HONDA ELECTRONICS CO., LTD.

Diagnostic Scanner

Convex / Linear Ultrasonic System

HS-4000

Our unique technology is the product of our originality and continual pursuance of achieving high quality. It is also our purpose to contribute in ways that will enhance society.

Superior performance plus easy operation:

The HS-4000 Plus

H-res HONDA Resolution

-advanced technology and excellent image embodied in a chic unit-

Still satisfied with your ultrasound system? Tired of being overwhelmed with all that consultation data? Longing to have extra office space? The solution to your problems is here at last. Let the HS-4000 with its built-in database do the work for you. Once you enter a patient's name and ID, all the images and measurement results are saved and sorted according to the order of each consultation.
The stored data can be utilized for reports and also be transferred to an external PC.
All in one database system with high quality grayscale ultrasound imaging right in your own clinic.

1 Improved resolution with *H-res* technology

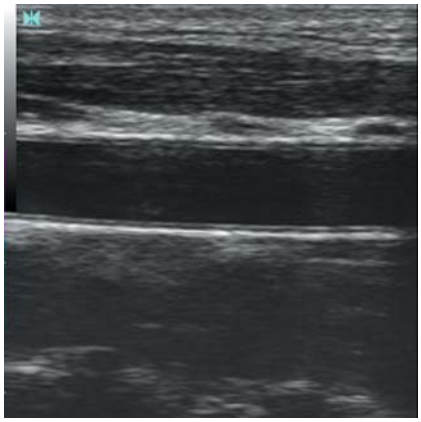
HS-4000 Plus now has the improved image quality by *H-res* (Honda Resolution technology) for various types of applications.

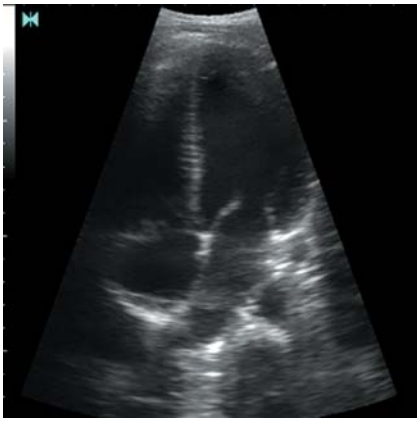
You can select the *H-res* characteristic from Standard, Detail, Fast, Soft (convex only) or Off according to your preference.

The level of enhancement can also be adjusted by Edge and Soft parameters.

The preferred setting is kept in preset function and easily recalled by using the function keys.

The preset parameters are also easily adjusted by user and kept up to 10 settings for every probe!



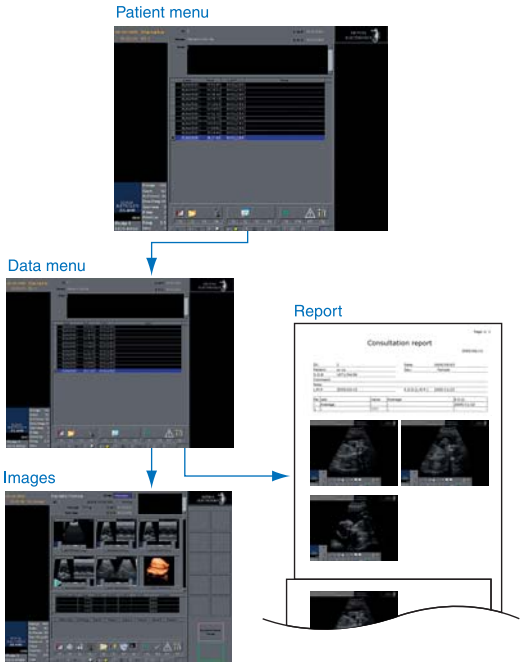


THE HS-4000 CONVEX / LINEAR DIAGNOSTIC SCANNER FEATURES ARE;

1. Improved resolution with *H-res* technology
2. Network capability
3. DataBase with easy operations
4. 3D Imaging with motion sensor
5. Multi- frequency Probes

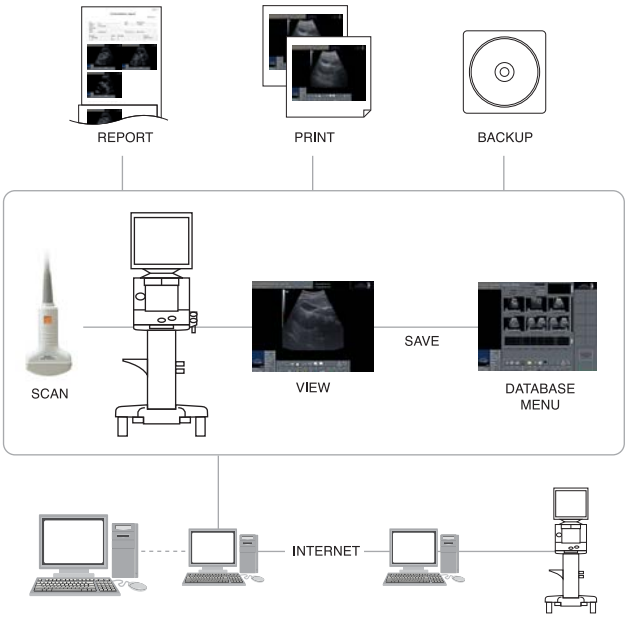
3 DataBase

Dialogue boxes are used for registering patients and managing the patient database. They provide easy access to past diagnostic records and allow the medial professional to add annotations when needed. It is possible to measure it again. Side-by-side comparison of the saved image with present image is available. The data saved in raw mode is changed into an AVI file, and can be written in CD-ROM.



