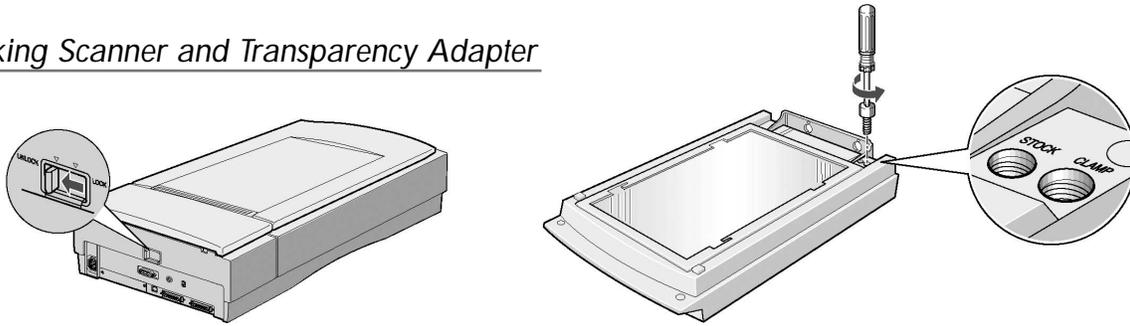## Unlocking Scanner and Transparency Adapter

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. If you purchased your computer through Quick Ceph Systems, the scanner software has already been installed and you can skip directly to "Setting up the Scanner Interface in MacOS 9", located on Page 2.
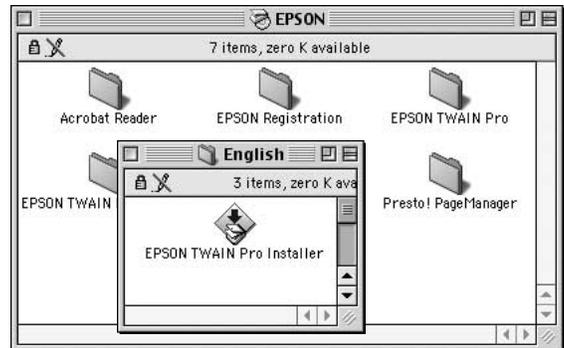
Installing Scanner Software for MacOS 9

1 Now that you have connected the scanner to the computer, it is time to install the scanner software. Insert the "Scanning Tools" CD-ROM found on the back of the Expression manual. An icon will appear on your desktop. Double click on this icon.
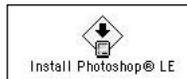

2 The folder shown to the right will open. Double click on the icon labeled "EPSON TWAIN Pro". Click on the appropriate language and then click on the installer icon to install the TWAIN software. Click on "Restart" when prompted.

3 When the computer boots up again, place the PhotoShop LE CD-ROM into the computer to install the software. Locate the Adobe Photoshop 5.0 LE folder. Double click on this folder and locate the "Install Photoshop® LE" icon. Double click to install. Follow the installation directions, and restart when prompted.
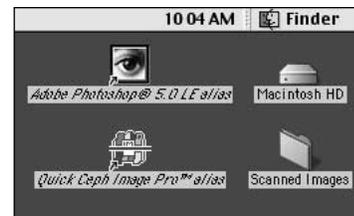

4 During the installation of the Photoshop software, you will be asked to type in a Serial Number. This is an alpha-numeric value located on the CD cover of the Photoshop software. Please type this number in exactly as it is shown. Otherwise, the installation will not be complete.

5 Open the Adobe Photoshop 5.0 LE folder when the computer has rebooted. Click once on the application icon to select it. Go to the File menu and select "Make Alias". The computer will make an "alias" (or "Shortcut") of the Photoshop program. Place this alias on the desktop.

6 Create a new folder on the desktop by clicking on the File menu an selecting "New Folder". Rename the "Untitled Folder" to "Scanned Images". This folder will be used to contain your scanned x-rays.
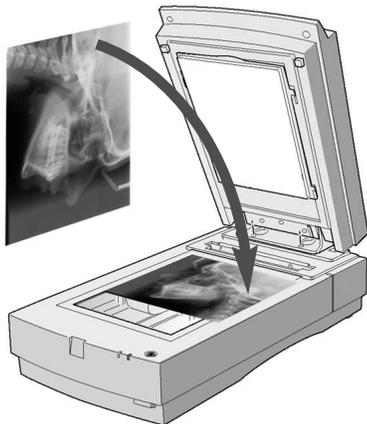
You should also create and place an alias of the Quick Ceph program on the desktop.

