

VOICE SENSORY CHESS CHALLENGER[®]



**OWNER'S MANUAL
INSTRUCTION BOOKLET**

**MODEL VSC
VOICE SENSORY
CHESS CHALLENGER[®]**

**INFINITE LEVELS
OF PLAY**

QUALITY MADE IN U.S.A.

Welcome To The Future. . .



Your Voice Sensory Chess Challenger[®] is Fidelity's first thinking chess game that talks. . .and "sees" every move you make. The most advanced state-of-the-art technology provides you with an amazing computerized opponent that plays chess with skill and cunning, yet allows you to control the level of difficulty.

Your Voice Sensory Chess Challenger[®] is not a contrived chess board that has been gimmicked with lights and pushbutton keys – Challenger[®] is, in every sense, a versatile and talented computerized chess playing opponent.

The voice feature is not a tape recording, but a computer created voice capability that talks in response to Challenger's[®] "thoughts" or to a move made by the human player. A vocabulary of over fifty words will verbalize play action such as which piece was moved or captured, illegal moves, when your King is in check, etc., and it will tell you when it is verifying the locations of the pieces on the board (at your request).

In addition to being an excellent chess opponent, Voice Sensory Challenger[®] provides a number of additional functions that enhance playability and increase enjoyment of the game. It is recommended that you familiarize yourself with this instruction manual before starting play.

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SECTION I — OPERATION

KEYS AND INDICATORS



DISPLAY WINDOW



TIME



REVERSE



SPEAKER



SET



DISPLAY MOVE





LEVEL


INTRODUCTION

The Playing Surface, Voice Feature, Display Window, Keys and indicators are provided as a means of communication between you and the Computer. These instructions describe how to operate and communicate with Voice Sensory Challenger® and do not relate to actual playing strategies of the game of chess. For the beginner, a handy booklet entitled "Let's Play Chess" is provided with the game.

Complete descriptions of the function and operation of the keys shown here are provided in the section entitled "Special Option Keys".

 **PROBLEM MODE LIGHT**
On for white Problem Mode;
Flashing for dark Problem Mode.

 **RESET** — Resets Computer to start a new game.

 **CLEAR** — Used to clear an unwanted FROM square. Also used in Problem Mode to clear a piece type from the board.

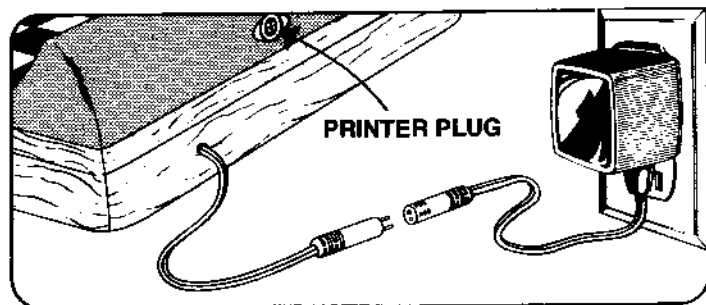


PIECE KEYS — Used to verify the location of a piece type. Also used in Problem Mode to add or remove pieces on the board.

POWER ON

The game is turned on when the transformer is plugged into an AC wall outlet and the transformer line cord is plugged into the game. A new game is started when you first plug in or when the RE (RESET) Key is pressed. Challenger® will introduce itself by saying, "I AM FIDELITY'S CHESS CHALLENGER®, YOUR COMPUTER OPPONENT. SELECT YOUR LEVEL." When the game is first plugged in, or when RE is pressed, Chess Level One is automatically selected.

Turning the game OFF and then ON again or pressing the RE Key automatically resets the program. For lengthy games, leave the game ON, as Challenger® is all solid state and is designed to be left ON for days or weeks, as desired.



THE GAME BOARD

Set up the chess pieces with dark at the top of the board. Each square on the chess board is designated, in accordance with international chess notation, by a letter of the alphabet and a number (printed along all four sides of the playing surface). Horizontal

squares (the ranks) are numbered 1 to 8. Vertical squares (the files) are lettered A to H. Thus, when the game begins, the white King is on square E1; the dark King is on square E8.

SELECTING OFFENSE OR DEFENSE

When the chess pieces are set up with the white pieces at the bottom, Voice Sensory Challenger® presumes you will play white. According to the rules of chess, white has the first move, and thus you should make the first move to begin playing.

If you choose to play the dark pieces from the bottom of the board, set up the pieces with the dark King on square D1 and the white King on square D8. Press down on the dark King on square D1. Challenger® will recognize this as a signal that it is playing white from the top of the board and it will make the first move. To have Challenger® play white from the bottom of the board, refer to paragraph on CHANGING SIDES.

CHESS LEVEL

The playing level may be selected before a game starts, or it may be changed at any time during a game (see LV Key description).

To change levels before a game, press the LV (LEVEL) Key as follows:

PRESS KEY

1. **LV**
2. **LV**
3. **LV**
4. **LV** this is the Level Select Mode

DISPLAY SHOWS



Continue to press LV until the desired level is shown in the Display Window. Level selection is achieved by simply stopping at the level shown in the Display Window. Each time the LV Key is pressed, the level will increase by one. After level ten (CLH), the Display will return to **CL1**.

To change levels during a game, press the LV Key after Challenger's® move is completed and before you make your next move. The Display will show the current level in effect. Continue to press LV until the desired level is shown in the Display, then continue the game by making your next move. During a game, continued pressing of LV will cycle the level through CLH back to CL1, CL2, etc.

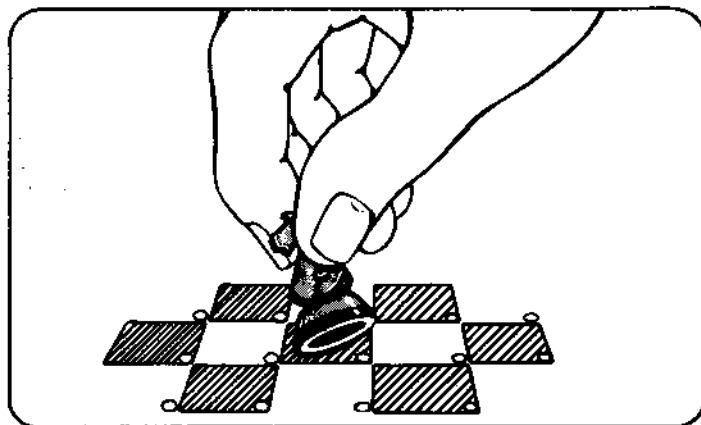
Following are listed the various playing levels and their average response times.

CHESS LEVEL	AVERAGE RESPONSE TIME*
CL1 Beginner	5 seconds
CL2 Intermediate	15 seconds
CL3 Experienced	35 seconds
CL4 Advanced	1 minute, 20 seconds
CL5 Superior	2 minutes, 20 seconds
CL6 Tournament Practice	3 minutes
CL7 Tournament Teacher	3 minutes, 20 seconds
CL8 Excellent	6 minutes
CL9 Expert	11 minutes
CLH Infinite	Computes move until stopped or search is exhausted (5 seconds to many hours)

*Refers to average amount of time allowed Challenger® to consider responses before it decides on its next move.

THE PLAY

Playing chess with Voice Sensory Challenger® is like playing with a human opponent — you make your move and Challenger® responds with its move. The only difference, of course, is that you must make the actual physical move of the piece for Challenger®. Because of the sensory characteristics of the playing surface, which senses the presence of a piece located on the square, it is necessary to press the piece down on each square — press down (gently), using the edge of the piece as shown in the illustration, first on the FROM square, then press down on the TO square.



