Introduction

Knowledge Imaging Center (KIC) kiosks are public self-serve scanning/copying systems for students, faculty, researchers, administrators and the general public. KIC systems make it fast and easy to digitally mine the tens or hundreds of millions of dollars in scholarly content that is locked in academic library print collections - students create their own digital study materials in searchable, editable and even audio formats. KIC output also enhances the quality of reports and papers with crystal clear color and black & white excerpts from books, magazines and journals.

In addition to almost magically making a library's entire print collections available in digital form for pennies on the dollar, Knowledge Imaging Center kiosks are very green. By making printed output optional, KIC systems minimize the use of paper and toner. Instead of printed output, users can load a virtually unlimited number of pages onto tiny USB drives that fit on a keychain or in a pocket, or directly onto their tablet or notebook or even their cell phone. Patrons feel free to source more materials without feeling that they are wasting paper.

KIC systems are also great as shared resources. They can be used as ad hoc scan stations for digital preservation & archiving and as a scanner for interlibrary loan departments. Preservation quality 600 dpi is a standard feature of the small KIC BookEdge and an option with the KIC Bookeye 4. An ILL department can save on a lower cost grayscale Bookeye and perform color scans on the KIC system.

KIC's color Bookeye 4 scanners have both flat and V-cradle modes, can perform several million scans and handle oversized materials up to 17 x 24 inches in black & white, grayscale or full color. That's several 100 times more output than typical desktop scanners.

KIC's BookEdge scanners have a 12x17 inch flatbed that allows scanning well into the fold of books, and although not as quick as face-up scanning with a Bookeye 4, these systems are far less expensive and fit in smaller spaces
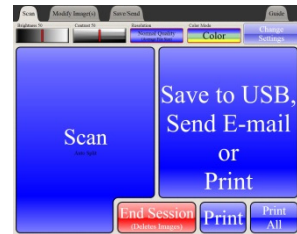
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How to Scan and Save Images

Overview

The KIC system utilizes two screens: 1) a large, interactive touch screen that is built in to the KIC cabinet and serves as the user's interface; and 2) a larger LCD display screen for viewing images that is located above the interactive touch screen on top of the KIC cabinet.

LCD Display Screen

Interactive Touch Screen

KIC's simple, two-button interface offers the user a very simple way of first scanning and then sending and/or saving the captured images.

To scan, simply place the document on the scanner bed and touch **[Scan]** on the interactive touch screen. Answer the copyright notice/question. *An image of your document will appear on the LCD display screen.*

To save the scanned images, plug a USB device into KIC's USB drive and Touch **[Save].**

Using KIC in Four Easy Steps

STEP 1: Document Placement
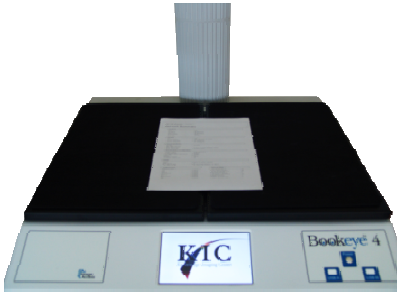
KIC Bookeye 4:

KIC systems operate with a variety of scanner models. If the scanner component for your KIC system is a Bookeye 4, notice that the scanner has movable cradles for the left and right side of books. The cradle can be left flat (i.e. at 180°) for scanning flat, unbound material, or raised to 120° for gentle handling of books or other types of bound material that flat scanners may damage.

To scan on the KIC Bookeye 4 system, place the document in the middle of the scanner bed, aligning the vertical laser guide with the gutter of the book. The ideal horizontal and vertical laser guide positions, as well as where to put your hands, is shown below.
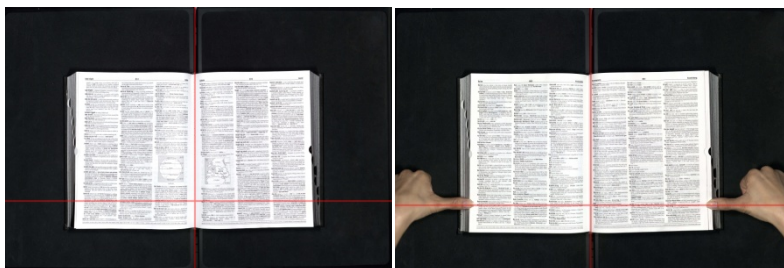
Placing Document on Bookeye 4's Scanner Bed

Many bound documents must be held open to get them to lay flat. If you need to use your thumbs to hold the pages down, the scanner's automatic cropping function will perform best if you make a fist with each hand and hold the book open with your thumbs extended as shown in the image above. The image of your hands will be removed automatically.

