

Console Design

- ♦ Laptop-sized
- ♦ Touch pad for functional control
- ♦ One active probe connector
- ♦ Water-proof keyboard
- ♦ 10.4-inch LCD monitor
- ♦ Large capacity rechargeable battery
 - Working hour: ≥2 hours in normal working condition
 - Charge time: 5 hours with battery charger



Transducer types

- ♦ Electronic transrectal probe
- ♦ Electronic microconvex probe
- ♦ Electronic convex probe
- ♦ Electronic linear probe
- ♦ Electronic transvaginal probe

Memory

- ♦ Digital Cine-Memory
 - Max up to 256 frames in B-mode
 - Max up to 256 second in M-mode
- ♦ Hard disk 2 G
- ♦ More than 16 frames instant image storage

Display Modes

- ♦ B mode
- ♦ 2B mode
- ♦ 4B mode
- ♦ B/M mode
- ♦ M mode
- ♦ Zoom B

Image Processing

- ♦ 6-step TGC slidepots
- ♦ Receive gain adjustable from 0 to 100%
- ♦ Edge enhancement (4 steps, 0~3)
- ♦ Image frame correlation (4 steps: 0~3)
- ♦ Grayscale transformation (24 types: 0~23)
- ♦ Adjustable depth, angle and width
 - Depth
 - Angle (Convex probe)
 - Width (Linear probe)
- ♦ Pseudo-color mode

Focusing:

- ♦ 1~4 selectable transmit / receiving focus
- ♦ 16 focusing positions selective
- ♦ Continuous dynamic focusing

Image Orientation

- ♦ Left / right
- ♦ Up / down
- ♦ ±90° image rotation

Zooming

- ♦ Real-time and freeze zooming
- ♦ Magnification (X1.0, X2.0, X3.0, X4.0)

Display Items

- ♦ More than 300 predefined annotations
- ♦ Display parameters related to diagnosis:
 - System model
 - Hospital name: 22 characters
 - Patient name: 20 characters

M-mode Sweep Speed

- ♦ Low: 10 seconds / frame
- ♦ Medium-Low: 5 seconds / frame
- ♦ Medium: 2.5 seconds / frame
- ♦ High: 1.25 seconds / frame

- Patient ID: 20 characters
- Date: 3 formats selectable
 - . DD-MM-YYYY
 - . MM, DD, YY
 - . YYYY/MM/DD
- Time: 12/24 hours mode
- Week
- Probe model
- Exam type
- Active probe type
- Probe orientation
- Display parameters related to imaging
 - Acoustic power
 - Imaging angle, width and depth
 - Frame rate
 - Focus zone mark and range
 - Gray scale
 - Probe operating frequency
 - TGC curve
 - Depth scale
 - Overall gain
 - Edge enhancement level
 - Persistence
 - Line density
 - Dynamic range
 - Zoom rate
 - Smoothness
 - Grayscale transform curve

Image and Patient Data Storage

- Hard disk
- USB memory stick, two USB ports
- Record device:
 - B/W video printer (Option)
 - Laserjet or inkjet printer (Option)

Measurements & Calculations

B-mode (2B, 4B)

- Distance: 9 sets
- Circumference: 9 sets (Ellipses/ Trace)
- Area: 9 sets (Ellipse / Trace/ Distance)
- Volume: 9 sets (Ellipse / Trace / Sphere)
- Angle between: 9 sets
- Histogram

M-mode

- Distance: 9 sets
- Time: 9 sets
- Slope: 9 sets
- Heart Rate: 9 sets

General Measurement

- B Mode (Including 2B and 4B)

<u>Menu</u>	<u>Calculation Method</u>
Ellipse-area	Area and circumference measurement in Ellipse method
Biplane-vol.	Volume measurement in biplane method
Ellipse-vol.	Volume measurement in ellipse sphere method
Simpson-vol.	Volume measurement in Simpson method
Sphere-vol.	Volume measurement in sphere method
Angle	Angle measurement
Area ratio(t)	Area ratio in trace method
Area ratio(e)	Area ratio in ellipse method
%area redu(t)	Area reduction percentage in trace method
%area redu(e)	Area reduction percentage in ellipse method
%diam.	Diameter reduction percentage
Reduce	
Histogram	Histogram