For example: if you want to move white Pawn D2 to D4, press down on the Pawn on square D2. The D2 indicator will light. Move the Pawn and press it down on square D4 to signal the move to Challenger®. The indicator light on square D2 will go out and, after

Challenger® has decided on a move, an indicator for one of Challenger's® pieces will light. Challenger® shows you which piece it wants moved by lighting the FROM square and announcing the move. Make the move for Challenger® by pressing the piece down on the lighted FROM square — that indicator will go out and the TO square will light. Move the piece and press it down on the lit TO square. The light will go out, signifying that Challenger's® move is complete, and it is now your turn to move. NOTE: You will notice that the TO square does not light when you make your move. This is because Challenger® instantly senses the piece you have placed and the move is already being recorded.

ACCIDENTAL WRONG MOVE

If you press down on a piece and the FROM square is lit but you decide not to make that move (before the TO square is pressed), simply press the CL pushbutton. Challenger® will turn that square's light off and await another move. You cannot undo a move after the TO square is pressed and Challenger® has started "thinking." However, you can always use the "Problem Mode" to change board positions, if desired.

ILLEGAL MOVE

Challenger® notifies you of an incorrect or illegal move by showing four dashes in the Display Window, and by lighting the TO square to which the piece was moved. To undo the wrong move, press the piece down first on the lighted TO square (the original FROM square will now light) and then press the piece down on the lighted FROM square. This ensures that the incorrectly moved piece is returned to its original location. Challenger® then waits for you to make another move.

Challenger® will not permit you to move into a check situation and will give the Illegal Move indication if you attempt to do so.

EN PASSANT

Challenger® will perform the En Passant maneuver when it deems such a move is desirable, and will also recognize when you choose to execute an En Passant maneuver. When performing En Passant, Challenger® will light the FROM square until it is pressed, then it will light the TO square until it is pressed. Do not forget to remove the captured Pawn.

CASTLING

Challenger® will castle by internally first performing a King move and then a Rook move and announcing "CASTLE." Only the King move need be acknowledged in the usual manner by pressing the FROM square and then the TO square. Don't forget to move the Challenger's® Rook. You may castle your King in a similar manner by pressing only the squares occupied by the King. Don't forget to move your Rook. It is not necessary to press down on the square occupied by the Rook, as Challenger® recognizes the castling maneuver by the King's move.

PAWN PROMOTION

As in a normal game of chess, when a Pawn reaches the "8th Rank," Challenger® will automatically promote the Pawn to a Queen. However, if you choose to promote a Pawn to some piece other than a Queen, use the Problem Mode to substitute a Knight or any other piece desired.

CHECK

When Challenger® places your King in check, Challenger® will announce that your King is in check.

CHECK & MATE

When Challenger® places your King in check and mate is inevitable, Challenger® will announce "CHECK AND MATE" and the Display digits will flash to signify Challenger's® victory.

I LOSE

When Challenger® loses or when it finds that it will lose within two moves, it will announce "I LOSE" after you have made the winning move.

SECTION II — SPECIAL FEATURES

CHANGING SIDES

Voice Sensory Chess Challenger® has the capability to change sides and compute moves for the opposing pieces. To cause Challenger® to change sides, first press the CL Key, then press the RV Key. Challenger® will now play your pieces and you will play Challenger's® pieces. By repeating this process after each move, it is possible to watch Challenger® play both sides of the game.

RANDOM PLAY

You have the option of the Random Play feature or of selecting the Non-Random Play feature. In the Random Play Mode, when a choice of equally good moves is available, Challenger® will choose from the equally good moves at random so that each game will be different. The Random Play feature is selected automatically when a new game begins.

NON-RANDOM PLAY

In the Non-Random Play Mode, Challenger® does not consider all equally good moves, but will select the first reasonably good move it finds, and thus should use less time to respond. Non-Random Play is selected by pressing the ST Key during Level Selection, after reaching the desired level of play (see CHESS LEVEL), as follows:

1. For example, Level 5 is selected.
2. Press **ST** for Non-Random Play.

DISPLAY SHOWS



The dash before the number indicates Non-Random Play has been selected for this chess level.

POSITION VERIFICATION

An outstanding feature of Voice Sensory Challenger® is its ability to verify the exact position of each of the pieces — both yours and Challenger's® — at any time during the course of the game (after one of Challenger's® moves is completed) or just before making your first move of a new game. Simply press the particular piece type key that you wish to verify. All squares with pieces of that type will light: squares with white pieces of that type will be ON continuously, squares with dark pieces will flash.

To terminate the Position Verification Mode, press the CL Key or just enter your next move.

PROBLEM MODE



Voice Sensory Challenger® is a most extraordinary, versatile device, which will permit you, the player, to perform numerous special moves at any time before or during game play.


By using the Problem Mode before starting the game, it is possible to set up various chess problems and "Mate in Two" puzzles, as desired. Moreover, by using the Problem Mode during game play, it is possible to alter the direction of the game, strengthen your side or Challenger's® side, resurrect lost pieces, or even move your King out of an imminent checkmate situation. You may enter the Problem Mode at any time after Challenger® has completed one of its moves.

To set up a particular problem, a special move situation, or a specific piece configuration, proceed as follows: Press the key for


the particular piece type you wish to set up. Continue to press until indicators are showing only continuously lit (for white pieces) or only continuously flashing (for dark pieces). Indicators will light on only those squares that contain pieces.

For example, the Pawns:

- | PRESS KEY | DISPLAY SHOWS |
|--|--|
| 1.  | Challenger® will announce (NO CHANGE)
"VERIFY PAWNS." |
| 2.  | Challenger® will announce (NO CHANGE)
"PROBLEM" for the white pieces;
Problem Mode indicator lights. |
| 3. At this point you may make any of three set-up entries for the white pieces as follows: | |
| A. To remove all white pawns remaining on the board, press CL . Indicators on all squares containing pawns will go out. | |
| B. To add a white pawn on a particular square, press that square, turning the indicator on. | |
| C. To remove a single white pawn from a square, press that square, turning the indicator off. | |

- | PRESS KEY | DISPLAY SHOWS |
|--|--|
| 4.  | Challenger® will announce (NO CHANGE)
"PROBLEM" for the dark pieces.
Problem Mode indicator flashes. |

A. Proceed as in A, B, or C, above for the dark pieces.

- | | |
|--|--|
| 5.  | will announce "CLEAR" to (NO CHANGE)
signify the end of the
Problem Mode for
the Pawns. |
|--|--|

You may now go on to the next piece type Problem Mode, or continue the game.

CHESSE TEACHER

Two of Challenger's® special features are helpful as teaching aids. By pressing the DM Key when it is your move (at any time during a game), Challenger® will recommend a move for your side by announcing the move and lighting the indicators on the appropriate squares.

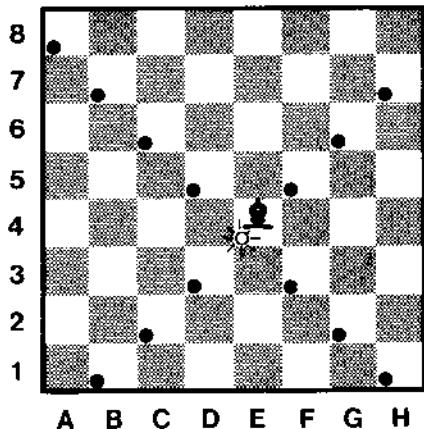
If you are in doubt as to how a piece moves — that is, the pattern a particular piece must follow as it is moved about the board — Challenger® will graphically illustrate that pattern for you. This should be done before starting a game. For example, the Bishops — proceed as follows:

- | PRESS KEY | DISPLAY SHOWS |
|--|---|
| 1.  |  |
| 2.  |  |
| 3.  |  |

4.



