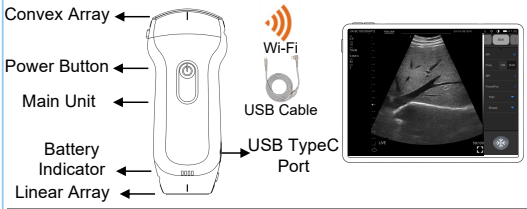
Portable Ultrasound Easy Operation Guide

1. Product Structure Composition



Probe Type	Application
Convex	Abdominal, OB/GYN, Urology, Lung, Cardiac
Linear	Small Parts, MSK, Nerve, Vascular access
High Freq. Linear	Small Parts, MSK, Nerve, Vascular access
Ultra High Freq. Linear	Facial aesthetics, Plastic surgery, Dermatology
Phase	Cardiac, Abdominal, Lung
Endocavity	OB/GYN, Urology
Micro Convex	Small Animal

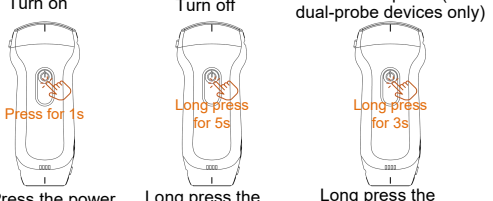
2. Download microVUE: Please use your browser to scan the QR code below to download and install.

iOS app

Android app

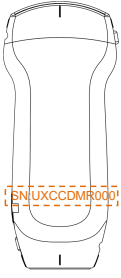
2.1 Software operating environment: Android 8.1.0 or above, iOS 12.3 or above.
2.2 Minimum hardware configuration: CPU: Qualcomm 865 or above, A11 or above.
Memory: 2GB RAM or above, 32GB storage memory or above.

3.Turn on/off/Switch the probe



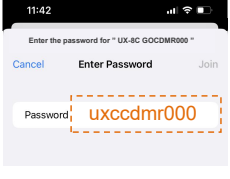
4.Connect Device

4.1 Wi-Fi Connection：



4.1.1
Find SN of your device. Such as SN: UXCCDMR000

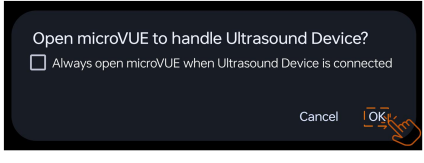
4.1.2
Choose SSID: ****CDMR000



4.1.3
Enter password, the password is the SN on the back of the device, enter it in **lowercase** not capital.

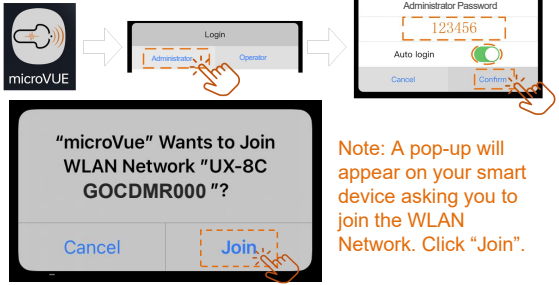
4.2 USB Connection (Only applicable to the device with USB connection function): Connect the ultrasound device and the smart device with a dedicated USB cable as shown.

Note: A-end must be fully inserted into the ultrasound device, and B-end must be fully plugged into the smart device.



Note: A pop-up will appear on the smart device asking whether to open microVUE to handle Ultrasound Device, click "OK".

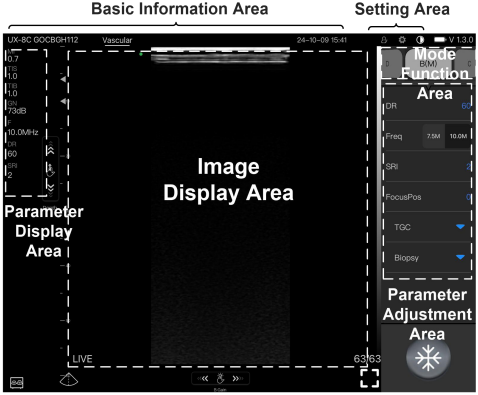
5.Login App: Open the app "microVUE", enter the login interface, select the Administrator or Operator (**Administrator is recommended**), and enter the initial password "123456". You can choose "automatic login" as necessary, then confirm, and enter the B mode scanning interface by default.



