






## SmartDR Training Curriculum

Training videos are located at: <http://install.soundvet.com/training#smartdr>  
Training help and FAQs can be found at: <http://installer.soundvet.com/training/>

### Part 1 – Setting up the Study

#### Main Patient Screen

##### Primary Icon Overview

-  ○ Plate Connectivity Status icon - Indicates panel connectivity
-  ○ Icon Help, Training and Suggest a Feature
-  ○ Management Screen icon – Generally used by the clinic only for shutting down the acquisition PC


#### Add/Search for Patients: Workflow

##### Search for Patient Manually

- Be sure Patient, Owner and Patient ID fields are **BLUE** by selecting them individually
  - Type patient information within search bar and **CLICK** the search icon
    - Note: Pressing “Enter” does not work.




##### Create New Study for Existing Patient


-  ○ If patient *is* found in search – click on patient bar to expand and display available studies, then click New Study icon by patient name. This will directly take you to select views in the Shot List screen



##### Create New Patient

-  ○ If patient *is not* found in search – click New Patient icon to add patient information before selecting views for shotlist

##### Search for Patient via Modality Worklist (Only if applicable)

-  ○ Click Worklist Search icon (right of the Search icon) to display retrieved MWL requests
  - Note: Additional set up is likely required for MWL functionality – Contact Sound for assistance.

## Add Patient Information Screen: New Patient

### ❑ Fill in All Mandatory Fields (in RED)

- Patient First Name
- Owner Last Name
- Patient ID
- Species
- Weight

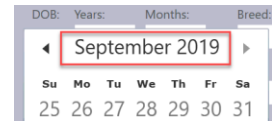
- Note: Once Species is selected it cannot be changed. Patient last name is not needed.

### ❑ Optional Fields

- Date of Birth



- Select the number of years and months, OR:
- Click the calendar to select a specific date
- Click the MONTH/YEAR to go back in months, the YEAR again to back in years, then make your year/month/day selections



### ❑ Move to Shot List Screen



- Forward arrow moves to the Shot List screen
- Back arrow moves back to the Main Patient screen

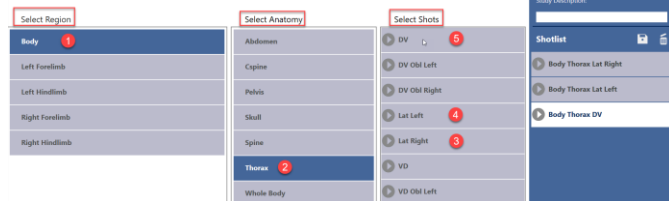


- Current patient will NOT be saved by pressing the back arrow
- Note: The Save Patient icon will save the current patient and allow additional patients to be entered. This function is generally used only by equine practices and requires additional workflow training.

## Shot List Screen

### ❑ Select Views

- Select Region, select Anatomy and select views to create the shotlist – this determines the order the images are acquired



### ❑ View Positioning Assistant

- Click arrow next to view to display Positioning Assistant

### ❑ Change View Acquisition Order

- Touchscreen – Tap and hold selected view with finger and drag to new position
- Mouse – Hold left click and drag selected view to new position



### ❑ Delete View from List



- Select/highlight view then click Trash Can icon

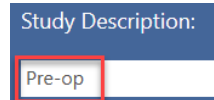
### ❑ Save Protocol for Future Use



- Click on the Disk icon and name the protocol, then click "Save"
  - New protocol saves only to the selected species on current patient

### ❑ Change Study Description

- The **DEFAULT** Study Description will be the first selected “Anatomy” in your shotlist
- Adding a description in the Study Description field will overwrite the default Study Description in SmartDR and SmartPACS when viewing the study later



### ❑ Move to Acquire/Review Screen

- Forward arrow moves to Acquire/Review screen
- Back arrow moves back to Main Patient screen
  - Current shotlist will be saved and may be resumed later if the back arrow is used



## PART 2 – Taking an X-ray

### Acquire/Review Screen: Acquiring an Image

#### ❑ Set Technique According to Provided Technique Chart

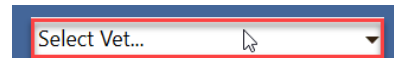
- This works as a guideline – actual technique may vary slightly
- **Summit DR Integration Automatic Technique Settings (If Applicable)**
  - If you have a Summit PC Interface Kit, the technique will be automatically set based on patient weight
    - To change Automatic Technique



