# MODEL 1089e CHECKTRODE®



UFI 545 Main Street, Suite C-2 Morro Bay, CA 93442

## Introduction

The Checktrode® is used to test the integrity of electrode/skin contacts in physiological and/or bio-electrical data acquisition systems.

Under microprocessor control, a highly accurate, constant-current AC signal is impressed across the electrodes under test. A signal derived from this excitation lights one of several LED lights to indicate the impedance range between the electrodes, and thus the electrode/skin contact quality.

## **Controls and connectors**

### Power on/test switch

- Press and release to turn on Model 1089e.
- All LEDs light in sequence as system test.
- Unit then indicates electrode quality by illuminating appropriate LED.
- Powers down automatically after 3 minutes.
- LEDs blink in continuous cycle when battery needs to be replaced.

#### Input connectors

• Plug the electrodes to be tested into the 0.060" DIN safety jacks, one red and one black, located on the rear panel.

# Using the Checktrode®

- Prepare electrode sites abrade skin and use a conductive gel for good electrical contact with skin.
- Attach at least two electrodes to subject, then attach electrode leads to electrodes as shown:



- Connect two electrode leads to input jacks.
- Press power switch if Checktrode® is not already turned on.
- Unit performs self-test: LEDs light up in sequence.
- One LED then remains lit to show electrode contact impedance between the two connected electrodes.

# Meaning of LEDs and indicated action:

 $< 5 K\Omega - excellent$  skin prep: proceed with recording and expect good results.

 $< 10 \text{ K}\Omega - good$  skin prep, but expect some noise in the recording.

 $< 20 \ K\Omega - fair$  skin prep. Contact impedance may decrease with time, but for best recording quality, electrodes should be removed and skin re-prepped.

 $< 50 \text{ K}\Omega \text{ or} > 50 \text{ K}\Omega - bad$  skin prep. Even slight patient motion will cause noise. Electrodes *must* be removed and skin reprepped.

## Model 1089e specifications

Impedance ranges	< 5K ohms	All UFI instruments are warranted against defects in
	< 10K ohms	materials and workmanship to the original purchaser for a
	< 20K ohms	period of one year from the date of original purchase. This
	< 50K ohms	warranty is void if our inspection shows the equipment has
	> 50K ohms	been tampered with; or installed at variance with factory-
		designated procedures; or has been subjected to
• Test frequency	30 Hz sine wave	negligence, misuse, or accident beyond normal usage; or
		has had the serial number altered, defaced, or removed.
• Test current	< 10 microamps	All quantions recording the momentu should be directed to
• Input connectors	0.060" DIN joaks	All questions regarding the warranty should be directed to:
	0.000 DIN Jacks	
• Power supply	Standard 9V alkaline	UFI 545 Main Street, Suite C 2
	battery	Morre Day, CA 02442
	battery	Mono Bay, CA 95442
• Size	5" x 2.75" x 1.5"	Eman: man@unservingscience.com
	(127 x 70 x 38 mm)	No third party including any dealer or agent is authorized
	()	to assume any liability for UEL
• Weight	5.2 ounces (146g)	to assume any hability for OTT.
		When corresponding or communicating with LIFI
		concerning your equipment please include the model and
		serial numbers

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Warranty and repair