Place Sheets of Paper in Flat Mode   Place Books in V-Mode

KIC Bookeye 2:

If the scanner component for your KIC system is a Bookeye 2, notice that there are four green dots ⊕ on the scanner bed. To scan on the KIC Bookeye 2 system, place the document face up and center it horizontally (left to right). Be sure that the bottom of the book is aligned with and contacts the ruled bottom edge of the scanner bed. This ensures that the black area around the document is automatically cropped from the scanned image.
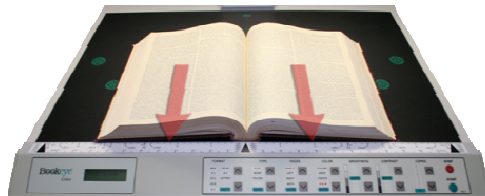
Many bound documents must be held open to get them to lay flat. In these cases, the scanner's automatic crop function perform best if you use your thumbs to hold the pages down by making a fist with each hand and holding the book open with your thumbs extended as shown in the next image.
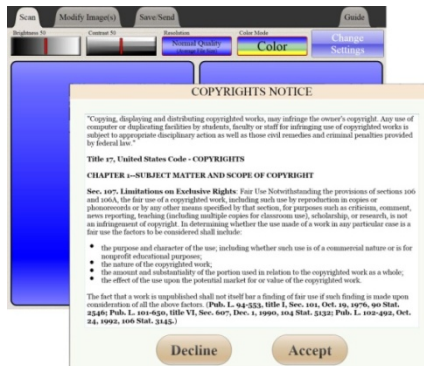
Placing the Document on the Bookeye 2's Scanner Bed

STEP 2: Copyright Notice


LCD Display Screen

Interactive Touch Screen

The first time a user touches the **[Scan]** button, a window with a Copyright agreement appears. Touch **[Accept]** on the Copyright notice to agree with the terms included and the scan session will begin automatically.

STEP 3: Scanning Documents

LCD Display Screen

A few seconds after accepting the copyright statement, the first scanned image will be displayed on the screen. If the KIC system detects that the document being scanned is a book, the system automatically splits the left from the right pages into different images. A thumbnail image of each scanned page is displayed at the top of the interactive touch screen.
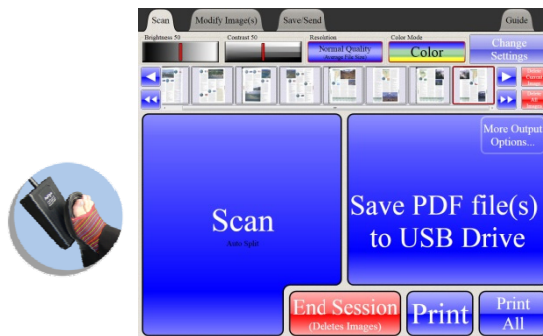

Interactive Touch Screen

To continue scanning additional pages, touch **[Scan]**. Users may also press the foot pedal, if present, to initiate scanning. *[KIC Bookeye 2 system users can also press one of the four green buttons on the scanner bed to initiate scanning.]* Repeat this step to scan additional images.

STEP 4: Saving the Images

Interactive Touch Screen

To save scanned images to a USB drive, plug a USB drive in the upper right corner of the cabinet. The system will automatically detect it. Then press the **[Save Images to USB Drive]** button to save the images to the USB drive.
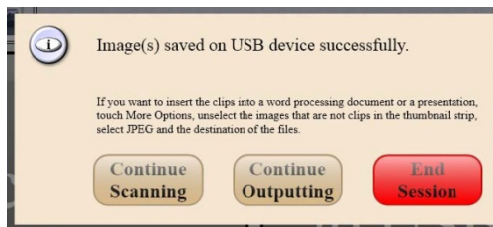

After the images are saved, touch **[Continue Scanning], [Continue Outputting]** or **[End Session].**

For security and confidentiality reasons, if there is no activity during a preset timeout, the current session will end and all images will be deleted.
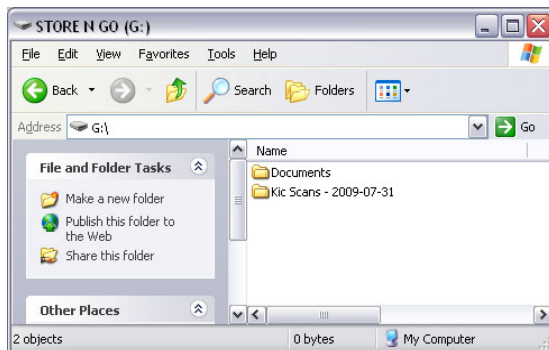
Retrieving the Images Saved to a Flash Drive

