

## ANG-2200 ACOUSTIC NOISE GENERATOR

## Protect your privacy...

Protect proprietary or sensitive conversations against eavesdropping threats from perimeter contact microphones and reflected laser listening devices.

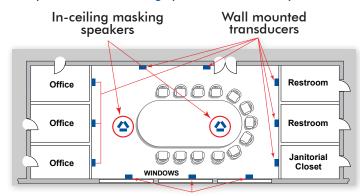
#### **ANG-2200 Features**

The ANG-2200 injects tuned masking noise into perimeter structures to mask structure-bound audio. Acoustic Spectrum Analysis Software (ASA-2000) ensures the masking noise is properly adjusted to provide adequate masking without being too loud or disruptive.

- True random noise source with no statistical repeatability
- Independently controlled dual channels for use on different structures
- "Tunable" masking noise for specific environmental requirements
- Provides an eavesdropping defense against devices that may not be detected by conventional methods

System configuration should be tailored to the environment. REI recommends one transducer every eight linear feet (2.4m).

#### Example of noise masking speaker/transducer placement



#### Window mounted transducers

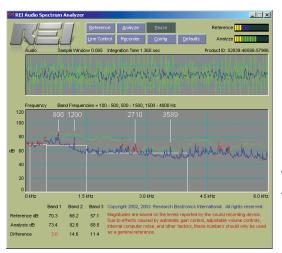
- TRN-2000 Provides perimeter protection for walls and windows
- OMS-2000 Provides protection from ceiling devices (mounted in drop ceilings)

### ANG-2200 Accessories (sold individually)

**TRN-2000** Transducer injects acoustic noise into walls, ceilings, windows, plumbing, air ducts, and other vulnerable structures.

**OMS-2000** Omni Directional Speaker projects masking noise into drop ceiling air spaces, closets, crawl spaces, and other vulnerable air spaces.

NOTE: Speaker wire not included, common 18 gauge speaker wire is recommended.







#### **ASA-2000** Acoustic Spectrum Analysis Software

Allows the user to evaluate structure-bound audio leakage for analysis and proper adjustment of the ANG-2200 to provide adequate masking without being too loud and/or disruptive.



TRN-2000

## **ANG-2200** Technical Specifications

#### ANG-2200 Acoustic Noise Generator

**Size:** 1.6 in x 5.5 in x 8 in (4.1 cm x 14 cm x 20.3 cm)

Weight: 1.3 lbs (590 g)

**Each Channel:** 

Independent Random Noise Source

Output voltage: 12 Vp-p @  $6\Omega$  ( $2\Omega$  min load)

Frequency range: 125 Hz to 5.6 kHz

Equalizer: LF 180 Hz  $\pm$  12 dB, HF 3 kHz  $\pm$  12 dB

Power: 15 VDC @ 1 A (AC adaptor supplied for 120 or 240 VAC)



Front Controls (Dual Channel)



**Back Connections** 

## **Accessory Specifications**

#### TRN-2000 Transducer

With wall mounting and connecting hardware

**Size**: 2.875 in x 1.25 in (7.3 cm x 3.2 cm)

Weight: 0.9 lbs (408 g) Impedance:  $6 \Omega$ 

#### Max Transducers per Channel:

3 @ full level (parallel)

12 @ 1/2 level (six groups of two)

27 @ 1/3 level (six groups of three)

#### WMT-2000 Transducer Window Mount

**OMS-2000** Omni Directional Speaker Size:  $5 \text{ in x } 5^{3/4} \text{ in } (12.7 \text{ cm x } 14.6 \text{ cm})$ 

Weight: 2.0 lbs (907 g)

Impedance: 24 Ω

Max Speakers per Channel:

12 @ full level



# ASA-2000 Acoustic Spectrum Analysis

Software

Allows the user to evaluate structure-bound audio leakage for analysis and proper adjustment of the ANG-2200 to provide



#### Acoustic Leakage Probe

Frequency Response: 50 Hz to 10 kHz

(Surface Dependant)

FET Preamp Bias: 3 to 9 VDC

Sensitivity: Optimized for voice use/low

noise high output element

Impedance:  $2 k\Omega$ 



## **Optional Rapid Deployment Kit**

This all-in-one ANG-2200 Rapid Deployment Kit provides the tools and accessories to rapidly deploy a complete ANG System in a medium sized conference room. Included in the kit:

ANG-2200 (2)
TRN-2000 (24)
ASA-2000 Acoustic Spectrum
Analysis software cd (1)
Omni masking speakers (2)
Transducer window mounts (24)
Multi-meter with cables (1)
Wire stripper (1)
Screwdriver (1)
Needle nose pliers (1)

1/4" socket bit (1)



2 Spools 500 ft (152 m) wire Portable case with casters

Weight Packed: 75 lbs (34 kg)

**Exterior Dimensions:** (LxWxD) 25 in x 20 in x 12 in (63 cm x 50 cm x 30.2 cm)



<sup>\*</sup> Product specifications and descriptions subject to change without notice.