

***Kodak Point-of-Care CR Systems  
Software Version 2.5.0 Software Guide***

**4H1865**

Carestream Health, Inc.

150 Verona Street

Rochester, New York, 14608

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Use of the Guide

The Kodak Point-of-Care 120/140/260 Systems are designed to meet international safety and performance standards. Personnel operating the unit must have a thorough understanding of the proper operation of the system. This guide has been prepared to aid medical and technical personnel to understand and operate the system. Do not operate the system before reading this manual and gaining a clear understanding of the operation of the system. If any part of this manual is not clear, please contact your Carestream Health representative for clarification.

Authorized European Representative

Carestream Health, Deutschland.

Hedelfinger Str. 60

70327 Stuttgart, Germany

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# 1 *Safety and Regulatory Information*

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## *Conventions used in this manual*



### **CAUTION:**

**Caution points out procedures that you must follow precisely to avoid damage to the system or any of its components, yourself or others, loss of data, or corruption of files in software applications.**

**IMPORTANT:** *Important highlights critical policy information that affects how you use this manual and this product*

**NOTE:** Notes provide additional information, such as expanded explanations, hints, or reminders.



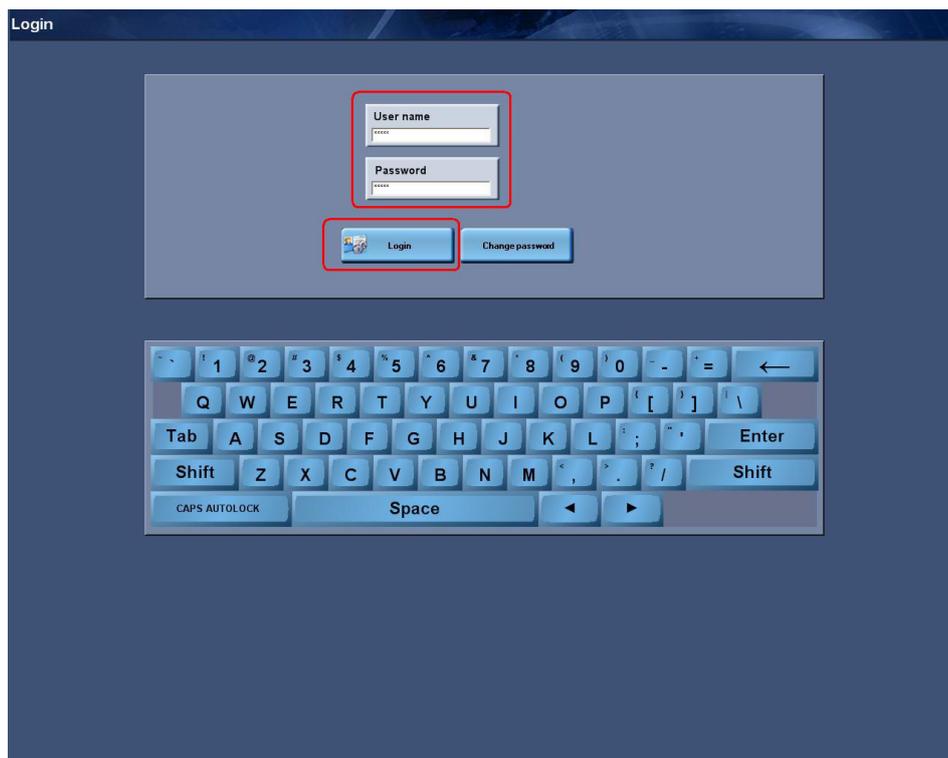
## 2 *Acquiring New Images*

This chapter describes the steps required for acquiring new images/studies for new/existing patients and includes the following Sections:

1. Logging In
2. Managing Patient Information—Manual Patient Entry
3. Managing Patient Information—Modality Work List
4. Acquiring Images

### *Logging In*

1. The application begins automatically upon computer startup. The Login screen appears:



*Login Screen*

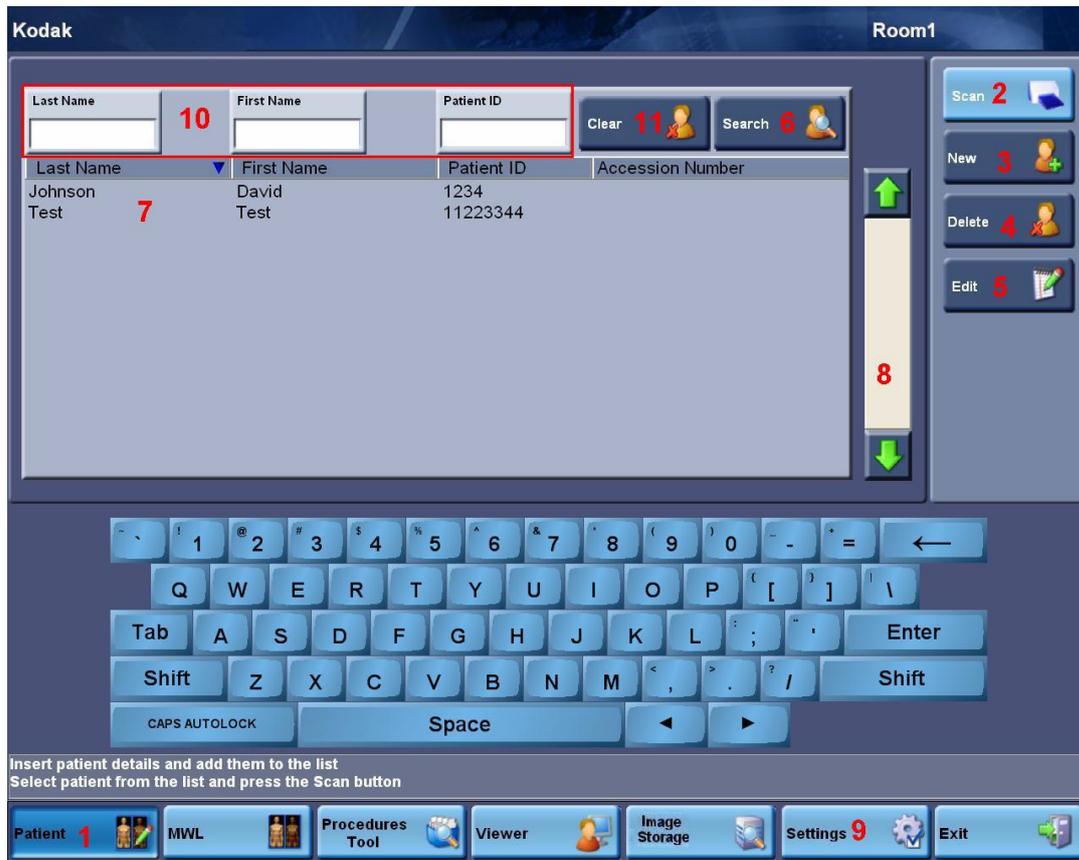
2. Fill in the user name and password, then click **Login**. The Patient Entry screen appears.

NOTE: User Name is case sensitive.

## Managing Patient Information—Manual Patient Entry

This screen enables patient information management when no **MWL** (Modality Work List) is available.

Click **Patient** to access the Patient List screen. This screen allows you to add, delete, and edit patient information.



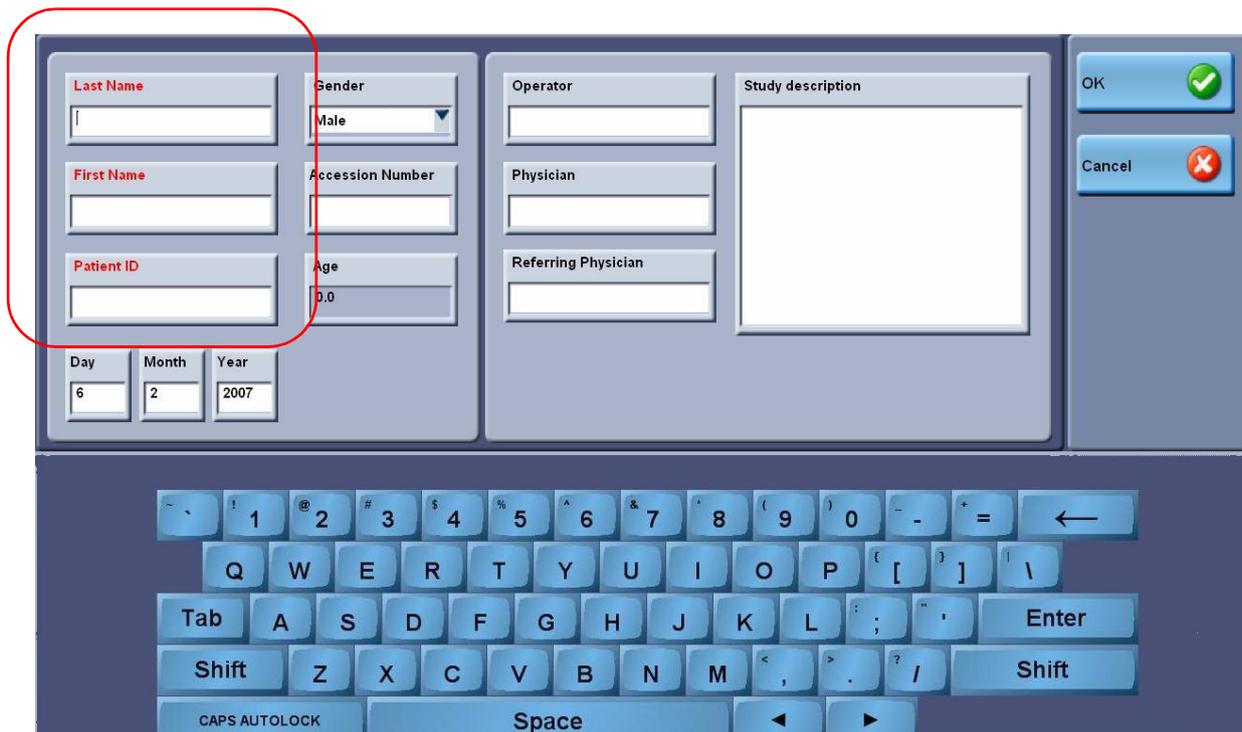
*Manual Patient Entry screen*

#	Component	Clicking here:
1	Patient	Opens the Manual Patient Entry screen
2	Scan	Opens the Scan screen
3	New	Opens the Add Patient screen
4	Delete	Deletes selected patient(s) from the Patient list
5	Edit	Opens the Edit Patient screen with the selected patient details

#	Component	Clicking here:
6	Search	Searches the Patient database for patient/s based on the criteria entered in the Patient Search fields and displays the results in the Patient List area
7	Patient List	Upon opening, the Patient List screen displays the entire Patient database by default. When a search is performed the results are displayed here.
8	Scroll Bar	Enables scrolling through the Patient list
9	Setting	Opens the User Tab in Settings for selecting User defaults.
10	Patient Search Fields	Entry for search criteria, any combination of First Name, Last Name or Patient ID
11	Clear	Clears search criteria entered in Patient Search fields

**Creating a New Patient**

1. Click **New**.  
The Add Patient screen appears:



*Add Patient Screen*

2. Enter patient information.
3. Click **OK** to add the patient to the list or **Cancel** to cancel the entry.

NOTE: Fields marked in red are mandatory. Mandated fields can be

designated in **Settings>User tab**.

### *Deleting a Patient*

1. Select a patient from the patient list.
2. Click **Delete**, a confirmation dialog will appear.
3. Confirm deleting the patient.

### *Editing a Patient*

1. Select a patient from the patient list.
2. Click **Edit**.

The Edit Patient screen will appear with patient information filled in:

The screenshot displays the 'Edit Patient' interface. On the left, a red rectangular box highlights three mandatory fields: 'Last Name' (containing 'Test'), 'First Name' (containing 'Test'), and 'Patient ID' (containing '11223344'). Below these are fields for 'Day' (6), 'Month' (2), and 'Year' (1989). To the right of the highlighted fields are 'Gender' (Male), 'Accession Number', and 'Age' (18.0). Further right are 'Operator', 'Physician', and 'Referring Physician' fields. A large 'Study description' text area is on the far right. At the bottom right, there are 'OK' and 'Cancel' buttons. Below the form is a virtual keyboard with various keys.

*Screen with patient information for editing*

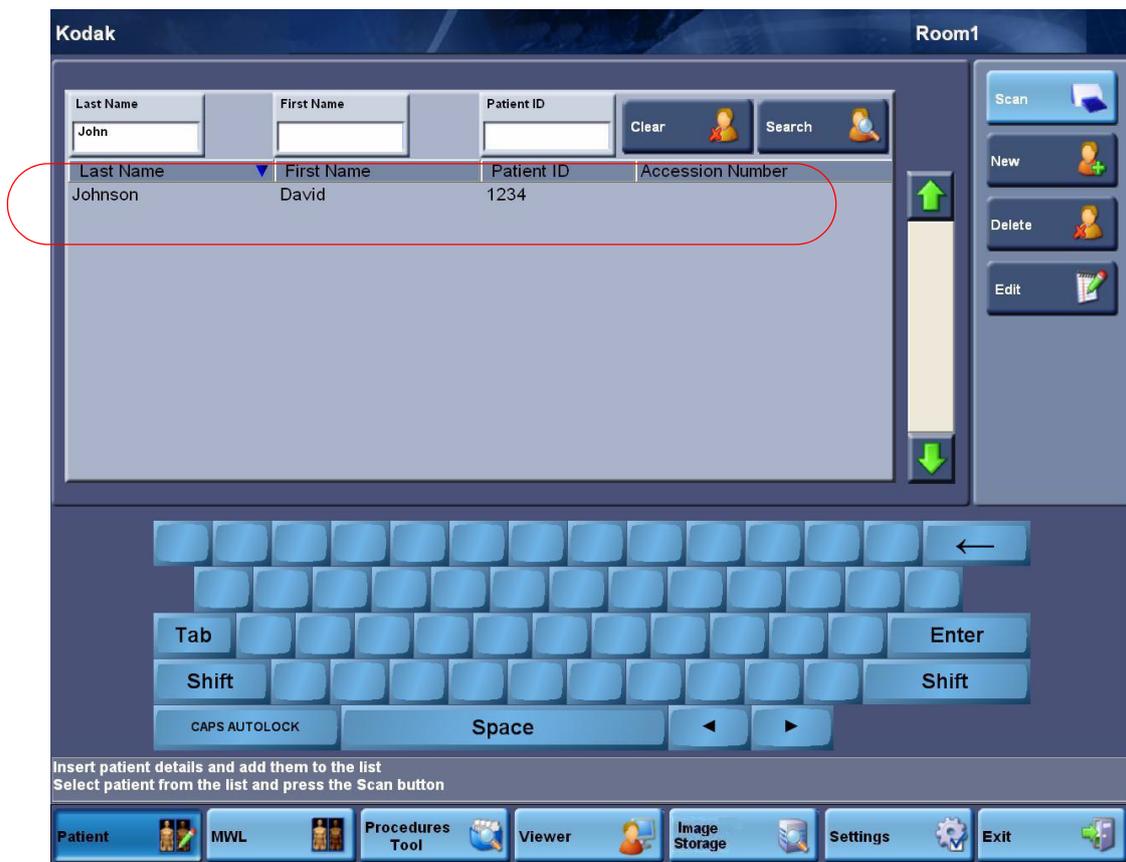
3. Change details as necessary.
4. Click **OK** to confirm details. Click **Cancel** to cancel changes.

