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### Multigauge 3000 **Underwater Gauge**

The Multigauge 3000 Underwater Gauge is a simple, robust ultrasonic thickness gauge designed for most common underwater thickness gauging applications. The gauge is pressure tested to 500m and has the option to transfer measurements to a surface display unit with the simple addition of a replacement end cap. It has been designed and built to survive extremely harsh conditions that exist in the offshore and underwater industries worldwide. The gauge uses multiple echo which means measurements can be easily taken without the need to remove coatings, up to 6mm thick, and the large bright

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, even on the most heavily corroded metals.

LED display ensures the display can be seen by the diver, even in poor visibility.



Large Bright 10 mm Display













- Large 10mm display for poor visibility
- Ignores coatings up to 6mm thick using multiple echo. Coating Plus+ ignores coatings up to 20mm
- Pressure tested to 500m
- Integral battery with 55 hour runtime on one fast charge. No need for a spare battery
- Easy to use
- No fuss upgrade option to a topside repeater
- **Intelligent Probe Recognition (IPR)**
- **Automatic Measurement Verification (AMVS)**
- No zeroing required
- Free calibration for the life of the gauge
- Rugged and robust



## Multigauge 3000 3 Options...

### Multigauge 3000 Diver Handheld

The standard unit allows the diver to take measurements underwater. The large bright display gives a clear reading even in poor visibility conditions. The gauge benefits from being highly visible and easy to hold due to its robust heavy duty construction.

The Multigauge 3000 can be easily upgraded to one of two topside repeater options by simply replacing the end cap. An alternative end cap houses an Impulse connector for connection to an umbilical. The umbilical can be up to 1000 metres long.



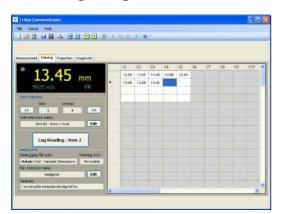
Surface Display Unit

### Multigauge 3000 Surface Display Unit

The Multigauge 3000 Surface Display unit repeats the measurements from the Multigauge 3000 diver unit. This allows measurements to be displayed topside when visibility is too bad for the diver to see the display, or when measurements have to be verified by another person.

Additionally, it also allows the person on the surface to remotely change the settings on the diver unit, including the calibration, measurement units and resolution.

### Multigauge 3000 Surface Software



The Multigauge 3000 Surface Software displays measurements onto a laptop which allows the topside person to log the data as required. The kit is supplied with an RS232 to USB converter for connection with most laptop computers.

The software allows the user to adjust settings in the gauge through a bi-directional link, display the repeated measurements from the diver and datalog the measurements into useful templates.

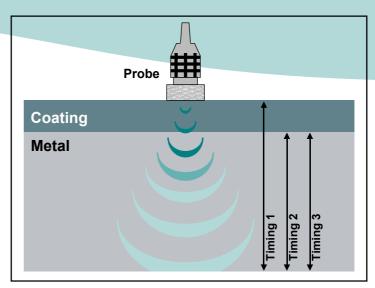
Communicator Software







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.

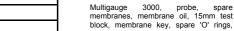


#### How it works:

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

Sound Velocity Range	From 1000 m/s to 800	From 1000 m/s to 8000 m/s (0.0394 in/µs to 0.3150 in/µs)					
Single Crystal Soft Faced Probe Options	2.25 MHz	2.25 MHz 3.5 MHz 5 MHz					
Probe Measurement Range	3 - 250 mm (0.120" to 10")						
Probe Sizes	13 mm (0.5") & 19 mm (0.75")	13 mm (0.5")	13 mm (0.5")				
Resolution	0.1 mm (0.005") or 0.	0.1 mm (0.005") or 0.05 mm (0.002")					
Accuracy	± 0.1 mm (0.005") or	± 0.1 mm (0.005") or ± 0.05 mm (0.002")					
Coatings Range	Up to 6mm (Standard	Up to 6mm (Standard Mode)*; up to 20mm (Coating Plus+)*					
Display	Red 4 character 7 seg	Red 4 character 7 segment LED					
Pressure Tested	500 metres	500 metres					
Batteries	1 x Rechargeable 7.2	1 x Rechargeable 7.2V 2.3Ah NiMH battery pack					
Battery Life	55 Hours continuous	55 Hours continuous use					
Gauge Dimensions	235 mm x 80 mm (9	235 mm x 80 mm (9.25" x 3.15")					
Gauge Weight	1110 g (38.85 ounces	1110 g (38.85 ounces) fully assembled					
Environmental	RoHS and WEEE cor	RoHS and WEEE compliant					
Operating Temperature	-10°C to +50°C (14°F	-10°C to +50°C (14°F to 122°F)					
Storage Temperature	-10°C to +60°C (14°F	-10°C to +60°C (14°F to 140°F)					



