

Multi-Purpose, Multi-Tissue Ultrasound Phantom

Model 040GSE



ZERDINE® Inside
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THE NEW STANDARD FOR ULTRASOUND QUALITY ASSURANCE

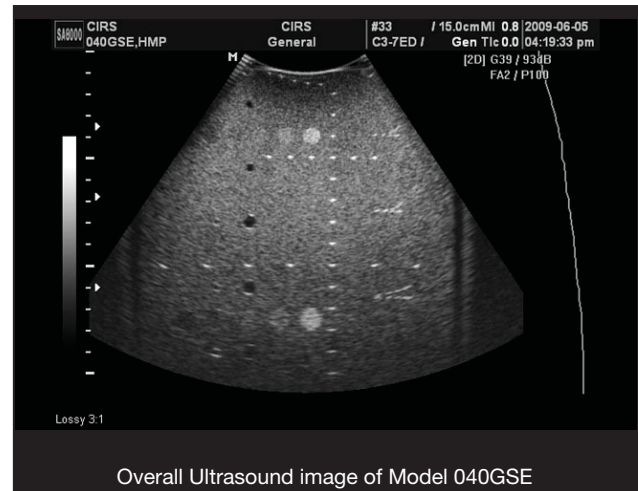
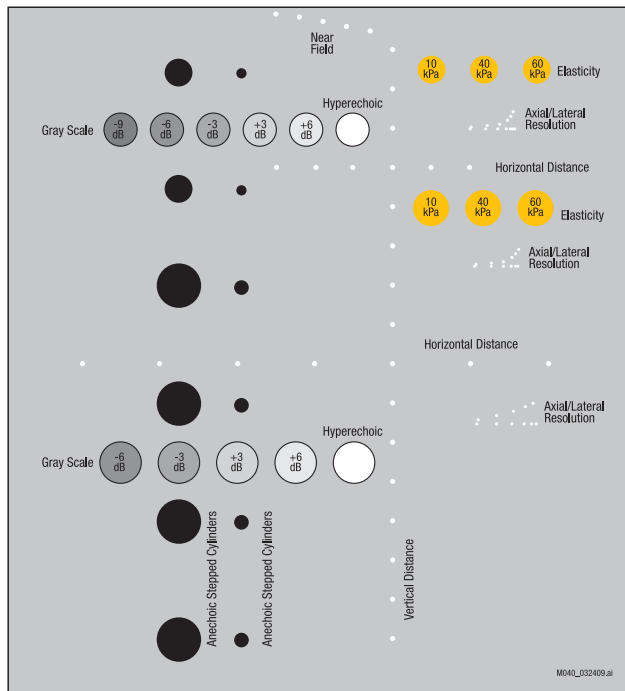
The CIRS Model 040GSE Multi-Purpose, Multi-Tissue Ultrasound Phantom contains nine performance measurements, including gray scale targets, anechoic stepped masses and elasticity targets. The CIRS Multi-Purpose, Multi-Tissue Ultrasound phantom exceeds ACR accreditation requirements, making it the only phantom of its kind designed to meet the ultrasound QA challenges of today and tomorrow.

The unique dual attenuation of the background gel allows for evaluation of transducers that range from 2 MHz - 15 MHz. A removable water well and endocavity cover extends the use of the phantom by allowing evaluation of all transducer configurations: linear, curvilinear and intercavity.

CIRS ultrasound QA phantoms come standard with a robust housing, rugged carry case, 48-month warranty, and user guide.

Features

- Performs nine performance measurements
- Contains dual attenuation for thorough evaluation
- Compatible with all transducer configurations
- Exceeds ACR accreditation requirements
- Made from Zerdine® to simulate acoustic properties of human soft tissue
- Housed in rugged ABS plastic for added durability



Phantom comes with detachable scanning wells to accommodate large sector probes and small endocavity probes. It is packaged in a foam lined carry case.

SPECIFICATIONS

DIMENSIONS:	17.8 cm x 12.7 cm x 20.3 cm (7" x 5" x 8")
PHANTOM WEIGHT:	11 lbs. (4.1 kg)
MATERIALS:	Zerdine

BACKGROUND MATERIALS

Material: Zerdine, solid elastic water-based polymer
Freezing point: 0° C
Melting point: Above 100° C
Attenuation: 0.5 dB/cm-MHz & 0.07 dB/cm-MHz
Speed of Sound: 1540 m/s ± 10 m/s

SCANNING WELL

1 cm deep

SCANNING MEMBRANE

Saran-based laminate

WIRE TARGETS

Material: Nylon monofilament

NEAR FIELD GROUP

Number of targets: 5
Wire Diameter: 100 microns
Depth range: 1 to 5 mm
Distance b/w Targets: 1 mm

VERTICAL DISTANCE GROUP

Number of targets: 16
Wire diameter: 100 microns
Depth range: 1 to 16 cm
Spacing: 10 mm

HORIZONTAL DISTANCE GROUPS

Number of groups: 2
Wire diameter: 100 microns
Depths: 4 & 9 cm
Number of targets: 4 & 7 respectively
Spacing: 10 & 20 mm respectively

MODEL 040GSE INCLUDES

QTY	COMPONENT DESCRIPTION
1	Multi-Purpose, Multi-Tissue Ultrasound Phantom
1	Detachable Protective Cover
2	Detachable Scan Wells
1	Carry Case
-	48-Month Warranty
-	User Guide

AXIAL-LATERAL RESOLUTION GROUPS

Number of groups: 2
Wire diameter: 80 microns
Depths: 3 & 6.5 cm
Axial separation: 4, 3, 2, 1, 0.5 & 0.25 mm
Lateral separation: 4, 3, 2, 1, 0.5 & 0.25 mm

Number of groups: 1
Wire diameter: 80 microns
Depths: 10.5 cm
Axial separation: 5, 4, 3, 2, & 1 mm
Lateral separation: 5, 4, 3, 2, & 1 mm

ANECHOIC STEPPED CYLINDERS

Number of targets: 12
Diameter of targets: 1.3, 2.0, 3.0, 4.5, 6.7 & 10.0 mm
Depth of Targets: 1.5, 4.5, 7.0, 10.0, 13.0, 16.0 cm
Attenuation: 0.5 dB/cm-MHz
Contrast: Anechoic, Cyst-like

GRAY SCALE TARGETS

Attenuation: 0.5 dB/cm-MHz ± 0.07
Number of groups: 2; 6 Targets, Ø 8mm at 3 cm depth
Contrast: -9, -6, -3, +3, +6 & > +15 dB
5 Targets, Ø 10mm at 11.5 cm depth
Contrast: -6, -3, +3, +6 & > +15 dB

ELASTICITY TARGETS

Attenuation: 0.5 dB/cm-MHz
Number of groups: 2; 3 targets per group
Ø 6 mm at 1.5 cm depth
Ø 8 mm at 5 cm depth
Elasticity: 10, 40 & 60 kPa

