

Chess Wizard

IQ III

- **INSTRUCTION**
- **ANLEITUNG**
- **MODE D'EMPLOI**
- **INSTRUCCIONES**
- **MANUALE D'USO**
- **INSTRUCTIES**

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GENERAL HINTS

Your chess computer can be your tutor if you are a beginner or your challenging chess partner if you are already a chess player. In case you are a beginner, we recommend you familiarize yourself with the rules of chess first. Relevant literature is available in bookstores.

Before you start to play with your chess computer read first the GENERAL HINTS. The instructions are laid out in such a way that each section is self contained, so you do not have to read everything at once.

BATTERIES:

This chess computer runs on 6 x 1.5V UM3-type (or "AA" size) **alkaline batteries** (not included). Open the battery door at the bottom of the unit and insert the batteries as indicated by the +/- signs.

A set of new alkaline batteries runs approx. 100 hours. Notice that weak batteries make the performance of the computer unreliable.

ADAPTOR:

The adaptor is not included with your set, but is available separately from your dealer. Before using the adaptor, check that the voltage of your electric mains is within the range specified on the adaptor label.

Note: Make sure you first connect the adaptor with the computer before you plug it into the mains. The adaptor jack is at the back panel of the computer. You may only use the adaptor which has been specially developed for this computer.

MEMORY:

The chess computer has a long term memory and will retain the last board position. However, make sure that there are batteries in the chess computer or an adaptor is connected otherwise you will lose the memory contents.

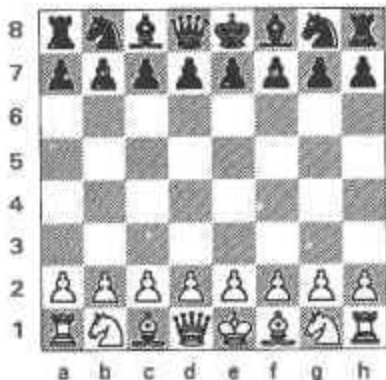
Note: If you are using the SET UP or VERIFY mode the computer will save the current mode when you switch the computer off before you exit these modes. When you switch on the computer again the SET UP LED or the VERIFY LED will be still on. To continue the game or start a new game press the GO key first to exit these modes.

The indicator lights will be referred to as LEDs (Light Emitting Diodes) in the following instructions.

1. GETTING STARTED

Set up your board in the opening position. Switch on the computer. The On/Off switch is at the back side of the computer. Select your level of skill (see LEVEL key for more details).

Opening position: White pieces on the 1st and 2nd rank and the Black pieces on the 7th and 8th rank.



Note: If you switch the computer off to continue at a later time or every time you press the NEW GAME key, the previous set skill level will be retained.

You play White (Choice of Colour s. para.8). The WHITE LED lights up. Make your opening move by gently pressing down the piece you want to move. The 2 respective row and column LEDs light up and point to the square of this piece. Pick up the piece, set it on the square you wish to move to and press it down gently.

Whilst the computer is calculating its move, the BLACK LED will be on. (Never try to enter a move or special functions while the computer is calculating!.) When it has found its move the row and column LEDs light up indicating the "from" square of the piece the computer wants you to move. Press this piece gently and pick it up. Now the row and column LEDs of the "to" square come up and you set the piece on the square, again pressing it gently. The computer's move is thus executed. The WHITE LED comes up again indicating that it is now your move again.

Every time you press a piece, you will hear a beep tone which indicates that the computer has registered your entry. (see SOUND KEY for more details)

2. IMPOSSIBLE AND ILLEGAL MOVES

Your chess computer was programmed in accordance with the international Chess Rules and does not accept or make illegal moves.

If you try to enter an illegal move, the ERROR LED will light up. Put that piece back on the "from" square without applying pressure and enter a legal move. The ERROR LED will disappear.

If you try to move a different piece for the computer than indicated, the two corresponding rank and file LEDs for that square will stay on. Set the wrongly moved piece back on its "from" square without applying pressure and move the correct piece as indicated by pressing it down gently.

If, while executing a move for the computer, you move a correct piece to a wrong square, the two corresponding rank and file LEDs for that square will stay on. Just move the piece to the square indicated by pressing it down gently.

3. CAPTURING A PIECE

If the computer indicates a move onto a square that is occupied by an opponent's piece, it means that this piece is captured and must be removed from the game board. Simply take it from the board without applying pressure.

