


SonoScape

S2 Operation Manual

PREPARATION

1. How to create and input patient data?

In the MAIN INTERFACE, press the  key, to enter into the patient exam list interface. Then, click “New patient” item to create new patient files. Patient data can be entered with PC keyboard, while each patient can get an ID number automatically.

2. How to enter the exam mode?

In the MAIN INTERFACE, choose transducer first, then choose and press EXAM icon to enter the exam mode.

B MODE SCANNING

3. How to adjust the 2D basic parameters?



GAIN: To increase and decrease the signal of grayscale.

TGC: To compensate the gain in vertical levels.





FOCUS: Move the FOCUS to the region of your target.



DEPTH: Position your target at the middle of the whole screen.

4. How to optimize the 2D image?

In the EXAM INTERFACE, press  (MENU) key, move cursor with  (Angle) and adjust


parameters with  (MENU) knob.


- Dynamic Range (20-320dB): Lower DYN for better contrast resolution, while higher DYN for better detailed information.
- Frequency (2-15MHz): Lower FRE for better penetration in the far field, while higher FRE for better resolution in the near field.
- Image processing (0-2): Reduce the speckle noise inside the imaging area

SonoScape



S2 Operation Manual



5. How to change the image orientation?

LT/RT: In all image modes (real-time or frozen), use  key to change the image left/right orientation.

Up/Down: Press  key to alternate the image orientation between up and down.

6. How to get the 2B and 4B mode?

2B: In the B mode, press  button to enter into 2B mode, and use  key to switch the active image.

4B: In the B mode, press number  on the PC keyboard to enter into 4B mode, and still use  key to switch the active image.



7. How to make panoramic imaging?

Press “K” key on PC keyboard, then start moving the probe to get a panoramic image and then press “freeze”.



8. How to make the basic measurement in 2D mode?

Measurements can be done not only after freezing but also under real-time.



- Distance:

- Press  button next to trackball
- Press  button to enter into the Calculation List, choose DISTANCE under BASIC MEASUREMENT

- Area:


- Press  button next to trackball.
- Press  button, choose AREA under BASIC MEASUREMENT

- Ellipse:

- Press  button next to trackball.
- Press  button, choose ELLISPE under BASIC MEASUREMENT


SonoScape

S2 Operation Manual


- **Volume:** Press  button, choose Volume (Height x Width x Length).

- **Angle:** Press  button, choose Angle.

9. How to get IMT and specialized measurement




Press  button to enter into the Calculation List, choose IMT under VASCULAR measurement. Other specialized measurement can also be found under this list.

Note:


- Both basic and specialized measurements can be done not only after image frozen but also under real-time.
- The calculation list is fully opened which offers measurements in different mode; for example, you can get access to OB measurement even when you're in the vascular mode with linear probe.
- "Trackball" and  key are used for choosing different calculation list or measurements.


M MODE SCANNING


10. How to change the B/M format?

In the 2D scanning, press  to enter B/M mode. Press  (MENU), use  (Audio) knob to choose items in the menu list. Change the B/M display format with "menu" knob including five options. V1/1, V1/2, H2/1, H1/1, H1/2.

11. How to make the M measurement?


Time: press  to enter the basic measurement, place trackball on the M graph, and then move to the measurement list and click "time".

Acceleration: press  to enter the basic measurement, place trackball on the M graph, and then move to the measurement list and click "Slope".

HR: press  to enter the basic measurement, place trackball on the M graph, and then move to the measurement list and click "HR".

Items under Basic measurement – Time, Distance, Slope, T1/T2, D1/D2

12. How to make the specialized measurement in M mode?

Press , when place trackball on the 2D image, calculation list will show measurements for 2D image. Place trackball on the M graph, move trackball to measurement list, choose cardiac measurement.

Items under Cardiac measurement include: +LV, Mitral Valve, Aortic Valve.

COLOR DOPPLER SCANNING

13. How to get the Doppler Power Image (DPI) and Color Flow Mode (CFM)?

DPI: In the 2D EXAM mode, press  to enter into the Power Doppler

CFM: In the 2D EXAM mode, press  to enter into the Color Mode

14. How to optimize the color Doppler image?

-- Knob on keyboard


D Gain: To increase and decrease the color Doppler signal.

