Operation Manual English

1. Inserting batteries and starting the computer

Place the device upside-down on a flat surface. You will see the battery compartment on the underside.

- Open the battery compartment by sliding its lid in the direction of the arrow.
- Insert three AA batteries (R6/LR6) into the compartment, paying attention to the polarity: the "positive" terminal of each battery, labelled "+", must match up with a "+" inside the battery compartment.
- Close the battery compartment.
- Make sure that the ON/OFF switch (on the left-hand side of the unit) is set to ON.
- The computer should give a characteristic sound signal, and the liquid crystal display (LCD) should light up.

When the display darkens and becomes indistinct, the batteries must be replaced.

Alternatively the computer can be powered by a mains adaptor with a centre positive plug and maximum 5V output. The port is located under the unit, in the recess on the left-hand side. The suitable M811 Power Supply can be bought from the Millennium online shop at computerchess.com or from the retailer who sold you the computer.

2. Choosing the language for the screen text

Once the batteries are correctly inserted, the display shows a list of languages. The first one is "highlighted" against a black background.

By repeatedly pressing the ⇧ or ⇩ button, you can highlight each language in turn. When the desired language is highlighted, press the ENTER button to select it.

***Note:* If the language list fails to appear, execute a "reset" of the computer:**

- Hold down the button marked **X**.
- Insert a thin object (e.g. paper clip) into the opening marked RESET on the underside of the unit, and press with it once.
- Release the **X** button when the language list appears.

If you have selected the wrong language by accident, carry out the reset procedure then select the correct one.

3. Playing a game

Once the language is selected, the screen shows the chessboard with the pieces in the starting position.

You can now begin a game with ChessChampion. We suggest you play your first game with the white pieces. Place the chess pieces (supplied with the package) on the membrane board, with White at the end next to the controls. Observe that each square is marked with its co-ordinates: A1, B2, etc.

Note: If you don't press a control button or a square on the chessboard during an interval of 10 minutes, the computer will automatically enter "standby" mode (see Section 6) unless it is in the process of computing a move. To switch on again, press the ⏻ button and hold it down for one second.

Your move
Press with your piece on the square it is moving from. The computer gives a "click" in acknowledgement, and the square is highlighted in blue on the LCD. Move the piece and press it down on its destination square.

To castle: make the king's move, then the rook's move.

For an *en passant* capture: move the capturing pawn, then press the square of the captured one.

For pawn promotion:

- Carry out the pawn's move.
- Using the ⇦ / ⇨ buttons, display the desired piece type.
- Re-press the promotion square.

If you try to make an illegal move (or press any wrong square or button), you hear a triple buzz. Simply continue as normal.

The computer's move
While ChessChampion is "thinking", a rotating "hourglass" is displayed. The computer's move is announced by a sound signal. The LCD shows the piece switching between its "from" and "to" squares, and the move appears in notation at the bottom of the display.

Example:

Move the black pawn from e7 to e5, pressing each square as shown in blue on the screen.

Check is indicated by a "ping" and by the "+" sign in the line below the chessboard display. The colour symbol (□ / ■) in this same line indicates which side moves next.

If you wish to adjust the computer's level of playing strength, see Section 8.3. Unless you select a "Timed Move" level, the clock display shows the total time so far used by the side to move.

Retracting and replaying moves

If you change your mind after selecting a square to move from, re-press the square. The blue highlighting is cleared, and you can start your move again.

To retract a move already played, press the ⇩ button, then move the piece back, pressing the squares indicated in blue. Then if the move was a capture, you will be prompted to press the captured piece down as you replace it.

The procedure may be repeated to take back a whole sequence of moves.

A move or sequence that you have retracted can be replayed in a similar manner, using ⇧ instead of ⇩.

At any point you may resume play from the position on the board, by making a new move or by pressing the button marked ⬍ to instruct the computer to play next.

4. "Help" messages

In most situations, for guidance on what to do next, you may press the button marked **?**. This displays a "scrolling" explanatory message.

If the computer is ready for you to move, a press on **?** causes all possible "from" squares to "flash" in green for a few seconds. When one of these squares is pressed, **?** demonstrates the possible "to" squares in the same way.

5. Game score display

To view the "score" of the game, i.e. a list of the moves played, press ⇦ or ⇨. With ⇧ or ⇩ the list may be "scrolled" up or down to bring more moves onto the screen.

Another press on ⇦ or ⇨ reverts to the chessboard display.

6. Starting a new game: your choices

To start a new game, press the ◨ button or select "New Game" from the Main Menu (see Section 8). This can be done at any time except when the computer is calculating its move or during some operations to which the menu gives access.

The "New Game" screen gives a list of choices. Use ⇧ or ⇩ to highlight the relevant line, then confirm your choice with ENTER.

