

FIU Libraries, Digital Collections Center Standard Operating Procedure: Checking Calibration of the Cameras on the ATIZ BookDrive (Part A)

PERFORM THE STEPS IN THIS SOP BEFORE THE “Metering and Calibrating Exposure (Part C)” SOP!

The cameras have been calibrated previously but slight changes may need to be made because of the age and intensity of light coming from the ATIZ light bulbs overhead.

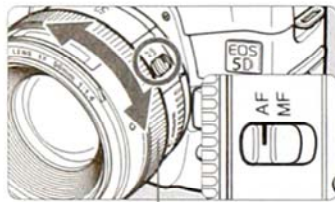
The initial “Settings” in the BookDrive Capture program are as follows:

AE Mode: Manual
Time Value: 60
Aperture Value: 3.5
ISO: 320
Metering Mode: Spot

- 1) Turn on the main switch for the ATIZ scanner power strip.
- 2) Turn the right camera on first, then the left camera.
- 3) Take the lens caps off of both camera lenses.
- 4) Open the BookDrive Capture program on the PC.
- 5) In the “Save As” dialog box, set destination for Libdlc2 (Cocoa) > ATIZ > ATIZtest > calibration
- 6) In order to ensure even and stable lighting conditions, make sure that the blinds are closed and the office lights are off.
- 7) To check the calibration of the cameras:
 - a) Focus the cameras by following these steps:
 - i) Place your open book on the book cradle, under the glass.
 - ii) While the lenses are set to auto focus “AF” (see figure 1), lightly press the shutter button (see figure 3) on each camera until the lens stops moving and beeps once.
 - iii) Without moving the lenses, switch them to manual focus “MF” (see figure 2).
 - b) Place the gray card in the center of left side of the book cradle, under the glass, on top of the book.
 - c) Click the “Capture” button in the BookDrive Capture program. You will see the gray card on the right side of the screen and the book on the left (see figure 4).
 - d) Switch the gray card to the center of the right side of the book cradle, under the glass, on top of the book.
 - e) Click the “Capture” button in the BookDrive Capture program. You will see the gray card on the left side of the screen and the book on the right (see figure 4).
 - f) Minimize the BookDrive Capture program window.
 - g) From your desktop, go to Libdlc2 (Cocoa) > ATIZ > ATIZtest > calibration.
 - h) View the thumbnails in Windows. Open the images of the gray card in Photoshop.
 - i) Be sure to keep track of which image came from what side of the book cradle (refer to figure 4). Theoretically, the images should be almost identical if the exposure settings in the “Settings” menu are the same.
 - ii) Crop the images to the edges of the gray card

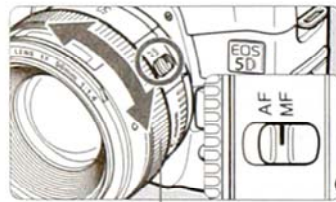
- (1) When cropping it is important to crop out the entire background book image.
- (2) You should have an image that is approximately 2500px wide x 1900px high.
- iii) For each image, go to “Filter” > “Blur” > “Average”
- iv) Go to “Window” > “Info”
- v) With the cursor on the gray card, the reading for the K value in the “Info” box should be between 62-74%
 - (1) If it is, you do not need to calibrate the cameras. If not, follow the procedures in the “Metering and Calibrating Exposure (Part C)” SOP.
- 8) Go to Libdlc2 (Cocoa) > ATIZ > ATIZtest > calibration and delete the images.
- 9) Be sure to switch the lenses back to auto focus “AF”.

Figure 1



Focusing ring

Figure 2



Focusing ring

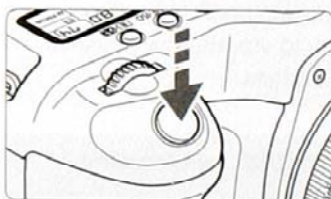
Figure 3



Pressing halfway

This activates autofocus (AF) and automatic exposure (AE) that sets the shutter speed and aperture.

The exposure setting (shutter speed and aperture) is displayed on the top LCD panel and in the viewfinder. (4)



Pressing completely

This releases the shutter and takes the picture.

Figure 4

File 0002 represents the Right side camera and the Left side of the book cradle
File 0003 represents the Left side camera and the Right side of the book cradle