

## KEYS AND FEATURES

- 1. BATTERY COMPARTMENT:** Slide the cover to the right to open (see **(A)**). Uses two “AAA” (AM4/RO3) alkaline batteries.
- 2. STOP KEY:** Press to turn the computer off. Current game is retained in memory for up to two years.
- 3. GO KEY:** Press to turn the computer on.
- 4. SENSORY CHESSBOARD:** Each square has a sensor that automatically registers piece movement.
- 5. PIECE SYMBOL KEYS:** Used to verify positions and to select Teach Modes.
- 6. GAME KEYS**
  - a. NEW GAME KEY:** Press to reset the computer for a new game.
  - b. SOUND KEY:** Press to turn the sound on and off.
  - c. PLAY KEY:** Press to change sides with the computer; press while the computer is thinking to force it to move. Press to get a move suggestion from the computer.
  - d. LEVEL KEY:** Press to enter Level Mode. Also used to access the five Teach Modes.
  - e. TAKE BACK KEY:** Press to take back the last individual move made. You may take back two individual moves, or a move for each side.
  - f. CLOCK KEY:** Press to enable or disable the chess clock.
- 7. LCD DISPLAY WINDOW:** Used to show moves, game information, and chess clock. Also used to select the playing levels and verify pieces.
- 8. ACL (Reset):** In base of unit. Used to eliminate static discharge after inserting new batteries.
- 9. PIECE STORAGE COMPARTMENT:** Handy storage compartment stores your captured pieces while playing.
- 10. PROTECTIVE LID:** Covers unit to keep pieces in place and to protect from dust; use finger grips on either side of unit to open.



## 1. USING YOUR COMPUTER

### 1 First, Install the Batteries

Your chess computer runs on two “AAA” (AM4/RO3) batteries. For longer battery life (up to 300 hours), use fresh alkaline batteries. Insert the batteries as shown in Figure 1-1. Press **GO** to turn the computer on—a beep signals that the game is ready to play. If the computer does not respond, use a paper clip 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.

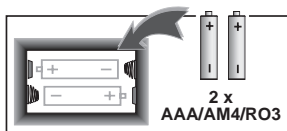


Fig. 1-1

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

- Follow these steps to start a game:
  - a. Press **GO** to turn the computer on.
  - b. Press **NEW GAME**, and set up the chess pieces in their starting positions, with the White pieces nearest to you, as shown in Figure 1-2.
  - c. To make a move, lightly press down on the piece you want to move until you hear a beep (see Figure 1-3). The computer's sensory board registers your move, and the display shows the square that was pressed.
  - d. Take the piece and lightly press it down on the square you want to move to. A second beep sounds and the computer starts thinking about its move.

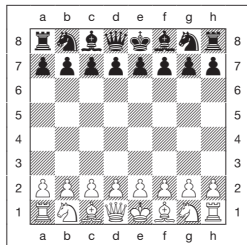


Fig. 1-2

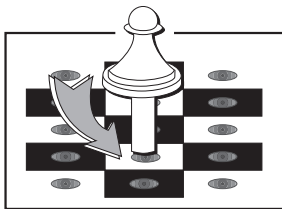


Fig. 1-3

### 3 The Computer Makes Its Move

When the computer moves, it beeps and shows its move in the display, as shown in Figure 1-4. Press the indicated piece down on its **from** square (e7, in this case) until you hear a beep. (Note that the display changes to show



Fig. 1-4

the symbol for that piece, along with the square that piece is moving **to**. For a chart of the symbols, see Figure 2-1.)

Next, press that same piece down on the second square in the display—the square the computer wants to move **to** (e5, here). Once you press e5, you have completed the computer's move! For an example, see Figures 1-5a and b.

## 4 Change Your Mind? Take Back!

If you make a mistake or change your mind about a move, you can take back two individual moves, or one move for each side. Press **TAKE BACK** when it is your turn to move. The display shows the **to** square of the move to be taken back. Press the piece down on that square. You now see the piece symbol and the square that piece came **from**. Press the piece down on the **from** square to finish the take-back. If the move taken back was a capture, the computer reminds you to put the captured piece back on the board by displaying the piece type for you. Press this piece down on the indicated square. To take back another move, press **TAKE BACK** again. To continue the game, either make your next move or press **PLAY** to have the computer move next.

