

# ACUSON Juniper Ultrasound System

System Overview  
Software Release VB30D



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## Speaker Notes:

In this presentation we will discuss the system overview of the ACUSON Juniper™ ultrasound system.

## Objectives

- Review external features
- Explain Control Panel and Touch Screen
- Discuss transducers and care of the system



### Speaker Notes:

Here are the objectives. We will start with reviewing the external features of the system.

## System overview



### Speaker Notes:

The ACUSON Juniper™ ultrasound system weighs 167.5 pounds (76 kilograms) and includes the following features:

- 21.5" LED display
- 13.3" tiltable Touch Screen
- Adjustable Control Panel
- Six transducer ports (5 standard and 1 pencil port)
- Easy-wheeling castors
- Generous storage

## Monitor

Enhanced 21.5" LED LCD  
with lower black levels



Easy monitor adjustment with  
palm curve on front and grip  
on back

Three step task light  
brightness adjustment



Monitor brightness control

### Speaker Notes:

The ACUSON Juniper system has a 21.5" LED LCD monitor which features:

- Lower black levels
- Easy monitor adjustment location with posterior grips
- Task light with 3 levels of brightness
- Easy monitor custom setting

## Touch Screen

Customizable 13.3"  
Touch Screen



Touch Screen  
brightness control

Two USB ports



20° Tilting  
adjustment

### Speaker Notes:

The customizable 13.3" Touch Screen tilts up to 20 degrees to best fit the needs of the user. Two USB ports are located on the left side of the Touch Screen, and brightness controls are located on the right.

## Gel warmer, speakers and transducer holders



### Gel Warmer

- Standard
- Adjustable temperature
- Configurable
- Optional large gel bottle holder

### Speakers

- High-quality speakers
- Left and right of Touch Screen

### Transducer Holders

- Six holders – 4 short and 2 long
- Configurable
- Easy to clean

### Speaker Notes:

High-quality speakers are located on both the left and right of the Touch Screen. The standard gel warmer is configurable in location and includes adjustable temperature controls. A large gel bottle holder is also available (optional).

The system includes 6 transducer holders (4 short and 2 long) which are configurable and easy to clean.

## Peripherals (optional)

### DVD/Physio

- System without DVD/physio (left)
- System with DVD/physio (right)

### B/W printer

- System without printer (left)
- System with printer (right)

### Color printer

- System without printer (left)
- System with printer (right)



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## Speaker Notes:

The following optional peripheral devices are available on the ACUSON Juniper system:

- DVD/Physio
- B/W printer
- Color printer

## Foot switch (optional)

- Ideal for interventional cases
- Dual configurable functions
- USB connection



### Speaker Notes:

A foot switch is available as an option and has two pedals for dual configurable functionalities.

The foot switch connects to the system via USB.

To configure the foot switch, select **System Configuration > Custom Keys > Key Function**. Select from the list of custom assignments available for the **Right Pedal** and **Left Pedal**.

## Storage



Rear basket



Below transducer ports



Magnetic side  
basket



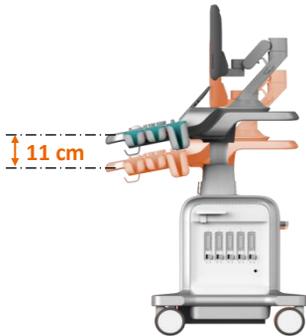
Behind Touch  
Screen

### Speaker Notes:

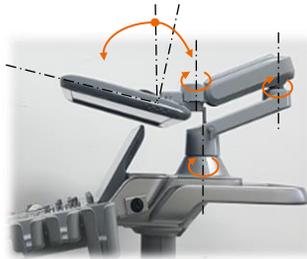
The ACUSON Juniper system features generous storage capabilities including:

- Rear basket
- Side wall
- Magnetic side basket
- Storage behind the Touch Screen

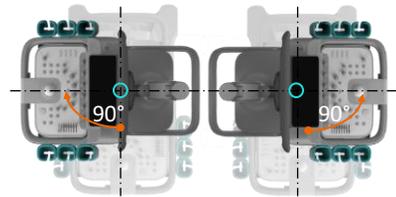
## Articulation



Control Panel height  
adjustment



Monitor  
adjustment



Control Panel swivel  
adjustment

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### Speaker Notes:

