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# ACUSON P300™ Ultrasound System Control Panel Diagram

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## ACUSON P300™ Ultrasound System\*

### Quick Reference Guide – System Overview

#### Introduction

This Quick Reference Guide contains brief descriptions and instructions for the functions most commonly used to perform 2D, M-mode and Doppler exams

This supplement is not a substitute for the system Operators Manual.

#### Contents

- Exam Basics
- 2D Controls
- Color, PW and CW Doppler and M-mode Optimization
- Measurements and Calculations
- Text and Pictograms
- Data and Image Management

### Exam Basics

The **Power On/Off** button  is located on the upper right side of the system.  
A solid yellow light will indicate the power is on.

The **Battery** option will allow the system to run on internal battery for 80 minutes (scanning) or 120 minutes (standby).

#### Begin an Exam

Press **START/END**



Enter patient name, ID and other exam information

Press **TAB** to move between data fields

*or*

Roll the trackball to move to the next data field and press **Right Select**



Select the proper **APPLICATION**, **PRESET** and **PROBE**

Press **Enter** or select **OK** to start exam

### Modify Patient Data During an Open Exam

Press **OPTIONS** 

Rotate **S** wheel to **EDIT ID** and press the **S** button 

Edit patient data

Select **OK**

*or*

Press **Enter on the QWERTY keyboard**

**Note:** Editing patient data will re-name all previously stored images/clips within the study.

### Modify Patient Data From Patient Archive

Press **ARCHIVE/REV** 

Highlight patient

Rotate **S** wheel to **NEXT/PREVIOUS** and press **the S** button

Rotate **S** wheel to **EDIT ID** and press the **S** button

**Note:** Editing patient data will re-name all previously stored images/clips within the study.

### Modify Application

Press **START/END** 

Select **CURRENT**

Select new **APPLICATION**, **PRESET** and **PROBE**

Select **OK**

### Change Transducer and/or Preset

Press **PROBE/PRESET** 

Select **PRESET** and/or **PROBE**

Select **OK**

The **UPDATE/LINE/GAIN**  controls gain levels (rotate) and cursor/update (press) for CW, PW and Color Doppler

The **AUTO/GAIN**  controls 2D and M-mode gain levels (rotate), one-button gain and TGC optimization for 2D (press)

## Storing Images/Clips

When frozen, press **CLIP/IMAGE** to save a static image to the local archive  
 When live, press **CLIP/IMAGE** to acquire and save a clip to the local archive  
 The saved data displays in the thumbnail panel on the right of the screen

Press **REC/PRINT**  to print the onscreen image

**Note:** Press **MENU**  to set up **PERIPHERALS** assigned to **REC/PRINT**

## Review an Image

Press **EXAM/REV**  during an active exam to view and delete images

To view thumbnails 1:1, roll trackball to thumbnails and press **Right Select**  or **Left Select**



To delete images, roll trackball to thumbnail and double-click **Right Select**



A red check mark will appear in the upper left corner

Select **DELETE**

Select **YES**

## Activate Review on a Previous Exam

Press **ARCHIVE/REV**  to view patient archive

Highlight patient name and double-click **Right Select** or **Left Select** to review

# 2D Controls

## Basic System Optimization

The following table identifies 2D system optimization and technologies which can be used during exams.

The **S** wheel  controls the softkey options located at the bottom of the imaging screen, rotating the **S** wheel (green) allows the user to scroll between softkeys, pressing the **S** button (yellow) changes the value and the **NEXT/PREVIOUS** softkey scrolls to additional pages.

*Items in table are not arranged sequentially*

To Adjust / Control	Do This
Depth	<ul style="list-style-type: none"> <li>Rotate the <b>DEPTH/ZOOM</b> wheel</li> </ul>

