

KASPIANO

PRESIDEN

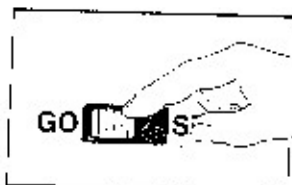
QUICK START

To play a game right away, without reading the entire manual first, simply follow these Quick Start steps!

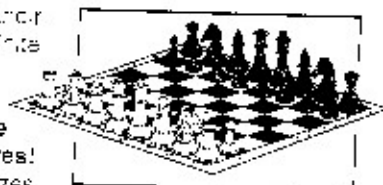
- 1** Insert 6 C (Type AM2/R14) batteries into the computer, making sure to observe the correct polarity. Use alkaline batteries for longer battery life (up to 150 hours).



- 2** Press **GO/STOP** to turn the computer on. If the computer does not respond, press into the hole marked **ACL** on the back of the unit, as described in Section 1, Step 2.

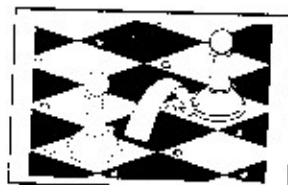


- 3** Set up the pieces in their initial position with the White pieces closest to you. **Important: Make sure that all the pieces are centered on their squares!**



Once the computer realizes that you are setting up the starting position, it automatically resets itself for a new game, just like magic!

- 4** Enter moves by moving the pieces on the board, just as if you were playing on a normal chessboard—no need to press down on the squares! A beep will sound as the computer registers your move.



- 5** When the computer makes its turn on board, lights indicate its move—the light in the **from** square dims or steadily, and the light in the **to** square flashes. Pick up the indicated piece and move it on the board to complete the computer's move.



Make your next move as described above. Enjoy your game!

Important: The above steps describe the basic operation of your computer without the Controller unit. To attain the Controller and begin taking advantage of all the extra features it offers, please refer to **Section 1, GETTING STARTED.**

A message from...
GARRY KASPAROV
WORLD CHAMPION

Dear Fellow Chess Player:

After computers were first created, just a few 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 a few years there will be a computer in almost every household.

Saito 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 enjoyment for the entire set. The rapid advance of technology and programming skills have certainly changed that. Today chess computers have become an accepted part of the chess world, solving 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 you alert even if you go on to learn a top class player.

Saito has been at the forefront of this development and has been responsible for many of the most interesting developments in the chess computer industry under Swiss management, and I look forward to a long and productive relationship with Saito and with you that have opened the horizons.

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

Good Luck!

Garry Kasparov

***KASPAROV* PRESIDENT CHESS**

INSTRUCTION MANUAL

TABLE OF CONTENTS

KEYS AND FEATURES

INTRODUCTION

The Chess Rules

1. GETTING STARTED

- 1 First, Install the Batteries
- 2 Plug the Controller In, Turn The Unit On
- 3 Set Up The Board (And Center Those Pieces!)
- 4 Ready to Play? Here's How To Move
- 5 The Computer Makes Its Move
- 6 Whose Turn? You Can Tell At A Glance!
- 7 Change Your Mind? Use Take-Back!
- 8 Game Over? Start A New Game Anytime

2. ADDITIONAL FEATURES

- 2.1 Capturing and Special Moves
 - En Passant
 - Castling
 - Pawn Promotion
- 2.2 Illegal Moves/Wrong Moves
- 2.3 Check, Mate and Draw
- 2.4 Terminating the Computer's Search
- 2.5 Changing Sides with the Computer
- 2.6 Playing Black From the Bottom
- 2.7 Openings Library
- 2.8 Thinking on the Opponent's Time
- 2.9 Game Memory
- 2.10 LCD Chess Symbols

3. LEVELS OF SKILL

- Setting a Playing Level
- 3.1 Normal Playing Levels
 - 3.2 Tournament Levels
 - 3.3 Speed Chess Levels
 - 3.4 Fun Levels
 - 3.5 Infinite Level
 - 3.6 Problem Solving Levels
 - 3.7 Training Levels

4. GAME INFORMATION

- Using Info Mode
- 4.1 Principal Variation
 - 4.2 Search Information
 - 4.3 Chess Clocks
 - 4.4 Move Count
 - 4.5 Move Suggestions

5. VERIFYING/SETTING UP POSITIONS

- 5.1 Verifying Board Positions
- 5.2 Changing and Setting Up Positions

6. GAME OPTIONS

Selecting Game Options

6.1 Operation Mode Options

- Auto Answer
- Sound
- Silent Mode
- Coach Mode
- Ticking Clock
- Countdown Clock
- Test Program
- Auto Power Down

6.2 Playing Mode Options

- Selective Search
- Easy Mode
- Random Mode
- Book On/Off
- Full Opening Book
- Passive Opening Book
- Active Opening Book
- Tournament Opening Book

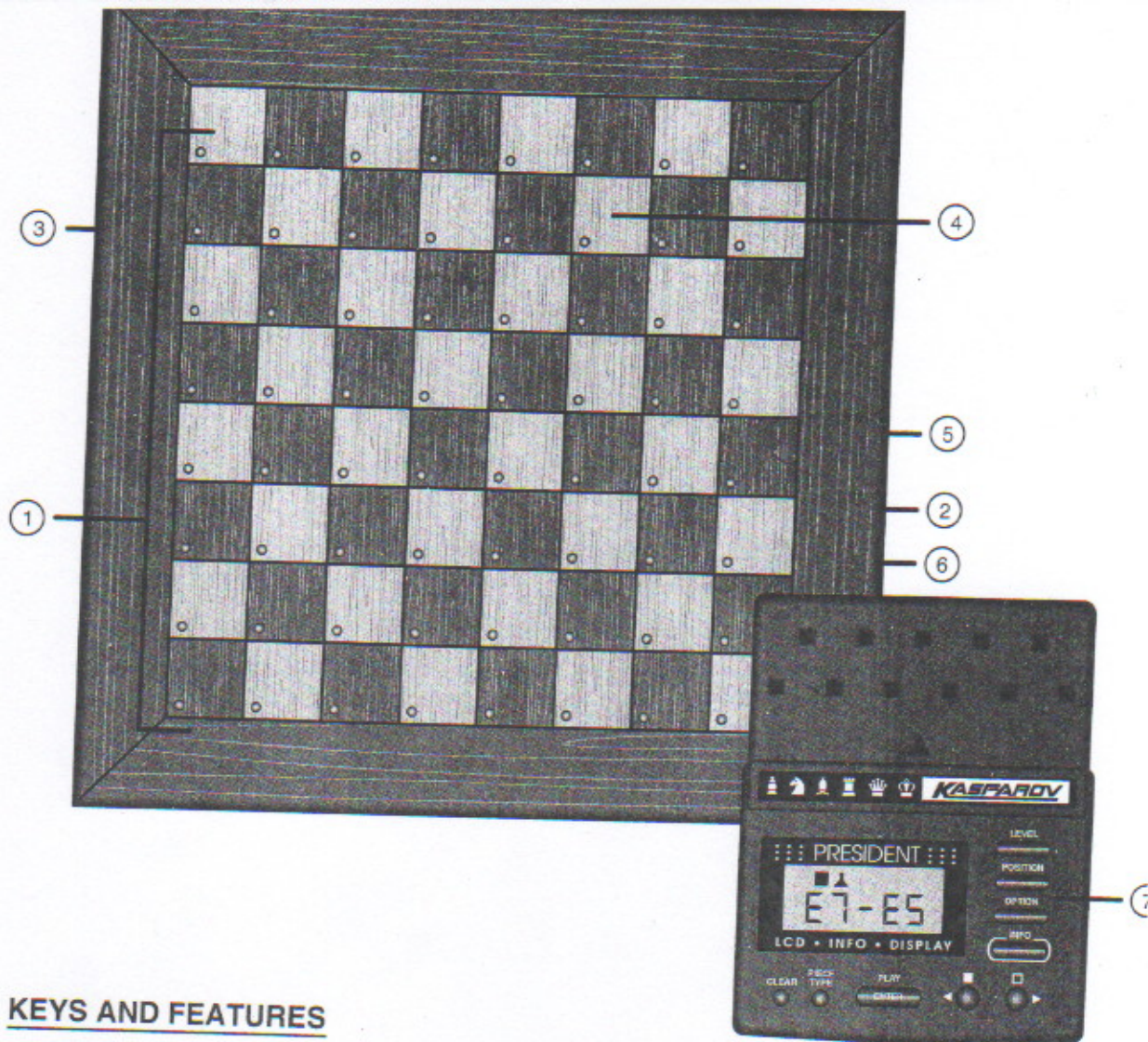
6.3 Rotating Display Options

7. TECHNICAL DETAILS

- 7.1 The **ACL** Function
- 7.2 Care and Maintenance
- 7.3 Technical Specifications

