

Multi-Modality Pelvic Phantom

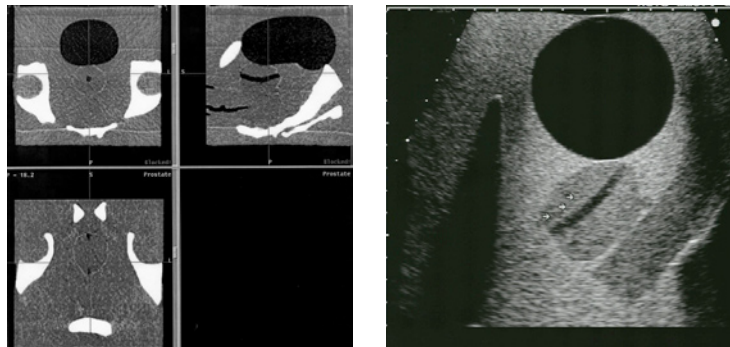
The CIRS Model 048 male pelvic phantom was designed for realistic abdominal ultrasound scanning of the bladder and prostate. The phantom includes pelvic bones, 177cc anechoic bladder, prostate, urethra, seminal vesicles and rectum enclosed in a rugged ABS housing.

The Model 048 is made from materials that can be imaged under ultrasound, MRI and CT making the phantom useful for applications that require multiple modalities such as radiation treatment planning. The phantom is provided with certified prostate and bladder volumes to enable assessment of volumetric measurement accuracy. Modifications are available such as permanently embedded brachytherapy “dummy” seeds or gold fiducial markers for demonstration of target visualization.

Each phantom is sold with documented certification traceable to NIST. Custom labeling and a foam lined carry case are also available.



Model 048



Model 048 Specifications

PHANTOM HOUSING

MATERIAL: Black ABS 3/16" thick
DIMENSIONS: 18 cm X 18 cm X 18 cm
SCANNING AREA: 16 cm X 16 cm
SCANNING WELL: 2 cm deep
MATERIAL: Saran based

BACKGROUND

MATERIAL: Zerdine®
PROPERTIES:
Speed: 1540 m/s 22°C
Attenuation: 0.50 dB/cm/MHz
Contrast: +9 dB with respect to CIRS reference material

BLADDER

MATERIAL: Zerdine®
PROPERTIES:
Speed: 1470 m/s at 22°C
Attenuation: < 0.07 dB/cm/MHz
Contrast: anechoic at 15 dB
Volume: 177cc

PROSTATE

MATERIAL: Zerdine®
PROPERTIES:
Speed: 1540 m/s at 22°C
Attenuation: 0.50 dB/cm/MHz
Contrast: hypoechoic
Volume: 45cc

URETHRA

MATERIAL: Zerdine®
PROPERTIES:
Contrast: hypoechoic
Diameter: 1/4"

SEMINAL VESICLES

MATERIAL: Zerdine®
PROPERTIES:
Contrast: isoechoic to prostate
Diameter: 1/4"

RECTUM

MATERIAL: Zerdine®
PROPERTIES:
Contrast: isoechoic to prostate
Diameter: 32 mm

PELVIS

MATERIAL: Tissue Equivalent epoxy resin
PROPERTIES:
Attenuation: Highly attenuating will cast shadows

OPTIONAL CARRYING CASE

DESCRIPTION: Foam lined, hard sided