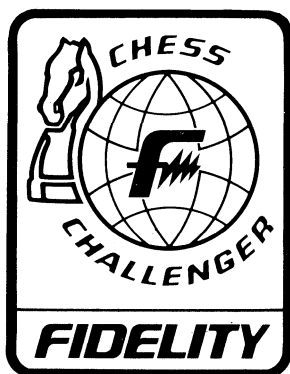


# **TRAVEL MASTER CHESS CHALLENGER<sup>®</sup>**

**with sensory board**

**OWNER'S MANUAL  
INSTRUCTION BOOKLET  
MODEL 6122**



**THIS LIMITED WARRANTY APPLIES ONLY TO FIDELITY  
PRODUCTS PURCHASED IN THE UNITED STATES**

**LIMITED ONE YEAR WARRANTY**

Fidelity Electronics warrants to the original consumer purchaser that its products are free from any electrical or mechanical defects for a period of one year from the date of purchase. If any such defect is discovered within the warranty period, Fidelity Electronics will repair or replace the unit free of charge upon receipt of the unit which has been sent insured and postage prepaid to the factory address shown below.

**A PURCHASE RECEIPT OR OTHER PROOF OF DATE OF  
ORIGINAL CONSUMER PURCHASE WILL BE REQUIRED BE-  
FORE WARRANTY PERFORMANCE IS RENDERED.**

This warranty covers normal consumer use and does not cover damage which occurs in shipment or failure which results from alteration, accident, misuse, abuse, neglect, wear and tear, inadequate maintenance, commercial use, or unreasonable use of the unit. Removal of the top panel voids all warranties. This warranty does not cover cost of repairs made or attempted outside of the factory.

Any applicable implied warranties, including warranties of merchantability and fitness, are hereby limited to one year from date of purchase. Consequential or incidental damages resulting from a breach of any applicable express or implied warranties are hereby excluded. Some states do not allow limitations on the duration of implied warranties and do not allow exclusion of incidental or consequential damages, so the above limitations and exclusions in these instances may not apply.

This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

The only authorized service center in the United States:

Fidelity Electronics  
8800 N.W. 23rd Street  
Miami, Florida 33172

If you ship the unit, carefully pack and send it prepaid, adequately insured, and preferably in the original carton. Include a letter, detailing the complaint, inside the shipping carton with a telephone number where you may be reached during business hours.

If your warranty has expired and you want a service fee quote, write to the above address specifying the model, and requesting a service quotation. **DO NOT SEND YOUR GAME** with your request for quotation, as Fidelity has no provisions for holding your game from service while waiting for your reply.

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## SECTION 1. INTRODUCTION

Congratulations on your choice. You now own a chess computer built around a very powerful, single-chip micro computer. It contains lots of features:

- \* 64 Levels including Blitz, Tournament and Beginner levels.
- \* Chess clocks, with count down feature.
- \* Sensory board for move input.
- \* Automatic Power Down with memory retention.
- \* Ability to play white from the top of the chess board.
- \* 2 Player mode.
- \* User selectable playing mode.
- \* User selectable opening book.
- \* Chess position setup.
- \* Advanced high speed selective search program.
- \* Programmable rotating display.
- \* 34 moves take back.
- \* Mate announcement.
- \* Knows all rules of chess: castling, en-passant, promotion, under promotion, stalemate, fifty move rule and three-time repetition.
- \* INFO-key provides insight in computer thought process: evaluation value, search depth, principal variation line, current move, nodes counter etc..
- \* Hint move on request.
- \* Thinks on the opponent's time.
- \* 2000 positions in opening book with transposition manager.

Operating your chess computer is not difficult, especially if you learn to use it correctly. This manual is designed to assist you, whether you are a novice or seasoned expert. A thorough reading of this manual will teach you exactly how to operate and enjoy your new chess computer. **Section 2** will provide you with all the information you need to play an actual game of chess against the computer. If you wish to play the computer at a different level then you must go to **Section 3** which tells you all about the 64 levels of skill and how to select them. **Section 4** tells you about the information you can get from the computer during a game while **Section 5** will let you learn how to verify and set up chess positions. **Section 6** deals with the various features and options which make your chess-computer such a versatile chess opponent.

