

*SARA*

*Scanning and Reading Appliance*

*User's Guide*

Freedom Scientific

October 2009

**Part #440412-001 Rev B**

## PUBLISHED BY

Freedom Scientific  
11800 31<sup>st</sup> Court North  
St. Petersburg, Florida 33716-1805  
USA  
<http://www.FreedomScientific.com>

Information in this document is subject to change without notice. No part of this publication may be reproduced or transmitted in any form or any means, electronic or mechanical, for any purpose, without the express written permission of Freedom Scientific.

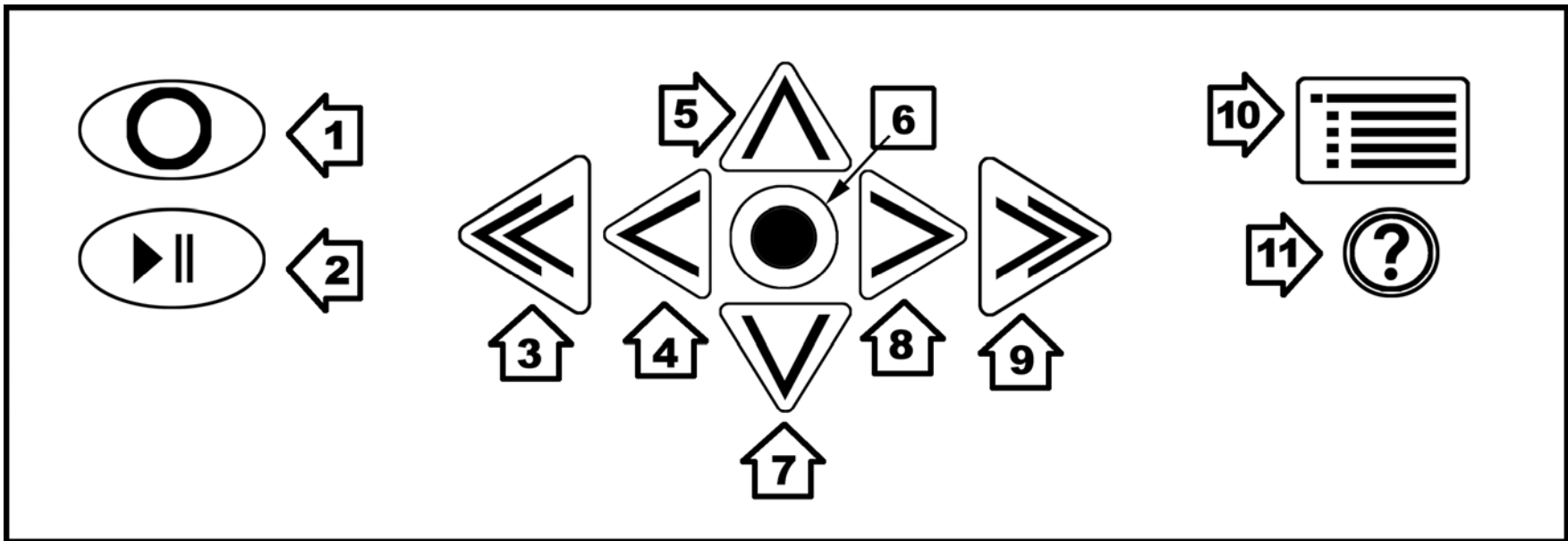
Copyright © 2008 Freedom Scientific, All Rights Reserved.

### **Federal Communications Commission Notice**

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio or television technician for help.