NOTE: Fields marked in red are mandatory. Mandated fields can be designated in **Settings>User tab**.

## Searching for a patient

1. Enter any combination of Last Name, First Name, or a Patient ID number in the Patient Search fields.
2. Click **Clear** to clear the entries or **Search** to search for the patient/s file/s and display that information in the Patient List.

Entering partial information also allows a quick search. For example, searching for “John” will locate and display information for “Johnson” as in the figure below.

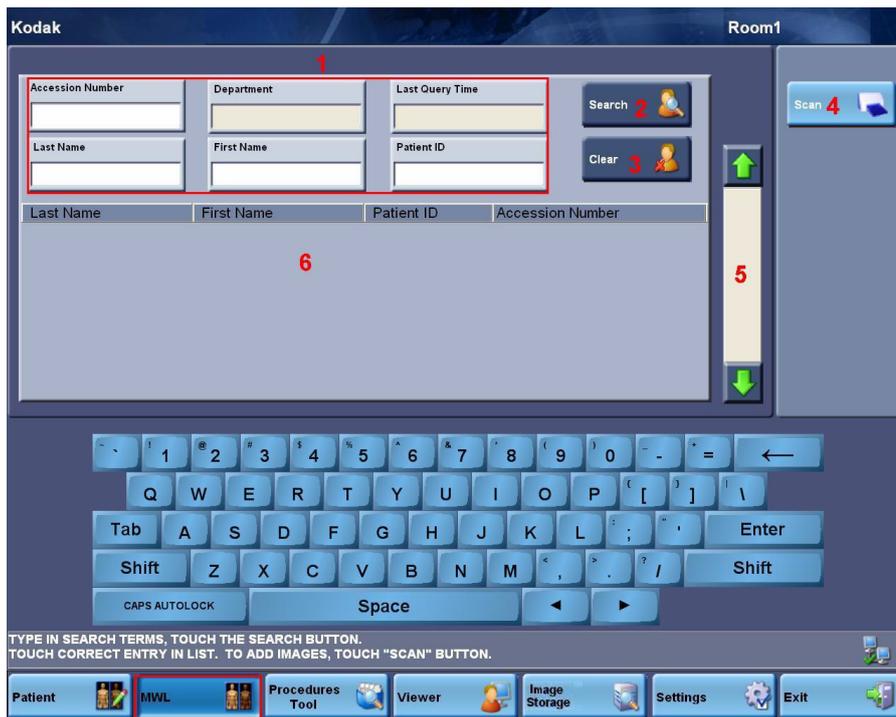


*Patient List After Search with Partial Information*

## Managing Patient Information–Modality Work List

The **MWL** (Modality Work List) screen enables searching the local HIS/RIS (Hospital Information System/Radiology Information System) for existing patients and selecting a patient from the results.

Click **MWL** button at the bottom to access the Modality Work List screen.



*Modality Work List Screen*

#	Component	Touching here:
1	Search Criteria Fields	Search for patient by entering information into one or more of the following fields: Accession Number, Patient ID, Department, First Name, Last Name. Last Query Time is the last time that the MWL was successfully queried from the HIS/RIS.
2	Search	Searches the HIS/RIS using the criteria entered in the Search Criteria fields.
3	Clear	Clears search fields
4	Scan	Opens the scan screen
5	Scroll Bar	Enables scrolling through the patient list
6	Patient list	Displays list of patients based on results of search according to specified criteria

***Searching for a Patient***

1. Type value for search in “Accession Number”, “Last Name” “First Name” and /or “Patient ID”.
2. Click **Search**.

***To Return to a Full List***

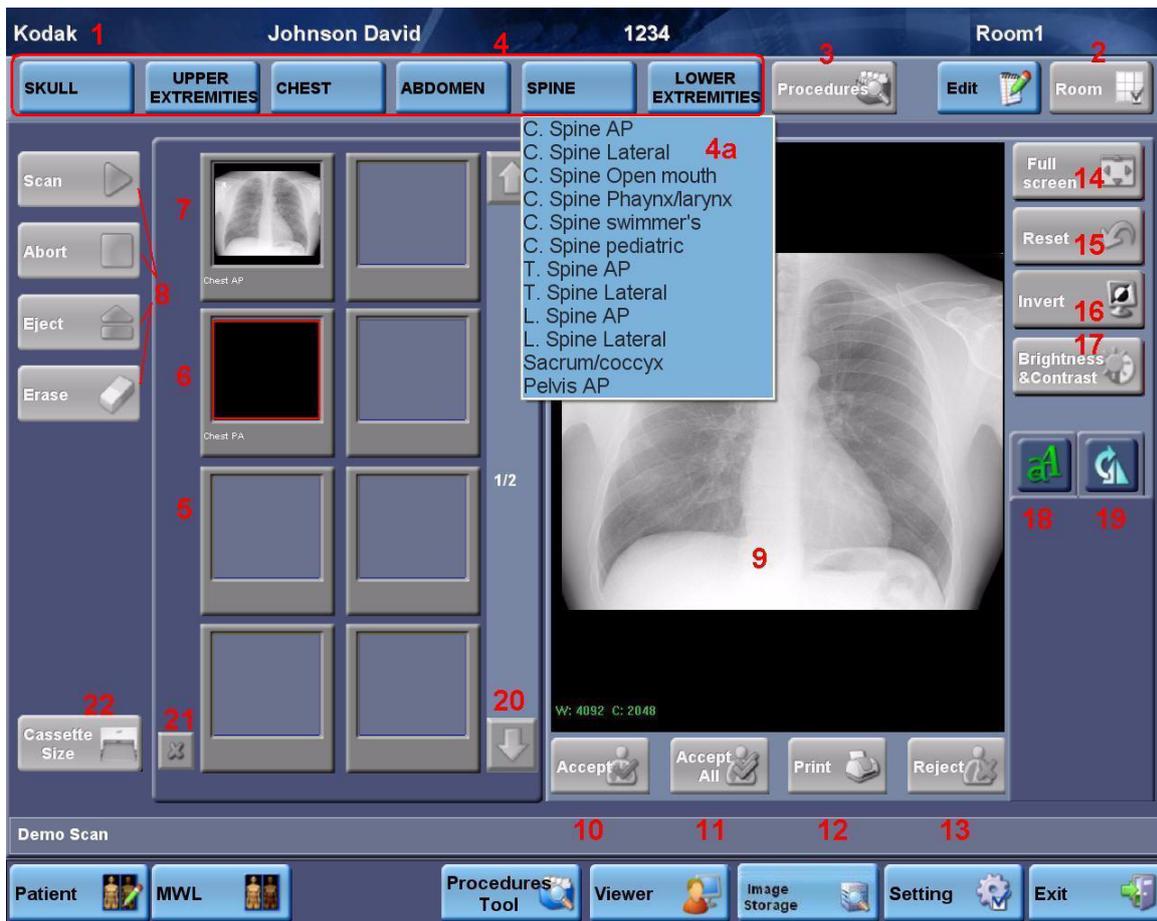
1. Click **Clear**.
2. Click **Search**.

***Opening the Scan Screen***

1. Select a patient.
2. Click **Scan**.

## Scanning Images

After a patient has been selected, the Scan screen allows you to scan, review, send, or print images.



Scan Screen

### Opening the Scan Screen

1. Select a patient.
2. Click **Scan**.

#	Component	Description
1	Title Bar	Includes patient name and room number
2	Room	Selects predefined x-ray room
3	Procedure Mapping Button	Opens a predetermined selection of image icons option
4	Body Part Selection Buttons	Opens body part and projection sub menu
4a	Body Part Sub-Menu	Selects body part and projection for thumbnail

#	Component	Description
5	“Ready-to-Scan” Thumbnail/Button	Location of next image to scan
6	Empty Thumbnail	Body part and Projection have been selected already, but image has not been scanned
7	Preview Thumbnail/Button	Displays image in “image preview” as a thumbnail
8	Scanner Control Buttons	Starts or stops scan, ejects or erases cassette
9	Image Preview	Displays a preview of selected image in the preview window
10	Accept Button	Sends image to PACS
11	Accept All Button	Sends all images to PACS
12	Print Button	Prints the selected image to the default DICOM printer
13	Reject Button	Rejects the image
14	Full Screen Button	Displays the image in full screen mode
15	Reset Button	Resets image properties
16	Invert Button	Reverses black and white
17	Brightness & Contrast Button	Enables changing image’s brightness and contrast
18	Add Annotations Tab	Enables the annotation toolbar to add markers (annotations) to the image (L, R, up arrow, down arrow)
19	Flip/Rotate Tab	Enables the flip/rotate toolbar: two buttons for image rotation (90°CW or 90°CCW) and two buttons for flipping image (horizontally or vertically)
20	Scroll Bar	Enables scrolling to preview thumbnails
21	Delete Button	Deletes “ready to scan” thumbnails
22	Cassette Size	Enables drop down list to manually choose cassette size

NOTE: Accepted and rejected images can be resent from the image storage at a later stage.

### *Selecting a room*

“Room” represents a set of user defined parameters that correspond to a specific X-ray room. Click **Room** and select the desired room.

### *Adding images to scan*

1. Select a body area, then a body part and projection from the menu which appears, or click **Procedures** and select a procedure which includes the desired body parts and projections. See “Chapter 5 Setting Procedure Mapping” for further information.



2. “Empty thumbnail” will become “ready to scan thumbnail” displaying the selected image type.

### *Scanning an image*

1. Load the cassette. Refer to the **Kodak Point-of-Care Hardware Guide** for information on loading cassettes.

At this point you may:

- Unload the plate by clicking **Eject**.
- Erase the plate by clicking **Erase**.
- Scan the plate by clicking **Scan**.

NOTE: If there is no action within two minutes, a message appears and the cassette is ejected automatically.

2. Click **Scan** to initiate scanning.

NOTE: The application can be set up to start the scan automatically.

“Initializing Scanning” and then “Scanning” messages appear on the “Status” bar.

To stop the scanning process, choose **Abort**. The plate is automatically unloaded from the scanner into the cassette. The portion of the image that was scanned is saved.

NOTE: If you stop the scanning process, the cassette is not erased. You must manually erase the cassette before the next exposure.

When the plate is scanned:

- The image appears as thumbnail on the left side of the screen.
- Unless another selection is made, the cassette is erased automatically, and an “Erase” message appears in the Status bar.
- If “Auto Erase” is not preselected, and you want to manually erase the cassette, click **Erase** after “Ready for Scan” appears (indicating that the plate is loaded).

### *Reviewing an image*

1. Click the desired **Preview Thumbnail**.
2. View the image in the image preview box.

### *Changing brightness and contrast*

1. Click **Brightness and Contrast**.
2. Using the mouse, left click and hold. Move the cursor on the image, changing the contrast and brightness. Release the button when the settings are as required.

Using a touchscreen, click and move your finger over the image.

### *Resetting an image*

Click **Reset** to reset the image properties.

NOTE: **Reset** removes all image changes.

### *Displaying in full screen mode*

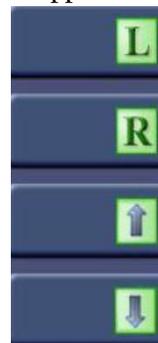
Click **Full Screen** to display the image in full screen mode.

Click **Full Screen** to return to the scan window.

### *Adding annotations to the image*

IMPORTANT: *The operator is responsible for the use of annotations. Incorrect use of annotations may cause errors in diagnosis.*

1. Click **Add Annotations**.
2. The Add Annotations toolbar appears:



3. Select a Marker from the toolbar (L, R, up arrow, down arrow).
4. Click on the image where you want to add the selected Marker.

*Flipping or rotating the image*

1. Click **Flip/Rotate**.
2. The Flip/Rotate toolbar appears:



3. Click the required button to flip or rotate the image.

*Saving/rejecting an image*

1. Click on a thumbnail image to open the image.
2. Click **Accept** to send the image to PACS, or **Reject** to reject it.

You have completed the plate scanning process. You can now re-use the scanned and erased plate.

# 3 *Working with Image Storage*



## *Image Storage Button*

The Image Storage (Archive) tool is used for viewing the status of acquired images and re-sending them in case the image/s did not reach its destination (e.g. PACS). A stored image may be recalled in its original unprocessed form. This allows processing using different parameters.

The system data base contains the previous 500 to 600 images scanned (depending on DICOM setting) whether accepted or rejected, as a short term back-up.

## Image Storage Status Tab

Click **Image Storage**. This button can be accessed from any screen.

The Image Storage Status screen appears:

Images Storage Screen

#	Component	Description
1	Search Criteria Fields	Search by patient info: First Name, Last Name and/or ID. By date range or by image status: Accepted, Rejected, Success, In Progress or Failure
2	Patient Image Storage Area	Until search is performed all files in the database are displayed. Clicking in box to the left of the line, selects it (as indicated by arrow)
3	Search Button	Initiates search of image storage based on criteria entered in Search Criteria fields

#	Component	Description
4	Clear Button	Clears the Search Criteria fields
5	Edit Patient	Opens the Edit Patient screen for the patient selected in the Patient Image Storage area
6	VKBD Button	Opens on-screen Virtual Keyboard for entering text via touchscreen
7	View Log Button	Opens Operation Log
8	Image List Area	Displays images of the patient selected in the Patient Image Storage area
9	Delete Image Button	Deletes image selected from Image storage
10	Reprocess Button	Opens the unprocessed selected image in a viewer for reprocessing
11	Send Button/Send Status Area	Send button sends image selected from Image Storage. Image Sending Status appears in this area
12	Send All Failed Button	Resends all images which failed to reach their destination
13	Image Thumbnail	Displays image thumbnail
14	Search Results	Displays total number of studies and processed images found in search
15	Total Studies	The total number of studies and processed images in the image storage
16	Burn Media	Activates the CVD/CD burning option
17	Multi-selection	Click to select multiple studies
18	Viewer	Loads selected images in the Viewer application
19	Print Status	Opens the Print status screen in order to print the image chosen from the storage.

