#### TRANSDUCER INSTALLATION

### INTRODUCTION

The ideal installation would be accomplished during construction or remodeling where sensitive points in the structure can be protected with transducers built into the building's structure. If this is not possible, the transducers can be placed directly onto wall surfaces. If visual appearance is a problem, the transducers should be disguised or covered accordingly.

### QUANTITY REQUIRED

Determine the quantity of transducers needed by these recommendations:

WALLS – One placed every eight linear feet, centered between floor and ceiling. Mount on or within 6 inches of a stud.

FLOOR and CEILING – One centered on every 64 square feet. (Use the OMS-2000 speaker for drop ceiling.)

WINDOWS – One placed on every major frame of glass within 6" of the corner.

DOORS – One placed adjacent to the center hinge on the doorframe.

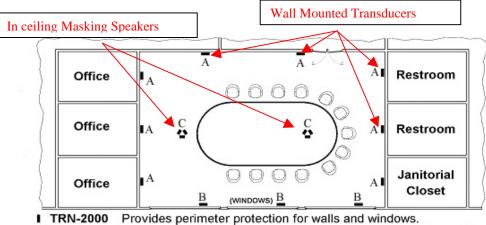
Note: "Shielded Screen Rooms" are shielded against R.F. devices transmitting out of the room, but not necessarily against acoustic leakage. During Construction or remodeling of a screen room, the transducers can be mounted on the frame members, and then acoustic insulation and a decorative panel can be installed to the inside wall surface. This will help isolate the noise generated from the room as well as decrease the acoustic leakage out of the room.

# APPENDIX A

Illustration: Perimeter noise-masking design for conference room (see diagram).

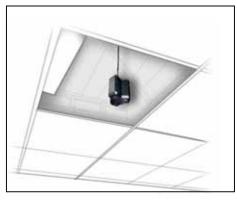
- Noise masking transducers placed along the walls and along the glass
- Noise masking speakers within the ceiling spaces.

If the masking noise level is properly adjusted and a listening device is placed within walls or in the ceiling, then the listening device will pick-up masking noise and the potential loss of information is greatly reduced. However, if a listening device is brought into the room near the conversation area, then the perimeter noise masking system can be defeated.

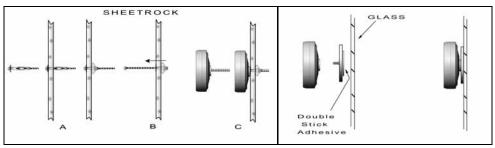


Comparison of the second second

Basic Design Layout



Installation of Omni-Masking Speaker (OMS) in Ceiling Plenum



Installation of Transducers (TRN) on Walls and Glass

## **APPENDIX B**

## RACK MOUNT SYSTEM

Rack Mount System available for secure centralized control or multiple Acoustic Noise Generators.



### OMS-2000

Omni Masking Speaker - The Omni directional Speaker is used with the ANG-3000 to project acoustic noise into drop ceiling air spaces, closets, crawl spaces, and air ducts.



# **APPENDIX B**

## TRN-2000

ANG Transducer - REI's TRN-2000 is a specially designed Transducer used to inject acoustic noise into walls, finished ceilings, windows, plumbing, and air ducts.



WMT-2000

Transducer Window Mount - WMT-2000 Transducer Window Mount provides a safe method of attaching the TRN-2000 to a glass surface.