PRF: To adjust the speed scale for the color Doppler.

Steer: To adjust the steer angle of ROI


-- Parameters in menu


Press  (menu) to enter parameters list, use  (Audio) knob to select items in the list,

rotate  (menu) knob to adjust WF for noise elimination


- Wall Filter (30-465): To eliminate the low frequency noise generated by movements of blood vessel walls.

15. How to get the PW mode?

PW: In the 2D EXAM mode, press  to enter into the Color Mode firstly, and then press

“PW” to enter into the PW-duplex mode, press  to activate PW spectral display.

16. How to adjust PW image?

 D Gain: To adjust brightness of spectral display.

SonoScape

S2 Operation Manual



Baseline: To adjust the 0cm/s baseline for better color and spectral display.



PRF: To adjust the speed scale for the color Doppler and spectral Doppler.





Correctional Angle: Adjust this button to optimize the spectral Doppler signal.

PWR DYN (20-200dB): Lower DYN for better contrast resolution, while higher DYN for better detailed information.

Frequency: Lower FRE for better penetration in the far field, while higher FRE for better resolution in the near field.

17. How to do the auto trace?



After pressing the  button to activate the spectral Doppler, press  to achieve automatic envelope with or without freezing the image.



18. How to make the basic measurement in PW mode?




Place trackball on the PW graph, press  to enter the basic measurement.

Basic Measurements including: velocity, time, HR, manual trace

19. How to make the special measurement in PW mode

When place trackball on the 2D image, calculation list will show measurements for 2D image.





Press , place trackball on the PW graph, move trackball to measurement list, choose cardiac measurement.



Cardiac measurement – TEI, PHT, Mitral Valve, Tricuspid Valve, Pulmonary Valve, Aortic Valve.

SAVE AND REPORT

20. How to save images and cine?


After freezing the image, press  to save the image, press  for a while to save the Cine.

21. How to make the measurement on the achieved image?


Press  to enter Patient Exam List, find and open the achieved image by double click .

Press  to make measurements. Use  or  to delete the last or all measurements.

22. How to print image?

- a. After freezing the image in the exam interface, press  for automatic print of image.
- b. In Patient Exam List, select saved image and click “print” item.


23. How to create report?

After the examination, you can press  to enter into the REPORT INTERFACE. On the one hand, all measurement results are in the report which divided into different applications such as Cardiology, Obstetrics and so on. On the other hand, users can insert images, description, graphs and comments into the report.


24. How to add images and comments to report?

In the Measurement Report Interface, click “image view” to add image and “Edit” to add comments.

25. How to copy images and cine to USB?

Plug in USB disk. Press  to enter Patient Exam List, Open the patient file. Select the images/cine, choose the wanted PC formats (JPG, BMP and TIF for still Image, WMV and AVI for cine) and click “Export”.

26. How to copy the patient file or directory to USB or DVD?

Plug in USB or connect DVD, Press  to enter Patient Exam List, click “Export Screen”, select the patient files, choose the formats wanted(System/PC/DICOMDIR), then click “Patient Export”.

Tips: this can only be done while all the exams are closed, or users have to close the exams first.

27. How to print report?

In the Measurement Report Interface, click  .

Pre-Set Setting

A. After freezing image, enter measurement/body marker/annotation menu automatically.

In MAIN INTERFACE, press menu – general – general—Auto Freeze Response.

- Cine
- Measure
- Bodymark
- Comment
- Arrow

B. Front Size

In MAIN INTERFACE, press menu – general – general—font size.

Comment	12-24
Measure Report	16-19
Image Parameter	12-16
Title Bar	12-15

C. Storage time/length

In MAIN INTERFACE, press menu – general – storage

Store Frame – 1-999

D. Store region

In MAIN INTERFACE, press menu – general – storage—storage region

- Full Screen
- US Image
- Right Top

E. Display items for report

In MAIN INTERFACE, press menu – report – display items for Report

- Patient Information
- Exam Information
- Measurements
- Image
- Graphs
- Comment