IBS GROUPE

STERNMED®

Sonos 12

diagnostic ultrasound system

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Sonos 12 is the state of the art of volumetric 3D/4D ultrasound system with perfect image quality of even 2D images. It is the best solution for OB/GYN, cardiology and general Imaging in clinics and hospitals with variety of patients.

FEATURES

- 19″ HD LED monitor Rotatable: ±90°
- Innovative energy-saving light
- Adaptive Control Panel Rotatable (±45°) Liftable (0-15cm)
- Dedicated video printer space
- Smart Standby Mode
- Smart backstage management enables
- extended battery life
- Instant power-on
- Internal Battery
- Hero Kit

OUTSTANDING FEATURES AND APPLICATIONS

10.1″ HD touch panel
- Superbly responsive
- Customizable interface
- Ergonomic tilting ensures all-dimensional, multi-angle visualization

Single Crystal Technologies
- Sonos 12 uses the latest advance in transducer technology, which has wider bandwidth, higher sensitivity and better signal-noise ratio, providing superb anatomic details to users, delivering excellent resolution and penetration, especially during difficult-patient scanning.

Wide Angle Transvaginal Probe
- Up to 210° extremely wide angle.
- Provide more diagnostic information.
- Save time, improve the efficiency.

LV Tracking
- A new non-invasive method for the assessment of left ventricular (LV) global and regional function.

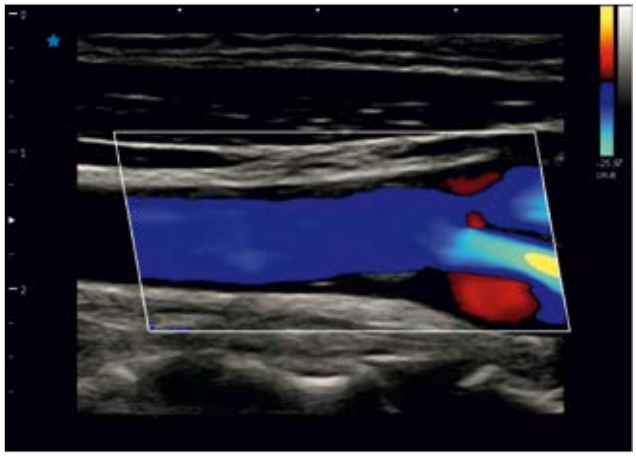
Stress Echo
- Help to confirm or rule out the presence of coronary artery disease.
- Patients with coronary artery blockages may have minimal or no symptoms during rest.
- Symptoms and signs of heart disease may be unmasked by exposing the heart to the stress of exercise.

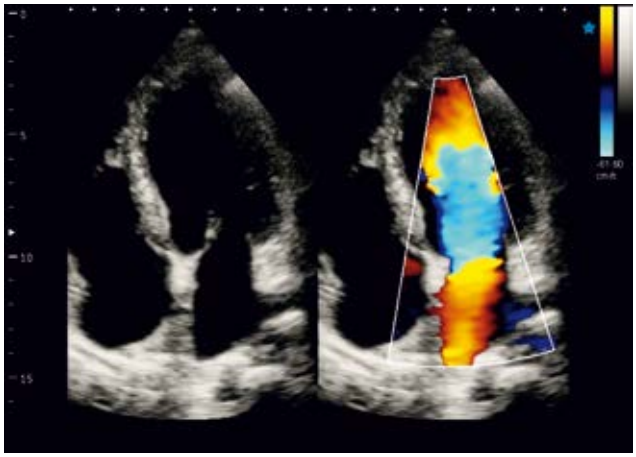
Quantitative Elastography
- Display the elasticity of different tissues in different color.
- Provide more clinical information, especially for soft tissue.
- Strain ratio measurement quantitatively gives the ratio between the average strain of the selected region and of the nearby normal tissue region.

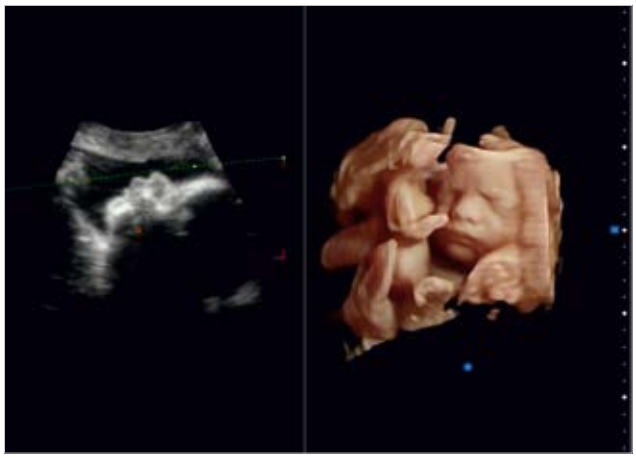
Auto Breast Detection
- Automatically detect breast lesion.
- Provide the size.
- Efficient for the diagnosis.

