

QBit 7

Color Doppler System Datasheet

V2.4



General Information

Dimensions and Weight

- Dimensions of main unit (approx.): 747mm (Length) *517mm (Width) *1283mm(Height)
- Net weight of main unit (approx): 50kg (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
- Alphanumeric keyboard
- 8 TGC Slides
- Interactive backlit keys
- High resolution color LED
 - Diagonal dimension: 19 inch
 - Resolution: 1280X1024
 - 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** (2.0MHz-6.8MHz)
- Linear transducer: **D7L40L** (4.0MHz-15MHz)
- Linear transducer: **D7L40L-REC** (4.0MHz-15MHz)
- Linear transducer: **D12L40L** (7.0MHz-18MHz)
- Trans-vaginal transducer: **D6C12L** (4.0MHz-12MHz)
- Trans-vaginal transducer: **D7C10L** (4.0MHz-15MHz)
- Micro convex transducer: **D3C20L** (2.0MHz-6.8MHz)
- Micro convex transducer: **D5C20L** (4.0MHz-10.7MHz)
- Micro convex transducer: **D6C15L** (4.0MHz-12MHz)
- Phased array transducer: **D3P64L** (1.5MHz-5.3MHz)
- Phased array transducer: **D6P64L** (2.0MHz-8MHz)

- 4D volume transducer: **V4C40L** (2.0MHz-6.8MHz)

Image Modes

- B Mode
- 2B Mode
- 4B Mode
- B/M mode
- M mode
- CFM Mode
- CPA Mode
- DPD Mode
- B/BC Mode
- Pulse Doppler Mode
- Trapezoidal imaging
- Multiple Compound Imaging
- SRA
- AIO
- 2D Steer
- Triplex
- Quadplex
- CWD
- Free Steering M Mode
- TDI
- Color M Mode
- Curved Panoramic Imaging
- Elastography
- ECG
- StressEcho
- Super Needle
- 4D
- Virtual HD
- FHI mode

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

- High resolution 19 inch LED display
- 4 active transducer ports
- Color Doppler Flow Imaging
- Pulse Wave Doppler
- Power Doppler Flow Imaging
- Directional Power Doppler Flow Imaging
- ≥500 GB integrated hard disk
- Human bodymark
- USB ports:6
- Ethernet port
- S-video Out port
- VGA port
- Remote

- Video out port
- General measurement package
- Multi-language screen display
- EasyView: image archive system
- Patient information management system
- Building reporting system
- AIO
- Intelligent Zoom
- Speckle Reduction Algorithm
- Auto Doppler spectrum trace and auto calculate

Software Options

- DICOM
- 4D software package
- Virtual HD
- Curved Panoramic Imaging
- Super Needle
- Cardiac Package: CW, Free Steering M Mode, Color M Mode, TDI, ECG
- Auto IMT
- 2D Steer
- Clinical measurement package
- Q-Image
- Q-flow
- Q-beam
- X-Contrast

Hardware Option

- Convex transducer: D3C60L
- Linear transducer: D7L40L
- Linear transducer: D7L40L-REC
- Linear transducer: D12L40L
- Trans-vaginal transducer: D6C12L
- Trans-vaginal transducer: D7C10L
- Micro convex transducer: D3C20L
- Micro convex transducer: D5C20L

- Micro convex transducer: D6C15L
- Phased array transducer: D3P64L
- Phased array transducer: D6P64L
- 4D volume transducer: V4C40L
- Footswitch
- ECG cable

Peripherals

- Video printer: SONY UP-897MD, SONY UP-D25MD, SONY UP-D711MD
SONY UP-D898MD/X898MD
- PC printer :
 - HP LaserJet 1020
 - HP LaserJet CP2055d
 - HP LaserJet P1102
 - HP LaserJet 200 color M251

Imaging

Processing and

Presentation

B Mode

- Gain
- TGC
- Depth maximum 36cm (depend on the probes)
- Frame Rate
- Scan Width
- Image Rotate
- Gamma
- Smooth
- Edge Enhance
- Acoustic Power
- Center Line
- LGC

- Freq.
- Dynamic range 20-290, 18/step
- Focus Number
- Focus Position
- Compound
- Q-image
- SRA
- Persistence
- Density
- Noise Reject
- 2D Map
- Chroma (30 Types)
- Flip
- Zoom
- Trapezoidal Mode
- Super Needle
- StressEcho
- Elastography
- 2D steer
- X-contrast

M Mode

- 2D Map
- Dynamic
- Color Map
- Sweep Speed
- Layout
- Free M Mode
- Display Format

Color Mode

- Gain
- Frame Rate
- Scale
- Color Mode: Velocity, Variance

- Wall Thre
- Blood Efection
- B/BC
- Freq
- Steer
- Wall Filter
- Color Map
- PRF
- Color Invert
- Persistence
- Density
- Baseline
- Q-flow
- Q-beam

CPA/DPD Mode

- Gain
- Frame Rate
- Wall Thre
- Blood Efection
- Freq
- Steer
- Wall Filter
- Color Map
- PRF
- Density
- Persistence

PW Mode

- Gain
- Scale
- 2D Map
- Steer
- Spectrum Enhance
- Dynamic Range

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- Auto Cal
- DTrace Smooth
- Threshold
- DVmean
- DVmax
- Trace area
- Layout
- Freq.
- Color Map
- Wall Filter
- Audio
- Triplex
- PRF
- Speed
- Quadplex
- Baseline
- DA
- SV

CW Mode

- Gain
- Scale
- 2D Map
- Spectrum Enhance
- Dynamic
- Layout
- Invert
- Color Map
- Wall Filter
- Audio
- PRF
- Speed
- Baseline
- DA

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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

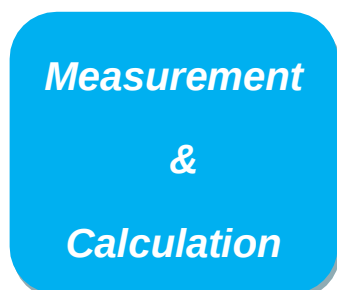
EasyView

- 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



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

- General
- OB
- GYN
- Pediatrics
- URO

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- Cardiac
- Vessel
- Abdomen
- Carotid
- Small parts



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, 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

- 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)

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- 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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