Eye-Pal®

User Guide

Freedom Scientific, Inc.

www.FreedomScientific.com

440802-001 Revision A

To register your product, visit http://www.freedomscientific.com/forms/ProductRegistration.

Safety and Maintenance

To keep the unit in good condition and to ensure safe usage, observe the following guidelines:

- Read the instructions in this user's guide before attempting to use the unit.

- Do not attempt to repair the unit or open its case. This product contains no user serviceable parts.

- Keep the unit away from wet areas, rain, and other sources of liquids or high humidity. Do not submerge the unit.

- Always operate the unit in a place where the temperature is between 10° and 40° C (50° and 104° F).

- Always store the unit in a place where the temperature is between -20° and 65° C (-4° and 149° F).

- Always use the unit on a stable, level, hard surface such as a desk or table.

- When cleaning the camera lens, unplug the power cord and apply a small amount of non-abrasive cleanser, such as the following, to a soft, lint-free cloth and gently wipe:

    - Water

    - Isopropyl alcohol

    - Petroleum benzene

    - Vinegar mixed with water at a concentration of no more than 10 percent vinegar, for example, 1.5 tablespoons of vinegar per cup of water (100 ml per liter)

CAUTION:
Do not apply excessive pressure to the camera lens. Do not spray cleanser directly on these items. Also, do not use any cleanser that contains the following agents: acetone, ethyl alcohol, ethyl acid, ammonia, or methyl chloride.

When cleaning the rest of the unit, make sure the unit is unplugged. Use a lightly dampened, soft, clean cloth with water or mild detergent.

Table of Contents

Eye- Pal® is a computer-connected portable electronic scanner/reader that helps those with low vision to hear text read aloud.

Eye-Pal reads aloud books, magazines, newspapers, documents, prescription labels and other print in a variety of naturally-sounding voices and languages.

The software program is fully customizable to accommodate individual preferences. Default settings can be changed by going to Application and down to Settings.

Setting Up Eye-Pal

1. Remove the device from the box and unfold the two legs. Pivot the two pins at the base of the vertical camera stand outward over each leg. This locks the legs in position (Picture 1).

2. This part is important. Insert the software installation CD into your computer and follow the installation instructions. Do not connect Eye-Pal to your PC until the installation wizard instructs you.

3. When instructed by the setup CD, plug the USB cable directly into the computer or laptop. Do not use bus-powered USB hub.

4. Locate Eye-Pal application by pressing the "Windows" key plus "D" key to open the desktop. Press "Z" key to locate Eye-Pal icon. Click on Eye-Pal icon to hear "Camera Started." This indicates that the camera is ready to start scanning and reading aloud.

How to Place a Document Under the Camera

Place a document under the Eye-Pal camera and press the Space bar to hear "Camera started"

1. To scan and hear printed material read aloud, press E on the keyboard, and wait until you hear a shutter sound. Reading starts immediately.

2. Press X to pause and resume reading.

3. Press E to have the text read to you from the beginning of the document. Follow along as the text is read aloud and displayed on the screen.

Keyboard Keys to Navigate Reading

1. Place printed material under the camera.

2. Press the Space bar to turn the camera on. You will hear "Camera Started".

3. Press the E key on the computer keyboard to start reading from the beginning of the page. You can also start reading by going to the menu's Voice tab and choosing Speak Entire Page.

4. Press the X key to stop or resume reading.

5. Press Shift + E to hear the page layout description.

   - Number of words on the page

   - Number of sections on the page

   - Percentage of text on the page

   - Number of columns and headers on the page

To navigate by word, sentence, section, or character:

   - Press Control + Right Arrow to move to the next word.

   - Press Control + Left Arrow to move to the previous word.

   - Press Down Arrow to move to the next sentence.

   - Press Up Arrow to move to the previous sentence.

- Press Control + Down Arrow to move to the next section

- Press Control + Up Arrow to move to the previous section.

- Press Right Arrow to move to the next character

- Press Left Arrow to move to the previous character

To stop the document from being read, press the Control key.