The system contains articulating components which enable the adjustment of:

- Control Panel height adjustment of 11 cm
- Monitor
- Control Panel swivel position, 90-degrees in either direction (180-degree swivel range); the 90-degree Control Panel swivel articulation allows the user to scan from either the front or side of the system, depending on clinical use

## Transducer ports

Six transducer ports

- Five standard transducer ports
- One transducer port for continuous wave (pencil) transducers



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### Speaker Notes:

The ACUSON Juniper system features 6 transducer ports. Five standard ports and one CW pencil port reducing the need to change transducers when changing exam types.

## Cable management

### Flexible cable management

- Two cable clips located above transducer ports
- Two cable hangers located on Control Panel



### Speaker Notes:

With the increased number of transducer ports available on the system, cable management is important.

The ACUSON Juniper system features a flexible cable management system which includes 2 cable clips located above the transducer ports and 2 cable hangers located on the Control Panel.

## Connecting the transducers

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



### Speaker Notes:

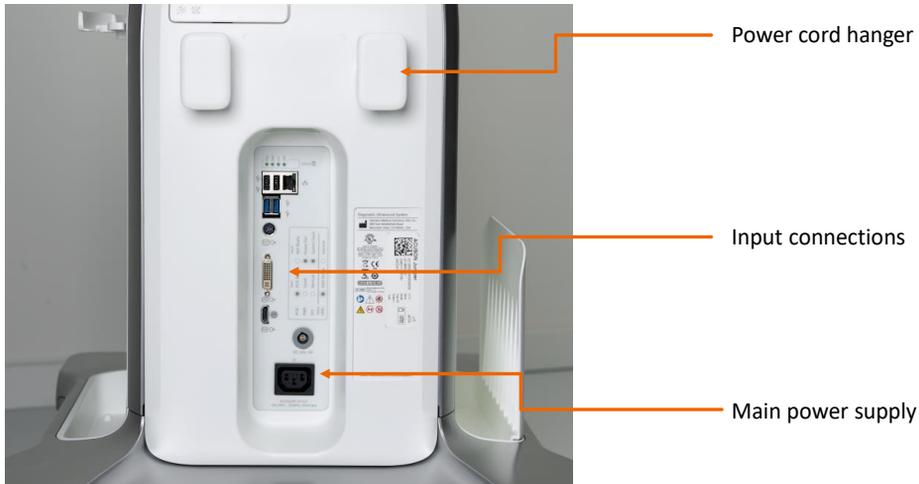
To connect a transducer:

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

To disconnect a transducer:

1. Place the lever into the left unlocked position
2. Remove the transducer connector

## Back of system



### Speaker Notes:

The following components are located on the back of the system:

- Power cord hanger
- Input connections
- Main power supply

## System casters Lock/steer/swivel functionality



Front wheels



Rear wheels

### Speaker Notes:

The ACUSON Juniper system has easy wheeling casters with steering and lock capabilities.

The front wheels have individual lock casters:

- Press the pedal down to lock the wheel
- Press the pedal up to unlock the wheel

The rear wheels have directional lock casters:

- Press both pedals down to place the wheel in a locked position with no movement
- Press both pedals up to unlock the wheel to roll and swivel freely
- Press the green pedal down and red pedal up to place the wheel in steer mode
- Press the red pedal down and green pedal up to place the wheel in a locked position with no movement

## Control Panel protective overlay (optional)

A protective overlay is available for the system  
Control Panel

- Large overlay for Control Panel
- Smaller overlays for individual controls
- Disposable



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### Speaker Notes:

A disposable (optional) protective overlay is available for the system Control Panel. Options include both a large overlay and smaller overlays for individual controls.

## Objectives

- Review external features
- Explain Control Panel and Touch Screen
- Discuss transducers and care of the system



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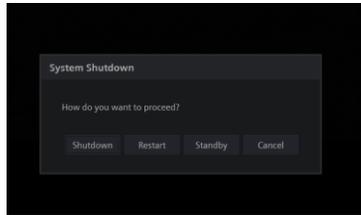
## Speaker Notes:

We continue with a more detailed look at the Control Panel and the Touch Screen.

