

## Transducer Amplifier Interface



**Isolated GSR Preamplifier**

- For GSR on human subjects for teaching purposes only

The front end of the preamplifier is battery powered (2 x 9 volt transistor radio batteries) while the back end receives its power from the host unit. A meter shows battery state and the batteries are connected only when linked to the host unit. There are 3 ranges (0 to 10 k $\Omega$ , 0 to 100 k $\Omega$  and 0 to 1 M $\Omega$ ) and DC level control, built in audio speaker with modulation facility and a normal/differential switch. The maximum sensitivity is 50 $\Omega$ /cm of pen deflection when used with the harvard oscillographs. It is supplied with the GSR Finger Electrode Set.

The Isolator Interface is needed to connect this unit to a Universal Oscillograph or Interface Adapter or it plugs directly into the Harvard Student Oscillographs.

Catalog No.	Product
CGS 8602.71	Isolated GSR Preamplifier
CGS 8603.71	Male 3-Pin DIN Input Connector
CGS 8604.71	GSR Palm Disposable Electrode Set use as an alternative to the 2-Lead Input Cable with Finger Electrodes which is included with the Amplifier



**Isolated Preamplifier**

- For ECG, EMG, ENG, EOG on human subject for teach purposes only

The front end of the Preamplifier is batter powered (2 x 9 volt transistor radio batteries) while the back end receives its power from the host unit. A meter shows battery state and the batteries are connected only when linked to the host unit. The input is via either the 3-pin binder socket or the row of five standard color coded 2 mm sockets (labeled LA, RA, LL, RL and C) for 5 electrode ECG measurements. A 7-position 'limb' selector allows connection of the standard ECG electrode configurations.

There is a 3-position gain switch (x10, x100 and x1000), an input selector for AC or DC coupled, a filter selector (3 dB down at 30 Hz, 150 Hz and 15 kHz) and a DC level control. Maximum gain when used with a Harvard Oscillograph is 30  $\mu$ V/cm of pen deflection. A comprehensive range of electrodes and input leads is available.

The Isolator Interface is needed to connect this unit to a Harvard Universal Oscillograph or Interface Adapter. the Isolated Preamplifier will plug directly into the Harvard Student Oscillographs.

Catalog No.	Product
CGS 8605.71	Isolated Preamplifier



**AC/DC Preamplifier**

This is a general purpose differential preamplifier for use on animals. It is powered by two 9 volt batteries (not supplied) and has a battery meter. Input is via a 3-pin binder socket and there is a two position gain control (x10 and x100 for DC coupled; x100 and x1000 for AC coupling). LF out (3 db down at 1, 5, 10, and 100 msec and 1 sec) and HF out (3 db down at 40 Hz, 100 Hz, 1 kHz, 10 kHz and 40 kHz) are selectable by two controls. Input impedance is 4.7 M $\Omega$  and the output is from a BNC connector. It measures 95 x 165 mm (3.75 x 6.5 x 6.3 in) and weighs 0.75 kg. (1.65 lb).

Catalog No.	Product
CGS 8606.71	AC/DC Preamplifier