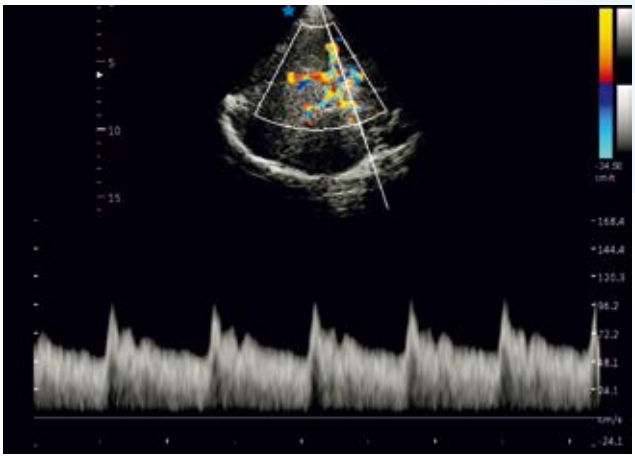
Smart HIP
- Use a graph for hip orthotics diagnosis, help the doctor with easier and more accurate diagnosis during the pediatric hip scanning.
- Different angle indicates different level of hip deformity, which is easier and more obvious to see with the aid of the graph. (I, II, D, IIia, IIIb).

EXCELLENT CLINICAL IMAGES







TECHNICAL SPECIFICATION
Sonos 12 | SternMed diagnostic ultrasound system

USER INTERFACE	
Operation Panel	• 10.1" Touch screen Control panel • Alphanumeric keyboard • 8 TGC Slides • Interactive backlit keys
Monitor	• High resolution color LCD • 19" Diagonal dimension • Brightness and contrast adjustment • Integrated speaker with adjustable Volume
SYSTEM OVERVIEW	
Applications	• Abdominal (Gynecology & Urology) • Fetal/OB • Small Organ (Breast, Testes, Thyroid) • Pediatric • Peripheral Vascular • Musculo-skeletal Conventional & Superficial • Cardiac (adult & pediatric) • Transvaginal
Scanning Method	• Electronic convex • Electronic linear • Electronic micro convex • Electronic phased array • Volume convex
Transducer Types	• 3.5 MHz Convex probe (2.0 - 6,8 MHz) • 7.5 MHz Linear probe (4.0 - 15.0 MHz) • 12.0 MHz Linear probe (7.0 - 18.0 MHz) • 6.0 MHz Trans-vaginal probe (4.0 -12 .0 Mhz) • 7.5 MHz Trans-vaginal probe (4.0 -15 .0 Mhz) • 2.5 MHz Phased array probe (Adult) (1.5 -5.3 Mhz) • 5.3 MHz Phased array probe (Pediatric) (2.0 -8.0 Mhz) • 6.0 MHz Pediatric Micro-convex probe (4.0 -15 .0 Mhz) • 3.0 MHz Micro-Convex probe (2.0 - 6.8 Mhz) • 4.5 MHz 4D volume probe (2.0 - 6.8 Mhz)
Image Modes	B Mode, B/M mode, M mode, 2B Mode, 4B Mode, CFM Mode, 2D Steer, PD Mode, DPD Mode, PW Mode, B/BC Mode, Triplex, Quadplex, CW Mode, Free Steering M Mode, TDI, Color M Mode, Curved Panoramic Imaging, Trapezoidal imaging, Compound, SRA, Elastography, Stress, echo, ECG, Super Needle, 4D, Virtual HD, FHI mode, AIO
Display Mode	Hospital name, Date/Time, Patient Name and Patient ID, System status, Gray/Color bar, Cine guide, Scanning direction, Measurement summary window, Measurement results window, Transducer type, Frequency, Application name, Menu indication, Trackball functions indication, Imaging parameters displayed on the screen
Standard Configuration	• 19" LCD monitor • 10.1" touch screen • Convex transducer D3C60L • Liner transducer D7L40L • 4 active transducer ports • 500G integrated hard disk • DVD-R/W • USB ports:6 • 4D module • CW module • TGC, LGC • B, 2B, 4B, B/M, B/BC, CFM, PW, Power Doppler/Directional PD, Instant Triplex, Duplex, Quadplex, Trapezoidal, Chroma B&M&PW, Full Screen • Automatic PW trace and measurement in real time • Super Image module: FHI, Multiple Compound Imaging, SRA (Speckle Reduction Algorithm), AIO • Q-Image (intelligent image optimization), X-contrast, Q-beam, Q-Flow • Measurement & calculation software packages: General, OB&GYN, Cardiac • 2D Steer • Cardiovascular: CW, TDI, IMT

