

System Overview

Front View



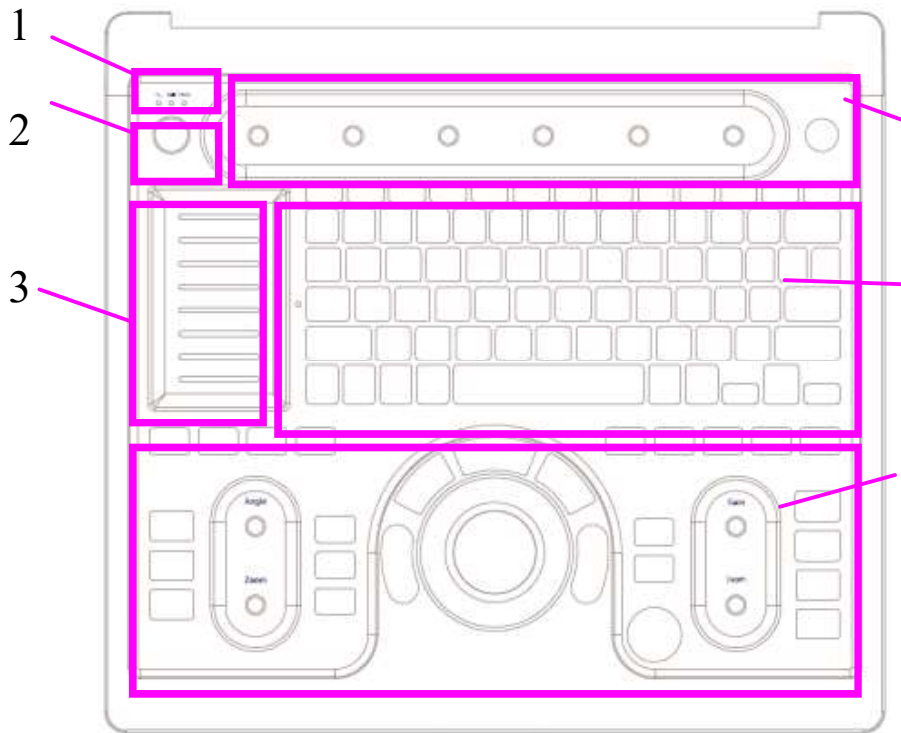
- 1. Display screen
- 2. Control panel
- 3. Keyboard
- 4. Connection ports

Rear View



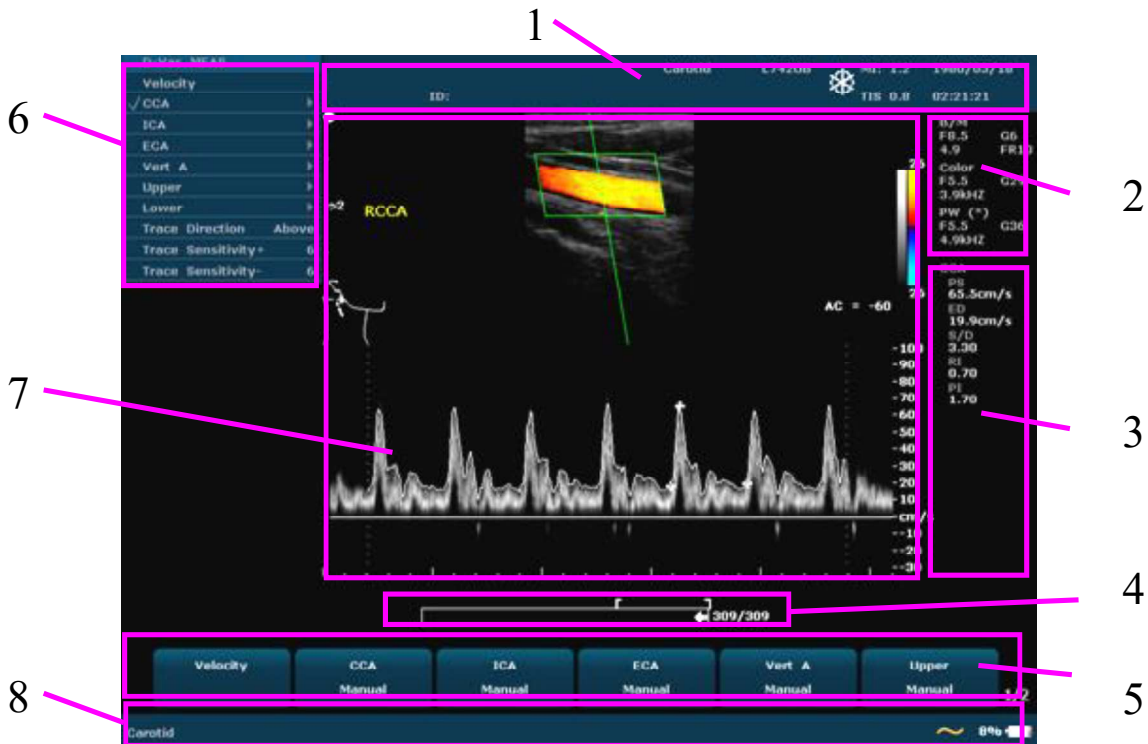
- 1. Probe port
- 2. Power supply input port
- 3. Probe holder
- 4. Battery compartment door
- 5. Base of control panel

