

CBit 8

Color Doppler System Datasheet

V2.0



General Information

Dimensions and Weight

- Dimensions of main unit (approx.): 810mm(Depth)*635mm(Width)*1330mm(Height)
- Net weight of main unit (approx): 76kg (no probe included)

Electrical Power

- Power supply voltage: Auto adaptable for AC100-240V
- Power supply frequency: 50-60 Hz
- Power consumption: 600 VA

User Interface

Operation Panel

- Control panel
- 10.1 inch Touch screen
- Gel Warmer
- Alphanumeric keyboard
- 8 TGC Slides
- Interactive backlit keys
- High resolution color LCD
 - Diagonal dimension: 19 inch
 - Brightness and contrast adjustment
- Integrated speaker
 - Volume adjustable

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

- Convex transducer: D3C60L
- Linear transducer: D7L40L
- Linear transducer: D12L40L
- Trans-vaginal transducer: D6C12L
- Trans-vaginal transducer: D7C10L
- Phased array transducer: D3P64L
- Phased array transducer: D5P64L
- Volume transducer: V4C40L
- Micro convex transducer: D6C15L
- Micro convex transducer: D3C20L

- Single crystal linear transducer: M8L40L
- High density transducer: M8L50L
- High density transducer: M8L60L
- TEE transducer
- Bi-plane transducer

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

- Quad/Dual display
- Duplex mode
- Triplex mode
- Quadplex mode

Display Annotation

- 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 inch LCD monitor
- 10.1 inch 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

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

- SONY UP-X898MD B&W Video Printer

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 Efection
- B/BC
- Frequency
- Baseline
- Scale
- Steer
- PRF

CPA/DPD Mode

- Gain
- Wall Filter

- Blood Effecton
- 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
- QuickAngle
- Layout
- Baseline
- PRF
- Speed

Cine loop

- Support 2D, M, PW, CFM, CPA, DPD, CW, Color M, Free Steering M
- Simultaneous and independent review in duplex mode
- Cine loop 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

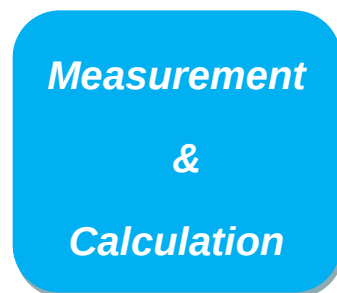
- 500GB integrated hard drive
- DVD-R/W driver
- USB ports
- Still images storage format: IMAG
- Still images export format: BMP, JPG, DCM, PNG, TIFF
- Cine loops storage format: CINE
- Cine loops export format: AVI
- Fast storage setting

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



General Measurement Package

- Software packages for various specific clinical use
- Comprehensive analysis methods
- Clinical analysis reports

General measurement package

- 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

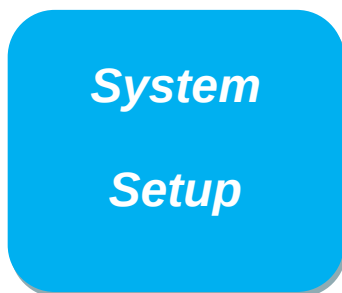
Angle

Strain Ratio

- M mode normal measurement
- PW mode Normal measurement

Clinical Analysis Packages

- OB
- GYN
- URO
- Cardiac
- Vessel
- Small parts
- Pediatrics
- TCD
- Breast



By using system setup, users could

- Customize hospital information
- Customize language
- Customize fast storage time
- Customize color map
- Customize functions to Footswitch, P1 key, Print key
- Customize functions to alphanumeric 0~9
- Customize PC and Video Print Option
- Customize Measure
- Customize Comment library
- Customize 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

- English
- Chinese
- Other languages

Note: other languages for detailed, please contact CHISON.

Inputs & Outputs

- AC Power In: 1
- AC power Out: 1
- Power Button: 1
- USB Port: 6
- Ethernet: 1
- Remote Control: 1
- S-Video Out: 1
- Audio: L,R
- DVI: 1
- VGA Out: 1
- Video Out: 1
- Footswitch Port: 2
- Ground pole: 1

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

Not all features or specifications described in this document may be available.

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