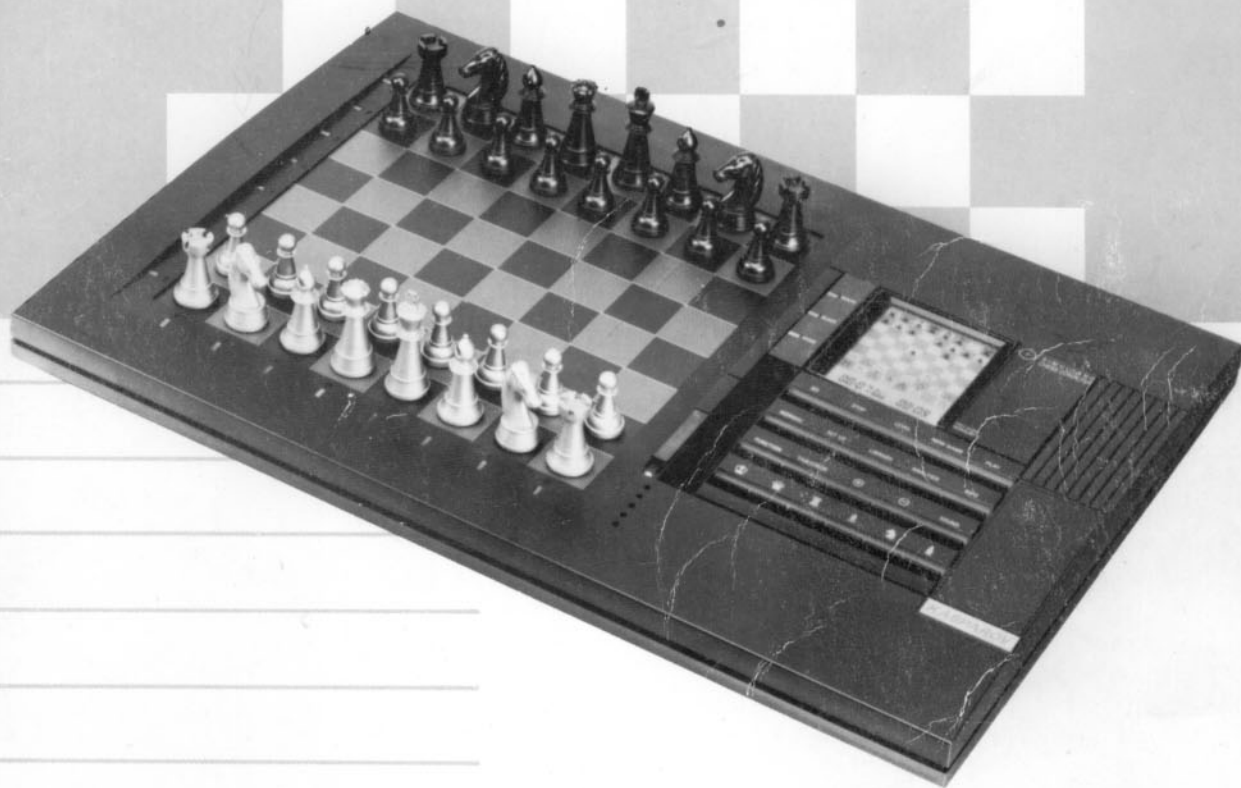


# **SIMULTANO<sup>TM</sup>**




**OWNER'S MANUAL**

**BEDIENUNGSANLEITUNG**

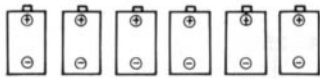
**MODE D'EMPLOI**

**GEBRUIKSAANWIJZING**

 **Swiss-led  
Precision**

 **KASPAROV**<sup>TM</sup>  
CHESS COMPUTER

 **Saitek<sup>TM</sup>**



AM2/C/R14

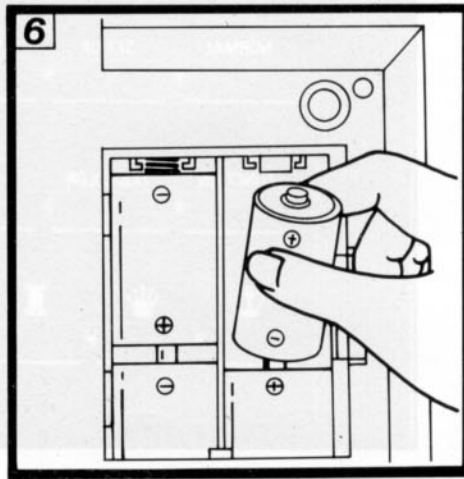
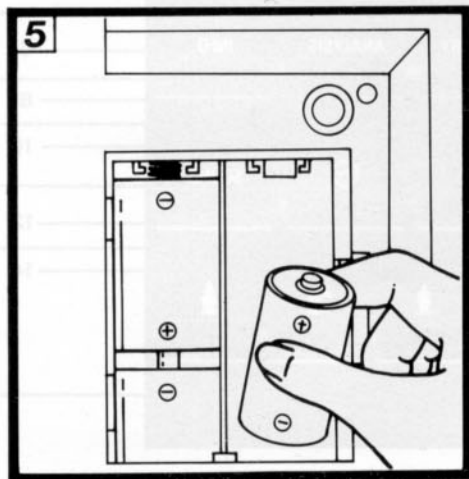
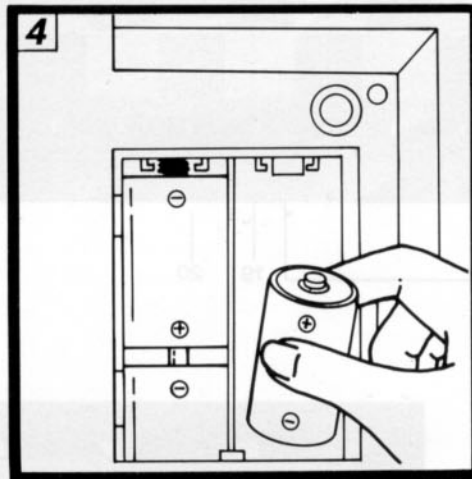
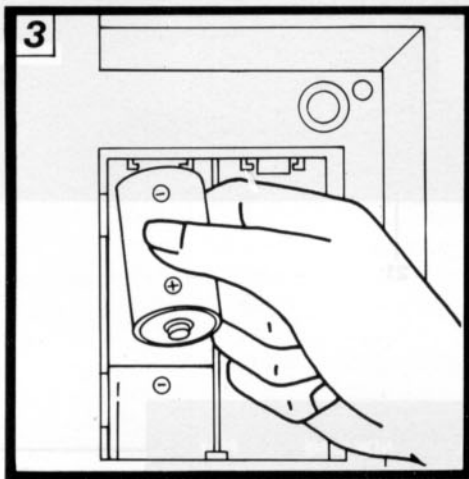
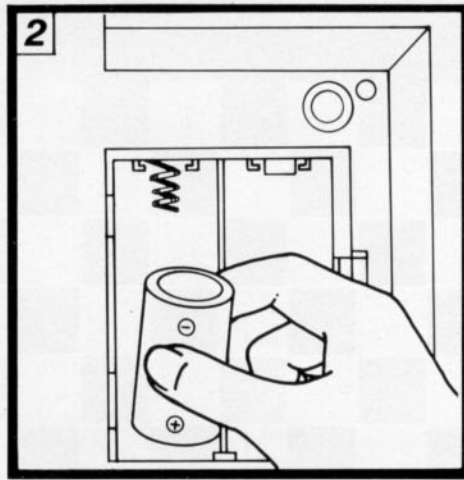
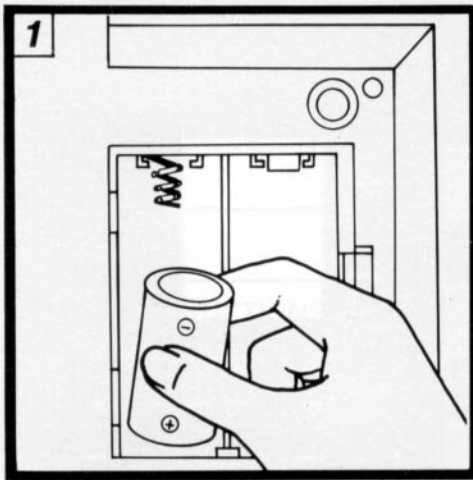
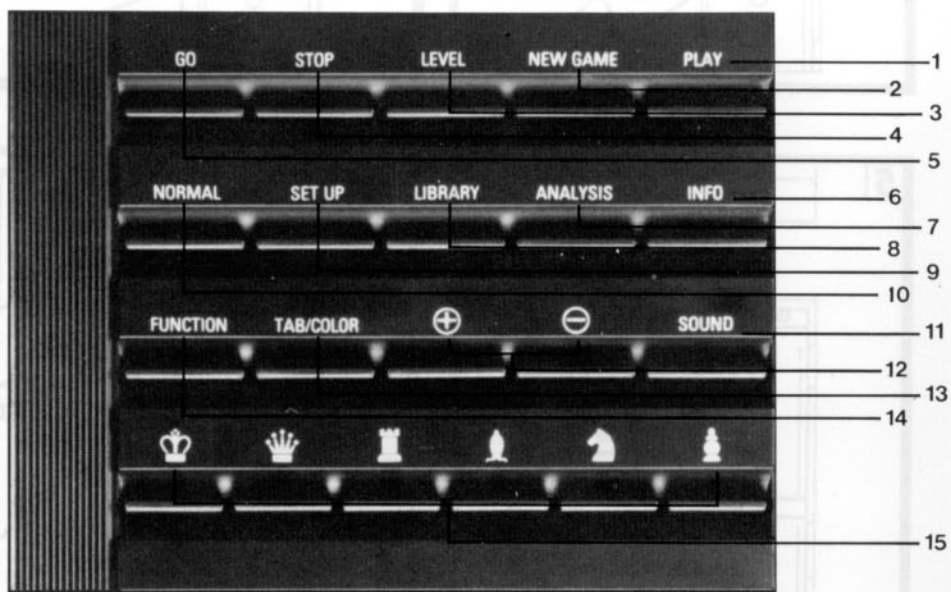
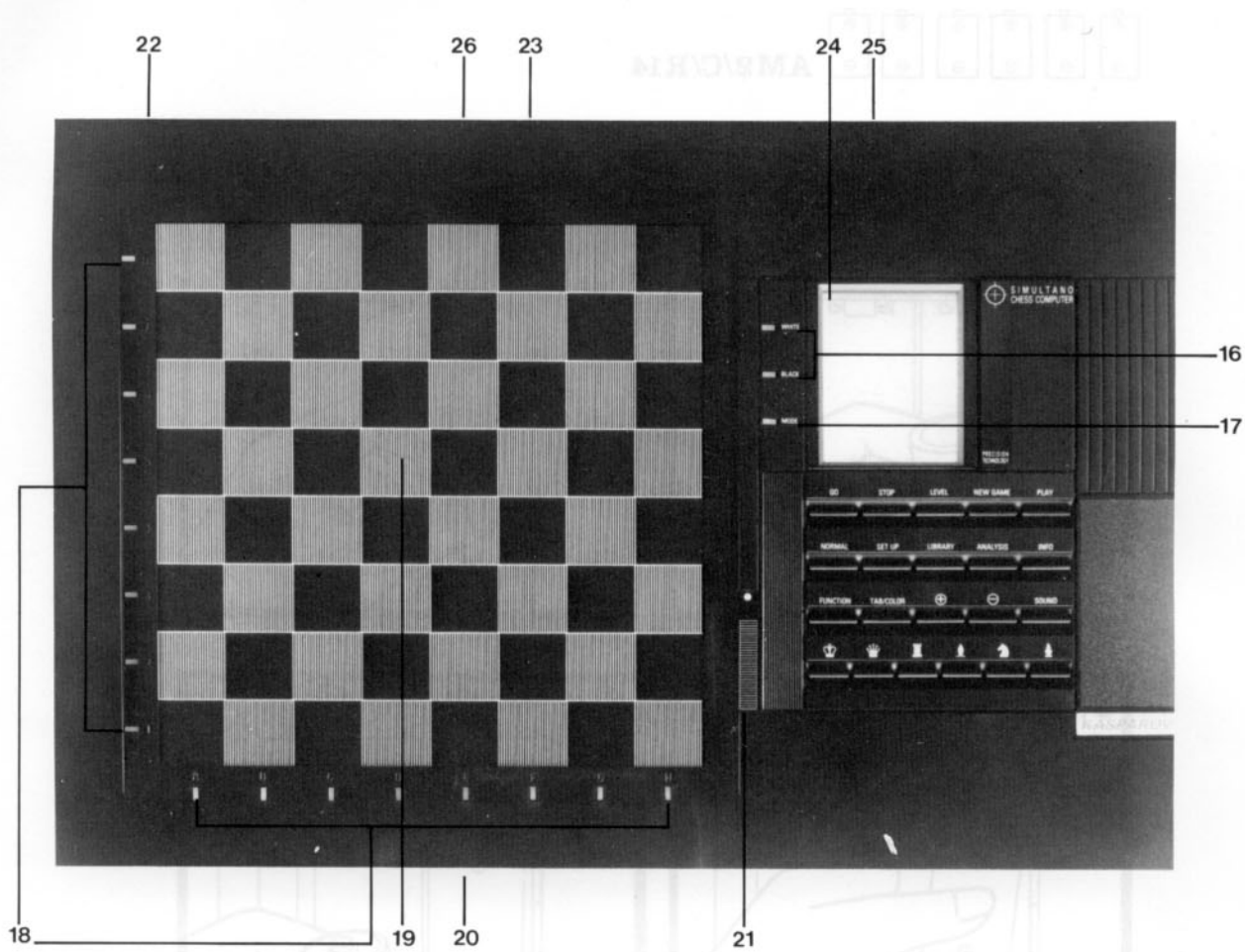