Connect a Flash Drive to a USB port in a computer and double click the icon on the desktop labeled My Computer.
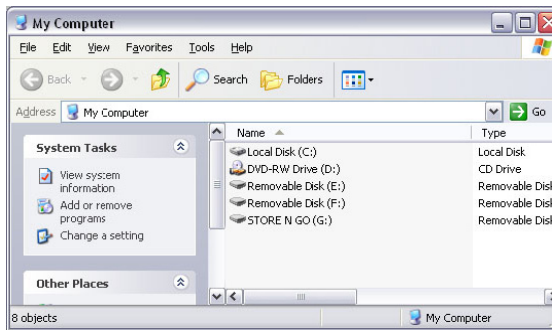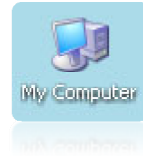
Double click the "Removable Disk" drive that corresponds to the flash drive used to save the images from the KIC system.

A folder named *"Kic Scans - <date stamp>"* will appear. Double click this folder to view the image files.
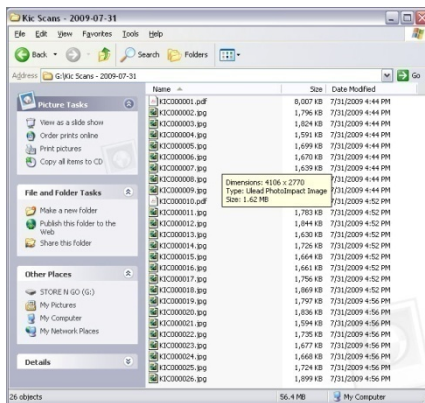

Image files are displayed in chronological order. Each file name consists of a "KIC" prefix and sequence number. Double-click any file name to view its image or drag an image onto a page in a word processing document. To insert images into a word processor or presentation document, open the document and click and drag the images scanned using the KIC system into the document.

Using KIC Menu Tabs

KIC's two-button interface is displayed on the initial screen of any scan session. There are four tabs along the top of the screen. The first three allow the user to navigate while scanning, modifying, sending, saving and/or printing the images. Each of the four tabs is described in detail in this section of the Help Desk Guide. The fourth tab is contextual help with links to this user's guide.

Scan Tab

The main screen on KIC's Scan tab includes most of the basic functions required by the average walk-up user.
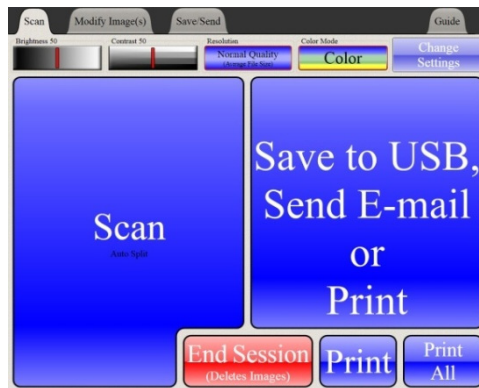
The Scan Tab Is KIC's Initial Screen

Scan Setup Options

Touch and drag the brightness sliding bar to reduce or increase the brightness for subsequent scans.

Touch and drag the contrast sliding bar to reduce or increase the contrast for subsequent scans.

Touch to view the options for resolution. Resolution refers to the quality of the image, with higher resolutions resulting in both higher clarity and bigger file sizes.

Touch **[High Quality]** to capture more detail in your scans. This setting is recommended when scanning for preservation purposes.

Touch **[Normal Quality]** to scan images that will be imported into documents, reports or presentations, or used for study purposes.

Touch **[Web Quality]** to capture lower resolution images, to save USB/disk storage space, or for use on the internet.
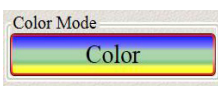
Touch to view the options for Color Mode. The size of the final image will require more USB/disk storage space if **[Color]** is selected than if **[Shades of Gray]** or **[Black & White]** are selected.

Touch **[Color]** to scan 24-bit color images.

Touch **[Shades of Gray]** to scan 8-bit grayscale images.

Touch **[Black & White]** to scan black and white (1-bit per pixels) images.

Below is a chart listing the resolution used for each Quality and Color Mode:

Color Mode vs. Quality	Color (dpi)	Shades of Gray (dpi)	Black & White (dpi)
High Quality	300	300	600
Normal Quality	200	200	300
Web Quality	100	100	200

Note: dpi stands for Dots per Inch.

Change Settings
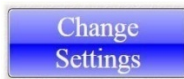
Touch **[Change Settings]** to customize the Settings options.

