

**Mephisto**<sup>®</sup>  
from Saitek

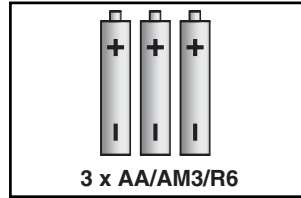
# Chess Explorer

Instructions  
Bedienungsanleitung  
Mode d'emploi  
Instrucciones de Funcionamiento  
Istruzioni d'uso  
Handleiding

# QUICK START

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

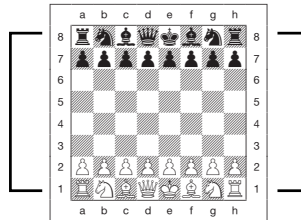
- 1** Open the battery cover in the base of the unit. Insert three "AA" (Type AM3/R6) batteries, making sure that you observe the correct polarity. Then, replace the battery cover.



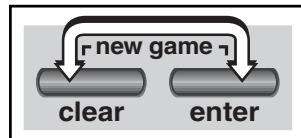
- 2** Press **GO/STOP** to turn the computer on. If the unit doesn't respond, reset it as noted in Section 7.1.



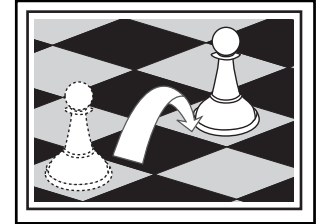
- 3** Set up the chess pieces in the initial starting position with the White pieces closest to you, as shown in this diagram.



- 4** To reset the computer for a **NEW GAME** of chess, simultaneously press the **CLEAR** and **ENTER** keys.



- 5** Enter moves by making them on the board, pressing the chess pieces down gently on the **from** and **to** squares for each move.



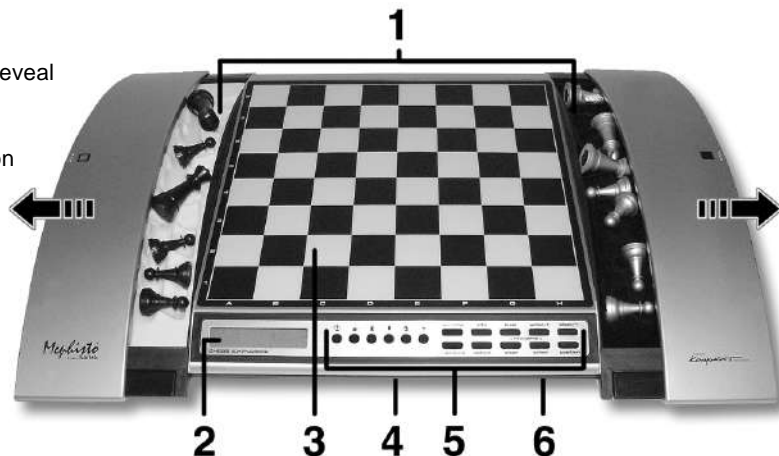
- 6** As soon as the computer makes a move, its move is shown in the display window. You'll see the piece, along with the **from** and **to** squares of the computer's move. In this example, the computer wants to move its Black pawn from E7 to E5. Press the computer's pawn down on Square E7, and then press it on Square E5. This completes the computer's move, and now it's your turn again. Make your next move as described above. Enjoy your game!



You can press **GO/STOP** at any time to turn the computer off. Your current position and game (up to 30 individual moves) will be stored in the computer's memory. When you switch back on again, you can continue playing right where you left off.

## KEYS AND FEATURES

1. **PIECE STORAGE AREAS:** Slide open sides of unit to reveal compartments for piece storage.
2. **DISPLAY WINDOW:** Used to show moves and move information during a game. Also used for level and option selection, piece verification, position set-up, and more.
3. **SENSORY CHESSBOARD:** Each square contains a sensor that registers piece movement. Certain squares can also be used within Level Mode and Option Mode to select levels and options.
4. **BATTERY COMPARTMENT:** In base of unit. Uses three "AA" (AM3/R6) alkaline batteries.
5. **GAME KEYS**
  - **PIECE SYMBOL KEYS:** Used in Verify and Position Modes. Also used for pawn promotions.
  - **GO/STOP:** Press to turn the unit on and off.
  - **INFO:** Press to enter Info Mode; within Info Mode, press to cycle through the main info groups. Press during your move to request a hint.
  - **LEVEL:** Press to enter Level Mode; within Level Mode, press to skip over eight levels at a time.
  - **WHITE/← and BLACK/→ KEYS:** Press to change levels one at a time in Level Mode, and press to cycle through options in Option Mode and Info Mode. Also used to select the color in Position Mode.
  - **TAKE BACK:** Press to take back an individual move (a move for either side). You can take back up to a maximum of 30 individual moves.
  - **OPTION:** Press to enter Option Mode; within Option Mode, press to cycle through the main option groups.
  - **CLEAR:** Press simultaneously with **ENTER** to reset for a



- new game. Press to exit Option, Verify, and Position Modes. Press to clear Info Displays and cancel Clear Board requests in Position Mode. Press to cancel Level Mode if you decide not to make changes (unless you have used board squares to change levels; then **CLEAR** will enter the new level, just like **ENTER**).
- **ENTER:** Press together with **CLEAR** to reset for a new game. Press to change sides with the computer; press while the computer is thinking to force it to move. Press to turn option settings on and off, and to exit Level Mode with your new level selected. Press to clear the board in Position Mode, and then press again to confirm.
  - **POSITION:** Press to enter Position Mode.
6. **ACL (Reset):** In base of unit. Used to eliminate static discharge after inserting new batteries.

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#### TROUBLESHOOTING GUIDE

## INTRODUCTION

Ready to enter the exciting world of computer chess? You've come to the right place! Your new computer offers so many game options, playing levels, and special features—you'll never look at chess the same way again. The *Quick Start* at the front of the manual will get you playing right away, and you'll find more details on basic game operation in Section 1. Once you learn the basics, be sure to go on and explore the rest of this manual, even if you normally don't like to read instruction booklets. You'll discover that this chess computer has all kinds of other interesting and fun-filled features that will delight you—we guarantee it!

Your new computer knows and follows all the rules of chess—you can be sure that it will never cheat. For those of you who haven't played before, we have included a short overview of the rules to get you started. For more detailed information, why not visit your local library, where you're sure to find lots of interesting chess books.

### 1. LET'S GET STARTED!

#### 1.1 First, Install the Batteries

Your computer runs on three "AA" (Type AM3/R6) batteries. Insert the batteries into the compartment in the base of the unit, making sure to observe the correct polarity. Use fresh alkaline batteries for longer battery life.

Turn the computer on by pressing **GO/STOP**, and a beep will signal that the game is ready to play. If the computer fails to respond (static discharge may cause it to lock up), use a paper clip or another sharp object to press down into the hole marked **ACL** in the base of the unit for at least one second. This will reset the computer.