Changing the Voice Settings

You can change the voice parameters by going to Application, Settings then Voice tab:
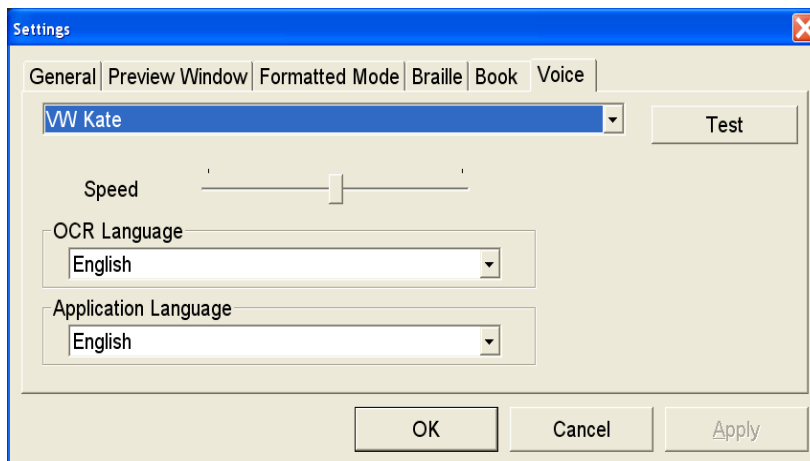
Test different voices, select the one that you like and click Apply.

You can change the speed by clicking the Shift + Q key to make it faster or the

Shift + Z key, to make it slower. You can also change the speed by going to Application, down to Settings, over to the Voice tab and using the slide bar.

Changing the Language

When you go to Application, down to Settings, and over to the Voice tab, there are two other options that you can modify. The first is OCR Language.
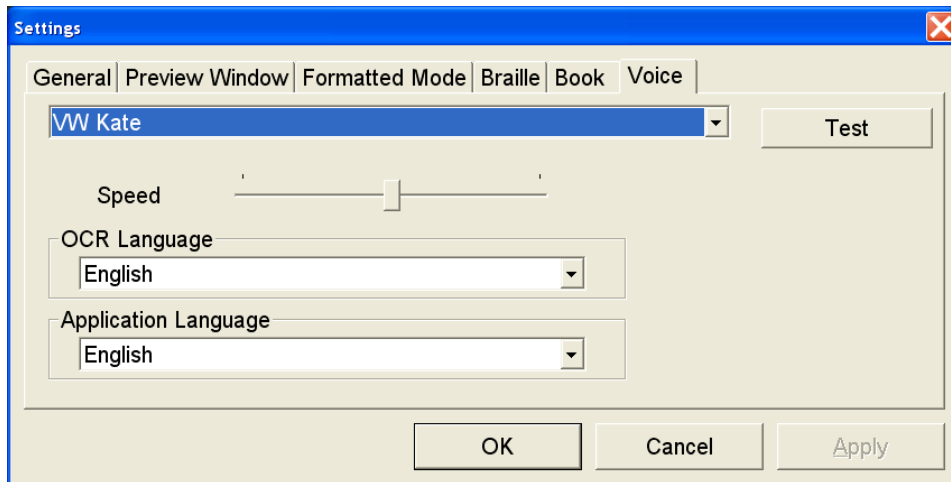
OCR Language is the language of the document that you are putting under the Eye-Pal camera. By default, the OCR Language is English.

The second is Application Language, which is the language of the application, including text, menus, and dialog boxes. By default, the Application Language is English.

Saving a Document and Opening a Previously Saved Document

Place a new page at the Eye-Pal base. Go to Application and down to Save Image. A Save Image dialog box will appear.
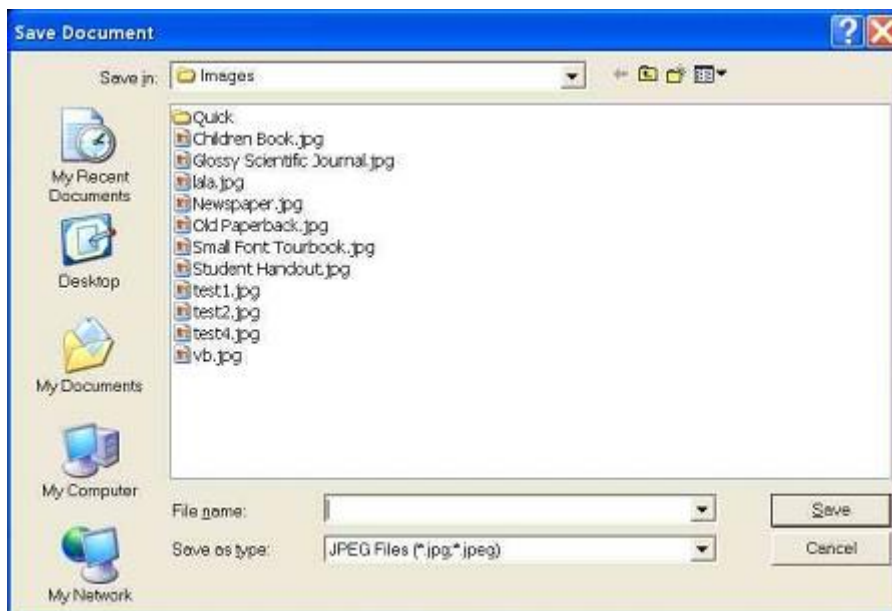
Type in the name for your document, and click the Save button. The image will be saved in the default directory My Documents\Eye-Pal\Images. You can also select another directory in which to save the document.