Fig.1



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GARRY KASPAROV  
WORLD CHAMPION

*Dear Fellow Chess Player,*

*When computers were first invented just four decades ago few people realized that mankind was witness to the most important single development of our time. Today computers have become freely available and in a few years there will be a computer in almost every household.*

*Saitek (formerly SciSys) has asked me to write a few words to welcome you to the world of chess playing computers. I have been personally associated with the company since 1983 and can therefore speak about its products from experience.*

*Until recently chess computers were regarded as simple toys which would never be capable of providing serious opposition for the enthusiast. The rapid advance of technology and programming skills have certainly changed that. Today chess computers have become an accepted part of the chess world, serving not only to introduce new players to the world's finest game but also encouraging them to take part in tournaments against human opponents. Chess computers can teach you all the basics of the game and keep up with you even if you go on to become a top club player.*

*Saitek has been at the forefront of this development and has been responsible for many of the most interesting innovations. It is the only chess computer company under Swiss management, and I look forward to a long and productive relationship with Saitek and with you who have chosen their computers.*

*I wish you enjoyment and satisfaction from your Kasparov chess computer — and who knows, maybe we'll meet in combat across the chessboard in the future!*

*Good luck!*

Garry Kasparov

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# Keys, Lights and Features

## KEYS

1. **PLAY** Execute next move. Pressing this key when it is your turn causes the computer to play the next move for you, pressing it when the computer is thinking interrupts the thought process.
2. **NEW GAME** Press to reset the initial position for a new game.
3. **LEVEL** Press to select level of skill.
4. **STOP** Press to turn off the computer. The current position is saved in memory.
5. **GO** Press to switch the computer on. Play is resumed at the point where the STOP key was pressed.
6. **INFO** Press to get advice from the computer (to see the main variation and evaluation, etc.).
7. **ANALYSIS** Enter analysis mode to take back, replay or enter moves.
8. **LIBRARY** Enter library mode to store or retrieve games.
9. **SET UP** Enter set up mode to change or enter positions.
10. **NORMAL** Return from special mode (analysis, set up, level, library) to normal play.
11. **SOUND** Press to turn sound off or on.
12. **⊕, ⊖** Used to increment or decrement level setting, info display, library slots. Also used together with **ANALYSIS** to play forwards or backwards, and together with **FUNCTION** to store or delete games from the library.
13. **TAB/COLOR** Change color (during position verification or entry) or change column (in level or library mode).

## 14. FUNCTION

"2nd Function" key. Pressing this key alters the meaning of the next keypress.

## 15. Piece keys

Used to choose promoted pieces, verify board position and set up new positions.

## LIGHTS

## 16. WHITE/BLACK

Side to move. When the computer is thinking the appropriate color light flashes.

## 17. MODE

Indicates which mode the computer is in:  
Green = normal play, yellow = analysis, red = set up, yellow flashing = level, red flashing = library, green flashing = verification.

## 18. Board Lights

The computer uses these to indicate game moves or take back moves. They are also used to verify the board position and to display the level of skill.

## FEATURES

19. Sensor Chessboard: each square has a sensor that registers piece movement.
20. ACL switch (in base of set).
21. LCD display contrast switch.
22. Battery compartment (in base of set).
23. Chess piece storage compartment (in base of set).
24. LCD display: Gives you a variety of information during all phases of the game.
25. Socket for mains adapter.
26. Module expansion compartment (in base of set).



# Introduction

Your Kasparov Simultano is an advanced chess computer that automatically registers the moves you make on its built-in sensor chessboard. It has a special LCD chessboard on which the current position and a variety of information is displayed during the game. In fact the computer is able to play eight games simultaneously against eight different opponents on this LCD display.

The computer can take back any number of moves, replay games, announce mate, and display its thought processes. It has 64 different levels of skill and in addition a unique user-programmable library that allows you to store games, positions and openings in its permanent memory. These features make your Kasparov Simultano one of the most versatile chess computers available.