4. GAME FEATURES

a) Castling

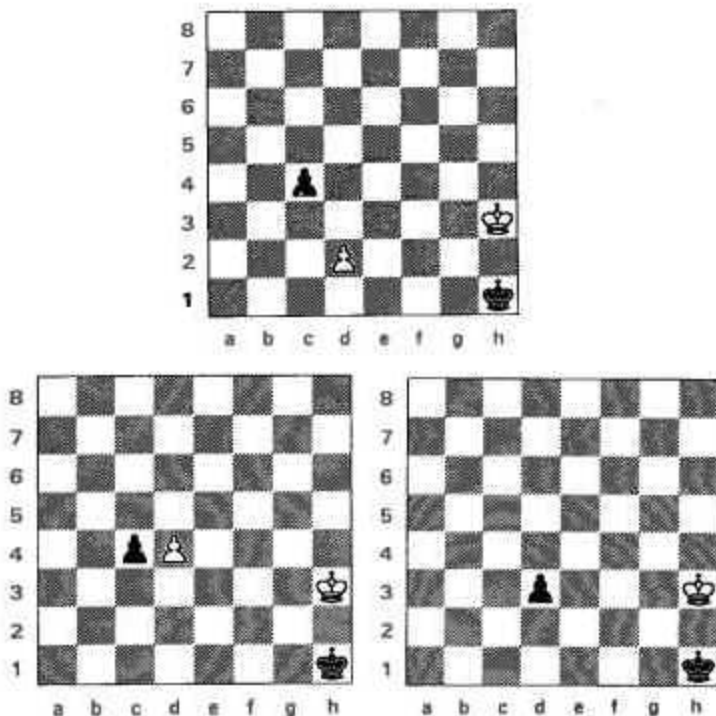
The computer displays Castling with the King's and the Rook's move. When Castling press first the 2 squares for the King and then move the Rook by applying pressure on the appropriate squares indicated by the lit up LEDs. Do the same when executing a Castling move for yourself.

Note: You may not castle while your King is in check, nor may you castle through check.

The chess computer accepts and executes Castlings in set up board positions.

b) En Passant Captures

The computer captures En Passant automatically. You may capture En Passant whenever the rules permit. Do not forget to remove the captured pawn. The computer accepts and executes En Passant moves in set up board positions.



Official Rules of Chess:

A pawn attacking a square crossed by an enemy pawn which has been advanced two squares in one move from its original square may capture this enemy pawn as though the latter had been moved only one square. This capture may be made only on the move immediately following such an advance and is called capturing "en passant".

c) Pawn Promotions / Underpromotions

If one of the Pawns (white or black) reaches the far side of the board, the computer will automatically promote the Pawn to a Queen. If you prefer to underpromote to another piece, take back the last computer move (s. para. 7) and use the SET UP mode (see para. 12) to remove the Queen and replace it with the piece of your choice. The computer accepts and executes Pawn Promotions in set up board positions.

d) Stalemate

A Stalemate condition is indicated by the STALE and MATE LEDs.

e) Check and Checkmate

If the computer puts you in Check the CHECK LED will light up. If you put the computer in check this will not be specifically displayed. In a Checkmate situation the CHECK and MATE LEDs light up indicating the end of the game.

SPECIAL FUNCTIONS**5. NEW GAME (New Game Key)**

Press the NEW GAME key every time you switch the computer on or whenever you want to commence a new game. The previous game is cancelled and in the computer memory all pieces are now in the opening position.

6. SETTING THE SKILL LEVEL (Level Key)

Your chess computer has 16 skill levels. To set the computer to any of these playing levels, press the key marked SET LEVEL and you will see the current level setting. If this is not the level that you wish to use, please press the SET LEVEL key until the level you require is reached, as indicated by the 2 corresponding rank and file LEDs. Press GO to exit this mode. Now you may enter your first move.

Note: Whilst setting the skill level the VERIFY and SET UP LEDs will also be turned on.

You may check or change the skill level at any time during a game, but not whilst the computer is computing. You cannot interrupt the computer while it is computing but must wait for it to make a move.

Note: If you switch the computer off to continue your game at a later time, or press NEW GAME, the previous set skill level will be retained.