To read a previously saved image: Go to Application and down to Import Image. A Load Image dialog box will appear. Select the image and right click Open. Press the E button to read it.

To save a document as a text file

To save a document as text that is currently under the Eye-Pal camera, press E to stop the camera. Once the camera is stopped you can save the document as text.

To quickly save text with default name as date/time stamp in the default folder My Documents\Eye-Pal\Temp, and immediately display the text file on the screen, press Control + Shift + W.

You can also save text in any directory and give it any name by going to the Application menu, down to Save text, and then press Enter.
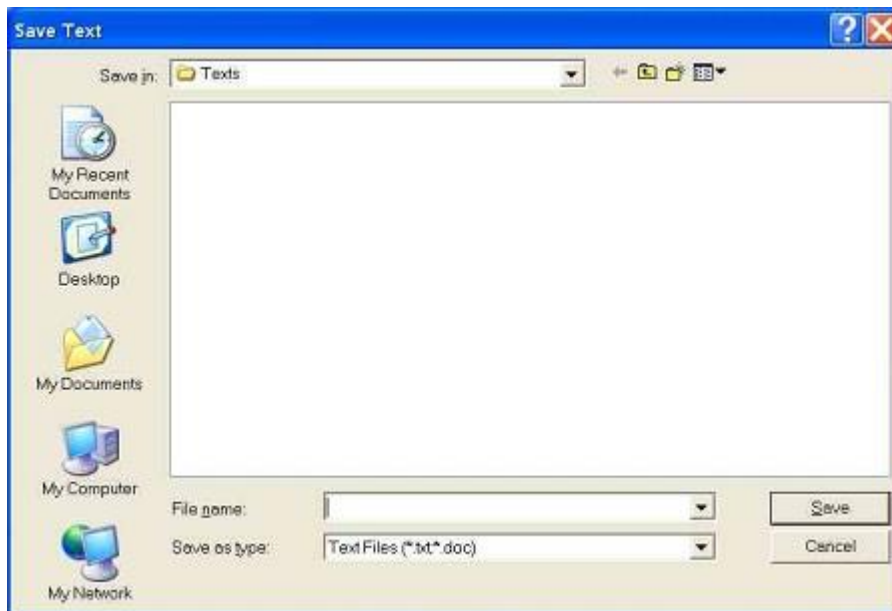
A Save text dialog box will appear. Type in the name for your document and click the Save button. Documents will be saved in the default directory My Documents\Eye-Pal\Texts. Again, you can select another directory in which to save the document.

When saving a previously saved image as text, there is no need to stop the camera because it is already stopped. Follow the same steps listed above.

To read previously saved as text document

Go to Application on the toolbar and go down to Import File.

A Load Document dialog box will appear. Select a document you have previously saved

in the default directory: My Documents\Eye-Pal\Texts.

Note: Text documents will not be displayed on the screen. Print E to start reading.

To view and read document saved on your computer in PDF format

Eye-Pal will not allow you to save a document in PDF format, however it allows you to open a PDF file already saved on your computer.

Go to Application on the toolbar and go down to Import File. Find a directory where you have saved the file.

Note: There is no default directory as there is for the TXT and JPG files.

Find a PDF file you would like to open and read, and select it. The document will be displayed on the screen. You can read it as described above for the JPG and TXT documents.

