DAWEI MEDICAL (JIANGSU) CORP., LTD.

DW-VET13 Color Ultrasonic Diagnostic Apparatus

Technical Specification

1：	**Summary of main specifications and system of cart type color Doppler ultrasound**
1.1	Portable type all digital color Doppler ultrasonic mainframe
1.2	Ultrasonic host operating system: Windows operating system
1.3	Applications： Abdomen, obstetrics, gynecology, heart, urinary system, small organs, superficial, blood vessels, pediatrics, newborns, musculoskeletal
1.4	Probes： Convex probe, Tran-vaginal probe, Linear probe, Micro-convex probe, Cardiac probe, 4D Volume probe
1.5	Applications and report： Abdominal,OB,GYN,Cardiac,Urinary,Small Parts,Superficial, Vascular, Pediatrics, Advanced measurement software packages, report software packages, case management software packages, etc.
☆1.6	carotid artery intima measurement thickness(IMT）
☆1.7	Automatic spectral envelope measurement
1.8	Full digital transmission and reception of beam synthesizer
1.9	Color Doppler imaging（C）
1.10	Pulse Doppler Imaging（PW）
☆1.12	Coherent Contrast imaging（CCI）
1.12	Continuous wave Doppler imaging（CW）
☆1.13	B/C/D Real-time three synchronous imaging
☆1.14	Power Doppler imaging（PDI）

☆1.15	Direct power Doppler imaging（DPDI）
1.16	M mode imaging
☆1.17	Anatomic M mode imaging
☆1.18	Color Doppler M mode imaging
☆1.19	Elastography
☆1.20	Tissue Doppler imaging（TDI）
☆1.21	Strain rate imaging (SRI)
1.22	Tissue harmonic imaging（THI）
1.23	Fusion harmonic imaging（FHI）
1.24	Speckle Reduce imaging（SRI）
☆1.25	Panoramic imaging
☆1.26	Deflection imaging
☆1.27	Trapezoidal imaging
1.28	Adaptive velocity optimization
☆1.29	Free hand 3D
1.30	Real time 3D imaging（3D/4D）
1.31	DICOM3.0
1.32	Monitor：15 inch，high definition ultrasonic display
1.33	Physical clipboard: save the image on the left side of the screen, which can be directly saved or deleted.
1.34	The system has the function of on-the-spot upgrade
1.35	Presupposition: for different inspection of the viscera, preset the inspection conditions for the best image, reduce the adjustment of the operation, and the commonly used external adjustment and combination regulation.
1.36	Probe interface: 2
1.37	Language: CN/EN/VI/DE/FR/ES/RU/AR/PT/ID
1.38	Depth：≥360mm；
1.39	Extended imaging
2：	**Probes**
2.1 Convex probe	Fundamental Frequency：2.0MHz/2.3MHz/2.5MHz/3.0MHz/3.5MHz/4.0MHz/4.6MHz/5.0MHz/5.4MHz, Harmonic Frequency： 4.0MHz/4.6MHz/5.0MHz，
2.2 Linear probe	Fundamental Frequency： 4.0MHz/4.6MHz/5.0MHz/6.0MHz/7.0MHz/8.0MHz/9.2MHz/10.0MHz/12.0MHz/13.3MHz， Harmonic Frequency： 8.0MHz/9.2MHz/10.0MHz,
2.3 Trans-vagin	Fundamental Frequency： 3.0MHz/3.5MHz/4.0MHz/5.0MHz/5.4MHz/6.0MHz/7.0MHz/8.0MHz/10.0MHz，

