SOUND CONTROL TECHNOLOGIES

AVT-24™ CEILING GAIN STRUCTURE SET-UP

CEILING MICROPHONE AND LOUDSPEAKER CONFIGURATION

The following procedure should be followed to set up the acoustic room gain for AVT-24™ teleconference systems using ceiling mounted microphone mixers and power amplifier systems.

1: REQUIRED EQUIPMENT:

1. **Sound Level Meter** Typical Radio Shack #33-2050 (Retail around $40.00), analog meter type will be easiest to use (vs. digital readout)
2. **MultiMeter** Typical FLUKE 83, digital display with bar graph. (Retail around $265.00)
3. **Loudspeaker** Typical JBL Control 1, any box speaker will be fine (or powered speaker).
4. **Pink Noise Source** Several manufactures available.
5. **Power Amplifier** 10-20W amplifier if powered speaker is not available.

2: MICROPHONE GAIN:

Introduce a **Pink Noise** source into the room environment. As shown in Figure 1 below, place the loudspeaker approximately 6' directly in front of a Sound Level Meter. Activate the Pink Noise source, and adjust the acoustic level to read 70 dBC using slow response on the sound level meter.

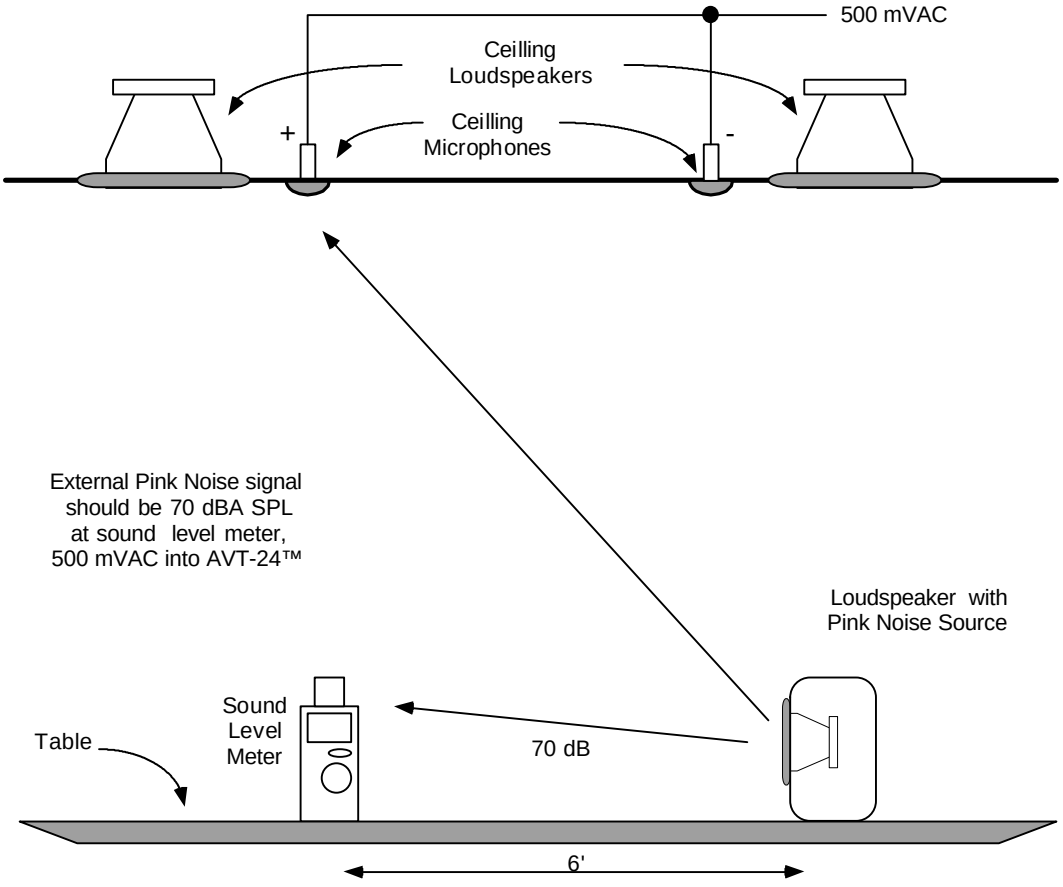

Figure 1

This referance level should be used to give a calibrated level into the AVT-24™ from the ceiling microphone system of 500 - 550 mvAC on the **MultiMeter**.

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Insert the MultiMeter on the output of the room microphone mixer (VF-1 Card Frame or FRM-1 Room Combining Matrix), it can be wired to the "ROOM SEND IN" on the AVT-24™ (as shown in Figure 2). Measure 500 -550 mvAC on the MultiMeter.