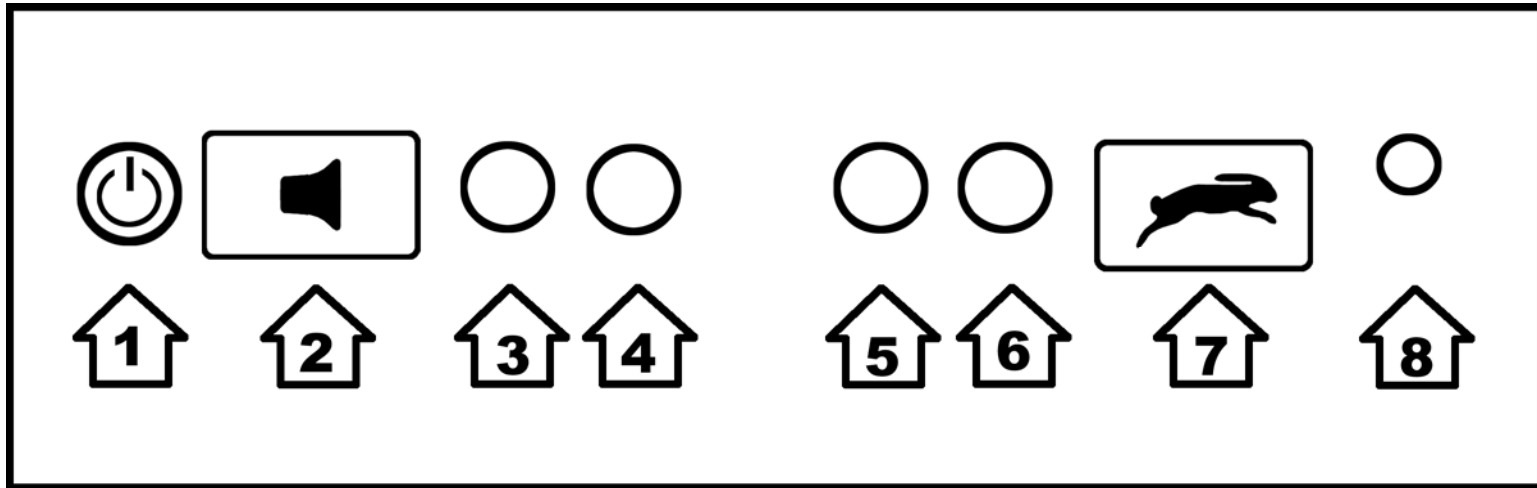
## **SARA's Top Panel**



1. Scan/Record Key
2. Play/Pause Key
3. Left Double Arrow
4. Left Arrow
5. Top Arrow
6. Select Key

7. Down Arrow
8. Right Arrow
9. Right Double Arrow
10. Menu Button
11. Help Key

## **SARA's Front Panel**



1. Power button
2. Volume Rocker
3. Function Key 1
4. Function Key 2

5. Function Key 3
6. Function Key 4
7. Voice Rate Rocker
8. Headset Jack

# Table of Contents

<b>Introduction</b>	<b>1</b>
Welcome to SARA!	1
Features	2
What's in the Box?	3
What SARA Cannot Read	4
How to Set Up SARA	4
<b>Scanning and Reading with SARA</b>	<b>5</b>
Powering SARA On and Off	5
Scanning and Reading with SARA	6
Adjusting Voice Volume	7
Adjusting Reading Speeds	7
Getting Help	8
Using the Movement Keys	8
To Skim through a Document while Reading	9
Cycling through Documents you are Reading	10
Using the Function Keys	10
<b>Using the Menus</b>	<b>12</b>

<b>Using the Settings Wizard</b>	<b>13</b>
<b>Working with Files</b>	<b>14</b>
Opening a New Blank Document	14
Opening a Saved Document	15
Opening a Document from a CD or USB Drive	16
Listening to an Audio File	17
Navigating an Audio File	18
Reading Public Domain Books	19
Closing a Document	19
Saving a Document	20
Saving a Document with a Different Name	21
Saving a Document on a CD or USB Drive	21
Deleting a Document	22
<b>Using the Menus for Other Settings</b>	<b>23</b>
Go To Menu	23
Voice Settings	24
Reading Voice and Menu Voice	24
Enabled Languages	25
Scanning Settings	26
Scanning Order	26
Scanning Mode	26
Scanning Contrast	27

Visual Settings _____	28
Text Font _____	28
Text Size _____	29
Text Color _____	29
Spotlight Color _____	29
Spacing _____	29
Advanced Settings _____	30
Key Assignments _____	30
Key Announcements _____	32
Save to CD Format _____	33
Save to USB Format _____	34
Autoplay Audio CD _____	34
Grade 2 Braille _____	35
Restore Factory Settings _____	35
Updating SARA _____	36
<b>Attachments for SARA _____</b>	<b>37</b>
Using a Headset or Speakers with SARA _____	37
Using a Monitor with SARA _____	37
Using a Braille Display with SARA _____	38
Optional Keyboard Covers _____	39

<b>Warranty Information</b>	<b>40</b>
Technical Support	43
Web Site	44
<b>Keyboard Layout Diagram for Creating Tactile Images</b>	<b>45</b>



## Welcome to SARA!

Freedom Scientific's Scanning and Reading Appliance (SARA) is a stand-alone device designed to help the blind and those with low vision read printed materials. You can use SARA to read almost anything, including mail, important documents, hardcover and paperback books, and more. SARA uses the latest in optical character recognition technology to scan pages and then reads the contents of that page to you with clear, crisp, human-sounding synthesized speech. SARA contains a host of features that let you customize your reading experience. A built-in CD drive lets you read your favorite books on CD. SARA even allows you to read DAISY (Digital Accessible Information System) format digital talking books.

This user's guide is intended to show you how easy it is to scan and read using SARA. It contains information on SARA and the keypad, as well as a few getting started keys. Not only can you easily set up SARA and attach a headset, but you can also connect it to a computer monitor.

For advanced users, there are menus you can use to set a variety of choices like reading and menu voices, language, visual settings, and managing a nearly unlimited number of files.

# Features

The colorful SARA is so simple to use that it works right out of the box. Major features of SARA include:

- Reads books, magazines, newspapers, bills, and more.
- Reads DAISY audio books.
- Reads audio book CDs.
- Reads columns and sidebars as well as text.
- Large buttons perform all the basic functions any user needs.
- A colorful keypad with tactile symbols and shapes conveys each button's use.
- Press the Help key followed by any of the other keys, to find out what their function is.
- Easy-to-use menus can also be used to control scanning and reading.
- Front-mounted stereo speakers make SARA easy to hear.
- RealSpeak™ Solo voices can be changed to suit your preferences, including reading speed and volume.
- Spell words to get a better understanding of what is being spoken.
- SARA remembers hundreds of thousands of pages.

- Built-in CD-RW player allows you to read books saved on a compact disc. You can also save books to a blank CD.
- Access reading material stored on a USB device, such as a USB thumb drive or external hard drive.
- Connect to a computer monitor for colorful, large print to complement the speech.

## **What's in the Box?**

- SARA Scanning and Reading Appliance
- Power cord (110 or 220 V)
- Power adapter
- Large print user's guide
- Basic training audio recording
- Headset
- Test page for scanning

## **What SARA Cannot Read**

SARA cannot read handwritten or hand-printed material. If there is a signature on a typewritten letter, SARA reads the letter but not the signature. If the signature is written over other printed words, for example the closing "Sincerely yours," the letters touched by the signature are not read correctly.

