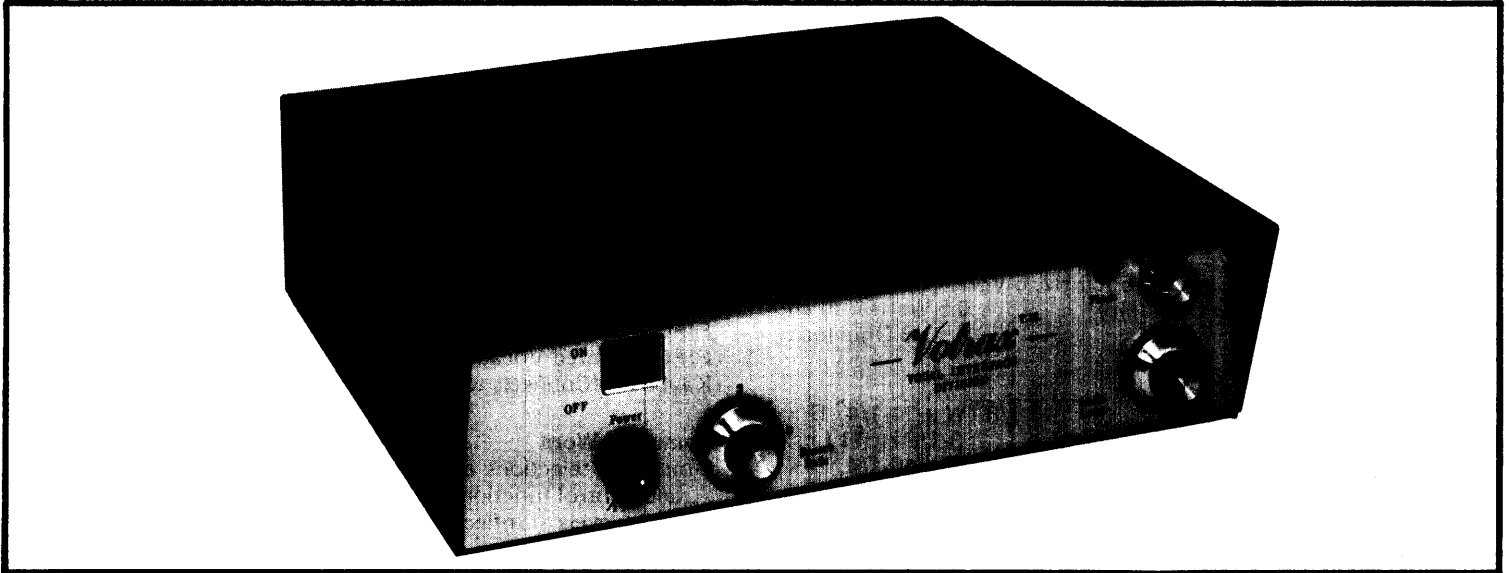


# Votrax®

## VS-6 ELECTRONIC VOICE SYSTEM



- **Cost Effectiveness**

The VOTRAX Model VS-6 is a new departure in voice response technology. This unique system combines low unit cost, unlimited vocabulary, operational simplicity and low data requirements to provide the ultimate in flexibility and cost effectiveness. The price of the VS-6 with parallel buffered interface is \$3605 in single-unit quantity. Purchase prices are discounted for quantity buys starting at two units. Maximum discount is over 50%.

- **Unlimited Vocabulary**

The VS-6 is programmed to speak based on phonetic coding principles. Each eight-bit command word selects one of 61 phonemes (sounds) and one of four levels of inflection (pitch). Utterances are "spelled" phonetically to produce all combinations of words and phrases required by the application. Since words and phrases are stored in the form of digital information in some storage medium, such as magnetic disc or solid-state memory, there is virtually no limitation as to the amount of vocabulary VOTRAX can produce. One well-known computer services company reports a vocabulary in excess of 300,000 words. The value of unlimited vocabulary is that the same low-cost VOTRAX unit can be used for any and all applications.