- **White:** You play a new game with the white pieces.
- **Black:** You play "up the board" with the black pieces. Note that the co-ordinates on the squares must now be disregarded, as the square marked C3 will be treated as F6, etc.
- **Two Players:** You play moves for both White and Black. (See Section 8.9.1.)
- **Setup:** This enables you to construct a special position on the chessboard. For details see Section 8.7.

- **Limited Material:** This offers a further choice: to start the game with kings and pawns only, or with kings, pawns and one other piece type. Novices can use this feature for practice.
- **Exercise:** This gives a choice of 100 exercise positions. See Section 9.
- **Mate-in-2:** This gives a chess problem position in which checkmate in 2 moves can be forced. To choose between 10 such positions, use ⇦ / ⇨ and ENTER.
- **Rated:** This starts a game in which the computer assesses your play and can give you a first estimate of your ELO rating. See Section 10.

7. Switching off and on

The ⏻ button places the computer in "standby" mode or switches it "on" again. The button must be held down for one second and then released.

In "standby" mode, the computer retains the current game in its memory, and after switching on you can resume play from the same point.

If you don't want to use the computer for a lengthy period or if you want to transport it, you can disconnect the power supply completely with the ON/OFF switch. Place the computer in standby mode beforehand, so that your settings and your last game are saved.

8. Special functions – the Main Menu

By pressing the button marked ▤ when it is your turn to move, you display a menu of the computer's special functions. To select and activate a function, highlight it using the ⇧ or ⇩ button, then press ENTER. To return from the menu to the chessboard screen, press **X**.

8.1 Menu: Hint
Asks ChessChampion to suggest a move for you. You may accept the hint by carrying the move out, or reject it by playing a different one. (To cancel the "hint" display, press **X**.)

8.2 Menu: New Game
Same as pressing the NEW button; see Section 6.

8.3 Menu: Level
Displays the computer's current level of playing strength, and enables you to alter it. The levels are divided into 6 categories as follows.

- **Automatic:** If one of these levels is selected, it will increase or decrease according to your performance in a number of games. On starting a new game, you may see a new level displayed; press ENTER to continue.
  When you first acquire it (or after a "reset"), the computer is set to play on Automatic level 2 (out of 10).
- **Fun:** On these levels (1-10), the computer makes some deliberate mistakes.
- **Basic:** The computer takes a certain average time per move ― shortest on level 1, longest on level 10.

- **Timed Move:** Each player is given a fixed amount of thinking time per move (5 seconds on the lowest of 14 levels; 240 on the highest). The time counts down on the screen. However, if you exceed the limit you may still continue the game.
- **Timed Game:** Each player is given an amount of thinking time for the whole game (5 minutes on the lowest of 10 levels; 120 on the highest). The clock display shows the total time used so far. If you exceed the limit, the computer announces that you have lost, but you may still continue the game with your time displayed in red.
- **Unlimited:** These levels have no time limit. The level number (1-15) specifies the computer's depth of search, i.e. how many "ply" it looks ahead. (One ply is a single move by White or Black.) The computer will move in response to the ▶ button, or after completing its calculations to the required depth.

When "Level" is selected from the menu, the screen shows the current category and the level within it, for example:

The ⇧ or ⇩ button switches the highlighting between the second and third lines. With the second line highlighted, the category can be changed by ⇦ or ⇨. With the third line highlighted, ⇦ / ⇨ can be used to decrease/increase the playing strength. When ready, press ENTER to return to the Main Menu.

8.4 Menu: Rating
The number displayed is your estimated ELO rating based on your performance in "rated" games against the computer (see Section 10). If no games have so far been rated, the display shows "----". If your performance is higher than ChessChampion's playing strength, the display is ">1700".

8.5 Menu: Tutor
This displays a screen offering 4 options:

- **None:** You will receive no "Tutor" messages.
- **Warnings:** The computer will warn you if it thinks you should reconsider your move.
- **Threats:** The computer will tell you if its own move contains a threat.
- **All:** Tou will receive warnings of weak moves *and* notice of threats.

To make your selection, use ⇧ / ⇩ and ENTER.

To give you a "warning", the screen shows "Are you sure?" You can then do any of the following:

- Press ENTER for an explanation, e.g. "Your move loses material worth 3 pawns." Another press on ENTER demonstrates the move that the computer thinks you have missed.
- Press ⇩ to take your move back (see Section 3). You can then play a different one.
- Press **X** to let your move stand and continue the game.

To call attention to a "threat", the screen shows "Be careful!" You can then press ENTER for an explanation such as "I am threatening to win material worth 1 pawn", and ENTER again to see the threatened move demonstrated. To clear this information from the screen, press **X** or simply continue by making your move.

