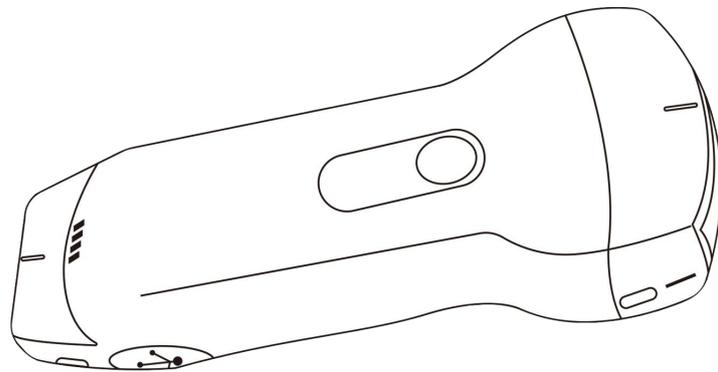


# USB&Wi-Fi Pocket ultrasound system

Instruction Manual

(V1.1N)



## **IMPORTANT !**

Read and understand this manual before operating the equipment. After reading, keep this manual in an easily accessible place.

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Product: Pocket Ultrasound System

Authorized European Representative:

Shanghai International Holding Corp. GmbH(Europe) Eiffestraße 80, 20537 Hamburg

Germany

CE certificate No. G2 003973 0002 Rev.01



# Introduce

This manual describes the operation of the ultrasonic diagnostic equipment. In order to ensure the safe operation of the system, please read and understand the contents of the manual before using the system

This specification is formulated and explained by US.

This manual is published: December 2018, first revised December 2019.

US reserves the right to change the contents of the instruction manual without prior notice

## **Important statement!**

1. The part or all of the contents of this manual shall not be copied or copied prior to the written permission;
2. It is forbidden to modify the software or hardware of this product;
3. The utility model can provide the doctor with the image and data needed for clinical diagnosis, and the doctor is responsible for the diagnosis process;
4. Quality assurance does not include the following, even within the warranty period:
  - (1) Damage or loss caused by improper installation or environmental conditions that do not meet the requirements;
  - (2) Damage or loss caused by the supply voltage exceeding the specified range;
  - (3) Damage or loss of equipment or components purchased not from US or its authorized distributor or agent;
  - (4) There is no damage or loss caused by the use of this instrument in the initial purchase area;
  - (5) Damage or loss caused by maintenance of non authorized personnel of the company;
  - (6) Damage or loss caused by force majeure such as fire, earthquake, flood or lightning;
  - (7) Damage or loss caused by error or rough use;
  - (8) Failure caused by other non product itself

# Maintenance and repair service

The main warranty period is 18 months. The warranty period from the date when the product leave the factory. Within the warranty period, the product can enjoy free customer service; but please note that even in the warranty period, due to the reasons on the page "important statement" caused by the products need maintenance, US will charge maintenance services, you need to pay the cost of maintenance and spare parts costs.

After the expiration of the warranty, US can provide maintenance services. It should be noted that if you do not pay or delay the payment of maintenance costs, US will temporarily suspend maintenance services until you pay.

We hereby declare that you must familiarize yourself with the operating instructions before use and operate and use it in strict accordance with the requirements and methods of operation of the operating instructions. The Company does not assume any responsibility for safety, reliability and performance assurance due to any abnormality caused by operation, use, maintenance and storage in accordance with the requirements of this manual.

Operation taboo:

 **Danger** ※ Do not modify this equipment, including equipment components, software, cables and so on. User modifications may result in security problems or reduced system performance. All modifications must be completed by the personnel approved by US.

# Intellectual Property Statement

This specification and the intellectual property rights of the products are owned by US. No individual or organization may copy, modify or translate any part of this manual without the written consent of US.

# 1 Safety precautions

---

## 1.1 Security classification

- According to the type of anti electric shock:  
Internal power supply, where the adapter is Class 1;
- According to the degree of anti electric shock:  
Type BF application part;
- According to the protection degree of harmful liquid:  
The system probe is IPX5;the probe head is IPX7
- According to the degree of safety in the presence of flammable anesthetic gas mixed with air (or oxygen, nitrous oxide two);
- According to the working mode:  
Continuous working equipment.

## 1.2 Security symbol

Security symbol	Detailed description
	<b>Type BF application part</b> Description: all the ultrasonic probes are part of the BF application.
	"Be careful" indicates what should be noted. Be sure to read the instructions carefully before using the system.

## 1.3 Safety warning information

In order to ensure the safety of the patient and the operator, the following safety rules should be strictly observed in the use of the wireless ultrasonic probe.

- |                    |  |
|--------------------|--|
| <b>⚠️ WARNING:</b> | <ol style="list-style-type: none"><li>1. Do not disassemble the ultrasonic probe, which may cause electric shock.</li><li>2. Use the power cord supplied with this unit; use only the power supply provided by US to supply power, the use of other specific power supply (such as UPS, etc.) on the ultrasonic probe power supply may bring the risk of electric shock.</li></ol> |
|--------------------|--|

3. Use the probe carefully, if the probe is scratched with the contact surface of the human body, immediately stop using the probe and contact the service representative. If you use a scratched probe, there is a risk of electric shock.
4. Every time you use the instrument must be checked for safety, do not let the probe by the impact of damaged ultrasound probe may cause the patient to be shocked.
5. Before performing an ultrasound check, check the surroundings to ensure safe use within the environment. Do not operate the unit in an environment with flammable or explosive liquids, vapors or gases such as oxygen or hydrogen.
6. Be sure to wear a sterile probe case on the probe when performing an ultrasonic chamber check.
7. Do not immerse the ultrasonic probe Type-C USB interface or above in water or disinfectant. Because the Type-C USB interface of the ultrasonic probe does not have a waterproof function, this may cause an electric shock or a probe malfunction.
- 8 Before and after each inspection, you must ensure that the ultrasound sound normal. A defective ultrasonic probe may cause the patient to be shocked.
- 9 If the head part of the probe does not comply with EMC requirements, it is forbidden to use the sound head for use in the body (as the device may be adversely affected by other equipment).

 **CAREFUL:**

1. **Matters needing attention in clinical examination technology:**
  - This equipment can only be operated by qualified medical personnel.
  - This manual does not introduce a clinical examination technique. It is necessary to select the correct inspection techniques according to the professional training knowledge and clinical experience.
2. The equipment can not be checked for a long time.
3. Do not use incompatible coupling agents, disinfectants, probe protective cover, probe, puncture rack.
4. Sterile gloves must be worn to prevent infection when using ultrasonic probes.
5. You must use a sterile ultrasound coupling agent. Use a coupling agent that is in compliance with local regulatory requirements. In addition, it is necessary to properly manage and use the ultrasonic coupling agent to ensure that it does not become a source of infection.
6. The probe cover is made of natural rubber and is used with caution for natural rubber allergy.
7. For in vivo transducers in a single fault condition, the surface temperature rise shall not exceed 43 ° C.

<b>CAUTION :</b>	<b>1</b>	<b>In order to prevent abnormal probe function, read the following safety precautions:</b> <b>After each ultrasonic examination, the ultrasonic coupling agent on the surface of the probe should be thoroughly erased. Otherwise, the ultrasonic coupling agent will be solidified on the probe head, which will affect the quality of the ultrasound image.</b> <b>The probe should be cleaned and disinfected before and after each ultrasonic examination.</b>
	<b>2</b>	<b>Ambient environmental requirements:</b> <b>Please use the ultrasonic probe in the specified environment:</b> <ul style="list-style-type: none"> <li>➤ <b>ambient temperature: 0℃ ~ 35℃</b></li> <li>➤ <b>relative humidity: 30% ~ 85% (No condensation)</b></li> <li>➤ <b>Atmospheric pressure: 70KPa ~ 106KPa.</b></li> </ul> <b>To prevent damage to the ultrasonic probe, do not expose the probe to the following environment:</b> <ul style="list-style-type: none"> <li>➤ <b>Place where the sun shines</b></li> <li>➤ <b>A place where the temperature changes dramatically.</b></li> <li>➤ <b>A place filled with dust</b></li> <li>➤ <b>Easy to vibrate place</b></li> <li>➤ <b>Place near the heat source</b></li> </ul>
	<b>3</b>	<b>Repeated disinfection will lead to the safety and performance of the probe, the performance of the probe should be regularly checked.</b>

## 1.4 WARNING Labels

The system has a variety of identification to cause the user to pay attention to the potential danger. The symbol on the warning sign  indicates the precautions for system security.

The instructions explain in detail the meaning of these warning signs. Read the instructions carefully before using the system.

## 1.5 Ultrasound Benefits and Risks

Ultrasound is widely used because it provides many clinical benefits to the patient and has an excellent safety record. Ultrasound imaging has been used for over twenty years and there have been no known long-term negative side effects associated with this technology.

## **Ultrasound Benefits**

- Portability
- Cost-effectiveness
- Multiple diagnostic uses
- Immediate results
- Safety record

## **Ultrasound Risks**

Ultrasonic waves can heat the tissues slightly. It is normal that the probe may feel warm to the touch while charging. If you remove the probe from the charging pad before or immediately after charging is complete, it is recommended that you allow the probe to cool down before use. Since the system limits patient contact temperature and will not scan at or above 43° C (109° F), allowing the probe to cool down before use will optimize scan time performance.

# 2 Product overview

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## 2.1 Intended use

It is designed to fulfill following intended uses: Obstetrics、 Gynaecology、 Abdominal Small Parts (breast, thyroid, testicle, etc) 、 Cardiology 、 Peripheral Vascular 、 Muscular-Skeletal、 Nerve、 Urology、 Orthopedic、 Angiography、 Physical Examinations、 Digestion、 Paediatrics、 Paracentesis .

## 2.2 Contraindication

The product is not suitable for the examination of the organs containing gas, such as the stomach and intestines, etc. when burned, burned or damaged in the surface of the human body, it can not be used in this part.

