ANG-2200

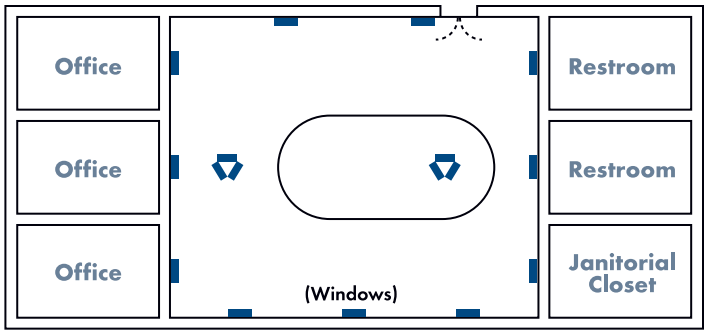
ACOUSTIC NOISE GENERATOR

The ANG-2200 is designed to generate voice band noise energy as a countermeasure for audio listening devices. In conjunction with the TRN-2000 and the OMS-2000, the ANG-2200 creates a complete masking system that allows normal conversation while frustrating eavesdropping devices that rely on acoustic leakage.

This technology is highly effective against contact microphones and reflected laser or microwave listening devices. The true random noise source has no statistical repeatability. The dual channels provide independent control of the power level and equalization, which lends itself to the use on a variety of surfaces.

ANG Accessories

- TRN-2000 Transducer used to inject acoustic noise into walls, ceilings, windows, plumbing, and air ducts.
- OMS-2000 Omni Directional Speaker is used to project acoustic noise into drop ceiling air spaces, closets, and crawl spaces.
- EAR-200 Electro-Acoustic Receiver used to evaluate the level of audio leakage and set the specific masking level. *(not shown)*



TRN-2000 Provides perimeter protection for walls and windows.

OMS-2000 Provides protection from ceiling devices (mounted in drop ceilings).

The ANG system, as shown here in a typical application, provides perimeter protection for rooms of concern.

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ANG-2200 Optional Accessories

Technical Specifications

ANG-2200 ACOUSTIC NOISE GENERATOR

Size: 1-5/8 in x 4-3/16 in x 7 in (4.1 cm x 10.6 cm x 17.8 cm)

Weight: 2 lbs (.93 kg)

Each Channel:

- Independent Random Noise Source
- Output voltage: 10Vp-p @ 6Ω (2Ω min load)
- Frequency range: 125Hz - 5.6kHz
- Equalizer: LF 180Hz ± 12dB, HF3 kHz ± 12dB

Power: 12V DC @1A, (AC adaptors supplied for 120 or 240VAC)

TRN-2000 TRANSDUCER

Size: 3 in x 1-1/4 in (7.6 cm x 3.1 cm)

Weight: 1.0 lbs (454 g)

Impedance: 6 Ω

Transducers per Generator:

- 3 @ full level (parallel)
- 12 @ 1/2 level (six groups of two)
- 27 @ 1/3 level (six groups of three)

OMS-2000 OMNI SPEAKER

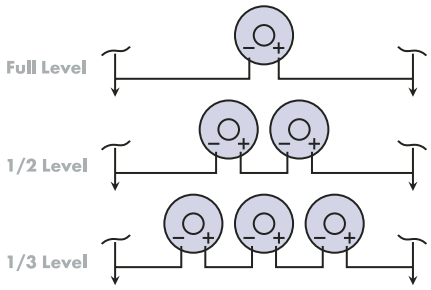
Size: 5 in x 5-3/4 in (12.7 cm x 14.6 cm)

Weight: 2.0 lbs (907 g)

Impedance: 24Ω

Speakers per Generator: 12 @ full level

SOME SURFACES REQUIRE LESS ENERGY THAN OTHERS TO ACHIEVE EFFECTIVE MASKING, RANGING FROM 1/3 LEVEL FOR WINDOWS TO FULL LEVEL FOR MASONRY WALLS.



SUGGESTED LEVELS FOR VARIOUS MATERIALS:

	FULL	1/2	1/3
BLOCK/CONCRETE	●		
DRYWALL/SHEET ROCK	●	●	
DUCTWORK/PLUMBING	●	●	
WINDOWS	●	●	●

● ***May require attenuator to reduce level to 1/2 or 1/3 in mixed systems.***

REI's engineers can assist in planning an efficient, economical system from a sketch of the room.

Additional Accessories

EAR-200 ELECTRO-ACOUSTIC RECEIVER

Size: 1 in x 2-3/8 in x 3-3/4 in (2.5 cm x 6.0 cm x 9.5 cm)

Weight: 2.2 lbs (1 kg)

Power: 9V battery

Used to locate sources of acoustic leakage, the EAR allows "before and after" comparisons to determine the effectiveness of the noise masking, and connects easily to recorders, spectrum analyzers, or other test equipment for more detailed analysis.

(The EAR-200 is intended for training and test purposes only, and is not to be used in a surreptitious manner.)

ASA-200 AUDIO SPECTRUM ANALYSIS SYSTEM*

This system is used to evaluate the ambient audio frequency spectrum and adjust the ANG noise level and frequency slope using "before and after" comparison. The system consists of PC software and a contact microphone that effectively turns an average computer into an audio spectrum analyzer.

**** Contact REI for availability.***