

# The Hybrid Music System

"There is no comparable integrated music system for any micro."

The Guardian

## *Universal* Software Pack for Music 5000 programmers

The Music 5000 Synthesiser *Universal* is a complete package that adds high-quality sound to all standard BBC Micro music packages. The *Universal* Software Pack provides the same facilities for existing Music 5000 users, and is particularly suited to programmers who wish to use the Music 5000 sound from BASIC, machine code or any other programming language. The *Universal* software makes the Music 5000 a legal extension to the SOUND and ENVELOPE commands, so it becomes very easy to control from user programs. Existing sound programs need no modification at all.

The *Universal* software consists of two parts:

- a side-ways RAM resident driver that redirects the SOUND and ENVELOPE commands to control the Music 5000 and provides additional controls for sound parameters beyond the SOUND command
- a disc-based control program that provides an interactive display of all sound parameters with facilities to load, save and print all settings.

The *Universal* Start-up Disc loads the driver and runs the control program if required. Once the driver has been loaded, it remains completely transparent to the user and program, but directs SOUND commands to the Music 5000, where they play as on the internal sound generator but using Music 5000 instruments instead. All the standard SOUND parameters are available – hold, flush, sync, channel, amplitude envelope, pitch and duration. Channel 0 (the noise channel) initially plays a drum sound instead of noise.

The *Universal* has additional parameters that greatly extend the power of the SOUND command. These may be set and read back by the program using the Sound Extension OSWORD call (&86), or set directly by the user through numeric key-pad 'hot' keys which are active at all times. These parameters provide:

- a choice of 16 preset instruments, including four drum sounds. The instrument number can be set

directly or via the envelope number. Each channel can be set individually

- pitched tones on all four channels, allowing four-voice music
- extended pitch range. SOUND's five-octave range can be positioned anywhere in a 9-octave range. In particular, this supplies the low pitches unavailable from standard SOUND
- fine-tuning in 16th-semitone steps
- ensemble and sustain (simulated reverb) to enhance the sound
- control of eight voices. Each channel can be set to send alternate notes to each of two voices, allowing eight-note chords to be played.

As with the standard SOUND, the ENVELOPE parameters are used to control amplitude when an envelope number is specified. The other envelope parameters have no effect.

### Features

- 16 instrument sounds - piano, organ, flute etc.
- individual choice of instrument for each channel
- stereo, sustain, ensemble, and pitch-shift effects
- 100% perfect pitch tuning over the whole range
- program control of all parameters via OSWORD
- sound control keys, active at all times
- interactive sound-settings display with print-out
- unlimited storage of sound settings on disc.

### Further details

please see the Music 5000 Synthesiser *Universal* information sheet

### Package contents

- Universal Issue Disc (dual 40/80-track DFS format)
- fit-on key card and 8-page User Guide
- Music Software Catalogue of compatible programs.

### Additional items required

- BBC Master, monitor or TV and disc drive
- Music 5000 Synthesiser and amplifier
- one blank disc

Price - please see enclosed price list and order form.

# HYBRID

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