

Complete Electrophysiology Teaching Unit

The two Isolated AC/DC Preamplifiers for full details, are connected externally to the Electrophysiological Teaching Unit, enabling measurements such as vector cardiography. In addition, for certain experiments, two students can use the equipment at one time. The high gain, low noise and high common mode rejection make these Preamplifiers suitable for applications at the micro-volt level, which is within the range of nerve and muscle potentials, ECG, EMG and EEG signals. The Preamplifiers are optically-isolated and battery-powered for maximum safety.

The Audio Amplifier can be used to monitor the twin Preamplifiers' signal. The controls on the front panel select the modulation facility and the channel to be monitored.

The Transducer Interface has suitable bridge and amplifier circuits to use with Harvard Apparatus' complete range of transducers. A multi-turn potentiometer can be used to adjust the DC level. A mode selection switch matches the input to the correct transducer.

Specifications

Oscilloscope:

Vertical Deflection	5 mV/div to 20 V/div
Time Base	0.5 μ sec/div to 0.2 sec/div
Input Impedance	1 M Ω // 30 pF
Input Coupling	AC/DC

Stimulator:

Frequency	0.1 to 1000 Hz
Delay	0.1 to 1000 msec
Width	0.05, 0.1, 0.5, 1, 2, or 5 msec
Voltage	0.25 to 25 V in 3 ranges
Output Impedance	22 Ω
Triggers	Oscilloscope and external

Isolated AC/DC Preamplifier:

Input	Differential, isolated
Output	Single-ended
Common Mode	
Rejection	> 70 dB
Gain	x10, x100, x1000
HF Filters	30 Hz, 150 Hz, 15 kHz
Coupling	AC/DC
Input Configuration	Simple three-lead differential or clinical with modes I, II, III, AVR, AVL, AVF, V

Audio Amplifier:

Power Output	0.1 W, max.
External Loudspeaker Load	4 Ω
Dimensions, H x W x D	43 x 53 x 33 cm (17 x 21 x 13 in)
Weight	22 kg (48 lb)

Catalog No.	Product
CGS 8607.71	Complete Electrophysiological Teaching Unit, 115 VAC, 60 Hz
CGS 8608.71	Complete Electrophysiological Teaching Unit, 230 VAC, 50 Hz
Individual Components Included with Electrophysiological Teaching Unit	
CGS 8609.71	Isolated AC/DC Preamplifiers, 2
CGS 8610.71	Isotonic Transducer
CGS 8611.71	Harvard Isometric Transducer, 0 to 50 g force range
CGS 8612.71	Harvard Stimulus Isolation Unit with Positive Output Pulses
CGS 8613.71	Patella Hammer
CGS 8614.71	Stimulating Electrode with Round 1 cm (0.4 in) Diameter Tip for Stimulating with Voltages up to 100 V
CGS 8615.71	Screened Electrode
CGS 8616.71	Nerve Conduction Chamber
CGS 8617.71	Plate Electrodes and Straps, set of 4
CGS 8618.71	Disposable Foam Electrodes, 48 mm (1.9 in), pkg. of 50
CGS 8619.71	Nondisposable Ag/AgCl Cup Electrodes, pkg of 3 Electrodes, 2 pkgs. supplied
CGS 8620.71	Small Double-Sided Adhesive Discs to Hold Non-Disposable Ag/AgCl Cup Electrodes, roll of 100
CGS 8621.71	Electrode Gel
CGS 8622.71	Syringe with Blunt Needle
CGS 8623.71	Electrode Adhesive Tape
CGS 8624.71	4 mm Socket to Snap Fastener (Press Stud) Connector, set of 5
CGS 8625.71	3-Lead Input Cable, 3-Pin DIN to Three 1 mm Plugs
CGS 8626.71	ECG Limb Cables, 2 mm Plugs to 4 mm Plugs, Color-Coded, set of 5
CGS 8627.71	Male 3-Pin DIN Input Connector, 2
CGS 8628.71	BNC to BNC Output Leads, set of 5

Transducer Interface of this Teaching Unit is for use with:

CGS 8080.28 Harvard Isotonic Transducer

Harvard Isometric Transducers

CGS 8611.71 0 to 50 g

CGS 8066.71 0 to 100 g

CGS 8067.71 0 to 200 g

Descontinuado CGS 8068.71 0 to 500 g

CGS 8069.71 0 to 1000 g

UF1 Series Isometric Transducers

CGS 8059.71 0 to 25 g

CGS 8060.71 0 to 55 g

CGS 8061.71 0 to 110 g

CGS 8062.71 0 to 220 g

CGS 8063.71 0 to 450 g

CGS 8064.71 0 to 900 g