<p>Zoom</p>	<ul style="list-style-type: none"> <li>▪ Press <b>DEPTH/ZOOM</b> </li> <li>▪ Use trackball to adjust position; rotate wheel to adjust size of ROI</li> <li>▪ Press <b>DEPTH/ZOOM</b></li> </ul>
<p>Focus</p>	<ul style="list-style-type: none"> <li>▪ Roll trackball to move focal zone(s)</li> <li>▪ To anchor position of focal zones, press <b>ACTION</b></li> </ul>
<p>TEI <i>Harmonic Imaging</i></p>	<ul style="list-style-type: none"> <li>▪ Rotate <b>S</b> wheel to <b>TEI</b>, then press <b>S</b> button</li> <li>▪ To change harmonic frequencies, rotate <b>S</b> wheel to <b>FREQUENCY</b>, then press <b>S</b> button</li> <li>▪ TEI frequencies range from <b>PEN, GEN, RES</b></li> </ul>
<p>Orient <i>Up/down invert</i></p>	<ul style="list-style-type: none"> <li>▪ Rotate <b>S</b> wheel to <b>ORIENT</b> and press <b>S</b> button</li> </ul>
<p>Frequency</p>	<ul style="list-style-type: none"> <li>▪ Rotate <b>S</b> wheel to <b>FREQUENCY</b> and press <b>S</b> button</li> <li>▪ Rotate <b>S</b> wheel to adjust</li> <li>▪ Range varies from transducer and application</li> </ul>
<p>Size (2D Sector Width) <i>Increases line density/frame rate</i> <i>*Not available on linear transducers</i></p>	<ul style="list-style-type: none"> <li>▪ Rotate <b>S</b> wheel to <b>SIZE</b> and press <b>S</b> button</li> <li>▪ Rotate <b>S</b> wheel to decrease size of sector</li> </ul> <p><b>Note: CONCURR</b> is available on <b>phased array transducers</b> and will automatically reduce 2D image width to the Color Doppler ROI and allows user to pan image.</p>
<p>Dynamic Range <i>Adjusts grayscale levels</i></p>	<ul style="list-style-type: none"> <li>▪ Rotate <b>S</b> wheel to <b>DYN RANGE</b> and press <b>S</b> button</li> <li>▪ Rotate <b>S</b> wheel to adjust</li> </ul>
<p>Adding Focal Zones</p>	<ul style="list-style-type: none"> <li>▪ Rotate <b>S</b> wheel to <b>FOCUSES</b> and press <b>S</b> button for additional foci</li> <li>▪ Select <b>ACTION</b> to lock focus in place</li> <li>▪ Range: <b>1-4; ALTERNATE</b></li> </ul>
<p>Reverse <i>Left/right invert</i></p>	<ul style="list-style-type: none"> <li>▪ Rotate <b>S</b> wheel to <b>REVERSE</b> and press <b>S</b> button</li> </ul>
<p>TPVIEW (Trapezoid) <i>Linear transducers only</i></p>	<ul style="list-style-type: none"> <li>▪ Rotate <b>S</b> wheel to <b>TPVIEW</b> and press <b>S</b> button</li> </ul>
<p>Gray Maps <i>Applies a post processing curve that assigns echo amplitudes to grayscale</i></p>	<ul style="list-style-type: none"> <li>▪ Rotate <b>S</b> wheel to <b>GRAY MAP</b> and press <b>S</b> button</li> <li>▪ Rotate <b>S</b> wheel to adjust</li> <li>▪ Range: <b>1-5</b></li> </ul>

<i>levels</i>	
Colorize (Tint) <i>Sets the chromatic scale active in 2D</i>	<ul style="list-style-type: none"> <li>▪ Rotate <b>S</b> wheel to <b>COLORIZE</b> and press <b>S</b> button</li> <li>▪ Rotate <b>S</b> wheel to adjust</li> <li>▪ Range: Off(-), <b>Orange, Indigo, Magenta, Blue, Yellow, RGB</b></li> </ul>
Sharpness <i>Accentuates edges and small differences in tissues</i>	<ul style="list-style-type: none"> <li>▪ Rotate <b>S</b> wheel to <b>SHARPNESS</b> and press <b>S</b> button</li> <li>▪ Rotate <b>S</b> wheel to adjust</li> <li>▪ Range: <b>1-5</b></li> </ul>
Density <i>Adjusts line density</i>	<ul style="list-style-type: none"> <li>▪ Rotate <b>S</b> wheel to <b>DENSITY</b> and press <b>S</b> button</li> <li>▪ Rotate <b>S</b> wheel to adjust</li> <li>▪ Range: <b>LOW, HIGH</b></li> </ul>
Persistence <i>Weighted average of frames over time</i>	<ul style="list-style-type: none"> <li>▪ Rotate <b>S</b> wheel to <b>PERSIST</b> and press <b>S</b> button</li> <li>▪ Rotate <b>S</b> wheel to adjust</li> <li>▪ Range: Off(-), <b>1-6; AVERAGE</b></li> </ul>
Clip Duration <i>Sets duration of clips</i>	<ul style="list-style-type: none"> <li>▪ Rotate <b>S</b> wheel to <b>CLIPS DUR</b> and press <b>S</b> button</li> <li>▪ Range (seconds): <b>1, 2, 3, 4, 5, 7, 10, 20, 30, 60, UNLIMITED</b></li> </ul>
MVIEW <i>Spatial Compounding</i>	<ul style="list-style-type: none"> <li>▪ Rotate <b>S</b> wheel to <b>MVIEW</b> and press <b>S</b> button</li> <li>▪ Rotate <b>S</b> wheel to adjust</li> <li>▪ Range: Off(-), <b>1-10</b></li> </ul>
XVIEW <i>Provides speckle reduction and contrast enhancement</i>	<ul style="list-style-type: none"> <li>▪ Rotate <b>S</b> wheel to <b>XVIEW</b> and press <b>S</b> button</li> <li>▪ Rotate <b>S</b> wheel to adjust</li> <li>▪ Range: Off(-), <b>1, 2, C.</b></li> <li>▪ <b>XVIEW</b> level <b>C</b> options: <b>X SMOOTH 1-5, X DETAIL 1-8, X ENHAN 1-12</b></li> </ul>