SARA may have trouble reading some printed forms because borders are often used to surround the text. SARA sometimes ignores text that is too close to vertical or horizontal lines or words surrounded by a box. For example, you will have difficulty using SARA to read box scores on the sports or stock market pages of a newspaper. Even if SARA reads most of the text correctly, it may be hard to determine the meaning.

## **How to Set Up SARA**

To set up SARA, first plug the square end of the AC power cord into the power adapter (the black rectangular box). Next, connect the small, circular end of the power adapter cable to the back of SARA. The correct socket is on the far right side when facing the back of the unit. Finally, plug the AC power cord into a wall outlet. The unit is now ready to use.

If you want to use the headset that comes with SARA, plug it into the headset jack on the lower right of the front panel.

# Scanning and Reading with SARA

---

## Powering SARA On and Off



The **POWER** button is the small, circular green button located on the far left of the lower vertical surface on the front of SARA. Press this button once to turn the power on.

While SARA is warming up, there is an intermittent tone to indicate it is active. When the unit is ready, it says, "Welcome to SARA. The reading voice is currently set to Samantha. Press the red Scan key to scan. Press the green Read key to begin reading. Press the yellow help key, followed by any other key, to learn what it does." This is SARA's default start up message. If you have changed the reading voice, you will hear a different name spoken. Refer to "Key Announcements" on page 29 for information on customizing this start up message.

**Warning:** Do not disconnect the power cord or unplug SARA while the unit is powering off.

Press the **POWER** button to turn off your SARA unit. SARA will prompt you to press the **POWER** button again to power down or any other key to cancel. If you do not press a button within 30 seconds, SARA will automatically cancel the shut down.

**Note:** Any unsaved documents will be discarded when you shut down. To save your documents, stop SARA from shutting down and save your documents. See *Saving a Document* on page 19 for more information.

## Scanning and Reading with SARA

1. Lift the cover of the scanner.
2. Place your reading material print side down on the scanner's glass plate. Square the page against the raised left and front edges around the glass.
3. Close the scanner cover.

**Warning:** If you have a thick document such as a book, the back part of the top of the scanner cover will raise up to level off as it rests on the book. Do not press down on the scanner. Placing pressure on the lid can shatter or dislodge the glass in the scanner, voiding the product warranty.



4. Press the **SCAN** key, which is the red oval key with a raised circle in the upper left of the keypad. SARA says, "*Scanning*" as it begins scanning and plays an intermittent tone while scanning and recognizing text. When SARA is finished analyzing the page, reading begins automatically.

**Tip:** If you want to cancel the scan, press the **SCAN** key again.



5. To stop reading, press the **READ** key, which is the green key with a raised play and pause symbol below the **SCAN** key. Press the Read key again to resume reading.

## Adjusting Voice Volume



To the right of the Power button on the front panel is an orange rocker key with a raised loud speaker on it that controls the volume of SARA's speech. This is called the **VOLUME ROCKER**. Press on the left side of the bar to lower the volume and on the right side to raise the volume. SARA says "softer" or "louder" so that you can adjust the volume to your preferred level.

## Adjusting Reading Speeds



SARA has another orange rocker key on the front edge, just to the left of the headset jack on the right. It has a raised rabbit symbol on it to represent speed. This is the **VOICE RATE ROCKER**. If you press the left side of the bar you hear SARA say "slower" each time you press it. Pressing on the right side of the bar increases the voice rate and you hear SARA say "faster."

Press the **VOICE RATE ROCKER** key until you find a comfortable reading speed.

## Getting Help



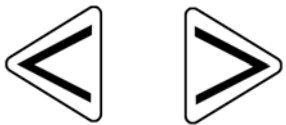
Press the **HELP** key followed by one of the other keys for an explanation of that key's function.

## Using the Movement Keys

To move around on a page you are reading, use the four blue arrow keys in the center of the keypad.



The **UP** and **DOWN ARROWS** move one line up or down.



The **LEFT** and **RIGHT ARROWS** move you one word in the direction of the arrow.





Press the blue **SELECTOR** key, located in the center of the arrow keys, to read the current word. Press the **SELECTOR** key a second time to spell the current word. Press the **SELECTOR** key a third time to spell the current word using the phonetic alphabet (where “A” is “Alpha,” “B” is “Bravo,” and so on).



The factory setting for the blue **DOUBLE ARROW** keys moves forward or backward by pages. You can change the movement unit of the **DOUBLE ARROWS** by selecting Double Arrow Movement from the Key Assignments submenu in the Advanced submenu. You can select page, sentence, paragraph, or none. Use the up and down arrow keys to select an option, and then press the **SELECTOR** key.

**Tip:** For more information on using SARA’s menus, see *Using the Menus* on page 12.


## To Skim through a Document while Reading

You can skim read through a document by using the arrows while SARA is already reading. The **LEFT** and **RIGHT ARROWS** move by sentence and the **DOUBLE ARROWS** move by paragraph. SARA continues to read at the next unit you have selected.

## Cycling through Documents you are Reading

You can have more than one document open simultaneously. It is possible to cycle through these documents using **FUNCTION Key 1**. This key is located beside the **VOLUME ROCKER** on the front of the SARA. Press the key once to move from one open file to another.

## Using the Function Keys

 Four small, circular function keys are located in the center of the front panel, between the **VOLUME ROCKER** and **VOICE RATE ROCKER**. **FUNCTION Key 1** is the farthest of the four keys on the left. **FUNCTION Key 2** is the next key to the right, and so on. You can assign a variety of different commands to these keys from the Key Assignments submenu in the Advanced submenu. For more information, see *Function Keys 1 through 4* on page 31.