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*Tip: To conserve energy and extend battery life, turn on the Auto Power Down option (see Section 5.1).*

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#### 1.2 Ready to Play? Here's How to Move!

Okay, now it's time to start a game! It's easy—just follow these steps:

- a. Press **GO/STOP** to turn the computer on, if you haven't already done so.
- b. Press the **CLEAR** and **ENTER** keys together to reset the unit for

a new game of chess. Set up the pieces in their starting positions, with the White pieces nearest to you, as shown in the *Quick Start*.

- c. To make a move, lightly press down on the piece you want to move until you hear a beep—the sensory board will recognize your piece automatically. Don't believe it? Just look at the display window, which is suddenly full of information—it shows your piece, along with the piece color and the square you just pressed.
- d. Take that piece and gently press it down on the square you are moving **to**. You'll hear a second beep as the computer confirms your move. You've just made your first full move of the game.

Next, it's the computer's turn.

*You'll notice that the computer often moves instantly at the beginning of a game, instead of taking time to think. This is because it is playing from memory, using a built-in "book" of opening moves (for more information, see Section 2.7).*

### 1.3 Now It's the Computer's Turn

When the computer moves, it beeps and displays its move. Check out the display window—you'll see the **from** and **to** squares of the computer's move, along with the color and type of piece it is moving! Press the indicated piece down on the **from** square until you hear a beep. Move that same piece to the indicated **to** square and press it down to complete the computer's move. And it's your turn again...

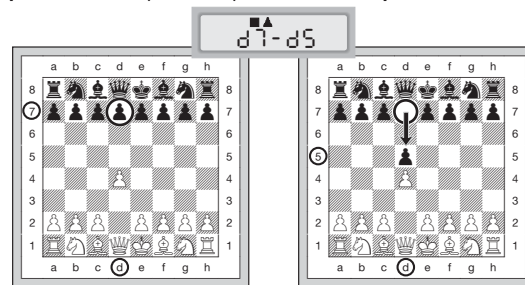
### 1.4 Change Your Mind? Take Back

When you're playing chess against this computer, nothing is "set in stone"—you can change your mind or decide to play a different move whenever you want! When it's your turn to move, simply press **TAKE BACK**, and the display will show the move to be taken back. Press the indicated piece down on the original **to** square, then press it down on the original **from** square to complete the take-back. Repeat this as often as you'd like, taking back up to 30 individual moves (or 15 moves for each side). To continue playing at any point, just make another move on the board.

*After taking back a capture and/or pawn promotion, the computer will make sure that your board is still set up correctly by reminding you to put the captured piece and/or pawn back on the board! It does this by displaying the piece symbol and its square location. Put the indicated piece back on the board and press down on that square to complete the take-back.*

## MAKING THE COMPUTER'S MOVE: AN EXAMPLE

After the computer displays its move, it's up to you to make its move on the board. Here, the display indicates the computer wants to move its Black pawn (♜♞) from **d7** to **d5**. Pick up the **d7** pawn and press it down lightly on **Square d7**. Then, press the pawn down on **Square d5**. That's it!



*When castling, first follow the take-back steps as described above for the King, and then do the same for the Rook to complete the take-back.*

### 1.5 Game Over? Why Not Play Again

Whenever you finish a game (or if you give up on your current game), it's easy to start over again! Reset the computer by pressing the **CLEAR** and **ENTER** keys together, and a New Game tone tells you that the computer is ready for a new game. The same playing level will be in effect, but you can change it if you'd like, as explained in Section 3.

**IMPORTANT:** *Resetting the computer for a new game clears your current game from the computer's memory—be careful not to press these keys by mistake!*

### 1.6 Too Easy/Hard? Change the Level

When you first turn your computer on, it's automatically set to Normal Playing Level D1 (five seconds a move). However, you have 64 different levels to choose from—you'll want to try them all out! For descriptions of the playing levels and how to change levels, see Section 3.

## 2. MORE FEATURES TO EXPLORE

### 2.1 Whose Move? Check the Display

When the computer plays Black, it flashes a black square in the display while it is thinking. After it has moved, a white square shows that it is now White's turn to move. You can tell at a glance if the computer is currently thinking, and which side is to move.

### 2.2 Special Chess Moves

**Captures:** To capture, press down on the piece you want to move, remove the captured piece from the board, and press your piece down on the square of the captured piece. Captures are displayed as in E5 \* F5.

**En Passant Captures:** In this type of capture, the computer continues to display your move until you press down on the captured pawn and remove it from the board.

**Castling:** The computer automatically recognizes castling after the King is moved. After you have pressed the King down on its **from** and **to** squares, the computer continues to display your move until you press on the Rook's **from** and **to** squares to complete the move. Note that Kingside castling is displayed as ♖-♖, and Queenside castling as ♜-♜-♜.

**Pawn Promotions:** When you promote a pawn, first make your move as usual, pressing your pawn down on its **from** and **to** squares. Next, press the **PIECE SYMBOL KEY** for your desired promotion piece (♙, ♚, ♛, or ♜). The computer recognizes your new piece immediately, displays it briefly, and then begins thinking about its next move. Remember to change your piece on the board! **When the computer promotes a pawn**, the display shows both the pawn and the promoted piece. Don't forget to replace the computer's pawn with its new piece.

### 2.3 Illegal Moves

Your computer will never accept an illegal move! If you try to make one, you'll hear a low double beep, and the display will show the square the piece came **from**. Either move that same piece to another square, or press the piece back down on its original **from** square and move a different piece.

If you don't make the computer's move correctly, you'll also get an error message. This means you are either moving the wrong piece, or moving the computer's piece to the wrong square. If the computer wants

to move its pawn from D7 to D5, for example, and you press down on D7 and then D6, the display shows E7 : d5 briefly, pointing out your error. The display then returns to showing the move again (d7 - d5), and the computer expects you to press down on D5 to complete its move.

If you press down on a piece and the **from** square is displayed, but you decide not to make that move, simply press down on that same square again to cancel. Then make another move. If you change your mind after entering your whole move, take the move back as described in Section 1.4.

### 2.4 Check, Mate, and Draw

When a King is in check, the computer first displays its move as usual. After the move is made, ♚HE♜ flashes in the display for a few seconds, along with the checking move. The display then goes 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., ♜ ♞ ♚ for a mate in two moves). The display then goes back to showing the clock.

When a game ends in checkmate, the display flashes ♚R♜E (along with the mating move or with the clock display) for a short 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. After a draw has occurred, the display flashes E ♞ ♚ (along with the drawing move or with the clock display) for a brief time after the move has been made. The display then goes back to showing the clock.

### 2.5 Interrupting the Computer's Search

Think the computer is taking too long to move? You can interrupt it any time! Simply press **ENTER** while the computer is thinking, and it will stop and play the best move it has found so far. This feature can be handy on the higher levels, where the computer can take a long time to move, and on the Infinite Level, where the computer thinks indefinitely unless you stop it.