Figures 1-6a and b show an example of taking back the move Ng8-f6. After pressing **TAKE BACK**, the display shows f6, the square the Knight moved **to** (Figure 1-6a). Press down on f6, and the display changes to show the piece color and symbol (Black Knight) and the square that piece came **from** (Figure 1-6b). Press the Knight back down on g8.

*Note that en passant captures cannot be replayed after two take-backs.*

## 5 It's Check, Mate, or Draw!

The computer displays certain symbols when a King is in check, or when the game ends in checkmate or draw by stalemate. These symbols are shown in Figures 1-7a, b, c, d and e.

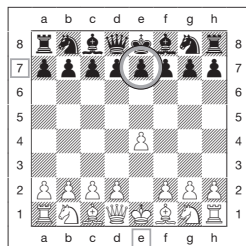


Fig. 1-5a - Press down on e7...

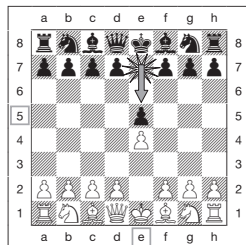


Fig. 1-5b - ...and then press down on e5.



Fig. 1-6a



Fig. 1-6b

## 6 Game Over? Start a New Game

Press **NEW GAME** to start a new game at any time. The computer is then ready for another game, using the currently selected level. Since pressing **NEW GAME** clears your current game from the computer's memory, be very careful not to press this key by mistake!

## 7 Too Easy/Hard? Change Levels!

Your chess computer offers you 64 levels of skill, which correspond to one of the 64 board squares (which are divided into 4 categories), making level selection so easy! Together with the built-in Teach Modes, you have a choice of 384 level settings. Press **LEVEL** to enter Level Mode, and the current level is displayed (e.g., Level (board square) A3 shows as L:A3). To change the level, simply press a board square, and that level will show in the display. Press **LEVEL** again to exit Level Mode.

The computer thinks progressively more deeply on each successive level. For more information on the playing levels, see Section 3.1.



## 2. ADDITIONAL FEATURES

### 2.1 Piece and Color Symbols

The display uses symbols for the chess pieces (as shown in Figure 2-1). The bar symbols in the display always indicate color (bottom bars = White, top bars = Black). When you are White and it is your turn to move, the display indicates this right after the computer's move is made, before changing to



Fig. 1-7a - Black in check.



Fig. 1-7b - White in check.



Fig. 1-7c - Checkmate (black).



Fig. 1-7d - Checkmate (white).



Fig. 1-7e - Draw.

show your total elapsed time on the chess clock (see Figure 2-2).

## 2.2 Chess Clocks

A built-in chess clock keeps track of the time for your (i.e. not the computer's) side, with a four-digit display showing the total elapsed time for you. If you change sides by pressing **PLAY**, the clock will keep track of the side you are currently playing. After entering the computer's move, the display shows the indication for your side to move for about one second to show that it is your turn. It then switches to show your total elapsed time (until any key or square is pressed). After you make your move, the display immediately switches to show "C ⚪ : ", indicating the computer is thinking and that the clock has stopped.

For the first hour of the game, the display will show MINUTES:SECONDS, with a steady colon. If the total elapsed time exceeds one hour, the display will show MINUTES:SECONDS of the next hour. Note that the clock stops whenever you have completed the allowable number of take-backs of a move, you verify or change the level, verify the board, or turn the computer off. Also note that when your King is in check, the display shows check instead of the chess clock. In each of these cases, however, the times are retained in memory, and the clock resumes when play is continued.

The chess clock can be switched off by pressing **CLOCK** when it is your turn to move. The computer will beep and the side to move will be displayed instead of the clock. Press **CLOCK** again to switch on the clock and it will resume.

## 2.3 Capturing and Special Moves

**Captures:** To capture, press down lightly on the piece you want to move, take the captured piece off the board, and press your piece down on the square of the captured piece.







LCD PIECE SYMBOLS		
Chess Piece	Display (White/Black)	
	King	- K - K
	Queen	- Q - Q
	Rook	- R - R
	Bishop	- B - B
	Knight	- N - N
	Pawn	- P - P

Fig.2-1



Fig.2-2 - White to move.

**En Passant:** In an en passant capture, the computer reminds you to remove the captured pawn from the board by displaying the pawn's location (for example, \_\_:E5). Press down on the captured pawn before removing it from the board. See Figures 2-3a and b for an example.

