

Aspects of the Directed Stick radiator(DSR)

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The so-called „directed stick radiator“ is an acoustic generator, which works in a relative broad frequency band of a few Hz up to 10 kHz. Its characteristic feature shows directed acoustic emission.

Its construction is rather simple. It consists of a tube of about 1m, its diameter is appr. 4 cm. Inside the tube there are series of piezoelectric devices, they all are connected with a mechanical wave guide. The principle of function looks like that:
an emitter introduces energy into the wave guide, which couples energy into the first disc, and step by step into the following discs.

The activation of the device results in pressure waves, which are directed against the target.

At present a laboratory equipment has been constructed. Measurements are planned for next time.