ECT Unit

Cat. No. 57800

General

The ECT apparatus is specially designed for neurochemical and neuropharmacological research.

A constant current output is used, which ensures reproducible results and accurate determination of the EC threshold while also pinpointing any variations in the threshold, brought about by drugs having a specific action on the cortex and subcortical regions.

The shock parameters have been selected after consulting the most recent literature, to supply the most suitable range when operating with mice and rats.

Consistent reproducible current levels are produced by feedback circuitry that adjust for variance in impedance of the contact from animal to animal.

The Electroconvulsive Device is supplied with auricular (ear lobe) electrodes.

DESIGNED FOR INDUCING CONVULSIONS IN RESEARCH ANIMALS

FOR NEUROCHEMICAL & NEUROPHARMACOLOGICAL RESEARCH

Particularly useful for:-

- General screening of potentially neurotropic substances
- Evaluating the depressant or stimulating action of drugs on the CNS
- Endocrinological investigations on the relationship between the nervous system and the hypophysis

General

Consistent reproducible current levels are produced by feedback circuitry that adjust for variance in impedance of the contact from animal to animal.

The impedance of the animal can be previously measured and displayed, and a warning signal flashes if the impedance is too great to deliver the desired current level.

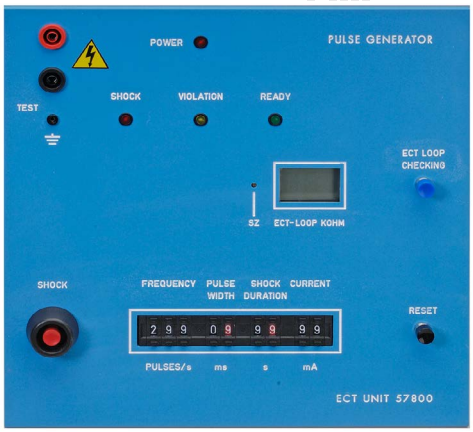
The special output circuit enables any type of electrode to be used.

The **auricular electrodes 57800-002**, supplied with the standard package, allow a single operator to deliver shock to a number of animals in a short time.

The above picture features **Corneal Electrodes Cat. 57800-003**, which can be provided as **optional**.

Different types of electrodes can be manufactured on request.

Specifications



Rectangular Positive Pulse :	by H.V. transformer
Constant Current :	controlled by a feedback network
Pulse Rise&Fall Time :	20µs
Pulse Width (ms) :	0.1 to 0.9 in 0.1ms steps ±1%
Frequency (pulses/s) :	1-299 in 1 pulse/s steps ±1%
Shock Duration :	0.1 to 9.9 in 0.1s steps ±1%
Pulse Voltage :	2.5KV max.
Current Range :	0-99mA in 1mA steps ±2%
Output Resistance :	min 0Ohm - max. 25KOhm (at max. current)
KOhm Display :	0-199 KOhm - 1KOhm resolution
Power Requirements :	115/230V - 50/60Hz - 70VA

WARNING: due to HIGH VOLTAGE involved, the operator should always wear rubber gloves when handling the electrodes.

Ordering Information

57800 **ECT Unit**, standard package including:

57800-001 Pulse Generator
57800-002 Set of Auricular Electrodes
57800-302 Instruction Manual (on USB pen drive)
E-WP 008 **Mains Cord**

Accessories and Spares

57800-003 Set of Corneal Electrodes
57800-320 Set of 4 Felt Pads for Auricular Electrodes

Physical

Instrument Size	27(W)x37(D)x13(H)cm
Weight	3.4Kg
Packing	45x34x26cm
Shipping Weight	5Kg

Bibliography

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- F. Tomaciello et alia: "**Resveratrol Lacks Protective Activity Against Acute Seizures in Mouse Models**" Neuroscience Letters 632: 199-203, **2016** (*6Hz model*)
- R.J. Schloesser et alia: "**Antidepressant-like Effects of Electroconvulsive Seizures Require Adult Neurogenesis in a Neuroendocrine Model of Depression**" Brain Stimulation 8(5): 862–867, **2015**
- A. Kretschmann et alia: "**Different MicroRNA Profiles in Chronic Epilepsy Versus Acute Seizure Mouse Models**" J. Molecular Neurosc. 55(2): 466-479, **2015**
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