The 16 levels and their characteristics are shown below:

- **Level 1 and 2** are fun levels designed for the absolute beginners, those who are new to chess and need familiarization with the basic rules of the game. On level 3 and 4 the computer develops increasing playing strength.

Level	Response time per move
A 1	instantly
A 2	2 sec.
A 3	5 sec.
A 4	10 sec.

- **Level 5 - 8** are designed for advanced and intermediate chess players.

Level	Response time per move
A 5	15 sec.
A 6	20 sec.
A 7	30 sec.
A 8	45 sec.

- **Level 9 - 12** are for the experienced chess players.

Level	Response time per move
B 1	1 min.
B 2	1.5 min.
B 3	2 min.
B 4	2.5 min.

- **Level 13 - 15** are mainly used for analyzing special problem positions but you may use these levels also to play a game if you do not mind waiting for a longer reply.

Level	Response time per move
B 5	3 min.
B 6	3.5 min.
B 7	4 min.
B 8	for chess problems

Note: All above times are average times and may change according to the situation of the game.

7. TAKE BACK A MOVE (Take Back Key)

This chess computer offers the possibility to take back 9 half moves to enable you to rectify your last move.

Wait until you have executed the computer's reply move. Press TAKE BACK and the row and column LEDs will show the computer's last move in reverse, e.g. first the "to" square and then the "from" square. Execute this move just as any ordinary one, i.e. applying pressure on both squares.

Press TAKE BACK again and the row and column LEDs will now show your last move in reverse. Proceed as explained above. The square position of a captured piece will be indicated by the row and column LEDs of this square. Simply reinstate the captured piece by applying pressure onto this square. You may then continue to take back moves if so desired.

8. CHOICE OF COLOUR (Go Key)

The computer is generally set to play Black and you White. If you want to play Black in a new game and the chess pieces are set in the opening position (White pieces on top of the board, Black pieces at the bottom of the board), press the GO key and the computer will calculate the first move for White.

9. CHANGE OF COLOUR (Color Key)

You can change the colour you want to play during a game by simply pressing GO. The computer will automatically make a move for your side. You can now enter a move for the other colour. You can change sides as often as you wish, but not whilst the computer is computing a move.

The COLOR key however can be used at any time during a game and the colour to move will be reversed.

Note: Please note that any moves made prior to pressing this key will be erased and the game history will begin with this position.

In Verify / Set Up mode you can choose with the COLOR key the required colour.

10. THE COMPUTER PLAYS AGAINST ITSELF (Go Key)

It may be of special interest at a certain point during a game, or for learning purposes to watch the computer play against itself. Just call off a computer move for your colour by pressing GO instead of entering a move. The computer will compute all moves based on the skill level it is set at. Repeated use of the GO key lets the chess computer play against itself.

11. VERIFYING A POSITION (Ver / Set Key = Verify / Set Up Key)

Any time before entering your next move or after setting up a board position you can check the position of any number of pieces to see if the board position corresponds to the position stored in the computer memory.

- Press the VERIFY / SET UP key **once**, the VERIFY LED comes up.
- The BLACK or WHITE LED lights up, indicating the colour of pieces that can be verified. The colour can be changed by pressing the COLOR key.
- Select the type of piece(s) to be verified by pressing the key marked with the symbol of the piece.
- To end the procedure press the GO key.

Everytime you press a symbol key, the respective row and column LEDs will light up to verify the board position of the figure in question. Pressing again the symbol key repeatedly will scan through all pieces of this type from left to right. After all those pieces have been called off, press the symbol key once more. The ERROR LED comes up, meaning that no further pieces of this kind are on the board and in the computer memory.

You can now call off the next type of pieces. The ERROR LED also lights up if there are no more pieces of this kind on the board. You can then proceed to the next type of piece.

To end the verification at any time simply press the GO key.

12. SETTING UP A POSITION (Ver / Set Key = Verify / Set Up Key)

You can go into SET UP mode at the beginning of a new game or during a game before you enter your next move.

In SET UP mode you can enter or remove pieces or set up board positions to solve chess problems. In SET UP mode the computer's legality check is disabled, and entries do not have to comply with the chess rules.

Note: After leaving SET UP mode the WHITE or BLACK LEDs indicate, which colour is to move. If a change of colour is required, press the VERIFY / SET UP key again, change the colour with the COLOR key and press GO. You can now enter a move for this colour or call off a move from the computer by pressing GO again.