## Reprocess Images Screen

Click the **Reprocess** button on the Images Storage screen. The following Image Reprocess screen appears:



*Image Reprocess Screen*

#	Component	Description
1	Image Viewing area/ Contrast-Brightness control	Area for viewing and reprocessing single or multiple views of the image for comparison. Left-click and drag (anywhere in Viewing area): -along the vertical axis to modify brightness -along the horizontal axis to modify the contrast. Using a touchscreen, click and move your finger over the image.
2	Study/Image Information area	Information on the displayed image: Name, ID, Body Part, and Position
3	Restore button	Restores image to original state

#	Component	Description
4	Split Screen button	Opens a Dialog box with options for splitting the Image Viewing area into two or four images for comparison
5	Annotation tab (Default tab)	Enables insertion of up arrow, down arrow, L or R. Click the button, then click on the point on the image where the symbol is to be inserted.
6	Image Rotation/Flip tab	Select the Image Rotation/Flip tab. Select button according to need.
7	Remove Over Scan checkbox	Crops white area around image if checked and <b>Process</b> button is clicked
8	Black Surround	Activates Black Surround feature
9	Body Part filter	Select the same <b>Body Part</b> from the drop down list that features in the Image Information Area in order to activate the correct Body Part filter.
10	View filter	Select the same <b>Position</b> from the drop down list that features in the Image Information Area in order to activate the correct Position View filter
11	Look filter	Choose from Medium/Sharp/Soft options
12	Process button	Applies filters according to selection
13	Accept	Select to Save and send the selected image and return to the Image Storage screen
14	Reject	Select to reject the selected image
15	Exit	Select to exit to Image Storage screen



# 4 *Working with the Viewer*

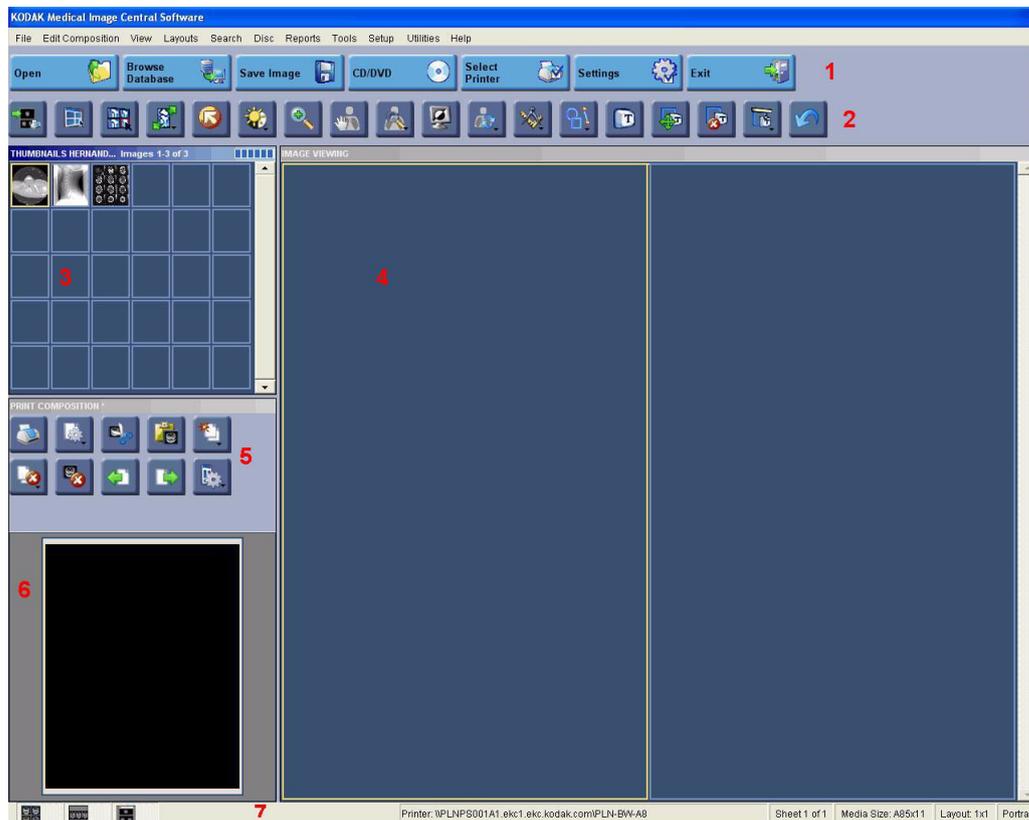
Use the Viewer (the Review Application) to:

- Load, view, and adjust previously acquired images.
- Build a composition of images for printing.
- Build a compilation of images and burn them to CD or DVD.
- View images from any IHE-compatible CD.

To open the Review Application, click **Viewer** on any screen.



## Overview: The Review Application



#	Component	Description
1	Main Toolbar	Access the main features.
2	Image Editing Toolbar	Use the tools to adjust and annotate the images. Apply the Image Editing tools to images in the Viewing Pane and in the Print Composition Pane.
3	Thumbnails Pane	Images load first into this pane. Preview the images here and select the first image to view in a larger size.
4	Viewing Pane	Work with the images in this pane. View, adjust, and annotate the images.
5	Print Composition Toolbar	Use the tools to navigate in and work with the Print Composition.
6	Print Composition Pane	Move images to this pane to build a composition (a group of images) to print. You can also view, adjust, and annotate the images here.
7	Task Icons and Status Bar	Use the Task Icons to change your workspace to optimize it for your workflow. The Status Bar provides status such as selected printer and media size/type.

**Workflow**

There are several options for working in the Review Application. You can adjust the steps to your preferences and to your site workflow.

<i>Basic Step</i>	<i>More Details</i>	<i>Where to Find the Instructions</i>
Load images into the Review Application.	<p>The images must be loaded into the Thumbnails Pane. To load the images, you can do either:</p> <ul style="list-style-type: none"> <li>• Preselect and load the images from the QC Software. In that case, the images automatically load into the Thumbnails Pane when you enter the Review Application.</li> <li>• Open the images after you have entered the Review Application.</li> </ul>	<p>If the images are not already loaded when you enter the Review Application, do one of the following:</p> <ul style="list-style-type: none"> <li>• Browse the QC database for previously acquired images, or open files from the hard drive. See <a href="#">“Opening Images in the Review Application”</a> on page 4-7.</li> <li>• Load images from an IHE-compatible CD. See <a href="#">“Retrieving Images to View from Disc”</a> on page 4-31.</li> </ul>
Load the thumbnail images into the Viewing Pane or the Print Composition Pane.	<p>You can move thumbnail images into either pane:</p> <ul style="list-style-type: none"> <li>• In the Viewing Pane, you can view and adjust images.</li> <li>• In the Print Composition Pane, you can view, adjust, and print images.</li> </ul>	<p>To load the thumbnail images into the Viewing Pane or the Print Composition Pane, see <a href="#">“Loading Images to View and Adjust”</a> on page 4-11.</p> <p>See <a href="#">“Working in the Viewing Pane vs. Print Composition Pane”</a> on page 4-4 for a comparison of the panes.</p>
View, adjust, and/or annotate images.	<p>Work with images in the Viewing Pane or the Print Composition Pane. If working with the images is not necessary for your workflow, continue to the next step for more choices.</p>	<p>For instructions to view, adjust and/or annotate images in the Viewing Pane or the Print Composition Pane, see <a href="#">“Adjusting Images”</a> on page 4-12.</p>
Print the images.	<p>Optional. It is not necessary to print.</p>	<p>To print, compose your images in the Print Composition Pane. If you have been working in the Viewing Pane, move the images into the Print Composition Pane.</p> <p>For instructions, see <a href="#">“Working in a Print Composition”</a> on page 4-15.</p>
Burn the images to CD/DVD.	<p>Optional. It is not necessary to burn images to CD/DVD.</p>	<p>To burn to CD/DVD, use the Disc Publishing Wizard to set up the disc. Then build the image compilation and burn.</p> <p>You can build a compilation with images from the Thumbnails Pane or the Viewing Pane.</p> <p>For instructions, see <a href="#">“Working with CD/DVDs”</a> on page 4-28.</p>

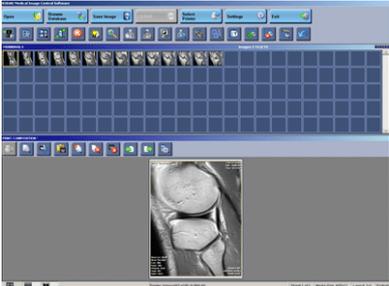
***Working in the Viewing Pane vs. Print Composition Pane***

You can view and adjust images in the Viewing Pane or in the Print Composition Pane. See the table for a comparison, and to understand why you might work in one pane or the other:

<i>Feature</i>	<i>Viewing Pane</i>	<i>Print Composition Pane</i>
Displays images in the desired size, including true size.	Yes	Yes
Allows use of the image editing and annotation tools to adjust images.	Yes	Yes
Allows you to save image edits.	Yes	No
Provides traditional image viewing layouts.	Yes	Yes
Provides flexible image layouts. Non-matrix layouts are provided, and you can create custom layouts.	No	Yes
When you drag an image into the pane, the full set of images appear.	Yes	No. Only the single image appears.
Build a composition of images, apply tools as needed (for example, use the Optimize Layout tool), and print.	No	Yes

**Optimizing the Review Application for your Preferences**

The Task Icons, at the bottom of the Review Application, each represent a pane in the Review Application. Use them to show or hide each pane.

Task	Icon	Description
<p>Hide or show the Thumbnails Pane</p>		<p>Click the icon to hide the Thumbnails Pane. The Print Composition Pane fills the left side of the screen.</p>  <p>If you hide the Thumbnails Pane and then load a new set of images, the new images are loaded into the Thumbnails Pane even though it is hidden.</p> <p>When the pane is hidden, click the icon again to show the pane.</p>
<p>Hide or show the Viewing Pane</p>		<p>Click the icon to hide the Viewing Pane. The Thumbnails Pane fills the top half of the screen, and the Print Composition Pane fills the lower half of the screen.</p>  <p>If you adjust images in the Viewing Pane and then hide the pane, the adjustments are still present when you show the pane again.</p> <p>When the pane is hidden, click the icon again to show the pane.</p>

Task	Icon	Description
Hide or show the Print Composition Pane		<p>Click the icon to hide the Print Composition Pane. The Thumbnails Pane fills the left side of the screen.</p>  <p>If you adjust images in the Print Composition Pane and then hide the pane, the adjustments are still present when you show the pane again.</p> <p>When the pane is hidden, click the icon again to show the pane.</p>

You can also maximize any pane by clicking the pane's title bar. The pane takes over the full screen space, hiding the other 2 panes.

For example, click the Viewing Pane title bar to maximize the Viewing Pane:



Click the title bar again to restore all 3 panes to their default configuration:



## Opening Images in the Review Application

Thumbnail images load first into the Review Application. To load the thumbnail images, use the Main Toolbar buttons in the Review Application.

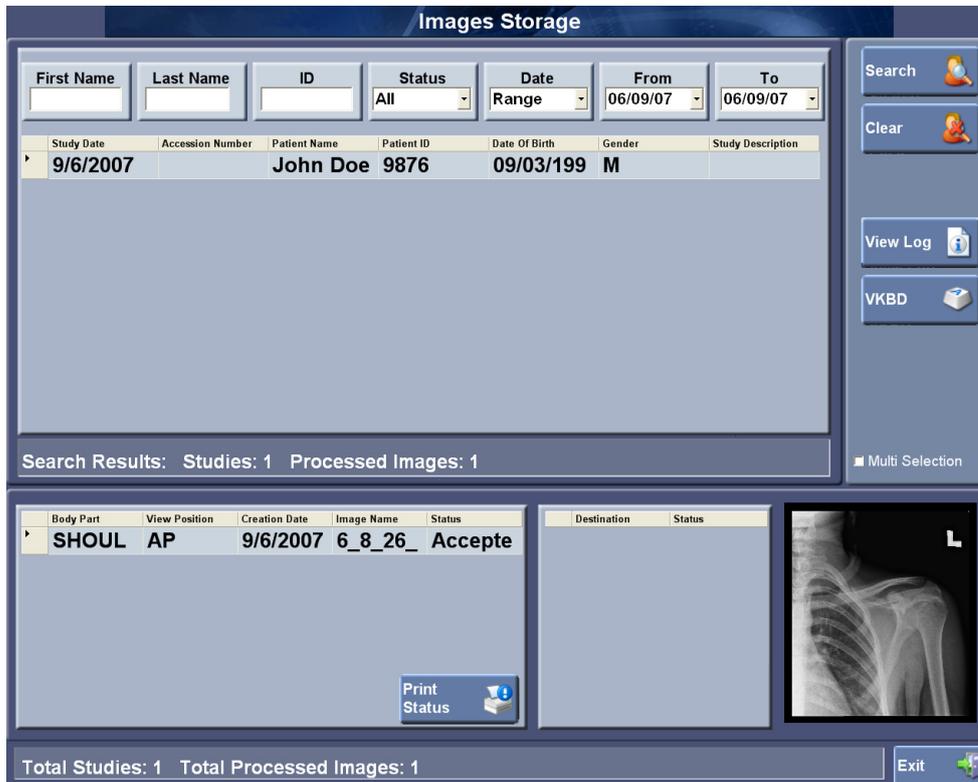
<i>Task</i>	<i>Icon</i>	<i>Description</i>
Browse Database		Open images that have been acquired by the QC Software. See <a href="#">“Browsing the Database”</a> on page 4-8.
Open		Select images to open from a local hard drive. See <a href="#">“Opening Files from Hard Drive”</a> on page 4-9.