TROUBLESHOOTING GUIDE

The Chess Rules



KEYS AND FEATURES

1. **BOARD LIGHTS:** Used to indicate game moves, take back moves, and verify or set up board positions. Also used to show when the computer is searching, display blunders and warnings in Coach Mode, and more.
2. **ACL:** On back of unit. Press a pin into this hole to reduce static discharge after inserting new batteries.
3. **BATTERY COMPARTMENT:** On back of unit. Uses six "C" (Type AM2/R14) batteries. Always keep fresh batteries in the unit, even when using a mains adapter, so that game memory is preserved.
4. **SENSOR CHESSBOARD:** Each square contains a sensor that registers piece movement automatically, without any need to press down on the squares.
5. **MAINS ADAPTER SOCKET:** Socket for the optional Saitek mains adapter, which may be purchased from your authorized dealer.
6. **GO/STOP:** Press to turn the computer on/off. When turned off, computer retains current position in memory.
7. **DETACHABLE CONTROLLER:** Plugs into the front of the chess computer. Provides an exceptional variety of additional features and game options.
 - a. **LCD DISPLAY WINDOW:** Used for showing moves and game information. Also used for level selection, piece verification, position set-up, option selection, rotating display, and other game information.
 - b. **LEVEL KEY:** Press to enter Level Mode. Within Level Mode, press to skip over 8 levels at a time.
 - c. **POSITION KEY:** Press to enter Position Mode (to set up or change board positions).
 - d. **OPTION KEY:** Press to enter Option Mode.
 - e. **INFO KEY:** Press to enter Info Mode (to display game information and watch the computer think).
 - f. **WHITE & BLACK/ARROW KEYS:** Press to change levels one at a time in Level Mode, and to cycle through options in Option Mode and Info Mode. Also used to select the color in Position Mode.
 - g. **ENTER/PLAY KEY:** Press to change sides with the computer; press while the computer is thinking to force it to move. Also used to enable/disable options in Option Modes, and to exit Level Mode after changing levels. Press together with **CLEAR** to reset for a new game. Press twice to clear the board in Position Modes.
 - h. **PIECE TYPE KEY:** Press to verify board positions, set up positions, and promote pieces.
 - i. **CLEAR KEY:** Press together with **ENTER** to reset the computer for a new game. Press to exit Option Mode and Verify Mode. Press to exit Level Mode without changing the level. Press once to exit Position Mode.

INTRODUCTION

Welcome to the exciting world of computer chess! We are very pleased that you have chosen Saitek's Kasparov President Chess as your new partner and opponent! This unique computer is extremely easy to operate, allowing you to play chess as naturally as you would on a normal chessboard—yet it also offers a great variety of options to help you enjoy the game.

President Chess can be used with or without its detachable Controller unit. Without the Controller, the computer performs all the functions required for basic chess play. With the Controller attached, you open up a whole world of additional features and options that will delight chess players of every age and skill level.

Just Look At All these Special Features!

- Large, luxurious wood cabinet houses strong chess computer, rated at 2220+ by the United States Chess Federation
- Built-in magnetic reed switches automatically sense which piece you are moving—no need to press down on the squares
- Detachable Controller unit with built-in LCD display allows you to access a great number of exciting game options
- Display shows game information, including position evaluation, principal variation, search depth, number of moves searched, and more
- Programmable rotating display option
- Choice of search methods—Selective Search or powerful Brute Force Search
- Large, user-selectable openings library with Automatic Transposition Manager
- User-selectable playing modes
- 64 bright board lights—one on each square
- Coach Mode allows you to learn as you play, even gives blunder and capture warnings
- 64 playing levels, including Training, Speed Chess, Tournament, Problem Solving, and even special Fun Levels just for beginners
- Chess Clocks with countdown feature and unique ticking clock sound option
- Knows all the rules of chess: Castling, pawn promotion and underpromotion, en passant, stalemate, 50-move rule, 3-fold repetition
- Computer thinks on your time for stronger play, or use Easy Mode to turn this feature off
- Verify and set up chess positions and problems
- Take back up to 64 ply
- Play against another person with the computer acting as referee and keeping track of the time
- Solves up to mate in 8 moves
- Automatic power down with memory retention

The Chess Rules

President Chess knows all the rules of chess, including castling, pawn promotion, en passant, and various draws. If you are not familiar with the game, turn to the back of the manual for an overview of the rules. Additional information may be found in your local library, which is sure to have books on the subject.

1. GETTING STARTED

IMPORTANT...

The Quick Start section at the beginning of this manual provides an introduction to the basic operation of Kasparov President Chess—it describes how to get right into a game of chess quickly and easily.

Once you have familiarized yourself with the unit's basic functions and you feel comfortable playing against a chess computer, return to this section for more details on starting up, including how to attach and use the Controller unit.

Finally, go on to the rest of the manual to learn more about the capabilities your new chess computer has to offer. Take your time, study the features at your leisure, and above all, have fun!!

1 First, Install The Batteries

Your computer runs on 6 "C" (AM2/R14) batteries. Use alkaline batteries for longer battery life (up to 150 hours). Make sure the computer is off, then insert the batteries as shown at the front of the manual. To conserve battery power, switch off when you interrupt your game for more than a few minutes. You may also turn on the Auto Power Down option (see Section 6.1) for the computer to turn itself off automatically if no keypresses or moves are made for 15 minutes.

If you would rather not use batteries, you may purchase a Saitek mains adapter from your dealer. Please use only the adapter specified for this computer. The use of any other adapter invalidates the warranty.

IMPORTANT: To ensure that memory contents are not lost, keep good batteries installed even when using an adapter. If batteries are not installed, memory data is lost when you unplug the adapter.

2 Plug The Controller In, Turn The Unit On

WARNING: NEVER INSERT OR REMOVE THE CONTROLLER UNIT WHILE THE COMPUTER IS ON. DOING SO COULD DAMAGE THE COMPUTER!

The Controller input slot is located on the front edge of the unit, on the right-hand side. Pick up the Controller unit and slide it into the slot, pushing it in firmly until it is correctly seated.



Insert the Controller into the computer firmly and evenly.

Next, press **GO/STOP**; a beep signifies that the computer has been switched on. If the unit fails to respond (static discharge could cause it to lock up), insert a paper clip or another sharp object into the hole

marked **ACL** on the back of the unit, and hold for at least one second. This resets the computer.

3 Set Up The Board (And Center Those Pieces!)

After turning the computer on, set up the chess pieces in their starting positions, with the White pieces nearest to you (see the Chess Rules at the back of this manual if you are unsure of the piece positions). Once the computer recognizes that you are setting up the initial starting position, it automatically resets itself for a new game! Alternatively, press **CLEAR** and **ENTER** together at any time to reset the computer for a new game. The New Game sound signifies that the computer is ready to play.