2 Network Capability

Both still and moving images as well as patient information are recorded on the HS-4000. Patient data and image parameters are recorded simultaneously. The recorded data can easily be sent through 100 base-T Ethernet interface.



4 3D Imaging with motion sensor (option)

The volume rendering 3D function is equipped as standard. Having the motion sensor option, the scanning procedure can be stress free work. It will also realize the accuracy and good reproduction of the image.

5 Multi-Frequency Probes

Convex	Linear	Transvaginal	Microconvex		Transrectal
HCS-536M HCS-436M 2.8-3.5-5.0 MHz	HLS-575M HLS-475M 5.0-7.5-10.0 MHz	HLS-513M HLS-413 7.5-10.0-12.5 MHz	HCS-5710MV HCS-4710MV 5.0-7.5-9.0 MHz	HCS-452M 3.5-5.0-7.0 MHz	HCS-4710M 5.0-7.5-9.0 MHz	HLS-455R 5.0-7.5-10.0 MHz

SPECIFICATIONS

Scanning Method	Convex/Linear electronic scan
Display Mode	B-mode (single or double) B/Z mode (simultaneous display) B/M mode (simultaneous display) M-mode (5 step sweep speed)
Dynamic Range	Dynamic range: 35-95db/10db step
Beam Former	Tx. Focus: 8 stage dynamic focus Rx. Focus: Real-time dynamic focus
Image Adjustment	Acoustic power: Available Gain control: 36-100db/2db step STC control: 6 VR
Image Processing	*H-res* (Image Enhancement) Soft: OFF and 4 level Edge: OFF and 3 level Gray correction (gamma): 10 Multi frequency selection: available Line Average: 2 level & off
Image Display	Image orientation: Reverse (Left/Right, Up/Down) Range select: 3-25cm (1cm step) Zoom:x1.1-4.4(range＞120mm) :x1.1-2.2(range＜120mm) Cine memory: up to 256 frames Screen display view width: Large, Medium, Small
Scan Converter	Interpolation: bi-linear Frame size: 512x512x8bit x 2 screen
Keyboard	Back lit: EL
Interface	Printer port x1 (parallel) Video port x1 (NTSC/PAL) Isolated AC output x1 (for monitor) Network port x1 (100base/T)
Storage Device	HDD (built-in): 95000 images (JPG) 9500 images (BMP), 300 images (RAW) External media: CD-R/W
Display	LCD Monitor 15"color (1024 x 768)
Power Source	Input Voltage: 100-120 or 220-240V Frequency: 50/60 Hz Power Consumption: 300VA
Dimension (WxDxH)	Approx. 420 x 680 x 1320 (mm)
Weight	Approx. 55 kg
Measurement Function	Distance: 4 sets x 2 Circumference: 2 sets x2 Volume: 1 set Hip joint (Angle): 2 sets Time & Velocity: 4 sets Heart rate, Cardiac, Histogram

Gestation Calculation		Standard: 37 kinds User definable: no limit Fetus weight: 8 kinds Graph display: Available
Support Software		3D imaging Patient data: ID, Name, sex, DOB, LMP Image data: still, raw motion, AVI CD-writing User definable preset function: 10 User presetable gestation calculation:9 Annotation text preset (editable) Report function to standard PC printer Archive function
Screen annotation		Hospital name, Patient data, Date, Time, Direction mark, Probe type, Range, Gain, Acoustic power, Dynamic range, Gamma, Edge Enhancement, Frame Correlation, Frequency, Line, Gray scale, Focus position
Probe Connector		2 (selected by keyboard)
Probes	**Standard:**	HCS-536M / HCS-436M — 2.8/3.5/5.0MHz 60R Convex probe
	Options:	HLS-575M / HLS-475M — 5.0/7.5/10.0MHz 50mm Linear probe
		HCS-5710MV / HCS-4710MV — 5.0/7.5/9.0MHz 10R Micro-Convex probe (Transvaginal 120°)
		HLS-513M / HLS-413 — 7.5/10.0/12.5MHz 30mm Linear probe (small parts)
		HCS-5712M — 5.0/7.5/9.0MHz 12R Micro-Convex probe
		HCS-452M — 3.5/5.0/7.0MHz 20R Micro-Convex probe
		HCS-4710M — 5.0/7.5/9.0MHz 10R Micro-Convex probe
		HLS-455R — 5.0/7.5/10.0MHz 50mm Linear probe (Transrectal)
		HLS-438 — 2.8/3.5/5.0MHz 80mm Linear probe
Options		LCD Monitor 19"color (1024 x 768) Video Printer Foot Switch Biopsy Guide Stand Off

*The specifications and appearance are subject to change without notice for improvement.
*Made in Japan

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