

# USAR-9000C B/W

## Laptop Digital Ultrasound Scanner



### Description of equipment:

Mainly used in abdomen, Urology, obstetrics and Gynecology, pediatrics, etc.

### Functional characteristics:

1. All digital ultrasonic diagnostic instrument with high definition and rich function
2. The image is clear, easy to operate, and strong in endurance. It has great superiority in consultation in cities, townships and outdoor environments.
3. A variety of charging methods ensure more consultation in different environments.
4. 3-4 hours extra-long standby time
5. 12.1 inch LCD
6. Powerful image post-processing functions
7. The first class digital imaging technology, the image is clearer
8. DBF all digital beam forming
9. DRF real-time dynamic reception of focus by point by point
10. DRA real-time dynamic sound velocity change
11. THI tissue harmonic imaging
12. RDA real-time dynamic aperture imaging
13. DFS numerical control dynamic frequency scanning
14. RDF real-time dynamic filtering
15. A stable and concise operating platform
16. Backlight silicone keyboard, more comfortable and wearable, darkroom use no longer worry.
17. Intelligent menu, human-computer dialogue is easy and quick
18. Shows two puncture guide lines, adjustable angles and positions.
19. The multiple rate shows that the diagnosis is more accurate

- 20. External USB storage, image uploading more convenient
- 21. Large volume movie playback, image automatic circulation demonstration
- 22. Abundant measurement functions: distance, circumference, area, volume, obstetric table, heart software package etc

### Performance introduction:

PARAMETER	SPECIFICATION
Display	12.1 inch LCD medical display
Scanning mode	convex matrix / linear array / micro convex
Probe interface	Standard 1, 2 (optional), automatic identification function, support multiple probe work.
Interface	Chinese/English/Russian/Spanish/French/Arabic/Vietnamese/Portuguese/Indonesian
Display mode	B, B+B, 4B, B+M, M
Electron focusing	four segment electron focusing
Postural markers	97 species
Probe	3.5MHz Convex Probe: 2.0MHz,2.5MHz,3.5MHz,4.0MHz,5.0MHz 5.0MHz Micro Convex probe: 4.0MHz, 4.5MHz, 5.0MHz, 6.5MHz, 7.0MHz 6.5MHz Trans vaginal probe: 5.0MHz, 5.5MHz, 6.5MHz, 7.5MHz, 8.5MHz 7.5MHz Linear probe & Rectal Probe: 5.5MHz, 6.5MHz, 7.0MHz, 7.5MHz, 9.0MHz
Image mirroring	upper and lower mirrors, left and right mirrors, black and white flip, in any mode can be mirrored conversion, operation
Image rotation	0 degrees, 90 degrees, 180 degrees, 270 degrees, and 360 degrees.
Measurements	distance, circumference, area, volume, heart rate, gestational age (BPD, GS, CRL, FL, HC, AC, EDD, AFI) and expected date of birth, fetal weight display and so on.
The function software package and measurement method can be selected through the track ball cursor.	
Angle measurement, you can intuitively see the angle and length of the angle.	
Have histogram function	
Have depth measurement function	
It has 16 obstetric measurement packages and has fetal growth curve function	
In any imaging mode, the data can be measured in real time	
Automatic memory and generative function of obstetric data	
Character display	date, clock, name, gender, age, doctor, hospital, annotation (full screen character editing)
One key out of patient information entry function	
Movie playback	512 frames, continuous playback or one by one view.
Permanent storage	built in 8G memory, more than 4000, supporting U disk storage (available for storage).
Single memory image time	less than 6 seconds

A key to find saved images, can be found by the date named folder quickly found and a key export.	
Gray scale	256 level
With the function of puncture and guidance, the angle and position of the two puncture lines can be adjusted visually.	
Lithotripsy positioning, dynamic target tracking function	
Dynamic range	0-135dB, step 8, with independent buttons, visually adjustable, adjustable cycle
Intelligent TGC control	8 segments.
Total gain	0-100, step 2
Variable aperture, dynamic trace, dynamic digital filtering, etc.	
2 stage visible tunable harmonics of tissue	
8 kinds of fake color processing, etc	
The 4 frames are independent keys, visually adjustable, cycle adjustable, and can also be changed through the track ball cursor.	
6 kinds of line correlation, with independent buttons, visually adjustable, circular adjustment, or track ball cursor changes.	
The 8 types of gamma correction are independent keys, visually adjustable, cycle adjustable, and can also be changed through the trackball cursor.	
Edge enhancement 4 level adjustable, with independent buttons, visually adjustable, adjustable cycle, also can be changed through the track ball cursor.	
The scanning range can be adjusted 4 levels, with independent buttons, visually adjustable, circular adjustment, and also can be changed by the track ball cursor.	
Luminance key addition and subtraction enhancement and weakening function	
Caps and Shift locking functions	
Blind area	less than 4
Maximum display depth	3.5MHz:307mm 6.5MHz:189mm 7.5MHz: 166mm 5.0MHz: 205mm
Geometric accuracy	transverse less than 5%, longitudinal less than 5%
Resolution	the side is less than 2mm, and the axis is less than 1mm
Interface	RS-232 interface, VGA interface, VIDEO interface, USB interface 2, DICOM
Display rate	6 display modes; lesion diagnosis is more accurate. When it is above 1.5 and over 1.8, the depth can be enhanced
Starting time	less than 10 seconds
Built-in 8800 Ma lithium battery	
Power indicator light and charging indicator	
Net weight	4.7KG
The button has a buzz sound, but open / close	
Formulae of fast data measurement	
You can quickly set time, name and other editors through the track ball and keyboard.	
<b>Accessories</b>	<b>probe interface development dock; ultrasonic imaging workstation; portable trolley.</b>

## Others:

1. Medical device quality management system (ISO13485) certification
2. Equipment inspection report
3. EC Authentication
4. Two years of quality assurance

# USAR-K2

## B/W Ultrasound Scanner



### Description of equipment:

Mainly used in abdomen, Urology, obstetrics and Gynecology, blood vessel, etc..