## Power on, QuikStart standby mode and Battery



Power On/Off



QuikStart standby mode



Battery (optional) –  
under front of system

### Speaker Notes:

The “Power” button is located on the Control Panel to the left of the Touch Screen.

A QuikStart standby mode is available. This feature:

- Powers up the system in less than 2 seconds and shuts it down in ~4 seconds
- Press **Power** and then **Standby** to enter
- Scanning requires a power source connection

The optional battery is located under the front of the system.

## Battery support

- Battery support indicator

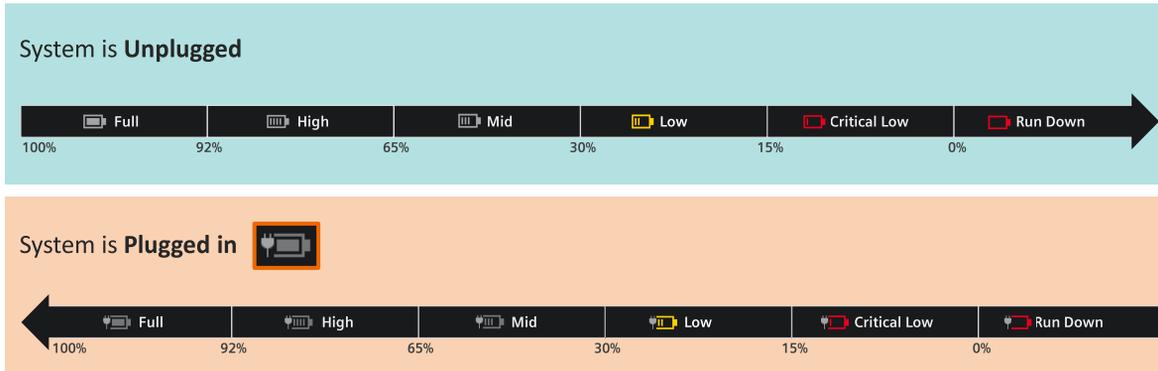


### Speaker Notes:

The battery indicator will be displayed on the upper right portion of the monitor.

## Battery indicators

Battery indicators will show the current battery status and if the system is plugged in or not with a plug icon



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### Speaker Notes:

The Battery indicator will be displayed so the user can recognize the current battery status. The display will indicate the battery level and whether the system is plugged in or not.

## Battery Standby and Restart

**Standby:** In Battery mode, Standby is allowed depending on the battery capacity

 Full	 High	 Mid	 Low	 Critical Low
<p><input checked="" type="checkbox"/> <b>Standby</b> When the battery level is Mid or above Mid, it's possible to run the Standby mode</p>			<p><input type="checkbox"/> <b>Standby</b> When the battery level is Low or Critical Low, the system will not allow the Standby mode. In this case, click the <b>Standby</b> button and an information dialog will be provided, <i>"The battery is too low to support standby."</i></p>	

**Restart:** Restart is not allowed when the system is unplugged

 Full	 High	 Mid	 Low	 Critical Low
<p><input type="checkbox"/> <b>Restart</b> Restart is only allowed once AC power is connected to the system. Therefore, click the <b>Restart</b> button, and an information dialog will be provided, <i>"Connect the AC power and then restart the system."</i></p>				