The built-in openings book contains an extensive selection of solid, popular lines that any master might very well be playing in modern international tournaments and with Garry Kasparov's latest ideas, especially as Black, where the Grunfeld Defense, the Meran Defense, and the Scheveningen Variation of the Sicilian Defense are major weapons. These are aggressive, full-scale openings programmed with many variations, and it is difficult to catch the computer in offbeat lines.

## Studying this manual

Before you start playing with the computer please read at least chapter 1 of this manual. It will teach you the basics: how to make moves, correct errors, and generally understand all the things that might occur during a game. This is enough to give you countless hours of pleasure with the computer.

Chapter 2 deals with the levels of skill and how to change them, and chapter 3 with some very useful features built into the computer. Chapter 4 tells you all about the Analysis mode and chapter 5 about the information you can get from the computer. In chapter 6 you will learn about how to verify and set up chess positions. Chapter 7 is devoted entirely to the user-programmable library and chapter 8 to the simultaneous play mode.

We hope that you will have a lot of fun with your Kasparov chess computer and that it will contribute to your enjoyment of this magnificent game.

**Important note:** This computer has been programmed to play chess with you. It knows all the rules of the game, including castling, en passant, underpromotion, stalemate and draw by threefold repetition or the 50 move rule. Sometimes the computer may appear to be playing irregularly when in fact it is obeying these rules. In case you are not very familiar with the game we have included a copy of the Rules of Chess. If you need additional information your local library is sure to have several books on the subject.

## 1. Getting started

### 1.1 Batteries

Your Kasparov chess computer runs on six AM2, R14 or "C" size batteries (you can also use a mains adapter which your dealer will provide as an option). Open the battery compartment and insert the batteries as shown in Fig. 1. The computer will conduct a quick self-test of all electronic components, after which it is ready to play against you. If it fails to respond — static discharge can sometimes cause it to lock up — use a paper clip or any other sharp object to press and hold the ACL switch located at the bottom of the set for a few seconds to reset the computer (see section 9.3). Press **PLAY** and then **GO** at the same time.

### 1.2 How you move your pieces

Once you have inserted the batteries you are ready for a first game of chess against the computer. Set up the pieces in the opening position with the white pieces nearest to you. Press **NEW GAME** (you should always do this at the beginning of a game).

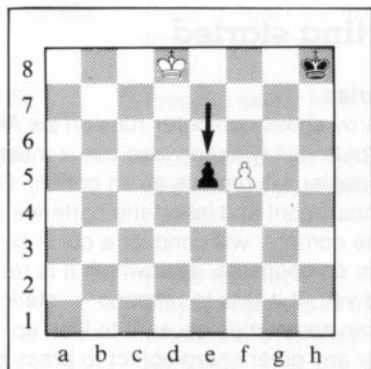
To make a move, first press down on the piece you wish to move. You will hear a short beep. Place the piece on its destination square and press down again. You will hear a second beep and the **BLACK** light will begin to flash. This means that the computer has accepted your move and has started to compute a reply for Black. (At the beginning of a game the reply will usually be instantaneous on any level because the computer is playing moves that are stored in its "openings book".)

To make a capture you only have to key in the move of the capturing piece. When castling always key in the king's move first — the computer will remind you to remove the rook. In case of an **en passant** capture the computer will remind you to remove the captured pawn (press it down before removing it).

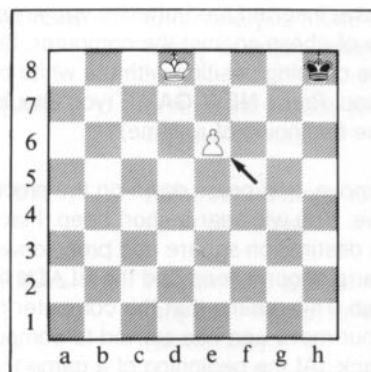


### Capturing "en passant"

Many beginners are not familiar with this rule (which was introduced into chess in the fifteenth century). Capturing "en passant" is possible when a pawn is on the fifth rank. If an enemy pawn crosses a square attacked by this pawn (because of its ability to move two squares on its first move) then the pawn may act as if the enemy pawn had only moved one square and capture it **en passant**. This can only be done on the very next move.



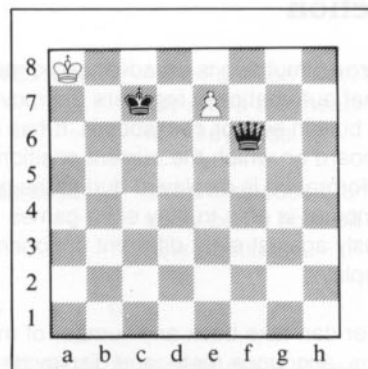
In the above position Black has just tried to avoid the capture of his pawn by advancing it two squares from e7 to e5.



White can capture the pawn **en passant** by moving his pawn from f5 to e6. The computer will always remind you to remove the captured pawn from the board.

### Pawn promotion

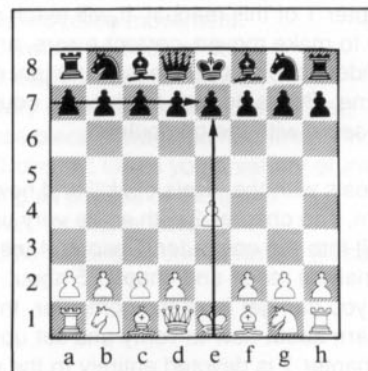
When a pawn promotes it is automatically changed into a queen. If you wish to "underpromote", do so in the following manner: First press down the pawn (which must be on the 7th rank) and remove it from the board. Now press a piece key (rook, bishop or knight) to tell the computer which piece you choose, and finally press the piece you have chosen on the promotion square. (When the computer promotes a pawn it will always tell you which piece it chooses by displaying it on the LCD.)



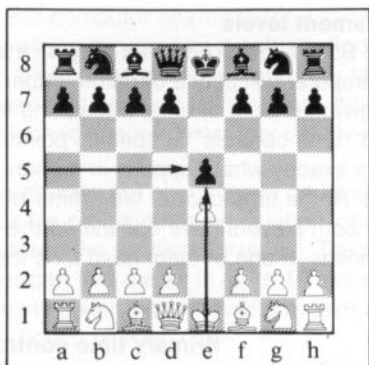
In this position it would be fatal for White to promote his pawn to a queen. Black could immediately deliver mate by moving his queen to a6. White must promote to a knight which attacks both the black king and queen (this is known as a "knight fork"). Press the pawn down, then the knight key and then place a white knight on e8, pressing down.

### 1.3 How the computer moves

Whenever the computer wants to make a move, it sounds a double beep and turns on two lights on the side of the chessboard (the "board lights"). These lights indicate the horizontal row and vertical column of the piece it wishes to move. Press this piece down on its square. The computer will now show you where the piece must go. Move the piece to the square indicated and press it down to complete the move.



The computer wants to move its king's pawn. Press it down.



This is where the pawn should go. Place it on the square and press it down.

Note that the move is also shown in the LCD chessboard display. The piece jumps between the "FROM" and "TO" squares, while at the same time the coordinates of the move are displayed below the board, e.g. (black pawn symbol) e7e5.

#### 1.4 Illegal moves

If you attempt to make a move not permitted by the rules of the game, the computer will not accept it. You will hear a warning beep (high-low) and the board lights will keep flashing the square to which you have just moved the piece. Press it down and the board lights will tell you where the piece came from. Replace it on the square indicated to cancel the move.

During move correction you will see the following messages in the LCD chessboard display:

"Clr xx"	Clear the square xx
"Put (piece symbol) xx"	Put the piece displayed on the square xx

If you do not execute a computer move correctly you will also hear the error beep. This indicates that you are trying to move the wrong piece or are moving it to the wrong square. Check the board lights and the LCD chessboard and move the piece correctly.

#### 1.5 Check, Mate, and Draw

When the computer puts your king into check you will hear a double beep. If a game ends in checkmate there will be a characteristic end-of-game signal (high-high-high-low) and in the display you will see "# End". The WHITE or BLACK lights tell you which side has been checkmated. The computer may announce a forced mate many moves before it actually occurs, e.g. "a2-a1, M in 3" (mate in three moves).

If a game ends in a draw you will hear the end-of-game signal and in the LCD display the draw sign ("= End") will appear. The computer knows four kinds of draws:

Draw by stalemate — the side to move is not in check and has no legal moves; (□End)

Draw by threefold repetition — a position has occurred three times in the game; (≡End)

Draw by the fifty-move-rule — there has been no capture or pawn advance during the last fifty moves; (⌒End)

Draw by insufficient material — a position cannot be won by either side and drawn by insufficient material; (♞End).

#### 1.6 New game

To start a new game simply press **NEW GAME**. You will hear the new-game signal (low-high-low-high). The level of skill remains unchanged. You can interrupt a game at any stage by pressing **NEW GAME** — so be careful not to press it by mistake.

