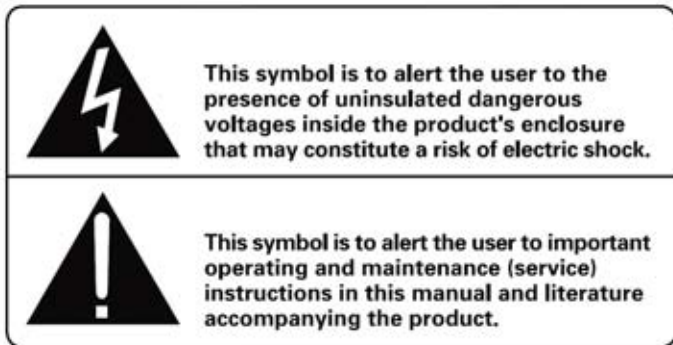




User Manual



TruDR LX (Rev 2 ODU–2010)



Specifications

Power Requirements

USA: 115 Volts, 60 Hz

Europe: 230 Volts, 50 Hz

Power Consumption 200 Watts

Dimensions (W x H x D) 508 x 355 x 267 mm
20 x 14 x 10½ in

Weight (net) 16.8 kg, 37 lb.

Important Safety Information

WARNING: There are no user serviceable parts inside. Refer all servicing to qualified service personnel.

WARNING: To reduce the risk of fire or electric shock, do not expose the unit to moisture or water. Do not allow foreign objects to get into the enclosure. If the unit is exposed to moisture, or a foreign object gets into the enclosure, immediately disconnect the power cord from the wall. Take the unit to a qualified service person for inspection and necessary repairs.

Read all the instructions before connecting or operating the component. Keep this manual so you can refer to these safety instructions.

Heed all warnings and safety information in these instructions and on the product itself. Follow all operating instructions.

Clean the enclosure only with a dry cloth or a vacuum cleaner.

Clean the DR plate with a damp cloth. Use no chemicals or alcohol.

You must allow 10 cm or 4 inches of unobstructed clearance around the unit. Do not place the unit on a bed, sofa, rug, or similar surface that could block the ventilation slots. If the component is placed in a bookcase or cabinet, there must be ventilation of the cabinet to allow proper cooling.

Keep the component away from radiators, heat registers, stoves, or any other appliance that produces heat.

Keep the component away from flammable materials.

The unit must be connected to a power supply only of the type and voltage specified on the side panel of the unit.

Connect the component to the power outlet only with the supplied power supply cable or an exact equivalent. Do not modify the supplied cable in any way. Do not attempt to defeat grounding and/or polarization provisions. Do not use extension cords.

Do not route the power cord where it will be crushed, pinched, bent at severe angles, exposed to heat, or damaged in any way. Pay particular attention to the power cord at the plug and where it exits the back of the unit.

The power cord should be unplugged from the wall outlet if the unit is to be left unused for a long period of time. Immediately stop using the component and have it inspected and/or serviced by a qualified service agency if:

- The power supply cord or plug has been damaged.
- Objects have fallen or liquid has been spilled into the unit.
- The unit has been exposed to rain.
- The unit shows signs of improper operation
- The unit has been dropped or damaged in any way

Place the unit on a fixed, level surface strong enough to support its weight. Do not place it on a moveable cart that could tip over.

System will become unresponsive when exposed to Electrostatic Discharge (ESD) or Electrical Fast Transient (EFT) conditions. This is the normal response to these environmental conditions. Please restart the system to return to normal operation.



TruDR Ix™ User Manual

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TruDR lx™ System

The TruDR lx™ system links seamlessly with the X-ray generator to provide the best image quality in a small, lightweight, self-contained system. The TruDR lx™ portable Acquisition Stations are intended to be used by Veterinarians for intermittent mobile diagnostic applications. They will connect the Acquisition laptop in the case to a Varian Amorphous Silicon Digital X-Ray Detector (2520E+).



TruDR lx™ System *(Continued)*

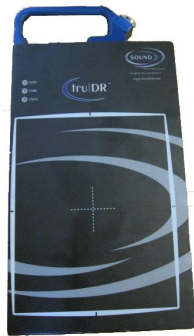
The system comes with several components that integrate the X-ray machine, plate, and the computer. If you need to order replacement parts, please refer to the part numbers in parenthesis.



TruDR lx™ Transit Case (70-309)

Wheel Kit for LX Case (30-580):

Carries and protects the computer, plate, and plate cable. Wheel kit allows for easy transport in airports and on smooth surfaces.



2520E+ Plate (91-402):

Captures digital radiographs.



Handswitch (90-412):

Syncs the generator's prep and expose cycle with the computer.



Ethernet Cable(90-403):

Connects the computer to the network to allow for easy image transfers from the Acquisition Station to the Storage Station.

TruDR lx™ System *(Continued)*



ODU Plate Cable (10-835):

Provides power to the plate and syncs the plate and TruDR lx™ System.



Generator Power Sync Cable (10-748):

Provides power to the X-ray machine and syncs the X-ray machine with the computer. It comes standard with a Min-X HF 80 connector. Other connectors (Medison, Poskom, Vet X-Ray Ultra, Ajex 90-15HF, Sternes Icon 90/20, and the Porta 1030 & 8020 generators) are also available.



Power Cable (10-171):

Connects the TruDR lx™ to any standard U.S. 110W power outlet (Nema 5-15).

Opening the TruDR lx™ Case

1. Press in on the metal pin on each latch to open the TruDR lx™ Case.
With the pin pressed, lift the latch to unlock the case.



2. Open the plate door by pulling up on the silver tab and lifting the cover back.

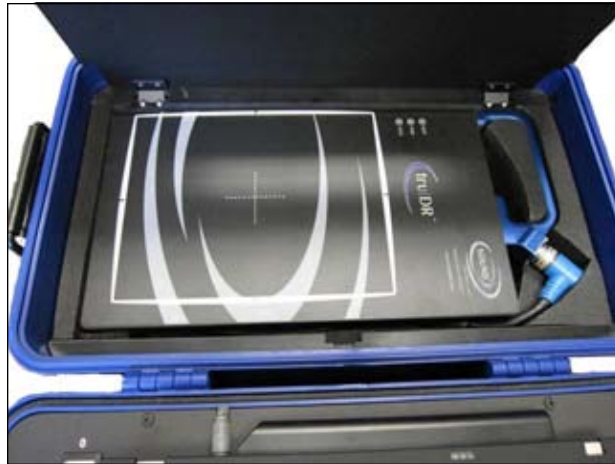


Connecting the Power and Sync Cables

1. Remove the Plate and the Plate Cable.



The plate cable should always remain attached to the plate.



2. Close the Plate storage door and place the plate in the Plate Park in the center of the door.



Connecting the Power and Sync Cables *(Continued)*

3. Twist the knob counter clockwise on the Connector Panel door to reveal the connection ports.



Power Cable



Generator Power Sync Cable



ODU Plate Cable



Connecting the Power and Sync Cables *(Continued)*

4. Connect the ODU Plate Cable by aligning the red dot and notch on the cable with the red dot and notch on the receptacle.



Connecting the Power and Sync Cables

(Continued)

5. Connect plate cable to the plate if it is not already connected. Twist the lock ring clockwise until it locks in place.



Connecting the Generator



The power sync cable should stay connected to the generator and should be stored in the generator box.

1. Plug the Generator Power Sync Cable into the generator by connecting the power adapter to the power port on the generator.



2. Plug the hand switch end of the Generator Power Sync Cable into the generator's hand switch port.



If using the system Internationally or on a 220 power, any device plugged into the side power must be able to handle 220.

Connecting the Generator *(Continued)*

3. Plug the Lemo cable on the Generator Power Sync Cable into the case by lining up the red dot on the Lemo cable to the top of the connector. To release the connector, pull out on the ring.



4. Plug the power cable into the case.



Powering up the TruDR lx™ System

1. Plug the female end of the power cable into the power cable slot on the TruDR lx™ box. Plug the other end into a grounded power outlet (see page 2 Power Requirements).



2. With the cables connected, turn on the TruDR lx™ by pressing the white ON switch to "I" (O = off, I = on) located in the upper left corner. The battery light on the laptop will light up, showing power to the unit.

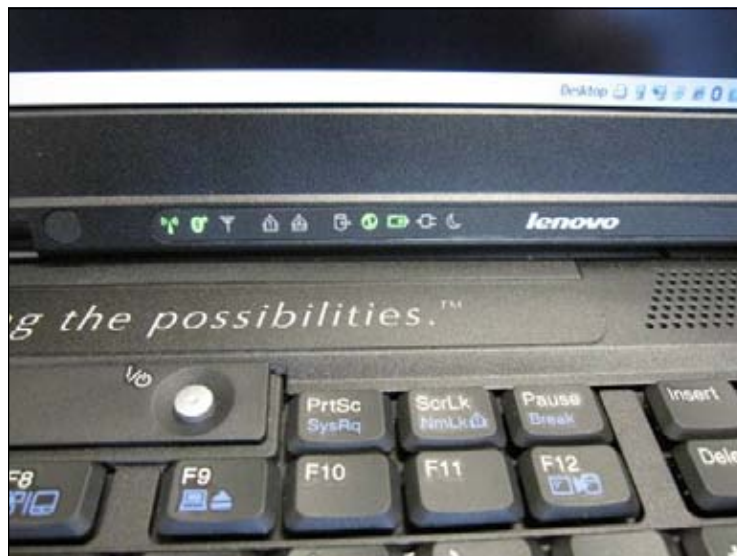


Powering up the TruDR Ix™ System *(Continued)*

3. Open the computer by sliding the gray clip on the front edge to the right and lifting the lid.




4. Turn on the laptop by pressing the **Power**  button on the keyboard.



Opening TruDR Ix™ Software

Open the TruDR Ix™ software to begin the process of taking a radiograph.

1. Double-click the TruDR Ix™ icon  on the desktop. This will load the TruDR Ix™ software for acquiring digital radiographs.
2. Enter the user name and password when the login screen appears.

The default login is:

User Name: admin

Password: admin



The software will load directly into the Patient Screen if the “Remember Me” box is checked.

A screenshot of the TruDR login interface. On the left is the TruDR logo with the text 'tru|DR™' and 'DIGITAL RADIOGRAPHY' below it. Below the logo is the instruction 'To begin, enter your user name and password'. On the right, there are two input fields: 'User Name:' containing 'admin' and 'Password:' containing six dots. To the right of the password field is a 'Login' button. Below the password field is a checked checkbox labeled 'Remember Me'.


Searching and Adding Patients

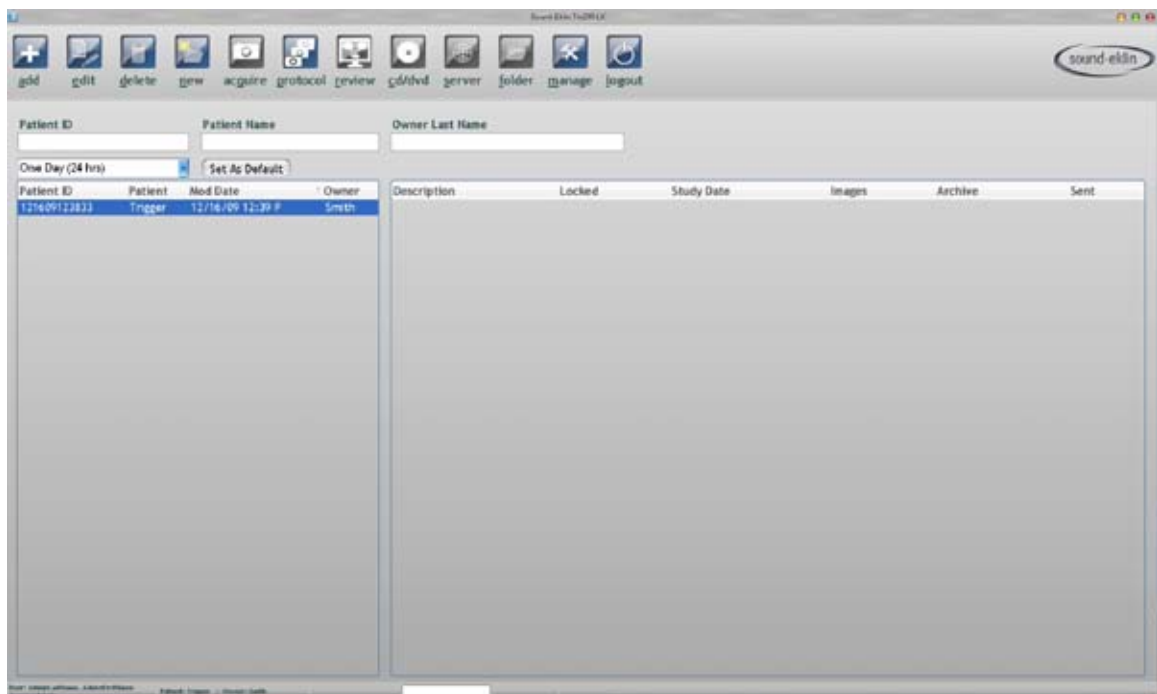
Search for existing patients or add new patients easily by using the filtered search fields.

1. Search for a patient in the Patient Screen by entering the **Patient ID**, the **Patient Name**, or the **Owner Last Name**. The patient list will automatically filter as you type.







Patient list is displayed based on the User Selected Default.

