

# The Hybrid Music System

“There is no comparable integrated music system for any micro.”

The Guardian

## MUSIC 4000 KEYBOARD

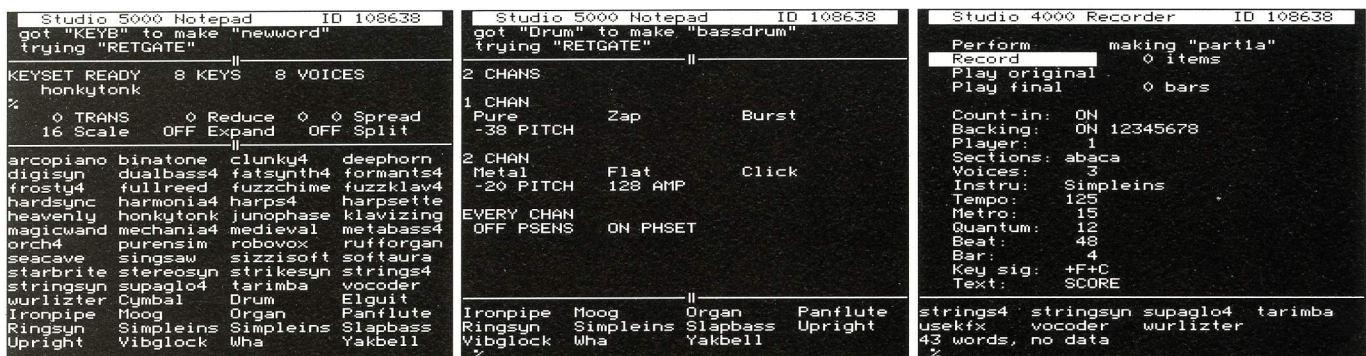
with Studio 5000 Software Pack

Alongside your BBC Micro and Music 5000 Synthesiser, the Music 4000 Keyboard gives you:

- a versatile digital keyboard instrument with an unlimited number of sounds and performance effects
- a powerful multi-track recording system with unmatched power for editing, organising and structuring music
- a complete computer music system with quick and easy entry of music in both staff and computer music notations

The keyboard is a high-quality, four-octave unit with full-size keys and a firm playing action. The robust case is of black plastic-coated steel with charcoal-coloured moulded end-cheeks and rubber feet. The footswitch fits at a jack socket on the rear, and a ribbon cable connects the keyboard to the user port of the computer.

The keyboard operating software is entirely integrated into the AMPLE system – the system disc holds an expanded version of the standard Studio 5000, an extended main menu, and user-friendly editor screens for keyboard instrument and performance effects, instrument sound design, and performance recording. AMPLE's multitasking ensures that the music keyboard is 'live' at all times, so, for example, you can play it while you use the Mixing Desk, edit an instrument in Notepad, run a user program, or work at the command prompt. The keyboard control screens are always readily accessible, so you can call on them at any point during development of a piece without having to save your work.



### a versatile digital keyboard instrument...

The Keyboard Performance screen presents a list of named instrument sounds (up to 60 at a time), any one of which may be selected just by moving the cursor. The 100 pre-defined sounds include many simulations of natural instruments such as organ, piano and strings, plus a wide variety of abstract synthesiser sounds and special effects. Up to eight notes may be played simultaneously (or twelve with the Music 3000) and the footswitch acts as a sustain pedal. The supplied instruments have the same format as those created using just the Music 5000, so once loaded they automatically appear on the Mixing Desk for inclusion in pieces, and instruments in a completed piece automatically appear on the Keyboard Performance screen for playing on the keyboard.

The Keyboard Performance screen also includes controls for performance effects: semitone transposition; microtonal and macrotonal scale tuning, stereo position and spread; volume reduction; keyboard split; voice echo, voice stacking

and voice sequencing. Many work together, for example: voice echo plus stereo spread for echoes that bounce from left to right.

All controls on the Keyboard Performance screen may be freely deleted, repositioned, repeated or renamed, and additional sound controls may be copied across from the Instrument screen. Complete Keyboard Performance set-ups may be stored as AMPLE words for recall by command, user-designed menu or user program.

A single key-press switches to the Instrument screen, where any sound control can be altered to modify the current instrument or create an entirely new one. Alterations take immediate effect on the sound, and the keyboard can be played at any time. Additional sound controls and written comments can be freely added. A single key-press returns to the Keyboard Performance screen, giving the option of storing the new sound under a new name, either chosen by the user or created automatically.

