



# DW-T50

P e r f e c t   O b s t e t r i c   A s s i s t a n t





# 5D ultrasound that you can afford

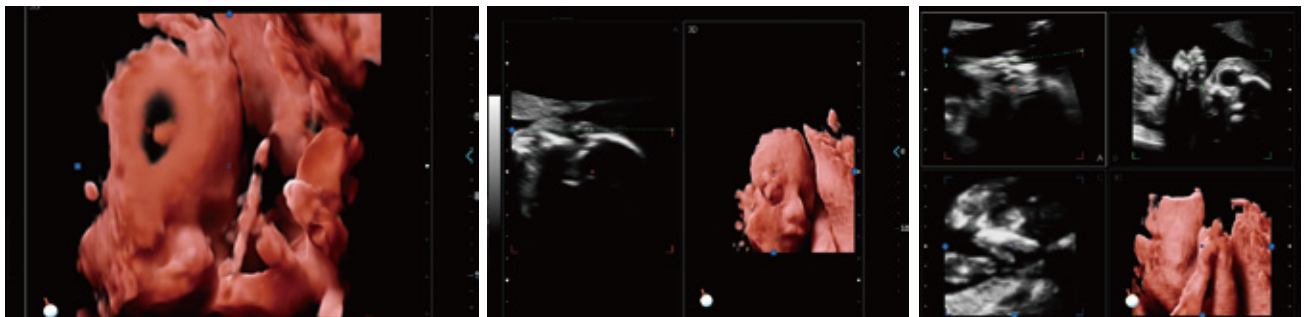
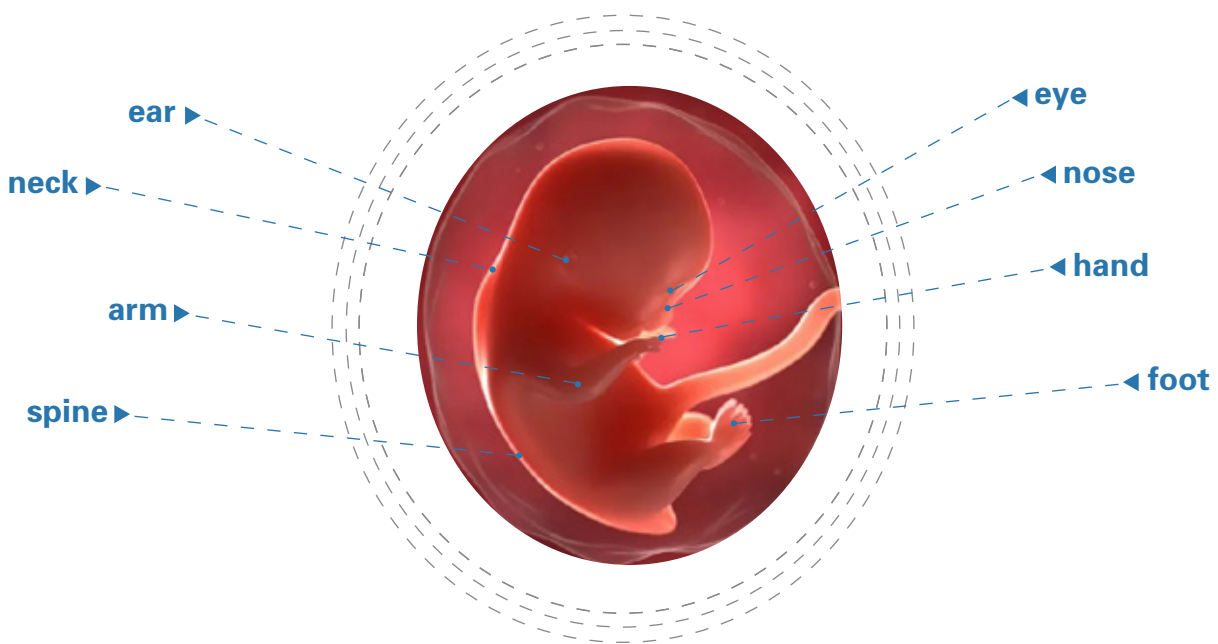
DW-T50 equipped with a high-resolution medical display, adopts multi-beam parallel technology and sub-array element transducers, and its superior image clarity perfectly meets the needs of women's health care. At the same time, DW-T50 relies on the realistic RealSkin 5D ultrasound technology and abundant measurement packages to better protect women's health.