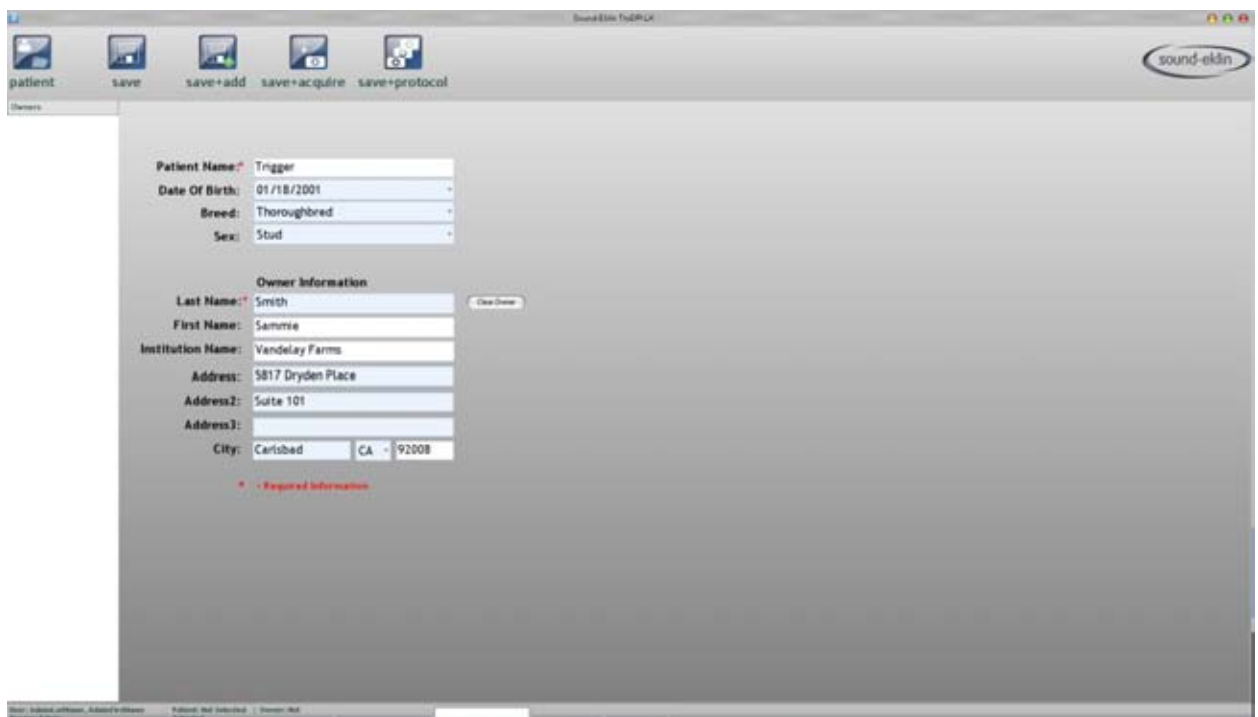
2. If you do not see the patient you are searching for, click the **Add** button  or press the Enter key on the keyboard to bring up the Add Patient Screen.



Searching and Adding Patients *(Continued)*

3. Enter the patient's information. **Patient Name** and **Last Name** are required fields.
4. Click one of the **Save** buttons.

- Save**  Saves the current patient and returns you to the Patient Screen.
- Save+ Add**  Saves the current patient and returns to the Add Patient Screen.
- Save+ Acquire**  Saves the current patient then opens the Anatomy/ Protocol Screen.
- Save+ Protocol**  Saves the patient and brings you to the Protocol Screen to select the desired series.



The screenshot displays the 'Sound Ekin T2000 LX' software interface. At the top, there is a toolbar with five buttons: 'patient', 'save', 'save+add', 'save+acquire', and 'save+protocol'. The main area contains a form for entering patient and owner information. The form fields are as follows:

- Patient Name:** Trigger
- Date Of Birth:** 01/18/2001
- Breed:** Thoroughbred
- Sex:** Stud
- Owner Information:**
 - Last Name:** Smith
 - First Name:** Sammie
 - Institution Name:** Vandelay Farms
 - Address:** 5817 Dryden Place
 - Address2:** Suite 101
 - Address3:**
 - City:** Carlsbad CA 92008


A red asterisk and the text '* Required Information' are located below the form fields. The 'sound-ekin' logo is visible in the top right corner of the window.

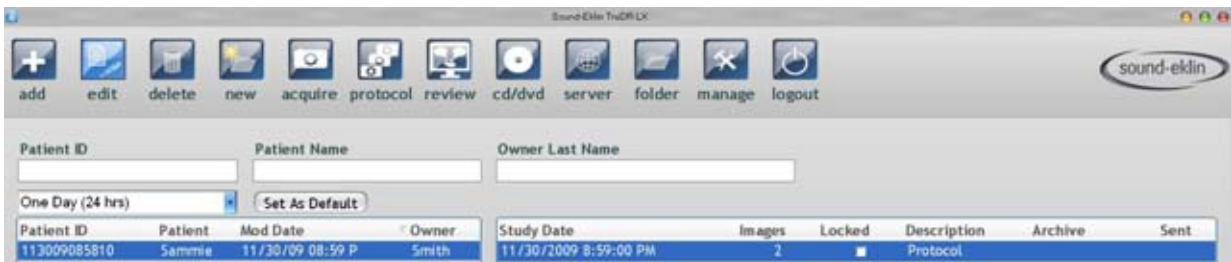
Editing an Existing Patient's Information

Edit an existing patient's information for future DICOM tagging.



Previous exam information can not be changed

1. Select a patient to edit from the Patient Screen.
2. Click the **Edit** button. 



3. Edit the information as needed.




If the patient is from an owner previously entered, owner can be selected from owner list on the left hand side.

4. Click the appropriate **Save** button (see Page 18).

Creating a New Study for an Existing Patient

Create a new study for a patient previously entered in TruDR Ix™ .

1. Search for a patient in the Patient Screen by entering the **Patient ID**, the **Patient Name**, or the **Owner Last Name**. The Patient List will automatically filter as you type.
2. Select a patient by clicking on the name in the **Patient List**.
3. Click the **New** button  to create a new study.

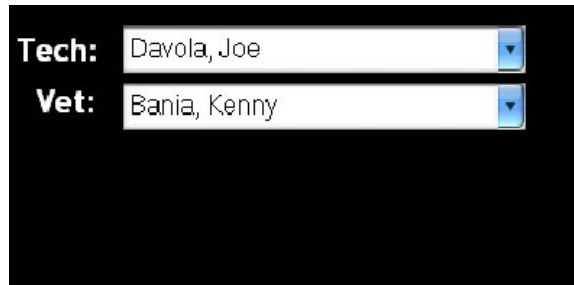


4. Select the anatomy and the view from the Anatomy Screen (see Page 21).

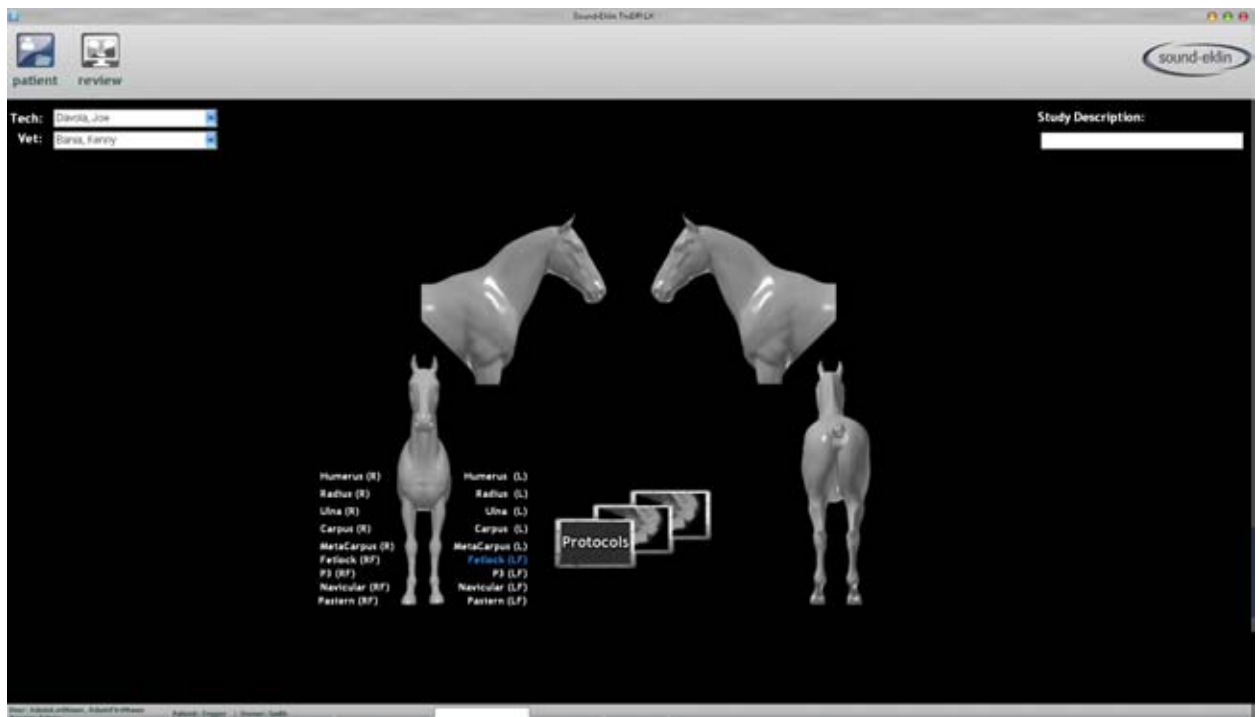
Choosing Anatomy and Positioning

Choose the anatomy and positioning to automatically enhance and position the radiograph.

1. Select the **Tech** and ordering **Vet** from the drop-down menus.

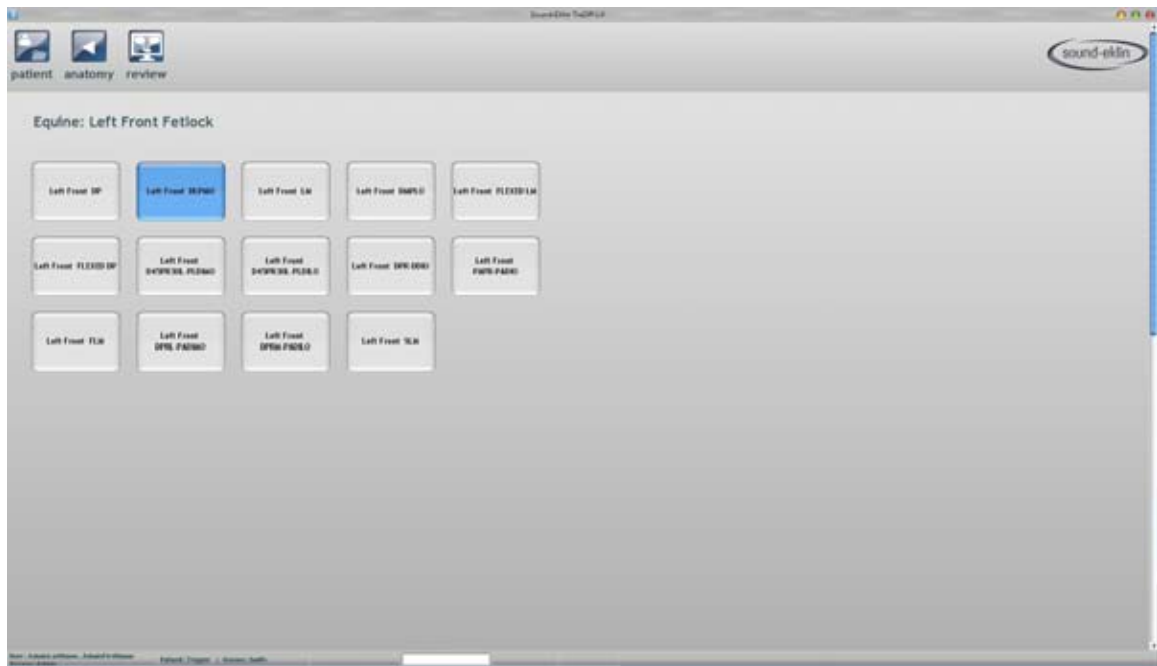


2. Move the mouse over the model to display anatomical region of interest and Select the appropriate anatomy.



Choosing Anatomy and Positioning *(Continued)*

3. Click on the appropriate view button for the exposure. This will bring you to the acquisition screen.



Acquiring Radiographs

1. Set the X-ray generator according to the Sound-Eklin™ Technique Chart using the appropriate kVp and mAs (depending on the X-ray generator).



Due to variations between X-ray generators, optimal techniques may vary somewhat from the values printed on the Sound-Eklin™ Technique Chart.



Users should be fully acquainted with State and local regulations governing radiation protection and the use of diagnostic X-ray equipment as well as the manual for the X-Ray Generator being used.

2. Align the generator 22 inches from the plate using the light beam to fill the entire capture area defined on the plate.



If the generator is aligned perpendicular, the light will form a rectangle with even sides filling the capture area.



The image capture area is highlighted by a white box with the dotted cross-hairs in the middle.



