

# UTAB H-1



Watch Inside The Body Clearly

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Novin Sepanta Medical Systems produces ultrasound machines to overcome your needs and more from a medical imaging device. Based on Sepanta's experiences, UTAB was designed and manufactured based on an innovative platform with unbelievable design. While using this device, good image quality and extraordinary vision are beyond your imagination. Beside its performance, UTAB is designed to be compatible with budgetary limitations. UTAB uses an essential technology to offer a unique performance. It is designed to be available whenever and wherever it is needed.

UTAB surprises users with its very quick ready to work time, based on its optimal hardware and software design. Clear, sharp and uniform images of UTAB provide enough facilities for efficient and reliable diagnosis. Its user-friendly and customizable software and touch screen, simple control panel, and programmable keys, make it possible for the user to get the best performance in less time. Also, due to UTAB's large monitor size (23 inch with DICOM standard and HD resolution), users can experience improved visualization, superior contrast and resolution. UTAB's ergonomic design, large screens, flexible and adjustable mechanical structure, reduce user fatigue and improve user comfort. Due to UTAB's great features, it reduces the need to repeat exams and proposes a higher clinical confidence.



# CONTEMPORARY DESIGN TO HELP FIT YOUR NEEDS.

- Smart in operations
- Maximum system uptime with fast and easy remote support
- Programmable scanning geometry
- Programmable transmitter parameters
  - » Frequency
  - » Pulse shape
  - » Pulse repetition frequency
  - » Medium physical properties
- Full digital beamforming
- Image enhancement techniques
  - » Harmonic imaging
  - » Spatial compounding
  - » Dynamic frequency filtering
  - » Multi-frequency imaging
  - » Speckle reduction
  - » Dynamic receive focus
  - » Multi focus in Tx
  - » Dynamic transmit focusing(optional)
  - » HD zoom
- Programmable digital beamforming in Tx/Rx Parameters
  - » Tx/Rx beamforming parameters are adjustable separately
  - » Elements geometry
  - » Tx/Rx resolution
- Patient information database
- Multi-image (split,quad)
- Rotation: 0,180°
- Cine features
- Image reverse: right/left,up/down
- DICOM 3.0 connected
- In-site & remote real-time service
- Upgradable system software
- Simultaneous ultrasound scanning modes (Brightness Mode (B-Mode), Motion Mode (M-Mode), Color Flow Mapping (CFM), Power Doppler (PD))
- Clinical reliability in hardware & software due to industrial design



## Transducer Types

- Linear array (L9-2)
- Convex array (C5-2)
- Endocavity (E9-4)



## Scanning Methods

- Electronic linear
- Electronic sector
- Electronic convex
- Trapezoid
- Wide sector



# EXAM TYPES



Liver



Bladder



Gallbladder



Breast



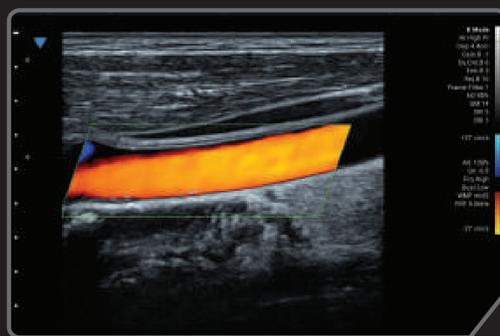
Left Kidney



Right Kidney



Breast



Jugular Vein



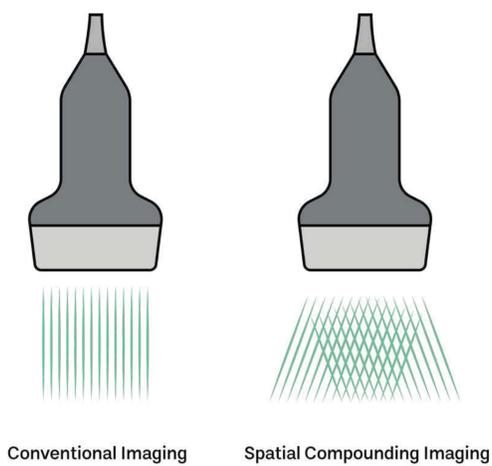
Fetus

# LEADING DESIGN

Improved axial & lateral resolution and penetration, enhanced contrast resolution, improved signal to noise ratio, and exceptional frame rate are gathered by employing the following advanced techniques:

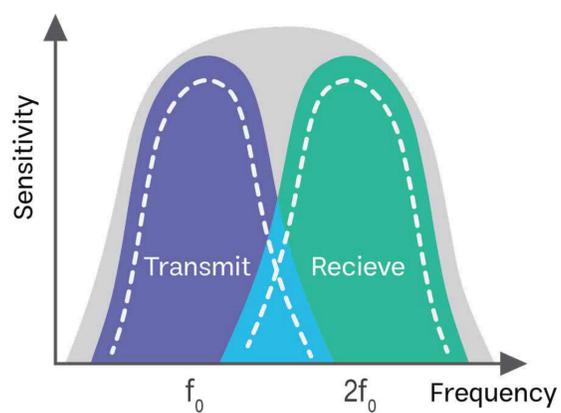
## Spatial Compounding

Provides enhanced contrast resolution and improved visualization by multiple scan angles.



