

Watching a Sound.

Material:

One PVC or metal or alternative-material pipe with a diameter between 5 and 10 cm, and a length between 20 and 30 cm.

One piece of very fine rubber (like a rubber skin balloon or a surgeon's glove)

One rubber band.

One small piece of a fine flat mirror (not a CD! Due to diffraction.) with a surface of approximately 1 cm².

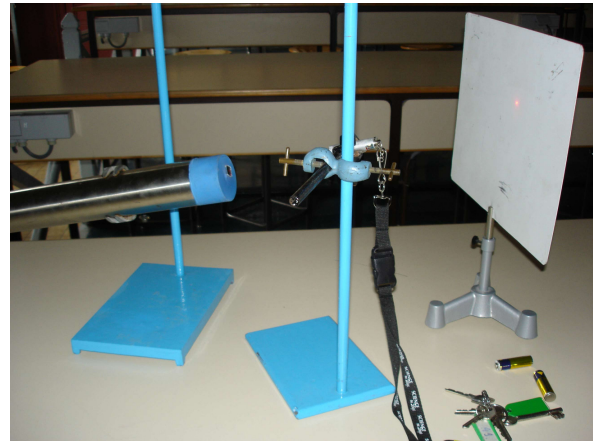
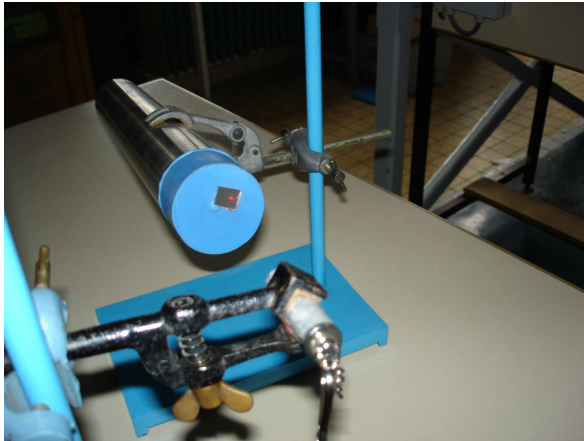
Basic glue.

Two stands with clamp holder and grip, or other similar steady support.

One laser pointer.

Procedure.

Tautly fix the flexible diaphragm to one end of the pipe, using a rubber band.

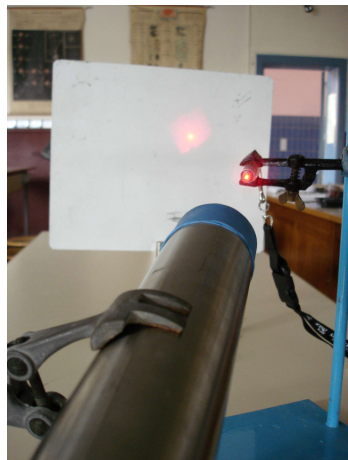


Glue the small piece of flat mirror on the flexible diaphragm, shifted from the centre of the diaphragm (about one third).

The pipe is held slightly sidewise on the stand.

Using the small laser pointer (itself attached to another stand), light up the mirror in order to reflect the beam of light on a screen or a light colour wall.

(Allow for a sufficient distance so you can better see).



Then, just speak (it is better using a deep voice), make a sound (for example, with musical instruments like djembes, flutes, etc...) or place a radio in front of the other end of the pipe.

You'll see beautiful pictures...