### Functional characteristics:

1. High definition and multifunctional trolley type full digital ultrasonic diagnostic apparatus
2. The image is clear and the operation is convenient
3. 15 inch LCD
4. Powerful image post-processing functions
5. The first class digital imaging technology, the image is clearer
6. DBF all digital beam-forming
7. DRF real-time dynamic reception of focus by point by point
8. DRA real-time dynamic sound velocity change
9. THI tissue harmonic imaging
10. RDA real-time dynamic aperture imaging
11. DFS numerical control dynamic frequency scanning
12. RDF real-time dynamic filtering
13. A stable and concise operating system
14. Backlight silicone keyboard, more comfortable and wearable, darkroom use no longer worry
15. Intelligent menu, human-computer dialogue is easy and quick
16. Shows two puncture guide lines, adjustable angles and positions.
17. The multiple rate shows that the diagnosis is more accurate.
18. External USB storage, image uploading more convenient
19. Large volume movie playback, image automatic circulation demonstration
20. Abundant measurement functions: distance, circumference, area, volume,
21. obstetric table, heart software package, etc

### Performance introduction

PARAMETER	SPECIFICATION
Display	15 inch LCD

Scanning mode	convex matrix / linear array / micro convex
Probe interface	2, with automatic identification function to support multiple probes.
Interface	Chinese/English/Russian/Spanish/French/Arabic/Vietnamese/Portuguese/Indonesian
Display mode	B, B+B, 4B, B+M, M
Electron focusing	four segment electron focusing
Postural markers	97 species
Probe	3.5MHz Convex Probe: 2.0MHz, 2.5MHz, 3.5MHz, 4.0MHz, 5.0MHz 5.0MHz Micro Convex probe: 4.0MHz, 4.5MHz, 5.0MHz, 6.5MHz, 7.0MHz 6.5MHz Trans vaginal probe: 5.0MHz, 5.5MHz, 6.5MHz, 7.5MHz, 8.5MHz 7.5MHz Linear probe & Rectal Probe: 5.5MHz, 6.5MHz, 7.0MHz, 7.5MHz, 9.0MHz
Image mirroring	upper and lower mirrors, left and right mirrors, black and white flip, in any mode can be mirrored conversion, operation
Image rotation	0 degrees, 90 degrees, 180 degrees, 270 degrees, and 360 degrees.
Measurements	distance, circumference, area, volume, heart rate, gestational age (BPD, GS, CRL, FL, HC, AC, EDD, AFI) and expected date of birth, fetal weight display and so on.
The function software package and measurement method can be selected through the track ball cursor.	
Angle measurement, you can intuitively see the angle and length of the angle.	
Have histogram function	
Have depth measurement function	
It has 16 obstetric measurement packages and has fetal growth curve function.	
In any imaging mode, the data can be measured in real time	
Automatic memory and generative function of obstetric data	
Character display	date, clock, name, sex, age, doctor, hospital, annotation (full screen character editing) (a mixed editor for letters, numbers, punctuation, and arrows)
One key out of patient information entry function	
Movie playback	512 frames, continuous playback or one by one view.
Permanent storage	built in 8G memory, more than 4000, supporting U disk storage (available for storage).
Single memory image time	less than 6 seconds
A key to find saved images, can be found by the date named folder quickly found and a key export.	
Gray scale	256 level
With the function of puncture and guidance, the angle and position of the two puncture lines can be adjusted visually.	
Lithotripsy positioning, dynamic target tracking function	
Dynamic range	0-135dB, step 8, with independent buttons, visually adjustable, adjustable cycle.
Intelligent TGCcontrol	8 segments.

Total gain	0-100, step 2
Variable aperture, dynamic trace, dynamic digital filtering, etc.	
2 stage visible tunable harmonics of tissue	
8 kinds of fake color processing, etc.	
The 4 frames are independent keys, visually adjustable, cycle adjustable, and can also be changed through the track ball cursor.	
6 kinds of line correlation, with independent buttons, visually adjustable, circular adjustment, or track ball cursor changes.	
The 8 types of gamma correction are independent keys, visually adjustable, cycle adjustable, and can also be changed through the trackball cursor.	
Edge enhancement 4 level adjustable, with independent buttons, visually adjustable, adjustable cycle, also can be changed through the track ball cursor.	
The scanning range can be adjusted 4 levels, with independent buttons, visually adjustable, circular adjustment, and also can be changed by the track ball cursor.	
Luminance key addition and subtraction enhancement and weakening function	
Caps and Shift locking functions	
Blind area	less than 4
Maximum display depth	3.5MHz: 126-307mm 6.5MHz: 189mm 7.5MHz: 40-166mm 5.0MHz: 205mm
Geometric accuracy	transverse less than 5%, longitudinal less than 5%
Resolution	the side is less than 2mm, and the axis is less than 1mm
Interface	RS-232 interface, VGA interface, VIDEO interface, USB interface.
Display rate	6 display modes; lesion diagnosis is more accurate. In the case of x 1.5 and X 1.8, the display of depth can be raised
Starting time	less than 10 seconds
The button has a buzz sound, but open / close	
Formulae of fast data measurement	
You can quickly set time, name and other editors through the track ball and keyboard.	
<b>Accessories</b>	<b>ultrasonic imaging workstation</b>

## Other:

1. Medical device quality management system (ISO13485) certification
2. Equipment inspection report
3. EC Authentication
4. Two years of quality assurance

