

Console Design

- ♦ Humanized appearance
- ♦ Backlit keyboard, 8 TGC
- ♦ Two active probe connectors
- ♦ Two probe holders
- ♦ 12-inch LCD monitor

Transducer Types

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

Port

- ♦ Video out port
- ♦ S-Video out port
- ♦ VGA out port
- ♦ 2 USB ports
- ♦ RJ-45 NIC port
- ♦ Printer control port
- ♦ AC power input port
- ♦ HDMI digital port

Display Modes

- ♦ B, 2B, 4B mode
- ♦ M, B/M mode
- ♦ Pulse Wave Doppler
- ♦ B+PW mode
- ♦ B+CPA, B+DPA mode
- ♦ B+C+PW mode
- ♦ Tissue Harmonic Imaging
- ♦ Trapezoidal Imaging
- ♦ Anatomical M mode (Option)
- ♦ Panoramic Imaging (Option)
- ♦ Elastography (Option in future)
- ♦ 3D image (Option)
- ♦ 4D image (Option)



Focusing:

- ♦ Continuous dynamic focusing
- ♦ Dynamic apodization
- ♦ Dynamic aperture
- ♦ 1~8 selectable transmit focus
- ♦ Acoustic lens focus

Zooming

- ♦ Realtime zooming
 - 4 steps: X1.5, X2.0, X3.0, X4.0
- ♦ Selectable zooming position
- ♦ 4D zooming
 - 3 steps: X1.0, X1.25, X1.625
- ♦ PIP zoom in real-time and freeze
- ♦ (picture in picture)

Memory

- ♦ Cine-Memory
 - B-mode (max. 2000 frames)
 - M-mode (max. 40 minutes)
- ♦ Hard disk 160GB

2D Mode Imaging Processing

- ♦ 8-step TGC slidepots
- ♦ Gain control (0~100)
- ♦ Dynamic range adjustable: 35-66db
- ♦ Edge enhancement (0~3)
- ♦ Persistence (0~7)
- ♦ Chroma (0~7)

- ♦ Maps (0~23)
- ♦ Grayscale
- ♦ Acoustic output power (-17~0dB, 0~100%)
- ♦ Adjustable depth, angle and width
- ♦ Image Orientation
 - Left / right
 - Up / down

DD-MM-YYYY
MM, DD, YYYY
YYYY/MM/DD

- Time: 12/24 hours mode
- Exam type
- Active probe type
- Probe orientation

M-mode Imaging Processing

- ♦ Gain (0~100)
- ♦ Sweep Speed (10S, 5S, 2.5S, 1.25S)
- ♦ Maps (0~23 steps)
- ♦ Chroma (0~7)

- ♦ Display parameters related to imaging
 - Depth
 - Frame rate
 - Probe operating frequency
 - TGC curve
 - Depth scale (1.6~25.2cm depended on probes)
 - Gain control
 - Persistence
 - Grayscale transform
 - Dynamic range
 - Edge enhancement
 - Acoustic output, power
 - Local zoom
 - Mechanical index (MI)
 - Thermal index (TI)

Color Flow Doppler Imaging Processing

- ♦ Gain control (0~100)
- ♦ Pulse repetition frequency (0.25KHz~6.0KHz)
- ♦ Wall filter (1~50 steps)
- ♦ Median Filter (0~3)
- ♦ Maps (0~7)
- ♦ Smooth (-3~3)
- ♦ Color persistence (0~7)

Image and Patient Data Storage

- ♦ Hard disk
- ♦ USB memory stick
- ♦ Record devices:
 - B/W or color Video printer (Option)
 - Laserjet or inkjet printer (Option)

PW/CW Doppler mode Imaging Processing

- ♦ Sample volume angle correction (-80°~80°)
- ♦ Doppler Gain (0~100)
- ♦ Wall filter (1~50 steps)
- ♦ Sample volume (1mm~10mm)
- ♦ Spectrum smoothing (0~3)
- ♦ Auto-trace
- ♦ Auto-calculation
- ♦ Scale
- ♦ Basic line shift (16 steps)
- ♦ Sweep speed (3 steps)
- ♦ Volume (0~100%)
- ♦ Pulse repetition frequency (1.0KHz~12.0KHz)
- ♦ Measurable speed range (1mm/s~7.6m/s)

Measurements & Calculations

B-mode

- ♦ Distance
- ♦ Circumference
- ♦ Area (Ellipse, trace)
- ♦ Volume
- ♦ Angle
- ♦ Histogram