To Save a Document as an MP3 (Audio) File

To save a single page document as an audio file, take a picture of this document first.

Once the camera is stopped you can save the document as an audio file.

Go to Application menu and select Save Audio then press Enter.

A Save Audio dialog box will appear. Type in the name for your document, and click the Save button. The document will be saved in the default directory MyDocuments\Eye-Pal\Audio. You can also select another directory in which to save the document.

Note: When you are saving the entire book as an MP3 file (Book/Save book MP3), it will be saved in the default directory: MyDocuments\Eye-Pal\MP3,

Opening an Audio File

An MP3 or audio file CANNOT BE OPENED in Eye-Pal. Go to the directory where the file was saved and open it from there. The default directory that the MP3 files are saved in is My Documents\Eye-Pal\Audio. Double click on the saved file and it will open in a program such as Windows Media Player.

The saved Audio file allows you to hear the full text without having to change it first to a text format to be read. Use the audio file, burn it onto a CD and upload it to an MP3 player so you can listen to your own audio book.

A Book is an electronic copy of a book that you can create using the Eye-Pal camera.

Eye-Pal allows you to scan and save multi-page documents to a computer. While reading a Book you can use all the same document capabilities that are available for documents with Eye-Pal.

You can listen while the book is read to you page by page. The whole book can be saved as text, using any third party software to read the file.
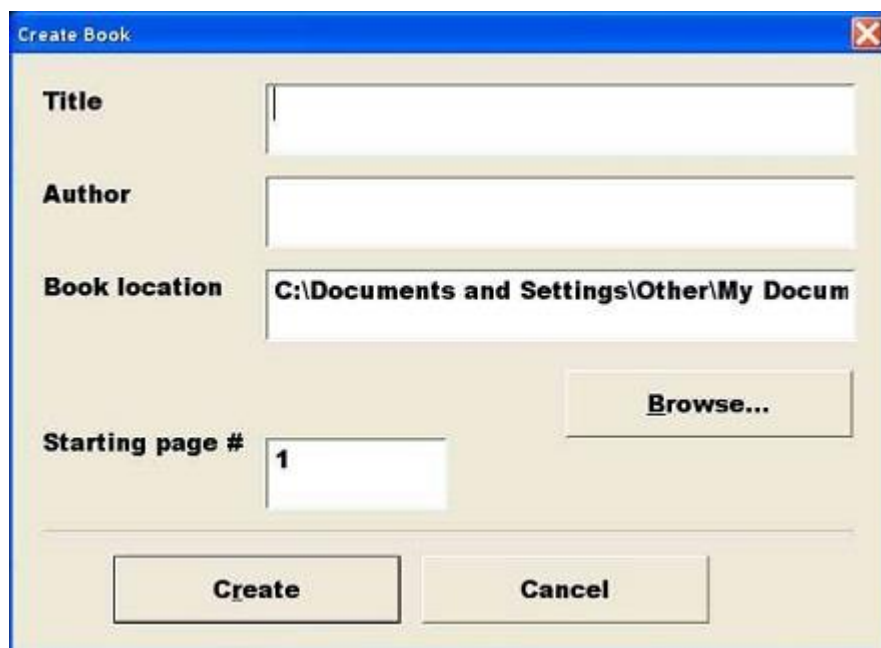
A Book allows you to bring your book anywhere with you. Just save it to a CD or upload it to your MP3 player.

Creating a Book

Have a book or a multi-page document handy for scanning and reading with Eye-Pal. Place your document under the Eye-Pal camera.

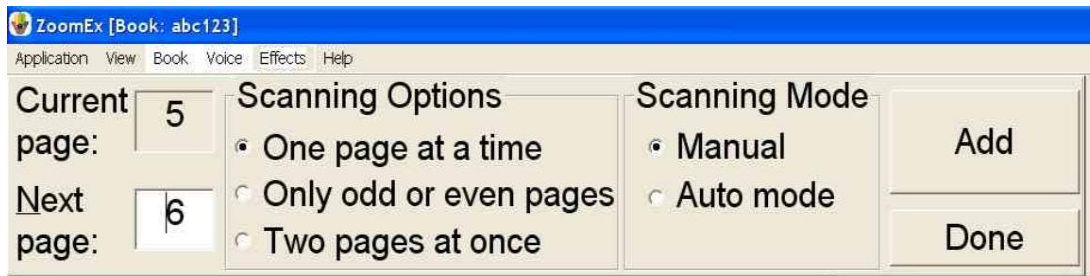Find the Book menu and click on it or click Alt + B and then the Enter key.

