

A Installing the Scanner Software for MacOS X

NOTE: If you purchased your computer through Quick Ceph Systems, the scanner software has already been installed, so you can skip to Section B, “Unlocking Scanner and Transparency Adapter”. Otherwise, you will need to install the necessary software.

- 1 Locate the Adobe Photoshop Elements 2.0 CD, included with the Epson Expression 1680 User’s Guide, and insert it into the computer. The “Photoshop® Elements 2.0” CD icon will appear on your desktop. Double click on this icon.

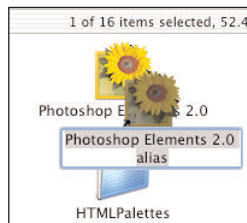


- 2 A window will open, displaying different language icons. Double click on the specific language icon, then double click on the “Install Photoshop Elements” icon that appears.



NOTE: You will be asked to type in the 24-digit software Serial Number during the installation. This Serial Number (“S/N”) is located on the Adobe Photoshop Elements 2.0 software CD sleeve. Type this number in exactly as it is shown. Do not lose this CD sleeve.

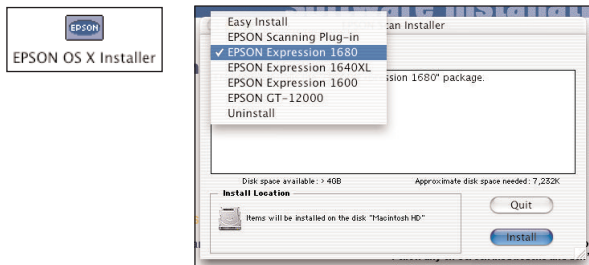
- 3 When the installation is complete, open the “Adobe Photoshop Elements 2” folder, located in the “Applications” folder in the Macintosh HD. Click once on the “Photoshop® Elements 2.0” application icon to select it. Go to the File menu and select “Make Alias”. The computer will make an “alias” (or “shortcut”) of this program. Place this alias on the desktop.



- 4 Eject the “Photoshop® Elements 2.0” CD and insert the “Epson Expression 1680 Series Scanner Software” CD, also included with the Epson Expression 1680 User’s Guide. The “Epson” CD icon will appear on your desktop. Double click on this icon.



- 5 A window will open, displaying the icon “EPSON OS X Installer”. Double click on this icon. When the installer window opens, click on the “Easy Install” button and select the scanner model, as shown below. Then click on the “Install” button to install the scanning software.

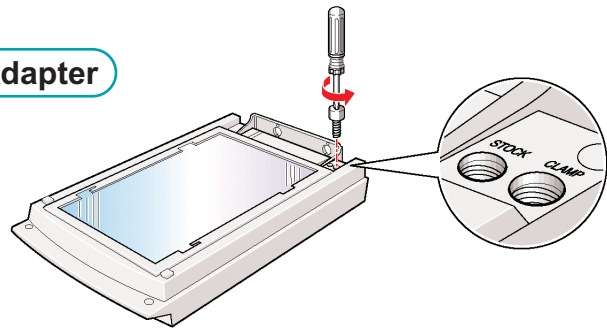
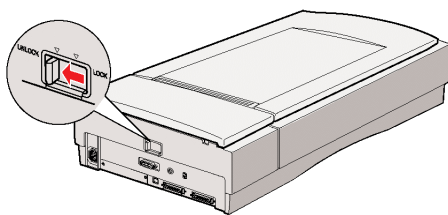


- 6 Create a new folder on the desktop by selecting “New Folder” under the File menu. A folder will appear on the desktop named “Untitled Folder”. Rename this folder “Scanned Images”. This folder will be used to store your scanned x-rays.



Your desktop should resemble the one shown above when the instructions on this page have been completed.