Note a. The computer will not play until all the pieces are centered on their squares. If the H8 Rook is off the board, for example, or if it is too far off-center in its square, the H8 light remains on until you center the Rook correctly.

b. If you are in Position Mode, to reset the computer for a new game you should press **ENTER** and **CLEAR** at the same time. This is also the case when you have exited Position Mode.

4 Ready To Play? Here's How To Move

To make a move, simply pick up your desired piece and make your move on the board. There is no need to press down on the squares—playing chess with this computer is no different from playing on a normal chessboard! After you have moved your piece, a beep indicates that the computer has registered your move. The computer now starts to think for Black.

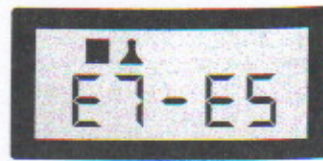
Note: At the beginning of a game, the computer's reply is usually instantaneous on many levels, because it is playing moves which are stored in its openings library (for details, see Section 2.7).

5 The Computer Makes Its Move

When the computer moves, it beeps and turns on board lights to indicate its move—the light in the *from* square turns on steadily, and the light in the *to* square flashes. Its move is also shown in the display window. Pick up the indicated piece and move it on the board to complete the computer's move.



In the above example, the E7 light is on and the E5 light is flashing, indicating the computer wants to move its pawn from E7 to E5. Pick up the computer's pawn and move it to Square E5 to complete its move.



The display shows the color, the piece, and the move.

6 Whose Turn? You Can Tell At A Glance!

When the computer plays, it flashes the light in its King's square while it is thinking, and the display flashes the color symbol for the side-to-move. There's never any question about whose turn it is to move!

7 Change Your Mind? Use Take-Back!

To take back a move for either side, simply retract the move on the board by moving the piece back to the square from which it came. The computer understands your intentions, and takes back the move in its memory. The board lights then indicate the next move that can be taken back. You may take back up to 64 ply (one ply is a move for either side). To resume play at any point, make another move on the board.

Note: After taking back a capture, the computer reminds you to put the captured piece back on the board—the lights for the capture square will come on. The display also indicates the capture square, along with the piece and color symbols for the captured piece. Put the indicated piece back on the board to complete the take-back.

8 Game Over? Start A New Game Anytime

Whenever you finish a game (or if you decide to abort your current game) you may reset the computer to start another game by setting up the pieces in their initial starting position. Alternatively, you may also press **CLEAR** and **ENTER** together at any time to reset the computer for a new game. In either case, the New Game sound signifies that the computer is ready for another game, using the currently set level. Note that the default level setting is Level 4 (5 seconds a move). For information on changing the level, see Section 3.

Note: Setting up a new game position clears the current game from the computer's memory.

2. ADDITIONAL FEATURES

2.1 Capturing and Special Moves

Captures are played on the board exactly as in a normal game of chess—pick up your piece, take the captured piece off the board, and put your piece down on the capture square.

En Passant

In an en passant capture, the computer reminds you to remove the captured pawn by lighting that square. As soon as you remove the pawn, the computer beeps to signify completion of the move.

Castling

The computer automatically recognizes castling maneuvers after the King is moved. After you have moved the King, the computer uses the board lights to

remind you displayed

Pawn Pro

When beeps to in automatic promotion. Simply rep Bishop or specify an the board Press **PIE** symbol sh of your ch immediate thinking at

When its pawn a original st when the r computer Square A& positions. square in Controller shows bot Remember pawn pror

2.2 Illegal

Your If you atte beep, and remains o square to another m

If you square, yc when a m have mov placed pie square for move. If tt the piece Controller computer' window fo

If you after all, p again to c of your ch your whol described

2.3 Check

When the move flashes in checking showing t

If the opponent move has flashes a several se

remind you to move the Rook. Kingside castling is displayed as [0-0], and Queenside castling as [0-0-0].

Pawn Promotion

When a pawn reaches the 8th rank, the computer beeps to indicate that a promotion is taking place, and it automatically assumes you are promoting to a Queen. Simply replace the pawn with a Queen to complete the promotion. If you wish to *underpromote* to a Knight, Bishop or Rook, the Controller must be attached. To specify an underpromotion, first remove the pawn from the board (the display automatically shows a Queen). Press **PIECE TYPE** until your desired promotion piece symbol shows in the display window, and put the piece of your choice down on the 8th rank. The computer immediately recognizes your new piece and begins thinking about its next move.

When the computer's pawn promotes, first pick up its pawn as usual. The computer will then light the original starting square for its chosen promotion piece when the controller is not attached. For example, if the computer is promoting to a Black Rook, it will light either Square A8 or H8, since those squares are original Rook positions. Put a Black Rook down on the flashing square in the 8th rank to complete the move. When the Controller is attached, you will notice that the display shows both the pawn and the promoted piece. Remember to change the piece on the board after a pawn promotion!

2.2 Illegal Moves/Wrong Moves

Your chess computer never accepts illegal moves. If you attempt such a move, the computer sounds a low beep, and the board light for the original *from* square remains on. Move the piece back to its original lighted square to cancel the illegal move indication. Now make another move to continue the game.

If you move the computer's piece to an incorrect square, you will not hear the normal beep that sounds when a move is completed. Instead, the square you have moved to lights up a while under its incorrectly placed piece, then the computer will light the correct to square for you, and the board will not accept any other move. If this occurs, pick the piece up again, and move the piece to that square to complete the move. If the Controller is plugged in and you happen to move the computer's piece incorrectly, simply check the display window for the correct move.

If you pick up a piece, but decide not to move it after all, put the piece back down on that same square again to cancel the input, and then make another move of your choice. If you change your mind after entering your whole move, you must take the move back as described in Section 1.

2.3 Check, Mate and Draw

When a King is in check, the computer first displays the move as usual. After the move is made, **[CHECK]** flashes in the display for a few seconds, along with the checking move. The display then reverts back to showing the clock.

If the computer discovers a forced mate against its opponent, it first displays its move as usual. After the move has been made on the board, the computer flashes a mate announcement along with the move for several seconds (e.g., [**♠** in: 2] for a mate in 2 moves).

The display then goes back to showing the clock. When a game ends in checkmate, the computer sounds a checkmate tone. The display also flashes **[MATE]**, along with the mating move, for a brief time after the move has been made. The display then goes back to showing the clock.

The computer recognizes draws by stalemate, three-fold repetition, and the 50-move rule. If you are unfamiliar with these draws, refer to the Chess Rules section at the back of this manual. After a draw has occurred, the display window shows **[End]**, **[End: 3]**, or **[End: 50]**, depending on the type of draw.

2.4 Terminating the Computer's Search

To interrupt the computer while it is thinking, simply lift up the user's King and put it back down. This forces the computer to play the best move it has found so far. You may also terminate the computer's search by pressing **ENTER** while it is thinking.

This feature can be very useful on some of the higher levels, especially on the Infinite Level, where the computer thinks indefinitely unless you stop it.

2.5 Changing Sides with the Computer

You may change sides with the computer at any time, and as often as you wish during a game. To do so, simply lift the opponent's King and put it back down on the board when it is your turn. The computer beeps and starts flashing the light for the King of the other side, to indicate that it has switched sides and is now thinking about its move for that side. You may also change sides by pressing **ENTER** when it is your turn. The computer will immediately start thinking about the next move for your side.

2.6 Playing Black From the Bottom

You may want to depart from the usual standard and play the Black pieces from the bottom of the board, letting the computer play White from the top. To do this, set up the board for a new game, then press **ENTER**. The computer reverses sides and makes the first move for White from the top of the board. The following diagram shows the initial piece set-up when Black plays from the bottom. Notice, in particular, that the Kings and Queens are positioned differently in this board set-up.

