BC ULT 2000
and
Probe Reference Datasheets

Australian Distributors
For BC Group USA

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Ultrasound Leakage Tester

Ultrasound Leakage Tester Series

CE

Features - ULT-2000 Series

- Tests the Upper & Lower Leakage Current Limits per Ultrasound Mfr. Specifications
- Range 0.5 to 500 µA - Designed to Meet Mfr. Transducer Specifications
- Large Graphic Display with Backlighting Allows Easy Selection of Options & Setup of Parameters
- User-Selectable Challenge (Test) Voltage (90 to 275 VAC) & Frequency (50 or 60 Hz)
- User-Selectable Test Limits
- Programmable Test Limits Based on Ultrasound Transducer Mfr. & Type
- ±1% F.S. Range Accuracy
- Auto Ranging for Enhanced Accuracy Over Entire Range
- Single Button Press for Full System Test
- Selectable Pass/Fail or Numerical Test Results
- User-Selectable Display Options
- Programmable Backlight Timer
- Flash Programmable, Field Upgradeable
- Compatible with Dale Technology® & Fluke Biomedical® Adapters & Probes
- RS-232 Interface
- PC Utility Software for Configuration Setup & Remote Control
- Test Results Printable w/Optional Printer
- On-Board Clock & Calendar Function for Date/Time Stamp of Test Records
- On-Board Storage for up to 99 Test Records
- Meter Mode
- Audio-Visual Test Status Indication

Are You IAC Section 2.2.3B Compliant?

ULT-2000

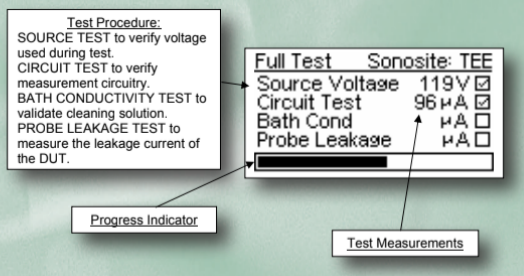
The ULT-2000 Series is specifically designed to test the electrical safety of all types of diagnostic ultrasound transducers totally independent of the ultrasound machines on which they are typically used. Although the ULT-2000 can be used on virtually any type of ultrasound transducer, it is especially recommended in the testing of TEE (Transesophageal Echocardiography) transducers prior to each use; as recommended by many TEE ultrasound device manufacturers. The ULT-2000 tests the integrity of the outer insulation barrier of the transducer as well as the capacitive leakage currents that exist.

The ULT-2000 Series is the most advanced instrument of its kind on the market today and adds a totally new dimension to diagnostic ultrasound transducer electrical safety testing. With features and functionality that far surpass competitive products from other manufacturers, the ULT-2000 is easy to set up and use. Operating modes include a simple PASS/FAIL mode as well as a QUANTITATIVE mode that offers actual readings. You can print test results to an optional printer.

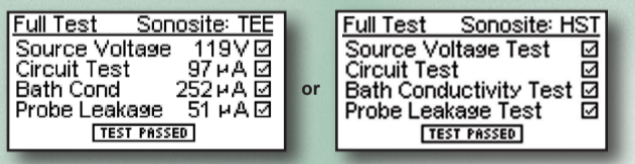
Compatibility with Dale Technology® DALE800, Fluke Biomedical® ULT800 adapters and Dual Conductivity Probes allow you to upgrade to the very latest technology platform, while safeguarding your prior investment in adapters and probes. A wide variety of BC Biomedical adapters and accessories are available.