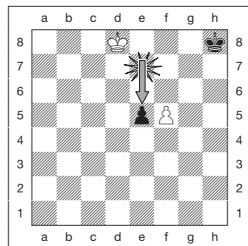
**Pawn Promotion:** When you promote a pawn, first press your pawn down on its **from** square, as usual. The computer displays your **from** square. As soon as you press your pawn down on the **to** square, it automatically becomes a Queen! Remember to change your piece on the board! The computer will also always promote to a Queen. After pressing its **from** square, the display indicates the pawn promotion by changing to show the Queen symbol and the **to** square. Press down on the **to** square to complete the computer's promotion move. However, this computer doesn't offer the option of under-promotion.

**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 displays the Rook's **from** square. Press down on this square. The computer then displays the Rook symbol, along with the square the Rook should move **to**. Press down on the Rook's **to** square to complete the move (see Figure 2-4).

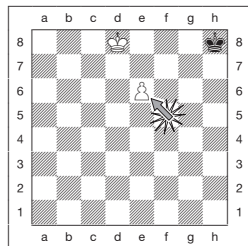
## 2.4 Illegal Moves

Your computer will never accept an illegal move. If you attempt an illegal move, the computer beeps and the display keeps showing the **from** square. Press on that square to clear the illegal move; then move again.

If you should move the computer's piece incorrectly, you will also hear an error beep. This can happen if you move the wrong piece or move a piece to the wrong square. Check the display and move again. If you press a piece and the **from** square shows in the display, but you decide not to make that move, press that same square once again to cancel. *Be*



*Fig.2-3a - Black tried to avoid the capture of his pawn by advancing it two squares, from e7 to e5. However...*



*Fig.2-3b - ...White can capture the Black pawn **en passant** by moving his pawn from f5 to e6!*

*careful not to make mistakes when the sound is off, as you will not be able to hear the error beeps.*

## 2.5 Interrupting the Computer's Search

To interrupt the computer while it is thinking, press **PLAY**, and the computer will play the best move it has found so far.

## 2.6 Changing Sides with the Computer

To change sides with the computer, press **PLAY** when it is your turn. The computer will make the next move for your side. Change sides as often as you wish!

## 2.7 Getting Hints from the Computer

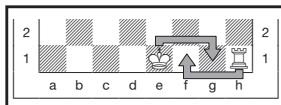
If you need help, you can have the computer show you what it would do in your position! Press **PLAY** on your turn, and the computer will make the next move for you. To keep this move as your own, press **PLAY** again and the computer will make its next move; then continue the game by making your own next move. If you do not want to use the computer's move as your own, take it back and make another move of your choice.

## 2.8 The Computer Plays Against Itself

To watch the computer play a game against itself, press **PLAY** for every move. Study its playing strategies to learn more about chess!

## 2.9 Game Memory

You may interrupt a game by pressing **STOP** to turn the computer off. The computer will "remember" your position for up to two years (with fresh alkaline batteries). When you switch on again, continue where you left off!



*Fig.2-4 - Press the King down on e1 and then g1. The computer will remind you to move the Rook from h1 to f1 to complete the castling move.*



### 3. LEVELS AND SPECIAL MODES

#### 3.1 Levels of Play

With 384 level settings to choose from (incorporating the Teach Modes), you can learn and grow with this chess computer! As shown in the chart of playing levels, each level corresponds to one of the 64 board squares. The levels are categorized into 4 groups intended to entertain users of different skill levels:

*Handicap* levels (H1-H16 = board squares A1-B8), *Beginner* levels (B1-B16 = board squares C1-D8), *Intermediate* levels (I1-I16 = board squares E1-F8) and *Advanced* levels (A1-A16 = board squares G1-H8). The computer will think ahead progressively more deeply when the higher levels are chosen. You may experiment with the levels before you settle with the level settings you feel most comfortable with, then advance to more difficult levels as your skill and knowledge expand.

Within each level category, the lower number levels are easier as the computer will not always search to its maximum ability to find the best move. Instead, the computer will deliberately make alternative moves that are not the absolute best it can think of. This produces some interesting variations in the moves of the game as the computer often makes some



Fig.3-1 - Teach Mode display, showing the Knights Study Mode selected.