Note: When you play Black from the bottom, the coordination of chessboard is reversed (see diagram below).



Board set-up with Black at the bottom

2.7 Openings Library

At the beginning of a game, the computer's reply is usually instantaneous on many levels. This is because President Chess is playing moves which are stored in its *openings library*. The computer's openings library consists of many positions from grandmaster play. If the current board position is in its openings library, the computer plays a response to that position from its collection of moves, instead of thinking about the move.

The computer's openings library can also handle transpositions. A transposition occurs when a position reached by a certain set of moves can also be reached when those same moves occur in a different order.

Note: This computer has a unique user-selectable book feature, which lets you choose from various types of openings libraries, or even turn the book off, if desired. For details, see Section 6.2.

2.8 Thinking on the Opponent's Time

As you play, you may notice that the computer sometimes replies to your moves instantaneously, even in the middle of games played on the higher levels. This is because the computer thinks on your time, using the time you are contemplating your next move to think ahead and plan its strategies. It tries to anticipate the move you are likely to make, and then calculates its responses for that particular move while you are still thinking. If it has guessed right, there is no reason for it to keep on calculating—it immediately plays the move it has already found!

Note: You may turn this feature off by choosing the Easy Mode option, as described in Section 6.2.

2.9 Game Memory

You may interrupt a game at any time by pressing **GO/STOP**. Play is then suspended, and the computer "remembers" the current position for up to 2 years (with fresh alkaline batteries). When you switch on again, the computer is ready to resume your game.

2.10 LCD Chess Symbols

	BLACK		WHITE
	PAWN		ROOK
	KNIGHT		QUEEN
	BISHOP		KING

3. LEVELS OF SKILL

The Kasparov President Chess has 64 playing levels, including levels for casual play, tournament levels, levels for speed chess and problem solving, and even some special fun levels for beginners. When you set the playing level, keep in mind that when the computer has more time to think about its moves, it becomes stronger and plays better—just like a human chess player!

Important: The Controller must be attached to change playing levels.

Setting a Playing Level

Press **LEVEL** to enter Level Mode, and the

HAVING PROBLEMS? SOME HINTS & TIPS:

• **Is it really your turn to move?** If the board light under the computer's King is flashing, it is the computer's turn, and President Chess is currently thinking about its move. When the Controller is attached, check the color symbol in the display window—if the square for the computer's color is flashing, the computer is currently thinking about its move.

• **Is the computer not responding to your moves?** Make sure all pieces are correctly centered on their squares. If any piece is too far off-center, the computer will not respond until you have corrected the problem by centering the piece.

• **Is a board light on, but you aren't sure why?** As above, a piece may be off-center in its square. When this occurs, the light under that piece remains on until you re-center the piece. A stray light might also indicate that a piece is in the wrong place—use Verify Mode to check the board position (see Section 5.1).

• **Did you execute the computer's last move incorrectly?** If you move the computer's piece to an incorrect square, you will not hear the normal move completion beep. Instead, the square you have moved to lights up a while under its incorrectly placed piece, then the correct to square lights up, and the board will not accept any other move. To rectify this situation, pick up the piece, and move the piece to that square to complete the move. If you have the Controller attached and you move the computer's piece incorrectly, simply check the display window for the correct move sequence.

• **Do you hear a low beep when you try to move?** You are attempting to enter an illegal move. Pick the piece up and move it back to the indicated *from* square again to erase the move, and make a different move. Trust the computer—President Chess knows all the rules and will not allow an illegal move!

• **Are you unsure of the board position? Have some pieces been moved inadvertently?** Use Verify Mode to check the piece positions. For details, see Section 5.1.

• **Is your King in check?** If your King is in check, you must move it out of check before you can make any other move (see the Rules).

• **Computer won't make a move?** The Auto Answer option may be turned off—this option must be turned ON for the computer to respond with its moves automatically (see Section 6.1).

computer
overview (

different le
following s
When

Level 4 (5
[L 0:05].
ARROW I
over 8 lev
desired lev
the compu

Note:
to change
Level Moc

3.1 Norma

TIPS:

ard
), it is
is
re
mbol
re
is

ir
tly
too
nd

er in
der
he
ta
ode
5.1).

love
piece
re
re
ile
a
will

piece
u
re the
k the
ence.

to
egal
to
the
he
rules

Have
/?
ons.

re
ules).

to
tion
spond
6.1).

computer displays the current playing level. For an overview of all 64 levels, refer to the Level Chart. The different levels are also described individually in the following sections.

When the computer is first turned on, it is set on Level 4 (5 seconds a move), and the display shows [L 0:05]. Change the levels one at a time by using the **ARROW KEYS**. As a shortcut, press **LEVEL** to skip over 8 levels at a time. When the display shows the desired level, press **ENTER** to enter your selection into the computer and exit Level Mode.

*Note: If you are verifying the level but do not wish to change levels, press **CLEAR**. This allows you to exit Level Mode without changing the level or clock settings.*

3.1 Normal Playing Levels

LEVEL	TIME PER MOVE	DISPLAY
1	1 second	[L 0:01]
2	2 seconds	[L 0:02]
3	3 seconds	[L 0:03]

4	5 seconds	[L 0:05]
5	10 seconds	[L 0:10]
6	15 seconds	[L 0:15]
7	20 seconds	[L 0:20]
8	30 seconds	[L 0:30]
9	45 seconds	[L 0:45]
10	1 minute	[L 1:00]
11	1.5 minutes	[L 1:30]
12	2 minutes	[L 2:00]
13	3 minutes	[L 3:00]
14	5 minutes	[L 5:00]
15	10 minutes	[L10:00]
16	15 minutes	[L15:00]

The first 16 levels are the normal playing levels. When you pick one of these levels, you are selecting an average response time for the computer.

Note: These times are averaged over a large number of moves. In the opening and endgame, the computer tends to play faster, but in complicated middlegame positions, it may take longer to move.

OVERVIEW OF THE 64 PLAYING LEVELS

30 seconds per move [L 0:30]	15 minutes per move [L15:00]	40 moves in 3:00 [3:00:40]	90 minutes per game [1:30:99]	Infinite Level [9:99:99]	Mate in 8 [♠ in: 8]	Search Depth 8 ply [PLY: 8]	Search Depth 16 ply [PLY: 16]
20 seconds per move [L 0:20]	10 minutes per move [L10:00]	50 moves in 2:00 [2:00:50]	60 minutes per game [1:00:99]	Fun Level #7 [Fun: 7]	Mate in 7 [♠ in: 7]	Search Depth 7 ply [PLY: 7]	Search Depth 15 ply [PLY:15]
15 seconds per move [L 0:15]	5 minutes per move [L 5:00]	45 moves in 2:30 [2:30:45]	45 minutes per game [0:45:99]	Fun Level #6 [Fun: 6]	Mate in 6 [♠ in: 6]	Search Depth 6 ply [PLY: 6]	Search Depth 14 ply [PLY:14]
10 seconds per move [L 0:10]	3 minutes per move [L 3:00]	40 moves in 2:00 [2:00:40]	30 minutes per game [0:30:99]	Fun Level #5 [Fun: 5]	Mate in 5 [♠ in: 5]	Search Depth 5 ply [PLY: 5]	Search Depth 13 ply [PLY:13]
5 seconds per move [L 0:05]	2 minutes per move [L 2:00]	35 moves in 1:30 [1:30:35]	20 minutes per game [0:20:99]	Fun Level #4 [Fun: 4]	Mate in 4 [♠ in: 4]	Search Depth 4 ply [PLY: 4]	Search Depth 12 ply [PLY:12]
3 seconds per move [L 0:03]	1.5 minutes per move [L 1:30]	40 moves in 1:45 [1:45:40]	15 minutes per game [0:15:99]	Fun Level #3 [Fun: 3]	Mate in 3 [♠ in: 3]	Search Depth 3 ply [PLY: 3]	Search Depth 11 ply [PLY:11]
2 seconds per move [L 0:02]	1 minute per move [L 1:00]	35 moves in 1:45 [1:45:35]	10 minutes per game [0:10:99]	Fun Level #2 [Fun: 2]	Mate in 2 [♠ in: 2]	Search Depth 2 ply [PLY: 2]	Search Depth 10 ply [PLY:10]
1 second per move [L 0:01]	45 seconds per move [L 0:45]	40 moves in 1:30 [1:30:40]	5 minutes per game [0:05:99]	Fun Level #1 [Fun: 1]	Mate in 1 [♠ in: 1]	Search Depth 1 ply [PLY: 1]	Search Depth 9 ply [PLY: 9]

