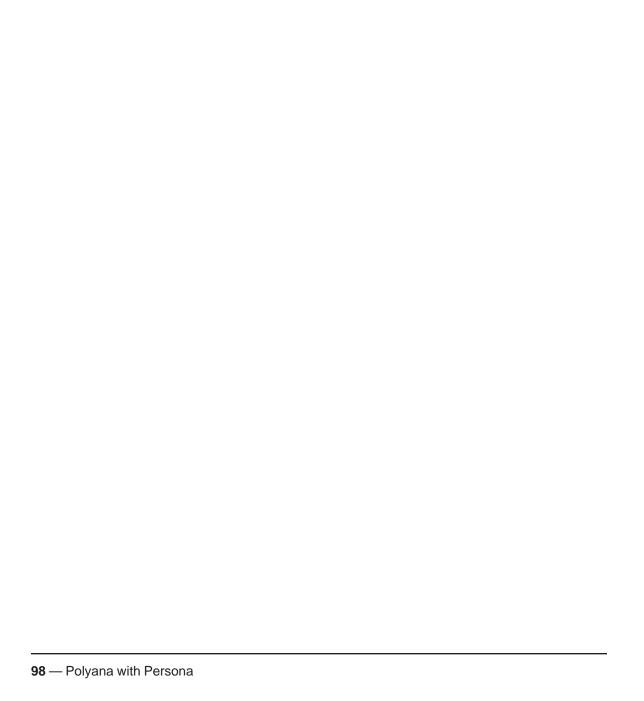
Background Color Tap on the Color button to change the background color of the Main and Scanning screens.

SETUP / Upgrading Persona

Using a Compact Flash (CF) Card

A CF card and a CF card Reader/Writer are required. The CF card Reader/Writer is a separately purchased device that attaches to a PC. The CF card will appear as another drive. Another option is a PCMCIA to CF adapter, which allows CF cards to be inserted into most notebook computers.

- Request a *Persona* Upgrade from ZYGO's Customer Service Department. Provide an e-mail address to which an upgrade file can be sent.
- 2. After the file has been received, use Windows Explorer to copy it to the CF card.
- Insert the CF card into the *Polyana*, use My Handheld PC to find the file, and double-click on it to begin the upgrade process.



Restoring *Persona* after a Dead Battery or Hard Reset

When the battery becomes depleted, or a hard reset is performed on the *Polyana*, all of the dynamic memory (RAM) will be lost. Typically, CE programs are stored in the RAM and require reinstallation. *Persona* was developed to minimize the hassle of reinstallation after the loss of memory.

All of the files required to restore and run *Persona* are stored in the Flash Disk. These files are not lost when the battery is dead or a hard reset is performed.

- 1) Once all of the initialization has been performed and you are at the Windows Desktop on your *Polyana*, double-tap on the "My Computer" in the upper left corner of the display.
- 2) Double-tap on the "Flash Disk" folder to open it.
- 3) Double-tap on the "Persona" folder to open it.
- 4) Double-tap on the "Persona.vb" file to restart *Persona*.
 - If the "Persona.vb" file does not exist, then you will have to follow the *Persona* SETUP / Upgrading *Persona* instructions on Page 97 in this User manual.
- 5) Restoring *Persona* does not restore the Persona shortcut icon on the Windows Desktop, nor does it restore the menu item under "Start/Programs/Persona". Also, all of the Windows settings are returned to the default state.

Here are few key items that you should restore manually...

Persona Icon on Desktop

- a) Double-tap on the "My Computer" in the upper right corner of the Windows Desktop.
- b) Double-tap on the "Flash Disk" folder to open it.
- c) Double-tap on the "Persona" folder to open it.
- d) Single-tap on "Persona.vb" to highlight it.
- e) Select the menu item "Edit" and then "Copy".
- f) Return to the Windows Desktop.
- g) Press and hold the "Alt" key and tap on the screen.
- h) Select "Paste Shortcut" from the pop-up menu.

Auto-hide Taskbar

- a) Tap on the "Start" button.
- b) Tap on "Settings" menu item.
- c) Tap on "Taskbar" menu item.
- d) Place a check mark in the "Auto hide" check box.
- e) Tap on the OK button.

Other settings may require changing or restoring in the Control Panel, such as:

- Display
- Power
- System

Refer to other sections of this user manual for instructions regarding memory settings.

Trouble-shooting

Error Messages

"Insufficient Text-to-Speech Run-time Licenses" When you see this message, it means that *Persona* has been started a second time. Only one instance of *Persona* can be run at a time. Tap on the OK button to continue. Another message box will appear stating that *Persona* is already running. Tap on the OK button to continue. Once that's done, the second instance of *Persona* will go away. Look at the Taskbar on the bottom edge of the screen to find a *Persona* related button (Type, Preferences, Scan).

"Out of Memory" This means that there is not enough memory to run *Persona*. Tap on the OK button to clear the error message. Adjust the System memory so that there is more memory available for running programs.

Refer to *Section 2*, *Memory Management*, for more details.

"Connecting to Serial Port" This means that a Control Panel option needs to be changed. To change it, go to the Control Panel, tap on the Communication icon, and then tap on the PC Connection tab. Make sure that the "Allow connection with desktop..." is unchecked.

Refer to Section 3, Scan Mode, Switch Adapter, for more details.

For additional assistance, consult ZYGO's Customer Service Department or your local dealer or agent.

ZYGO CUSTOMER SERVICE

Toll Free (U.S.A./Canada): (800) 234-6006

TEL: +1 (503) 684-6006 FAX: +1 (503) 684-6011 E-mail: zygo@zygo-usa.com

Resetting the Polyana

Occasionally, the *Polyana*'s base computer may need to be reset. Instructions for resetting the computer are in the NETBOOK PRO User Manual.

Access to the Reset button is provided through a hole to the right of the right-hand Shift key. Using a thin object, like an unfolded paper clip, hold the Reset button down for a second.

If the computer turns off, press the Esc/On button to turn it back on.

After a "soft" reset as described, any changes to open files will be lost. Files in internal storage will almost always be safe.



Maintenance

Replacing the Polyana's Backup Battery

Polyana's base computer has a replaceable backup battery to maintain the system configuration information. It will need to be replaced if it fails to maintain the system configuration information.

Instructions for replacing the backup battery are in the NETBOOK PRO's User Manual.