Your desktop should resemble the one shown above when the software installation has concluded.
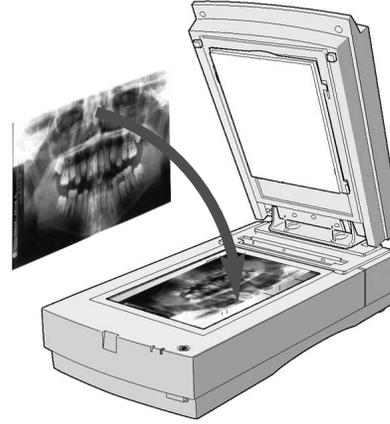
Once the software for the Epson Expression 1680 has been installed, you can begin scanning x-rays.
The following section covers the recommended settings for Quick Ceph Image Pro and Quick Ceph 2000.

Setting up the Scanner Interface in MacOS 9

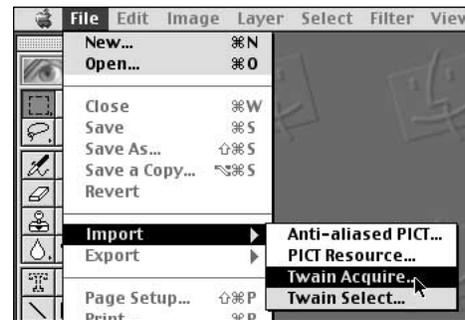**Lateral X-Ray Orientation**   **Panoramic X-Ray Orientation**

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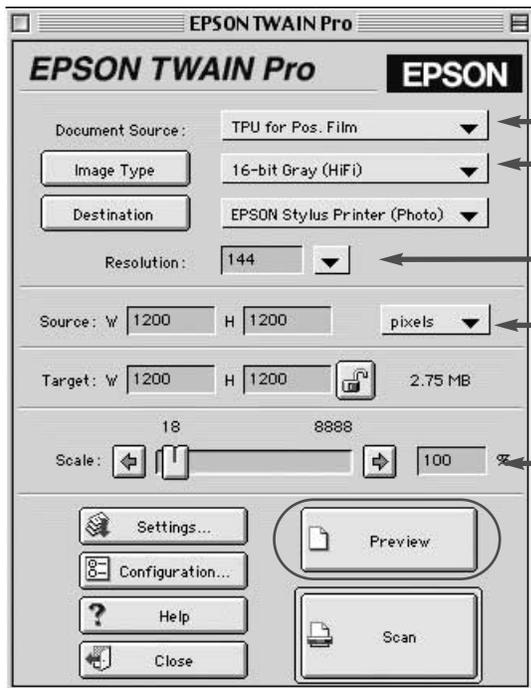should be placed face down on the scanner bed.**

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

Adobe® Photoshop® 5.0 LE alias

2 The scanner software will launch. Click on the File menu and scroll down to Import. Then, select "Twain Acquire". The window for the scanner settings will appear.

File menu:
- New... ⌘N
- Open... ⌘O
- Close ⌘W
- Save ⌘S
- Save As... ⇧⌘S
- Save a Copy... ⌥⇧⌘S
- Revert
- Import ▶ Anti-aliased PICT... / PICT Resource... / **Twain Acquire...** / Twain Select...
- Export ▶
- Page Setup... ⇧⌘P
- Print ⌘P

3 Change settings to match those with the arrows. At this point, both the "Source" and "Target" settings are inaccessible.

EPSON TWAIN Pro

Document Source:	TPU for Pos. Film ▼
Image Type	16-bit Gray (HiFi) ▼
Destination	EPSON Stylus Printer (Photo) ▼
Resolution:	144 ▼
Source: W 1200	H 1200 pixels ▼
Target: W 1200	H 1200 🔒 2.75 MB
	18 8888
Scale: ◀ |||▶ 100 %

Buttons: Settings... / Configuration... / Help / Close / Preview / Scan

Select this setting to activate the Transparency Adapter

Select 16-bit Gray for better scans or 8-bit Gray for faster scanning

Select or type in the resolution required for your specific program:
Quick Ceph Image Pro: 72 dpi   Quick Ceph 2000: 144 dpi

Change to pixels

Make sure this value is always 100%

4 Click on the "Preview" button when the changes have been made. Once the image has been previewed, you will then be able to change the Source and Target settings.

