3B SCIENTIFIC® PHYSICS



Vibration Generator 1000701

Instruction sheet

06/16 TLE/ALF



1. Description

The vibration generator is used for generating mechanical waves to study oscillations and resonance.

The vibration generator consists of a loudspeaker fitted inside a stable plastic housing. A mounting pin with a 4-mm socket is attached to the speaker to transmit the oscillations.

Springs, Chladni plates, rubber bands and other accessories can be attached to the vibration generator and allowed to oscillate. A function generator with a power output (e.g. function generator FG 100 1009956/1009957) is required to generate the oscillations. Including holder for stand rod (up to 8 mm \emptyset) on the rear side of the apparatus for the demonstration of standing waves in a coil spring. The generator is equipped with overload protection.

2. Technical data

Connection:	via 4-mm safety sockets
Impedance:	8 Ω
Frequency range:	0 up to 20 kHz
Overload protection:	1 A fuse
Dimensions:	200 x 160 x 75 mm ³
Weight:	1.4 kg

- 1 Input sockets (4-mm safety sockets)
- 2 Mounting pin with 4-mm socket
- 3 Fuse holder (with F 1.0 fuse for 250 V)

3. Operation

- When plugging in or removing accessories, take care not to apply too much pressure or force on the mounting in order to avoid damaging the loudspeaker.
- Hold the mounting still with one hand whilst inserting or removing the accessory with the other.
- Attach appropriate accessories for the experiment to the vibration generator.
- Connect a function generator and modify the frequency.

To perform experiments the following equipment is also required:

1 Function generator FG 100 @230 V 1009957 or

1 Function generator FG 100 @115 V 1009956 Experiment leads

3.1 Changing the fuse

- Unscrew the fuse holder.
- Replace the blown fuse with a new one.
- Screw the fuse holder back in.

- 4. Accessories and sample experiments
- 4.1 Chladni plates (1000705 /1000706)



4.2 Resonance wire (1000707)



4.3 Rubber band (1000702)



4.4 Accessories for spring oscillations (1000703)



4.5 Accessories for rope waves (1008540)



4.6 Accessories for kinetic gas theory (1000704)



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