NORMAL PLAYING LEVELS
(Average Time Per Move)

TOURNAMENT LEVELS

SPEED CHESS LEVELS

FUN LEVELS/ INFINITE LEVEL

PROBLEM SOLVING LEVELS

TRAINING LEVELS
(Fixed Search Depth)

3.2 Tournament Levels

LEVEL	MOVES	TIME	DISPLAY
17	40	1 hour 30 min.	[1:30:40]
18	35	1 hour 45 min.	[1:45:35]
19	40	1 hour 45 min.	[1:45:40]
20	35	1 hour 30 min.	[1:30:35]
21	40	2 hours	[2:00:40]
22	45	2 hours 30 min.	[2:30:45]
23	50	2 hours	[2:00:50]
24	40	3 hours	[3:00:40]

President Chess has 8 special pre-programmed Tournament Levels. These levels require you to make a specified number of moves within a certain amount of time. If a player exceeds the allotted time for a given number of moves, the computer beeps and flashes [TIME] along with the elapsed time to show that the game is over. If you wish, you may continue to play even after the time has run out.

Note: If you select a Tournament Level, you may want to set the chess clocks to display countdown time instead of the elapsed time (see Section 6.1).

3.3 Speed Chess Levels

LEVEL	TIME PER GAME	DISPLAY
25	5 minutes	[0:05:99]
26	10 minutes	[0:10:99]
27	15 minutes	[0:15:99]
28	20 minutes	[0:20:99]
29	30 minutes	[0:30:99]
30	45 minutes	[0:45:99]
31	60 minutes	[1:00:99]
32	90 minutes	[1:30:99]

On the Speed Chess Levels, you set the total time for the whole game. If the game time is exceeded, the computer beeps and flashes [TIME] (along with the elapsed time) to show that the game is over.

Note: If you select a Speed Chess Level, you may want to set the chess clocks to display countdown time instead of the elapsed time (see Section 6.1).

3.4 Fun Levels

LEVEL	AVERAGE TIME PER MOVE	DISPLAY
33	1 second	[Fun: 1]
34	2 seconds	[Fun: 2]
35	3 seconds	[Fun: 3]
36	4 seconds	[Fun: 4]
37	5 seconds	[Fun: 5]
38	6 seconds	[Fun: 6]
39	7 seconds	[Fun: 7]

These unique "Fun Levels" are especially for beginners. On these levels, President Chess is much more "human" than most chess computers—it gives everyone a chance to win, in a world where chess machines are typically relentless and often difficult to beat. Although the general consensus seems to be that computers never make mistakes, on the Fun Levels, this computer actually does even in Coach Mode! The computer may issue improper warnings.

Various handicaps are built into the Fun Levels, demonstrating some common chess mistakes. If the computer brings out its Queen too early, for example, the beginner can practice punishment of this typical error, thus strengthening his game against the human players he is likely to face. Level 33 ([Fun: 1]) is the weakest level—here the computer actually tries to lose material! Levels 34 and 35 also give away material,

not as consistently. On Levels 36-39, the computer plays more like a beginner who has learned the basics of the game but still makes mistakes (such as leaving pieces unguarded, bringing out the Queen too early, and opening itself up to check and checkmate threats).

3.5 Infinite Level

LEVEL	TIME	DISPLAY
40	Infinite	[9:99:99]

On the Infinite Level, the computer will search indefinitely, until it finds a forced mate or you stop the search by lifting user's King or pressing ENTER. If you halt the search, the computer makes the move it currently thinks is best. You can use this level to have the unit analyze complicated positions for hours or even days!

3.6 Problem Solving Levels

LEVEL	PROBLEM	DISPLAY
41	Mate in 1	[♠in: 1]
42	Mate in 2	[♠in: 2]
43	Mate in 3	[♠in: 3]
44	Mate in 4	[♠in: 4]
45	Mate in 5	[♠in: 5]
46	Mate in 6	[♠in: 6]
47	Mate in 7	[♠in: 7]
48	Mate in 8	[♠in: 8]

If you have a position where there may be a mate and you want the computer to find it, set the computer on one of the Problem Solving Levels. President Chess can solve mates in up to 8 moves. Mates in 1 to 5 are usually found quite quickly, whereas solutions taking 6 to 8 moves may take quite some time.

If there is no mate present or the computer cannot find a mate, it will beep and display [----]. You may continue to play by changing the level and pressing ENTER if a mate is not found.

3.7 Training Levels

LEVEL	DISPLAY	LEVEL	DISPLAY
49	[PLY: 1]	57	[PLY: 9]
50	[PLY: 2]	58	[PLY:10]
51	[PLY: 3]	59	[PLY:11]
52	[PLY: 4]	60	[PLY:12]
53	[PLY: 5]	61	[PLY:13]
54	[PLY: 6]	62	[PLY:14]
55	[PLY: 7]	63	[PLY:15]
56	[PLY: 8]	64	[PLY:16]

On the Training Levels, the computer's search depth is limited to the number of moves corresponding to the currently set level. As you cycle through the levels, the computer displays [PLY: n] for each level. A ply is a half-move (a move for either side), and [n] represents the search depth. For example, on Level 49, the computer searches to a depth of one ply ([PLY: 1]), and thus looks ahead only one move. On this level, therefore, it may overlook a mate. This produces weaker play, giving beginners and average players a better chance of winning.

TIPS

- Are Level restr in we learr For e Easy your
- Are play or th Leve diffic Train dept next! chall
- War Leve the F up to of yc the c

4. GAM

In a r your oppc would you Playing a allows you attached, informati move it is expects a its search can help y

Impo access Ir

Using Inf

You r using Info thinking, y computer deeper. S access In computer taking you Game pressing I

ARROW I informatio the followi

After Section 6.

Rotating the comp informatio every time watch the

Note: when req

TIPS ON CHOOSING A PLAYING LEVEL:

• **Are you a beginner?** Start out with the Fun Levels or lower Training Levels. These levels restrict the computer's search depth, resulting in weaker play, and giving you the chance to learn about the game and perhaps even win! For even more of a shot at winning, turn on Easy Mode, so the computer cannot think on your time! See Section 6.2 for details.

• **Are you an intermediate or advanced chess player?** Try the Normal or Tournament Levels, or the higher Training Levels. The Normal Levels range from easy all the way up to a difficult 15-minute average response time. The Training Levels let you set your desired search depth—as you conquer each level, go on to the next! Tournament Levels are the most challenging.

• **Want to experiment?** Try the Speed Chess Levels for fast and very exciting games. Or use the Problem Solving Levels to solve problems up to mate in 8—search from a position in one of your games, or set up an actual problem for the computer to solve!

4. GAME INFORMATION

In a normal game of chess, you would never ask your opponent what move he was considering, nor would you ask his evaluation of the current position. Playing against Kasparov President Chess, however, allows you to do just that! In fact, when the Controller is attached, this chess computer gives you a wealth of information about its thought process—it shows you the move it is currently considering, the continuation it expects after that, its evaluation of the current position, its search depth, and more. Studying this information can help you learn more about chess.