## 2D Imaging Features

The following table identifies 2D imaging features.

*Items in table are not arranged sequentially*

Feature	To Use Feature
One button image optimization	<ul style="list-style-type: none"> <li>▪ Press <b>AUTO</b>  to automatically adjust the general gain and TGC</li> </ul>

<p>Dual Mode <i>Side-by-side imaging</i></p>	<ul style="list-style-type: none"> <li>▪ Press left <b>DUAL</b>  to activate dual screen display</li> <li>▪ Press right <b>DUAL</b>  to activate right screen display</li> <li>▪ Press <b>2D</b>  to escape</li> </ul> <p><b>Note:</b> For live dual, rotate <b>S</b> wheel to <b>NEXT/PREVIOUS</b>, scroll to <b>SIMULT</b> and press <b>S</b> button.</p>
<p>QUAD Imaging</p>	<ul style="list-style-type: none"> <li>▪ When in <b>DUAL</b> function, select <b>NEXT/PREVIOUS</b>, scroll to <b>QUAD</b>, press the <b>S</b> button</li> <li>▪ Press right <b>DUAL</b> button to advance</li> </ul>
<p>2D-CFM <i>Live Dual 2D and Color Doppler</i></p>	<ul style="list-style-type: none"> <li>▪ Rotate <b>S</b> wheel to <b>2D-CFM</b> and press <b>S</b> button</li> <li>▪ Allows for live 2D and Color Doppler imaging</li> </ul>
<p>VPAN <i>Activates panoramic imaging</i></p>	<ul style="list-style-type: none"> <li>▪ Press <b>TOOLS</b>  , select <b>VPAN</b>, select <b>OK</b></li> <li>▪ Press <b>ACQUIRE</b>  to activate ROI box, press <b>ACQUIRE</b> to begin scanning, scan, then press <b>ACQUIRE</b> to end acquisition</li> <li>▪ Press <b>MEASURE</b>  for labeled measurement</li> <li>▪ Press <b>GENERIC MEASUREMENTS</b>  for generic measurement</li> </ul>
<p>Steer Image <i>Linear transducers only</i></p>	<p><b>Note:</b> <b>MVIEW</b> must be deactivated.</p> <ul style="list-style-type: none"> <li>▪ Rotate <b>S</b> wheel to <b>B-STEER</b> and press <b>S</b> button</li> <li>▪ Rotate <b>S</b> wheel to steer image</li> </ul>
<p>Biopsy <i>Activates or de-activates biopsy display</i></p>	<ul style="list-style-type: none"> <li>▪ Rotate <b>S</b> wheel to <b>BIOPSY</b> and press <b>S</b> button</li> </ul>

## Color, PW and CW Doppler and M-mode Optimization



The **UPDATE/LINE/GAIN**  controls gain levels (rotate) and cursor/update (press) for CW, PW and Color Doppler.