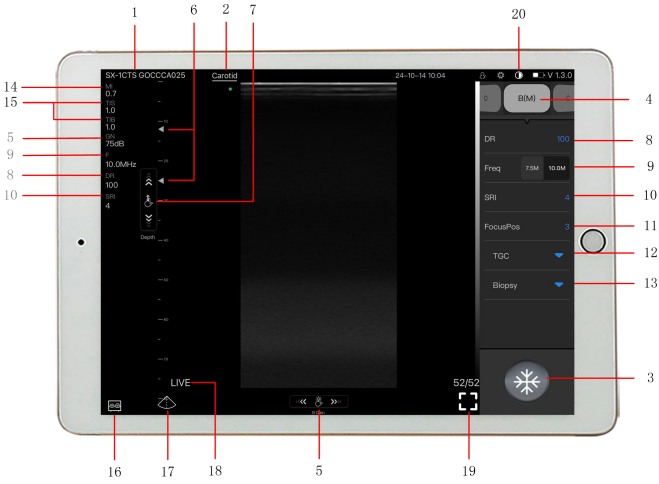
Note: A pop-up will appear on your smart device asking you to join the WLAN Network. Click "Join".

Note	1. It is recommended to turn off the Bluetooth function on the smart device to avoid affecting Wi-Fi transmission and causing image transmission to be stuck. 2. Android Smart Devices are recommended to turn on "Settings > Battery > Performance Mode" to optimize the fluency of the App.

6.Interface Layout

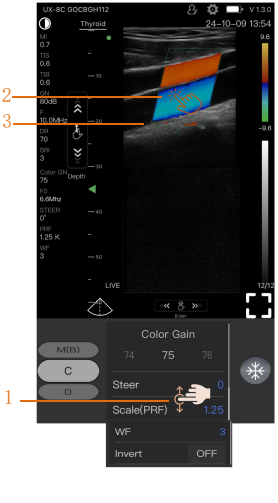


B Mode Live Display

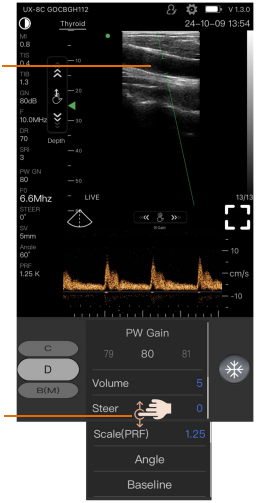


No.	Description
1	Ultrasound Device's Wi-Fi hotspot SSID number
2	Select the Preset Application
3	Freeze / Unfreeze: Click to switch between image freeze and live view status
4	Mode Switching: Slide left and right to switch between B\Color\PW mode, and click to switch between B and BM mode
5	B Gain (GN): Slide left and right to adjust the GN
6	Focus Position Indication
7	Depth: Slide up and down to adjust the depth range
8	Dynamic Range (DR): Adjust according to different application
9	Frequency (F)
10	Image Enhancement: For noise reduction
11	Focus Position: Linear array, fixed two focus, convex array one focus
12	TGC：Control the segment gain
13	Puncture Guidance Function: Optional in-plane and out-of-plane puncture guidance line
14	MI: Mechanical Index
15	TI: Thermal Index
16	Dual-screen Display
17	The Midline
18	Live / Freeze Display
19	Full Screen: Click to switch to full screen display
20	The Screen Brightness Setting

* Mode Switching: Slide to switch between B\Color\PW mode, and click to switch between B and BM mode