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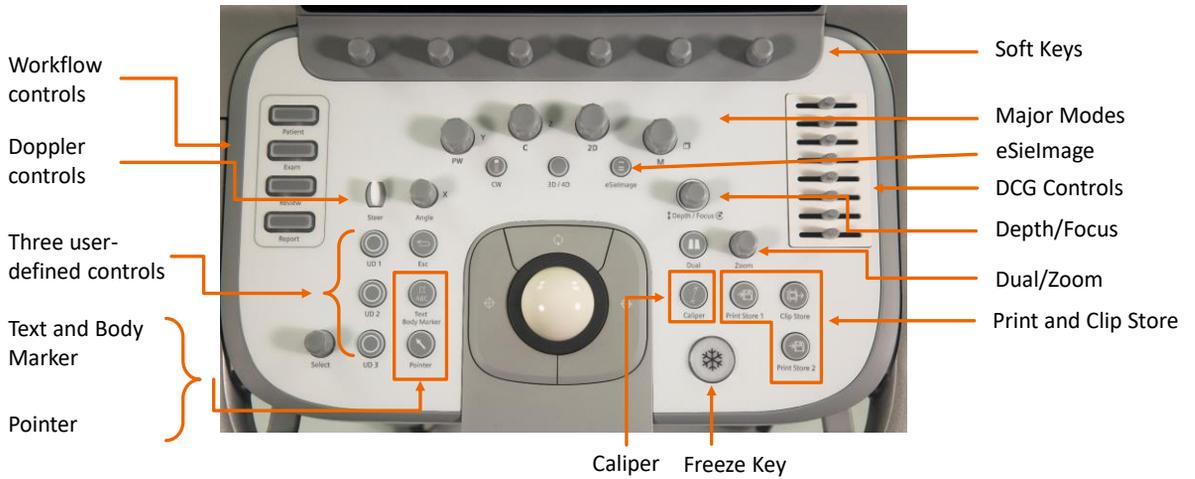
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### Speaker Notes:

The standby feature is only allowed when the battery level is Mid or above. If the battery is low or critical low, then Standby will not be allowed, and a message will appear that the battery is too low to support.

Restarting the system is only allowed once the AC power is connected to the system.

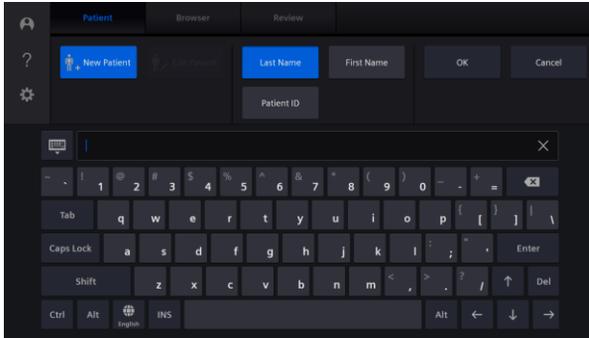
**Control Panel**



**Speaker Notes:**

The Control Panel controls are displayed and labeled here.

## Keyboard



Virtual keyboard

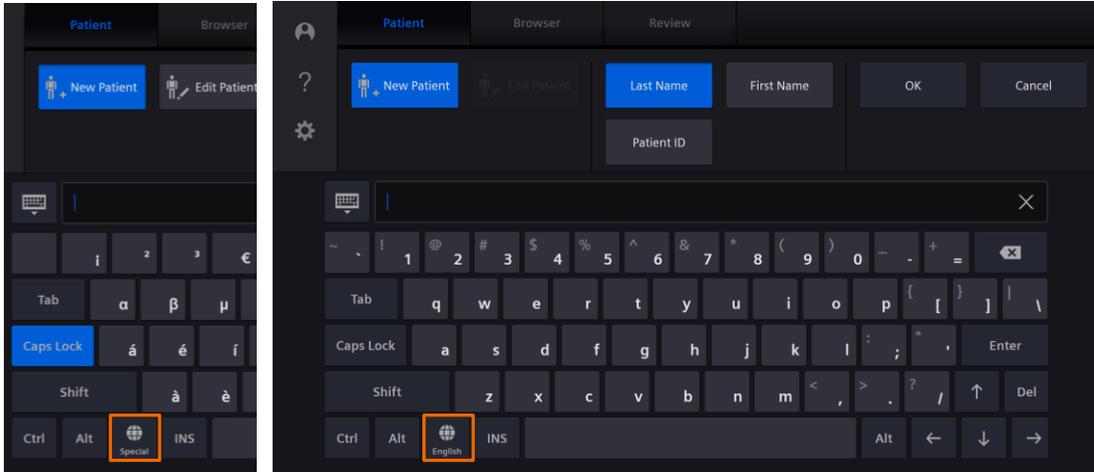


Pull-out keyboard (optional)

### Speaker Notes:

A virtual alphanumeric keyboard is located on the Touch Screen. A pull-out keyboard is also available (optional).

## Language and special character key



### Speaker Notes:

The language key is located on the digital keyboard and gives the user access to special characters as desired.

