

thought processes including lookahead, positions examined, current-line and best-line with evaluation. The display can be toggled between the two screens by pressing the <SPACE> bar.

2.b - The board

The main screen has a graphics board printout showing the current position. Letters and numbers around the board indicate the algebraic notation used for each square.

2.c - Messages and questions

Various messages and questions are displayed around the board as necessary. These are explained in more detail in later sections.

2.d - The move record

The secondary screen shows the last six moves made by each side in two columns including move numbers. Above the moves are displayed the colours, player names and elapsed-time chess clocks for each side.

2.d.i - The player names

Above each column is displayed the names of the white and black players. The programs name is displayed as 'Colossus' while its opponents name is displayed as 'Opponent'.

2.d.ii - The clocks

Below the player names are displayed the elapsed-time clocks for white and black. The clocks are in the format 'hh:mm:ss' (hh=hours, mm=minutes, ss=seconds). The clocks show the total time used by each side in the game so far. Because the Apple has no hardware timer, the clocks are estimated from the number of positions examined by the program. The accuracy of the clocks may vary depending on certain conditions, but over a long game they should average out correctly. The clock display is only updated after each move is made.

2.d.iii - The moves

The moves are displayed in algebraic notation with the from-square followed by the to-square. The separator between the from- and to- squares indicates whether the move is a capture or not ('x' signifies a capture, '-' signifies a non-capture). Castling moves are indicated with the from- and to- squares of the moving king. En-passant captures are indicated by the letters 'EP' printed after the move.

Promotions are indicated after the move by a '/', followed by a letter to indicate the promoted piece ('N'=knight, 'B'=bishop, 'R'=rook, 'Q'=queen). Checks are indicated by a '+' being printed after the move.