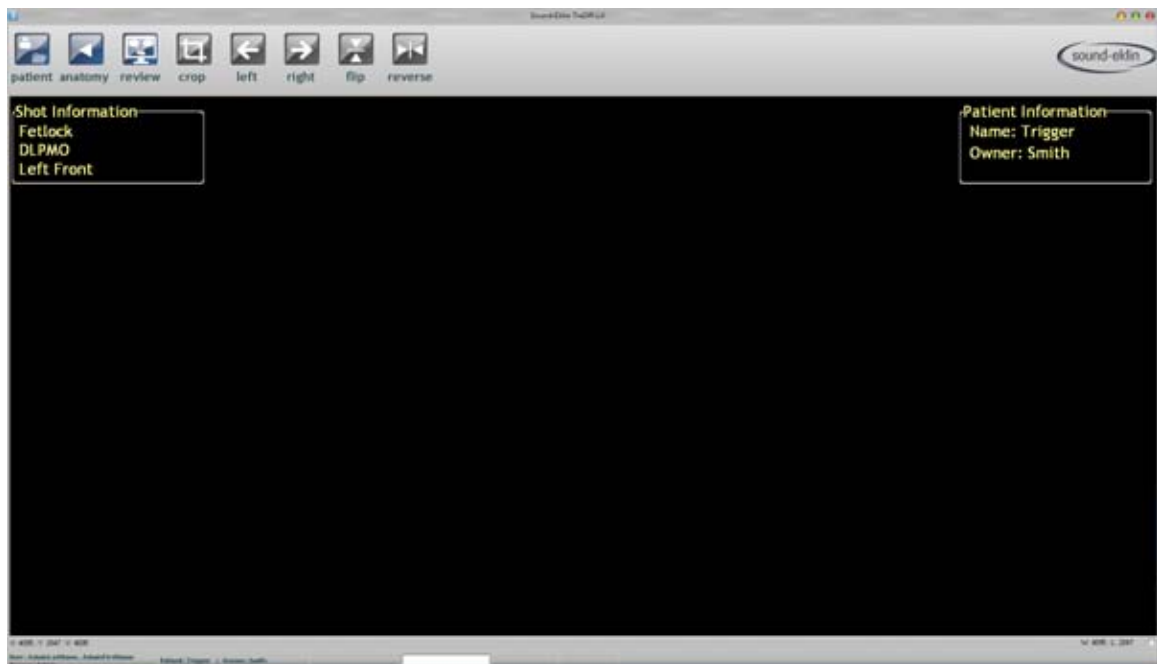
Acquiring Radiographs *(Continued)*

3. From the Acquisition Screen press the hand switch halfway down to prep and all the way down to expose the X-ray machine.



Proper Two-Stage Hand switch Technique

1. *To Prep, push the hand switch halfway down.*
2. *Wait until the Generator is ready to fire (i.e. prep light on the X-ray machine is illuminated, etc.).*
3. *To expose, push the hand switch completely down .*



Acquiring Radiographs *(Continued)*

- The image will appear in less than 3 seconds. Use the **Left**, **Right**, **Flip**, and **Reverse** buttons to make orientation adjustments before shooting the next shot.






Crop the images as needed (see Pages 26-28).



If you need to reshoot your X-ray, press the hand switch and fire again.



- Click the **Anatomy** button  to change views.
- Select the next view from the Views Screen. Click the **Anatomy** button from the Views Screen if another anatomy is needed (see Page 21).
- Click the **Patient** button  to return to the Patient Screen or click the **Review** button. 

Cropping a Radiograph

Remove unwanted portions of the radiograph.

1. Click the Crop button  in the Acquisition Screen.

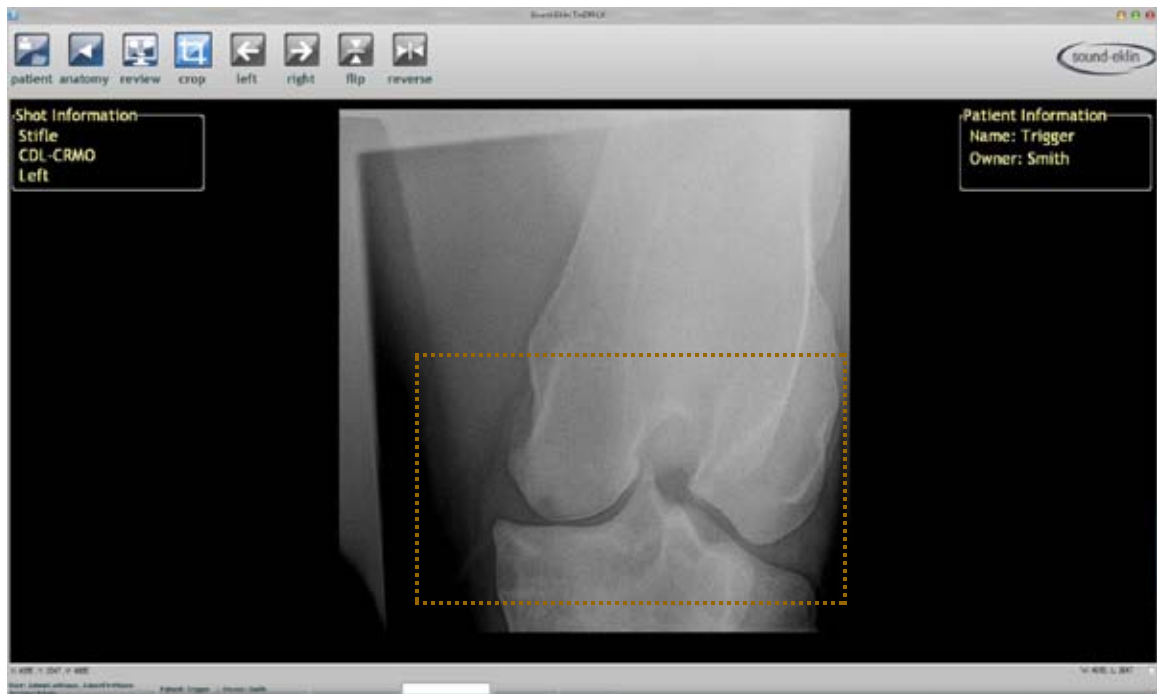


*The new image will appear lighter after clicking the crop button.
The image will enhance once the cropping is complete.*



Cropping a Radiograph *(Continued)*

2. Frame the desired image by holding the left mouse button in the upper left corner of the image and dragging to the lower right hand corner.



Cropping a Radiograph *(Continued)*

3. The image will enhance once it is cropped.



4. Re-crop the image if necessary before taking the next radiograph by pressing the crop button.



Images must be cropped before shooting the next image.

Using Protocols

Shoot a series of X-rays in a preset order which automatically advances to the next shot after each shot taken.

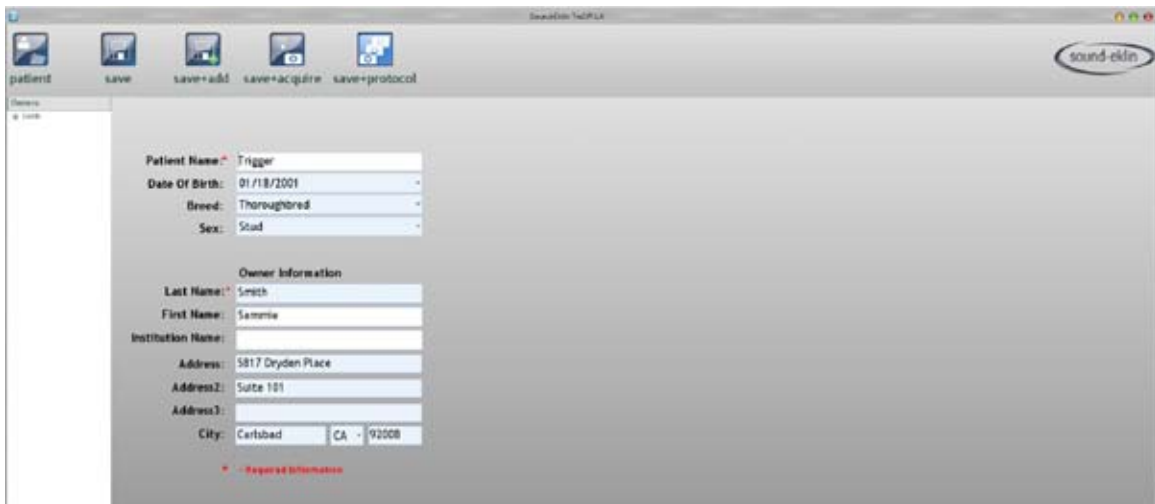
1. From the Patient Screen, select the **Patient** and click **Protocol**.



Or, from the Patient Screen, click **New** and click **Protocol**.



OR, from the Add Patient or Edit Patient screen, click **Save + Protocol**.
(to add a Patient see page 17).



Using Protocols (Continued)

2. Select a Protocol button to begin the protocol series.

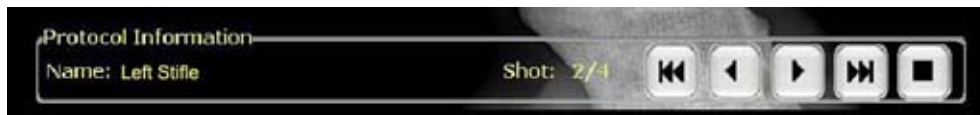
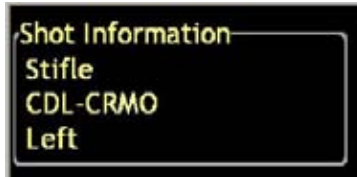


3. The Acquisition Screen now has a Protocol Information bar showing the Protocol shot number. The current Shot Information is located in the upper left portion of the screen.








Using Protocols *(Continued)*

4. Shoot the first image. The software will automatically advance to the next shot in the protocol series. The shot number in the Protocol Information Bar keeps track of the shot sequence, while the current Shot Information appears in the upper left.



5. Use the Protocol Information bar to repeat a shot, skip a shot, restart the protocol, move to the last shot in the protocol, or stop the protocol.

-  Move to the first shot in the protocol series
-  Repeat the previous shot
-  Skip to the next shot
-  Skip to the last shot in the protocol series
-  Stop the protocol

6. Click the **Review** button to open the Review screen (see Page 42).

7. Click the **Patient** button  to return to the Patient Screen.

Adding New Protocols


Create new protocols for your individual studies.

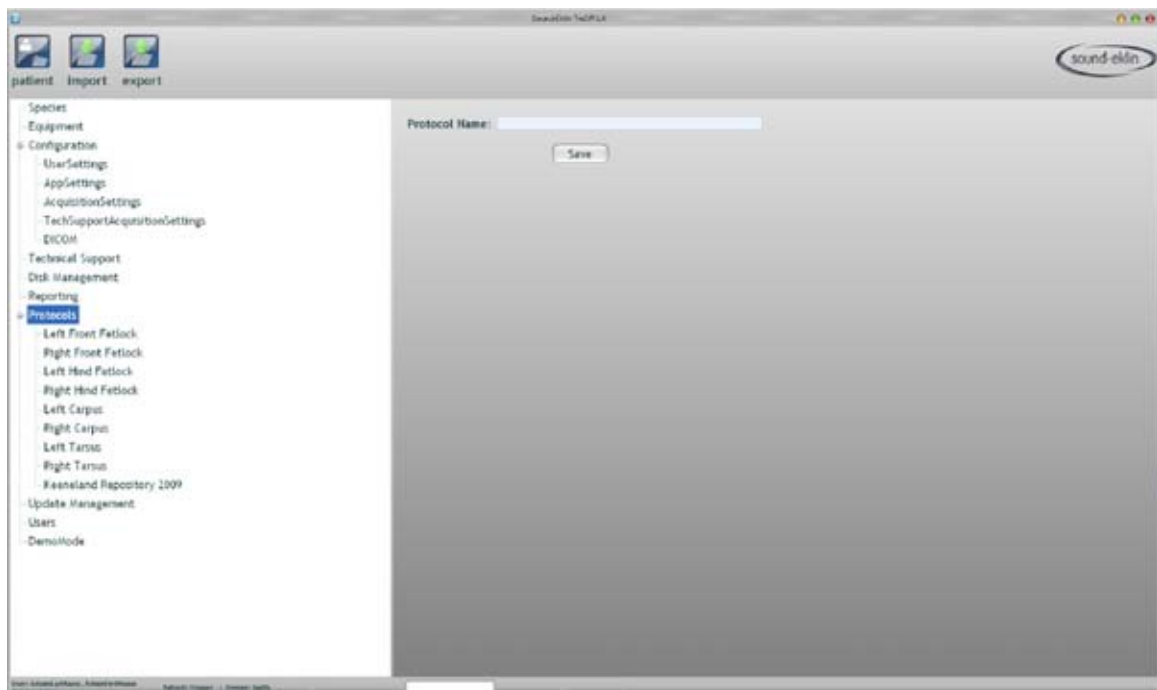
1. Click the **Manage** button  in the Patient Screen.



To access the Manage screen, the user needs to have Administrative rights. Changing items in the Manage Screen other than “Users” and “Protocols” may cause your system to function improperly. If you are concerned about making changes in the Manage Screen, please contact Technical Support at 1-800-268-5354.

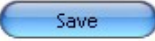


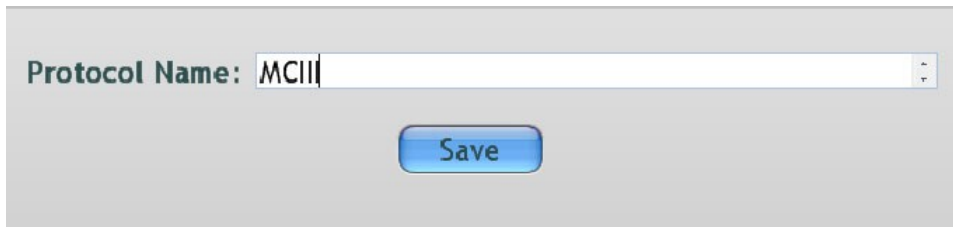
2. Click on the **Plus Sign**  next to the Protocols List to show the existing protocols.
3. Select the **Protocols** menu from the left side of the screen to load the Protocol Screen.



