ACUSON Juniper ultrasound system

Quick Reference Guide

VB10 SW Release

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An estimated five million patients worldwide everyday benefit from our innovative technologies and services in the areas of diagnostic and therapeutic imaging, laboratory diagnostics and molecular medicine as well as digital health and enterprise services.

We're a leading medical technology company with over 120 years of experience and 18,500 patents globally. With over 50,000 employees in more than 70 countries, we'll continue to innovate and shape the future of healthcare.

Table of content

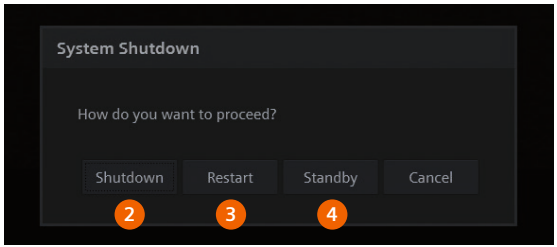
System Overview

1. Flat Panel Display Monitor
2. 2 USB Ports
3. Power On / Off (QuikStart standby)
4. Pull-out Keyboard (optional)
5. Rear Handle
6. Gel Warmer
7. Articulating Arm
   (tilt, swivel, raise, lower)
8. Touch Screen
9. Control Panel
   (height and swivel adjustable)
10. 5 Transducer Ports
11. Auxiliary CW Pencil Port
12. Lock / Steer / Swivel Wheels

System Overview

Power on and QuikStart Stand-by Mode

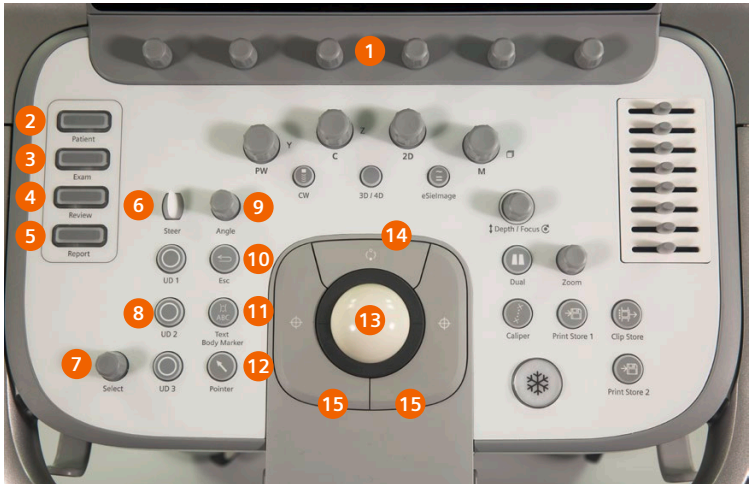
1. Press the **Power** key to turn the system on or to enter the system shutdown menu
2. Select **Shutdown** to turn the system off
3. Select **Restart** to reboot the system
4. Select **Standby** to enter QuikStart stand-by mode which allows the system to power off / on in less than 5 seconds



System can remain in Standby Mode for up to 30 minutes before it must be connected to a power source.

Control Panel

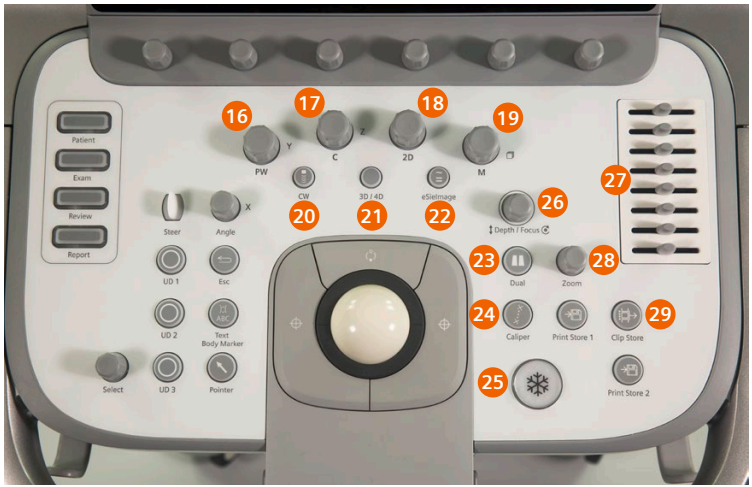
1. Soft Key Rotary Controls
2. Patient Study Control
3. Exam Selection
4. Review
5. Report
6. Steer
7. Select
8. UD (user-defined keys)
9. Angle
10. Escape
11. Text, Body Marker, Arrow
12. Pointer
13. Trackball
14. Update
15. Left / Right Set



System Overview

Control Panel

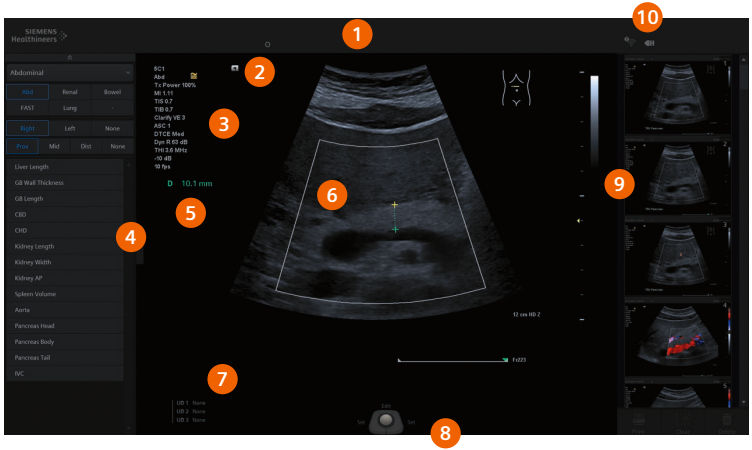
16. Pulsed Wave Doppler
17. Color Doppler
18. 2D Mode
19. M-mode
20. Continuous Wave Doppler
21. 3D / 4D
22. eSieImage Multi-parametric Optimization
23. Dual
24. Caliper
25. Freeze
26. Depth / Focus
27. DGC Controls
28. Zoom
29. Print, Store and Clip



Atitikimas į 10.1 reikalavimą

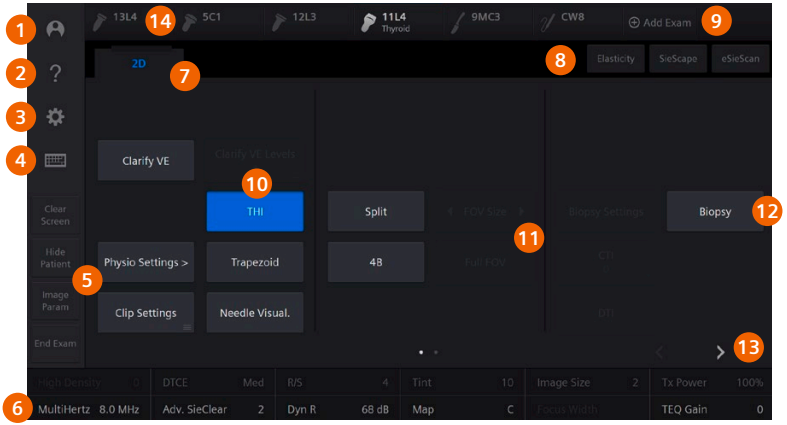
Monitor Screen Layout

1. Patient Banner
2. Orientation Marker
3. Imaging Parameters
4. Image Screen Menu Area
5. Measured Results (movable)
6. Image Display
7. User-Defined Key Functions
8. Trackball Functions
9. Thumbnail Display
10. Status Icons



System Overview

Touch Screen Layout



1. Login / Logoff
2. System User Manual
3. System Configuration
4. Digital Keyboard
5. Study Display Options
6. Soft Key functions that correspond to rotary controls
7. Active Modes
8. Advanced Application Tabs
9. Add Exam
10. Blue Highlight = Active Selection
11. Grayed-Out = Unavailable Selection
12. Gray Highlight = Available Selection
13. Page Navigation
14. Transducers

Connecting Transducer

1. Ensure the lever lock is in the left, unlocked position
2. Align the connector and press into the transducer port
3. Place the lever into the right, locked position

System Overview

System Casters / Steering

Easy wheeling casters

- Individual brakes
- Lock / steer / swivel functionality

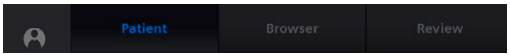



Getting Started

Patient Registration – Manual

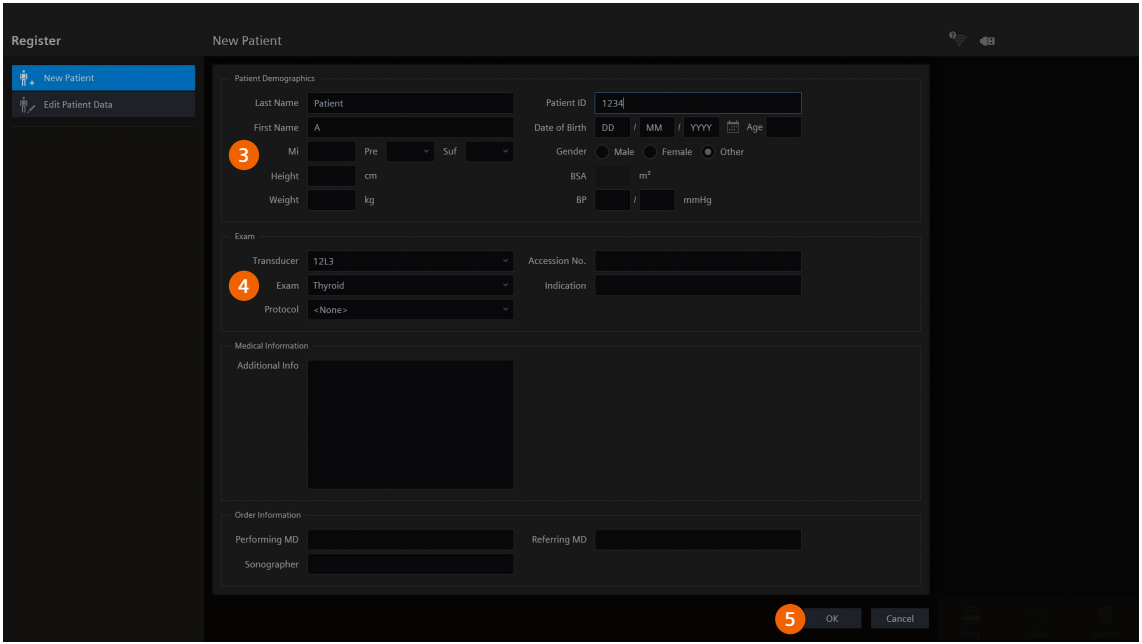
1. Press the **Patient** Key 

2. Select the **Patient** Tab on the Touch Screen



3. Enter patient information
4. Select transducer and exam
5. Select **OK**

Tip: Transducer and Exam can also be selected from the Touch Screen after patient registration by selecting Exam on the Control Panel.

