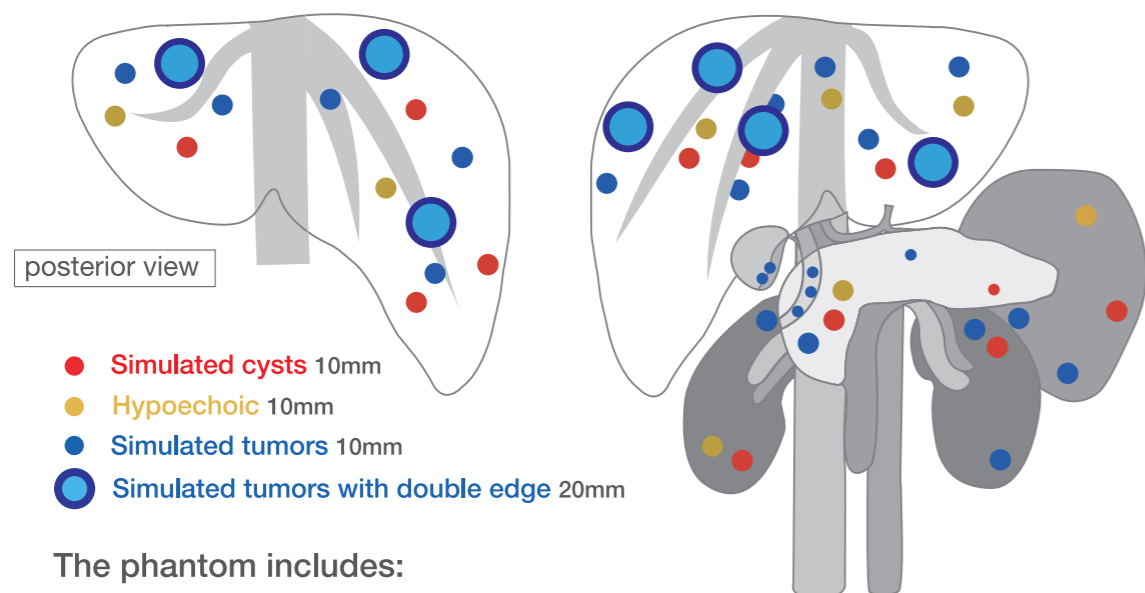




**Caution** Don't mark on the phantom with pen or leave printed materials contacted on its surface. Ink marks on the phantom will be irremovable.

The contents of this manual are subject to change without prior notice. 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.

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



- Simulated cysts 10mm
- Hypoechoic 10mm
- Simulated tumors 10mm
- Simulated tumors with double edge 20mm

#### The phantom includes:

the liver (segmental anatomy, portal and hepatic venous systems, ligamentum teres and ligamentum venosum), 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)



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Tel: +81-75-605-2510 Fax: +81-75-605-2519

#### Kyotokagaku USA Office: USA and Canada sales and services

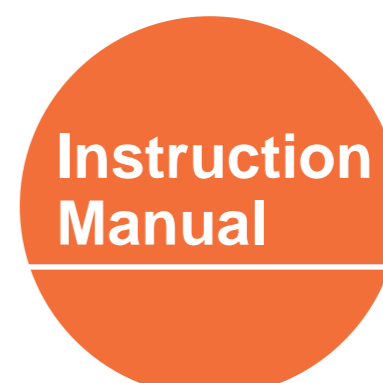
3109 Lomita Boulevard, Torrance, CA 90505-5108, USA  
Tel: 1-310-325-8860 Fax: 1-310-325-8867

## US-3

# Abdominal Intraoperative & Laparoscopic Ultrasound Phantom "IOUSFAN"

Production supervision:  
Junji Machi, MD, PhD  
University of Hawaii at Manoa and Kuakini Medical Center

**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.



## Contents



- Please read before training
  - Set Includes ..... P. 1
  - 1 Set-up ..... P. 1
- Training Session
  - 2 Training items and simulated targets ..... P. 2
  - 3 After use ..... P. 2

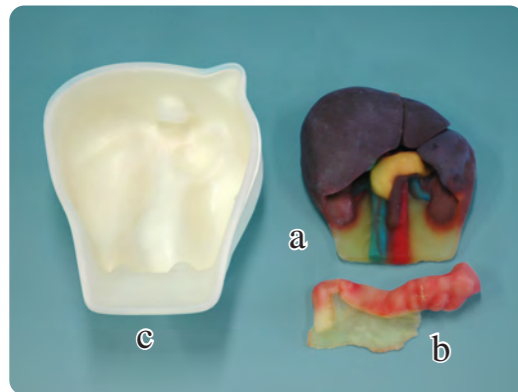
IOUSFAN is designed to facilitate training and demonstration in upper abdominal intraoperative ultrasound scanning both for open surgery and laparoscopy. Any other use, or any use not in accordance with the enclosed instructions, is strongly discouraged. The manufacturer cannot be held responsible for any accident or damage resulting from such use. Please use this model carefully and refrain from subjecting it to any unnecessary stress or wear. Should you have any questions on this simulator, please feel free to contact our distributor in your area or KYOTOKAGAKU at any time.