## Color Doppler Imaging



Items in table are not arranged sequentially

To Adjust / Control	Do This
Engage Color Doppler	<ul style="list-style-type: none"> <li>Press <b>C</b> button</li> </ul>
Color Gain	<ul style="list-style-type: none"> <li>Rotate the <b>UPDATE/LINE/GAIN</b> wheel </li> </ul>
ROI Size and Position	<ul style="list-style-type: none"> <li>Roll trackball to desired position</li> <li>Press <b>ACTION</b> and roll trackball to desired size</li> <li>Press <b>ACTION</b> to set</li> </ul>
2D-CFM <i>Live dual 2D and color Doppler</i>	<ul style="list-style-type: none"> <li>Rotate <b>S</b> wheel to <b>2D-CFM</b> and press <b>S</b> button</li> </ul>
PWR D (Power Doppler)	<ul style="list-style-type: none"> <li>Rotate <b>S</b> wheel to <b>PWR D</b> and press <b>S</b> button</li> </ul>
PRF (Scale/Velocity)	<ul style="list-style-type: none"> <li>Rotate <b>S</b> wheel to <b>PRF</b> and press <b>S</b> button</li> <li>Rotate <b>S</b> wheel to change PRF</li> </ul>
Baseline	<ul style="list-style-type: none"> <li>Rotate <b>S</b> wheel to <b>BASEL</b> and press <b>S</b> button</li> <li>Rotate <b>S</b> wheel to change</li> </ul>
D-Steer <i>Linear transducers only</i>	<ul style="list-style-type: none"> <li>Rotate <b>S</b> wheel to <b>D-STEER</b> and press <b>S</b> button</li> <li>Rotate <b>S</b> wheel to desired steering angle</li> </ul>
Color Doppler Frequency	<ul style="list-style-type: none"> <li>Rotate <b>S</b> wheel to <b>FREQUENCY</b> and press <b>S</b> button</li> <li>Rotate <b>S</b> wheel to adjust</li> </ul>
Sensitivity	<ul style="list-style-type: none"> <li>Rotate <b>S</b> wheel to <b>SENSIT</b> and press <b>S</b> button</li> <li>Rotate <b>S</b> wheel to adjust</li> <li>Range: <b>1, 2, 3</b></li> </ul>
Density	<ul style="list-style-type: none"> <li>Rotate <b>S</b> wheel to <b>DENSITY</b> and press <b>S</b> button</li> <li>Rotate <b>S</b> wheel to adjust</li> <li>Range: <b>LOW, HIGH</b></li> </ul>
Persistence	<ul style="list-style-type: none"> <li>Rotate <b>S</b> wheel to <b>PERSIST</b> and press <b>S</b> button</li> </ul>

	<ul style="list-style-type: none"> <li>▪ Rotate <b>S</b> wheel to adjust</li> <li>▪ Range: Off(-), 1-7</li> </ul>
Color Map	<ul style="list-style-type: none"> <li>▪ Rotate <b>S</b> wheel to <b>COLOR MAP</b> and press <b>S</b> button</li> <li>▪ Rotate <b>S</b> wheel to adjust</li> <li>▪ Range: <b>V1-V6</b>, plus two Velocity/Variance maps (<b>VV1</b> and <b>VV2</b>).</li> </ul>
Filter <i>Used to reduce the artifacts caused by acoustic decoupling or moving structures</i>	<ul style="list-style-type: none"> <li>▪ Rotate <b>S</b> wheel to <b>FILTER</b> and press <b>S</b> button</li> <li>▪ Rotate <b>S</b> wheel to adjust</li> <li>▪ Range: <b>LOW, MEDIUM, HIGH, ARTEF SUP</b></li> </ul>
Smooth <i>Makes the flow representation homogenous</i>	<ul style="list-style-type: none"> <li>▪ Rotate <b>S</b> wheel to <b>SMOOTH</b> and press <b>S</b> button</li> <li>▪ Rotate <b>S</b> wheel to adjust</li> <li>▪ Range: <b>LOW, HIGH</b></li> </ul>

**PW Doppler**



PW Doppler audio volume can be decreased or increased by pressing  or .

*Items in table are not arranged sequentially*

To Adjust / Control	Do This
Engage PW Doppler	<ul style="list-style-type: none"> <li>▪ Press <b>UPDATE/LINE</b> to activate cursor</li> <li>▪ Roll the trackball to position cursor</li> <li>▪ Press the <b>PW</b> control to activate</li> </ul>
Auto-Doppler Optimization	<ul style="list-style-type: none"> <li>▪ Press <b>AUTO</b> </li> </ul>
ADM <i>Automatic Doppler Trace</i>	<ul style="list-style-type: none"> <li>▪ Rotate <b>S</b> wheel to <b>ADM</b> and press <b>S</b> button</li> </ul> <p><b>Note:</b> These calculations will not be sent to the report.</p>
B-Ref <i>Alternates between split screen or full screen in PW</i>	<ul style="list-style-type: none"> <li>▪ Rotate <b>S</b> wheel to <b>B-REF</b> and press <b>S</b> button</li> </ul>
Velocity (PRF/Scale)	<ul style="list-style-type: none"> <li>▪ Rotate <b>S</b> wheel to <b>VELOCITY</b> and press <b>S</b> button</li> <li>▪ Rotate <b>S</b> wheel to adjust</li> </ul>
Baseline	<ul style="list-style-type: none"> <li>▪ Rotate <b>S</b> wheel to <b>BASEL</b> and press <b>S</b> button</li> </ul>

