

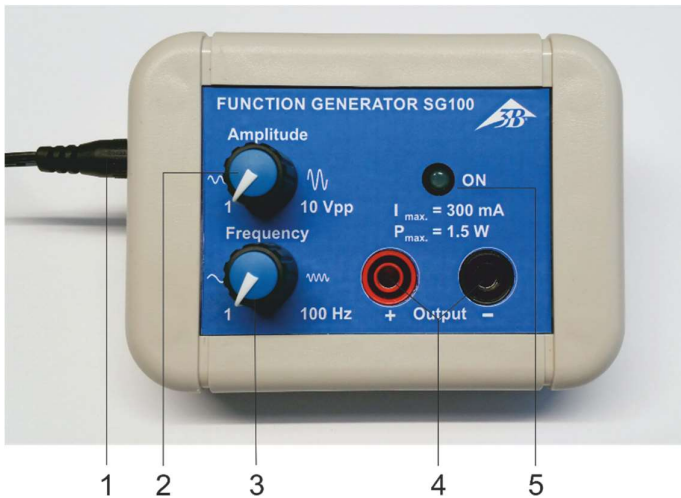


Sine wave generator SG100 (230 V, 50/60 Hz) 1021744

Sine wave generator SG100 (115 V, 50/60 Hz) 1021745

Instruction manual

05/19 GH/SD



- 1 Plug-in power supply
- 2 Amplitude adjustment knob
- 3 Frequency adjustment knob
- 4 4-mm output sockets
- 5 Power-LED

1. Safety instructions

The sine wave generator SG100 conforms to safety regulations for electrical measuring, control and laboratory equipment as specified in DIN EN 61010 Part 1. It is to be operated in dry rooms as appropriate for the use of electrical equipment.

The supplied plug-in power supply unit complies with the standard for safety transformers DIN EN 61558-2-6 and the output voltage is a non-hazardous contact voltage.

Safe operation of this equipment is guaranteed as long as it is used as stipulated. However, there is no guarantee of safety if the equipment is used incorrectly or carelessly.

If there is any suspicion that the equipment can no longer be operated without risk (e.g. if visible damage is detected), the equipment must immediately be with-drawn from use and secured in such a way as to prevent its inadvertent operation.

- Only use the instrument in a dry environment.
- Do not apply any external voltage to the output sockets.
- Use only with the supplied plug-in power supply.

2. Description

The sine wave generator SG100 is a generator with a power amplifier for generating sine waves of very low frequency. It is particularly well suited for use in experiments which are to be performed by the students themselves.

The equipment outputs a sine-wave voltage of adjustable amplitude and frequency.

The LED "ON" indicates that the device is ready for operation.

The output is resistant against short circuits, and protected from induced voltages and spark discharges. Power is supplied via a 12 V AC plug-in power supply.

The sine wave generator SG100 with order number 1021745 is intended for a mains voltage of 115 V ($\pm 10\%$), whereas the one numbered 1021744 is for 230 V ($\pm 10\%$).

3. Technical data

Signals:

Frequency range:	1 Hz to 100 Hz
Distortion factor:	<5%
Signal waveform:	Sine

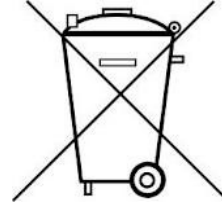
Output:

Output amplitude:	1 Vpp to 10 Vpp, continuously adjustable
Output power:	1.5 W permanent
Output current:	300 mA max.

General data:

Power supply:	Plug-in power supply, 12 V AC, 0.5 A
Transformer:	Safety transformer according to DIN EN 61558-2-6
Safety:	DIN EN 61010-1
Dimensions:	100x75x35 mm approx.
Weight:	400 g approx. (including power supply)

- Should you need to dispose of the equipment itself, never throw it away in normal domestic waste. Local regulations for the disposal of electrical equipment will apply.



4. Operation

- Connect the plug-in power supply to the mains and plug it into the sine wave generator.

The equipment is then switched on and ready to use.

- Adjust the amplitude with the amplitude knob.
- Adjust the frequency with the frequency knob.

The frequency can be adjusted to between 1 Hz to 100 Hz along a linear curve.

The signal can be displayed with an oscilloscope. For this an additional HF cable, BNC/ 4 mm plug e.g. 1002748 is required. We recommend the SG100 for experiments together with the SEG electronics 1021672 or the vibration generator 1000701.

5. Storage, cleaning, disposal

- Keep the equipment in a clean, dry and dust free place.
- Before cleaning the equipment, disconnect it from its power supply.
- Do not clean the unit with volatile solvents or abrasive cleaners.
- Use a soft, damp cloth to clean it.
- The packaging should be disposed of at local recycling points.