**Hand held Ultrasound Scanner Specification**

**MX5 plus**

## System Specification

* 1. **Product name：**MX5 Plus Pocket Color Doppler Ultrasound
  2. **Application:** The device can be used for clinical ultrasound examination of gynecology, obstetrics, abdomen, urology, peripheral blood vessels, small organs, musculoskeletal, neurological, and pediatrics.
  3. **Ultrasound platform:**

**Harmonyos/Android**: 8.0 (API 19) or greater and devices which have the following architectures: x86, x64, and ARM;

**Qualcomm 820 above, or Huawei kirin960 above**.

PC **:** Windows 8.1 above; CPU Intel(R) Core (TM) 45 Elite above.

* 1. **Applicable pad or phone (Tested)**  Phone: HUAWEI：Nova 8, P40 ,Mate 40; SAMSUNG： S21,S10, Z Flip 5G, S9、S9+、MI: MI 11 Ultra, MI 11 Pro;

Pad：HUAWEI：HUAWEI MatePad Pro M5/M5 Pro; SAMSUNG：Tablet S3、Tablet S6

* 1. **Promising design** 180g,ultra-light and thin, agile mobility, Remote control

USB-C transducer with replaceable cable

3rd party ultrasound integration

Splash-resistant design for reliable cleaning and hospital grade disinfectants.

* 1. **Overview**

Imaging Modes: **M-mode, B-mode, Color Doppler, Power Doppler, Pulsed Wave Doppler**

Frequency 2-15Mhz

Dimensions: 114 x43x23mm, Weight: 368g,Probe Button: 1

Controls: Depth,Gain

Channels：Receiving on 32 channels

Elements：128

Gray scale levels: 256

Dynamic range: 120dB

Frames rate: 26/frames

Scanning depth: Min/max scan depth 1cm / 31cm

**1-year warranty,no hidden fees**

* 1. **Trustworthy Imaging**

Advanced MSK

High resolution imaging for shallow applications: Soft Tissue, Vascular, Superficial, Musculoskeletal, and Lung;

Center line marker, also deeper applications: abdominal, gall bladder, OB/GYN and lung imaging preset optimizations;

### iBTech+ platform;

Advanced harmonic imaging;

Probe S-crystal technology: broadband frequency response and higher sensitivity;

Versatile and easy to use,ready when you are;

Broadband curved/linear array transducer(15 to 1 MHz operating frequency range);

Ideal Application: Gynecology, obstetrics, abdomen, vascular, pediatrics, small parts, vascular, musculoskeletal, superficial, vascular, urology

## Imaging technologies

Full-domain synthetic aperture Beam-forming

Real time point by point dynamic Receiving focusing

Real time dynamic receiving apodization

Forward and reverse pulse harmonic imaging technology

Adaptive speckle suppression imaging

Digital beam formation channels：64

## 3. Image mode: B, D, C, M

### **B image mode:**

Brightness: 0-100, adjustable

Scanning depth: Max 240mm (convex probe), adjustable

TGC adjustment: 6 segments adjustable

Contrast: 45db-80db

Enhance: 8 level adjustable

Map: 8 level adjustable

Pseudo color: 8 level adjustable

After glow: 4 level adjustable

Frequency: high resolution, high penetration

Image flip: up/down, left/right

### **B|B: Single real time**

### **C image mode:**

Brightness: 0-100, adjustable

Wall filtering: 5 level adjustable

After glow: 5 level adjustable

Velocity: 8 level adjustable

Deflection: 5 level adjustable

Priority: 5 level adjustable

Mode: blood flow, enegy

Map: 12 level adjustable

Reverse: whether to flip

3.4 **D image mode:**

Brightness: 0-100, adjustable

Contrast: 20db-60d

Velocity: 8 level adjustable

Baseline: 7 level, adjustable

Wall filtering: 3 level adjustable

angle: -80°-80°

Refresh rate: 3 level adjustable

Deflection: 5 level adjustable

Sampling door: 4 level adjustable

Reverse: whether to flip

Maximum frame rate: 15 FPS

Grayscale level: 256

System ADC: 12 bits

Cine playback: 200 frames, automatic and manual

## Function area

Screen: support horizontal and vertical display

Puncture guide: with center guide line, grid display

General measurement: Distance, Circumference, area, volume

Body mark: more than 100 types of body mark, position markable with probe and angel adjustable.