The Create Book dialog will appear. Put in the book title and the author's name, and click Create.

The dialog will go away and the Add Pages bar will appear instead.

You can save any kind of book using Eye-Pal; small paperback books, large books with page sizes up to 8.5'x11', and magazines.

Choose how to scan a Book

Start by selecting one of the three scanning options:

1. Scan one page at a time. Use this option to scan a small amount of large pages.

2. Scan only odd or only even pages. Use this option to scan pages in a large book. Open the book and place the left or right page under the camera. If a portion of the second page also appears under the camera, Eye-Pal will ignore it. Do not move the book until you have scanned all odd pages you want.

   Once you have finished scanning odd pages, do the same for the even pages. Start by turning the book 180 degrees. Be sure that the even pages are now under the camera. The fact that the pages appear upside-down does not matter. Eye-Pal rotates the pages for you automatically when you want to read the book.

   Change the Next page number to the first even page number and start scanning the even pages. When you have finished, click the Done button. A Book will sort and keep all the pages in the right order automatically.

3. Scan two pages at once. Use this option to scan small-sized books. If you place the open book under the camera and can see both pages in the preview window (F5), you can save both pages at once. While using this option, the book orientation is important. Always put the book in landscape format and align the edges of the book with the Eye-Pal base.

   When you scan two pages at once, both pages will be saved with their respective numbers. You will be able to view each page separately. If the Book failed to separate two pages, this will be indicated by an error sound and will be saved as one page. In this case, you can delete that page. See

Deleting a Page in a Book section to adjust the book and save the same pages again.

Scanning modes

There are two types of scanning modes:

1. Manual Mode: Press the A key or click the Add button to scan and save the page. You will hear a shutter sound indicating that the page has been scanned and saved.

2. Auto Mode: Click the Start Auto Mode button to start scanning and saving pages. Then simply turn the pages. The Eye-Pal camera has motion detectors so it will scan each page as soon as the page image is still for a few seconds. It waits while you turn the pages. Auto Mode allows you to use both hands to hold the pages in place, since you don't have to operate the mouse or keyboard to push the Add button.

Note: The default selection is Manual mode.

Adding pages to a new Book

Now that you've chosen how to scan and save a book, let's start adding pages.

Manual Mode

1. Put the first page of your document under the Eye-Pal camera and it will appear on the screen.

2. Click the Add (A) button. Use your hands to keep the book flat and in a second, you will hear a shutter sound. The page is now saved, and the Current page field should display 1. The Next page number should display 2 if you are saving one page at a time or 3 if you are saving two pages at a time, (or odd or even) pages.

3. Put the next page of your document down, click the Add button or press A on the keyboard.

4. Save as many pages as you need by repeating the previous step.

5. If you are saving many pages, you can continue saving pages later.

Auto Mode

1. Click the Start Auto Mode Button.

2. Place the open book under the camera and use both hands to flatten the page. In a few seconds you will hear the shutter sound, as the page has been scanned and saved.

3. Turn the page, again keep the page flat and in a few seconds you will hear the same sound.

4. Continue turning pages until you have all the pages you want to be scanned and saved.

5. When you are done or need a break, click the Stop Auto Mode button and remove the book from under the camera.

6. When you are completely finished saving pages, click the Done button. The Add Pages Book bar will disappear, and the Read Mode Book bar will appear.

> **Note:** You can add more pages to this book later. See Adding Additional Pages to an Existing Book section of the manual for more details.
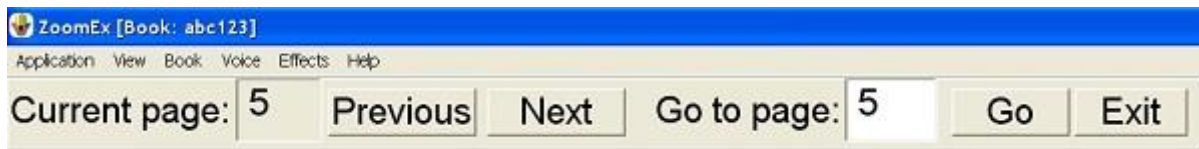
The Read Mode bar allows you to easily read your saved book with navigation buttons. For more information on reading your book with the Read Mode Book bar, see Reading a Saved Book topic below.