8.6 Menu: Playing Style
This offers you 5 choices for the computer's style, ranging from "Very Passive" to "Very Aggressive". To make your selection, use ⇧ / ⇩ and ENTER.

8.7 Menu: Setup
This places the computer in "Setup" mode, allowing you to arrange the pieces on the board in a special position — for instance to reproduce a chess problem from a magazine.

Below the chessboard, the display shows a row of chess pieces, one of which is highlighted against a blue square:

You now have these possibilities: —

- To remove a piece, press its square.
- To select a type of piece for insertion: press ⇦ or ⇨ as many times as needed to highlight it.
- To change the piece colour: press ⇧, ⇩ or ⬍ .
- To insert a piece, of the selected type and colour, on a vacant square: press the piece down on the square.
- If you want to abandon the position you have been constructing, press **X**. The computer then asks, "Are you sure?" Press ENTER to confirm (or re-press **X** to cancel).
- For further options, press the ▤ button. Then repeated presses on ⇦ or ⇨ will show the following 5 instructions in rotation: —
- **Setup Done:** to confirm the position you have constructed and allow play to proceed from this position.
- **New Board:** to place the pieces in the standard "New Game" position.
- **Clear Board**: to vacate the entire chessboard. You may want to do this first of all.
- **Resume Setup:** to continue inserting or removing pieces.
- **Cancel Setup:** another way to abandon the position and revert to the situation before you entered "Setup" mode.

To input any of these 5 instructions, display it and press ENTER.

If you input "Setup Done", the bottom of the screen shows either <White> or <Black>. This indicates the side that will move when play begins from the position you have constructed. To switch from one to the other, press ⇦ or ⇨. When the right colour is shown, press ENTER to take the computer out of "Setup" mode. Play may now proceed; carry out a move, or press the ⬍ button to make ChessChampion move first.

Note: If the position on the board is recognized as illegal, the computer will refuse to exit from "Setup" mode. In that case press **X**, then either modify the position to make it legal, or abandon it. A position is rejected as illegal in the following cases:

- A player has no king, or more than one king.

- A king is in check and the other side is to move.
- A pawn is on the first or eighth rank.

8.8 Menu: Load/Save

Up to three games at any time can be saved in the computer's memory for later retrieval. When "Load/Save" is selected from the menu, the screen displays the contents of three memory "slots".

Example:

The game in slot 1 is 29 moves long. Slots 2 and 3 are vacant.

To save your current game in a vacant slot: highlight the slot (using ⇧ / ⇩) and press ENTER.

To manage the contents of an occupied slot: highlight it, press ENTER, then use ⇦ / ⇨ to view 4 options:

- **Load Game:** The game in this slot is retrieved. You can continue the game if it was unfinished; the screen shows the last position reached.
- **Erase Game:** The slot is cleared.
- **Save Game:** Your current game is saved to this slot, replacing its previous contents.
- **Replay Game:** This retrieves the game from the slot while taking you back to the starting position. You can then replay the moves of the game by using the ⇧ button — see Section 3.

When the desired option is shown, press ENTER to select it. To return from the "Load/Save" screen to the Main Menu, press **X**.

8.9 Menu: Options

This displays a list of extra features and parameters. Use ⇧ / ⇩ to navigate to an item you want to alter.

To switch between ✔ (feature "on") and X (feature "off"): use ⇦, ⇨ or ENTER.

To decrease or increase a parameter number: use ⇦ or ⇨.

To return from the Options list to the Main Menu: press **X**.

8.9.1 Option: Referee

With this feature switched "on" (✔), the computer doesn't calculate any moves, Both White and Black are played by the user(s). This feature enables you to play against a friend, with the computer merely acting as "referee" — ensuring that the moves are legal, announcing the result, etc.

On the screen, a purple line below the chessboard indicates that the computer is in "Referee" mode. The mode is switched "on" when you select "Two Players" from the "New Game" list (see Section 6).

8.9.2 Option: Turn Board

With this option selected (✔), Black plays "up the board", i.e. away from the controls.

8.9.3 Option: Brightness

Use ⇦ / ⇨ to regulate the brightness of the display. There are 5 different settings.

8.9.4 Option: Volume

Use ⇦ / ⇨ to choose between 4 settings for the sound volume; 3 is loudest, 0 is mute.

8.9.5 Option: Main Variation

Under this option, the screen gives an insight into the computer's thinking while it calculates its move. The bottom line shows the first moves in the "main variation" of the analysis. That is:

- The move that the computer currently rates as best.
- The move it views as the opponent's strongest reply.

Example:

The leftmost number in the line shows how far ChessChampion is currently looking ahead — in this case 5 "ply" (one ply is a single move for White or Black).

8.9.6 Option: Draw/Resign

Highlight the option and press ENTER. You then have these possibilities:

- **Enable:** to switch the "Draw/Resign" feature on (✔) or off (X).
- **Offer draw:** if the feature is "on", you can offer the computer a draw, or
- **Resign:** you can resign the game.