- M Mode

<u>Menu item</u>	<u>Definition</u>
Multi-distance	Multi-distance (length) measurement
Time	Time measurement
Heart rate	Heart rate
Slope	Slope (velocity) measurement

Applications

- Bovine
- Equine
- Ovine
- Canine
- Feline
- Porcine

Abdominal Menu

<u>Menu Item</u>	<u>Definition</u>
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Long L Lobe	Long Diameter of Left Lobe
A-P L Lobe	Antero-posterior Diameter of Left Lobe
Angle L Lobe	Angle of Left Lobe
Obli. R Lobe	Obliqued of Right Lobe
A-P R Lobe	Antero-posterior Diameter of Right Lobe
Angle R Lobe	Angle of Right Lobe
PV	Portal vein
IVC	Inferior vena cava
SMA	Superior mesentery artery
CELA	Celiac artery
AO	Aorta
Long Spleen	Long Diameter of Spleen
A-P Spleen	Antero-posterior Diameter of Spleen
Splenic A	Splenic artery
Splenic V	Splenic vein
Long GB	Long Diameter of gallbladder
A-P GB	Antero-posterior Diameter of gallbladder
Trans GB	Transversal diameter of gallbladder
Wall GB	Thickness of the wall of gallbladder
CBD	Common bile duct
LHD	Left hepatic duct
RHD	Right hepatic duct
Head	Pancreas head
Body	Pancreas body
Tail	Pancreas tail
MPD	Main pancreatic duct
%D Redu AO	% Diameter Reduce of Aorta
%A Redu AO	% Area Reduce of Aorta
L L Kidney	Long diameter of Left Kidney
A-P L Kidney	Antero-posterior diameter of Left Kidney
Trans L Kidney	Transversal diameter of Left Kidney
L Ureter	Left Ureter
LRA	Left Renal artery
L R Kidney	Long diameter of Right Kidney
A-P R Kidney	Antero-posterior diameter of Right Kidney
T R Kidney	Transversal diameter of Right Kidney
R Ureter	Right Ureter
RRA	Right Renal artery
Long Blad	Long Diameter of Bladder
A-P Blad	Antero-posterior diameter of Bladder
Trans Blad	Transversal diameter of Bladder

Reproductive System of Female Menu

<u>Menu item</u>	<u>Definition</u>
Long Uterus	Long Diameter of Uterus
A-P Uterus	Antero-posterior diameter of Uterus
Trans Uterus	Transversal diameter of Uterus
Endometrium	Endometrium
Long Cervix	Long Diameter of Cervix
A-P Cervix	Antero-posterior diameter of Cervix
Long L Ovary	Long Diameter of Left Ovary
A-P L Ovary	Antero-posterior diameter of Left Ovary
T L Ovary	Transversal diameter of Left Ovary
Long R Ovary	Long Diameter of Right Ovary
A-P R Ovary	Antero-posterior diameter of Right Ovary
T R Ovary	Transversal diameter of Right Ovary
Vol Follicle1	Follicle1 Volume
Vol Follicle2	Follicle2 Volume
Vol Follicle3	Follicle3 Volume
Vol Follicle4	Follicle4 Volume
Vol Follicle5	Follicle5 Volume
Vol Follicle6	Follicle6 Volume
Vol Follicle7	Follicle7 Volume
Vol Follicle8	Follicle8 Volume
Vol Follicle9	Follicle9 Volume
Vol Follicle10	Follicle10 Volume

Reproductive System of Male Menu

<u>Menu item</u>	<u>Definition</u>
S-I Prost	Superior-inferior diameter of Prostate
A-P Prost	Antero-posterior diameter of Prostate
Trans Prost	Transversal diameter of Prostate
A-P IG	Antero-posterior diameter of Internal gland
Trans IG	Transversal diameter of Internal gland
Long L Testis	Long Diameter of Left Testis
Trans L Testis	Transversal Diameter of Left Testis
A-P L Testis	Antero-posterior Diameter of Left Testis
Long L Epidi	Long Diameter of Left Epididymis
A-P L Epidi	Antero-posterior Diameter of Left Epididymis

