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Optical Seismograph

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Seismometers are instruments that measure motions of the ground, including those of seismic waves generated by earthquakes, nuclear explosions, and other seismic sources. Records of seismic waves allow seismologists to map the interior of the Earth, and locate and measure the size of these different sources.
In this article I am going to give an idea to use optical properties in a new seismograph which will be more sensitive in compare with most of the being used inertial seismographs nowadays. This instrument uses an optical system to measure the movements in the direction of Earth plates seismic in any of the three axes. Any movement, even very small one, will move a crystal bulb which is lashed by some narrow elastic bands in a fixed box surrounded by three optical sources and light meters. Light meters measure the attitude and the angel of changes in the light beams going through the bulb which is related to the amount and direction of quakes. The system will be very sensitive even against movement around its access.
As an electro digital device in connection to a process unit it can be used for many different experiments. The sensitivity rate of the instrument will be based on the quality and sensitivity of the light meters.