Screen Views

Typical Passing Results Display

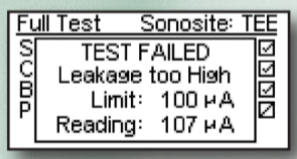


Typical Passing Results Display Choices



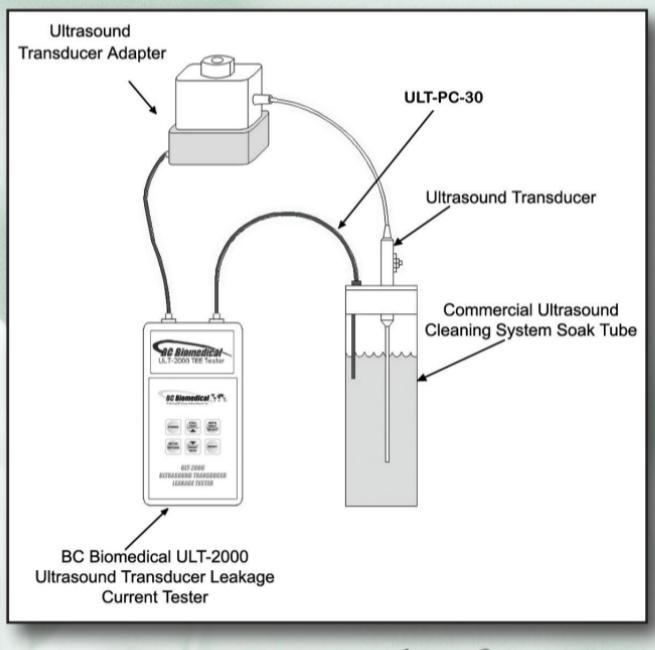
Quantitative Mode **Pass/Fail Mode**

Typical Failed Results Display



Quantitative Mode & Pass/Fail Mode

Test your TEE Transducers While They are being Disinfected in a Commercial Cleaner

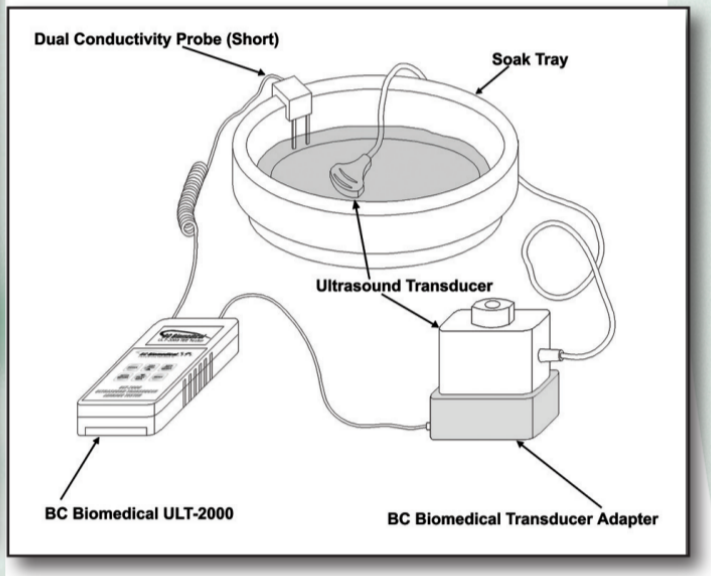


BC20-42332 Optional ULT-2000 Printer Kit

Specifications

Source Voltage	90 to 275 VAC, ± 1% FS
Leakage Current	0.50 to 10.00 µA, ± 0.5 µA 10 to 250 µA, ± 1% FS 250 to 500 µA, ± 1% FS
Conductivity Current	0.5 to 500 µA, ± 1% FS
Display	LCD Graphical w/Backlighting 128 x 64 Pixels
Setup Memory	EEPROM, All Parameters
Memory Retention	10 years w/o Power
Operating Range	15 to 30 °C (59 to 86 °F)
Storage Range	-40 to 60 °C (-40 to 140 °F)
Construction	Enclosure - ABS Plastic Face - Lexan, Back Printed
Size	7.27 x 3.97 x 1.80 Inches (184.7 x 100.8 x 45.7 mm)
Weight	< 1.1 lbs (0.68 kg)
Power Consumption	On: < 300 mA Off: < 250 µA
Battery	9V Lithium (ANSI/NEDA 1604LC or equivalent)
Battery Life	Continuous: > 100 Full Tests (Note: Backlight set to OFF) OFF: > 1 Year
Battery Eliminator (Included)	BC20-21111 Battery Eliminator (Universal)

Typical Test Setup for Testing Your Ultrasound Transducers with a Transducer-Specific Adapter & a Soak Tray.