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SYSTEM OVERVIEW		
Software Options	• Virtual HD/Depth View • Niche/ Smart Volume Slice • Free hand 3D • Free NT • Strain and Strain Ratio • LV Tracking • Stress Echo • Elastography • Super Needle • Needle Tracking	• Curved Panoramic • Extended Cardiac Package: ECG Software, Free Steering M, Color M • DICOM 3.0 • WIFI Function • Biopsy kit: for convex/linear/TV/ 3.0 MHz Micro-Convex probe respectively
Hardware Option	• Footswitch • ECG Lead	
Peripherals	B&W Video Printer Color printer (optional)	
IMAGING PROCESSING AND PRESENTATION		
B Mode	Gain, Compound, SRA, Focus Number, Focus Position, Full Screen, X-contrast, Persistence, Density, 2D Map, Noise Reject, Scan Width, Image Rotate, Gamma, Smooth, Edge enhance, A. power, Frequency, Dynamic, Depth, Zoom, TGC, Scanning direction, Center Line, Trapezoidal Mode, Biopsy, Super Needle, Elastography, 2D steer	
M Mode	Gain, Layout, Display Format, Chroma, Free M Mode, Color Map, Dynamic, Speed	
Color Mode	Gain, Color Map, Color Invert, Q-flow, Q-beam, Persistence, Color Mode: Velocity, Variance, Wall Filter, Density, Wall Thre, Blood Effection, B/BC, Frequency, Baseline, Scale, Steer, PRF	
CPA/DPD Mode	Gain, Wall Filter, Blood Effection, Q-beam, Q-flow, Wall Thre, Persistence, Frequency, PRF, Steer, Color Map	
PW Mode	Gain, 2D Map, Wall Filter, Spectrum Enhance, Dynamic Range, Auto Cal Parameter, DTrace , Smooth, Threshold, DVmean, DVmax, Trace area, Layout, Audio, Color Map, QuickAngle, Auto Cal, Freq., Baseline, PRF, Steer, Speed	
CW Mode	Gain, 2D Map, Spectrum Enhance, Dynamic, Audio, Wall Filter, Color Map, Quick-Angle, Layout, Baseline, PRF, Speed	
Cineloop	• Support 2D, M, PW, CFM, CPA, DPD, CW, Color M, Free Steering M • Simultaneous and independent review in duplex mode • Cineloop auto/manual • Variable cine playback speed • User-define start and end frame of cine storage • User-define start and end frame of cine review • storage in hard disk and display in real-time modes • Slide show: slide show function	
Storage	• 500GB integrated hard drive • DVD-R/W driver • USB ports • Still images storage format: IMAG • Still images export format: BMP, JPG, DCM,PNG,TIFF • Cine loops storage format: CINE • Cine loops export format: AVI • Fast storage setting	
EasyView	• Image review Layout:1×1,2×2 • Image management	
Exam Review	• Search Exam • Exam review: patient view, study view • Exam management: delete selected exam, export selected exam, backup selected exam, recover from the backup exam, selected all, expand all, collapse all, edit selected exam, review selected exam, continue selected exam	

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MEASUREMENT & CALCULATION	
General Measurement Package	• Software packages for various specific clinical use • Comprehensive analysis methods • Clinical analysis reports • B mode normal measurement Distance: Length Area (Ellipse), Length Area (Trace),Volume (1 Distance),Volume (2 Distance),Volume (3 Distance),Volume (1 Ellipse), Volume (2 Ellipse), Volume(1 Distance 1 Ellipse), Ratio, Angle, Strain Ratio • M mode normal measurement • PW mode Normal measurement
Clinical Analysis Packages	OB, GYN, URO, Cardiac, Vessel, Small parts, Pediatrics, TCD, Breast
SYSTEM SETUP	
By using system setup, users could Customize	Hospital information, language, fast storage time, color map, functions to footswitch and P1 key and print key, functions to alphanumeric 0~9, PC and video print option, measure, comment library, report
User Define Functions	By user-define function, users could customize user-define preset, including • Applications name, Presets name • Applications exam type • Imaging parameters
Multi-language Display Interface	• German • English • Other languages
Inputs & Outputs	1xAC Power In, 1xAC power Out, 1xPower Button, 6xUSB Port, 1xEthernet, 1xRemote Control, 1xS-Video Out, Audio: L&R, 1xDVI, 1xVGA Out, 1xVideo Out, 2xFootswitch Port, 1xGround pole
GENERAL INFORMATION	
Dimensions	810 x 635 x 1330mm (LXWXH)
weight	main unit (approx.): 76kg (probes not included)
Power	AC100-240V
Power frequency	50/60 Hz
Power consumption	600 VA
Operating conditions	• Ambient temperature: 10°C to 40°C • Relative humidity: 30% to 75% (no condensation) • Atmospheric pressure: 700 hPa to 1060 hPa
Storage and transport conditions	• Ambient temperature: -5°C to 40°C • Relative humidity: ≤80% (no condensation) • Atmospheric pressure: 700 hPa to 1060 hPa

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