## SECTION 2. GETTING STARTED

### 2.1 BATTERIES

Your new chess computer works on 4 "AAA" batteries. To insert the batteries, open the battery door at the bottom of the unit. Insert the batteries as indicated by the + and - signs on the compartment. You will hear the start up "tune". The display will read 0:00:00 and the WHITE indicator on the display will be on. Weak batteries should be replaced promptly as they might leak and cause damage to the computer.

### 2.2 ADAPTER

If you want to use an adapter, first check that the voltage specified is the one used in your country. The adapter socket is located at the back of your computer.

**Note:** *You must only use the adapter specified for your computer. The use of another adapter automatically invalidates the warranty.*

### 2.3 MAKING MOVES

Playing chess against your chess computer is like playing with a human opponent - you make your move and the computer responds with its move. The obvious difference of course, is that you must make the actual physical move of the piece for the computer.

To make a move, first press down gently on the square with the piece that you want to move. The most convenient way is to tilt your piece slightly and press down with the edge of its base. The computer responds by sounding a beep. Then put the piece down on the destination square. The computer will sound a beep again and it has registered your move and starts computing its reply.

### 2.4 COMPUTER MOVES

While the computer is considering its reply, it will flash the color indicator of the side it is playing. At the beginning of the game the computer will be able to move immediately because of its extensive opening library with more than 2000 moves. When the computer has decided its move, it sounds two beeps and the move appears on the display.

### 2.5 SPECIAL MOVES

CAPTURES can be performed just like any other move. The moving piece is pressed down on the "from" and "to" squares, while the captured piece is removed from the board without being pressed.

EN-PASSANT CAPTURES are performed in the same way.

CASTLING is done by making the king's move in the usual way. Move the rook without pressing down on the squares. Note that castling king-side is indicated as 0-0 and castling queen-side as 0-0-0 conforming to standard chess notation.

**PAWN PROMOTION:** If you advance a pawn to the far end of the board, you must next tell the computer which piece you are replacing it with. Press the appropriate key marked with the QUEEN, ROOK, BISHOP or KNIGHT symbol. If the computer promotes a pawn of its own, it will show you the piece chosen on its display. If you did not pay attention you can always check by verifying the position as in Section 5.1.

### 2.6 ILLEGAL MOVES

If you try to make an illegal or impossible move, or try to do something else which is not possible, you will hear the error signal. Whenever you hear this signal, it means that you have done something wrong, and that your last entry has been ignored.

### 2.7 ACCIDENTAL WRONG MOVE

If you press down on a piece and the "from" square appears in the display, but you decide not to make that move, you can press down on that same square once more, canceling your previous input. You may now enter another move of your choice.

If you change your mind after you have entered a whole move then the computer has accepted your move and is already considering its countermove. The TAKE BACK feature will correct such a mistake (Section 2.11).

### 2.8 CHECK, MATE, DRAW and MATE ANNOUNCEMENT

When the computer checks you, the display will flash the word CHECK.

A checkmate is indicated by the word MATE.

If a draw occurs, the display will read END. The computer recognizes draw by stalemate, three-time repetition and the 50-move rule.

**Note:** *The three-time repetition mechanism in your computer covers the last 34 single moves only.*

When the computer discovers a forced mate against its opponent, it will flash a MATE ANNOUNCEMENT message: For example, when the display flashes  $\pm$  in 3 it means that the computer can force mate in three moves, its last move included.

### 2.9 NEW GAME

A new game can be started at any time. Press the CLEAR and ENTER key simultaneously and rearrange the pieces to their initial position.

## 2.10 CHANGING SIDES

If you press the **ENTER** key the computer will make a move. Thus if you want to change sides with the computer, just press the **ENTER** key. The computer will make a move and expect you to move for the other side. If you want to play a game with the black pieces, press the **ENTER** key in the starting position. Refer to **Section 6.10** on how to make the computer play the white pieces from the top.