**IMPORTANT:** *For optimal viewing and system speed, limit the file size of the images in the Review Application to 200 MB. The following combinations equal approximately 200 MB:*

- 35 x 43 cm (14 x 17 in.) cassette – 5 images scanned at high resolution, or 10 images scanned at standard resolution
- 25 x 30 cm (10 x 12 in.) cassette – 10 high resolution images
- 35 x 35 cm (14 x 14 in.) cassette – 6 high resolution images

## Browsing the Database

1. Click **Browse Database** on the Main Toolbar. The following screen appears.



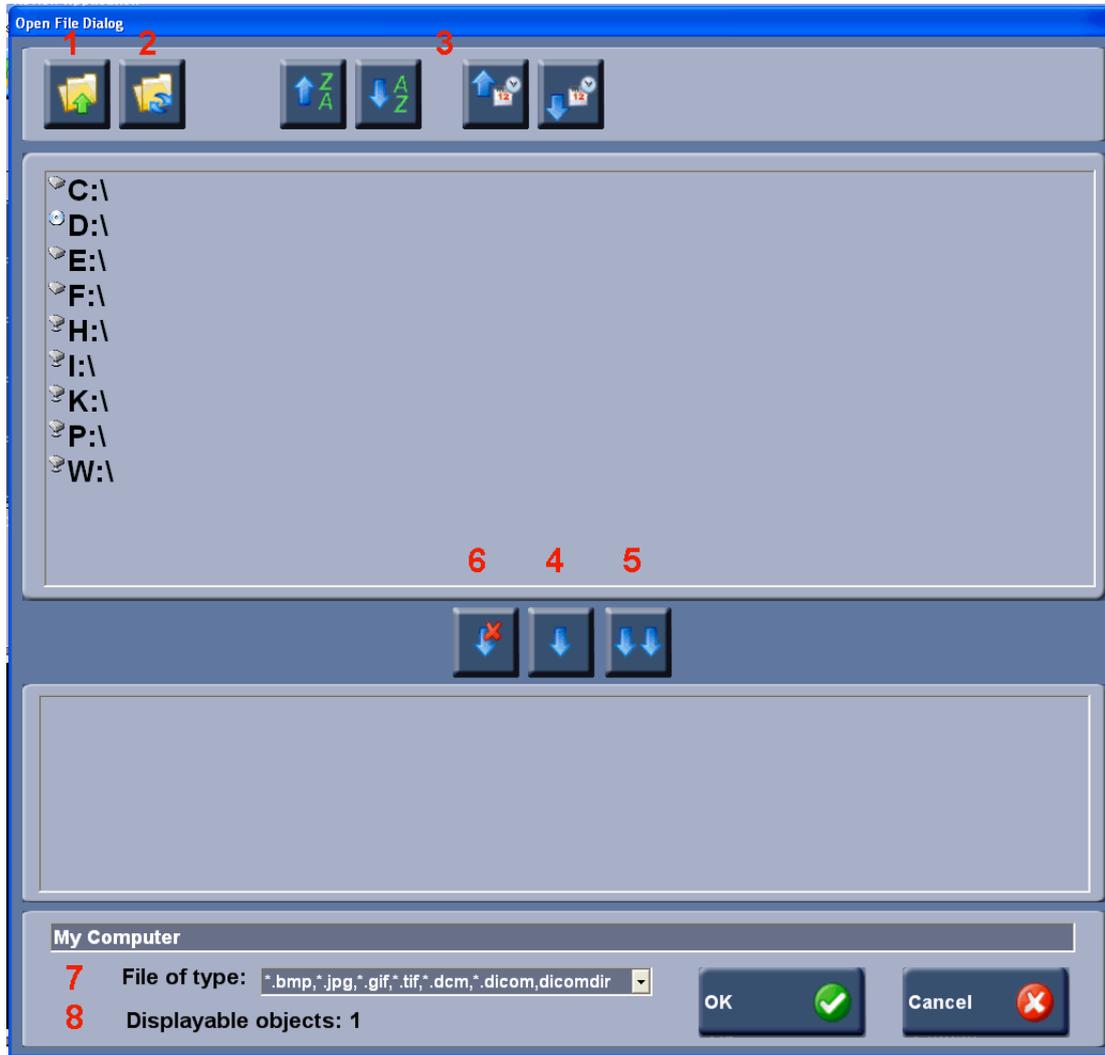
2. Search for and/or select the patient. The patient studies appear in the list at the top.
3. Locate and select the study. All study images appear in the list at the lower left.

NOTE: To select multiple studies, select **Multi Selection** on the right side.

4. Click **Exit** to load the selected study(ies) into the Review Application.

**Opening Files from Hard Drive**

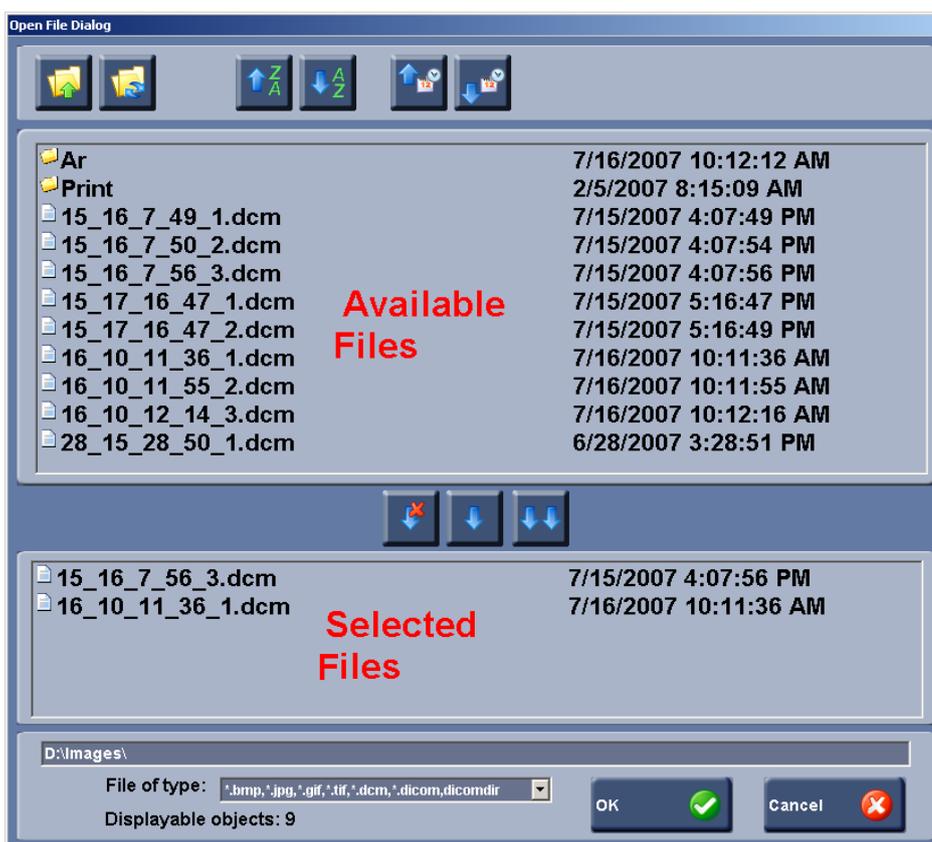
Click **Open** on the Main Toolbar. The following screen appears.



#	Component	Description
1	Up	Click to browse to a higher folder in the file structure.
2	Refresh	Click to refresh the drives (for example, to display a portable drive that you just connected).
3	Sorting buttons	Sort files by file name or exam time/date.

## Working with the Viewer

#	Component	Description
4	Single file selection	Click on a file name in the Available File Pane to highlight it, then click on the Single Arrow button, the file name will appear in the Selected File Pane. When you have selected all the files you want to view, click [OK] to transfer them to the Viewer.
5	Multi selection	Select all files in Available File Pane.
	Available Files Pane	Files in the drive or folder that can be selected to be viewed.
	Selected Files Pane	Files that you have selected to send to the Viewer, but have not sent yet.
6	Cancel selection	Select one file name in the Selected File Pane, then on Cancel Selection button to cancel the selection of that file.
7	File of type	Limit the file types that appear for selection
8	Displayable objects	Count of how many files are available for selection.



## *Loading Images to View and Adjust*

You can view and adjust images in the Viewing Pane or in the Print Composition Pane.

NOTE: See [“Working in the Viewing Pane vs. Print Composition Pane”](#) on [page 4-4](#) for a comparison of the panes.

### *Using the Viewing Pane*

To load the images into the Viewing Pane, drag a thumbnail image into the Viewing Pane.

- The image you dragged appears, selected (with a border around the image) in the Viewing Pane. The other images fill in around that image.
- All images are available in both the Thumbnails Pane and the Viewing Pane.
- The image sequence is always the same in both panes.

### *Using the Print Composition Pane*

As an alternative to viewing and adjusting images in the Viewing Pane and then moving them to the Print Composition Pane for printing, you can view and adjust images in the Print Composition Pane.

To move images into the Print Composition Pane, do either of the following:

- Drag a thumbnail image into the Print Composition. Only the dragged image displays in the Print Composition (not the whole set of images). It displays in the image frame where you drop it.
- Click the **Compose All** tool to move all thumbnail images into the Print Composition. New pages are added automatically for all the images in the set.

## Adjusting Images

### Working with the Image Editing Tools

Use the Image Editing Tools to adjust images in the Viewing Pane and the Print Composition Pane.



Task	Icon	Description
Compose All		<p>Move the group of images in the Review Application into the Print Composition.</p> <ul style="list-style-type: none"> <li>If the Thumbnails Pane is active, all images from the Thumbnails Pane move to the Print Composition.</li> <li>If the Viewing Pane is active, all images, including any image adjustments and annotations, move to the Print Composition.</li> </ul>
Layouts		<p>Open the Layouts dialog to change the image layout for the active pane (Viewing Pane or Print Composition Pane).</p> <ul style="list-style-type: none"> <li>Viewing Pane – The Layouts dialog presents matrix image layouts.</li> <li>Print Composition Pane – The Layouts dialog presents matrix, non-matrix, and any custom layouts.</li> </ul> <p>NOTE: The layout choices are different because the panes can be used differently. The Viewing Pane is available for traditional on-screen image viewing. Matrix layouts provide the best use of the screen space with maximum viewing area. The Print Composition Pane provides maximum image layout flexibility so you can easily arrange and print the images to suit your needs.</p> <p>NOTE: For instructions to create custom layouts for the Print Composition Pane, see <a href="#">“Print Composition Custom Image Layouts” on page 4-24.</a></p>
Scope		<p>Specify if your image edits apply to the selected image or all images. Scope applies to the following editing tools: Invert, Window Width/Level, Zoom, Pan, and Orientation.</p>
Resize Images		<p>Specify how the image displays:</p> <ul style="list-style-type: none"> <li>Fit to View (default) – Sizes the image to fit in the image frame.                             <p>NOTE: If the image is minified or enlarged, it is indicated on the image with a Scissors icon. The scale factor also displays on and prints with the image.</p> </li> <li>True Size – Displays the image in the size it was captured. When True Size is selected, it remains the default until another set of images is loaded.</li> </ul>
Select		<p>Return the cursor to selection mode. Exit from an edit mode.</p>

<i>Task</i>	<i>Icon</i>	<i>Description</i>
Window Width/Level		Adjust Window W/L: <ul style="list-style-type: none"> <li>• Dynamic Window Width/Level – Drag along the vertical axis of the image to modify the contrast. Drag along the horizontal axis to modify brightness.</li> <li>• Presets – Apply predefined W/L values based on modality and body part.</li> <li>• Revert to Default – Undo any W/L changes and restore the original image.</li> </ul>
Zoom		Zoom in or out from the image. Drag up to zoom in, drag down to zoom out. NOTE: Drag to the top of the image frame to display the image in true size.
Pan		Drag the image to move it within the image frame. This tool does not apply when the full image displays in the frame.
Magnifying Glass		Magnify an area on the image. Select the magnification level and click the image. Drag your finger to move the magnifying glass (to magnify different places on the image). Touch again to close the magnifying glass.
Invert		Invert the grey scale.
Orientation		Select an option to rotate or flip the image.
Measurements		Measure a length, angle, or Cobb angle on the image. Select the end points on the image and the measurement displays as an annotation on the image.
Drawing		Draw a line, arrow, circle, or rectangle to point out an area of interest. Select the shape, click the image, then drag the shape to the desired size.
Text Annotation		Add a text note to the image. Click the tool, click the image where you want the text to display, and a keyboard opens to enter the text.
Edit Annotations		Change or move a note or shape on the image. <ul style="list-style-type: none"> <li>• To move the annotation – Click the tool, click the annotation, then drag it to the desired place.</li> <li>• To edit the text – Click the tool, click the annotation, release the click, and a keyboard opens to enter/change the text.</li> </ul>

<i>Task</i>	<i>Icon</i>	<i>Description</i>
Delete Annotations		Delete a note, shape, or measurement on the image. Click the annotation, and then click the tool.
Show/Hide Overlays and Annotations		Click to open drop down list in order to select whether to show or hide overlays and annotations: <ul style="list-style-type: none"><li>• Overlays – Descriptive information that came with the image, for example, patient information and markers.</li><li>• Annotations – Text notes, shapes, and measurements that are added to the image at the Review Application.</li></ul> Click the item to show or hide. The asterisk to the left of Overlays or Annotations in the drop-down list indicates that Show is enabled, without the asterisk, the item is hidden.
Reset		Restore the original image settings.

### *Saving Images*

You can save images with the edits you have made. Click **Save Image** to save the selected image. Saving overwrites the original captured image.

**NOTE:** Some image adjustments are not saved. For example, if you apply Pan and Zoom to the image, those adjustments are not saved.

## Working in a Print Composition

### Moving Images to the Print Composition Pane

To move images into the Print Composition Pane, you can:

- Drag an image into the Print Composition.
  - When you drag an image from the Thumbnails Pane, the image is the same as when it was loaded.
  - When you drag an image from the Viewing Pane, any image adjustments, annotations, etc., move to the Print Composition Pane with the image.
- Click the **Compose All** tool to move all images into the Print Composition.
  - When the Thumbnails Pane is active, all images from the Thumbnails Pane move to the Print Composition Pane. The images are the originally loaded images.
  - When the Viewing Pane is active, all images from the Viewing Pane, along with any image adjustments, annotations, etc., move to the Print Composition Pane.

### Working with Images in the Print Composition

To work with images in the Print Composition, click the Print Composition Pane to make it active. When the images display in the Print Composition, do any of the following.