The Tritex Multigauge 3000 has been manufactured to comply with British Standard BS EN 15317:2007, which covers the characterisation and verification of ultrasonic thickness measuring equipment.



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**3 YEAR WARRANTY** 

Molykote grease, nose cone release bar, battery charger with appropriate power

lead, manual, calibration certificate, carry

Kit Contents:













### 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,











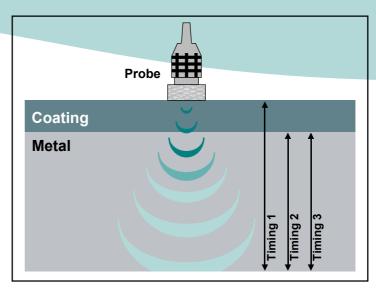
Multigauge 4400 4000 m

#### 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



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

Sound Velocity Range	From 1000 m/s to 8000 m/s (0.0394 in/µs to 0.3150 in/µs)					
Single Crystal Soft Faced Probe Options	2.25 MHz 3.5 MHz 5 MHz					
Probe Measurement Range	3 - 250 mm 2 - 150 mm 1 - 50 mm (0.120" to 10") (0.080" to 6") (0.040" to 2")					
Probe Sizes	13 mm (0.5") & 13 mm (0.5") 13 mm (0.5")					
Resolution	0.1 mm (0.005") or 0.05 mm (0.002")					
Accuracy	± 0.1 mm (0.005") or ± 0.05 mm (0.002")					
Coatings Range	Up to 6mm (Standard Mode)*; up to 20mm (Coating Plus+)*					
Output	RS232 or RS422 User Selectable					
Pressure Tested	1000 metres (Multigauge 4100) & 4000m (Multigauge 4400)					
Power	9Vdc - 30Vdc @ 150mA					
Gauge Dimensions	145 mm x 72 mm (5.71" x 2.83")					
Gauge Weight	Multigauge 4100 ROV: 465 g (16.40 ounces) Multigauge 4400 ROV: 2500g (151.68 ounces)					
Environmental	RoHS and WEEE compliant					
Operating Temperature	-10°C to +50°C (14°F to 122°F)					
Storage Temperature	-10°C to +60°C (14°F to 140°F)					

Figures relate to most coating types

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.





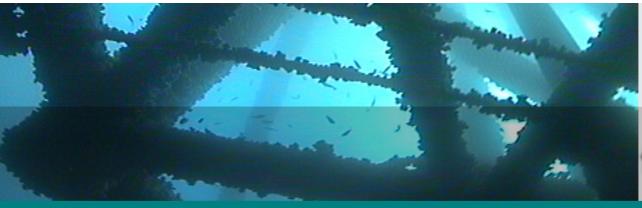




#### Kit Contents:

Multigauge 4000 gauge, probe, spare membranes, membrane oil, 15mm test block, membrane key, spare 'O' rings, Molykote grease, nose cone release bar, manual, calibration certificate, carry case, communicator software, RS422 - RS232 converter, Impulse connector with fly lead, ROV test cable, power supply for use with test cable.



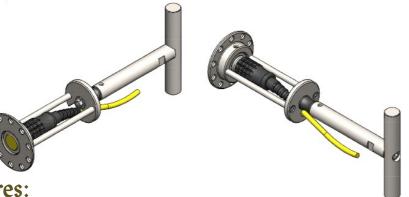




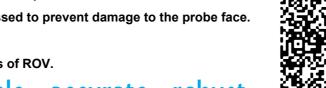
### Multigauge 4000 series Probe Holder

The Multigauge ROV Probe Holder has been designed to accurately present the ROV probe onto the surface being measured, whether it is curved or flat. The ingenious design means there are no moving parts to get clogged with silt and seaweed and yet there is a 75° freedom of movement in all directions there are no axial restrictions.