By default, each function key performs the following command:

- **Function Key 1** – Cycles through all documents that you currently have opened. If you find you have too many documents open, you can close them by using the Close Document command on the File submenu.
- **Function Key 2** – Erases the current page. When you press this key, SARA asks you to press it again if you wish to delete the page. If not, simply press any other key to cancel this command.

- **Function Key 3** – Cycles through the various reading languages you have selected.
- **Function Key 4** – Allows you to choose whether SARA divides columns or ignores columns when scanning.

**Note:** Some commands are not available when an audio file is playing.

## Using the Menu

---



SARA has a menu that allows you to work with files, set voice and scanning options, choose visual settings, and select languages you want to use.

Use the **MENU** key to access the menu. The **MENU** key is the rectangular brown key on the upper right of the keyboard. Press the **MENU** key once to open the menu. Pressing the **MENU** key while in any of the menus closes the item and returns you to the document.

Once the menu is open:

- Use the **UP** and **DOWN ARROWS** to select menu items. SARA reads each menu item as you move to it.
- Use the **SELECTOR** key to open submenus and to accept menu choices, similar to pressing the **ENTER** key on a computer.
- Press the **LEFT ARROW** to close a submenu if it is open or close a list and return to the menu.
- When you are in a list, the **DOUBLE ARROWS** move up or down a list by 10 items.
- Press the **MENU** key to close the menus and return to the document.

**Tip:** Press the **HELP** key followed by any other key to have its function explained.

## Using the Settings Wizard

---

The Settings Wizard offers a convenient way to configure SARA without having to go through several menus to locate the options you want. To launch the wizard, press the **MENU** key to open the menu, use the **UP** or **DOWN ARROW** keys to navigate to Settings Wizard, then press the **SELECTOR** key.

The wizard consists of a series of pages which allow you to change various settings including the font type and point size; foreground and background color for displayed text; foreground and background color for the spotlight; the reading voice name and rate; the menu voice name and rate; how SARA announces keys at startup; and the format used when saving files to a CD or a USB drive. Use the **UP** and **DOWN ARROW** keys to change a setting and the **RIGHT** and **LEFT ARROW** keys to go to the next or previous page. If you are on the last page, pressing **RIGHT ARROW** will close the wizard and apply your new settings. Press the **MENU** key from any page in the wizard to cancel and return to the currently open document without changing settings.

## Working with Files

---

You can use the File submenu to open documents, close documents, play audio files (such as DAISY books), read public domain books, save documents, and delete documents. To access the File submenu, press the **MENU** key, and then press the **SELECTOR** key to choose File. To choose a command, use the **UP** and **DOWN ARROW** keys to select it, and then press the **SELECTOR** key.

### Opening a New Blank Document

To open a new document, select New Document from the File submenu. You can then scan a new page. SARA adds the page to the document. You can continue scanning pages to add to this document and then save them as a single file (see *Saving a Document* on page 19).

**Tip:** Do not use one document to store all of your scanned pages. Not only will it become increasingly difficult to locate important information in a timely manner, but SARA will take longer to save or open the file.

The ability to save and manage multiple files is a key function of SARA to help improve organization. Once you have scanned a document, such as a newspaper article, or a piece of mail, save it with a unique file name related to the information it contains. When you are ready to scan something different, remember to open a new document and repeat the process. You will find it much easier to locate information stored in smaller, well-named files.

## Opening a Saved Document

To open a document that you have saved, select Open Document from the File submenu. SARA displays a list of all files in memory. Use the **UP** and **DOWN ARROWS** to move by item and the **DOUBLE ARROWS** to move through the list by ten items. SARA speaks the names of the files available as you move through them. After you hear the name of the desired document, press the **SELECTOR** key to open it.

**Note:** If you have read the document previously, you are moved to the text location where you left off.

## Opening a Document from a CD or USB Drive

If you have reading material on a CD or USB drive, such as a thumb drive or external hard drive, you can open the file and read it with SARA. Insert the disc in the slot on the front of the SARA or connect a USB drive to one of the USB ports on the back of the SARA, open the File submenu, and select Open from Media. The following file formats are supported: OBX, ARK, RTF, TXT, DOC, PDF, HTML, and XML.

If more than one device is available, for instance, a CD is inserted and a USB drive is connected at the same time, you are first placed in a list of all available drives. Use the **UP** and **DOWN ARROW** keys to select the drive you want to open files from, and press the **SELECTOR** key to list the files on that drive.

**Note:** Files you want to read with SARA on a CD or USB drive cannot be stored in folders.

You can also open TIFF, JPEG, and PCX image files. When you open image files, SARA scans and recognizes the text and then inserts it into a new document. You must save this document if you want to keep it (see *Saving a Document* on page 20).

To remove the disc, press the Eject button to the left of the CD drive.



## Listening to an Audio File

To begin playing an audio file, including DAISY books, insert the audio CD into the slot on the front of the SARA. By default, SARA automatically places you in a list of all the audio tracks or DAISY books on the CD so you can choose the one you want to listen to. If the CD only contains one title, SARA automatically opens and begins playing it.

If you have turned off the Autoplay Audio CD feature, or you want to open a different book, open the File submenu and select Play Audio from CD. Select the title of the CD by pressing the Selector key. SARA opens the selected title and places you in a list of the available CD tracks. SARA only lists audio tracks that are supported. The following file formats are supported: MP3, WAV, audio MPG, unprotected WMA, and CDA

**Note:** Titles can be the actual book title or a unique, invented title. Some titles also indicate how many CDs are part of the book. For example, a long book may be recorded onto several CDs. Some CDs also contain more than one book.