- Click the KVP/MAS icon to manually change the technique
- Click “Save” to save the settings for *all future images acquired with the same patient weight, species, and anatomy*
- **NOTE:** *The clinic must manually change patient weight in SmartDR by clicking the Edit icon if the patient’s weight has changed since the previous study*

#### ❑ Select Veterinarian

- Selecting a Vet or Tech is optional
- Clinic can add Vets/Techs in Management screen later if needed



#### ❑ How do you know what your current view is?

- It is highlighted white

#### ❑ Select a Different View for Next Acquisition

- Click on desired view



#### ❑ Acquire an Image

- System will “BEEP” and radiation icon will stop spinning when ready for acquisition
- Press and hold foot switch *halfway* down to PREP (**≈3 seconds**), then press *all the way* down to EXPOSE (another **≈3 seconds**, to ensure complete exposure)

#### ❑ Acquire Next Image

- System will “BEEP” and radiation icon will stop spinning when ready for acquisition
- SmartDR automatically moves down through shotlist
- View that is highlighted white is the next view ready for acquisition
  - The last image will be displayed on the screen

### Reject an Image



- Select image and click the Reject Image icon
- A large red X will appear on the image and that view type will be duplicated for repeat acquisition

- Note: *This doesn't delete the image from the PC or study, but it will **NOT** send that image with the study to the PACS.*



### Keep a Rejected Image



- Select rejected image
- Click the Accept Image icon
  - Used if a higher quality image is not acquired, or if the original image is decided to be kept in the study

### Add a New View to the Shotlist



- Click the Add Shot icon
- Select view(s) from the Shot List screen
- Click the forward arrow to return to Acquire/Review screen and acquire new image(s)

### Rename/Edit View Information



- Select view and click the Rename Shot icon
- Select the new view name and click "Continue" to accept
- Click the forward arrow to return to Acquire/Review screen
  - An example of why this might be used: *An Abdomen Lat Right view was acquired with patient in Abdomen Lat Left position. The Abd Lat Right can be changed to a Lat Left, and the Ab*

### Edit Patient Information



- Click the Edit Patient Information icon
- Everything but species can be edited
- Edits can only occur before a patient is sent to the SmartPACS/Storage Server

## Acquire/Review Image Manipulation Toolbar – DEMO HOW TO USE TOOLS FIRST

**Selected icons are *NOT WHITE*, this is how you know a tool is selected on the Image Manipulation Toolbar**

### Three primary tools are active by default and available once an image is displayed

- Window Level (Brightness/Contrast), Zoom and Pan

### Zoom in on an image



- Touch screen – With two fingers pinch and zoom, like on a tablet or smart phone
- Mouse – With scroll wheel: up to zoom in, down to zoom out

### Move or pan an image



- Touch screen – Hold one finger on screen and move image around
- Mouse – Hold right click on screen and move image around
  - Note: *You can only pan after zooming in*

### **Change Window Level (Brightness/Contrast)**



- Touch screen - two fingers on the screen
  - Up and down – Increase or decrease brightness
  - Left and right – Decrease or increase contrast
- Note: *Changes made to Window Level, Pan, Zoom, etc. will be sent to DICOM server if not reset using the Revert icon prior to closing a study.*

### **Reset an image to original**



- Click the Revert icon on top of Image Manipulation Toolbar
- Returns displayed image to its original state, prior to any modifications made
  - Note: *This function will not undo changes that have been saved by leaving the Acquire/Review screen.*

### **Crop an Image**



- Click the Crop icon then touch and drag your finger across the screen over the area of the image that you wish to isolate, lifting your finger to initiate the crop
  - May be repeated as desired

### **Rotate/Flip an Image**



- Left and right 90 degrees
- Flip horizontally and vertically

### **Add a Marker or Text**



- Click the Annotation Mode icon
- To add a marker: select Left Marker or Right Marker (“L” or “R”) icon then click on the image to place marker
- To add text: click Free Text (“T”) icon
  - Text box automatically appears in the center of the image
  - To edit text, move or change font size:
    - Touch screen - Hold text box with finger and move; long press to edit
    - Mouse – Hold left click and move, then right click to edit
      - Click “Save” to save changes
- NOTE: *Always use physical markers.*

### **Remove a marker or text**

- Click and hold desired annotation (text, marker, etc.) and swipe image into shotlist



- To remove ALL annotations - click the Clear Annotations icon



- Click the Leave Annotation Mode icon at the bottom of the toolbar to save annotations

## Acquire/Review Screen: Completing a study

### **Pause a Study**



- Click the Pause Study icon
  - This does **NOT** send the study to the PACS



- To resume study - From Main Patient screen, locate the patient and study, then click the Resume Study icon

