The Speech Synthesis and Cartridge ROM System
for the BBC Microcomputer

ACORN COMPUTER

The BBC Microcomputer can be extended to include the ability to speak sounds and words from a vocabulary contained within a Word PHROM (Phrase Read Only Memory). This extension also provides the facility to enable cartridge ROMs to be plugged into the microcomputer via a socket to the left of the keyboard.

Speech Synthesis

The key items enabling the microcomputer to produce coherent speech are the Speech Processor and PHROM Integrated Circuits. The Speech Processor is based on the Linear Predictive Coding technique which provides a very compact encoding into a binary representation of speech information. The first PHROM to be made available is designated PHROM 'A'. The Speech Processor takes serial data provided by the PHROM Integrated Circuit and converts it into audible "words" under the control of the main CPU. In addition to the PHROM fitted internally in the microcomputer, serial data can also be provided by Cartridge ROMs or from internal RAM. The PHROM 'A' currently fitted contains approximately 164 addressable words or word-parts with an English accent. A particular word is activated by means of extensions to the BBC Basic "SOUND" statement using channel − 1.

Cartridge ROM

The Speech Processor provides the vital serial processing capability required by Cartridge ROMs. These ROMs, planned for later availability, plug into the microcomputer via the vacant area to the left of the keyboard. Further speech PHROMs are planned in Cartridge ROM format in addition to games and application programs.

The Speech Synthesis/Cartridge ROM upgrade is only available fitted by an Authorised Service Centre and requires version 1.2 MOS (Machine Operating System) which will be fitted free by the Service Centre, if required, during this upgrade.

A Speech System User Guide is included with the upgrade.

Upgrade cost is £55 inc VAT, fitted.

The BBC Microcomputer System is designed, produced and distributed in the UK by Acorn Computers Limited.

Price and specification may change without notice.

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