M7 Hand-Carried Color Doppler
Diagnostic Ultrasound System

Confidence for Diagnose
Raising the level on image quality

- iTOUCH with parasternal long axis and display cardiac structures
- Anatomical M-mode with three sample lines shows motions of three cardiac regions simultaneously
- Transvaginal transducer with high definition displays minute fetus clearly
- Distinct fetal aortic arch with CS-2s convex transducer
- Quality volume transducer shows vivid fetal facial organs
- Sensitive Color Doppler displays plentiful renal blood flow
- Dedicated software measures carotid IMT automatically and accurately
- Vertebral artery and vein blood flow reflects enough penetration and good spatial resolution
- Definite median nerve using L14-6s high frequency linear transducer

M7 Hand-Carried Color Doppler
Diagnostic Ultrasound System

Clarity·Accuracy·Performance
Bring Your Crystal Ball to Point-of-Care

Mindray is listed on the NYSE under the symbol "MR"
Multi-Specialty
High Performance Ultrasound can let you scan more.

The M7 Diagnostic Ultrasound System is designed to fulfill clinicians' busy, challenging point of care environments. With M7’s crystal clarity, crisp, clear image quality, it can perform any exam, from abdominal to vascular to cardiac, with efficiency and accuracy. Just choosing a transducer, the M7 brings you more benefits in more way than ever with wellness within reach.

**Cardiovascular:**
- Free Xros™ Imaging (Anatomic M mode)
- Tissue Doppler Imaging
- Embedded IMT (Intima Media Thickness) software detects edge with mean and maximum thickness value.

**Obstetrics/Gynecology**
- 4D Imaging on top of Portability
- New transducer design: the ergonomic design and the light weight allow the users to scan in 2D as with a standard convex probe.
- New 4D transducer: With its ergonomic design and the light weight allow clinicians elevate speed of scanning and provide ease of 3D/4D acquisitions.
- Abundant clinical measurement and analysis packages

**Anesthesiology/ Emergency Medicine/ Musculoskeletal**
- Abundant and dedicated clinical measurement and analysis packages
- Wide range of broadband transducers including convex, linear, transvaginal, phased array and 4D transducer
Anywhere, Anytime

M7 Diagnostic Ultrasound System is a powerful imaging tool with superior image quality to assist you in meeting your clinical challenges today and tomorrow. The M7 is designed for use in all point of care environments. It delivers premium imaging performance across a broad range of specialties. Providing accurate data with speed, the M7 enables clinicians to achieve enhanced level of diagnostic confidence and efficiency.

High capacity Li-ion batteries support continuous scanning more than 1.5 hours.
Robust magnesium with anti shock and anti splash ability can perform diagnostic exams whatever inside hospital or outdoor harsh environment.
Comfortable grab and go backpack and artistic traveling case for easy transportation
iRoam™, 802.11b/g wireless data transfer solution
DICOM 3.0 and M-Scan Pack providing Point-of-Care and field scan support

From Cart-Based Configuration to

the Point-Of-Care Environment
Gorgeous design with Innovative technology

It’s obviously designed with the power of leadership MINDRAY technology available to all clinicians. As a world-class medical equipment solution provider, M7 is a multiplying power station with innovation for the future. With its ergonomic mobile trolley same with performance and features comparable to that of conventional cart-based systems, provide you mobility with power and improve your productivity. To sum it up, the M7 delivers you the power and productivity of a full-sized system in a hand-carried size.
M7 Advanced
Hand-carried Diagnostic Ultrasound System

Designed for echocardiology environment
- Power up in seconds
- One key image optimization
- 15" LCD display
- Anti-shock magnesium case
- TDI
- TDIQ
- Free Xros M and CM
- LV Auto Calc

Premium performance through advanced technologies
- Multiple transducer connectors (optional)
- Premium performance through advanced technologies
- Multiple frequency broadband imaging
- iZoom™: enables accurate viewing of image for users from distance
- iClear™: speckle suppression technology
- iBeam™: spatial compounding
- iStation™: on board workstation for patient information management and connectivity
- Wired and wireless connectivity: DICOM PACS and PC

speed | clarity | flexibility

A premium performance procedural tool for echocardiology.