#### 1.7 Time display

In a normal game you will always see two clocks in the LCD display. These keep track of the time each side has used up in the game. Initially hours, minutes and seconds are displayed, after 10 hours the display changes to hours and minutes.

Both clocks are reset to "0:00:00", when you press **NEW GAME**. When White plays his first move his clock is stopped and Black's clock started. The clocks also keep track of the time when two humans are playing against each other (as described in section 4.5). If you interrupt a game with **STOP** (see section 1.9) both clocks are stopped until the game is resumed with **GO**.

#### 1.8 Sound

If the computer's beeps are distracting you or others during a game, you may turn off the sound by pressing **SOUND**. Pressing the key again will turn it back on (you will hear a double beep to confirm this). You must watch the indicator lights and press pieces and keys carefully when playing without sound.

#### 1.9 Switching the computer off

To turn the computer off just press the key marked **STOP**. This is a so-called "soft switch" which you may use at any time, even when the computer is thinking. If you press **GO** the computer will come back to life and continue to play (even the clock times are held in memory). You should use **STOP** whenever you interrupt a game for more than a few minutes, as this will conserve battery power.

If you are using fresh batteries the computer will retain the current position (and game) for up to two years.

## 2. Levels of skill

Your Kasparov Simultano has a total of 64 different levels of skill. They include levels for casual play, tournaments, speed chess, analysis, problem solving and eight special junior levels for beginners. Remember that just like a human being the computer becomes stronger when it has more time to think about its moves.

### 2.1 Setting a level

When you first switch on the computer, level A3 is automatically set. You may verify this by pressing **LEVEL**. The MODE light will begin to flash yellow, indicating that you are in level mode, and two board lights will point to the square A3, which is the level currently set. You will also see the level in the LCD display. Levels "B,E,F and G" have secondary time controls.

To change the level press the key marked  $\oplus$ . The board lights will now point to the square A4. Keep pressing  $\oplus$  and you will see that all squares from A3 to H8 are successively indicated. The  $\ominus$  key reverses the direction.

There is one more key to help you change levels. Try pressing **TAB/COLOR** in level mode. This moves the level setting across between the columns (e.g. from A1 to B1). Using  $\oplus$ ,  $\ominus$  and **TAB/COLOR** you can reach any level very quickly.

You may change the level at the beginning or at any time during a game. Once you have reached the level you want, press **NORMAL** to return to normal play (the MODE light turns green). The new level setting remains unchanged even if you press **NEW GAME**.

### 2.2 Levels for casual play

The first eight levels are designed for casual play and the average response time on each level is as follows:

A1	1 second per move
A2	2 seconds per move
A3	5 seconds per move
A4	15 seconds per move
A5	30 seconds per move
A6	1 minute per move
A7	2 minutes per move
A8	3 minutes per move

The above times are averaged over a large number of moves. In the opening and in the endgame the computer will tend to play faster, but in tactically complicated middle game positions it may take considerably longer on individual moves.

### 2.3 Tournament levels

Levels B1 to B5 are for tournament play. In these levels the computer will play a certain number of moves in a given amount of time, attempting to meet the so-called "time controls" at specific points in the game. This is exactly what happens in human tournaments. At the time control the arbiter checks to see whether both players have completed the required number of moves. If one of them hasn't, he loses the game.

Level	Description	Primary time control, Secondary time control
B1	Club tournaments	1st 30 moves in 30 minutes, then 30 moves in 30 minutes
B2	International standard	1st 40 moves in 2 hours, then 20 moves per hour
B3	Grandmaster tournaments	1st 40 moves in 2½ hours, then 16 moves per hour
B4	Fast tournaments	1st 45 moves in 1½ hours, then 15 moves in 30 minutes
B5	U.S. Open	1st 50 moves in 2½ hours, then 20 moves per hour

Take Level B2 as an example: the computer will finish the first 40 moves in 2 hours (primary time control) and then play the following 20 moves within 1 hour (secondary time control). All further moves are played at a rate of 20 moves per hour. In accordance with tournament regulations, any time remaining at the primary time control is carried forward to the second phase of the game. If, for instance, the computer has made the first 40 moves on Level B2 in just one hour, it has a total of two hours for its next 20 moves. The remaining time at each time control is accumulated until the end of the game.

### 2.4 Special levels

The B-column has three more levels:

Level	Description
B6	10 seconds per move — a special form of speed chess in which both players must make each move in exactly 10 seconds.
B7	Analysis Level — The computer will go on thinking until you interrupt it (by pressing <b>PLAY</b> ). You can use this level to have the computer analyse complicated positions for many hours or even days.
B8	Problem solving level (up to mate in 10).

On level B8 the computer searches for a forced mate and will only play a move when it actually finds one. If it does, then it will announce mate and play the key move. You can try to defend for the other side, but the computer will checkmate against any defence.

If the computer does not play a move on level B8, then it means that the problem has no solution (check that you have entered the position correctly). Theoretically the computer can find mates in up to 10 moves, but solving mates in six or more moves can take a very long time — hours, or even days.

In section 6.4 of this manual you will find an example for solving a chess problem with the computer.

## 2.5 Modern tournament levels

A tournament form that is rapidly gaining popularity is one which requires each player to make all his moves in a certain amount of time. This is independent of how many moves are played in the game. If one side runs out of time without checkmating his opponent then he loses the game ("sudden death"). The game may be terminated if it is a technical draw (e.g. if there is insufficient material for mate) or if both players agree to a draw.

In levels C1 to C8 the computer will try to complete all the moves of the game in the times specified below. If it is a very long game you will notice that the computer will keep increasing its speed in an attempt to stay within the time allocation.

C1	5 minutes for the entire game (Blitz chess)
C2	7 minutes for the entire game
C3	10 minutes for the entire game
C4	15 minutes for the entire game
C5	20 minutes for the entire game
C6	30 minutes for the entire game (Active chess)
C7	60 minutes for the entire game
C8	90 minutes for the entire game

## 2.6 Novice levels

If you are a beginner or a very casual player you may find that the computer is far too strong for you on any of the levels described above. It can be very discouraging to get beaten every single time without ever having a chance to try out any tactical plans. Children, especially, can lose interest in the game if there is no element of success.

To meet this problem your Kasparov chess computer has eight special novice levels. On the levels D1 to D8 it plays almost instantaneously on each move. With its power thus tamed, even a beginner should be able to win occasionally. Level D1 is the easiest, and the playing strength of the computer increases gradually up to level D8.

## 2.7 Other levels

There are a number of time controls that have become popular in Europe, England, America and Australia. You are sure to find your favorite amongst the levels E1 to G8.

Level	First time control	Second time control
E1	20 Moves in 30 Min.	Rest in 30 Min.
E2	20 Moves in 30 Min.	20 Moves in 30 Min.
E3	20 Moves in 40 Min.	20 Moves in 40 Min.
E4	25 Moves in 60 Min.	25 Moves in 60 Min.
E5	30 Moves in 45 Min.	30 Moves in 45 Min.
E6	30 Moves in 60 Min.	Rest in 30 Min.
E7	30 Moves in 60 Min.	30 Moves in 60 Min.
E8	30 Moves in 70 Min.	30 Moves in 70 Min.
F1	30 Moves in 75 Min.	30 Moves in 75 Min.
F2	30 Moves in 80 Min.	30 Moves in 80 Min.
F3	30 Moves in 90 Min.	10 Moves in 30 Min.
F4	30 Moves in 100 Min.	30 Moves in 100 Min.
F5	35 Moves in 90 Min.	Rest in 15 Min.
F6	40 Moves in 40 Min.	20 Moves in 20 Min.
F7	40 Moves in 60 Min.	20 Moves in 30 Min.
F8	40 Moves in 80 Min.	20 Moves in 40 Min.
G1	40 Moves in 90 Min.	20 Moves in 45 Min.
G2	40 Moves in 100 Min.	20 Moves in 50 Min.
G3	40 Moves in 105 Min.	Rest in 15 Min.
G4	45 Moves in 120 Min.	23 Moves in 60 Min.
G5	50 Moves in 90 Min.	25 Moves in 45 Min.
G6	50 Moves in 100 Min.	25 Moves in 50 Min.
G7	50 Moves in 120 Min.	25 Moves in 60 Min.
G8	60 Moves in 60 Min.	30 Moves in 30 Min.

H1 to H8 are "experimental" levels in which the computer will search to a fixed depth. In level H4, for example, it will look at all continuations up to four plies (a "ply" is a move for each side), and in level H8 up to a depth of eight plies.

## 2.8 Levels in the LCD display

When you are setting levels the computer will always display information on them in the line below the LCD chessboard. This is a very useful function, since it means you will not have to consult this manual all the time. For example "2:00/1" means that each player is expected to make one move in two minutes; "0:30/30" = 30 moves in 30 minutes; "9:59/1" = one move in unlimited time (Analysis!); "0:05/99" = all moves in 5 minutes ("99" always means "all moves").

