

COMPUTACHESS II

User Manual

WA-002



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INTRODUCTION

Your COMPUTACHESS II is the world's most conveniently operated chess computer! Developed from COMPUTACHESS I, it includes many new operating features which will greatly add to your pleasure in using it. You can now play against your computer opponent with a full-sized chessboard and pieces — just as you would against a human opponent. And since it runs entirely on batteries (you'll find it extremely economical on power consumption!), the machine is fully portable.

This user manual is in two parts. The first part explains how to use your COMPUTACHESS II, and the second section teaches you how to play chess, just in case you are a beginner or novice. If you already know how to play the game, simply read the first 8 pages of this manual and you will be ready for many hours of enjoyable chess.

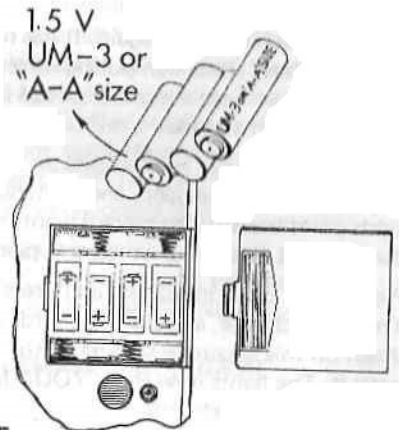
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1. THE BATTERIES



2. STARTING A GAME

Set up the pieces on the chessboard in their starting positions, and turn the OFF/ON/SAVE switch to the ON position. You immediately hear a characteristic signal, and see three red lights come on. Two of these are labelled: YOUR MOVE. The third one, to the left of the chessboard, has a small white square next to it. The computer is showing that it is ready for you to make a move with the white pieces.

Before starting, you may adjust the computer's level of playing strength if you like. See Section 6.

If you wish to play White, make your first move like this:—

- Press down on the center of the square occupied by the piece you want to move. The most convenient way is to tilt your piece slightly and press down with the edge of its base.

The machine 'beeps', and you will now see **two** red lights on — one at the end of the rank (or horizontal row of squares) and one at the bottom of the file (or vertical column) in which your piece is located.

- (b) Move your piece to the square where you want it to go, pressing down on the center of this square as before.

The machine beeps again. It has now registered your move, and starts computing its reply. While it is doing so, you will see a number of red lights flashing rapidly on and off.

When the computer has decided on its move, it gives a characteristic treble beep, and switches two lights on. The lights point towards the piece it wants to move, by showing the row and column in which this piece is to be found.

Pick up the piece indicated, and press down on its square. The lights change, and point towards a new square. Press down on this square as you move the computer's piece onto it. The lights now show YOUR MOVE again. Proceed as before.

If you want to play Black, start by pressing the control key labelled **REVERSE PLAY**, and the computer will make the opening move. Afterwards, when YOUR MOVE is indicated, the light next to the small **black** square will be on.

3. SPECIAL MOVES

Captures. You carry out a capture (for yourself or the computer) just like any other move. The capturing piece is pressed down on its old and new squares, while the captured piece is removed from the board without being pressed. A pawn capture **en passant** is handled no differently.

Castling. If you wish to castle, make the king's move by pressing on the squares in the usual way, but move the rook without pressure. If the computer decides to castle, the lights will indicate the move of the king only. Carry out the moves of both pieces, pressing down with the king but not with the rook.

Promotion of pawns. If you advance a pawn to your opponent's end of the board, you will, of course, normally promote it to a queen, and COMPUTACHESS assumes you are doing so unless you tell it otherwise. If you want to promote to a rook, bishop or knight, you must press the key marked by the appropriate symbol (to the right of the chessboard); you do this **after** pressing on the square your pawn is moving from, but **before** pressing the promotion square. When COMPUTACHESS promotes one of its own pawns, it always chooses a queen.

Check. If the computer puts your king in check, the pair of lights labelled CHECK will be on until you make your next move (or press key other than SOUND).

4. CHECKMATE — STALEMATE — NEW GAME

If either player delivers checkmate, the pair of lights labelled MATE will come on. The 'white' or 'black' light shows the side that has been checkmated. Similarly, when the computer makes a move that stalemates you, the two STALEMATE lights will come on.*

To start a new game, rearrange the pieces and press the NEW GAME key. If you want to abandon a game that's in progress, you can press NEW GAME any time when the machine is not computing a move.