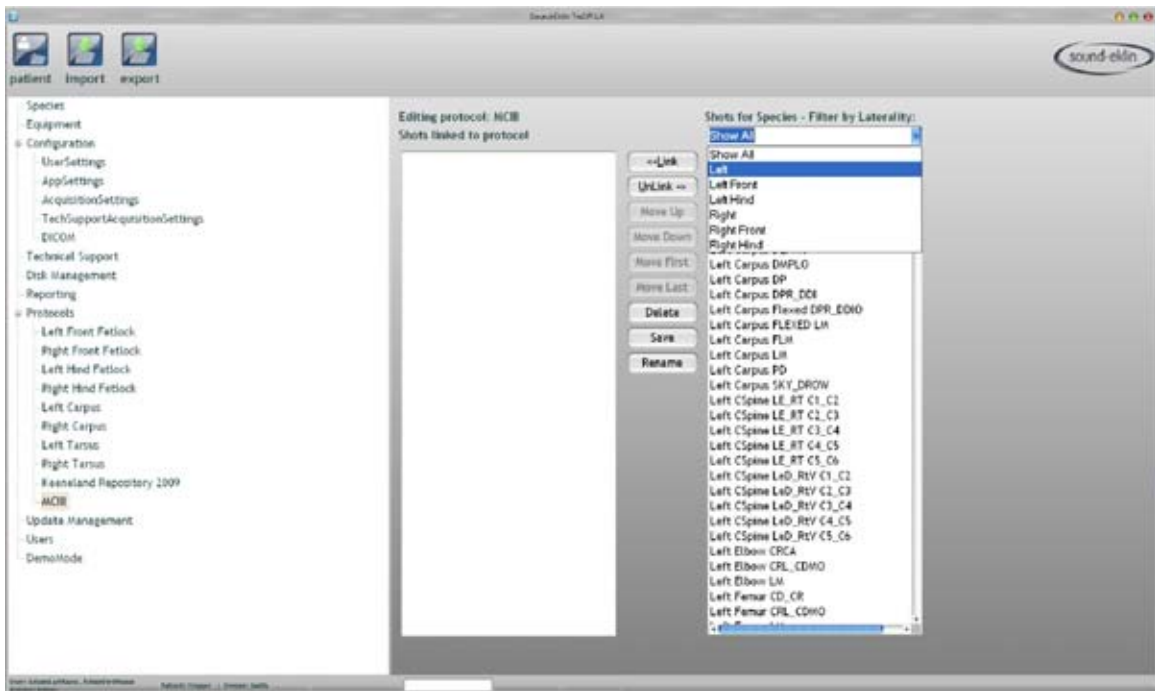
Adding New Protocols *(Continued)*

4. Enter the name of your new protocol in the **Protocol Name** field.

5. Click the **Save** button. 

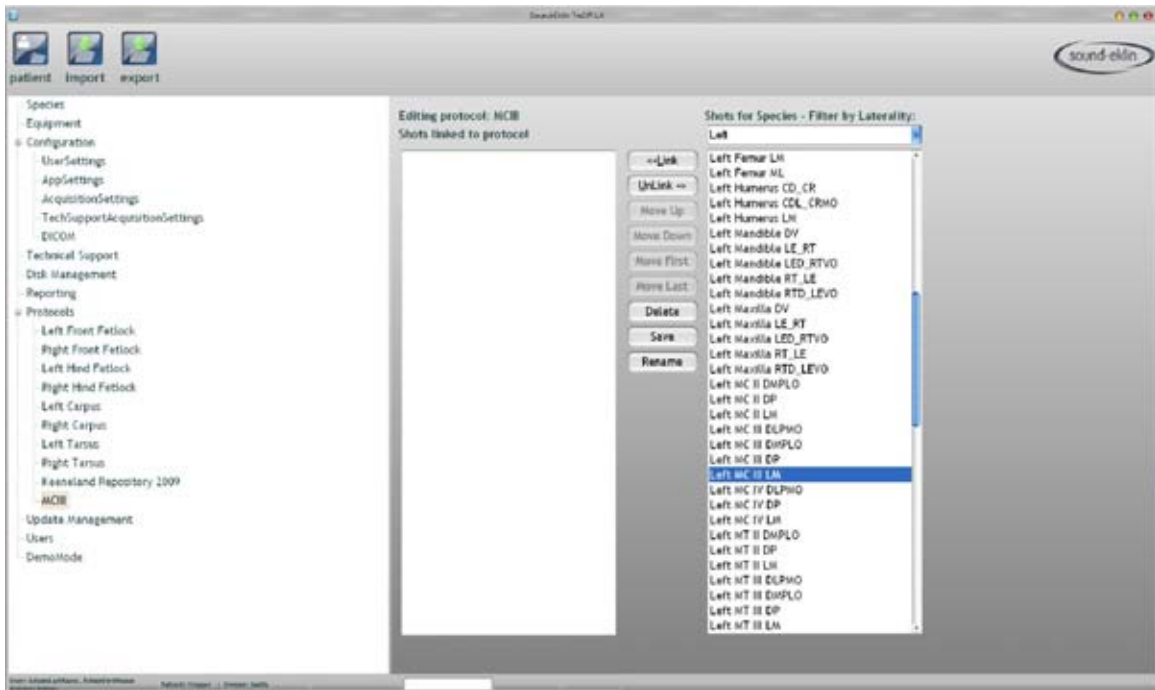



6. Filter the shots as necessary by selecting the **Filter by Laterality** drop down menu.

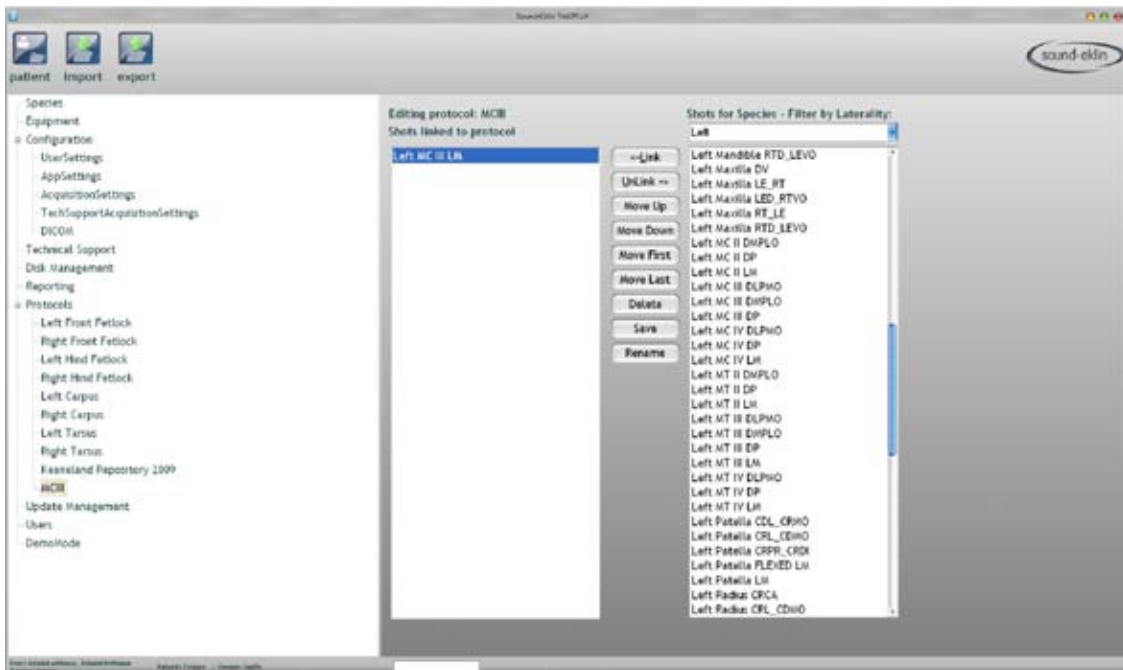


Adding New Protocols (Continued)

7. Select the first shot from the Shots for Species list.


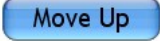

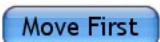
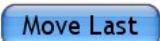




8. Click the Link button  to add the shot to the Shots Linked to Protocol box.



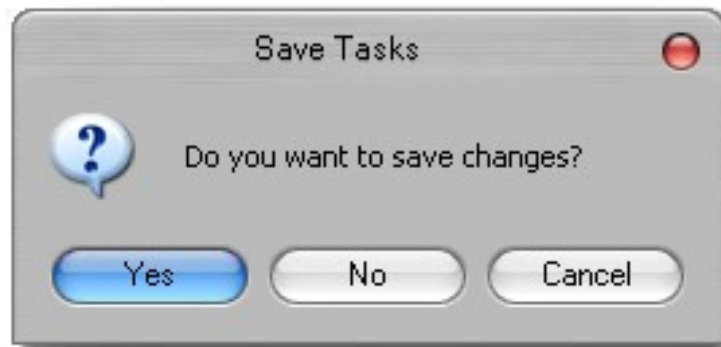
9. Repeat step 6 through 8 as necessary.

Adding New Protocols *(Continued)*

10. Click the **Unlink** button  to remove any shots from the **Shots Linked to Protocol** box.
11. Select a shot in the **Shots Linked to Protocol** box and change the order using the **Move Up**, **Move Down**, **Move First**, and **Move Last** buttons.
 -  Moves your protocol shot up one shot in the series.
 -  Moves your protocol shot down one shot in the series.
 -  Moves your protocol shot from its location to the first shot in the series.
 -  Moves your protocol shot from its location to the last shot in the series.
12. Click the **Save** button  to save your protocols.
13. Click the **Patient** button  to return to the Patient Screen.



If you have forgotten to save your protocols, a Save dialogue box will appear. Click the Yes button to save your changes and return to the Patient Screen.



Editing Existing Protocols


Edit current Protocols to customize them to your shot series.

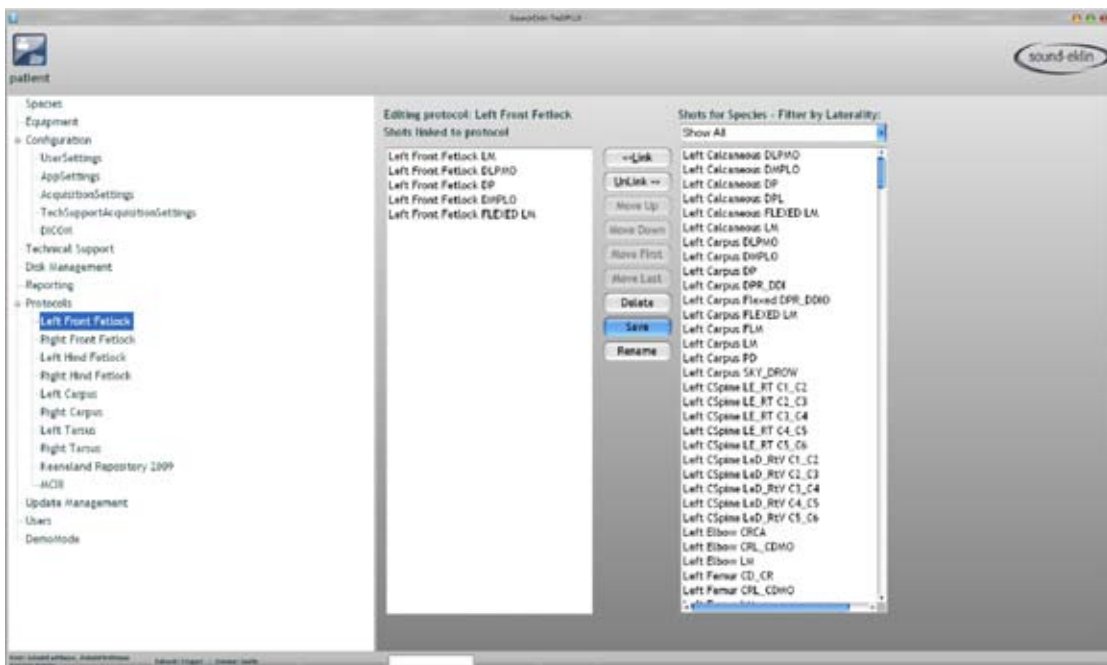
1. Click the **Manage** button  in the Patient Screen.



To access the Manage screen, the user needs to have Administrative rights. Changing items in the Manage Screen other than “Users” and “Protocols” may cause your system to function improperly. If you are concerned about making changes in the Manage Screen, please contact Technical Support at 1-800-268-5354.



2. Click on the **Plus Sign**  next to the Protocols list to show the existing protocols.
3. Select a **Protocol** to edit from the left side menu, make changes and click **Save**.



4. Continue with Step 8 on Page 34.



Closing the LX software and re-opening is required to save protocol database changes.

Renaming Protocols


Rename current protocols.

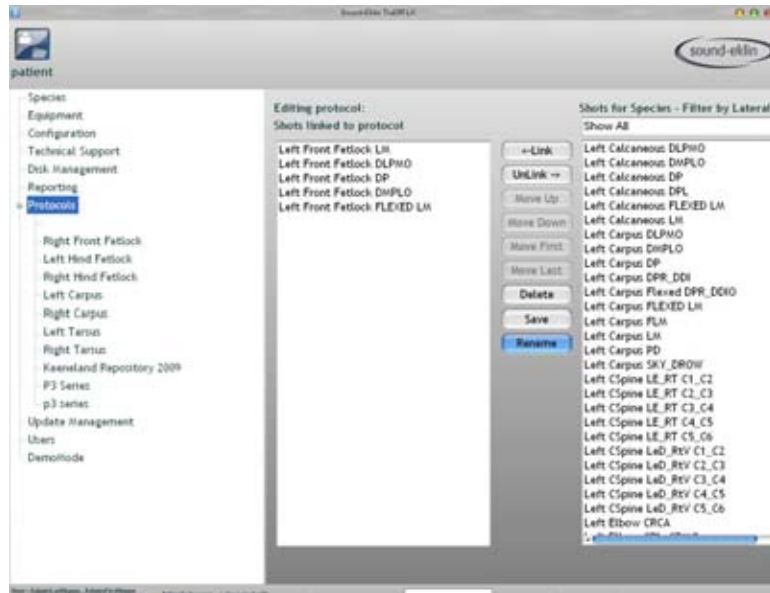
1. Click the **Manage** button  in the Patient Screen.