# USAR-480B

## Ultrasound Scanner

### Portable Color Doppler



#### Specification

PARAMETER	SPECIFICATION
Displaying mode	B, B/B,4B, B/M, M, B/C, B/C/D, B/D, duplex, triplex, CFM, PW
Signal processing	Full-digital beam forming, dynamic filter, dynamic real time receiving focusing, spectral processing, CFM processing, real-time dynamic focusing, dynamic aperture in all fields
Image processing	THI Storage: 16G Power adjustable Smoothing function Edge enhancement One-key optimization Image conversion Wall filter adjustable Base line adjustable PRF adjustable AIO-Auto image optimization IZoom: Instant full screen image I-Image: intelligent optimization MBF: Multi Beam Former SA: Synthetic Aperture Ultrasonic imaging Iclear: Speckle Noise Reduction CDF: Continuous Dynamic Focusing
General measurement	Normal, MSK, ABD, OB, Pelvic,Urology, Cardiac, Small Parts, Vascular
Normal measurement	Volume, V3L, STD_S, Area Trace,Mtime, MHR, D Time, DV, D Common, D Auto, Area, Angle, CrossLine, STD D, ParalleLine, Mdist,MV, D HR, DA, D



	Trace
ABD packages	ABD, Aorta, R_Kidney & L_Kidney, Bladder, Prostate
OB Packages	Early OB, Rt-Ovary, Lt-Ovary, Uterus, Fetal_Biome, Long_Bones, AFI
Pelvic Packages	Uterus, Rt/Lt - Ovary, Rt/Lt-Follicle
Urology packages	Rt/Lt- kidney measurement, Bladder, Prostate,Rt/Lt_Testicle
Small Parts	Rt/Lt_Thyroid, Rt/Lt_Testicle, Vessel, Breast
Vascular	Stenosis D, stenosis A, Intima, Arterial, Venous
MSK	Distance, Area, Hip_Angle
Scanning depth	≥250mm
Probe elements	80
Cine loop	Automatically & manually
Image storage format	BMP, JPEG, PNG, DICOM(Optional)
Input/output ports	Video Port, S-Video Port, Remote Port, LAN1/2 Port, VGA
Standard Configuration	Main unit, LED monitor, 3.5Mhz convex probe, 2 Probe connectors, User's Manual, hard disk (SSD), battery
Options	7.5Mhz linear probe, 6.5Mhz Transvaginal Probe, Trolley, Printers, Biopsy kit , Aluminum case

# USAR-580A

## Ultrasound Scanner

### 4D Color Doppler



#### Summary of main specifications and system of laptop 4D color

##### Doppler ultrasound

1. Laptop type all digital color Doppler ultrasound host.
2. Ultrasonic host operating system: Windows 7 operating system.
3. Spectrum pulse Doppler.
4. Direction energy Doppler.
5. Real time three synchronization.
6. Space composite imaging: the requirement is 3 level, visual adjustable.
7. Organized harmonic imaging technology.
8. 4B imaging mode.
9. One key intelligent optimization.
10. Support multilingual user interface.
11. Monitor: 15 inches, high definition LED
12. Physical clipboard: display the saved image below the screen, and delete it directly.
13. The system has the function of on-the-spot upgrade
14. 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.
15. Language: Chinese/English/Russian/Spanish/French/Arabic/Vietnamese/Portuguese /Indonesian
16. The probe interface is 1

##### Technical Specifications

PARAMETER	SPECIFICATION
<b>Probes</b>	
Convex probe	2.0MHz/3.0MHz/3.5MHz/4.0MHz/5.5MHz

Linear probe	6.0MHz/6.5MHz/7.5MHz/10.0MHz/12.0MHz
Trans-vaginal probe	5.0MHz/6.0MHz/6.5MHz/7.5MHz/9.0MHz
R11 Micro convex probe	5.5MHz/6.0MHz/6.5MHz/7.5MHz/9.0MHz
R15 Micro convex probe	5.5MHz/6.0MHz/6.5MHz/7.5MHz/9.0MHz
4D Volume probe	2.0MHz/3.0MHz/3.5MHz/4.0MHz/5.5MHz
Under each probe, there is a selection of specialist and viscera mode and rapid entry detection.	
<b>Two-dimensional imaging mode</b>	
Gain	0-100, step 2 visible adjustable
TGC	8 segment adjustable
Image optimization	visible and adjustable over 6 levels
Dynamic range	0-270dB 15 level visual adjustable
False color	7, visible and adjustable
Smooth treatment	8, visible and adjustable
Edge enhancement	8, visible and adjustable
Sound power	0-15, step 7%, visible adjustable
Display depth	≥ 320mm
Maximum focus number	4 focal points, which can be moved throughout the whole process.
Scan line density 256 visible tunable	
Gray scale	1-16 level visible visible and adjustable
Filtering	3 kinds
Scanning range	50%-100%
Frame correlation, 0-4 level, visible and adjustable	
The screen has 14 forms of real time display of voice power, probe frequency, dynamic range, pseudo color, grayscale and so on.	
<b>Color imaging mode</b>	
Color frequency	≥5 frequency conversion, visible adjustable
Color deflection	equipped with
C afterglow	8, visible and adjustable
Color map	7, visible and adjustable
Color reversal	adjustable
B/C split screen synchronous display function	equipped with
Color baseline	7, visible and adjustable
Color line density	adjustable
<b>Spectrum Doppler mode</b>	
Sampling volume angle correction	-80 degree to 80 degree adjustable
Sampling volume	0.5mm-48mm visibility adjustable

Frequency	≥ 5, visible and adjustable	
Baseline	7 adjustable	
Smooth	8 files can be adjusted	
False color	7 kinds of adjustable	
Maximum display blood flow measurement speed	0.1mm/s	25m/s,
minimum resolvable blood flow measurement speed		
<b>Measurement and analysis function</b>	General measurement distance, area, angle, time, slope, heart rate, velocity, acceleration, spectrum tracing, resistance index / pulsatility index, etc.	
	Professional software package: abdomen, volume, ratio, obstetrics and Gynecology, small organs, carotid artery, Urology	
<b>Graphic and text management system</b>		
Host built in ≥120G solid state hard disk to start fast and stable		
Movie playback	600 frames	
Internal patient 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	
The type of report	3	
One key fast report graphic and text management		
<b>Interface</b>		
USB interface	3	
Audio interface	1	
HDMI interface	1	
LAN interface	2	
<b>Technology, after-sales service and other requirements</b>		
After acceptance, the warranty is free for two years		
Manufacturer has ISO13485 certification.		