Indicators will light on the board in the appropriate pattern as shown in the following illustration. Place a Bishop on the FLASHING square. The squares with steady lit indicators illustrate the move pattern.



VOICE CONTROL

The Voice Control feature allows you to turn the voice off or to change it from high volume to low volume. You may also limit voice announcements to only illegal move and check warnings. Voice control is accomplished via the SPEAKER Key, as follows:

(NO CHANGE)

PRESS KEY

1. Voice is turned off.
2. Volume is low.
3. Volume is high (press again, returns to LO).
4. All 50 words usable.
5. Limited announcements (press again to return to ALL).

DISPLAY SHOWS

0 00

-L 5-

H -

E 4

E 5

Selection is made by simply leaving the displayed option in the Window.

PEEK

While Challenger® is thinking about its next move during levels 1, 2, 5, 7, 9, and H, you may peek to find out what move Challenger® is considering by pressing the DM Key. The move being considered will be shown in the Display Window — the left two digits show the FROM location; the right two digits show the TO location.

STOP

While Challenger® is thinking on levels 1, 2, 5, 7, 9, and H, you may stop the thinking process by pressing the ST Key. Challenger® will then respond immediately with its move.

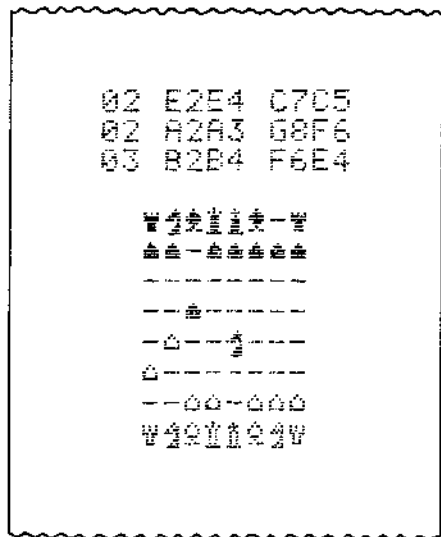
DISPLAY SUGGESTED MOVE

The DM Key may be pressed at any time during a game to request Challenger® to recommend a move for you to make.

PRINTER CONTROL

If a Fidelity Challenger® Printer is used with Voice Sensory Chess Challenger®, plug the Printer into the printer plug in the back of the game. Printer operation is automatic and will start when the Printer is turned on.

The Printer can provide a graphic pictorial printout of the current board positions at any time during a game. To activate this feature, simply press any one of the piece type keys to establish the Verify Mode, then press the ST Key. On the printout, a dash (—) is used for an empty square and the following symbols designate the piece types.



MATE IN TWO

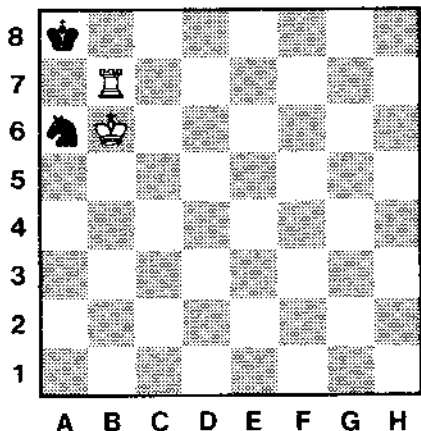
When Challenger® finds it will mate your King in two moves, it will announce "MATE IN TWO" and the Display will flash.

If you desire to set up a specific Mate in Two problem, you may do so using the Problem Mode. Following is an example of a typical Mate in Two set-up:

PRESS KEY

DISPLAY SHOWS

- | | | | |
|----|-----------|--|-------------|
| 1. | RE | | 0.00 |
| 2. | LV | Select Chess Level H (see CHSS LEVEL) | CL H |
| 3. | ST | Select Non-Random feature | CL H |
| 4. | | Using the Problem Mode, remove all white and dark pieces from the board. Place a white Rook on square B7; the white King on square B6. Place a dark Knight on square A6; the dark King on square A8 (see illustration on page 10.) | |
| 5. | CL | | CL H |
| 6. | RV | Display begins counting, up, showing the clock for the white pieces (see Chess Clock). After a few seconds, Challenger® will announce "FROM B7 TO D7, ROOK MOVE, AND MATE IN TWO". | 0.00 |



Note that, since the Mate-in-two problem was set up for white to win, it was necessary to have Challenger® change sides in order to make the move for white. This was accomplished using the RV Key (see CHANGING SIDES).

CHESS CLOCK

Voice Sensory Chess Challenger® has two built-in Chess Clocks (clocks are not used during Greatest Games play). One clock is for the pieces played from the bottom of the board; the second clock is for the pieces played from the top. Either clock may be selected for viewing in the Display Window. At the start of a new game, the clocks are reset to zero.



NEW GAME — ZERO TIME BOTTOM OF THE BOARD CLOCK

The colon in the center of the Display Window indicates which clock is being displayed. The bottom colon indicates bottom of the board clock; the top colon indicates top of the board clock. At zero time — the start of a new game — white's clock is shown (colon at bottom), since white always moves first.

To view the second clock, press the RV Key. Colon is at the top of the Display Window.



TOP OF THE BOARD CLOCK

To view total elapsed time for that player since the start of the play, press (and hold) the TM Key.

The clocks have two modes of operation: Elapsed Time Mode and Count Down Mode. Challenger® automatically selects the Elapsed Time Mode at the start of a new game. Counting begins immediately after Challenger® responds to your first move. Each clock records the time used to make a move plus accumulated time. Both clocks operate although only one is being displayed.

In the Count Down Mode, the clocks may be preset to a certain time (maximum of nine hours and 59 minutes) and will count down from the start of the game. If the clock count goes beyond 59

minutes, the Display will start showing hours/minutes. The top segment of the first digit lights to indicate it is showing hours/minutes.



59 MINUTES



1 HOUR, 15 MINUTES

To preset the time (for example, 15 minutes), proceed as follows:

PRESS KEY

DISPLAY SHOWS

1. **TM**
2. **ST** Hold key until clock reads



If you inadvertently enter too much time, press the RV Key to reverse direction, and then press ST again until desired time is shown.

While the clocks are being set in the Count Down Mode, the colon is used to indicate direction of count. The colon at the bottom indicates time count is increasing; at the top (when RV is pressed) the colon indicates time is decreasing.

During play, when one of the clocks counts down to zero, the Display will begin to flash no matter which clock is shown in the Display Window. The clock that has counted down to zero will display nine hours and 59 minutes, which is maximum clock time.

In the Elapsed Time Mode, the clock displays the move time and shows total elapsed game time when the TM Key is pressed. This is the opposite of the Count Down Mode.

In the Count Down Mode, the clock displays the time remaining for the game and shows the move time when the TM Key is pressed.

If you should desire to interrupt or delay the progress of the game and not have the clocks continue to run, you may do so by simply not acknowledging Challenger's® move until you are ready to continue play. Both Clocks stop the instant Challenger® indicates its move and resumes only after the move is physically accomplished.

BOOK OPENINGS

Challenger® is programmed to respond to a variety of book openings (e.g. Sicilian, French, Ruy Lopez, Queen's Gambit Declined, etc.). Challenger® will continue to follow a patterned book response until the player departs from the pattern or attempts to enter an illegal move.