## Screen saver



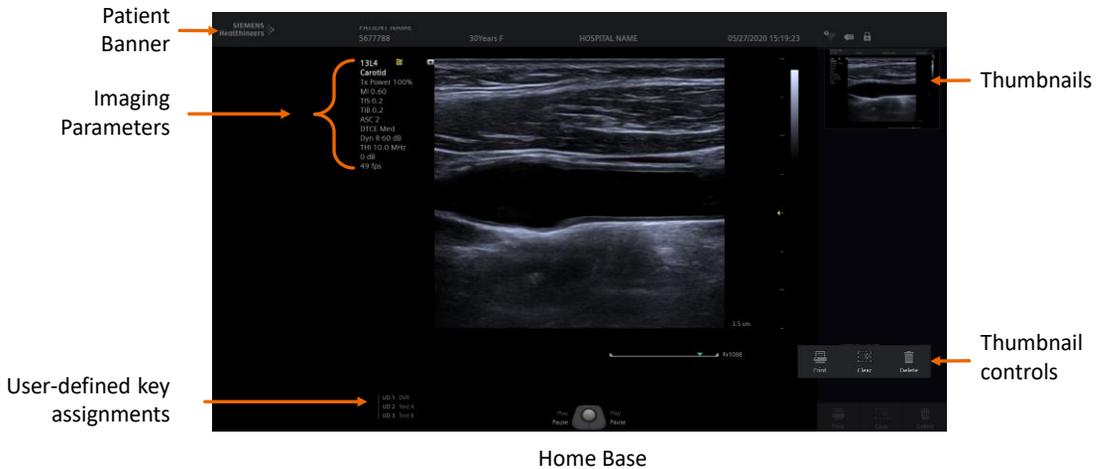
### Speaker Notes:

The system supports a screen saver feature with images of a juniper tree displayed in multiple environments over the course of a day.

This represents the versatility and adaptability of the system to many different scanning environments and clinical uses throughout the day.

To set the timing of the screen saver, select the **System Configuration** icon on the Touch Screen, then select **Display**.

## Image screen



### Speaker Notes:

The Patient Banner displays the patient information. The Hospital name can be entered in the System Configuration menu under General 1. The user can hide the patient information by selecting **Hide Patient** on the left side of the Touch Screen. The patient information can be redisplayed by selecting **Hide Patient** again.

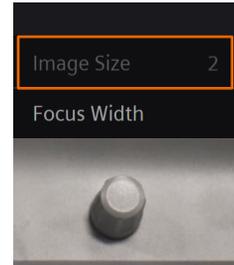
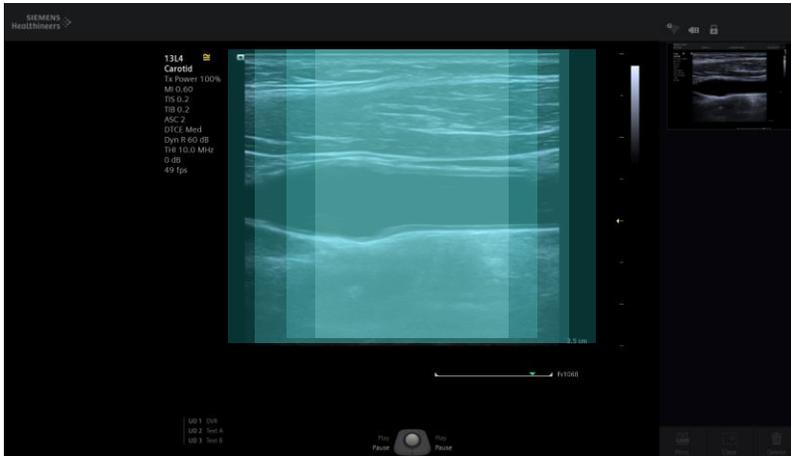
The imaging parameters are displayed for each mode. The user can hide the imaging parameters by selecting **Imaging Parameters** on the left side of the Touch Screen. Select **Imaging Parameters** again to restore.

The assignments for the user-defined (UD) keys are displayed on the bottom left of the imaging screen. They can be programmed in **the System Configuration Menu > Custom Keys**.