M-mode

- ♦ Distance
- ♦ Time
- ♦ Slope
- ♦ Heart Rate

C-mode

- ♦ Blood Distributing

Display Items

- ♦ User-definable annotations
- ♦ Display parameters related to diagnosis
 - Hospital name: ≥24 characters
 - Patient name: 40 characters
 - Patient ID: 50 characters
 - Date: 3 formats selectable

D-mode

- ♦ Velocity
- ♦ Acceleration
- ♦ Heart rate
- ♦ Auto-trace
- ♦ Manual trace

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

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 Epidi Long diameter of right epididymis

A-P R Epidi Antero-posterior diameter of right epididymis

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

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

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
A-P L Testis	Antero-posterior diameter of left testis
Long L Epidi	Long diameter of left epididymis

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
LVD	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
<u>M, B/M mode menu</u>	
LA/AO	Left atrium/ Aorta
MV	Mitral valve
TV	Triscupid valve
PV	Pulmonic valve
LV	Left ventricle
LV FUNC	Left ventricle function

B/C mode

RVAWd	Right ventricular anterior wall in diastolic period
RVd	Right ventricle in diastolic period
IVSd	Inter-ventricular septum in diastolic period
LVd	Left ventricle in diastolic period
LVPWd	Diameter of left ventricle posterior wall in diastolic period
RVAWs	Right ventricular anterior wall in systolic period
RVs	Right ventricle in systolic period
IVSs	Inter-ventricular septum in systolic period
LVs	Left ventricle in systolic period
LVPWs	Diameter of left ventricle posterior wall in systolic period
RVOT	Right ventricular outflow tract
AO	Aorta
LA	Left atrium
IVC	Inferior vena cava
PA	Great artery short axis view

D mode

LA	Area of left ventricle
RA	Area of right ventricle
PHT	pressure half-time
LVTI	Left ventricular velocity time integral
RVTI	Right ventricular velocity time integral

Software, Accessories & Probes

Standard Accessories

- ♦ Power Cable
- ♦ Potential equalization conductor
- ♦ Printer control cable
- ♦ Video connecting cable
- ♦ S-Video cable
- ♦ Fuse
- ♦ Operation Manual
- ♦ Dust-proof cover

Optional Accessories and Software

- ♦ B/W or color Video printer
- ♦ Laserjet or inkjet printer
- ♦ Biopsy guide for convex or linear probe
- ♦ Biopsy guide for transvaginal or transrectal probe
- ♦ DICOM 3.0 software
- ♦ BNC cable
- ♦ Foot switch (JT-2)

Physical Features

Dimension

- ♦ 325mm(H) X 310mm(W) X 215mm(D)

Weight

- ♦ Approximately 8kg

Power Requirements

- ♦ Voltage: AC 100V to 240V
- ♦ Frequency: 50 / 60Hz
- ♦ Rated Power: 250VA

Operation Conditions

- ♦ Ambient temperature: 0°C to +40°C
- ♦ Relative humidity: 30% to 85%
- ♦ Atmospheric Pressure: 70kPa to 106kPa

Probes

Model name	Transmit frequency (MHz)	Max. depth	Band width	View field	Array radius	Biopsy guide
<Linear rectal probe>						
L5L65VK	4.0/4.7/5.5/6.2/7.0	14cm	≥60%	65mm		Invalid
<Micro convex probe>						
C6L15K	4.5/5.2/6.0/6.7/7.5	12cm	≥60%	85°	R15	Invalid
C3I20K *	2.0/2.5/3.3/4.2/5.0	25.2cm	≥60%	110°	R20	Invalid
C5I20K *	4.0/4.7/5.5/6.2/7.0	14cm	≥60%	110°	R20	Invalid
<Linear probe>						
L8L38K *	5.0/6.6/7.5/10.0/12.0	9cm	≥60%	38mm		Available
L8L50K *	5.0/6.6/7.5/10.0/12.0	9cm	≥60%	50mm		
L10L25K *	8.0/9.0/10.0/11.0/12.0	6cm	≥55%	26mm		Available
<Convex probe>						
C3L60K *	2.0/2.5/3.3/4.2/5.0	25.2cm	≥60%	70°	R60	Available
C3L40K *	2.0/2.5/3.3/4.2/5.0	24cm	≥60%	85°	R40	Available
<Transvaginal probe>						
V6L11K *	4.0/5.0/6.0/7.0/9.0	12cm	≥55%	157°	R11	Available
<Transrectal probe>						
U5L50K *	4.0/4.7/5.5/6.2/7.0	9cm	≥60%	50mm		Available

Notes:

- a) Probes with ‘ * ’ are optional parts.
- b) Specifications and appearance are subject to be changed.