<i>Tool</i>	<i>Icon</i>	<i>Description</i>
Layouts		Change the selected image layout. The Layouts dialog presents matrix layouts, several non-matrix layouts, and any custom layouts.  NOTE: For instructions to create custom layouts, see <a href="#">“Print Composition Custom Image Layouts”</a> on page 4-24.
Edit	Use the Image Editing tools	See <a href="#">“Working with the Image Editing Tools”</a> on page 4-12 for instructions.
Cut		Reorganize images on the page or between pages: <ul style="list-style-type: none"> <li>• Cut – Click the image to select it, then click Cut. The Cut tool assumes you will paste next.</li> </ul>
Paste		<ul style="list-style-type: none"> <li>• Paste – Click the image frame where you will paste the image that you cut, then click Paste.</li> </ul> <p>To let 2 images trade image frames, or swap locations, on the page, drag Image 1 and drop it on Image 2. Image 1 takes over the image frame of Image 2, and Image 2 appears where Image 1 previously displayed.</p>

<i>Tool</i>	<i>Icon</i>	<i>Description</i>
Add Page options		You can add a page or delete a page from the Print Composition. <ul style="list-style-type: none"> <li>• Add Page options – Add a page at the end of the Print Composition, or before or after the current page.</li> </ul>
Delete Page options		<ul style="list-style-type: none"> <li>• Delete Page options – Delete the current page or all pages.</li> </ul> <p>NOTE: When you use the <b>Compose All</b> tool to move a set of images into the Print Composition, new pages are created automatically so that all the images fit.</p>
Delete		Delete – Click the image to delete, then click Delete.
Previous Page		When the Print Composition has multiple pages, use the navigation buttons to move back and forth: <ul style="list-style-type: none"> <li>• Previous Page – Moves the Print Composition to the previous page.</li> </ul>
Next Page		<ul style="list-style-type: none"> <li>• Next Page – Moves the Print Composition to the next page.</li> </ul> <p>The current page number and page count display on the Status Bar.</p>
Advanced options		Use the Advanced options to minimize the amount of media and optimize the image layout: <ul style="list-style-type: none"> <li>• Minimize Media – The images are arranged in the Print Composition to make the best use of the media. Images are moved to fill in empty spaces as possible. Empty pages are deleted.</li> <li>• Optimize Layout – The images are arranged in the Print Composition for the best layout based on the image types. Empty spaces are eliminated, and image orientation may be changed to place more images on each page.</li> </ul>

## Printing Images

When you are ready to print the Composition, see the following:

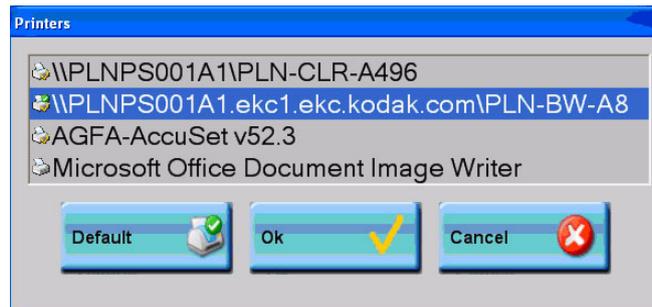
<i>Tool</i>	<i>Icon</i>	<i>Description</i>
Print		Initiates the print request. NOTE: To select a different printer, click <b>Printer Settings</b> on the Main Toolbar.
Page Setup		Change the selected: <ul style="list-style-type: none"><li>• Page orientation</li><li>• Media size and type</li></ul> NOTE: You can always view the selected page orientation, media size/type, and printer on the status bar.

## Working with Settings

Some of the features in this section require use of a keyboard and mouse.

### Printer Settings

To open the Printers dialog, click **Select Printer** on the Main Toolbar.



The dialog box shows the current default printer for the *Windows* Operating System AND the one or multiple printers that are selected for printing in the Review Application. See the table to understand and use the dialog to change printer selections:

Icon	Description
	<p>Indicates the default printer. All print jobs are delivered to the default printer. To change the default:</p> <ol style="list-style-type: none"> <li>1. Click to de-select the current default printer.</li> <li>2. Click a different printer in the list.</li> <li>3. Click <b>Default</b>.</li> </ol> <p>NOTE: This changes the computer's default printer (at the Operating System level). Only one printer can be selected as the default.</p>
	<p>Indicates a selected printer. The next print job will be delivered to all printers with this icon. To change the selected printer(s):</p> <ol style="list-style-type: none"> <li>1. Click to select one or multiple printers.</li> <li>2. Click <b>OK</b>.</li> </ol> <p>The next print job will be sent to all selected printers. Jobs will continue to be sent to these selected printers until you re-enter the dialog and make a change.</p> <p>NOTE: When you select a printer and then click <b>OK</b>, any previously selected printers will become de-selected and jobs will not be delivered to them. Select each printer in the list before you click <b>OK</b>, even if you are reselecting a printer that is already has the yellow check icon.</p>
	<p>Indicates an unselected printer.</p>

To exit from the dialog without making any changes, click **Cancel**.

## Image Adjustment

**IMPORTANT:** Connect a keyboard and mouse to the computer to continue with this utility.

The DICOM Image Adjustment Wizard lets you adjust DICOM, grayscale images printing to a KODAK Printer. Optimize images from a modality to a printer by adjusting the image processing parameters to your preferences.

**NOTE:** The default image processing parameters produce acceptable printed images for most users. However, if the images do not meet your preferences, use the wizard to adjust the image processing parameters.

1. To start the wizard, click **Settings**, then **Image Adjustment**.
2. Answer the questions on the wizard screens, and retrieve and review test prints, as prompted.

If you need help while going through the wizard, see the table:

<i>Screen</i>	<i>Help</i>
Welcome	<ul style="list-style-type: none"> <li>• You must have already sent an image from the image source to the printer. For example, if you will adjust CR images, send one to the printer before you begin this procedure.</li> <li>• Browse to select a grayscale image from the image source that you want to adjust.</li> </ul>
Verify Image Source	<ul style="list-style-type: none"> <li>• The image file you selected at the Welcome screen provides information about the image source. At this screen, the information appears. Confirm that the information is correct for the image source you want to adjust.</li> <li>• If the information is incomplete, the file you selected did not provide all of the expected information. To provide the best recommendations for the image processing parameters, you may want to click <b>Back</b> to select another image.</li> <li>• If the information is not what you expected, for example, the image source is not correct, then you may not have selected the file you intended. Click <b>Back</b> to return to the Welcome screen and select another image.</li> </ul>
Select Printer	The configured KODAK Printers appear in the list.

<i>Screen</i>	<i>Help</i>
Remove Parameters	<p>If this screen appears, the modality and printer combination have previously been set up in the wizard. The previously chosen parameters listed on the screen may or may not be the same as the recommended parameters.</p> <ul style="list-style-type: none"> <li>• <b>Show me the parameters that were previously set up and the default recommendations.</b> As you go through the wizard, the previously chosen parameters and the recommended parameters display. You can keep or change any of the parameters.</li> <li>• <b>Remove the parameters that were previously set up.</b> The wizard will only show the recommended parameters. The previously chosen parameters are no longer applied. You can keep or change any of the recommended parameters.</li> <li>• <b>Remove all parameters for this image source and printer.</b> No image processing parameters are applied. You are taken to the Finish screen where you can exit from the wizard or start again.</li> </ul>
Recommended Touchscreen (TFT) (LCD) Set	<p>This screen appears if you selected a laser imager that supports TFT (Touchscreen) Sets. The screen displays the recommendations for TFT Set and Contrast based on the selected image source and printer.</p> <ul style="list-style-type: none"> <li>• <b>Use the recommended parameters. Print test images...</b> A set of test pages prints your image with the recommended parameters applied. Select your preferred image from the test pages. If you do not like any images on the test pages, you can change the parameters on the screens that follow.</li> </ul> <p>NOTE: If you specified on the Remove Parameters screen to see the parameters that were previously chosen, they also print on the test pages.</p> <ul style="list-style-type: none"> <li>• <b>Do not use the recommended parameters...</b> The wizard lets you select a different TFT Set and/or Contrast.</li> <li>• <b>I know the parameters that I want to use...</b> The wizard lets you enter a different TFT Set and/or Contrast.</li> </ul>
Select TFT Set	<p>If you are not sure which TFT Set and Contrast to use, print your image with TFT Sets and multiple Contrast settings applied. On this screen, click one or multiple TFT Sets to print your image with the TFT Sets applied. The <b>Total pages</b> count provides the number of pages that will print.</p>

<i>Screen</i>	<i>Help</i>
Recommended Wet Parameters	<p>This screen appears if you selected a printer that supports wet processing. The screen displays the recommendations for Wet Contrast and Curve Shape based on the selected image source and printer.</p> <ul style="list-style-type: none"> <li>• <b>Use the recommended parameters. Print test images...</b> A set of test pages prints your image with the recommended parameters applied. Select your preferred image from the test pages. If you do not like any images on the test pages, you can change the parameters on the screens that follow.</li> </ul> <p>NOTE: If you specified on the Remove Parameters screen to see the parameters that were previously chosen, they also print on the test pages.</p> <ul style="list-style-type: none"> <li>• <b>Do not use the recommended parameters...</b> The wizard lets you select a different Wet Contrast and Curve Shape.</li> <li>• <b>I know the parameters that I want to use...</b> The wizard lets you enter a Wet Contrast and Curve Shape.</li> </ul>
Review Test Images	If there is not an acceptable image, click <b>No</b> to enter different parameters.
Select Image Number	Locate the image number on the test page with the image.
More Parameters	<p>This screen provides more recommended image processing parameters. Depending on the selected printer, recommendations are listed for Dmax/Dmin/Smoothing Type or Dmax/Dmin/Interpolation.</p> <ul style="list-style-type: none"> <li>• <b>Use the recommended parameters. Print test images...</b> A set of test pages prints your image with the recommended parameters applied. Select your preferred image from the test pages. If you do not like any images on the test pages, you can change the parameters on the screens that follow.</li> </ul> <p>If there is only one set of recommended parameters and they have already printed on a test page, the Finish screen appears.</p> <p>NOTE: If you specified on the Remove Parameters screen to see the parameters that were previously chosen, they also print on the test pages.</p> <ul style="list-style-type: none"> <li>• <b>Do not use the recommended parameters...</b> The wizard lets you select different settings for Dmax/Dmin/Smoothing Type or Dmax/Dmin/Interpolation.</li> <li>• <b>I know the parameters that I want to use...</b> The wizard lets you enter a setting for Dmax/Dmin/Smoothing Type or Dmax/Dmin/Interpolation.</li> </ul>
Print Dmax Settings, Print Dmin Settings, Print Wet Contrast Settings	If you are not sure which Dmax, Dmin, or Wet Contrast settings to use, print your image with the selected settings applied. On these screens, click one or multiple settings, or click <b>Print all</b> if you want to print your image with all of the settings applied. The <b>Total pages</b> count provides the number of pages that will print.
Select Parameter, Select More Parameters	On these screens, you enter the parameters without help from the wizard. Select the parameter from a pull-down list of the available choices.

<i>Screen</i>	<i>Help</i>
Finish	<p>This screen lists all the settings you selected or entered. When you click Finish, the settings are saved and applied to all images that are sent from the image source to the selected printer.</p> <p>Record the parameters that are listed on the Finish screen, and put the list in a safe place. This list will save you time if you need to restore the system for any reason.</p> <ul style="list-style-type: none"><li>• Click <b>Finish</b> to exit and save, or click <b>Next</b> to return to the Welcome screen and repeat the process for another image source and/or printer.</li><li>• Click <b>Next</b> to return to the Welcome screen and repeat the process for another image source and/or printer.</li></ul>

## Monitor Calibration

**IMPORTANT:** Connect a keyboard and mouse to the computer to continue with this utility.

The Monitor Calibration wizard helps you adjust your monitor's color and contrast for optimal image viewing. Use your own image or view a SMPTE test pattern as you adjust the monitor.

1. To start the wizard, click **Settings**, then **Monitor Calibration**.
2. Answer the questions on the wizard screens, and retrieve and review test prints, as prompted.

If you need help while going through the wizard, see the table:

Screen	Help
Welcome	<p>Choose an option:</p> <ul style="list-style-type: none"> <li>• <b>SMPTE pattern.</b> Provides a pattern of squares that display a full range from white to black, including the percentage of gray in each square. 100% = white, and 0% = black. You will use the monitor controls to adjust color and contrast until you can see appropriate variance in each square.</li> <li>• <b>My image.</b> Click the field and click <b>Browse</b>, then find and open your own image. You may want to select an image that has a good range of colors. You will use the monitor controls to adjust color and contrast until you like how the image appears on the monitor.</li> </ul>
Select Image Display	<p>Choose an option:</p> <ul style="list-style-type: none"> <li>• <b>Keep the image's proportions.</b> Displays the image or pattern with the same aspect ratio, or proportions, of the original file. The SMPTE pattern displays in a portrait format with borders on the left and right sides.</li> <li>• <b>Expand the image to display on the full screen.</b> Uses the full screen to display the image or pattern. The SMPTE pattern is stretched horizontally to display on the full screen.</li> </ul>
SMPTE or Image Display	Use the monitor controls to adjust color and contrast. When finished, click the image to exit.
Finish	<ul style="list-style-type: none"> <li>• Click <b>Finish</b> to exit.</li> <li>• Click <b>Next</b> to return to the Welcome screen and repeat the process.</li> </ul>

## ***Modality Default Image Layouts***

View or modify the image layout defaults for each modality and for the number of images in the set.

1. Click **Settings**, then **User Preferences**.
2. Locate the modality and click the default to change. Select the number of images and then the default layout.
3. Click **Save**.

## ***Modality Preferences***

View or modify Window Width and Level defaults by modality.

1. Click **Settings**, then **Modality Preferences**.
2. Click **Add/Modify Presets**.
3. Click or type an exam type.
4. Complete the fields and click **Save**.