## 2.3 Product specifications

### 2.3.1 Imaging mode

B mode  
BM mode  
C mode  
PW mode  
PDI mode

### 2.3.2 Power condition

#### External power adapter

Supply voltage AC : 100 - 240V

Power frequency : 50/60Hz

Output DC: 5V/2A

#### Internal battery

voltage: 3.8V

capacity: 2800mAh(C10RL/C10RQ/C10UE) 1350mAh(C10UR/C10UL)

### 2.3.3 environment condition

	work environment	Storage and transportation environment
ambient temperature	0°C ~ 35°C	0°C ~ +45°C
relative humidity	30% ~ 85% (No condensation)	30% ~ 95% (No condensation)
atmospheric pressure	70KPa ~ 106KPa	70KPa ~ 106KPa

**Transport:**

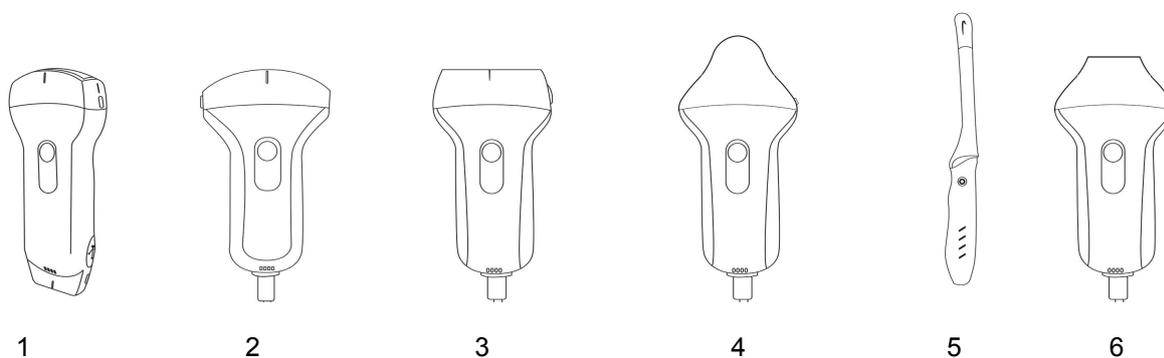
1. Do not use or store the system outside the specified environmental conditions.

**Working:**

1. Please ensure that the use of the equipment to master a solid, otherwise, equipment may hurt the patient fall.
2. To ensure that the equipment in a dry environment, the operation of environmental temperature and humidity changes, may lead to liquid condensation in the circuit board, there is the risk of short circuit.
3. Do not operate the unit in an environment with flammable or explosive liquids, vapors or gases such as oxygen or hydrogen. Equipment failure or fan motor sparks may be electronically detonated of these substances.
  - A. Please ensure that the environment before use, if the detection of flammable substances in the environment, please do not plug in the power or open the system.
  - B. Use the real-time detection environment to detect flammable substances after the system is turned on. Do not attempt to turn off the device or unplug the power supply. First empty the air in the area and ensure a smooth ventilation and then turn off the power.
4. If the system fails, please do not disassemble the view, please contact the service center or your sales representative.

**⚠ WARNING:**

## 2.3.4 Probe outline dimensions and weight



Probe Model	Probe size	weight
1	125mm (L) * 55mm (W) * 25mm (thickness)	109g
2	115mm (L) * 70mm (W) * 20mm (thickness)	102g
3	115mm (L) * 60mm (W) * 20mm (thickness)	102g
4	135mm (L) * 60mm (W) * 20mm (thickness)	103g
5	330mm (L) * 34mm (W) * 27mm (thickness)	202g
6	127mm (L) * 60mm (W) * 20mm (thickness)	116g

## 2.4 system configuration

The system is mainly composed of probe and application.

### 2.4.1 Standard configuration

- Main unit probe: 1 set
- Type-C Cable: 1 set
- Wireless charger: 1 set
- Black handbag : 1 set

- Plug: American Standard or British Standard Plug
- Accessory: Operation manual

## 2.4.2 Components

### Transducer Type

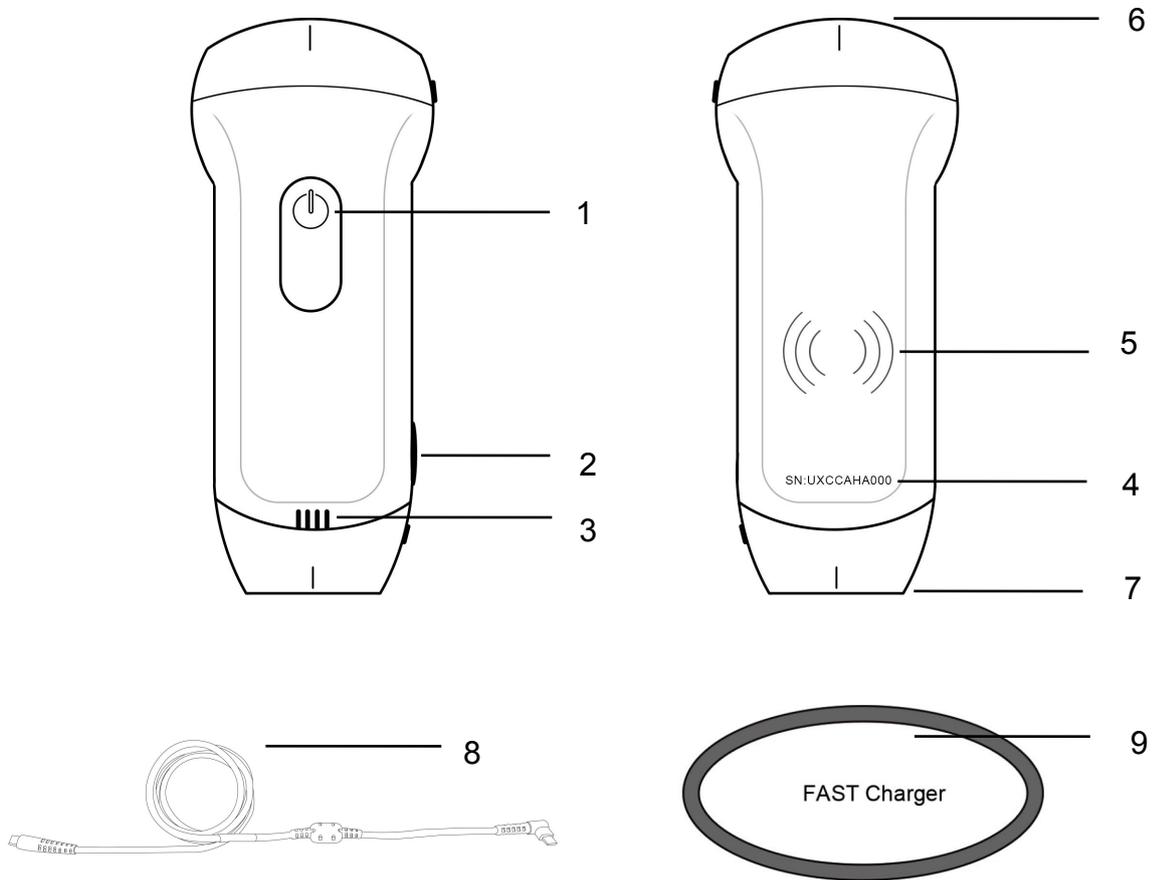
Transducer model	Type of Transducer	Intended use	Applicable site	Wireless charging
1	3 in 1 type	Gynecology and obstetrics, abdominal kidney, Small organ, carotid artery, Msk, Cardiac	body surface	√
2	3.5/5Mhz Convex probe	Gynecology and obstetrics, abdominal kidney	body surface	×
3	7.5/10Mhz Linear probe	Small organ, carotid artery	body surface	×
4	8/11Mhz Ophthalmic probe	Eye	body surface	√
5	6.5/8Mhz Endocavitary probe	Gynecology and obstetrics	Via vagina	√
6	2.2/3.6Mhz	Cardiac, abdomen	body surface	√

## 2.5 Symbol description

This device uses the following symbol identification, the following list shows its meaning.

Serial number	Symbol	Explain
1		Type BF application part explain: All ultrasonic probes are part of the BF application.
2		Please refer to the instruction manual for this symbol to avoid accidents
3		Indicates the product serial number
4		Indicates the manufacture.
5	IPX 7	The 7 indicates that the system is protected against the effects of immersion in water to depth between 15 cm and 1 meter.
6		Safety mark on behalf of the product has been in line with European standards for safety / health / environmental / health and other standards and directives
7		Indicates the date of manufacture.
8		Indicates that the device must be collected separately for disposal. Follow proper disposal procedures.
9		Authorized European Representative: Shanghai International Holding Corp. GmbH(Europe) Eiffestraße 80, 20537 Hamburg Germany
10		Indicates the reference or catalog number

## 2.6 Introduction of each component of the system

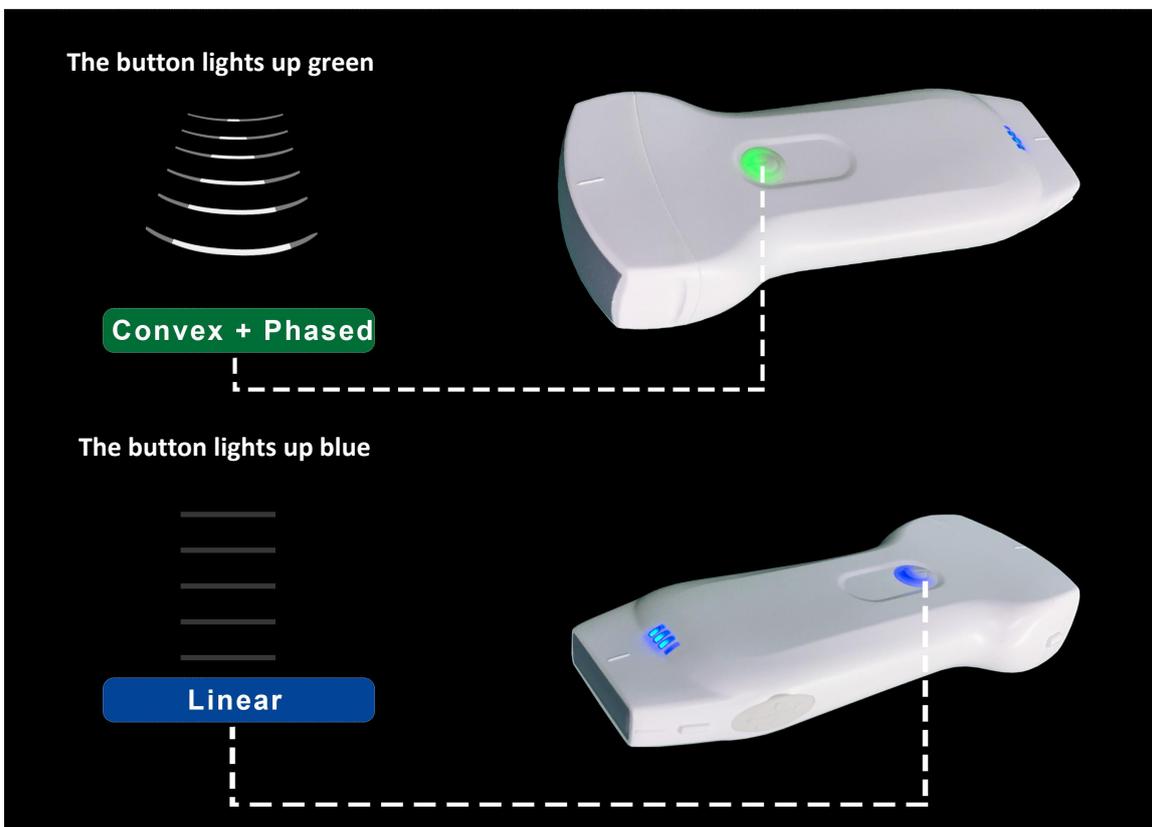


number	Name	Function
1	Control buttons	Power switch / freeze /Living button
2	USB Type-C port	Connect to Android/Windows software/Charging with USB type-C cable
3	Battery status	Battery charge/remaining display
4	SN	Serial number; password of this probe's wifi
5	Wireless charging symbol	Face to wireless charger
6	Convex probe	= Convex probe + Phased probe
7	Linear probe	Linear probe
8	Type-C cable	Connect to Android/Windows software/Charging with USB type-C cable
9	Fast Charger	The wireless charging pad