❑ **Urgent Send** - Show them the icon but do not press it

- Only used for emergencies and is generally NOT recommended
  - Used only if a doctor needs to see an image immediately, but is not able to get into the x-ray room
  - NOT USED for seeing if the image is good or bad
- You cannot reject an image after it has been urgent sent
- NOTE: Sends to SmartPACS (or DICOM server), not AIS or any other auto forwarding DICOM locations, until study is CLOSED



❑ **Complete/Close a study**

- Show this icon but do not press it yet!
  - Let them know this is what they will use 99% of the time
- When you hit the Close Study icon, the images will send to SmartPACS and other auto-send DICOM locations



## PART 3 – New Views, Emergency Patients and Help

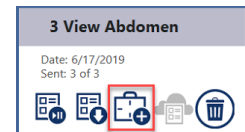
### Main Patient Screen: Adding Views and New Studies

❑ **Add a view to the study you just closed**

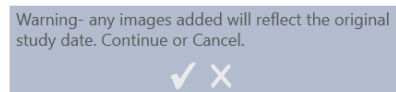
- Locate and select patient on Main Patient screen
- Locate the study you wish to add new views to and click the Shotlist icon – this takes you to the Shot Selection screen



- Select view(s) from the Shot List screen
- Click the forward arrow to return to Acquire/Review screen and acquire new image(s)



- Adding images will prompt a warning message:
  - NOTE: *If the warning does not pop up, it should be enabled in the Management screen*



- Click the Check Mark icon to confirm
- This is to alert the technician that the new images will be tagged with the *original study date*
- Used if you need extra views that could not be /were not acquired previously
  - I.E. Barium series
- Images added to a study with a different acquisition date will show up in SmartPACS under the date of the original study
  - I.E. If you are trying to create a new study for today, but instead hit the Resume Study icon for a study with a date of 2/2/17, the new images will not show up in your SmartPACS/DICOM viewer under today's date, but in the study on 2/2/17

## Main Patient Screen: Emergency Patient

### Emergency Patient



- Used in an emergency case (I.E. without time to gather patient data)
- Demographics (I.E. weight, Patient ID) can be edited once patient is in the system
  - Try to edit/enter emergency patient demographics prior to closing study
    - Use the Edit Patient Information icon
  - If no Patient ID, enter Patient Name and Owner Last Name
- Note: *If the Close Study icon is pressed and the emergency patient demographics are still input, it will need to be changed with tech support.*

## Help and Training

### Help Menu



- Click the Help icon on any screen
  - Icon Help - Shows the name of every clickable icon on the *current* screen
  - Training - Takes the user to a training screen SPECIFIC to the *current* screen
    - Play videos or read text (like an interactive User Manual)
  - Support Portal - For submitting tech support ticket via chat. *Currently in BETA*
  - Suggest a Feature – We take all suggestions very seriously!

## Emailing a Study

**THIS SHOULD BE DONE IN AIS – it is quicker, easier and the full DICOM images will be made available**

- Email arrives with three links – View in browser, or download (with and without JAVA)
- If they wish to send JPEGs (for OFA studies, etc.) call Tech Support for setup and training
  - Note: *More details are in the SmartPACS/AIS Training Curriculum.*


## Management Screen: Shutdown PC and other settings

### Shutdown Procedure

- Based on current shutdown procedure for clinic computers
  - Once a week is generally considered best practice; the night before a day they are closed if possible
  - Clinic can choose best day and time to perform shut down
    - Note: *24-hour clinics may want to choose a limited time period (I.E. 2-2:30am Monday mornings) to shut down the PC where it will not affect their workflow.*

### Shutdown Acquisition PC



- Click Management Screen icon
-  ○ Click the Shut Down icon
  - Click check mark to shut down or the “X” to cancel
    - Note: *This is the **ONLY** way acquisition PC should be shut down.*

### Turn on PC

- Press and hold the power button on the acquisition PC for three seconds
- SmartDR will auto launch
  - When you see the Main Patient screen, acquisition PC is ready (≈3 min. or so)

❑ **Log on to Acquisition Computer using SOUND USER**

- This happens automatically when PC is turned on
- PC *should* **ALWAYS** be logged into the SOUND USER account
  - Note: *Clinic should never need to log into a user account, as they should never be logged out of the Sound User.*
    - If the acquisition PC does get logged out of Sound User, select the Sound User and enter password: **JuniorSeau@55**

FAQs that may have come up during training can be found here:

<http://install.soundvet.com/faqs>