Setting up the Scanner Interface in MacOS 9 (cont.)

5 After you click on the "Preview" button, the scanner will launch the Preview window. This window allows you to adjust the image to gain the most clarity.

6 **Marquee Button:**
Click here first to create a marquee.

Image Controls Button:
Allows you to modify the exposure, gamma, highlight, shadow, and threshold settings for the image.

Tone Correction Button:
Allows you to manually adjust the tone settings on image.
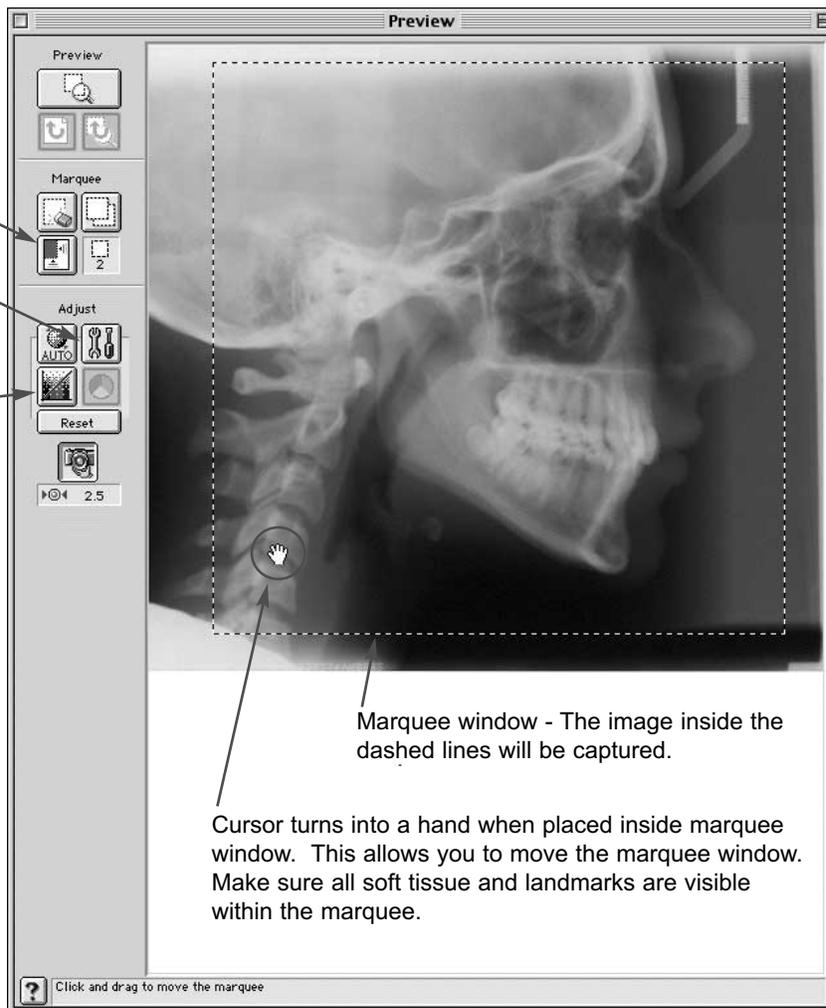
7 *Resizing the Marquee*

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 Resolution and marquee settings should be changed according to the Quick Ceph program you are using.

NOTE: Values for Target and Source should be identical for a 1:1 scaling. When settings are correct, click on icon to "Lock".

8 If the image needs adjustment, you can use both the Image Controls or the Tone Correction features.

For Dark X-rays:
Image Controls Window
Increase Exposure slightly
Increase Gamma
Reduce Shadow slightly

Tone Correction Window
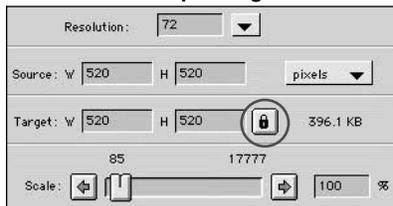Click on the Tone Curve Name and select "Lighten".

Marquee window - The image inside the dashed lines will be captured.