## 2.7 Control panel

Control buttons	Button icon	Key name	Function
		Power switch / freeze / thaw button	<ol style="list-style-type: none"> <li>1) When the probe is not turned on, press the key to open the probe;</li> <li>2) When the probe is in the open state, press the key to close the probe;</li> <li>3) When the probe is in the scanning state, press the key to freeze the screen image;</li> <li>4) In the frozen state, press the button to thaw the screen image, the probe continues to scan the image.</li> <li>5) Press and hold for 3 seconds to switch the scanning mode(Convex array probe/linear array probe)</li> </ol>

Press the button and hold for 3 seconds to switch the scanning mode  
(Convex array probe ↔ linear array probe)

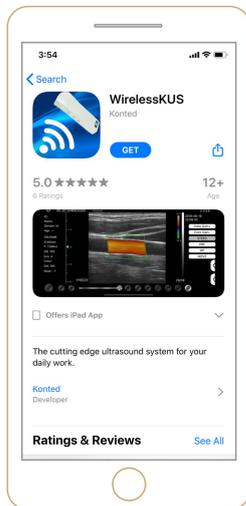


# 3 Basic introduction

## 3.1 Install software

### 3.1.1 iPhone/iPad

Download the IOS software from App store  on your Apple iphone/ipad, the APP name is **Wirelesskus**. The following lists the requirements:



Updates to the App and probe are handled through the Apple App Store.  
Keep your mobile device's operating system and the App updated to ensure you have the most up-to-date version.

Apple Device	Requirement	Operating System
iphone	Available for iphone SE, iPhone 6s~iphone12 pro Max	iOS version 11.0 or newer
ipad	iPad Air 1th/2th/3th, iPad 4th/5th/6th/7th/8th, iPad mini 3th/4th, iPad Pro 1th/2th/3th/4th	
PC	×	×

#### Note:

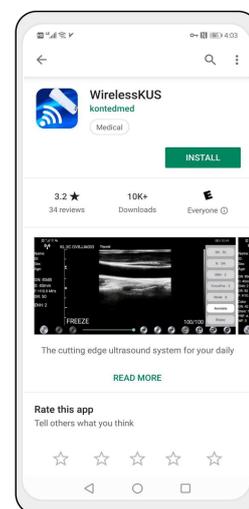
- Wirelesskus App is available for download and use on an iphone/ipad device, not support Apple PC.
- Do not use the Wirelesskus App on a mobile device that does not meet minimum requirements. Using the APP on a mobile device that does not meet the minimum requirements may affect performance and image quality, possibly resulting in misdiagnosis.

### 3.1.2 Android device

Download the Android software from Google Play store . The App name is **Wirelesskus**. The following lists the requirements:



Updates to the App and probe are handled through the Google play.  
Keep your mobile device's operating system and the App updated to ensure you have the most up-to-date version.



Android Device	Requirement	Operating System
Smart phone	RAM≥2GB, ROM≥32GB	Android version 8.0 or newer
Smart Tablet	Wi-Fi: (802.11n/20MHz/5G) USB connector type: Type-C	

### 3.1.3 Windows device

Please contact us to get the windows software installation package after receiving the probe. The following lists the requirements:

Windows Device	Requirement	Operating System
PC	RAM: ≥4GB Wi-Fi: (802.11n/20MHz/5G) CPU: ≥1GHz, up to 3.6GHz, Inter i3/i5/i7 (Recommended Brand: Lenovo, HP, Dell, Acer, ASUS) It is recommended to use laptops manufactured after 2017.	Windows10 ,64-bit or newer
Smart Tablet	RAM≥4GB, ROM≥16GB Wi-Fi: (802.11n/20MHz/5G) USB connector type: Type-C	

## 3.2 Turn on/off the probe

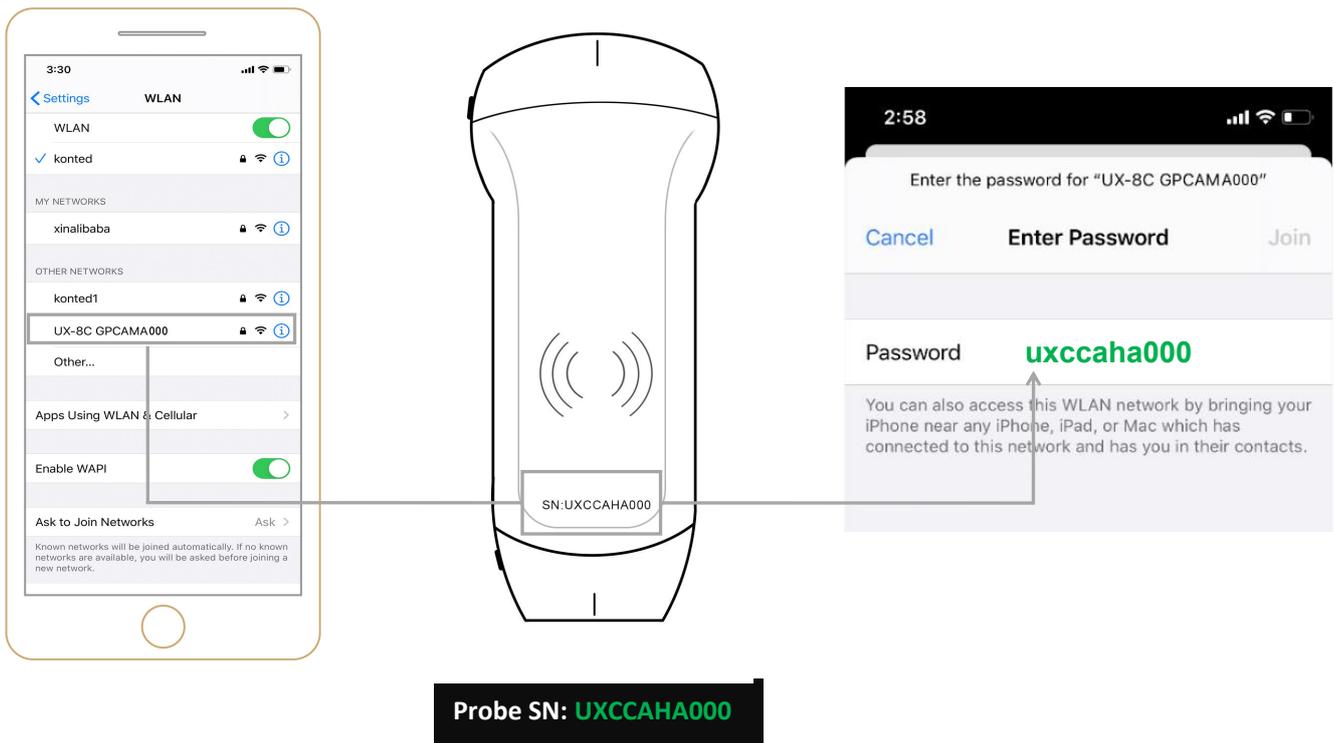
Press the power button  to turn on the probe, the indicator will show the battery icon.

after ultrasonic examination, Press the power button  and hold for 5 seconds to turn off the probe, the indicator become black screen.

### 3.3 Probe and Terminal connection

#### Wi-Fi connection:

The first time connection between the probe and the smart terminal device need to be entered the Wi-Fi password. After the first time connection, the device will be connected with the probe's Wi-Fi automatically.



#### Step1:

Turn on the ultrasound transducer and turn on the Wi-Fi on your IOS or Android device.

#### Step2:

Search the list of networks for the SSID with the suffix "UX-8C \*\*\*\*\*A000".

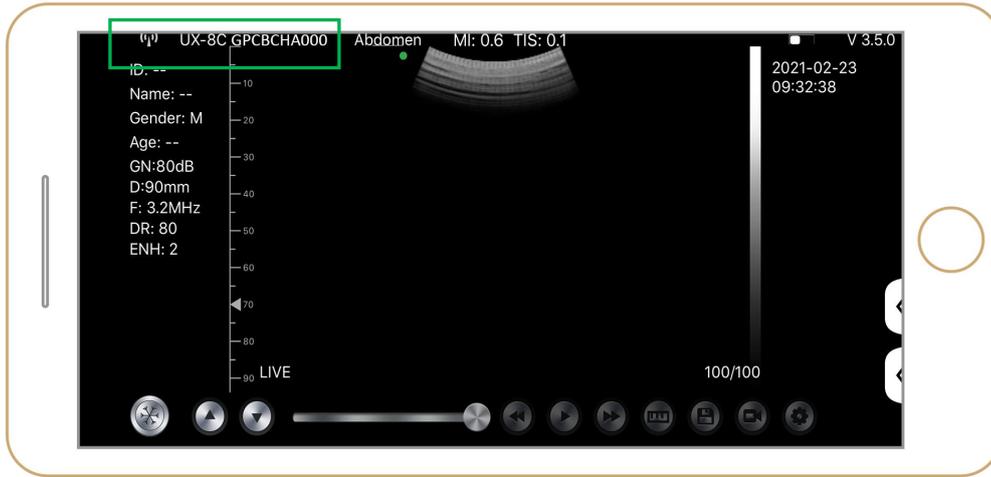
#### Step3:

Enter the Wi-Fi password, this Wi-Fi password is the serial number of the probe, but it is the small letter not capital.