Long R Testis	Long Diameter of Right Testis
A-P R Testis	Antero-posterior Diameter of Right Testis
Trans R Testis	Transversal diameter of Right Testis
Long R Ependi	Long Diameter of Right Epididymis
A-P R Ependi	Antero-posterior Diameter of Right Epididymis

Physical Features

Dimension

- ♦ 85mm(H) X 310mm(W) X 270mm(D)

Weight

- ♦ Approximately 4kg

Obstetrics Menu

<u>Menu item</u>	<u>Definition</u>
GSD	Gestational sac diameter
CRL	Crown rump length
BPD	Biparietal diameter
HD	Head diameter
TD	Trans-Abdominal diameter
BD	Body length
Growth Charts	Fetus growth curve
Heart Rate	Heart Rate

Power Requirements

- ♦ Voltage: AC 100V to 240V
- ♦ Frequency: 50 / 60Hz
- ♦ Rated Power: 60VA

Environment Requirements

- ♦ Ambient temperature: -40°C to +70°C
- ♦ Relative humidity: 10% to 100%
- ♦ Atmospheric Pressure: 50kPa to 106kPa

Cardiology Calculation Menu

<u>Menu item</u>	<u>Definition</u>
<u>B mode menu</u>	
RVAW	Right ventricular anterior wall
RV	Right ventricle
RVOT	Right ventricular outflow tract
AO	Aorta
LA	Left atrium
IVSD	Inter-ventricular septum in diastolic period
LVDD	Left ventricle in diastolic period
LVPWD	Diameter of left ventricle posterior wall in diastolic period
IVSS	Inter-ventricular septum in systolic period
LVS	Left ventricular diameter in systolic period
LVPWS	Diameter of left ventricle posterior wall in systolic period
IVC	Inferior vena cava
PA	Great artery short axis view
RA	Four chambers view
<u>M, B/M mode menu</u>	
LA/AO	Left atrium/ Aorta
MV	Mitral valve
TV	Tricuspid valve
PV	Pulmonic valve
LV	Left ventricle

Software, Accessories & Probes




Standard Accessories

- ♦ One Lithium battery
- ♦ Battery charger
- ♦ Power adapter
- ♦ Operation manual
- ♦ BNC cable
- ♦ Power Cable
- ♦ Printer control cable
- ♦ Cable connection for car cigarette lighter

Optional Accessories and Software

- ♦ 4 G integrated hard drive
- ♦ One Lithium battery
- ♦ Sony UP-897MD B/W video printer
- ♦ Biopsy guide for convex or linear probe
- ♦ Biopsy guide for transvaginal probe
- ♦ Dicom 3.0 software

Probes

Model name	Transmit frequency (MHz)	Max. depth	Band width	View field	Array radius	Biopsy guide
<Transrectal Probe>						
L5I65VH	3.5/4.2/5.0/6.0/7.0	14cm	≥60%	65mm		Invalid
L7I50VH *	5.0/6.2/7.5/8.2/10.0	9cm	≥60%	50mm		Invalid
<Convex Probe>						
C3I60H *	2.5/3.0/3.5/4.2/5.0	25cm	≥60%	70°	R60	Available
C3I20H *	2.5/3.0/3.5/4.2/5.0	25cm	≥60%	110°	R20	Invalid
C3I40H *	2.5/3.0/3.5/4.2/5.0	25cm	≥60%	80°	R40	Available
C5I20H *	3.5/4.2/5.0/6.5/7.5	14cm	≥60%	110°	R20	Invalid
C6I15H *	4.5/5.2/6.0/6.7/7.5	12.6cm	≥65%	95°	R15	Invalid
<Linear probe>						
L7I38H *	5.0/6.2/7.5/8.2/10.0	9cm	≥60%	38mm		Available

Notes:

- a) Probes with ‘*’ are optional parts.
- b) Specifications and appearance are subject to change without prior notice.