BREAST IMAGING SOLUTIONS

Instructions for Use

SELENIA® Dimensions®

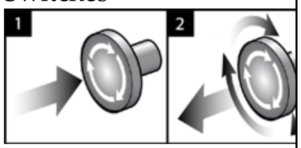
HOLOGIC®

MAN-02557

4.0 How to Turn On the Selenia Dimensions

4.1 Preparation

1. Reset all three Emergency Off switches.

Emergency Off Switches 	There are three emergency Off switches, one on each side of the Gantry and one on the Acquisition Workstation. Press any of the Emergency Off switches to turn Off the Gantry and disable the Standard Acquisition Workstation Lift Mechanism. Turn the Emergency Off switch by one-quarter turn to reset the switch.

2. Make sure that both system circuit breakers are in the On position.
3. Remove any obstructions to the C-Arm movement and to the view of the Operator.

4.2 Startup

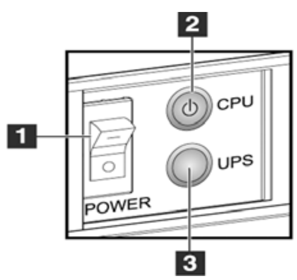


Figure 13: Premium Acquisition Workstation Power Buttons

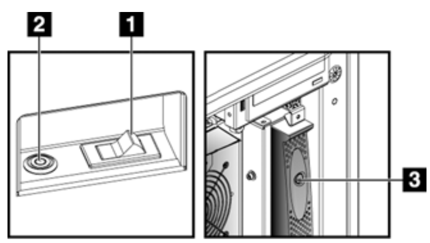
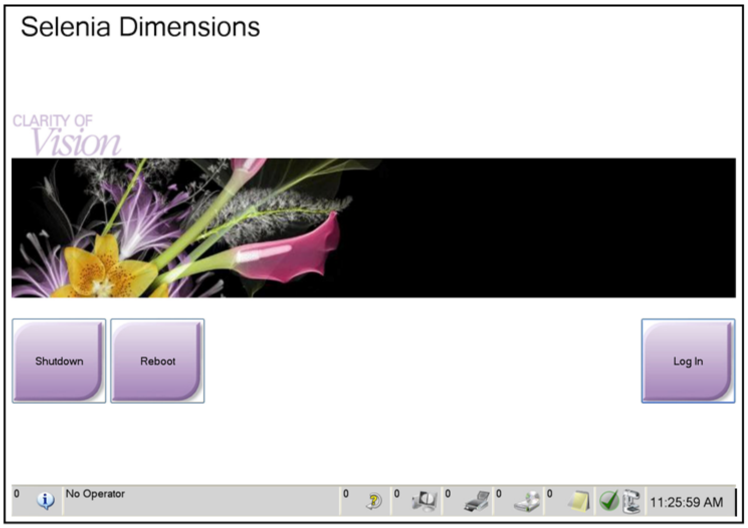


Figure 14: Standard Acquisition Workstation Power Buttons

Legend for Figures

1. Acquisition Workstation Circuit Breaker
2. Computer Power Button
3. UPS Power Button

1. If the UPS was shut down, press the UPS power button (at the rear of the Premium Acquisition Workstation or on the side of the Standard Acquisition Workstation).
2. Press the computer power button at the rear of the Acquisition Workstation.



The Startup Screen

3. Select the **Log In** button.

Note... *The Startup screen includes a* ***Shutdown*** *button that turns off the system, and a* ***Reboot*** *button that restarts the system.*

Note... *The system requires between five minutes and fifteen minutes to prepare for image acquisition. The wait time depends on the detector power configuration. A timer in the Taskbar displays the wait time before the system is ready. Do not acquire clinical or QC images unless the System Status Icon indicates the system is Ready.*

4.3 Log In

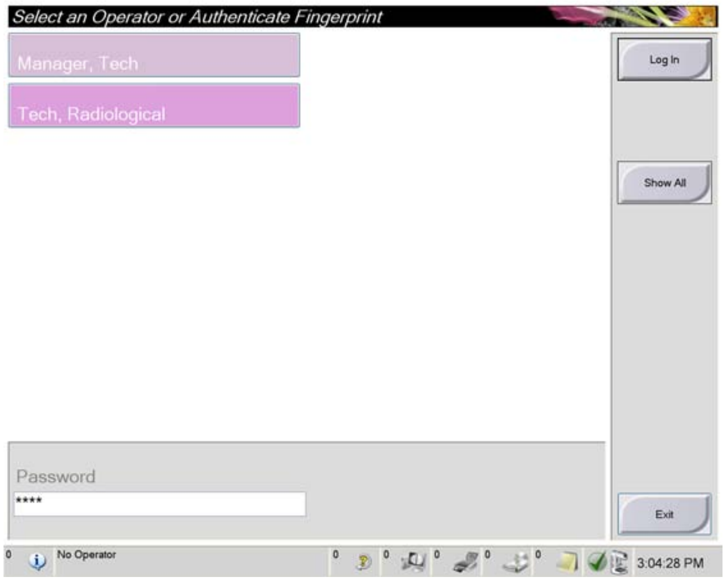


Figure 15: How to Log In

When the user Log In screen displays, all Managers and Technologists show in the list of Operators.