## 2.11 TAKING BACK MOVES

If you take up a piece but then decide not to move it after all, just press down again on the same square. If you made a mistake and wish to retract your move you may press the **TAKE BACK** key when it is your turn to move. If you want to take back more moves, simply continue taking back moves. The computer remembers the last 17 moves for each player. When taking back moves, if you are unsure of where to replace a captured piece which should be put back on the board, use the six piece-keys to verify the position (see **Section 5.1**).

## 2.12 TERMINATE SEARCH

If you press the **ENTER** key while the computer is thinking, it will immediately terminate the search and play the move that it considers best.

## 2.13 ON/OFF

You can switch the unit ON and OFF by pressing the **ON/OFF** key. Since the internal memory of the computer is retained when it is off, you can later resume an interrupted game. The unit also has the ability of switching itself off (**AUTO POWER DOWN**) if there is no key pressed for 15 minutes. Refer to **Section 6.9** for detailed information.

# SECTION 3. LEVELS

There are 64 levels of skill on which the computer may be instructed to play. They include levels for casual play, tournaments, speed chess, analysis, problem solving and levels for beginners. Obviously, on a high level it will need more time for its moves than on a low one.

## 3.1 SET LEVEL

To set a level, first press the **LEVEL** key. The computer will show the current level. When you first switch on the computer the level is set at 5 seconds per move. You may verify this by pressing **LEVEL**. The display will show **L: 0:05**, you can then change the level using the **= >** and **< =** key, use the **LEVEL**-key to skip over eight levels. When you have selected the correct level, press the **ENTER** key. However, if you only want to verify the level, press **CLEAR** to exit from **LEVEL** mode.

The level can be changed at any time in the course of a game.

## 3.2 NORMAL LEVELS

The first 15 levels are the normal playing levels. When selecting one of these 15 levels you select an average response time for the computer.

LEVEL	TIME PER MOVE	DISPLAY
1	1 sec.	L 0:01
2	2 sec.	L 0:02
3	3 sec.	L 0:03
4	5 sec.	L 0:05
5	10 sec.	L 0:10
6	15 sec.	L 0:15
7	20 sec.	L 0:20
8	30 sec.	L 0:30
9	45 sec.	L 0:45
10	1 min.	L 1:00
11	1.5 min.	L 1:30
12	2 min.	L 2:00
13	3 min.	L 3:00
14	5 min.	L 5:00
15	10 min.	L10:00
16	infinite	9:99:99

## 3.3 INFINITE LEVEL

Level 16 is the infinite level. The computer will continue to search, looking deeper and deeper until it finds a forced mate or until the search is halted by you (see **Section 2.12**). When halted the computer will play the move that it considers best at that moment. You can halt the computer's thinking at any time by pressing the **ENTER** key.

## 3.4 TOURNAMENT LEVELS

There are 8 preprogrammed tournament levels. These levels require the player to make a prescribed number of moves within a given amount of time. Should one of the players exceed the allotted time for a given number of moves, the computer will sound a beep and flash the display. If however you wish to continue the game, simply play on.

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

### 3.5 BLITZ LEVELS

If you wish to play speed chess against your computer, you may select from 8 levels that set the total time for the whole game. When a tournament or speed chess level is selected, you may select the chess clocks to display the count down time instead of the elapsed time (Section 6.7).

LEVEL	TOTAL TIME	DISPLAY
25	5 min.	b 5:00
26	10 min.	b 10:00
27	15 min.	b 15:00
28	20 min.	b 20:00
29	30 min.	b 30:00
30	45 min.	b 45:00
31	60 min.	b 60:00
32	90 min.	b 90:00

### 3.6 BEGINNER LEVELS

Levels 33-40 are beginner levels. On these levels the computer will restrict its search so that it will deliberately play weaker to accommodate the novice player.