*On the Mate Search Levels, pressing **ENTER** won't force the computer to make a move. Instead, the computer will display - - - - - to indicate that it was interrupted before it found a mate. To continue play, switch to another level.*

## 2.6 Changing Sides with the Computer

To change sides with the computer, simply press **ENTER** when it's your turn—and the computer will make the next move for your side. Change sides as often as you wish.

Want the computer to play the first move for White at the start of a new game? Press **CLEAR** and **ENTER** together to reset for a new game, and then press **ENTER**.

Want to watch the computer play chess against itself? Press **ENTER** after each move—watch as it plays for both sides of the board, one move after another. Study its strategies, and you might improve your own game!

## 2.7 Built-In Openings

At the beginning of a game, the computer will often move instantly on many levels. This is because it is playing from memory, using its own built-in “book” of opening chess moves. This book contains most major openings and many positions from grandmaster play. If the current board position is in its book, the computer plays a response to that position automatically, instead of having to think about the move!

A special feature of this computer's opening book is its ability to 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. The computer's integrated Automatic Transposition Manager handles these cases with ease.

Also included is a unique user-selectable book feature, which lets you choose from different types of opening books, or even turn the book off, if desired. For complete details, see Section 5.2.

## 2.8 Thinking on the Opponent's Time

As you play, you may notice that the computer sometimes replies to your moves immediately, 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 taking for your move to think ahead and plan its own strategies. It tries to guess the move you are likely to make, and then calculates its responses for that particular move while you are still thinking. If the computer has guessed right, there's no reason for it to keep on calculating—it immediately plays the move it has already found.

*To disable this feature, turn on the Easy Mode option, as described in Section 5.2.*

## 2.9 Game Memory

You may interrupt a game at any time by pressing **GO/STOP**. Play is then suspended, and the computer stores your current game (up to 30 individual moves). When you switch back on again, you can continue right where you left off.

# 3. THE PLAYING LEVELS

Your chess computer offers 64 different levels of play. When you set the 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! For an overview of all the levels, refer to the Level Chart. The levels are also described individually in this section.

## Setting a Playing Level

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*See “**USE THIS CHART TO SELECT A PLAYING LEVEL!**” for a look at how to set a level and a chart showing all the levels.*

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There are two methods of setting levels—by using the game keys or the board squares. Whichever method you use, always press **LEVEL** first to enter Level Mode, and the computer will display the current playing level. When you enter Level Mode the first time, the computer is set on Normal Playing Level D1 (with an average response time of five seconds a move), and the display shows ♞ ♚ : ♞ ♚.

- **To select a level by using game keys:** After entering Level Mode by pressing **LEVEL**, change levels one at a time by using the **BLACK/→** and **WHITE/←** keys. As a shortcut, press **LEVEL** repeatedly to skip over eight levels at a time. When the display shows your desired level, press **ENTER** to enter your new level into the computer and exit Level Mode.
- **To select a level by pressing board squares:** As indicated in the Level Chart, each of the 64 squares corresponds to one level. After entering Level Mode by pressing **LEVEL**, press the desired square to activate a level, using the chart as a guide. When you press down on the desired square and that level shows in the display, press **ENTER** to enter your new level into the computer and exit Level Mode. *When making your selection via the board squares, pressing **CLEAR** has the same effect as pressing **ENTER**—it enters your level into the computer.*

- **To verify the level without changing it:** If you press **LEVEL** to verify the level but you don't want to actually change levels, press **CLEAR**. This returns you to normal play without changing the level or clock settings, even while the computer is thinking.

Other important points to remember regarding levels:

- *Changing the level always resets the chess clocks.*
- *We do not recommend changing levels while the computer is thinking. If you must do this, first press **ENTER** to abort the computer's search, and make its move on the board. Then, take back the computer's move and change the level. Finally, press **ENTER** to make the computer start thinking on the new level.*
- *If you change the level while the computer is thinking, the clock is reset and the current search is aborted.*
- *If you press **LEVEL** while the computer is thinking but the level is not changed (if you press **CLEAR** instead of **ENTER**), the computer will also abort its search.*

### 3.1 Normal Playing Levels (Squares A1-G2)

LEVEL	TIME PER MOVE	DISPLAY
A1 .....	1 second .....	L 0 : 0 1
B1 .....	2 seconds .....	L 0 : 0 2
C1 .....	3 seconds .....	L 0 : 0 3
D1 .....	5 seconds .....	L 0 : 0 5
E1 .....	10 seconds .....	L 0 : 1 0
F1 .....	15 seconds .....	L 0 : 1 5
G1 .....	20 seconds .....	L 0 : 2 0
H1 .....	30 seconds .....	L 0 : 3 0
A2 .....	45 seconds .....	L 0 : 4 5
B2 .....	1 minute .....	L 1 : 0 0
C2 .....	1.5 minutes .....	L 1 : 3 0
D2 .....	2 minutes .....	L 2 : 0 0
E2 .....	3 minutes .....	L 3 : 0 0
F2 .....	5 minutes .....	L 5 : 0 0
G2 .....	10 minutes .....	L 1 0 : 0 0

When you choose one of the Normal Playing Levels, you are selecting an average response time for the computer. Note that the 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.

### 3.2 Infinite Level (Square H2)

LEVEL	TIME	DISPLAY
H2 .....	No time limit .....	9 : 9 9 : 9 9

On the Infinite Level, the computer will search indefinitely, until it finds a forced mate or forced move; until it has fully searched the position to its maximum depth; or until you stop the search by pressing **ENTER**. If you halt the search, the computer makes the move it currently thinks is best. Try experimenting with this level—set up interesting board positions and let the computer analyze them for you! It will think for hours or even days on end, trying to come up with the best possible move. And don't forget to watch the computer as it thinks—take advantage of the Rotating Display feature (see Section 5.3).

### 3.3 Tournament Levels (Squares A3-H3)

LEVEL	MOVES/TOTAL TIME	ALTERNATING DISPLAY
A3 .....	40 moves in 1 hr. 30 min. ....	L r 4 0 1 : 3 0 : 0 0
B3 .....	35 moves in 1 hr. 45 min. ....	L r 3 5 1 : 4 5 : 0 0
C3 .....	40 moves in 1 hr. 45 min. ....	L r 4 0 1 : 4 5 : 0 0
D3 .....	35 moves in 1 hr. 30 min. ....	L r 3 5 1 : 3 0 : 0 0
E3 .....	40 moves in 2 hrs. ....	L r 4 0 2 : 0 0 : 0 0
F3 .....	45 moves in 2 hrs 30 min. ....	L r 4 5 2 : 3 0 : 0 0
G3 .....	50 moves in 2 hrs. ....	L r 5 0 2 : 0 0 : 0 0
H3 .....	40 moves in 3 hrs. ....	L r 4 0 3 : 0 0 : 0 0

The Tournament Levels require you to make a certain number of moves within a given amount of time. If a player exceeds the allotted time for a given number of moves, the computer flashes **L IFE** along with the elapsed time to show that the game is over. If you wish, you can continue to play even after the time has run out.

