# **DC-40**

Scanning with Exceptional Capability



# **DC-40**

Enhanced confidence



## Enhanced confidence

Image optimization technology

- •PSH
- •iBeam
- •iClear

Wide range transducers offer the best balanced performance

- •Up to 15
- High density
- High frequency
- •Bi-plane...



Magnitude (dB) -10 -20 -30

(d) Fundamental

20

Frequency (MHz)

30

Harmonic

Magnitude (dB) 01-10 -20 -30

Fundamental

15

Frequency (MHz)

Harmonic

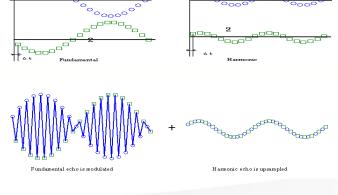
## Phase Shift Harmonic Imaging(PSH)







PSH on



- Purified harmonic imaging for better contrast resolution
- High S/N ratio to get better noise suppression



### iBeam









- Combine multiple angle-steered images into one, no frame rate drop
- Better contrast resolution
- Less shadow for more information

### iClear



iClear off



iClear on

- Detect different structures then separate them into 3 categories:
  - Edge: Sharpen it and make it more continuous
  - Uniform tissue: Smooth it
  - No echo area: Clean the noise
- Better contrast resolution
- Clearer and sharper tissue border definition



# Enhanced confidence

Exceptional capability

Increased efficiency

Ergonomic design

# Wide range transducers

- Total 15 transducers
- 192 elements high density linear probe
- 1.3-16 MHz wideband frequency



Convex	Linear	Endo- cavity
3C5A 6C2	7L4A L12-3E L14-6NE L14-6	V11-3 V10-4B CB10-4E
© 2016 Mindray Confidential	L7-3 7L5	







CW5s

P4-2 P7-3





# **DC-40**

- Enhanced confidence
- Exceptional capability
- Increased efficiency
- Ergonomic design

# Exceptional capability

#### OB/GYN

#### General imaging

Natural Touch Elastography: higher stiffness sensitivity; Good stability and reproducibility

UWN Contrast Imaging: for better visualization of tiny vessel perfusion

iScape: show whole anatomical

structures

Auto IMT: for cardiovascular risk

assessment

Smart Bladder: auto measurement of

bladder volume



3D/4D: rich rendering modes

**ILIVE:** revolutionary technology for amazing realistic view of fetus

iPage: display volume data with multiple parallel 2D images

Smart OB: auto measure of most frequently used items

Smart NT: auto measure of NT

IVF package

#### Cardiology

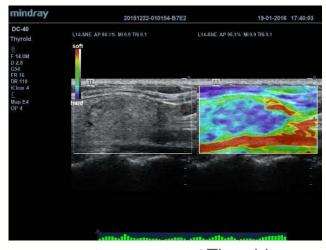
TDI & TDI QA: for myocardial movement and synchronization evaluation

Free Xros M: provide more anatomical precise observation

Free Xros CM: evaluate myocardial motion, determine myocardial synchronization

Auto LV: simple measurement procedure for left ventricle

## Natural Touch Elastography

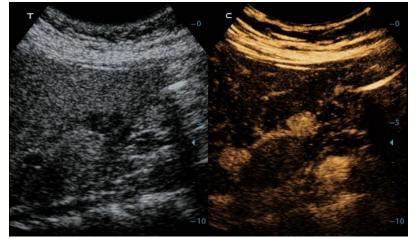


Elastography of Thyroid

Use different color to code different strain values, displaying the tissue stiffness for tumor

- evaluation Stress bar indicators make you scan much easier
- Excellent reproducibility with consistence
- Stiffness sensitive, and less user dependent
- Support B+E dual display mode
  \*Available on Thyroid, Breast and MSK modes of 7L4A, L12-3E and L14-6NE
  \*\* The Elastography feature is designed for Imaging, will not support quantitative analysis