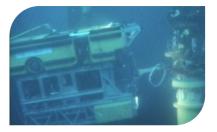
The probe can be mounted slightly recessed into the holder to prevent damage to the probe if a collision with the surface occurred. Measurements are unaffected by the small water gap due to the Multiple Echo technology used by all Tritex gauges, which ignores the water gap as if it were a coating.



- Features:
- Automatically aligns probe on flat and curved surface.
- No moving parts to get jammed from silt and seaweed.
- Universal front plate can be fitted with lugs for pipelines or flat bars for ships hulls.
- Standard 'T-bar' and 'fishtail' compatible.
- Allows the probe to be recessed to prevent damage to the probe face.
- Rugged and robust.
- Can be used with most types of ROV.











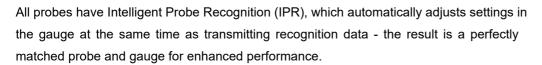






### Multigauge 5300 / 5350 GRP

The Multigauge 5300 is a simple, robust ultrasonic thickness gauge designed to check the condition of Glass Reinforced Plastic (GRP) or Engineering Plastics. It can also be used on uncoated metal. The easy to use keypad allows operator interface, whilst the bright colour LCD display can be used in all light conditions. The moulded soft rubber surround feels comfortable, looks good and provides extra protection against knocks and scrapes.





### **Features**

- Measures GRP or all types of engineering plastic
- Large colour LCD display giving user information.
- · No zeroing required.
- · Single crystal hard faced probe.
- Easy calibration with menu driven buttons.
- · Intelligent Probe Recognition (IPR).
- · Echo strength indicator.
- Datalogging version with wireless data transmission.
- 3 year warranty.
- · Free calibration for the life of the gauge.

simple . accurate . robust







**Easy Menu System** 

#### **Typical Applications**

Leisure Craft
Yachts
Potable Water Tanks
GRP Storage Tanks
Marine Surveying
Engineering Plastics
Non Coated Metal

### Datalogging (Multigauge 5350)

Measurements can be logged using a grid or string format. The gauge will store up to 895 files, each containing 100 records. Each record can store either a string of 250 or grid of  $16 \times 16$  measurements. The simple, easy to use menu guides the user through intuitive setup procedures.

The gauge uses wireless technology to transmit the measurements to the PC where dedicated Communicator software allows the analysis of the results or easy production of templates using wizards. Measurements are stored in a .txt format so that they can be opened in other applications.

Measurements can also be displayed remotely on a PC up to 1000 metres away.



Logi	ile: 0	15	.1 MM		
O 11	C1	C2	C3		
R1					
R2					
R3					
R4					
Reco	ord:	of	2 Gri	d: 10R	x 3C
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### Specification

Sound Velocity Range	From 1000 m/s to 8000 m/s (0.0394 in/µs to 0.3150 in/µs)
Single Crystal Hard Faced Probe	1 MHz
Probe Measurement Range	2 - 300 mm (0.080" to 11")
Probe Sizes	19 mm (0.75")
Resolution	0.1 mm (0.005")
Accuracy	± 0.1 mm (0.005")
Display	Multi character colour LCD
Batteries	3 x disposable AA alkaline batteries or rechargeable NiMH / NiCD
Battery Life	Up to 50 Hours continuous use using alkaline batteries
Gauge Dimensions	147 mm x 90 mm x 28 mm (5.75" X 3.5" X 1")
Gauge Weight	325 g (11.5 ounces) including batteries
Environmental	Case rated to IP65. RoHS and WEEE compliant
Operating Temperature	-10°C to +50°C (14°F to 122°F)
Storage Temperature	-10°C to +60°C (14°F to 140°F)
Multigauge 5350 Datalogger Only	
Storage capacity	32 Mb
Data Transmission	Wireless RF

The Tritex Multigauge 5300 and Multigauge 5350 gauges have been manufactured to comply with British Standard BS EN 15317:2007, which covers the characterisation and verification of ultrasonic thickness measuring equipment.