Cursor turns into a hand when placed inside marquee window. This allows you to move the marquee window. Make sure all soft tissue and landmarks are visible within the marquee.
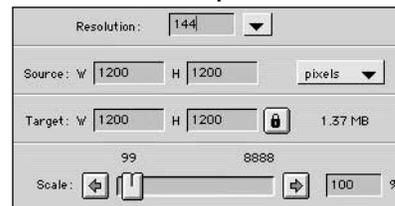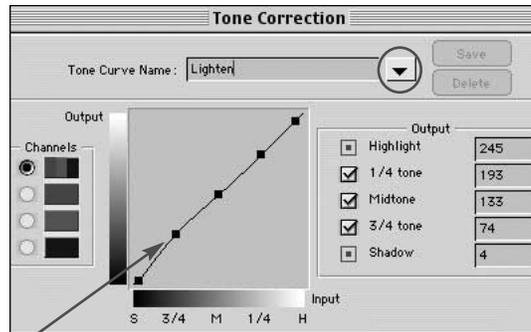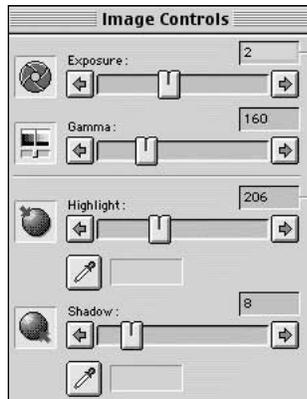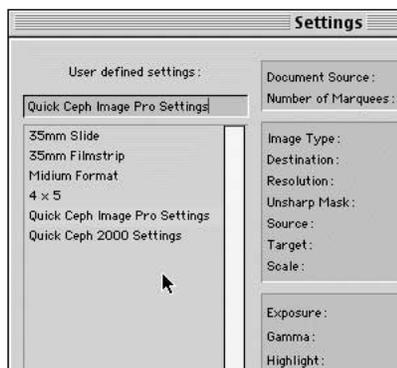
Recommended Settings for Quick Ceph Image Pro

Resolution: 72
Source: W 520 H 520 pixels
Target: W 520 H 520 396.1 KB
85   17777
Scale: 100 %

Recommended Settings for Quick Ceph 2000

Resolution: 144
Source: W 1200 H 1200 pixels
Target: W 1200 H 1200 1.37 MB
99   8888
Scale: 100 %

Image Controls

Exposure: 2
Gamma: 160
Highlight: 206
Shadow: 8

Tone Correction

Tone Curve Name: Lighten

Output
Channels

Output
Highlight 245
1/4 tone 193
Midtone 133
3/4 tone 74
Shadow 4

Input
S   3/4   M   1/4   H

Tone can also be manually adjusted by dragging on the tone boxes.

Scanning with the Epson Expression in MacOS 9

1 After the settings are correct, you should create a custom setting for Quick Ceph. Click on the "Settings" button circled below. The window shown to the right will open.

2 Type in the name you would like to call this setting, then click on Save, as shown below. The dimensions, resolution, and image changes will be saved in this setting.

3 Once the settings have been saved, you can click on the "Scan" button to begin scanning. The scanner will place the scanned image on the screen.

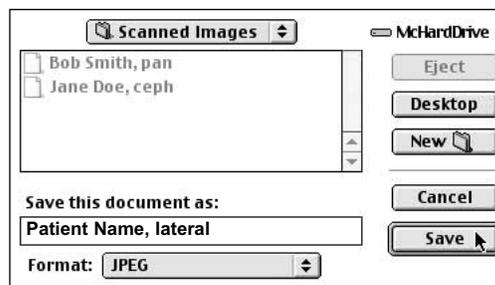If the image is satisfactory, proceed to step 4. Otherwise, close the window and make further adjustments to the image before scanning again.

5 After the images have been saved, you can drag and drop them onto Quick Ceph. You should create a Quick Ceph alias icon on your desktop for easier access.

Please note that 16-bit images can only be saved in TIFF format.

4 Click on the File menu and select "Save As". A save dialog box will open. You should save all scanned files to the "Scanned Images" folder on the desktop.

We recommend naming the images with the name of the patient, followed by the type of x-ray. This allows for easier identification.

Quick Scanning Tutorial

Once you have saved the scanner settings, scanning will become much faster. You will not have to reinput the settings. Follow the instructions below for quick scanning instructions.