ULT-PA-29 Adapter

Ultrasound Leakage Testers Series

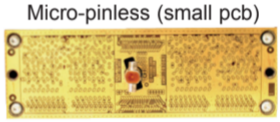
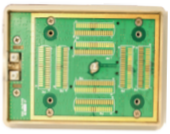
U-Tech Medical

Australian Distributors For BC Group USA

QUALITY SYSTEM CERTIFICATION DNV·GL ISO 9001

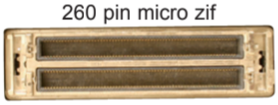
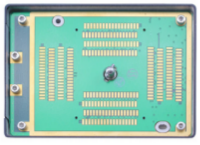
Ultrasound Leakage Tester Series

Ultrasound Transducer Adapter Cross Reference

BC Adapter Part #	Manufacturer	Transducer Compatibility	Ultrasound Platform	Transducer Connector
ULT-PA-10	Siemens/Acuson	V5M (TEE), V7M (TEE), EV8-C4, etc. For Acuson Sequoia Ultrasound Systems	Acuson Sequoia Ultrasound Systems	Micro-pinless (small pcb) 
ULT-PA-11	SonoSite	ICT7-4, ITC8-5, C60, L38/10-5, TEEx For Sonosite Titan and Micromaxx Ultrasound Systems	Sonosite Titan and Micromaxx Ultrasound Systems	Micro-pinless (small pcb) 156-pin ZIF 
ULT-PA-12	Siemens	6.5EV13, EC9-4, etc.	Call for Details	260-pin ZIF 
ULT-PA-13	Siemens/Acuson Ultrasonix	Siemens/Acuson 156-pin and V510B Transducers, and ATL UM4, UM9 and 5Mhz Bi-plane Ultrasonix C5-2	128XP	156-pin ITT Cannon ZIF 
ULT-PA-14	Philips/ATL	HP/Agilent/Philips 21311A, 21369A, 21378A, 21381A For HP Sonos 4500, 5500,7500 and Imagepoint For ATL HDI 1500,3000,3500 and 5000	HP Sonos 4500, 5500,7500, and Imagepoint; ATL HDI 1500,3000,3500, and 5000	260-pin ZIF 
ULT-PA-16	GE	GE LogiQ 3, 5, 7, 9 and GE Vivid 3, 5, 7, 6T, 9T	LOGIQ, Vivid & GE P9603AU	260-pin ZIF 
ULT-PA-17	Philips/ATL Mindray	Philips iE33 and iU22 diagnostic TEE - S7-2 (TEE), S7-3t (TEE), S3-1, C8-4v, C9-5, etc. all with bellhousing-Mindray DC8	iE33/iU22	260-pin ZIF 
ULT-PA-18	Philips/HP	HP/Agilent/Philips 21202A, 21364A, 21365A, 21366A, 21367A	Call for Details	156-pin ZIF 
ULT-PA-19	Philips Mindray Koelis SAS Samsung	Mindray M9, M7, TE7 Philips Sparq, CX50, Affiniti 50, Affiniti 70, Epiq 5, Epiq 7, all Koelis transducers, Samsung Medison HM70A	Sparq, CX50, Affiniti 50, Affinity 70, EPIQ 5, EPIQ 7 Samsung Twin-Zip	260 pin micro zif 

To download the current cross reference sheet in PDF format, go to:
http://www.bcgroupstore.com