al probe	Harmonic Frequency： 6.0MHz/7.0MHz/8.0MHz，
2.4 Micro-convex probe	Fundamental Frequency： 3.0MHz/3.5MHz/4.0MHz/5.0MHz/5.4MHz/6.0MHz/7.0MHz/8.0MHz， Harmonic Frequency： 6.0MHz/7.0MHz/8.0MHz，
2.5 Cardiac probe	Fundamental Frequency：1.7MHz/1.9MHz/2.1MHz/2.5MHz/3.0MHz/3.4MHz/3.8MHz/4.2MHz/5.0MHz， Harmonic Frequency： 3.4MHz/3.8MHz/4.2MHz，
2.6 4D Volume probe	Fundamental Frequency： 2.0MHz/2.5MHz/3.0MHz/3.3MHz/3.7MHz/4.0MHz/5.0MHz/6.0MHz， Harmonic Frequency： 4.0MHz/5.0MHz/6.0MHz，
3：	**2D imaging mode**
3.1	Gain：0－100，Step 2 adjustable
3.2	TGC：8 segment adjustable
3.3	Maximum focus point：≥7, which can be moved throughout the whole process.
3.4	Speckle reduction：0-5，5 level
3.5	Space Synthesis：0-2，2 level（Liner probe: 3 level， cardiac probe:0）
3.6	Dynamic：30-180，35 level，step 5 adjustable
3.7	Line density：low、middle、high，3 level
3.8	Frame correlation：0-4,4 level
3.9	Noise reduction：0-5，5 level
3.10	Edge Enhancement：0-5，5 level
3.11	Sound power：2-10, 9 level
3.12	Grey scale：0-67, 67 level
3.13	False color：0-67，67 level
3.14	Image style：Soft-Comparison，2 level
	The screen has real-time display of voice power, probe frequency, dynamic range, pseudo color, gray scale and other 11 parameters can be adjusted
4：	**Color Doppler imaging mode**
4.1	Blood gain：0-100，Step 2
4.2	Parameter display：Velocity、Variance
4.3	B-Restrain（B/W restrain）：0-7, 7 level
4.4	Speed Through：0-8, 8 level
4.5	Sampling number：6-24, 7 level
4.6	Blood flow preferred：0-8, 8 level

4.7	Filtering：1-6, 6 level
4.8	Sound power：2-6, 4 level
4.9	Noise reduction：0-4, 4 level
4.10	Smooth treatment：0-4， 4 level
4.11	Frame correlation：0-6， 6 level
4.12	Chromatography（Blood flow graph）：0-37， 37 level
4.13	Line density：Low-Middle-High， 3 level
4.14	Frequency：4 level adjustable
4.15	Velocity：Minimum 0.4K，Maximum 40.5K Convex probe：0.4K-4.3K-38.5K Linear probe：0.4K-14.7K-39.0K Trans-vaginal probe：0.4K-7.8K-39.7K Volume probe：0.4K-4.2K-34.8K Micro-convex probe：0.4K-10.3K-40.5K cardiac probe：0.4K-7.8K-39.7K
	PS：The frequency of the probe changes and the frequency value changes
	PS：Frame rate changes with speed
5：	**Pulse wave Doppler（PW）**
1	Gain：0-100，Step 2
5.2	Spectrum envelope function: real time automatic spectrum envelope, manual spectrum envelope, and other modes. The system automatically analyses and displays various data such as PSV, EDV, RI, PI, S/D, ACC, HR and so on. Can wake up or close
5.3	Sample volume：0.5mm~30mm
5.4	Blood angel：-75—75 degree，Step 5
5.5	False color：0-67， 67 level
5.6	Dynamic range：20-40， 4 level
5.7	Filter：0-9, 9 level
5.8	Smooth treatment：1-4， 4 level
5.9	Sound power：2-5， 4 level
5.10	Volume：0-100, 10 level，Step 10
5.11	Audio filtering：0-4， 4 level
5.12	Base line：-1.0~1.0,
5.13	Grey map：0-67， 67 level
5.14	Scan velocity：100-500, 6 level
5.15	PRF:Minimum 0.5K，Maximum 87.5K Convex probe：0.5K-4.3K-63.3K Linear probe：0.5K-14.5K-78.4K Trans-vaginal probe：0.5K-8.1K-78.4K

