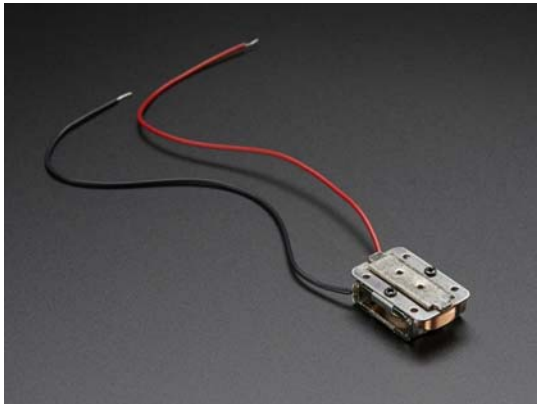# Bone Conductor Transducer with Wires - 8 Ohm 1 Watt

PRODUCT ID: 1674

• Description

Drown out the voices in your head with a bone conduction transducer! This incredible speaker does not have a moving cone like most speakers you've seen, instead, a small metal rod is wrapped with the voice coil. When current is pulsed through the coil, the magnetic field causes a piece of metal to expand and contract - if pressed against a flat surface or cavity it turns it into a speaker!

Often these size transducers are pressed up against the jaw or ear bone to turn the skull into a speaker cavity. The effect is a perfect quality sound that is coming from within your head that nobody else can hear. You can also press it against your elbow bone and stick a finger in your ear to hear the audio transmitted through your arm! Since no air is required, we've seen this kind of module covered in plastic so it can be used for waterproof 'underwater' headphones for swimmers. Other fun tricks you can try: press it against a table or wall to make a flat speaker, or at the end of a plastic cup to point sound in a particular direction.

If you plan to use the bone conduction transducer for prolonged direct contact with skin, we recommend that cover the transducer and wire connections with something like Sugru to prevent accidental shorting of driver current through the skin, due to sweat and electrolyte accumulation around the metal parts.

This transducer is lightweight and small and has 8 ohm impedence and should be run at about 1W. It pairs great with any of our audio amps such as the TS2012 breakout or MAX98306. Just connect it as you would any other speaker, we even have some wires pre-soldered on

Technical Details

- o Dimensions: 14mm x 21.5mm / 0.6" x .8"
- o Weight: 9.6g
- o Power handling: 1 watt RMS/2 watt max
- o Le: 1.26 mH
- o Impedance: 8 ohm
- o Re: 5.8 ohms
- o Frequency response: 300-19,000 Hz (but will vary with what you use as the transducer surface)
- o Fs: 1,600 Hz
- o SPL: 90.1 dB 1W/1m (but will vary with what you use as the transducer surface)