If the computer offers its resignation, press ENTER to accept and start a new game, or **X** to decline and continue play.

8.9.7 Option: Theme

Highlight the option and press ENTER. This offers you the choice of 3 colour schemes for the LCD screen. Use ⇦ / ⇨ to inspect them and ENTER to make your selection.

8.9.8 Option: Language

Highlight the option and press ENTER to display the language list as in Section 2. The language may be changed with ⇧ / ⇩ and ENTER.

9. Chess Exercises

The computer has a set of 100 chess exercises. For access to them, select "Exercise" from the "New Game" screen. The exercises can then be viewed by repeated presses on ⇦ or ⇨.

When the desired exercise is shown, press ENTER and the display indicates your task, e.g. "Find the move that wins material," or "Find the move that will lead to checkmate." (In the latter case there may be more than one move leading to mate, but you have to find the one that does so by the shortest route.)

If you make the correct move, your score for this move is displayed. By pressing ⇧ or ⇩ you can switch between this score and your percentage for the exercises you have attempted so far. For another exercise, press ENTER.

If your move is wrong, you can take it back (see Section 3) and try another one. You score 6 points for finding the solution at the first attempt, 4 for the second attempt and 2 for the third.

Alternatively, after a wrong move, you may press the ⬍ button to play against the computer from the current position. In this case, if you want another exercise, you must press ▶ (or select "New Game" from the menu) and select "Exercise" again from the "New Game" screen.

When accessed from a chess exercise, the Main Menu omits some of the normal items but includes your current percentage score.

10. "Rated" games

For a game in which the computer assesses your play, select "Rated" from the "New Game" screen.

In a "Rated" game, after each of your moves, the screen displays a score in the range 0-6. When both sides have made 10 moves or more, ChessChampion gives you a rating number for your play so far.

When your score for a move is displayed, you may press ENTER to continue the game, or alternatively press ⇧ or ⇩ to inspect the rating number. After 5 seconds with no button pressed, the game continues automatically.

When accessed from a "rated" game, the Main Menu contains a restricted number of items, and "Timed Move" (see Section 8.3) is the only available level category. You score more highly for moving well within the allotted time. If your time counts down to zero for the third move in succession, your score for that move is 0.

The "Rating" item in the menu gives your average rating for all games played. If no games have been rated yet, the display shows "----". The number gives you an idea of the ELO rating you might achieve in chess tournaments.

11. Uses of the control buttons (summary)

⏻	Switches the computer on or places it in "standby" mode. The button must be held down for one second and then released. In "standby" mode the current game is saved and can be continued later.
☀	Regulates the display's backlight. There are 5 different settings.
?	Displays a scrolling message, explaining what the user may do next. Shows which moves a particular piece is permitted to make.
⬍	If it is your turn, ⬍ makes the computer calculate and play the next move, i.e. it swaps sides with you. When the computer is "thinking", ⬍ makes it play immediately. When "setting up" a position, ⬍ switches between white and black pieces.

☰   Displays the Main Menu, from which various special functions can be selected. Makes various commands available when "setting up" a position.

ENTER   Selects an item from the menu.
Confirms a change of "Level".
In the "Options" list, ENTER switches a feature "on" or "off".
Accepts an offer of resignation.

X   Returns to the previous screen. Exits from a menu. Interrupts a scrolling message. Abandons a "Setup" position. Declines an offer of resignation.

▶   Begins a new game; equivalent to selecting "New Game" from the Main Menu.

⇦   Switches between chessboard screen and game score (chess notation) screen.
Switches between "Level" categories.
Alters a parameter setting; decreases a parameter number.
Cycles round the various piece types in "Setup" mode.

⇨   Switches between chessboard screen and game score (chess notation) screen.
Switches between "Level" categories.
Alters a parameter setting; increases a parameter number.
Cycles round the various piece types in "Setup" mode.

⇧   Replays a move that was taken back.
Navigates the screen, stepping upwards through a list of items.
Switches between white and black pieces in "Setup" mode.

⇩   Retracts a move.
Navigates the screen, stepping down through a list of items.
Switches between white and black pieces in "Setup" mode.

RESET   Sometimes, owing to electrostatic charges or other types of electrical interference, or after insertion of the batteries, computers do not function correctly. Should this occur, hold down the **X** button, insert a thin object into the opening marked RESET on the underside of the machine, and press with it once. Release the **X** button when the language list appears (see Section 2). This resets the computer, clearing its memory and returning it to normal operation.

ON/OFF   Disconnects the computer from its power source. Use this function if you travel (in this way you avoid switching on accidentally), or if you are storing the computer for a lengthy period of time.