

MiniSim EEG

User Manual



- ▶ **Compact**
- ▶ **Lightweight**
- ▶ **Easy to Use**

EEG Waveform Simulator

(EEG Simulation Instrument)

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Notices

Copyright

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Quality Assurance

Netech is ISO 9001-2015 Registered. This instrument was thoroughly tested and inspected according to Netech's ISO 9001-2015 quality system and test procedures and found to meet those specifications when it was shipped from the factory. Calibration measurement Instruments are traceable to the NIST (National Institute of Standards and Technology).

Trade Mark

Netech and MiniSim 330 EEG are trademarks of Netech Corporation. Any other trademark names used in this manual are only for editorial purposes and the benefit of the respective trademark owner with no intention of improperly using that trademark

Unpacking and Inspection of the Unit

Before unpacking the MiniSim EEG, inspect the shipping box for any visual damage. If damage is found, do not unpack the unit and immediately notify the shipping carrier. If no damage is found to the shipping box, open the box and perform a visual inspection of the MiniSim EEG. If any damage to the unit is observed please contact Netech Customer Service.

Technical Support

For technical support questions, either email

Techsupport@NetechBiomedical.com or Call 1-800-547-6557

or (1-631-531-0100)

Refunds and Credits

A Return Material Authorization (RMA) number must be obtained from our service or customer service dept, before a product is returned for refund or credit. The RMA number should be clearly marked on the package along with a statement indicating the reason for return.

Restocking Charges

Products returned within 30 days after purchase are subject to a restocking charge of 15%. Products must be shipped prepaid in original shipping cartons with all accessories and parts. Additional charges will be applied for any missing parts or accessories.

Repair and Recalibration

Products returned for repair or recalibration must obtain a RMA (Return Material Authorization) from our service department after completing a service request form our website <https://www.NetechBiomedical.com/repair> or contact Netech Customer Service

Department at CustomerService@NetechBiomedical.com

Calibration

The MiniSim EEG is factory calibrated, thoroughly tested, and meets Netech's ISO 9001-2015 quality standards.

Any attempt to remove or tamper with the calibration seal will void the warranty.

General Contact Information

Netech Corporation, 110 Toledo St, Farmingdale, NY 11735.

Phone: 631-531-0100, (or) 1-800-547-6557

Website: www.NetechBiomedical.com

Email: sales@NetechBiomedical.com

Warnings

SYMBOL	DESCRIPTION
	Caution: Important Safety Information
	Hazardous Voltage
	Conforms to European Union Directive

Introduction

Description

MiniSim EEG Simulator is a compact battery operated EEG simulator. It simulates various waveforms for testing the functionality of sleep study monitors and recorders.

This compact, micro-controller based instrument has five separate floating outputs. It's engineered to be a resourceful testing device that simulates Alpha-Beta Rhythm (ABR), Sine, Square and Triangle waveforms with user selectable frequencies and amplitudes from 10 microvolts to 3.5 millivolts.

Simple to operate, the MiniSim EEG Simulator is menu driven via 8 tactile keys and a large LCD screen. High accuracy is provided by its advanced microprocessor with a crystal oscillator and precision voltage reference. Additionally, Netech's patented cup electrode connector makes it easier to attach electrodes to the device.

The MiniSim EEG Simulator offers quick and intuitive testing of all EEG instrumentation, so you can be confident in their performance.

MiniSim EEG Features

- Large LCD screen
- Clean microvolt signals
- Selectable amplitudes
- Selectable frequencies
- Compact, rugged case
- Ideal for sleep study EEG monitor testing

Preparation for Use

The MiniSim EEG is shipped with the following items included in the customized hard carrying case:

- MiniSim EEG Waveform Simulator.
- 9 Volt Battery
- User manual
- AC Adapter

Specifications

General Specifications

ABR Waveform: 1 KHz, 0.64 μ V

Sine, Square, Triangle Waveforms:

Frequencies: 0.1, 2, 5, 50, 60 Hz

Amplitudes: 10, 30, 50, 100, 500 μ V and 1, 2, 2.5 mV.

Operating Temperature: 15°C to 35°C.

Storage Temperature: 0°C to 55°C

Accuracy: \pm 2%.

Power: One 9 Volt Alkaline Battery.