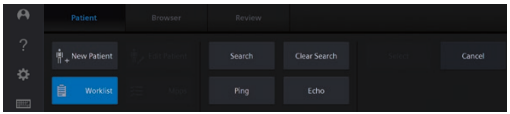

Register
New Patient
New Patient
Edit Patient Data
Patient Demographics
Last Name
Patient
First Name
A
3
Mi
Pre
Suf
Height
cm
Weight
kg
Patient ID
1234
Date of Birth
DD / MM / YYYY
Age
Gender
Male
Female
Other
BSA
m²
BP
/
mmHg
Exam
Transducer
12L3
4
Exam
Thyroid
Protocol
<None>
Accession No.
Indication
Medical Information
Additional Info
Order Information
Performing MD
Sonographer
Referring MD
5
OK
Cancel

Getting Started

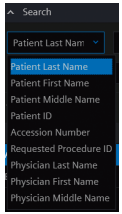
Patient Registration – Worklist

1. Press **Patient** Key 

2. Under the **Patient** Tab, select **Worklist** on the Touch Screen



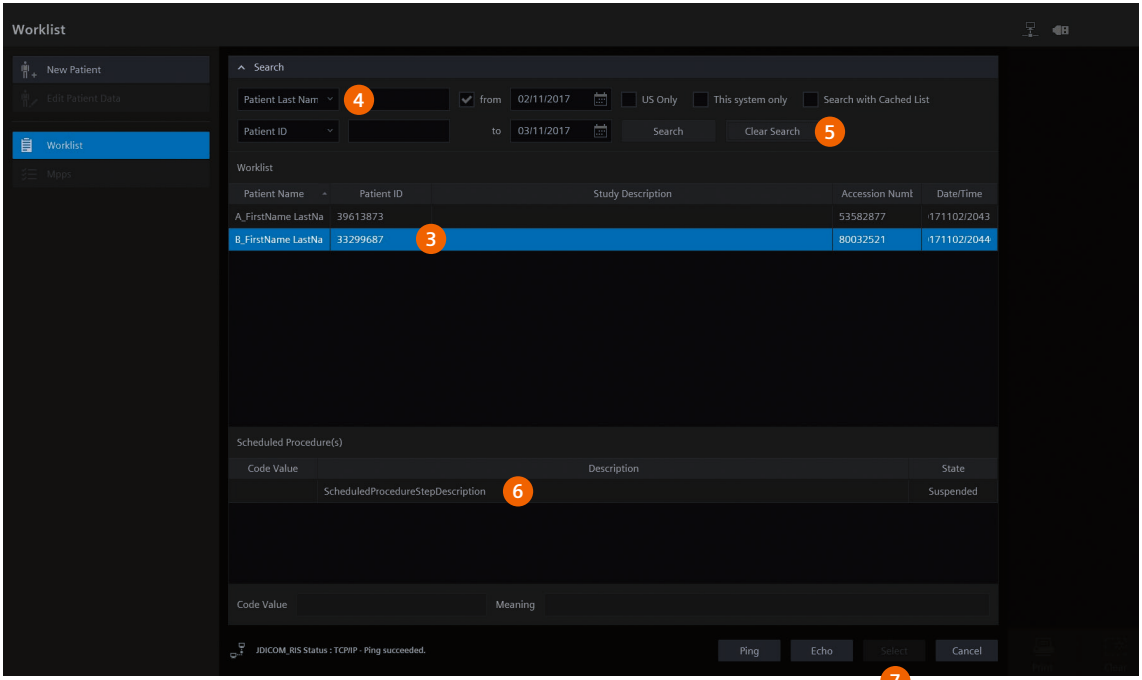
3. Select the desired patient
4. If patient is not displayed, search using the drop-down menu or by dates



5. **Clear Search** will also refresh the overall list
6. Select the scheduled procedure
7. Press **Select** to open the patient registration page

⚠ System must be connected to a HIS / RIS server to access patient worklist.

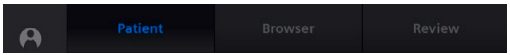
Tip: You can also open the patient registration page by double clicking the scheduled Procedure.


Worklist
New Patient
Edit Patient Data
Worklist
Mpps
Search
Patient Last Nam
4
from
02/11/2017
US Only
This system only
Search with Cached List
Patient ID
to
03/11/2017
Search
Clear Search
5
Worklist
Patient Name
Patient ID
Study Description
Accession Numt
Date/Time
A_FirstName LastNa
39613873
53582877
171102/2043
B_FirstName LastNa
33299687
3
80032521
171102/2044
Scheduled Procedure(s)
Code Value
Description
State
ScheduledProcedureStepDescription
6
Suspended
Code Value
Meaning
JDICOM_RIS Status : TCP/IP - Ping succeeded.
Ping
Echo
Select
Cancel
7

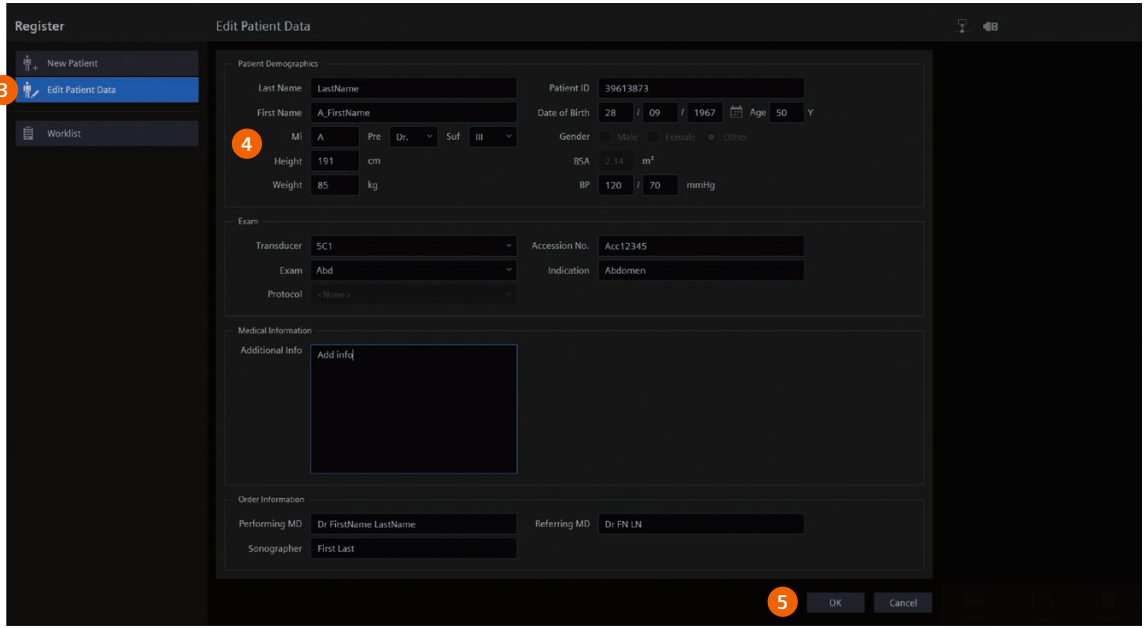
Getting Started

Edit Study

1. Press the **Patient** Key 

2. Select the **Patient** Tab on the Touch Screen


3. Select **Edit Patient Data** on the image screen or **Edit Patient** on the Touch Screen
4. Modify the desired data fields
5. Select **OK**


Register
Edit Patient Data
New Patient
3
Edit Patient Data
Worklist
Patient Demographics
Last Name
LastName
First Name
A_FirstName
4
Mi
A
Pre
Dr.
Suf
III
Height
191
cm
Weight
85
kg
Patient ID
39613873
Date of Birth
28
09
1967
Age
50
Y
Gender
Male
Female
Other
BSA
2.14
m²
BP
120
70
mmHg
Exam
Transducer
5C1
Exam
Abd
Protocol
<None>
Accession No.
Acc12345
Indication
Abdomen
Medical Information
Additional Info
Add info
Order Information
Performing MD
Dr FirstName LastName
Sonographer
First Last
Referring MD
Dr FN LN
5
OK
Cancel

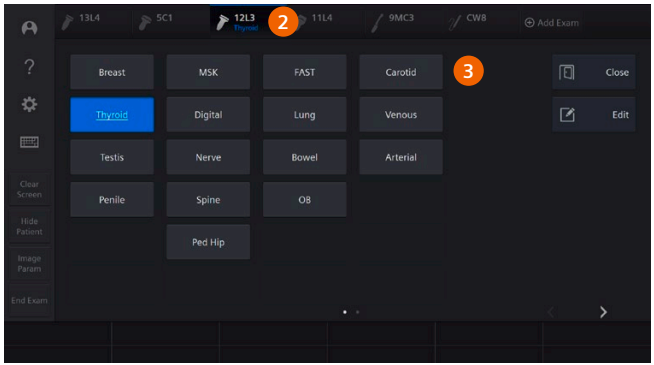
Getting Started

Transducer / Study

Control Panel and Touch Screen

1. Select **Exam** 

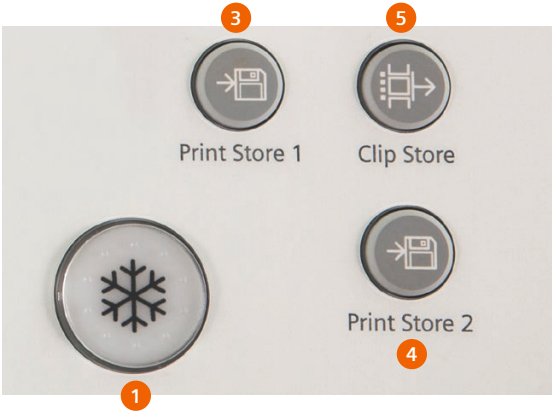
2. Select the transducer on the Touch Screen
3. Select the desired Exam type



Store, Print, and Clip Store

Control Panel and Touch Screen

1. Press **Freeze**
2. If desired, roll trackball for frame-by-frame CINE review
3. Press **Print Store 1** to save a static image
4. Press **Print Store 2** to save and print[1]
5. Press **Clip Store** to acquire and save a clip while scanning



[1] A compatible printer must be connected and assigned to the print function in the Configuration menu before using selection.

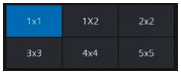
Tip: Clip Store length is adjustable on the Touch Screen during live scanning.