1 Open the Photoshop application. Go to the File menu and select "Import", then "Twain Acquire". Click on the "Preview" button on the window that appears.
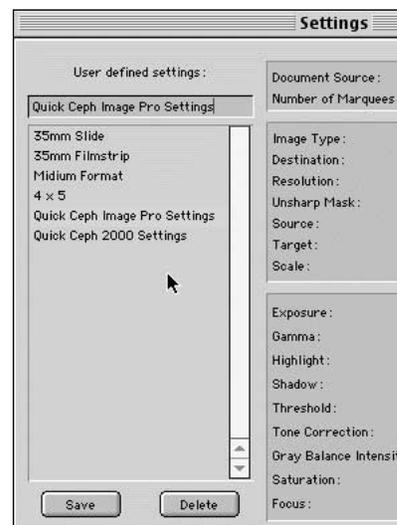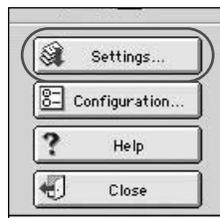
The scanner will bring up a previewed image on the screen. The resolution, Source, and Target settings will be reset to the default settings.

3 The settings should change to the correct values for Quick Ceph. You can then adjust the image using either the Image Controls or the Tone Correction features. When the image is satisfactory, click on the "Scan" button.

4 After the image is scanned and saved, you can drag and drop it onto Quick Ceph. For more information about dragging and dropping x-rays onto Quick Ceph, please refer to your Quick Ceph Manual.

2 Click on the "Settings" icon and select the name of the saved settings. In this case, we will choose "Quick Ceph Image Pro Settings". Once selected, click on "OK".
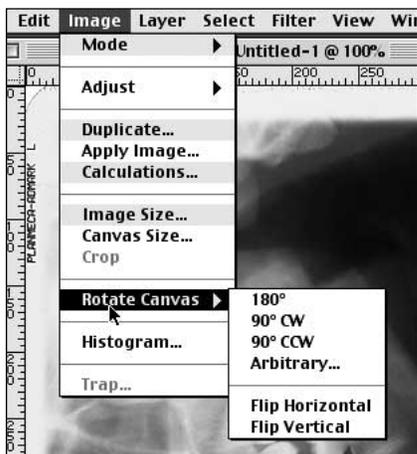
Scanning Panoramic X-rays with the Epson Expression

1 Place the panoramic x-ray lengthwise on the scanner bed with the image face down, as shown on page 2. You should leave a border on both sides.

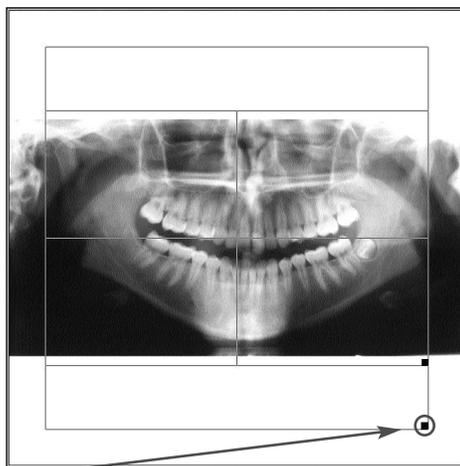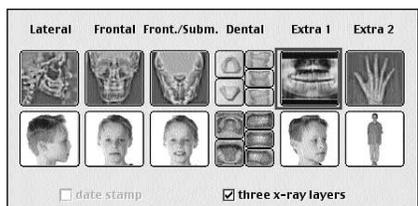**2** Click on the "Preview" button shown below. An image will appear in the Preview window.

3 Click on the lower left "Marquee" button to create a marquee around the image. Use the Image Control and Tone Corrections features if the image needs adjustment.

4 Click on the "Scan" button to begin scanning the image into the program.

5 **Rotating the Panoramic X-ray**
To rotate the image after it is scanned, click on the Image Menu and select the "Rotate Canvas" option. The program allows you to rotate the image depending on the original orientation. The example shown above would be rotated "90º CW".

6 Save the scanned image as described on page 4.

7 **Entering the Panoramic X-ray into QCIPro and QC2000**
To enter the panoramic x-ray, hold down the "option" key on the keyboard and drag the image onto the QCIPro or QC2000 icon. The window with the cropping tools will appear as before, but the x-ray image will be centered between two horizontal white borders, one above and one below. Crop the image using the cropping square for the larger image as shown. Once the image is cropped, click outside the cropping window to capture. Click on the Extra 1 x-ray image in the Input Dialog Box to store the image.

Use this square to resize the cropping window for panoramic x-rays.