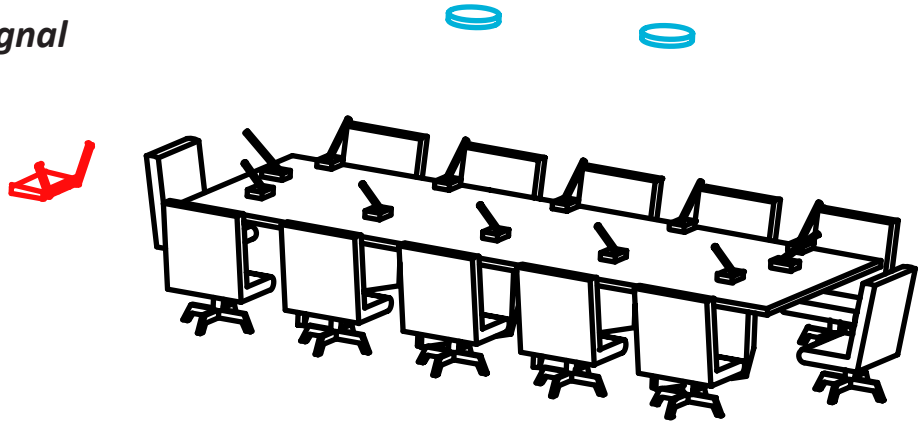
SACOM
MISSION-CRITICAL AUDIO

Tech Note 12:

How Credenzas Can Cause Intermittent Dropouts and Add Costs

Mounting receiver antennas in credenzas can be convenient, but the design is prone to dropouts, especially with larger systems. SACOM's powered extension antennas provide a more reliable RF platform and significantly reduce costs in split and multi-room configurations.

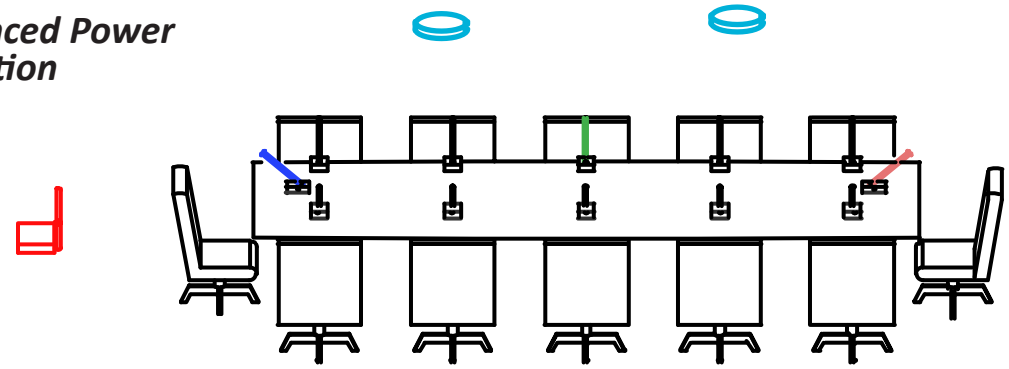
Blocked Signal

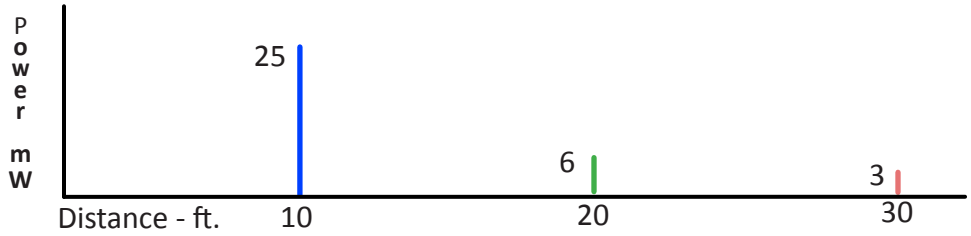


Problem: Metal-reinforced chairs, people's bodies, computers, etc. block the RF signal.

Solution: Extend the antennas to the ceiling for clear line of sight and true diversity.

Unbalanced Power Distribution





RF Power drops with the inverse square of the distance

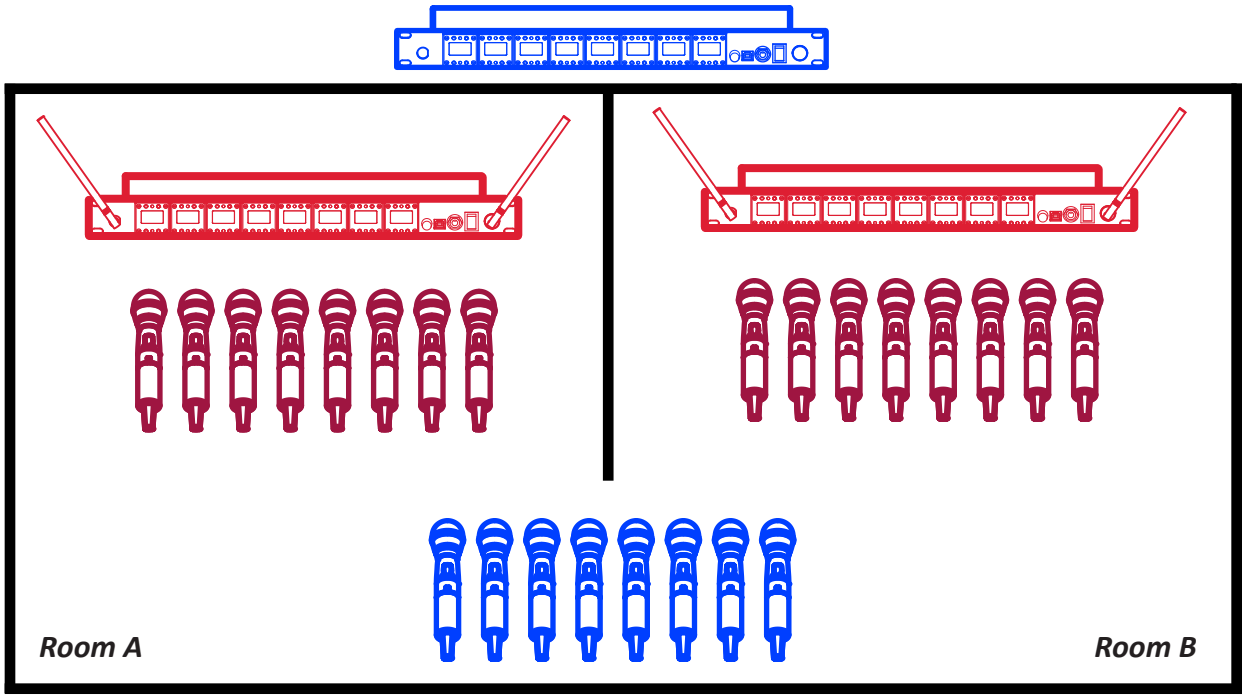
Problem: Large systems experience intermittent dropouts during meetings, but mics work normally when tested individually.

