

# Related Products (Acoustic Measurement Related Products)

Check the performance characteristics of floor surface materials

## Tapping Machine Light Floor Impact Sound Generator

FI-01A 



- Light and hard impact source imitating walking with shoes, designed for on-site use in measuring impact sound levels of flooring
- Allows checking insulation performance of floor surface materials mainly in medium and high frequency range

ISO 10140-5, ISO 16283-2, JIS A 1418-1 Standard Light Impact Sound Source

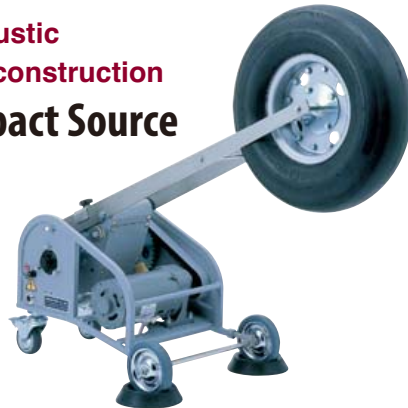
### Specifications

Applicable standards	ISO 10140-5, ISO 16283-2, JIS A 1418-1
Hammers Number and Spacing	5 hammers are arrayed at 100 mm intervals in a straight line
Average time between floor impacts of each hammer	100 ms ± 5 ms
Interface	RS-232C
Power requirements	AC power supply 100 V to 240 V Built-in rechargeable lithium ion battery (Under continuous operation Approx. 45 minutes)
Dimensions, Weight	230 (H) × 265 (W) × 557 (D) mm, approx. 10 kg

For testing the acoustic properties of floor construction

## Heavy Floor Impact Source

FI-02



- Heavy and soft impact source suitable for floor impact sound level measurement, simulating events such as children jumping up and down
- Can be used to evaluate mainly the medium and low frequency range insulation aspect in the acoustic performance of floor structures

JIS A 1418-2: 2000 Standard Heavy Impact Source (impact force characteristics 1)

Octave band impact force exposure level and tolerance values for impact force characteristics 1

Octave band center frequency Hz	Octave band impact force exposure level dB	Tolerance dB
31.5	47.0	±1.0
63	40.0	±1.5
125	22.0	±1.5
250	11.5	±2.0
500	5.5	±2.0

For sound insulation testing of floors in buildings

## Impact Ball

YI-01

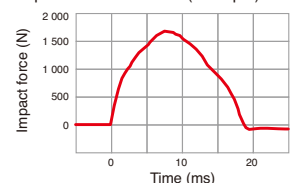


- Designed for sound insulation testing in lightweight structures where a standard heavy impact sound source (bang machine) with characteristics (1) would create too much impact force
- By performing a free drop from a height of 1 meter, a stable impact force of about 1 500 N (Newton) can be created
- Light mass of 2.5 kg allows for easy carrying

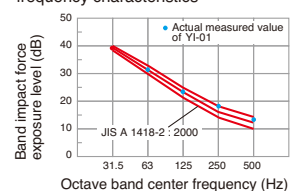
### Specifications

Equivalent mass	2.5 ± 0.1 kg
Drop height	1 m
Major rubber compound	Silicone rubber
Shape	Hollow sphere with 32 mm thick wall and 178 mm external diameter
Rebound coefficient	0.8 ± 0.1

Impact force waveform (example)



Impact force exposure level frequency characteristics



Sound source for all kinds of acoustic measurements

## Random Noise Generator

SF-06



- Generates white noise and pink noise and uses a 1/1 octave filter to produce band noise
- White noise and pink noise covers the 20 Hz to 20 kHz frequency range, and octave band noise uses center frequencies from 31.5 Hz to 8 kHz
- Applications include architectural acoustic measurements, sound absorption factor measurements in anechoic chambers, and sound insulation measurements

### Specifications

Output frequency range	White noise, Pink noise (bandwidth 20 Hz to 20 kHz), Octave band noise
Output signal level	Approx. 5.6 Vrms
Output level range	0 dB to -60 dB
Octave bands	31.5 Hz to 8 kHz
Power	100 to 250 V AC (50/60 Hz), approx. 20 VA
Dimensions, Weight	168 (H) × 198 (W) × 270 (D) mm, approx. 3 kg

※Contact RION distributors for recommendations on suitable powered speakers.