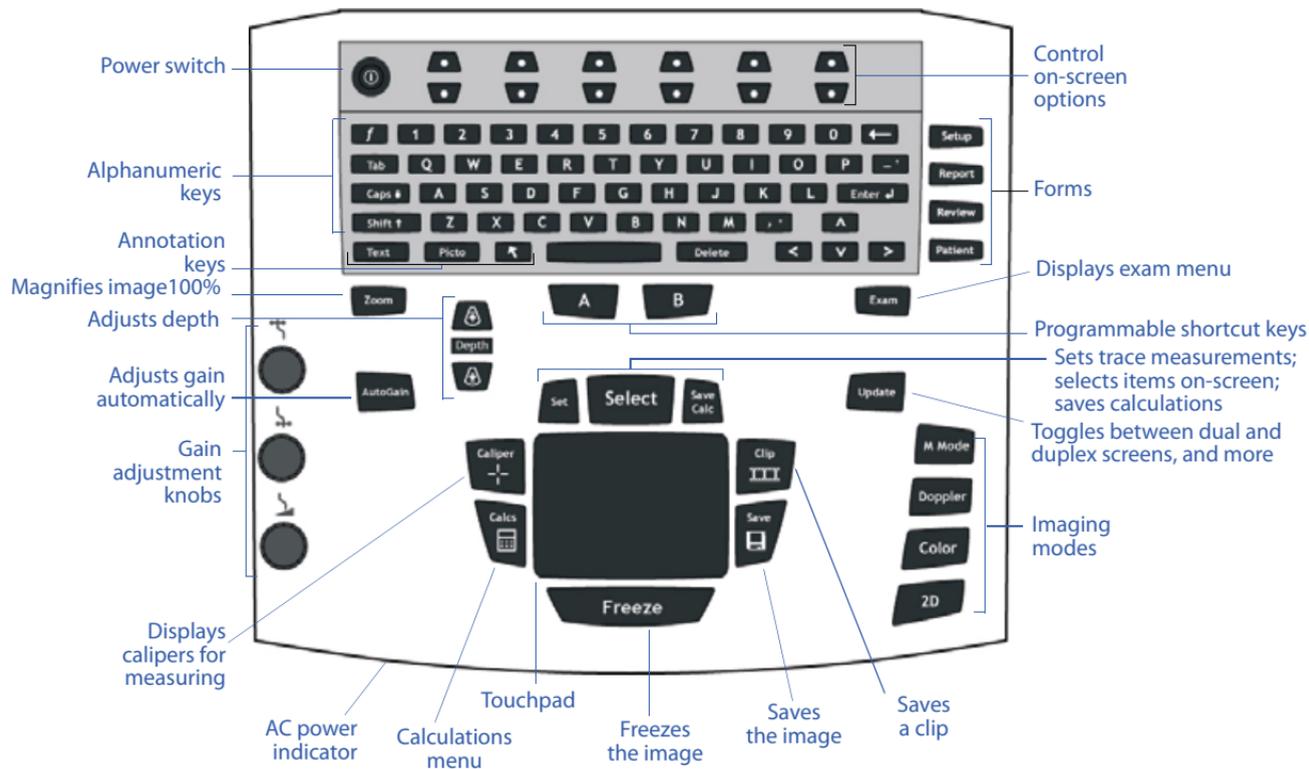


M-Turbo[®] Ultrasound System

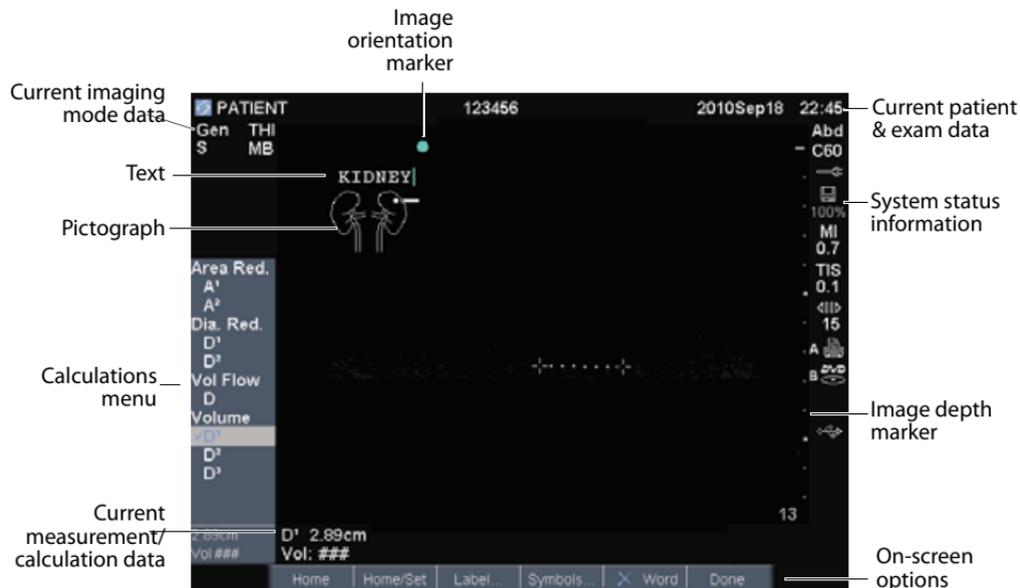
Quick Start Guide



Control panel



Screen layout



Basic steps

1 Turn the system on.

By default, the system is in 2D.

2 Attach a transducer.

3 Press the PATIENT key, and enter patient data.

4 Press an imaging mode key:

- M-MODE
- COLOR DOPPLER
- DOPPLER

To return to 2D imaging, press the 2D key.

2D and M Mode imaging

To display the 2D image

- 1 Turn on the system, or press the 2D key.
- 2 Set options as desired.

To display the M-Mode image

- ❖ Press the M MODE key for the M-line. Press it again for the M Mode trace.

2D and M MODE options



Optimize The **Res** setting provides the best possible resolution. **Gen** provides a balance between resolution and penetration. **Pen** provides the best possible penetration.



Dynamic Range Adjusts the grayscale range.



Dual Displays side-by-side 2D images. The UPDATE key displays the second screen and toggles between the screens (live image) or images (frozen images).



LVO (Cardiac exam) Turns Left Ventricular Opacification on and off.



Orientation Select from four image orientations: **U/R** (Up/Right), **U/L** (Up/Left), **D/L** (Down/Left), **D/R** (Down/Right).



Brightness Adjusts the display brightness.



Biopsy Turns biopsy guidelines on and off.

Guide Turns the guideline on and off.



Sector (Cardiac exam) Specifies the sector width.