	<ul style="list-style-type: none"> <li>▪ Rotate <b>S</b> wheel to change</li> </ul>
SV Size (Gate)	<ul style="list-style-type: none"> <li>▪ Rotate <b>S</b> wheel to <b>SV SIZE</b> and press <b>S</b> button</li> <li>▪ Rotate <b>S</b> wheel to adjust</li> </ul>
Θ Angle	<ul style="list-style-type: none"> <li>▪ Rotate <b>S</b> wheel to <b>Θ ANGLE</b> and press <b>S</b> button</li> <li>▪ Rotate <b>S</b> wheel to adjust</li> </ul>
D-Steer	<ul style="list-style-type: none"> <li>▪ Rotate <b>S</b> wheel to <b>D-STEER</b> and press <b>S</b> button</li> <li>▪ Rotate <b>S</b> wheel to adjust</li> <li>▪ Color ROI and PW cursor will steer together</li> </ul>
Invert (Reverse)	<ul style="list-style-type: none"> <li>▪ Rotate <b>S</b> wheel to <b>REVERSE</b> and press <b>S</b> button</li> </ul>
Triplex (PLEX)	<ul style="list-style-type: none"> <li>▪ Rotate <b>S</b> wheel to <b>PLEX</b> and press <b>S</b> button</li> </ul>
Frequency	<ul style="list-style-type: none"> <li>▪ Rotate <b>S</b> wheel to <b>FREQUENCY</b>, press <b>S</b> button</li> <li>▪ Rotate <b>S</b> wheel to adjust</li> </ul>
Format	<ul style="list-style-type: none"> <li>▪ Rotate <b>S</b> wheel to <b>B FORMAT</b> and press <b>S</b> button</li> <li>▪ Rotate <b>S</b> wheel to adjust</li> <li>▪ Range: <b>SMALL, MEDIUM, LARGE</b>, and <b>DUAL</b></li> </ul>
Dynamic Range <i>Adjusts grayscale levels</i>	<ul style="list-style-type: none"> <li>▪ Rotate <b>S</b> wheel to <b>DYN RANGE</b> and press <b>S</b> button</li> <li>▪ Rotate <b>S</b> wheel to adjust</li> </ul>
Gray Maps <i>Post processing curve that assigns echo amplitudes to grayscale levels</i>	<ul style="list-style-type: none"> <li>▪ Rotate <b>S</b> wheel to <b>GRAY MAP</b> and press <b>S</b> button</li> <li>▪ Rotate <b>S</b> wheel to adjust</li> <li>▪ Range: <b>1-5</b></li> </ul>
Colorize (Tint) <i>Sets the chromatic scale active in PW</i>	<ul style="list-style-type: none"> <li>▪ Rotate <b>S</b> wheel to <b>COLORIZE</b> and press <b>S</b> button</li> <li>▪ Rotate <b>S</b> wheel to adjust</li> <li>▪ Range: Off(-), <b>Orange, Indigo, Magenta, Blue, Yellow, RGB</b></li> </ul>
Filter <i>Filters Doppler signal</i>	<ul style="list-style-type: none"> <li>▪ Rotate <b>S</b> wheel to <b>FILTER</b> and press <b>S</b> button</li> <li>▪ Rotate <b>S</b> wheel to adjust</li> </ul>
Reject <i>Improves spectral curve display</i>	<ul style="list-style-type: none"> <li>▪ Rotate <b>S</b> wheel to <b>REJECT</b> and press <b>S</b> button</li> <li>▪ Rotate <b>S</b> wheel to adjust</li> </ul>
Sweep	<ul style="list-style-type: none"> <li>▪ Rotate <b>S</b> wheel to <b>SWEEP</b> and press <b>S</b> button</li> <li>▪ Rotate <b>S</b> wheel to adjust</li> </ul>

**CW Doppler**



(Phased array transducers only)

CW Doppler audio volume can be decreased or increased by pressing  or .

