

Material:

Item Code	Qty	Description
DE751-3A	1	Oscilloscope, two-channel, 30 MHz, with VGA
DW340-2M	1	Measuring microphone "inno"
MB240-1LS	1	MBC Loudspeaker with nose
P3120-4A	1	L-shaped assembly platform
P3120-1G	1	Function generator with digital display "inno"
P3120-1B	1	Rechargeable battery, "inno", 6V/10 Ah
DG520-1C	1	Connecting lead, double, 50 cm
P1350-2K	1	Resonance tube "compact"
P1351-2H	2	Holder for resonance tube, small
P3120-5G	1	Assembly platform, large
	2	Connecting lead

Goal:

Sound can be reflected like light.

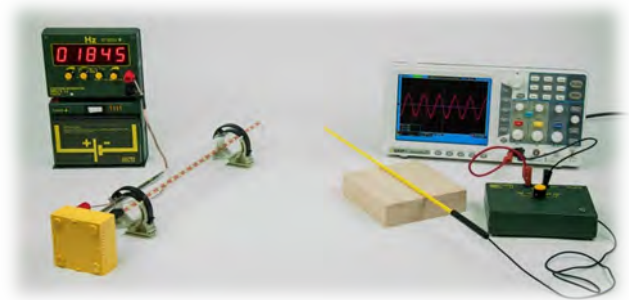
Setup:

The loudspeaker is connected to the function generator with the double cable. The resonance tube is placed with its holders in front of the loudspeaker. The measuring microphone is connected to the oscilloscope. The measuring range of the oscilloscope is set to 50 mV and 200 μ s. The amplification factor is 30. Now the microphone and the tube are aligned to a right angle with a distance of about 10 cm between the devices.

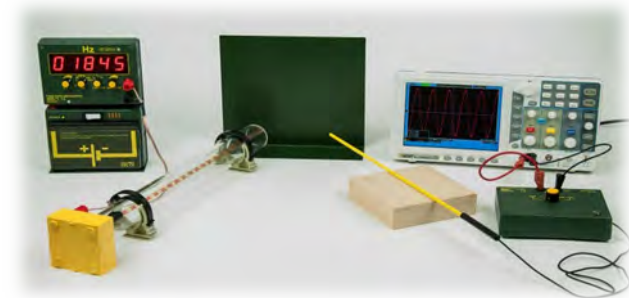
Experiment:

Now the function generator is switched on. Well visible results are obtained at the frequencies 790 Hz and 1845 Hz.

First, a measurement is performed without the assembly plate.



Then place the assembly plate at a distance of about 5 cm from the two devices.

**Result:**

Without the assembly plate, the microphone picks up the sound, but the amplitude is low. With the assembly plate, the amplitude increases.