Expanded Settings Options

Touch and drag the sliding bar to reduce or increase the Brightness for subsequent scans. Touch the arrows to increase or decrease the Brightness by a predefined quantity. Touch **[Reset]** to set the Brightness value to 50 (in a 0 to 100 range).

Max. Brightness   Min. Brightness

Touch and drag the sliding bar to reduce or increase contrast for subsequent scans. Touch the arrows to increase or decrease contrast by a predefined quantity. Touch **[Reset]** to set the contrast value to 50 in a 0 to 100 range.

Max. Contrast   Min. Contrast

Touch **[High Quality]** to capture more detail in your scans. This setting is recommended when scanning for preservation purposes.

Touch **[Normal Quality]** to capture images with regular quality. This setting is recommended for scanning images that will be imported into documents, reports or presentations.
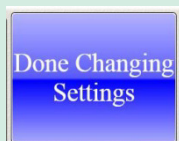
Touch **[Web Quality]** if you are scanning images that will be uploaded to the internet.
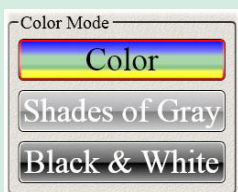
Touch **[Color]** to scan 24-bit color images.

Touch **[Shades of Gray]** to scan 8-bit grayscale images.

Touch **[Black & White]** to scan black and white (1-bit) images.

Touch to minimize the change settings panel.

Users can scan additional images without having to press **[Done Changing Settings]**.

Single Images Touch to fix skew and auto-crop the image.

Document on scanner bed   Result

Auto Split Touch to automatically split the left and right pages in a book.

Document on scanner bed   Result

Split in Half Touch to split each image down the middle.

Document on scanner bed   Result

Turbo Scan Touch to auto-locate the document in the first scan and use the same auto-focus and positioning for all subsequent scans. Place the document in the same location for all scans. *This mode is only available for Bookeye 2 KIC systems.*

Document on scanner bed   Result

Thumbnail Panel

◀	Touch to scroll the thumbnail panel to the left.
◀◀	Touch to scroll the thumbnail panel to the first image.
▶	Touch to scroll the thumbnail panel to the right.
▶▶	Touch to scroll the thumbnail panel to the last image.
Delete Current Image	Touch twice to delete the current image (i.e. the image that is shown in the LCD display screen)
Delete All Images	Touch twice to delete all scanned images.

Scan Touch to scan an image. Scanning can also be initiated by pressing the foot pedal or one of the green buttons on the scanner bed.

**End Session** Touch when you finish scanning, modifying, saving, sending and printing the images. By touching this button, the user resets the KIC station for the next user.
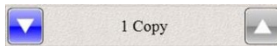
Print Touch to print the current image (i.e. the image that is shown on the LCD display screen). A window will be displayed with the following options.*

* This option is only displayed if it is enabled in the KIC Setup. Check with your Help Desk for details.
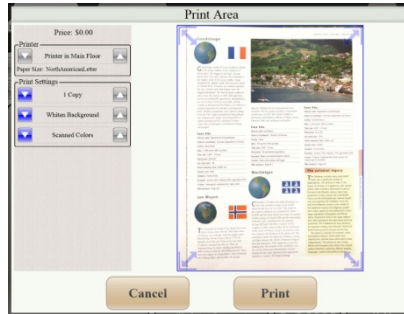
 Use the arrows to select the printer.

 Use the arrows to select the number of copies to print. Min: 1 & Max: 10

 Use the arrows to select background whitening. By opting to whiten the background, the printed image will show a lighter background which produces an image with greater contrast and saves toner. Background whitening is recommended for images that have only text and not for images with photos.
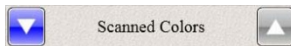
 Use arrows to select the color mode to be used for printing the images.

Touch and drag the arrows on the four corners of the image to change the area that should be printed as shown below.

Default Printed Area   Selected Printed Area

Print   Touch to send the image to the printer.

Cancel   Touch to Cancel and close the printing window.

Print All   Touch to print all scanned images. The window shown here will display print options. *

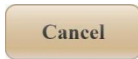** This option is only displayed if printing is enabled in the KIC Setup. Check with your Help Desk for details.*
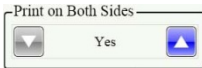
KIC
Knowledge Imaging Center
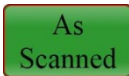
Use the arrows to select the printer.

Printer in Main Floor

Copies
1 Copy

Use the arrows to select the number of copies to print.
Min: 1 & Max: 10

Print on Both Sides
Yes

Use the arrows to indicate whether the images should be printed on one or both sides of the paper.