B Unlocking the Scanner and Transparency Adapter

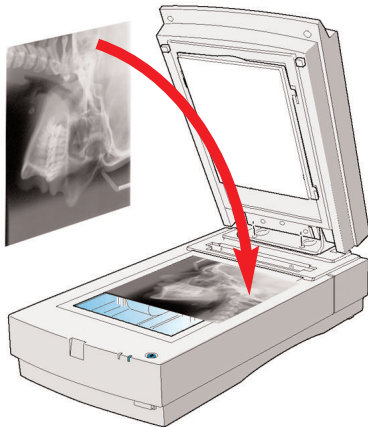


- 1 Make sure your scanner and transparency adapter are unlocked. They should only be locked for storage or transport.
- 2 Unpack the scanner and attach the transparency adapter. (**NOTE:** Do not throw away original boxes or packaging material, as they may be necessary for future transport or returns.)
- 3 Make sure to attach the two bolts included with the adapter. Plug in the scanner and attach the cable from the scanner to the appropriate port (FireWire, USB, or SCSI) on the computer or USB hub.

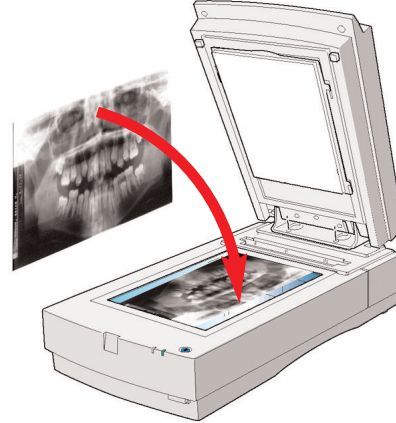
Once the software for the Epson Expression 1680 has been installed, you can begin scanning x-rays. The following section covers the recommended settings for Quick Ceph 2000.

C Setting up the Scanner Interface

Lateral X-Ray Orientation



Panoramic X-Ray Orientation



NOTE: For correct orientation, patient identification on x-rays should be placed face down on the scanner bed.

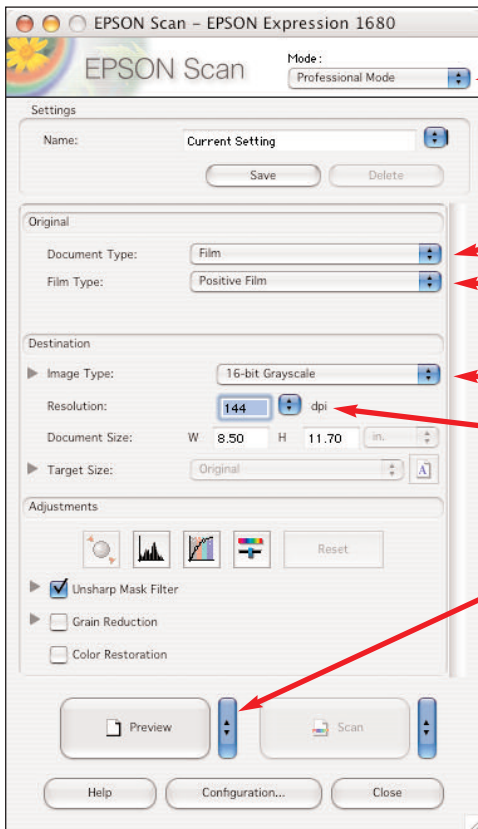
1 Place the x-ray on the scanner bed as shown above. Close the lid and double click on the “Photoshop Elements 2.0 alias”, as shown below.



2 The Photoshop software will launch. Click on the File menu and select Import, then “EPSON Scanner Expression 1680”. The **Epson Scan** window will appear.



3 Follow the 4 steps below in the order presented to select the specific settings:



A. Select “Professional Mode” from the “Mode” menu.

B. Select the “Film” option under the “Document Type” menu.

C. Select “Positive Film” under the “Film Type” menu.

D. Select “16-bit Grayscale” under the “Image Type” menu.

E. QC2000 requires a resolution of 144 dpi. Type this value in the “Resolution” field.

4 After the above settings are selected, click on the blue arrow icons next to the “Preview” button and select the “Normal” option from the menu that appears, as shown below.



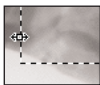
5 Click on the “Preview” button to preview the x-ray.