With high speed response, exceptional image quality and a sealed surface for easy cleaning/infection control, the M7 is a top choice premium class imaging tool for cardiology professionals. Mindray engineering team employs the System On Chip (SOC) design to enable complex technologies to be built into the M7’s compact chassis. The M7 elevates the performance standard of hand-carried ultrasound imaging tool.
Stress Echocardiography

- Fast, intuitive, user friendly work flow
- 13 factory default stress protocols covering: Exercise, Dobutamine, and Ergometer
- Unlimited user defined protocols with up to 12 stages per study
- Pause function
- Easy global clip edit function
- Wall motion scoring protocols ASE 16, ASE 17

Transesophageal Echo

- Motor driven
- Forward/reverse and lateral flexion
- 180 degree scan plane
- 180 degree scan plane indicator

VAccess

- Easily connects to your workstation, giving you the ability to access essential patient reporting directly on the ultrasound system
- Access to direct applications as diverse as inputting data and editing the patient report from the workstation through the M7 while never leaving the patient’s side
- Provides immediate connectivity, bringing the user in touch with patient data streams such as electronic patient reports, at a single location, without compromising the workflow
System Description
The Mindray M7 Diagnostic Ultrasound System is a premium performance hand-carried color doppler ultrasound imaging system. Mindray research and development engineers employ the System On Chip (SOC) design within the M7. SOC enables complex technologies to be built into the M7's compact laptop style chassis. The M7's exceptional image quality, high speed user experience and versatility have expanded the envelop of performance and flexibility for hand carried ultrasound systems.

Applications
Abdomen, Obstetrics, Gynecology, Cardiology, Peripheral Vessels, Small Parts, Urology, Anesthesia, Emergency Medicine, IC/CCU, Pediatrics, Neonate, Trans-cranial, Interventional, Musculoskeletal, Intra-operative.

General Specification
Dimensions and Weight
Width: 361mm (14.21 inch)
Depth: 357mm (14.06 inch)
Height: 75mm (2.95 inch)
Weight: Approx. 6.5kg, including batteries.

Electrical Power
AC adapter input
Voltage: 100 – 240V~
Frequency: 50/60Hz
Input current: 1.5 – 0.6A

AC adapter output
Voltage: 12V
Output current: 10A Battery

Battery
Lithium-Ion
Battery Pack: 11.1V, 4500mAh

Operating Environment
Ambient temperature: 0°C – 40°C
Relative humidity: 30% – 85% (no condensation)
Atmospheric pressure: 700 hPa – 1060 hPa

Storage and Transportation Environment
Ambient temperature: -20°C – 55°C
Relative humidity: 30% – 95% (no condensation)
Atmospheric pressure: 700 hPa – 1060 hPa

Console Design
Display
Control Panel
Handle
Transducer port
Transducer locking lever
IO extend port
Power input port
USB port: 2
Ethernet port
S-Video separate video output
Wireless LAN support

User Interface
Control Panel
Alphanumeric keys
Functional keys
Navigation Rotary Knob
Ergonomic soft key operations
Backlight keys
8 segment TGC
Power/Battery indicator
Blank keys for user-defined functions
Trackball, sensitivity and color adjustment
Integrated speakers, audio volume adjustment

Display Screen
Display: 15 inch LCD, High-Resolution 1024 x 768
Brightness adjustment
Screen saver: setting adjustment

Inputs & Outputs
Main Unit
Transducer port: 1 (Connect to a Transducer or the Transducer extend module)
I/O extend port: 1 (Connect to the I/O extend module)
Power input port: Connect to the power adapter
USB port: 2
S-Video separate video output: 1 (For image signal output)
Ethernet port: 1 (To connect to the network)

I/O Module (optional)
USB port: 2
ECG port: 1
Serial port: 1
Audio output port: 1 L/R
Mic In port: 1
Remote control port: 1
Composite video output port: 1
DVI-I output port: 1

V/A Extend Module (optional)
Audio input port: L/R
Composite video input port
Separate video input port

ECG Module (optional)
ECG lead port
Connection port: To connect to I/O module

Mobile System Cart
UMT-200
UMT-300
15 inch Extra LCD Display (optional)
Power supply module (optional)
External DVD R/W storage (optional)

Intelligent Workflow
Synchronous navigation: On-screen instructions
Screen saver mode: Transducer transmission is turned off
Thumbnail images: Display saved images during live scan
Soft keys: Shortcut for easy access to system
Menus and active parameter adjustment
Report edit and preview function
Backlight indication
User account management tool
Task management tool