## Harmonic Imaging

Tissue Harmonic Imaging (THI), improves contrast by suppression of interfering signals from clutter. Harmonic frequencies produced by beam propagation through tissue, can be detected due to receiver high bandwidth.

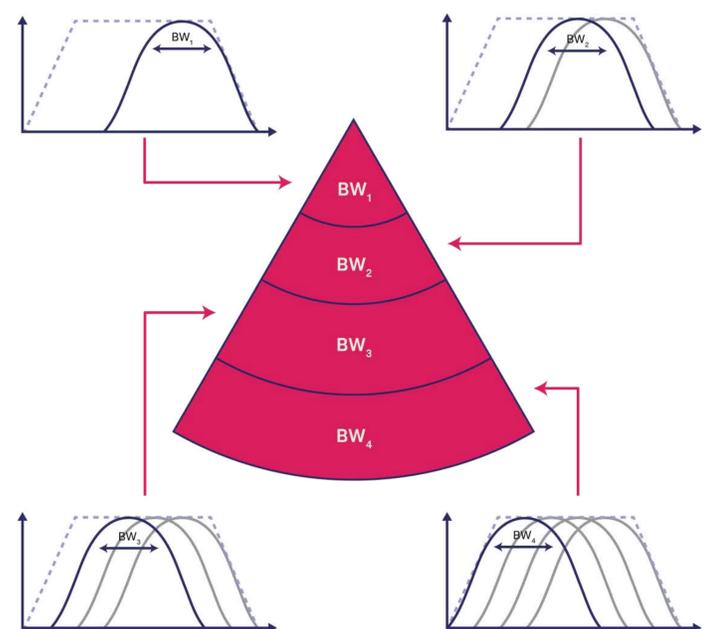


## Modern Dynamic Transmit Focusing (Optional)

Provides perfectly focused image in every pixel in every depth by an innovative beamforming method.

## Dynamic Frequency Filtering

The receiver center frequency and bandwidth are adjusted to lower frequencies as deeper depths are sampled in order to use the total transducer bandwidth. The extracted image has additional focusing at various depths and improved noise reduction.



## HD-Zoom

HD-Zoom helps users localize regions of interest for closer study with higher resolution along with higher frame rate.

## Dynamic Receive Focus

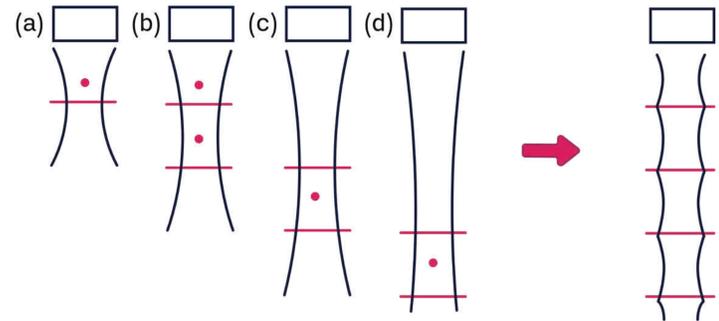
High sampling rate in addition to amazing processing power enables UTAB to achieve focused received beams in every depth.

## Multi-frequency Imaging

Using high bandwidth transmitters, probes and receivers, UTAB can use multi-frequency imaging. Operator can adjust the center frequency according to the patient anatomy to get high quality images.

## Multi Focus

In order to achieve through-depth transmit focused beam, 1-4 focus points can be selected among up to 10 positions.



1

### Main display

Adjustable main monitor angles with articulating arm  
Large monitor size (23")  
superior contrast resolution and improved visualization



4

### Four active probe ports

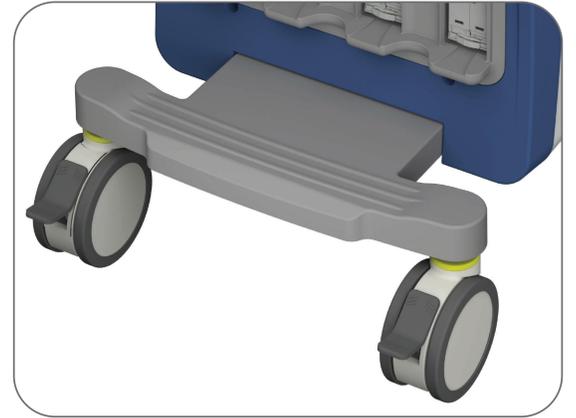
Equipped with four active probes for versatile



5

### Swivel with steer and lock wheels

Moves everywhere with ease, using four vibration reducing wheels



2

### Touch screen

Anti-reflective, anti-glare, anti-fingerprint for clear, comfortable, and clean use



3

### Adjustable panel height and direction

Easy movement in the upward, downward and rotational directions





**SEPANTA**  
Medical Systems

**Visualizing health, shaping the future**



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