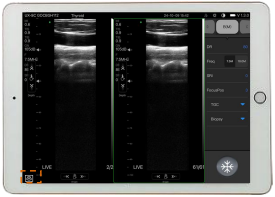
Color mode (C mode）



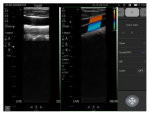
PW mode (D mode）

No.	Description
1	Color Menu: ①Color Gain, ②Steer, ③Scale(PRF), ④WF, ⑤Invert
	①Color Gain: Adjust the color gain
	②Steer: Adjust the angle of the color box
	③Scale(PRF)：Adjust the pulse repetition frequency
	④WF: Adjust the wall filter
	⑤Invert: Color code flip
2	Color Box Position: Single-finger touch and slide to adjust the position of the color box anywhere in the screen image display
3	Color Box Size: Single-finger touch any of the four right corners of the color box and slide to adjust the size of the color box
4	PW Menu: ①PW Gain, ②Volume, ③Steer, ④Scale(PRF), ⑤PW Correction Angle, ⑥Baseline
	①PW Gain: Adjust the color gain
	②Volume: Adjust the sampling volume
	③Steer: Adjust the Angle of the PW sampling line
	④Scale(PRF): Adjust the pulse repetition frequency
	⑤PW Correction Angle: Adjust the sampling gate angle
	⑥Baseline: Adjust the zero position of the frequency spectrum
5	PW Sampling Gate Location: Slide on the screen to adjust the position of the sampling gate

* Dual-screen Display: Click to switch between dual and single screen. In dual-screen display, clicking left/right screen can switch between B/BM/C/PW modes



B+B mode

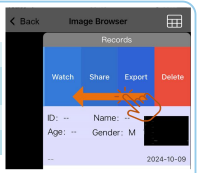


B+C mode

C+PW mode

Data Table

Watch	Click Watch and check record
Share	Print/share data by other apps, save image (iOS)
Export	Export saved data in the App
Delete	Delete saved data in the App



How to save data to the Photo Album	**iOS**: Click Share>Save Image, data can be viewed in the Photo Album **Android**: Click Export, data can be viewed in Photo Album
How to view exported data's location	**iOS**: Files>My iPad>microVUE>Corresponding date folder **Android**: File Manager>Internal Storage>DCIM> microVUE>images/movies

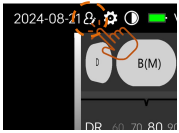
7.Freeze

	Measurement: Distance, Heart rate, S/D, etc.
	Annotation: Add annotations on frozen image
	Automatic video playback
	Manual video playback
	Save image/video
	Data Table: View saved images/videos. Swipe left to view, share, export or delete saved data, can be saved in jpg, dcm or mp4 formats
	DICOM: Store patient image information

Note	1. If the device is turned off during measurement, all unsaved data will be lost. 2. During measurement, once the freeze state is released, all measurement information on the image will be deleted.

8.Setting Area

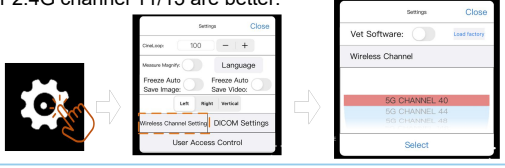
8.1 New / Edit Patient



8.2 Setting

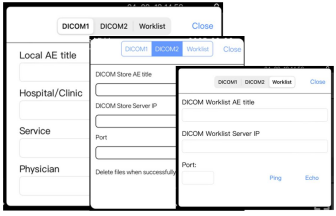
Cineloop	Adjust cineloop frames to 100/200/500/1000
Measure Magnify	When the function is turned on, smaller targets can be measured more accurately
Language	Can be set to Chinese, English, Spanish, etc.
Freeze Auto Save Image/Video	After turning on the function, the scanned image/video can be automatically saved in the freezing state
Left/Right /Vertical	Adjust the viewing direction of the screen
Wireless Channel Setting	For Wi-Fi channel setting
DICOM Setting	Store patient image information
User Access Control	Specify who can access and use specific data and resources under what conditions

8.2.1 Wi-Fi Channel Change: Wi-Fi channels are set by the manufacturer. When the image discontinuous, it means the channel is crowded. You can select another channel, restart the device and reconnect. Usually 5G channel 40/165/149, or 2.4G channel 11/13 are better.