To access the Manage screen, the user needs to have Administrative rights. Changing items in the Manage Screen other than “Users” and “Protocols” may cause your system to function improperly. If you are concerned about making changes in the Manage Screen, please contact Technical Support at 1-800-268-5354.

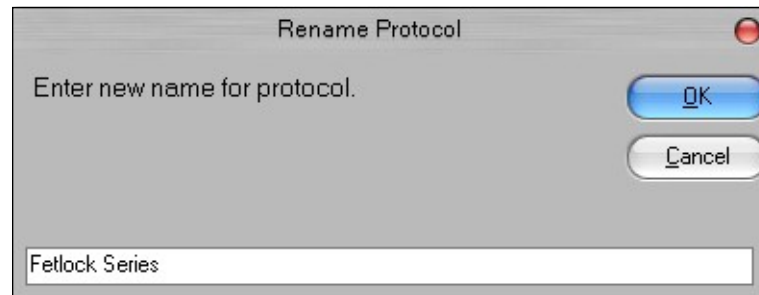



2. Click on the **Plus Sign**  next to the Protocols List to show the existing protocols.
3. Select the **Protocol** to rename from the left side menu click the **Rename** button.

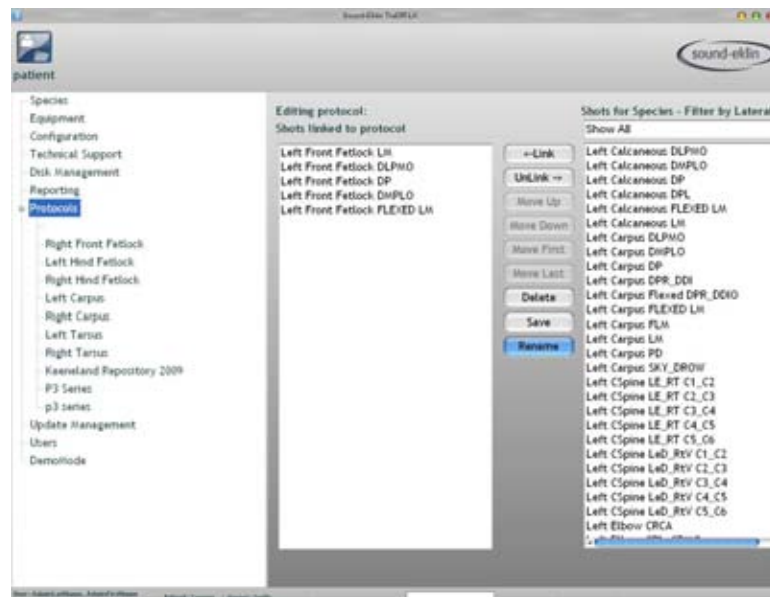


Renaming Protocols *(Continued)*

4. Rename the protocol in the text box and click the **OK** button when finished.



5. Restart the TruDR Ix™ software by clicking the close button in the upper right hand corner. 



Deleting Protocols


Delete current protocols.

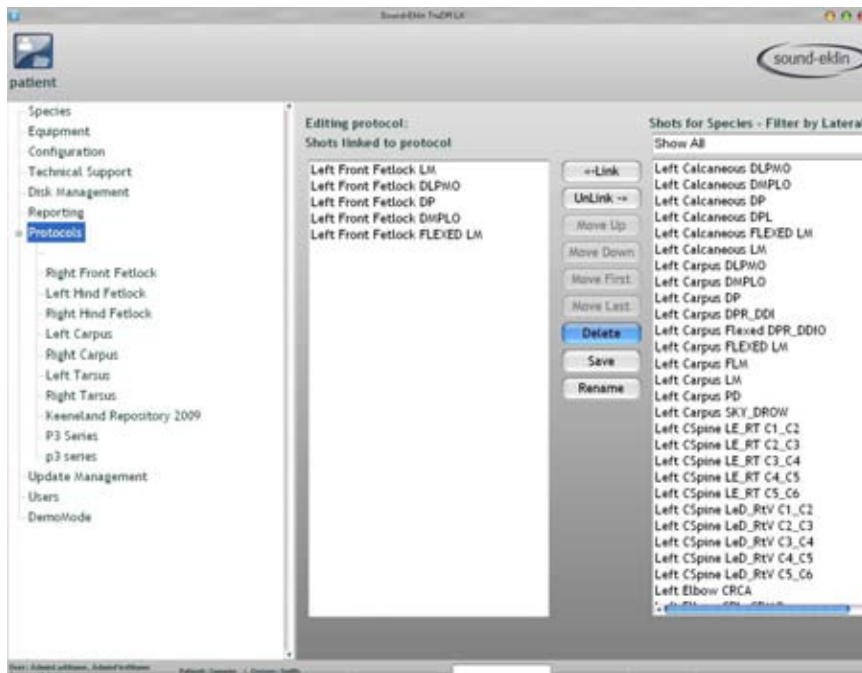
1. Click the **Manage** button  in the Patient Screen.



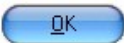
To access the Manage screen, the user needs to have Administrative rights. Changing items in the Manage Screen other than “Users” and “Protocols” may cause your system to function improperly. If you are concerned about making changes in the Manage Screen, please contact Technical Support at 1-800-268-5354.




2. Click on the **Plus Sign**  next to the Protocols List to show the existing protocols.
3. Select the **Protocol** to delete from the left side menu click the **Delete** button.



Deleting Protocols *(Continued)*


4. Click the **OK** button  to permanently remove the protocol.



5. Restart the TruDR Ix™ software by clicking the close button in the upper right corner. 

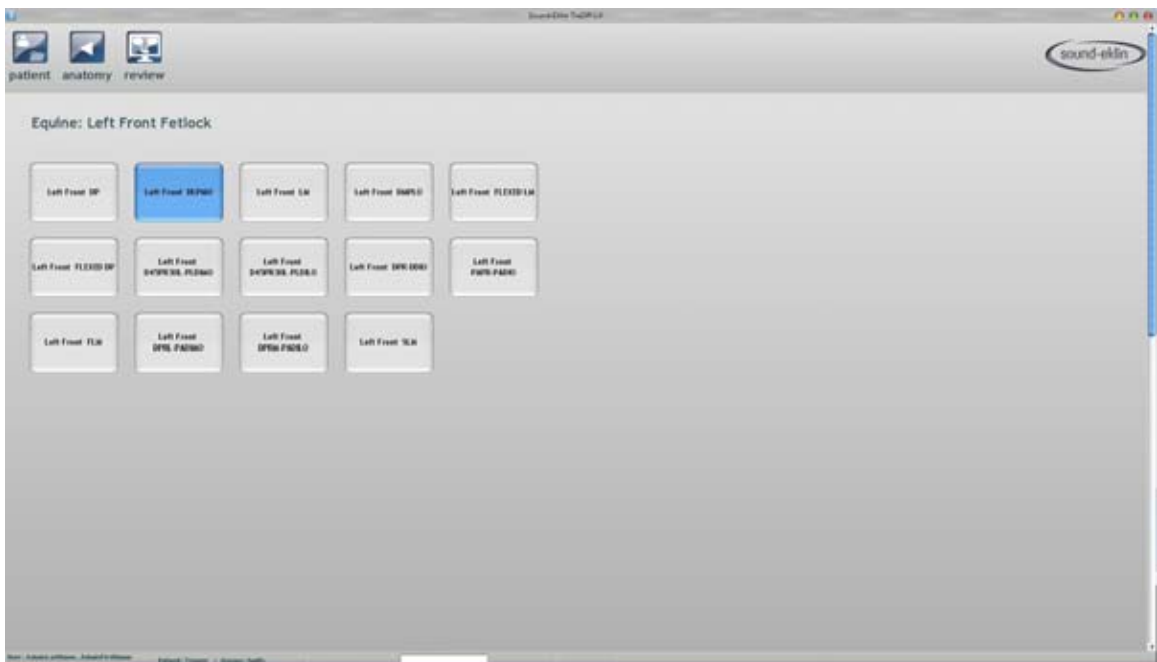
Adding New Images to an Existing Study

Add new images to an existing patient's study.

1. Search for a patient in the Patient Screen by entering the **Patient ID**, the **Patient Name**, or the **Owner Last Name**. The Patient List will automatically filter as you type.
2. Click the **Acquire** button. 




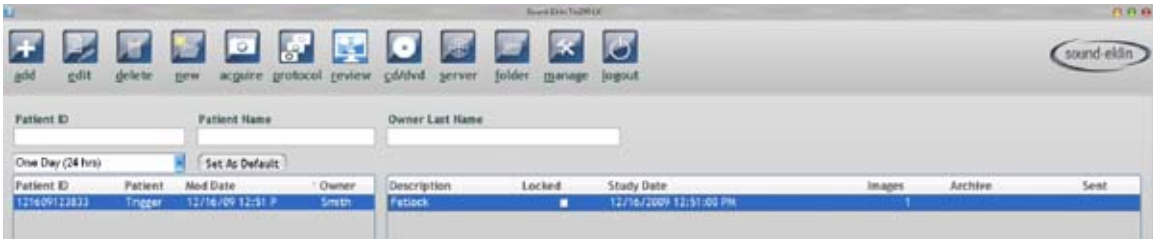
This will take you to the Views Screen using the anatomy you selected from the original study. This is shown in the description field.



Reviewing a Study

Change the layout or delete any unwanted images before the study is archived on the Storage Station.

1. Select a patient by clicking on the name in the **Patient List**.
2. Click on the Study from the list on the right.
3. Click the **Review** button. 



4. Select a thumbnail in the left-hand pane to load the image into the review pane on the right. The selected image is highlighted by a yellow box.



5. Review the images by using the following techniques:
 - Zoom:** Use the LEFT and RIGHT arrow keys. Hold the arrow keys down for continuous zoom.
 - Pan:** Click and hold the left touch pad button and move your finger across the touch pad.
 - Window Level:** Click and hold the right touch-pad button then move your finger diagonally across the touch pad.

Reviewing a Study *(Continued)*

6. Use the toolbar for advanced review features.



Patient: Returns to the Patient Screen.



New: Opens the Anatomy/Protocol Screen for creating a new study or protocol.



Acquire: Opens the Views Screen using the anatomy you selected from the original study.



Anatomy: Opens the Anatomy/Protocol Screen to select a new view to add into the same study.



Save: Saves the image with any changes that have altered the original image.



Warning message will appear to choose “Yes” to overwrite (replace) the image or “No” to create a new (additional) image.



Delete: Removes any unwanted images.



Deleting an image permanently removes it from the computer.



Revert: Reverts to the original image.



Left: Rotates the image 90° counterclockwise.



Right: Rotates the image 90° clockwise.



Flip: Flips the image vertically.



Reverse: Flips the image horizontally.



Magnify: Activates the magnifier which will zoom on the selected area.



Actions: Shows a drop-down menu with additional review features.



Win Level: Selects the window level feature (also accessible by using the right mouse button).



Invert: Inverts blacks and whites, replicating a fluoroscopy.



Pan: Pans the image (also accessible by using the left mouse button).



Crop: Trims an image without applying enhancements.



In the Review Screen, cropping does not re-enhance the image based on the captured area. It only trims the image without re-enhancing the image.

Reviewing a Study *(Continued)*



Annotations: Shows a drop-down menu with annotations.



Display: Displays the annotations.



Hide: Hides the annotations.



Add: Adds annotations to the image using the Annotation Toolbar (shown below).



Select: Selects an annotation button or previous annotation.



Line: Click and drag to draw a line.



Rectangle: Click and drag to create a square.



Ellipse: Click and drag to create a circle.



Text: Click and drag a box to open for text to be typed.



Ruler: click and drag to draw a line measurement.



Poly Ruler: Create a measurement using multiple lines by clicking at each point.



Protractor: To measure an angle, click the center of the angle, then click the base line, then click the angle line.



Cross Product: Click and drag to create two perpendicular lines of equal length.



Layout: Click a view box, then click the image to load.



1 Up: 1 image displays on the screen.



2 Up Horizontal: Image windows tile horizontally.



2 Up Vertical: Image windows tile vertically.



4 Up: 4 images display.



Overlay: Opens menu for DICOM text display.



Hide: Hides all DICOM information.



Summary: Displays patient and shot information.




Detail: Displays patient, shot, and additional detailed information.

7. Click the **Patient** button  to return to the Patient Screen.

Burning a CD

Burn a copy of a study to a CD.


1. Search for a patient in the Patient Screen by entering the **Patient ID**, the **Patient Name**, or the **Owner Last Name**. The Patient List will automatically filter as you type.
2. Select a patient and a study. The patient and study are highlighted in a blue box.
3. Click the **CD/DVD** button. 




4. Select either the DICOM or JPEG image format from the **Export As:** drop-down menu.



5. When selecting the DICOM option from Step 4, Click the Add DICOM viewer check box only if the computer does **NOT** have a full DICOM viewer already installed.

 *The options below are unchecked by default.*

- Annotation Burnin** — Imprints annotations made to saved images
- Anonymize Images** — Strips all client and clinic information from the images
- Repository Format** — Places images in a repository folder format
- Add DICOM Viewer** — Adds a DICOM viewer on the CD to view the images on a computer without a full DICOM viewer installed.

 *Efilm Lite and Reveal Lite are optional DICOM viewers to add.*

Burning a CD *(Continued)*

- When selecting the JPEG format from Step 4, select the **Overlay Burnin** options from the drop-down menu:



The default option is set to None:

None: Does not show overlays on the JPEG image

Detail: Shows a detailed DICOM overlay on the JPEG image (shows Image Number, Manufacturers Model Number, Study ID, Image Anatomy, View Position, Image Laterality Extended, Columns X Rows, Technique, Institution Name, Physician of Record, Patients Name, Patient ID, Patient Breed Description, Patients Birth Date, Patients Sex, Acquisition Number, Acquisition Date, Acquisition Time.)

