

The Listening Room - technology

The basic installation consists of a microphone connected to a noise gate, amplifier and speakers in a highly reverberant room. The system is arranged in such a way that when the microphone and loudspeaker begin to feed back the amplitude of the sound causes the noise gate to cut off the signal. The Drawmer DS201 gate has a 'duck' mode which allows this. The feedback notes resonate through the space accentuated by the long reverberation time of the gallery. As the sound falls below the threshold of the noise gate the system switches back on and the process continues. Microphones are PZM type, allowing for the microphonic activation of the plane of a whole wall surface within the space, giving maximum coverage to the soundfield and allowing the presence of people in the space to modulate the feedback.



This is the basic system - a chain of microphone, a small mixer acting as preamp, noise gate, amplifier and loudspeaker. In practice one microphone is usually connected to a couple of amplifiers and more speakers so that the level and placement of speakers within the space can be individually controlled.

It has been my intention to keep the technology involved in these installations minimal and comprehensible to the viewer/listener.

TECHNICAL REQUIREMENTS - basic system:

- audio amplifier, usually 2 (average domestic hi-fi standard is ok - usually no more than 30 watts required)
- 2, usually 4 speakers (domestic hi-fi standard is ok)
- Drawmer DS201 noise gate
- Behringer 1604 mixer
- microphone (Audio Technica PRO 42 or Crown PZM-6LPB pressure zone mic)
- various cables for above