Auto Levels
Whiten Background

Use the arrows to select or deselect background whitening. Images printed with this option have lighter backgrounds and greater contrast, thus using less ink. Background whitening is recommended for images that have only text.

As Scanned

Touch to print the images with their original colors as they were scanned.

Black and White

Touch to print all the images in Black and White (recommended for images that contain text only).

Gray-scale

Touch to print all the images in Grayscale (recommended for images that contain tables and charts).

Color

Touch to print all the images in Color (recommended for images that have pictures).
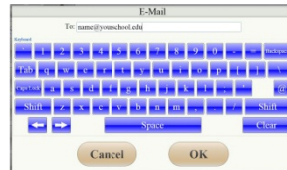
Print

Touch to send all the images to the printer.

Cancel

Touch to Cancel and close the printing window.
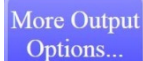
Save to USB or Send E-mail — Touch to Save to a USB drive if one is plugged in. If a USB drive is not plugged-in, touch this button to have a virtual keyboard displayed to enter an email address and send the

images via email.

Save/Send

Save/Send Tab

The Saving and Sending options can be accessed by pressing the **[More Output Options]** or by selecting the third tab on the interface.

More Output Options... — Touch to display more options for outputting, including file formats, sending methods, naming the files, etc.

Select File Format

Searchable PDF — Touch to create a multi-image file of type Portable Document Format (PDF) with search functionality enabled. The user can open this file using Adobe Acrobat™, enter a word using the searching functionality and find all the instances of the word throughout the file.

Quick PDF — Touch to create a multi-image Portable Document Format (PDF) file format without search functionality enabled. Users can open PDF file formats using Adobe Reader™.

JPEG — Touch to create files in JPEG file format. Files of this type

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can be inserted into word-processor documents and electronic presentations. A separate file will be created for each of the selected images.

PNG Touch to create files in PNG file format. Files of this type can be inserted into word processor documents and electronic presentations. A separate file will be created for each of the selected images.

Rich Text Touch to create files in RTF file format. Files of this type can be opened in word processor programs. These files contain the text found in the selected images.

Audio Touch to create editable files in MP3 file format. Files of this type can be played in audio players. When played, the user will hear the text found on the selected images. (*See Appendix A for more details.)*

Select Destination

Save to USB Drive Touch to save the images to a flash drive.
*This button is selected automatically when the user inserts a flash drive in KIC's USB port.**
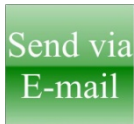
Send via E-mail Touch to e-mail the images to one or more recipients. *A virtual keyboard will be displayed on the touch screen.* Enter the e-mail address, separating multiple addresses with a semicolon (;). Touch **[OK]** when finished.*

* This button will only be displayed if its corresponding option is enabled in the KIC Setup. Check with your Help Desk for details.
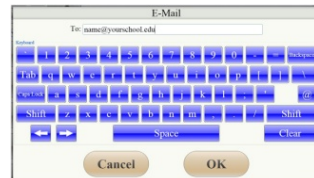
Send via FTP Touch to send image(s) via FTP (File Transfer Protocol). *A virtual keyboard will be displayed on the touch screen.* The first four fields will auto-populate with information entered during the KIC Setup. Enter the username and password assigned to you by your institution, please check with your Help Desk staff for details.*

Save to Shared Disk Touch to send the images to a shared location on the network.*

Print Touch to send the images to a printer. *

Printer in Main Floor — Use the arrows to select the printer.

Copies — 1 Copy — Use the arrows to select the number of copies to be printed. Min: 1 & Max: 10
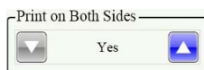
Print on Both Sides — Yes — Use the arrows to indicate whether the images should be printed on one or both sides of the paper.

* This button will only be displayed if its corresponding option is enabled in the KIC Setup. Check with your Help Desk for details.
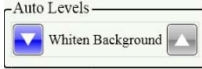
Use the arrows to select or deselect background whitening. Images printed with this option have lighter backgrounds and greater contrast, thus using less ink. Background whitening is recommended for images that have only text.
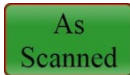
Touch to print the images with their original colors as they were scanned.

Touch to print all the images in Black and White. It is recommended for images that contain text.

Touch to print all the images in Grayscale (recommended for images that contain tables and charts).

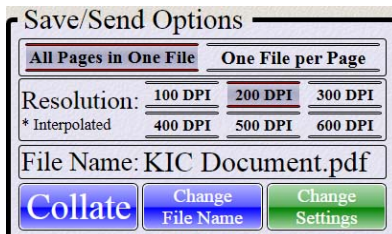Touch to print all the images in Color (recommended for images that have pictures).