Important: The Controller must be attached to access Info Mode.

Using Info Mode

You may access game information at any time by using Info Mode. If you do this while the computer is thinking, you will see the info displays change as the computer considers different moves and searches deeper. Some of the displays may change even if you access Info Mode during your turn, because the computer never stops thinking, even while you are taking your turn!

Game information is divided into 4 groups, and pressing **INFO** cycles from one group to another. The **ARROW KEYS** can be used to cycle through the information within each of the groups, as described in the following sections.

After familiarizing yourself with Info Mode, refer to Section 6.3 for a description of the user-programmable **Rotating Display** feature. Selecting this feature makes the computer automatically cycle through all the game information described below in one-second intervals every time it thinks about its move—you can actually watch the computer "think out loud"!

Note: If some of the information is not available when requested, the display shows [----].

4.1 Principal Variation

Pressing **INFO** the first time shows you the first move of the principal variation (the line of predicted play). This first move is the move the computer is currently considering making.

Use the **ARROW KEYS** to see the rest of the moves. The principal variation is shown to a maximum depth of 6 ply, or 6 half-moves.

FOR PRINCIPAL VARIATION INFORMATION:

PRESS	DISPLAY
INFO (x1)	First move of principal variation
RIGHT ARROW	Second move of principal variation
RIGHT ARROW	Third move of principal variation
RIGHT ARROW	Fourth move of principal variation
RIGHT ARROW	Fifth move of principal variation
RIGHT ARROW	Sixth move of principal variation

4.2 Search Information

Pressing **INFO** the second time gives you access to information on the computer's search. Use the **ARROW KEYS** to cycle through the different displays, as described below.

FOR SEARCH INFORMATION:

PRESS	DISPLAY
INFO (x2)	Computer's evaluation of the current position, based on a pawn being worth 1.0 points (a positive number indicates that White is ahead)
RIGHT ARROW	Current search depth (number of half-moves the computer is looking ahead); and the number of moves the computer has examined so far
RIGHT ARROW	Current move being evaluated by the computer
RIGHT ARROW	Number of positions (nodes) the computer is currently examining every second

4.3 Chess Clocks

Pressing **INFO** a third time gives you access to the chess clocks. Use the **ARROW KEYS** to cycle through five different clock displays. The chess piece symbols turn on one by one from lower rank to higher rank (P,N,B,R,Q,K) when the LCD is displaying the elapsed time for white or black. The chess piece symbols turn on in reverse order (K,Q,R,B,N,P) when the LCD is displaying the remaining time for white or black.

The chess clocks keep track of the time for both sides. The clocks stop whenever you take back a move, change levels, select options, verify or set up a position, or turn the unit off. In all of these cases, however, the

times are retained in memory, and the clocks resume as soon as play is continued. Whenever you start a new game, the chess clocks are always reset to [0:00:00].

FOR CHESS CLOCK INFORMATION:

PRESS	DISPLAY
INFO(x3)	Elapsed time since last move made
RIGHT ARROW	Elapsed time for White
RIGHT ARROW	Elapsed time for Black
RIGHT ARROW	Remaining time for White*
RIGHT ARROW	Remaining time for Black*

**Speed Chess/Tournament Levels only;
On other levels, display will show [-----]*

4.4 Move Count

Pressing **INFO** the fourth time shows the number of White moves that have been played in the game so far. Repeatedly pressing the **ARROW KEYS** at this point displays the moves of the current game (up to last 64 ply).

FOR MOVE COUNT INFORMATION:

PRESS	DISPLAY
INFO(x4)	Number of White moves played
ARROW KEYS	Moves of current game

4.5 Move Suggestions

If you would like advice on any particular move, the computer can give you a move suggestion. Press **INFO** when it is your turn to move, and the computer displays its suggested move.

FOR A MOVE SUGGESTION:

PRESS	DISPLAY
INFO(on your turn)	Suggested move

SUMMARY OF ALL INFO MODE DISPLAYS:

PRESS	DISPLAY
• INFO	1st move of principal variation
RIGHT ARROW	2nd move of principal variation
RIGHT ARROW	3rd move of principal variation
RIGHT ARROW	4th move of principal variation
RIGHT ARROW	5th move of principal variation
RIGHT ARROW	6th move of principal variation
• INFO	Computer's evaluation of position
RIGHT ARROW	Search depth & moves examined
RIGHT ARROW	Move currently being considered
RIGHT ARROW	Nodes examined per second
• INFO	Time since last move was made
RIGHT ARROW	Elapsed time for White
RIGHT ARROW	Elapsed time for Black
RIGHT ARROW	Remaining time for White*

.....

.....	
RIGHT ARROW	Remaining time for Black* <i>*Speed Chess/Tournament Levels only</i>
• INFO	Number of White moves played
ARROW KEYS	Moves of current game
• INFO	Move suggestion (on your turn)

5. VERIFYING/SETTING UP POSITIONS

Important: The Controller must be attached to use Verify and Position Modes.

5.1 Verifying Board Positions

If you should knock over the chess pieces or if you think the board position is incorrect, the computer can verify all piece locations for you.

When it is your turn, press **PIECE TYPE**. The display shows one of the piece symbols, and the board lights indicate the positions of all pieces of that type. The board lights are on steadily for all White pieces, and flashing for all Black pieces. Press **PIECE TYPE** again to change the piece symbol in the display, and to see all board locations for that piece. Repeatedly pressing **PIECE TYPE** allows you to verify the entire board, if desired. Press **CLEAR** to return to normal play.

TRY OUT VERIFY MODE FOR YOURSELF!

PRESS	DISPLAY
CLEAR & ENTER	[0:00:00] (New game)
PIECE TYPE	[King] (E1 on=W.King; E8 flashing=B.King)
PIECE TYPE	[Queen] (D1 on=W.Queen; D8 flashing=B.Queen)
PIECE TYPE	[Rook] (A1/H1 on=W.Rooks; A8/H8 flashing=B.Rooks)
PIECE TYPE	[Bishop] (C1/F1 on=W.Bishops; C8/F8 flashing=B.Bishops)
PIECE TYPE	[Knight] (B1/G1 on=W.Knights; B8/G8 flashing=B.Knights)
PIECE TYPE	[Pawn] (A2-H2 on=W.pawns; A7-H7 flashing=B.pawns)
CLEAR	[0:00:00] Exit Verify Mode

5.2 Changing and Setting Up Positions

Your Kasparov President Chess lets you set up special board positions to play from or problems you would like the computer to solve.

Press **POSITION** to enter Position Mode, and the display shows [-POS-]. You may change or set up a board position at any time during a game, whenever it is your turn to move. After you have set up your desired position, always press **CLEAR** to exit Position Mode.

- **To remove a piece from the board**, simply pick up the piece and physically remove it from the board. Notice that the display indicates the piece type and color, along with a minus sign and the location for that square.
- **To move a piece from one square to another**, pick up the piece from its original square, and put it down on the new square. As you do this, the display shows a minus for the first square, and a plus for the second.
- **To add a piece to the board**, first press **PIECE TYPE** until the desired piece symbol shows in the display. Make sure the display shows the correct color symbol for the piece you wish to add. If not, press a **COLOR KEY** to change the color. When the display shows the correct piece type and color, place that piece on the desired square. The display shows a plus sign along with the location for that square. To add another piece of the same type,

simply differer piece s
 • To cle Mode.
 to conf add pie very ha contain easier
 • Once descri display Chang the CC
 • Press Note:
 above pro set up an i more than game, or c determine: error beep Mode until CAUT will be era. changes to

TRY OUT F
 PRESS
 CLEAR & EN
 POSITION
 Lift D2 pawn
 Put pawn on
 PIECE TYPE
 Lift D8 Quee
 Put Queen o
 "WHITE" KE
 CLEAR

6. GAM
 In adr

ROTATING
 DISPLAY
 OPTIONS

PLAYING
 MODE
 OPTIONS

OPERATIO
 MODE
 OPTIONS

simply put another piece on the board. To add a different piece, press **PIECE TYPE** until the desired piece symbol is displayed, then proceed as above.

