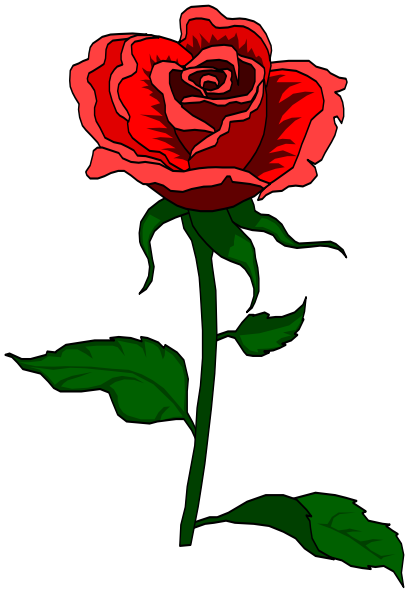
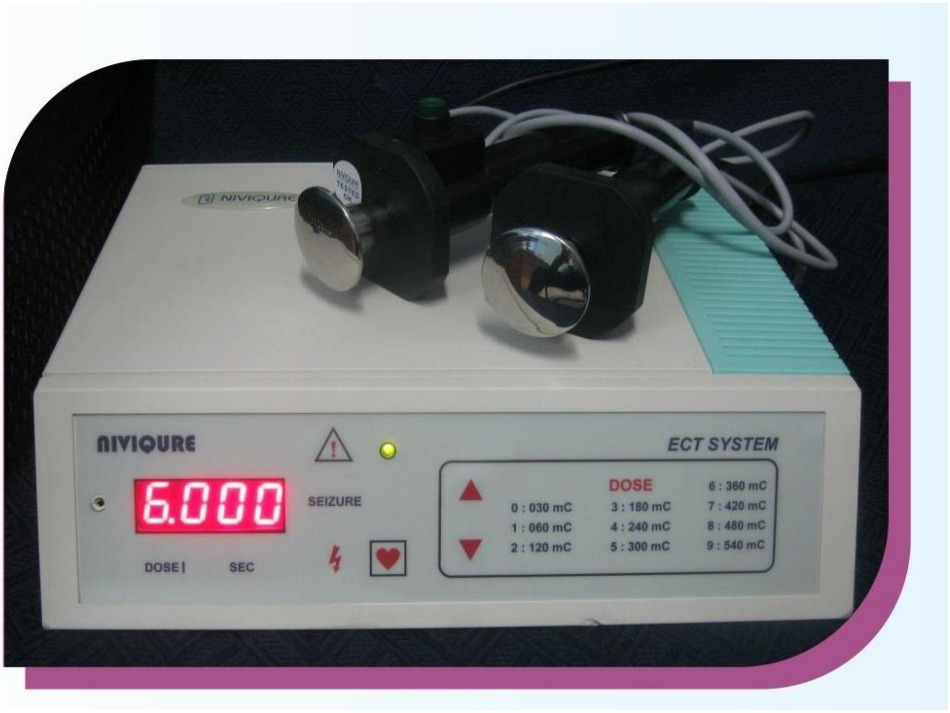
NIVIQURE

WOULD YOU WATER A FLOWER WITH A FIRE HOSE?



This is how it would be with a conventional sinusoidal ECT system!

NIVIQURE ECT systems produce pulsed, constant current, bipolar, electronically controlled electrical charge (milli-coulombs) for BEST THERAPEUTIC EFFECT. This ensures JUST ADEQUATE ELECTRICAL DOSAGE required for least side effects like memory impairment, post-ECT confusion, etc. SAFETY of medical attendants and other Electro-medical / electronics apparatus in contact with the patient at the time of ECT administration are ensured by thorough isolation between patient, ECT system and Computer (in case of computerized system) – both transformer and opto-isolation techniques are used in the design.



NIVIQURE

A TOTAL SOLUTION USING COMPUTERISED / SMARTPHONE COMPATIBLE NIVIQURE SYSTEM

A fully computerized ECT and 8/4/2-channel EEG / ECG system has the following advantages:

(a) Computer set (AUTO or MANUAL mode) electrical dosage.
(b) Off-line or On-line data recording and retrieval.
(c) Automatic dosage setting based on Sex, Age and Inion-Nasion distance.
(d) Automatic post-ECT EEG / ECG display (2 channel EEG to monitor EEG in both the hemispheres. Or at least 1-channel of ECG recommended for heart rate monitoring, particularly from anesthetist point of view, in case of modified ECT).
(e) Automatic dosage upgradation in case of 'inadequate seizure' (less than 20 seconds of motor seizure).
(f) Record storage and retrieval facility.
(g) Printer output for record purposes.
(h) Time domain and Frequency domain (Spectral power) analysis / reportage.

- Multi-monitor arrangement can help Conferencing / Tutorials / Demonstration arrangement without many persons crowding around the patient.

- Remote ECT administration possible.

ENTER THE WORLD OF AUTOMATION AND COMPUTERISATION!

UNIQUE ADDITIONAL FEATURES OF NIVIQURE ECT SYSTEM

- ♥ *The compact, portable EEG / ECG unit can be detached and data collected in ambulatory mode. The system has flash memory for data collection and can later on be downloaded for analysis (Post ECT analysis and studies).*
- ♥ *The system is up gradable for wireless and 'Wi-Fi' data transfer.*
- ♥ *On-line EEG / ECG monitoring. ECG monitoring required from anesthetist point of view - modified ECT procedure.*
- ♥ *There is newer trend to study HRV (Heart Rate Variability) during any medical procedure. ECG or EEG data can be collected at high sampling rates (for example, it is required to collect at least 5 minutes of ECG data for FFT and other time-domain mathematical analysis at 1024 samples per second).*
- ♥ *The detachable EEG / ECG unit can be used for off-line data collection in post-recovery ward (for research studies during post-ECT period).*
- ♥ *The detachable EEG / ECG unit can be used for off-line data collection in auto-increment mode (say, every 1, 2, 3 hours or user-programmable time) in post-recovery ward for research studies like sleep analysis (through out the night, etc.) during post-ECT period.*

NIVIQURE

Specification

Output	Constant current Pulse amplitude	NIVIQURE-SA / NIVIQURE-VR	800 ma 4 to 1020 ma
	Pulse width	Stand alone mode / PC Add-on mode	1.5 ms 0.5 to 4 ms
	Frequency	Stand alone mode / PC Add-on mode	125 PPS 10 to 200 PPS
	Duration	Stand alone mode / PC Add-on mode	0.4 to 3.6 Sec 0.1 to 20 Sec
	Charge	Stand alone mode / PC Add-on mode	60 to 540 mC Variable
	Pulse waveform		Bidirectional
	Interface to the computer (PC Add-on mode)	Only with NIVIQURE-VR	Through USB / RS 232 Port.
Input	Ac: 230V, + / - 10%, 50 Hz	Same on all models	
	Trigger: Remote on hand-held electrode	Same on all models	
Built-in safety	Timer Control	Stand alone mode / PC Add-on mode	Electronic / Electronic & Computer
	Opto-Isolation from computer	Stand alone mode / PC Add-on mode	Not applicable Available
	Transformer Isolation	Available on all models	
	Relay Isolation	Available on all models	
	Audio and visual indication	Available on all models	
Mechanical	Dimensions Weight Casing	290 x 250 x 80 mm Approx. 5 Kgs. Plastic	*(The dimensions and weights are without cables and accessories).*