Getting Started

Review and End Exam

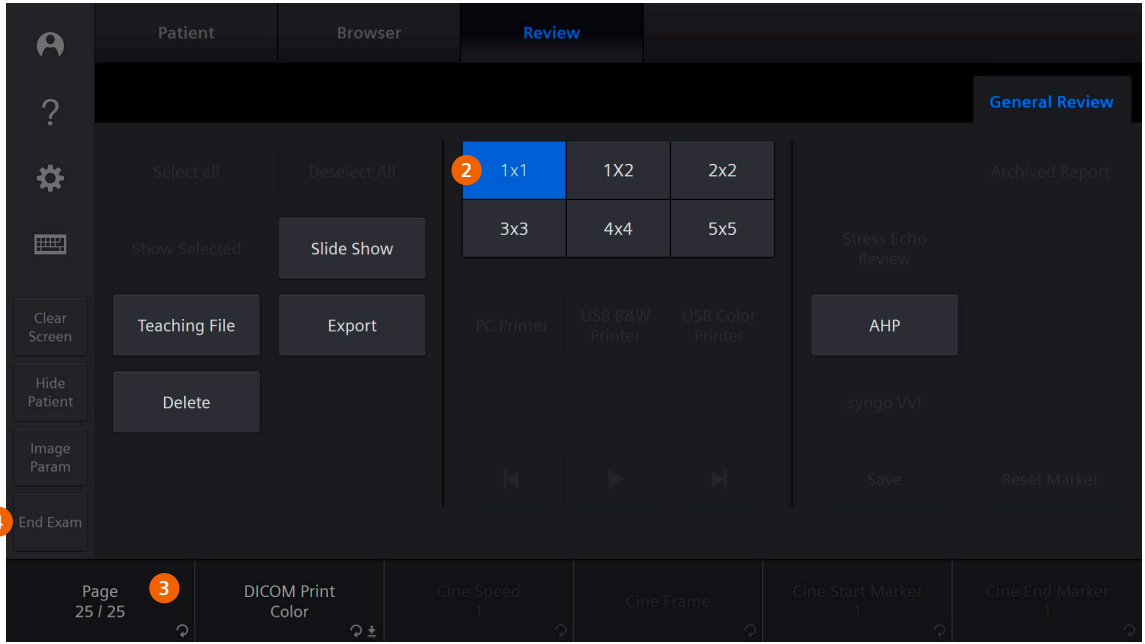
1. Press **Review**

2. Select the desired layout on the Touch Screen



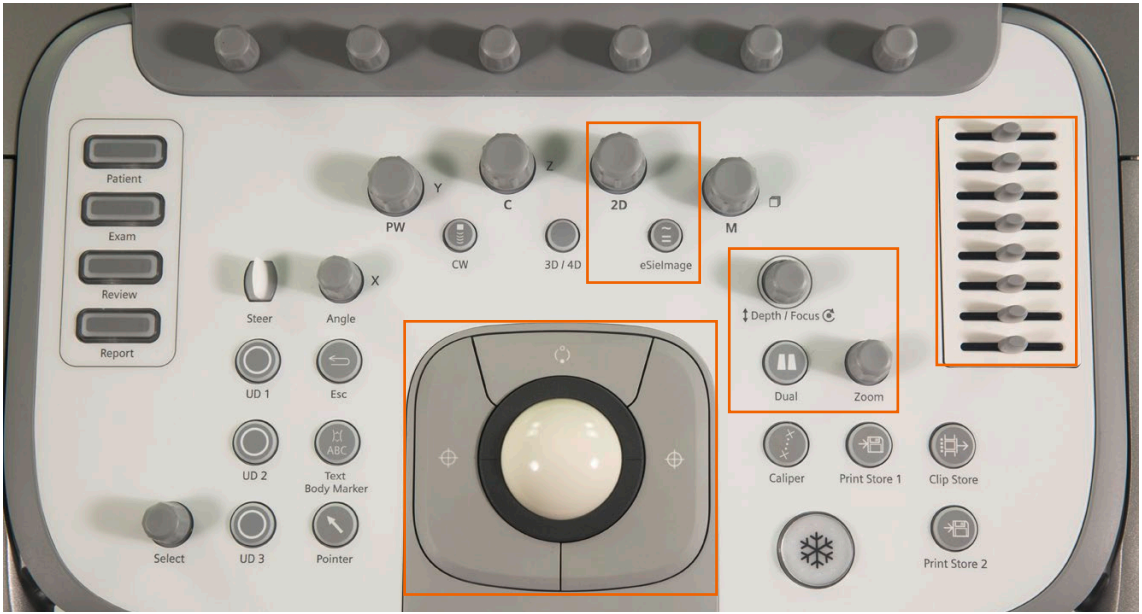
3. Rotate the Page soft key or rotate **Select** to move between images

4. Select **End Exam** on the Touch Screen to end the study


Patient
Browser
Review
General Review
Select all
Deselect All
2
1x1
1X2
2x2
3x3
4x4
5x5
Archived Report
Show Selected
Slide Show
Stress Echo Review
Clear Screen
Teaching File
Export
PC Printer
USB B&W Printer
USB Color Printer
AHP
Hide Patient
Delete
syngo VVI
Image Param
Save
Reset Marker
4
End Exam
Page 25 / 25
3
DICOM Print Color
Cine Speed
Cine Frame
Cine Start Marker
Cine End Marker

2D and M-mode

2D Control Panel



2D Controls	Function
2D	*Enters / exits 2D-mode or adjusts overall 2D gain / brightness*
eSieImage (eSieImage multiparametric image optimization)	*Automatically and continuously applies TEQ in real-time* Press twice to deactivate **Note: Available on a live image only**
DGC	*Manually adjusts gain / brightness at depth* Default all slide pods in the center
Zoom	*Magnifies the image* Rotate to increase or decrease image magnification **Note: Zoom is available on a live and frozen image**
HD Zoom	*Increases image size, detail resolution and frame rate in a region of interest (ROI) / Displays "HD Z" on the image screen* Press **Zoom** key to display the ROI and roll trackball to position Rotate (or, press right or left **Set** key) to resize the ROI and Press to activate Press again to deactivate **Note: Available on a live image only**

2D and M-mode

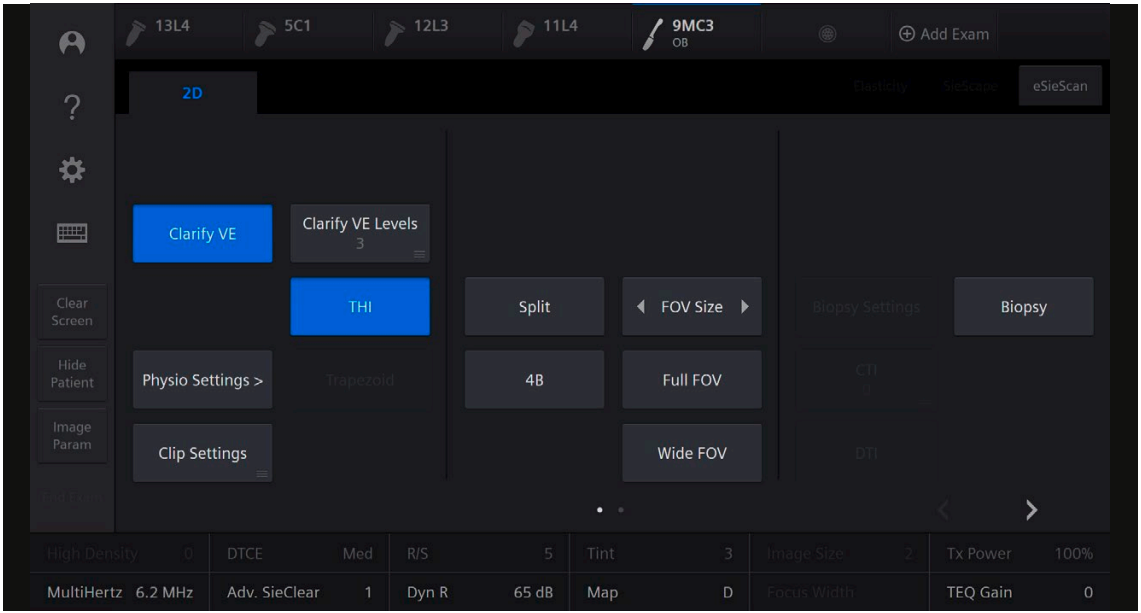
2D Control Panel

2D Controls	Function
# of Focal Zones	*Adjusts the number of focal zones* Press the **Depth / Focus** control to select the desired number of focal zones **Note: Availability varies by transducer, exam type and THI activation**
Depth / Focus	*Adjusts the scanning depth and the focal zone* Press the toggle up / down to adjust the depth Rotate the toggle to adjust the focal zone **Note: Direction of depth and focal zone control is customizable in the Configuration Menu / Custom Keys**
Dual	*Displays two separately acquired images side by side* Press **Dual** to activate and toggle between images Press the **2D** key to exit

2D Sector Width	*Increases the line density / frame rate* Press the **Set** key and roll trackball to resize the sector Press the **Set** key and roll trackball to position Press the **Set** key to lock **Note: Available on a live image only, not available on linear transducers**

2D and M-mode

2D Touch Screen



2D Controls	Function
Trapezoid	*Displays linear or trapezoid image format* Select to activate / deactivate **Note: Available on Linear transducers and on a live image only**
Live Dual (Split)*	*Activates two simultaneous images in dual format* Select to activate / deactivate
4B	*Displays four separately acquired images* Select **4B** to activate and add each image Select **2D** to exit **Note: Available on a live image only in 2D and Color Doppler**
THI (Tissue Harmonic Imaging)	*Increases contrast and lateral resolution, reduces noise and clutter* Select to activate / deactivate **Note: Available on a live image only**
Needle Visual (Enhanced Needle Visualization)	*Activates multiple needle interrogation angles* Select to display available in-plane needle enhancement options **Note: Available on a live image only**

***Note: This guide uses the term "Live Dual" to refer to Split imaging displayed as Split on the ultrasound system**

2D and M-mode

2D Touch Screen

2D Controls	Function
Focus Width	*Increases the distance between multiple focal zones* Rotate to increase / decrease the distance between multiple focal zones
Wide FOV	*Activates a larger field of view* Select to display the 220° FOV **Note: Available on the 9MC3 transducer only**
Full FOV	*Changes the FOV back to 176°* **Note: Available on the 9MC3 transducer only**
FOV Size	*Activates the FOV size* Select to increase / decrease the size of the FOV (also can use trackball and select keys) **Note: Available in Full FoV on the 9MC3 transducer only**

Clarify VE (Clarify vascular enhancement [VE] technology)	*Decreases artifacts, increases contrast resolution and boundary detection in structures with flow* Press to activate / deactivate **Note: Available on a live imaging only**
Clarify VE Levels	*Adjusts levels of sensitivity when using Clarify VE* Select higher level to increase sensitivity Select lower level to decrease sensitivity **Note: Available on a live image only**
U / D and R / L Flip	*Adjusts orientation on the image screen* Press to activate / deactivate **Note: Available on a live or frozen image**
Clip Settings	*Selects the type and length of clip capture* Chronology – prospective / retrospective, capture type, acquisition rate and trigger type **Note: Available on a live image only**
CTI (Custom Tissue Imaging)	*Optimizes the 2D image by adjusting the speed of sound for fatty tissue versus dense tissue in Breast imaging* Press to activate Adjust the CTI levels based on the type of breast tissue

2D and M-mode

2D Touch Screen

2D Controls	Function
LVO Contrast (Left Ventricular Opacification)	*Activates contrast imaging for the left ventricle* Press to activate / deactivate **Note: Only compatible with the 5P1 transducer in the Adult Echo preset**

2D Soft Keys

2D Controls	Function
Compounding* (Advanced SieClear spatial compounding and SieClear multi-view spatial compounding)	*Enhances contrast resolution and boundary detection* Increase for more compounding Decrease for less compounding **Note: Available on a live image only**
TEQ Gain	*Adjusts default gain setting for eSieImage multiparametric imaging*
R/S (Resolution/Speed)	*Balances line density (spatial resolution) and frame rate* Increase to improve image detail Decrease to improve frame rate **Note: Available on a live image only**

***Note: This guide uses the term "Compounding" to refer to Advanced SieClear spatial compounding and SieClear multi-view spatial compounding displayed as Adv. SieClear or SieClear on the ultrasound system**