System Overview
Exam Mode
Factory default: 35, user customizable
User Defined: 15
Total: 50 exam modes, all customizable

Scanning Method
Electronic convex
Electronic linear with steer and trapezoid scanning function
Electronic sector

Transducer Type
Linear array
Phased array
Convex array

Imaging Mode
B M
Free Xros M: Anatomical M mode
Color
Power (DirPower)
PW
CW
Smart 3D
Static 3D

4D (optional): Dynamic 3D
iScape™ (panoramic imaging)
TDI (Tissue Doppler imaging)
Color M (CM)

Display Mode
Triplex mode: B/C/D
Dual live: B/C, B/TDI
Adjustable 2D+ time line display format
Single window
Dual-split:
Quad-split:
Performance Specifications

Imaging Technology
- Tissue harmonic imaging
- Tissue doppler imaging
- Steer scanning for linear transducers (B, Color/Power, PW/CW independent)
- Trapezoid imaging for linear transducers
- iBeam™: Spatial compounding imaging for linear transducer
- iClear™: Adaptive speckle suppression imaging for all transducers
- iTouch™: Quick optimization for B or PW/CW image with one button control
- HPRF for PW
- Multi-frequency Transducers for 2D and Doppler imaging modes

Imaging Feature
- Zoom: Magnification factor 1 – 10
- Full screen iZoom: Zoom in the image area
- System dynamic range: 30 – 160dB
- Frame rate (Max.): 643 frames/s
- Adjustable focus positions (Max.): 16
- Maximum frame rate in 4D: 30 volumes/s

Languages
- Software display, control panel overlay and electronic copy of operation manuals including: Chinese, English, French, German, Italian, Portuguese, Russian, Spanish, Polish, Czech, Turkish, Finnish, Danish, Icelandic, Norwegian, and Swedish.

System Configuration
- Standard Configuration
  - Display: 15 inch LCD display, High resolution
  - PW
  - HPRF
  - Color doppler flow imaging
  - Power doppler flow imaging
  - Directional power doppler flow imaging
  - Tissue harmonic imaging
  - Trapezoid imaging
  - iTouch™
  - iStation™
  - 160G integrated hard disk
  - Multi-language screen display and control panel overlay
  - Carrying case with telescopic handle

Software Options
- iClear™
- CWD module
- iScape™ module
- Free Xros M (Anatomical M)
- Smart 3D module
- 4D module
- TDI (Tissue Doppler imaging) module
- Application packages, including exam mode, comments, measurements, body marks and report.
  - Abdominal package
  - Obstetrical package
  - Gynecological package
  - Cardiac package
  - Small parts package
  - Urological package
  - Vascular package
  - Pediatric package
  - Nerve blocks package
  - Emergency medicine
- DICOM basic function module (including: task management, DICOM storage, DICOM print, DICOM storage commitment, DICOM media storage (including DICOM DIR)
- DICOM Worklist
- DICOM MPPS
- DICOM OB/GYN structured report
- DICOM vascular structured report
- DICOM cardiac structured report
- DICOM Query/Retrieve

Hardware Options
- External USB DVD-RW: SE-S224Q
- Transducer extend module: PEM-21
- V/A extend module: VAM-11
- ECG module: ECG-21
- Footswitch: 971-SWNOM
- Mobile trolley: UMT-300
- Battery Pack (LI23I001A)
- Wireless-LAN adapter
- Transducers
- Needle-guided brackets

Peripherals Supported
- Black/white video printer: SONY UP-D23MD
- Color video printer: SONY UP-D23MD
- Graph/text printer: HP Deskjet D2568
- HP OfficeJet J3600 (HP Officejet J3608 All-in-One)
- HP Color LaserJet CM1015

Display Annotations
- Manufacturer logo
- Hospital name: Display up to 64 characters
- ID: Display up to 64 characters
- Name display up to 64 characters
- Transducer model
- Current exam mode
- ECG icon (displays when connects with a physiology module)
- Accession#: display up to 64 characters
- Operator: display up to 64 characters
- Menu
- Image
- ECG trace
- Transducer orientation mark
- Time line
- Coordinate axis, including depth, time, velocity/frequency
- TGC curve
- Focus
- Comment
- Body Mark
- Measure caliper
- Gray/color scale bar
- Thumbnail
- Cine icon
- Trackball functionality status icon
- Help information
- Soft Menu
- Status icons
- Biopsy guideline
- Measure result window (up to 8 results can be displayed)