	Volume probe：0.5K-4.2K-53.8K Micro-convex probe：0.5K-10.3K-81.1K cardiac probe：0.5K-4.3K-87.5K
5.16	Frequency：4 level
	PS：The frequency of the probe changes and the PRF value changes
	PS：The frequency of the probe changes and the frequency value changes
6：	**Continuous Wave Doppler（CW）**
6.1	Support probe：Cardiac probe
6.2	Adjustment of B mode parameters is switchable
6.3	Gain：0-100，Step 2
6.4	Sampling line position is adjustable
6.5	PRF:0.9K~36.1K
6.6	Baseline：-1.0~1.0
6.7	Blood angel：-75~75 degree
6.8	Grey map：0-67
6.9	Scan velocity：100-300
6.10	False color：0-67
6.11	Dynamic range：20-40
6.12	Filtering：0-9，9 level
6.13	Smooth treatment：1-4
6.14	Frequency：2.0MHz/2.3MHz/2.5MHz/3.0MHz，4 level adjustable
6.15	Sound power：2-5
6.16	Volume：0-100
6.17	Audio Filtering：0-4
☆7：	**Anatomical M imaging**
7.1	Support probe：Convex probe, Linear probe,Cardiac probe
7.2	Adjustment of B mode parameters is switchable
7.3	Gain：0-100，Step 2
7.4	M Sampling line angel is adjustable
7.5	M Sampling line length is adjustable
7.6	Sampling line：3，Can be displayed or hidden separately
☆8：	**Color M mode（MC）**
8.1	Adjustment of B mode parameters is switchable
8.2	Gain：0-100，Step2
8.3	MC Sampling line angel is adjustable

8.4	MC Sampling line length is adjustable
8.5	Frequency：4 level
8.6	Sampling number：6-24
8.7	Speed through：0-8, 8 level
8.8	Scan velocity：150-500
8.9	Frame correlation：0-6, 6 level
8.10	Filtering：1-6，6 level
8.11	Blood flow preferred：0-8，8 level
8.12	Smooth treatment：0-4,4 level
8.13	Map：0-37, 37 level
☆9：	**Elastography**
9.1	Adjustment of B mode parameters is switchable
9.2	Gain：0-100，Step 2
9.3	B/E，Double real-time display on the same screen
9.4	Probe displacement curve display：Up/Down
9.5	Pressure indicator bar display
9.6	Frequency：8-9 level，Adjustable；According to the probe display
9.7	Noise reduction：0-2, 2 level
9.8	Frame correlation：0-3, 3 level
9.9	Comparison：0-13, 13 level
9.10	False color：0-3， 3 level
9.11	Don’t support cardiac probe
☆10：	**Tissue Doppler imaging（TDI）**
10.1	Support probe: Cardiac probe
10.2	Adjustment of B mode parameters is switchable
10.3	Gain：0-100，step 2
10.4	ROI area adjustable
10.5	Sampling number：6-24
10.6	Velocity：0.4K-8.0K
10.7	Frame correlation：0-6，6 level
10.8	Tissue preferred：0-7, 7 level
10.9	Frequency：2.0MHz/2.3MHz/2.5MHz/3.0MHz
10.10	Support color reversal
☆11：	**Strain rate imaging**
11.1	Support probe: Cardiac probe

