Mephisto®

supermini

Dear chess friend !

Congratulations on the purchase of your MEPHISTO supermini! Your new chess-computer is a high quality product, developed in Germany and designed to be both simple to use and strong-playing. Your MEPHISTO team wishes you many hours of chess fun with your new partner.

Hegener + Glaser AG

München

LIST OF CONTENTS:

A.1. Getting started

Open the back of the computer and remove the battery compartment cover. Fit four 1.5V batteries into place, making sure that they are in the right way around. We recommend alkaline cells as these last much longer.

When changing batteries please dispose of these in the proper way i.e. do not place in your household waste. After you have fitted the cells a LCD-test will start and the computer will sound a special tone. Close the battery compartment and turn the machine over again. The display should now show 'PLAY', to tell you that your MEPHISTO is ready for a game.
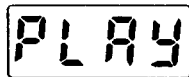
A.2. Preparing for a game

Set up the pieces in the starting position and press the 'NEW GAME' key (tone sounds).
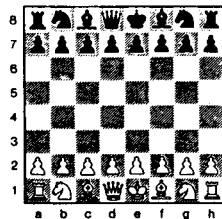
A.3. Playing moves

Press the piece you are moving down until the computer beeps. The display will show the co-ordinates of the square you are moving from in the left of the display. Remove the piece and press it down on the square to which you are moving (tone sounds again). The display shows the move made for about a second and then switches to the chess clock mode.

The computer nows starts thinking about a reply (shown by the flashing display). When a move has been found it shows the move in the display after beeping. Press the piece indicated down first on the 'from' square and then on the 'to' square. The display then jumps back to the clock mode.

Continue in the same way for all the moves, pressing the pieces being moved down twice (once to show 'from' and again to show 'to'). MEPHISTO shows its moves in the display as a double check. When the computer is thinking the display flashes. When it is your turn the counting clock is shown but doesn't flash.

When **capturing**, make only the moves of the capturing piece and simply remove the captured piece. The same applies to pawns captured according to the 'en-passant' rule.

"en passant"(frensh) literally means "in passing" and is used to describe a special Pawn move.

If a Pawn moves two squares from its starting position and by doing so lands past or next to an advancing opponents's Pawn, than the latter may capture this with its next move. the capturing piece is moved as if the first Pawn had only moved forwards one square. In our example, if the b2 Pawn advances to b4, the black Pawn captures by moving to b3, and the b4 Pawn is removed.
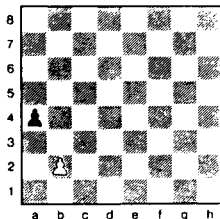
When **castling** you only need to make the King's moves. The Rook is moved without being pressed down.

If you or MEPHISTO manage to get a Pawn to the opposite side of the board then this will automatically be promoted into a **Queen**. If you make an **illegal move** the computer will sound a special beep and refuse the move. Replace the wrong piece on the 'from' square (press down again) and MEPHISTO is ready for a legal move. The display jumps back to the clock mode to show readiness.

Opening Libary :

Mephisto supermini has more than 2000 opening positions stored in his programm memory.

During the first moves of the game it looks if the position on the board ist stored in this memory. If yes, it has not to compute a countermove and answers immediatly.

A.4. Interrupting a game (store position)

If you have to interrupt a game for whatever reason MEPHISTO offers

you the chance to switch off and continue days or weeks later from the last position.

To do this simply press the ON/OFF key. Pressing the same key starts the game again from the last position stored.

If you have changed the position on the board and don't know where the pieces were then please refer to section E.1.1 for more information.

A.5. New game

If you are checkmated - or better checkmate MEPHISTO - then you can start a new game by pressing the NEW GAME key. Set up the pieces again and start playing.

You now have all the information you need to play. The following sections tell you more about MEPHISTO's special features.
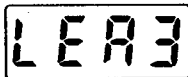
B.1. Level mode (playing levels)

When switched on MEPHISTO is set to level A2 with an average of 5 seconds per move, sound on and

random off. You have 47 other possible settings.

B.1.1 Changing the playing levels

Press the LEVEL key first and the display shows the level presently set (e.g. LEA3).

$$\boxed{L E A 3}$$

Each square on the A-file (A1 to A8) represents a playing level. Pressing a piece on one of these activates a new level, which is shown in the display.

The levels on the A-file are the normal playing levels. The higher the level set, the longer the response time (see table). Having selected a level, press the PLAY key.

The computer switches the clock on and waits for your move. Other levels are also available.