If you listened to this book before, you are immediately placed at the spot where you last stopped listening when you open the book. Press the green **READ/PLAY** key with the raised play and pause symbols on it to begin listening to the audio file. Press this key again to pause.

**Tip:** Press the **HELP** button followed by one of the other buttons for an explanation of that button's function while accessing an audio file.

**Note:** SARA will only play audio files from a CD. It will not open audio files stored on a USB drive.

## Navigating an Audio File

While playing an audio file, you can use the **LEFT DOUBLE ARROWS** to rewind or the **RIGHT DOUBLE ARROWS** to fast forward the audio file by five seconds. After you rewind or fast forward, SARA immediately begins playing the audio from the new position. To increase or decrease the playback speed of the audio file, use the **VOICE RATE ROCKER**.

When the file is stopped, you can use the **UP** and **DOWN ARROWS** to select the track you want to listen to. Press the **READ/PLAY** key to play that track.

When you are finished listening to an audio file, select Close Document from the File submenu. You can only have one audio file open at a time, but you can freely switch to other documents that are open.

**Note:** While most audio files simply list the track numbers, DAISY books display topics, or chapters, in a tree view. You can navigate by using the **UP** and **DOWN ARROWS**. You can also use the **RIGHT** and **LEFT ARROWS** to expand and close the topics.

## Reading Public Domain Books

SARA includes many classic literary works for your reading enjoyment. To read one of these books, open the File submenu and select Public Domain Books. If you have assigned the Public Domain Book function to a Function key, press that function key. Depending on the enabled languages and available books, another submenu listing the languages you can choose from may be available. If more than one dialect of a language is enabled, and a collection of books for that language is available, the book collection will be the same. For example, the book collection for British English and U.S. English is the same because both are English dialects.

**Note:** If there are collections available for other languages that you have enabled, these also appear on the submenu.

Use the **UP** and **DOWN ARROWS**, or the **DOUBLE ARROW** keys, to select the book you want to read and press the **SELECTOR** key. When SARA opens the book, it reads it using the dialect you selected previously from the submenu. You can navigate these books the same way as documents that you scan.

## Closing a Document

To close a document, open the File submenu and select Close Document. If the document has not been saved prior to closing, SARA will ask if you would like to save the document.

Upon closing a document, you are returned to another open document if any are open. If no other documents are open, a new untitled document is created.

## **Saving a Document**

To save the current document, select Save Document from the File submenu. If the file has not been saved previously, you are prompted to press the **SCAN/RECORD** key to record a file name. To record a name for the document, speak in the general direction of the microphone located on the right front of the SARA next to the speaker. This process is similar to recording a greeting on an answering machine.

Begin speaking when you hear the tone. Your file name can be 5 seconds long. The recording ends automatically and is played back.

SARA then prompts you to press the **SELECTOR** key to accept the file name or to press the **SCAN/RECORD** key again to redo the recording.

You can re-record the file name until you are satisfied. The file is not saved until you press the **SELECTOR** key to accept your recorded file name.

By default, documents opened from a USB device are saved to the USB device unless you save the document using Save As from the File submenu.

## **Saving a Document with a Different Name**

You can save a document under a different name. To save the currently open document with a different name, select Save As from the File submenu. Press the **SCAN/RECORD** key, and speak a new name for the document. When you are finished, press the **SELECTOR** key. A version of the document with the original name is retained in memory.

## **Saving a Document on a CD or USB Drive**

You can save the currently open document on a CD or on an external USB drive, such as a thumb drive or external hard drive. Insert a blank, writable CD-R or CD-RW disc into the slot on the front of SARA or connect a USB drive to one of the USB ports on the back of the SARA. Then, select Save to Media from the File submenu.

If more than one device is available, for instance, a CD is inserted and a USB drive is connected at the same time, you are first placed in a list of all available drives. Use the **UP** and **DOWN ARROW** keys to select the drive you want to save the file to, and press the **SELECTOR** key. Press the **SCAN/RECORD** key, and speak a name for the document. When you are finished, press the **SELECTOR** key. SARA will copy the file to the blank CD or USB drive, whichever you selected.

By default, SARA saves the document as an OpenBook 8.0 (.OBX) file, if you save the file to a CD, or as a Rich Text (RTF) document, if you save to a USB drive. You can also choose to save the file as an OpenBook (.ARK), plain text (.TXT), or rich text (.RTF) document using the Save to CD Format submenu, or as an OpenBook 8.0 (.OBX) or plain text (.TXT) document using the Save to USB Format submenu (see page 33) in the Advanced submenu. The file name is saved as a sound (.wav) file.

**Tip:** You can save additional documents on the CD in later sessions.

## Deleting a Document

To delete a document saved in memory, select Delete a Document from the File submenu. Use the **UP** and **DOWN ARROWS** to move to the file you want to delete. Press the **SELECTOR** key to delete the file. SARA will ask you if you want to delete the file. You can use the **LEFT ARROW** to go back to the menu without deleting the file, or press the **SELECTOR** key to delete the file.

# Using the Menus for Other Settings

---

To access the submenus described in this section, press the **MENU** key. Then, use the **UP** and **DOWN ARROWS** to make a selection and press the **SELECTOR** key.

## Go To Menu

The Go To submenu allows you to quickly move from place to place in the current document or audio CD.

The available commands include:

- **Top of Document** – Moves you to the beginning of the current document or audio track list.
- **Bottom of Document** – Moves you to the end of the current document or audio track list.
- **Next Page** – Moves you to the next page of the current document.
- **Previous Page** – Moves you to the previous page of the current document.
- **Next Paragraph** – Moves you to the beginning of the next paragraph.
- **Previous Paragraph** – Moves you to the beginning of the previous paragraph.
- **Next Sentence** – Moves you to the beginning of the next sentence.