1. To display the Service, Applications, and Physicists user names, select the **Show All** button.
2. Select your user name, enter your password, and select the **Log In** button.

   Or

   Validate your fingerprint.

5.0 How to Change the Language

1. Select the **Admin** button.
2. Select the **My Settings** option.
3. From the **Locale** field, select a language from the drop-down menu.
4. Select the Save button, then select the OK button to the Update Successful message. The selected language displays.

5.1.3 How to Use the AEC Sensor

The AEC Sensor has seven manual positions and an automatic position. The manual positions start at the chest wall edge (position 1) and reach to the nipple edge (position 7). The automatic position selects two regions within an area that extends from the chest wall to the nipple.

Use the plus (+) and minus (-) keys on the Compression Device or in the AEC Sensor area of the screen to change the sensor position. You can select Auto AEC to allow the system to calculate the best exposure for the breast.

5.2 How to Use the Implant Present Button

The Implant Present button is above the Accept button on the Procedure screen. This button applies special implant processing to the implant and implant displaced views, and changes the "Implant Present" DICOM tag in the image header. When this button is selected, a checkmark appears on the button.

Select the **Implant Present** button for both implant and implant displaced views before you acquire the image.

Note... *The Implant Present button is automatically selected if the open procedure contains an ID view.*

5.3 How to Acquire an Image

See *Clinical Procedures* on page 71, for information about clinical procedures.

1. Select a view from the thumbnail images at the bottom of the screen.
2. Press and hold the x-ray button for the complete exposure. During the exposure, a System Message appears, a tone sounds, and the x-ray indicator on the control panel lights to indicate x-ray emission.
3. The image displays when the x-ray is complete. You must select how to complete the acquisition.
   - You can **Accept** the image. The locked image transmits to output devices with all attributes and marks.
   - You can **Reject** the image. When the dialog box appears, select the reason for the reject. The Preview closes. You can repeat the rejected view, or select another view.
   - You can **Pend** the image. The image saves for future review.
4. Repeat the steps 1 to 3 for each view.

5.4 How to Add or Remove a View

1. To add a view, select the Add View button to display the Add View screen.

Figure 24: The Add View Screen

View Modifiers

ID = Implant Displaced
RL = Rolled Lateral
RM = Rolled Medial
RI = Rolled Inferior
RS = Rolled Superior
NP = Nipple in Profile
AC = Anterior Compression
IMF = Infra-Mammary Fold
AX = Axillary Tissue

Note... *ID indicates Implant Displaced.*

Note... *When you select the STX tab, Stereo View Modifiers appear.*

2. Select the tab, then select the view. You can select a maximum of 3 View Modifiers from the right panel of the screen.
3. Select the **Add** button. A thumbnail image for each view that you select appears in the bottom of the window.
4. To remove a selected view, select the view then select the trash icon.
5. To remove all selected views, select the **Clear** button.

Chapter 4
The Images

1.0 Introduction

After you make an exposure, the acquired image displays on the Preview screen. Review the image and add a comment, if necessary, then Accept, Reject, or Pend the image. A thumbnail image appears in the Case Study area of the screen.

- If you select the **Reject** button, an "X" appears on the thumbnail image.
- If you select the **Pend** button, a question mark "?" appears on the thumbnail image.

Figure 29: The Preview Screen

1.1 Conventional Imaging Sequence of Events

- Review the image after the exposure.
- Accept, Reject, or Pend the image.

1.2 Tomosynthesis Imaging Sequence of Events (Tomosynthesis option)

- Wait for the image reconstruction to complete.
- Review projection slices for motion.
- Accept, Reject, or Pend the images.