# What is HD Live ( 5D ) Technology?

Ultrasounds with 3D/4D imaging have been around for years, but the HD live (5D) ultrasound technology uses a unique and moveable light source inside the probe that not only provides both 3D and 4D imaging, but “lights up” the baby, making it possible for soon-to-be-parents to see the facial expressions of their child, and even watch their baby yawn, wink and smile.

An HD live (5D) ultrasound provides impeccable views of your baby by providing better depth perception. We can change the position of the light and more clearly see the baby’s lips, nose and eye lids.



## Real skin rendering

Real skin rendering adopts 4D ultrasonic images plus spatial dimension parameters to obtain more three-dimensional and realistic 4D images, which surpasses most of the limitations of traditional gray-scale ultrasound.



# Smooth Workflow

The whole is elegant and beautiful, the diagnostic measurement package is rich and comprehensive, and the operation process is simple and fast.

## Expandable

- Four fully activated probe interfaces. USB image storage export. Can connect external monitor and printer.

## Efficient

- Built-in file information management system can record the number, name, check number, check date, and so on, and can search through the number, check number, name and so on.
- The diagnostic report can be edited, ultrasound diagnostic image can be embedded in the report, and directly printed.



## Simple

- Integral small keyboard, easy to operate. Probe storage tank free combination.

## Superior

- Main screen is 21.5-inch and auxiliary screen is 13.3-inch medical ultrasonic touch screen, to meet the needs of doctors from different angles.
- The full use of touch screen can reduce inaccurate operation caused by button contact and pressing, and minimize user fatigue.

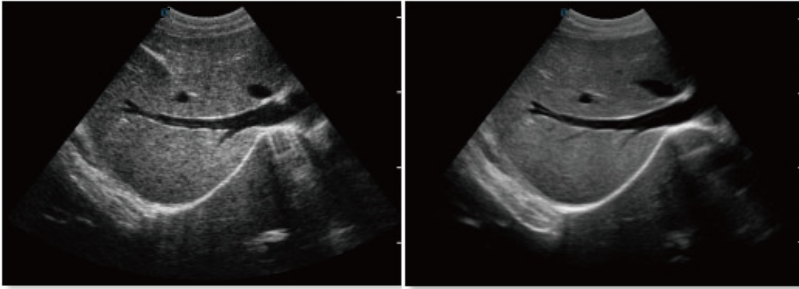


# Imaging Features

The whole is elegant and beautiful, the diagnostic measurement package is rich and comprehensive, and the operation process is simple and fast.

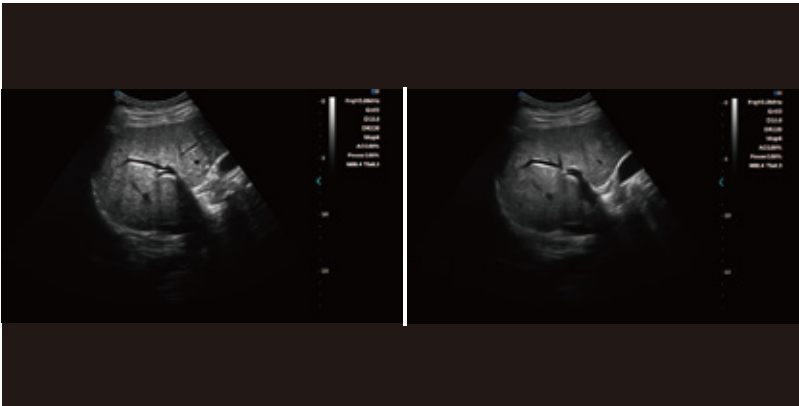
- **Trapezoid imaging**
- **Spatial composite imaging**
- **Spectrum pulse Doppler**
- **Tissue harmonic imaging**
- **DPDI**
- **Real-time triplex**