The trackball controls are mode-dependent and are displayed at the bottom of the Touch Screen.

The thumbnail images are displayed along the right side of the image. The controls to print, delete and clear thumbnail images are located on the bottom right.

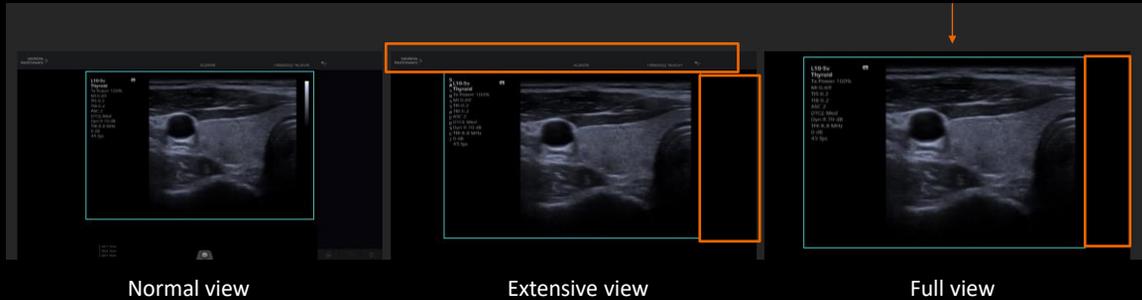
## Image size



### Speaker Notes:

The system allows the user to choose the desired image size displayed on the monitor. The ACUSON Juniper ultrasound system has 5 available image sizes, which are easily selected by using the rotary soft key located at the base of the Touch Screen.

## Image display size options



Normal view

Extensive view

Full view

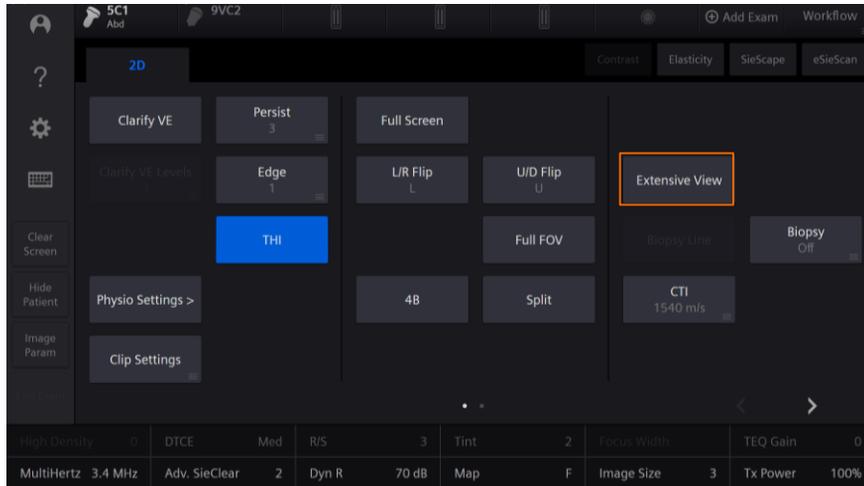
- Captures Patient Information and Banner
  - Hides Thumbnails
  - Hides Trackball legend
- Does not capture Patient Information and Banner
  - Hides Thumbnails
  - Hides Trackball legend

### Speaker Notes:

The user has 3 options for the size of the image display:

- The normal view will capture the patient information, patient banner, thumbnails and the trackball legend
- The extensive view will capture the patient information and the patient banner, although it hides the thumbnails and the trackball legend
- The full view will display the largest diagnostic image on the monitor; it will not capture the patient information or the patient banner and will also hide the thumbnails and the trackball legend

