

Digital Color Doppler Ultrasound System

SonoAir 70

V1.0



General information

Dimensions and Weight

- Dimensions of main unit (approx.): 322mm (Length) ×217mm (Width) ×26mm (Height)
- Net weight of main unit (approx.): 2.1kg (no probe included)

Electrical Power

- Adapter power supply voltage: AC100-240V~±10%, 47-63Hz
- Main system power input: ≤150W
- Battery type: U726467PHVG-4S1P: 70Wh ● Power consumption: 150VA

User interface

Operation Panel

- Control panel
- Alphanumeric keyboard
- Interactive backlit keys
- High resolution color LCD
 - Diagonal dimension: 14.1 inch
 - Resolution: 1920 x 1080
 - Angle adjustable range: 0-135°
 - Touch Screen
- Touch panel
- Touch pad
- Finger print
- Integrated speaker

System overview

Applications

- Abdominal
- Cardiac
- Thyroid ● Breast
- Vascular
- Carotid
- Pelvic
- MSK
- Nerve
- Superficial
- Pediatric
- OB
- Urology
- TCD
- Scrotum

- Renal
- Lung
- Lumbar
- Prostate
- UT&Ovary

Scanning Method

- Electronic convex
- Electronic linear
- Electronic micro convex
- Electronic phased array

Transducer Types

- Convex transducer: 3C
- Linear transducer: 7L,
- Transvaginal transducer: 6E
- Phased array transducer: 3S
- Micro-convex transducer: 6MC

Image Modes

- B Mode
- B/M Mode
- M Mode
- 2B Mode
- 4B Mode
- 2D Steer
- CFM Mode
- CPA Mode
- DPD Mode
- PW Mode
- B/BC Mode (option)
- Triplex Mode
- Quadplex Mode
- Trapezoidal Mode

- Super Needle
- Super Needle +

Display Mode

- Quad/dual display
- B/BC Mode
- Triplex mode
- Quadplex Mode

Display Annotation

- Logo
- Hospital name
- Exam Date/Time
- Mechanical index
- Tissue thermal index
- Patient Name and Patient ID
- System status (real-time or frozen) ● Gray/Color bar
- Cine guide
- Measurement summary window
- Measurement results window
- Probe type
- Frequency
- Menu indication
- Imaging parameters

Standard Configuration

- High resolution 14.1 Inch LCD display
- Probe Connectors *4
- USB 3.0*2
- LAN
- HDMI
- Touch pad
- Touch panel
- Wifi

- Bluetooth
- Pulse Wave Doppler
- Color Doppler Flow Imaging
- Power Doppler Flow Imaging
- Directional Power Doppler Flow Imaging
- ≥128G integrated hard disk
- General measurement package
- Clinical measurement packages
- Multi-language screen display ● Review: images review system
- Archive: patient information management system
- Reporting system
- AIO (Automatic Image Optimization)
- Zoom
- Speckle Reduction Algorithm (SRA)
- Q-Image software package

Software Options

- DICOM (storage, print, worklist)
- B/BC mode
- Intelligent Doppler
- Ultra Remote

Hardware Option

- Convex transducer: 3C
- Linear transducer: 7L
- Transvaginal transducer: 6E
- Phased array transducer: 3S
- Micro-convex transducer: 6MC
- Carrying case
- Trolley TR3000
- Biopsy Kit for 3.0 MHz Convex Probe BC10-A
- Biopsy Kit for 40mm Linear Probe BL08-A
- Biopsy Kit for 6.0 MHz Micro-convex Probe BC09-A

Peripherals

- Video printer: SONY UP-D711MD, SONY UP-X898MD
- PC printer :
 - HP Laser Jet M251n/ 252dw
 - HP OfficeJet Pro 6230
 - HP LaserJet Pro M12a
 - CP1300
 - Mitsubishi P95D