### ◀ Micron imaging technology

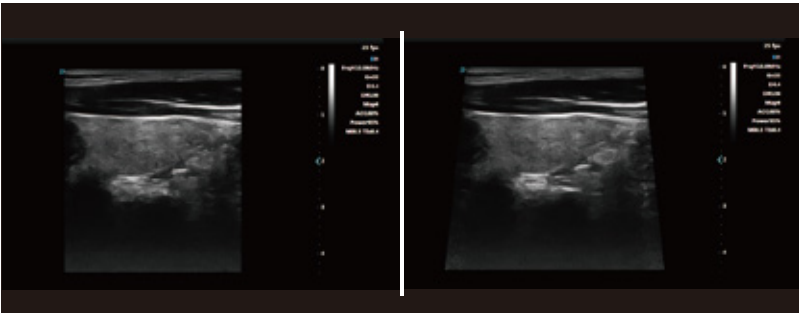
Micron imaging technology, real-time tracking of specific signals at the edges of different tissues, to achieve edge enhancement, and monitor each pixel at the same time; optimize the internal signal of the organization and perfectly integrate the edge information and the internal pixel information of the organization to restore the real and delicate, excellent level contrast Two-dimensional image.



### ◀ Harmonic imaging technology ( THI )

It improves image clarity by improving tissue contrast resolution, spatial resolution, and eliminating near-field artifacts. It is mainly used for the diagnosis of cardiovascular and abdominal diseases. It plays an important role in evaluating the lesion area and boundary division of patients with imaging difficulties. The technology has been fully approved by clinicians.

Harmonic technology retains the second harmonic signal to the greatest extent based on removing the fundamental signal, which increases the signal strength by more than 30% compared with the traditional signal processing, reduces noise and artifacts, and improves the contrast resolution of tissue images.



### ◀ Trapezoid imaging

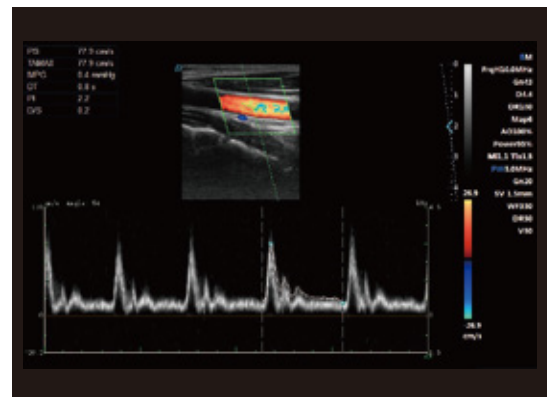
Trapezoid imaging is a kind of expanded imaging, which is transformed into a trapezoid based on the original rectangle, and the left and right sides are expanded to a certain extent, achieving a wider field of view.

The principle of ultrasound imaging is to scan the human body with ultrasonic sound beams, and obtain images of internal organs by receiving and processing the reflected signals.

### Automatic spectrum tracking measurement technology ▶

Ultrasound Doppler technology is used in the ultrasound system for examining the heart and arteries and veins. It is necessary to extract relevant parameters from the Doppler spectrogram to evaluate the hemodynamic status of the heart and blood vessels. The disadvantage of manual detection is that the operator's marking of the peak velocity is relatively monotonous and time-consuming, with poor repeatability and low estimation accuracy; and during the detection, in order to mark the peak velocity, the operator needs to interrupt the acquisition of Doppler signals, which makes it impossible to estimate in real time.