In some levels you can obtain further information on the secondary time controls at the right in addition to the primary one at the left. In the Handicap levels "Handi" is displayed, in the problem level "Probl", and in the experimental levels with fixed depth (H1-H8) you will see "Fi" and the depth set.



## 2.9 Thinking in the opponent's time

You may have noticed that the computer will sometimes reply to your move instantaneously, even in the middle of a game played on one of the higher levels. This is because the computer was thinking in your time! In all but the novice levels, the computer will try to anticipate the move you are likely to make and to calculate its responses for this move while you are thinking. If it has guessed right there is no reason to go on calculating — so it plays the move it has found immediately.

## 3. More features

All the things we have seen so far are enough to give you countless hours of pleasure with your Kasparov chess computer. You can play straight games against it, correct mistakes and adjust the level of skill to match your needs. But there are many other things the computer can do that make it even more fun to use. This chapter deals with these features individually.

### 3.1 Changing sides

Would you like to play a game as Black for a change? Just set up the board with the black pieces at the bottom, closest to you. Remember that the black queen must be on a black square and the white queen on a white one. Now press **NEW GAME** and **PLAY**. The computer will make the first move for White, playing down from top of the board.

Pressing **PLAY** always causes the computer to play the next move. You can change sides with the computer at any time during the game simply by pressing this key instead of making a move. You can do this as often as you like — even press **PLAY** after every move, forcing the computer to play the entire game against itself!

### 3.2 Self-play mode

There is also a way to make the computer play against itself without having to press a key after every move. Press **FUNCTION, PLAY, PLAY** and the computer will continue the game, making moves for both sides on the LCD chessboard only (i.e. you do not have to move the pieces on the board). If you want to interrupt the game just press **ANALYSIS** and then **NORMAL**. You can take up the game if you want, but be sure to move the pieces to the right squares, which is not difficult using the LCD board.

Self-play mode is not just a gimmick, it is extremely useful if you want to analyse a position very deeply. Set a high level (e.g. 3 min. per move) and press **FUNCTION, PLAY, PLAY**. Allow the computer to play the game out against itself — perhaps overnight. The next morning you can replay the game on the LCD board (see section 4.2) and study the results of the computer's hours of work at your leisure.

## 3.3 Interrupting the thought process

If the computer is spending too long on a move, you can press **PLAY** to interrupt the thought process and force it to play a move. This is very useful on the higher levels, especially analysis level B7, where the computer "thinks forever". Pressing **PLAY** while the computer is thinking always causes it to stop thinking and play the best move it has found so far.

**Note:** There is one exception to this rule. On level B8 (problem solving), pressing **PLAY** will not cause the computer to play a move. It will only sound a double beep to inform you that it had not found a forced mate when it was interrupted.

## 3.4 New features

The following new features have been added to Simultano to make it even more versatile! By pressing the key sequences described, you can turn an option on and off.

**Swap Sides** : **NEW GAME, TAB/COLOR**: White side at the top  
**NEW GAME**: White side at the bottom

**Timekeeping** : Computer timekeeping (power up default) — clock stops when the computer indicates its move and until that move is completed. This allows you to leave the board for a break without upsetting the time controls in Normal mode. LCD displays "tourn off".  
Tournament timekeeping — one side or the other's clock is always running once the game starts in Normal mode. LCD displays "tourn on".  
**SET UP, FUNCTION, SOUND**

**LCD Board only**: Computer displays all its moves on the LCD board only. No need to register the computer's moves on the sensor board. LCD displays "auto on".  
**NORMAL, FUNCTION, SOUND**

**NOTE** : **SET UP, FUNCTION, TAB** will reset the last two modes to their initial "power up" default status.

## 4. Analysis mode

We shall now come to a very useful mode in which you can retract moves, replay games and analyse positions. Analysis mode is switched on by pressing **ANALYSIS**, which turns the MODE light yellow (always an indication that you are in Analysis mode). Press **NORMAL** to return to normal play.

### 4.1 Taking back moves

Normally you are not allowed to take back moves in a serious game of chess. However, if you have committed an unnecessary blunder or when you are analysing a position, it is very handy if you are able to retract one or more moves.

Your Kasparov Simultano has a very elegant take-back function. Try the following experiment: Play about a dozen moves in a normal game. Then, after the computer has made a move, retract this move on the board (more precisely: press down the piece that has just moved and then press it down on the square from which it came). The computer understands your intentions and retracts the move in its memory. You can take back as many moves as you like in this way. To resume play just enter a new move, or press **PLAY** if it's the computer's turn to make a move.

There is another way to retract moves. First press **ANALYSIS**. If you now press the key marked  $\ominus$  the computer will show you the last move that was made in the game on the LCD, thus helping you to retract it on the board. Press  $\ominus$  again to take back the move.

If you keep pressing  $\ominus$  the moves will only be retracted on the LCD chessboard. In this way you can go all the way back to the beginning of the game without moving any pieces on the sensor board. Press **FUNCTION**,  $\oplus$  to return to the current position quickly.

Press **NORMAL** to leave analysis mode and return to normal play (the MODE light turns green).

### 4.2 Replaying the game

After taking back moves it is easy to play them forwards again. Just press **ANALYSIS** and then the key marked  $\oplus$ . The computer will show you which moves were made on the LCD without playing them on the sensor board. A double beep will tell you when you have reached the last move of the game. To return to normal play, press **NORMAL**.

You can use analysis mode to replay an entire game. Set up the initial position and press **NEW GAME** and **ANALYSIS**. If you now press  $\oplus$  the computer will show you the first move of the previous game. Keep pressing  $\oplus$  to play through the entire game, move for move (here, too, you can press **FUNCTION**,  $\oplus$  to jump to the final position quickly). If you want to stop at any stage (e.g. to try a better continuation), just press **NORMAL**. The MODE light turns green and you can play on from the current board position against the computer.

### 4.3 Marking positions

Apart from the functions described above you can also "mark" positions in a game so that you can jump to them later on. This is useful if, for instance, you wish to return to a crucial point in the game later on. Press **ANALYSIS** (MODE light yellow) and then **FUNCTION**, **SET UP** to mark the position during the game. Press **NORMAL** and continue the game in the normal fashion. Of course you can also mark a position when replaying a game in Analysis mode — you only need to press **FUNCTION**, **SET UP** to mark it.

When you wish to return to a marked position you can do so by pressing **FUNCTION**,  $\oplus$  or  $\ominus$ . If no positions are marked then the computer will jump to the final or the initial position respectively.

### 4.4 Summary of all Functions

**ANALYSIS** — Switch to Analysis mode (MODE light turns yellow)

After that in Analysis mode:

$\oplus$  — Play move forwards

$\ominus$  — Take back (retract) move

**FUNCTION**, **SET UP** — Mark position

**FUNCTION**,  $\oplus$  — Jump to the marked position (if none marked to the final position)

**FUNCTION**,  $\ominus$  — Jump to the marked position (if none marked then to initial position)

**NORMAL** — Return to normal play (MODE light green)



#### 4.5 Further uses of Analysis mode

Analysis mode has a number of interesting uses. For instance it allows you to enter moves or force the computer to play a certain continuation. Say you want to try an opening the computer refuses to play of its own accord. Press **NEW GAME** and **ANALYSIS**, and then start entering moves for both sides. You will notice that the computer does not try to find countermoves but just keeps track of the moves you play on the board, making sure that all of them are legal. The LCD will show the move number and the move made. Once you have reached the position you want, press **NORMAL** and play on as usual against the computer.

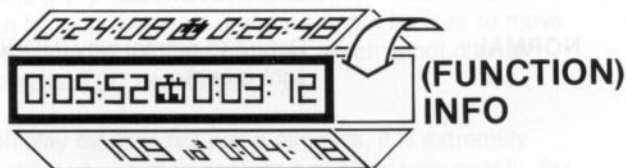
You can use this feature to enter entire games — e.g. the games from the last World Championship Match — and store them in the computer's permanent library (see chapter 7 of this manual). It is also useful when you are playing a game against a friend and want the computer to act as referee and adviser. Just switch to analysis mode and play the game on the sensor board. The computer will monitor the game, making sure that nobody cheats. If either side needs help, you can always press **PLAY** and allow the computer to suggest the next move, then **ANALYSIS** to resume as before.

### 5. Information from the computer

What move is your opponent considering? What does he think of the current position? Hardly questions you can ask a human player during a game. But your Kasparov Simultano will not object. In fact it will give you a wealth of information on its "thought process". It will show you which move it is presently considering, what continuation it expects after that, its evaluation of the position, the depth of its search, and a lot more. This is not just of passing interest — it can help you to learn more about the game.

