



IN CASE OF DIFFICULTY

If upon completion of careful construction, the instrument fails to operate as specified, proceed as follows:

1. Check the wiring carefully step-by-step. Often having a friend check for you will locate an error consistently overlooked.
2. Inspect visually for malfunctioning, such as tubes lighting, discoloring of resistors through overheating, etc.
3. Inspect electrically with a voltmeter. The nominal voltages between tube socket pins and chassis are tabulated below. Nominal voltages were measured with a VTVM with 11 megohm input resistance. Lower resistance meters may give lower readings in some instances (particularly pin 6 on the 6AU6). Normal deviations due to line voltage and component variation may reach $\pm 20\%$.

TUBE	Pin 1	Pin 2	Pin 3	Pin 4	Pin 5	Pin 6	Pin 7	Pin 8	Pin 9
6X4	320AC	NC	X	X	NC	320AC	420		
6AU6	1.5	4	X	X	200	140	4		
6CL6	210	200	410	X	X	410	210	410	200

NC - no connection. X - heater voltage (one pin 0 volts, other pin 6.3 volts AC.)
Generator frequency set to 10 cycles or higher.

Discrepancies of indicated voltages warrant investigation of the particular circuit involved. Wiring errors or faulty components may be found with inspection or resistance measurements.

Consider the characteristics of the circuit by rereading the circuit description. An understanding of the theory will aid in locating and correcting difficulties.

If intelligent investigation along the lines indicated does not solve your problem, write to the Heath Company describing your difficulty in detail, giving all symptoms, voltages and other data that may aid in correcting your trouble. Be sure to state model and name of instrument, IG-72 Audio Generator. You will receive a prompt reply to guide your further efforts.

APPLICATION

This instrument lends itself to the many applications in audio laboratories where a near-perfect sine wave signal within its amplitude and frequency limits is required. Some of the applications are as follows:

- Signal source for bridge measurements.
- Signal source for harmonic distortion measurements.
- Signal source for external modulation of RF signal generators.
- Signal source for testing of audio amplifiers for gain and frequency response.

OPERATION

The instrument produces a low distortion sine wave signal voltage of adjustable amplitude and frequency. To select the desired frequency, adjust the 0-100 knob to the first significant figure, adjust the 0-10 knob to the second significant figure and turn the multiplier to the desired value.

Example: For a frequency of 35 cycles, set the 0-100 knob to 30, the 0-10 knob to 5 and the multiplier to X1.