User Manual
Mode D'emploi
Bedienungsanleitung
Manual De Instrucciones
Gebruiksaanwijzing

⬦⬥⬦ SPHINX

CONTENT

1. INTRODUCTION

Your SPHINX Chess Computer is an ideal opponent. It is ready to play you at any time, as often as you like, at whatever level of skill you choose. Using the machine is simple - you just move the pieces on the chessboard in much the same way as you would against a human player.

The main part of this manual explains how to use the computer. Sections 2 to 5 are all you need to read in order to start a game.

2. STARTING PLAY

The computer is powered by four AA batteries. Remove the lid on the underside of the machine and install the batteries in their compartment, making sure that the polarity is correct.

Set up the pieces in the starting position. "White" should be playing "up the board", i.e. with the control panel on his right. Turn the ON/OFF switch to the ON Position.

Then press the key marked NEW GAME. The red light on the left of the chessboard at the "White" end will now be on, showing that the machine is ready for "White" to make a move.

Before starting the game, you may adjust the computer's level of playing strength if you like. See Section 9.

3. MAKING MOVES

If you want to play "White", start the game like this:

(a)   Press down on the center of the square occupied by the piece you want to move. The best way is to tilt the piece slightly and press with the edge of the base.

The machine "beeps", and two red lights come on - at the end of the rank (or vertical column) in which your piece is located.

(b) Move your piece to the square where you want it to go, and press down with it again. The machine gives another "beep". It has now registered your move.

The computer may now make its reply instantaneously. If on the other hand it needs time to think, the light at the "Black" end of the chessboard will be on - to show that a move is being computed for "Black".

When the computer is ready with its move, it gives a characteristic sound signal 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.

Press down with the piece indicated. The lights change, and point towards a new square. Move the computer's piece to this square, and press it down. The light at your end of the board comes on again. Make your next move in the same way as before.

If you want to play "Black", start by pressing the key labeled MOVE, and the computer will make the first move for "White". Afterwards, when it is your turn, the light at the "Black" end will be on.

4.   CORRECTING ERRORS

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

If you move a piece to a square where it cannot legally go, the computer gives a characteristic double beep - the error signal. You must now start your move again.

The error signal is also heard if you make a mistake when carrying out a move for the computer. Simply continue making the move as indicated by the lights.

5. SPECIAL MOVES

(a) Captures:
In order to 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.

(b) Castling:
In order to castle, make the King's move by pressing the piece down 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 piece, pressing down with the king but not with the rook.

(c) Promotion of Pawns:
Whenever a pawn reaches the far end of the board, the computer assumes it is being promoted to a queen.

6. WARNINGS OF THREATS

Sometimes, after carrying out the computer's move, you will see the light labeled THREAT come on, together with two lights pointing to a square on the board. If your king is on this square, the computer is announcing check. Otherwise it is warning you of a possible capture on this square, which may lead to loss of material for you. Similarly, after your own move, the lights may show that one of the computer's pieces is threatened.

The Threat signal is canceled when you press a square on the board. If you would rather not be warned about attacks on your piece, you should switch to a different "level" as explained in Section 9.

7. CHECKMATE - STALEMATE - NEW GAME

If either player checkmates the opponent, all the lights along the left-hand edge of the board will flash on and off. The machine similarly indicates stalemate by flashing all the lights along the bottom edge of the board.

To start a new game, rearrange the pieces and press the NEW GAME key. You may do this when checkmate or stalemate is indicated, or whenever the computer is expecting a move from you.

8. INTERRUPTING THE COMPUTER - CHANGING SIDES

If you press MOVE while the computer is computing, it will cut short its calculations and make the move which is best according to its analysis so far.

Note that special operations such as changing the level, checking the locations of the pieces, or setting up a position (see Section 9, 12 and 13) can only be carried out when it is your turn to move. It is for this reason that you may sometimes want to interrupt the computer's analysis.

If you press MOVE when it is your turn, the computer will start computing a move for the side you have been playing, and will expect you to take over the other side. You can change sides like this as often as you like. By pressing the MOVE key after every move played, you can make the computer play an entire game against itself.