# USAR-580C

## Ultrasound Scanner

### 4D image Portable Color Doppler



#### Features

1. Laptop type all digital color Doppler ultrasound host
2. Ultrasonic host operating system: Windows7 operating system
3. Spectrum pulse Doppler.
4. Direction energy Doppler.
5. Real time three synchronization.
6. Space composite imaging: the requirement is 3 level, visual adjustable.
7. Organized harmonic imaging technology.
8. 4B imaging mode.
9. One key intelligent optimization.
10. Support multilingual user interface.
11. Monitor: 15 inches, high definition LED
12. Physical clipboard: save the image on the left side of the screen, which can be deleted directly.
13. The system has the function of on-the-spot upgrade
14. 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.
15. Support real-time 3D imaging function
16. Language: Chinese/English/Russian/Spanish/French/Arabic/Vietnamese/Portuguese/Indonesian
17. The probe interface is 2

## Technical Specifications

PARAMETER	SPECIFICATION
<b>Probes</b>	
Convex probe	2.0MHz/3.0MHz/3.5MHz/4.0MHz/5.5MHz
Linear probe	6.0MHz/6.5MHz/7.5MHz/10.0MHz/12.0MHz
Trans-vaginal probe	5.0MHz/6.0MHz/6.5MHz/7.5MHz/9.0MHz
R11 Micro convex probe	2.0MHz/3.0MHz/3.5MHz/4.0MHz/5.5MHz/6.0MHz/7.5MHz/10MHz
R15 Micro convex probe	2.0MHz/3.0MHz/3.5MHz/4.0MHz/5.5MHz/6.0MHz/7.5MHz/10MHz
Phased array probe	2.1MHz/3.0MHz/3.5MHz/4.0MHz/5.0MHz
4D Volume probe	2.0MHz/3.0MHz/3.5MHz/4.0MHz/5.5MHz
The above probe has harmonic frequency (providing picture proof)	
It can be selected according to customer needs	Convex array probe, Linear array probe, Rectal probe, Micro convex probe, Phased array probe, 4D Volume probe. Under each probe, there is a selection of specialist and viscera mode and rapid entry detection.
<b>Two-dimensional imaging mode</b>	
Gain	0-100, step 2 visible adjustable
TGC	8 segment adjustable
Image optimization	visible and adjustable over 6 levels
Dynamic range	0-270dB 15 level visual adjustable
False color	7, visible and adjustable
Smooth treatment	8, visible and adjustable
Edge enhancement	8, visible and adjustable
Sound power	0-15, step 7%, visible adjustable
Display depth	≥320mm
Maximum focus number	4 focal points, which can be moved throughout the whole process.
Scan line density 256 visible tunable	
Gray scale	1-16 level visible visible and adjustable
Filtering	3 kinds
Scanning range	50%-100%
Frame correlation	0-4 level, visible and adjustable
The screen has 14 forms of real time display of voice power, probe frequency, dynamic range, pseudo color, grayscale and so on	
<b>Color imaging mode</b>	
Color frequency	≥7 frequency conversion, visible adjustable
Color deflection	equipped with
C afterglow	8, visible and adjustable
Color map	7, visible and adjustable
Color reversal	adjustable

B/C split screen synchronous display function	equipped with
Color baseline	7, visible and adjustable
Color line density	adjustable
<b>Spectrum Doppler mode</b>	
Sampling volume angle correction	-80 degree to 80 degree adjustable
Sample volume	0.5mm-48mm visually adjustable
Frequency	$\geq 5$ , visible and adjustable
Baseline	$\geq 7$ adjustable
Smooth	8 files can be adjusted
False color	7 kinds of adjustable
Maximum display blood flow measurement speed 25m/s, minimum resolvable blood flow measurement speed	0.1mm/s
<b>Measurement and analysis function</b>	General measurement distance, area, angle, time, slope, heart rate, velocity, acceleration, spectrum tracing, resistance index / pulsatility index, etc
	Professional software package: abdomen, volume, ratio, obstetrics and Gynecology, small organs, carotid artery, Urology, orthopedics, peripheral blood vessels, heart.
<b>Graphic and text management system</b>	
Host built in $\geq 120$ G solid state hard disk to start fast and stable	
Movie playback	600 frames
Internal patient 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.
Report type	3 species
One key fast report graphic and text management	
<b>Interface</b>	
USB interface	3
Audio interface	1
HDMI interface	1
LAN interface	2

# USAR-K8

## Ultrasound Scanner

### (4D image Color Doppler)



#### Summary of main specifications

1. Trolley type all digital color Doppler ultrasonic mainframe
2. Ultrasonic host operating system: Windows 7 operating system.
3. Spectrum pulse Doppler.
4. Direction energy Doppler.
5. Real time three synchronization.
6. Space composite imaging: the requirement is 3 level, visual adjustable.
7. Organized harmonic imaging technology.
8. 4B imaging mode.
9. One key intelligent optimization.
10. Support multilingual user interface.
11. Monitor: 17 inches, high definition LED
12. Physical clipboard: display the saved image below the screen, which can be deleted directly.
13. The system has the function of on-the-spot upgrade
14. 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.
15. Language: Chinese/English/Russian/Spanish/French/Arabic/Vietnamese/Portuguese /Indonesian
16. The probe interface is 3