Touch to send all the images to the printer.

Touch to Cancel and close the printing window.

Additional output options are summarized in the Save/Send Options panel. Here the user can change the order of the images, specify the resolution, select multi-image files vs. single image files and select a file name.

Collate Touch to open the Collate Images window. Here the user can change page order by touching and dragging image to their new positions.
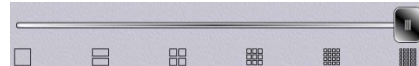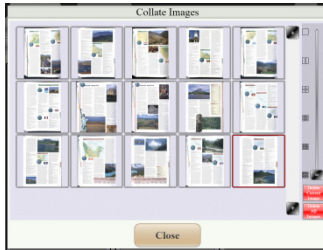
Use the slider to select how many images should be displayed in the preview panel.

Change File Name Touch to open the Export File Prefix window. *A virtual keyboard will be displayed.* Type the name of the file. Keep in mind that KIC will automatically add a suffix with the sequence number when exporting multiple files (i.e. JPEG or PNG).

Change Settings Touch to open a window and specify the number and resolution of output files. *Please Note: For some file formats, these options do not apply. For example, JPEG files can only be outputted One File per Page, and Audio files do not use the resolution setting.*

Save/Send Options		
Number of Files:	All Pages in One File	One File per Page
Resolution:	100 DPI	200 DPI	300 DPI
	400 DPI	500 DPI	600 DPI

Cancel   OK
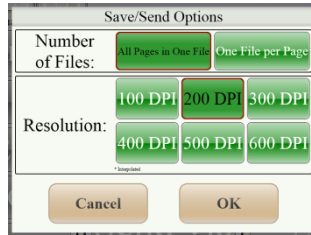
All Pages in One File Touch to save or send all pages in one file. *Please Note: This function does not apply if the selected file format does not support multi-image files (i.e. JPEG and PNG).*

One File per Page Touch to save or send each page in a separate file. The result will be multiple files.

100 DPI Select to save or send the pages at 100 DPI resolution. (Recommended for color or grayscale pages that contain text only.)

200 DPI Select to save or send the pages at 200 DPI resolution. (Recommended for color or grayscale pages that contain text, pictures and/or charts.)

300 DPI Select to save or send the pages at 300 DPI resolution. (Recommended for Black and White pages that contain text and color or grayscale pages that contain fine print.)

400 DPI Select to save or send the pages at 400 DPI resolution. (Recommended for high quality projects.)

500 DPI Select to save or send the pages at 500 DPI resolution. (Recommended for very high quality projects.)

600 DPI Select to save or send the pages at 600 DPI resolution. (Recommended for preservation quality projects.)

Please Note: If an output resolution that is higher than the scanning resolution is selected, the KIC system will apply interpolation in order to generate the desired output resolution.

Continue Scanning Touch to Continue Scanning.

End Session (Deletes Images) Touch to terminate the session. All the images are deleted when a session is ended.

Modify Image(s)

Modify Image(s) Tab

Image Settings

The Modify tab allows the user to change the settings on the images that have already been scanned. The options to modify the Brightness, Contrast, Resolution, and Color mode are located on the left side of the touch screen. The results are previewed in the right side of the touch screen, and they are also shown on the LCD display screen.
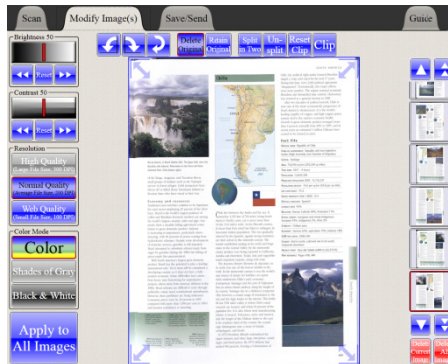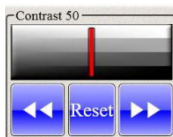

Touch Screen

Touch the thumbnail of the image to be modified and:

Touch and drag the sliding bar to reduce or increase the Brightness of the current image. Touch the arrows to increase or decrease the Brightness by a predefined quantity. Touch **[Reset]** to set the Brightness value to 50, the midpoint in its 0 to 100 range.

Touch and drag the sliding bar to reduce or increase the Contrast of the current image. Touch the arrows to increase or decrease the Contrast by a predefined quantity. Touch **[Reset]** to set the Contrast value to 50, the midpoint in its 0 to 100 range.

Touch **[High Quality]** to show fine details in the current image. This setting produces very large images and is therefore recommended for preservation and archive scanning only.