9. LEVELS OF PLAY

The operating key marked LEVEL - which can be used any time when it is your turn to move - enables you to alter the speed and strength of the computer's play. When you press this key, the corresponding light on the control panel comes on. You can now choose between sixty-four different "levels". On level 1, the computer takes an average of five seconds per move. On higher levels, it takes more time and its playing strength is correspondingly increased; the average for level 64 is 20 to 25 seconds per move.

You select the level by pressing the appropriate square on the chessboard. This is explained by the table on Pages 6 to 7.

On some levels (as indicated in the table), the computer will warn you of attacks on your pieces, as described in Section 6. On other levels, it will only warn you of check.

Also note that on some levels, whenever you make your move, the machine automatically responds by computing a move for the other side - as we have already seen. These levels are indicated by "AUTOMATIC RESPONSE" in the table. On other levels, the machine will not compute a move unless you use the MOVE key to instruct it to do so. See Section 11.

LEVEL SETTING

1. Press LEVEL key once. A "beep" should occur.

2. Press a square corresponding to the desired level, e.g. "H1" once. A "beep" should follow.

3. Press LEVEL key again once. A "beep" acknowledges acceptance of the entry.

4. Commence playing.

LEVEL	SQUARE TO BE PRESSED	THREAT SIGNALS	AUTOMATIC RESPONSE
1	A1	no	no
2	B1	no	no
3	C1	no	yes
4	D1	no	yes
5	E1	yes	no
6	F1	yes	no
7	G1	yes	yes
8	H1	yes	yes
9	A2	no	no
10	B2	no	no
11	C2	no	yes
12	D2	no	yes
13	E2	yes	no
14	F2	yes	no
15	G2	yes	yes
16	H2	yes	yes
17	A3	no	no
18	B3	no	no
19	C3	no	yes
20	D3	no	yes
21	E3	yes	no
22	F3	yes	no
23	G3	yes	yes
24	H3	yes	yes
25	A4	no	no
26	B4	no	no
27	C4	no	yes
28	D4	no	yes
29	E4	yes	no
30	F4	yes	no
31	G4	yes	yes

LEVEL	SQUARE TO BE PRESSED	THREAT SIGNALS	AUTOMATIC RESPONSE
32	H4	yes	yes
33	A5	no	no
34	B5	no	no
35	C5	no	yes
36	D5	no	yes
37	E5	yes	no
38	F5	yes	no
39	G5	yes	yes
40	H5	yes	yes
41	A6	no	no
42	B6	no	no
43	C6	no	yes
44	D6	no	yes
45	E6	yes	no
46	F6	yes	no
47	G6	yes	yes
48	H6	yes	yes
49	A7	no	no
50	B7	no	no
51	C7	no	yes
52	D7	no	yes
53	E7	yes	no
54	F7	yes	no
55	G7	yes	yes
56	H7	yes	yes
57	A8	no	no
58	B8	no	no
59	C8	no	yes
60	D8	no	yes
61	E8	yes	no
62	F8	yes	no
63	G8	yes	yes
64	H8	yes	yes

In the table, each square is identified by the letter of its rank and the number of its file. Looking at the board from White's end, the files range from "A" on the left to "H" on the right; the ranks range from "1" at the bottom to "8" at the top.

Notice that as long as the LEVEL light is on, the current level will be indicated by the lights at the edge of the board.

When you have pressed the right square, so that the lights indicate the required level, re-press the LEVEL Key. The LEVEL light goes out, and play may continue.

The level can be altered as often as you like in the course of a game. When you first switch on after installing the batteries, the computer automatically selects level G1. Of course, if you simply want to check the current level, press LEVEL and then re-press the same key, without pressing any square.

On any level, the computer is likely to take more time in a complicated position - with queens and many other pieces on the board - than in a relatively simple one. On the other hand, the program is equipped with knowledge of several standard chess openings - so the first few moves of a game are likely to be played fast, irrespective of the level.

10. TAKING BACK MOVES

If you have completed a move but then want to take it back, this is easily done. If the computer is already indicating its reply, you must carry out this move in the usual way. Then press the TAKE BACK key. THE "rank" and "file" lights come on, pointing towards the piece that was moved. Press down with this piece, and the lights change to indicate the square where it came from. Move the piece back, and press it down again. Now press TAKE BACK a second time, and retract your own last move in the same way. Don't forget to put back any pieces that were captured.

