

## Microphone U11367

### Instruction sheet

11/08 Hh



#### 1. Safety instructions

- Do not expose the microphone to sound levels in excess of 110 dB!

#### 2. Scope of delivery

- 1 Microphone box
- 1 Table microphone
- 1 Mini DIN connecting lead 8-pin, 60 cm length

#### 3. Description

The microphone is suitable for measurements of relative sound pressure, for examination of sound waves and sound frequencies, e.g. those of voices and musical instruments (fundamental tone and overtones), for determination of sound velocity in air, as well as for the examination of beats and the Doppler effect.

It consists of a microphone box with amplifier and an electret table microphone on a base, with detachable gooseneck stand.

#### 4. Technical data

Table microphone with 3.5 mm stereo jack plug	
Cable length:	1.8 m
Impedance:	1.4 k $\Omega$
Frequency range:	30 Hz – 16 kHz
Type:	Omni-directional

#### 5. Operation

- Connect the microphone to the microphone box and connect the latter to one of the two analog inputs A or B of the 3B NET/log™ unit via the mini DIN lead
- Select “Vdc” as the operating mode for the selected input.

## 6. Sample experiment

### Measuring the sound wave from a tuning fork

Equipment needed:

1 3B NETlog™ module	U11300
1 Microphone	U11367
1 Tuning fork 440 Hz, on resonance box	U10121



Fig. 1: Measuring the sound wave of a tuning fork

- Mount the 440 Hz tuning fork on the resonance box and position the microphone in front of the resonance box's sound hole.
- Select an analog input on the 3B NETlog™ module and activate the tuning fork experiment (template) in the 3B NETlab™ software. This provides all the necessary output settings.
- Conduct and analyse the experiment.

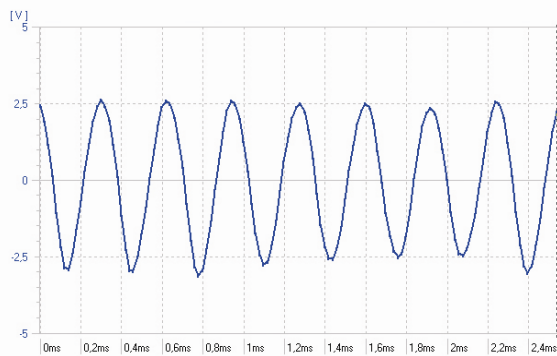


Fig. 2: Amplitude of sound wave from a tuning fork as a function of time