



Instructions For Use

Trident™

Specimen Radiography System

4.0 Controls and Indicators

4.1 Cabinet Controls and Indicators

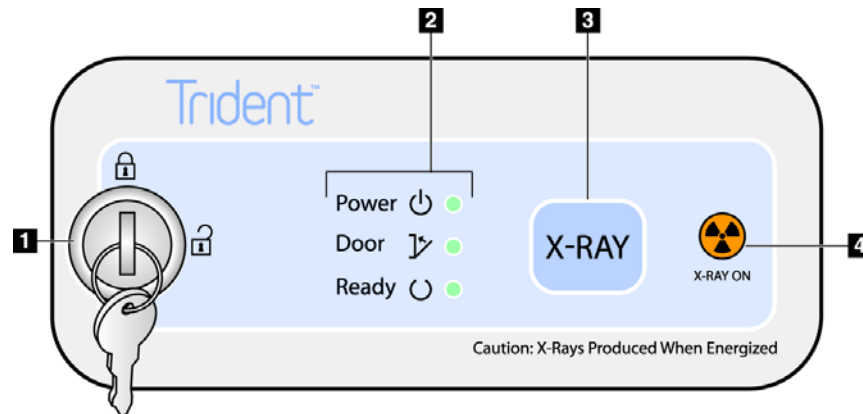


Figure 2-4: Cabinet Controls and Indicators

Legend for Figure 2-4

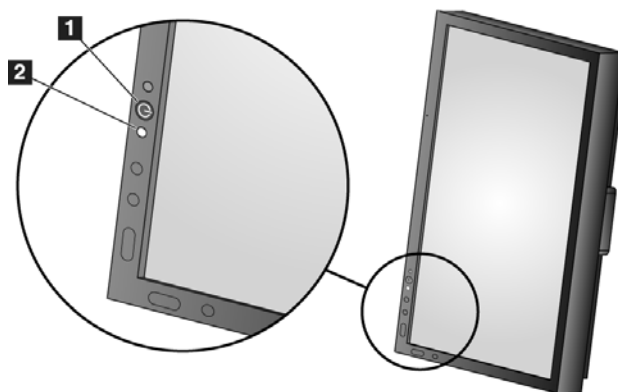
- | | |
|--|--|
| <ol style="list-style-type: none"> 1. Key Switch 2. System Status Indicators 3. Exposure Control 4. X-ray On Indicator | <ul style="list-style-type: none"> • Locked: X-ray is disabled. • Unlocked: X-ray is enabled. • Power: ON = LED is green. • Door: CLOSED = LED is green. • Ready: X-RAY READY = LED is green. • X-RAY: Press to begin an exposure. Press to end an exposure before automatic termination. • X-RAY ON = LED is amber. |
|--|--|



Note...

After the computer starts and launches the application, exposures cannot be made until the key switch is in the unlocked position.

4.2 Display Controls and Indicators



Legend for Figure 2-5

1. Display Power Control
2. LED for Display Power

Figure 2-5: Display Control and Indicator

5.0 Cable Connections

Put the Trident in a location where you can easily access the disconnecting device.

1. Connect the network cable to the network outlet in the wall.
2. Connect the system power cord to the wall outlet.

6.0 How to Start the System

1. If the UPS was stopped, press the UPS On button. (The UPS is an option.)
2. Press the power button on the Computer.
3. Select the **Log In** button.



Figure 2-6: Startup Screen



Note...

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

6.1 Log In

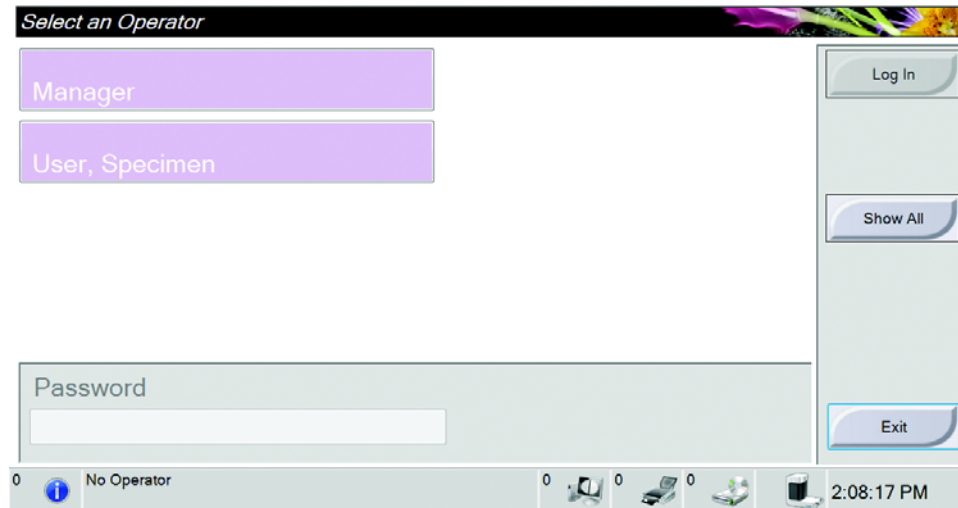


Figure 2-7: Select an Operator

1. Select your user name.



Note... When the user name is selected, the Password field activates.