Image parameters
- B mode (including iScape™)
- Frequency (F)
- Depth (D)
- Gain (G)
- Frame rate (FR)
- B IP (IP)
- Dynamic range (DR)
- Color mode
- Frequency (F)
- Gain (G)
- IP (IP)
- Pulse repeated frequency (PRF)
- Wall filter (WF)
- M mode
- M speed (V)
- M IP (IP)
- Dynamic range (DR)
- Power mode
- Frequency (F)
- Gain (G)
- IP (IP)
- Pulse repeated frequency (PRF)
- Wall filter (WF)
### System Configuration (cont’d)

**PW mode**  
- Frequency (F)  
- Gain (G)  
- Pulse repeated frequency (PRF)  
- Wall filter (WF)  
- Sample volume depth (SVD)  
- Sample volume (SV)  

**CW mode**  
- Frequency (F)  
- Gain (G)  
- Pulse repeated frequency (PRF)  
- Wall filter (WF)  
- Sample volume depth (SVD)  

**CW mode**  
- Frequency (F)  
- Gain (G)  
- Pulse repeated frequency (PRF)  
- Wall filter (WF)  
- Sample volume depth (SVD)  

**TVI mode**  
- Frequency (F)  
- Gain (G)  
- TVI IP (IP)  
- Pulse repeated frequency (PRF)  
- Wall filter (WF)  

**TEI mode**  
- Frequency (F)  
- Gain (G)  
- TEI IP (IP)  
- Pulse repeated frequency (PRF)  
- Wall filter (WF)  

**TVD mode**  
- Frequency (F)  
- Gain (G)  
- Pulse repeated frequency (PRF)  
- Wall filter (WF)  
- Sample volume depth (SVD)  
- Sample volume (SV)  

**3D/4D**  
- Brightness (B)  
- Contrast (C)  
- Scan method (only for Smart 3D)  
- Quality (Q, for Static 3D and 4D)  
- Angle (A)  

**Setup**  
- General settings  
- User-defined functional keys:  
  - Print, Save, F1-F6, footswitch  
- Customize user-defined exam modes in:  
  - Exam selection of each Transducer  
  - Configuration of measurement packages, body mark and comment libraries  
  - Imaging parameters setting as well as layout of menus and soft keys in imaging mode  
  - 15 User-defined exam modes  
  - Create new measurement items, body marks and comments  
  - Preset data manage: to save, load, export and default  
  - Peripheral devices installation and setting  

### Performance Specifications

**DICOM settings and network setting**  
- System Configuration (network updating, remote desktop, system test, log operation and preset)  
- System information viewing  

**Imaging and Processing**

#### Display Depth
- Minimum: 18mm, Transducer dependent  
- Maximum: 388mm, Transducer dependent

#### B mode
- Gain: 0 – 100  
- TGC: 8 segments, with re-mapping functionality at any depth  
- iTouch™: -12dB – 12dB  
- iTouch™ Bright: -2, -1, 0, 1, 2  
- FOV position
  - B IP: 1 – 8, combination of dynamic range, iClear™, persistence, smooth  
  - THI IP: 1 – 8, combination of dynamic range, iClear™, persistence, smooth  
  - Rotation: 0°, 90°, 180°, 270°

#### Colorize/
- Colorize Map: On/Off, 1 – 10

#### Color mode
- Gain: 0 – 100
- Color IP: 1 – 8, combination of Smooth and Persistence
- A. power: 10% – 100%, in increments of 6
- Line Density: L, M, H, UH
- B Display: On, Off
- Smooth: 0 – 4
- Persistence: 0 – 4
- Baseline: -8 – +8
- Focus Position: 0% – 100%
- Packet Size: 0 – 3
- B/C Wide: On, Off
- Dual Live: On, Off
- Map: V0 – V10, VV0 – VV9
- Priority: 0 – 100%
- WF: 0 – 7
- Frequency: Transducer dependent
- Scale: Frequency, Transducer and depth dependent
- Steer: Transducer dependent
- Invert: On, Off
- Flow State: L, M, H