You can now make another move in place of your last one. Alternatively, you can press TAKE BACK again and retract the preceding move. Up to eight "half- moves" (i.e. four moves for each side) can be taken back at any one time. To resume play, simply make a move in the normal manner for the side whose turn it is, or press MOVE to make the computer do so.

The TAKE BACK function may be used even after one side has been checkmated! If you press TAKE BACK while the computer is computing its move, it simply stops its calculations. Again various options are open to you: make a move for the side the machine was playing, or press the MOVE key; or re-press TAKE BACK to retract a further move or moves.


11. PLAYING BOTH SIDES

In the table in Section 9, some of levels were marked "no" in the column headed "AUTOMATIC RESPONSE". By selecting one of these levels, you enable yourself to make a continuous sequence of moves for both sides. For example, you may want a game to begin with a particular opening variation. Simply carry out the moves for "White" and "Black", pressing down with the pieces in the usual way. When you arrive at the position from which you want the machine to play against you, switch to a level that has "yes" in the "AUTOMATIC RESPONSE" column, and press MOVE to start the computer computing.

12. CHECKING THE POSITION

In case of confusion (if, say, you accidentally knock any pieces over), you can make the computer show you where every piece should be, according to its memory. You do this with the six keys marked with piece symbols (♛ ♚ ♝ ♞ ♜ ♟) which can be used whenever it is your turn to move.

As an example, suppose the position is as follow:

BLACK
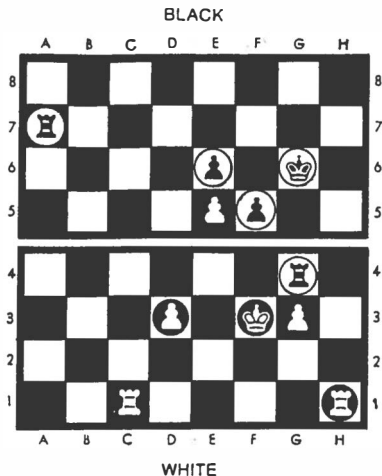
WHITE

To check the positions of the pawns, press the "pawn" key (♟). The light at the end of third rank (the row of squares third from 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 light comes on at the bottom of the "D" and "G" files (the fourth and seventh columns from the left).

Now press (♟) 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 blinks (flashes on and off). This shows that the pawn on the square "F5" is a black one.

Press (♟) a third time, and the light for the sixth rank comes on, while the light for the "E" file blinks. If you press (♟) a fourth time, no squares will be indicated; this tells you that there are no pawns on the board other than those demonstrated already (A fifth press of the "pawn" key will have the same effect as the first one). 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" lights blink. Of course, if you press the "queen", "bishop" or "knight" keys, no squares will be indicated, since there are no such pieces on the board.

When you've checked as many pieces as you want, simply carry on with the game. The lights stop showing the piece positions as soon as you press a square or another key.

13. SETTING UP A POSITION

You may sometimes want to construct a particular position on the chessboard, to see how the computer handles it. To do this, begin by pressing the SET-UP key. The light next to this key now comes on, showing that the computer is ready for a special mode of operation. As long as this light is on, you can alter the contents of any square on the board - adding and removing pieces just as you wish.

We shall see from example how the alterations are made. The general idea is as follow. When you press on a square where a white piece is located, the computer assumes you are removing this piece and inserting a black one on the square instead. When you press a square containing a black piece, the computer assumes the square is being cleared. When you press a vacant square, a white piece is inserted there. To tell the computer which type of pieces you want to insert, you use the keys marked with piece symbols. Note that each time a square is pressed, its new contents are displayed by the lights in the manner described in Section 10. So if you press the same square several times running, you will see the lights change in rotation, showing a white piece, a black piece, an empty square, a white piece again ... and so on.

Suppose you want to construct the position on Page 8, and white is to move next. It doesn't matter what position is on the board to begin with. After pressing SET- UP, proceed as follows: Press once on every square that currently contains a black piece, and remove the piece from the board. Make sure, each time, that the lights are no longer indicating a piece on the square. Next remove all the white pieces, pressing twice on each square. Press the "rook" key (♖). This means that until further notice, any new pieces inserted on the board will be rooks.