- The **Preview** window will open with the image of the x-ray, as shown below. You will then need to create a Marquee box around the x-ray. You do this by placing the cursor in the upper left corner of the x-ray. Then click, hold, and drag the cursor toward the lower right corner. The Marquee box will appear, as shown in the **Preview** window below.

Recommended Settings for QC2000 Marquee:
1200 pixels W x 1200 pixels H.

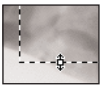
NOTE: These settings also apply for frontal and submentovertex x-rays.

The size of the Marquee is circled at the bottom of the **Preview** window to the right. To resize the Marquee, follow the instructions below:



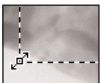
Horizontal Adjustment

Move mouse to a vertical line until cursor displays horizontal arrows. Click mouse and drag to desired marquee size.



Vertical Adjustment

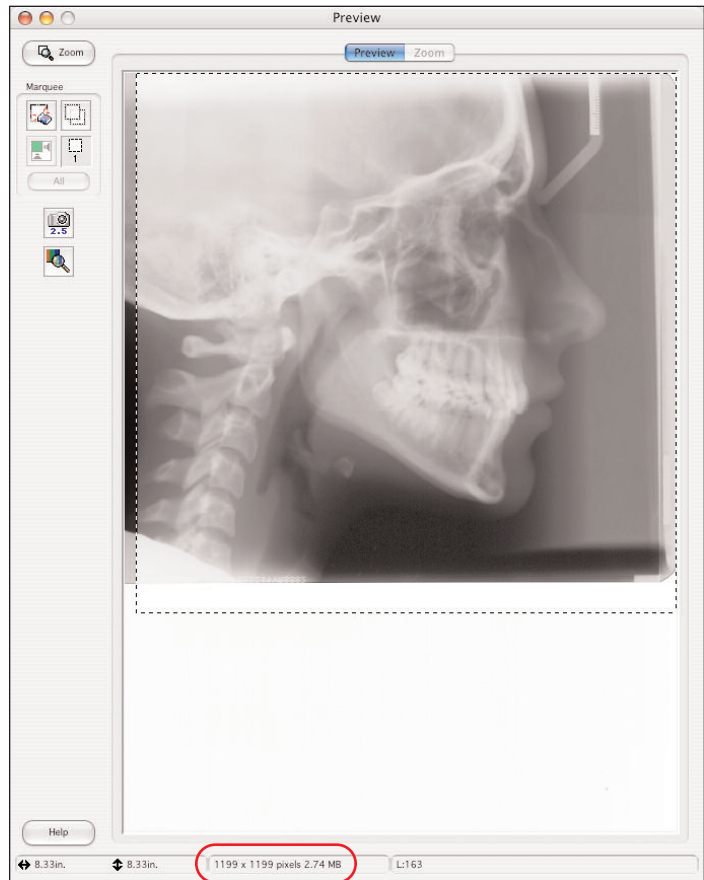
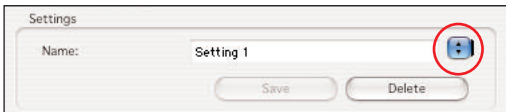
Move mouse to a horizontal line until cursor displays vertical arrows. Click mouse and drag to desired marquee size.



Simultaneous Adjustment

To move both, click and drag the cursor at the vertice.

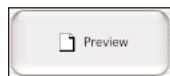
- The final step in the initial setup is to save the settings. Click on “Save” in the **Epson Scan** window. This setting will be changed to “Setting 1”. You can access these settings by clicking on the blue button, circled below.



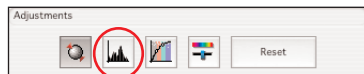
NOTE: The width and height do not have to be exactly 1200 x 1200 pixels. However, the marquee size should be very close.