If you are done with your book, click the Exit button to close the book.

More tips on saving a Book

1. Place a piece of white paper under the camera and place a book on the paper. Then Eye-Pal will not scan the background as part of your document.

2. Make the book as flat as possible. If you are saving a thick book with many pages, choose the Auto mode and use both hands to flatten the book.

3. When you are saving a book in Auto mode, Eye-Pal will automatically adjust brightness to the light conditions at that time. If you are taking a lot of time

saving all of the pages, take a break occasionally. Click Stop Auto Mode and then click Start Auto Mode to allow Eye-Pal to re-adjust the brightness according to the illumination of your room.

4. When you are saving a lot of pages in Auto mode, you may notice you have to wait longer to hear the shutter. It could be due to one of three reasons:

- The camera detects some motion such as wind, unstable hands, etc.;

- The camera missed a motion when you flipped the page; or

- Eye-Pal turned the camera off because the conditions have changed; for example, the lights in the room were turned on or off.

You can always restart the camera and click the Start Auto Mode button again.

5. If you are using Manual mode, be sure that the page is stable on the screen before clicking Add (A).

Reading a saved Book

To enable the continuous reading of the saved book go to Application, Settings, Book tab and select a check box near the Continuous Book read mode. Then press Apply button and OK button. This option allows you to read a book from page one to the last page unstopped.

To browse through the saved pages of your document:

1. Go to the Book menu and select Open Book.

2. The Open Book dialog will show the books in the default folder My Documents\Eye-Pal\Books. If you want to open the book that was saved in another folder, use the Browse button to select the desired folder. The location of the selected folder will be displayed in the Book location field. The list of books in this folder will be displayed on the screen.

Note: Select the folder that contains all of your books, and not the folder that bears the name of a specific book. You might see the folder which bears the name of the specific book – do not select it.

3. Select the book you would like to view, and click the Open button.

The Open Book dialog box disappears. The Read Mode bar appears at the top of the screen; the first page of the chosen document is displayed on screen as well.
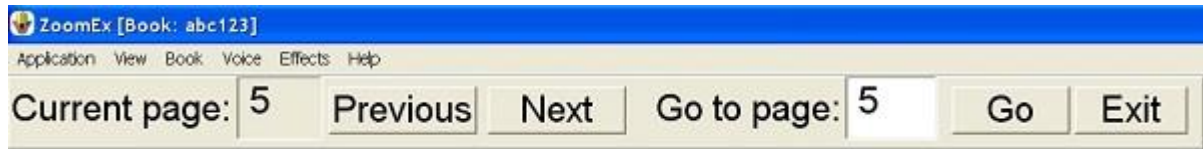
The Read Mode bar has the Previous and Next buttons, the Go to page field and Go button to jump to a page out of order. The Read Mode bar also has the Current Page field, which displays the number of the page currently being viewed.

If the Status Parameter box is checked under General Settings, Eye-Pal will tell you the current page number.

Eye-Pal will remember all of your selections when you move from page to page or from book to book. If you use the Save only odd or only even pages option while saving the book, you will have to rotate only the first even (odd) page. Eye-Pal will rotate the rest of the pages automatically.

4. Click the Next button or N on the keyboard to go to the next page of your document. Click the Previous button or P on the keyboard to go to the previous page. You can also put in a page number out of sequence, and click the Go button to jump to that page.

5. When you are done browsing the book, click the Exit button.

Adding pages to an existing Book

To add additional pages to an existing book:

1. Open the book by going to the Book menu and go down to Open Book.

2. Once the Read Mode bar appears, go to the Book menu and select Add Pages

3. The Add Pages Book bar will appear.

4. Place the page you want to scan under the camera, set its page number, and press the Add button or the letter A. You can also use the Auto Save mode and/or save two pages at a time. See "Creating and Saving a Book" section for details.

5. Repeat step 4 as needed.

6. When you finish adding new pages, click the Done button. If you are saving pages in Auto Mode, click the Stop Auto Mode button first and then click the Done button. The Add Pages book bar will disappear, and the Read Mode Book bar will appear again.

