

Votrax[®] Talking Points

Vocal Interface Division
Federal Screw Works
FRAMINGHAM, MASS.
(617) 879-3274
TROY, MICHIGAN
(313) 588-2050
NEWPORT BEACH, CALIF.
(714) 557-9181

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VOTRAX LV-50 CALL SIGN ANNUNCIATOR

Technical Description

The VOTRAX LV-50 Call Sign Annunciator is a small, solid-state voice output system which automatically announces station call signs for Land Mobile Radio Service, unmanned repeater sites and similar installations.

The call sign vocabulary is stored in the form of a digital pattern within the LV-50 itself. This digital pattern is developed by taking an analog voice recording of the call sign and processing it via the VODIS-I proprietary computer system. The resulting digital pattern is then stored in three Programmable Read-Only-Memory (PROM) modules and becomes a Permanent part of the Call Sign Annunciator. Each PROM module contains .66 seconds of speech.

The Demodulator reconstitutes the digital pattern into the original analog voice signal which announces the station call sign. The standard output signal is capable of driving 0 dbm into a 600 ohm load. (An optional amplifier which increases drive to .5 watts into an 8 ohm load is also available.) Output bandwidth is 50 to 3.5 KHz.

Several optional power supplies are available for a variety of application environments. Also, optionally available are stand-alone cabinet enclosure and 19" EIA horizontal rack mount.

LV-50



VOTRAX AND HASP MAKES FOR HAPPY PROGRAMMERS!

"Hello, this is your computer - your job number one, two, three, four, five is done printing and available for pickup. Thank you. Good-by."

This is a typical message from the computer of a large national research organization. This organization supports several data processing centers, each of which has a through-put of several thousand jobs per day. These systems use HASP to handle spooling and job scheduling.

Several VOTRAX systems were added to these systems through a mini-computer. The mini-computer is connected to the main system through a serial data link. The mini-computer is connected to HASP as a remote log console. As a job is entered into the system, and proceeds through it, HASP generates messages which are "printed" on the log. The mini-computer receives these log messages and stores job number and status. A user may pick up his telephone, call into the mini-computer through VOTRAX and enter his job number on the push buttons of his telephone. VOTRAX will then tell him where his job is in the system.

With several thousand jobs per day and requirements for faster turn-around on these jobs, VOTRAX relieves the congestion at the output desk and demands upon the operators for job status. This in turn improves productivity and eliminates the annoyance of output retrieval.

VOTRAX and HASP - a combination hard to beat!

VOTRAX
AND
HASP



NAVY VOICE SYNTHESIZER CAN READ ENGLISH TEXT

(As published in the Minicomputer News August 14, 1975)

WASHINGTON, D.C. — The Navy Research Laboratory has developed a computer program that translates English into synthetic speech. By applying a limited set of letter-to-sound rules to words, the software translates stored text into signals that drive a voice synthesizer.

In an average sample of English text, the system pronounces about 95% of the words correctly. Most of the errors are obvious enough to be detected by humans.

The research is part of a Navy program to develop a practical digital speech synthesis system for command and control applications. Because operators of such systems spend so much of their time referring to complicated visual displays, the Navy believes voice output would improve the man/machine interface.

The experimental system is built around a Texas Instruments 960 minicomputer and a Votrax synthesizer, but the goal of the research is to design a system that can be implemented using only standard command and control equipment, eliminating the need for special, dedicated equipment.

The key difference between the Navy research, headed by Drs. John Shore and Rodney Johnson, and the voice response systems used by banks and other organizations is that the Navy system has an unlimited vocabulary. It could be used to "read aloud" records fetched from a mass storage device. Commercial systems translate messages by matching whole words and numbers to a fixed vocabulary, a process that becomes more and more cumbersome as the size of the vocabulary increases.

TAKE A TIP FROM GE . . . TOUCHTONE PHONES MAKE GREAT TERMINALS

General Electric (Rockville, MD) has added a new service to its Mark III timesharing network . . . using a standard touchtone telephone, courtesy Ma Bell, as remote terminal. Telephone Information Processing (TIP) aims at those who need to input small amounts of data from widely-dispersed sources . . . and offers both on-line and off-line modes. The new service became part of GE's timesharing repertory recently . . . already claims dozens of customers.

Data such as product orders, cash deposits, daily sales figures is fed into GE CPUs through any telephone in the country. A computer-generated voice requests the data, verifies input received . . . and when performing on-line, speaks answers resulting from processing.

According to GE, TIP is the first nationwide network to use a Votrax digital voice synthesizer . . . made by Federal Screw Works' Vocal Interface Division . . . which has a vocabulary of over 300,000 words. Votrax translates eight-bit codes into 63 distinct voice sound particles, each with four possible inflections . . . when particles and inflections are linked together, they form words and sentences in a nearly unlimited vocabulary.

Prices for the TIP service are based on computer use . . . a typical TIP session lasting under a minute costs from 25¢ to \$1.00, depending on application.

This sort of inexpensive service is one answer for timesharing networks to growing competition from minicomputer-based turnkey systems. In TIP's case, the terminals are already there, and the "voice" response eliminates need for add-on output devices. Perhaps while turnkey system makers appeal to small users, the timesharing firms have a customer base among even smaller users, like everyday consumers.

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If you desire additional information, please check the box at the margin and return to Vocal Interface, 500 Stephenson Hwy., Troy, Michigan 48084.

Name _____

Address _____

City, State _____ Zip _____

VOTRAX SPEAKS YOUR LANGUAGE

NAVY



VOTRAX
AND
GENERAL
ELECTRIC