*If you choose a Tournament Level, you may want to set the chess clocks to display countdown time instead of the elapsed time (see Section 5.1). When the game time runs out, the countdown clock automatically reverts back to the normal clock display.*

### 3.4 Blitz Levels (Squares A4-H4)

LEVEL	TIME PER GAME	DISPLAY
A4 .....	5 minutes .....	b L : 5
B4 .....	10 minutes .....	b L : 1 0
C4 .....	15 minutes .....	b L : 1 5
D4 .....	20 minutes .....	b L : 2 0



## USE THIS CHART TO SELECT A PLAYING LEVEL!

1. Press **LEVEL** to enter Level Mode.



2. Next, select your level, using the Level Chart. There are two ways to do this.

- Cycle through the levels until your level is displayed:
  - Press **BLACK** → to **increase** → levels by one.
  - Press **WHITE** ← to **decrease** ← levels by one.
  - Press **LEVEL** to **increase** → levels by eight.
- **OR**, simply locate your level square and press one of the pegged chess pieces down into the hole to display that level.

3. Finally, press **ENTER** to exit Level Mode, using your new level!



TRAINING LEVELS	A8	9 ply search PLY: 9	B8	10 ply search PLY: 10	C8	11 ply search PLY: 11	D8	12 ply search PLY: 12	E8	13 ply search PLY: 13	F8	14 ply search PLY: 14	G8	15 ply search PLY: 15	H8	16 ply search PLY: 16
	A7	1 ply search PLY: 1	B7	2 ply search PLY: 2	C7	3 ply search PLY: 3	D7	4 ply search PLY: 4	E7	5 ply search PLY: 5	F7	6 ply search PLY: 6	G7	7 ply search PLY: 7	H7	8 ply search PLY: 8
MATE SEARCH LEVELS	A6	Mate in 1 move T.M.: 1	B6	Mate in 2 moves T.M.: 2	C6	Mate in 3 moves T.M.: 3	D6	Mate in 4 moves T.M.: 4	E6	Mate in 5 moves T.M.: 5	F6	Mate in 6 moves T.M.: 6	G6	Mate in 7 moves T.M.: 7	H6	Mate in 8 moves T.M.: 8
BEGINNER LEVELS	A5	1 sec. per move BEG: 1	B5	2 sec. per move BEG: 2	C5	3 sec. per move BEG: 3	D5	4 sec. per move BEG: 4	E5	5 sec. per move BEG: 5	F5	6 sec. per move BEG: 6	G5	7 sec. per move BEG: 7	H5	8 sec. per move BEG: 8
BLITZ LEVELS	A4	5 min. per game BL: 5	B4	10 min. per game BL: 10	C4	15 min. per game BL: 15	D4	20 min. per game BL: 20	E4	30 min. per game BL: 30	F4	45 min. per game BL: 45	G4	60 min. per game BL: 60	H4	90 min. per game BL: 90
TOURNAMENT LEVELS	A3	40 moves in 1:30 T: 40 1:30:00	B3	35 moves in 1:45 T: 35 1:45:00	C3	40 moves in 1:45 T: 40 1:45:00	D3	35 moves in 1:30 T: 35 1:30:00	E3	40 moves in 2:00 T: 40 2:00:00	F3	45 moves in 2:30 T: 45 2:30:00	G3	50 moves in 2:00 T: 50 2:00:00	H3	40 moves in 3:00 T: 40 3:00:00
NORMAL PLAYING LEVELS + INFINITE LEVEL	A2	45 sec. per move L: 45	B2	1 min. per move L: 1:00	C2	1.5 min. per move L: 1:30	D2	2 min. per move L: 2:00	E2	3 min. per move L: 3:00	F2	5 min. per move L: 5:00	G2	10 min. per move L: 10:00	H2	Infinite Level 9:99:99
	A1	1 sec. per move L: 0:1	B1	2 sec. per move L: 0:02	C1	3 sec. per move L: 0:03	D1	5 sec. per move L: 0:05	E1	10 sec. per move L: 0:10	F1	15 sec. per move L: 0:15	G1	20 sec. per move L: 0:20	H1	30 sec. per move L: 0:30

For more details, see Section 3.

E4 .....	30 minutes .....	bL : 30
F4 .....	45 minutes .....	bL : 45
G4 .....	60 minutes .....	bL : 60
H4 .....	90 minutes .....	bL : 90

On the Blitz Levels (also called Speed Chess or “Sudden Death” Levels), you set the total time for the whole game. If the game time is exceeded, the computer flashes  $\text{bL}$  along with the elapsed time to show that the game is over. *If you select a Blitz Level, you may want to set the chess clocks to display countdown time instead of elapsed time (see Section 5.1). When game time runs out, the countdown clock automatically reverts back to the normal clock display.*

### 3.5 Beginner Levels (Squares A5-H5)

LEVEL	TIME PER MOVE	DISPLAY
A5 .....	1 second .....	bEG : 1
B5 .....	2 seconds .....	bEG : 2
C5 .....	3 seconds .....	bEG : 3
D5 .....	4 seconds .....	bEG : 4
E5 .....	5 seconds .....	bEG : 5
F5 .....	6 seconds .....	bEG : 6
G5 .....	7 seconds .....	bEG : 7
H5 .....	8 seconds .....	bEG : 8

Are you a novice or beginning chess player? If so, these levels are especially for you! Here, the computer restricts its search so that it deliberately plays weaker and gives you a better chance to win. The levels start out easy and gradually get a little harder—as you beat each one, go on to the next.

### 3.6 Mate Search Levels (Squares A6-H6)

LEVEL	PROBLEM	DISPLAY
A6 .....	Mate in 1 .....	$\text{f in} : 1$
B6 .....	Mate in 2 .....	$\text{f in} : 2$
C6 .....	Mate in 3 .....	$\text{f in} : 3$
D6 .....	Mate in 4 .....	$\text{f in} : 4$
E6 .....	Mate in 5 .....	$\text{f in} : 5$
F6 .....	Mate in 6 .....	$\text{f in} : 6$
G6 .....	Mate in 7 .....	$\text{f in} : 7$
H6 .....	Mate in 8 .....	$\text{f in} : 8$

Selecting one of these levels activates a special Mate Finder Program. If you have a position where there may be a mate and you would

## NEED HELP CHOOSING A LEVEL? SOME TIPS FOR YOU

- **Are you a beginning player?** Start out with the Beginner 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, combine one of these levels with the Easy Mode option (Section 5.2), so the computer can’t think on your time.
- **Are you an intermediate or more advanced player?** Try the Normal, Training, or Tournament Levels. The Normal Levels range from easy all the way up to a difficult 10-minute response time, and the Tournament Levels are extremely challenging. The Training Levels allow you to set your desired search depth—as you conquer each level, go on to the next! And don’t forget to try the Blitz Levels for some fast and exciting games of Speed Chess.
- **Want to experiment?** Use the Mate Search Levels to solve problems up to mate in eight—try searching from a position in one of your own games, or set up an actual mate problem. Choose the Infinite Level to have the computer analyze complicated positions for hours or even days.

like the computer to find it, set the computer on one of the Mate Search Levels. This computer can solve mates in up to eight moves. Mates in one to five are usually found quite quickly, whereas solutions taking six to eight moves may take quite some time. If there is no mate present or the computer can’t find a mate, it will display dashes (— — — —). To continue play, simply switch to another level.