- **To clear the board**, press **ENTER** while in Position Mode. The display shows [-----]. Press **ENTER** again to confirm that you want to clear the board. Then add pieces as described above. This feature can be very handy if you want to set up a position which contains only a few pieces, where it would be easier to start out with an empty board.
- **Once you have changed the board position as described above**, make sure the color symbol displayed is the correct color of the side to move. Change the color if necessary by pressing one of the **COLOR KEYS**.
- **Press CLEAR to exit Position Mode.**

Note: Any legal position may be set up using the above procedures. The computer will not permit you to set up an illegal position, such as one where there are more than the prescribed number of pieces for a normal game, or one where a King is in check. If the computer determines that your position is illegal, it sounds an error beep, and you will not be able to exit Position Mode until you have resolved the problem.

CAUTION: All previous moves in the current game will be erased from the computer's memory if you make changes to the position during a game.

TRY OUT POSITION MODE FOR YOURSELF!

PRESS	DISPLAY	
CLEAR & ENTER	[0:00:00]	(New game)
POSITION	[-POS-]	(Enter Position Mode)
Lift D2 pawn	[-d2]	(Board lights indicate all pawns, White on, Black flashing; D2 is off, since D2 pawn was removed)
Put pawn on D4	[+d4]	(Lights on for all pawns, including new D4 pawn)
PIECE TYPE (2x)	[Queen]	(D1 on for W.Queen; D8 flashing for B.Queen)
Lift D8 Queen	[-d8]	(D8 light turns off, since Queen was removed)
Put Queen on H5	[+H5]	(D1 on for W.Queen, H5 flashing for B.Queen)
"WHITE" KEY	[White]	(Choose color to move next: White)
CLEAR	[0:00:00]	(Exit Position Mode, White to move)

6. GAME OPTIONS

In addition to all the features described so far,

President Chess offers you many other intriguing game options when the Controller is plugged in. All options are user-selectable at any time during the game. For an overview of all the game options, refer to the Options Chart in this section.

Important: The Controller must be attached to access or change Game Options.

Selecting Game Options

The computer's game options are divided into 3 groups: Operation Mode, Playing Mode, and Rotating Display Mode. Pressing **OPTION** cycles from one group to another. Each group contains 8 different options, and the **ARROW KEYS** are used to cycle through the options within each of the groups. For each option, a plus (+) in the display indicates the displayed option is ON, and a minus (-) means the option is OFF. Press **ENTER** to turn each option on or off as it is displayed. After you have made all your option selections, press **CLEAR** to return to normal game play.

When the computer is first powered on or when new batteries are inserted, certain default options are set. Options which are automatically on at the first startup are shown in the chart with a plus, and options which are off are shown with a minus. Whenever you reset the computer for a new game, most of your selected options are carried over to your next game. The only option which always goes back to its default state when you start a new game is Auto Answer.

6.1 Operation Mode Options

These 8 options affect how you operate your computer. Press **OPTION** once to select this group, and then use the **ARROW KEYS** to select the options. Press **ENTER** to turn the options on (+) or off (-).

Auto Answer

Normally, the computer automatically answers with a countermove whenever you enter a move. If you turn Auto Answer off by choosing [-Auto], however, you can enter any number of moves one by one, without letting the computer answer. This feature can be used to enter a series of moves for both sides or to replay a game to a certain position. Turning Auto Answer off also allows

	Principal Variation 1st ply	Principal Variation 2nd ply	Principal Variation 3rd ply	Principal Variation 4th ply	Position Evaluation	Search Depth & Move Count	Nodes Searched per Second	Time per Move
ROTATING DISPLAY OPTIONS	[-rd: 1]	[-rd: 2]	[-rd: 3]	[-rd: 4]	[-rd: E]	[-rd: d]	[-rd: n]	[-rd: t]
PLAYING MODE OPTIONS	[+SEL]	[-EASY]	[-rAnd]	[+book]	[-bk:FL]	[-bk:Pa]	[-bk:at]	[-bk:tn]
OPERATION MODE OPTIONS	[+Auto]	[+Snd]	[-SIL]	[-Co:ch]	[-tic]	[-c:dn]	[-tEst]	[-aPd]

*option on = +, option off = - (defaults are shown)

you to play against another person, with the computer acting as referee and checking the legality of all moves.

*Note: When playing against another person, if either side needs help from the computer, press **INFO** to see a suggested move. If you want to see what the computer would do in a certain position, press **ENTER** and the computer will make the next move. After it has made the move, Auto Answer remains turned off, and you may continue your game.*

TRY TURNING AUTO ANSWER OFF!

- Play through master games. Press **ENTER** to get the computer's analysis of any position.
- Replay to a certain position for further study.
- Study book lines by entering them manually.
- Play against another person, with the computer checking all moves for legality and keeping track of the time for both sides.

Sound

This option allows you to turn off the "beep" that accompanies each keypress by choosing [**-Snd**]. Note that illegal keypresses will still generate an error sound.

Silent Mode

Normally, the computer always beeps when it has found its move. Turning on Silent Mode by selecting [**+SIL**] allows for completely silent operation of the game.

Coach Mode

When you activate Coach Mode by choosing [**+Co:ch**], the computer acts as your own private chess coach! If it thinks you have committed a blunder, it warns you by sounding a series of beeps and flashing its intended move. You can either go ahead or take back your own move and make another. In Coach Mode, the computer also warns you when you are in danger of losing a piece. If the computer's move threatens a low-to-high capture, for example, it sounds a series of warning beeps and flashes the square of the threatened piece. Use this option to sharpen your chessplaying skills!

Ticking Clock

When you turn on the unique Ticking Clock option by choosing [**+tic**], you activate a ticking sound that makes the computer's chess clock sound like a real chess clock! Create the atmosphere of an actual championship tournament in your very own home!

Countdown Clock

Activate this option by selecting [**+C:dn**]. This forces the computer to display the countdown time instead of the elapsed time.

Note: This option is only available in combination with the Tournament and Speed Chess Levels.

Test Program

Turning this option on by choosing [**+tEst**] causes the computer to run an internal test program. To stop the test, press **ENTER** and **CLEAR** simultaneously.

Note: This option is included mainly for technical troubleshooting by your authorized service center in the event of a malfunction.

*Warning: Choosing [**+tEst**] clears the computer's memory.*

Auto Power Down

The Auto Power Down option is a battery-saving feature. When this option is activated by selecting [**+aPd**], the computer will automatically turn itself off after 15 minutes if no keypresses or moves are made during that time. To continue the game where you left off, press **GO/STOP** to turn the computer on.

Note: The computer will not turn itself off while it is thinking about a move.

6.2 Playing Mode Options

These 8 options affect how the computer selects its moves. Press **OPTION** twice to choose this group, and then use the **ARROW KEYS** to select the options. Press **ENTER** to turn the options on (+) or off (-).

Selective Search

President Chess normally uses a *Selective Search algorithm*. This lets the computer see combinations that would otherwise take much longer to compute. Turning this option off by choosing [**-SEL**] makes the program switch to a powerful *Brute Force algorithm*. This search method minimizes the risk of an occasional oversight.

Note: The Problem Solving Levels always use the Brute Force method.