## Extensive view



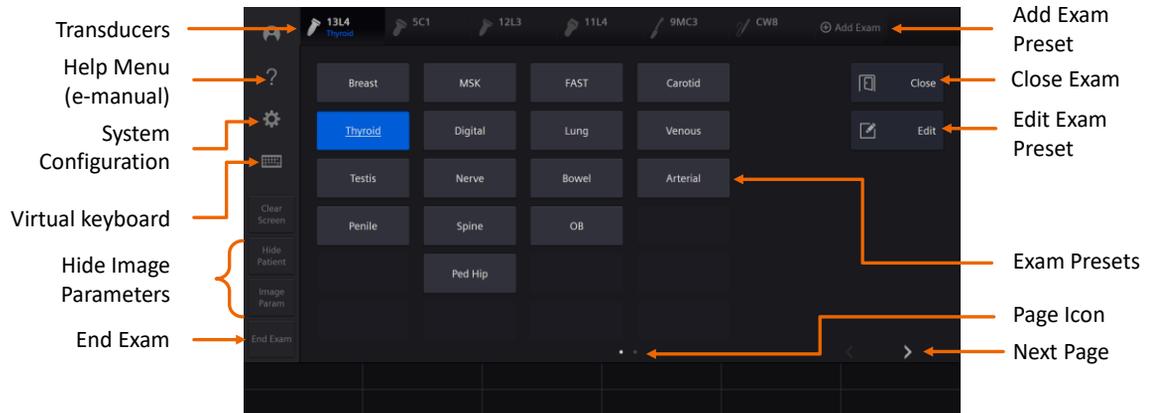
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### Speaker Notes:

The extensive view option will now be displayed on the Touch Screen. Select either view to display the desired size.

## Exam Touch Screen



### Speaker Notes:

The Touch Screen controls are displayed and labeled here.

## Objectives

- Review external features
- Explain Control Panel and Touch Screen
- Discuss transducers and care of the system



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### Speaker Notes:

We will now discuss transducers and the care of the system.

## Transducers

Convex	Linear	Phased array	Micro convex	Volume	TEE	Pencil
7C2	18H5	10V4	11M3	9VE4	5VT	CW8
6C1	16L4	8V4	10MC3	9VC2		CW5
5C1	14L4	5P1	9MC3			CW2
	13L4	P4-2				
	12L3					
	11L4					
	L10-5v					

### Speaker Notes:

The 23 transducers available for the ACUSON Juniper ultrasound system are listed here.

## System filter

Clean air filters at least once a week to maintain proper system cooling

1. Power off the system and unplug the power cord from power supply
2. Push the air filter tray in to release the locking mechanism; then pull the tray from system
3. Rinse the air filter with running water and allow to dry completely



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### Speaker Notes:

The filter is located on the back of the system. To clean the filter:

1. Power off the ultrasound system and unplug the power cord from the power supply
2. Push the air filter tray in to release the locking mechanism; then pull the tray from the system
3. Rinse the air filter tray with running water and allow the filter to dry completely

Check and clean the air filters weekly, or as needed, to maintain proper system cooling.

## Cleaning the system

1. Power off the system and unplug the power cord from the power supply
2. Use clean gauze pad or lint-free cloth, lightly moistened with a mild detergent to gently wipe:
  - Touch Screen
  - Monitor
  - Control Panel
3. Dry surfaces with a clean lint-free cloth
4. As required, use an approved disinfectant wipe to disinfect the system and accessories



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### Speaker Notes:

1. Power off the ultrasound system and unplug the power cord from the power supply
2. Use a clean gauze pad or lint-free cloth, lightly moistened with a mild detergent to gently wipe:
  - Touch Screen
  - Monitor
  - Control Panel
3. Dry surfaces with a clean lint-free cloth
4. As required, use an approved disinfectant wipe to disinfect the system and accessories

## Cleaning the trackball

1. Rotate the ring around the trackball and lift to remove
2. Remove trackball
3. Clean ring, trackball and trackball assembly with mild detergent or approved disinfectant
4. Place trackball into assembly
5. Place ring over trackball and rotate clockwise until it snaps into place



### Speaker Notes:

To clean the trackball:

1. Rotate the ring around the trackball counterclockwise and carefully lift the ring
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 (as required, use an approved disinfectant wipe to disinfect the ring, trackball and trackball assembly)
4. After allowing the trackball components to completely dry, place the trackball into the assembly
5. 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

## Trademarks and Disclaimers

- ACUSON Juniper is a trademark of Siemens Medical Solutions USA, Inc.

### Speaker Notes:

No Speaker Notes.

Thank you for your enthusiasm!

# Questions?

**Speaker Notes:**

No Speaker Notes.