D Scanning Lateral X-Rays

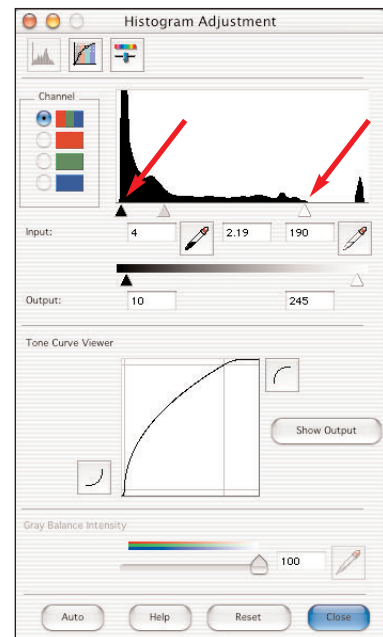
- To scan an image, place the x-ray on the scanning bed, as shown on Page 2. Then, click on the “Preview” button. The image will appear in the **Preview** window with the marquee surrounding it, as shown above.



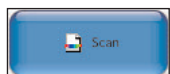
- If the image appears too dark or too light, it can be adjusted within the scanning software. To do this, click on “Adjustments”, found in the **Epson Scan** window. The tool to concentrate on is the “Histogram Adjustment”, circled in the image below.



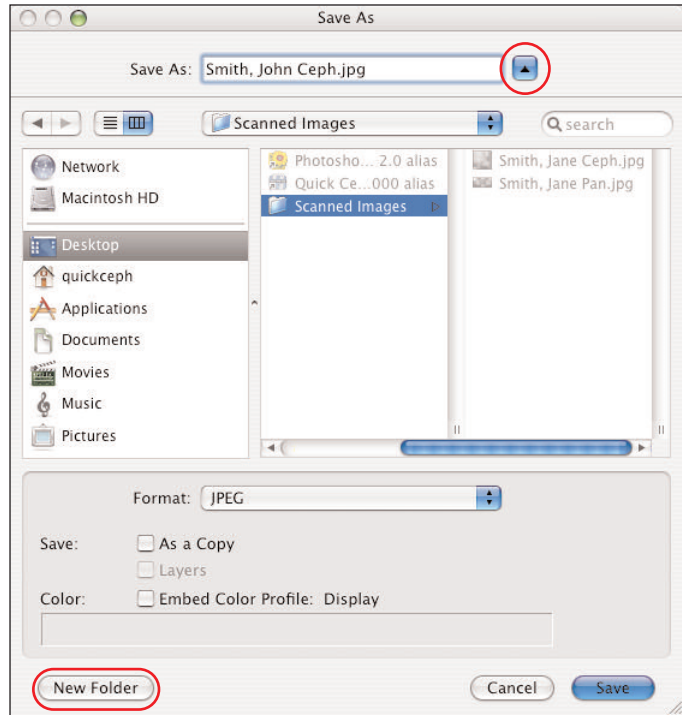
- When the “Histogram Adjustment” button is selected, the **Histogram Adjustment** window will appear, as shown to the right. Move the Black and White triangles, indicated by the arrows, to the edges of the histogram. (Do not move the “Output” triangles). Then, adjust the position of the middle Gray triangle. You will notice that as you do so, the x-ray image in the **Preview** window will lighten or darken. When the image is to your liking, you can click on the “Close” button to keep the changes that were made.



- Click on the “Scan” button, as shown below.



- 5 The image will open in Photoshop. Click on the File menu and select "Save As". The Save As Dialog Box will appear, as shown to the right.
- 6 In the "Save As" field, type the name of the x-ray to be saved. Then, click on the blue triangle button to the right of this field, circled in the image to the right, to display where to save the patient file.
- 7 We recommend creating a "Scanned Images" folder on your desktop to save your scanned files. To do this, select "Desktop" from the left side of the Save As Dialog Box. Next, click on "New Folder", as shown to the right, to create a new folder called "Scanned Images". Once this folder is created, you can save all of your scanned images into this folder.
- 8 Select "JPEG" from the "Format" menu.
- 9 Click on the "Save" button to save the scanned image. You can then close the image in Photoshop. If you would like to scan more x-rays, repeat Steps 1 through 9. If you are ready to import the x-rays into Quick Ceph 2000, refer to Chapter 3 of the Quick Ceph 2000 Manual.