Imaging processing and presentation

B Mode

- Gain
- Frame rate
- TGC
- Depth ● Freq.
- FHI
- X-CONTRAST
- U/D flip
- Zoom
- Full screen
- Compound
- SRA
- Density
- Dynamic
- Focus position
- Q-Image
- Persistence
- B Rejection
- Scan width
- Gamma
- Smooth

- Edge enhance
- Acoustic power
- L/R Flip
- Chroma
- 2D Map
- Trapezoidal imaging (only for linear transducer)
- 2D steer
- Keyboard light

M Mode

- 2D Map
- Speed
- Layout
- M 2D map

Color Mode

- Gain
- Frame rate ● Freq.
- Wall filter
- Color Invert
- Steer (only for linear transducer)
- Color Map
- PRF
- Persistence
- Baseline
- Wall Thre.
- Blood Efection
- Density
- B/BC
- ROI Size

CPA/DPD Mode

- Gain
- Frame rate ● Freq.

- Wall filter
- Steer (only for linear transducer)
- PRF
- Persistence ● Wall Thre.
- Blood Efection
- Density
- DPD
- ROI Size

PW Mode

- Gain ● Freq.
- Wall Filter
- Triplex mode
- Steer
- Invert
- PW chroma
- Audio
- PRF
- Speed
- Baseline
- Angle
- SV
- D 2D map
- Spectrum Enhance
- Dynamic Range

Cineloop

- Support 2D, M, PW, CFM, CPA, DPD
- Simultaneous and independent review in Triplex 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

- ≥128GB integrated hard drive
- USB driver
- Still images storage format: BMP
- Still images export format: BMP, JPG

- Cine loops storage format: CINE
- Cine loops export format: AVI

Review

- Image review Layout : 1×1,2×2, 4×4
- Image management

Archive

- Patient info
- Review report
- Backup exam
- Restore exam
- Send exam
- Delete exam
- Patient view
- Study view
- Expand all
- Collapse all
- Select all

Measurement & calculation

General Measurement Package

- Software packages for various specific clinical use
- Comprehensive analysis methods
- Clinical analysis reports
- **General measurement package**
- General B mode measurement
 - Distance
 - Perimeter/area
 - Volume(1Distance)
 - Volume(1Distance)
 - Volume(1Ellipse)
 - Volume (2Distance)

- Volume (3Distance)
- Volume(1Distance1Ellipse)
- Ratio(distance/ area)
- Angle
- Histogram(rectangular/ellipse/trace)
- profile
- PW mode measurement
 - M distance
 - M Time
 - Velocity
 - Heart_Rate
- General M mode measurement
 - Velocity
 - Distance
 - Peak
 - Trace -
 - StD%
 - StA%
 - ICA/CCA
 - Flow Volume
 - HR

Clinical Analysis Packages

- Abdomen
- Obstetric
- Gynecology
- Cardiology
- Vascular
- Urology
- Small parts
- ORTH
- Pediatrics

System setup

By using system Setup, users could

- Customize hospital information
- Customize language
- Customize screen type
- Customize screen controller
- Customize measurement package
- Customize comment/bodymark
- Customize exam mode
- Customize hotkey functions
- DICOM setting
- Net setting
- System information
 - function setting
 - hardware function

User Define Functions

By user-define function, users could customize user-define preset, including

- Applications name, Presets name, User defined name
- Applications exam type
- Imaging parameters

Multi-language Display Interface

- English
- Chinese
- Other languages

Note: other languages for detailed, please contact CHISON.

Inputs & outputs

- System power in: 1
- LAN: 1
- Type-C : 4
- HDMI: 1

Operating conditions

- Ambient temperature: 10°C to 40°C
- Relative humidity: 30% to 75%
- Atmospheric pressure: 700 hPa to 1060 hPa

Storage and transport conditions

- Ambient temperature: -10°C to 50°C
- Relative humidity: ≤80%
- Atmospheric pressure: 700 hPa to 1060 hPa

Not all features or specifications described in this document may be available in all probes and/or modes.

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