Easy Mode

Turn on Easy Mode by displaying [**+EASY**] if you want to prevent the computer from thinking on your time. This effectively weakens all playing levels without affecting the computer's time controls. Normally, as described in Section 2.8, the computer thinks on your time, using the time you are contemplating your next move to think ahead and plan its strategies. This is part of what makes your computer such a tough opponent! By using Easy Mode to make all the levels weaker, you effectively have many more levels to choose from.

Random Mode

Setting Random Mode by selecting [**+rANd**] forces the computer to randomly choose between moves which are almost equal in their evaluation. This option gives you games of greater variety.

Book On/Off

When you turn the book off by choosing [**-book**], the computer is forced to take time to think of its moves from the very beginning of the game, rather than using book moves. For more details on book openings, see Section 2.7.

Note: If you turn the book off, the remaining book options (described below) are automatically disabled.

Full Openings Library

Turning on the Full Book option with [**+bk:FL**] gives the computer the freedom to choose any move from its openings library, so you will see a greater variety of book lines being played.

Note: With this option on, the computer may make some questionable moves. This is because its openings library must contain responses to certain lines of play (even questionable lines) in case they are played. While the computer would not make these moves on its own,

it needs to be done in a certain manner. We could potentially enable that and Tournament

Passive Options

Choose your preferred opening when deciding between different openings.

Note: See the Book and Tournament

Active Options

When you choose an opening, the computer will open position.

Note: See the Book and Tournament

Tournament

When you choose the best opening, the computer will use the best opening lines.

6.3 Rotated

Normally, the time for each move can also be set. Section 4 works hard to choose and then rotate. You may find options, a

If you too quickly display. **S KEYS** all displays the display **CLEAR**. I thinking a starts rotate

IMPC activated

To see **3 times** t **ARROW** rotated. F

TURN ON THE ROTATING DISPLAY OPTIONS AND WATCH THE COMPUTER THINK!

1st move of principal variation	[+rd: 1]
2nd move of principal variation	[+rd: 2]
3rd move of principal variation	[+rd: 3]
4th move of principal variation	[+rd: 4]
Position evaluation	[+rd: E]
Search depth/move count	[+rd: d]
Nodes per second	[+rd: n]
Time taken per move	[+rd: t]

7. TECHNICAL DETAILS

7.1 The ACL Function

Computers sometimes "lock up" due to static discharge or other electrical disturbances. If this occurs, take out the batteries and use a pin or another sharp object to press into the hole marked **ACL** on the bottom of the unit for at least one second. This resets the computer and clears its memory.

7.2 Care and Maintenance

Your 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 it, as they can cause damage.

7.3 Technical Specifications

Processor Speed:	10 MHz
ROM Memory:	32768 bytes
RAM Memory:	1024 bytes
Keys:	9 (on Controller unit)
Power Keys:	1 Go/Stop push button
LEDs:	64 (one on each square)
LCD:	48-segment
Sound:	Piezo-electric buzzer
Batteries:	6 C cells (AM2/R14)
Battery Life:	150 hours (with new alkalines)
AC Adapter (optional):	9V DC at 300 mA
Dimensions:	370 x 370 x 50mm (excl. Controller)
Weight:	3.5kg

Do not use rechargeable batteries.

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

it needs to know how to respond to them in the best manner. When you turn on the full book, the computer could potentially play one of these moves. Note, also, that enabling this option will disable the Passive, Active, and Tournament Book options.

Passive Opening Book

Choosing [+bk:Pa] forces the computer to give preference to passive openings and closed positions when deciding which opening to play.

Note: If this option is selected, the Active Opening Book and Tournament Book options are disabled.

Active Opening Book

When this option is activated by picking [+bk:at], the computer will give preference to active lines and open positions when deciding which opening to play.

Note: If this option is selected, the Passive Opening Book and Tournament Book options are disabled.

Tournament Opening Book

When you select [+bk:tn] to turn the Tournament Book option on, the computer is forced to always select the best possible line of play in every opening position. While this results in the best play, it also narrows down the computer's choice of moves by limiting its available book lines.

6.3 Rotating Display Options

Normally, the Controller's display window shows the time for the player to move. However, the computer can also display other information, as described in Section 4 (Info Mode). The Rotating Display feature works hand-in-hand with Info Mode, since it allows you to choose which of the info displays you want to see, and then rotates your choices in 1-second increments. You may turn on any or all of the rotating display options, as desired.

If you find that the display information is changing too quickly when it rotates, press **INFO** to freeze the display. Successive presses of **INFO** and the **ARROW KEYS** allow you to cycle through all the different displays manually, as described in Section 4. To start the display rotation again, press **OPTION** followed by **CLEAR**. In any event, when the computer starts thinking about its next move, the display automatically starts rotating again.

IMPORTANT: The rotating display feature is only activated WHILE THE COMPUTER IS THINKING.

To set the Rotating Display, first press OPTION 3 times to select this group of options. Then use the **ARROW KEYS** to select the options you want to be rotated. Press **ENTER** to turn options on (+) or off (-).

TROUBLESHOOTING GUIDE

SYMPTOMS	POSSIBLE CAUSES	ACTION TO TAKE
1. The computer does not react, behaves erratically, or "freezes" during a game.	<i>Batteries not inserted properly.</i>	See instructions for installing batteries in Section 1.
	<i>Batteries weak or bad.</i>	Replace the batteries with fresh ones (see Section 1).
	<i>Static discharge or an electrical disturbance has caused the computer to lock up.</i>	Reset the computer by inserting a pin or another sharp object into the hole marked ACL for one second (see Section 7.1).
2. LCD display is difficult to read.	<i>Weak batteries.</i>	Replace the batteries (see Section 1).
3. The computer will not play a move.	<i>Auto Answer option is turned off.</i>	The computer only plays automatic responses to your moves if the Auto Answer option is on (see Section 6.1).
	<i>You might be on a level which causes the computer to think for a long time (e.g., Infinite or Problem Solving Levels).</i>	You may interrupt the computer's thinking and force it to move by pressing ENTER or by lifting up the user's King for a while.
4. The computer will not accept your move.	<i>Is it your turn? Is your King in check? Will your move put your King into check? Are you trying to castle incorrectly?</i>	Make sure you are familiar with the chess rules. Press PIECE TYPE to verify the board position (see Section 5.1).
	<i>The computer is thinking—its color symbol is flashing in the display and the light for its King is flashing.</i>	You may interrupt the computer's thinking, if desired, by pressing ENTER , or by lifting up the user's King for a while.
5. A stray board light is on, and the computer will not respond.	<i>The light may indicate a piece that is not centered in its square.</i>	Re-center any pieces which are off-center and then continue your game as usual.
6. The light in the to square remains on even after moving the computer's piece.	<i>You have not entered the computer's last move correctly.</i>	Pick the piece up again, and the computer will light the correct to square. Put the piece down on the indicated square. If you are using the Controller, check the display window for the correct move.
7. The computer seems to be making illegal or irrational moves.	<i>The computer has made a special move, such as an passant, castling, or pawn promotion/underpromotion.</i>	Review the chess rules. Verify the board position as described in Section 5.1.
	<i>The computer may be set on one of the Fun Levels, where it purposely makes common mistakes, or on one of the lowest Training Levels, where it moves very quickly and plays weaker than normal because its search depth is limited.</i>	Press LEVEL to check which playing level is currently selected (see Section 3).
	<i>Your board position is not correct (pieces have been moved).</i>	Verify the board position, as described in Section 5.1.
	<i>Batteries are running out.</i>	Replace the batteries.
8. A board light is out.	<i>Defective component or contact.</i>	Consult your Kasparov Distribution Center.
9. Computer does not work with adapter.	<i>Wrong adapter type, incorrect voltage rating, or defective adapter.</i>	Check with your dealer. Use the Saitek recommended mains adapter only.