## Technical Specifications

PARAMETER	SPECIFICATION
<b>Probes</b>	
Convex probe	2.0MHz/3.0MHz/3.5MHz/4.0MHz/5.5MHz
Linear probe	6.0MHz/6.5MHz/7.5MHz/10.0MHz/12.0MHz
Trans-vaginal probe	5.0MHz/6.0MHz/6.5MHz/7.5MHz/9.0MHz
R11 Micro convex probe	5.5MHz/6.0MHz/6.5MHz/7.5MHz/9.0MHz
R15 Micro convex probe	5.5MHz/6.0MHz/6.5MHz/7.5MHz/9.0MHz
4D Volume probe	2.0MHz/3.0MHz/3.5MHz/4.0MHz/5.5MHz
Under each probe, there is a selection of specialist and viscera mode and rapid entry detection.	
<b>Two-dimensional imaging mode</b>	
Gain	0-100, step 2 visible adjustable
TGC	8 segment adjustable
Image optimization	visible and adjustable over 6 levels
Dynamic range	0-270dB 15 level visual adjustable
False color	7, visible and adjustable
Smooth treatment	8, visible and adjustable
Edge enhancement	8, visible and adjustable
Sound power	0-15 stage, step 7%, visible adjustable
Display depth	≥320mm
Maximum focus number	4 focal points, which can be moved throughout the whole process.
Scan line density 256 visible tunable	
Gray scale	1-16 level visible visible and adjustable
Filtering	3 kinds
Scanning range	50%-100%
Frame correlation	0-4 level, visible and adjustable
The screen has real-time display of voice power, probe frequency, dynamic range, pseudo color, gray scale and other 14 parameters can be adjusted	
<b>Color imaging mode</b>	
Color frequency	≥5 frequency conversion, visible adjustable
Color deflection	equipped with
C afterglow	8, visible and adjustable
Color map	7, visible and adjustable
Color reversal	adjustable
B/C split screen synchronous display function	equipped with
Color baseline	7, visible and adjustable
Color line density	adjustable

<b>Spectrum Doppler mode</b>	
Sampling volume angle correction	-80 degree to 80 degree adjustable
Sample volume	0.5mm-48mm visually adjustable
Frequency	$\geq 5$ , visible and adjustable
Baseline	7 adjustable
Smooth	8 files can be adjusted
False color	7 kinds of adjustable
Maximum display blood flow measurement speed 25m/s, minimum resolvable blood flow measurement speed	0.1mm/s
<b>Measurement and analysis function</b>	General measurement distance, area, angle, time, slope, heart rate, velocity, acceleration, neck hyaline layer, spectrum tracing, resistance index / pulsatility index, etc.
	Professional software package: abdomen, volume, ratio, obstetrics and Gynecology, small organs, carotid artery, Urology, heart.
<b>Graphic and text management system</b>	
Host built in $\geq 120G$ solid state hard disk to start fast and stable	
Movie playback	600 frames
Internal patient 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.
The type of report is 3. Provide picture proof.	
One key fast report graphic and text management	
<b>Interface</b>	
USB interface	2
VGA interface	1
RJ-45 interface	1
VIDEO interface	1
Grounding wire interface	1
<b>Technology, after-sales service and other requirements</b>	
After acceptance, the warranty is free for two years	
Manufacturer has ISO13485 certification.	

# USAR-K10

## Ultrasound Scanner

### Digital Color Doppler (4D Optional)








#### Description

The familiar PC system, 15 inch LED monitor, ergonomic & rotatable design operation panel, free arm with 360 degree rotation and four probe connectors make the machine operate easily and conveniently

#### Technical Specifications

PARAMETER	SPECIFICATION
Displaying mode	B,B/B,4B,B/M,M,PW,B/C,B/C/D,B/D, duplex, triplex, CFM
Signal processing	Full-digital beam forming, dynamic filter, dynamic real time receiving focusing, RDA, DRA, spectral processing, CFM processing, real-time dynamic focusing, dynamic aperture in all fields
Image processing	THI PSHI TM broadband multi-frequency harmonic image Speckle-reduction Power adjustable Smoothing function iBeam TM intelligent space image technology iZoom TM undistorted full screen image Free Xros M Engineer control technology with low power consumption Edge enhancement Image optimizing disposal One-key optimization Image conversion Up/down conversion

	Left/right conversion Intelligent built-in workstation system(Chinese/English) Doppler Sound output volume adjustable Wall filter adjustable Base line adjustable Sampling frame adjustable Spectrum sampling volume adjustable Spectrum sampling volume angle adjustable PRF adjustable		
General measurement	B mode-distance, circumference, area, volume, angle, area Red, Diam Red, M mode- distance, time, velocity, heart rate		
Abdomen measurement	Liver, GB, Aorta, GBWT, CBD, Portal Vein, Spleen		
OB packages	EDD table: GS ,BPD, CRL,FL,YS,TAD,LV,OFD,NT,AC,HC,APAD, Cxlength.		
Gynecological packages	Uterine measurement (Uterine diameter, uterine endometrial);left/right ovary measurement; left/right saccules measurement; Cervix; Uterine depth		
Urology packages	Left/right kidney measurement, Volume, Cortex		
Small Parts Measurement	Left/ right thyroid, volume, Isthmus and calculating report		
Cardiac Measurement Package	Heart rate, Valve speed, LV, aortic, mitral, ventricular		
Skeletal & Muscles	Skeletal & Muscles, distance, area, Hip angle		
Vascular	Senosis D, senosis A, Lt/Rt VVA, Lt/Rt Rulb, Lt/Rt ICA		
Body mark	Abdominal , Gynecology, Obstetrics, Small parts		
Scanning depth	Up to 300mm		
Cine loop	Automatically & manually, speed control		
Image storage format	BMP,JPEG,PNG		
Image storage size	500G		
Input/output ports	VGA, USB port, DICOM port(network port)		
Standard Configuration	Main unit, 15 inch LED monitor, 3.5Mhz convex probe, DICOM 3.0,free arm, 4 probe connectors, user's manual, 500G hard disk, DVD-RW		
Option	7.5Mhz linear probe, 6.5Mhz transvaginal probe, 3.5Mhz micro-convex probe, 3.5Mhz phased array probe, 4D volume probe, 19 inch LED monitor, laser printer, biopsy kit		
<b>Probes Configuration</b>		<b>5 Steps Multi-frequency</b>	<b>Image</b>
Standard	3.5Mhz abdominal probe	2.0, 3.0, 3.5, 4.0, 5.5Mhz	

