

FIU Libraries, Digital Collections Center Standard Operating Procedure: Metering and Calibrating Exposure for the ATIZ BookDrive (Part C)

MAKE SURE YOU HAVE PERFORMED STEPS IN THE “CHECKING CALIBRATION (Part A)” SOP BEFORE CONTINUING WITH THIS SOP!

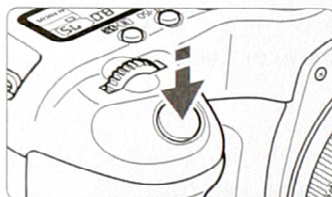
The cameras have been calibrated previously but slight changes may need to be made because of the age and intensity of light coming from the ATIZ light bulbs overhead. The initial “Settings” in the BookDrive Capture program are as follows:

AE Mode: Manual
Time Value: 25
Aperture Value: 3.5
ISO: 200
Metering Mode: Spot

- 1) After checking the calibration (using the “Checking Calibration” SOP), if you find that the cameras need to be recalibrated, begin with step 2. However, if the room and scanner are already set up, you may skip to step 7.
- 2) Turn on the main switch for the ATIZ scanner power strip.
- 3) Turn the right camera on first, then the left camera.
- 4) Take the lens caps off of both camera lenses.
- 5) Open the BookDrive Capture program on the PC.
- 6) In order to ensure even and stable lighting conditions, make sure that the blinds are closed and the office lights are off.
- 7) Place the gray card in the center of left side of the book cradle, under the glass.
- 8) Lightly press the shutter button of the camera on the right side (see figure 1).
- 9) Look at the light meter reading on the camera’s LCD panel (see figure 2)
 - a) You will be looking at the meter upside down. From your perspective it should read +2..1..0..1..-2.
 - b) For correct exposure the meter should point to the 0 (meaning there is 0 compensation needed for correct exposure).
 - c) If the meter is pointing to either side of the 0, you will need to either increase or decrease the exposure.
- 10) Open the BookDrive Capture program.
- 11) Click “Settings” in the top navigation bar. (Here is where you will find the exposure settings).
 - a) The AE Mode should always be set to “Manual”.
 - b) If the light meter is showing over exposure (closer to the +2 on the left side of the LCD) you may increase the “Time Value” number. This shortens the exposure time. If the light meter is showing under exposure (closer to the -2 on the right side of the LCD) you may decrease the “Time Value” number.
 - i) This may seem counterintuitive but the “Time Value” number represents a fraction of a second so 60 actually means 1/60 of a second.
 - ii) For example, if the light meter indicates -1, you will need to increase the “Time Value” by one full stop, to 30.

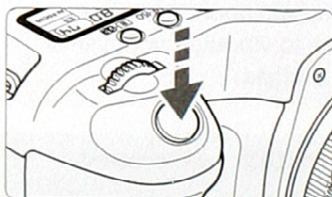
- iii) You will notice that there are numbers between 60 and 30. These are partial stops and can be used if the exposure is off by a fraction of a stop.
 - iv) Try not to set the “Time Value” below 30. There is occasionally some movement of the support structure when the glass platen is raised and lowered. This, in conjunction with a low “Time Value” may blur the scanned images.
- 12) If for any reason you need to change the “Aperture Value” or “ISO” settings for exposure compensation:
- a) Do not decrease the “Aperture Value” below 3.5.
 - i) A larger number for “Aperture Value” will decrease the exposure.
 - b) Do not increase the “ISO” above 400.
 - i) A larger number for “ISO” will increase the exposure.
- 13) Metering Mode should remain on Spot.
- 14) After making your adjustments, re-meter following steps 8 - 13. If the exposure is correct (the light meter points to 0) continue to step 15. If not, repeat steps 8-13 until you get a correct exposure.
- 15) You will need to make these changes for the other camera.
- a) Click on the pull-down menu under “Connected Cameras” and choose the second camera.
 - i) Make changes so that the settings are the same for both cameras.
 - b) Place the gray card in the center of right side of the book cradle, under the glass.
 - c) Lightly press the shutter button of the camera on the left side (see figure 1).
 - d) Check the light meter (step 9).
 - e) If changes need to be made, follow steps 11a-14.

Figure 1



Pressing halfway

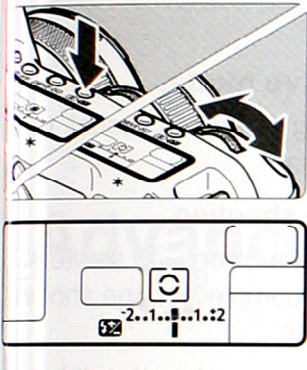
This activates autofocus (AF) and automatic exposure (AE) that sets the shutter speed and aperture. The exposure setting (shutter speed and aperture) is displayed on the top LCD panel and in the viewfinder. (4)



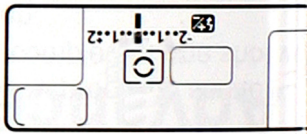
Pressing completely

This releases the shutter and takes the picture.

Figure 2



This is the light meter right side up.



This is what the light meter will look like from your perspective.

+2..1..0..1..-2