2D and M-mode

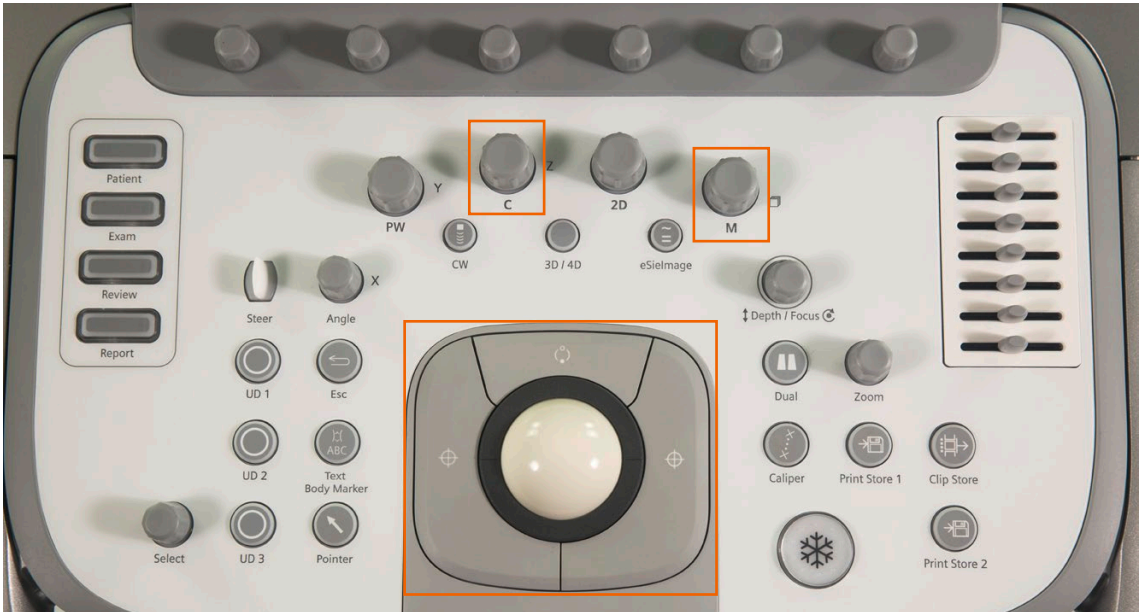
2D Soft Keys

2D Controls	Function
DTCE (Dynamic TCE tissue contrast enhancement technology)	*Reduces speckle and enhances tissue contrast* Settings are **Low, Medium** and **High** **Note: Available on a live image only**
Image Size	*Adjusts the size of the image display* Increase for a larger image display, decrease for a smaller image display Available options are 0–4 **Note: Available on a live image only**
Tx Power (Transmit Power)	*Adjusts the level of acoustic energy delivered to the patient* Rotate clockwise to increase power Rotate counterclockwise to decrease power **Note: Available on a live image only**

Dyn R (Dynamic Range)	*Adjusts number of gray shades displayed* Rotate clockwise for a softer / grayer image Rotate counterclockwise for more contrast **Note: Available on a live or frozen image**
MultiHertz (MultiHertz multiple frequency imaging)	*Adjusts transmit frequency of the active multi-frequency transducer* Use higher frequency for increased resolution Use lower frequency to increase penetration **Note: Available on a live image only**
Map	*Selects a processing curve that assigns echo amplitudes to gray shades* Rotate to select desired Map
Tint	*Colorizes the gray scale image* Rotate to select desired Tint

2D and M-mode

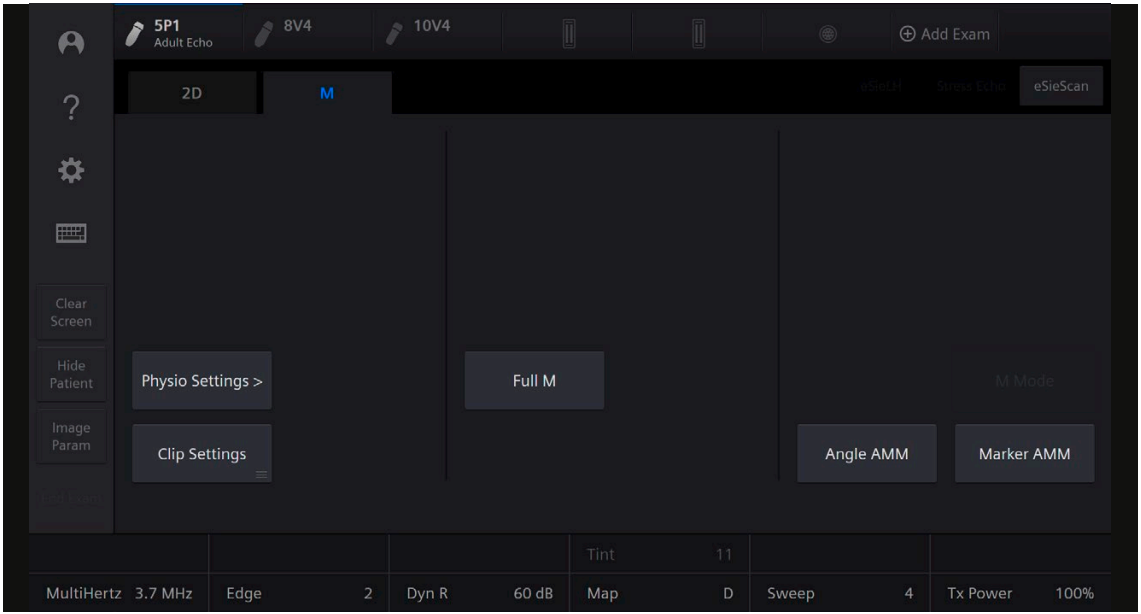
M-mode Control Panel



M-mode Controls	Function
M **(M-mode)**	*Enters / exits M-mode or adjusts overall M-mode gain* Press to activate / deactivate Rotate to adjust overall M-mode gain Roll trackball to position M-line **Note: Available on a live image only**
Update / View	*Alternates between 2D / M-mode formats* Press Update to move between modes **Note: Available on a live image only**
Color M-mode	*Enters / exits color M-mode* With color Doppler activated, press **M** (M-mode) Position M-line and Press **M** Press **M** (M-mode) again to deactivate **Note: Only available with cardiac transducers**

2D and M-mode

M-mode Touch Screen



M-mode Controls	Function
Full M	*Changes the display format to full screen M-mode* Press to activate / deactivate
Angle AMM (Anatomical M-mode)	*Views the M-mode sweep based on patient anatomy, independent of transducer orientation utilizing angle rotation* Press to activate / deactivate
Marker AMM (Anatomical M-mode)	*Views the M-mode sweep based on patient anatomy, independent of transducer orientation utilizing freehand drawing of the angle* Press to activate / deactivate

2D and M-mode

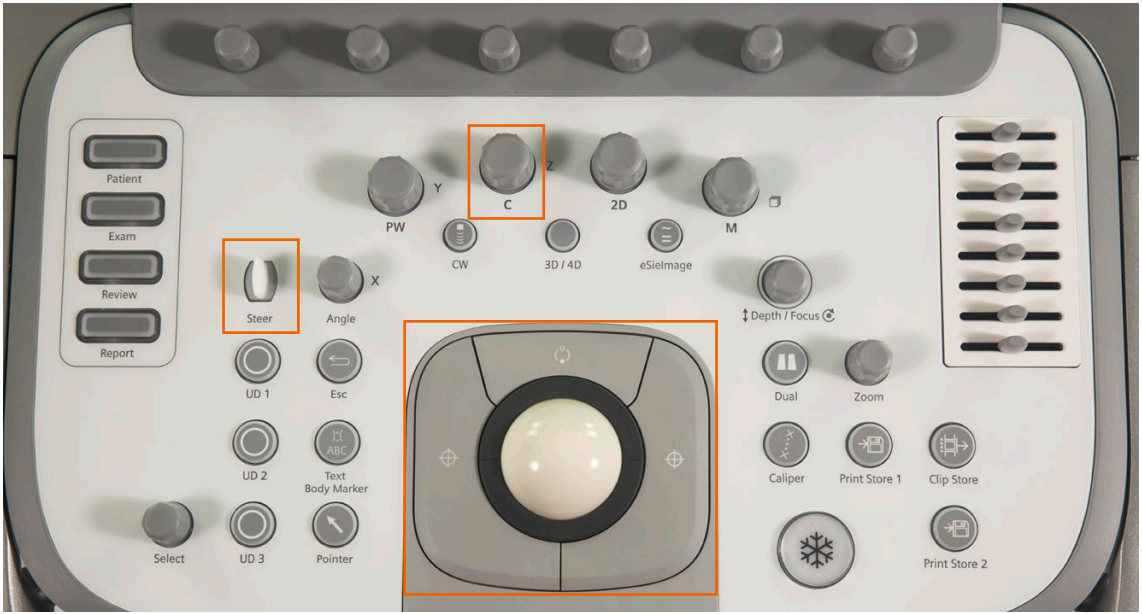
M-mode Soft Keys

M-mode Controls	Function
Edge	*Sharpens the contours of a structure in the M-mode sweep* Increase for more sharpness Decrease for less sharpness To deactivate, select zero **Note: Available on a live image only**
Map	*Selects a processing curve that assigns echo amplitudes to gray shades in the M-mode sweep* **Note: Available on a live and frozen image**
Tint	*Colorizes the M-mode sweep* **Note: Available on a live and frozen image**
DR (Dynamic Range)	*Adjusts the number of gray shades displayed in the M-mode sweep* Rotate clockwise for a softer / grayer sweep Rotate counterclockwise for more contrast **Note: Available on a live or frozen image**

Sweep	*Adjusts the scrolling speed of the M-mode sweep* Increase to display fewer cardiac cycles Decrease to display more cardiac cycles **Note: Available on a live or frozen image**

Color and Spectral Doppler

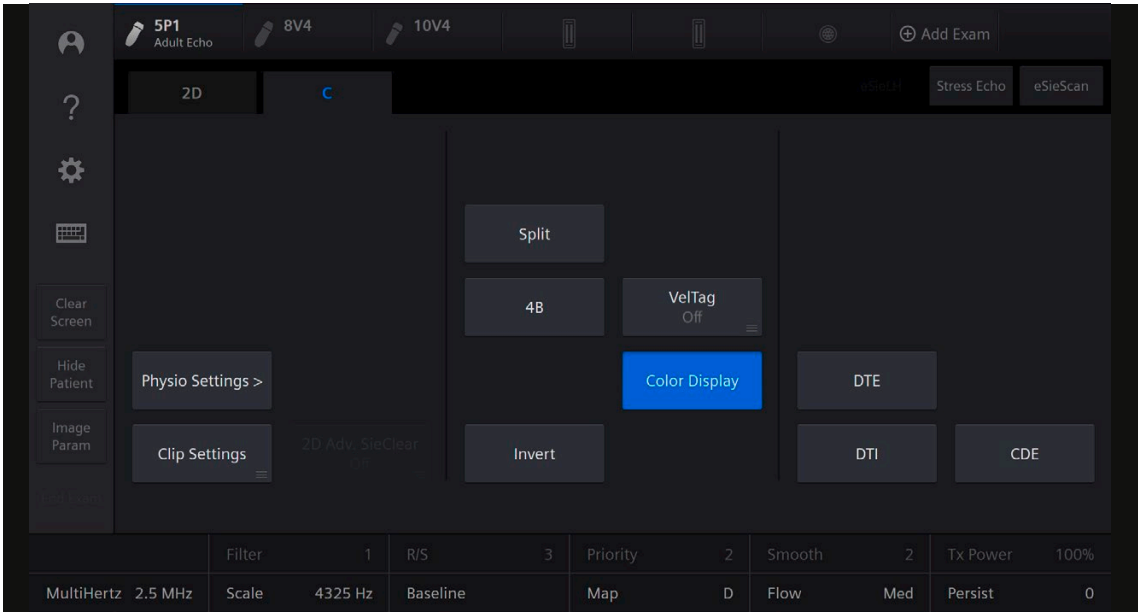
Color Doppler Control Panel



Color Doppler Controls	Function
C (Color Doppler)	*Enters / exits color Doppler or adjusts overall color Doppler gain* Press to activate / deactivate color Doppler mode Rotate to increase / decrease color Doppler gain **Note: Available on a live image only**
Color Box Size / Position	*Adjusts the color ROI* *Increases frame rate by decreasing the color ROI width or depth* Press **Set** to alternate between Size / Position Roll the trackball to resize or reposition color ROI **Note: Available on a live image only**
Steer	*Steers the Color ROI* Toggle the **Steer** key left / right to steer **Note: Steering angle is transducer dependent**