**Step4:**



To open the Wirelesskus App on your mobile device's home screen, when the probe connect to your mobile device successfully, The “ UX-8C \*\*\*\*\*A000” will be displayed on the App interface.



**Note:**

- If you connect the probe to your device successfully, but there is no image on the screen, please try to press the power button again.
- The password's letters must be input as small letters, not capital.
- When the probe is connected to mobile device A, if you want to change mobile device B to connect with the probe, please disconnect the probe from the mobile device A firstly. The probe only can be connected to one mobile device at the same time.

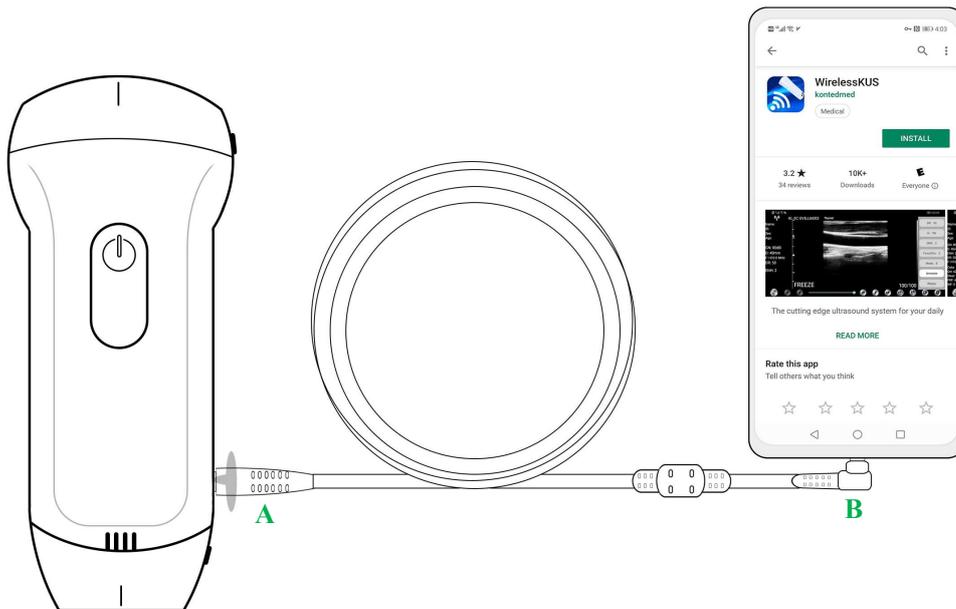
## USB connection:

### Step1:

Pull out the rubber plug on the right side of the probe.

### Step2:

Connect the probe to your smart device by Type-C cable according to the picture above. The A-end and B-end of the cable can not be inserted reversely. The A-end must be fully inserted into the probe and the B-end must be fully inserted into the smart device.

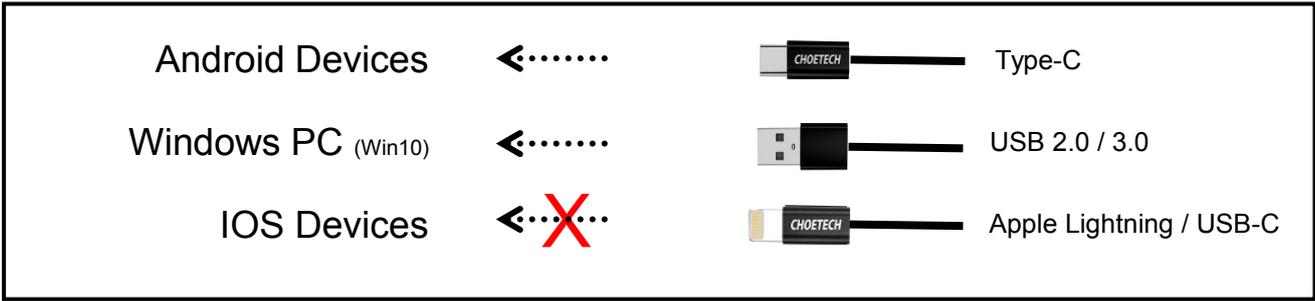


### Step3:



To open the Wirelesskus App on your mobile device's home screen, when the probe connect to your mobile device successfully, The “UX-8C \*\*\*\*\*A000” will be displayed on the App interface.





**Note:**

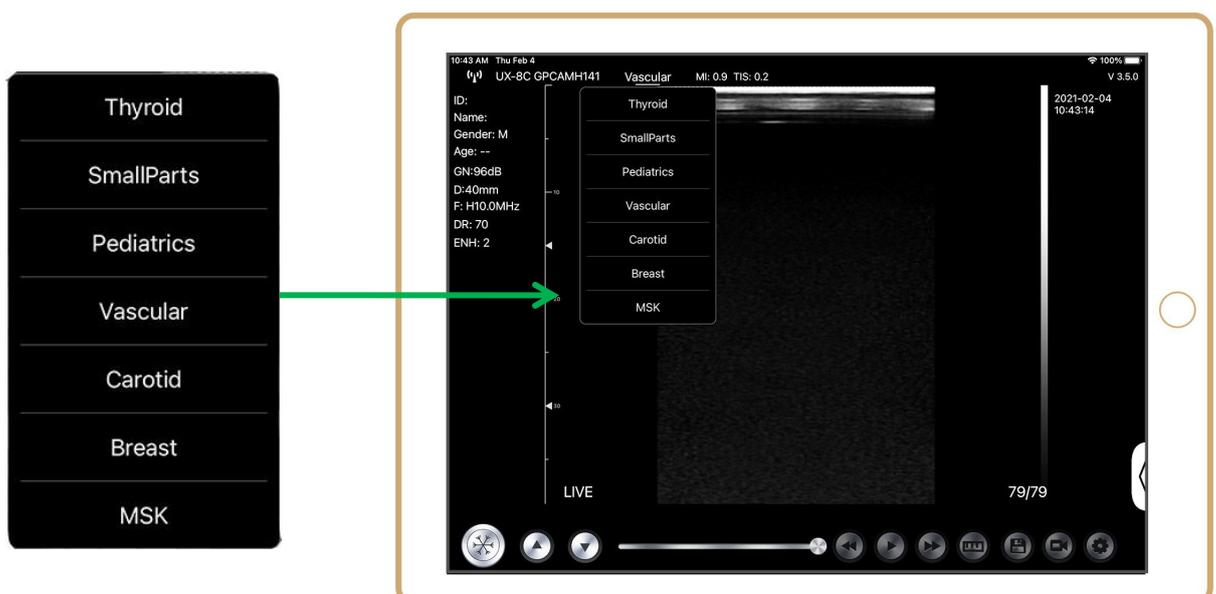
- If you connect the probe to your device successfully, but there is no image on the screen, please try to press the power button again.
- When the probe is connected to the device successfully, the probe charging indicator will automatically flash and charge the probe.
- The probe can be connected to an Android/Windows device via Type-C cable.
- iPad/iPhone only can be connected via Wi-Fi, not support Type-C cable connection.
- The probe can be used while charging.

### 3.4 Basic software interface

Convex array + Phased array mode:



Linear array mode:



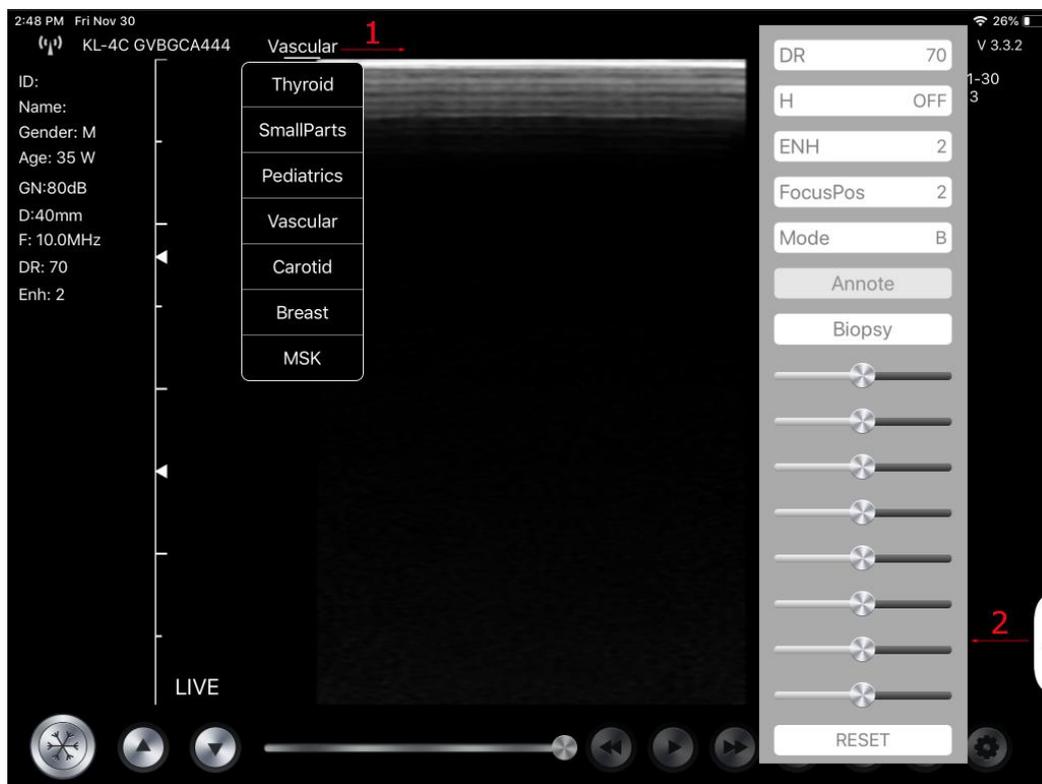
# 4 Detailed operation introduction

## 4.1 Introduction to all levels of menu

The menu in this system is divided into first level, second level

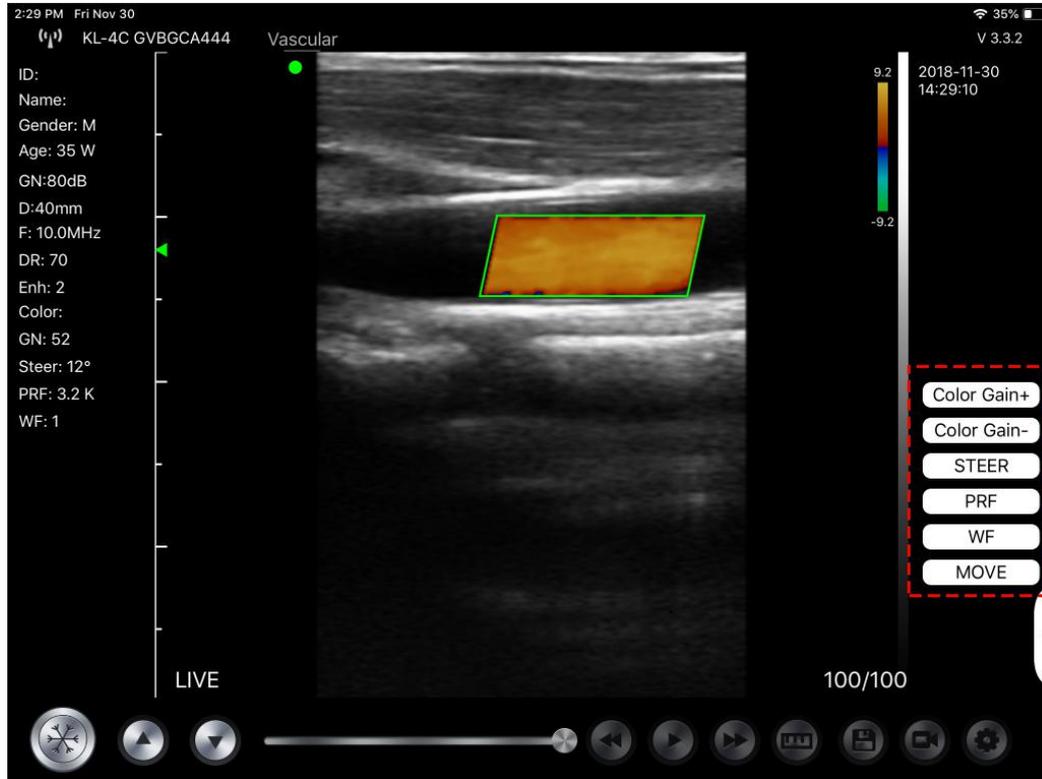
### 4.1.1 First level menu

1. Preset button
2. Hidden menu for parameters



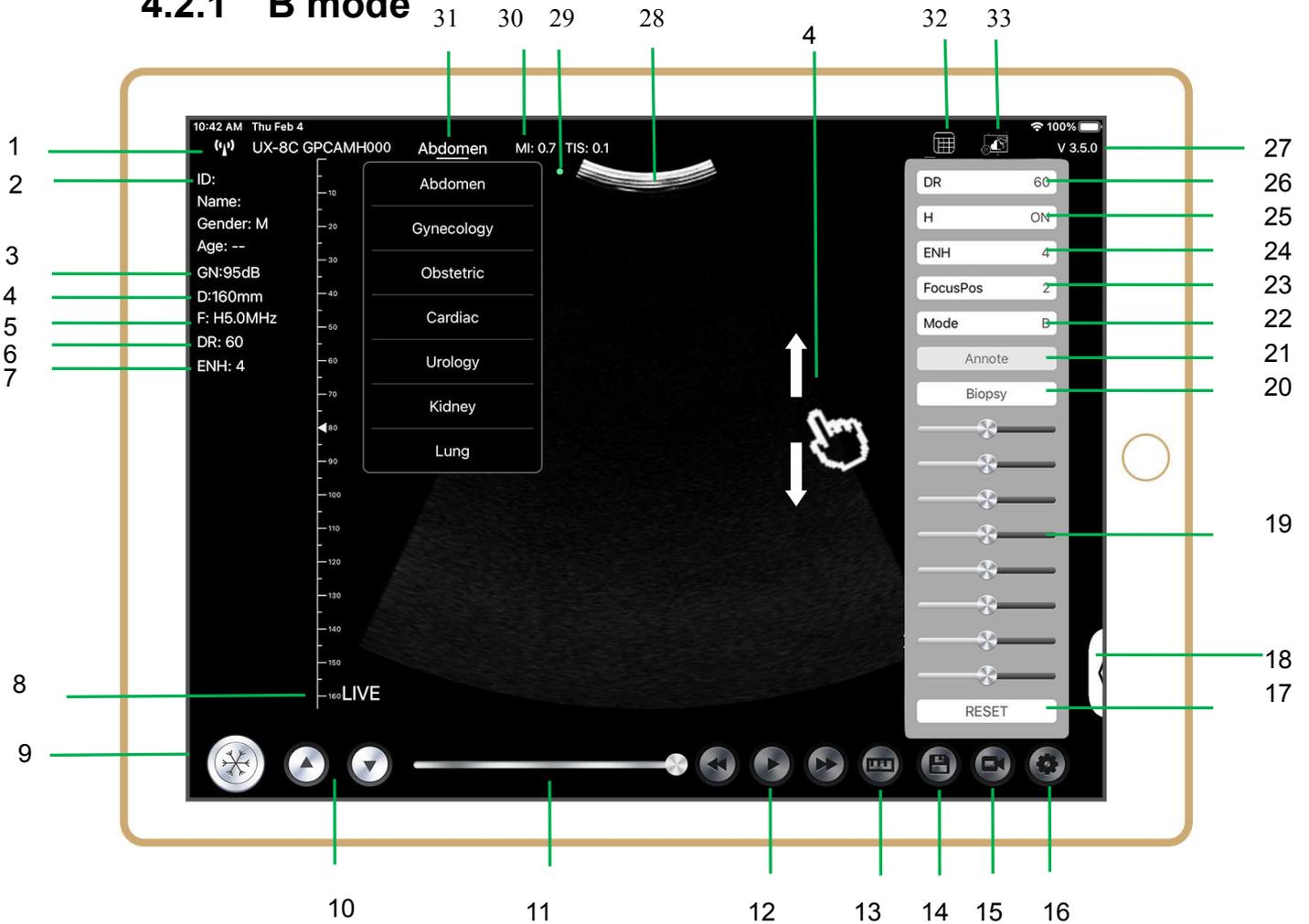
## 4.1.2 Introduction to the second level menu

The 2 level menu is controlled by clicking on the corresponding item of the 1 menu.  
This is the 2 level menu in Color mode.

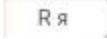


## 4.2 Operation Introduction

### 4.2.1 B mode



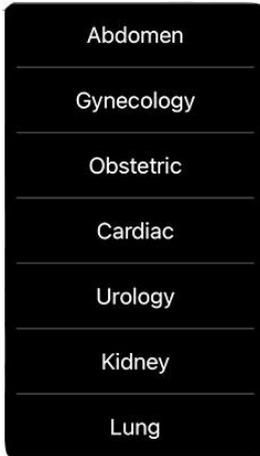
NO	Item	Description	Effects
1		Wi-Fi connection status	If the probe's serial number showed, connected successfully
2	ID	ID/Name/Gender/Age	Entering Patient Data
3	GN	Gain	Gain display
4	D	Depth	Depth display. While scanning, adjust the depth by swiping the screen with your finger
5	F	Frequency	Frequency display
6	DR	Dynamic Range	Dynamic Range display
7	ENH	Enhance	Enhance display
8	Live	Live/Freeze status	Live/Freeze display
9		Live/Freeze button	after power on and connect with the probe, it will be showed Freeze status, press this button again, the status will be live

10		Gain adjust button	Increasing the gain will brighten the image and you can see more received signals. However, noise may also be increased.
11		Manual cine review	Manual cine review
12		Manual cine review	Auto Review
13		Measurements	distance/area/obstetric measurement(Length,Angle,Trace, Area,Circumference,GA(CRL,BPD,GS,FL,HC,A C),EFW(BPD,FL)
14		Save a image	You can review the image in the your mobile device album
15		Save a video	You can review the video in the your mobile device album
16		Setting	WIFI channel setting, Cine frames setting
17	Reset	Reset 8 TGC	
18		Hidden button	Hidden menu for parameters
19		8 TGC	Adjust gains of different depth, Adjust the signal gain for the certain image area to get a balanced image.
	Biopsy	Enter/Exit Needle Guide	In-plane, out-plane
20		Invert /Rotation	To invert the image horizontally or vertically. U/D flip, R/L flip
21	An note	Adding Annotations	You can add annotations on any frozen image
22	Mode	change the imaging mode.	B, B/M, color, PW, PDI
23	Focus Pos	Focus Position	Click the Focus Position and tap it to get a clear image.
24	ENH	Enhance	Enhance the shape of the image to get a clear boundary.
25	H	THI	click it to change THI on/off, change the scan frequency
26	DR	Dynamic Range	This function is used to adjust the B image resolution to compress or expand the gray display range. The more the dynamic range, the more specific the information, and the lower the contrast with more noise.
27	V.3.5.0	The app version number	
28		Image display area	
29		Probe orientation marker	
30	MI, TIS		The Thermal Index (TI), Mechanical Index (MI), and Hz values
31	Present	Present selection	Tap it to change the present
32/	Data sheet	Image Browser	You should set Dicom in the Setting (No 16.)first.
33	Dicom	Dicom	

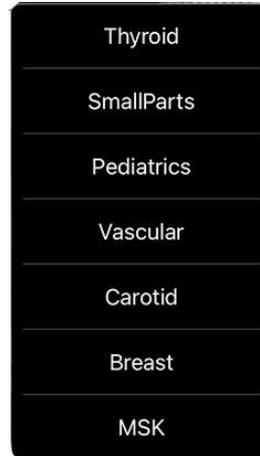
## Selecting Exam Present

Tap **No.31 (Abdomen)** to select the present:

Convex probe:



Linear probe:



## Switching Between Imaging Modes

Tap **No.22 (Mode)** to select the imaging modes:

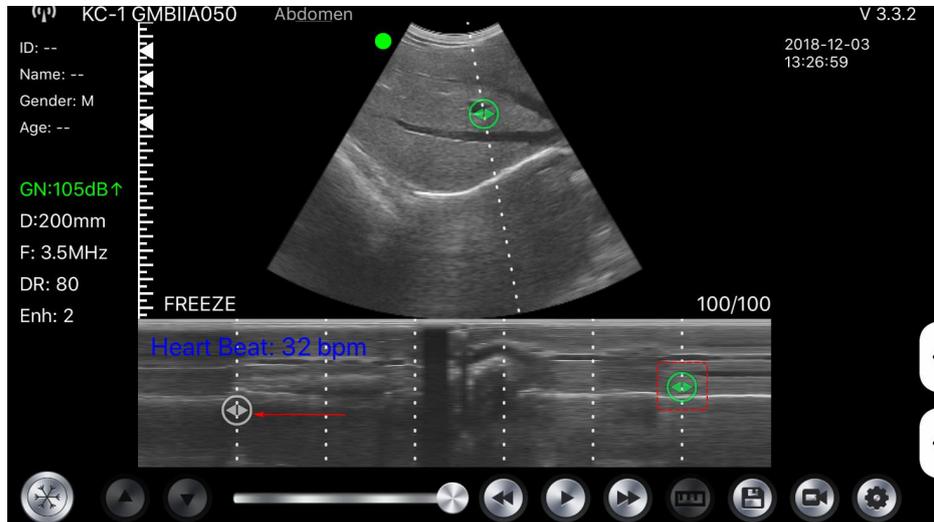


## Image Adjustment

Requirement	Available Operations
To modify the brightness	Adjust <b>No.10 Gain</b> Adjust <b>No.19 8TGC</b>
To modify gray scale image effect	Adjust <b>No.23 Focus Pos</b> Adjust <b>No.24 ENH</b> Adjust <b>No.25 H</b> Adjust <b>No.26 DR</b>
Zoom	Adjust <b>No.4 Depth</b>