### 3.7 Training Levels (Squares A7-H8)

LEVEL	DISPLAY	LEVEL	DISPLAY
A7 .....	PLy : 1	A8 .....	PLy : 9
B7 .....	PLy : 2	B8 .....	PLy : 10
C7 .....	PLy : 3	C8 .....	PLy : 11
D7 .....	PLy : 4	D8 .....	PLy : 12

E7 .....	PLY : 5	E8 .....	PLY : 13
F7 .....	PLY : 6	F8 .....	PLY : 14
G7 .....	PLY : 7	G8 .....	PLY : 15
H7 .....	PLY : 8	H8 .....	PLY : 16

On the Training Levels, the computer's search depth is limited to a certain number of moves, as shown above. As you cycle through the levels, the computer displays PLY : # for each level. A "ply" is an individual move (a move for either side), and "#" is the number representing the search depth. For example, on Level A7, the computer searches to a depth of one ply (PLY : 1), and thus looks ahead only one individual move. On this level, therefore, it will often overlook a mate in one. This produces weaker play, giving beginners a better chance of beating the computer.

## 4. INFO MODE: WATCH AND LEARN

**Imagine this:** *You're playing chess against a friend, and it's his move. You'd love to know what move he's thinking about, and you'd really like to get his opinion of the board position. But, of course, you won't ask—because that's just not done.* Well, guess what—when you play against this chess computer, you can ask anything you want, and you'll get all the answers! In fact, you can get an incredible amount of information about the computer's thought process. On request, it will show you the move it's thinking of, the line of play it expects after that move, its evaluation of the current board position, how deeply it is searching, and more. As you can imagine, studying this information can help you learn so much more about chess.

### Using Info Mode

How do you access all this game information? By using Info Mode at any time! If you do this while the computer is thinking, you'll see the information displays change as the computer considers different moves and searches deeper!

---

See "**INFO MODE AT A GLANCE!**" for a chart summarizing all the Info Mode displays.

---

Game information is divided into four groups, and pressing **INFO** cycles from one group to another. The **BLACK/→** and **WHITE/←** keys can be used to cycle through the displays within each of the groups.

Press **CLEAR** to exit Info Mode and go back to showing the normal chess clock.

After learning about Info Mode, take a look at Section 5.3 for a description of the Rotating Display feature. Selecting this feature makes the computer automatically cycle through the requested information in one-second intervals every time it thinks about its move—you can actually watch the computer "think out loud"! *Whenever requested information is not available, the display will show dashes (-----).*

### 4.1 Principal Variation

Press **INFO** the first time to get information on the principal variation (the predicted line of play, or the sequence of moves the computer thinks will be made). The first display you will see is the move the computer is currently thinking of making. The principal variation is shown to a maximum depth of four individual moves. Press **BLACK/→** repeatedly to scroll forward through all the moves:

- Move 1 (predicted line of play)
- Move 2 (predicted line of play)
- Move 3 (predicted line of play)
- Move 4 (predicted line of play)

Press **WHITE/←** to scroll backward and see previous displays again. Press **CLEAR** to return to the normal clock display.

*Since the first move of the predicted line of play is the move the computer assumes you will make, you can also consider this move as a hint! So—whenever you need help, press **INFO** on your turn.*

### 4.2 Search Information

Press **INFO** a second time to get information on the computer's search! Press **BLACK/→** repeatedly to scroll forward through these four displays:

- Evaluation of the current position (based on a pawn being worth 1.0 points; a positive number indicates White is ahead)
- Two numbers: The first is the current search depth, or the number of individual moves the computer is looking ahead; the second is the number of moves the computer has examined so far
- The move currently being considered
- The search speed, or number of positions (nodes) being searched every second

Press **WHITE/←** to scroll backward and see previous displays again. Press **CLEAR** to return to the normal clock display.

### 4.3 Chess Clock Information

Press **INFO** a third time for chess clock information. The chess clocks keep track of the time for both sides. Press **BLACK/→** repeatedly to scroll forward through the clock displays:

- Elapsed time since the last move was made
- Total elapsed time for the computer
- Total elapsed time for the player
- Remaining time for the computer (*Blitz/Tournament Levels only*)
- Remaining time for the player (*Blitz/Tournament Levels only*)

Press **WHITE/←** to scroll backward and see previous displays again.

Press **CLEAR** to return to the normal clock display.

The clocks stop whenever you take back a move, check level settings, select options, verify or set up a position, or turn the unit off. In all these cases, however, the times are retained in memory, and the clocks resume as soon as play is continued. Whenever you change levels or press **CLEAR** and **ENTER** together to reset for a new game, the chess clocks are always reset to 0 : 00 : 00.

### 4.4 Move Count/Game Moves

Press **INFO** a fourth time to show the move number in the game so far. You can then press **WHITE/←** repeatedly to scroll backward back through the moves of your game (up to 30 individual moves).

- Number of White moves played so far
- Moves of the current game




Press **BLACK/→** to go forward through the moves again at any point. Press **CLEAR** to return to the normal clock display.

### 4.5 Want a Hint? Just Ask!




In case you missed this feature when it was mentioned in Section 4.1, we wanted to point it out again—if you ever need advice on a move, you can always ask the computer for a hint. Simply press **INFO** when it's your turn to move, and the computer will show a suggested move for your side!

## INFO MODE AT A GLANCE!




### PRINCIPAL VARIATION INFO:

	<b>x1</b>	• Move 1 (predicted line of play)	
			↑
			↓
			• Move 2 (predicted line of play)
			• Move 3 (predicted line of play)
			• Move 4 (predicted line of play)

### SEARCH INFO:




	<b>x2</b>	• Evaluation of current position	
			↑
			↓
			• 2 numbers: Search depth + number of moves examined so far
			• Current move under consideration
			• Positions searched per second


### CHESS CLOCK INFO:

	<b>x3</b>	• Elapsed time since last move	
			↑
			↓
			• Elapsed time for the computer
			• Elapsed time for the player
			• Remaining time for the computer*
			• Remaining time for the player*

*\*Blitz/Tournament Levels only*

### MOVE COUNT INFO:

	<b>x4</b>	• Number of White moves played so far	
			↑
			↓
			• Moves of the current game

Press  at any time to exit Info Mode.