Color and Spectral Doppler

Color Doppler Touch screen



Color Doppler Controls	Function
CDE (Color Doppler Energy)	*Applies color based on flow amplitude* **Note: Available on a live image only**
Color Display	*Turns color display off when in color Doppler* Select to activate / deactivate **Note: Color ROI remains on the image**
Invert	*Reverses the colors depicting forward and reverse flow in the color ROI and the color bar* Select to activate / deactivate **Note: Available on a live or frozen image**
4B	*Displays four separately acquired images* Press to activate and add each image **Note: Available on a live image only in 2D and Color Doppler**
DTI (Doppler tissue imaging capability)	*Activates the Doppler tissue imaging feature for cardiac exams* Press to activate / deactivate **Note: Available on a live image only**

Color and Spectral Doppler

Color Doppler Soft Keys

Color Doppler Controls	Function
MultiHertz (MultiHertz multiple frequency imaging)	*Adjusts the color Doppler frequency independent of the 2D frequency* Rotate to increase / decrease **Note: Available on a live image only**
Map	*Selects a processing curve that assigns the velocity / velocity variance (Color) or flow amplitudes (Power) to a range of colors* **Note: Available on a live and frozen image**
Tx Power (Transmit Power)	*Adjusts the level of acoustic energy delivered to the patient in color Doppler mode* Rotate clockwise to increase power Rotate counterclockwise to decrease power **Note: Available on a live image only, changes mechanical and thermal indices**

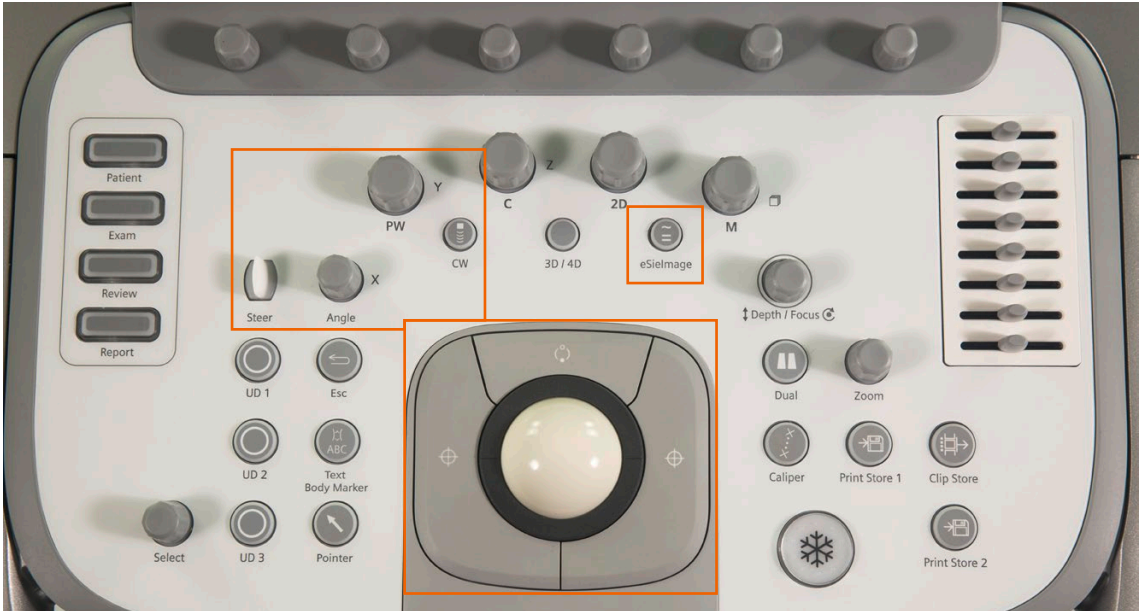
Smooth	*Adjusts spatial averaging (smoothing) for color flow* Increase for flow sensitivity Decrease for color spatial resolution **Note: Available on a live image only**
Scale	*Adjusts the pulse repetition frequency (PRF)* Rotate clockwise to increase PRF Rotate counterclockwise to decrease PRF **Note: Available on a live image only**
Baseline	*Adjusts the range of flow velocities displayed above and below the baseline* Rotate to adjust the baseline of the active mode
Priority	*Prioritizes the display of grayscale or color flow data* Increase for greater color fill Decrease to prioritize grayscale and less color fill
Persist (Persistence)	*Adjusts the time that the color flow data remains in the ROI before being replaced by another color* Increase for greater color fill Decrease to increase temporal resolution **Note: Available on a live image only**

Color and Spectral Doppler

Color Doppler Soft Keys

Color Doppler Controls	Function
Filter	*Adjusts the color wall filter* Increase to reduce motion artifacts Decrease to increase sensitivity to low flow states **Note: Available on a live image only**
R/S (Resolution/Speed)	*Balances line density (spatial resolution) and frame rate* Increase for image detail Decrease to increase frame rate **Note: Available on a live image only**

Spectral Doppler Control Panel



Color and Spectral Doppler

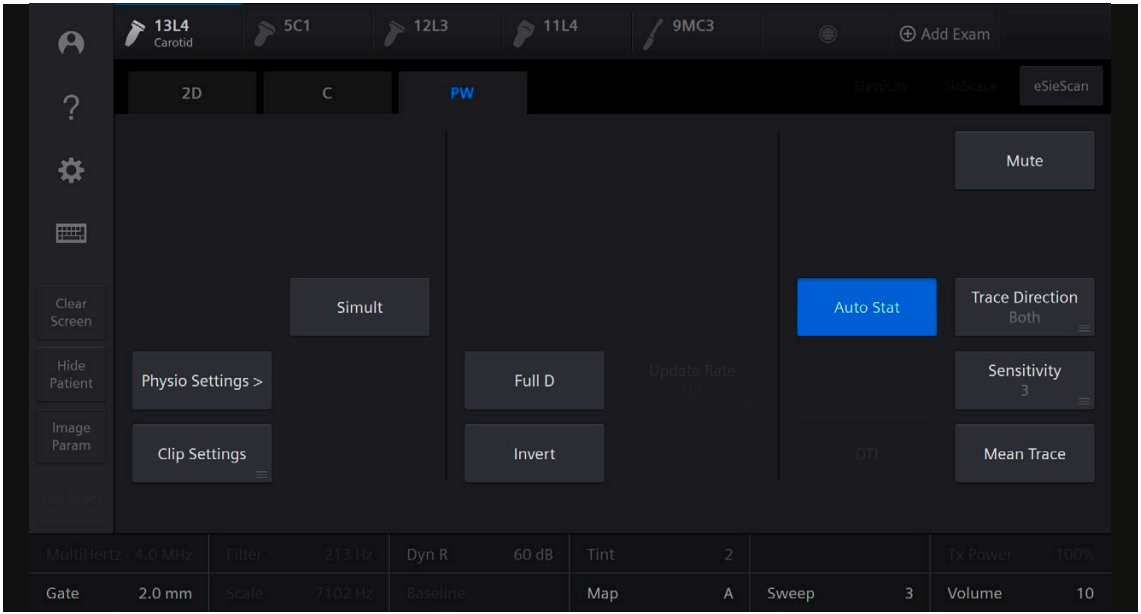
Spectral Doppler Soft Keys

Spectral Doppler Controls	Function
PW (pulsed wave) Doppler and CW (continuous wave) Doppler	*Enters / exits spectral Doppler or adjusts overall spectral Doppler gain* Press to enter / exit Roll trackball to position Doppler gate Press **PW** or **CW** to activate the strip Rotate **PW** to adjust overall spectral Doppler gain **Note: Available on a live image only**
Update / View	*Alternates between the Doppler spectrum and the 2D image* Press once to alternate between Doppler / 2D **Note: Available on a live image only**
Steer	*Adjusts the PW Doppler angle* Toggle left / right to adjust the steering angle **Note: Available on linear transducers and on a live image only**

Angle	*Adjusts angle correction* Press to cycle through 60 / 60 / 0° angle selections Rotate to adjust values in 1° increments **Note: Available on a live or frozen image**
eSieImage (Auto Doppler Optimization)	*Optimizes spectral Doppler gain, baseline, scale and dynamic range* With Doppler spectrum active, press **eSieImage** on the Control Panel to activate Press twice to exit **Note: Available on a live image only**

Color and Spectral Doppler

Spectral Doppler Touch Screen



Spectral Doppler Controls	Function
Full D	*Displays Full Screen Doppler* Select to activate / deactivate **Note: Available on a live image only**
Invert	*Reverses the Doppler spectrum (negative values display above the baseline)* Select to activate / deactivate **Note: Available on a live or newly frozen image only**
Auto Stat	*Automatic tracing and display of PW Doppler measurements* Select to activate / deactivate Select settings for data above, below or on both sides of the baseline **Note: Available on a live or newly frozen image and in Caliper mode**
Sensitivity	*Adjusts the sensitivity of the Trace tool when in Auto Stats* Increase for higher sensitivity. Choices are 0–7 **Note: Available when Auto Stat is activated only**
Mean Trace	*Displays graphic traces of the mean (yellow) with maximum (blue) velocities or frequencies on the spectrum* **Note: Available when Auto Stat is activated only**

Color and Spectral Doppler

Spectral Doppler Touch Screen

Spectral Doppler Controls	Function
Trace Direction	*Select to choose trace direction* Choose above, below or both sides of the baseline **Note: Available in Auto Stat only**
Live / Live* (Simultaneous [Triplex])	*Displays both the 2D image and spectral Doppler tracing in real-time* Press to activate / deactivate **Note: Available on a live image only**
DTI (Doppler Tissue imaging capability)	*Activates the Doppler Tissue imaging feature for cardiac exams* Press to activate / deactivate **Note: Available on a live image only**
Update Rate	*Defines the interval for refreshing the 2D-mode image* Select Off, 1 sec, 2 sec, 4, sec or 8 sec **Note: Available on a live image only**

Mute	*Mutes the Doppler audio* Select to activate / deactivate **Note: Available on a live image only**

***Note: This guide uses the term "Live / Live" to refer to Simultaneous Triplex imaging displayed as Simult on the ultrasound system**

Color and Spectral Doppler

Spectral Doppler Soft Keys

Spectral Doppler Controls	Function
MultiHertz (MultiHertz multiple frequency imaging)	*Adjusts spectral Doppler frequency independent of the 2D or color frequency* Rotate to adjust **Note: Available on a live image only**
Map	*Selects a processing curve that assigns echo amplitudes to gray shades in the Doppler spectrum* **Note: Available on a live and frozen image**
Tx Power (Transmit Power)	*Adjusts the level of acoustic energy delivered to the patient in spectral Doppler mode* Rotate clockwise to increase power Rotate counterclockwise to decrease power **Note: Available on a live image only, changes mechanical and thermal indices displayed**

Scale	*Adjusts the pulse repetition frequency (PRF)* Rotate clockwise to increase PRF Rotate counterclockwise to decrease PRF **Note: Available on a live image only**
Baseline	*Adjust the range of velocities displayed* Rotate to adjust the baseline of the active mode **Note: Available on a live or frozen image**
Dyn R (Dynamic Range)	*Adjust number of gray shades displayed* Rotate clockwise for a softer / grayer spectrum Rotate counterclockwise for a blacker / whiter spectrum **Note: Available on a live or frozen image**
Gate	*Adjusts sample volume size* Rotate clockwise to increase size Rotate counterclockwise to decrease size **Note: Available on a live image only**
Tint	*Colorizes the Doppler spectrum* Select desired Tint from 0–11 **Note: Available on a live and frozen image**