Weight: 10 oz. (0.28 kg) With Battery.

Dimensions: 5.5 X 3.5 X 1.5 in (14 X 8.9 X 3.8 cm.)

Part Numbers and Ordering Information

Part Number: **330:** MiniSim EEG Simulator

Standard Accessories (Included with the Unit):

301: Hard Carrying Case

302: AC Adapter

330-USB: User Manual USB

Optional Accessories:

330-EEG-Cup-Electrode-Cable: EEG Gold
Cup Electrodes

Various optional accessories including universal connector kits are available. Visit www.NetechBiomedical.com for more information.

Instrument Familiarization

Before getting started, it is important to get familiar with the control and operation of the unit.

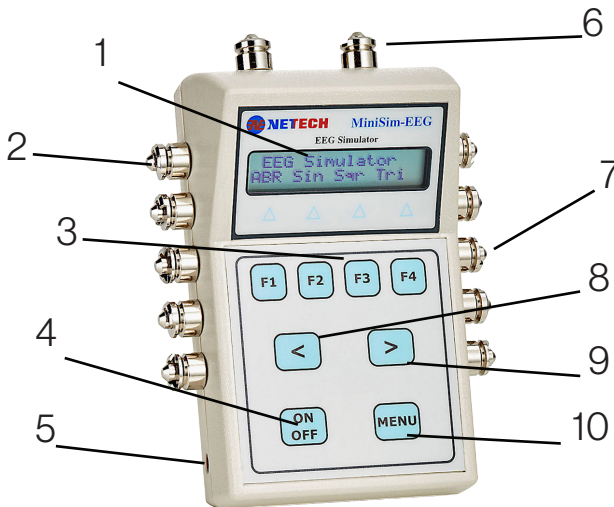


Figure 1. EEG Simulator Controls

Number	Description
1	Graphics LCD Window
2	Negative Lead Connectors
3	Function Keys, F1, F2, F3, F4
4	On/Off Key
5	AC Adapter Connection
6	Reference Ground Connectors
7	Positive Lead Connectors
8	Arrow Key < (Left)
9	Arrow Key > (Right)
10	Menu Key

Warranty

Netech warrants this instrument to the original purchaser, as purchased from a Netech distributor or dealer, will conform to the written specification as of the date of its manufacture, for two years from the date of purchase. The second-year warranty is contingent upon returning the unit to the factory for the annual recalibration at the end of the first year warranty. Netech warrants this instrument against defects in materials and workmanship. If the instrument fails to conform to these warranties, Netech will repair or replace the unit and/or its components within a reasonable period; if the MINISIM EEG is returned, shipping prepaid, to Netech's facility at Farmingdale, NY, USA within the warranty period as expressed above.

These warranties are made upon the expressed condition that:

- 1. The purchaser promptly notifies Netech in writing of any nonconformity with the above warranty including a detailed explanation of the alleged deficiencies.*
- 2. The MiniSim EEG is returned to Netech at the buyer's expenses only after obtaining the proper RMA authorization from Netech.*
- 3. Netech will not be liable for any incidental or consequential damages.*
- 4. In the opinion of Netech upon inspection, the MiniSim EEG has not been misused, altered, or damaged due to the abnormal handling and/or operation.*
- 5. Repairs to the MiniSim EEG and/or its components have not been made by anyone other than Netech or one of its authorized repair agents.*
- 6. The MiniSim EEG has not been modified, altered, or changed in any manner by anyone other than Netech or one of its authorized repair agents.*
- 7. All shipping and handling charges will be billed to the purchaser.*

THIS WARRANTY EXCLUDES ALL OTHER WARRANTIES, WHETHER EXPRESSED OR IMPLIED, ORAL OR WRITTEN, INCLUDING WITHOUT LIMITATION WARRANTIES OF MERCHANTABILITY AND/OR FITNESS FOR A PARTICULAR PURPOSE. NETECH IS NOT LIABLE FOR ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES OR LOSSES FROM ANY MISUSE OF THE INSTRUMENT.

To receive free software and firmware updates, please fill out and send the warranty registration card or fill out online warranty registration: - <https://www.NetechBiomedical.com/warranties>

Appendix: A

Current Revision: R2 09/16/25

Pages revised from the previous Revision (R1).



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