A1, B1, C1, D1	= 3 SEC
A2, B2, C2, D2	= 5 SEC
A3, B3, C3, D3	= 15 SEC
A4, B4, C4, D4	= 30 SEC
A5, B5, C5, D5	= 1 MIN
A6, B6, C6, D6	= 2 MIN
A7, B7, C7, D7	= 3 MIN
A8, B8, C8, D8	= INFINITE

The B-file represents the normal playing levels without the beep tones. Setting these levels is done as before with the A-file except that a piece is pressed on a B-square. The display will show e.g. LEb1 for level B1 and LEb4 for B4 etc.

You can see the average response time for each level in the table. If you have set a level without beep tones then press the PLAY key and the computer will switch to the clock mode and will wait for your move.

The levels on the C- and D-file are the so-called special levels. Whereas the computer will not always play the best move it can find when set to an A-file or a B-file level, when

17

set to a special level it will switch a random move generator off, which will play one of several equally evaluated moves. Setting these levels is done as before.

If you want to play with a special level without beep tones then these can be selected as before, but with the D-file squares. The computer switches back to the clock mode after you press the PLAY key and is ready for your next move.

The levels on the E- and F- file are the so called ply depth levels. Whereas MEPHISTO supermini will compute to a selected ply depth before announceing its move. You can see the ply depth for each level in the tabel.

E1, F1 = 1 ply
E2, F2 = 2 plys
E3, F3 = 3 plys
E4, F4 = 4 plys
E5, F5 = 5 plys
E6, F6 = 6 plys
E7, F7 = 7 plys
E8, F8 = 8 plys

If you want to play the ply depth levels without beep tone then this can be selected as before, but with the F- file squares.

C.1. Memory Mode

This mode is switched on when you press the MEM key. In this mode you can enter moves without the computer playing a response or take moves back.
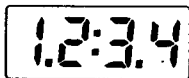
C.1.1 Entering move sequences

Sometimes it is useful to enter a sequence of moves (e.g. the first ten moves of an opening). Press the MEM key and you will see that the computer will show ON in the display for about a second.

After that the clock will be switched on again. If you look at the display carefully you will notice a small dot between the first and second, and the third and fourth characters of the display.

This is to indicate that the Memory mode is switched on. Now play the move sequence you want on the board. You will see that MEPHISTO does not play a reply but stores the moves. The computer will not allow illegal moves.

When entering moves you will also notice that another small dot appears under the clock. This is a signal that it is Black's move.

After you have stored your sequence press the PLAY key to switch off the Memory mode again. The display will show OFF for about a second and the dots just described will disappear.

```
OFF
```

You can now continue the game by simply playing your next move. Alternatively press the PLAY key for MEPHISTO to carry on the game.

You can use the Memory mode in the middle of a game too. This may be useful to make the computer play a certain, complex line that you would like to investigate, but which the computer would otherwise not normally play.
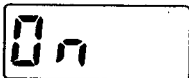
C.1.2 Adjudicate Function

MEPHISTO will gladly act as an adjudicator (referee) between two humans playing on the board. Switch on the Memory mode and play the moves. MEPHISTO will make sure that no-one breaks the rules.

C.1.3 Taking moves back

If you make a mistake or bad move which like to take back again (e.g. if you lose a piece) then rather than starting the game again you can take the last move back and continue with a better move.

To do this first press the MEM key (when it is your move) and the display will show ON for about a second, before jumping back to the clock mode.
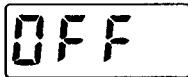
```
On
```

If you now press the MEM key again, the display will show you the co-ordinates of the last move in reverse. If the last move was E2E4 then the display will show E4E2. Play the move in reverse e.g. from E4 to E2 on the board.

```
E4E2
```

If you press MEM again you can take the previous move back too. Please don't forget that you can only take back one move for White and one for Black, i.e. **eight plys.**

After you have taken back one or two moves press the PLAY key to switch off the Memory mode. The display shows OFF again for about a second.

```
OFF
```

You can now continue the game or make the computer play the next move (press PLAY again).

D.1. Information Mode

In this mode MEPHISTO gives you information about its move analysis (position evaluation, best move found etc).

D.1.1 Switching the Information Mode on and off.

The information mode is switched on by pressing the INFO key. The display then shows ON for about a second. After which the display successively shows the game-time, the move which MEPHISTO calculates to be the best,

the position evaluation and the play depth with one-second beats. The position evaluation is shown in 'Pawn-units' (i.e.a Pawn-1) A negative prefix means that MEPHISTO is losing.For example if — 1.50 is shown then the computer is losing by one and a half Pawn-units.
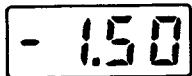
Switch off the Information mode by pressing the INFO key at any time. The display shows OFF for about a second. The display now only flashes the clock.