#### 5.1 Info 1 — Elapsed time

When you are playing against the computer you will notice that, in the line below the LCD chessboard, the time that has been used up by each side is normally displayed. For instance if you see



this means that White has used up 5 minutes and 52 seconds for all his moves so far, and Black 3 minutes and 12 seconds. The little picture of a chess clock with the left button raised means that White's clock is running (i.e. it's his turn to move).

Both clocks are set to "0:00:00" when you press **NEW GAME** and Black's clock is started as soon as White has entered his first move. If a game is interrupted with **STOP** then both clocks are frozen until the computer is restarted with **GO**.

#### 5.2 Info 2 — Remaining time

If you press the **(FUNCTION,) INFO** key during a game the "elapsed time" display will disappear and the info line below the LCD chessboard will display the time remaining for each side. Of course this is not relevant for all levels (e.g. casual play, analysis, problems), and in these cases a flashing "0:00:00" will be displayed.

The Info 2 display is particularly useful in the C1 to C8 levels, in which all moves must be made within a given time limit and acts as a "countdown clock".

#### 5.3 Info 3 — Main variation

Pressing **(FUNCTION,) INFO** a second time displays the "main variation", i.e. the best sequence of moves the computer has found for both sides. While it is thinking it shows you which move it is considering, what it expects you to reply to that move, what it intends to play, etc. You can watch the pieces move on the LCD chessboard.

#### 5.4 Evaluation

At the end of the main variation the computer displays the depth and the evaluation. The evaluation display is in 100ths of a pawn (e.g. "2:00" means that it thinks that White is the equivalent of two pawns ahead). A minus sign in front of the value means that Black is leading.

#### 5.5 Freezing the Info display

If the information supplied in Info 3 is coming too fast, you can always "freeze" it by pressing **⊕**. This will cause the computer to show you only the first move (the one it is considering). Press **⊕** again to see the next move. You can cycle through the information display manually at any speed you want. Pressing **⊖** naturally takes you back one step.

So, in the main variation display, pressing **+** displays only the first move of the main variation. In this state the computer will beep every time it changes its mind. And pressing **-** gives you an instant position evaluation. You can watch the evaluation change as the search progresses.

## 5.6 Unfreezing the Info display

Pressing **(FUNCTION,) INFO** when the display in Info 3 has been "frozen" will cause this display to return to cycling mode. (Pressing **(FUNCTION,) INFO** in Info 3 when the display is not frozen will move the display to Info 4.)

## 5.7 Info 4 — Depth of search + anticipated next move + evaluation

Pressing **(FUNCTION,) INFO** again displays the depth of search, the first move of the main variation, and the evaluation of the current position. This is a display that many people find most convenient. Depth of search means: to what depth it has examined all possible continuations: "3:" = Full-width search to three ply. Note this means it has looked at every possible continuation to this depth, but at the same time it looks at certain important variations much deeper than the full-width display indicates.

## 5.8 Info 5 — Number of positions + time

Pressing **(FUNCTION,) INFO**, the computer will tell you how many positions the computer has generated and evaluated in the current search, and how much time it has spent doing this. Large position counts are shown in thousands, so that 167 10<sup>3</sup> means that the computer has looked at 167,000 positions.

## 5.9 Changing the Info display

Once chosen any of the above Info displays will remain active until you change it by pressing **(FUNCTION,) INFO**. In fact the Info display will remain intact even after you press **NEW GAME**.

## 5.10 An experiment with Info

Press **NEW GAME** and **ANALYSIS**, and then enter the following moves: 1.e2-e4 e7-e5 2.Ng1-f3 d7-d6 3.Bf1-c4 h7-h6 4.Nb1-c3 Bc8-g4. Now set the computer to level A8 and press **PLAY**, and then **(FUNCTION,) INFO**, **(FUNCTION,) INFO...** until Info 3 (the main variation) is displayed. Press **+** to freeze the first move. You can watch how the computer keeps changing its mind until it finds the killer: 5.Nf3xe5! You should also press **-** occasionally to see how the evaluation changes, or just **(FUNCTION,) INFO** to cycle through the entire variation.

Experiment with the position above to find out why the white queen may not be captured after 5.Nf3xe5. If you play 5...Bg4xd1 for Black the computer will immediately show you why it was advocating another move in its main variation.

## 5.11 Hints from the computer

Even after it has played a move the computer will remember the rest of the main variation and display it if you wish. Set the display to Info 3 or 4 to find out which was the best reply the computer found for you. This is a "hint" which you can consider as advice from the computer, so avoid looking at the display if you wish to play all on your own.

**Note:** When the computer is playing on its openings library and not actually computing moves, it will not be able to give you any hints Press **PLAY** if you want the computer to make the next move for you.

## 5.12 Information while solving problems

On the problem solving level B8 the computer is looking only for a forced mate and will not display a main variation while it is computing. Only the depth of search and the elapsed time are of relevance here. However, if you call up Info 3 after it has found the mate it will show you the main variation all the way to mate on the LCD chessboard.

# 6. Verifying and setting up positions

In this chapter you will learn two important things: how to check whether all pieces are correctly located on the board, and how to set up special positions.

## 6.1 Verifying board position

It may sometimes happen that you have upset the pieces on the board or for some other reason are not sure that the position is correct. In such cases you can always verify the board position in the LCD chessboard display. But there is also another method.

Just press one of the piece keys. The computer will use the board lights to show you where that piece is located on the sensor board. Press the same piece key again to find further pieces of the same kind. When there are none left the computer will turn off the board display. You can check other pieces by pressing the appropriate piece keys, in any order you like. To change colors press **TAB/COLOR**. To return to normal play press **NORMAL**.

Note that when the computer is showing you the location of a piece the piece type and its coordinates are shown in line below the LCD chessboard.

## 6.2 How to change the board position

This is very easy. First press **SET UP** to put the computer into set up mode (the MODE light turns red and you will see "SETUP" in the LCD display). You can now remove or add pieces at will:

- To **remove a piece** simply press it down on its current square and remove it from the board. Note that it also disappears in the LCD chessboard display.
- To **add a new piece** first select the color (by pressing **TAB/COLOR** if necessary). Now press the appropriate piece key and press the new piece on an empty square. Watch the piece appear on the LCD chessboard.

Make sure that the WHITE or BLACK lights correctly indicate the side to move next before you return to normal play by pressing **NORMAL**.

Try the following experiment: Press **NEW GAME** and **SET UP**. Now press the black queen down on its square and remove it from the board. Press **NORMAL**. The familiar new game signal (low-high-low-high) will tell you that the computer has accepted the position. It will play the game without its queen (this is known as a "queen-odds" game). Try adding a second black king to the position. When you press **NORMAL** you will hear an error beep (high-low) indicating that the computer does not accept the illegal position.

## 6.3 Setting up a special position

To set up a special position which contains only a few pieces, it is better to start from scratch. Press **FUNCTION, NEW GAME** in SET UP mode. This clears the board of all pieces. You can then enter the position as described above.

**Example:** To set up a "white to move" position with white king on E1, white rook on A1, black king on D5, and black rook on B2. First press:

**NEW GAME, SET UP** — Setup mode (MODE light red)

**FUNCTION, NEW GAME** — Clear board

**TAB/COLOR** — (if necessary) to turn the WHITE light on

Press the king key and then press the white king down on E1.

Press the rook key and then the white rook on A1.

**TAB/COLOR**

— turns the BLACK light on

Press the king key and then the black king on D5.

Press the rook key and then the black rook on B2.

**TAB/COLOR**

— WHITE light on = White to move

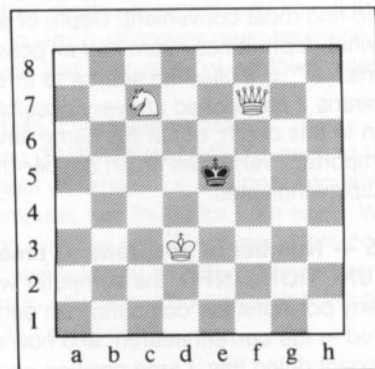
**NORMAL**

— return to normal play mode

**Note:** In the above position the computer will permit castling. If you press **PLAY**, it will castle and capture the black rook on the next move!

## 6.4 Chess problems

Your Kasparov chess computer has a special problem mode (level B8) in which it will solve chess problems. Here's an example:



Problem by William A. Shinkman  
White to play and mate in 3 moves

Enter this position as described in the last section (**NEW GAME, SET UP, FUNCTION, NEW GAME**, key, press the white king on D3, key, white queen on F7, key, white knight on C7, **TAB/COLOR**, key, black king on E5, **TAB/COLOR, NORMAL**).

In this position White has an overwhelming material advantage and there is no doubt that he can easily mate the black king. But whereas in chess the ultimate aim is to checkmate the opponent, the goal in chess problems is to checkmate the opponent in a given number of moves!