#### Kit Contents:

Multigauge 5300 or Multigauge 5350 gauge, hard faced probe, probe lead, ultrasonic gel, 15mm test block, batteries, manual, calibration certificate, carry case.

Optional leather case.

Multigauge 5350 Datalogger Only
Transceiver, Communicator software

#### 3 YEAR WARRANTY



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### Multigauge 5500

The Multigauge 5500 has been designed for hands free use when climbing on staging, ladders, scaffolding or when accessing by rope. Whether it's onboard a ship, on large storage tanks, climbing on top of a road tanker or inspecting underneath a bridge, the 5500 will make the job much easier. The moulded soft rubber surround feels comfortable, looks good and provides extra protection against knocks and scrapes. All probes have Intelligent Probe Recognition (IPR), which automatically adjusts settings in the gauge at the same time as transmitting recognition data - the result is a perfectly matched probe and gauge for enhanced performance. Additionally, the Automatic Measurement Verification System (AMVS) ensures only true measurements are displayed, even on the most heavily corroded metals.





### **Features**

Ignores coatings up to 6 mm thick using Multiple Echo.
 Coating Plus+ ignores coatings up to 20 mm.

 Automatic Measurement Verification System (AMVS).

- Mounts onto waist belt or chest harness for hands free use.
- · No zeroing required.
- Single crystal soft faced probe protected by a membrane.
- Easy calibration with menu driven buttons.
- Intelligent Probe Recognition (IPR).
- Echo strength indicator.
- 3 year warranty.
- Free calibration for the life of the gauge.

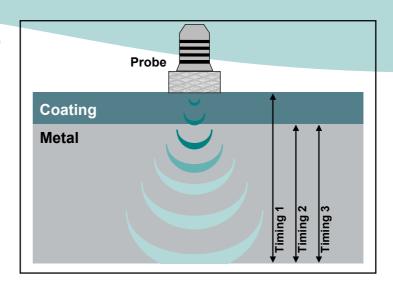
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#### Typical Applications

Shipping Pipelines
Bridges Road Tankers
Pilings Offshore Platforms
Storage Tanks Lighting Columns
Industry Phone Masts
Quality Control Lock Gates
Leisure Craft Barges

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

Sound Velocity Range	From 1000 m/s to 800	From 1000 m/s to 8000 m/s (0.0394 in/µs to 0.3150 in/µs)					
Single Crystal Soft Faced Probe Options	2.25 MHz	2.25 MHz 3.5 MHz 5 MHz					
Probe Measurement Range	3 - 250 mm (0.120" to 10")						
Probe Sizes	13 mm (0.5") & 19 mm (0.75")	13 mm (0.5")	6 mm (0.25") & 13 mm (0.5")				
Resolution	0.1 mm (0.005") or 0.	0.1 mm (0.005") or 0.05 mm (0.002")					
Accuracy	± 0.1 mm (0.005") or	± 0.1 mm (0.005") or ± 0.05 mm (0.002")					
Coatings Range	Up to 6mm (Standard	Up to 6mm (Standard Mode)*; up to 20mm (Coating Plus+)*					
Display	Red 4 character 7 seg	Red 4 character 7 segment LED					
Batteries	3 x disposable AA alk	3 x disposable AA alkaline batteries or rechargeable NiMH / NiCD					
Battery Life	Up to 50 hours contin	Up to 50 hours continuous use using alkaline batteries					
Gauge Dimensions	147 mm x 90 mm x 28 mm (5.75" X 3.5" X 1")						
Gauge Weight	320 g (11.3 ounces) including batteries						
Environmental	Case rated to IP65. RoHS and WEEE compliant						
Operating Temperature	-10°C to +50°C (14°F	-10°C to +50°C (14°F to 122°F)					
Storage Temperature	-10°C to +60°C (14°F	-10°C to +60°C (14°F to 140°F)					

Figures relate to most coating types

The Tritex Multigauge 5500 has been manufactured to comply with British Standard BS EN 15317:2007, which covers the characterisation and verification of ultrasonic thickness measuring equipment.