SonoMB (MB) Turns SonoMB™ multi-beam technology on and off.



THI Turns Tissue Harmonic Imaging on and off.

Color Doppler imaging

To display the Color image

- 1 Press the COLOR key for color power Doppler (CPD) or color imaging (depending on the transducer and exam type).
- 2 Select **Color** or **CPD**.
- 3 Using the touchpad, position the region of interest (ROI) box.

CPD and Color options



Color, CPD Toggle between CPD and Color.



Color Suppress Shows or hides color information.



Flow Sensitivity The current setting appears on-screen. **Low** optimizes the system for low flow states. **Med** optimizes the system for medium flow states. **High** optimizes the system for high flow states.



PRF Scale Select the desired pulse repetition frequency (PRF) setting by pressing the control keys. There is a wide range of PRF settings for each Flow Sensitivity setting (Low, Med, and High).



Wall Filter Settings include **Low**, **Med**, and **High**.



Steering Select the steering angle setting of the color ROI box (-15, 0, or +15).



Variance (Cardiac exam) Turns variance on and off.



Invert Switches the displayed direction of flow. Available in Color imaging.



Sector (Cardiac exam) Specifies the sector width.

PW or CW Doppler imaging

To display the D-line

- 1 Press the DOPPLER key.
- 2 Using the touchpad, position the D-line.
(Cardiac exam) **PW/CW** toggles between PW and CW Doppler.

