

Technical Specifications

Features

- Delivers bi-phasic, constant current trains of stimulation pulses
- Stimulates "user selectable" electrode pairs or bipolar probe
- Two Stimulus Switching Units may be used to electronically select 128 electrodes, 64 electrode pairs
- Train durations can be terminated by "Stop" button
- Countdown of remaining stim time
- User configurable pulse frequency, pulse duration and current level
- Single Stimulus Pulse and Continuous mode available
- Active Stimulation indicator light
- Actual current delivered displayed
- Trigger Out permits synchronizing external equipment
- Check Stim feature measures and verifies current delivery
- Channel Mark feature allows confirmation of stimulated electrodes on the EEG Acquisition Waveforms
- Ictal Disrupt generates single pulse at previous parameters allowing management of after discharges and seizure propagation

Benefits

- Standalone unit or seamlessly integrates with NicOne EEG application software
- Convenient small size facilitates handheld use
- Graphical user interface provides unprecedented ease of use
- Automated Report provides visual documentation and audit of stimulations and responses
- Languages: English, French, Italian, German, Spanish, Russian, Chinese, Japanese and Portugese (Nicolet EEG software) English, French, Italian, German, Spanish,
- Patient safety assured by continuous error detection monitoring
- Patent pending

General Specifications

Current Output	Up to 15 mA of isolated current into a 1.0 KΩ load
Stimulus Levels ...	User specified, adjustable in 0.1 mA increments: 0, 1-15 mA (+/- 20%)
Train Durations	User specified 0.1-30 seconds (+/- 20%)
Available train durations.....	Single, 0.1, 0.2, 0.5, 1, 2, 3, 4, 5, 6, 7, 10, 12, 15, 17, 20, 25, 30 seconds (.1 second increments in NicOne software) Continuous available (probe biphasic mode)
Pulse Frequencies	User specified 1-100 Hz (+/- 10%)
Available pulse frequencies.....	1, 2, 5, 10, 20, 30, 40, 50, 60, 100 Hz seconds (.1 Hz increments in Nicolet EEG software) Single stimulation pulses are also available
Pulse Duration	User specified 100-1000 μsecs (+/- 10%)
Available pulse durations.....	100, 150, 200, 250, 300, 400, 500 and 1000 μsec/phase (10μS increments in NicOne software)
Control Unit Weight	Less than 1kg
Dimensions	
Control Unit.....	230 mm (L) x 130 mm (W) 60 mm (H)
Power Requirements.....	15V @ 3A



Environmental Considerations (Operating)

Temperature.....	+5 to +40° C, (+41 to +104° F)
Relative Humidity	25 - 95%, non-condensing
Atmospheric Pressure	700 hPa to 1060 hPa

Non-Operating Environment (in storage)

Temperature.....	-20 to +65° C, (+4 to +149° F)
Relative Humidity	10 - 95%
Atmospheric Pressure.....	500 hPa to 1060 hPa

Quality System

Manufactured, designed, developed and marketed under ISO 13485 certified quality system

Compliance/Regulatory Standards

Designed, tested, manufactured and certified to meet the following domestic (USA), Canadian, European and International Standards:

- UL 60601-1** Medical Electrical Safety Standard (USA)
- CAN/CSA-C22.2 no. 601.1-M90** Medical Electrical Safety Standard (Canada)
- EN/IEC 60601-1** Medical Electrical Safety of Medical Equipment (International and Europe)
- IEC 60601-2-26** Particular Safety of electroencephalographs equipment
- IEC 60601-2-40** Particular Safety of electromyography and evoked response equipment
- EN 60601-1-2** Collateral safety standard for EMC
- European Community (CE Mark)**
Medical Device Directive (MDD) product certified to comply to EC Directive 93/42/EEC
- Complies with Food and Drug Administrative (FDA) regulatory requirements**
Patient Isolation BF

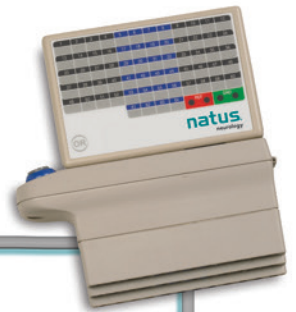


Nicolet Cortical Stimulator

- Delivers bi-phasic, constant current trains of stimulation pulses
- May be used as a stand alone unit
- May be used with Nicolet Bipolar Probe or with intracranial electrodes
- User configurable pulse frequency, pulse duration and current level
- Single Stimulus Pulse and Continuous mode available
- Actual current delivered displayed
- Patient safety assured by continuous error detection monitoring
- Countdown of remaining stim time
- Trigger out permits synchronizing external equipment
- Convenient small size facilitates hand-held use

Nicolet Bipolar Probe

- Disposable one time use
- 2.2 mm gold plated Ball Tips
- Flexible legs
- 15 Foot Cable
- Rubberized mold
- Touch proof connectors
- May be used with extender cables of 6 feet increments



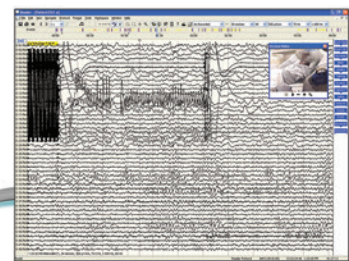
C64 OR/SSU Amplifier

- High quality amplifier provides patient protection from electrocautery
- Stimulus Switching Device (SSU) provides Electronic Method of Switching Electrodes
- 2 amplifiers may be linked to electronically select 128 channels, 64 electrode pairs
- OR Headbox option without Stimulus Switching Device (SSU)
- Amplifier Recovery time < 1 second



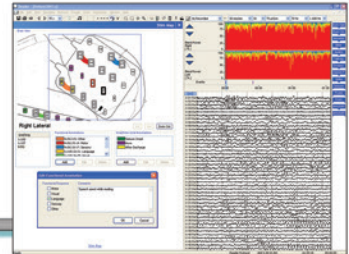
Nicolet LTM System

- Seamlessly integrates with NicoletOne software
- Immediate viewing of EEG
- on stimulated electrodes
- Stimulation Parameters selectable in software
- EEG and Video synchronization



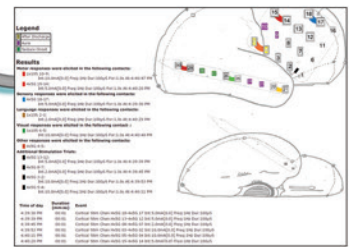
Special Software Features

- Ictal Disrupt: Used to interrupt "after discharges"
- Check Stim: Verifies proper stimulator operation
- Channel Mark: Confirms correct electrode pair selected



Dynamically Updated Data

- Unprecedented 'point and click' ease of use
- Annotation log automatically displays all stimulation parameters
- Color coded functional responses and ictal events
- Enhanced Grid Strip Editor
- Enhanced Brain Map Views



Automated Report

- Visual images of brain map with response annotations
- Results displayed by response category
- Functional response includes tabulation of stim parameters
- Legend enables quick response review



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