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#### Kit Contents:

Multigauge 5500 gauge, probe, probe lead, spare membranes, membrane oil, belt clip, ultrasonic gel, 15mm test block, membrane key, batteries, manual, calibration certificate, carry case.

Optional leather case.







### Multigauge 5600

The Multigauge 5600 is a simple, robust ultrasonic thickness gauge designed for most common thickness gauging applications. The easy to use keypad allows operator interface whilst the bright LCD display can be used in all light conditions. The moulded soft rubber surround feels comfortable, looks good and provides extra protection against knocks and scrapes. All probes have Intelligent Probe Recognition (IPR), which automatically adjusts settings in the gauge at the same time as transmitting recognition data - the result is a perfectly matched probe and gauge for enhanced performance. Additionally, the Automatic Measurement Verification System (AMVS) ensures only true measurements are displayed, even on the most heavily corroded metals.



### **Features**

- Ignores coatings up to 6 mm thick using Multiple
   Echo. Coating Plus+ ignores coatings up to 20 mm.
- Automatic Measurement Verification System (AMVS).
- · Large colour LCD display giving user information.
- · No zeroing required.
- Single crystal soft faced probe protected by a membrane.
- Easy calibration with menu driven buttons.
- Intelligent Probe Recognition (IPR).
- · Echo strength indicator.
- 3 year warranty.
- Free calibration for the life of the gauge.

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iPROBE	Measuring	Battery
21/4 MHz	-	
13mm	mm	4.4V
Calibration	Units	Resolution
5915	mm	0.1
m/s	V3.10p	mm

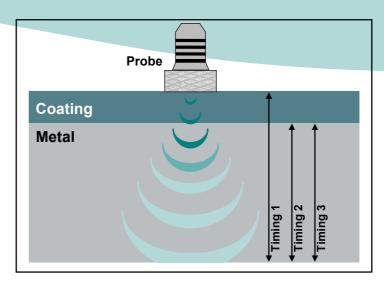
**Easy Menu System** 

### **Typical Applications**

Shipping
Bridges
Pilings
Storage Tanks
Industry
Quality Control
Leisure Craft

Pipelines
Road Tankers
Offshore Platforms
Lighting Columns
Phone Masts
Lock Gates
Barges