To display the spectral trace

- 1 Display the D-line.
- 2 Press the DOPPLER key.

PW Doppler options



PW, CW (Cardiac exam) Toggle between PW Doppler and CW Doppler. The current selection appears in the upper left-hand screen.



Angle Correction Corrects the angle to 0° , $+60^\circ$, or -60° .



Gate Size Settings depend on the transducer and exam type. In TCD or Orb exams, use the touchpad to specify the Doppler gate depth (the depth of the center of the gate in the Doppler image). The Doppler gate depth indicator is in the lower right-hand screen.

TDI (Cardiac exam) Turns tissue Doppler imaging on and off. When on, *TDI* appears in the upper left-hand screen. The default is **TDI off**.



Steering Select the desired steering angle setting. You can manually correct the angle afterward.

Spectral trace options

-  **Scale** Select the desired scale (pulse repetition frequency [PRF]) setting.
-  **Line** Sets the baseline position. (On a frozen trace, the baseline can be adjusted if **Live Trace** is off.)
-  **Invert** Vertically flips the spectral trace. (On a frozen trace, **Invert** is available if **Live Trace** is off.)
-  **Volume** Increases or decreases Doppler speaker volume.
-  **Wall Filter** Settings include **Low, Med, High**.
-  **Sweep Speed** Settings include **Slow, Med, Fast**.
-  **Live Trace** Displays a live trace of the peak or mean.

Measurements and calculations

To perform a measurement

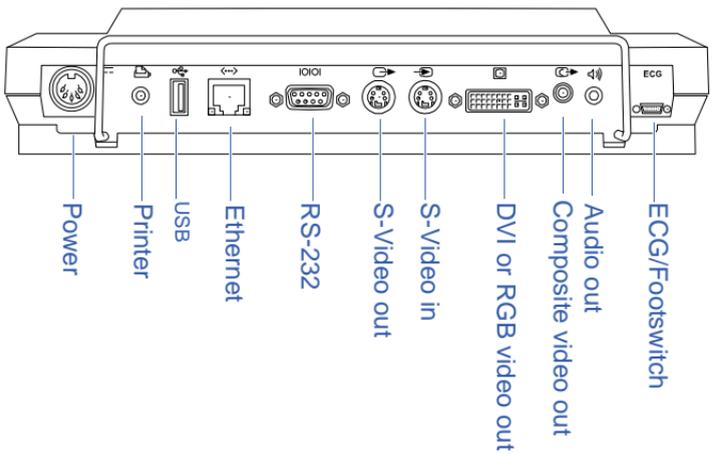
- 1 Press the FREEZE key.
- 2 Press the CALIPER key.
- 3 Place calipers for a distance, area, or circumference measurement.

To perform a calculation

- 1 Press the FREEZE key.
- 2 Press the CALCS key.

Available calculations depend on exam type and transducer.

Mini-dock connections



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The SonoSite product(s) referenced in this document may be covered by one or more of the following U.S. patents: 5722412, 5817024, 5893363, 6135961, 6203498, 6364839, 6371918, 6383139, 6416475, 6447451, 6471651, 6569101, 6648826, 6575908, 6604630, 6817982, 6835177, 6962566, 7169108, 7449640, 7534211, D456509, D461895, D509900, D538432, D544962, D558351, D559390, D591423, D592750, D592760, and by the following counterpart foreign patents: AU727381, AU730822, CA2373065, CN ZL 97113678.5, CN ZL 98106133.8, CN ZL 98108973.9, DE60021552.0, DE60029777.2, DE60034670.6, DE69730563.5, DE6980539.6, DE69831698.3, FR0815793, FR0875203, FR0881492, FR1175713, FR1180970, GB0815793, GB0875203, GB0881492, GB1175713, GB1180970, GB1180971, IT0815793, IT0881492, IT1175713, KR528102, KR532359, NO326202, NO326814, NZ542968, RCD000897368-0001, SP0815793, SP0881492. Patents pending.

Caution:

Federal (United States) law restricts this device to sale by or on the order of a physician.

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