

Caution:

Don't mark on the phantom with pen or leave printed materials contacted on its surface.
Ink marks on the phantom will be irremovable.

US-22 Dual Modality Human Abdomen Phantom

Instruction Manual

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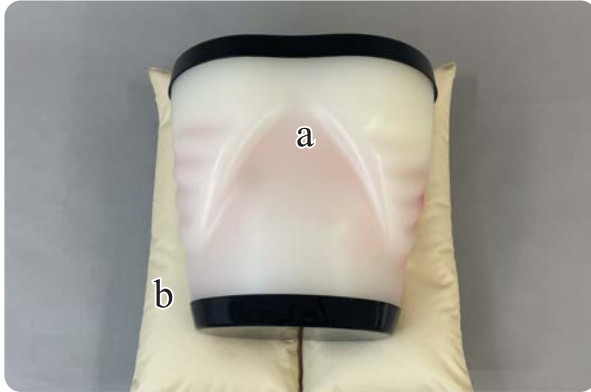
● This phantom is a comprehensive diagnostic imaging training phantom that uses fusion imaging. This phantom is designed to confirm lesions noted on CT as well as ultrasound.
※For effective training, use ultrasound devices that is under appropriate control.
This phantom is designed for a step-by-step learning process from the basic of ultrasound screening to organ-specific screening procedures and screening for intra-organ lesions.
Please do NOT use this phantom outside of its purposes.

● **Features**

- The new material is compatible with CT and ultrasound.
- The phantom includes nearly full-scale and accurate lungs, aorta, gallbladder, inferior vena cava, liver (portal vein, bile duct, hepatic artery, hepatic vein), kidneys (left and right), pancreas (pancreatic duct), spinal column, spleen, and ribs.
Cysts, stones, tumors and other lesions with different sizes, echo, CT values are also included, which allows simultaneous anatomic understanding and training in simple screening.
- ※Biopsy and other punctures cannot be performed.

Set includes

Before your first use, please ensure that you have all components listed below.



● Set includes

a. Dual modality abdominal phantom 1
the liver (segmental anatomy, portal and hepatic venous systems, hepatic circumflex and ductus venosus), biliary tract (gallbladder, cystic duct, intrahepatic and extrahepatic bile ducts), pancreas (pancreatic duct), spleen, kidneys, detailed vascular structures (aorta, vena cava, celiac artery and its branches, portal vein and its branches, superior mesenteric vessels, renal vessels, etc)	
b. Positioning pillow 1
c. Talcum Powder 1
d. sample CT images (DVD) 1
e. Instruction Manual (this leaflet) 1

The setting of supine position and the lateral position is possible using a positioning pillow.



⚠ DOs and DON'T s

DO s

- Handle with care
The materials for the phantom are special composition of soft resin. Please handle with care at all times.
- Cleaning and care
Please clean the phantom completely every time after you finish the training.
The remaining ultrasound gel may deteriorate the phantom.
- Keep the training set at room temperature, away from heat, moisture and direct sunlight.

DON'Ts

- Never wipe the phantom with thinner or organic solvent.
- Don't mark on the phantom with pen or leave printed materials contacted on their surface. Ink marks on the surface will be irremovable.

Please note: The color of the phantom may change over time, though, please be assured that this is not deterioration of the material and the ultrasonic features of the phantom stay unaffected.

This phantom has a thin layer of coating for protective purposes which may cause minor wrinkling. However, it has no effect on the ultrasound image.



Please watch the following movie about handling precautions of ultrasound phantoms.

<https://www.youtube.com/watch?v=D3VcaUYcPAY>

1 Before training



1. Set the phantom on the positioning pillows.



2. Apply ultrasound gel on the phantom body.

2 Training session



1. The phantom can be scanned with actual ultrasound devices.

* The map of simulated targets is on the backside of this manual.

Examples of ultrasound images



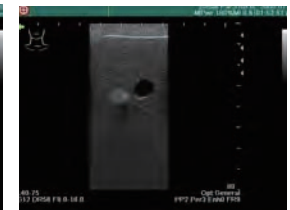
Duplication lesion



Low echo target



Gallstone



High and non echo targets

3 After training

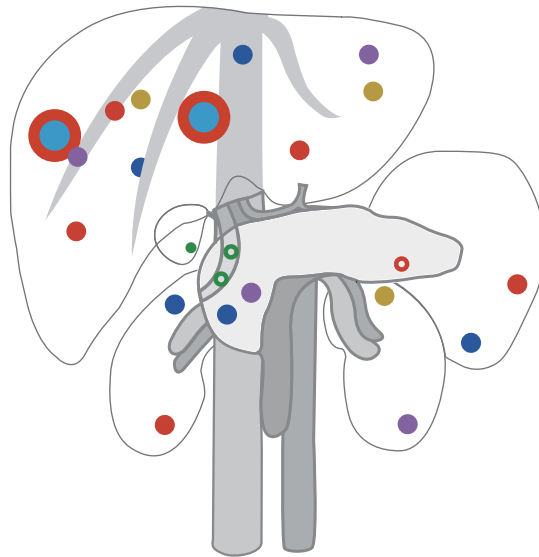


Wipe the remaining gel completely with wet cloth. If remaining gel gets dried up on the body, it will be irremovable.

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Simulated lesions in liver, pancreas, kidney, spleen, gallbladder



Anatomy

lung / kidneys (right and left) / gallbladder / aorta/ liver (portal vein, bile duct, hepatic artery, hepatic vein) / spleen / pancreas (pancreatic duct) / inferior aorta / spine / ribs

Abnormal lesions

liver / gallbladder / pancreas / spleen / kidney

- Liver lesions (cysts, solids)
- Gallbladder and bile duct stones
- Pancreatic tumors
- Spleen lesions
- Left and right kidney lesions

【Embedded Targets】

	Liver HU70	Gallbladder HU20	Pancreas HU30	Spleen HU50	Kidney(R) HU30	Kidney(L) HU30
anechoic	3 HU50		1 HU10	1 HU10	1 HU10	
<ul style="list-style-type: none"> ● Φ10mm ○ Φ3mm 						1 HU10
hypoechoic	2 HU50					1 HU10
<ul style="list-style-type: none"> ● Φ10mm 	2 HU90		1 HU10			1 HU10
medium echo	2 HU90		1 HU10	1 HU10	1 HU10	
<ul style="list-style-type: none"> ● Φ10mm 	2 HU90					
hyperechoic	2 HU90					
<ul style="list-style-type: none"> ● Φ10mm 	2 HU90					
double echo lesion inside: hyperechoic outside: anechoic	2 HU90					
<ul style="list-style-type: none"> ● Φ20mm 						
gallstones		1 HU170	2 HU170			
<ul style="list-style-type: none"> ● Φ5mm ○ Φ3mm 						

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No part of this instruction manual may be reproduced or transmitted in any form without permission from the manufacturer.

Please contact manufacturer for extra copies of this manual which may contain important updates and revisions.

Please contact manufacturer with any discrepancies, typos, or mistakes in this manual or product feedback.

Your cooperation is greatly appreciated.

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Dear customer,

Note

Thank you for choosing our ultra sound phantom.

There may be a case that the surface of phantom is in a wet condition.

The ultra sound image will not be affected. In such case, wipe the surface with medical use alcohol. **Do not wipe the surface with strong solvent such as benzene.**

If you have any questions regarding this matter, please do not hesitate to contact us at any time.

Faithfully yours,

Kyoto Kagaku Co., Ltd.

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