E.1 Position Mode

This is used to check the position on the board, alter it or enter a new one.

E.1.1 Checking a position

Each time you press the POS key the position of a piece and its identifying symbol (see table) are shown. The limitations of the display are obvious

so we could not show perfect letters, however with the use of the table you should have no problems at all.

= king = bishop
= queen = knight
= rook = pawn

Black pieces are shown by a minus sign (-) before the symbol. Press the PLAY key to return to the normal mode. The clock is switched back on again.

Continue the game with a move or press PLAY to make the computer play the next move.

E.1.2 Entering a position
Erasing the position on the board

To store a position on the board (e.g. for chess problems) you first have to erase the position already present. Do this by pressing SET UP. The display now shows the symbol for the white King. Press NEW GAME to erase the position in memory.

Entering a position

After you have erased the position the computer is ready to store a new one. The symbol for the white King is being displayed, meaning that the computer is waiting for you to show it where White's King is.
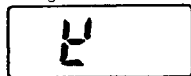
Press the King down on the correct square and the co-ordinates of that square will be shown in the display for about a second.

Continue by pressing the SET UP key. The display will change to show the symbol for the white Queen.


20
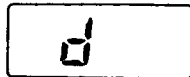
Press this piece down onto the location you want and again the co-ordinates are shown for about a second in the display. Press SET UP again and the computer will ask for the white Rooks etc. To skip over a piece (e.g. if you don't have a Queen) press the SET UP key again, until the symbol for the next piece you need is shown. If you have two identical pieces (Rooks for example) then merely enter first one and then the other piece before pressing SET UP for the next type of piece. The computer will ask you for the black pieces after the white ones.

Having set up all the pieces you have to decide whose turn it is when you start to play. To make it White's turn to play, press the SET UP key until the symbol for the white King appears again. Then press the PLAY key. If it should be Black's turn, then press the PLAY key after entering the last black piece.

After the PLAY key has been pressed, the computer shows the clock and is waiting for your next move (or press PLAY again to make the computer play the next move).

E.1.3 Changing a position
Storing additional pieces

If you want to add a piece during a game you first have to tell the computer which type of piece and which colour is being added. First press the SET UP key, bring the symbol for the white King into the display.
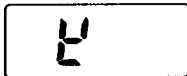
Press the SET UP key repeatedly to reach the piece you need and then push this down onto the square where it should be. The co-ordinates are shown for about a second.

Return to the normal mode by pressing PLAY (the display shows the clock) and continue with a move or by pressing PLAY again to make MEPHISTO play. You can obviously store a number of pieces before returning to the normal mode.

Removing or replacing pieces

First press the SET UP key. To remove a piece then simply press it down before taking it away.

To replace a piece first press SET UP and then repeatedly until you have the colour and type in the display. Then press the piece being moved down and, instead of removing completely, press it down again on its new location. Return to the normal mode by pressing PLAY.

F.1 Solving chess problems

21
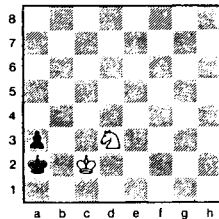
Your MEPHISTO has four special levels for solving chess problems for White. It is best to set up the position on the board first before refering to section E.1.2 and switching on the problem-solving levels.

You now have to tell MEPHISTO in how many moves the problem is to be solved e.g. for the problem opposite, three moves. First press the LEVEL key and then store the number of moves needed by pressing a piece on the respective square of the G-file (G1 for one move, to G4 for four moves). Next press PLAY.

Press PLAY again and MEPHISTO starts to search for a solution. If it finds an answer, then the first move of the combination is shown.

It is now your job to play the next move (for Black) on the board (whatever you like). After this MEPHISTO calculates the next move and shows you this etc. until the checkmate is reached.

If the computer doesn't find a solution then it will sound a special beep tone and will not show a move in the display. Please note that a computer may not always find a solution to mate-in-four problems. Problem chess is an extremely difficult area for chess-computers (however big and complex!).

G. 1 With black against the computer

If you want to play with the black pieces on the buttom of the board against your computer, just set up at the beginning of a game the black chessmen at the buttom. Press PLAY and MEPHISTO will start playing the white pieces form the top to the buttom.

Please note, that the numbers and letters printed on the chessboard in this case are invalid.

You now know all there is about your MEPHISTO supermini. We would like to wish you many hours of chess fun with your new electronic sparring partner!