If you wish to play a particular book opening (see BOOK OPENINGS list), you may make a book opening selection before the game begins as follows:

PRESS KEY

DISPLAY SHOWS

1. **LV**
2. Press a square for one of the Book Openings; for example, C4.
3. Make your first move.





If desired, you may request Challenger® to show you the next book opening move by pressing the DM Key when it is your turn.

GREATEST GAMES

Voice Sensory Challenger® is programmed to replay any one of 64 of the world's greatest games (see GREATEST GAMES List). This special feature allows you to test your skill by playing against one of the masters.

To play one of the Greatest Games, make your selection at the beginning (when the game is first plugged in or after RE is pressed) by using the LV Key as shown below. You may play white or dark (see CHANGING SIDES). Your objective in a Great Game is to try to duplicate the moves that were made by the master during the actual game.

PRESS KEY

1. 
2. 
3. Press a square for one of the Greatest Games; for example, A3.

DISPLAY SHOWS



If desired, you may request Challenger® to show you the next correct move that should be made by pressing the DM Key when it is your turn.

If you decide to make a different move from the move the master made, Challenger® will accept it, but the Great Game will be terminated and normal play will resume.

To compute your score and find out how well you did against the master, refer to the SCORING TABLE.

NOTE: During a Great Game, when Challenger® captures En Passant, acknowledge the move by pressing first the FROM square and then the square of the pawn which is being captured. Your En Passant move is entered in the usual FROM-TO manner.

You are given two opportunities to make the correct move. A running total of correct first try and correct second try moves is shown in the Display Window (the left two digits are the first try count and the right two digits are the second try count).

After an incorrect first try, Challenger® says "CLEAR" to clear your incorrect move, and then "ENTER YOUR MOVE" to prompt you for another try. After an incorrect second try, Challenger® says "CLEAR," then announces the correct move. Make the move by pressing both squares as in regular play.

SECTION III — SPECIAL OPTION KEYS

RE RESET KEY

Pressing the RESET Key will recycle Challenger® to the start of a new game.

CL CLEAR KEY

The CL Key is used to clear an unwanted entry. It is also used, as described under the RV Key, to clear the View Chess Clock Mode to allow you to reverse sides with Challenger®. Another use of the Clear Key is in Problem Mode.

LD SPEAKER KEY

Press once and the Display reads OFF. The voice function is turned off.

Press the SPEAKER Key again and the Display shows -LO-, signifying that voice is at low volume. To change to high volume, press the RV (REVERSE) Key — the Display will read -HI-.

Press the SPEAKER Key a third time and the Display will read ALL. This signifies that Challenger's® entire 50-word vocabulary will be used as appropriate. To limit voice announcements to only illegal move and check warnings, press the RV Key. The Display will read LESS, which signifies the minimum vocabulary mode.

Whenever one of the Speaker Modes is to be changed, press the SPEAKER Key first and then cycle to the desired mode that is to be changed.

TM TIME KEY

The TIME Key may be pressed at any time to view the built-in Chess Clock readout.

The Count Down Mode for the Chess Clocks is selected (at the beginning of the game) by pressing the TM Key to view the clock, and then pressing the ST Key to set the clock. The minutes will increment up at two per second as you hold down the ST Key. When the Clock Display shows the maximum game time desired, release the ST Key. If the desired maximum game time is too high, press the RV Key to reverse direction so that the clock will count down: (the colon LED will change to show the direction reversal), and again press the ST Key until the desired time is in the Display. This operation sets both clocks simultaneously and when a move is made, the appropriate clock will start counting down. When one of the clocks counts down to zero, the Display will start flashing, no matter which clock is being viewed on the Display. When viewed, the clock that has counted down to zero will show -9 hours and 59 minutes, which is maximum clock time.

In the Elapsed Time Mode, each clock displays the move time. When the TM Key is held down, the clock displays total game time.

In the Count Down Mode, the clock displays the remaining time for the game; holding down the TM Key allows you to view the move time.

If the clock counts beyond 60 minutes, the Display will start showing hours/minutes. The top segment of the first digit will light to indicate that the Display is showing hours/minutes.

RV REVERSE KEY

As described under the Time Key, the RV Key is used to select which of the two Chess Clocks you wish to view. As also described under the Time Key, it is used to reverse directions of the changing clock when setting the maximum game time under Count Down Mode.

This key is also used to reverse sides.

LV LEVEL KEY

The LEVEL Key is used to select one of the 64 Book Opening Variations; one of the 64 Greatest Games; one of the ten levels of playing difficulty; or the Teaching Aid Mode that illustrates how each piece is moved.

Before the first move, pressing the LV Key causes the Display to show -OP-. One of the 64 opening variations may be selected by pressing one of the 64 playing squares. If an opening is selected, Challenger® acknowledges the selection by displaying two dashes and then the opening selected.

Pressing the LV Key a second time shows -GA-. If you have not selected a book opening variation, you may select one of the 64 pre-programmed Great Games by pressing one of the 64 playing squares. If a Great Game is selected, Challenger® acknowledges the selection by displaying two dashes and then the Great Game selected.

Press the LV Key a third time and the Display shows -PL-. If you are in doubt as to how a piece moves, simply press the circle key with the figure of the piece type of whose movement you are unsure. Place a piece of that type on the flashing square. All continuously lit squares are the squares this piece can move to, assuming no other pieces are on the board (except for Pawn captures).

Press the LV Key a fourth time and CL 1 will show in the Display. This signifies level 1, which is Challenger's® lowest level. Continually pressing LV will raise the level higher and higher until level "H" (the highest level) is reached. Level selection is achieved by stopping at the level at which you wish to play.

DM DISPLAY MOVE

The DM Key may be pressed at any time during a game (when it is your turn) to request Challenger® to recommend a move for you to make.

While Challenger® is "thinking" (during levels 1, 2, 5, 7, 9, and H), DM may be pressed to find out what move it is "thinking" about.

ST SET KEY

During Level Selection, when the desired level is reached, you may select Non-Random play by pressing the ST Key. A dash will appear in front of the level number, signifying that the Non-Random feature is in effect. Pressing ST again turns the dash off.

The normal procedure to follow is to select a Book Opening or a Great Game if desired, and then sequence to the desired level of difficulty.

Additionally, as described under the Time Key, the ST Key is used to set the time when the clocks are used in the Count Down Mode.

This key can also be used as a Stop Key. While Challenger® is thinking on levels 1, 2, 5, 7, 9, and H, you may press the ST Key to stop Challenger® from thinking. Challenger® will then respond immediately with its move.

The last use of the ST Key is to start a printout of the current board position on the accessory printer.

To activate this feature, simply press any of the piece type figures in order to put Challenger® in the Verify Mode. Then press the ST Key and Challenger® will print the board positions on the accessory printer.

