

## USB-powered microphone heating HCM16

The HCM16 microphone heating module for the CM16/CMPA microphone can increase the temperature of the microphone capsule by about 10 Kelvin above the ambient temperature, which should prevent condensation under difficult environmental conditions, such as dew or rain.

The USB B connector can be connected either to a free USB port of the PC that is running the UltraSoundGate unit or alternatively to a separate USB power supply unit or battery.

### Installation

Mount the heating module to the CM16 microphone capsule in such a way that the resistor chips on it face outwards (see picture). The protective grid might be still inserted between the microphone capsule and the heating module. However, the efficiency (the thermal contact) would be better without the grid.

Under some circumstances, the USB cable connection between the heating module and the computer might cause electrical interferences that are caused by a ground loop. In this case, the ground connection to the heating module through the USB connector should be removed (USB pin 4). This can be achieved for instance by using a modified USB cable whose ground wire (USB pin #4, black) has been cut. The required ground connection to the computer would then be established exclusively through the microphone and the UltraSoundGate ground rail.

### Specifications

Electric power requirements : 0.9 W (180 mA @ 5V)

Absolute maximum power: 3.0 W (330 mA @ 9V)

Maximum supply voltage: 9 V

Electrical impedance: 27 ohm