- **Previous Sentence** – Moves you to the beginning of the previous sentence.

## Voice Settings

The Voice Settings submenu allows you to change your reading and menu voice settings. You can change the speech rate and the voice. The speaking language determines the voices that are available. You can also select the reading language by choosing the Reading Voice command.

### Reading Voice and Menu Voice

Open the Voice Settings submenu and select Reading Voice to change the voice SARA uses while reading, or select Menu Voice to change the voice SARA uses when navigating menus. The following voice options are available:

- **Voice Rate** - The voice rate can be set between 100 and 500 words per minute. You can change this setting using either the **VOICE RATE ROCKER** bar on the front right of the unit or the menu. The rate adjusts in units of 20 words per minute. When you go to the menu, SARA announces the current rate for either the reading or menu voice.
- **Voice Selection** - When you select the Voice Selection command, a list of the voices available for the current language displays. Use the **UP** and **DOWN ARROW** to move through the list of voices. Press the **SELECTOR** key to choose the voice you want to use.



- **Voice Language** - Changing the voice language automatically changes the scanning language and the list of available voices. While in the document, you can return to the menu to change languages.

## Enabled Languages

Select Enabled Languages from the Voice Settings submenu to open a list of the languages installed on SARA. If a language is activated, you hear the word “checked.” Use the **SELECTOR** key to check or uncheck the language. You can enable as many of these languages as you like. Once a language is enabled, you can choose it for the reading voice.

**Tip:** You can press **FUNCTION Key 3** to cycle through your enabled languages.

# Scanning Settings

The Scanning Settings submenu allows you to change the scanning order, scanning mode, and scanning contrast.

## Scanning Order

Select Scanning Order from the Scanning Settings submenu to choose whether SARA should divide columns or ignore them. The default setting is Divide Columns. For example, if you are scanning a newspaper, you would want to have Divide Columns selected so SARA recognizes the columns instead of reading straight across the page. If you want to read across columns of text, select Ignore Columns.

**Tip:** You can also press **FUNCTION Key 4** to toggle between Divide Columns and Ignore Columns.

## Scanning Mode

Select Scanning Mode from the Scanning Settings submenu to choose one of the following modes:

- Scan and Read – Selected by default, SARA stops reading when you press the **SCAN** key and begins scanning. When the scan is complete, SARA begins reading the new page.

- Scan in Background - Allows you to continue reading the current document while SARA scans a page.
- Scan and Replace – SARA replaces the current page with the newly scanned page. You can use this mode to rescan or replace a page in a multi-page document.
- BuckScan – SARA scans and recognizes United States paper currency. Denominations supported include \$1, \$2, \$5, \$10, \$20, \$50, and \$100. To scan a bill, place it horizontally along the edge of the glass plate's left front corner and press the **SCAN** key.

## Scanning Contrast

Use Scanning Contrast to control the dark-to-light contrast ratio in the scanned document. The following choices are available:

- **Automatic Contrast** - SARA will individually evaluate each page to determine the best contrast setting for maximum accuracy. This is the easiest setting but it adds to the scanning time. This is the default setting.
- **Normal Contrast** - This setting will work for most books and memos, or anything else that has reasonably good black print on white paper.

- **Darken Page** - This setting is useful when the print on the page is too light. When SARA reads a light page, letters seem to break up. An example of this is when SARA reads “iii” instead of the letter “m.”
- **Lighten Page** - Choose this option if the letters are becoming glued together. An example of this is when SARA reads the letter “m” instead of the letters “r” and “n.”

You can fine-tune the contrast level by choosing one of the numbers 0 through 16. Darken Page is equivalent to a value of 4, Normal Contrast is 8, and Lighten Page is 12.

## Visual Settings

Use the Visual Settings submenu when SARA is attached to a computer monitor to change the font, size, color, and spacing of displayed text. For instructions on how to connect a monitor to SARA, see *Using a Monitor with SARA* on page 37.

### Text Font

Select Text Font from the Visual Settings submenu to change the font of the displayed text.

## **Text Size**

Select Text Size from the Visual Settings submenu to increase or decrease the size of the displayed text. The available sizes are expressed in points.

## **Text Color**

Select Text Color from the Visual Settings submenu to choose from several different foreground/background color combinations for displayed text.

## **Spotlight Color**

Select Spotlight Color from the Visual Settings submenu to choose from several different foreground/background color combinations for the spotlight, which highlights each word as SARA reads. Having the spotlight color set differently from the text color makes it easier to locate the highlighted text.

## **Spacing**

Select Spacing from the Visual Settings submenu to change the spacing of displayed text. Six different text spacing options are available. Each level provides increasing amounts of space between words and letters.

# Advanced Settings

From the Advanced submenu, you can change how certain keys behave, change the start up message, set the document format used when saving to a CD, and reset SARA to factory defaults.

## Key Assignments

The Key Assignments submenu allows you to change the behavior of the double arrow keys and the function keys.

### *Double Arrow Movement*

Select Double Arrow Movement from the Key Assignments submenu to change how far in the document you will move each time you press the double arrow keys. The keys can be set to move by sentence, paragraph, page, or none. The default setting is page.

## ***Function Keys 1 through 4***

You can assign different commands to the four function keys located on the front panel of the SARA. To do this, open the Advanced submenu, then the Key Assignments submenu, and select one of the four available function keys. A list of possible commands that you can assign to the selected function key is displayed. Use the **UP** and **DOWN ARROW** keys to move to the command that you want to assign to the key, and then press the **SELECTOR** key. After you have assigned the command, press the **LEFT ARROW** key to close the list.