2.0 How to Review the Images

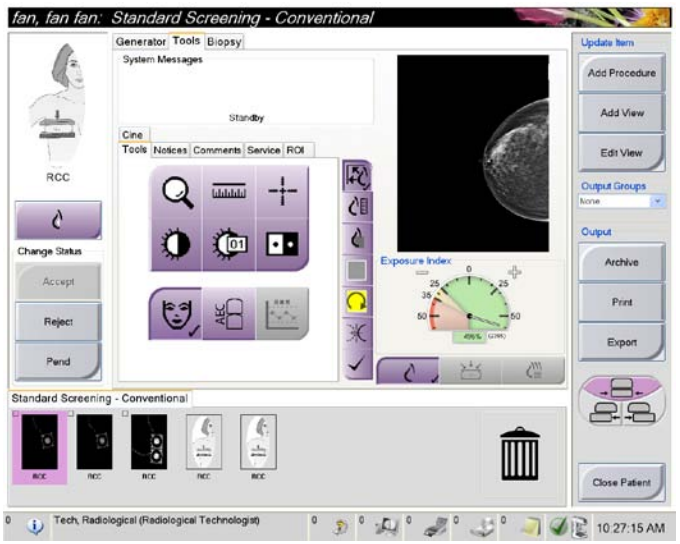


Figure 30: The Tools Tab (Tomosynthesis option shown)

Select any thumbnail image to display that image in the Preview screen. The thumbnail image is marked accordingly if the image is not accepted.

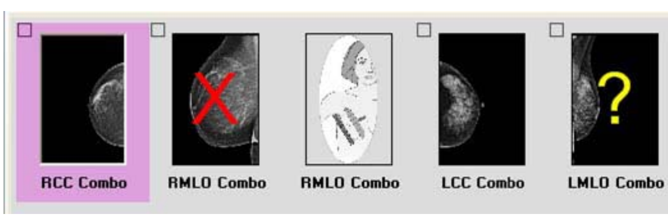


Figure 31: Marked Images in a Procedure (Tomosynthesis option shown)

2.1 The Image Review Tools Tab

The Tools tab in the Procedure screen provides the image review tools. A checkmark appears on an active tool.

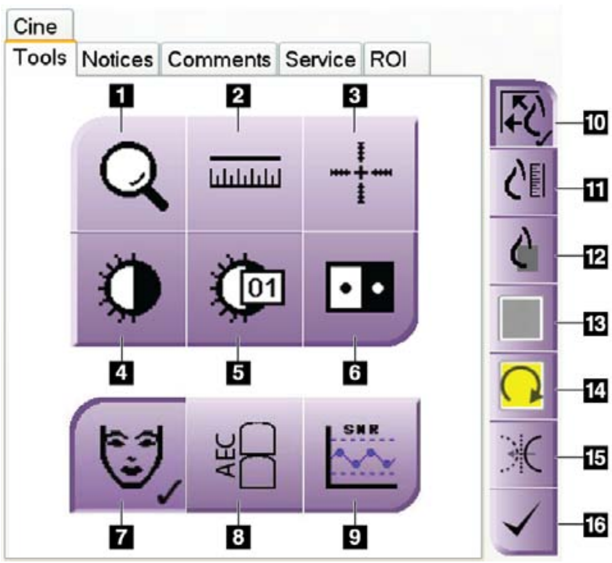


Figure 32: Image Review Tools

Figure Legend

1. The **Zoom** tool magnifies a section of the image.
2. The **Ruler** displays a measurement of the distance between two points.
3. The **Crosshair** tool displays a crosshair on the Preview Screen.
4. The **Window/Level** tool with the Trackball changes the brightness and contrast.
5. The **Window/Level Fine Adjustment tool** allows the entry of the specified contrast and brightness values.
6. The **Invert Image** tool changes blacks to whites and whites to black.
7. The **Patient Information** button activates the patient information display..
8. The **AEC** button displays the AEC Sensor areas used for the exposure calculation. The sensor areas display on the Preview Screen.
9. The **SNR/CNR** button calculates the signal-to-noise ratio and contrast-to-noise ratio on the ACR Phantom
10. The **Fit-to-Viewport** button fits the image within the image tile.
11. The **True Size** button displays the image in the actual size of the breast.
12. The **View Actual Pixels** button displays the image in full resolution.
13. The **Multi-Up Display** button selects the number of tiles to display.
14. The **Image Tile Advance** button sets the active Multi-Up tile.
15. The **Mirror** button reverses (mirrors) the image.
16. The **Tag for Print** button tags the projection or reconstruction images of a tomosynthesis image to print later (Tomosynthesis option).

2.2 The Notices Tab

The tools on the Notices Tools tab allow you to mark and annotate images and send notices about the displayed image or procedure. The Notice Output Groups drop-down menu at the bottom of the tab allows you to select the destination for the Notices.