Comments: support to add, revise and delete comments

Arrow mark: position and angel adjustable

1. **Measurement & Calculations**

### **General measurement:** 2 D and PW measurement

2 D measurement: Distance, Circumference, area, volume

PW measurement: velocity, heart rate

5.2 **Obstetric measurement:**

Obstetric general measurement

Support fetal weight calculation

Auto-calculation of fetal age

Fetal growth and development curve

The expected date of calculation

Complete obstetric measurement report

## Storage and data processing

### **Screen information:**

Probe name

Exam type

Patient ID

Measurement button

Comment button

Freeze button

Save button

Image mode

Image parameters

Battery level

Grid line

Center line

### **Status management and storage:**

Support patient information input, modify and search

Patient report generate, export and print

By USB or hard disk

Capacity of disk: 64G or128G

Image format: JPG

Cine format: MP4

## Connectivity

Software Language: Chinese, English，other language customized

Support wifi internet and DICOM 3.0 net transmission

## Probe Specification

### Probe Type: convex probe, linear probe, micro-convex probe, **Trans-vaginal probe，Phased array probe**

### **Convex probe (C5-2)**

Application: Abdomen, Obstetrics, Gynecology, urology, peripheral blood vessels, Nerve, Musculoskeletal.

Central frequency: 3.5MHz

Frequency bandwidth: 2.0 - 5.0Mhz

Radius: R60mm

Depth: 6-24cm

Size：118x74x27mm

Weight：180g

### **Linear probe (L10-5)**

Application: Small parts, MSK, Nerve, Vascular, Carotid, P-Arterial, SMP, Thyroid, Breast, Testicle, SmEye, ABD.

Central frequency: 7.5MHz

Frequency bandwidth: 5.0- 10.0Mhz

Length: L38mm

Depth: 2-21cm

Size：111x57x22mm

Weight：141g

### **High frequency linear probe (L14-6S)**

Application: Small parts, Vessels, MSK, Nerve, Vascular, Carotid, P-Arterial, SMP, Thyroid, Breast, Testicle, SmEye, ABD

Central frequency: 8.0MHz

Frequency bandwidth: 6.0-14.0Mhz

Length: L25.6mm

Depth: 2-21cm

Size：113 43x22mm

Weight：141g

### **Mirco-convex probe (C8-4)**

Application: Abdomen, pediatric, Vascular, ABD

Central frequency: 6.0MHz

Frequency bandwidth: 4.0-8.0Mhz

Radius: R15mm

Depth: 2-18.4cm

Size：114 x43x23mm

Weight：137g

### **Mirco-convex probe (C7-3M)**

Application: Abdomen, pediatric, Vascular, ABD

Central frequency: 6.0MHz

Frequency bandwidth: 4.0-8.0Mhz

Radius: R20mm

Depth: 2-18.4cm

Size：114 x43x23mm

Weight：137g

### **Trans-vaginal probe（E9-4）**

Application: gynecology, Early OB, Urology

Central frequency: 6.5MHz

Frequency bandwidth: 4.0-9.0 MHz

Radius: R10mm

Depth: 2-18.4cm

Size：114 x43x23mm

Weight：137g

1. Elements

### 8.8 Software settings

Screen saver: 5min, 15min, 30min, 45min, never

Hospital name:

Show center line: yes or no

Show table line: yes or no

Image size: Full screen or Image area

Probe parameters: yes or no

Probe parameters position: Left or right

Operation mode: Horizontal, Vertical or adaptive

## Product configuration

Standard configuration: MX5 plus Probe (main unit included), User manual, Carrying case

Optional accessories:10.1-inch tablet with USB line, adapter, protect cover and shoulder straps

## Technical support, Repairing, Training and Others

In main city, local spear parts warehouse and local engineer supporting installment, commissioning and maintenance.

Professional on-site operation and training

## Other business terms：

The manufacturer of the product with the international environmental certification.