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

Battery Life Up to 50 hours continuous use using alkaline batteries  Gauge Dimensions 147 mm x 90 mm x 28 mm (5.75" X 3.5" X 1")  Gauge Weight 325 g (11.5 ounces) including batteries  Environmental Case rated to IP65. RoHS and WEEE compliant	Sound Velocity Range	From 1000 m/s to 8000 m/s (0.0394 in/µs to 0.3150 in/µs)					
Probe Measurement Range         (0.120" to 10")         (0.080" to 6")         (0.040" to 2")           Probe Sizes         13 mm (0.5") & 19 mm (0.75")         13 mm (0.5")         6 mm (0.25") & 13 mm (0.5")           Resolution         0.1 mm (0.005") or 0.05 mm (0.002")           Accuracy         ± 0.1 mm (0.005") or ± 0.05 mm (0.002")           Display         Colour LCD           Coatings Range         Up to 6mm (Standard Mode)*; up to 20mm (Coating Plus+)*           Batteries         3 x disposable AA alkaline batteries or rechargeable NiMH / NiCited Display           Battery Life         Up to 50 hours continuous use using alkaline batteries           Gauge Dimensions         147 mm x 90 mm x 28 mm (5.75" X 3.5" X 1")           Gauge Weight         325 g (11.5 ounces) including batteries           Environmental         Case rated to IP65. RoHS and WEEE compliant		2.25 MHz 3.5 MHz 5 MHz					
Resolution	Probe Measurement Range						
Accuracy ± 0.1 mm (0.005") or ± 0.05 mm (0.002")  Display Colour LCD  Coatings Range Up to 6mm (Standard Mode)*; up to 20mm (Coating Plus+)*  Batteries 3 x disposable AA alkaline batteries or rechargeable NiMH / NiCit  Battery Life Up to 50 hours continuous use using alkaline batteries  Gauge Dimensions 147 mm x 90 mm x 28 mm (5.75" X 3.5" X 1")  Gauge Weight 325 g (11.5 ounces) including batteries  Environmental Case rated to IP65. RoHS and WEEE compliant	Probe Sizes						
Display  Colour LCD  Coatings Range  Up to 6mm (Standard Mode)*; up to 20mm (Coating Plus+)*  Batteries  3 x disposable AA alkaline batteries or rechargeable NiMH / NiCl  Battery Life  Up to 50 hours continuous use using alkaline batteries  Gauge Dimensions  147 mm x 90 mm x 28 mm (5.75" X 3.5" X 1")  Gauge Weight  325 g (11.5 ounces) including batteries  Environmental  Case rated to IP65. RoHS and WEEE compliant	Resolution	0.1 mm (0.005") or 0.05 mm (0.002")					
Coatings Range  Up to 6mm (Standard Mode)*; up to 20mm (Coating Plus+)*  Batteries  3 x disposable AA alkaline batteries or rechargeable NiMH / NiCit Battery Life  Up to 50 hours continuous use using alkaline batteries  Gauge Dimensions  147 mm x 90 mm x 28 mm (5.75" X 3.5" X 1")  Gauge Weight  325 g (11.5 ounces) including batteries  Environmental  Case rated to IP65. RoHS and WEEE compliant	Accuracy	± 0.1 mm (0.005") or ± 0.05 mm (0.002")					
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Battery Life Up to 50 hours continuous use using alkaline batteries  Gauge Dimensions 147 mm x 90 mm x 28 mm (5.75" X 3.5" X 1")  Gauge Weight 325 g (11.5 ounces) including batteries  Environmental Case rated to IP65. RoHS and WEEE compliant	Coatings Range	Up to 6mm (Standard Mode)*; up to 20mm (Coating Plus+)*					
Gauge Dimensions  147 mm x 90 mm x 28 mm (5.75" X 3.5" X 1")  Gauge Weight  325 g (11.5 ounces) including batteries  Environmental  Case rated to IP65. RoHS and WEEE compliant	Batteries	3 x disposable AA alkaline batteries or rechargeable NiMH / NiCD					
Gauge Weight 325 g (11.5 ounces) including batteries  Environmental Case rated to IP65. RoHS and WEEE compliant	Battery Life	Up to 50 hours continuous use using alkaline batteries					
Environmental Case rated to IP65. RoHS and WEEE compliant	Gauge Dimensions	147 mm x 90 mm x 28 mm (5.75" X 3.5" X 1")					
7 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -	Gauge Weight	325 g (11.5 ounces) including batteries					
Operating Temperature -10°C to +50°C (14°E to 122°E)	Environmental	Case rated to IP65. RoHS and WEEE compliant					
Operating reinperature	Operating Temperature	-10°C to +50°C (14°F to 122°F)					
Storage Temperature -10°C to +60°C (14°F to 140°F)	Storage Temperature	-10°C to +60°C (14°F to 140°F)					

The Tritex Multigauge 5600 has been manufactured to comply with British Standard BS EN 15317:2007, which covers the characterisation and verification of ultrasonic thickness measuring equipment.











#### Kit Contents:

Multigauge 5600 gauge, probe, probe lead, spare membranes, membrane oil, ultrasonic gel, 15mm test block, membrane key, batteries, manual, calibration certificate, carry

Optional leather case.





### Multigauge 5650 / 5750 Surveyor Gauge

The Multigauge 5650 Surveyor / 5750 Surveyor Datalogger are simple, robust ultrasonic thickness gauges designed specifically for ship and small craft surveyors. The user has a choice of Multiple Echo, Echo to Echo or Single Echo to cover all requirements. The gauges can be used for metal, GRP or plastic measurement and they automatically switch modes and settings depending on the type of probe fitted. The easy to use keypad allows operator interface whilst the bright LCD display can be used in all light conditions. All probes have Intelligent Probe Recognition (IPR), which automatically adjusts settings in the gauge at the same time as transmitting recognition data - the result is a perfectly matched probe and gauge for enhanced performance. Additionally, the Automatic Measurement Verification System (AMVS) used with multiple echo ensures only true measurements are displayed, even on the most heavily corroded metals.