# UWN (Ultra-Wideband Non-linear) Contrast Imaging

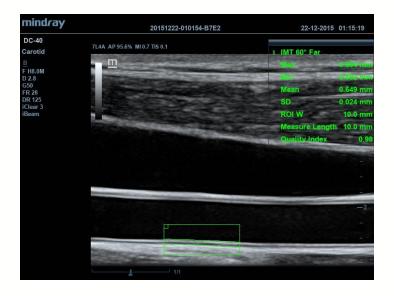


#### Clinical Benefits:

- Liver Tumor
- 2nd harmonic and non-linear fundamental signal
- Excellent contrast agent sensitivity
- lower MI setting
- Longer CEUS perfusion time



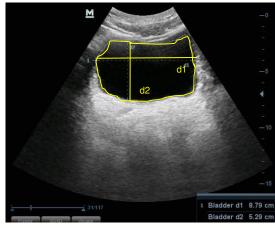
### Auto IMT



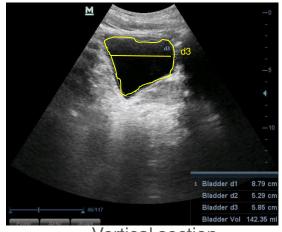
- Automatically detect and calculate IMT for cardiovascular risk assessment
- Highly accurate measurements are reliable and reproducible



### Smart Bladder



Transverse section



Vertical section

- Auto trace the border of bladder, detect three diameters of bladder, and calculate the bladder volume
- Operation tips:
- ✓ Scanning sequence: transverse section then vertical section
- ✓ Keep bladder at the center of image area
- Make sure of the clear border of bladder



### Powerful 3D/4D





- Rich rendering modes: Surface, Max, Min, X-ray, iLive
- Advanced function: iPage
- Curved ROI: Suit for different shape rendering
- iClear for better volume image quality



### iLive





A revolutionary way to obtain the amazingly realistic view of fetus with human skin like color

- New virtual light source integrated
- Light source adjustment



# iPage



 Display volume data with multiple parallel 2D images, which could easily interpret anatomical structures, for those are usually difficult to capture and make more confident diagnosis

### Smart OB



Smart OB - HC



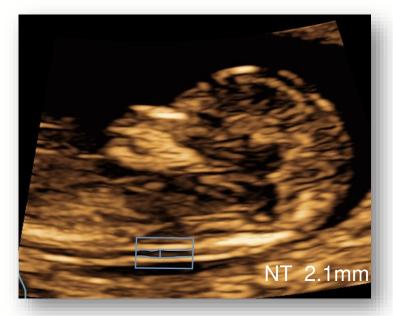
Smart OB - FL

Accurate auto measurements of most frequently examined parameters including BPD/HC/FL/AC/OFD on a single click

- Efficient and accurate
- Greatly reduce repetitive key strokes and increase productivity



### Smart NT



Automatically trace the NT tube cavity edge and display max NT result by industry standard method of "In to In".

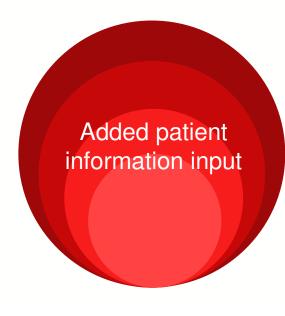


## Dedicated package for IVF application

IVF patient information (injection time and hormonal level)

#### Injection time(date)

- •CC (clomiphene citrate )
- •HMG (human menopausal gonadotropin)
- •HCG (human chorionic gonadotropin)



#### Hormonal level

- •FSH (folliclestimulating hormone) (mIU/L)
- •LH (luteinizing hormone) (mIU/L)
- •E2(pg/ml)
- •PRL(ng/ml)
- •P(ng/ml)
- •T(ng/ml)



# Dedicated package for IVF application

#### Specialized IVF program solution:

- Intuitive documentation for follicles and endometrial measurements.
- Dedicated reporting structure to help assess and monitor follicles development and growth

Improve pating management and patient care

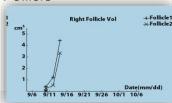


Measure

- Uterus(L/W/H/V)
- Artery (Uterine /Ovary )
- Endometrium Thickness
- Uterine Cervix
- Ovary (L/W/H/V)
- •Follicle (d1/d2/d3/MD/V)
- Follicles Growth Graph