Cause: The strong RF levels and IMD of the close transmitters interferes with the weaker RF signals of the far transmitters.

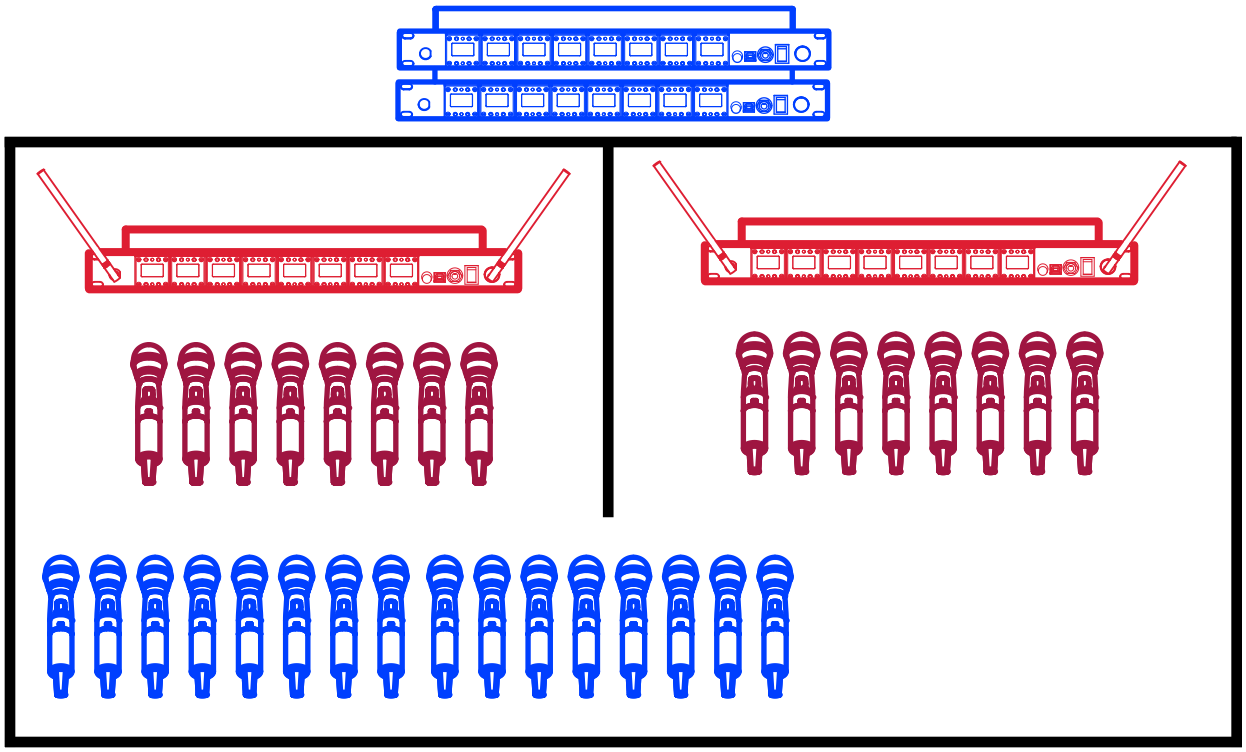
Solution: Extend the antennas to the ceiling so that all mics are about the same distance to the antennas.

Extension Antennas Cut Costs and Add Flexibility in Multi-Room Configurations

Cost Savings: One 8-channel receiver with extension antennas covers two rooms, or a split room, reducing the cost by half.



Added Flexibility: Two 8-channel receivers with extension antennas provide 16 channels distributed in any combination in the two rooms, e.g., 12 channel in Room A and 4 channel in Room B. However, putting an 8-channel receiver in each room limits the rooms to a maximum of 8 channels each.



SACOM receivers have built-in antenna distribution that powers amplified extension antennas. Up to 32 channels can be daisy-chained to a single pair of antennas. SACOM engineers provide free antenna design.

www.SacomUSA.com **http://www.sacomusa.com/resources/AntennaDesign120801.pdf**

Sabine, Inc. 13301 Hwy 441, Alachua, FL 32601 P. 386 418 2000 sales@SacomUSA.com

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- GPIO, USB, RS232, & Ethernet monitoring control
- Made in USA