SECTION IV — BOOK OPENINGS

1. MASTER PRACTICE

✓(A3)	King's Gambit Accepted	E2-E4
✓(H3)	Ruy Lopez - Open (Classical Variation)	E2-E4
✓(G1)	Ruy Lopez - Open (Keres Variation)	E2-E4
✓(C3)	Ruy Lopez - Closed (Marshall Attack)	E2-E4
✓(B7)	Ruy Lopez - Closed (Breyer Variation)	E2-E4
✓(C1)	Ruy Lopez - Closed (Tchigorin Variation)	E2-E4
✓(B5)	Alekhine's Defense - Four Pawns Attack	E2-E4
✓(B1)	Modern Defense	E2-E4
✓(E5)	Pirc Defense - Normal Variation	E2-E4
✓(B3)	Pirc Defense - Austrian Attack	E2-E4
✓(E7)	French Defense - Tarrasch Variation	E2-E4
✓(F1)	French Defense - Winawer Variation	E2-E4
✓(F3)	Sicilian Defense - Closed Variation	E2-E4
✓(G3)	Sicilian Defense - Taimanov Variation	E2-E4
✓(G5)	Sicilian Defense - Accelerated Dragon Variation	E2-E4
✓(G7)	Sicilian Defense - Dragon Variation	E2-E4
✓(D3)	Sicilian Defense - Najdorf Variation	E2-E4
✓(C7)	Sicilian Defense - Scheveningen Variation	E2-E4
✓(C2)	Larsen's Opening	B2-B3
✓(C6)	King's Bishop Fianchetto Opening	G2-G3
✓(D2)	King's Indian Reversed	G1-F3
✓(E2)	Reti Opening	G1-F3
✓(A8)	English Opening I (Symmetrical)	C2-C4
✓(B2)	English Opening II	C2-C4
✓(H6)	English Opening III	C2-C4
✓(D4)	Dutch Defense - Leningrad Variation	D2-D4
✓(A4)	Queen's Gambit Declined - Slav Defense	D2-D4

✓(A6)	Queen's Gambit Declined - Tarrasch Defense	D2-D4
✓(D6)	Queen's Gambit Declined - Semi-Tarrasch Defense	D2-D4
✓(F8)	Queen's Gambit Declined - Meran Variation	D2-D4
✓(B8)	Queen's Gambit Declined - Orthodox Defense (Exchange Variation)	D2-D4
✓(G6)	Catalan Opening	D2-D4
✓(G8)	Nimzo - Indian Defense - Rubinstein Variation	D2-D4
✓(G4)	Queen's Indian Defense	D2-D4
✓(F2)	King's Indian Defense - Classical Fianchetto	D2-D4
✓(F6)	King's Indian Defense - Saemisch Variation	D2-D4
✓(E6)	King's Indian Defense - Normal Variation	D2-D4
✓(E4)	Gruenfeld Defense - Exchange Variation	D2-D4
✓(D8)	Modern Benoni Defense	D2-D4
✓(C8)	Benko Gambit	D2-D4
✓(C4)	Old Benoni Defense	D2-D4

2. AVERAGE TOURNAMENT PLAY

✓(D5)	Center Game - Danish Gambit	E2-E4
✓(H1)	Vienna Game	E2-E4
✓(E3)	Scotch Game	E2-E4
✓(F7)	Giuoco Piano	E2-E4
✓(A5)	Ruy Lopez - Exchange Variation	E2-E4
✓(A7)	Caro-Kann Defense	E2-E4
✓(D1)	Sicilian Defense - Richter Attack	E2-E4
✓(H8)	Polish Opening	B2-B4
✓(B4)	Bird's Opening	F2-F4
✓(A2)	Dutch Defense - Staunton Gambit	D2-D4

- ✓(H2) Queen's Gambit Accepted _____ D2-D4
- ✓(H4) Queen's Gambit Declined -
Orthodox Defense (Main Variation) _____ D2-D4
- ✓(G2) Nimzo-Indian Defense - Leningrad Variation _____ D2-D4
- ✓(E8) King's Indian Defense - Four Pawns Attack _____ D2-D4

3. SOCIAL "CLUB" PLAY

- ✓ (H5) Center Game _____ E2-E4
- ✓ (H7) Bishop's Opening _____ E2-E4
- ✓ (E1) Philidor's Defense _____ E2-E4
- ✓ (D7) Petroff's Defense _____ E2-E4
- ✓ (C5) Four Knights' Game _____ E2-E4
- ✓ (A1) Center Counter Defense _____ E2-E4
- ✓ (F5) Sicilian Defense - Larsen-Miles Variation _____ E2-E4
- ✓ (B6) Queen's Knight Opening _____ B1-C3
- ✓ (F4) Colle System _____ D2-D4

SECTION V — 64 GREATEST GAMES

THE 64 GREATEST GAMES BY WORLD CHESS CHAMPIONS

NOTE: In certain of the 64 Greatest Games presented herein, one side has resigned where the reason may not be apparent to the inexperienced. In these cases, we have appended the likely continuing play.

PLAYERS	OPENING	TOTAL MOVES	WINNER
(A1) L. PAULSEN-MORPHY	Four Knights' Game	28	BLACK
(A2) MORPHY-HARRWITZ	Philidor's Defense	35	WHITE
(A3) MORPHY-BRUNSWICK/ISOUARD	Philidor's Defense	17	WHITE
(A4) MORPHY-DE RIVIERE	Giucco Piano	35	WHITE
(A5) ANDERSSSEN-DUFRESNE	Evans Gambit	24	WHITE
(A6) ANDERSSSEN-ZUKERTORT	Evans Gambit	44	WHITE
(A7) STEINITZ-L. PAULSEN	Vienna Game-Steinitz Gambit	36	WHITE
(A8) ROSENTHAL-STEINITZ	Three Knights' Game	38	BLACK
(B1) ENGLISH-STEINITZ	Ruy Lopez	43	BLACK
(B2) STEINITZ-BARDELEBEN	Giucco Piano	35	WHITE
(B3) EM. LASKER-BAUER	Bird's Opening	33	WHITE
(B4) PILLSBURY-EM. LASKER	Queen's Gambit Declined-Semi-Tarrasch Defense	31	BLACK
(B5) EM. LASKER-NAPIER	Sicilian Defense-Dragon Variation	35	WHITE
(B6) ILYIN-GENEVSKY-EM. LASKER	Sicilian Defense-Scheveningen Var.	38	BLACK
(B7) MARSHALL-CAPABLANCA	Queen's Gambit Declined-Tarrasch Defense	49	BLACK
(B8) ALEKHINE-CAPABLANCA	Ruy Lopez-Steinitz Defense	35	BLACK
(C1) CAPABLANCA-MARSHALL	Ruy Lopez-Closed (Marshall Attack)	40	WHITE
(C2) CAPABLANCA-TARTAKOWER	Dutch Defense	52	WHITE
(C3) NIMZOWITSCH-CAPABLANCA	Caro-Kann Defense	46	BLACK
(C4) CAPABLANCA-LOEWENFISCH	Queen's Gambit Declined Meran Var.	26	WHITE
(C5) MIESES-ALEKHINE	Center Game	33	BLACK
(C6) ALEKHINE-STERCK	Queen's Gambit Declined-Orthodox Defense	30	WHITE