*Items in table are not arranged sequentially*

To Adjust / Control	Do This
Engage CW Doppler	<ul style="list-style-type: none"> <li>Press <b>UPDATE/LINE</b> to activate cursor</li> <li>Roll the trackball to position cursor</li> <li>Press the <b>CW</b> control to activate</li> </ul>
Auto-Doppler Optimization	<ul style="list-style-type: none"> <li>Press <b>AUTO</b> </li> </ul>
B-Ref <i>Alternates between split screen or full screen in CW</i>	<ul style="list-style-type: none"> <li>Rotate <b>S</b> wheel to <b>B-REF</b> and press <b>S</b> button</li> </ul>
Velocity (PRF/Scale)	<ul style="list-style-type: none"> <li>Rotate <b>S</b> wheel to <b>VELOCITY</b> and press <b>S</b> button</li> <li>Rotate <b>S</b> wheel to adjust</li> </ul>
Baseline	<ul style="list-style-type: none"> <li>Rotate <b>S</b> wheel to <b>BASEL</b> and press <b>S</b> button</li> <li>Rotate <b>S</b> wheel to change</li> </ul>
Invert (Reverse)	<ul style="list-style-type: none"> <li>Rotate <b>S</b> wheel to <b>REVERSE</b> and press <b>S</b> button</li> </ul>
Frequency	<ul style="list-style-type: none"> <li>Rotate <b>S</b> wheel to <b>FREQUENCY</b>, press <b>S</b> button</li> <li>Rotate <b>S</b> wheel to adjust</li> </ul>
Format	<ul style="list-style-type: none"> <li>Rotate <b>S</b> wheel to <b>B FORMAT</b> and press <b>S</b> button</li> <li>Rotate <b>S</b> wheel to adjust</li> <li>Range: <b>SMALL, MEDIUM, LARGE, and DUAL</b></li> </ul>
Dynamic Range <i>Adjusts grayscale levels</i>	<ul style="list-style-type: none"> <li>Rotate <b>S</b> wheel to <b>DYN RANGE</b> and press <b>S</b> button</li> <li>Rotate <b>S</b> wheel to adjust</li> </ul>
Gray Maps <i>Post processing curve that assigns echo amplitudes to grayscale</i>	<ul style="list-style-type: none"> <li>Rotate <b>S</b> wheel to <b>GRAY MAP</b> and press <b>S</b> button</li> <li>Rotate <b>S</b> wheel to adjust</li> <li>Range: <b>1-5</b></li> </ul>

<i>levels</i>	
Colorize (Tint) <i>Sets the chromatic scale active in CW</i>	<ul style="list-style-type: none"> <li>▪ Rotate <b>S</b> wheel to <b>COLORIZE</b> and press <b>S</b> button</li> <li>▪ Rotate <b>S</b> wheel to adjust</li> <li>▪ Range: Off(-), <b>Orange, Indigo, Magenta, Blue, Yellow, RGB</b></li> </ul>
Filter <i>Filters Doppler signal</i>	<ul style="list-style-type: none"> <li>▪ Rotate <b>S</b> wheel to <b>FILTER</b> and press <b>S</b> button</li> <li>▪ Rotate <b>S</b> wheel to adjust</li> </ul>
Reject <i>Improves spectral curve display</i>	<ul style="list-style-type: none"> <li>▪ Rotate <b>S</b> wheel to <b>REJECT</b> and press <b>S</b> button</li> <li>▪ Rotate <b>S</b> wheel to adjust</li> </ul>
Sweep	<ul style="list-style-type: none"> <li>▪ Rotate <b>S</b> wheel to <b>SWEEP</b> and press <b>S</b> button</li> <li>▪ Rotate <b>S</b> wheel to adjust</li> </ul>

**M-mode** 

*Items in table are not arranged sequentially*

To Adjust / Control	Do This
Engage M-mode	<ul style="list-style-type: none"> <li>▪ Press <b>M-MODE</b></li> </ul>
Overall Gain	<ul style="list-style-type: none"> <li>▪ Rotate <b>AUTO/GAIN</b> wheel </li> </ul>
B-Ref <i>Alternates between split screen or full screen in M-mode</i>	<ul style="list-style-type: none"> <li>▪ Rotate <b>S</b> wheel to <b>B-REF</b> and press <b>S</b> button</li> </ul>
Gray Maps <i>Applies a post processing curve that assigns echo amplitudes to grayscale levels</i>	<ul style="list-style-type: none"> <li>▪ Rotate <b>S</b> wheel to <b>GRAY MAP</b> and press <b>S</b> button</li> <li>▪ Rotate <b>S</b> wheel to adjust</li> </ul>
Colorize (Tint) <i>Sets the chromatic scale active in M-mode</i>	<ul style="list-style-type: none"> <li>▪ Rotate <b>S</b> wheel to <b>COLORIZE</b> and press <b>S</b> button</li> <li>▪ Rotate <b>S</b> wheel to adjust</li> <li>▪ Range: Off(-), <b>Orange, Indigo, Magenta, Blue, Yellow, RGB</b></li> </ul>