LEVEL	TOTAL TIME	DISPLAY
33	1 sec.	beg: 1
34	2 sec.	beg: 2
35	3 sec.	beg: 3
36	4 sec.	beg: 4
37	5 sec.	beg: 5
38	6 sec.	beg: 6
39	7 sec.	beg: 7
40	8 sec.	beg: 8

### 3.7 MATE SEARCH LEVELS

Levels 41-48 activates a MATE finder program. This special feature is used to solve mate problems. The computer will search for the shortest possible solution to the problem. Check mates in 1 to 5 moves can be found relatively quickly whereas solutions with 6 to 8 moves may take some time. You may instruct the computer to search for a mate in 1 to 8 moves. If there is no mate present or if the computer cannot find the mate, it will sound two beeps and return to normal play.

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

### 3.8 TRAINING LEVELS

Levels 49-64 are training levels. The computer will display PLY: (= half move) together with the search depth. On these levels the search depth is limited to the number of moves corresponding to the level set i.e. on level PLY: 1 the computer will only look one move ahead, and thus often overlook mate in one from the opponent. This gives weaker play, and thus gives average players a better chance of winning against the computer.

LEVEL	DISPLAY
49	PLY: 1
50	PLY: 2
51	PLY: 3
52	PLY: 4
53	PLY: 5
54	PLY: 6
55	PLY: 7
56	PLY: 8

LEVEL	DISPLAY
57	PLY: 9
58	PLY: 10
59	PLY: 11
60	PLY: 12
61	PLY: 13
62	PLY: 14
63	PLY: 15
64	PLY: 16

### 3.9 CHART OF THE LEVELS

TEST 9 PLY	TEST 10 PLY	TEST 11 PLY	TEST 12 PLY	TEST 13 PLY	TEST 14 PLY	TEST 15 PLY	TEST 16 PLY
TEST 1 PLY	TEST 2 PLY	TEST 3 PLY	TEST 4 PLY	TEST 5 PLY	TEST 6 PLY	TEST 7 PLY	TEST 8 PLY
MATE IN 1 MOVE	MATE IN 2 MOVES	MATE IN 3 MOVES	MATE IN 4 MOVES	MATE IN 5 MOVES	MATE IN 6 MOVES	MATE IN 7 MOVES	MATE IN 8 MOVES
Beginner 1 sec.	Beginner 2 sec.	Beginner 3 sec.	Beginner 4 sec.	Beginner 5 sec.	Beginner 6 sec.	Beginner 7 sec.	Beginner 8 sec.
BLITZ 5 MIN.	BLITZ 10 MIN.	BLITZ 15 MIN.	BLITZ 20 MIN.	BLITZ 30 MIN.	BLITZ 45 MIN.	BLITZ 60 MIN.	BLITZ 90 MIN.
*TOURN 40 IN 1:30	*TOURN 35 IN 1:45	*TOURN 40 IN 1:45	*TOURN 35 IN 1:30	*TOURN 40 IN 2:00	*TOURN 45 IN 2:30	*TOURN 50 IN 2:00	*TOURN 40 IN 3:00
NORMAL 45 SEC.	NORMAL 1 MIN.	NORMAL 1.5 MIN.	NORMAL 2 MIN.	NORMAL 3 MIN.	NORMAL 5 MIN.	NORMAL 10 MIN.	NORMAL Infinite
NORMAL 1 SEC.	NORMAL 2 SEC.	NORMAL 3 SEC.	NORMAL 5 SEC.	NORMAL 10 SEC.	NORMAL 15 SEC.	NORMAL 20 SEC.	NORMAL 30 SEC.

\* TOURN IS EQUIVALENT TO TOURNAMENT

Use the LEVEL key to select a horizontal group and use => or <= key to step within one group. Use the ENTER key to set the selected level. The CLEAR key returns to normal playing mode without changing the level or the clock settings. Setting the level always resets all chess clocks.

## SECTION 4. INFO

**INFO** mode allows you to look at the computer's thought process. Information is divided into four groups. Press the **INFO** key to cycle from one group to another. You may use **INFO** mode at any time during the game.

Refer to **Section 6.20** for an even more advanced feature—the programmable **ROTATING DISPLAY**. Selecting this mode will force the computer to automatically update the display every second with all kinds of information.