Touch **[Normal Quality]** for clear images that are moderate in size. This setting is recommended for scanning images that will be imported into documents, reports or presentations.

Touch **[Web Quality]** for small files. This setting is recommended for images that will be uploaded to the Web.
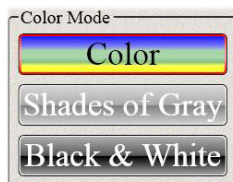
Touch **[Color]** to change the current image to 24-bit color.

Touch **[Shades of Gray]** to change the current image to 8-bit grayscale.

Touch **[Black & White]** to change the current image to Black and White (1-bit per pixel).

Touch to apply the settings of the current image to all images.

Thumbnail Panel

	Touch to scroll the thumbnail panel to the left.
	Touch to scroll the thumbnail panel to the first image.
	Touch to scroll the thumbnail panel to the right.
	Touch to scroll the thumbnail panel to the last image.
Delete Current Image	Touch twice to delete the current image (i.e. the image that is shown in the LCD display screen)
Delete All Images	Touch twice to delete all scanned images.

Rotating Images

Touch to rotate the current image 90° counterclockwise.

Touch to rotate the current image 90° clockwise.

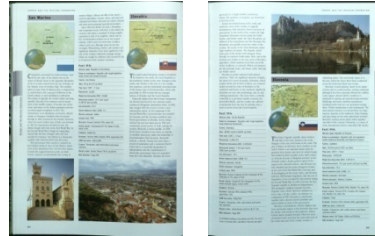Touch to rotate the current image 180°.

Splitting Images

Split in Two — Touch to split the current image in the middle and create an image for each clip. The new images will replace the original image.
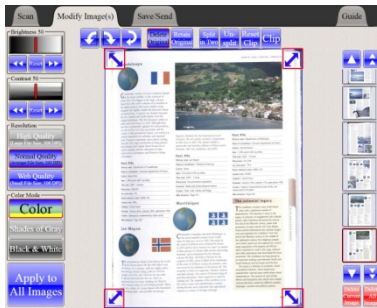

Original

Result

Un-split — Touch to un-split the current image.

Clipping Images

Touch and drag the blue arrows located in the corners of the image to delimit the new clip; then, touch **[Clip]**.

Clip — Touch this button to clip the selected area.

Original   Result

The clipping function works in conjunction with the Retain and Delete Original Image settings. When an image is clipped and the selected area corresponds to a small portion of the image, the original image is normally deleted, but if the clip area is large, the original image is normally retained. The user can overwrite these settings by touching the **[Delete Original]** or **[Retain Original]** buttons.

Touch to reset the delimited area. This will place the blue arrows back in the corners of the image.

Guide

User Guide Tab

The User Guide is available at any time from the KIC system's Interactive Touch Screen. Simply touch the **[Guide]** tab to view the Guide Navigation Window. Select the section or page of interest on the Interactive Touch Screen and view the guide contents on KIC's LCD Display Screen.

LCD Display Screen with User Guide Contents

Interactive Touch Screen
with User Guide Navigation window
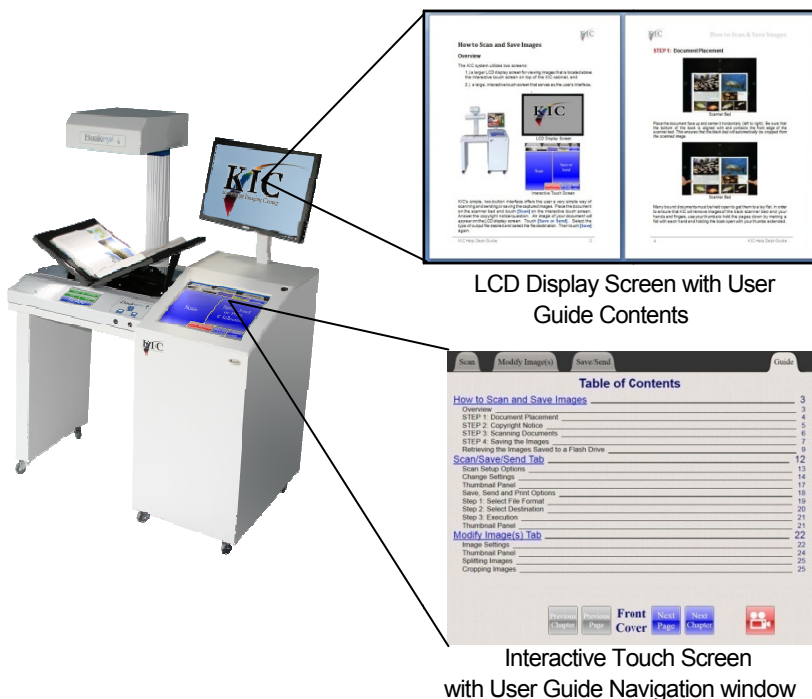
Navigate the User Guide using the bookmarks for each section, or move forward or backward one chapter at a time or one page at a time.

