# SUPER CHESS 3.0

**USER GUIDE** 



# SUPERCHESS 3.0

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### 1. TO LOAD A PROGRAM

The procedure for loading a program is described in detail in Chapter 6 of the Sinclair SPECTRUM Instruction Booklet. For your convenience the procedure is summarized here.

SUPERCHESS 3.0 is recorded on both sides of the cassette and takes approximately 7 minutes to load.

- 1. Ensure the tape is fully rewound.
- Ensure that the EAR socket on the Spectrum is properly connected to the earphone socket of your tape recorder.
- Set the volume control to about ¾ of maximum and any tone controls to: treble high; bars low. Alternatively, use levels that you have already found to be successful on your recorder.
- Enter LOAD " ", by pressing the following keys J (for LOAD) symbol shift and P twice (for " ") and then press the ENTER key.
- Start the tape recorder playing.
   If the program fails to load, press BREAK and try again with a
  different volume setting or try the other side of the tape. If the
  program still fails to load refer to the Sinclair SPECTRUM
  Instruction Booklet

#### 2. ABOUT SUPERCHESS 3.0

One of the main criticisms levelled at chess programs is the length of time that they take to reply to a move, particuarly at high levels of play where they are often looking 5 or more moves ahead. SUPERCHESS 3.0 answers this criticism by offering 10 levels all of which are played within tournament time limits. Of course the response time for individual moves varies considerably depending on the stage of the game and the complexity of the position. For instance at the highest level during the opening the program can respond almost instantaneously, while in a complex middle game it may require 4 or 5 minutes to reply. Level 0 is as specially past, always replying within a few seconds.

These improvements in response times do not mean a reduction in playing performance, on the contrary playing strength has been increased. The program can look more than 6 moves ahead in the middle game and over 10 moves ahead in the end game, and it has a substantial opening library.

Beginners are specially catered for at level 0 which has been designed to play an 'easy' game with a rapid response,

While it is calculating its move SUPERCHESS 3.0 displays, on the left of the screen, the best move found so far, the score it gives that moves and the number of positions (nodes) already analysed.

In addition to its superior playing performance it offers a considerable range of features which are designed to enhance the use and pleasure that the program gives.

These features include Problem Solving where problems of up to mates in 4 can be solved. Several sample problems are listed after the analyse instructions. There is a substantial opening library which contains openings such as the Ruy Lopez, various lines of the Queens Gambit, Réte Opening, Kings Indian and many more. If asked, Superchess 3.0 will recommend a move and it can be made to self play. Positions can be changed and set up using the Analyse feature, which is useful for resuming unfinished games.

The colours of the board and pieces can be changed at any time as can the playing level and sides.

Technical information, on how the programe 'thinks', is given for those who are interested

## 3. PLAYING INSTRUCTIONS

To load enter LOAD " " and press the ENTER key.

When loaded the program auto runs, the title and a list of 5 options are displayed.

The options are used to select the mode, eg. Play (new game) or Analyse or to choose one of the features available at the start. To select an option simply enter its corresponding number e.g. to start a game enter 1.

The options are:-

- l. New Game
- 2. Analyse position
- 3. Change display colours
- 4. Options at (your move)
- Technical information

**NEW GAME** after selecting new game, (to play) it is necessary to answer two questions before play can start, these are:

Level (0-9 or Problem) ? , respond with a number between 0 and 9.

The Problem solving mode will be dealt with later.

Play black or white (B/W)?, enter B or W

Note, only a single key response is necessary, the ENTER key need not be pressed.

The board and pieces will now be displayed with your colour and the level shown at the side.

The standard algebraic notation is used to enter moves and the coordinates for this system are displayed along two sides of the board.

**TO ENTER A MOVE**, first enter the coordinates of the square that you wish to move FROM followed by the coordinates of the square that you wish to move TO. The move is made immediately the final coordinate has been entered.

Example: to move a Knight on square b1 to square c3 enter B1C3. **TO EDIT A MOVE**, only allowed before the final coordinate is entered, complete the input with an illegal move and then when the message 'Illegal move' appears enter the required move. Example: you start to enter g1f3 but then decide to play e2e4, complete the first entry say G1F8 (illegal) and then enter E2E4. **CAPTURES**, are entered in the same way as other moves. Example: to use a black Bishop on b4 to capture a white Knight on c3 enter B4C3.

Pawn captures EN PASSANT are made just as other moves. Example: to use a white Pawn on c5 to capture a black Pawn that has just moved from d7 to d5 enter C5D6.

**CASTLING**, when castling only the King's move is entered. Examples: as white to castle King's side enter ElG1; as black to castle Queen's side enter E8C8.

#### 4. FEATURES

As mentioned earlier the program offers a large variety of features. These can be placed in two categories (a) those available at any time (b) those available only during play at your move. The distinction between the two categories should be obvious but where there may be possible doubt clarification is given. There are two lists in the program which show the options and features that are available. The first is the list of options that you are given before the start of a new game, during play this list can be accessed at your move' by pressing X, option 6 will return you to that game. The feature list is accessed by selecting option 4 from the first list.