#### ● Features

- Soft materials of phantom organs allow realistic probe manipulation.
- Near real-size organs, structures and abnormal lesions with approximate-to-human echogenicities.
- Detailed hepatobiliary, pancreatic and other abdominal anatomy meeting requirement for excellent training: open intraoperative scanning and laparoscopic examination.
- Various simulated lesions including biliary stones and cysts, solid tumors.
- Detachable stomach and duodenum allows various scanning methods of the bile duct and pancreas.
- Container allows water-immersion scanning for both contact and stand-off techniques, simulating real abdominal intraoperative and laparoscopic scanning.
- Container with phantom fits in the laparoscopic trainer box so that laparoscopic ultrasound of organs is possible under direct laparoscopic view.
- Durable long-life phantom materials.

Set Includes

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



- a. Upper abdomen ultrasound phantom ..... 1  
the liver (segmental anatomy, portal and hepatic venous systems, ligamentum teres and ligamentum venosum), 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. Stomach-duodenum phantom ..... 1
- c. Phantom container ..... 1  
(a set of outer and inner container)

**⚠ DOs and DON'T s**

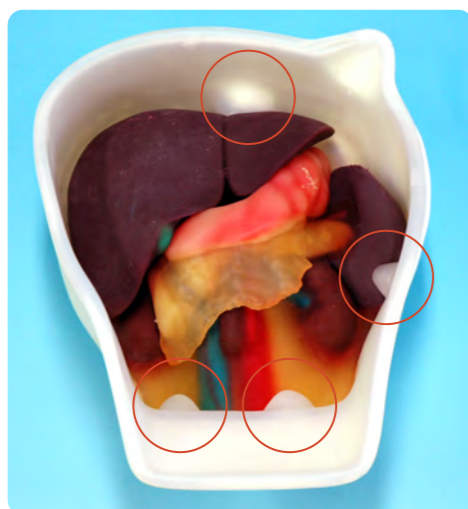
**DO s**

- Handle with care.
- The materials used for the phantom are made of special soft resin composites.
- Excessive force may cause breakage.
- Set the phantom properly as instructed below.
- The phantom may float a little because its gravity is smaller than water.
- Drain and dry before storage
- After use, wipe the phantom and container with soft cloth or paper before storage.
- Keep the training set at room temperature, away from heat, moisture and direct sunlight.

**DON'T s**

- Do not make puncture or incision
- IOUSFAN is designed for ultrasound scanning only.
- Do not try to make any puncture or incision as this will break the phantom.
- Never wipe the phantom or models 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 models will be irremovable.

**1 Set-up**



1. Place the phantom in the container orientating it in spine position. Fix it so that the four projections on the container wall hold the phantom in place.

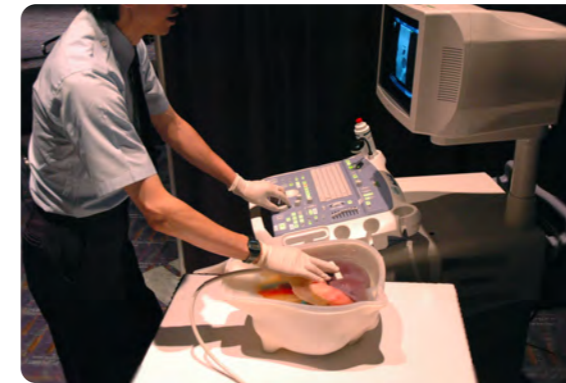


2. Fill the container with water until the phantom is fully covered. The phantom may float a little in the water.

Now IOUSFAN is ready for training.

**2 Training items and simulated targets**

Open intraoperative scanning of liver, biliary tract and pancreas.  
Laparoscopic examination of the biliary system for screening of stones and evaluation of hepatic and pancreatic lesions, etc.

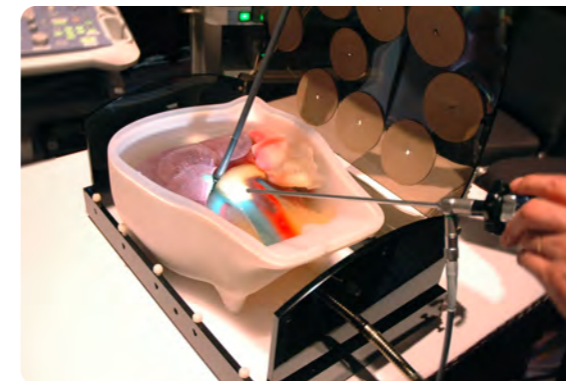


Open intraoperative scanning.



Laparoscopic examination.

**● Ultrasound images**



Laparoscopic examination.

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



Pancreas head



Biliary stones



Lesions in the liver



Gall stone

**3 After use**



① Drain water from the container.



② Wipe the container walls and the phantom by soft cloth and make them dry before storage.