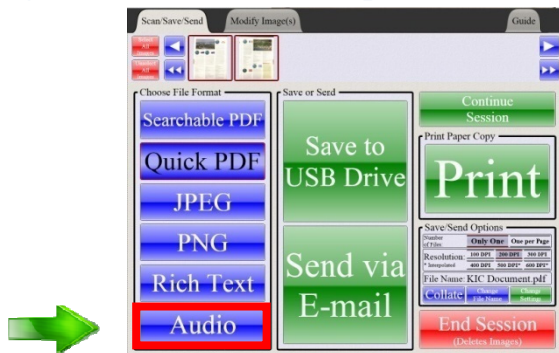|	
	Touch to move back to the previous chapter of the User Guide.
	Touch to move back one page in the User Guide.
	Touch to move forward one page in the User Guide.
	Touch to move to the next chapter of the User Guide.
	Touch to view a silent instructional video on how to use the KIC system.

Appendix

Selecting Zones for Audio Output

When **[Audio]** is selected as an output file format, the user has the option of selecting specific areas to be included in the MP3 files. This very useful feature allows the user to exclude unnecessary or undesirable content from the output (i.e. page numbers, picture captions, etc.). The following message is displayed on the touch screen when the user chooses **[Audio]** file output from the Save Send and Print Options window:
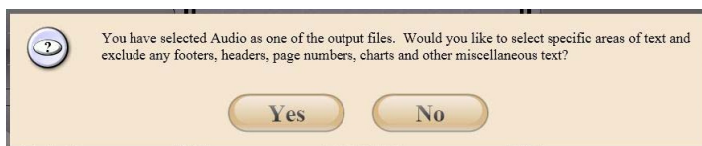
If the user selects "No", the Audio file that is created will contain all of the information in the scanned images, including miscellaneous text. If the user selects "Yes", KIC will automatically find the zones with text and will enclose them with blue boxes. When this automatic process is finished, the following Audio Zones window will be displayed. *Note: the images in this window are displayed in low resolution black and white.*
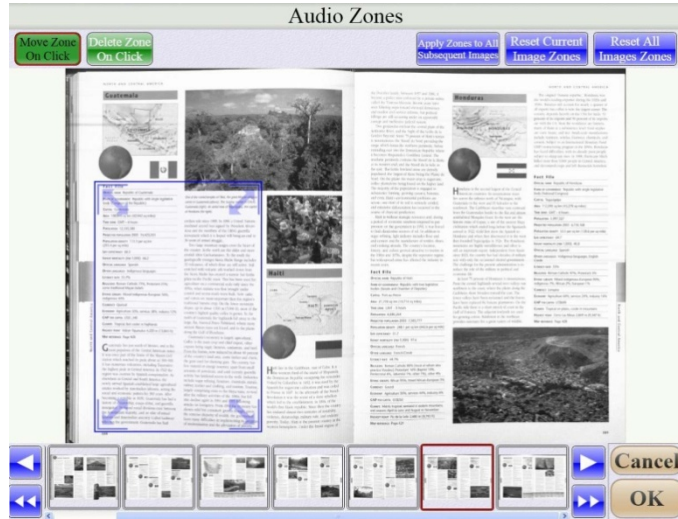
Audio Zones Window

Move Zone On Click	When selected, the user may touch and drag a zone. To create a zone, touch the screen over the image and a new zone will be displayed. Use the arrows inside the blue box to change the size of the zone. Simply touch an arrow and drag it to change the size of the box.
Delete Zone On Click	When selected, the user may delete a zone by touching any point inside its corresponding blue box.
Apply Zones to All Subsequent Images	Applies the zones selected for the current image to all subsequent images.
Reset Current Image Zones	Deletes all the zones in the current image and sets a new zone that includes the entire image. A blue box will outline the whole image.

Reset All Images Zones   Deletes all the zones in all the images and sets a new zone in each image that encloses the whole image. A blue box outlines each whole image.

◀   Touch to scroll the thumbnail panel to the left.

◀◀   Touch to scroll the thumbnail panel to the beginning.

▶   Touch to scroll the thumbnail panel to the right.

▶▶   Touch to scroll the thumbnail panel to the end.

Cancel   Touch to exit the Audio Zones window and use all text for Audio output.

OK   Touch to save the selected zones.