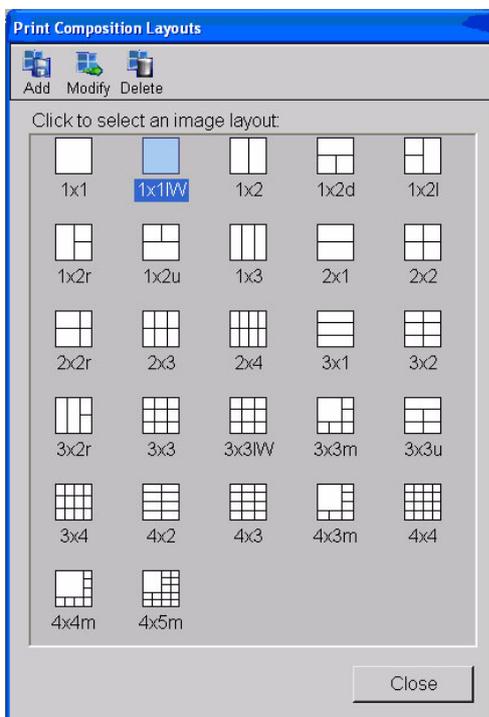
## ***Print Composition Custom Image Layouts***

This section provides instructions to manage custom layouts.

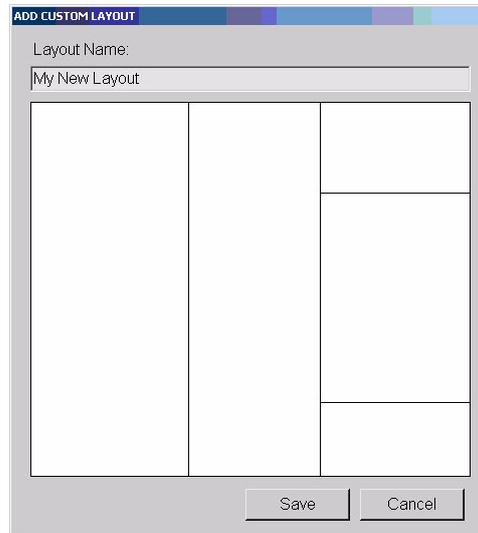
NOTE: To change the image layout in the Print Composition Pane, see [“Working with the Image Editing Tools” on page 4-12](#).

## ***Adding a Custom Layout***

1. Click **Settings**, then **PC Image Layouts**.



2. Click **Add**.



**NOTE:** You can also **modify an existing layout** as a base for the new layout.

3. Enter a descriptive name in the Layout Name field.
4. In the layout window, click and drag the frame border to create the desired layout. The dividers become the frame borders for the images. To add a divider to the layout, move the cursor to the edge of the window until the cursor changes. Hold and drag until the divider is where you want it.
  - Place the cursor on a divider to move it.
  - Place the cursor next to a divider, then drag out to create another divider.
  - Continue until you have the desired layout.
5. Click **Save**. The layout becomes available in the Print Composition Layouts dialog.
6. Click **Close**.

### *Modifying a Layout*

1. Click **Settings**, then **PC Image Layouts**.
2. Click the layout to modify.
3. Click **Modify**.
4. For the Layout Name field:
  - Leave the name unchanged to permanently modify the selected layout.
  - Change the name of the layout to save the original layout and the modified layout.
5. In the layout window, click and drag the frame border to create the desired layout. The dividers become the frame borders for the images.

To add a divider to the layout, move the cursor to the edge of the window until the cursor changes. Hold and drag until the divider is where you want it.

- Place the cursor on a divider to move it.
  - Place the cursor next to a divider, then drag out to create another divider.
  - Continue until you have the desired layout.
6. Click **Save**. The layout becomes available in the Print Composition Layouts dialog.
  7. Click **Close**.

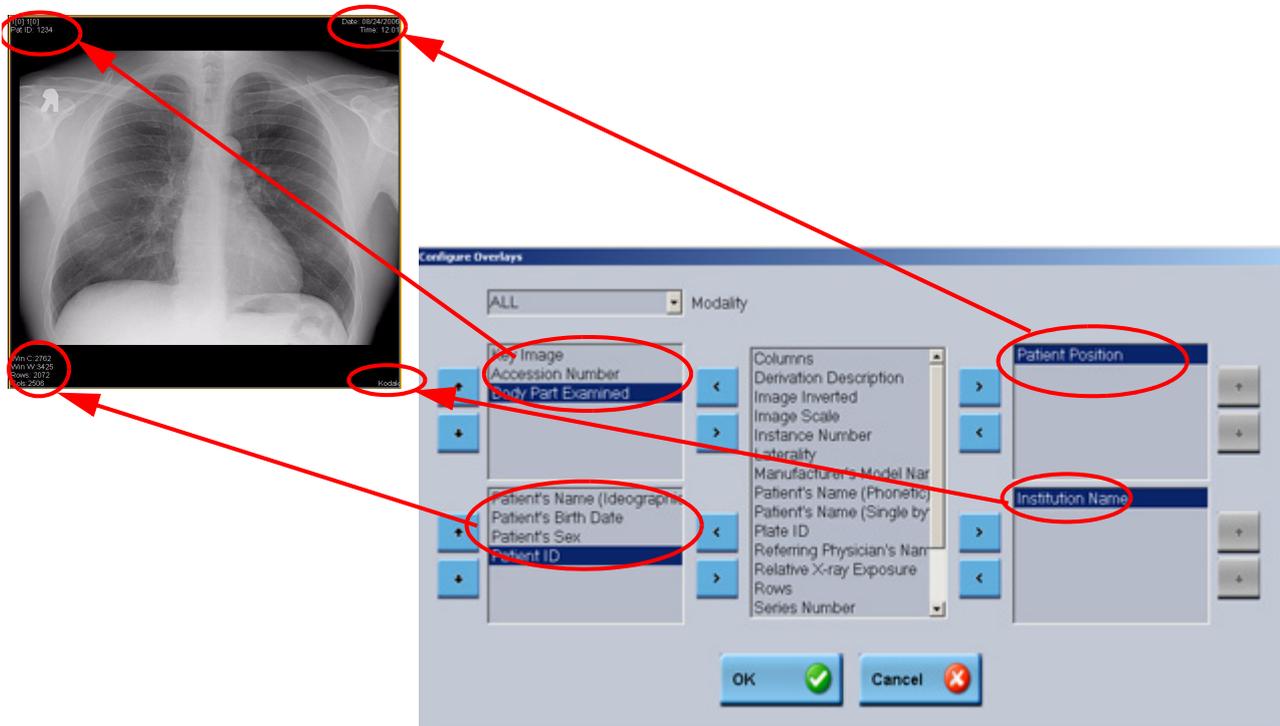
### Deleting a Layout

1. Click **Settings**, then **PC Image Layouts**.
2. Click the layout to delete.
3. Click **Delete** and confirm.
4. Click **Close**.

### Configuring Overlays

To add or remove overlays for the displayed and printed images:

1. Click **Settings**, then **Configure Overlays**. The following screen appears.



2. Select a modality if desired.
3. Select the items from the main list, and add each item to a corner. The items will display as overlays in the specified corners when you display and print the images (after you restart the application).
4. To remove an item from the overlay, select the item and click the arrow button pointing toward the main list.

### *Backing up and Restoring Settings*

You can make a backup of the configuration settings. This backup will save you time if you need to reinstall the software or restore the system. The backup includes user preferences, modality preferences, and any custom layouts.

- To make a backup – Click **Settings**, then **Back up Settings**. Follow the prompts to select a directory where the backup files will be saved.
- To restore the backup – Click **Settings**, then **Restore Settings**. Follow the prompts to specify the directory where the backup files were saved.

## Working with CD/DVDs

**IMPORTANT:** *To burn DVDs, you must purchase and install NERO 7 Ultra Edition. See [page 4-31](#) for more information.*

You can do the following:

- Burn images to a local CD or DVD disc writer.
- Search for discs and the contents of them.
- Retrieve and view images on a CD.

### Burning Images to Disc

#### Overview

When you burn images to a local CD or DVD disc writer, each disc is assigned a unique identification number. For each disc, you will do the following:

1. Set up the disc using the Disc Publishing Wizard.
2. Build a compilation of images at the Disc Publishing Window.
3. Start the burn to disc.

You have the option to protect the contents of the disc with a password. If you choose to encrypt the disc, you will enter a password to apply to the disc before starting the burn. Users must then enter the password before viewing information from the disc that is classified as Protected Health Information (PHI, for example, patient names, IDs, dates of birth, etc.). If a user who tries to view the contents of the disc does not know the password, the PHI on the disc will be de-identified to protect the patient's right to privacy.

You also have the option to retrieve the discs from a database where identifying information for each compilation is stored.

See the following sections for instructions.

#### Working with the Disc Publishing Wizard

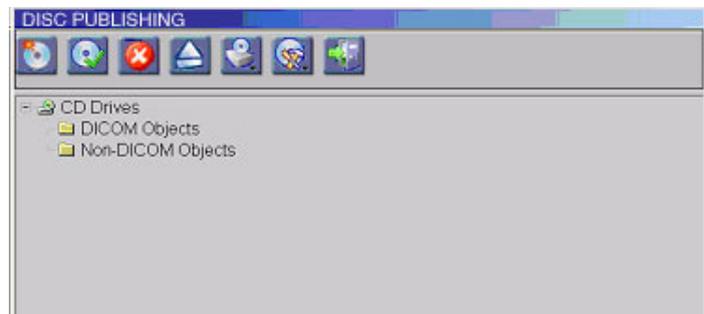
The Disc Publishing Wizard takes you through a series of questions that are necessary to set up the CD/DVD before burning it. When finished with the wizard, you will be ready to add images to the new compilation.

To use the wizard to set up the disc:

1. Insert the CD or DVD into the drive.
2. To start the wizard, click **CD/DVD**, then **New**.
3. Answer the questions on the wizard screens as prompted. When finished, the Disc Publishing Window opens.

## Working in the Disc Publishing Window

Work in the Disc Publishing Window to build a compilation of images and start the burn to disc.



<i>Tool</i>	<i>Icon</i>	<i>Description</i>
New Compilation		Restart the wizard and clear out the Disc Publishing Window.
Start Burn		Initiate the disc burn.
Delete		Delete the selected object (file or folder). NOTE: Default folders (“DICOM Objects” and “Non-DICOM Objects”) cannot be deleted. If a default folder is selected when you click <b>Delete</b> , all files inside the default folder are deleted.
Eject		Eject the disc.
Change Disc Writer		Change from the disc writer drive that you specified in the wizard.
Setup		View or change the settings you specified in the wizard. You can change the de-identification selection, media type, and the spanning option.
Exit		Close the Disc Publishing Window.

### *Building an Image Compilation*

Drag files into the Disc Publishing Window to build the compilation.

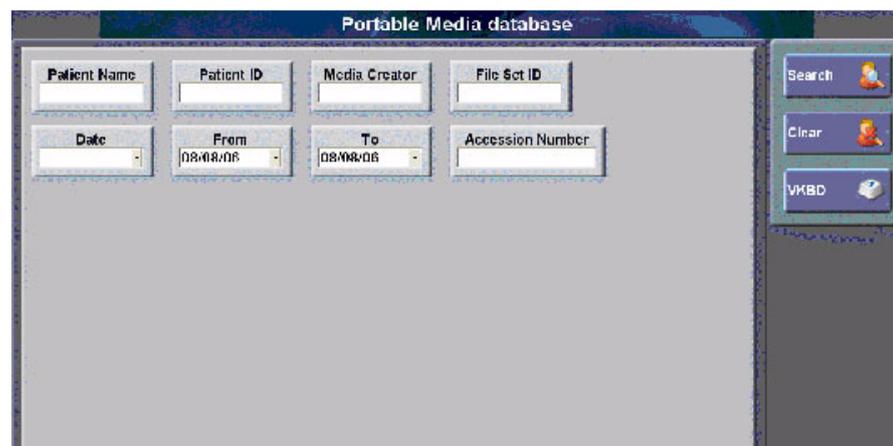
- You can build a compilation with images from the Thumbnails Pane or the Viewing Pane.

NOTE: Any image adjustments that you have applied in the Review Application are not saved into the compilation.

- The files are automatically organized into the DICOM and Non-DICOM folders.
- The size of the compilation is shown by the blue rectangles at the bottom of the application as you drag the files in. If you drag in more files than can fit on the disc, the compilation progress bar and the disc hierarchy only show one disc, but you are warned that you will need more discs when you click **Start Burn**.
- Click **Start Burn**. If the compilation is larger than the disc, a message informs you to insert another disc. When the burn has completed, a message appears with the identification number. Shelf storage users should record the identification number for easy retrieval.

### *Retrieving Discs from the Database*

Click **CD/DVD** on the Main Toolbar, then **Search Database**. The following screen appears.



Enter information to search for a disc, a patient, or a set of images.

- Click the date buttons to select a date range.
- Click **VKBD** to display the keyboard where you can enter text in the other search fields.
- Click **Search** to start the search.
- Click **Clear** to start over with new search criteria.

## Retrieving Images to View from Disc

You can retrieve and view images from an IHE-compatible CD.

1. Insert the CD into the drive. If the CD has an auto-run program, the Review Application opens.

NOTE: If the Review Application does not open, launch a *Windows* Operating System File Explorer. Browse to display the CD/DVD drive. Right-click the drive, and select **Autoplay**.

2. Click **Open** on the Main Toolbar.
3. Navigate to the CD/DVD drive.
4. Locate and select the DICOMDIR file, and click **OK**. The Open File dialog closes and the images load into the Thumbnails Pane in the Review Application.

NOTE: Alternatively, you can open DICOMDIR files in a *Windows* Operating System *Internet Explorer* window. Display the CD/DVD drive in a File Explorer, and expand the directory to locate the index.xml file. Double-click the file to launch *Internet Explorer* with a list of .jpeg versions of each image on the CD. Click an image to view a larger version in the Explorer window.

## Installing NERO to work with DVDs

To burn DVDs, you must purchase and install NERO 7 Ultra Edition.

NOTE: You must have Administrative rights on the computer.

Install the software using the instructions that are provided. Then do the following:

1. In a *Windows* Operating System *Internet Explorer* window, locate the file: **ProgramFiles\Nero\Nero 7\NeroToolkit\NeroBurnRights.exe**.
2. Double-click the file to run it.
3. When the options dialog appears, select the following:
  - “Everyone has burn rights”
  - “Automatically apply setting to newly installed drives”
4. Click **OK**.
5. Restart the computer.

Now you can use the instructions on the previous pages to burn images to DVD.