Options:	7.5Mhz linear probe	6.0, 6.5, 7.5, 10.0, 12.0Mhz	
	6.5Mhz transvaginal probe	5.0, 6.0, 6.5, 7.5, 9.0Mhz	
	3.5Mhz micro-convex probe	2.0, 2.5, 3.5, 4.5, 5.0Mhz	
	3.5Mhz phased array probe	2.0, 3.0, 3.5, 4.0, 5.5Mhz	
	4D volume probe	2.0, 3.0, 3.5, 4.0, 5.5Mhz	

# USAR-K30

## Ultrasound Scanner

### Digital Color Doppler (Double Screen)



#### Summary of Main Specifications

1. Trolley type all digital color Doppler ultrasonic mainframe
2. Ultrasonic host operating system: Windows7 operating system.
3. Spectrum pulse Doppler.
4. Direction energy Doppler.
5. Real time three synchronization.
6. Space composite imaging: the requirement is 3 level, visual adjustable.
7. Organized harmonic imaging technology.
8. 4B imaging mode.
9. One key intelligent optimization.
10. Support multilingual user interface.
11. Monitor: 19 inches, high definition LED.
12. Physical clipboard: save the image on the left side of the screen, which can be directly saved or deleted
13. The system has the function of on-the-spot upgrade
14. 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.
15. Support real-time 3D imaging function
16. Language: Chinese/English/Russian/Spanish/French/Arabic/Vietnamese/Portuguese /Indonesian
17. The probe interface is 4

## Technical Specifications

PARAMETER	SPECIFICATION
<b>Probes</b>	
Convex probe	2.0MHz/3.0MHz/3.5MHz/4.0MHz/5.5MHz
Linear probe	6.0MHz/6.5MHz/7.5MHz/10.0MHz/12.0MHz
Trans-vaginal probe	5.0MHz/6.0MHz/6.5MHz/7.5MHz/9.0MHz
R11 Micro convex probe	2.0MHz/3.0MHz/3.5MHz/4.0MHz/5.5MHz/6.0MHz/7.5MHz/10MHz
R15 Micro convex probe	2.0MHz/3.0MHz/3.5MHz/4.0MHz/5.5MHz/6.0MHz/7.5MHz/10MHz
Phased array probe	2.1MHz/3.0MHz/3.5MHz/4.0MHz/5.0MHz
4D Volume probe	2.0MHz/3.0MHz/3.5MHz/4.0MHz/5.5MHz
The above probe has harmonic frequency (providing picture proof)	
<b>Two-dimensional imaging mode</b>	
Gain	0-100, step 2 visible adjustable
TGC	8 segment adjustable
Image optimization	visible and adjustable over 6 levels
Dynamic range	0-270dB 15 level visual adjustable
False color	7, visible and adjustable
Smooth treatment	8, visible and adjustable
Edge enhancement	8, visible and adjustable
Sound power	0-15, step 7%, visible adjustable
Display depth	≥ 320mm
Maximum focus number	4 focal points, which can be moved throughout the whole process.
Scan line density 256 visible tunable	
Gray scale	1-16 level visible visible and adjustable
Filtering	3 kinds
Scanning range	50%-100%
Frame correlation	0-4 level, visible and adjustable
The screen has real-time display of voice power, probe frequency, dynamic range, pseudo color, gray scale and other 14 parameters can be adjusted	
<b>Color imaging mode</b>	
Color frequency	7 frequency conversion, visible adjustable
Color deflection	equipped with
C afterglow	8, visible and adjustable
Color map	7, visible and adjustable
Color reversal	adjustable
B/C split screen synchronous display function	equipped with
Color baseline	7, visible and adjustable

Color line density	adjustable
<b>Spectrum Doppler mode</b>	
Sampling volume angle correction	-80 degree to 80 degree adjustable
Sample volume	0.5mm-48mm visually adjustable
Frequency	$\geq 5$ , visible and adjustable
Baseline	7 adjustable
Smooth	8 files can be adjusted
False color	7 kinds of adjustable
Maximum display blood flow measurement speed 25m/s, minimum resolvable blood flow measurement speed	0.1mm/s
<b>Measurement and analysis function</b>	General measurement distance, area, angle, time, slope, heart rate, velocity, acceleration, spectrum tracing, resistance index / plasticity index, etc.
	Professional software package: abdomen, volume, ratio, obstetrics and Gynecology, small organs, carotid artery, Urology, orthopedics, peripheral blood vessels, heart.
<b>Graphic and text management system</b>	
Host built in $\geq 120G$ solid state hard disk to start fast and stable	
Movie playback	600 frames
Internal patient 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.
The type of report	3
One key fast report graphic and text management	
<b>Interface</b>	
USB interface	4
HDMI interface	1
RJ-45 interface	1
VIDEO interface	1
Grounding wire interface	1
<b>Technology, after-sales service and other requirements</b>	
After acceptance, the warranty is free for two years	
Manufacturer has ISO13485 certification and EU CE certification.	