Summary: Shows a summary DICOM overlay on the JPEG image (shows Image Number, Image Anatomy, View Position, Image Laterality Extended, Institution Name, Physician of Record, Patients Name, Patient Breed Description, Patients Birth Date, Patients Sex, Acquisition Date, Acquisition Time).



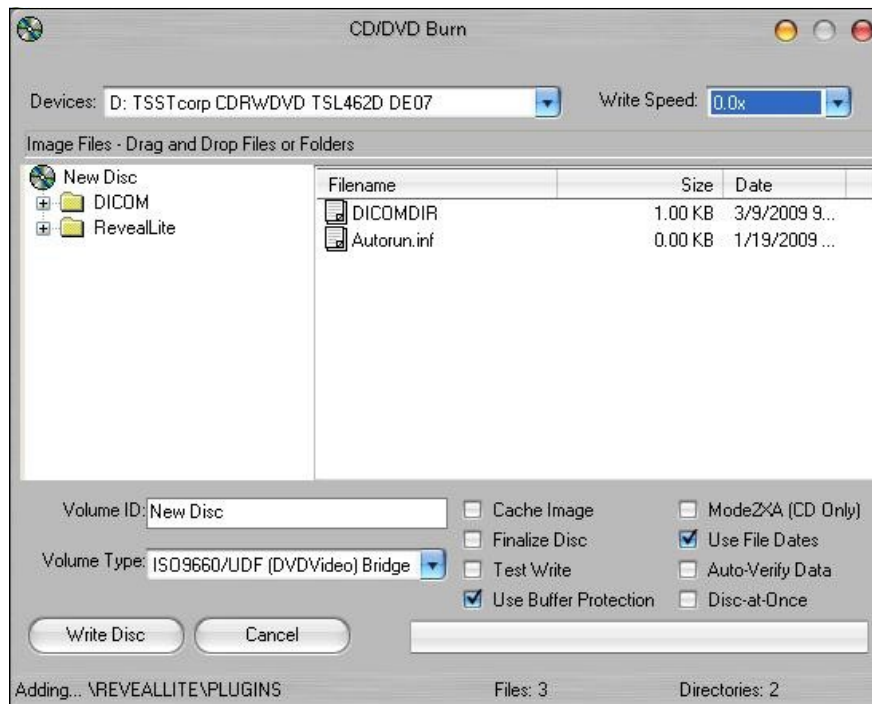
- Click the **Select** button on the Export As dialog box.

Burning a CD *(Continued)*

8. Insert a blank CD (CD-R or CD-RW) into the computer.
9. Click the **Write Disc** button.



The CD burn progress is shown in the lower right hand corner. You will be prompted to remove the disc when the burn is finished.




10. Click the **OK** button to complete writing the CD and remove the CD from the CD-Rom.



Exporting Images to a Folder

Export images from a study to a folder to save on a computer, thumb drive, etc.


1. Search for a patient in the Patient Screen by entering the **Patient ID**, the **Patient Name**, or the **Owner Last Name**. The Patient List will automatically filter as you type.
2. Select a patient and a study. The patient and study are highlighted in a blue box.
3. Click the **Folder** button. 



4. Select either the DICOM or JPEG image format from the **Export As:** drop-down menu.



5. When selecting the DICOM option from Step 4, Click the Add DICOM viewer check box only if the computer does **NOT** have a full DICOM viewer already installed.

 *The options below are unchecked by default.*

- Annotation Burnin** — Imprints annotations made to saved images
- Anonymize Images** — Strips all client and clinic information from the images
- Repository Format** — Places images in a repository folder format
- Create DICOM DIR** — Adds a DICOM directory to quickly import all images into a PACS system.

Exporting Images to a Folder *(Continued)*

- When selecting the JPEG format from Step 4, select the **Overlay Burnin** options from the drop-down menu:



The default option is set to None:

None: Does not show overlays on the JPEG image

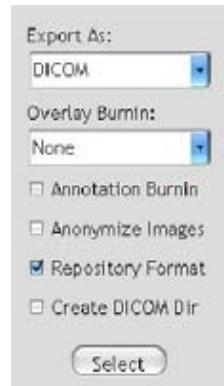
Detail: Shows a detailed DICOM overlay on the JPEG image (shows Image Number, Manufacturers Model Number, Study ID, Image Anatomy, View Position, Image Laterality Extended, Columns X Rows, Technique, Institution Name, Physician of Record, Patients Name, Patient ID, Patient Breed Description, Patients Birth Date, Patients Sex, Acquisition Number, Acquisition Date, Acquisition Time.)

Summary: Shows a summary DICOM overlay on the JPEG image (shows Image Number, Image Anatomy, View Position, Image Laterality Extended, Institution Name, Physician of Record, Patients Name, Patient Breed Description, Patients Birth Date, Patients Sex, Acquisition Date, Acquisition Time).



Exporting Images to a Folder *(Continued)*

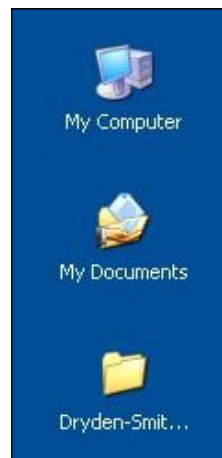
7. Click the **Select** Button



8. Select a location to save the images.



Images are saved to a selected location in a folder with the animals name and the clients last name (e.g. Trigger-Smith).



Transferring Studies to the Storage Station

Transfer the studies from the Acquisition Station to the Storage/Review Station.

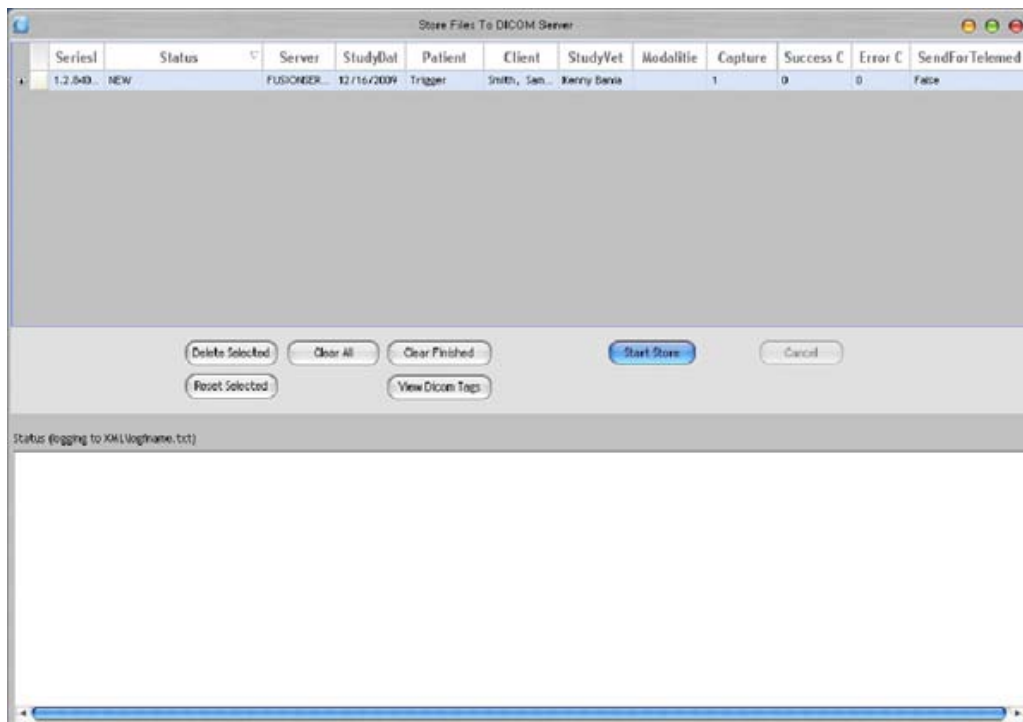


You must have your TruDR lx™ and your TruDR Storage/Review Station networked. Please contact your local IT Person for any networking needs and SoundEklin tech support for configuring DICOM Server for the LX Acquisition.

1. Connect a Cat-5 Internet cable into the Internet port on the computer.



2. Press the F4 key on your keyboard to bring up the Store Files to DICOM Server screen from the Patient Screen.

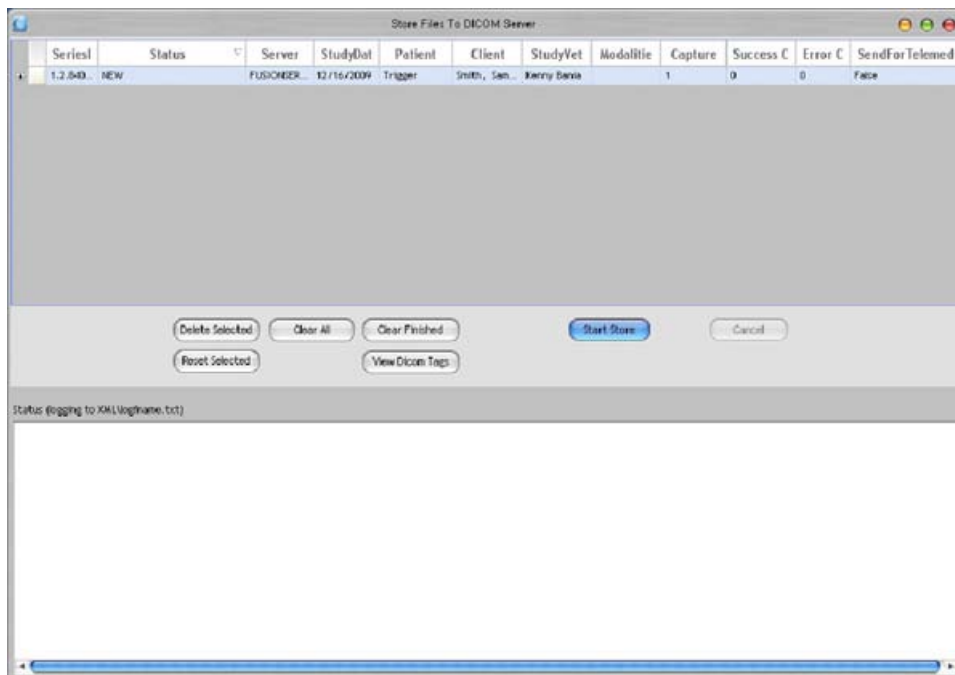


Transferring Studies to the Storage Station *(Continued)*

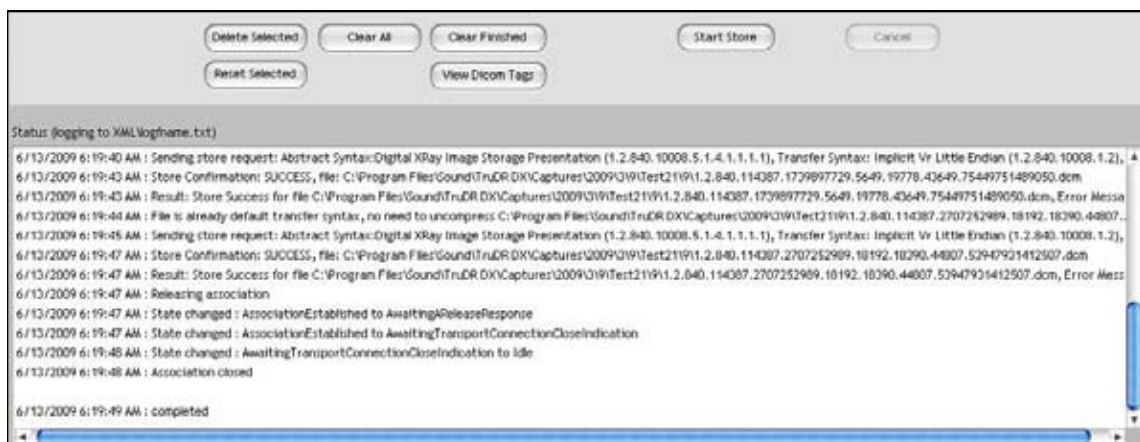
3. Click the **Start Store** button to begin the DICOM image transfer to the Storage Station.



This will store all the studies that were taken since your last transfer and clear the queue. If any studies are missing, you can transfer them individually (see Page 53).




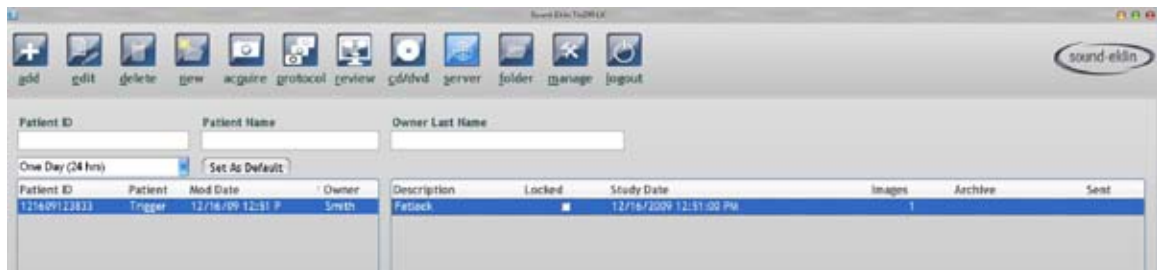
4. Status box displays transfer results. When the status box states “completed”, your images have successfully transferred to the DICOM server. Click the Red close button in the upper right corner to close the screen.