**Power (DirPower)**
- Gain: 0 – 100
- Packet Size: 0 – 3
- Flow State: L, M, H
- Dyn Ra.: 10dB – 70dB, in increments of 5dB
- Power IP: 1 – 8, combination of Smooth and Persistence
- A. power: 10% – 100%, in increments of 6
- Line Density: L, M, H, UH
- Smooth: 0 – 4
- Persistence: 0 – 4
- Focus Position: 0% – 100%
- B Display: On, Off
- B/C Wide: On, Off
- Dual Live: On, Off
- Map: P0-3 (Power), dP0-3 (DirPower)
- Priority: 0% – 100%
- Frequency: Transducer dependent
- Scale: Frequency, Transducer and depth dependent
- Invert: On, Off
- WF: 0 – 7
- Steer: -12°, 0°, 12°
**Performance Specifications**

### Imaging and Processing (cont’d)

**PW/CW**
- Gain: 0 – 100
- V Max: On, Off
- V Mean: On, Off
- Colorize/Colorize Map: On/Off, 1 – 10
- Dyn Ra.: 24dB – 72dB, in increments of 2
- Audio: 0 – 100%, in increments of 2
- Trace Area: Above, Below, All
- A. power: 10% – 100%, in increments of 6
- Trace Sensitivity: 0 – 5
- Trace Smooth: Off, 1 – 4
- Time Mark: On, Off
- Display Format: L/R, 1:1, 1:2, Full
- T/F Res: 0 – 3
- Auto Calc Param: On, Off
- HPFR: On, Off
- Frequency: Transducer dependent
- Scale: Frequency, Transducer and depth dependent
- Baseline: -4 – 4
- Invert: On, Off
- Quick Angle: -60, 0, 60
- Angle: -80 – 80°, in increments of 1°
- SV: 0.5mm – 20mm
- SVD
- WF: 0 – 6
- Auto Calc: On, Off
- Speed: 1 – 6
- Duplex/Triplex: On, Off
- Gray Map: 1 – 8
- Post Process: Curve, Gray Rejection, y
- PW Steer: Maximum ±20°
  (Transducer dependent)

**Free Xros M**
- Gain: 0 – 100
- TGC: 8 segments, with re-mapping functionality at any depth
- Colorize/Colorize Map: On/Off, 1 – 10
- Post Process: N, curve, gray rejection
- Display Format: L/R, 1:1, 1:2, Full
- Display: Cur, Full
- Mark Adjustment: Show A, Show B, Show C
- Time Mark: On, Off
- Angle
- Speed: 1 – 6
- Gray Map: 1 – 8

**CM**
- For parameter details in CM mode, please refer to relevant sections of B, Color and M modes.

**TVI**
- Gain: 0 – 100
- Baseline: -8 – +8
- TVI IP: 1 – 8, combination of Smooth and Persistence
- A. power: 10% – 100%, in increments of 6

**TEI**
- Gain: 0 – 100
- Dual Live: On, Off
- TEI IP: 1 – 8, combination of Smooth and Persistence
- Focus Position: 0% – 100%
- Frequency: Transducer dependent
- Scale: Frequency, Transducer and depth dependent
- Tissue State: L, M, H
- Invert: On, Off
- WF: 0 – 7
- Persistence: 0 – 4
- Smooth: 0 – 4
- Dyn Ra.: 10 – 70dB, in increments of 5
- B/C Wide: On, Off
- Map: P0 – P3, dP0 – dP3
- Packet Size: 0 – 3
- B Display: On, Off
- Priority: 0 – 100%
- Line Density: L, M, H, UH
- A. power: 10% – 100%, in increments of 6

**TVD**
- Gain: 0 – 100
- Quick Angle: -60°, 0°, 60°
- WF: 0 – 6
- Trace Sensitivity: 0 – 5
- Auto Calc Param
- V Max: On, Off
- V Mean: On, Off
- Trace Area: Above, Below, All
- Duplex/Triplex: On, Off
- Colorize/Colorize Map: On/Off, 1 – 10
- Gray Map: 1 – 8
- Invert: On, Off
- Speed: 1 – 6
- Angle: -80 – 80°, in increments of 1
- SV: 0.5mm – 20mm
- SVD
- A. power: 10% – 100%, in increments of 6
- Display Format: L/R, 1:1, 1:2, Full