*For more details, see Section 4.*

## 5. OPTIONS FOR FUN AND VARIETY

In addition to all the features you've learned about so far, your chess computer also offers many other exciting game options! All of these options are user-selectable at any time during a game. They are described individually in this section, and summarized in the Option Mode Chart.

### Selecting Game Options

There are two methods of setting options, as described below—by using the game keys or pressing board squares.

---

See “**THE BASICS OF OPTION MODE: HERE'S HOW**” for a chart summarizing how to use Option Mode, and an overview of all the options.

---

The Game Options are divided into three groups: *Operation Mode*, *Playing Mode*, and *Rotating Display Mode*. Pressing **OPTION** cycles from one group to another. Each group contains eight different options, and the **BLACK/→** and **WHITE/←** 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. Remember that pressing **OPTION** cycles through the three main groups, so you can switch to any of the groups at any time. After you have made all your option selections from any or all of the option groups, press **CLEAR** to return to normal game play.

Another method of selecting game options is by **pressing the option squares**. As shown in the Options Chart, Squares A1-H1, A2-H2, and A3-H3 can be used to turn options on and off. First, press **OPTION** to enter Option Mode; then take a chess piece and press the desired square to access any option, using the chart as a guide. You'll see that pressing a square repeatedly turns that option on and off again, with plus (+) for ON and minus (–) for OFF. Once you have made all your selections, press **CLEAR** to return to your game.

When the computer is first powered on, certain default options are set. Options which are automatically in effect 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. Some exceptions are Auto Answer, which is automatically set back to ON

when you start a new game, and Play White from the Top, which is automatically set back to OFF.

### 5.1 Operation Mode Options (Squares A1-H1)

*These options affect how you operate your computer.*

Press **OPTION** once to select the Operation Mode Options. Then use the **BLACK/→** and **WHITE/←** keys to select options within this group, and press **ENTER** to turn options on (+) or off (–). Or, simply press the option squares to turn options on or off.

#### a. Auto Answer Mode (Square A1)

On: + R U t Off: - R U t

Normally, the computer automatically answers with a countermove whenever you enter a move. If you turn Auto Answer off, however, you can enter any number of moves one by one, without allowing the computer to answer. You'll see that there are many great ways to use this feature.

- Play through master games. Press **ENTER** to see what the computer would do in any position!
- Keep records of your own chess games. When a game is over, play to any position to see how other moves or different strategies might have affected the outcome.
- Study opening lines by entering them manually.
- Play against a friend, with the computer acting as referee. It will monitor your game, checking all moves for legality and keeping track of time for both sides!

*When playing against another person, if either side should need help, press **INFO** to see a suggested move. 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 its move, Auto Answer remains off, and you may continue your game. Also, note that this option will automatically go back to its default setting of ON whenever you use **CLEAR** and **ENTER** simultaneously to start a new game.*

#### b. Sound with Keypress (Square B1)

On: + S n d Off: - S n d

This option lets you turn off the sound that accompanies each keypress. You will still hear beeps when the computer moves or when an illegal move or keypress is made.

### c. Silent Mode (Square C1)

On: +5 IL Off: -5 IL

Normally, the computer always beeps when it has found its move. For completely silent operation, turn on Silent Mode.

### d. Ticking Clock (Square D1)

On: +t IÇŁ Off: -t IÇŁ

When you turn this option on, you activate a ticking sound that makes the computer's clock sound like a real chess clock! Just imagine—you can create the atmosphere of a championship chess tournament in your own living room!

### e. Countdown Clock (Square E1)

On: +c dŋ Off: -c dŋ

Turning this option on causes the computer to display the countdown time instead of the elapsed time. *Note that this option is only available in combination with the Tournament and Blitz Levels.*

### f. System Test (Square F1)

On: +t E5t Off: -t E5t

The System Test is included primarily as a troubleshooting tool. After activating this option by selecting +t E5t, pressing **BLACK/→** repeatedly will cycle through all the segments in the LCD display. To exit the test, press **CLEAR** and **ENTER** together to reset the computer.

**CAUTION:** Be careful not to activate this option during a game, since resetting the computer is the only way to exit the test, and your current game will be lost.

### g. Auto Power Down (Square G1)

On: +3Pđ Off: -3Pđ

The Auto Power Down option is a battery-saving feature! With this option activated, the computer will automatically turn itself off if no keypresses or moves are made for about 15 minutes. To continue the game where you left off, press **GO/STOP** to turn the computer back on. *Note that the computer will not turn itself off while it is thinking.*

### h. Play White from the Top (Square H1)

On: +t ŪP Off: -t ŪP

Want to depart from the usual standard and let the computer play the White pieces from the top of the board? Then try out this interesting

option! Choose +t ŪP at the beginning of a new game, and set up the board with the Black pieces closest to you, as shown in the diagram in this section. Then, press **ENTER** to start the game. Watch as the computer makes the first move for White from the top of the board!

---

*See “**TRY BLACK FROM THE BOTTOM: HERE'S THE POSITION**” for the correct board set-up when using this option.*

---

*When the computer plays White from the top, board notation is automatically reversed. Additionally, this option will go back to its default setting of OFF when you start a new game.*

## 5.2 Playing Mode Options (Squares A2-H2)

*These options affect how the computer selects its moves.*

**Press OPTION twice to select the Playing Mode Options.** Then use the **BLACK/→** and **WHITE/←** keys to select options within this group, and press **ENTER** to turn options on (+) or off (-). **Or**, simply press the option squares to turn options on or off.

### a. Selective Search (Square A2)

On: +5EŁ Off: -5EŁ

The program in this chess computer normally uses a *Selective Search algorithm*. This allows the computer to see combinations that would otherwise take much longer to compute. Turning this option off by choosing -5EŁ makes the program switch to a powerful *Brute Force algorithm*. This search method minimizes the risk of an occasional oversight.

*Note that the Mate Search Levels always use the Brute Force method.*

### b. Easy Mode (Square B2)

On: +ER5ŷ Off: -ER5ŷ

Want to win more games against the computer? Try turning on Easy Mode, which prevents the computer from thinking on your time! This weakens all the 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.

## THE BASICS OF OPTION MODE: HERE'S HOW

**1.** Press **OPTION** repeatedly to select a Mode. 

 x1 = **OPERATION MODE** (RUt...)

**2.** Next, select your option(s), using the Option Chart below. There are two ways to do this.

 x2 = **PLAYING MODE** (SEt...)

 x3 = **ROTATING DISPLAY MODE** (rd: l...)

• Cycle through the options within that mode:

- Press **BLACK/→** to cycle **→ forward**.
- Press **WHITE/←** to cycle **← backward**.

• When your option is displayed, press **ENTER** to toggle it **on (+)** or **off (-)**.