#### **Features**

- Ignores coatings up to 6 mm thick using Multiple Echo. Coating Plus+ ignores coatings up to 20 mm.
- Single crystal soft faced probes protected by a membrane and single crystal hard faced probes for linear accuracy.
- Automatic Measurement Verification System (AMVS) in multiple echo mode.
- Echo Echo mode for enhanced performance.
- Inspect GRP for osmosis.
- Large colour LCD display giving user information.
- No zeroing required.
- Easy calibration with menu driven buttons.
- Intelligent Probe Recognition (IPR).
- Echo strength indicator.



**Easy Menu System** 

simple . accurate . robust

FREE ANNUAL CALIBRATION FREE 3 YEAR WARRANTY

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. A minimum of three echoes are checked each time. This is referred to as the **Automatic Measurement Verification System (AMVS)**.

# Probe Coating Metal Probe Edular Regular Regu

### Datalogging (Multigauge 5750)

Measurements can be logged using a grid or string format. The gauge will store up to 895 files, each containing 100 records. Each record can store either a string of 250 or grid of 16 x 16 measurements. The simple, easy to use menu guides the user through intuitive setup procedures.

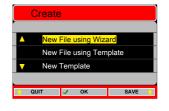
The gauge uses wireless technology to transmit the measurements to the PC where dedicated Communicator software allows the analysis of the results or easy production of templates using wizards. Measurements are stored in a .txt format so that they can be opened in other applications. Measurements can also be displayed remotely on a PC up to 1000 metres away.

### Specification

The Tritex Multigauge range has been manufactured to comply with British Standard BS EN 15317:2013, which covers the characterisation and verification of ultrasonic thickness measuring equipment.

Sound Velocity Range	From 1000 m/s to 8000 m/s (0.0394 in/µs to 0.3150 in/µs)					
Single Crystal Probe Options	1 MHz 2.25 MHz 3.5 MHz 5 MHz					
Probe Type	Hard Faced Soft Faced Soft Faced Soft Faced					
Probe Measurement Range	2 - 300 mm 3 - 250 mm 2 - 150 mm 1 - 50 mm (0.080" to 11") (0.120" to 9") (0.080" to 6") (0.040" to					
Probe Sizes	19 mm (0.75")					
Resolution	0.1 mm (0.005") or 0.05 mm (0.002")					
Accuracy	± 0.1 mm (0.005") or ± 0.05 mm (0.002")					
Display	Multi character Colour LCD					
Batteries	3 x disposable AA alkaline batteries or rechargeable NiMH / NiCD					
Battery Life	Up to 50 Hours continuous use using alkaline batteries					
Gauge Dimensions	147 mm x 90 mm x 28 mm (5.75" X 3.5" X 1")					
Gauge Weight	325 g (11.5 ounces) including batteries					
Environmental	Case rated to IP65. RoHS and WEEE compliant					
Operating Temperature	-10°C to +50°C (14°F to 122°F)					
Storage Temperature	-10°C to +60°C (14°F to 140°F)					
Multigauge 5750 Datalogger Only	1					
Storage capacity	32 Mb					
Data Transmission	Wireless RF					
* Figures relate to most coating type:						





Logfile: 000001				1	5.1 MM	
14	C1	C2	C3			
R1						
R2						
R3						Ī
R4						Ī
Reco	ord:	of	2 Gri	d: 10F	R x 3C	
<u> </u> Ut	1DO	√ L	.og	RE	CORD	I





#### Kit Contents:

Multigauge 5650 or Multigauge 5750 datalogger gauge, soft faced probe, hard faced probe, probe lead, spare membranes, membrane oil, ultrasonic gel, 15mm test block, membrane key, batteries, manual, calibration certificate, carry case.

Optional leather case.

Multigauge 5750 Datalogger Only Transceiver, Communicator software













### Multigauge 5700 Datalogger

The Multigauge 5700 is a simple, robust ultrasonic thickness gauge designed for most common thickness gauging applications with the added benefit of being able to store measurements within the gauge. The easy to use keypad allows operator interface whilst the bright LCD display can be used in all light conditions. The moulded soft rubber surround feels comfortable, looks good and provides extra protection against knocks and scrapes. All probes have Intelligent Probe Recognition (IPR), which automatically adjusts settings in the gauge at the same time as transmitting recognition data - the result is a perfectly matched probe and gauge for enhanced performance. Additionally, the Automatic Measurement Verification System (AMVS) ensures only true measurements are displayed, even on the most heavily corroded metals. The gauge can store measurements in either a grid or string format which can then later be used in other proprietary programs.