Deleting pages in an existing Book

In order to delete a page in a book:

1. Open the book by going to the Book menu, and click on Open Book. The Read Mode Book bar will appear.

2. Navigate to the page that you want to delete by putting the page number into the Go to page field and pressing Go.

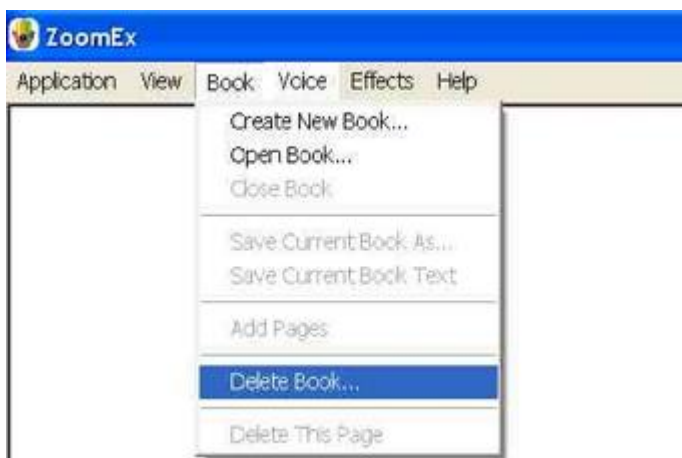3. Go to the Book menu, and click on Delete This Page.
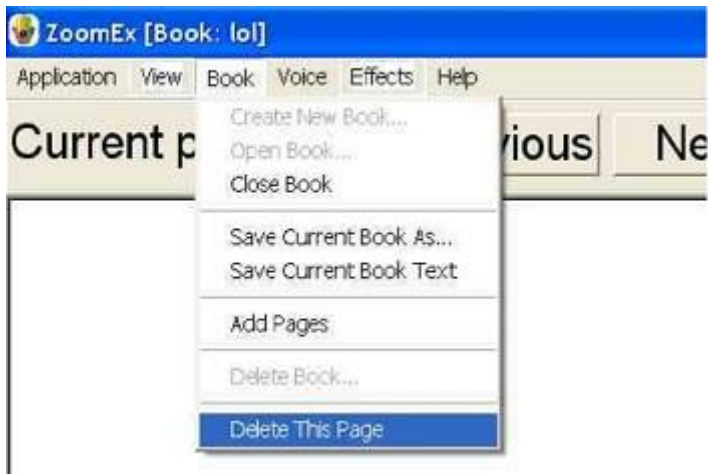
4. You will be asked to confirm your instruction. Click yes.
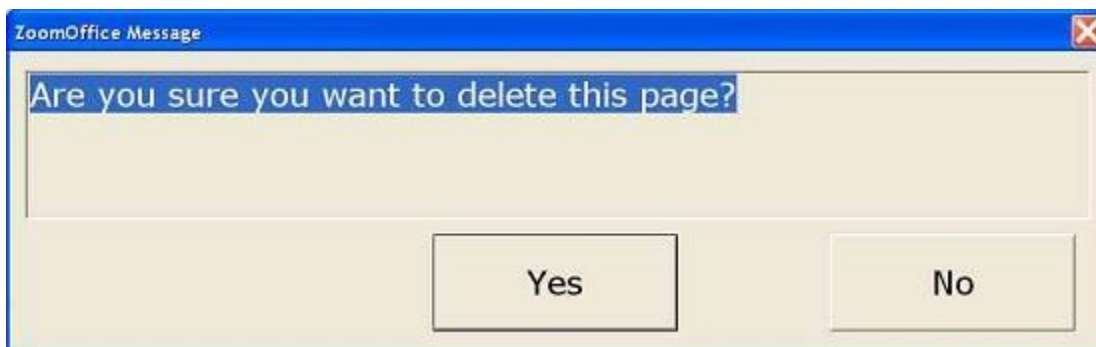
5. The page will be deleted. The display will automatically move to the next page or to the previous page if the deleted page was the last page of the document.
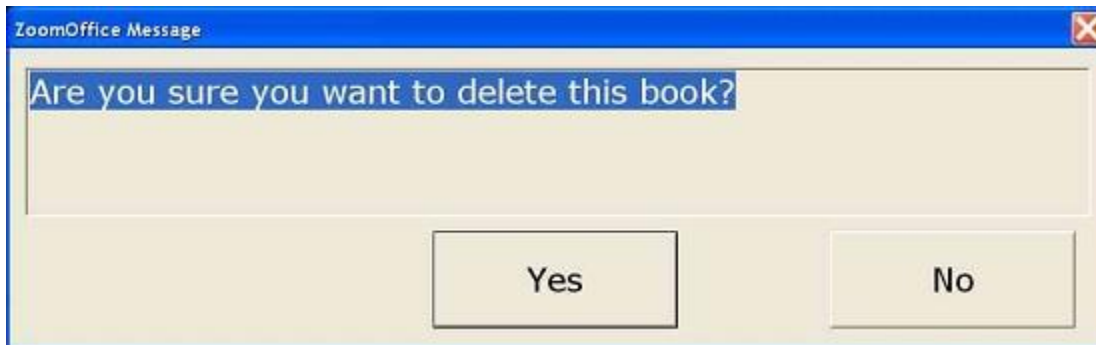
Deleting a Book