Sharpness <i>Accentuates the edges and the small differences in M-mode</i>	<ul style="list-style-type: none"> <li>▪ Rotate <b>S</b> wheel to <b>SHARPNESS</b> and press <b>S</b> button</li> <li>▪ Rotate <b>S</b> wheel to adjust</li> <li>▪ Range: <b>1-5</b></li> </ul>
Sweep	<ul style="list-style-type: none"> <li>▪ Rotate <b>S</b> wheel to <b>SWEEP</b> and press <b>S</b> button</li> <li>▪ Rotate <b>S</b> wheel to adjust</li> </ul>
Triplex (PLEX)	<ul style="list-style-type: none"> <li>▪ Rotate <b>S</b> wheel to <b>PLEX</b> and press <b>S</b> button</li> </ul>
Frequency	<ul style="list-style-type: none"> <li>▪ Rotate <b>S</b> wheel to <b>FREQUENCY</b> and press <b>S</b> button</li> <li>▪ Rotate <b>S</b> wheel to adjust</li> </ul>
Format	<ul style="list-style-type: none"> <li>▪ Rotate <b>S</b> wheel to <b>B FORMAT</b> and press <b>S</b> button</li> <li>▪ Rotate <b>S</b> wheel to adjust</li> <li>▪ Range: <b>SMALL, MEDIUM, LARGE, and DUAL</b></li> </ul>
Dynamic Range <i>Adjusts grayscale levels</i>	<ul style="list-style-type: none"> <li>▪ Rotate <b>S</b> wheel to <b>DYN RANGE</b> and press <b>S</b> button</li> <li>▪ Rotate <b>S</b> wheel to adjust</li> </ul>

## Performing Measurements and Calculations

Measurements can be made on frozen, stored and archived images.

**Labeled Measurements** 

**Generic Measurements** 

### Activate Calculations

Press **MEASURE (Label)** to activate the labeled measurement function on frozen 2D, Color, PW or M-mode images

or

Press  to go to generic measurements

### Perform a Generic Measurement

Freeze image 

Press 

Select desired generic measurement and press **Right Select**

Place the first caliper and press **Right Select**

Place second caliper and press **Right Select**



Move between active calipers (yellow) by pressing **ACTION**

Rotate **S** wheel and press **S** button for these options:

- **ADD TO RP** adds a generic measurement to the report; user has the option to label
- **CLEAR**
- **CLEAR ALL**

### Perform a Labeled Measurement

Application-specific measurements are particular to one study type

The measurement tools and labels are organized by the active imaging mode and application (e.g., abdomen)

Freeze image 

Press **MEASURE** 

Select desired labeled measurement and press **Right Select**



Place the first caliper and press **Right Select**

Place second caliper and press **Right Select**

Move between active calipers (yellow) by pressing **ACTION**



The system automatically cascades to the next labeled measurement

### Selective Deletion of a Measurement

Press **POINTER** 

Position the arrow on the caliper to be deleted (yellow)

Rotate **S** wheel to **CLEAR** and press **S** button to delete measurement

## Calculation Reports

**Report** 

Calculation worksheets and reports are offered for each preset when labeled or generic measurements are entered

**Note:** Application-specific reports are particular to one study type. Different report options will be available within each application (e.g., OB).

Press **REPORT** to activate Reports

Rotate **S** wheel and press **S** button for the following options:

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- **PREVIEW** to preview printed report
- **PAGE** to scroll between report pages
- **MEASURE** to scroll between measurements within one page
- **CONFIG** to configure descriptions and labels within current report only

To delete measurements within the report, scroll to desired measurement (measurement will be framed in yellow), rotate **S** wheel to **CLEAR** and press **S** button

To hide measurements from the *printed* report, scroll to the desired measurement and press the **Right Select**. The measurement will now be highlighted in black

To access descriptor drop-down menus, scroll to drop-down menu and make selection

To add free text to a report, scroll to text box and type desired text

### Import Images into the Report

From live imaging screen, Press **EXAM/REV**



Scroll to thumbnails on the right hand side of the screen

Press the **Right Select** on desired image

Rotate **S** wheel to **ATTACH** and press the **S** button

An **"A"** will display in the lower left hand corner

### Delete Images from the Report

Press **REPORT**



Rotate **S** wheel to **PAGE** and press the **S** button

Rotate until attached images are displayed

Scroll trackball to desired image and press the **Right Select**, image will be framed in red

Rotate **S** wheel to **DELETE** and press **S** button

## Text and Pictograms

Text and Pictograms can be entered on both real-time and archived images/clips.