(C7)	ALEKHINE-WOLF	Queen's Gambit Declined-Symmetrical Defense	40	WHITE	(E2)	BOTVINNIK-SMYSLOV	Nimzo-Indian Defense-Rubinstein Var.	30	WHITE
(C8)	BOGOLJUBOV-ALEKHINE	Dutch Defense	53	BLACK	(E3)	BOTVINNIK-HOLMOV	Nimzo-Indian Defense-Rubinstein Var.	52	WHITE
(D1)	RETI-ALEKHINE	King's Bishop Fianchetto Opening	40	BLACK	(E4)	SMYSLOV-PANOV	Old Indian Defense	45	WHITE
(D2)	ALEKHINE-BOOK	Queen's Gambit Accepted	25	WHITE	(E5)	SMYSLOV-RESHEVSKY	Ruy Lopez-Steinitz Deferred Defense	52	WHITE
(D3)	SAEMISCH-EUWE	King's Indian Defense-Four Pawns Variation	30	BLACK	(E6)	KERES-SMYSLOV	Queen's Indian Defense	28	BLACK
(D4)	EUWE-ALEKHINE	Queen's Gambit Accepted	41	WHITE	(E7)	BOBOTZOV-TAL	King's Indian Defense-Saemisch Var.	30	BLACK
(D5)	GELLER-EUWE	Nimzo-Indian Defense-Saemisch Var.	26	BLACK	(E8)	TAL-MILEV	Queen's Gambit Declined-Semi-Tarrasch Defense	20	WHITE
(D6)	RAUZER-BOTVINNIK	Sicilian Defense-Dragon Variation	29	BLACK	(F1)	TAL-BOTVINNIK	French Defense-Winawer Variation	32	WHITE
(D7)	BOTVINNIK-CHEKHOVER	Nimzo-Indian Defense	41	WHITE	(F2)	TAL-LARSEN	Sicilian Defense-Scheveningen Var.	37	WHITE
(D8)	BOTVINNIK-CAPABLANCA	Nimzo-Indian Defense-Rubinstein Var.	41	WHITE	(F3)	SPASSKY-TAL	Nimzo-Indian Defense-Leningrad Var.	38	BLACK
(E1)	LYUBLINSKY-BOTVINNIK	Ruy Lopez	53	BLACK	(F4)	POLUGAEVSKY-TAL	English Opening	28	BLACK
					(F5)	PETROSIAN-PACHMAN	King's Indian Reversed	21	WHITE

(F6)	PETROSIAN- BOTVINNIK	Gruenfeld Defense	48	WHITE	(H3)	KARPOV-SPASSKY	Ruy Lopez-Closed (Breyer Variation)	38	WHITE
(F7)	SPASSKY- PETROSIAN	Queen's Pawn Opening	43	BLACK	(H4)	KARPOV- UNZICKER	Ruy Lopez-Closed (Tschigorin Var.)	44	WHITE
(F8)	HORT-PETROSIAN	French Defense- Winawer Variation	48	BLACK	(H5)	KARPOV- KORCHNOI	Sicilian Defense- Dragon Variation	27	WHITE
(G1)	SPASSKY- BRONSTEIN	King's Gambit Accepted	23	WHITE	(H6)	LJUBOJEVIC- KARPOV	Ruy Lopez-Closed (Breyer Variation)	42	BLACK
(G2)	SPASSKY-FISCHER	Gruenfeld Defense-Exchange Variation	50	WHITE	(H7)	TATAI-KARPOV	English Opening	32	BLACK
(G3)	LARSEN-SPASSKY	Larsen's Opening	17	BLACK	(H8)	TIMMAN-KARPOV	English Opening	31	BLACK
(G4)	KESTLER- SPASSKY	Sicilian Defense- Richter Attack	31	BLACK	WHY IS THE GAME GREAT?				
(G5)	BILEK-FISCHER	Sicilian Defense- Najdorf Variation	27	BLACK	A1	L. PAULSEN — MORPHY One of the most brilliant Queen sacrifices of all time.			
(G6)	R. BYRNE- FISCHER	Gruenfeld Defense	24	BLACK	A2	MORPHY — HARRWITZ Crystal clear modern strategy leading to instructive tactics.			
(G7)	PORTISCH- FISCHER	Nimzo-Indian Defense- Rubinstein Var.	35	BLACK	A3	MORPHY — DUKE OF BRUNSWICK An immortal series of combinations presents a textbook illustration of how to exploit an edge in development.			
(G8)	FISCHER- PORTISCH	Ruy Lopez- Exchange Variation	34	WHITE	A4	MORPHY — DE RIVIERE With opening sophistication one hundred years ahead of his time, Morphy obtains a positional advantage and then employs characteristically sharp tactics to gain material.			
(H1)	FISCHER- PETROSIAN	Sicilian Defense- New Taimanov Var.	34	WHITE	A5	ANDERSSSEN — DUFRESNE The combination envisioned with White's 19th move is one of the most beautiful and famous of all time. Often referred to as "The Evergreen Game."			
(H2)	FISCHER-SPASSKY	Queen's Gambit Declined-Orthodox Defense (Tartako- wer Variation)	41	WHITE	A6	ANDERSSSEN — ZUCKERTORT The creativity at move 24 combined with verve and accuracy			

- later on stamp this as one of the great attacking games of the 19th century.
- A7 **STEINITZ — L. PAULSEN**
A marvelous demonstration of two of Steinitz's major tenets: (a) the King can be safe in the center; (2) combinations played from a position of strength will be both brilliant and effective.
- A8 **ROSENTHAL — STEINITZ**
The first perfect demonstration of the use of the Two Bishop advantage in a nominal middlegame position is the crown jewel in a strategic masterpiece.
- B1 **ENGLISH — STEINITZ**
The first classical endgame, demonstrating how an accumulation of small advantages — including importantly the Two Bishops — can be transformed into a win.
- B2 **STEINITZ — BARDELEBEN**
One of the immortal combinations, deftly set up by a square freeing sacrifice very much in the modern tradition.
- B3 **LASKER — BAUER**
A brilliant attacking game which added the concept of the Two Bishop Sacrifice to the theory of chess combinations.
- B4 **PILLSBURY — LASKER**
The most creative and scintillating example of Rook sacrifices, with Black sacrificing both of them for "nothing" on a3.
- B5 **LASKER — NAPIER**
Perhaps the greatest fighting game of all time with the piquant ultimate point that White gives up all of his material advantage and achieves the win from a superior endgame.
- B6 **ILYIN-GENEVSKY — LASKER**
One of the earliest and most outstanding examples of purely psychological play: Black allows his Queen to be trapped to both complicate the position and induce in his opponent overconfidence and carelessness.
- B7 **MARSHALL — CAPABLANCA**
An early and perfect demonstration of how to transform the strategic advantage of the Queenside Pawn majority into a win.
- B8 **ALEKHINE — CAPABLANCA**
A perfect blend of middlegame concepts: Capablanca uses strategy to obtain the superior position and creatively thematic tactics to achieve the decisive advantage.
- C1 **CAPABLANCA — MARSHALL**
The greatest defensive game of all time. Capablanca meets the inaugural of the Marshall Attack head on, defends perfectly, consolidates smoothly and then launches a devastating counterattack.
- C2 **CAPABLANCA — TARTAKOWER**
An outstanding endgame overall, within which appears the first demonstration of the value and use of the active King in a Rook and Pawn endgame.
- C3 **NIMZOWITSCH — CAPABLANCA**
The methodology of infiltrating along a half open file is so perfect that the loser used this game as a model in his middle-game treatises.
- C4 **CAPABLANCA — LOEWENFISCH**
One of the most devastating, quietly elegant Kingside attacks ever to come out of a closed opening.