**TVM**
- For parameter details in TVM mode, please refer to relevant sections of B, M and TVI modes.

**3D/4D**
- Method (only for Smart 3D): Fan, Linear
- Direction: Up/Down, Down/Up, Back/Front, Front/Back, Left/Right, Right/Left
- Display Format: Single, Dual, Quad
- Distance (for Smart 3D only): 10 – 200mm, in increments of 10mm
- Angle
- Smart 3D: 10 – 80°, in increments of 2°
- Static 3D/4D: Transducer dependent
- Quality (for Static 3D/4D only): Low 1, Low 2, Mid, High 1, High 2
- Inversion: On, Off
- Para pack: 5
- Auto Rot.: On, Off
- Reset ROI (For Smart 3D only)
- Adjusting VOI: On, Off
- Accept VOI: On, Off
- Colorize/Colorize Map: Off, 1 – 5
- Reset: On, Off
- Quick rotate angle: 0°, 90°, 180°, 270°
- Current image: A/B/C/3D
- Brightness: 0 – 100%, in increments of 2%
- Contrast: 0 – 100%, in increments of 2%
- Smooth: 0 – 20, in increments of 1
- Threshold: 0 – 100%, in increments of 1
- Transparency: 0 – 100%, in increments of 5
- Render mode: Surface, Min, Max, X Ray
- MPR Line: Partial, None, Entire
- Edit Type: Inside Contour, Outside Contour, Big Contour, Big Eraser, Small Eraser, Inside Rect, Outside Rect, Inside Polygon, Outside Polygon
- Edit Depth: Full Depth, User Defined (0 – 100%)
- Reset Curve
- iScape™ View
- Actual Size
- Fit Size
- Ruler: On, Off
- Colorize/Colorize Map: Off, 0 – 10
- Rotation: 0 – 360°, in increments of 5°

**Audio:**
- 0% – 100%, in increments of 2%
- Frequency:
- Scale: Frequency, Transducer and depth dependent
- Baseline: 4 – 44
- Dyn Ra.: 24 – 72dB
- Trace Smooth: Off, 1 – 4
- Time Mark: On, Off
- T/F Res: 0 – 3
- Post Process: Curve, Gray Rejection, y

**TVM**
- For parameter details in TVM mode, please refer to relevant sections of B, M and TVI modes.

**3D/4D**
- Method (only for Smart 3D): Fan, Linear
- Direction: Up/Down, Down/Up, Back/Front, Front/Back, Left/Right, Right/Left
- Display Format: Single, Dual, Quad
- Distance (for Smart 3D only): 10 – 200mm, in increments of 10mm
- Angle
- Smart 3D: 10 – 80°, in increments of 2°
- Static 3D/4D: Transducer dependent
- Quality (for Static 3D/4D only): Low 1, Low 2, Mid, High 1, High 2
- Inversion: On, Off
- Para pack: 5
- Auto Rot.: On, Off
- Reset ROI (For Smart 3D only)
- Adjusting VOI: On, Off
- Accept VOI: On, Off
- Colorize/Colorize Map: Off, 1 – 5
- Reset: On, Off
- Quick rotate angle: 0°, 90°, 180°, 270°
- Current image: A/B/C/3D
- Brightness: 0 – 100%, in increments of 2%
- Contrast: 0 – 100%, in increments of 2%
- Smooth: 0 – 20, in increments of 1
- Threshold: 0 – 100%, in increments of 1
- Transparency: 0 – 100%, in increments of 5
- Render mode: Surface, Min, Max, X Ray
- MPR Line: Partial, None, Entire
- Edit Type: Inside Contour, Outside Contour, Big Contour, Big Eraser, Small Eraser, Inside Rect, Outside Rect, Inside Polygon, Outside Polygon
- Edit Depth: Full Depth, User Defined (0 – 100%)
- Reset Curve
- iScape™ View
- Actual Size
- Fit Size
- Ruler: On, Off
- Colorize/Colorize Map: Off, 0 – 10
- Rotation: 0 – 360°, in increments of 5°
Performance Specifications