Color and Spectral Doppler

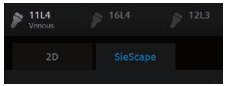
Spectral Doppler Soft Keys

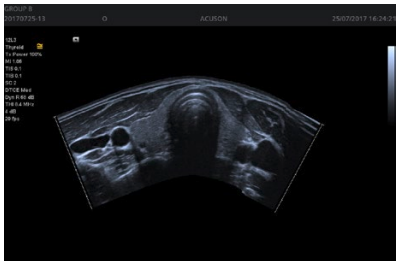
Spectral Doppler Controls	Function
Filter	*Adjusts the spectral Doppler signal filter* Increase to reduce motion artifacts Decrease to increase sensitivity to low flow states **Note: Available on a live image only**
Sweep	*Adjusts the scrolling speed of the Doppler spectrum* Increase to display fewer cardiac cycles Decrease to display more cardiac cycles **Note: Available on a live and frozen image**
Volume	*Adjusts the spectral Doppler audio volume* Increase to raise audio level Decrease to lower audio level **Note: Available on a live and frozen image**

Panoramic (SieScape Panoramic Imaging[1])

Perform a Panoramic Acquisition

1. Select the **SieScape*** tab to activate Panoramic imaging
2. Press the right or left **Set** keys to Acquire the image
3. Press **Freeze** or one of the **Set** keys to End acquisition, press **Freeze** again to reactivate acquisition if desired
4. Use the SieScape review controls, zoom rotary control and the trackball and select keys after completing the acquisition to size, rotate, pan, magnify or measure the image
5. Use the Cine function to recall single frames for review
6. Select **Exit** to deactivate Panoramic imaging





[1] *Optional feature*

***Note: This guide uses the term “Panoramic” to refer to the SieScape Panoramic Imaging displayed as SieScape on the ultrasound system**

Measurements and Reports

Unlabeled Measurements

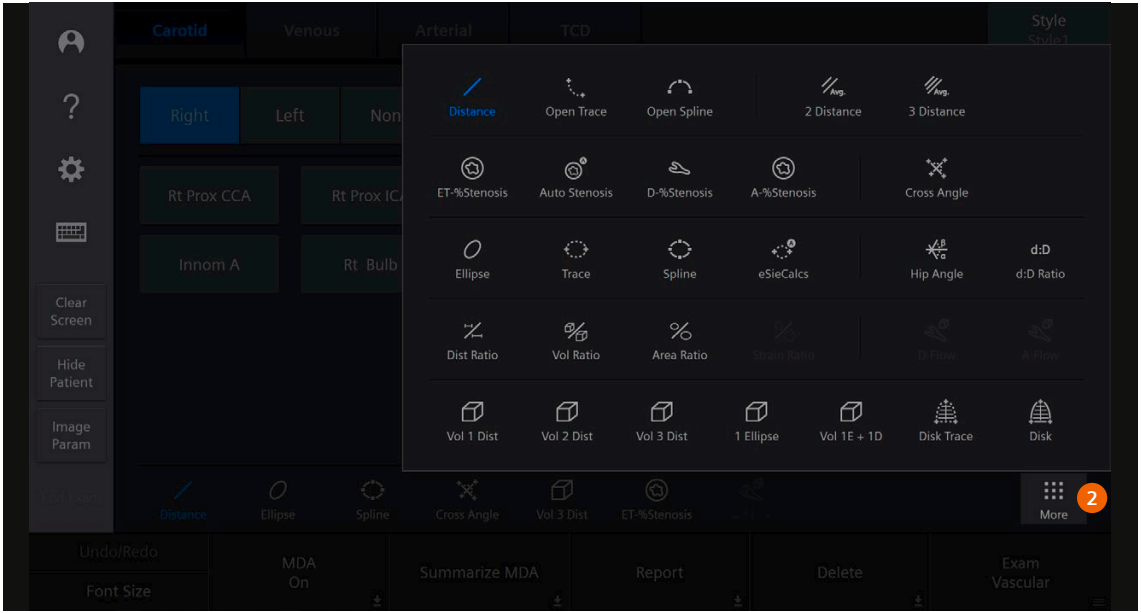
1. Press **Caliper** 

2. To change the measurement type, press **More** and select the desired function
3. Roll the trackball to position the first caliper
4. Press **Set** to anchor 
5. Roll the trackball to position the second caliper
6. Press **Set** to complete the measurement and / or activate additional caliper sets

Unlabeled measurements do not enter into the exam report.

Tip: Measurements can be performed on frozen, CINE and stored images.

Unlabeled Measurements – Perform Measurements



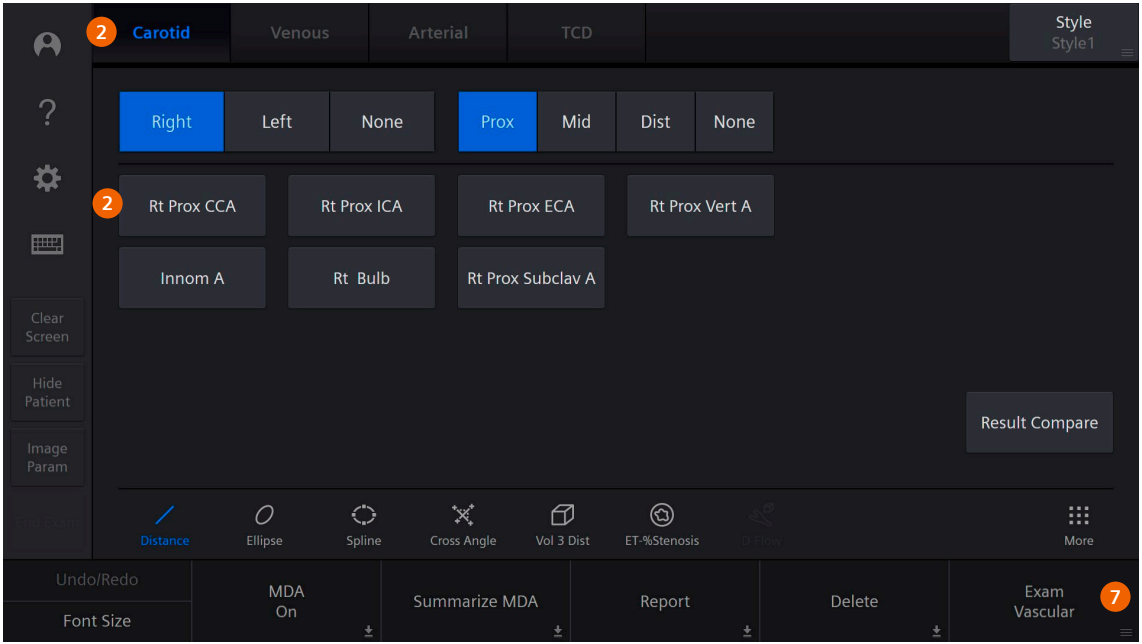
Measurements and Reports

Labeled Measurements

1. Press **Caliper** 

2. Select the desired measurement label
3. Roll the trackball to position the first caliper
4. Press **Set** to anchor 
5. Roll the trackball to position the second caliper
6. Press **Set** to complete the measurement, send the labeled value(s) to the patient report and / or activate additional measurements
7. Rotate the Exam type soft key to display additional labeled measurement packages

Tip: The measurement label can be selected before or after calipers are placed.


2
Carotid
Venous
Arterial
TCD
Style
Style1
Right
Left
None
Prox
Mid
Dist
None
2
Rt Prox CCA
Rt Prox ICA
Rt Prox ECA
Rt Prox Vert A
Innom A
Rt Bulb
Rt Prox Subclav A
Clear Screen
Hide Patient
Image Param
End Exam
Result Compare
Distance
Ellipse
Spline
Cross Angle
Vol 3 Dist
ET-%Stenosis
D Flow
More
Undo/Redo
Font Size
MDA On
Summarize MDA
Report
Delete
Exam Vascular
7

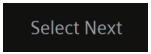
Measurements and Reports

Edit Measurements (Labeled and Unlabeled)

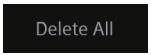
Edit Completed Measurement

1. Press **Update** to activate calipers and cycle between active calipers

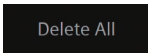
2. Press the **Select Next** soft key to cycle between calipers sets



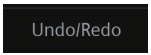
3. Press **Delete** soft key to remove active measurement



4. Press **Delete All** soft key to delete all measurements



5. Rotate **Undo/Redo** or the **Select** key to edit a trace measurement



Reposition Measurement Results

1. Select **Pointer**
2. Click and drag MDA Results to desired position

Tip: Click and drag MDA Results to the bottom of the screen to display in a horizontal format.

Measurements and Reports

Report

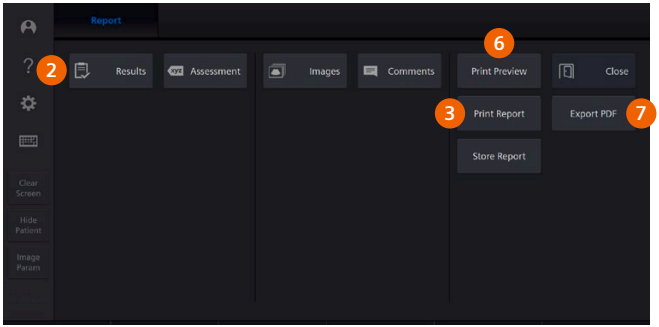
Review the Report

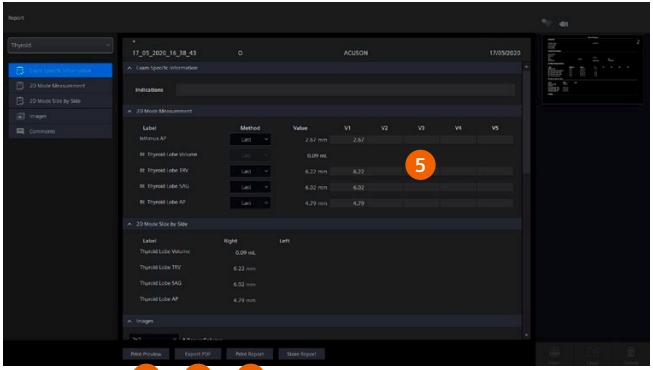
1. Press the **Report** key to enter / exit report page

2. Select **Results** to review additional measurements
3. Select **Print Report** to send to connected external printer
4. Press **Print Store 1** to store report as a thumbnail

5. To edit the report, roll the trackball to the desired measurement and edit
6. Select **Print Preview** to visualize the revised summary
7. Select **Export PDF** to save the report on a USB

Only labeled measurements appear on the report; an * appears for any edited measurement.





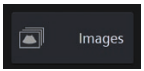
Tip: Press Store Report to capture the report page(s) as an image(s).

Measurements and Reports

Report

Import Images into the Report

1. Press the **Report** key to enter / exit report page
2. Select **Images** on the Touch or Imaging Screen



3. Select the display format on the imaging screen
4. Roll the trackball to the thumbnail image and press the **Set** key to transfer to the images section
5. To Delete the image from the report, hover the cursor over the image and click the "**X**" that appears in the upper right corner

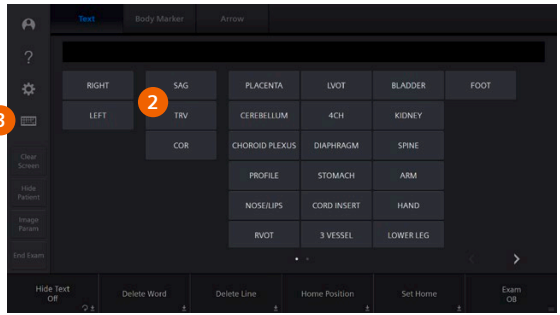
Up to 20 images can be stored to the Summary.