Note that whenever you turn the power switch to the 'off' position then turn it 'on' again, COMPUTACHESS II assumes that a new game is starting.

5. INCORRECT MOVES

If you try to make an illegal or impossible move, you will, normally hear the 'ERROR' signal — an unpleasant buzz. If you do hear that buzz, complete a legal move with your piece or press down again on its square and move something else. (See also Section 8.) The 'error' buzz is likewise heard if you press a square occupied by one of your opponent's pieces when it is your move.

* NOTE: On those very rare occasions when you are easily winning but accidentally make a move that STALEMATES the computer, it will show its surprise by indicating an illegal or impossible move.

If you're carrying out a move of the computer's, and you press a wrong square (or press a key, other than NEW GAME or SOUND), you will hear a rapid treble beep instead of the normal single beep. Simply continue carrying out the move as indicated by the lights.

6. LEVELS OF PLAYING STRENGTH

COMPUTACHESS II has eight levels of playing strength. The following table gives the approximate average time it takes over a move on each level:—

Level	Time
1	5 sec.
2	10 sec.
3	15 sec.
4	3 min.
5	4 min.
6	10 min.
7	12 min.
8	14 min.

Note that the time taken over a particular move will sometimes differ considerably from the average time for the respective level. In a complicated position, with queens and many other pieces on the board, COMPUTACHESS II is likely to use much more thinking time than in a simple position.*

At any time when it is your move, you can check the level on which the computer is currently playing. Press the key marked LEVEL. You will then see one or more lights on, at the left-hand edge of the chessboard. If only the bottom light is on, the computer is playing on Level 1. If two lights are on, it's set for Level 2 — and so on.

* From the lights flashing on and off while the computer is thinking, you can tell which move it assesses as best at each stage of its analysis.

When the level is being displayed you can change it, if you wish, by pressing the LEVEL key again, one or more times. Each press of the key takes you one level higher — or, from Level 8, back to Level 1.

When the lights display the level that you want, carry on with the game. The lights stop indicating the level when you press any other key (except SOUND), or any square. The level will remain the same until you alter it or start a new game (when the computer automatically sets itself to Level 1).

In the course of a game the level can be changed as often as you like.

7. CHANGING SIDES

If you press the REVERSE PLAY key when it's your turn to move, the computer will move for the side that you have been playing, and will expect you to take over the other side. You can change sides like this as often as you want.

By pressing REVERSE PLAY after every move, you can make the computer play an entire game against itself. If COMPUTACHESS II is thinking about a move, you can change sides by pressing the TAKE BACK key. The machine will then stop computing, and will expect you to make a move for the side whose turn it is.

8. TAKING BACK MOVES

If you press down with one of your pieces but then decide not to move it after all, press on its square a second time. The lights pointing to this square go out, and you may move a different piece.

Even if you've already completed a move, it's not too late to retract it. While the machine is computing its reply, press TAKE BACK (as in Section 7). Then, when the lights indicate YOUR MOVE, press TAKE BACK a second time. The lights will now point to the piece you moved last. Press down with it, and the lights will show

the square where it came from. Press on this square as you move your piece back. You may now make another move in place of your last one.

If you want to take a move back and the computer has already indicated its reply, you must first carry out the indicated move in the normal manner. Then you can press take back and retract the computer's move in the same way that we've just described. You now have the choice of either making a move for the side that the computer was playing, or else pressing TAKE BACK once again and retracting your own move.

The TAKE BACK key may be used even after one side has been checkmated!

When retracting a move, don't forget to replace any piece that was captured. (You put it back without giving the square a second press.) The flashing light next to the appropriate symbol (on the left of the board) will remind you which piece it was.

9. SETTING UP A POSITION

By a suitable repeated use of the TAKE BACK key, it's possible to make a continuous sequence of moves for both White and Black. This means that you can make a game begin with any opening of your choice; or you can bring about a special position that interests you, and instruct the computer to play on from there.

To do this, you first make a move for one side (let's say White). If the computer replies at once (as it may do if the game is still in the opening stage), carry out its move, then take it back as in Section 3.