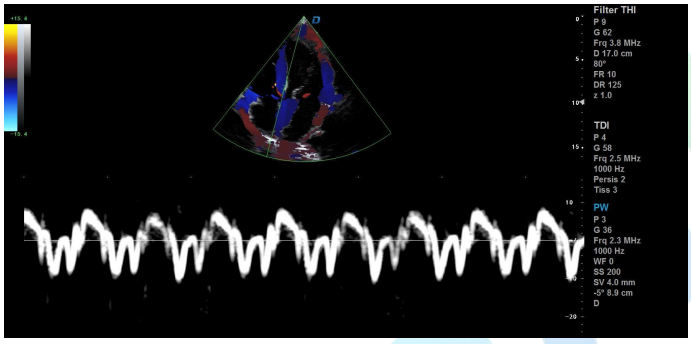
11.2	Adjustment of B mode parameters is switchable
11.3	ROI area adjustable
11.4	Gain：0-100，Step 2
11.5	Sampling number：6-24，6 level
11.6	Axial average：1-4， 4 level
11.7	Velocity：0.4K-8K
11.8	Frame correlation：0-6， 6 level
11.9	Tissue optimization：0-7，7 level
☆12：	**Panoramic imaging**
12.1	Support probe：Linear probe
12.2	Speckle Reduction：0-5, 5 level
☆13：	**Deflection imaging**
13.1	Support probe：Linear probe
13.2	Adjustment of B mode parameters is switchable
13.3	Deflection angel：8 level
13.4	Speckle reduction：0-5, 5 level
13.5	Dynamic rate：30-180，Step 5
13.6	Line density：low-middle-high，3 level
13.7	Frame Correlation：0-4， 4 level
13.8	False color：0-67, 67 level
13.9	Image style：Soft-Comparison，2 level
13.10	Noise reduction：0-5, 5 level
13.11	Edge Enhancement：0-5，5 level
13.12	Sound power：2-10，8 level
13.13	Grey map：0-67，67 level
☆14：	**Trapezoidal imaging**
14.1	Probe support：linear probe
14.2	Adjustment of B mode parameters is switchable
14.3	Deflection angel：8 level
14.4	Speckle reduction：0-5, 5 level
14.5	Dynamic rate：30-180，Step 5
14.6	Line density：low-middle-high，3 level
14.7	Frame Correlation：0-4， 4 level
14.8	False color：0-67, 67 level
14.9	Image style：Soft-Comparison，2 level

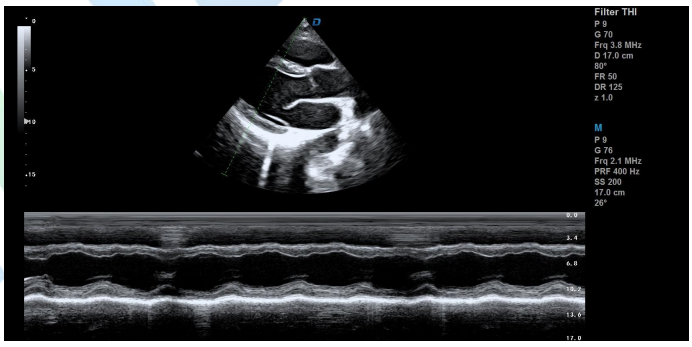
14.10	Noise reduction：0-5, 5 level
14.11	Edge Enhancement：0-5，5 level
14.12	Sound power：2-10，8 level
14.13	Grey map：0-67， 67 level
14.14	Space Synthesis：0-2, 2 level
☆15	**Freehand 3D imaging**
15.1	Support probe：convex probe, linear probe
15.2	Display model: 4 pictures
15.3	Image Rotation X/Y/Z Axis
15.4	Multi-slice Visibility
16	**Real-time 4D imaging**
16.1	Support probe: 4D volume probe
16.2	Adjustment of B mode parameters is switchable
16.3	Gain：0-100，Step 2
16.4	Display model：one image、two images、four images
16.5	Image Rotation：X/Y/Z Axis
16.6	Multi-slice Visibility
16.7	Light&Shade inversion
16.8	Smooth：0-4, 4 level
16.9	Threshold level：0-129, Step 3
16.10	Transparency：1-509，Step 10
16.11	Render type：4 kinds，Surface、maximum、minimum、perspective
17：	**Extended Imaging**
17.1	Gain：0－100，Step 2
17.2	TGC：8 segment adjustable
17.3	Maximum focus point：≥7, which can be moved throughout the whole process.
17.4	Speckle reduction：0-5，5 level
17.5	Space Compound：0-2，2 level（Linear probe: 3 level，don’t support cardiac probe）
17.6	Dynamic range：30-180，35 level，Step 5
17.7	Line density：Low、Middle、High，3 level
17.8	Frame correlation：0-4,4 level
17.9	Noise reduction：0-5，5 level
17.10	Edge enhancement：0-5，5 level
17.11	Sound power：2-10, 9 level
17.12	Grey map：0-67, 67 level