System Serial Number : 900122
Report
Carotid
Exam Specific Information
D Mode Measurement
Carotid Assessment
Images
Comments
2
26_10_2017_14_53_07
26/10/2017
Images
2x2
3
4
5
Right SAG ICA
Right SAG ICA
Right SAG ICA
Print Preview
Export PDF
Print Report
Print
Clear
Delete

Text, Arrows and Body Markers

Text

1. Press the **Text Body Marker** key on the control panel
2. Select the desired annotation on the Touch Screen
3. Select the **Keyboard** icon on the Touch Screen to activate the digital alphanumeric keyboard; press again to return to the text screen



Text Icons

Controls	Function
	Activates / deactivates text cursor and the text Touch Screen menu
Set Home	Sets default position for the text cursor
Home Position	Positions the cursor at the home location
Hide Text Off	Temporarily hides text
Clear Screen	Deletes all text, pictograms or arrows

Controls	Function
Delete Line	Deletes one line of text at the cursor
Delete Word	Deletes the last word
‹ ›	Displays the next or previous page, when available
Caps Lock	Press to activate / deactivate and make all letters typed capitalized / not capitalized

Text, Arrows and Body Markers

Body Markers

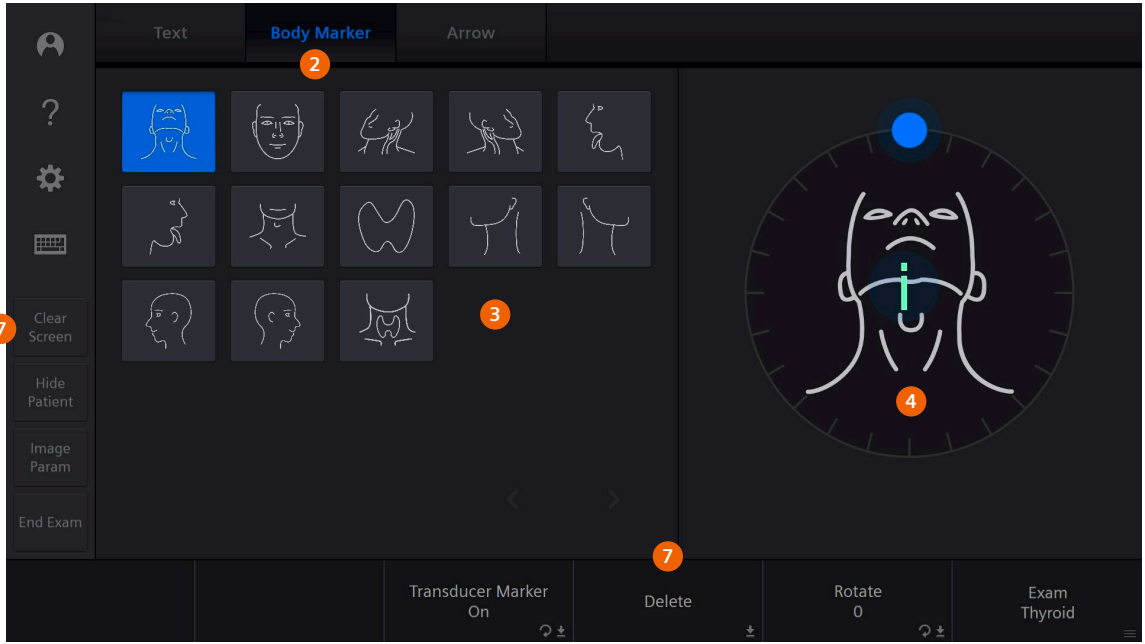
1. Press the **Text Body Marker** key on the Control Panel

2. Select the **Body Marker** tab
3. Select the desired Body Marker from the Touch Screen
4. Use the Body Marker widget on the Touch Screen to adjust the transducer orientation / position
5. Press **Set** to anchor

6. Reselect the **Text Body Marker** key on the Control Panel to readjust the Body Marker position

7. Press **Delete** or **Clear Screen** on the Touch Screen to delete the Body Marker

Tip: Body Marker options can be customized in the System Configuration Menu.


Text
Body Marker
Arrow
2
3
4
7
Clear Screen
Hide Patient
Image Param
End Exam
7
Transducer Marker On
Delete
Rotate 0
Exam Thyroid

Text, Arrows and Body Markers

Arrows

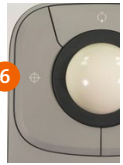
1. Press the **Text Body Marker** key on the control panel

2. Select the **Arrow** tab on the Touch Screen
3. Select the desired arrow type / size / color
4. Use the Arrow widget to adjust the arrow orientation
5. Roll the trackball to position
6. Press **Set** to activate additional arrows
7. Press **Delete** to delete the last arrow or **Clear Screen** to delete all markings
8. Press **Update** to cycle through multiple arrows
9. Press **Text Body Marker** to exit Arrow function

Tip: Unlimited arrows can be added.


Text
Body Marker
Arrow
2
Clear Screen
7
Hide Patient
Image Param
End Exam
3
4
Arrow Color Green
3
Arrow Size Large
3
Delete
7
Rotate
4


5


6


8

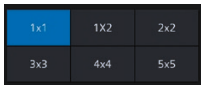
Data and Image Management

Review and Delete Images

Review Images on Current Study

1. Press **Review** on the Control Panel

2. Select the desired layout on the Touch Screen



3. Rotate the **Select** key or **Page** soft key to view more images

4. Press **Review** or **2D** to exit

Tip: Rotate the **Select** key to choose a protocol view and press the **Select** key to pause / resume the protocol.

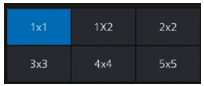
Review Images from a Closed Study

1. Press **Patient** on the control panel

2. Select **Browser** Tab on the Touch Screen

3. Double click the desired study

4. Select the desired display format on the Touch Screen



5. Rotate the **Select** key or **Page** soft key to view more images

6. Press **Review** or **2D** to exit

Delete Images from a Current Study or in Review

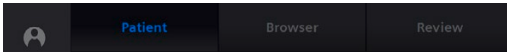
1. Select the **Pointer** from the control panel
2. Select an image on the thumbnail panel to highlight
3. Press the **Delete** icon on the Touch Screen

Data and Image Management

Restart an Exam

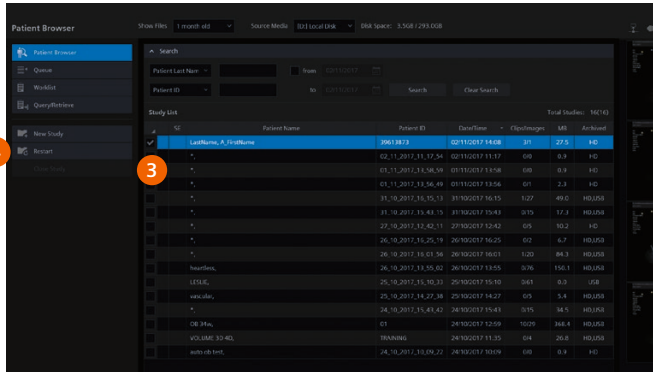
1. Press **Patient** Key 

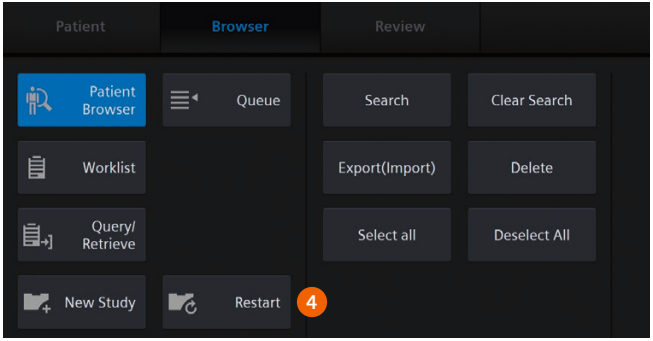
2. Select **Browser** Tab on the Touch Screen



3. Select patient study from list to highlight
4. Select **Restart**
5. Select **OK**

Images, clips and volumes can be added to a closed study within 24 hours.


Patient Browser
Show Files
Source Media
Disk Space: 3.5GB / 293.0GB
Search
Study List
Total Studies: 16(16)
4
3

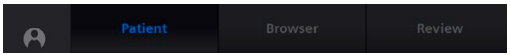

Patient
Browser
Review
Patient Browser
Queue
Search
Clear Search
Worklist
Export(Import)
Delete
Query/ Retrieve
Select all
Deselect All
New Study
Restart
4

Data and Image Management

Teaching File

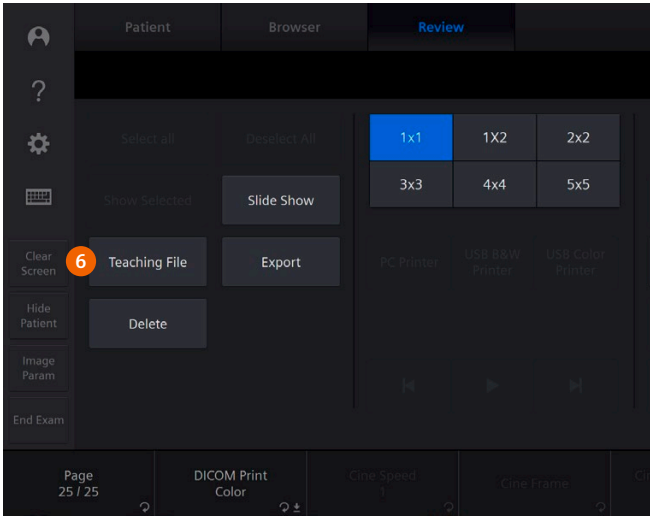
1. Press **Review** 

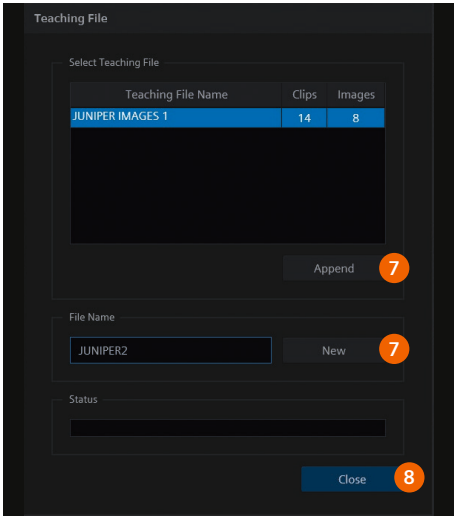
2. Select **Browser** tab



3. Double click the desired exam from **Local Disk** to load study
4. Roll the trackball, highlight an image or clip from the imaging screen (not thumbnail) and press the **Set** key
5. Repeat for all desired images
6. Press **Teaching File** on the Touch Screen
7. Under Teaching File, name the file and select **New** or select an existing file and select **Append**
8. Select **Close**
9. The teaching file is now displayed in the Patient Browser
10. To add images from multiple studies, follow steps 1–5, then select the desired teaching file
11. Press **Append** to add the additional images

Tip: Images and Clips stored in a teaching file removes all patient data.