- C5 MIESES — ALEKHINE
The Queen sacrifice envisioned on move 10 and executed next move is probably the earliest and deepest one on record.
- C6 ALEKHINE — STERCK
One of the most creative combinations of all time, starting on move 17 and climaxing on moves 23-24. The game gains in stature because of Black's tough resistance.
- C7 ALEKHINE — WOLF
The game that provided the definitive proof for the thesis of the "hypermoderns" (in the 1920's!) that the quality of opening moves is of much greater importance than a static count of developed tempos. White has a strategically won position after move 11, despite having made 4 Queen moves and 3 with his KN!
- C8 BOGOLJUBOV — ALEKHINE
An extraordinary deep queening combination is the decisive element in a brilliant strategic effort encompassing both edges of the board.
- D1 RETI — ALEKHINE
An exceedingly deep attacking combination — a cardinal part of which is an early Queen exchange — tops off a tremendous strategic battle.
- D2 ALEKHINE — BOOK
A brilliant attacking game featuring the first great intuitive "positional" Rook sacrifice.
- D3 SAEMISCH — EUWE
The game that established the legitimacy of the King's Indian Defense by showing how to tame the imposing looking White center.
- D4 EUWE — ALEKHINE
An incomparable demonstration of the value of a developmental tempo in an attack carried out without Queens.
- D5 GELLER — EUWE
The most creative and devastating counterattack ever.
- D6 RAUZER — BOTVINNIK
The center break — discovered and brilliantly executed by Black in this game — has become the definitive counterplay method in the Sicilian.
- D7 BOTVINNIK — CHEKHOVER
A brilliant strategic exposition of the value and utilization of a key central square (d5).
- D8 BOTVINNIK — CAPABLANCA
Demonstration of the building and utilization of the latent pawn center.
- E1 LYUBLINSKY — BOTVINNIK
The discovery/introduction of the "Russian Exchange Sacrifice," a concept combining both defensive and offensive characteristics.
- E2 BOTVINNIK — SMYSLOV
For the player of closed variations, a perfect illustration of the methodology to use and the power that can result from an accurately timed early opening of the game.
- E3 BOTVINNIK — HOLMOV
A virtuoso technical demonstration of the use of the active King to generate winning chances in a symmetrical minor piece endgame.
- E4 SMYSLOV — PANOV
A consummate lesson in the exploitation of a spatial advan-

- tage in a closed position.
- E5 SMYSLOV — RESHEVSKY
Masterful creative strategy in first creating and then exploiting pawn weaknesses.
- E6 KERES — SMYSLOV
The most famous and impressive show of ice cold nerves in demonstrating that an attack on the wing can be best countered by action in the center.
- E7 BOBOTZOV — TAL
The most unexpected and electrifying “positional” early (move 11!) Queen sacrifice.
- E8 TAL — MILEV
In power and creativity, an unparalleled breakthrough against a King in the center.
- F1 TAL — BOTVINNIK
The virtuoso example of skillfully juggling all pieces and squares during extremely complicated, unbalanced play all across the board.
- F2 TAL — LARSEN
One of the most creative intuitive “positional” piece sacrifices, based on both chess and psychological factors.
- F3 SPASSKY — TAL
How to first gain and then keep the initiative is demonstrated by Black with exceptional creativity and vigor.
- F4 POLUGAEVSKY — TAL
The value of the initiative for Black is demonstrated with a rare combination of sophistication and power.
- F5 PETROSIAN — PACHMAN
Perfect strategy prepares a Queen sacrifice — which appears to be out of the blue — drawing out the King from its shelter for ultimate death.
- F6 PETROSIAN — BOTVINNIK
The most impressive realization of a tiny endgame advantage in world championship play.
- F7 SPASSKY — PETROSIAN
Perhaps the most creative, strategically perfect game in world championship play.
- F8 HORT — PETROSIAN
A marvelous exhibition of the defensive and counterplay prospects inherent in the French Defense.
- G1 SPASSKY — BRONSTEIN
One of the great romantic attacking games of the 20th century. The final phase appeared in the James Bond movie “To Russia With Love.”
- G2 SPASSKY — FISCHER
A classical example of using accuracy and power in the opening and middlegame to obtain just enough of an endgame advantage for a win.
- G3 LARSEN — SPASSKY
The most brilliant drastic capitalization of an edge in development by Black.
- G4 KESTLER — SPASSKY
Brilliant strategy and tactics of opening lines against a King castled on the Queenside.

- G5 **BILEK — FISCHER**
The game that opened the labyrinth of the most complicated modern opening variation.
- G6 **R. BYRNE — FISCHER**
The quiet moves following the first sacrifice mark this as one of the most profound and elegant attacking games of all time.
- G7 **PORTISCH — FISCHER**
The strategy of demonstrating the superiority of the Queen over two Rooks from early on in the game is brilliantly conceived and beautifully executed.
- G8 **FISCHER — PORTISCH**
A perfect strategic game which caused the rebirth of the Exchange Variation of the Ruy Lopez after more than 50 years in the doldrums.
- H1 **FISCHER — PETROSIAN**
An incomparable example of how to turn a slight endgame advantage into a quick win — even if the opponent is a former world champion.
- H2 **FISCHER — SPASSKY**
A perfect strategic Kingside attack against a slightly weakened pawn formation.
- H3 **KARPOV — SPASSKY**
An incomparable blend of strategy and tactics on the White side of the Ruy Lopez: a perfect game.
- H4 **KARPOV — UNZICKER**
How to use a spatial advantage to squeeze your opponent to death.
- H5 **KARPOV — KORCHNOI**
The definitive combination of strategy and tactics in formulat-

- ing the attack against the Dragon Sicilian.
- H6 **LJUBOJEVIC — KARPOV**
A perfect demonstration of how to win by defending the Ruy Lopez for Black.
- H7 **TATAI — KARPOV**
An extremely creative pawn sacrifice — for a closed position — and a marvelous exploitation of the resulting edge in development.
- H8 **TIMMAN — KARPOV**
A pawn exchange — which would be dismissed by every strong player as being too anti-positional — is the surprising prelude to an unexpectedly powerful Kingside attack.

SCORING TABLE 64 GREATEST GAMES

The following tables may be used to rate your performance against the master who actually played that side in the original game. To determine a score, proceed as follows: 1) Take the number of first-try points (the left two digits in the Display) and multiply by two. 2) Add this first-try sum to the number of second-try points (the right two digits in the Display). 3) Compare the computed total of first and second-try points to the scoring table for the particular game you played.

For example: Suppose you played the white pieces in game number A1. Suppose, also, that your final score was displayed as 14:15. Using the method described above, $14 \times 2 = 28$, $28 + 15 = 43$, which is your total computed score. Compare the 43 against the white column in the table for game number A1. Since 43 is within the 42-46 block, your rating for this game would be **B**.

64 GREATEST GAMES SCORING

GAME NO.	A1		A2		A3		A4		A5		A6		A7		A8	
	White	Black	White	Black	White	Black	White	Black	White	Black	White	Black	White	Black	White	Black
A	47-56	50-56	63-70	63-68	28-34	27-32	65-70	61-68	44-48	37-46	83-88	76-86	64-72	63-70	65-76	69-76
B	42-46	40-49	50-62	55-63	24-27	26	42-64	45-60	35-46	30-36	56-82	46-75	40-63	43-62	45-64	41-68
C	34-42	34-39	43-49	44-54	22-23	25	36-42	36-44	29-34	26-29	43-55	44-45	32-39	33-42	33-44	32-40
D	33	29-33	24-42	25-43	13-21	23-24	23-35	24-35	20-28	22-25	30-42	34-43	20-31	20-32	21-32	17-31
E	23-32	19-28	9-23	9-29	5-12	13-22	11-22	9-23	6-19	13-21	11-29	19-33	7-19	11-19	5-20	7-16
F	0-22	0-18	0-8	0-8	0-4	0-12	0-10	0-8	0-5	0-12	0-10	0-18	0-6	0-10	0-4	0-6
GAME NO.	B1		B2		B3		B4		B5		B6		B7		B8	
	White	Black	White	Black	White	Black	White	Black	White	Black	White	Black	White	Black	White	Black
A	79-86	77-86	63-70	63-68	60-66	59-64	51-62	56-62	65-70	62-68	71-76	69-76	93-98	89-98	63-70	64-70
B	50-78	42-76	37-62	51-62	44-59	49-58	37-50	38-55	39-64	42-61	46-70	44-68	63-92	48-88	46-62	40-64
C	35-49	32-41	30-36	44-50	35-43	40-48	29-36	31-37	28-38	33-41	33-45	32-43	46-62	34-47	34-45	29-39
D	20-34	17-31	15-29	31-43	17-34	21-39	15-28	14-30	15-27	15-32	13-32	12-31	32-45	19-33	24-33	16-28
E	7-19	7-16	5-14	19-30	6-16	15-20	7-14	6-13	5-14	6-14	5-12	6-11	11-31	5-18	7-23	6-15
F	0-6	0-6	0-4	0-18	0-5	0-14	0-6	0-5	0-5	0-5	0-4	0-5	0-10	0-4	0-6	0-5

