



## Irwin EA0030 Signal Generator/Power Amplifier

### Electromagnetic Compatibility

The use of this apparatus outside the classroom, laboratory, study area or similar such place invalidates the conformity with the protection requirements of the Electromagnetic Conformity Directive (89/336/EEC) and could lead to prosecution.

The Irwin Signal Generator/Amplifier has a variety of functions which are all accessed from the front panel controls.

The main controls are the **RANGE** switch and the **FUNCTION** switch which control the shape and frequency range of the output. The frequency selected is displayed on the LED digital display and the frequency is adjusted by **COARSE** and **FINE** controls.

The unit has several outputs as follows:

**Function out** – this is an output of the selected waveform whose output level may be adjusted. This is not suitable for powering loudspeakers etc (See later) but is suitable for injecting signal level waveforms into electronic circuits, oscilloscopes etc. It utilises a standard BNC socket

**TTL/CMOS out**– this is specially designed for TTL and CMOS circuits, is fixed at an amplitude of 5V and utilises a BNC socket

**Amplifier** – the amplifier may be connected to the internally generated waveform by selecting INT on the selector switch. If the switch is moved to EXT then the EXT IN BNC socket may be used to bring in an external signal. The amplifier output is suitable for powering vibration generators, loudspeakers etc. The output is taken through standard 4mm terminals and its amplitude is controlled by the **LEVEL** knob.

The only other socket on the front panel is labelled **VCG IN 0-20V DC**. This is the voltage controlled generator socket and allows the output waveform to be modified by impressing a 0-20V signal upon it.

When using the unit it should be appreciated that it will take about 10 seconds from switching on for the unit to stabilise.

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