Ultrasound Transducer Adapter Cross Reference

BC Adapter Part #	Manufacturer	Transducer Compatibility	Ultrasound Platform	Transducer Connector
ULT-PA-20	Acuson/Toshiba	Acuson/Toshiba (for use with Acuson/ Siemens XP, Aspen, Capasee, 3-Needle Guide C3 Transducers; ATL 3.5 DFT Transducers; Toshiba PSF-37HT and F Series Transducers)	Toshiba PVF Series, 2B701-753E	156-pin ZIF 
ULT-PA-21	Hitachi	HI VISION 900, 5500, 6500, 8500, EUB-2000, EUB-525, EUB-405 Plus	EUP-ES52M, EUP-Series Probes in general	260-pin ZIF 
ULT-PA-22	Ultraschallkopf - Aloka	UST-934N/9395, UST-945BP/945BP, ASU-32-3-M, ASU-32-WSJ, UST-556/5512, UST-5514DTU	SSD-620, SSD-650	260-pin ZIF 
ULT-PA-23	ALL	ALL Transducers	All Platforms	ALL Configurations
ULT-PA-24	Philips/ATL	T6210, L7-4 and similar 260-pin transducers with bellhousing	Call for Details	260-pin ZIF 
ULT-PA-25	GE	LogiqBook Probes - GE VIVID I 6T, 9T, etc.	Vivid	260 pin micro zif 
ULT-PA-26	Acuson Toshiba	PET-512MC, Artida, Aplio XG, Aplio MX, Aplio 80, Aplio 50, Aplio 300, Aplio 500, Aplio XV, Nemio XG, Viamo, Xario XG, and Xario	Antares	360-pin ZIF 
ULT-PA-27	GE	YMS/RT (for use with GR YMS/RT Transducers)	Call for Details	156-pin ZIF 
ULT-PA-29	Zonare	E9-4	All Zonare Platforms	168-pin Proprietary Custom Connector 
ULT-PA-30	GE Samsung	4C-D, 6VT-D, Voluson E8, Vivid E9 Samsung RS80A, HS70A	Samsung DLP408	408 Pin ZIF connector, With Shutters 
ULT-PA-32	Sonsonite	TEE X-Porte	Call for Details	

Ultrasound Leakage Testers Series

Ultrasound Leakage Tester Series

“Soft Touch” ULT Adapter Family Continues to Grow

PHILIPS Ultrasound®

“The BC Biomedical ULT-2020 current leakage tester with the ULT-PA-19 adapter have been validated by Philips Ultrasound for use with the X7-2t, S7-3t, and S8-3t compact connector TEE transducers.”

GE® PHILIPS®

SIEMENS® ZONARE®

Old Rubber Pad

New “Soft Touch” Connector

Did you know that all ultrasound transducer adapters are not created equally? There are basically two types of adapters available in the market today. The traditional adapters available from other manufacturers utilize a conductive rubber pad within a rigid body that captures the center mounting post of the transducer and pushes the pins of the transducer electrical connector into the surface of this relatively rigid conductive rubber pad. This action creates stress on the individual pins of the transducer connector and can actually bend or break pins under certain conditions.

Ultrasound manufacturers are aware of the existence of this type of adapter, and they will typically not provide warranty repairs to transducers with bent or broken pins caused by the use of these adapters. In fact, most ultrasound manufacturers frown upon the use of this type of adapter because of the physical stress placed upon the pins of the electrical connector. Replacement of a transducer electrical connector due to bent or broken pins can be a very costly experience.

The ULT line of second generation “Soft Touch” transducer adapters, available from BC Group International, completely eliminates the possibility of costly damage. Our second generation adapters utilize the actual multi-pin mating connector for the ultrasound transducer to be tested. The transducer electrical connector is subjected only to the same level of insertion and locking force that is normally seen when the transducer is connected to the ultrasound machine. There are no other undesired mechanical forces on the transducer electrical connector, or the individual pins within it. So why not take steps to avoid unnecessary and costly transducer electrical connector damage as a result of using older generation adapters? Second generation improved design adapters are now available from BC Group International.

Ultrasound Transducer Adapter Reference

			
ULT-PA-10	ULT-PA-11	ULT-PA-12	ULT-PA-13
			
ULT-PA-14	ULT-PA-16	ULT-PA-17	ULT-PA-18
			
ULT-PA-19	ULT-PA-20	ULT-PA-21	ULT-PA-22
			
ULT-PA-23	ULT-PA-24	ULT-PA-25	ULT-PA-26
			
ULT-PA-27	ULT-PA-29	ULT-PA-30	ULT-PA-32

Conductivity Probes

				
ULT-PC-10	ULT-PC-15	ULT-PC-20	ULT-PC-25	ULT-PC-30

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