Transferring Individual Studies to the Storage Station

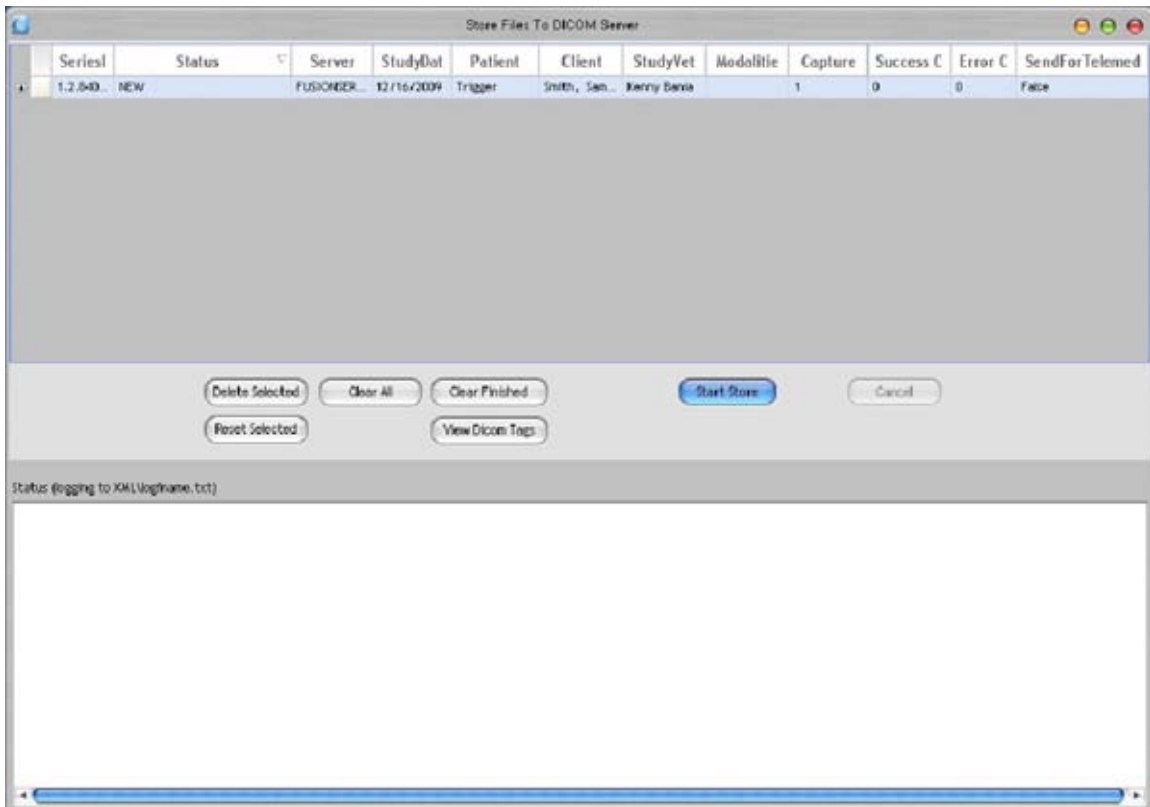
Transfer the studies from the Acquisition Station to the Storage/Review Station.

1. Search for a patient's study by entering the **Patient ID**, the **Patient Name**, or the **Owner Last Name**. The Patient List will automatically filter as you type.
2. Select a patient by clicking on the patient name in the **Patient List** field.
3. Click the **Server** button. 

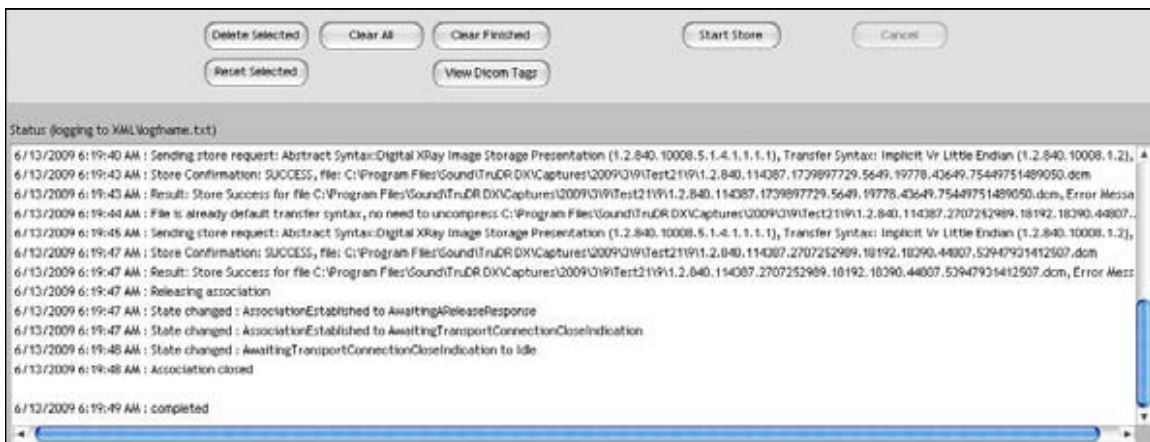


Transferring Individual Studies to the Storage Station *(Continued)*

4. Click the **Start Store** button  to begin DICOM image transfer.



5. Status box displays transfer results. When the status box states “completed”, your images have successfully transferred to the DICOM server. Click the Red close button in the upper right corner to close the screen.



Confirm Storage of a Study

Confirm the study successfully sent to the Storage/Review Station.

1. On the Patient Screen, the Archive field will show a server name (e.g. SOUND-SERV1).
2. Hold the mouse over the server name to show a pop-up window with the transfer data.



The pop-up box displays how many images have been transferred and the date and time of the transfer. The information is color coded for easy reference. If only one study appears, it will be highlighted in blue and the color coding will not appear:

Green Box— Image transfer complete
Red Box — Image transfer failed

Description	Locked	Study Date	Images	Archive	Sent
Abdomen	<input type="checkbox"/>	3/9/2009 8:39:00 PM	1	SOUNDSERV1	
Thorax	<input type="checkbox"/>	3/9/2009 8:38:00 PM	1	SOUNDSERV1	

1 of 1 images archived on: 3/9/2009 9:02:00 PM

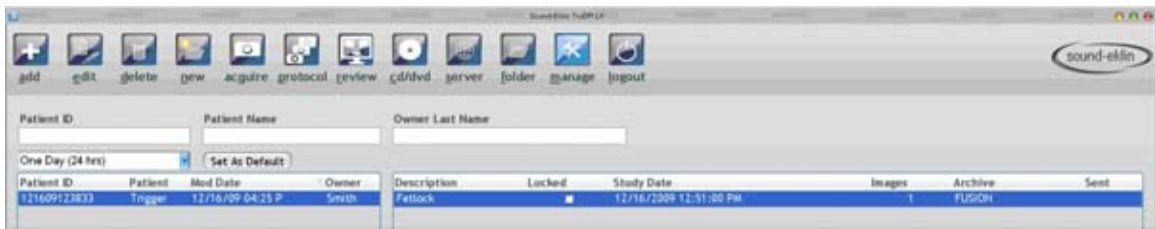
Adding Users

Add veterinarians and technicians to TruDR Ix™.

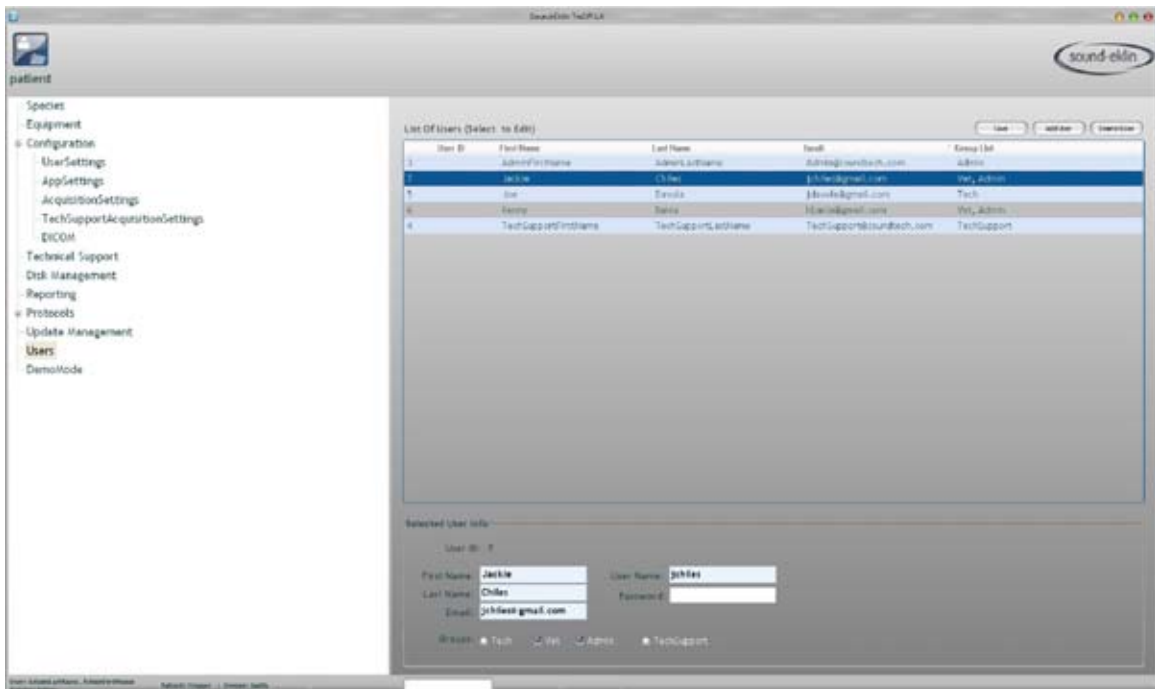
1. Click the **Manage** button  in the Acquisition Screen.



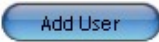
To access the Manage screen, the user needs to have Administrative rights. Changing items in the Manage Screen other than “Users” and “Protocols” may cause your system to function improperly. If you are concerned about making changes in the Manage Screen, please contact Technical Support at 1-800-268-5354.

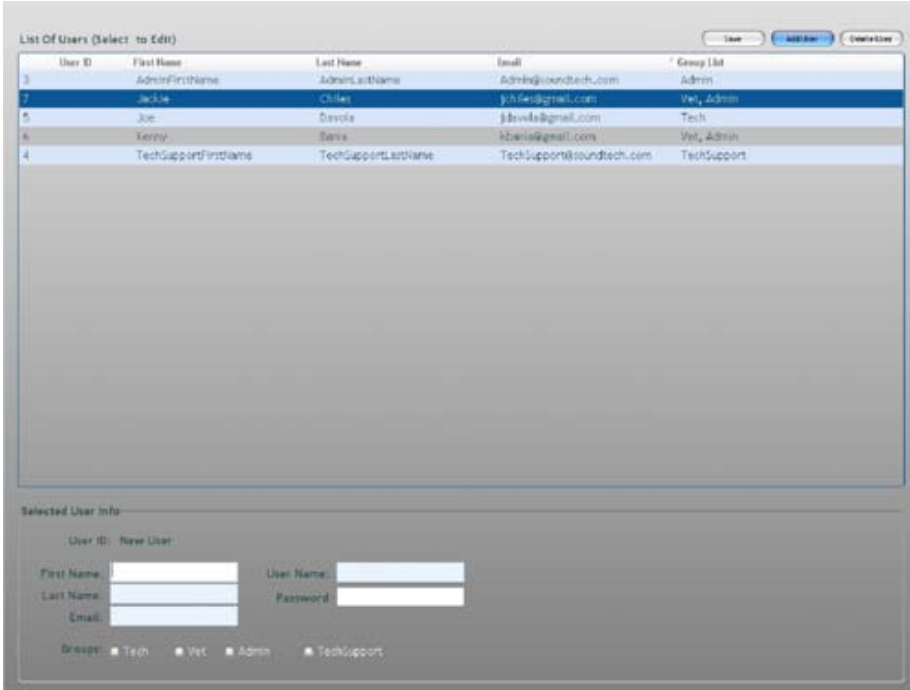


2. Select the **Users** menu from the left side of the screen to load the Users Screen.



Adding Users *(Continued)*

3. Click the **Add User** button  in the Acquisition Screen.



User ID	First Name	Last Name	Email	Group List
3	Admin	Admin	Admin@soundtech.com	Admin
7	Jackie	Chiles	jchiles@gmail.com	Vet, Admin
5	Joe	Savola	jsavola@gmail.com	Tech
6	Kenny	Banks	kbanks@gmail.com	Vet, Admin
4	TechSupport	TechSupport	TechSupport@soundtech.com	TechSupport

Selected User Info

User ID: New User

First Name: User Name:

Last Name: Password:

Email:

Groups: Tech Vet Admin TechSupport

4. Enter the User's name in the **First Name** and **Last Name** fields.
5. Create a unique user name and password in the **User Name** and **Password** fields.



Suggested user name: First initial of your first name plus last name (e.g. jsmith for John Smith). Passwords can be left blank for ease of use.

6. Select a Group or Groups for each user by clicking **Tech** or **Vet**.

Each Group allows different permissions. You may select multiple check boxes per user:

Tech: User is added to the Tech pull down list has no access to the Manage features.