# USAR-K70

## Ultrasound Scanner

(Advanced Cardiac Color Doppler)



### Technical Specifications

PARAMETER	SPECIFICATION
	Trolley type full digital color Doppler ultrasonic mainframe
Ultrasonic host operating system	Windows operating system
Applications	Abdomen, obstetrics, gynecology, heart, urinary system, small organs, superficial, blood vessels, pediatrics, newborns, musculoskeletal
Probes	Convex probe, Tran-vaginal probe, Linear probe, Micro-convex probe, Cardiac probe, 4D Volume probe
Applications and report	Support abdomen, obstetrics, gynecology, heart, urology, small organs, superficial, blood vessels, pediatrics, etc. advanced measurement software package, report software package, patient management software package
	carotid artery intima measurement thickness (IMT)
	Automatic spectral envelope measurement
	Full digital transmission and reception of beam synthesizer
	Color Doppler imaging (C)
	Pulse Doppler Imaging (PW)
	Coherent Contrast imaging (CCI)
	Continuous wave Doppler imaging (CW)
	B/C/D Real-time three synchronous imaging
	Power Doppler imaging (PDI)
	Direct power Doppler imaging (DPDI)
	M mode imaging
	Anatomic M mode imaging

Color Doppler M mode imaging	
Elastography	
Tissue Doppler imaging (TDI)	
Strain rate imaging (SRI)	
Tissue harmonic imaging (THI)	
Fusion harmonic imaging (FHI)	
Speckle Reduce imaging (SRI)	
Panoramic imaging	
Deflection imaging	
Trapezoidal imaging	
Adaptive velocity optimization	
Free hand 3D	
Real time 3D imaging (3D/4D)	
DICOM3.0	
Monitor	≥21.5 inch, high definition ultrasonic display
≥10.4 inch touch screen	
Physical clipboard	save the image on the left side of the screen, which can be directly saved or deleted.
The system has the function of on-the-spot upgrade	
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.
Probe interface	4
Chinese and English System, Chinese and English input, optional	
Depth	≥360mm
Extended imaging	
<b>Probes</b>	
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
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
Trans-vaginal probe	Fundamental Frequency: 3.0MHz/3.5MHz/4.0MHz/5.0MHz/5.4MHz/6.0MHz/7.0MHz/8.0MHz/10.0MHz Harmonic Frequency: 6.0MHz/7.0MHz/8.0MHz
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
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
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
<b>2D imaging mode</b>	
Gain	0—100, Step 2 adjustable
TGC	8 segment adjustable
Maximum focus point	≥7, which can be moved throughout the whole process
Speckle reduction	0-5, 5 level
Space Synthesis	0-2, 2 level (Liner probe: 3 level, cardiac probe:0)
Dynamic	30-180, 35 level, step 5 adjustable
Line density	low、middle、high, 3 level
Frame correlation	0-4,4 level
Noise reduction	0-5, 5 level
Edge Enhancement	0-5, 5 level
Sound power	2-10, 9 level
Grey scale	0-67, 67 level
False color	0-67, 67 level
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	
<b>Color Doppler imaging mode</b>	
Blood gain	0-100, Step 2
Parameter display	Velocity、Variance
B-Restrain ( B/W restrain )	0-7, 7 level
Speed Through	0-8, 8 level
Sampling number	6-24, 7 level
Blood flow preferred	0-8, 8 level
Filtering	1-6, 6 level
Sound power	2-6, 4 level
Noise reduction	0-4, 4 level
Smooth treatment	0-4, 4 level
Frame correlation	0-6, 6 level
Chromatography (Blood flow graph)	0-37, 37 level
Line density	Low-Middle-High, 3 level
Frequency	4 level adjustable

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	
<b>Pulse wave Doppler (PW)</b>	
Gain	0-100, Step 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
Sample volume	0.5mm~30mm
Blood angle	-75—75 degree, Step 5
False color	0-67, 67 level
Dynamic range	20-40, 4 level
Filter	0-9, 9 level
Smooth treatment	1-4, 4 level
Sound power	2-5, 4 level
Volume	0-100, 10 level, Step 10
Audio filtering	0-4, 4 level
Base line	-1.0~1.0
Grey map	0-67, 67 level
Scan velocity	100-500, 6 level
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	
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	
<b>Continuous Wave Doppler (CW)</b>	
Support probe	Cardiac probe
Adjustment of B mode parameters is switchable	
Gain	0-100, Step 2
Sampling line position is adjustable	
PRF	0.9K~36.1K
Baseline	-1.0~1.0

Blood angel	-75~75 degree
Grey map	0-67
Scan velocity	100-300
False color	0-67
Dynamic range	20-40
Filtering	0-9, 9 level
Smooth treatment	1-4
Frequency	2.0MHz/2.3MHz/2.5MHz/3.0MHz, 4 level adjustable
Sound power	2-5
Volume	0-100
Audio Filtering	0-4
<b>Anatomical M imaging</b>	
Support probe	Convex probe, Linear probe, Cardiac probe
Adjustment of B mode parameters is switchable	
Gain	0-100, Step 2
M Sampling line angel is adjustable	
M Sampling line length is adjustable	
Sampling line	3, Can be displayed or hidden separately
<b>Blood flow M model (MC )</b>	
Adjustment of B mode parameters is switchable	
Gain	0-100, Step2
MC Sampling line angel is adjustable	
MC Sampling line length is adjustable	
Frequency	4 level
Sampling number	6-24
Speed through	0-8, 8 level
Scan velocity	150-500
Frame correlation	0-6, 6 level
Filtering	1-6, 6 level
Blood flow preferred	0-8, 8 level
Smooth treatment	0-4,4 level
Map	0-37, 37 level
<b>Elastography</b>	
Adjustment of B mode parameters is switchable	
Gain	0-100, Step 2
B/E, Double real-time display on the same screen	
Probe displacement curve display	Up/Down
Pressure indicator bar display	
Frequency	8-9 level, Adjustable; According to the probe display
Noise reduction	0-2, 2 level
Frame correlation	0-3, 3 level
Comparison	0-13, 13 level