8.2.2 DICOM Setting

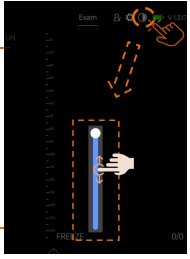
DICOM Settings



8.3 Screen Brightness Adjustment

Click the brightness icon in the upper right corner

The brightness bar will pop up, and slide it up and down to adjust the screen brightness. It's recommended to adjusting to the highest setting



9. Charging

9.1 Wireless Charging: If there is a wireless charging logo on the back of the device, it can be charged wirelessly.

9.2 Wired Charging: If the device has a USB TypeC port, it can be charged via cable.

10. Maintenance

Main unit maintenance	(1) The device should not be turned on and off frequently. (2) When the device is not used for a long time, it should be cleaned and placed in the packaging box for safekeeping. (3) When the device shell needs to be cleaned, it should be wiped with a soft cloth when it is turned off.
Probe maintenance	(1) Do not use the probe if it is cracked, broken or damaged. (2) The probe is not a watertight structure and must not be immersed in any conductive liquid to avoid corrosion of the probe.
Probe cleaning and disinfection	(1) Do not clean or disinfect the probe when the device power is turned on. (2) Wipe the probe with a soft cloth. (3) Liquid chemical disinfectants that comply with local regulations must be used to disinfect the probe. (4) Do not immerse the entire device in water, disinfectant or other liquids, otherwise it may cause leakage or probe failure.
Battery maintenance	(1) If the device is not used for a long time, it should be charged and discharged once a month. (2) It can be used normally only after charging is completed. (3) The device contains a built-in lithium battery so it cannot be placed near or into a fire source to avoid explosion. (4) The user cannot replace the built-in lithium battery of the instrument by himself. It must be replaced by the manufacturer.

11.Troubleshooting

Failure Problem	Solution
No response after press power button	Charge.
The charging light does not flash when charging	(1) Adjust the position of the device and wireless charger, align with the coil, or try another wireless charger. (2) Plug in the USB plug tightly; try another USB cable. (3) If the battery is over-discharged, the probe needs to be charged for a long time (more than 1 hour) to activate the battery, and then it can be charged normally.
Android tablet can't find probe Wi-Fi hotspot	(1) Use iPad connect device to modify the Wi-Fi channel to 2.4g. (2) Replace the Android tablet which support 5g Wi-Fi or buy 5g Wi-Fi network card. (3) Usually use 5G channel 40,165,149, or 2.4G channel 11,13.
The tablet finds the probe Wi-Fi hotspot but can't connect correctly	(1) Check whether the password input is correct, enter lowercase letters not capital. (2) Check whether the device is automatically connected by other tablets, if so, please exit.
After correctly connecting the probe to Wi-Fi, open the software and the interface displays normally, but there is no ultrasound image	Unfreeze.
The image is very dark	(1) Turn on the display brightness button in the upper right corner to increase the brightness. (2) Increase gain or TGC. (3) Apply gel on the contact surface between the probe and the human body.
The image quality is abnormal	(1) Select the appropriate preset application mode. (2) Adjust parameters such as frequency, focus position, gain, and image enhancement, etc., as needed.
Snow-like interference on the image	There may be electromagnetic interference caused by other devices activated nearby. Turn off the device or move away from the device.
Image is choppy	You can try to switch to other channels, the commonly used channels are 5G 40/149/165 or 2.4G channel 11/13.