## 4.2.2 BM mode

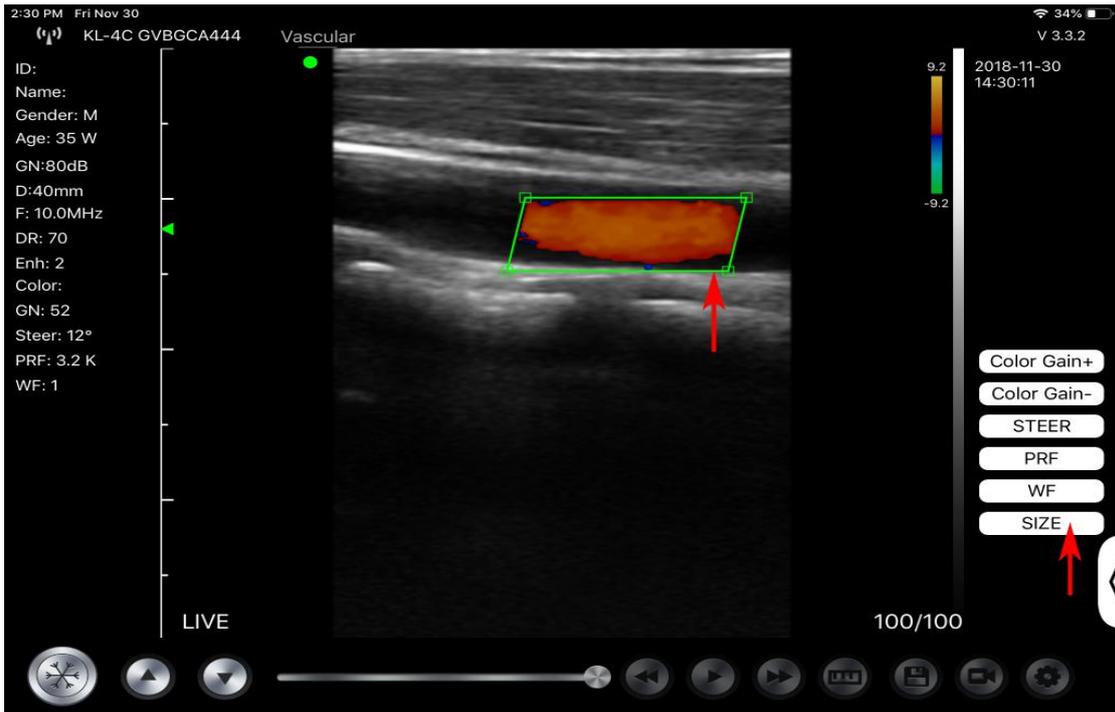
In BM mode, click the cursor two times, it will change green, you can adjust the position of the M sampling line by moving the following marks with your finger.



## 4.2.3 C mode

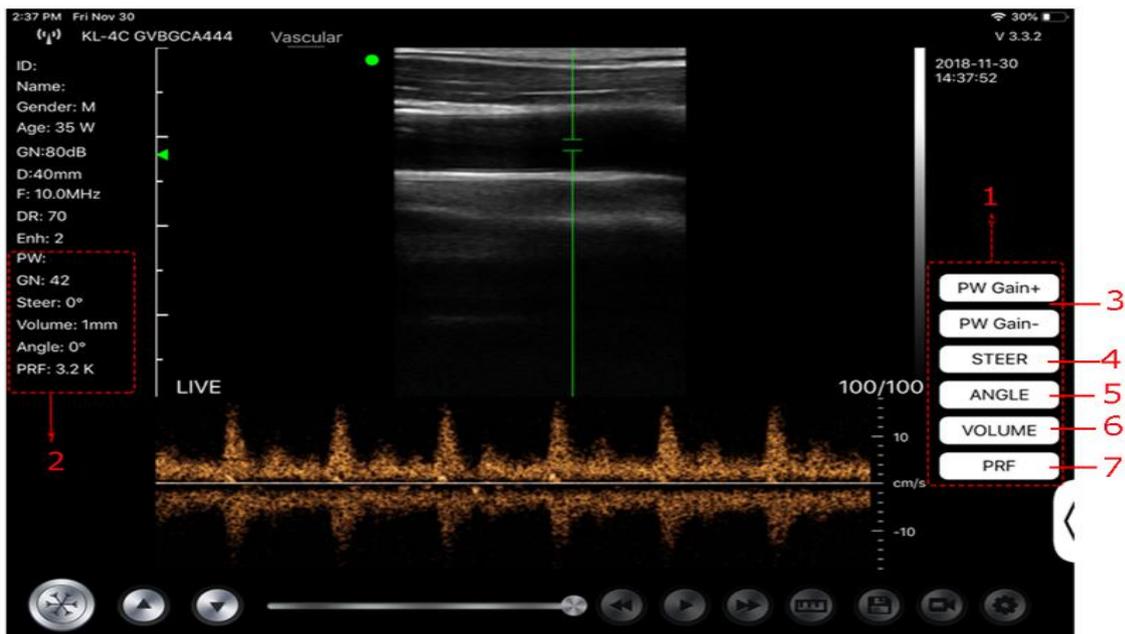
- 1). Second menu in color mode, click the buttons, the parameter will be changed
- 2). Parameters display area in color mode
- 3) Click this button, this button will be changed to button named "size", the \*\*\* can be adjust the size in this status as below
- 4) Increase+ or reduce - the color gain
- 5) Steer: afterglow adjustment
- 6) PRF: Adjust color pulse repetition frequency
- 7) WF: adjusting the filtering frequency of a pulse wave or continuous wave Doppler low frequency signal





## 4.2.4 PW mode

1. Second menu in PW mode,click the buttons, the parameter will be changed
2. Parameters display area in PW mode
3. PW gain: Increase+ or reduce - the pulse gain
4. Steer: afterglow adjustment
5. Angle: real-time scanning state, used to change the spectrum sampling line angle
6. Sampling volume: change the size of the sampling volume
7. PRF:Adjust color pulse repetition frequency



## 4.3 Measurements

General measurements refer to general measurements on images of B/C/PDI mode, M mode, PW mode.

To perform a measurement:

1. Tap  to freeze the image.

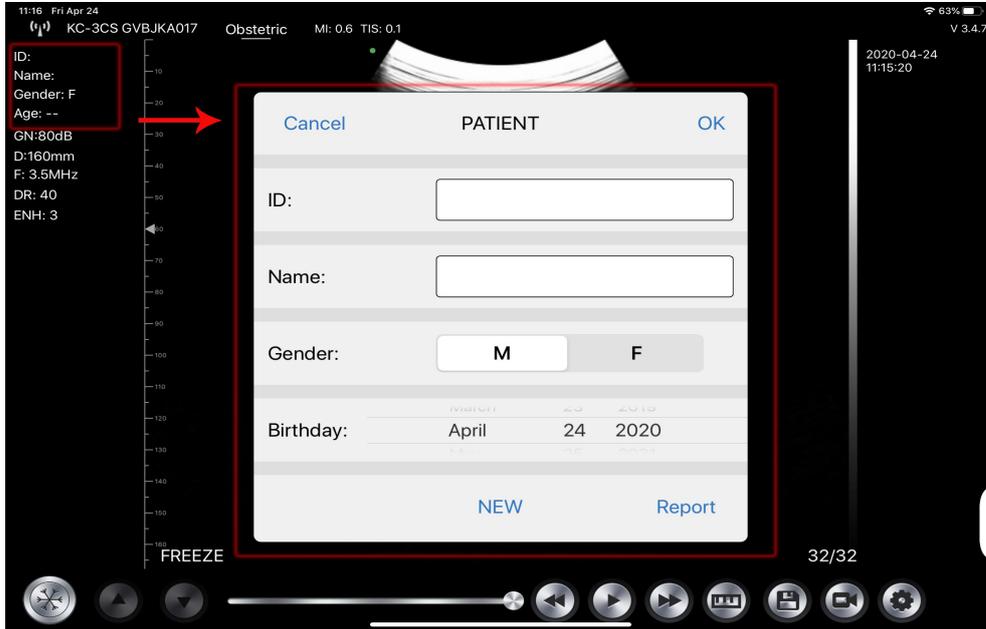
2. Tap  to access the measurement tools.

Mode	Measurement Tools	Available Operations
B/C/PDI	Length	Measures the length between two points of interest.
	Angle	The angle between two intersected planes
	Area/Circumference	Measures the distance between two points of interest.
	Trace	Measures the length of a curve on the image
	Distance	Measures the distance between two points of interest.
	GA(CRL,BPD,GS,FL,HC,AC) EFW(BPD,FL)	<b>Only for present: Obstetric</b>
M	Heart Rate(5)	Measures the time of tow cardiac cycles and calculates the heart rate in M mode image.
	Time	The time interval between any two points.
	Distance	The vertical distance between two points.
PW	Velocity	Calculate the velocity of the point in Doppler spectrum wave.
	Heart Rate(2)	Measures the time of tow cardiac cycles and calculates the heart rate
	S/D	Calculate the PE/SD and RI
	Distance	The vertical distance between two points.