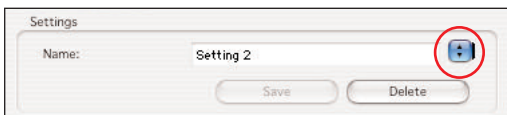


E Scanning Panoramic X-Rays

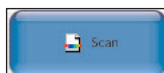
- 1 To scan a panoramic x-ray, place it on the scanner bed as shown on Page 2. Then, click on the "Preview" button. The x-ray will appear in the Preview window, as shown to the right.



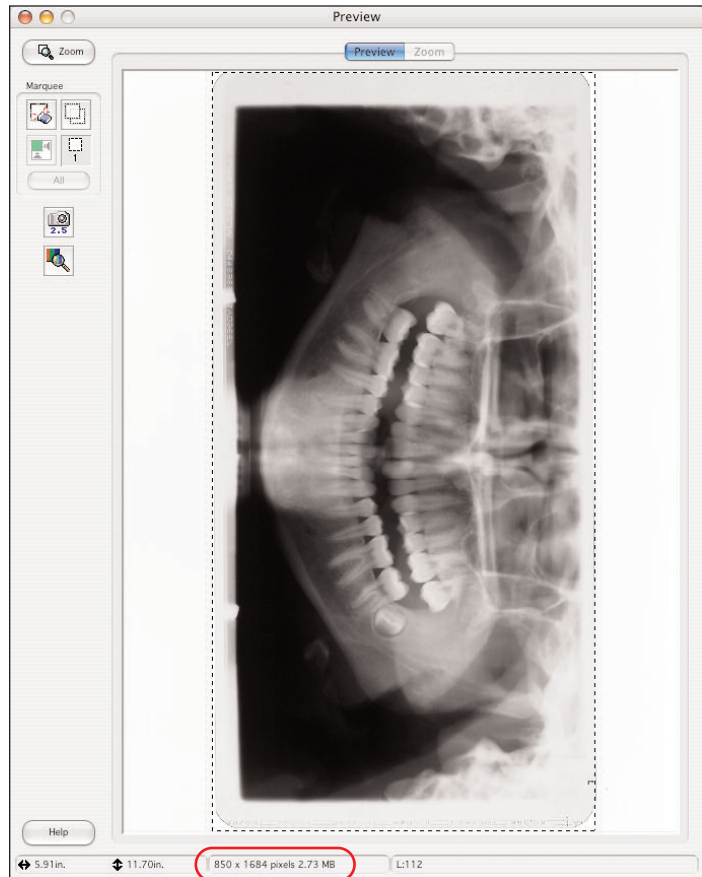
- 2 Place the cursor on the marquee lines and adjust them to fit the width and height of the pan. Once these dimensions are correct, you can save these settings. Click on "Save" in the Epson Scan window. This setting will be changed to "Setting 2" if you have already saved "Setting 1". You can access these settings by clicking on the blue button, circled below.



- 3 If the x-ray appears too dark or too light, follow Steps 2 and 3 on Page 3 to adjust the image.
- 4 Click on the "Scan" button.



- 5 The image will open in Photoshop. Follow Steps 5 through 9, shown above, to complete the scanning process for panoramic x-rays. If you are ready to import this x-ray into Quick Ceph 2000, refer to Chapter 3 of the Quick Ceph 2000 Manual.



NOTE: The dimensions circled above vary for different panoramic x-rays. Therefore, there are no specific settings required by Quick Ceph 2000.

F Using the Epson Scan Software without Adobe Photoshop

The Epson Scan program can be used as a standalone application. This is useful if you do not have a MacOS X compatible version of Adobe Photoshop, or if your computer has a limited amount of memory. Follow the instructions below to setup and use the Epson Scan program.