CHOOSE A LEVEL FROM THE 64 BOARD SQUARES

8	H8	H16	B8	B16	I8	I16	A8	A16
7	H7	H15	B7	B15	I7	I15	A7	A15
6	H6	H14	B6	B14	I6	I14	A6	A14
5	H5	H13	B5	B13	I5	I13	A5	A13
4	H4	H12	B4	B12	I4	I12	A4	A12
3	H3	H11	B3	B11	I3	I11	A3	A11
2	H2	H10	B2	B10	I2	I10	A2	A10
1	H1	H9	B1	B9	I1	I9	A1	A9
	A	B	C	D	E	F	G	H

Vertical labels on the table: HANDICAP (A1-B8), BEGINNER (C1-D8), INTERMEDIATE (E1-F8), ADVANCED (G1-H8).

very human mistakes! The highest level in each level category always produces the best moves the computer can think of within the settings constraint.

When you set the level, bear in mind that when the computer has more time to think about its moves, it gets stronger and plays better—just like a human player! Sharpen your chess skills—as you beat the computer on each level, graduate to the next. Keep challenging yourself and learn more about the game!

Note that on the higher levels, the computer may take a long time to complete its search. Press **PLAY** to force the computer to abort the search and make a move.

Press **LEVEL** to enter Level Mode, and the current level is displayed (e.g., Level (board square) A3 shows as L:A3). To change the level, simply press a board square, and that level will show in the display. Press **LEVEL** again to exit Level Mode.

The **LEVEL** key also gives you access to five special Teach Modes. For details on selecting Teach Modes, see Section 3.2.

### 3.2 Teach Modes: Learn Tactics!

Your chess computer contains five built-in Teach Modes. This feature allows you to learn basic moves and master the tactics of the pieces, one at a time. For each individual Teach Mode, the only pieces on the board will be Kings, pawns, and the selected piece type. This will help beginners to concentrate solely on one piece at a time, without losing focus and being distracted by other pieces on the board.

To select a Teach Mode, press **LEVEL**, and then the required piece

#### TEACH MODES AT A GLANCE!

1. Press **LEVEL** and then any piece symbol key except King (as shown below) to enter Teach Mode.

**To study**    **Press**    *Pieces on the board*

**Queens**        *Kings, Queens, pawns*

**Rooks**        *Kings, Rooks, pawns*

**Bishops**        *Kings, Bishops, pawns*

**Knights**        *Kings, Knights, pawns*

**Pawns**        *Kings, pawns*

2. Press **LEVEL** to exit Level Mode and enter your selection into the computer. Now you can play, studying the piece of your choice! To return to the standard 32-piece game, press **NEW GAME**.

symbol key, except **KING**. The display shows the selected Teach Mode. In Figure 3-1, for example, the display indicates that the Knights Teach Mode is in effect. After pressing the corresponding Piece Symbol key (**QUEEN, ROOK, BISHOP, KNIGHT, or PAWN**) press **LEVEL** to exit Level Mode and enter your selection into the computer.

The **KING** key is reserved for the normal game, using all 32 pieces. To return to normal game play, press **NEW GAME**.

Please note the following, in relation to the Teach Modes:

- If you do not press a square to select a new level, the current level will remain in effect.
- If **NEW GAME** is pressed during any game, the computer will switch back to the standard game (32 pieces), with the current level still in effect.
- If you press **LEVEL** and you then decide not to change the current playing level or Teach Mode, simply press **LEVEL** again, and the current status will remain as it is.
- If you accidentally press any piece symbol key in Level Mode, you will lose the current game after exiting Level Mode. To continue with the current board, press any square key, **TAKE BACK, CLOCK or PLAY** to deselect the Teach Mode before exiting Level Mode.

### 3.3 Verify Mode: Check Piece Positions!

If pieces get knocked over or you think the position might be wrong, the computer can check the board for you. On your turn, press one of the Piece Symbol keys. The computer will show the symbol for that piece, along with the square occupied by that piece. Keep pressing the same Piece Symbol key to see the board locations of all pieces of that same type. The bottom bar in front of the piece symbol indicates a White piece, and the top bar indicates a Black piece. When there are no more pieces of that type, the computer beeps, and the display shown before you started to

#### **HAVING PROBLEMS? SOME HINTS & TIPS!**

- **Could your position be wrong? Have pieces been knocked over or moved by mistake?**  
*Verify the position as described in Section 3.3.*
- **Does the display keep showing your “from” square when you try to move?**  
*You are trying to enter an illegal move. Either move your piece to another square, or press the indicated **from** square again to erase the move and make a different move. Trust the computer—it knows the rules and won’t allow any illegal moves!*
- **Is your King in check?**  
*Whenever your King is in check, you must first move it out of check before you can make any other move!*
- **Computer won’t make a move?**  
*It is thinking on a higher level. Press **PLAY** to force it to play the best move it has found so far.*

verify pieces will resume.

