**Electret Microphone**

1. A sound wave enters the sound inlet and front volume of the microphone.
2. The rear volume of the microphone creates a pressure reference for the membrane.Incoming sound creates a pressure difference between front and rear volume. This pressure difference moves the membrane.
3. The backplate creates an electrical field over the cartridge. The strength of this depends on the amount of charge in the backplate and on the size of the air-gap. The potential of the membrane changes when it moves in a sound field.
4. The amplifier converts the high impedance of the cartridge to a low impedance. Due to this the voltage swing at the output terminal represents the potential change at the membrane and is consequently proportional to the incoming sound level.

Helping hearing at maximum comfort.