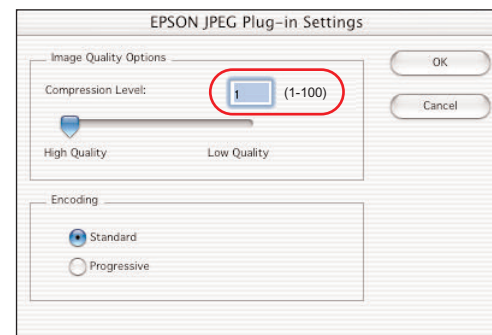
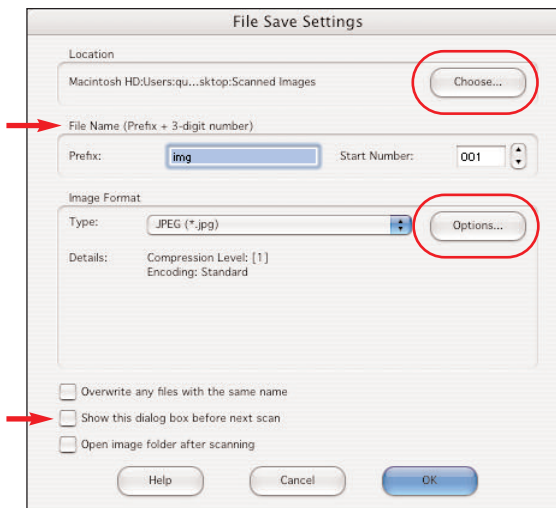
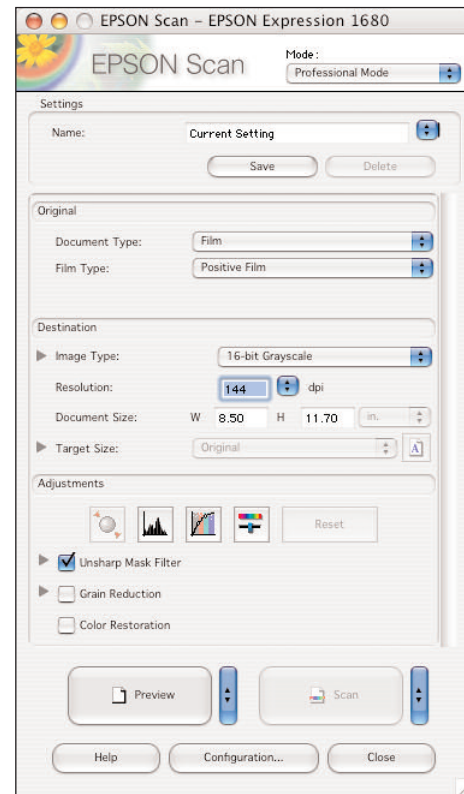
- 1 Locate the “Epson Scan” application in the “Applications” folder in the Macintosh HD. The icon looks like the one shown to the right.



You should make a shortcut of this icon by either dragging and dropping it into the Dock, or by clicking once on the image and selecting “Make Alias” under the File menu.

- 2 Double click on the Epson Scan icon. The **Epson Scan** window, shown to the right, will appear. Select the specific settings as shown. For further information on these settings, refer to page 2 of this document.

- 3 Once all of the settings are selected in the **Epson Scan** window, click on the arrow button to the right of the “Scan” button, then select “File Save Settings”.



- 4 The window shown above will appear. Click on the “Choose” button, circled in the example above, to select the location where the scanned images are to be saved. We recommend saving the images to a folder on the Desktop called “Scanned Images”.

- 6 The file name of the scanned image, shown above by the first arrow, consists of the contents of the “Prefix” field (“img” by default) followed by a 3-digit number starting with the value in the “Start Number” field.

OPTIONAL: To give the scanned image a non-generic name, type the patient’s name in the “Prefix” field. Then, check the box to the left of “Show this dialog box before next scan” (indicated by the second arrow). Click on “OK” when you are finished making these changes.

- 5 Next, click on the “Options...” button to open the Image Quality Options Dialog Box. Type the number “1” in the “Compression Level” field, circled above, then click on “OK”.

- 7 Follow the directions in Section D of this document to create the marquee for the lateral x-ray. To save this setting, click on “Save” in the **Epson Scan** window. This setting will be changed to “Setting 1”, as shown below. You can also create and save additional settings for Pans (see Section E) or Models.

- 8 Click on the “Scan” icon to scan the images once the marquee has been setup. Once the images are scanned, please refer to Chapter 3 to import images into Quick Ceph 2000.