**TO EXIT,** from a game press X. It is now possible to use any of the listed options eg. use Analyse to change the position of the current game.

**RESIGN OR QUIT,** to resign or quit a game and return to the start options press X.

**FORCE MOVE**, the program can be forced to abandon its search and play the best move found so far by pressing and holding down the BREAK, until the program responds. Note this may take about 10 seconds.

**RECOMMENDED MOVE**, a recommended move can be obtained by pressing R. The program will only recommend a move once it is out of its opening library, i.e. not while 'book move' is displayed. To play the recommended move enter it in

the usual way, alternatively any other move may be played. Note the recommended move is not necessarily the best move in that position.

**SELF PLAY**, the program can be made to play itself by pressing M after each move. To resume play simply enter a move instead of pressing M. This feature also serves a second purpose:

**CHANGE SIDES,** to change sides during a game press M. **MOVE LIST,** during a game to obtain a list of the previous moves press V.

**CHANGE LEVEL**, to change the playing level press L and then when asked enter the new level.

**CHANGE DISPLAY COLOURS,** to change the colours of the board and pieces during a game press X to return to the start options then press 3.

It is now only necessary to follow the screen prompts.

**INVERT BOARD,** by pressing O the orientation of the board can be changed from white at the bottom of the screen to the top of the screen and V.V.

**CHANGE POSITION**, to change the position during a game the Analyse mode is used. Press X to exit and then select option 2 Analyse. See below for details of setting up and changing a position.

#### 5. PROBLEM SOLVING

SUPERCHESS 3.0 can also solve mating problems of up to mates in 4. Problems are set up using the Analyse mode which can be accessed either directly by selecting option 2 at the start or when ever the 'LEVEL (0 - 9 or Problem)?' prompt appears enter P# where # is a number 1,2,3 or 4 corresponding to the number of moves for mate in the problem to be set.

## 6. ANALYSE

Analyse has three basic uses, to set up a position (e.g. to set up and resume playing a discontinued game), to change the position during a game and to set up a problem.

Analyse mode is accessed either directly using start option number 2 or by selecting Problem mode when asked 'Level (0 - 9 or Problem)?'

Note: Positions cannot be set up with more than one extra piece of each type and colour e.g. you may have more than 3 white bishops or 3 black knights etc. on the board at the same time. Nor are you permitted to return to PLAY when a King is in check.

The board can be CLEARED, except for the two Kings by

pressing Z, or INITIALIZED by pressing I each time the prompt 'square to alter?' appears. You are asked for confirmation before the board is cleared or initialized.  The following examples illustrate the procedure for altering or setting up a position or entering a problem.  Example (1): to move a white Bishop from c1 to f4,  'Square to alter (e.g. E2)?'
To return to the Playing mode, when asked 'square to alter' enter X and follow the prompts:
Example (3): after pressing X, 'Level (0-9 or Problem)? enter level 'Play black or white (B/W)?' enter colour 'Which side to move (B/W)?' enter colour of side to move first.
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#### Setting up and playing a PROBLEM

Example (4): If only a few pieces are involved in the problem it will be easier to clear the board before setting up the position. When asked 'Square to alter (e.g. E2) enter Z; and then when asked 'Clear — Are you sure (Y/N)?' enter Y.

After setting up the problem press X to Play and then follow the prompts, 'Level (0-9 or Problem)?' enter P# where # is the number (max 4) of moves for mate. 'Who is to give mate (B/W)?' enter colour of side to give mate.

Note, you will play the moves for the other side.

#### 7. SAMPLE PROBLEMS

The following problems can be used to demonstrate the problem solving ability of SUPERCHESS 3.0.

Enter each problem using the Analyse mode and procedure described above.

**Sample Problems,** The problems are written down in the order in which the pieces are placed on the board using the Analyse mode i.e. square, piece type, colour.

Example. D4PB reads square D4, Pawn, black.

(1) by Nesic

DÍRW, GIBW, H1NB, E2BW, F2NB, B3RW, D3PW, C4PW, D4KB, H4KW, E5RB, A6PW, F6QW, A7PB.

Mate in 2 by white, White to move.

(2) by Healey

ÀÍBW, D1RW, D2PW, G2PW, H2KW, A3PW, C3PW, F3RW, A4PB, C4PB, F4PB, B5BB, C5KB, D5PW, B6NW, G6QW, B7NB, F7NW, G7PB.

Mate in 3 by white, White to move.

(3) by A. F. Mackenzie.

CIBW, DIRW, G2PW, E4KB, G4PB, E6PB, F6KW. Mate in 4 by white. White to move.

(4) by Dr. Plunck.

C2PW, H2PW, B3KW, C3BW, D4NW, C5KB, A6PW, C6BW, F6NW, A7PB.

Mate in 4 by white, white to move.

