C O N C H E S S

THE CONTEMPORARY RANGE OF

CHESS COMPUTERS

WORLD CHAMPION CARTRIDGES

OPERATING GUIDE

A. INSTALLATION

1. Add-on World Champion Cartridge (A1) 2mhz ROM

Firstly, the original cartridge (AØ) should be returned to Contemporary Chess Computers for a small modification. This is essential in order to disconnect the old program. The new Add-on cartridge cannot be used until this has been done.

The Add-on cartridge works in conjunction with the modified program cartridge (AØ) and should be fitted into the second free slot underneath the board. The two cartridges will then work together in tandem and are ready for immediate use in the normal way.

2. Replacement World Champion Cartridges (A2)
(2, 4 or 6mhz EPROM versions)

In each case the existing cartridge (AØ) should be removed and the new cartridge (A2) installed in its place. The cartridge is then ready for immediate use in the normal way. Similarly the AØ cartridge may continue to be used by removing the A2 cartridge and installing the AØ.

3. All cartridges in your CONCHESS chess computer should be supported in place by the small foam packs as supplied. (Further packs may be obtained from Contemporary Chess Computers for 50p to cover postage).

B. INSTRUCTION BOOK ADDITIONS

The new World Champion program contains the following enhancements.

1. Practice Levels

          P1 searches to 2 ply (not 1)
          P2 searches to 3 ply (not 2)
          P3 searches to 4 ply (not 3)
          P4 searches to 5 ply (not 4)
          P5 searches to 6 ply (not 5)

Ply search times are always variable according to the complexity of the position at the time. The timings in the instruction book give an approximate idea however.

2. Tournament Level Options

These have been made more flexible and now all the options that were available at practice levels are also available at tournament levels

     eg: take back moves
             terminate thinking
             change sides
             change levels, etc.

The use of any of these facilities (excepting terminate thinking) will reset the CONCHESS internal timer to start of game, as also will use of alternative move, position set up and exit from referee mode.

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3. End of Game Displays

End of game is indicated by use of the STOP light as before but with the following modifications:-

steady light for win/loss (by mate or loss on time)

blinking light for a draw in conjunction with
additional blinking lights as follows:-

Pawn	(1)	- for stalemate
Knight	(2)	- for "non mating material" (eg. K + B / N vs K)
Bishop	(3)	- for threefold repetition
Queen	(5)	- for 50 moves rule

4. Opening Library

This is identical in content to the combination of the existing cart-ridge (AØ) plus Library Cartridge (LØ). One enhancement is that a Library position is recognised even when set up by the problem or position setting routines (via function ⊕ - see instruction book 5.1).

5. Hint Button (?)

The ability to see what the computer is thinking is only available when the computer has come out of its library and started to think.

6. Mate Search

CONCHESS will now find mate in up to 7 moves.

7. Bugs

All computer programs, ranging from those in use on the Sinclair Spectrum through to the most advanced IBM operating system have bugs, such is the state of the art. To wait for a totally bug free program could take many years which would make little commercial sense and deprive the public of the availability of advanced products now.

Rather than pretend that there are no bugs in the new CONCHESS program we felt it more constructive to list those we know about. These will be corrected in future versions of the program but we believe none of them to be dramatically serious.

a) On rare occasions when CONCHESS is winning and the opponent has no pieces other than pawns and also CONCHESS is definitely in a position to queen two or more pawns itself then CONCHESS will sometimes underpromote the first of those pawns, usually to a bishop. This may be corrected by the use of the position setting function.

b) On a few occasions the hint button will only show one rather than both the moves it is examining. Usually this happens when the 'missing' move is forced eg. after a check there is only one move available.

Very occasionally, also, the hint button will show a grossly un-sound move, which is in fact one it has already discarded, but it will in fact not actually play this move.

c) Occasionally, on setting up the game in the start position, having pressed butons O.(1) and ● (8) on the right, the end of game pips will sound. The user should press O.(1) and ● (8) again to over-come this.