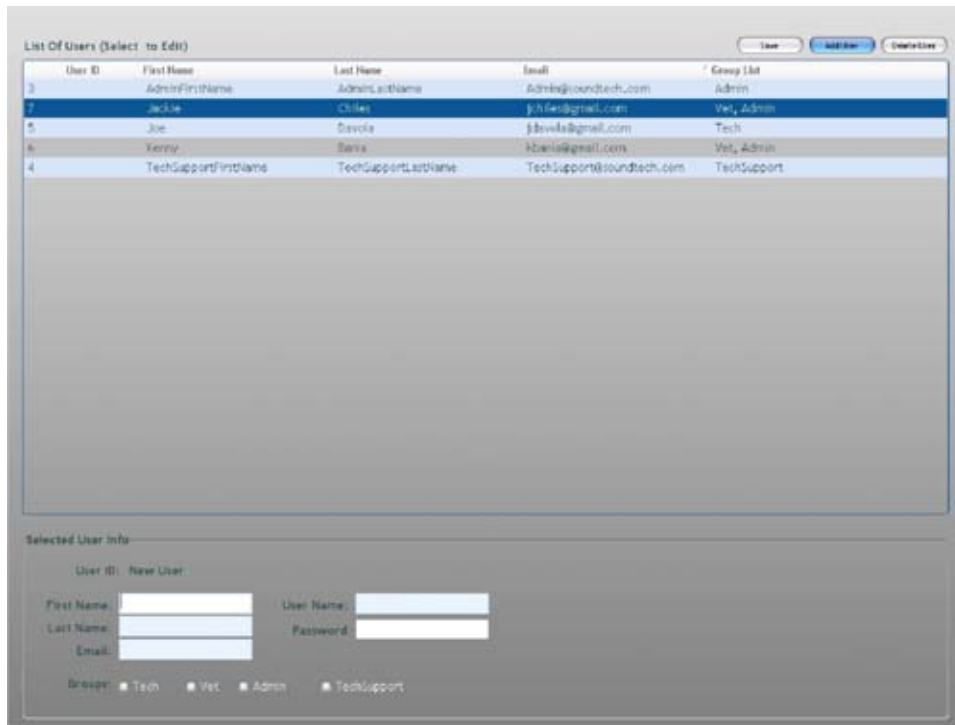
Vet: User is added to the Vet pull down list, has no access to the Manage features.

Admin: Has full access to the Manage features.

Tech Support: Should only be used by Sound-Eklin™ Tech Support

Adding Users *(Continued)*

7. Click the **Save** button  to add the User.



The screenshot shows a web application interface for user management. At the top, there is a title "List Of Users (Select to Edit)" and three buttons: "User", "Add New", and "Delete User". Below this is a table with the following data:

User ID	First Name	Last Name	Email	Group List
3	AdminFirstName	AdminLastName	Admin@roundtech.com	Admin
7	Jackie	Chiles	jchiles@gmail.com	Web, Admin
5	Joe	Devola	jdevola@gmail.com	Tech
6	Kenny	Berra	kberra@gmail.com	Web, Admin
4	TechSupportFirstName	TechSupportLastName	TechSupport@roundtech.com	TechSupport

Below the table is a section titled "Selected User Info" with a "User ID: New User:" label. It contains four input fields: "First Name", "Last Name", "Email", and "Password". At the bottom, there is a "Groups:" label followed by four radio buttons: "Tech", "Web", "Admin", and "TechSupport".

8. Repeat steps 3 through 7 to add additional Users.

Adding and Editing a DICOM Location

Add DICOM server locations for sending images to a Storage Station, Radiologist, etc.

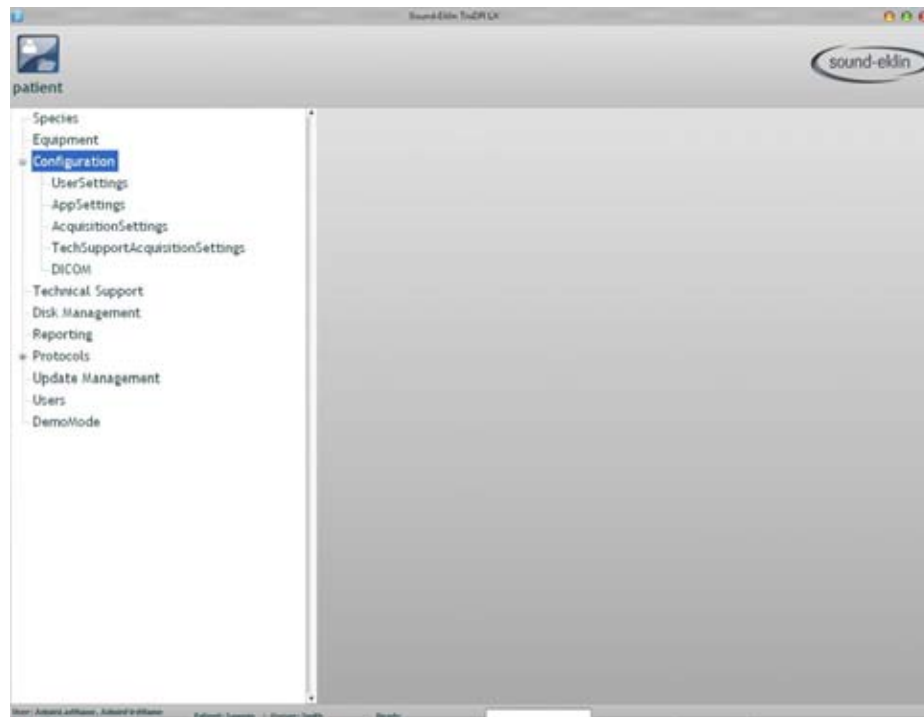
1. Click the **Manage** button  in the Acquisition Screen.



To access the Manage Screen, the user needs to have Admin rights. Changing items in the Manage Screen other than “Users” and “Protocols” may cause your system to function improperly. If you are concerned about making changes in the Manage Screen, please contact Technical Support at 1-800-268-5354.

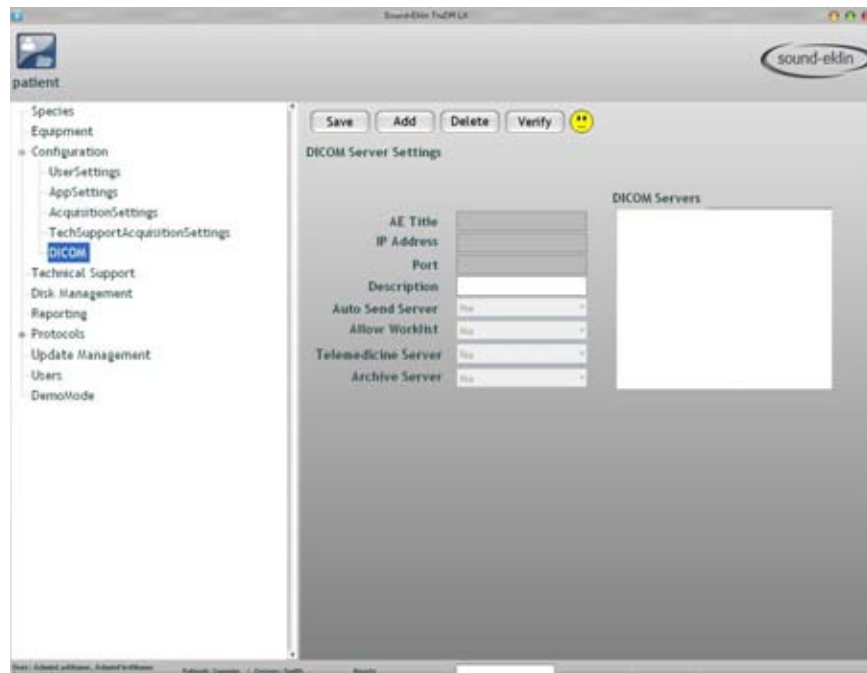


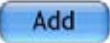
2. Select the **Configuration** menu from the left side of the screen to load the Users screen.



Adding and Editing a DICOM Location *(Continued)*

3. Select the **DICOM** button from the left to bring up the DICOM Server Screen.



4. Click the **Add** button  to add a new DICOM server. Or if editing select the existing DICOM server from the DICOM Servers list on the Right.
5. Enter the **AE Title**, **IP Address**, and **Port** number for your DICOM server. OR if editing enter the corrected **AE Title**, **IP Address**, and **Port** number for your DICOM server.



Contact Sound-Eklin™ Technical Support or the location you are sending the DICOM images for the appropriate DICOM provider information.

Adding and Editing a DICOM Location *(Continued)*

6. Select additional information by choosing **Yes** from the drop-down menus.



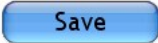

Only select the following options if you are directed to do so by a Technical Support representative:

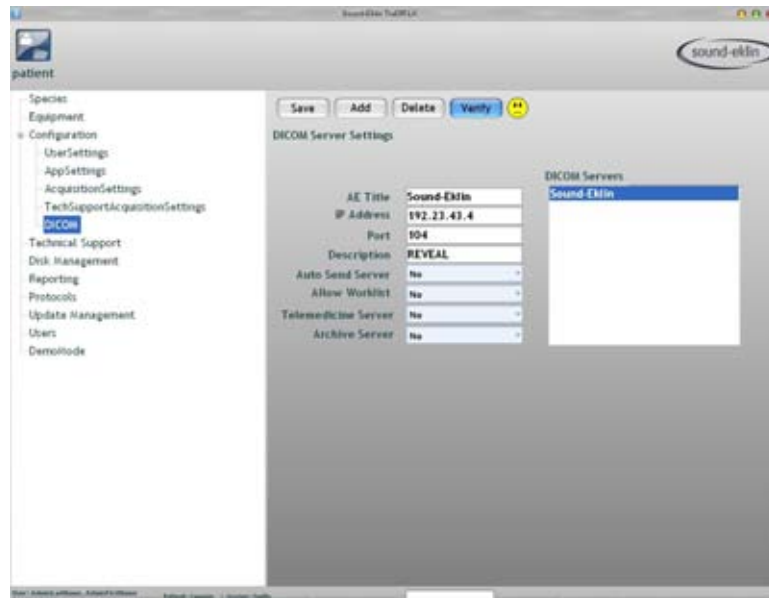
Auto Send Server: Automatically sends images to the selected DICOM location.


Allow Worklist: Designates the DICOM location as a worklist modality.

Telemedicine Server: Designates the DICOM location as a telemedicine server.

Archive Server: Designates the DICOM location as an archive server.

7. Click the **Save** button  to save the current information.
8. Click the **Verify** button  to verify that you can connect to the DICOM Server.



9. A smiley face  will appear when you have verified the connection to the DICOM Server.



If a frowning face appears, please contact Sound-Eklin™ Technical Support (1-800-268-5354).

10. Click the **Patient** button  to return to the Patient Screen.

Gain Calibration

Calibrate the X-ray Generator and the plate.



Before beginning, make sure the LX software is closed and that there is nothing on the digital panel. Remove any X-ray grid that is directly on the panel.

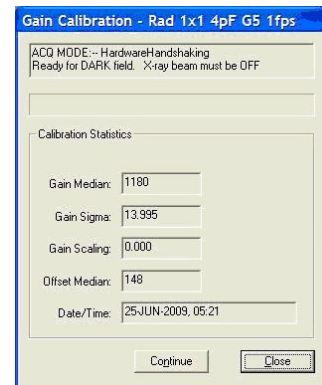
1. Manually set the X-ray machine to the following settings and open the collimator to it's full size:
 - 62 KVP
 - 10 seconds
2. Set the collimator 40 inches (102 cm) from the plate and ensure that the light field covers the entire plate.
3. Open the Viva program from the desktop using **START > Varian > Paxscan > Viva.**
4. Click the **OK** button on the status window when the program opens.



5. Click the **Acquisition** menu from the toolbar menus on top and select **Gain Calibration.**
6. Click the **Continue** button when the pop-up window appears.

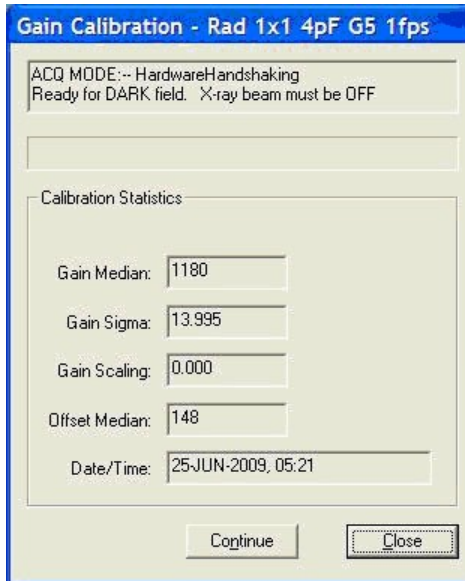


The software will automatically begin an offset calibration that will last about one minute.



Gain Calibration *(Continued)*

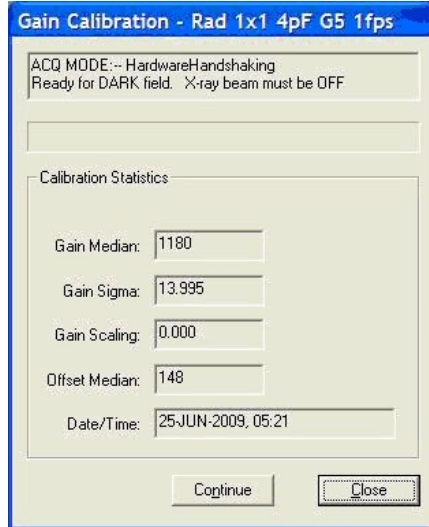
7. Shoot an X-ray when the screen prompts you to “Initiate X-ray exposure number: 1”.



8. Shoot again when prompted until you have reached a total of 8 shots.
9. Click the **Finish** button when the status box reads “Finish” OR “Initiate Next Exposure (#9)”.

Gain Calibration *(Continued)*

10. Read the Gain Median in the pop-up window. The number should be between 1000 to 1500.



11. If the Gain Median is not between 1000 and 1500, repeat steps 7-10 using a different technique.



Whether to increase or decrease your technique

Gain Median is lower than 1000: raise the technique

Gain Median is higher than 1500: lower the technique

12. Click the **Acquisition** menu from the toolbar menus on top, and select **Acquire Image**.



13. When the text box pops up, shoot an X-ray using the same technique you used to determine your gain median.
14. Examine the image to make sure it is a uniform milky-gray color.
15. Close the Viva software and open the **TruDR Ix™** software to begin shooting.



a VCA ANTECH company

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