• **OR**, simply locate your option square and press one of the pegged pieces down into the hole to toggle that option **on (+)** or **off (-)**.

 x4 = back to **OPERATION MODE**...

**3.** Finally, press **CLEAR** to exit Option Mode, using your new option(s).



	A4	B4	C4	D4	E4	F4	G4	H4
ROTATING DISPLAY OPTIONS	Variation to ply 1 -rd:1 A3	Variation to ply 2 -rd:2 B3	Variation to ply 3 -rd:3 C3	Variation to ply 4 -rd:4 D3	Position Evaluation -rd:5 E3	Depth & Moves -rd:6 F3	Nodes Searched -rd:n G3	Time per Move -rd:t H3
	Selective/Brute Force Search +SEL A2	Easy Mode -EASy B2	Random Play -rRNd C2	Passive Book -bP:P D2	Active Book -bP:A E2	Complete Book -bP:P F2	Tournament Book -bP:t G2	Book On/Off +bOOt H2
PLAYING MODE OPTIONS								
OPERATION MODE OPTIONS	Auto Answer +RUt A1	Sound with Keypress +Snd B1	Silent Mode -SIL C1	Ticking Clock -tICk D1	Countdown Clock -cdn E1	System Test -tEst F1	Auto Power Down -aPd G1	Play White from Top -tOP H1

For more details, see Section 5.

### c. Random Play (Square C2)

On: +r RNd Off: -r RNd

Turn this option on for greater variety of play. Instead of selecting one single best move, the computer will then choose one of the best moves to play by consulting its built-in Randomizer.

### d. Passive Book (Square D2)

On: +bP:P Off: -bP:P

Selecting the Passive Book option forces the computer to give

preference to passive and closed positions when deciding which lines to play. *If this option is selected, the Active and Tournament Book options are disabled.*

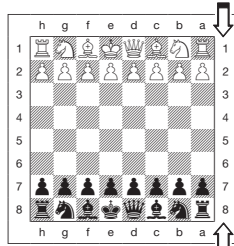
### e. Active Book (Square E2)

On: +bP:A Off: -bP:A

When this option is activated, the computer will give preference to active lines and open positions when deciding which lines to play. *If this option is selected, the Passive and Tournament Book options are disabled.*

## TRY BLACK FROM THE BOTTOM: HERE'S THE POSITION

When the computer plays White from the top (Section 5.1, Option H1), be sure to set up the pieces correctly! Notice that the Kings and Queens are positioned differently, and the board notation is reversed.



For more details, see Section 5.1.

### f. Complete Book (Square F2)

On: + b ̂ : ̂ Off: - b ̂ : ̂

Turning on the Complete Book option gives the computer the freedom to choose any move from its built-in book of openings, so you'll see a greater variety of opening lines being played. *If this option is selected, the Passive, Active, and Tournament Book options are disabled.*

*With this option on, you may see the computer make some questionable moves. This is because its built-in book of openings 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 know how to respond to them in the best way. Therefore, when you turn on the Complete Book, the computer could potentially play one of these moves.*

### g. Tournament Book (Square G2)

On: + b ̂ : ̂ Off: - b ̂ : ̂

When you turn the Tournament Book option on, the computer is forced to always select the best possible line of play in every opening. While this results in the best chess play, it also narrows down the computer's choice of moves by limiting its available book lines. *If this option is selected, the Active and Passive Book options are disabled.*

### h. Book On/Off (Square H2)

On: + b ̂ ̂ ̂ ̂ Off: - b ̂ ̂ ̂ ̂

Set this option to - b ̂ ̂ ̂ ̂ to completely lock out the computer's built-

in book of openings. When you turn the book off, the computer is forced to take time to think of its moves from the very beginning of the game, rather than using moves contained in its memory. For more details on openings, see Section 2.7. *If you turn the book completely off, all other book options are also automatically disabled.*

## 5.3 Rotating Display Options (Squares A3-H3)

**IMPORTANT:** The Rotating Display feature is only activated **WHILE THE COMPUTER IS THINKING.**

Normally, the display shows the time for the player to move. However, the computer can also display other information, as noted 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 cycles your choices in one-second increments. You may turn on any or all of the Rotating Display options, as desired.

**Press OPTION three times to select the Rotating Display Options.** Then use the **BLACK/→** and **WHITE/←** keys to select the options you want to see rotated in the display. The options are described below and summarized in the Option Mode Chart in this section. Press **ENTER** to turn these options on (+) or off (-). **Or**, simply press the option squares to turn the options on or off.

If you think the display information is changing too quickly when it rotates, press **INFO** to freeze the display. Successive presses of **INFO** and the **BLACK/→** and **WHITE/←** keys will allow you to cycle through all the 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.

The game information you can see **while the computer is thinking** includes the following:

- r d : ̂ to r d : ̂ = the predicted line of play (up to four individual moves)
- r d : ̂ = an evaluation of the current position
- r d : ̂ = the computer's search depth, and the number of moves examined so far in the game
- r d : ̂ = the number of nodes searched per second
- r d : ̂ = the amount of time the move has taken so far

*When requested information is not available, the display will show a series of dashes (-----).*



For complete descriptions of these options and details on exactly how to interpret the displays, see Section 4.

## 6. VERIFYING/SETTING UP POSITIONS

### 6.1 Verifying Positions

See **“IT’S EASY TO VERIFY PIECES!”** for a step-by-step example of using Verify Mode.

If you should knock over the chess pieces or if you think your board position may be incorrect, the computer can verify all the piece locations for you!

When it is your turn, press one of the **PIECE SYMBOL KEYS** (♔, ♚, ♜, ♝, ♞, ♟, ♠, or ♡). The computer shows you where the first piece of that type is located on the board—the display shows the piece symbol, color indicator, and square designation. Press the same **PIECE SYMBOL KEY** again to see the location of the next piece of that same type. All the White pieces are shown first, then the Black pieces. When there are no more pieces of that type, only the piece symbol remains in the display.

Want to verify more pieces? Simply repeat the above procedure using the other **PIECE SYMBOL KEYS**, verifying the entire board if desired! Press **CLEAR** to return to normal game play.

### 6.2 Changing and Setting Up Positions








See **“TRY OUT POSITION MODE”** to get an idea of how this feature works.

Position Mode is an exciting feature which lets you set up special board positions to play from, or problems you want the computer to solve! **Caution:** All previous moves in your current game will be erased from the computer’s memory if you make changes to the position during a game.

Press **POSITION** to enter Position Mode, and the display will show - P 0 5 -. You can change or set up a position whenever it is your turn to move. After you have set up your new position, press **CLEAR** to exit Position Mode.

