

Function Generator and Amplifier

The unit provides Sine, Triangle or Square wave output through an amplifier to drive a loudspeaker coil for demonstration of vibration and sound from low frequency to ultra-sonic.

Input to the dc coupled amplifier, at a gain of 20x, is available through the front panel 4mm connectors. The switched selection to the amplifier has adjustable amplitude. The unit is powered from 12 AA batteries or 12-30 volts dc for 800mW output.

Features: 0.1Hz to 25KHz frequency range
 Battery or power supply operation
 dc coupled amplifier - 3 volts into 8 ohms

1. Power Supply

This unit is powered by 12 AA batteries or a dc supply of 12 to 30 volts. To fit the batteries, remove the four control panel screws and lift the panel away from the case body. The batteries are held in place by tie-wraps. The tie-wraps hold the batteries laterally and require tightening. A spare set of tie wraps is included for battery replacement.

The dc input is by a 2.5mm co-axial plug. The centre connection is **negative** with reference to the outer connection. A supply of 100mA will provide full power output.

2. Output

The output is marked with an exclamation mark as a reminder that the unit can supply sufficient power to damage low power loudspeakers and other devices. The output is current limited against short circuits.

3. Input

Input connection on the control panel allows the use of the amplifier section. The amplifier has a gain of 20x and a frequency response from dc to more than 50KHz.

The terminal on the right is connected directly to the internal reference point and so can be used for grounding. The left terminal relates to the output terminals in that the top output terminal is in phase and the lower terminal out of phase to the differential output of the amplifier.

4. Controls

The controls provide the basic functions as marked, but the Amplitude control varies the output from 0 to 100%, which will depend on the output load.

5. Accessories

Accessories are available for the unit. They include:

A low voltage mains adaptor
A loudspeaker unit

Please contact us for more details.