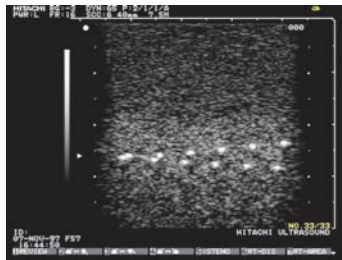


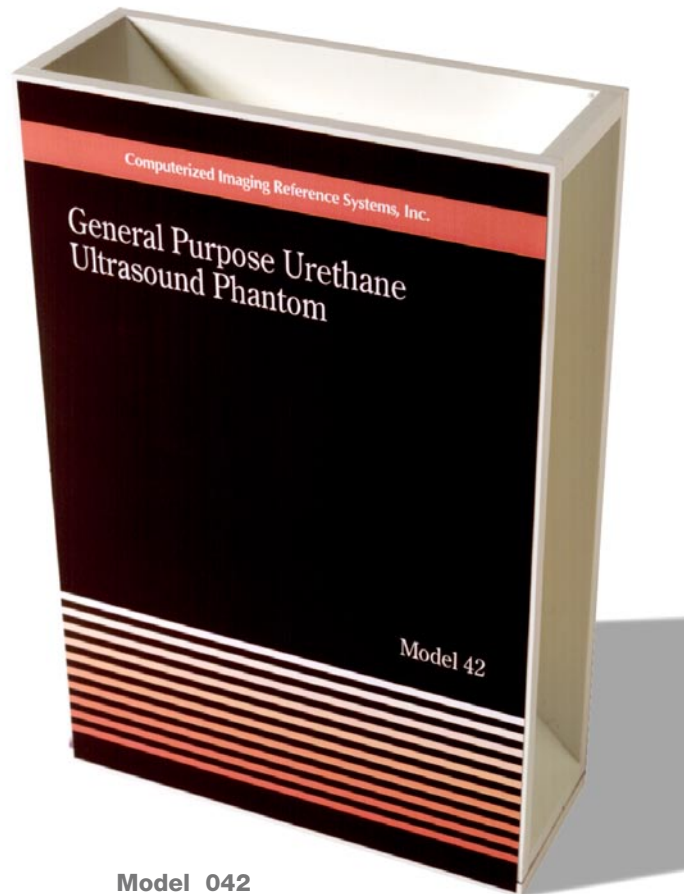
General Purpose Urethane Ultrasound Phantom

Three scan-surfaces

The CIRS series of ultrasound phantoms, unlike human subjects or random scannable materials, offers a reliable medium which contains specific, known test objects. The CIRS line of ultrasound phantoms enables repeatable, qualitative assessment of ultrasound scanner performance over time.



The Model 042 is constructed from a proprietary urethane matrix, housed within a rigid PVC container with three separate scanning windows. It allows for depth of penetration, uniformity, distance calibration, resolution and lesion detectability assessment. The Model 042



Model 042

is sold with a three year warranty. All CIRS Ultrasound QA phantoms, including the Model 042, are sold with an

in-house certification traceable to NIST standards, user manual, and a carrying case.

*Tissue Simulation &
Phantom Technology*

CIRS

2428 Alameda Avenue • Suite 212 • Norfolk, Virginia 23513 • USA
(800) 617-1177 • (757) 855-2765 • FAX (757) 857-0523
www.cirsinc.com • admin@cirsinc.com

Model 042 Specifications

MATERIAL: Proprietary Urethane Matrix

ATTENUATION

COEFFICIENT: 0.50 dB/cm/MHz \pm 0.05 dB/cm/MHz at 5.0 MHz

SPEED OF SOUND:

1430 m/s \pm 10 m/s at 20°C

SCANNING SURFACES:

Number: 3

Depth of scanning wells: 2 cm

HOUSING:

Material: White PVC

Outer Dimensions:

17 cm X 25.5 cm X 7 cm

VERTICAL PLANE

TARGETS:

Number of Groups: 1

Number of Targets per Group: 10

Depth of Visualization: 1 cm - 19 cm

Visualized Spacing:

20.0 mm \pm 0.38 mm

Material: 0.10 mm diameter, Nylon monofilament

HORIZONTAL PLANE

TARGETS:

Number of Groups: 1

Number of Targets per Group: 10

Depth of Visualization:

3 cm and 10 cm

Visualized Spacing:

18.56 mm \pm 0.38 mm

Material: 0.10 mm diameter, Nylon monofilament

Note: This target group is also the Vertical Plane Target group

AXIAL

RESOLUTION TARGETS:

Number of Groups: 2

Number of Targets per Group: 12

Depth of Visualization:

2, 5, 8 & 11 cm

Axial Resolution Test Range:

0.50 mm, 1.00 mm - 5.00 mm in 1.00 mm increments

Material: 0.1 mm diameter, Nylon monofilament

LATERAL RESOLUTION TARGETS:

Number of Groups: 2

Number of Targets per Group: 6

Depths of Visualization:

2, 5, 8 & 11 cm

Lateral Resolution Test Range:

1.00 mm - 5.00 mm in 1.00 mm increments

Material: 0.1 mm diameter, Nylon monofilament

ANECHOIC TARGETS:

Number of Targets: 2

Diameter:

8 mm - 2 mm in 2 mm increments

Depths of Visualization:

2, 5, 8, 11, 13 and 16 cm.