2. Enter your password.
3. Select the **Log In** button.



Note... When the **Show All** button is pressed, the Service user displays in the list.



Note... To change the system language or other preferences, access the Admin screen (refer to Section 6.1.1, page 12).

6.1.1 How to Access the Admin Screen

1. Select the User Name area of the taskbar at the bottom of the screen.
2. Select the Admin option from the menu.

6.1.2 How to Change the Language


1. Select the User name area in the taskbar at the bottom of the screen.
2. Select the **Admin** option to display the Admin screen. For complete information about the functions on the Admin screen, refer to Chapter 6, page 33.
3. Select the **My Settings** option.
4. From the **Locale** field, select a language from the drop-down menu.
5. Select the **Save** button, then select the **OK** button to the Update Successful message. The selected language displays.

7.0 How to Turn Off the System

1. Select the **Close Patient** button in the Procedure screen.
2. From the Select Patient screen, select the **Log Out** button.
3. From the Startup screen, select the **Shutdown** button.
4. Select the **Yes** button in the Confirmation screen.

8.0 How to Remove All Power from the System

Table 2-1: Removal of All Power from the System

System without the UPS	System with the optional UPS
<ol style="list-style-type: none"> 1. Make sure the system is completely turned off. 2. Disconnect the power strip from the wall. 	<ol style="list-style-type: none"> 1. Make sure the system is completely turned off. 2. Press and hold the UPS Off  button for five seconds. 3. Disconnect the UPS from the wall.

9.0 Battery Power Operation

Systems that have a backup battery (the UPS) continue to operate when AC power is removed during system operation. The UPS automatically engages and the system gives audible and visual alerts about the battery status.

When the battery reaches the critical low limit, the Trident shuts down then the UPS shuts down. If AC power is restored while the battery is on, the UPS returns silently to normal operation.

9.1 Battery Alerts

When the system starts on battery power:

- A black battery icon appears in the status area of the taskbar at the bottom of the screen.
- The UPS beeps approximately one time every four seconds. To stop the beep, refer to Section 9.2, page 13.

When the battery is near depletion:

- The battery icon in the taskbar at the bottom of the screen changes from black to red.
- The UPS beeps approximately one time every two seconds. To stop the beep, refer to Section 9.2, page 13.

9.2 How to Stop the Beep

1. Press and hold the **Silence** button on the front of the UPS.
2. When you hear a long beep, release the **Silence** button.

Chapter 4—The Images

1.0 Introduction

After you make an exposure, the acquired image displays and is accepted automatically. A thumbnail image appears in the left panel of the screen. Use the Image Tools (refer to Section 2.1, page 26) to help with the review of the image and to add a comment.



Figure 4-1: An Acquired Image

1.1 Information on the Left Side of the Image

Information about the patient and the exam displays to the left of the image. This information displays when the Patient Information tool is selected. See Section 2.1, page 26.

1.2 Information on the Right Side of the Image

- The Enhancement Level displays on the right side of the screen after the Enhanced Visualization tool is selected. The value changes with movement of the slider that appears on the Tools tab after the Enhanced Visualization tool is selected.
- The Zoom value changes when the Zoom tool is selected and the cursor is moved within the displayed image.
- The Acquisition Mag line indicates the magnification factor for the exposure.
- The W/L value changes when the Window/Level Fine Adjustment tool is selected and the cursor is moved within the displayed image.

This information displays when the Patient Information tool is selected. See Section 2.1, page 26.

