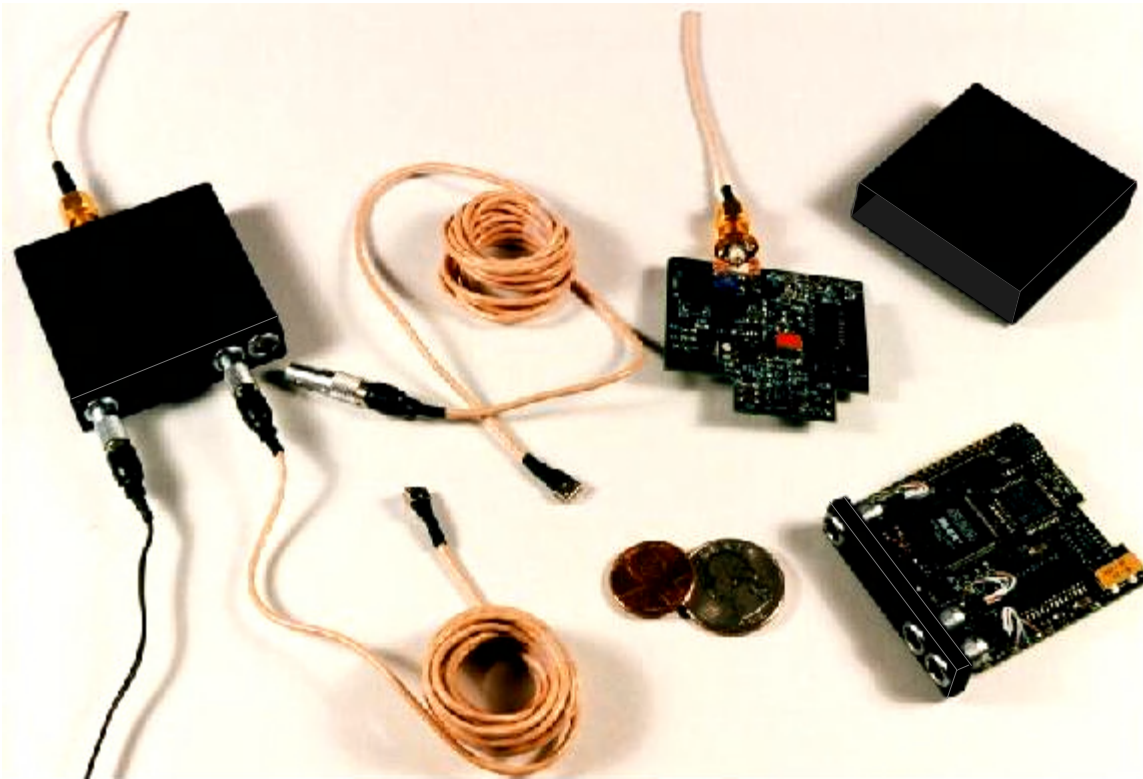




**ZEUS** *Technology Systems, Inc.*  
Technical Data Sheet

**ZDV-300**  
**Digital Voice System**



Stereo transmitter, with mic's, antenna and power connection: interior displayed at right

The Zeus Technology Systems **ZDV-300 Digital Voice System** is a digital stereo transmitter / receiver pair providing high quality stereo audio, and maximum flexibility. The system's wide bandwidth digital RF data link offers protection against unauthorized signal detection, and security of the transmitted voice. The system's dual channel receiver permits maximum data recovery, even in multipath environments. The transmitter is small, 2"X 2"X1/2", light weight, less than 5 oz., and can be powered by a variety of power sources, including batteries. The transmitter's and receiver's operating frequency and the transmitter's output power are field programmable using the receiver's front panel.

**RECEIVER:**

The Digital Voice Receiver covers the entire system range of 700 to 959 MHz, and, when equipped with appropriate band antennas, can operate with either the High Band Transmitter (870 to 950 MHz) or the Low Band Transmitter (700 to 780 MHz). The receiver's two separate RF channels, each with their own antenna, independently process the

received signal, providing signal diversity for better data recovery in a multipath environment. The recovered data from each channel is compared, and the better is selected for further processing of the data and conversion back to analog.

Analog stereo output is available on the front panel via the 1/4" headphone jack, along with a volume control and integrated off switch. The received data is also available in various digital and analog formats on the back panel: digital AES/EBU, and SPDIF (both electrical and optical), as well as RCA Phono jacks for analog left and right channels, and balanced left and right channels via XLR jacks. The rear panel also provides a 3.5 mm miniature phone jack COR, and a 2.5 mm power jack for auxiliary 8 V DC output.

### **TRANSMITTER:**

The transmitter has two 3-pin size "OO" LEMO jacks for microphones. The supplied high dynamic range microphones have mating plugs. The 4-pin size "OO" LEMO jack allows the receiver, via the programming cable, to program the transmitter's frequency and power. (The programming options and procedures are covered in the "Receiver" section.) This jack is also used to supply power to the transmitter during operation. A DC/DC converter with a mating 4-pin plug is provided for this purpose. The DC/DC converter accepts 6 to 17 volts DC, and supplies the transmitter with the required 5.2 to 5.4 volts. When powering the transmitter, the DC/DC converter draws up to 500ma of initial surge, and approximately 250 ma at maximum transmitter output. The antenna is connected to the transmitter via the female SMA connector at the opposite end of the transmitter. The transmitter is sealed to protect it from "harsh" environments, but it is not watertight.