**Note:** Some commands are not available when playing an audio book.

The available commands include:

- **Toggle Language** – Cycles through your enabled languages.
- **Divide Columns Toggle** – Switches between Divide Columns and Ignore Columns.
- **Delete Page** – Erases the current page.
- **Document Toggle** – Cycles through currently open documents.
- **Go to Top of Document** – Moves you to the beginning of the current document or audio track list.
- **Go to Bottom of Document** – Moves you to the end of the current document or audio track list.

- **Scanning Mode Toggle** – Switches between Scan and Read mode, Scan in Background mode, and Scan and Replace mode.
- **Public Domain Books** – Opens a list of Public Domain books available for the language and dialect you have currently selected.

## Key Announcements

The Key Announcements submenu allows you to change the message that you hear after SARA is powered on. Use the **UP** and **DOWN ARROW** keys to move to the type of message you want to hear and press the **SELECTOR** key. The available options are:

- **Speak Visual Cues** - selected by default. After SARA has finished starting, the following message is spoken, "Welcome to SARA. The reading voice is currently set to Samantha. Press the red Scan key to scan. Press the green Read key to begin reading. Press the yellow help key, followed by any other key, to learn what it does."
- **Speak Orientation cues** - When selected, SARA speaks the following message after starting, "Welcome to SARA. The reading voice is currently set to Samantha. Press the Scan key, located at the top left of the keypad, to scan. Press the Read key, located directly below the Scan key, to begin reading. Press the Help key, located at the bottom right of the keypad, followed by any key to learn what it does."



- None - When selected, SARA speaks the following message after starting, "Welcome to SARA. The reading voice is currently set to Samantha."

**Note:** If you have selected a different reading voice, you will hear that voice name spoken instead of Samantha, which is the default reading voice. You can change the reading voice by opening the Voice Settings submenu, Reading Voice submenu, and choosing Voice Selection.

## Save to CD Format

Use this submenu to specify the format your documents are saved in when you save to a CD using the Save to Media command from the File submenu. By default, documents are saved to CD in OpenBook 8.0 (.OBX) format. However, if you or someone else needs to access your saved documents on a computer that does not have OpenBook installed, you can choose to have SARA save your documents in plain text (.TXT) or rich text (.RTF) format which can be opened by most common word processing applications. You can also choose to save your files in ARK format if you will be opening them in a version of OpenBook prior to 8.0.

Use the **UP** and **DOWN ARROW** keys to move to the document format you want, and press the **SELECTOR** key. Once selected, any documents you save to a CD will be saved in the document format you specified.

## Save to USB Format

Use this submenu to specify the format your documents are saved in when you save to a USB drive using the Save to Media command from the File submenu. By default, documents are saved to USB in Rich Text (RTF) format. You can also choose to save your documents in OpenBook 8.0 (OBX) format, or plain text (TXT) format.

Use the **UP** and **DOWN ARROW** keys to move to the document format you want, and press the **SELECTOR** key. Once selected, any documents you save to a USB drive will be saved in the document format you specified.

## Autoplay Audio CD

Enabled by default, when you insert an audio CD, SARA automatically displays the list of audio tracks, if it is a music CD, or a list of titles if the CD contains DAISY audio. If you choose to turn off this option, you must open the File submenu and select Play Audio from CD in order to play a file. Refer to Listening to an Audio File on page 17 for more information on listening to audio.

## Grade 2 Braille

If you are using SARA with a Freedom Scientific Focus braille display or PAC Mate™ Portable Braille Display, enable this option to have text sent to your display in grade 2 (contracted) braille. By default, this setting is off, which means text is displayed in computer braille. In computer braille, each character is represented by a single braille cell. In grade 2 braille, certain combinations of letters are combined into a shorter form, and more information is displayed at one time.

Note: Grade 2 braille is only available in English documents.

## Restore Factory Settings

Select this option to reset all of SARA's settings to their factory defaults. Any settings you have modified such as voice settings, function key assignments, file saving options, as well as scanning and visual settings are reset to the way they were when you received your SARA. When you select this option, you will be asked if you are sure you want to reset to factory defaults. Press the **SELECTOR** key to reset or the **LEFT ARROW** key to cancel. You will receive a message confirming that SARA has been reset to factory defaults.

## Updating SARA

This command lets you add updated information from Freedom Scientific for your SARA. If you receive an update disc, insert it into the slot on the front of SARA. Press the **MENU** key, and then use the arrow keys to move to Update from DVD, and press the **SELECTOR** key. SARA will ask you if any files need to be saved and will then perform the update. When the update is complete, the unit will turn itself off and restart on its own. When you hear, “Welcome to SARA,” the update is complete. To remove the disc, press the Eject button to the left of the drive.

### Using a Headset or Speakers with SARA

- There is a headset jack on the front panel on the far right. Just plug in the headset that comes with SARA to enjoy listening to SARA read without disturbing others in the area. While the headset is plugged in, the speakers are turned off. You can also connect external speakers using the audio out jack on the right of the back panel of the SARA next to the power plug.

### Using a Monitor with SARA

You can connect a monitor to SARA so that you can see the text you are reading. You can change the font, size, color, and spacing of the displayed text in the Visual Settings submenu.

To connect a monitor to SARA, do the following:

1. Turn off the power for both the monitor and SARA.
2. Turn SARA so that the back of the unit is facing you.

3. In the bottom row of connections, the second connector (square and protruding a bit) is a blue port for a typical computer monitor. Connect the monitor display cable to the blue monitor port.