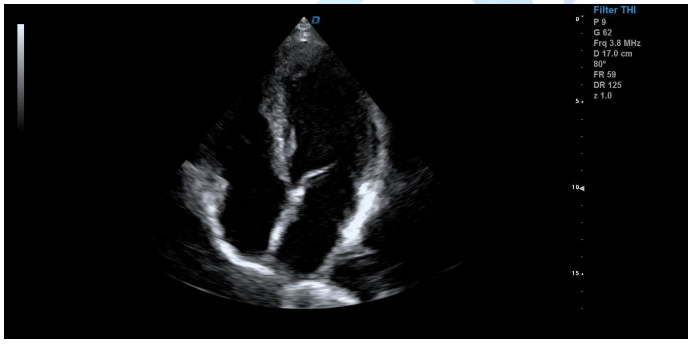
17.13	False color：0-67，67 level
17.14	Image style：Soft-Comparison，2 level
17.15	Extended level: Maximum 72 level Convex probe：9 level Trans-vaginal probe：72 level Micro-convex probe：29 level Cardiac probe：40 level 4D Volume probe：17 level
	PS：The screen has real-time display of voice power, probe frequency, dynamic range, pseudo color, gray scale and other 11 parameters can be adjusted
	PS: When the probe scan range reaches the maximum, the space synthesized is 0.
18：	**Measurement and analysis function:**
18.1	General measurement: Distance, area, ellipse, cross line, angle, distance ratio, volume, Volume (ellipse), area ratio, diameter, joint angle
18.2	Cardiac：Automatic spectrum envelope、LV、Main Pulmonary artery diameter、RVEDd、RVEDs、LVM、LAV、HR、MVF、AO、AR、LVOT、TVF、Pulmonic valve、Pulmonary vein、RV、Doppler fetal heart sound、LVET、LVM、LVMI、AV
18.3	Vascular: carotid intima (IMT), length stenosis ratio, area stenosis ratio, IMT (back wall), IMT (front wall)
18.4	OB：Fetal routine、AFI、TW、GS、CRl、OFD、HL、ulna、NT、Fibula、Nbonel、Radial、Tibia
18.5	GYN：uterus、cervix、corpus uteri/cervix uterus、left ovarian vein、right ovarian vein、dominant follicle、intima thickness
18.6	Urology: prostate、residual urine、left kidney、right kidney、left suprarenal vein、right suprarenal、left testis、right testis、left seminal vesicle、right seminal vesicle
18.7	Abdomen：liver、CHD、partal vein diameter、cholecyst、CBD、pancreas、spleen、Internal diameter of abdominal aorta、kidney
18.8	Small parts：Thyroid
18.9	Software package：Measurement package、Software package、Medical records management software package
19：	**Graphic and text management system**
19.1	Host build in hard disk (SSD 128GB), Start fast and stable, RAM: 8GB
19.2	Movie playback：≥1200 frames
19.3	Internal file information management system: can record patient number, name, check number, check date and so on, and can be searched and managed by numbering, checking number, name and so on.
19.4	Type of report is 16
19.5	One key fast report graphic and text management
20：	**Interface**
20.1	USB interface： 2

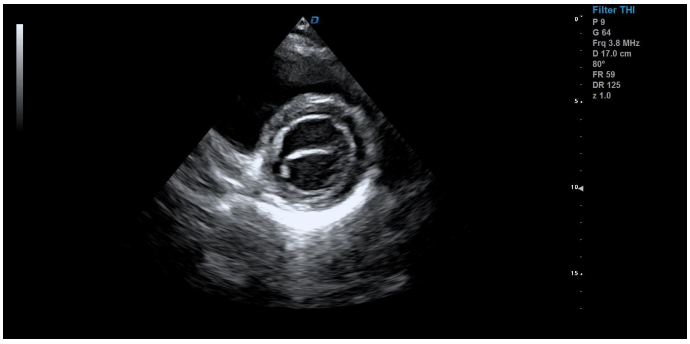
20.2	HDMI interface： 1
20.3	RJ-45 interface：1
20.4	Grounding wire interface：1
21：	**Configuration**
21.1	Portable type full digital color Doppler ultrasound diagnostic system
21.2	Probe: convex array probe (standard), linear probe (optional), Trans-vaginal probe (optional), cardiac probe (optional), 4D volume probe (optional)
21.3	≥13 quick adjusting knobs
22:	**Technology, after-sales service and other requirements**
22.1	After acceptance, the warranty is free for two years（Provide manufacturer warranty certificate）
22.2	Manufacturer has ISO13485 certification and EU CE certification.