### **Features**

- Ignores coatings up to 6 mm thick using Multiple
   Echo. Coating Plus+ ignores coatings up to 20 mm.
- Automatic Measurement Verification System (AMVS).
- · Large colour LCD display giving user information.
- · No zeroing required.
- · Wireless data transmission.
- Single crystal soft faced probe protected by a membrane.
- · Easy calibration with menu driven buttons.
- Intelligent Probe Recognition (IPR).
- · Echo strength indicator.
- 3 year warranty.
- Free calibration for the life of the gauge.

simple . accurate . robust





iPROBE	Measuring	Battery
21/4 MHz	-	
13mm	mm	4.4V
Calibration	Units	Resolution
5915	mm	0.1
m/s	V3.10p	mm

**Easy Menu System** 

#### **Typical Applications**

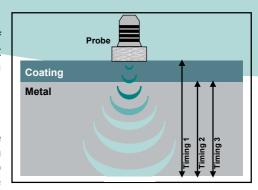
Shipping
Bridges
Pilings
Storage Tanks
Industry
Quality Control
Leisure Craft

Pipelines
Road Tankers
Offshore Platforms
Lighting Columns
Phone Masts
Lock Gates
Barges

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

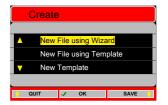


small echoes gives us the timing of the echoes within the metal, which relate to the metal thickness. The returned echoes need not be consecutive as the gauge will interpret them automatically and calculate the thickness. A minimum of three echoes are checked each time. This is referred to as the Automatic Measurement Verification System (AMVS).

### Datalogging

Measurements can be logged using a grid or string format. The gauge will store up to 895 files, each containing 100 records. Each record can store either a string of 250 or grid of 16 x 16 measurements. The simple, easy to use menu guides the user through intuitive setup procedures.

The gauge uses wireless technology to transmit the measurements to the PC where dedicated Communicator software allows the analysis of the results or easy production of templates.



### Specification

The Tritex Multigauge 5700 has been manufactured to comply with British Standard BS EN 15317:2007, which covers the characterisation and verification of ultrasonic thickness measuring equipment.

Sound Velocity Range	From 1000 m/s to 8000 m/s (0.0394 in/μs to 0.3150 in/μs)					
Single Crystal Soft Faced Probe Options	2.25 MHz 3.5 MHz 5 MHz					
Probe Measurement Range	3 - 250 mm 2 - 150 mm 1 - 50 mm (0.120" to 10") (0.080" to 6") (0.040" to 2")					
Probe Sizes	13 mm (0.5") & 13 mm (0.5") 6 mm (0.25") & 13 mm (0.5")					
Resolution	0.1 mm (0.005") or 0.05 mm (0.002")					
Accuracy	± 0.1 mm (0.005") or ± 0.05 mm (0.002")					
Display	Colour LCD					
Storage capacity	32 Mb					
Data Transmission	Wireless RF					
Coatings Range	Up to 6mm (Standard Mode)*; up to 20mm (Coating Plus+)*					
Batteries	3 x disposable AA alkaline batteries or rechargeable NiMH / NiCD					
Battery Life	Up to 50 hours continuous use using alkaline batteries					
Gauge Dimensions	147 mm x 90 mm x 28 mm (5.75" X 3.5" X 1")					
Gauge Weight	325 g (11.5 ounces) including batteries					
Environmental	Case rated to IP65. RoHS and WEEE compliant					
Operating Temperature	-10°C to +50°C (14°F to 122°F)					
Storage Temperature	-10°C to +60°C (14°F	to 140°F)				





#### Kit Contents:

Multigauge 5700 gauge, probe, probe lead, spare membranes, membrane oil, ultrasonic gel, 15mm test block, membrane key, batteries, manual, calibration certificate, carry

Optional leather case.