Multi-frame images formats: AVI, DCM, CIN, supports off-line analysis
Clip length: 1 – 60s, 1 – 16 cycles
Storage area:
- Image area: 640x480
- Standard area: 800x600
- Full-screen: 1024x768
iVision™
Cine review: Auto, Manual (auto review segment can be set), supports linked cine review for 2D, M/D images, 8380 frames (Max.).
Send/print image after End Exam
DICOM:
- DICOM Storage
- DICOM print
- DICOM Worklist
- Query/Retrieve
- Structured Report (SR)
- Storage Commitment
- MPPS
- Media review
iStation™
Intelligent patient data management platform
Integrated search engine for patient data
Detailed patient information view
Intelligent data backup/restore
Patient data/image sending
Patient data deleting
Exam managing: create new exam, activate exam and continue exam
Recycle Bin
Measure/Calc/Study
Caliper
2D mode
M mode
Doppler mode
Application
Optional package for specific clinical uses
Clinical Packages
Abdomen
Obstetrics
Cardiology
Vascular
Gynecology
Urology
Small Parts
Pediatrics
Diagnostic Report
View/add images
Edit report
Obstetric/vascular analysis
Fetal growth curve
Print report
Import/export report
View history report
Physio Input/Output
ECG
Display: On, Off
Position: 0% – 100%, in increments of 5
Display HR: On, Off
Gain: 0 – 30
Transducer Specifications
CS-2s
Array type: Convex-wide
Applications: Gynecology and obstetrics, abdomen, vascular, pediatrics
B mode imaging frequency: 2.5/3.5/5.0MHz
Harmonic frequency: 5.0/6.0MHz
Doppler frequency:
- C: 2.5 /3.0MHz
- PW: 2.5 /3.0MHz
Convex radius: 49.57mm
Biopsy guide: NGB-015, 25°/35°/45°
7L4s
Array type: Linear
Applications: Small parts, vascular, musculoskeletal, pediatrics, abdomen
B mode imaging frequency: 5.0/7.5/10MHz
Harmonic frequency: 8.0/10MHz
Doppler frequency:
- C: 5.0/5.7MHz
- PW: 5.0/5.7MHz
Steer angle: ±6°/12°
Biopsy guide: NGB-007, 40°/50°/60°
L14-6s
Array type: Linear
Applications: Small parts, vascular, musculoskeletal, pediatrics
B mode imaging frequency: 8.0/10.0/12.0MHz
Harmonic frequency: 10.0/11.0MHz
Doppler frequency:
- C: 5.7 /6.6MHz
- PW: 5.7 /6.6MHz
Steer angle: ±6°/20°
Biopsy guide: NGB-016, 30°/40°/50°
Transducer Specifications (cont’d)

L14-6Ns
Array type: Linear
Applications: Small parts, vascular, musculoskeletal, pediatrics
B mode imaging frequency: 8.0/10.0/11.0MHz
Harmonic frequency: 10.0/14.0MHz
Doppler frequency
  C: 5.7 /11MHz
  PW: 5.7 /6.6MHz
Steer angle: ±6°/20°

L12-4s
Array type: Linear
Applications: Small parts, vascular, musculoskeletal, pediatrics
B mode imaging frequency: 6.0/7.5/10.0MHz
Harmonic frequency: 10.0/11.0MHz
Doppler frequency
  C: 5.0 /5.7MHz
  PW: 5.0/5.7MHz
Steer angle: ±6°/12°
Biopsy guide: NGB-007

P4-2s
Array type: Sector phased
Applications: Cardiology, abdomen, transcranial, pediatrics
B mode imaging frequency: 2.0/2.5/3.0MHz
Harmonic frequency: 3.2/3.6MHz
Doppler frequency
  C: 2.0/2.3MHz
  PW: 2.0/2.5MHz
  CW: 2.0MHz
  TVI: 2.5/3.0MHz
  TVD: 2.0/2.5MHz
  TEI: 2.5/3.0MHz
Biopsy guide: NGB-011, 11°/23°

P7-3s
Array type: Sector phased
Applications: Cardiology, abdomen, transcranial, pediatrics
B mode imaging frequency: 3.6/5.0/6.6MHz
Harmonic frequency: 6.0/7.0MHz
Doppler frequency
  C: 3.3/4.0MHz
  PW: 3.2/4.0MHz
  CW: 3.3MHz
  TVI: 3.3/4.0MHz
  TVE: 3.2/4.0MHz
  TEI: 3.3/4.0MHz
Biopsy guide: None