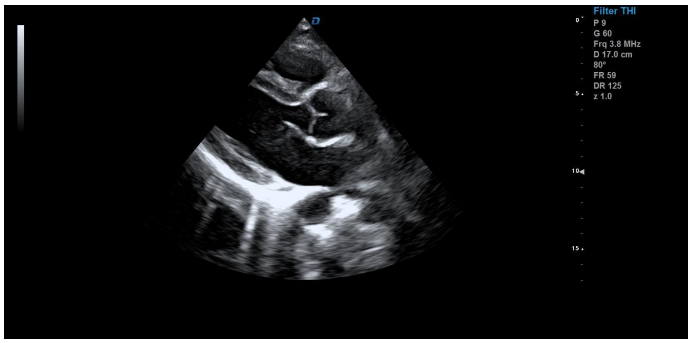
Image Gallery







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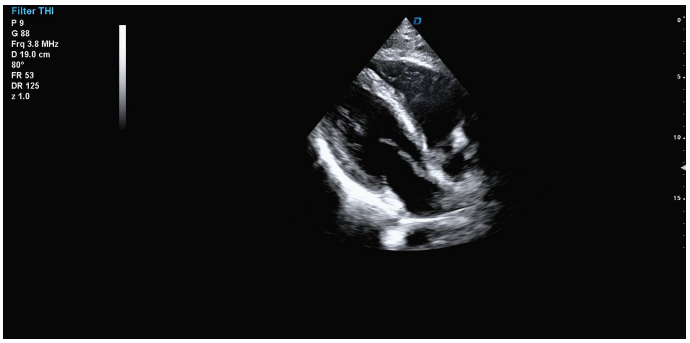
P 9
G 60
Frq 3.8 MHz
D 17.0 cm
80°
FR 59
DR 125
z 1.0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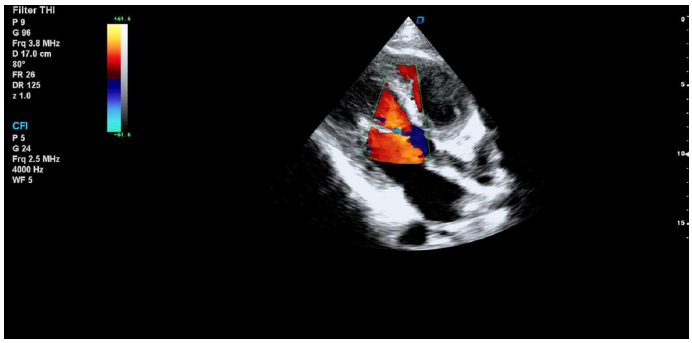
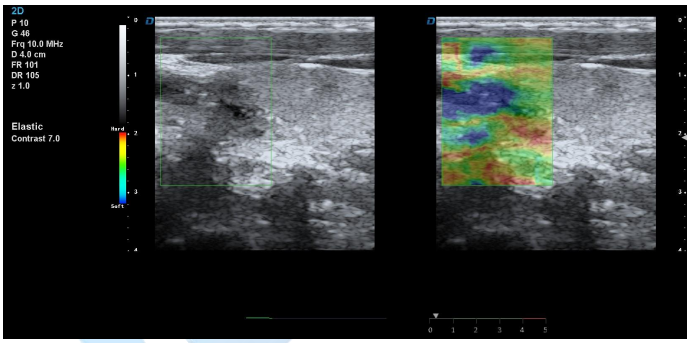
G 88
Frq 3.8 MHz
D 19.0 cm
80°
FR 53
DR 125
z 1.0


Filter THI
P 9
G 96
Frq 3.8 MHz
D 17.0 cm
80°
FR 26
DR 125
z 1.0
CFI
P 5
G 24
Frq 2.5 MHz
4000 Hz
WF 5


2D
P 10
G 46
Frq 10.0 MHz
D 4.0 cm
FR 101
DR 105
z 1.0
Elastic
Contrast 7.0