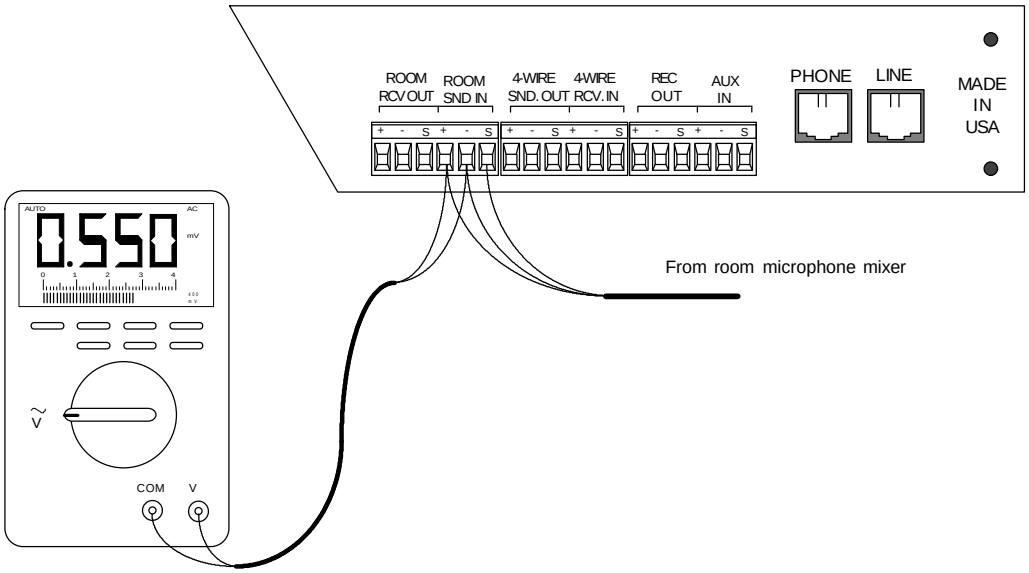

Figure 2

3: LOUDSPEAKER GAIN:

The calibrated level from the AVT-24™ into the room from an external power amplifier system should be 70 dBA SPL at the **Sound Level Meter** (See Figure 3). This level is set by introducing the AVT-24™ training signal into the room and reading the level on the **Sound Level Meter** (as shown in Figure 3).

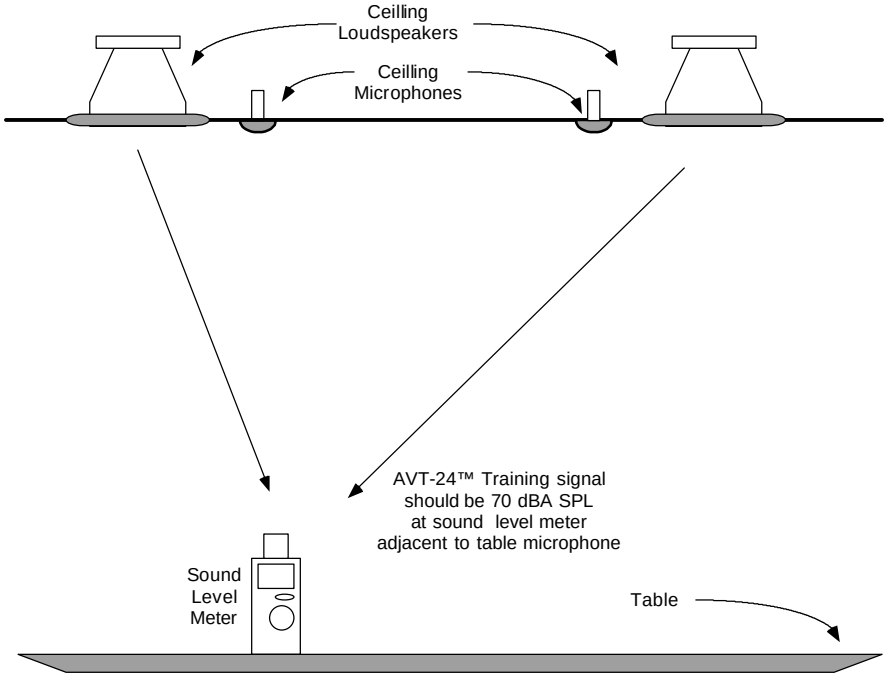

Figure 3

The Sound Level Meter should be placed near a seated positions (ear level). Acoustic level is presumed to be evenly distributed throughout the space.

***** If there are multiple output channels, each must be calibrated for a unity feed into the room on the teleconference signal path.**

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