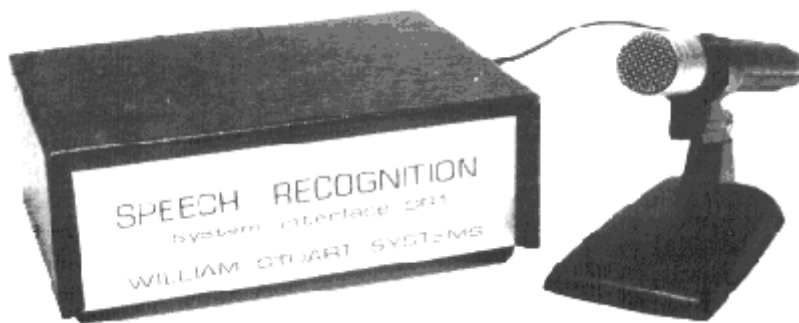


sp recog Big Ears

Big Ears speech recognition system

Dropbox

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Big Ears SPEECH RECOGNITION SYSTEM

A Speech Input Device for most popular microprocessors has been announced by William Stuart Systems Ltd. Marketed under the name Big Ears, the system consists of a microphone, preamplifier, analogue frequency filters and digital interface, complete with software.

Words are stored as voice patterns which the system learns from repetition by the user. Analysis is then by correlation over a statistical frequency plane which plots combinations of formants and harmonics throughout the speech waveform.

The unit has been designed to connect directly to the UK101 / Superboard family of computers, or to any other via a spare user input port. The analysis programs are supplied in Basic language, with small real-time input routines written in 6502 or Z80 machine code.

Big Ears is supplied fully assembled in an attractive cabinet, and costs £49 plus VAT, including postage and packing. William Stuart Systems are at Dower House, Herongate, Brentwood, Essex, CM13 3SD. Telephone 0277-810244. Barclay/Access Welcome.

Big Ears TECHNICAL DATA

Physical: Cabinet 6 x 5 x 2, Vinyl leatherette clad steel surround, Brushed Aluminum Facia, non-slip feet, Weight 0.35 kg. Microphone provided complete with stand.

Connectors: 5 pin DIN socket (to computer), 1/4 Mono Jack (for microphone), Din Cable supplied for make-up to appropriate computer connector. (PET connectors J2 & J3 ex-stock) @ £5.50 per pair.
Computer Interface: Requires only two bits of any parallel input port (PIO, VIA or logic strobe, handshake not used) Superboard / UK101 interfaces

without need for VIA. Zx81 connects using STUART or other I/O port
Memory Requirement: Minimum 5K bytes RAM for Basic program, realtime acquisition code and data storage for 6 voiceprints. Additional voiceprints occupy approx 130 bytes each if floating point arrays are used, 40 bytes each if 8 bit integer arrays used.

Software: Supplied as machine code for real time acquisition and Basic program for analysis. Machine code is called by Basic program as a USR Subroutine. Software is fully documented and the operation is explained in detail, thus facilitating adaption to specific applications. Machine code is provided for UK101, Zx81, PET, TRS-80, Nascom, VIC, MZBOK, Apple, BBC, Micron, but is easily adapted to any other 6502 or Z80 based machine which satisfies the hardware requirement. In general this will involve merely relocation to an appropriate area of memory and the provision of the correct address for the data input port.

Vocabulary size: " One-shot " Recognition: Limited only by available memory. Dependant on speaker and words used, but typically capable of resolving individual menus of up to 12 words at a time. By cascading menus the " apparent " resolution is effectively unlimited.