Press once on the squares for the white rooks (C1 and H1), as you place the pieces in their new positions. Press twice on the square for the black rooks (G4 and H7).

Now press the "pawn" key (♟). Press once on the squares for the white pawns, and twice on the squares for the black pawns.

Press the "king" key (♔). Press twice on the square G6 (for the black king). Press once on F3, for the white king. Note that a white piece has to be inserted last, since we want white to make the next move.

Finally, re-press the SET-UP key, to normal playing conditions. If you press MOVE, the machine will compute a move for White. If you want to play White yourself, carry out a move in the normal way.
If our final operation in SET-UP mode had been to insert a black piece, Black would have moved first on resumption of play.

Note that in SET-UP mode, just as in normal playing mode repeated presses on a "piece" key have the effect of demonstrating all the piece positions of the relevant type. If you remove all pieces of the one type from a particular rank, the lights change to show the next rank that contains such pieces - or, if there are no such pieces present, the lights go out. If no "piece" key at all has been pressed, the computer assumes that all new pieces will be pawns. So when you first press SET-UP, the location of one or more pawns (if any are on the board) will be shown by the lights.

In the last example we cleared the entire chessboard before constructing the position anew. At other times, you may just want to modify a position by adding or removing one or two pieces. For example, suppose you want White to give odds of queen's knight at the start of a game. This is what you would do:

Press NEW GAME. Arrange the pieces in the starting position.

Press SET-UP. (The SET-UP light comes on)

Press twice on the square of the queen's knight, and remove the piece from the board.

Press three times on the square of any white pawn. (This has the effect of converting the white pawn to a black one, removing the black pawn, and then reinserting a white one. If you omitted this action, the first move of the game would be made by Black.) Press SET-UP again. The SET-UP light goes out, and the computer is ready for White's first move.

In connection with setting up positions, there are a few further points to be noted:

(a)   CASTLING AND EN PASSANT

If a king or rook has been placed on the board in the way we have just described, there can be no castling with that piece. To create king's side, press NEW GAME before SET-UP - then leave the king and king's rook undisturbed on their starting squares, while other pieces are removed and reinserted as necessary.

After a position has been set up, the next move cannot be a pawn capture en passant. To create a position where such a capture is legal, set up the immediately preceding position and then make the move which permits the capture.

(b)   GAME RECORD

Once you press the SET-UP key, the clocks are set to zero and the computer's memory of all moves that were played previously is erased. Those moves cannot subsequently be retracted with the TAKE BACK key.

(c)   ILLEGAL POSITIONS

Before taking the computer out of SET-UP mode, you should make sure that the position you have constructed is legal. There should not be too many pieces of the type - for example, if there are eight white pawns on the board, there cannot be two white queens. Each side must, of course, have one and only one king, and the king of the player who is not to move must not be in check. There must be no pawns on the first or eighth rank. If you do try to make the computer play from an illegal position, don't be surprised if the results are crazy!

14. SOUNDS

Press the sound key if you prefer the computer to operate without its audio signals. The sounds can be switched on again by repressing the same key.

15. MEMORY

If a game in progress has to be interrupted, the computer can be switched off (see Section 16), and will retain the game position in its memory while using a minimum of current. When you switch on again, the situation will be wholly unchanged, and the game can be resumed as before; though if the machine was computing a move when you switched off, you will need to press MOVE to make it resume its calculations.

16. SWITCHING OFF THE COMPUTER

The only time you can switch off the computer is when it is your turn to make a move. You cannot switch off the computer until the computer's move has been entered and it is your turn to move. Also, the computer cannot be switched off if the LEVEL or SET-UP LEDs are on.

The Chess Pieces shipped with this Chess Computer may be small enough to be swallowed. Please be sure to keep the pieces out of the reach of small children, particularly children of age less than 3 years.

Not suitable for children under age 3 years.

NOTE:

Occasionally you may find that the unit acts abnormally when a new set of batteries is inserted or the adaptor is connected. If this happens, simply turn the unit over, locate the hole near the center labeled ACL. Insert a small screw driver into the hole and press once. You should hear a "beep". The unit is turned on and ready for a new game.