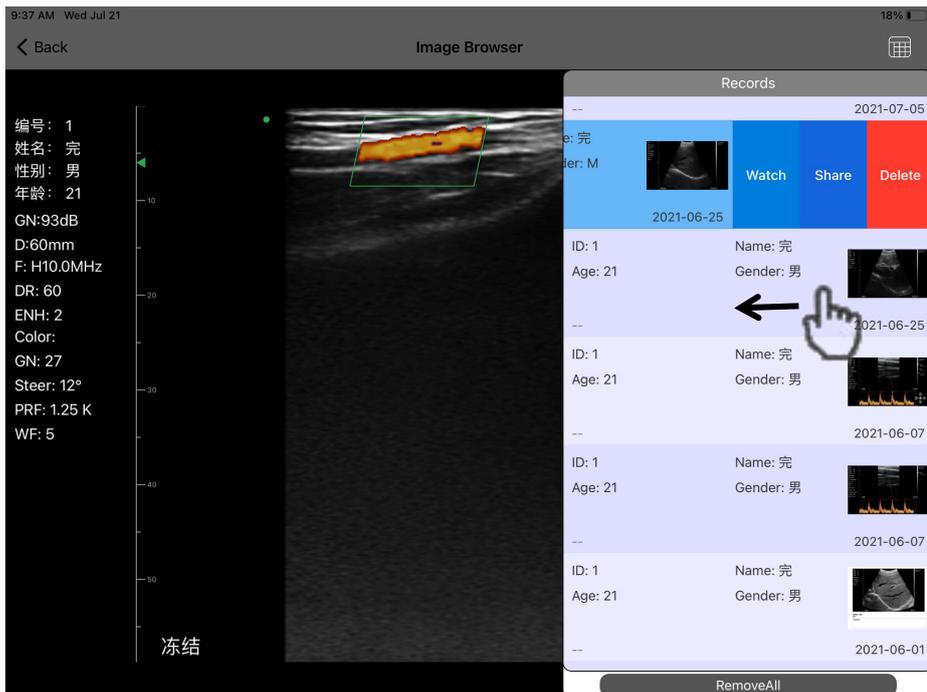
3. To delete a result, tap the result, then tap the **X** next to the corresponding numeric measurement display, and then tap Delete Line to confirm.

## 4.4 Patient's information and report

1. Click "ID" on the patient information enter the patient data input box.

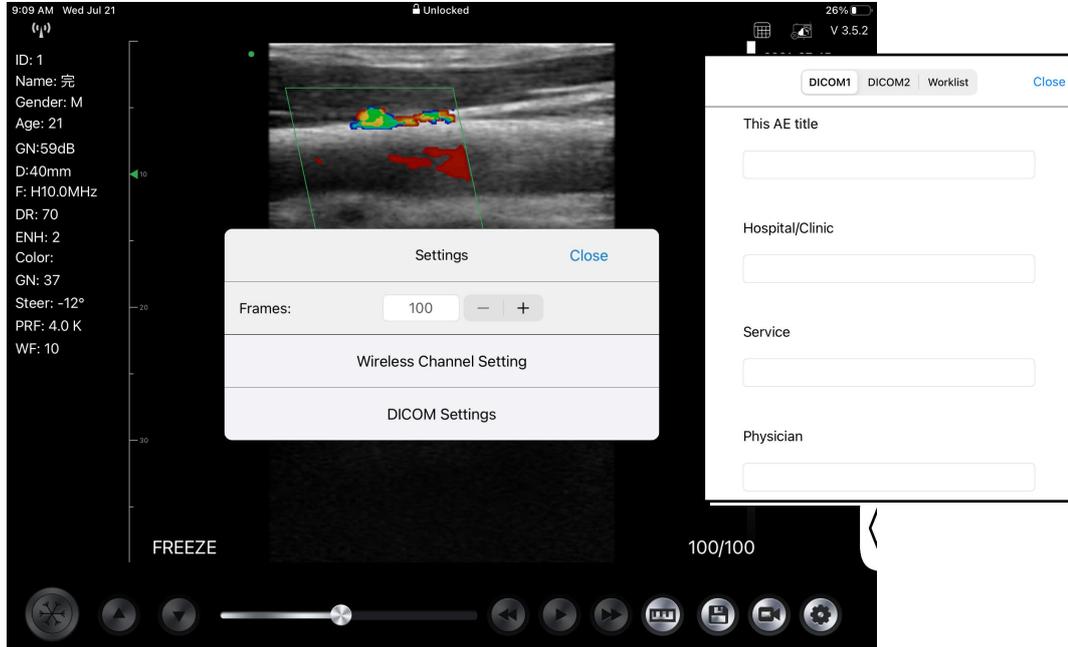


4. After editing the report, click  to save the report to the  Data Sheet . Please swipe to the left to browse the pictures/videos and report.

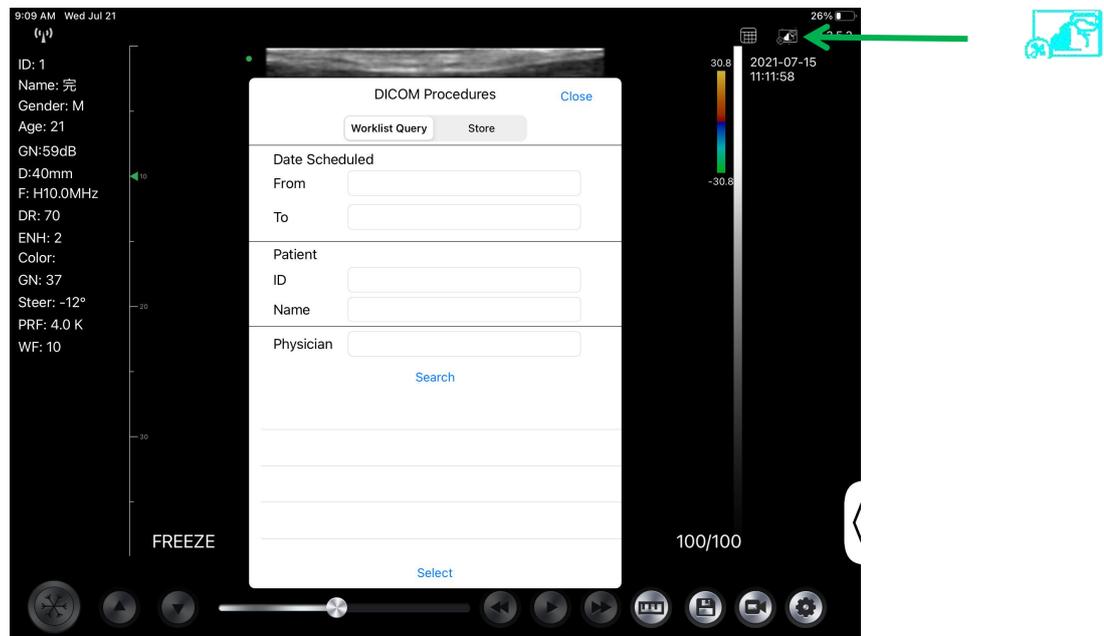


# 4.5 DICOM

1. Click setting , then press Dicom Settings.



2. Click , you can search and select patient info in the Worklist Query and Store.



# 5 maintenance and inspect

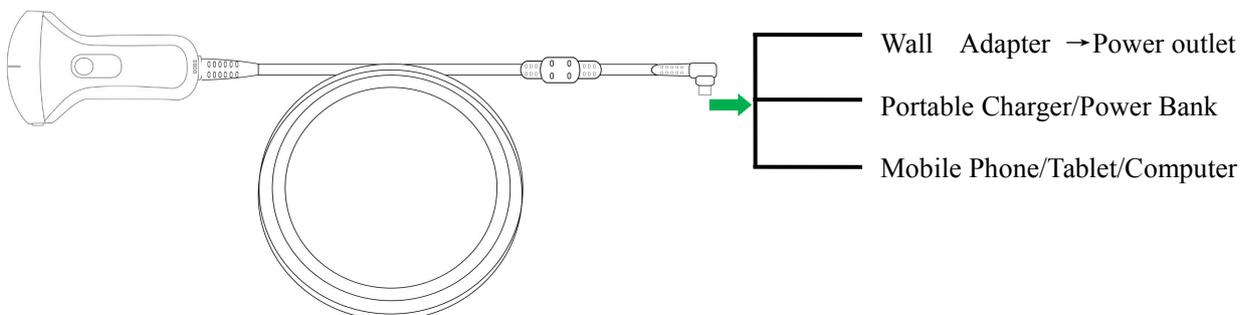
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## 5.1 Charging the probe

Charge the probe when the battery is low(one cell battery). When charging, the battery indicator flashes to indicate the current charge level. US suggest the probe should be charged when one cell battery showed. If the 4-cell battery indicator is on and the battery indicator stops blinking, the battery is fully charged.

### Charging by USB cable:

1. Pull out the rubber plug at the end of the probe.
2. Use our USB Type-C charging cable to connect the probe and wall adapter.(or other USB port that can provide the power supply such as a portable charger) as shown below.
3. Plug the wall adapter into a power outlet.



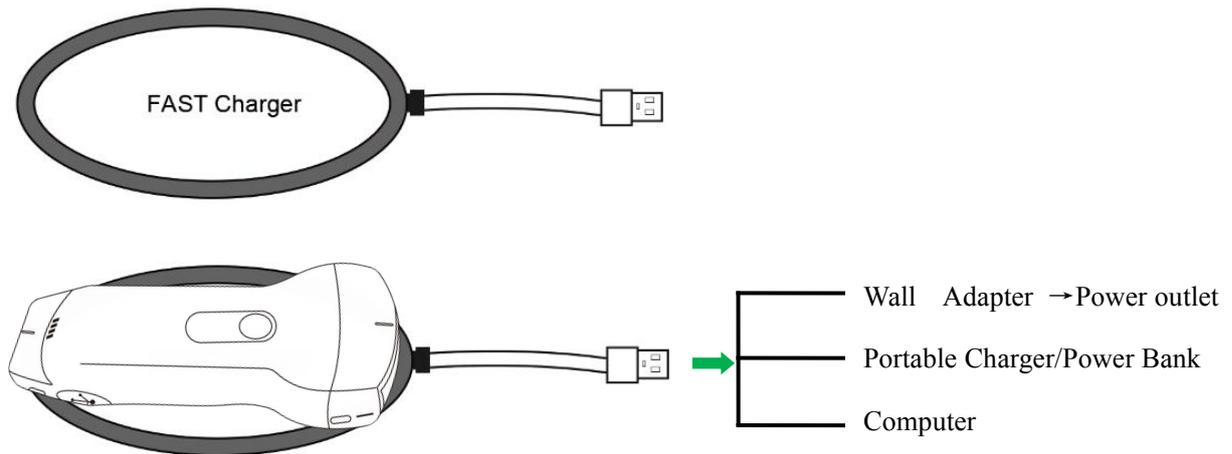
### Note:

- You can perform imaging while the probe is charging by Power Bank. (Just connect the probe to mobile device by Wi-Fi)
- When you connect the probe to your Mobile phone/Tablet/PC by type-c cable, the probe will be charged automatically.

