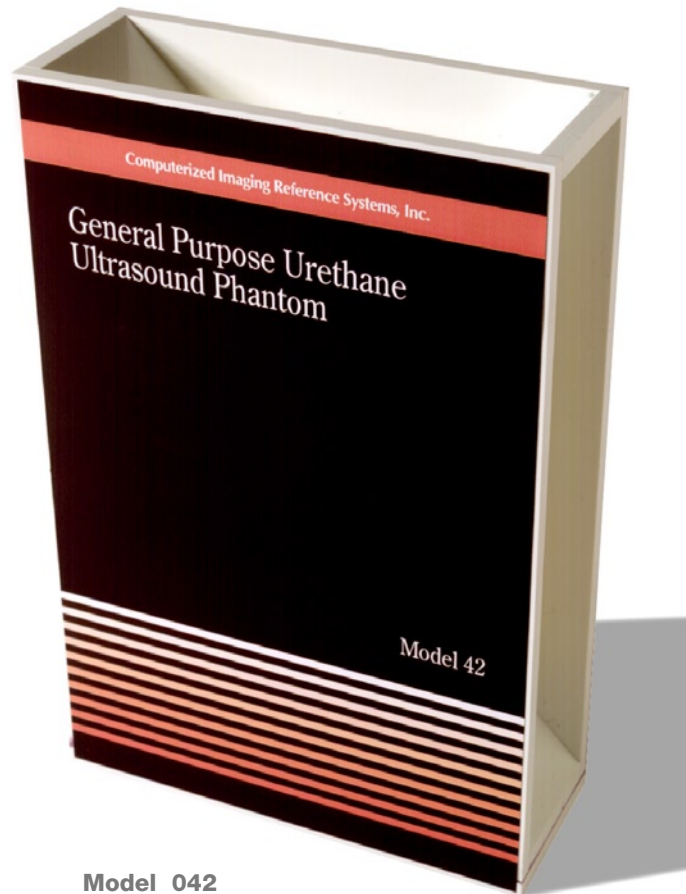


# General Purpose Urethane Ultrasound Phantom

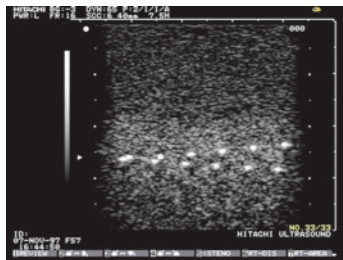
*Three scan-surfaces*

The Model 042 General Purpose Urethane Ultrasound Phantom provides an alternative solution for ultrasound quality assurance. It is ideal for monitoring system performance over time.

The Model 042 is constructed from a proprietary urethane matrix and housed within a rigid PVC container with three separate scanning windows. The three scan windows allow the same targets to be imaged at multiple depths thus increasing the functionality of the phantom. The Model 042 is a compact, lightweight, durable tool ideal for ultrasound system consistency checks. It allows for depth of penetration, uniformity, distance calibration, resolution and lesion detectability assessment.



**Model 042**



M042 Axial Resolution Target

All CIRS QA phantoms, including the Model 042, are sold with a user manual, carry case and a certificate of compliance. Please note, that because the urethane has a

speed of sound = 1430 m/s, the Model 042 should not be used to assess absolute system performance. The Model 042 is sold with a four-year warranty.

# Model 042 Specifications:

## HOUSING:

Material: White PVC  
Outer Dimensions: 17 x 25.5 x 7 cm

## BACKGROUND

Material: Proprietary Urethane Matrix  
Attenuation Coefficient: 0.50 dB/cm-MHz  
Speed of Sound: 1430 m/s  $\pm$  10 m/s at 20°C

## SCANNING SURFACES:

Number: 3  
Depth of scanning wells: 2 cm

## VERTICAL PLANE TARGETS:

Number of Groups: 1  
Number of Targets per Group: 10  
Depth of Visualization: 1 - 19 cm  
Visualized Spacing: 20.0 mm  
Material: 0.1 mm  $\varnothing$ ,  
Nylon monofilament

## HORIZONTAL PLANE TARGETS:

Number of Groups: 1  
Number of Targets per Group: 10  
Depth of Visualization: 3 & 10 cm  
Visualized Spacing: 18.6 mm  
Material: 0.1 mm  $\varnothing$ ,  
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, 1.0 mm - 5.0 mm in 1.0 mm increments  
Material: 0.1 mm  $\varnothing$ ,  
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: 1.0 mm - 5.0 mm in 1.0 mm increments  
Material: 0.1 mm  $\varnothing$ ,  
Nylon monofilament

## STEPPED MASSES:

Number of Targets: 2  
Diameter: 8 mm - 2 mm in 2 mm increments  
Depths of Visualization: 2, 5, 8, 11, 13 and 16 cm.  
Appearance: Cyst-like