Patient
Browser
Review
Select all
Deselect All
1x1
1X2
2x2
3x3
4x4
5x5
Show Selected
Slide Show
Clear Screen
6
Teaching File
Export
PC Printer
USB B&W Printer
USB Color Printer
Hide Patient
Delete
Image Param
End Exam
Page 25 / 25
DICOM Print Color
Cine Speed 1
Cine Frame


Teaching File
Select Teaching File
Teaching File Name
Clips
Images
JUNIPER IMAGES 1
14
8
Append
7
File Name
JUNIPER2
New
7
Status
Close
8

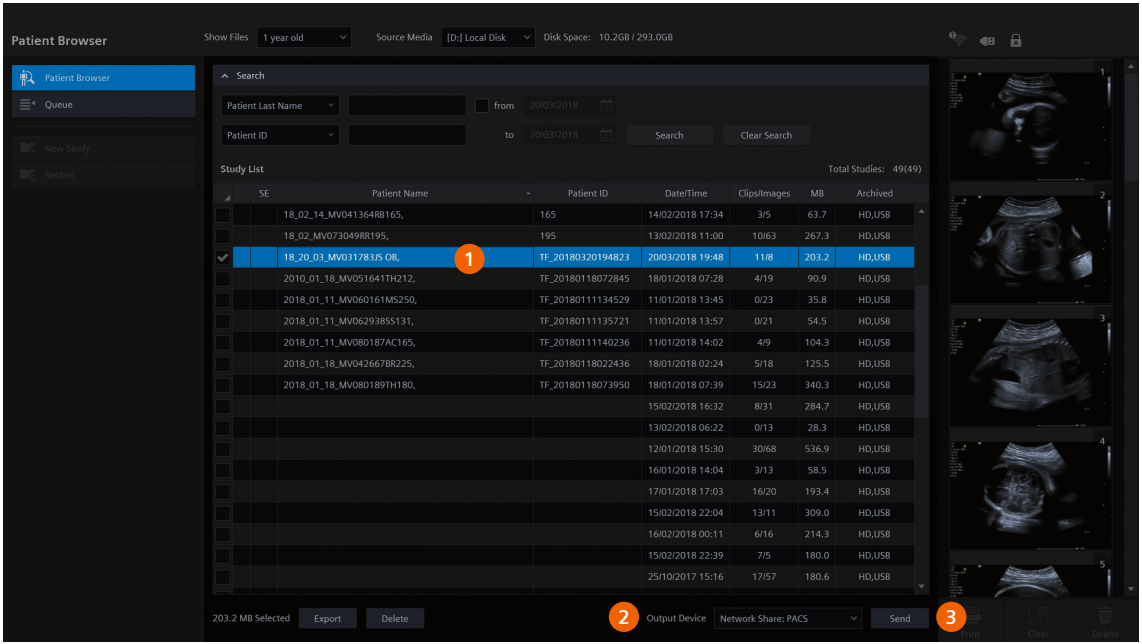
Data and Image Management

Export Study

Export Study to Network

1. Select the patient name in the **Patient Browser**
2. Select the desired Output Device
3. Select **Send**

Tip: Images automatically send to PACs if the system is configured to send during the exam or at the end of the exam.


Patient Browser
Show Files
1 year old
Source Media
[D:] Local Disk
Disk Space: 10.2GB / 293.0GB
Patient Browser
Queue
New Study
Restart
Search
Patient Last Name
from
20/03/2018
Patient ID
to
20/03/2018
Search
Clear Search
Study List
Total Studies: 49(49)
SE
Patient Name
Patient ID
Date/Time
Clips/Images
MB
Archived
18_02_14_MV041364RB165,
165
14/02/2018 17:34
3/5
63.7
HD,USB
18_02_MV073049RR195,
195
13/02/2018 11:00
10/63
267.3
HD,USB
18_20_03_MV03178JJS OB,
TF_20180320194823
20/03/2018 19:48
11/8
203.2
HD,USB
2010_01_18_MV051641TH212,
TF_20180118072845
18/01/2018 07:28
4/19
90.9
HD,USB
2018_01_11_MV060161MS250,
TF_20180111134529
11/01/2018 13:45
0/23
35.8
HD,USB
2018_01_11_MV062938SS131,
TF_20180111135721
11/01/2018 13:57
0/21
54.5
HD,USB
2018_01_11_MV080187AC165,
TF_20180111140236
11/01/2018 14:02
4/9
104.3
HD,USB
2018_01_18_MV042667BR225,
TF_20180118022436
18/01/2018 02:24
5/18
125.5
HD,USB
2018_01_18_MV080189TH180,
TF_20180118073950
18/01/2018 07:39
15/23
340.3
HD,USB
15/02/2018 16:32
8/31
284.7
HD,USB
13/02/2018 06:22
0/13
28.3
HD,USB
12/01/2018 15:30
30/68
536.9
HD,USB
16/01/2018 14:04
3/13
58.5
HD,USB
17/01/2018 17:03
16/20
193.4
HD,USB
15/02/2018 22:04
13/11
309.0
HD,USB
16/02/2018 00:11
6/16
214.3
HD,USB
15/02/2018 22:39
7/5
180.0
HD,USB
25/10/2017 15:16
17/57
180.6
HD,USB
203.2 MB Selected
Export
Delete
Output Device
Network Share: PACS
Send
Print
Clear
Delete
1
2
3

Data and Image Management

Export Study

Export Study to CD-R/DVD in DICOM

1. Insert CD-R/DVD
2. Select the patient name in the **Patient Browser**
3. Select **Export**
4. Select **DICOM** as the export format
5. Select **CD/DVD** as the destination
6. Select **Export**

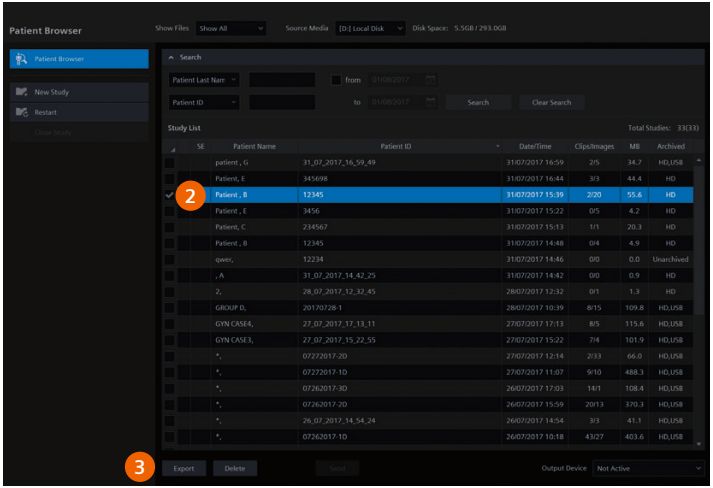
Tip: Hold **CTRL** to select more than one patient name and select **De-identify** to anonymize a study before exporting.

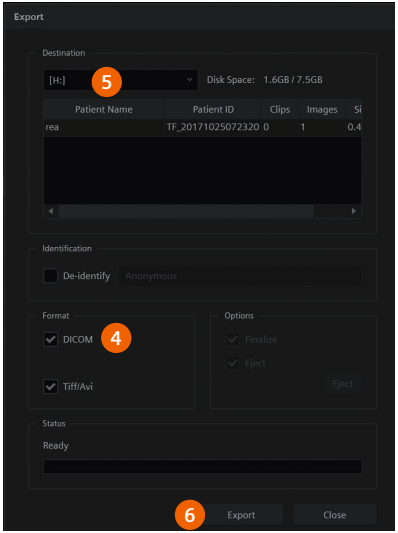
Export Study to USB in PC Format (TIFF or AVI)

1. Insert USB
2. Select the patient name in the **Patient Browser**
3. Press **Export**
4. Select **Tiff/AVI** as the export format
5. Select a **USB Drive** as the destination
6. Select **Export**

Tip: USB icon is displayed in the top right of the image screen when USB is inserted correctly.

Export to USB or CD-R/DVD





Data and Image Management

Import Study

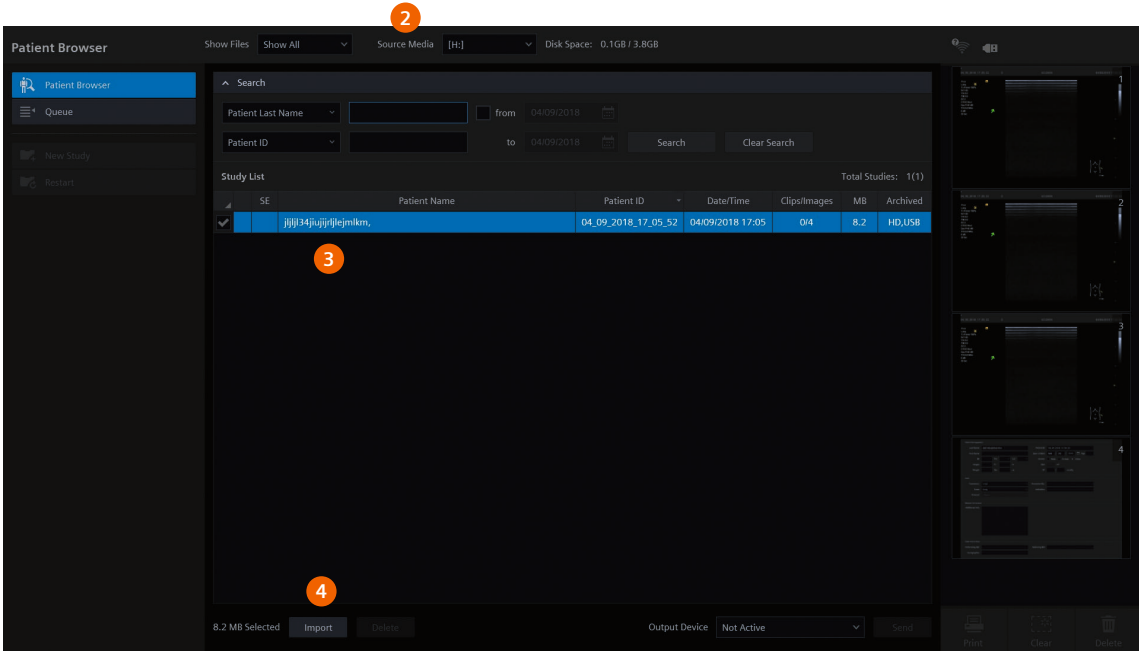
Import Study from CD-R / DVD

1. Insert CD-R / DVD
2. Select **CD / DVD** from Source Media in the Patient Browser
3. Select patient name on the CD / DVD
4. Select **Import**

Import Study from USB to Local Database

1. Insert USB
2. Select USB drive from Source Media in the **Patient Browser**
3. Select patient name on the USB
4. Select **Import**

Import from USB or CD-R/DVD



Care and Cleaning

Cleaning and Disinfecting the System

1. Power off the system and unplug the power supply
2. Use a clean gauze pad or lint-free cloth, lightly moistened with a mild detergent, to wipe the surface of the system
3. Use a clean, lint-free cloth to dry the surface
4. As required, use an approved disinfectant wipe to disinfect the system and accessories
5. Plug the power cord into the power supply

Tip: Ensure that fluids do not seep into any openings on the system.

Cleaning the Trackball

1. Rotate the ring around the trackball counter-clockwise and carefully lift the ring to remove
2. Remove the trackball
3. Clean the ring, trackball and trackball assembly with a cotton swab or lint-free pad moistened with a mild detergent solution
4. As required, use an approved disinfectant wipe to disinfect the ring, trackball and trackball assembly
5. After allowing the trackball components to completely dry place the trackball into the assembly
6. Place the ring over the trackball, aligning the tab with the point of attachment on the assembly and rotate clockwise until the ring snaps into place

Care and Cleaning

Air Filter

Cleaning the Air Filter

1. Power off the system and unplug the power supply
2. Push the air filter tray to release the locking mechanism and then pull the tray from the system
3. Rinse the air filter tray with running water and allow the filter to completely dry
4. Slide the dry air filter back into the system
5. Plug the power cord into the power supply

Tip: Air filter should be checked and cleaned weekly to maintain proper system cooling.

Note: Some functions shown in this material are optional and might not be part of your system.

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