- **To remove a piece from the board**, press the piece down on its square and then remove it. Notice that the display indicates the

### IT’S EASY TO VERIFY PIECES!

1. Press **CLEAR** and **ENTER** together to reset the computer for a new game.  
Display: □ 0 : 00 : 00.
2. Press the **KNIGHT** Key.  
Display: □, ♞, b 1 (the first White Knight).
3. Press **KNIGHT** again.  
Display: □, ♞, c 1 (the second White Knight).
4. Press **KNIGHT** again.  
Display: ♜, ♞, b 8 (the first Black Knight).
5. Press **KNIGHT** again.  
Display: ♜, ♞, c 8 (the second Black Knight).
6. Press **KNIGHT** again.  
Display: ♞ (no more Knights on the board).
7. Repeat to verify any other piece! Press **CLEAR** to exit Verify Mode.

For more details, see Section 6.1.

piece type and color, along with a minus sign (–) and the square location.

- **To move a piece from one square to another**, press the piece down on its original square, pick it up, and then press it down on the new square. As you do this, the display will show a minus sign (–) for the first square, and a plus sign (+) for the second square.
- **To add a piece to the board**, first press the **PIECE SYMBOL KEY** for that piece (♔, ♚, ♜, ♝, ♞, ♟, ♠, or ♡). Make sure the display shows the correct color symbol for the piece you want to add. If it does not, press **BLACK/→** or **WHITE/←** to change the color. When the display shows the correct piece type and color, place that piece onto the desired square and press down gently. The display shows a plus sign (+), along with the location for that square. To add another piece of the same type, simply press down onto another

square. To add a different piece, press a different **PIECE SYMBOL KEY** and follow the same steps outlined above.

- **To clear the board**, press **ENTER** while you are in Position Mode. The display will show [ ] to symbolize an empty chessboard. Press **ENTER** once more to confirm that you do want to clear the board. Then add pieces as described previously. If you decide not to clear the board, press **CLEAR** to cancel. This feature can be handy when you want to set up a position with only a few pieces, where it would be much easier to start out with an empty board!
- **Once you have changed the board position as described above**, make sure the color indicator in the display is showing the correct color of the side to move. Change the color, if necessary, by pressing **BLACK/→** or **WHITE/←**.
- **To exit Position Mode**, press **CLEAR**. You will return to normal game play, with your new board position!

*Note that any legal position can 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 and is not to move. In such cases, the computer will simply beep when you press **CLEAR**, and you will not be allowed to exit Position Mode. Check the position using the **PIECE SYMBOL KEYS**, if necessary, and correct the position (by adding a piece, removing a piece, or moving an incorrectly placed piece). Then press **CLEAR** to exit Position Mode.*

## 7. TECHNICAL DETAILS









### 7.1 The ACL Function

Computers sometimes “lock up” due to static discharge or various other electrical disturbances. If this should happen, take out the batteries and use a pin or another sharp object to press into the hole marked **ACL** in the base of the unit for at least one second. This resets the computer.

### 7.2 Care and Maintenance

Your chess computer is a precision electronic device, and should not be subjected to rough handling or exposed to extreme temperatures or moisture. Be sure to remove the batteries before cleaning the unit. Do not use chemical agents or liquids to clean the unit, as they may

### TRY OUT POSITION MODE

1. Press **CLEAR** and **ENTER** together to reset the computer for a new game.  
Display: □ 0 : 00 : 00.
2. Press **POSITION** to enter Position Mode.  
Display: - P05 -.
3. Press the White pawn down on Square E2, and remove it from the board.  
Display: □, ♖, - E 2.
4. Press that same pawn down on Square E3 to add it to the board.  
Display: □, ♖, + E 3.
5. Press the Black Queen down on Square D8, and remove it from the board.  
Display: ♚, ♚, - d8.
6. Press that same Queen down on Square H5 to add it to the board.  
Display: ♚, ♚, + H 5.
7. Press **WHITE/←** to change the color to move next.
8. Press **CLEAR** to exit.

*For more details, see Section 6.2.*

damage the plastic.

Weak batteries should be replaced promptly, since they can leak and damage the computer. Please also note the following regarding the use of batteries. **Warning: Use only alkaline or zinc carbon batteries. Do not mix different types of batteries or new and used batteries. Do not recharge non-rechargeable batteries. Use only the recommended batteries or equivalent. Be sure to observe the correct**

**polarity when inserting batteries. Worn out batteries should be removed from the unit promptly. Do not short circuit the supply terminals.**

### 7.3 Technical Specifications

Keys:	16
LCD Display:	48-segment
Batteries:	3 x AA/AM3/R6 (1.5V) cells
Power Consumption:	330 mW maximum
Dimensions:	335 x 302 x 35 mm
Weight:	975 g (excluding batteries)

**Please retain this information for future reference.**

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

## CONDITIONS OF WARRANTY

1. Warranty period is 2 years from date of purchase with proof of purchase submitted.
2. Operating instructions must be followed.
3. Product must not have been damaged as a result of de-facement, misuse, abuse, neglect, accident, destruction or alteration of the serial number, improper electrical voltages or currents, repair, alteration or maintenance by any person or party other than our own service facility or an authorized service center, use or installation of non-Saitek replacement parts in the product or the modification of this product in any way, or the incorporation of this product into any other products, or damage to the product caused by accident, fire, floods, lightning, or acts of God, or any use violative of instructions furnished by Saitek plc.
4. Obligations of Saitek shall be limited to repair or replacement with the same or similar unit, at our option. To obtain repairs under this warranty, present the product and proof of purchase (e.g., bill or invoice) to the authorized Saitek Technical Support Center (listed on the separate sheet packaged with this product) transportation charges prepaid. Any requirements that conflict with any state or Federal laws, rules and/or obligations shall not be enforceable in that particular territory and Saitek will adhere to those laws, rules, and/or obligations.
5. When returning the product for repair, please pack it very carefully, preferably



6. IMPORTANT: To save yourself unnecessary cost and inconvenience, please check carefully that you have read and followed the instructions in this manual.
7. This warranty is in Lieu of all other expressed warranties, obligations or liabilities. ANY IMPLIED WARRANTIES, OBLIGATIONS, OR LIABILITIES, INCLUDING BUT NOT LIMITED TO THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, SHALL BE LIMITED IN DURATION TO THE DURATION OF THIS WRITTEN LIMITED WARRANTY. Some states do not allow limitations on how long an implied warranty lasts, so the above limitations may not apply to you. IN NO EVENT SHALL WE BE LIABLE FOR ANY SPECIAL OR CONSEQUENTIAL DAMAGES FOR BREACH OF THIS OR ANY OTHER WARRANTY, EXPRESS OR IMPLIED, WHATSOEVER. Some states do not allow the exclusion or limitation of special, incidental or consequential damages, so the above limitation may not apply to you. This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

### Information for Customers in the United States:

#### FCC Compliance and Advisory Statement

**Warning:** Changes or modifications to this unit not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

1. This device may not cause harmful interference, and
2. This device must accept any interference received, including interference that may cause undesired operation

**NOTE:** This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

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