The problem requires that White mate on his third move at the latest, against any defence by Black. The solution is not easy to find and, unless you are an experienced problem solver, you may not find it at all. For the computer it is trivial. Set level B8 and press **PLAY**. In just a few seconds it will show you the startling solution: 1.Nc7-a8!, the only move that leads to mate in three. You can try to defend the position for Black by entering moves as usual. The computer will continue playing the checkmating side until the game is over. Or you can just switch to Info 3 to see the main variation: 1...Ke5-d6 2.Kd3-d4 Kd6-c6 3.Qf7-d5 mate.

Chess problems such as the above are generally found in newspapers and magazines and usually adhere to certain fixed conventions. Unless otherwise stated, the problem will always require White to play and deliver mate in a certain number of moves against any defence Black may put up. The caption to the diagram may be as in our example, or it may simply say "Mate in three" or "Mate in four".

## 7. The programmable library

Your Kasparov chess computer has some memory features that are quite exceptional in the chess computer world. As we have seen (in section 1.9) it remembers the board position and the entire game even when you switch it off by pressing **STOP**. You can resume play exactly where you left off, weeks or even months later. But this is not just possible for one game only. You can save a large number of games in the built-in programmable library in a truly unique fashion.

### 7.1 Storing a game in the library

Let us assume you have just finished playing a fine game against the computer and think you might want to take another look at it later. Well, then store it in the computer's programmable library! First press **LIBRARY** to get into library mode. The MODE light and two board lights will flash (the MODE light in red). The computer is offering you a memory "slot" for the game. If you have not yet stored any games, it will flash the square A1. This is also displayed in the LCD. Press **FUNCTION**,  $\oplus$ . The board lights will turn steady to indicate that the computer has stored the game in slot A1. Press **NORMAL** to exit library mode.

You can save not only the games you play against the computer but also ones you input manually (see section 4.5). You can also store special openings, positions, or chess problems, including their solutions. Whatever you put into a memory slot is stored permanently and will not be lost even when you switch the computer off.

### 7.2 The memory banks

When putting a game into the programmable library, you do not, of course, have to accept the memory slot the computer is offering you. Using  $\oplus$ ,  $\ominus$  and **TAB/COLOR** (in library mode) you can choose any of the 64 squares of the chessboard to store your game. Just make sure the slot you are using is empty, i.e. that the red board lights are flashing.

The computer can store a total of 3,000 half-moves — which certainly adds up to a lot of games. To make it easier for you to classify and keep track of them, there are six memory "banks".

When you first pressed **LIBRARY** you may have noticed that the king symbol was displayed in the LCD, together with the slot the computer was offering you. This meant that you were in bank 1 (or the "king's bank"). By pressing **FUNCTION** and one of the other piece keys you can switch to any of the other five banks. Each has 64 slots of its own, which adds up to six times 64 slots. However, the first eight slots in the pawn bank are reserved for simultaneous games (see section 8.3) and the last slot (h8) of the pawn bank is also reserved for the computer, so don't store any games there.

You will appreciate this system of banks and slots when you begin storing large numbers of games and positions. You might put the games you play against the computer in the king's bank, famous games in the Queen's bank, chess problems in the Bishop's bank, etc. Or if you want to build up an extensive openings library (see section 7.4) you might store all king-pawn openings in the king's bank, queen-pawn openings in the Queen's bank, etc. It is advisable to keep a note of where you store anything, e.g. "Queen's bank, E1: First game of the 1985 World Championship Match between Kasparov and Karpov".

### 7.3 Retrieving games

So how do you recover a game that you have stored in the library? First press **LIBRARY** and then, if necessary, **FUNCTION** and a piece key to get into a specific memory bank. Now use **TAB/COLOR**,  $\oplus$  and  $\ominus$  to go to the slot you want. The board lights should be steady to indicate that there is actually a game stored there. Press **FUNCTION** and **NEW GAME**. This loads the game into current memory and you can play through it by pressing **ANALYSIS**,  $\oplus$ .



There is another way to find a game in the library. Say you remember the first few moves of a game you want to retrieve. Enter these moves in analysis mode and then press **LIBRARY**. The computer will look for the game that contains these moves and show you the bank where it is stored. Press **NORMAL** and the rest of the game is copied into current memory. You can play through it by pressing **ANALYSIS**,  $\oplus$ .

If there is more than one game that matches your moves, then the computer will keep pointing to game slots each time you press **LIBRARY**. After the last game it will offer you a free slot (flashing board lights) for the moves you have entered. Press **LIBRARY** again to return to the first matching game.

The above, of course, also applies to positions and chess problems. If you set up and enter a position and then press **LIBRARY** the computer will check to see if the position is already in the library. If it is, the board lights will be steady, and you can press **NORMAL** (or **FUNCTION**, **NEW GAME**) to copy the moves into current memory. If the computer cannot find the position, then it will offer you a slot (flashing board lights) in which you may store it for future use (press **FUNCTION**,  $\oplus$  to do so).

#### 7.4 Storing active openings

As we have just seen, you press **FUNCTION**,  $\oplus$  to store a normal game or sequence of moves. Pressing **FUNCTION**, **TAB/COLOR** instead also stores the game, but with an important difference: The game becomes part of the openings library of the computer! This means that the computer will play the moves of its own accord during normal games.

This function is principally used to extend the computer's built-in openings library. Try the following drastic experiment: Enter the moves 1.e2-e3 e7-e5 2.Bf1-c4 Nb8-c6 3.Qd1-h5 Ng8-f6 4.Qh5xf7 mate and then press **LIBRARY**, **FUNCTION**, **TAB/COLOR**. If you now start a new game with the move 1.e2-e3 the computer will play the above sequence of moves, allowing you to mate it in four moves. This is a mean trick to play, but it serves to illustrate how you can store openings that become active in normal play.

#### 7.5 Deleting games

You will probably want to delete the above "opening" as quickly as possible. Or you might have filled up the computer's memory completely — that should take you quite a while! — and are unable to store any more games (you will get an error signal if you try). So you must delete some that are no longer of interest. Or perhaps you will want to "tidy up" occasionally and get

rid of some of the games you have stored. To do so, go into Library mode, choose the memory slot of the game you wish to delete, and then press **FUNCTION**,  $\ominus$ . The board lights will start to flash, indicating that the slot is now empty.

#### 7.6 Things to remember

Here's a short summary of the commands in Library mode:

- LIBRARY** — enter library mode (MODE light flashes red)
- FUNCTION**, piece key — choose bank
- TAB/COLOR**,  $\oplus$  or  $\ominus$  — choose memory slot
- If the board lights are flashing, then the slot is empty, if they are steady then there is a game in the slot.
- FUNCTION**,  $\oplus$  — copy the current game or position into that slot
- FUNCTION**, **TAB/COLOR** — copy the current game into that slot and make it part of the computer's openings library
- FUNCTION**, **NEW GAME** — make the game stored in that slot the current game
- FUNCTION**,  $\ominus$  — delete game stored in that slot
- NORMAL** — return to normal play
- If you have made some moves in a game or entered a special position:
  - LIBRARY** — search for a game that matches the moves or the position
  - NORMAL** — add the rest of the moves to the current game

## 8. Simultaneous games

There is one more feature that makes your Kasparov Simultano quite unique — and gives it its name. The computer is able to play a number of games simultaneously, just like a Grandmaster giving an exhibition. In such simultaneous displays the master walks from one board to the next, and whenever he approaches a board the opponent makes his move. The master then considers briefly, plays his reply and moves on to the next board. Usually the master has the white pieces on all boards.

### 8.1 Marking simultaneous games

The simultaneous games played by the computer are always stored in the slots A1 to A8 of the pawn bank (see section 7.2). The computer can play up to eight games at the same time. To mark a game for simultaneous play you must store it with the following key combination in one of these slots: **LIBRARY, FUNCTION, pawn key, FUNCTION, ⊕**. You can include any game that is in progress or a new game (initial position) in this way.

### 8.2 Starting simultaneous play

Simultaneous play is started by pressing **NORMAL, FUNCTION, LIBRARY**. The computer switches to the first marked game and plays a move there (on the LCD chessboard). As soon as you have entered your reply (on the sensor board) it switches to the second marked game and plays a move there.

So the computer moves from board to board, displaying the current position on the LCD and executing moves on each of them. In this way it can play against a number of opponents, each of whom can use a traditional board to keep track of the position. Or one person can play several games against the computer simultaneously.

If you use **PLAY** (in Simultaneous mode) to change sides with the computer, then it will not automatically switch to the next board after it has made its move until you have entered your reply.

Press **FUNCTION, LIBRARY** to switch to the next board when the current game is ended.

### 8.3 Setting up eight games quickly

If you want to set up eight simultaneous games quickly you can do so by pressing **NORMAL, FUNCTION, NEW GAME**. This marks all games in the slots A1 to A8 of the pawn bank as simultaneous games. The computer will make its first move for white in the first game. As soon as you have entered your reply (on the sensor board) it switches to the second marked game and plays a White move there.