Control Panel



- 1. Indicators
- 2. Power on/off key
- 3. TGC sliders
- 4. Menu Controls
- 5. PC keyboard
- 6. Function controls

Screen Display



- 1. **Information Field:** Institution/Hospital name, Patient name, Patient ID, etc.

2. **Parameter Field:** Parameters of the current active mode are marked with “*” symbols.
3. **Measurement Results Field:** It displays the measurement and calculation items and results in different rows.
4. **CINE Review Progress Bar**
5. **Menu Controls Field:** Image parameters adjustment/program menus control, the items correspond to system menus in different modes or status.
6. **Menu Field:** Image control menus/control program menus.
7. **Image Field:** Ultrasound image (B/Color/PDI/PW/CW/M mode) and relevant information, etc.
8. **Status Prompt Field:** It displays operation prompt, examination type; the state of USB and power supply, etc.

NOTE:

: AC power supply, with battery connected;

: AC power supply, without battery connected;

: Battery power supply.

Using Probes

NOTE:

Ensure that the system is shut down, or the image is frozen, before connecting and disconnecting probes.

Connecting a Probe

1. Turn the connector locking handle counterclockwise to the horizontal position

2. Align the connector with the transducer port and carefully push into place.
3. Turn the locking handle on the transducer connector clockwise to the vertical position.
4. Place the transducer in the transducer holder.

Activating the Probe

Press **Probe** on the control panel to select a probe and a desired examination type associated to this probe.

You can preset examination types associated to each probe using *Probe Preset*.

Deactivating the Probe

1. Press **Freeze**, and the probe is automatically placed in the standby mode.
2. Gently wipe the excess coupling gel from the surface of the probe.
3. Gently put the probe in the probe holder.

Disconnecting the Probe

1. Turn the locking handle on the connector housing counterclockwise to the horizontal position.
2. Firmly grasp the transducer connector and carefully remove it from the system port.
3. Store each transducer in its protective carrying case.

Probe Application

Model	Application
C352UB/ C5-2b	Abdomen, obstetrics, gynecology, urology
E612UB	Endovaginal, obstetrics

L742UB/L1042UB/ L15-7b	Small parts, musculo-skeletal (both conventional and superficial), peripheral vascular
C612UB/C6152UB	Pediatrics, pediatrics cardiac
C422UB	Abdomen, adult cardiac
L552UB	Small parts, musculo-skeletal (both conventional and superficial), peripheral vascular, pediatrics
P5-1b	Adult cardiac

For cleaning and disinfection instructions of the probes, refer to user manual section *15.2 Cleaning and Disinfection*.

Examination and Measurement

◆ New Patient

Press **Patient** -> enter the patient data.

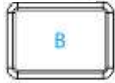
◆ Probe and Examination Type Selection

Press **Probe** on the control panel to select a probe and a desired exam type corresponding to the probe: abdominal, obstetric, gynecology, pediatric, small parts, urology, peripheral vascular, musculoskeletal (conventional and superficial), and cardiac.

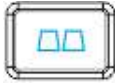
◆ Measurement

Properly move the probe to obtain an optimal image of the target area, adjust **brightness, gain, TGC and focus combination** properly to get the measurement result shown in the *Measurements results* region.

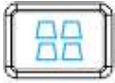
1 Imaging Controls



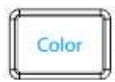
Press this key to enter the B mode.



Press this key to enter the 2B mode and switch between a live or frozen, single or multi-mode A/B split screen display.



Press this key to enter the 4B mode and cycle between a live or frozen A/B/C/D single or multi-mode split screen display.



Press this key to enter the Color mode.



Press this key to enter the PDI mode.



Press it to enter the B+M mode. Roll the trackball to move the M Mark, and press **Set** to locate it. Press this key repeatedly to switch between the single M mode and B+M mode. The slope has four levels.