12.A REMOVING A PIECE:

If you wish to remove one or more pieces from the board proceed as follows:

- Press the VERIFY / SET UP key twice, the SET UP LED lights up.
- The BLACK or WHITE LED will be on, indicating the colour of pieces that can be removed. The colour can be changed by pressing the COLOR key.
- To remove the piece(s) press the square it stands on.
- To end the procedure check first if you want to change the colour to move then press GO. You can now enter a move for this colour or call off a computer move by pressing GO again.

12.B. CLEARING THE ENTIRE BOARD: (Clear Key)

If you wish to clear the entire board (to enter a board position thereafter) proceed as follows:

- Press the VERIFY / SET UP key twice, the SET UP LED comes up.
- Press the CLEAR key and the entire board will be cleared.
- You may now set up a board position.

12.C. ENTERING A PIECE:

If you want to enter one or several pieces or enter a board position, proceed as follows:

- Press the VERIFY / SET UP key twice, if you are not yet in SET UP mode. The SET UP LED will come up.
- If you want to clear the entire board press the CLEAR key (see para 12.B.).
- The colour of the pieces to be entered can be changed with the COLOR key. The WHITE and BLACK LEDs indicate which colour can be entered.
- Select the piece by pressing the corresponding symbol key.
- Enter the piece(s) of this kind by placing each on the desired square pressing it down lightly. The respective row and column LEDs will come up for each square.

- Choose the next piece type by pressing the symbol key and enter the piece(s). The colour has to be changed only if it differs from the colour of the previously entered piece(s).
- To end the procedure press GO.
- Check if you want to change the colour to move first as explained above before you enter a move or call off a move from the computer.

Note: Use the Verify mode to check that you have entered the position correctly.

13. MOVE SUGGESTION (Hint Key)

The computer can suggest moves if you are not sure how to continue your game, which is a great tutoring feature.

When it is your turn to move, press the HINT key **once** and your chess computer will show you the "**from**" square of the move it considers the best for the colour to move. Press the HINT key a **second time** and the LEDs of the "**to**" square light up. A **third** press of the HINT key will display the next best move if there is one.

If you do not want to make use of the "HINT" move you can make your own move by simply pressing the piece you want to move instead.

14. TRAINING FUNCTION (Training Key)

This function is to help the novice player.

First Step:

When it is your turn to move, press the TRAINING key and the row and column LEDs will show the "**from**" square of the first piece with a legal move. If you continue to press the TRAINING key, the computer will show you the "**from**" square of all pieces with at least one legal move. Once all possible moves have been shown all LEDs will go off for a few seconds. You may repeat the above procedure after the WHITE or BLACK LED lights up again.

Second Step:

Once you have chosen the piece you want to move, press the designated square (square position is indicated by the lit up row and column LEDs) and then the TRAINING key again. Now your chess computer will show you all the possibilities to move to.

Third Step:

To exit the TRAINING mode make a move or press GO to call off a computer move.

Should you wish to go back to step one press on the indicated square.

15. ACOUSTIC SIGNALS (Sound Key)

Your chess computer has four different sound settings, which will be indicated by LED 1 to 4:

- Setting 1 (LED 1): There will be no acoustic signals at all.
- Setting 2 (LED 2): There will be an acoustic signal only when the computer answers with its counter-move.
- Setting 3 (LED 3): There will be an acoustic signal when pressing any key and when the computer or you make a move.
- Setting 4 (LED 4): The same sound setting as mentioned under c) and in addition the computer will indicate with a double beep and the lit up row and column LEDs that one of the high rank pieces is threatened.

Note: Press the SOUND key to select the required sound setting. The SET UP and VERIFY LEDs will be on when you cycle through the four choices. To exit this mode make a move or press GO to call off a computer move.

16. CHESS PROBLEMS

On level 16 the computer will solve most mate-in-3 problems and also help solve difficult chess problems, which can include castlings, pawn promotions and en passant moves.

You proceed by setting up the board position (s. para. 12) and the skill level. If you want to solve a chess problem, play the computer against itself (s. para. 10).

If you want to find out if the computer can mate you in 3 moves set up the board position and the skill level and play against the computer. If it cannot mate you in 3 moves, it continues the game, alternatively he mates you and the CHECK and MATE LEDs light up.