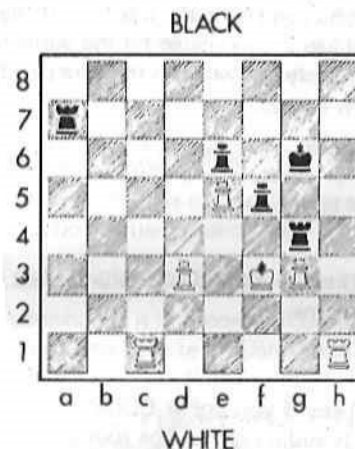
Then make whatever move you want for Black. If the computer now takes some time for thought, you have only to press the TAKE BACK key to be able to make the next move on White's side as in Section 7. . . . Usually, with the computer set on a high level, the process is simple; you move, press TAKE BACK, move for the

other side, press TAKE BACK again — and so on, until the desired position is reached.


10. CHECKING THE POSITION

In case of confusion — if, say, you accidentally upset the board and pieces — you can make the computer show you where every piece should be, according to its memory. You do this by using the six keys along the right-hand side of the board. (If the machine is computing or announcing a move, you will first have to press TAKE BACK or carry the move out.)

As an example, suppose the position is as follows:—



To check the positions of the pawns, press the 'pawn' key

 The light at the end of the third rank (the row of squares third from the bottom) comes on, showing that this rank is the nearest one to White's end that has pawns on it. At the same time, to show which squares on this rank the pawns should be occupying, the lights come on at the bottom of the 'd' and 'g' files (the fourth and seventh columns from the left).

Now press **f** again. The next rank that has pawns on it is the fifth. So the light for this rank comes on, together with the light at the bottom of the 'e' file. At the same time, the light for the 'f' file **flashes** on and off. This shows that the pawn on the square f5 is a black one.

Press **f** a third time, and the light for the sixth rank comes on, while the light for the 'e' file flashes. If you press **f** a fourth time, the 'error' buzz tells you that there are no pawns on the board other than those already indicated. (A fifth press of the 'pawn' key will have the same effect as the first press — the computer starts demonstrating the pawn positions all over again.)

In the same way, you can check the position of the kings and rooks; a white piece is indicated by the 'rank' and 'file' lights continuously on, while in the case of a black piece the 'file' light flashes.

If you press the 'queen', 'bishop' or 'knight' keys, you will simply get the 'error' buzz, telling you that there are no such pieces on the board.

When you've checked as many pieces as you want, simply carry on with the game.

11. SOUNDS

Press the SOUND key if you prefer COMPUTACHESS to operate without its audio signals. The sounds can be switched on again by re-pressing the same key.

12. MEMORY

If you have to interrupt a game and want to resume it later, the OFF/ON/SAVE switch should be turned to the SAVE position. The computer will then retain the chess position in its memory while using a minimum of current. Later you can switch 'on' again and continue as before.

PART TWO: HOW TO PLAY CHESS

Chess is an easy game to learn yet it may take a lifetime to become a Master, and although many people have become chess masters the game is so complex and subtle that no-one has become the master of chess. There are not very many rules for you to learn but it is important that you do learn these essential rules, otherwise you will not be able to enjoy chess to the full and you may occasionally be mystified by one of your opponent's moves, which you had thought was impossible.

In this section we are quoting from the official laws of chess as laid down by the International Chess Federation (F.I.D.E.). Some of these rules are given with a little explanation or an example, just to make it easier for you to learn how to play this wonderful game. We will retain the same numbering system as employed in the F.I.D.E. laws of chess, but we have omitted some rules which are only needed for tournament play.

ARTICLE 1: INTRODUCTION

The game of chess is played between two opponents by moving pieces on a square board called a "chessboard"

ARTICLE 2: THE CHESSBOARD AND ITS ARRANGEMENT

2.1 The chessboard is composed of 64 equal squares alternately light (the "white" squares) and dark (the "black" squares).

2.2 The chessboard is placed between the players in such a way that the corner square to the right of each player is white

2.3 The eight rows of squares running from the edge of the chessboard nearest one player to that nearest the other player are called "files".

2.4 The eight rows of squares running from one edge of the chessboard to the other at right angles to the files are called "ranks".

2.5 The rows of squares of the same colour, touching corner to corner, are called "diagonals"