### Enter Text

Press any alphanumeric key on the QWERTY keyboard to begin inputting text

Type the annotation and press the **Right Select** to set (white) or press **Enter** to auto-complete when desired word is displayed

*or*

Press **OPTIONS** and select **ANNOTATIONS**

A pre-defined set of annotations will appear

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Roll the trackball to scroll through the annotations

Press **Right Select** to set

### Move text

Press any alphanumeric key on the QWERTY keyboard to activate the cursor

Roll the trackball to place the cursor within the text, press **Right Select**

Press **ACTION** , text will now be framed in yellow

Roll the trackball to the new location

Press **Right Select** to set

### Delete Text

Press any alphanumeric key on the QWERTY keyboard to activate the cursor

Roll the trackball to place the cursor within the text

Press **Right Select** within the annotation (yellow)

Rotate **S** wheel to **CLEAR** or **CLEAR ALL** and press the **S** button

### Place an Arrow/s

Press any alphanumeric key on the QWERTY keyboard to activate text menu

Rotate **S** wheel to **ARROW** and press the **S** button

Rotate **S** wheel to rotate arrow

Roll the trackball to desired location and press the **Right Select** to anchor (green)

### Delete an Arrow/s

Rotate **S** wheel to **CLEAR ALL** and press the **S** button

### Add a Pictogram/s

Press **MARK** 

Arrow is active on the trackball

Rotate the arrow by rotating **S** wheel to **ARROW**, press the **S** button

To select a different pictogram, rotate **S** wheel to **MARK** and press the **S** button

Rotate **S** wheel until desired pictogram is displayed

### Delete a Pictogram

If necessary, press **MARK** 

Rotate **S** wheel to **CLEAR** and press the **S** button

## Data and image Management

Hard Disk	Burner	USB medium	Network	DICOM
				
<i>Local Storage</i>	<i>CD/DVD</i>	<i>USB</i>		<i>Review</i>
Local Archive	Archive Display	Media Archive	USB Archive	Network Archive
				

### *CD/DVD Archive*

User has the option to make patient exams anonymous during export procedures.

### End an Exam

Press **START/END**



Select desired image archive/transfer/export

Select **OK**

### Transferring Exams at the End of Exam

The following format options are available:

- **ACUSON P300 (native) format**
- **BMP, PNG, JPEG and AVI**
- **DICOM**

Make selection by using the trackball and **Right Select**

or

Rotate the **S** wheel and press the **S** button

Press **START/END**   
Insert a CD/DVD or a USB

- **ARCHIVE**

Selecting this option will transfer exams in native (ACUSON P300) format

**Note:** User must select this option to transfer to or view exams on the ACUSON P300 system.

- **EXPORT**

Selecting this option will transfer images in PC format

- **DICOM**

Selecting this option will transfer images in DICOM format, along with a DICOM viewer

The following options are also available:

- **ANONYMIZE**
- **SEND REPORT**

## Transferring Exams/Images from Exam Review or Archive Review

Transferring images and/or exams can be done during live scanning or from the patient archive

### From Exam Review (USB only)

Transferring images and/or exams from the Exam Review screen will be done in PC format

Press **EXAM/REV** 

Insert USB

Select the desired images(s) by scrolling to thumbnail(s)

Place a checkmark in the upper left corner of the thumbnail to export

**Note:** Images/clips framed in green will also be exported.

Scroll to **EXPORT** and press the **Right Select** 

Select **OK**

To confirm image/clip copy completion, select **USB**  at the top of the image screen

### From Archive Review

Press **ARCHIVE/REV** 

Insert a CD/DVD or a USB

Highlight patient(s)

For multiple patients, press **Shift** or **Ctrl** on the QWERTY keyboard

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Make selection of the following format options:

▪ **COPY**

Selecting this option will transfer images/clips in native (ACUSON P300) format

**Note:** User must select this option to transfer or view images/clips on the ACUSON P300 system.

▪ **DICOM**

Selecting this option will transfer images/clips in DICOM format, along with a DICOM viewer

▪ **EXPORT**

Selecting this option will transfer images/clips in PC format

### Transferring Exam to PACS

Press **ARCHIVE/REV**



Highlight patient(s)

Select **DICOM**

Select **DESTINATION**

Select **OK**

### Delete Images from an Active Exam

Press **EXAM/REV**



Select the desired images/clips to delete by scrolling to thumbnail(s) and placing a checkmark in the upper left corner

Rotate **S** wheel to **DELETE** and press **S** button

Select **YES**

### Delete Exams from Local Archive

Press **ARCHIVE/REV**



Highlight patient(s)

Rotate **S** wheel to **DELETE** and press **S** button

Select **YES**

## Import Exams from a CD/DVD or USB to the Local Database

**Note:** Only studies saved in ACUSON P300 (native) format are available for importing to the system.

Insert the CD/DVD or USB

Press **ARCHIVE/REV** 

Select **USB ARCHIVE**  or **CD/DVD Archive**  located at the top right of the imaging screen

Highlight the patient(s) to import

Rotate **S** wheel to **COPY** and press **S** button

Select **OK**