



## GJX-5i Vibration Calibrator

Can be used to calibrate vibration accelerometer, velocity and proximity transducer and also a vibration measuring instruments. Standard sine signals at frequency 10, 20, 40, 80, 160, 320, 640 and 1280 Hz can be generated from the calibrator. It also has a socket for input from an external signal generator for any vibration frequency and even sweep signal. The amplitude of the, acceleration, velocity and displacement, can be defined through potentiometers and shown on digital displays. Either horizontal or vertical vibration can be generated. GJX-5i combines sine signal generator, power amplifier, standard transducer and a shaker in one and features a small volume, high accuracy and easy operation. It can be used either in laboratory or on site.



### Specifications

**Frequency:** Fixed 10, 20, 40, 80, 160, 320, 640, 1280Hz and external input for any signal with continuous frequency adjustment, sweep, non-sine

#### Amplitude accuracy:

|                                       |                                                     |
|---------------------------------------|-----------------------------------------------------|
| Acceleration(@30m/s <sup>2</sup> pk)  | 40Hz to 320Hz $\pm 0.3\text{dB} \pm 1\text{digit}$  |
|                                       | 20Hz to 1280Hz $\pm 0.5\text{dB} \pm 1\text{digit}$ |
| Velocity ( @25mm/sec pk)              | 40Hz to 320Hz $\pm 0.5\text{dB} \pm 1\text{digit}$  |
| Displacement(@50 $\mu\text{m}$ pk-pk) | 40Hz to 320Hz $\pm 0.5\text{dB} \pm 1\text{digit}$  |

#### Proximity probe linearity

Prode: 5mm and 8mm probes Range: 0~2.0mm

**Display:** 3 <sup>1</sup>/<sub>2</sub> digit display for acceleration, velocity or displacement

#### Maximum vibration amplitude and maximum load

| Wt<br>Freq | $\leq 100\text{g}$   |         |                    | $\leq 250\text{g}$   |         |                    | $\leq 650\text{g}$   |         |                    |
|------------|----------------------|---------|--------------------|----------------------|---------|--------------------|----------------------|---------|--------------------|
|            | a(m/S <sup>2</sup> ) | v(mm/S) | d( $\mu\text{m}$ ) | a(m/S <sup>2</sup> ) | v(mm/S) | d( $\mu\text{m}$ ) | a(m/S <sup>2</sup> ) | v(mm/S) | d( $\mu\text{m}$ ) |
| 10Hz       | 2.5                  | 28      | 1300               | 3.5                  | 40      | 1800               | 4                    | 45      | 2000               |
| 20Hz       | 15                   | 85      | 1900               | 10                   | 60      | 1300               | 5                    | 28      | 640                |
| 40Hz       | 60                   | 170     | 2000               | 35                   | 100     | 1100               | 12                   | 35      | 380                |
| 80Hz       | 100                  | 141     | 800                | 40                   | 60      | 320                | 14                   | 20      | 110                |
| 160Hz      | 75                   | 53      | 150                | 35                   | 25      | 70                 | 12                   | 8.5     | 24                 |
| 320Hz      | 50                   | 18      | 25                 | 30                   | 10      | 15                 | 10                   | 3.5     | 5                  |
| 640Hz      | 30                   | 5       | 3                  | 20                   | 3.5     | 2                  | 6                    | 1       | *                  |
| 1280Hz     | 23                   | 2       | *                  | 10                   | 0.9     | *                  | 5                    | 0.4     | *                  |

**Size:** 280 x 180 x 250(mm)

**Gross Weight:** 10 kg

**Temperature: Operation:** 0°C to 50 °C

**Storage:** -20 °C to 70 °C

**Power:** 220Vac (optional 110Vac)