False color	0-3, 3 level
Don't support cardiac probe	
<b>Tissue Doppler imaging (TDI)</b>	
Support probe	Cardiac probe
Adjustment of B mode parameters is switchable	
Gain	0-100, step 2
ROI area adjustable	
Sampling number	6-24
Velocity	0.4K-8.0K
Frame correlation	0-6, 6 level
Tissue preferred	0-7, 7 level
Frequency	2.0MHz/2.3MHz/2.5MHz/3.0MHz
Support color reversal	
<b>Strain rate imaging</b>	
Support probe	Cardiac probe
Adjustment of B mode parameters is switchable	
ROI area adjustable	
Gain	0-100, Step 2
Sampling number	6-24, 6 level
Axial average	1-4, 4 level
Velocity	0.4K-8K
Frame correlation	0-6, 6 level
Tissue optimization	0-7, 7 level
<b>Panoramic imaging</b>	
Support probe	Linear probe
Speckle Reduction	0-5, 5 level
<b>Deflection imaging</b>	
Support probe	Linear probe
Adjustment of B mode parameters is switchable	
Deflection angel	8 level
Speckle reduction	0-5, 5 level
Dynamic rate	30-180, Step 5
Line density	low-middle-high, 3 level
Frame Correlation	0-4, 4 level
False color	0-67, 67 level
Image style	Soft-Comparison, 2 level
Noise reduction	0-5, 5 level
Edge Enhancement	0-5, 5 level
Sound power	2-10, 8 level
Grey map	0-67, 67 level
<b>Trapezoidal imaging</b>	
Probe support	linear probe
Adjustment of B mode parameters is switchable	

Deflection angel	8 level
Speckle reduction	0-5, 5 level
Dynamic rate	30-180, Step 5
Line density	low-middle-high, 3 level
Frame Correlation	0-4, 4 level
False color	0-67, 67 level
Image style	Soft-Comparison, 2 level
Noise reduction	0-5, 5 level
Edge Enhancement	0-5, 5 level
Sound power	2-10, 8 level
Grey map	0-67, 67 level
Space Synthesis	0-2, 2 level
<b>Freehand 3D imaging</b>	
Support probe	convex probe, linear probe
Display model	4 pictures
Image Rotation X/Y/Z Axis	
Multi-slice Visibility	
<b>Real-time 4D imaging</b>	
Support probe	4D volume probe
Adjustment of B mode parameters is switchable	
Gain	0-100, Step 2
Display model	one image、two images、four images
Image Rotation	X/Y/Z Axis
Multi-slice Visibility	
Light&Shade inversion	
Smooth	0-4, 4 level
Threshold level	0-129, Step 3
Transparency	1-509, Step 10
Render type	4 kinds, Surface、maximum、minimum、perspective
<b>Extended Imaging</b>	
Gain	0—100, Step 2
TGC	8 segment adjustable
Maximum focus point	≥7, which can be moved throughout the whole process
Speckle reduction	0-5, 5 level
Space Compound	0-2, 2 level (Linear probe: 3 level, don't support cardiac probe)
Dynamic range	30-180, 35 level, Step 5
Line density	Low、Middle、High, 3 level
Frame correlation	0-4,4 level
Noise reduction	0-5, 5 level
Edge enhancement	0-5, 5 level
Sound power	2-10, 9 level
Grey map	0-67, 67 level
False color	0-67, 67 level

Image style	Soft-Comparison, 2 level
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.	
<b>Measurement and analysis function</b>	
General measurement: Distance, area, ellipse, cross line, angle, distance ratio, volume, Volume (ellipse), area ratio, diameter, joint angle	
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
Vascular	carotid intima (IMT), length stenosis ratio, area stenosis ratio, IMT (back wall), IMT (front wall)
OB	Fetal routine, AFI, TW, GS, CRI, OFD, HL, ulna, NT, Fibula, Nbonel, Radial, Tibia
GYN	uterus, cervix, corpus uteri/cervix uterus, left ovarian vein, right ovarian vein, dominant follicle, intima thickness
Urology	prostate, residual urine, left kidney, right kidney, left suprarenal vein, right suprarenal, left testis, right testis, left seminal vesicle, right seminal vesicle
Abdomen	liver, CHD, portal vein diameter, cholecyst, CBD, pancreas, spleen, Internal diameter of abdominal aorta, kidney
Small parts	Thyroid
Software package	Measurement package, Software package, Medical records management software package
<b>Graphic and text management system</b>	
Host build in 2 hard disk (SSD 120+1T), Start fast and stable	
Movie playback	≥1200 frames
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.	
Type of report	16
One key fast report graphic and text management	
<b>Interface</b>	
USB interface	4
HDMI interface	1
RJ-45 interface	1
Grounding interface	wire 1



DVD RW	1
<b>Configuration</b>	
Trolley type full digital color Doppler ultrasound diagnostic system	
Probe	convex array probe (standard), linear probe (optional), Trans-vaginal probe (optional), cardiac probe (optional), 4D volume probe (optional)
≥ 13 quick adjusting knobs	
<b>Technology, after-sales service and other requirements</b>	
After acceptance, the warranty is free for two years ( Provide manufacturer warranty certificate )	
Manufacturer has ISO13485 certification and EU CE certification.	