2.0 How to Review the Images

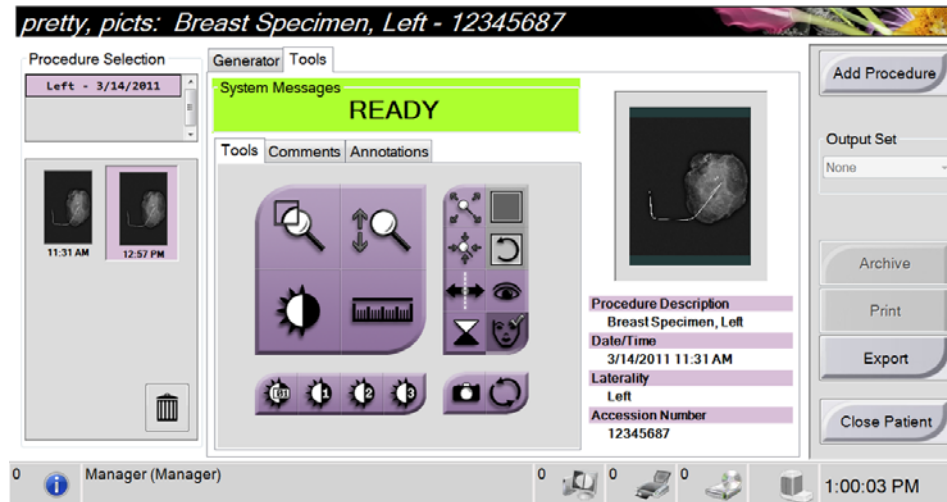


Figure 4-2: The Tools Tab in the Procedure Screen

1. Select a thumbnail image.
 - A preview image shows on the right side of the screen. When the review tools are used, this image shows the relationship between the area that is selected with the tool, and the whole image.
 - A larger image shows above the Procedure screen.
2. Use the image tools (refer to Section 2.1, page 26) to enhance the whole image or areas of interest in the image.

2.1 The Image Review Tools

The Tools tab displays after an image is acquired. When you select the Tools tab, you have access to the image review tools. A checkmark appears on an active tool.



Figure 4-3: Image Review Tools

**Note...**

The Ruler, W/L Presets, and Enhanced Visualization tool are inactive for snapshot images.

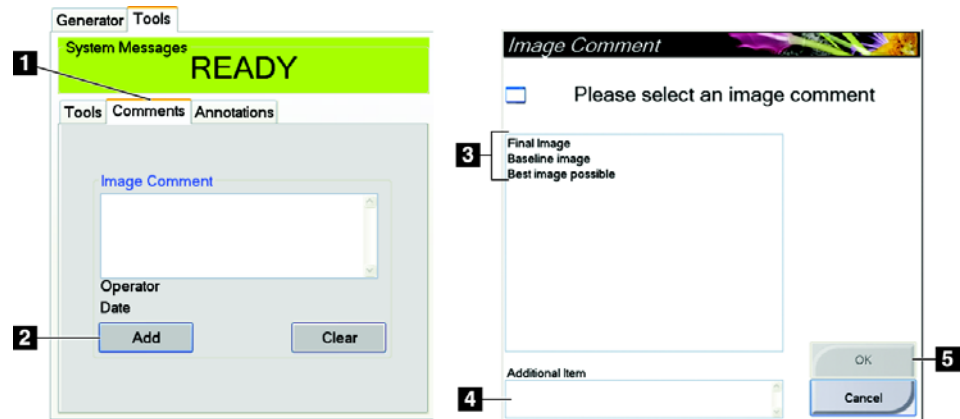
Legend for Figure 4-3

1. The **Mag** tool magnifies a section of the image.
2. The **Zoom** tool magnifies the whole image.
3. The **Window/Level Fine Adjustment** tool allows the entry of specified values for contrast and brightness.
4. The **Ruler** tool displays a measurement of the distance between two points. To move the measurement line, click and drag the line to the new location.
5. The **Fit-to-Viewport** tool fits the image within the image tile.
6. The **View Actual Pixels** tool displays the image in full resolution.
7. The **Mirror** tool reverses (mirrors) the image.
8. The **Invert** tool changes blacks to white and whites to black.
9. The **Multi-Up Display** tool selects the number of tiles to display.
10. The **Image Tile Advance** tool sets the active Multi-Up tile.
11. The **Enhanced Visualization** tool adjusts the image sharpness with a slider.
12. The **Patient Information** tool activates the patient information display.
13. The **Window/Level** tool is used with the mouse to change the brightness and contrast. To reset the Window/Level to the original values, double-click the image.
14. The **Pre-defined Window/Level** tools set the values most used.
15. The **Camera** button captures a snapshot of the image display area and adds the snapshot to the current procedure.
16. The **Reset** tool returns an enhanced image to the original state and keeps on-screen drawings and annotations. Your Service Engineer can set this tool to return to the original state without drawings or annotations.

2.2 Other Image Review Tools

2.2.1 The Comments Tab

This feature allows you to make notes or comments about image content.



1. Select the **Comments** tab.
2. Select the **Add** button.
3. In the Image Comments dialog box, select an option from the image list.
4. Use the keyboard to add comments in the Additional Item area of the screen.
5. Select the **OK** button.

2.2.2 The Annotations Tab



Figure 4-4: Annotations Tab

Legend for Figure 4-4

1. Draws an elliptical pattern in the image. You can change the size and move this pattern within the display area, and you can add the text to this pattern.
2. Creates an arrow to point to an area of interest. You can change the size, move the arrow within the display area, and add the text to this pattern.
3. Draws a free-form in the image. You can move this pattern within the display area, and you can add the text to this pattern.
4. Creates a text box. Click in the box, then use the keyboard to add the text.

- To move a pattern that you created in the display, click and hold the line of the pattern then move to the new location.
- To change the size a pattern that you created in the display, click and hold an end dot of the pattern then drag.
- To add text to the text box of a pattern, click in the box then use the keyboard to add text. Wherever you can move this box within the display area, the text stays connected to that pattern.