WARRANTY

For details please refer to the enclosed Warranty Card.

CARE OF YOUR CHESS COMPUTER

Dirt or dust can be removed with a soft cloth. Do not use chemical solvents or water on the set. Any damage caused by their use invalidates the warranty. Always keep the computer in a dry and cool place (normal room temperature). Avoid exposing the computer to heat, e.g. spot lights, radiators, sunshine, etc. as this may lead to permanent damage caused by overheating, which is not covered by the warranty.

TECHNICAL INFORMATION

• Program Size	4 KByte ROM, 256 Byte RAM
• CPU clock speed	8 Mhz
• Power Consumption	130 mW max
• Power supply	6 x 1.5V UM-3 type (or AA size) alkaline batteries or adaptor
• Move entry via	Sensor chessboard
• Function keys	16
• Extra Error LED	
• Handy board	260 x 243 x 23 mm
• Levels	16
• Take Back	9 half moves
• Set Up and Verify mode	
• Opening book size	630 plies
• Solve mate in	3
• Hint and Training function	

All data subject to change without notice.

Rules of Chess

I. General Moves

1. The two players must alternate in making one move at a time. The player with the white pieces moves first to start the game.
2. With the exception of castling (section II.1.), a move is the transfer of a piece from one square to another square which is either vacant or occupied by an enemy piece.
3. No piece, except the Rook when castling and the Knight (section II.5) may cross a square occupied by another piece.
4. A piece moved to a square occupied by an enemy piece captures it as part of the same move. The captured piece must be immediately removed from the chessboard by the player making the capture.
5. When one player moves a piece into a position whereby he can attack the King, the King is in "Check" (announced by the CHECK LED) and must either
 - a) move the King,
 - b) block the path of the attacking piece with another piece,
 - c) or attack the attacking piece.
6. The game is over when there is no escape for the King from an attacking piece. This is known as "Checkmate" (the CHECK and MATE LED).

II. Individual Moves

1. KING

Except when castling, the King can move only one space to any adjoining square (including diagonally) which cannot be attacked by an enemy piece.

Castling is a move of both the King and either Rook which counts as a single move (of the King) and is executed as follows:

- a) The King is moved from its original square two squares toward either Rook on the same row, and
- b) The Rook is moved to the opposite side of the King.

Castling cannot occur if:

- a) the King has already been moved.
- b) the Rook has already been moved.
- c) the King's original square or the square which the King must cross or the one which it is to occupy is attacked by an enemy piece.
- d) there is any piece between the King and the Rook.

2. QUEEN

The Queen can move to any square along the same row, column or diagonal on which it stands (except as limited by Article I.3).

3. ROOK

The Rook can move to any square along the same row or column on which it stands (except as limited by Article 1.3).

4. BISHOP

The Bishop can move to any square along the same diagonal on which it stands (except as limited by Article 1.3).

5. KNIGHT

The Knight's move is in the shape of an "L", moving two squares horizontally vertically, and then one square at 90° angle from the first move. These two moves can be reversed (one square and then two) if desired.

6. PAWN

The Pawn can move either one or two squares forward on its original move, and then one square forward at any time afterward. When capturing, it advances one square diagonally (forward). When a Pawn reaches the last row, it must be immediately exchanged for a Queen, Rook, Bishop, or a Knight of the same colour as the Pawn, at the player's choice and without taking into account the other pieces still remaining on the chessboard. This exchange is called a "promotion".

A Pawn can attack a square crossed by an enemy Pawn which has been advanced two squares in one move from its original square as though the latter had been moved only one square. This capture may be made only on the move immediately following such an advance and is called capturing "en passant". (When your computer makes an en passant capture it will display the symbol "ep".) The en passant moves is also described under section 6.b in this instruction.

III. HINTS & TIPS

Get a feel for the values of different pieces, which will be useful when making decisions on captures and exchanges. In general, try to capture the more valuable pieces. Some important principles:

- Castle your King into safety as soon as possible.
- If you control the center squares, this will give you the advantage. To do this, move your center pawns and develop your Bishops and Knights early in the game.
- Take advantage of capture situations, particularly if you will gain material.
- Concentrate – don't be caught off guard by your opponent!

Art.No.6503-III
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