

ABSTRACT**A FULL-DUPLEX ANALOG INTERCOM SYSTEM**

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The present analog intercom system facilitates full duplex handset-to-handset communication by recovering audio from multiple independent sources, e.g., cordless handsets, by demodulating the modulated RF frequencies generated from the handsets where the demodulated signals are subsequently retransmitted on a single carrier frequency back to the handsets. The present analog intercom system includes a base station, and a plurality of cordless handsets. The handsets transmit a signal to the base at a unique carrier frequency. At the base, the received signals are demodulated and the audio is recovered from each of the signals. The recovered audio is modulated on a single carrier frequency f_b which is different than the frequencies employed by the handsets, and is transmitted back to the handsets, which then demodulate and recover the audio.

20 FIG. 2