

Console Design

- ♦ Bright color design
- ♦ Stream line shape
- ♦ Two probe holders
- ♦ Ergonomically key layout with backlit
- ♦ 7 user-programmable keys for personal preference (F1 ~ F7)
- ♦ High resolution monitor
 - 10-inch non-interlace
 - Screen saver



Transducer types

- ♦ Electronic Convex Array
- ♦ Electronic Microconvex Array
- ♦ Electronic Linear Array
- ♦ Electronic Transvaginal Probe
- ♦ Electronic Transrectal Probe

Memory

- ♦ Digital Cine-Memory
 - Max up to 256 frames in B-mode
 - Max up to 2560 second in M-mode
- ♦ Hard disk 80 G
- ♦ More than 16-frame instant image storage

Display Modes

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

Image Processing

- ♦ 8-steps TGC slidepots
- ♦ Receive gain adjustable from 0 to 100%
- ♦ Dynamic range adjustable from 35 to 66db
- ♦ Edge enhancement (4 steps, 0~3)
- ♦ Line density (Auto)
- ♦ Image frame correlation (8 steps: 0~7)
- ♦ Adjustable depth, angle and width
 - Depth
 - Angle (Convex probe)
 - Width (Linear probe)

Focusing:

- ♦ 16 focus selectable zones
- ♦ Continuous dynamic focusing
- ♦ Dynamic apodization
- ♦ 1~4 selectable transmit / receiving focus
- ♦ Acoustic lens focus

Image Orientation

- ♦ Left / right
- ♦ Up / down
- ♦ $\pm 90^\circ$ image rotation

Zooming

- ♦ Real-time zooming (X1.0, X2.0, X3.0, X4.0)
- ♦ Selectable zooming position

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
- Exam type
- Active probe type
- Probe orientation
- ♦ Display parameters related to imaging
 - 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

- ♦ Large capacity 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>
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
Portal Vein	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

- ♦ 320mm(H) X 310mm(W) X 415mm(D)

Weight

- ♦ Approximate 11 kg

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 220V±10%; 110V±10%
- ♦ Frequency: 50Hz±2%; 60Hz±2%
- ♦ Input Power: 250VA

Environment Requirements

- ♦ Ambient temperature: 0°C to 40°C
- ♦ Relative humidity: 30% to 85%
- ♦ Atmospheric Pressure: 70kPa 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



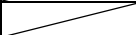
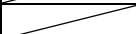
Standard Accessories

- ♦ Power Cable
- ♦ Equipotential cable
- ♦ BNC cable
- ♦ Printer control cable
- ♦ Dust cover
- ♦ Operation Manual
- ♦ Fuse

Optional Accessories and Software

- ♦ Mobile trolley CR-4
- ♦ USB printer
- ♦ Sony UP-897MD B/W video printer
- ♦ Biopsy guide for convex or linear probe
- ♦ Biopsy guide for transvaginal or transrectal probe
- ♦ Dicom 3.0 software

Probes

Model name	Transmit frequency (MHz)	Max. depth	Band width	View field	Array radius	Biopsy guide
<Convex Probe>						
C3I60 *	2.5/3.0/3.5/4.2/5.0	25.2cm	≥60%	70°	R60	Available
C3I40 *	2.5/3.0/3.5/4.2/5.0	25.2cm	≥60%	80°	R40	Available
C3H20 *	2.5/3.0/3.5/4.2/5.0	25.2cm	≥60%	110°	R20	Invalid
C5I20 *	3.5/4.2/5.0/5.7/6.5	14cm	≥65%	110°	R20	Invalid
C6I15B *	4.5/5.0/6.0/7.5	12cm	≥60%	95°	R15	Invalid
<Linear probe>						
L7I38 *	5.0/6.2/7.5/8.2/10.0	9cm	≥60%	38mm		Available
<Transvaginal probe>						
V5H11 *	4.5/5.2/6.0/6.7/7.5	12cm	≥60%	140°	R11	Available
<Transrectal probe>						
U7I50 *	5.0/6.2/7.5/8.2/10.0	9cm	≥60%	50mm		Invalid
L7I50V	5.0/6.2/7.5/8.2/10.0	9cm	≥60%	50mm		Invalid
L5I65V *	3.5/4.2/5.0/6.0/7.0	14cm	≥60%	65mm		Invalid

Notes:

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