### 4.1 PRINCIPAL VARIATION

Press **INFO**, for the first time it shows you the principal variation. Use the arrow keys: **< =** and **= >** to look at the rest of the moves. The principal variation will be shown to a maximum depth of four (half) moves.

### 4.2 SEARCH INFORMATION

Pressing **INFO** for the second time gives access to some more search information. Use the arrow keys **= >** and **< =** to cycle between the four display modes.

- The evaluation value of the position is shown as a number, with a pawn being worth 1.0 point. A positive number means that the computer is ahead.
- Next are two numbers, the first being the depth to which the computer is looking ahead every line, the second counts the number of moves that have been examined.
- Then the move is under consideration.
- Last is the "**NODE COUNTER**" the number of positions that are examined every second.

### 4.3 CHESS CLOCKS

Pressing **INFO** for the third time leads to the **CHESS CLOCKS**. Use the **= >** key to show all 5 possible clock display modes.

- The first clock measures the time since the last move was executed.
- The second and third clocks show the elapsed time for the computer and for the player.
- The fourth and fifth clock display the remaining time for the computer and for the player. These clocks are available on **BLITZ** and **TOURNAMENT LEVELS** only. On all other levels the display will read——.

### 4.4 MOVE COUNTER

The fourth **INFO** key press shows you the number of moves that have been played in the game. The number in the display shows the number of moves that have been played by white.

### 4.5 HINT

Even after it has played a move the computer will remember the rest of the principal variation and display it if you wish. Just press **INFO** when it is your turn to move. Since the first move the computer displays is the best it has found for your side, you may regard this move as a "**HINT**" from the computer. So if at any time during a game you need advice, just press **INFO**.

## SECTION 5. VERIFY POSITION, ENTER POSITION

### 5.1 VERIFY POSITIONS

In case of confusion, you can make the computer show you where every piece should be. Press one of the six keys with a piece on it, and the computer will show you where the piece of that type is located according to its internal board position. Press the same key again to find the next of this type of piece. First, all the white pieces are shown, then the black pieces. By repeating this process for each piece type, every piece on the board can be correctly located. To return to normal play, press the **CLEAR** key.

### 5.2 ENTER POSITIONS

When you press the **POSITION** key, the computer will enter **POSITION** mode, the display will show "**-POS-**". **POSITION** mode is used to change or set up a position on the board. The position can of course be changed at any time during the game. When it is your turn to move, however the previous moves will be erased from memory by any change that you make to the position.

### 5.3 REMOVING A PIECE

If you want to remove a piece, press gently on the square and remove the piece. If you want to move a piece from one square to another, press on the piece that you wish to move and lift it up. Then put it down on the square that you wish and press gently.

### 5.4 ADDING A PIECE

If you want to add a piece, first press the corresponding piece key. Check that the color indicator shows the color of the piece you want to add. If not, press the **< = WHITE** or **= > BLACK** key to change the color. When the piece and color lights show the correct type and color, place the piece on the square that you wish and press gently.

### 5.5 CLEAR BOARD

If you wish to remove all the pieces from the board in **POSITION** mode, press **ENTER**. The display will read [ ] . Press **ENTER** again to confirm that you want to clear the board.

## 5.6 SET COLOR

When you have entered the correct position, first make sure that the color indicator shows the color of the side to move. You can change the color by pressing the < = WHITE or => BLACK key. Then press the CLEAR key to exit from POSITION mode.

## 5.7 ILLEGAL POSITION

Any legal position may be set up using the above procedure. The computer does not permit the setting up of illegal positions, where there are more than the number of pieces prescribed for a normal game or when one of the kings is left in check.

## SECTION 6. OPTIONS

In addition to the features described previously, a number of additional options may be selected to enhance your enjoyment of your chess computer. These options are user selectable at any time during the game.