## a powerful multi-track recording system...

The Keyboard Recorder screen faithfully records each performance with full timing information, allowing a piece of music to be recorded in 'real-time', part-by-part, section-by-section and at any tempo. The recording is stored in completely standard AMPLE form, so it can be taken to the Staff Editor for correction and print-out, and to the Mixing Desk for balancing and instrument selection.

The Recorder provides a menu for the four main operations, and controls like those of the Instrument screen for others.

**Perform** lets the user practice before recording, using the optional metronome facility. The instrument sound may be selected by name, or using the Mixing Desk.

**Record** records the performance (with single notes or chords) after either a two-bar count-in or an automatic start. Previously recorded parts accompany automatically, or a special selection of backing parts and sections may be chosen.

**Play original** replays the recording for initial checking. The tempo may be altered over a 1000:1 range, and a limit imposed on the number of voices used for chords.

**Play final** plays the 'quantised' form, removing timing imperfections by automatically aligning any off-beat notes. The unit of quantisation can be set from 1/48 of a crotchet to one minim, including all triplet values.

The finished recording is stored with the user's choice of part number, key and time signature. The user can also specify a section letter so that it can be repeated any number of times in the final composition. The recording can be edited or printed out on the staff or in computer music notation, simply by recalling it in the appropriate editor.

## a complete computer music system...

Because the Music 4000 Keyboard is fully integrated into the AMPLE environment, it also greatly enhances the existing facilities of the Music 5000 Synthesiser package.

In the Staff Editor, notes, rests and chords may be entered simply and quickly through the music keyboard. Pressing a key sounds the note and places it on the staff, along with any sharp, flat or natural sign for the chosen key. The user may then change the length using cursor keys or footswitch. Rests are entered by tapping the footswitch and chords are written automatically when two or more keys are held down together. The computer keyboard is used to delete or correct mistakes made on the music keyboard, and to enter extra symbols such as slurs, ties, accents and special 'above staff' instructions.

In the Notepad editor, music keyboard input is instantly translated into AMPLE computer music notation. This facility has all the features of input to the staff, with the advantage that the footswitch enters 'hold' signs, so any regular note value can simply be tapped-out on the footswitch in the user's own time. This easy keyboard input method makes computer music notation even more attractive to the beginner who would like to take advantage of its simplicity and flexibility.

In the Mixing Desk, the music keyboard sounds on whichever voice the cursor is on. This greatly assists in trying out Mixing Desk settings, and lets the user play along with existing parts. In conjunction with the Keyboard Performance screen, the Mixing Desk gives display and control of individual voice settings for creating special keyboard mixes with split and layered instruments, and stereo effects.

The Music 4000 package also adds a Staff Editor print-out facility for use with any Epson-graphics-compatible printer.

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### Documentation

- User Guide (40 A5 pages) including:
  - Contents
  - Keyboard playing
  - Recording
  - Music input
  - Managing instruments
  - Staff printing
  - Index
- Installation Guide (4 A5 pages)

### Connections

- user port ribbon cable
- 1/4" jack socket for footswitch

### Package contents

- Music 4000 Keyboard unit (725 x 156 x 240mm)
- footswitch
- Music 4000 User Guide
- Music 4000 Installation Guide
- Studio 5000-4 Issue Disc, 40/80-track DFS
- label for user's Studio 5000-4 System Disc

### Other equipment required

- Music 5000 Synthesiser, installed and tested (For maximum music storage when using the staff, BBC Model B plus shadow RAM, B+ or Master 128 is recommended.)

### Terms of supply

Each Music 4000 is supplied for use with one particular AMPLE Nucleus ROM, identified by its ID at time of ordering.

### Further hardware available

- extension lead, allowing the Music 4000 to be used up to 3m from the computer; ideal for schools or disabled users
- Music 3000 Expander, to double the number of sound channels to a total of 32, with stereo or quad outputs
- Music 2000 Interface, for controlling the sounds of MIDI-equipped synthesisers and drum machines
- Music 1000 Amplifier, with dual mixable inputs and outputs for speakers, three pairs of headphones and tape recorder

### Prices and ordering information

Please see enclosed price list and order form

# HYBRID

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