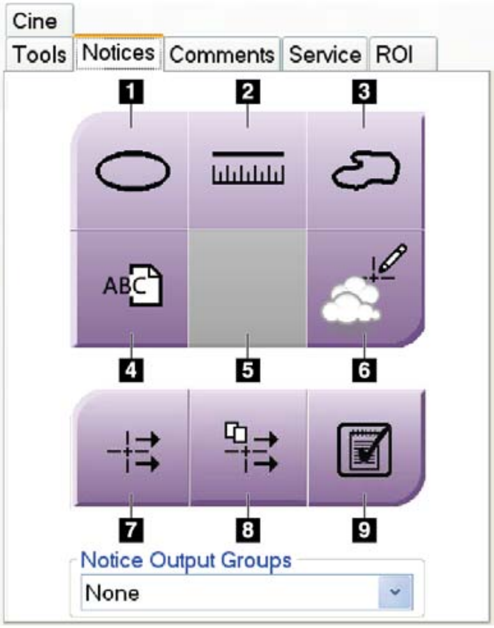


Figure 33: The Notices Tools Tab

Figure Legend

1. Draw an Oval marking on the image.
2. Measure a distance on the image.
3. Draw a Freehand marking on the image.
4. Add a text note to the image without a marking.
5. Future use.
6. Show or hide the Notice Markings and Annotations.
7. Send the Notice for the current image to the selected destination.
8. Send the Notices for all images in the opened study to the selected destination.
9. Change the Patient's Notices status to viewed.

2.2.1 How to View the Notices

1. Select the patient in the Unviewed Notices list.
2. Open the patient.

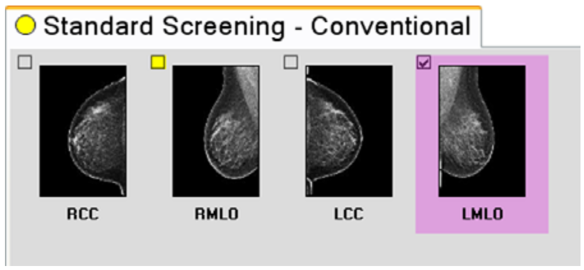


Figure 34: Yellow and Clear Checkboxes

- A yellow box on a thumbnail image indicates that image has unviewed notices.
- A clear box with a checkmark on a thumbnail image indicates the notices for that image were viewed.

Note... *When your system is connected to an Advanced Workflow Manager and the selected patient images are in the cluster but not in the local database, the following sequence occurs:*

- *Blank icons appear in the thumbnail image area and a small asterisk appears on the thumbnail image tab.*
- *As the images are received, the thumbnail images fill the blank icons.*
- *When all images for that case study are received, the asterisk disappears.*

2.2.2 Image Markings

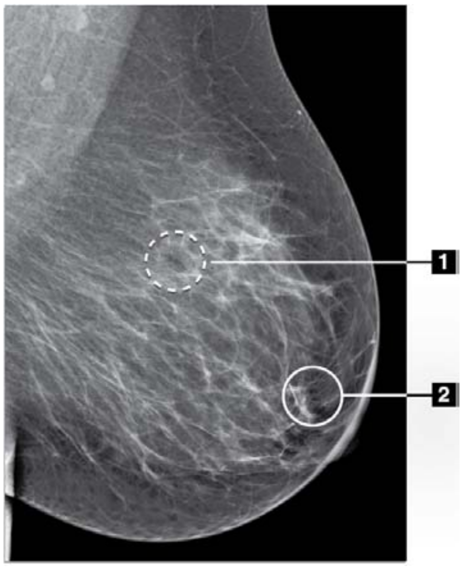


Figure 35: Image Markings

Figure Legend

1. Dashed lines indicate the marking was received in a notice.
2. A solid line indicates a marking created by you.

- When you mark an image, an annotation box appears next to your marking.You can enter comments in this box. If you move the box, the comment you entered moves with the box. If you hover over the box, your initials and the date and time of the creation display.
- A received Notice includes the marking, annotation, the user initials, the date and the time the Notice was received. You cannot move a marking or annotation that was received in a Notice
- Markings and annotations created by the user that are not sent remain on the image until the procedure is closed.
- After you send a marked or annotated image, you cannot move that marking or annotation.

2.2.3 Delete a Mark

You can delete a Mark and the related Annotation, or a standalone Annotation.

1. Select either the mark or the related annotation.
2. Click the "X" that appears to delete the mark, the related annotation, and the label.

Note... *After you send the Marks and Annotations (Notice), you cannot delete these Marks and Annotations.*