### 6.1 HOW TO SET AN OPTION

Operation of **OPTIONS** can be divided into 3 groups of 8 options each: **OPERATION MODE**, **PLAYING MODE** and **ROTATING DISPLAY**. You can access a group by repeatedly pressing **OPTION**. Once you are in the correct group you can step through the options by pressing the < = and => key. A "+" on the display means the **OPTION** is **ON** and a "-" means the **OPTION** is **OFF**. Press the **ENTER** key to enable or disable. Note: How the - changes into a + or vice-versa.

After you finish press **CLEAR** to return to normal mode. When the computer is first powered or a new set of batteries is put into the unit, the options marked by a "+" in the tables below will be set. Also when a **NEW GAME** is started some of the options will be returned to their original settings

### 6.2 OPERATION MODE OPTIONS

Eight options affect the way in which you operate the computer

+RUE	SND	-SIL	tICK	cdn	-tEST	-aPd	-tOP
Auto Answer Mode	Sound with each Key	Silent Mode	Clock Tick	Count Down Clock	System Test	Auto Power Down	Play White from Top

### 6.3 AUTO ANSWER

Normally the computer will react with a counter move whenever you enter a move. If you want to enter a series of moves for both colors you may switch off **AUTO ANSWER**. This may be useful to enter a particular opening, to replay a game to a certain position, or to use the computer as a normal chess board, allowing two humans to play against each other, while the computer checks the legality of the moves.

### 6.4 SOUND

Allows you to switch off the "beep" that accompanies each key press. However, illegal key presses will still generate an error signal.

### 6.5 SILENT MODE

Normally the computer sounds two "beeps" when it has found a counter move. Activate this option for completely silent operation of the game.

### 6.6 CLOCK TICK

This option activates a nervous clock tick that makes your computer sound like a real chess clock. Create the atmosphere of a grand master tournament in your living room with the **CLOCK TICK** option.

### 6.7 COUNT DOWN CLOCK

Activating count down forces the computer to display the count down time instead of the elapsed time. This option is available in combination with a Tournament or Blitz level only.

### 6.8 TEST PROGRAM

Activate this option to run a simple test program. The unit will flash the display and do some internal tests. Press **ENTER** and **CLEAR** simultaneously to interrupt the test.

### 6.9 AUTO POWER DOWN

A battery saving feature is the **AUTO POWER DOWN** option. When activated the unit will automatically switch off after 15 minutes when during that time no key is pressed or move is given and it was your turn to move. Press **ON/OFF** to continue play.

## 6.10 PLAY WHITE FROM TOP

At any point in the game you can change the direction of play, for example, if you want to play the black pieces from the bottom of the chess board. If you choose this option, be sure to set the pieces up correctly, remember that the black queen starts on a black square and the white queen on a white square.

## 6.11 PLAYING MODE OPTIONS

<i>SEL</i>	<i>-EASY</i>	<i>-RAND</i>	<i>bE:P</i>	<i>-bE:A</i>	<i>-bE:P</i>	<i>-bE:E</i>	<i>+bOOE</i>
Selective / Brute	Easy Mode	Random Play	passive Book	Active Book	Total Book	Tournament Book	Book ON/OFF

Eight **PLAYING MODE OPTIONS** affect the way in which the computer selects its counter move. Press the **OPTION** key twice to select this group. Use the **< =** and **= >** keys to select one of these options.

## 6.12 SELECTIVE SEARCH

Your chess computer uses a **SELECTIVE SEARCH** algorithm that allows it to see into combinations that would otherwise take much longer to compute. De-activating this option turns the program into a **BRUTE FORCE** algorithm. This minimizes the risk of an occasional oversight. The Mate finder levels always perform a brute force search.

## 6.13 EASY MODE

**EASY MODE** is an option which weakens all playing levels without affecting the computer's time controls. This is accomplished by restricting the computer's use of its allotted time. Ordinarily, the computer will do some thinking on your time, while you are contemplating your next move. This feature is part of what makes your chess computer such a tough opponent. Selecting **EASY MODE** will prevent the computer from thinking on your time. Since this weakens all of the skill levels, you are thus given the option of having more playing levels to choose from.

## 6.14 RANDOM MODE

Setting this option will force the computer to randomly choose between moves which are almost equal in their evaluation. Games of greater variety may be played using this option.