### 8.4 Levels of skill in simultaneous play

Simultaneous games can only be played on casual levels (A1 to A8). If a different level was set when simultaneous play was started the computer will automatically switch to level A4. All simultaneous games are played on the same level.

### 8.5 Terminating simultaneous play

This can be done at any stage by simply pressing **NEW GAME**. Since the simultaneous games are still stored in the library slots you can always return to them by pressing **NORMAL, FUNCTION, LIBRARY**. To delete a game press **LIBRARY, FUNCTION, pawn key**, then select the game square to be deleted (**⊕ / ⊖**, **TAB/COLOR**), then **FUNCTION, ⊖**.

### 8.6 Summary of simultaneous functions

<b>LIBRARY, FUNCTION, pawn key</b> (with <b>⊕ / ⊖</b> if necessary):	Identifies game square to store simultaneous game in (press <b>FUNCTION, ⊕</b> , to store game)
<b>NORMAL, FUNCTION, NEW GAME:</b>	sets up eight games (library slots A1 — A8 in the pawn bank) for simultaneous play. Starts simultaneous play
<b>NORMAL, FUNCTION, LIBRARY:</b>	Start simultaneous play

## 9. Technical specifications

### 9.1 Changing the batteries

Weak batteries should be replaced promptly as they might leak and cause damage to the computer. One set of alkaline batteries will give you about 100 hours of play. When batteries are low, a "B" will appear on the LCD display, periodically. This happens several hours before the batteries actually expire, so you have ample time to remedy the situation.

If you have stored games in the user-programmable library, then you should take some precautions when changing batteries. First switch the computer off by pressing **STOP**. Turn your computer over so that the letters "ACL" face you. Have a new set of batteries ready and remove the row of batteries furthest from you and replace them at once with a fresh set. Then replace the row nearest to you. This will ensure that the batteries which power the library memory are not removed for longer than 20 seconds so that the library contents are not lost.



## 9.2 The mains adapter

If you use the optional mains adapter provided by your dealer then you should take the following precaution to ensure that the contents of the user-programmable library are not lost. You should always install batteries in the computer even though you are using an adapter. If you operate your computer without batteries a "B" may appear on the LCD periodically. Whenever attaching the adapter make sure that the computer is switched off. Connect the adapter first to the adapter socket of the computer and then to the mains.

## 9.3 The ACL key

If the computer locks up because of static discharge or some other reason, press **STOP** and then use a paper clip or some other sharp object to press the **ACL** key on the back of the cabinet for a few seconds. Then press **PLAY** and **GO** simultaneously. This resets the computer. It also clears the memory, so that the contents of the user-programmable library are lost.

## 9.4 Care and maintenance

Your Kasparov chess computer is a precision electronic device and should not be subjected to rough handling or exposed to extreme temperatures or moisture. Do not use chemical agents to clean the set as these may damage the plastic.

## 9.5 Technical specifications

Microprocessor:	65C02
Processor speed:	5 MHz
Program memory:	64 Kbytes
RAM memory:	8 Kbytes
LED lamps:	18 red, 1 triple-color
Keys:	21
LCD display:	Full chessboard, Info line
Power consumption:	0.8 W
Battery requirement:	6 "C" cells (type AM2/R14)
Battery life:	100 hours (alkaline batteries)
AC adapter (optional):	9V DC at 200 mA minimum with 2.1 mm ID / 5.5 mm OD plug
Dimensions:	419 x 283 x 37 mm
Weight:	1.4 kg (without battery)
Playing strength:	Less than 2% of all chess players can be expected to beat the Simultano. With practice you could be one of them!

Saitek reserves the right to make technical changes without notice in the interest of progress.

## 9.6 Troubleshooting guide

SYMPTOMS	POSSIBLE CAUSES	WHAT YOU SHOULD DO
1. The computer does not work with batteries.	Batteries not inserted properly.	See Fig 1.
	Power reset problem.	Press <b>ACL</b> key (see section 9.3).
2. The computer keeps beeping, does not play moves.	Batteries weak or bad.	Replace batteries (see section 9.1).
3. Computer does not work on adapter.	Wrong adapter type, voltage rating, etc.	Check with dealer. Use Saitek recommended adapters only.
	Defective adapter.	If the computer works on batteries but not with the adapter then the latter is probably defective. Send it to the service centre.
4. Lights light up together, the computer behaves erratically or "freezes" in the middle of a game.	Power or reset problem, static discharge or mains disturbance.	Unplug adapter, take out batteries, press <b>ACL</b> key, check mains connection (both adapter plugs fit snugly), reinstall batteries and switch on again by pressing <b>PLAY</b> and <b>GO</b> keys together.
5. Light, key or chessboard square does not work.	Defective component or contact.	Consult your service centre.
6. Computer cheats or makes illegal moves.	It has made a special move like — En passant — Castling (king or queen side) — Pawn promotion/ underpromotion	Make sure you are familiar with the chess rules (read the "Rules of Chess" manual). Use the piece keys to check the current board position (see section 6.1), then take back a move and check the previous board position. This will tell you exactly what the computer has done.
	Your board position is not correct, some pieces have been displaced.	Verify the board position (see section 6.1).
7. The computer refuses to accept a move.	You are trying to make an illegal move.	Is it your turn? (look at the color lights) Is your king in check? (CHECK light) Is the game over? (checkmate or draw) Will your move put your king into check? Are you trying to castle incorrectly? (check the rules) Did you move the rook first when castling? Is one of the pieces displaced? (flashing lights for that square).

SYMPTOMS	POSSIBLE CAUSES	WHAT YOU SHOULD DO
8. A pawn moves like a queen (or rook, bishop or knight).	The pawn has been promoted.	Use the piece keys to confirm the board position. Take back moves until before the promotion and allow the computer to make the move again.
9. The king moves like a queen.	King and queen were swapped around in the initial position.	Use the piece keys to confirm the identity of the pieces.
10. Computer will not reply to your moves.	You are in Analysis Mode (see section 4).	Press <b>NORMAL</b> and then <b>PLAY</b> .
	The computer is still thinking (color light flashing).	Press <b>PLAY</b> to interrupt (see section 3.3).
	Level B7 (analysis) or B8 (problem solving) is set (see section 2.4).	Verify the level.
11. The computer is silent.	The sound is off (see section 1.8).	Press <b>SOUND</b> to turn it on again.
12. The computer won't store a game.	The memory slot is occupied (see section 7.2).	Clear the slot (see section 7.5) or choose another slot.
	The library is full.	Delete unimportant games (see section 7.5).
13. Computer makes instant or irrational moves.	Excess time has been accumulated by computer's side.	Press <b>STOP</b> whenever you leave Simultano for any length of time to stop the internal clocks.
14. LCD display difficult to read.	LCD contrast not adjusted or weak batteries.	Adjust the LCD contrast slider to suit your viewing angle. Replace batteries with fresh ones if still out of adjustment range.

Playing against a Kasparov chess computer is an ideal way to learn the skills of chess and improve your game. There are many good books written on chess and the following are some we recommend:

**'HOW TO GET THE MOST FROM YOUR CHESS COMPUTER'**

Julio Kaplan  
R.H.M. Press

**'CHESS OPENINGS (BCO)'**

Garry Kasparov & Raymond D. Keene  
Batsford Books

**'LEARN FROM THE GRAND MASTERS'**

Raymond D. Keene  
Batsford Books

**'OPENING REPERTOIRE FOR WHITE'**

Raymond D. Keene  
Batsford Books

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## Authorized Service Centers

### AUSTRIA

Kasparov Chess Computer Center  
Theuretzbacher & Co.  
Sonleithnergasse 20  
A-1100 Wien

### AUSTRALIA

Kasparov Chess Computer Center  
Wheelite Pty. Ltd.  
16 Hertford Crescent  
Wheelers Hill 3150  
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Kasparov Chess Computer Center  
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### FRANCE

Kasparov Chess Computer Center  
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Parc d'Activités des Doucettes  
F-95140 Garges-Les-Gonesses

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Duisburger Straße 57  
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### HOLLAND, BELGIUM, LUXEMBOURG

Kasparov Chess Computer Center  
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### HONG KONG

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Bondwell Trading Limited  
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414 Kwun Tong Road  
Kwun Tong, Kowloon

### ITALY

Kasparov Chess Computer Center  
Intelligent Games Srl.  
Via Germanico 107  
I-00195 Roma

### JAPAN

Kasparov Chess Computer Center  
Sakura Trading Co., Ltd.  
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3-3, Yanagibashi 1-chome  
Taito-Ku  
Tokyo

### NEW ZEALAND

Kasparov Chess Computer Center  
Commodore Computer (NZ) Limited  
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Takapuna  
Auckland

### SAUDI ARABIA

Kasparov Chess Computer Center  
Universal Electronics Apl.  
P.O. Box 2154,  
Al-Khobar 31952

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\*\*Service Centers are correct at the time of going to press but may change from time to time.\*\*