In B mode, press to display the sample line, after the sample line is adjusted, press **PW** again to enter PW mode; Or, press user defined keys F1/F2/F3/F4(if the button is defined as “display or hide the sample line” in system preset) on the PC keyboard to display the sample line, after the sample line is adjusted, press **PW** to enter PW mode.



In B or B+C mode, press this key to display the sample line,

press it again to enter B+CW or B+C+CW mode .




Toggle between current imaging modes in duplex or triplex, or in freeze status, press to switch between different frozen imaging modes and Cine Review status.

2 Image Optimization

You can optimize images using the **Gain** knob, trackball, PC keyboard and Menu Controls. For details about imaging parameters under each scanning mode, check user manual section *6.4 Image Adjustments*.

Operation of menu controls:

- ◆ To activate a function:
 - (1) If an item of the menu has a submenu or several options, rotate the menu control to select submenu items or options, and press the menu control to activate the function.
 - (2) If an item of the menu has no submenu or option, press the menu control to activate the function directly.
- ◆ To switch options/adjust parameters:

If an item of the menu has a submenu or several parameter values, press or rotate the menu control to switch between options or adjust values. (Values are not circulative by rotating menu controls)
- ◆ Page down: You can press  on menu controls panel to flip through pages of menu controls field. Press this key again, it returns to the first page circularly if the current page is the last one.

3 Printing

Video Printing: Press **Print** on the control panel to print the currently displayed image on the screen.

Graph/Text Report Printing: Press **Print** in the report dialog box to print the currently displayed report on the screen.

4 Generic Measurements

In B/Color/PDI/PW/CW/M mode, press **Caliper** to enter B/Color/PDI/PW/CW/M mode generic measurements respectively. Press **Caliper** again to exit. For detail information, refer to user manual, section 6.5 “*Generic Measurements and Calculations*”

5 Application Measurements

Press **Probe** to select a probe and a relevant examination type and press **Measure**, then you can choose the desired measurement item from the application measurements menu. The application measurements include abdomen, obstetric, cardiology, gynecology, small parts, urology, peripheral vascular, and pediatrics.

For example, to enter B mode obstetric examination:

1. Press **Probe**, select a desired probe model and the exam mode **Obstetric-1/3, Obstetric-2/3, or Fetal Cardiac**, and then press **Set**, or double click on the exam type.
2. Press **B** to enter B mode.
3. Press **Measure** to activate the application measurement function. The system displays the measurement menu. Roll the trackball to select items from the menu and perform measurements.

4. Press **Report** to view the patient reports.

Using CINE

Press **Freeze** to freeze the image, roll the trackball to start playing back frame by frame. Press **Start Frame/End Frame** menu control to set the start/end point, and press **Play/Stop** to stop.

Cine Review	
* Start Frame	253
* End Frame	352
* Play / Stop	
* FPS	50
* Save As	...

For details about operation method, please refer to user manual, section *6.11.Cine Review*.

File Management

1 Saving Images

The system provides two ways to save images:

1. Press **SaveImg** on the control panel:

Press **SaveImg** on the control panel to save the current displaying image in BMP, JPG, FRM or DCM (if DICOM is installed) format, which you can set via pressing **File** on the control panel >selecting a file type in the **File type** options.

2. Use **Snapshot**, **Save Cine**, **Save As**, **Save Frame** or **Save AVI** of the file menu to save files. For detail operation information, refer to user manual section *6.12.1 Saving Files*.








2 Opening and Browsing Stored Images

Opening Images:

Press **File** on the control panel, select **File Manager** and then press **Set**. Select a desired driver from the **Driver** pull-down menu and file format, and then press **Set**. Point to the file that needs to be opened and press **Set**, press **Open** or double click on the file, a prompt *Loading file...* is displayed in the middle of the screen.

Browsing Images:

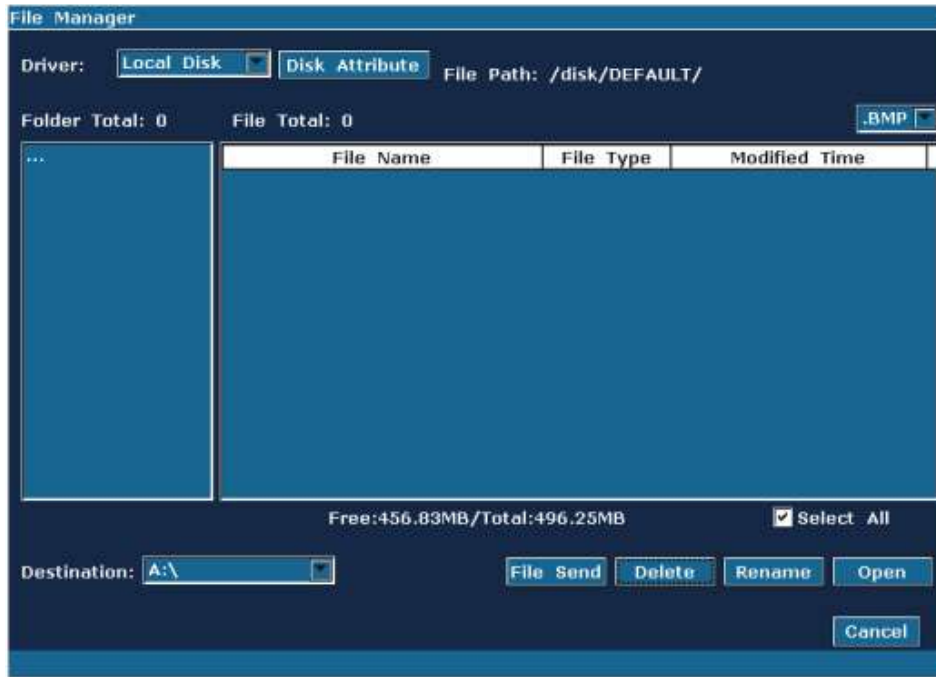
If the file format is FRM/CINE, cine images will be loaded. You can perform Cine review, measurements, or add comments/body marks and print them out in reports; if the file format is BMP/JPG/DCM, the system will enter image browsing status: check the multi-choice checkbox to browse the selected files in file list, uncheck the checkbox to browse all files. Press  on the bottom of the screen to open the previous image, and press  to open the next image; press  to perform automatic browsing, and press  to stop automatic browsing; press  or **Esc** to exit.

NOTE:

The JPG, BMP, and DCM (if DICOM is installed) images are available to the browsing function.

3 File Manager

Press **File** on the control panel ->select **File Manager** ->perform the following:



Basic operations:

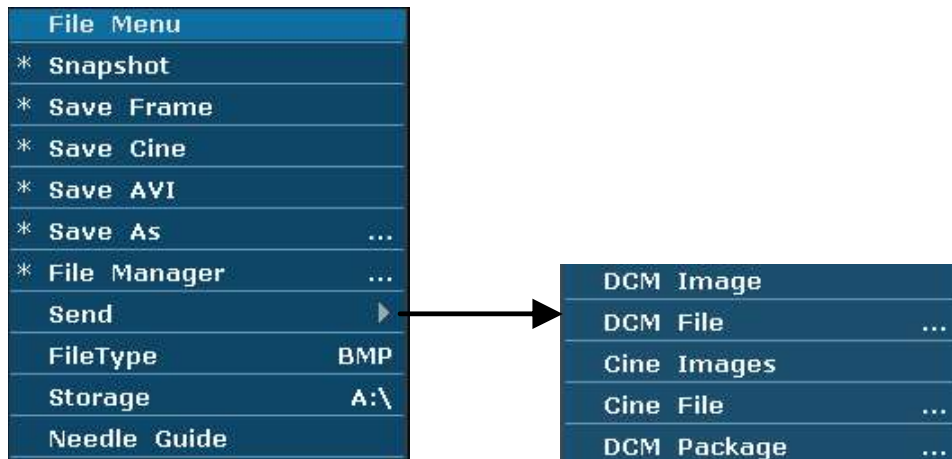
- ◆ Press **Disk Attribute** to check capacity information of current driver.
- ◆ Select a file format from the pull-down menu **.BMP**, such as BMP/ JPG/ DCM/ FRM/ CIN/ AVI/ DAT /XML/ PDF to display files in one type, or select *.* to display all files.
- ◆ Point to a file, press **Set** to select it, and press **Set** again to deselect it; the system supports multi-choice by default; check the **Select All** checkbox to select all files, and then you can perform following operations: **File Send**, **Delete** and **Open**.
- ◆ Click on the headings of the file list: **File Name**, **File Type** or **Modified Time**, to rearrange the file sequence according to the file name, file type or modified time (in ascending/descending order).

File Send Delete Rename

For operation of file send, file delete and file rename, refer to user manual section *6.12.2 File Manager*.

4 Sending Images/Files to the DICOM Device

Press **File** on the control panel ->select **Send**:



Perform the following:

To send a DCM Image/Cine Images, to send a DCM file/Cine File, to send a DCM package. For detail operation information, refer to user manual section *6.12.3 Sending File*.

NOTE:

The destination device is configured on the Presetting screen (press **Preset** ->select **DICOM** to configure).

P/N: 01.54.457983

MPN: 01.54.457983010