- Uterine/Endometrium
- Follicle



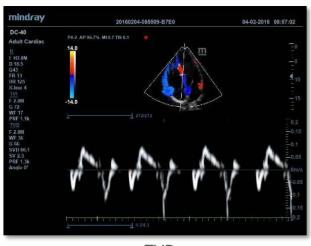


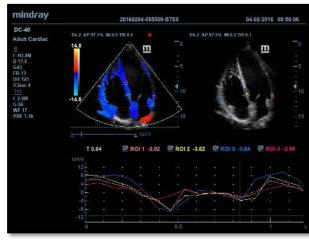
Body Mark Comment

 Specialize comment and body mark for IVF



### TDI & TDI QA



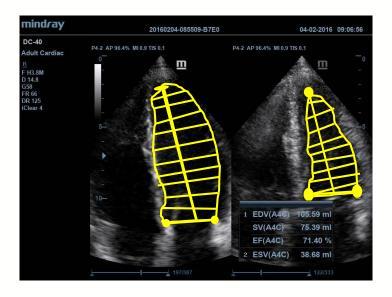


TVD TDI QA

- Complete TDI modes (TVI/TVD/TVM/TEI)
- Quantitatively evaluate myocardial movement and synchronization Analysis for up to 8 ROI ROI tracking tissue movement for accurate analysis



### **Auto LV**



- Auto trace and calculation for LV function
- Easy manual correction is available





# Increased efficiency



- iZoom
- iTouch
- iScanHelper
- Raw data
- iStorage
- Medsight
- Auto measurement



# iScanHelper

- Anatomical diagram illustrations including schematic and ultrasound pictures
- Standard ultrasonogram comparison with real-time scanning
- Scanning reference picture demonstrating appropriate patient position and probe placement
- Tips on scanning skills and diagnostic information



Dedicated inbuilt educational tool, providing users with guidance on 'how & what 'of ultrasound scanning.

 iScanHelper includes anatomical illustrations, standard ultrasound images, scanning reference pictures and tips on scanning skillfully.



Exceptional capability

Increased efficiency

Ergonomic design

# iStorage



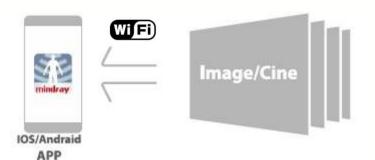
iStorage data transfer

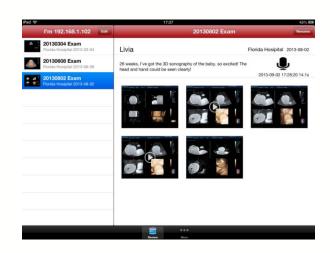


- Directly transfers images and reports to PC via wired or wireless network
- DICOM is not necessary for iStorage



# MedSight





Interactive App that could transfer clinical images/cines and reports from ultrasound to your smart devices via WiFi

- Specially designed for patients to do image transmission: for example, mom could then easily share the lovely unborn baby with her family or friends
- Support both IOS and Android powered devices
- DICOM is not necessary for Android devices



### Raw data



- Stored image and cine is capable to be re-processed: optimize, measure, adding comments....
- Achieve maximum productivity during scanning





# **DC-40**

- Enhanced confidence
- Exceptional capability
- Increased efficiency
- Ergonomic design









# Standard 15" LED high resolution monitor

- •Optional 17 "monitor
- •180° rotational angle

#### 10.4" LED touch screen

Angle adjustable

#### Flexible control panel

- Height adjustable
- Rotatable



- 1TB hard disk
- Built-in battery for real-time scanning
- DVD-RW drive
- Retractable QWERTY keyboard
- Gel warmer
- Dedicated endocavity transducer holder
- Cable management design
- Table for placing peripherals
- 4 active transducer sockets





## **Full functionality**

• GI: Elastography, Contrast

•OB: 3D/4D, iPage, iLive

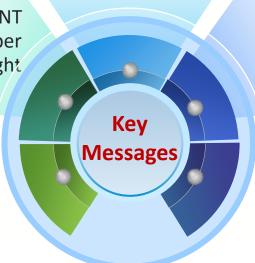
• CV: Free Xros M/CM, TDI, TDI QA

## Simplified workflow

Auto measurement: Smart OB, Smart NT

Tutorial function: iScanHelper

APP: Medsight



### Gorgeous design

- 1TB hard disk
- Standard 15", optional 17" screen
- 10.4" touch screen
- 4 active transducer connectors
- Built-in battery

