Multigauge 4000 series

ROV Gauge

The Multigauge ROV 4100 and 4400 Underwater Gauges are simple, robust ultrasonic thickness gauges designed to be mounted onto all types of work class ROV’s. There are two models in the range, the Multigauge ROV 4100 which has a depth rating of 1000m and the Multigauge ROV 4400 which has a depth rating of 4000m. Both gauges have been designed and built to survive extremely harsh conditions that exist in the offshore and underwater industries worldwide. The gauges use multiple echo which means measurements can be easily taken without the need to remove coatings, up to 6mm thick, and the selectable RS232 or RS422 output makes connection to most ROV’s simple. The gauge is equipped with Intelligent Probe Recognition (IPR), which automatically adjusts settings in the gauge for enhanced performance and Automatic Measurement Verification System (AMVS) to ensure only true measurements are displayed.

Features:

• Ignores coatings up to 6mm thick using multiple echo.
  Coating Plus+ ignores coatings up to 20mm
• Depth rating to 1000m and 4000m
• Easy to use datalogging software
• Compatible with most ROV’s
• RS232 or RS422 output
• Optional probe holder for correct presentation of the probe
• Rugged and robust
• Intelligent Probe Recognition (IPR)
• Automatic Measurement Verification (AMVS)
• No zeroing required
• Free calibration for the life of the gauge

www.tritexndt.com
About Multiple Echo

All Ultrasonic Thickness Gauges should be calibrated to the velocity of sound of the material being measured. Coatings have a different velocity of sound than metal and it is important they are not included in the measurement. Multiple Echo ensures all coatings, up to 6mm thick, are completely eliminated from the measurement.

How it works:

A transmitted ultrasound pulse travels though both the coating and the metal and reflects from the back wall. The returned echo then reverberates within the metal, with only a small portion of the echo travelling back through the coating each time. The timing between the small echoes gives us the timing of the echoes within the metal, which relate to the metal thickness. The returned echoes need not be consecutive as the gauge will interpret them automatically and calculate the thickness. A minimum of three echoes are checked each time.

This is referred to as the Automatic Measurement Verification System (AMVS).

### Specification

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<th>Single Crystal</th>
<th>Soft Faced Probe Options</th>
<th>Probe Measurement Range</th>
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<tr>
<td>Sound Velocity Range</td>
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<td>2.25 MHz</td>
<td>3 - 250 mm</td>
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<td>0.120&quot; to 10&quot;</td>
<td>Up to 6mm (Standard Mode)*</td>
<td>RS232 or RS422 User Selectable</td>
<td>1000 metres (Multigauge 4100) &amp; 4000m (Multigauge 4400)</td>
<td>9Vdc - 30Vdc @ 150mA</td>
<td>145 mm x 72 mm (5.71&quot; x 2.83&quot;)</td>
<td>Multigauge 4100 ROV: 465 g (16.40 ounces)</td>
<td>Multigauge 4400 ROV: 2506g (151.68 ounces)</td>
<td>RoHS and WEEE compliant</td>
<td>-10°C to +50°C (14°F to 122°F)</td>
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The Tritex Multigauge 4000 series has been manufactured to comply with British Standard BS EN 15317:2007, which covers the characterisation and verification of ultrasonic thickness measuring equipment.

### Contact

**UK Office:**

Tritex NDT Ltd  
Unit 10, Mellstock Business Park,  
Higher Buckhamton, Dorchester,  
Dorset, United Kingdom, DT2 8QJ  
t: +44 (0) 1305 257160  
f: +44 (0) 1305 259573  
e: sales@tritexndt.com  
w: www.tritexndt.com

**USA Office:**

Tritex NDT LLC  
1533 Stuyvesant Avenue,  
Union, New Jersey,  
07083, United States  
t: +1 908 688 6706  
f: +1 908 688 9040  
e: sales.us@tritexndt.com  
w: www.tritexndt.com

3 YEAR WARRANTY