1. Go to the Book menu, and click on Delete Book.

2. The Delete Book dialog box will appear. Select the book that you wish to delete and click the Delete button. You cannot delete an open book.
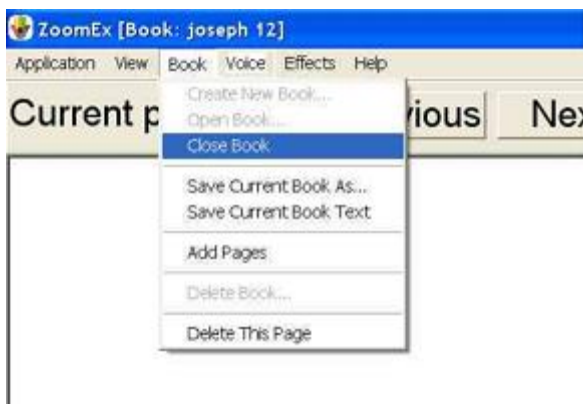
3. You will be asked to confirm your instruction. Click yes.

Closing a Book

To close a book you can click the Exit button or go to the Book menu, and click Close Book.

Saving a Book as text

After you have scanned the book, you can convert the whole book to one text file. Under the Book Menu, click on Save Current Book as Text. The file is saved in the folder My Documents\Eye-Pal\Texts. Depending on the power of your computer, it will take approximately 3 to 6 seconds to save each page. For 200 pages the process may take 10 to 20 minutes.

If the Status box is checked under General Settings, Eye-Pal will tell you the current page number.

Saving the entire Book as MP3 audio file

After you have scanned a book, you can convert the whole book to an audio MP3 file. Under the Book Menu, click Save Current Book as MP3. The file is saved in the folder My Documents\Eye-Pal\MP3.

Please note that MP3 file cannot be opened from the Zoom-Ex application. You can open it from the directory on your computer where it has been saved.

Copying a saved Book

The fastest way to initially save a book is to save it on the hard drive. After you have scanned your book, you can use the Save Current Book As menu item to copy the book onto a CD or a flash drive.

1. Go to the Book menu, and click on Save Current Book As.

2. Use the Browse button to select the drive and/or folder where you want to copy the book.

3. Enter the New Name for the book.

4. Click the Save button.

   It may take a few seconds to save the book.

Notebook (Laptop) Keystrokes for Reading Functions	
Scan and Start reading	E
Stop Eye-Pal Camera	Space
Pause/Resume reading	X
Reading by word	Next: Control + Right Arrow Previous: Control + Left Arrow
Reading by character	Next: Right Arrow Previous: Left Arrow
Reading by sentence	Next: Down Arrow Previous: Up Arrow
Reading by section	Next: Control + Down Arrow Previous: Control +Up Arrow
Speech Output Control Keystrokes	
Increase voice speed:	Shift + Q or F9
Decrease voice speed:	Shift + Z or F8
Hear page description:	Shift + E
Hear current control:	Shift
Stop speaking current control:	Control
Zoom-Book Keyboard Command Keys	
Add page	A (While creating a new book)
Next page	N
Previous page	P

Zoom-Book Menu Accelerator Keys	
Accelerator for Book Sub-Menu	Alt + B
Key Function	
B	Book Menu, Create new book
O	Open Book
D	Delete Book
L	Close book
V	Save current book as
A	Save current book as text
G	Add pages
T	Delete this page