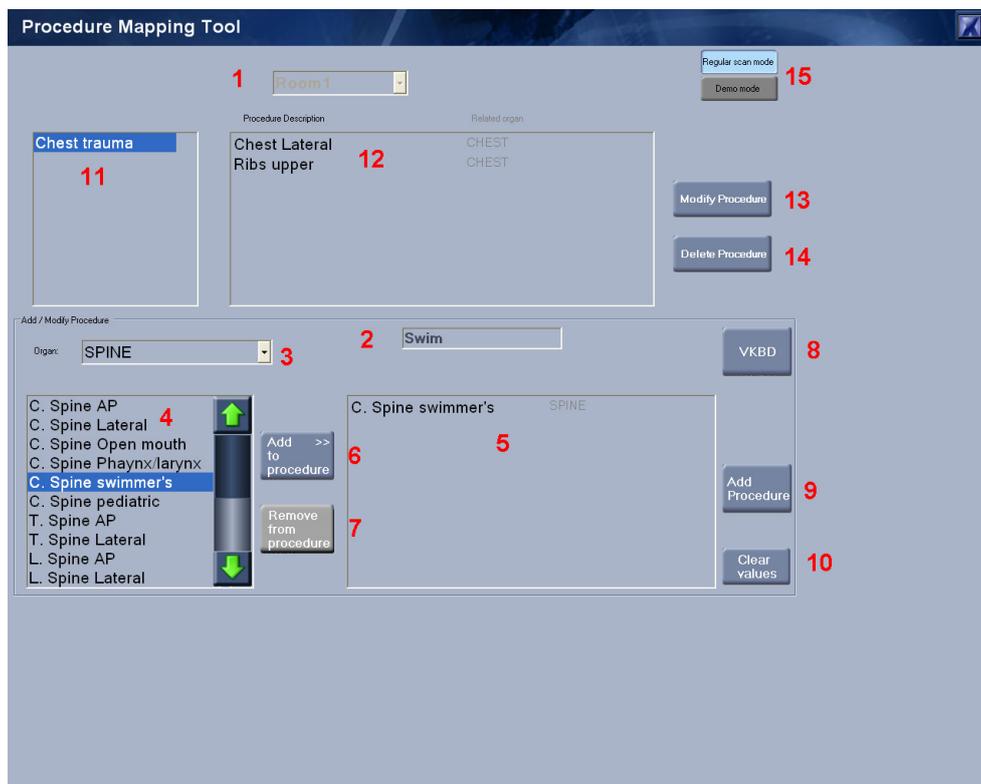
# 5 *Setting Procedure Mapping*

The Procedure Mapping tool is used to define the list of procedures that appear in the scan screen. A “Procedure” is a user-defined set of body-parts and view positions, created in order to group logically related procedures for ease of selection and time savings.



*Main Toolbar - Procedures Tool Button*

When Procedure Mapping is selected, the image icons associated with a procedure (study) are predefined and appear as “ready to scan” thumbnails.



*Procedure Mapping Tool*

#	Component	Description
1	Room	Name or number of Room that the procedure will be implemented on.
2	Procedure Name	Type in the new procedure name.
3	Organ	List of Organs
4	Sub-Organ	List of Sub Organ positions available for selected organ.
5	Procedure Component List	List of Sub Organs positions selected to be included in the procedure being created.
6	Add to Procedure	Select a Sub Organ, then touch this button to include the procedure being created/modified.
7	Remove from Procedure	Touch to remove a Sub Organ from the Procedure being created/modified.
8	VKBD	Virtual Keyboard
9	Add Procedure	Touch to accept and save the Procedure being created/modified.
10	Clear Values	Clear details of the Add/modify Procedure process
11	Existing Procedures	Names of Existing Procedures
12	Procedure Description	Shows the Sub Organs included in the selected Procedure in the Existing Procedures List.
13	Modify Procedure	Select Procedure from Existing Procedures to modify
14	Delete Procedure	Deletes Procedure
15	Regular Scan Mode/Demo Mode	Select regular or demo mode. Regular scan mode is default

**To Create a new Procedure**

1. Select a **Room**.
2. Touch on the field **Procedure Name**; the field becomes enabled, enter a name for the procedure
3. .Select an **Organ**; the Organ's Sub Organ list appears in the Sub Organ dialog.
4. Select a Sub Organ, the then touch **Add to procedure**; the Sub Organ appears in the Procedure Component List.  
 To remove selections, touch Remove from Procedure.  
 To cancel the Procedure creation, touch **Clear**.

5. When you have added all the Sub Organ positions that you require to the list in the Procedure Component list, touch **Add Procedure**. The new procedure appears on the list of procedures.

**To modify an existing Procedure**

1. Select a Procedure from **Existing Procedures**.
2. Touch **Modify Procedure**; the Procedure details will appear in the Procedure Name and Procedure Component List dialog boxes.
3. Use **Add to Procedure** and **Remove from Procedure** buttons to modify the list.
4. Touch **Add Procedure** to save.

NOTE: Demo mode is used for selecting Demo images.



# 6 *Advanced Settings*

The advanced settings tool is used to access advanced features of the QC and CR software. The available tabs depend on the user's designation:

	Anatomical	Calibration	Diagnostics	SW Update	Setup	User	Admin
Administrator	✓	✓	✓	✓	✓	✓	✓
Technician	✓	✓	✓	✓	✓	✓	
Operator						✓	



### Main Tool Bar - Setting Button

The Scanner Information screen is displayed on the top of the Advanced Settings screens, above the Tab bar.

It displays information about the unit. FPGA, Firmware and Software version details are updated each time the particular software version is updated.

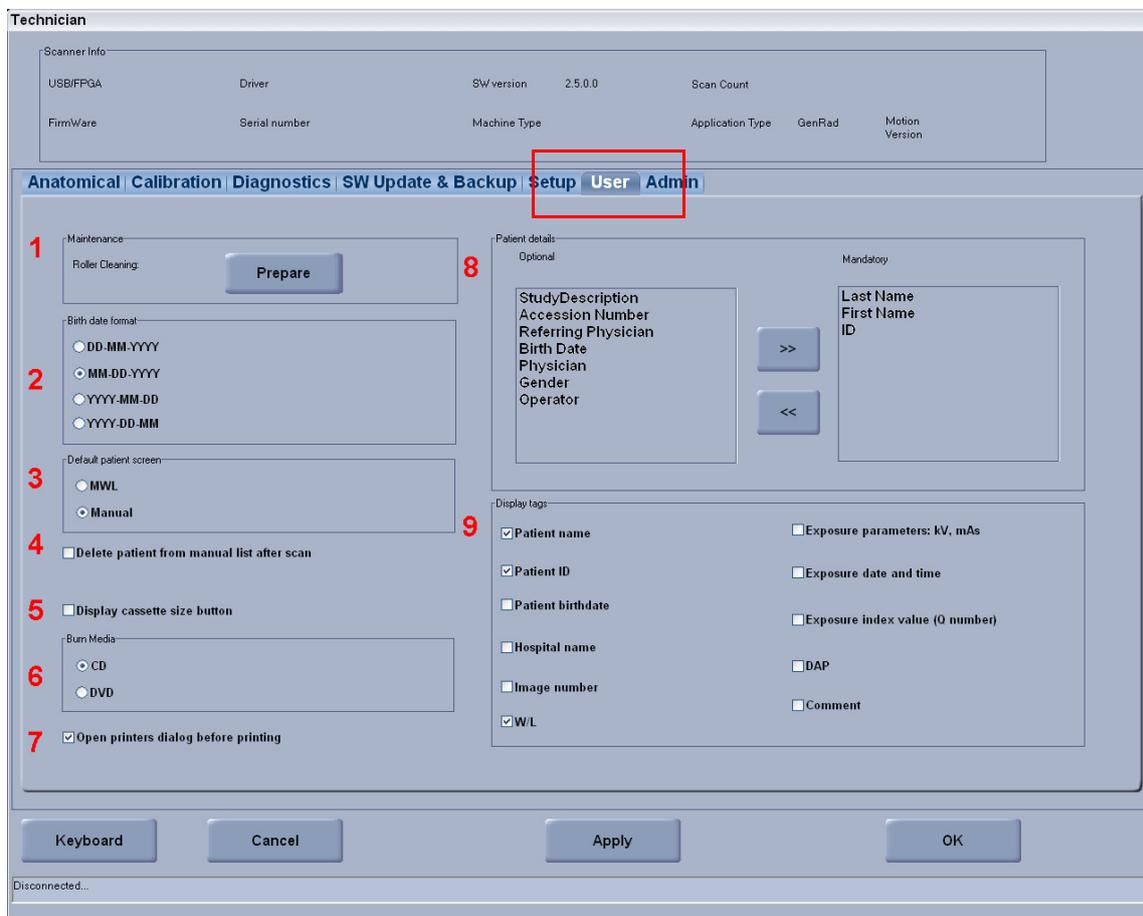


*Scanner Information screen*

## The User Tab

Certain parameters may be set for local clinic preferences: birth date format, the default screen which appears when the user interface is opened, patient detail fields which are mandatory, and display tags which appear when an image is displayed. In addition the roller cleaning procedure of the Imaging Reader is initiated from the User tab.

1. Open the user interface and log in.
2. On the Manual screen, click **Setting** on the Main tool bar
3. Update the setting(s) you require, then click [Apply] and [OK].



User Tab

#	Component	Description
1	Roller Cleaning	Refer to the user guide of the Imaging Reader for information on the Roller Cleaning Procedure. The <b>Prepare</b> button, located on the User tab is used to initiate the procedure

#	Component	Description
2	Setting the Date Format	In the Birth Date Format section select the preferred format. This format will appear on the Manual Patient Entry Form.
3	Selecting Default patient screen	Determines whether Manual or MWL patient list will be the default display for the scanner operator. Usually MWL is set as default.
4	Delete patient from manual list after scan	When the Manual list is being used and this option is checked, the patient name will be deleted from the list after the scanning procedure.
5	Display cassette size button	When checked, the button will be displayed only if there is a problem with the barcode reader. Allows the operator to choose to open a cassette size drop down list and enter the cassette size manually. This option also allows you to choose the resolution of 14x17 cassettes.
6	Burn Media	Determines whether data will be copied to CD or to DVD, according to which tool is available or required
7	Open printers dialog before printing	Determines whether printer dialog will open before printing
8	Setting Mandatory Patient Detail Fields	<p>Patient Detail Fields which are mandatory are displayed in red letters on the Manual Patient Entry screen or the Modality Work List.</p> <p>Last Name, First Name, and ID are defaults and cannot be transferred from the mandatory list.</p> <p>Other details may be set as mandatory.</p> <ol style="list-style-type: none"> <li>1. Select a patient detail from the Optional list on the left.</li> <li>2. Click the arrow symbol &gt;&gt; to transfer the detail to the Mandatory list.</li> <li>3. To remove a detail from the Mandatory list, select the detail, click the arrow symbol&lt;&lt; and it will reappear on the Optional list</li> </ol>
9	Display Tags	In the Display Tag section, mark tags you wish to appear on the Image screen.
10	Keyboard	Activates the On Screen Virtual Keyboard

## The Administration Tab

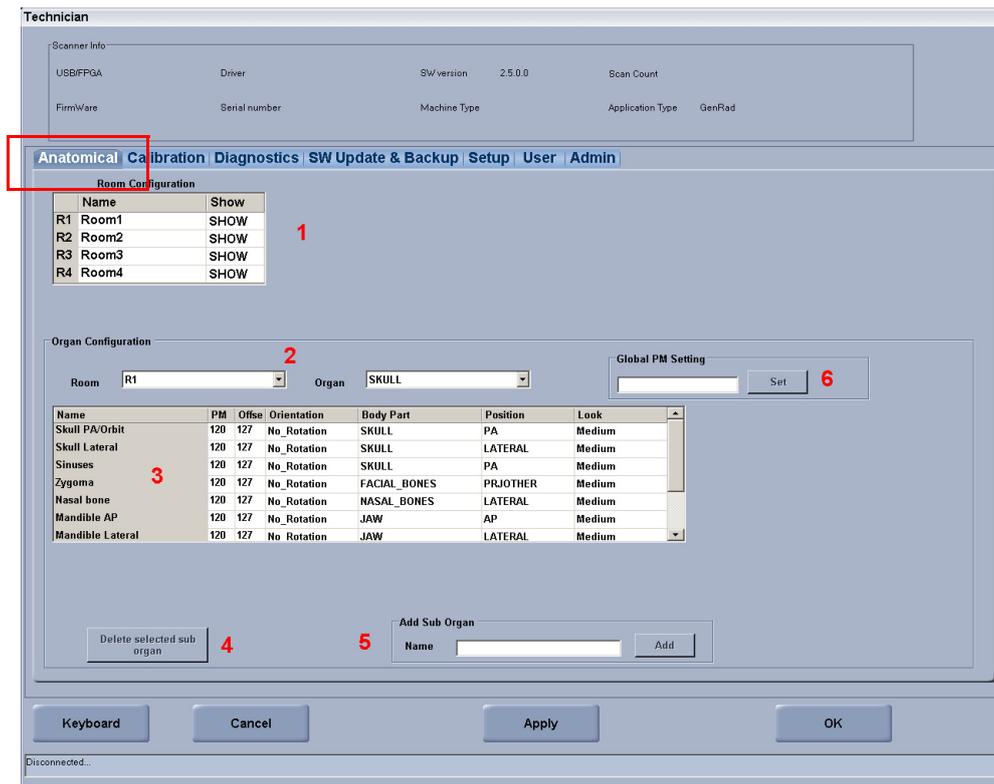
The Administration tab is accessible only by the Administrator level user. It is used to manage the list of registered users of the system. There are three user access levels: Operator, Technician and Administrator.

