Wireless Digital Date and Voice Transmit and Receive System

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Introduction

The project is designed to transmit and receive audio and data using one 900 Mhz signal.

As shown in the figure below, data from an audio microphone and the serial port of a computer are collected. These signals are then combined into one digital signal and appended with an initialization string and transmitted using a 939 Mhz BPSK transceiver.

The transmitted signal is then received and decoded. The bits are then routed to the appropriate output.
442 Project Transmitter/Receiver Block Diagrams

Transmitter

Microphone in
A/D Circuit

Serial Port in
Serial To TTL

Mixing Logic

900 Mhz Transmitter

Receiver

900 Mhz Receiver

Digital Decoder

D/A Amplifier

To Speaker

Amplifier

To Serial Port