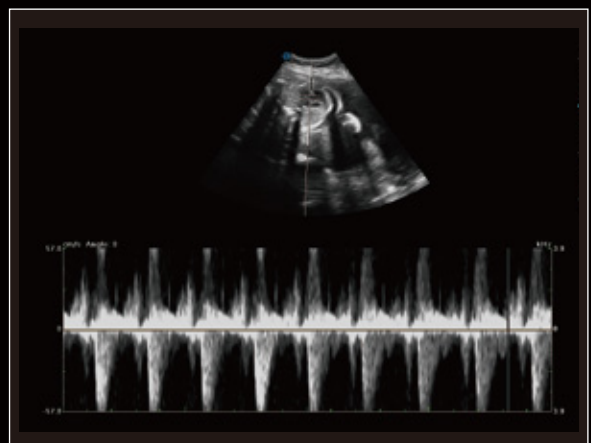
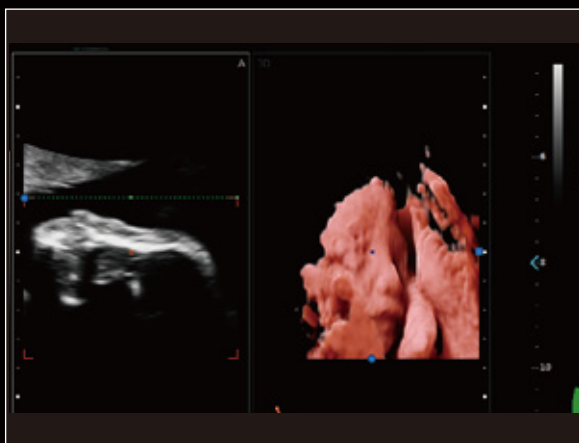
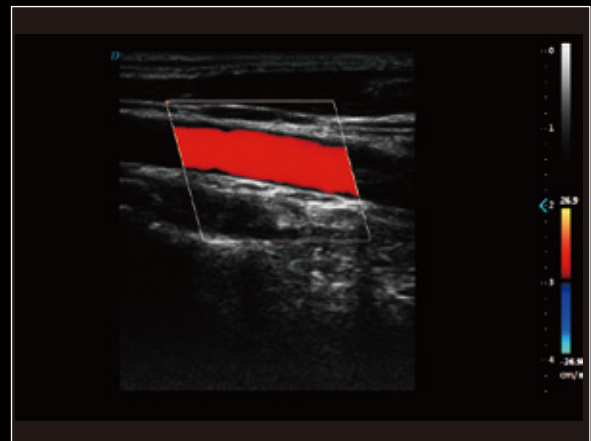
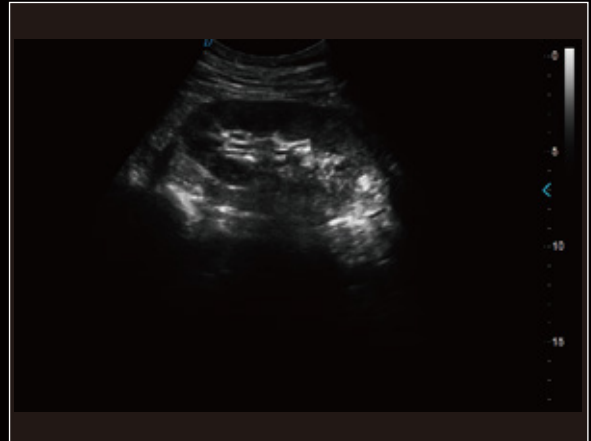
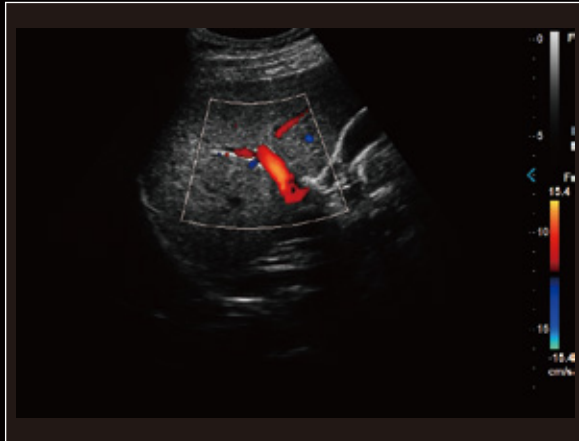
This host contains an automatic envelope detection module, which can automatically track the time-related changes of the peak blood flow velocity and average velocity, and display them in real time on the Doppler spectrogram.



## Versatile Applications



# Clinical image cases





# Part of the probe display



**Convex probe**

Application: Abdomen, Obstetrics, Gynecology



**Linear probe**

Application: Small Parts, Vascular, Musculoskeletal



**Trans-vaginal probe**

Application: Obstetrics, Gynecology, Urology



**4D Volume probe**

Application: Abdomen, Obstetrics, Gynecology



**Micro-convex probe**

Application: Small parts, baby organs



**Phased array probe**

Application: Heart and chambers, cardiac function, pericardial effusion



**Trans-rectal probe**

Application: prostate gland



## Sub-array technology

The dedicated high-density probe adopts a brand-new array design technology and a unique sub-array element technology. The second cutting of independent wafers can completely control the entire process of wafer vibration, thereby reducing side lobe artifacts and enhancing the fine resolution of tissues. The boundary between adjacent strong echo reflectors is sharper. It fully demonstrates the high-resolution images brought by the high-density probe, perfectly presents the image details, and increases the accuracy of clinical diagnosis.