

Can dust/dirt affect my measurement microphones?

Dust/dirt can be problematic when in contact with a measurement microphone set. The accumulation of dust in the protection grid can cause its clogging, which will affect the frequency response of the microphone.

Even though a bit of dust on the microphone's diaphragm won't affect its performance, the accumulation of it will affect the microphone's sensitivity due to the added mass.

Dust/dirt can affect the contacts between microphone and preamp and the preamplifier cable connector pins. Therefore it is advised not to expose these parts in dusty environments. Dirty contact can higher the noise floor of the microphone or completely block the signal.

Venting holes in preamp and/or microphone capsule can be clogged by dust or dirt. When this happens the microphone can't equalize its internal pressure with the outside pressure and measured data won't be reliable.

Both microphones (including its diaphragm) and preamps are cleaned by our experts when sent for calibration or repair to GRAS calibration laboratories.

GRAS offers a line of ruggedized microphones that are ready to work in demanding environments with dust/dirt. Check for GRAS [146AE](#), [147AX](#) and [147EB](#).