4CD4s
Array type: Convex
Applications: Abdomen, gynecology, obstetrics
B mode imaging frequency: 2.5/4.5/6.0MHz
Harmonic frequency: 5.0/6.0MHz
Doppler frequency
  C: 2.5/3.0MHz
  PW: 2.5/3.0MHz
  Convex radius: 40mm
  Swing angle (Max): 70°
Biopsy guide: None

V70-4Bs
Array type: Convex
Applications: Gynecology, obstetrics, urology
B mode imaging frequency: 5.0/6.5/8.0MHz
Harmonic frequency: 8.0/9.0MHz
Doppler frequency
  C: 4.0/5.0MHz
  PW: 4.0/5.0MHz
Convex radius: 10mm
Biopsy guide: NGB-004

Safety & Conformance

Quality Standards
ISO 9001:2000
ISO 13485:2003

Design Standards
UL 60601-1
CSA C22.2 No. 601-1
EN 60601-1 and IEC 60601-1
EN 60601-1-1 and IEC 60601-1-1
EN 60601-1-2 and IEC 60601-1-2
EN 60601-2-37 and IEC60601-2-37
EN60601-1-4 and IEC60601-1-4
EN60601-1-6 and IEC60601-1-6

CE Declaration
M7 system is fully in conformance with the Council Directive Concerning Medical Devices 93/42/EEC. The number adjacent to the CE marking (0123) is the number of the EU-notified body that certified meeting the requirements of Annex II of the Directive.
M7
Quick Reference Guide

1. Power
2. iStation (Patient management)
3. Setup
4. Report
5. Patient (Input patient information)
6. Exam (Choose probe and exam)
7. Review
8. End Exam
9. Body Mark
10. Cine
11. Zoom
12. A B C Comment & Arrow
13. iTouch (Gain & iTouch)
14. Image Mode & 2D/B Mode Select
15. Multi-function Knob
16. Depth
17. Update (Shift exam status)
18. Measure
19. Cursor
20. Save (Frame or cine)
21. Set
22. Soft Keys
Quick Reference Guide

Getting Started

New Patient
1. Press [Patient], fill in basic patient information.
2. Press [Exam].

Scanning

B Mode
1. Press [B] to enter B mode.

CDFI/Power Mode
1. Press [Color] to enter Color mode.
2. Move [Trackball] to change the position of ROI.
3. Press [Set], and then move [Trackball] to change the size of ROI, press [Set].

PW/CW Mode
1. Press [PW] to enter PW mode.
3. Use related [Function Key] to change the size and angle of sample volume, press [Update] or [PW] to get the Pulse Wave Doppler.

Image Adjustment

Free Xros M mode (Anatomical M mode)
1. Under B mode, click [Free Xros M] on the screen to enter.
2. Move [Trackball] to set the position of the sample line, and rotate [Multi-functional Knob] to change the angle of the sample line.

Tissue Doppler Imaging
1. Under B mode with phased array probe, click [TDI] on the screen to enter TDI mode.
2. Move [Trackball] to change the position and size of the ROI.

Measurement

1. Press [Freeze] to freeze the image before the measurement.
2. Press [Measure] to enter the application measurement status.
3. Move [Trackball] to choose the measurement tool, and then go to the desired position to measure.

Post Scanning

Comments and Body Marks

Comment
1. Press [Comment] to choose the comment setting position and then add the comment to the image.

Body Mark
1. Press [Body Mark] and rotate it to choose the desired one.
2. Move [Trackball] to place the probe marker, and rotate the [Multi-functional Knob] to adjust the orientation of the probe.

Save Images or Cine
1. Press [Save] to save a single-frame image or cine to the system.
2. Press [Review] or select an exam of a patient in the [iStation] screen, and click [Review] to see the image of cine.

Report and Print

1. Press [Report], move the cursor to the comment text box and type the text.
2. Click [Image select] on the report page to add images, and then click [Print View] to preview the report, click [Print] to print the report out.

End Exam
Press [End Exam] to end one examination. You may start a new exam by repeating the instructions above.

Image Management

Image Transfer
1. Press [iStation] to enter the image management system and choose the images.
2. Click [Send to] to send the images to USB, DICOM, etc.

Note: For detailed information, please refer to the operation manual.