## 6.15 PASSIVE OPENING BOOK

This will force the computer to give preference to passive openings and closed positions when it is deciding which opening to play.

## 6.16 ACTIVE OPENING BOOK

This will force the computer to give preference to passive openings and closed positions when it is deciding which opening to play.

## 6.17 COMPLETE OPENING BOOK

When this option is in effect, the computer is free to choose any move from its opening book including some questionable or even bad moves.

## 6.18 TOURNAMENT OPENING BOOK

This narrows down the choice that the computer has in deciding which opening to play. It will force the computer to always select the best variation associated with any opening that you wish to play against it.

## 6.19 OPENING BOOK ON / OFF

Activate this option to lock out the computer's opening book completely. When the opening book is canceled the computer will be forced to take time to think from the beginning of the game.

## 6.20 PROGRAMMABLE ROTATING DISPLAY

Normally the display will show the time for the player to move. If you would like to obtain additional information, however, you may do so by activating the **ROTATING DISPLAY** option. Press the **OPTION** key three times and use the **= >**, **< =** and **ENTER** key to activate from 1 to 8 items for display. It is important to note that these features will be displayed WHILE THE COMPUTER IS THINKING only. If you have selected multiple display features, the information will be "rotated" in one-second increments. The information that can thus be displayed is a subset of what is found under **INFO**. It is described in more detail under **Section 3** from this manual. Below is an overview of the eight **ROTATING DISPLAY** options. If you find that the information on the display changes too fast for your convenience, you can of course always use the **INFO** key to freeze the display on one particular piece of information (see **Section 3 - INFO**).

<i>-rd:1</i>	<i>-rd:2</i>	<i>-rd:3</i>	<i>-rd:4</i>	<i>-rd:E</i>	<i>-rd:d</i>	<i>-rd:n</i>	<i>-rd:t</i>
Main line 1st move	Main line 2nd move	Main line 3rd move	Main line 4th move	Evaluation value	Search depth + move count	Nodes per second	Time per move

## SECTION 7. TECHNICAL DATA

Microprocessor: H8/330  
Speed: 10 MHertz  
Program Memory: 16 KByte  
Storage Memory: 0.5 KByte  
Power Supply: 9 Volt DC  
Current Dissipation: 20 MA.  
Batteries: 4 "AAA" size type batteries  
Battery Life: 150 Hours  
Display: Liquid Crystal Display, 48 segments  
Program: High speed selective search.

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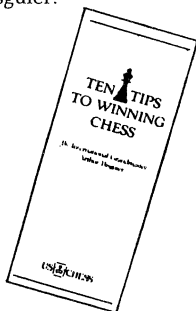
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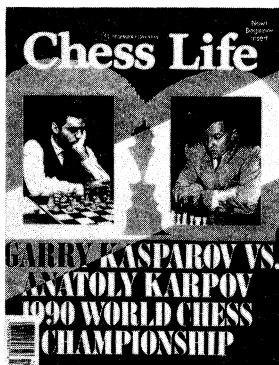
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SC01

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## **\*\*IMPORTANT NOTICE\*\***

This equipment generates and uses radio frequency energy and if not installed and used properly, that is, in strict accordance with the manufacturer's instructions, may cause interference to radio and television reception. It has been type tested and found to comply with the limits for a Class B computing device in accordance with the specifications in Subpart J or Part 15 of FCC Rules, which are designed to provide reasonable protection against such interference in a residential installation. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause 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 the receiving antenna.
- Relocate the computer with respect to the receiver.
- Move the computer away from the receiver.
- Plug the computer into a different outlet so that computer and receiver are on different branch circuits.

If necessary, the user should consult the dealer or an experienced radio/television technician for additional suggestions. The user may find the following booklet prepared by the Federal Communications Commission helpful:

*How to Identify and Resolve Radio TV Interference Problems.*  
This booklet is available from the U.S. Government Printing Office, Washington, D.C. 20402. Stock No. 001-000-00315-4.

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