## Charging by wireless charging pad:

The C10RL/C10UE/C10RQ probe support wireless charging.

1. Disconnect the probe from your mobile device.
2. Connect the Micro USB cable to the wireless charging pad.
3. Connect the USB end of the cable to the wall adapter.
4. Plug the wall adapter into a power outlet.
5. Place the probe onto the white wireless charging pad.



### Note:

- You can not perform imaging while the probe is charging by wireless charging pad.
- Make sure to place the probe on the charging pad so that it lies flat on the charging pad on a flat surface. Do not hang the charging pad or hang the probe from the charging pad.
- Ensure that the probe is properly placed on the charging pad so that the probe's battery indicator flashes blue and the charger indicator light is blue.

**CAUTION :**



- 1** If the probe will not power on after charging, it could indicate a battery failure. Contact Support.
- 2** A non-medical grade power supply must be used outside of the patient environment so that it is at least 1.5 meters from the patient.
- 3** The probe battery should be charged at least monthly to ensure proper functionality.
- 4** It is normal that the probe may feel warm to the touch while charging. If you remove the probe from the charging pad before or immediately after charging is complete, it is recommended that you allow the probe to cool down before use. Since the system limits patient contact temperature and will not scan at or above 43°C (109°F), allowing the probe to cool down before use will optimize scan time performance.
- 5** If the battery charge is too low (25% or less), you may not be able to perform a study until the battery is recharged. Keep the battery fully charged whenever possible.

## 5.2 Replace the battery

The battery of USB&Wi-Fi probe can't be replaced. If the probe cannot be charged or the probe cannot be turned on, please contact us.

## 5.3 Cleaning and Disinfecting the probe

### Cleaning the probe

1. Probe is an unit which is direct to contact with patient,so in order to avoid infection please close ultrasound exam system after finish each exam, then clean and disinfect (sterilize)probes as required.
2. Cleaning Please follow the cleaning introductions on the manual to do it.
  - a) Put on bacteria resistant gloves to prevent infection.
  - b) Use water to clean the probe, get rid of stains.You can also use suds and clear with Polyurethane Sponge.Avoid using a brush so as not to damage the probe.
  - c) After cleaning,use sterilization cloth or gauze wipe dry the probe.Do not oven dry it.

#### **Be careful:**

1. The probe must be cleaned after each use;
2. Do not use surgical brush to clean the probe, even if the use of soft brush may damage the probe, only use a soft cloth;
3. Always inspect the probe before and after cleaning, disinfection, or use. Check the lens face, cable, housing, seams, and connector for signs of damage such as cracks, chips, abrasions, or leaks. To avoid the risk of electrical hazards, do not use the probe if there is any sign of damage.



#### **WARNING:**

1. Do not put plug of probe into any liquid like water and antivirus solutions,or it will lead to electric shock or breakdown.
2. If you don't clear coupling agent after exam,it will freeze and impact probe's image quality
3. When cleaning and disinfection,do not put probe in high temperature condition(over 55°C),the high temperature may lead to probe incomplete and damage.

## Disinfecting the probe

### 1. High disinfection

Please follow the disinfection introductions on the manual to do it

a) Put on bacteria resistant gloves to prevent infection.

b) Please clear the probe before disinfection, the following disinfection solutions is recommended.

Chemical Name	Handing
<b>0.6% Sodium Hypochlorite</b>	Please follow introductions provided by manufacturer to do it.
<b>Germicidal Disposable Wipes</b>	
Alcohol-based disinfectant wipes containing	
<b>22% of hydrogen peroxide</b>	

### Note:

- Disinfection solutions' do's and don'ts, dilution and enrichment, disinfection methods and use process please follow the instructions from Manufacturers provide.
- Do not put plug of probe or it's tail end into any liquid like water and antivirus solutions,
- The shortest time of the probe immerse in disinfectant reference provided by the manufacturer(for example, the shortest time of the probe immerse in Cidex provided by the manufacturer is 12minutes.)
- Please follow the local rule to choose and use disinfectant,
- Use vast sterilization water to clear Chemical residues on probe(about 7.75 liter)at least one minute.Or use the method provided by disinfectant manufacturers to clear the probe.
- After cleaning,use sterilization cloth or gauze wipe dry the probe.Do not oven dry it.

## 5.4 Wear probe protection sleeve

In order to reduce the spread of the disease, it is necessary to take some protective measures. In clinic, the probe sheath is conducive to prevent infection. Strongly recommended in accordance with requirements of the sterile transducer sheath cavity inspection.

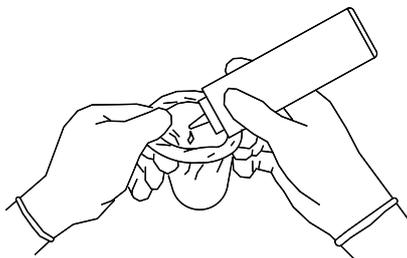
On the human body are examined using the probe to probe must be put on the probe set. Please use the protection cover market acceptance.

### **⚠️ CAREFUL:**

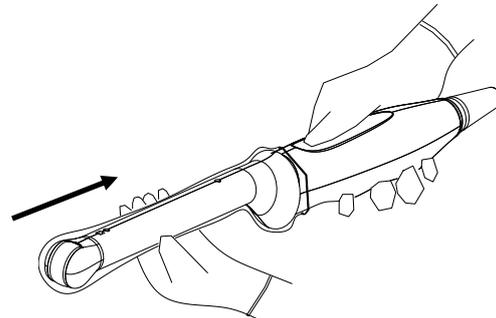
- 1. In order to avoid infection, in the inspection, the probe cover can only be used once.**
- 2. The probe sheath is made of natural latex and talc, which may cause allergic reactions in some people**
- 3. Do not use expired probe sheath. Check the probe sheath for expiration before using the probe sheath**

Operation procedure (for reference only):

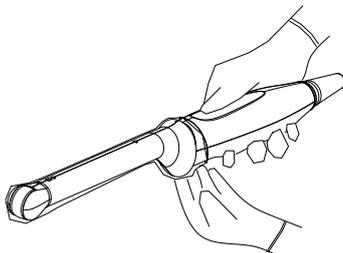
1. In the protective sleeve or inside the probe surface coated with an appropriate amount of coupling agent, without the use of coupling agent, the image is not clear.



2. To probe into the protective sleeve to ensure the sterility of the probe. The protective sleeve of the tension to remove wrinkles and bubbles, do not pull too far.



3. With the rope to ensure the protection of security.



4. Check the protective sleeve to ensure no damage

## 5.5 Storage

When not using the probe, please place the probe in a suitable package to avoid the impact of violent impact on the probe. And to avoid contact with the probe too high temperature (suitable storage temperature: 0 ° -40 °).

## 5.6 Inspect

Frequently check the probe cable, if found damaged, broken phenomenon, prohibit the use of immediate replacement or repair.

Regularly check the socket, the sound window parts, if found damaged, bubble phenomenon, prohibit the use of immediate replacement or repair.

Every time the main body and head of the probe to clean, disinfect (sterilization), are required to be checked, if found the above, please stop using, immediately replace or repair.

<b>⚠WARNING:</b>	<b>Equipment failure, Users are not allowed to repair without authorization. Product must be sent back to the company</b>
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## 5.7 Life cycle

According to the manufacturer's design, production and other related documents, this type of product life is generally 5 years, it depends on using frequency, it is possible to be used 6-8 years. constituting the product material over time will gradually aging, continue to use the products beyond the life of the post, may cause performance degradation and failure rate is significantly high.

<b>⚠WARNING:</b>	<b>The manufacturer will not be held responsible for the risks arising from the continued use of the product life cycle.</b>
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## 5.7 Troubleshooting

Here lists the troubleshooting issues and resolutions.

If you are unable to resolve an issue using Table-1, please note the issue and report it to Support for assistance.

<b>Table-1 Troubleshooting</b>	
<b>Connection issues</b>	
Display the error password	<ol style="list-style-type: none"> <li>1. The SN number of the probe is the wifi password, re-enter the password, The password's letters must be input as small letters, not capital.</li> <li>2. Try to connect to the probe with type-C cable.</li> </ol>
The probe can not connected to Mobile phone/tablet, but can work with laptop	<ol style="list-style-type: none"> <li>1. Please change the Wi-Fi channel with your laptop.</li> <li>2. Try to connect the probe to your mobile phone again.</li> </ol>
The probe can work by Wi-Fi, but can not work with Type-C	<ol style="list-style-type: none"> <li>1. The A-end and B-end of the cable can not be inserted reversely. The A-end must be fully inserted into the probe and the B-end must be fully inserted into the smart device.</li> <li>2. Try to connect the probe with the other side of the type-C A port interface</li> </ol>
<b>Probe issues</b>	
Probe can not be charged by cable	<ol style="list-style-type: none"> <li>1. The A-end must be fully inserted into the probe and the B-end must be fully inserted into the smart device.</li> <li>2. Charge the probe for 1h with wireless charger.</li> <li>3. If not work, pls contact support!</li> </ol>
Can not turn on the probe	<ol style="list-style-type: none"> <li>1. Charge the probe for 30 minutes firstly</li> <li>2. Try to turn on the probe again</li> <li>3. If not work, pls contact support!</li> </ol>
Can not turn off the probe	<ol style="list-style-type: none"> <li>1. Press and hold the probe's power Button for 15-20 seconds.</li> <li>2. Charge the probe</li> </ol>
<b>App issues</b>	
App can not turn on	<ol style="list-style-type: none"> <li>1. Delete and re-install the App</li> <li>2. Update the App</li> <li>3. Try to install the app to other mobile device</li> </ol>
App crashes	
App opens but will not scan images	<ol style="list-style-type: none"> <li>1. Make sure the probe is connected successfully</li> <li>2. Try to press the probe power button</li> <li>3. Re-install and update the App</li> <li>4. Charge the probe</li> </ol>

Black screen or screen no longer updates	<ol style="list-style-type: none"> <li>1. Close the App and restart the App.</li> <li>2. Unplug the probe from the mobile platform (mobile device) and reconnect.</li> </ol>
<b>Imaging issues</b>	
Image degradation or occurrence of image artifacts	Make sure you are using the appropriate preset and the depth is appropriate for the anatomy being scanned.
Image quality degraded	<ol style="list-style-type: none"> <li>1. Make sure you are using enough approved ultrasound gel. If quality does not improve.</li> <li>2. If not work, contact Support</li> </ol>
Image is nor clear	<ol style="list-style-type: none"> <li>1. Adjust the image parameters follow the page-24</li> <li>2. Use enough ultrasound Gel.</li> </ol>