*Admin Tab*

#	Component	Description
1	User List	List of users registered within system
2	User Name	User name of selected user or new user
3	User Password	User password of selected user or new user
4	Technician Level	List of permission levels: -Administrator, -Technician, -Operator
5	Insert/Update Button	Inserts new user/ updates existing user
6	Remove Button	Removes the selected user from the system

## The Anatomical Tab

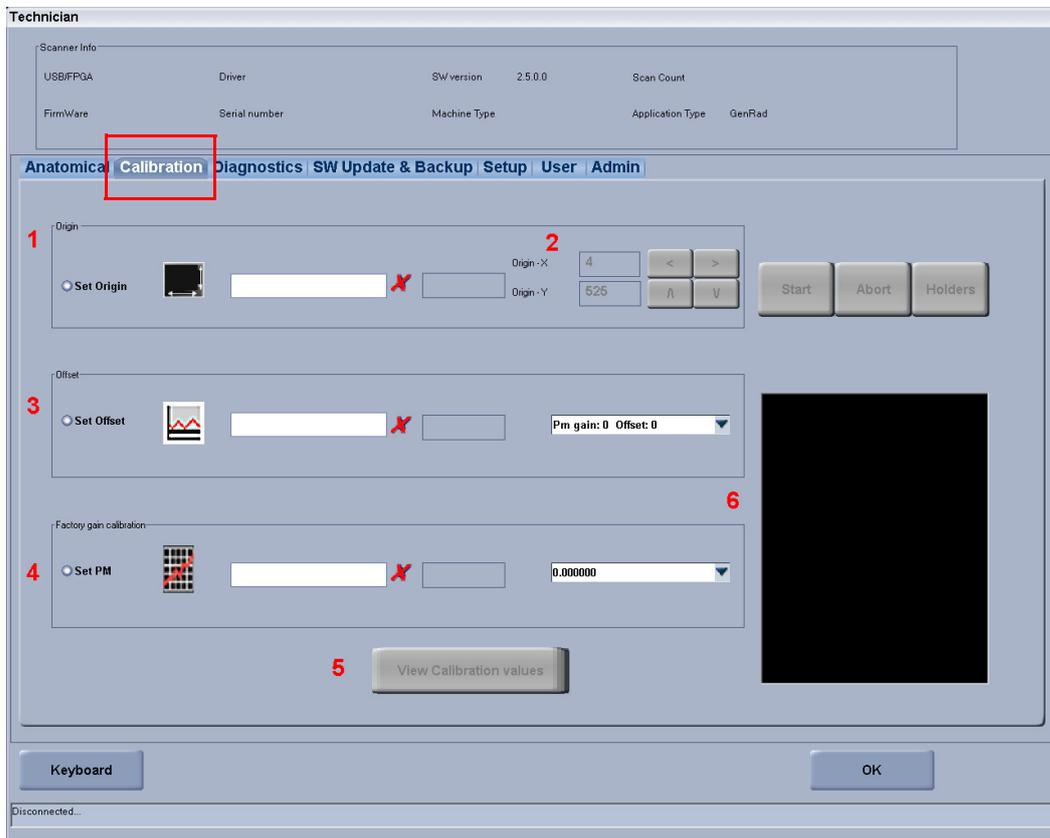
Kodak PoC systems are capable of handling several X-ray systems installed in a single hospital. To be able to pre-define usage according to specific X-ray unit usage, “Rooms” represent a set of user-defined parameters that correspond to a specific X-ray unit in a particular location, its name and the position names of the organ and sub-organ images acquired there.



Anatomical Tab

#	Component	Description
1	Room Configuration	Edit room names, Select <b>SHOW/HIDE</b> room.
2	Room and Organ List Boxes	Select room and organ (body part) from drop down list boxes. Related sub organs (view positions) appear in the main list.
3	Main List	Displays sub organs (view positions) list for selected room and organ.
4	Delete Selected Sub Organ	Select sub organ and click button, to delete from the list.
5	Add Sub Organ	Enter a name and click <b>Add</b> , to add to the Sub Organ list
6	Global PM Setting	Enter PM gain value and click <b>Set</b> to update the value to all suborgans for the correct Organ and Room

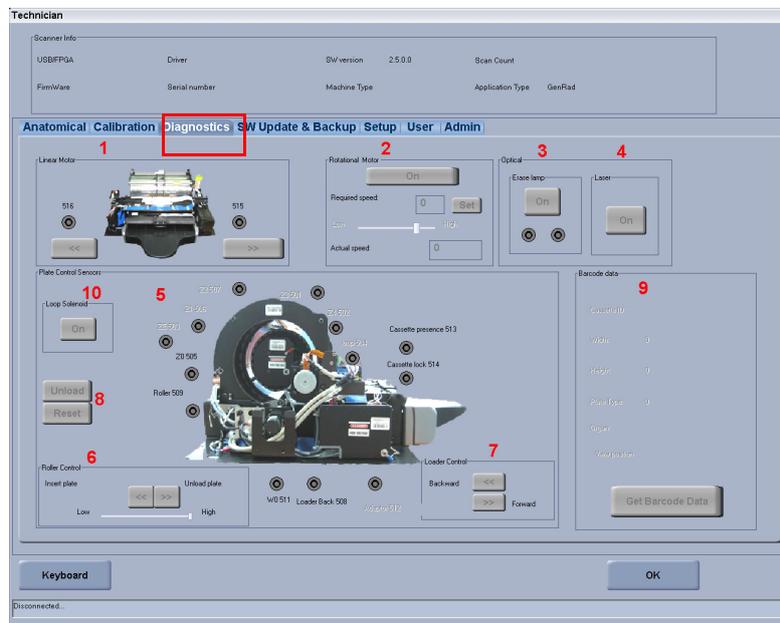
## The Calibration Tab



Calibration Tab

#	Component	Description
1	Origin Calibration	Select <b>Set Origin</b> , click <b>Start</b> and follow the instructions to perform origin calibration.
2	Manual Origin Calibration	Select <b>Set Origin</b> , use up/down, left/right arrow buttons to manually set the origin parameters.
3	Offset Calibration	Select <b>Set Offset</b> , click <b>Start</b> and follow the instructions to perform the offset calibration.
4	Factory Gain Calibration	Select <b>Set PM</b> click <b>Start</b> to perform the set PM calibration.
5	View calibration values	Displays calibration values.
6	Calibration Preview	Displays scan progress during the calibration procedure.

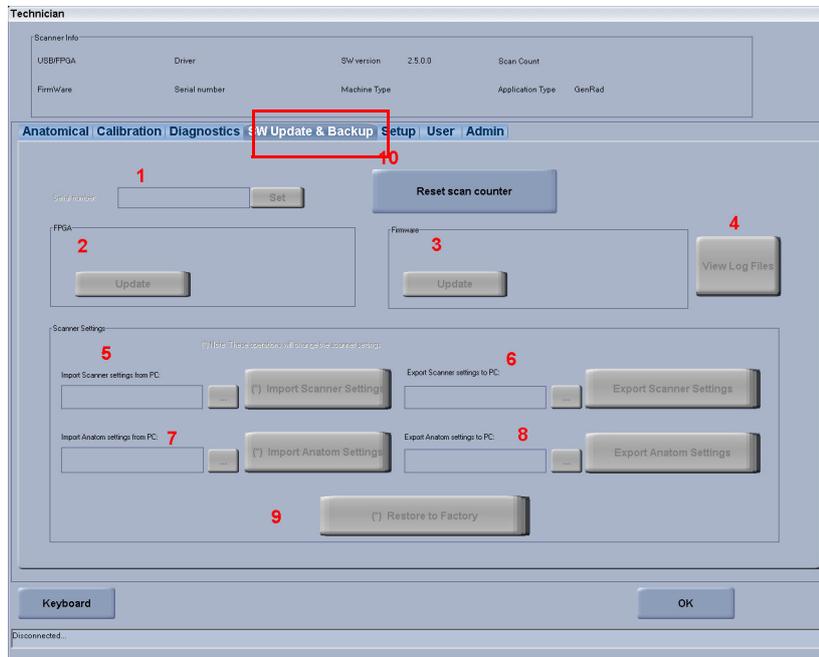
## The Diagnostics Tab



*Diagnostics Tab*

#	Component	Description
1	Linear Motor	Use the << / >> buttons to move the optical head and PM left and right and view 515 and 516 sensor indicators.
2	Rotational Motor	Use the <b>On/Off</b> button to start or stop the motor and view the motor speed. You can also select motor speed by dragging the selector along <b>High-Low</b> slide bar.
3	Erase Lamp	Click <b>On</b> to turn on the erase lamps. The two Erase lamp sensor indicators will indicate the status of the erase lamps.
4	Laser	Click <b>On</b> to turn on the laser
5	Sensor indicators	Displays status of sensors in the system
6	Roller Control	Use << / >> buttons to move the motor and <b>High-Low</b> slide bar to control the speed.
7	Loader control	Use << / >> buttons to operate the loader motor
8	Unload/Reset Button	Simulates unload and reset operations (combining both loader and roller motors)
9	Get Barcode Data	Displays cassette information from barcode
10	Loop Solenoid	Click <b>On</b> to turn on the Loop Solenoid

## Software Update and Backup Tab

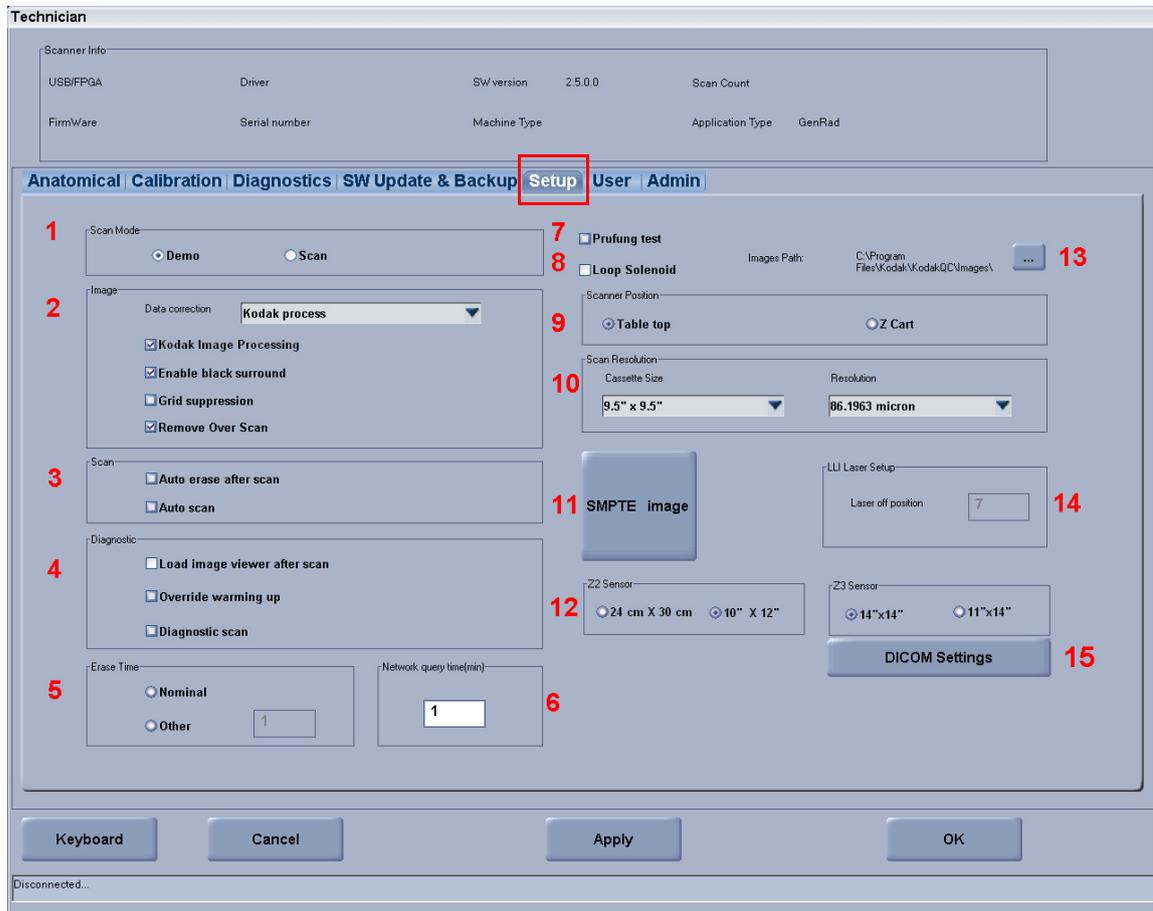


Software Update and Backup Tab

#	Component	Description
1	Serial Number	Displays the scanner's Serial number.
2	FPGA	Click to update FPGA (Field Programmable Gate Array) to scanner.
3	Firmware	Click to upgrade firmware to scanner.
4	View log file	Click to display log file.
5	Import scanner settings	Enter path to scanner setting file and click the button to import.
6	Export Scanner Settings	Enter path and file name to create the scanner setting file and click the button to export.
7	Import Anatom	Enter path to anatom setting file and click the button to import.
8	Export Anatom settings	Enter path and file name to create the anatom setting file and click the button to export.
9	Restore to Factory	Click to restore the original factory settings.
10	Reset Scan Counter	Resets scan counter. The counter counts all scan procedures since the system was installed at the site.

## The Setup Tab

The Setup tab is used to define usage of certain applications.



Setup Tab

#	Component	Description
1	Scan mode	Select between regular scan, and demo modes.
2	Image	Sets image data correction options
3	Scan	Sets scan options:- Auto erase after scan, -Auto scan
4	Diagnostic	Sets diagnostic options: -Load Image viewer after scan, -Override warming up, -Diagnostic screen
5	Erase Time	Sets erase time- nominal or other (manual)
6	Network query time	Set time in minutes for network query.
7	Prufung test	Use only for Prufung test (Germany only)

#	Component	Description
8	Loop Solenoid	Should always be checked if Loop Solenoid is installed
9	Scanner Position	Select scanner location: -on a tabletop (flat surface) or -Zcart (60 degrees).
10	Scan Resolution	Select scan resolution for each cassette size
11	SMPTE Image	Loads SMPTE image. For viewing only
12	Z2, Z3 Sensor Setup	Select according to cassette size that you are using at your site
13	Image file destination	Select image file destination. Default destination is C:\Program Files/Kodak/KodakQC/Images
14	LLI Laser Setup	To set the starting point of the laser scan for a long length image. For details see the Calibration section of the FLC Manual. (presently not in use)
15	DICOM Settings	Displays DICOM settings screen (See Chapter 7-2)

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# 7 *DICOM Settings*

The DICOM settings screens enable set up of all DICOM related parameters for connecting the QC software to PACS, HIS/RIS and DICOM printers. The DICOM settings screens are accessed by Technician and Administrator from Settings >Setup tab and clicking the **DICOM Settings** button (see Chapter 6, The Setup Tab)

NOTE: In order for the changes you make to take effect to any of the two screens:

1. Before making any change, click **Stop Service**
2. After completing the changes, click **Start Service**

**For the required parameters - please consult your clinic/hospital System Administrator.**

Detailed description of DICOM Settings, DICOM Printer and DICOM Destinations procedures and screens can be found in the updated edition of Kodak QC Software Installation Guide.



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Rochester, N.Y. 14608

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