- **Low Data Requirements**

The use of phonetic coding in the VOTRAX VS-6 permits the production of speech at uniquely low data rates. A rule of thumb indicates that the number of phonemes per word is approximately equal to the number of letters per word. At eight data bits per phoneme command, VOTRAX can achieve continuous speech from input as low as 150 bps. The result is maximum utilization of data communications channels.

- **Operational Simplicity**

The VOTRAX VS-6 is designed to be as simple as possible to install and operate. All VOTRAX interfaces are compatible with most conventional computer and communications equipment (EIA Serial and TTL Parallel). In the case of the EIA unit, the interface controls are comparable to the Bell 103 and 202-Type modems. Consequently, an asynchronous communications adapter that is compatible with the Bell 103 or 202 will attach to VOTRAX without modification. Since this system operates in the same way as an asynchronous data terminal, any standard ASCII terminal driver software will provide device support for VOTRAX. Data formats are either serial ASCII or eight-bit parallel. The user needs to do little more than prepare his application program to start effectively using the VS-6. Consequently, the VOTRAX system becomes productive quickly, easily, and with a minimum of expense.

- **Flexibility**

The VOTRAX VS-6 was developed to fit into a wide variety of applications and physical environments. A complete range of interface types and options makes VOTRAX compatible with virtually all computers, from the largest business mainframes to the smallest microprocessors. The small amount of data and limited controls required to drive VOTRAX permit installation at almost any point in a communications network: host computer, communications concentrator, communications multiplexor, or computer terminal. Data rates of 110 to 9600 bps also allow VOTRAX to fit in with a minimum of change to existing systems. Operating temperature and humidity specifications are such that specially conditioned environments are not required. Applications include: Computer Timesharing, Education, Handicapped Aids, Instrumentation, Manufacturing, Military and Training Simulators.

## SPECIFICATIONS:

### Electrical

Input Power Requirements . . . . . 115 VAC  $\pm$ 10%,  
47-420 Hz, 0.25 Amps  
Input Power Fuse . . . . . 3AG - 1/2 Amp, 125 Volts  
Audio Output . . . . . 100-5000 Hz, 6 Volts Peak, Nominal  
Audio Output Drive Capability . . . . . 0.5 Watts into an  
8 Ohm load

### Physical

Stand-Alone Cabinet . . . . . 11-7/8" W x 11-1/4" D x  
3-1/8 H, 11 Lbs.  
19" Horizontal Rack . . . . . 19" W x 10-1/4" D x  
3-1/2" H, 11 Lbs.  
Portable Case . . . . . 18" W x 22-1/2" D x 6" H, 20 Lbs.  
Phonetic Keyboard . . . . . 15-3/4" W x 8" D x  
3-1/2" H, 6 Lbs.  
Speaker . . . . . 15-1/8" W x 6-3/4" D x  
8-1/8" H, 10 Lbs

### Environmental

Operating Temperature . . . . . 0<sup>o</sup> C. to 50<sup>o</sup> C.  
Storage Temperature . . . . . - 20<sup>o</sup> C. to 70<sup>o</sup> C.  
Operating Humidity . . . . . 0 to 95% with no condensation

### Data Rates (bps)

110, 150, 300, 600, 1200, 2400, 4800, 9600

### Interface Types

EIA Serial (RS232C) 403-Type Dataset Compatible  
EIA Serial (RS232C) 407-Type Dataset Compatible  
Dataswitch (Connects to Asynchronous ASCII Terminal)  
Buffered Parallel (TTL, Shift Register)  
Unbuffered Parallel (TTL)  
FIFO Buffered Parallel (TTL)  
FIFO Buffered Vocabulary ROM (TTL)  
Keyboard (Connects to Phonetic keyboard)

### Command Word

6-bits: 64 selections available, includes phonemes, pauses  
and control functions  
2-bits: 4 levels of inflection available

### Options

Dataset, 403-Type  
Touch Tone\* Pad, Acoustically Coupled  
External Pitch Adjustment  
Phonetic Keyboard  
Vocabulary Development Service  
External Amplifier with Tone Control  
Customized Interfaces

\* Registered Trademark of the Bell System

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# VOCAL INTERFACE

A Division of Federal Screw Works

*The  
Communications  
People*