

# Low Distortion Audio Generator

Scientech 4036



**Scientech 4036** is a low-distortion stable amplitude oscillator designed to meet the needs of today's audio test and measurement technology. Covering the frequency range from 10 Hz to 100 KHz, Scientech 4036 produces a very low distortion sine wave for measuring audio pre-amplifier and power harmonic distortion. With its outstanding flat response of ±0.2 dB, the Scientech 4036 eliminates the need of constantly monitoring the voltage level during the frequency response test. Exact frequency and amplitude setting is provided by means of a digital Frequency/Amplitude readout.

The Scientech 4036 provides 30 Vpp, selectable Sine wave or Square wave. The two push button attenuators calibrated in 20 dB steps, along with the 20 dB variable, provide a total of -60dB output voltage attenuation.

#### **Features**

- Frequency Range 10 Hz 100 KHz
- Low Signal Distortion
- Digital Readout for Frequency and Amplitude
- Output Voltage 30 Vpp
- 50 / 600  $\Omega$  Output
- TTL output
- Online Product Tutorial

## **Technical Specifications**

Operating Modes : Sine wave & Square wave (Free running with AGC)

Frequency Range : 10 Hz - 100 KHz, in suitable decade steps.

Variable control 0.1: 1 overlapping the

ranges

Frequency Stability : With frequency control centered

0.1 % per hour, 0.5 % per 8 hour

Display : Frequency / Amplitude switch selectable

Frequency : 4 digit 7-segment LED display

Accuracy : ±1 Digit

Amplitude : 3 digit 7 segment LED display

Accuracy :  $3 \text{ Vpp} - 30 \text{ Vpp} : \pm 3 \%$ ,

0.3 Vpp - 3 Vpp: ±5 % 30 mVpp- 300 mVpp: ±5 %

## **Waveform Characteristics**

Sine Wave Distortion : 10 Hz to 100 KHz: Max 0.5 %

Square Wave Rise/Fall time: Max. 70 ns

Overshoot :  $\leq$  5 % (when output is terminated with 50 $\Omega$ )

 $\begin{array}{lll} \text{Output} & : \ \ \text{BNC (short-circuit proof)} \\ \text{Output voltage} & : \ \ 30 \ \ \text{Vp Cp o.c.} \ \ 15 \ \ \text{Vpp into } 50\Omega \\ \text{Output Impedance} & : \ \ \text{approx. } 50\Omega, \ 600 \ \Omega \ \ \text{(switchable)} \end{array}$ 

Amplitude Flatness : 10 Hz to 10 KHz : ±0.2 dB, 10 KHz to 100 KHz : ±0.5 dB

Attenuation : Min. -60 dB

2 attenuators :  $-20 \text{ dB} \pm 0.2 \text{ dB}$  each Variable control : 0 to -20 dB min.

Trigger Output : Square wave +5V (TTL) approx.

General Information

Mains Supply :  $220V \pm 15\%$ , 50 Hz.

110V ± 15 %, 60 Hz on request

Power Consumption : 12 VA (approx.)

Operating Temp. : 0-50°C, RH 95 %

Dimensions (mm) : W 198 × D 285× H 90

Weight : 2.2 Kg (approx.)

### **Included Accessories**

BNC to BNC cable, Power cord, Product Tutorial CD-1