**Tip:** If the cable connector does not seem to fit well, turn the cable connector over.

4. Tighten the screws on the connector. The monitor is ready to use.

## Using a Braille Display with SARA

You can connect a Freedom Scientific Focus braille display or PAC Mate Portable Braille Display to SARA so you can receive tactile access to the text you are reading. Controls on these braille displays allow you to navigate through documents and menus.

To connect a braille display to SARA, plug the USB cable that came with your display into one of the USB ports on the back of the unit next to the blue monitor connector. It is not necessary to turn off the power before doing this. SARA automatically detects the display and you can immediately begin using braille.

By default, text is displayed in computer braille. To read in grade 2, open the Advanced submenu and select Grade 2 Braille.

## Optional Keyboard Covers

A basic and advanced set of keyboard covers is sold separately. The covers allow you to conceal certain, non-essential SARA buttons to help users focus on basic functionality. To order these keyboard covers, contact Freedom Scientific Sales at (800) 444-4443 or e-mail [Info@FreedomScientific.com](mailto:Info@FreedomScientific.com).

## Warranty Information

---

Freedom Scientific, warrants that the magnetic media the software is recorded on, the product's Documentation, and any hardware provided by Freedom Scientific, are free from defects in materials and workmanship under normal use. Freedom Scientific warrants that the product performs substantially in accordance with the specifications set forth in the Documentation, and processes a specific sample data (the "Recognition Test Image") with the specified standard of accuracy. Some documents may be processed with a high degree of accuracy. However, poor quality documents, certain typefaces, complex layout, or lower resolutions may make it difficult or impossible for the product to process pages with satisfactory accuracy. As a result, Freedom Scientific performance warranty is based on the system's handling of the Recognition Test Image.

### ***Duration of the Warranty***

The warranty described above is made for a period of one (1) year from the date the products are delivered to you as the first user.

### ***Repair or Replacement***

Freedom Scientific will repair or replace any hardware, software, documentation, or magnetic media that proves defective in materials, workmanship, or must be corrected to achieve warranted performance, without additional charge, on an exchange basis, as described below.



## ***Final Remedy***

If Freedom Scientific is unable to replace defective hardware, documentation, or defective media, or if Freedom Scientific is unable to make the product perform to its specifications within a reasonable time, Freedom Scientific will either replace the entire package with a similar product or refund the purchase price of the package.

## ***Exclusions***

Freedom Scientific does not warrant that the product will meet your requirements or that its operation will be uninterrupted or error free. The warranty does not cover a component or part of the product that has been subjected to damage or abuse, or that has been altered or changed in any way by you or others. Freedom Scientific is not responsible for problems caused by changes in the operating characteristics of the computer hardware or operating system, or any upgrades or modifications to these items that are made after the delivery of Freedom Scientific's product to you.

## ***Warranty Limitations and Freedom Scientific Liability***

Any implied warranties, including any warranties of merchantability or fitness for a particular purpose, are limited to the term of this express warranty.

**Note:** Some states do not allow limitations on how long an implied warranty lasts, so the above limitation may not apply to you.

FREEDOM SCIENTIFIC shall not, in any case, be liable for special, incidental, consequential, indirect or other similar damages arising from any breach of these warranties even if Freedom Scientific or its agent has been advised of the possibility of such damages.

**Note:** Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you.

### ***Your Obligations***

You may call the Freedom Scientific Technical Support Department for assistance or authorization to return any defective item to Freedom Scientific during the warranty period. Technical Support hours are 8:30 A.M. to 7:00 P.M. Eastern Time, Freedom Scientific holidays excepted and the telephone number is (727) 803-8600. Collect calls will not be accepted. The Technical Support representative will help you diagnose and correct any apparent problem. You may be asked to run certain diagnostic tests.

If a Freedom Scientific Technical Support representative is unable to correct your problem by telephone, you will be given a return authorization number and an address for returning the defective item for warranty service or replacement. You must include proof of your purchase date such as a copy of your receipt or invoice. Also, you are responsible for any shipping and insurance costs associated with returning the defective item.

### ***Other Warranty Conditions***

The warranties set forth above are in lieu of all other warranties, whether oral, written, express, or implied, and the remedies set forth above are your sole and exclusive remedies. Only an authorized officer of Freedom Scientific may make modifications to this warranty, or make additional warranties binding on Freedom Scientific. Accordingly, additional statements such as advertising or presentations, whether oral or written, do not constitute warranties by Freedom Scientific and should not be relied upon as such. This Warranty gives you specific legal rights, and you may also have other rights that vary from state to state.

## **Technical Support**

Our Technical Support staff provides assistance for the initial setup of SARA and other Freedom Scientific products. Ongoing Technical Support is available for those users who purchase and register SARA. Before calling Technical Support, please visit our Web site at <http://www.FreedomScientific.com> or e-mail us at [Support@FreedomScientific.com](mailto:Support@FreedomScientific.com). Our Technical Support phone number is (727) 803-8600. When calling Technical Support, please have your SARA serial number ready.

## Web Site

Freedom Scientific has an Internet Web site that has additional sources of technical support and information. You can use your computer to download software programs, technical bulletins, and product updates from these sources. You can find the Freedom Scientific Web site at [www.FreedomScientific.com](http://www.FreedomScientific.com).

SARA has a 30-day money back guarantee and a standard one year warranty against manufacturers defect from date of receipt.

Please call Technical Support at (727) 803-8600 and talk to a specialist who will assist you in troubleshooting any problem.

# Keyboard Layout Diagram for Creating Tactile Images

---

