Scanning
You will scan each volume in its entirety into the scanner’s virtual memory before (in section 3) processing the images and transferring them from the scanner. The scanning procedure is fundamentally straightforward, but the details will vary quite a bit depending upon the attributes of the volume being scanned. Be sure to consult the appropriate subsection below.

Scanning Basics
To initiate each page scan, press the foot pedal at the base of the scanning table. (On occasion during the scanning process, often when first switching among “Color” settings on the front scanner panel [see below], you will receive an error message. Typically, you will need to click Scan in the BSC-2 window in order to continue after dismissing the error.)

Open the volume on the scanner platform and make the necessary adjustments according to the guidelines outlined below.

Scan left-to-right, regardless of the language of the material you are scanning. (You will scan pages in pairs and then split them during processing, and the scanner will automatically put the left page first. Scanning left-to-right will put Arabic material in reverse order, which you will correct later in processing, but will keep the pages in the correct sequence.) Ignore the library binding and end papers; begin with the journal’s back cover, if it includes one, or last page, if it does not.

Tailoring the Scanning Process: Volumes That Can Be Opened Flat
Volumes with some combination of a low page count, generous gutters, and loose bindings can generally be opened flat and are easiest to scan.
This volume (left) has generous gutters and is quite thin. When held with thumbs at either corner (right), it lies flat.

Before beginning to scan, set the “Type” setting to “Flat” on the front panel of the scanner. Open the volume and align its bottom near the green lines at the front edge of the scanner plates. Adjust the platform height (using the crank below the right side of the platform) and gap space (by loosening the screws below the front of the platform) to help support the book so it can be held open and flat. You’ll likely need to readjust the platform as you move from one end of the volume to the other.

Begin scanning. While scanning each page, hold the volume open by pressing your thumbs against the bottom corners. Keep the rest of your hand tucked away beneath the scanning platform. As you progress through the volume, check to ensure that the book remains aligned squarely against the green lines at the front edge of the scanner plates.

**Tailoring the Scanning Process: Volumes That Cannot Be Opened Flat**

Volumes that have some combination of a high page count, small gutters, and tight bindings typically have a persistent page curvature even when held open. Such volumes are somewhat more difficult to scan.
This volume has a small gutter and a tight binding. Its pages curve considerably when opened, and even when held with thumbs, curvature is in evidence when scanned using the “Flat” setting.

Before beginning to scan, set the “Type” setting to “Book” on the front panel of the scanner. In “Book” mode, the scanner automatically detects and corrects for curvature near the gutter between pages.

Open the volume and center it on the scanner plates. Adjust the platform height (using the crank below the right side of the platform) and gap space (by loosening the screws below the front of the platform) to help support the book so it can be held open and as flat as possible. You’ll likely need to readjust the platform as you move from one end of the volume to the other.

Although the scanner should detect and correct for curvature near the gutter, flattening the volume as much as possible produces the best results. However, to properly detect and compensate for page curvature, the scanner also requires a consistent curvature at both top and bottom of the page. Thus, scanning a tightly bound book requires a balancing act: you must try to hold the pages flat without flattening the bottom of the page more than the top. This will require practice, experimentation, and careful attention to the results displayed in BCS-2 as you progress through the volume.

As you proceed through the volume, also check to ensure that the volume remains square and in the center of the scanner plates.
Tailoring the Scanning Process: Volumes with Thin Pages and/or Faint Print

Volumes printed on lighter-weight paper stock will often evince visible bleed-through of text from one side of the page to the other. When scanned, this often results in speckles and ghosting that can make text difficult or impossible to read. If you notice such results, experiment with increasing the “Brightness” setting on the front scanner panel.

Substantial bleed-through is visible on this page, and results in speckles and ghosting when scanned at “Auto” brightness. Increasing the brightness to +1 (second from right) and +2 (far right) partially remedies this problem.

Alternatively, you may find text printed so faintly that it is not legible once scanned. In this case, experiment with decreasing the brightness setting.

Again, remedying these shortcomings requires a balancing act. Increasing the brightness setting too much will result in scanned text that is faint and broken; decreasing it too much will register increased bleed-through from the back side of the page.

Handling Photographs, Illustrations, and Color

Pages that include photographs (black-and-white or color), color illustrations, or black-and-white illustrations with fine lines and/or gradients must be scanned not only in “B & W” mode, but also in “Gray” (for black-and-white photographs and illustrations) or “Color” (for color photographs and illustrations), as appropriate. The Arabic-language
OCR software requires the bitonal image produced by “B&W” mode; after OCR is complete, this image will be replaced with the appropriate grayscale or color image.

In a later step of the scanning and processing workflow, you will segregate these grayscale/color images and create the composite images that will be used in the final digital object.

When grayscale or color content extends all the way to page edges (or “bleeds”), as in the example at left above, take extra care in scanning, as it’s more complicated to remove thumbs from a non-white page than from one with a white background. Rather than holding the page as normal, try to only the very tip to hold down the page edge. If the page will lay flat briefly without being held, refrain from doing so.

Note: I didn’t include the Western language exception here, b/c I think composites will offer a better final “look” in all cases.

<table>
<thead>
<tr>
<th>SUMMARY</th>
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<tbody>
<tr>
<td>- Scan pages in pairs, from left to right.</td>
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<tr>
<td>- If the volume can be opened flat, use the “Flat” setting and align the volume at the bottom of the scanner plates.</td>
</tr>
<tr>
<td>- If the volume cannot be opened flat, use the “Book” setting, center the volume on the scanning plates, and flatten it as much as possible.</td>
</tr>
<tr>
<td>- Compensate for bleed-through and faint print as necessary.</td>
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</tbody>
</table>
- Regularly check the preview images in BCS-2 to ensure continued proper scanner settings and volume alignment.
- Scan pages that include photographs or illustrations twice—once in “B & W” mode and once in “Gray” or “Color,” as appropriate.