To verify other pieces, repeat the same steps using the other Piece Symbol keys. When you are finished, simply make your next move.



## 4. TECHNICAL DETAILS

### 4.1 The ACL Function

Computers can sometimes “lock up” due to static discharge or other electrical disturbances. If this should happen, 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.

### 4.2 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. Do not use chemicals to clean your unit, as they may damage the plastic.

Weak batteries should be replaced promptly, since they can leak and damage the computer.

**Use only alkaline or zinc carbon batteries.**

**Non-rechargeable batteries are not to be recharged.**

**Different types of batteries or new and used batteries are not to be mixed.**

**Only batteries of the same or equivalent type as recommended are to be used.**

**Batteries are to be inserted with the correct polarity.**

**Exhausted batteries are to be removed from the unit.**

**The supply terminals are not to be short-circuited.**

## TRY OUT VERIFY MODE FOR YOURSELF!

1. Press **NEW GAME**.

Now, let's check the positions of all the Rooks on the board:

2. Press the **ROOK** key:

 (1st Rook)

3. Press **ROOK** again:

 (2nd Rook)

4. Press **ROOK** again:

 (3rd Rook)

5. Press **ROOK** again:

 (4th Rook)

6. Press **ROOK** again:

 (no Rooks)

That's all there is to it! To verify another piece, press a different Piece Symbol key and follow the same steps as above!

### 4.3 Technical Specifications

Clock Frequency: 4 MHz

Keys: 14

LCD Display: Viewing area 18 x 9mm

Sound: Piezo-electric buzzer

Batteries: 2 AAA/AM4/R03 (1.5V) cells 

Battery Life: 300 hours (with new alkaline batteries)

Dimensions: 163 x 108 x 17mm

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

## TROUBLESHOOTING GUIDE

SYMPTOMS	POSSIBLE CAUSES	ACTION TO TAKE
1. The computer doesn't react, or "freezes" during your game.	Batteries are not inserted properly.	Install batteries as shown in 1.1.
	Batteries are weak or bad.	Replace the batteries.
	Static discharge or an electrical disturbance has caused a lock-up.	Press into the hole marked <b>ACL</b> , as described in Section 1.1.
2. The display is dim.	Batteries are weak.	Replace the batteries.
3. The computer will not play a move.	You may be on one of the higher levels, where the computer thinks for a longer time.	You may interrupt the computer and force it to make a move by pressing <b>PLAY</b> .
4. The computer will not accept your move.	Is it your turn? Is your King in check? Will your move put your King into check? Did you move the Rook first when castling? Are you moving to an illegal square?	Make sure you are familiar with the chess rules. Use <b>TAKE BACK</b> to reconstruct the last move that was made.
	The computer is thinking.	To interrupt the computer, press <b>PLAY</b> .
	You have entered the computer's last move incorrectly (pressed the wrong <b>from</b> or <b>to</b> square).	Check the displayed move. Press the correct square to complete the computer's move.
5. The computer seems to be making illegal moves.	The computer has made a special move, such as en passant, castle, or pawn promotion.	Review the chess rules. Use <b>TAKE BACK</b> to reconstruct the last move.
	Your board position is incorrect.	Verify the board (see Section 3.3).
6. The computer is silent.	The <b>SOUND</b> key has been pressed to turn the sound off.	Press <b>SOUND</b> again to turn the sound back on.

## TROUBLESHOOTING GUIDE (CONTINUED)

SYMPTOM	POSSIBLE CAUSES	ACTION TO TAKE
7. The computer doesn't show the chess clock on your turn to move.	Chess clock has been switched off.	Press <b>CLOCK</b> to turn the chess clock on when it is your turn to move.
	You have taken back a move and no more can be taken back.	This is normal — continue to play.
	Your King is in check.	This is normal — continue to play.