64 GREATEST GAMES SCORING

GAME NO.	C1		C2		C3		C4		C5		C6		C7		C8	
FIDELITY SKILL LEVEL	White	Black	White	Black	White	Black	White	Black	White	Black	White	Black	White	Black	White	Black
A	73-80	75-78	94-104	95-102	83-92	81-92	46-52	45-50	59-66	57-66	49-60	49-58	72-80	71-78	95-106	94-106
B	49-72	55-74	50-93	59-94	56-82	47-80	32-45	33-44	40-58	37-56	36-48	31-48	52-71	44-70	56-94	51-93
C	43-48	42-54	35-49	39-58	43-57	37-46	25-31	25-32	29-39	29-36	28-35	22-30	38-51	30-43	36-55	38-50
D	40-42	35-41	18-34	17-38	33-42	32-36	15-24	15-24	18-28	21-28	14-27	10-21	27-37	21-29	17-35	19-37
E	11-39	6-34	6-17	6-16	6-32	6-31	6-14	6-14	7-17	6-20	6-13	6-9	17-26	13-20	9-16	6-18
F	0-10	0-5	0-5	0-5	0-5	0-5	0-5	0-5	0-6	0-5	0-5	0-5	0-16	0-12	0-8	0-5
GAME NO.	D1		D2		D3		D4		D5		D6		D7		D8	
FIDELITY SKILL LEVEL	White	Black	White	Black	White	Black	White	Black	White	Black	White	Black	White	Black	White	Black
A	74-80	72-80	42-50	43-48	55-60	52-60	71-82	75-80	47-52	45-52	53-58	51-58	72-82	75-80	74-82	75-80
B	55-73	39-71	30-42	36-42	41-55	34-51	51-70	47-74	35-46	28-44	39-52	34-50	42-71	55-74	45-73	49-74
C	40-54	26-38	26-29	28-35	30-40	26-33	38-50	31-46	26-34	22-27	29-38	27-33	32-41	39-54	35-44	33-48
D	20-39	8-25	22-25	22-27	22-29	18-25	23-37	17-30	17-25	13-21	18-28	14-26	19-31	17-38	24-34	23-32
E	6-19	6-7	6-21	6-21	6-21	6-17	6-22	6-16	6-16	6-12	6-17	6-13	6-18	6-16	7-23	6-22
F	0-5	0-5	0-5	0-5	0-5	0-5	0-5	0-5	0-5	0-5	0-5	0-5	0-5	0-5	0-6	0-5

64 GREATEST GAMES SCORING

GAME NO.	E1		E2		E3		E4		E5		E6		E7		E8	
FIDELITY SKILL LEVEL	White	Black	White	Black	White	Black	White	Black	White	Black	White	Black	White	Black	White	Black
A	100-106	100-106	53-60	53-58	95-104	97-102	81-90	83-88	95-104	97-102	52-56	49-56	57-60	53-60	35-40	31-38
B	60-99	54-99	35-52	35-52	52-94	56-96	42-80	48-82	48-94	63-96	39-51	32-48	41-56	38-52	26-34	25-30
C	40-59	35-53	26-34	24-34	38-51	35-55	29-41	30-47	31-47	42-62	30-38	25-31	31-40	30-37	22-25	20-24
D	24-39	19-34	21-25	19-23	27-37	23-34	14-28	11-29	19-30	24-41	11-29	10-24	22-30	24-29	8-21	8-19
E	9-23	6-18	6-20	6-18	6-26	6-22	6-13	6-10	6-18	6-23	6-10	6-9	6-21	6-23	6-7	6-7
F	0-8	0-5	0-5	0-5	0-5	0-5	0-5	0-5	0-5	0-5	0-5	0-5	0-5	0-5	0-5	0-5
GAME NO.	F1		F2		F3		F4		F5		F6		F7		F8	
FIDELITY SKILL LEVEL	White	Black	White	Black	White	Black	White	Black	White	Black	White	Black	White	Black	White	Black
A	55-64	54-62	67-74	67-72	69-76	67-76	51-56	49-56	37-42	35-40	86-96	89-94	75-86	76-86	89-96	97-96
B	37-54	40-53	43-66	46-66	44-68	37-66	35-50	28-48	27-36	29-34	49-85	52-88	47-74	39-75	50-88	45-96
C	27-36	27-39	32-42	33-45	29-43	26-36	24-34	19-27	22-26	24-28	34-48	32-51	32-46	28-38	27-49	27-44
D	24-26	23-26	17-31	14-32	20-28	19-25	9-23	9-18	8-21	8-23	15-33	12-31	13-31	13-27	19-26	22-26
E	6-23	6-22	6-16	6-13	6-19	6-18	6-8	6-8	6-7	6-7	6-14	6-11	6-12	6-12	6-18	6-21
F	0-5	0-5	0-5	0-5	0-5	0-5	0-5	0-5	0-5	0-5	0-5	0-5	0-5	0-5	0-5	0-5

64 GREATEST GAMES SCORING

GAME NO.	G1		G2		G3		G4		G5		G6		G7		G8	
FIDELITY SKILL LEVEL	White	Black	White	Black	White	Black	White	Black	White	Black	White	Black	White	Black	White	Black
A	39-46	39-44	92-100	90-98	29-34	28-34	55-62	57-62	50-54	46-54	45-48	42-48	63-70	64-70	59-68	57-66
B	31-38	32-38	52-91	51-89	24-28	20-27	43-54	37-56	40-49	34-45	33-44	28-41	39-62	39-63	38-58	43-56
C	26-30	24-31	37-51	33-50	18-23	16-19	32-42	25-36	31-39	29-33	25-32	22-27	26-38	28-38	30-37	32-42
D	16-25	13-23	21-36	18-32	11-17	8-15	29-31	23-24	28-30	27-28	12-24	12-21	20-25	21-27	26-29	27-31
E	6-15	6-12	6-20	6-17	6-10	6-7	9-28	6-22	6-27	6-26	6-11	6-11	6-19	6-20	6-25	6-26
F	0-5	0-5	0-5	0-5	0-5	0-5	0-8	0-5	0-5	0-5	0-5	0-5	0-5	0-5	0-5	0-5
GAME NO.	H1		H2		H3		H4		H5		H6		H7		H8	
FIDELITY SKILL LEVEL	White	Black	White	Black	White	Black	White	Black	White	Black	White	Black	White	Black	White	Black
A	61-68	61-66	75-82	73-80	68-76	69-74	77-88	79-86	48-54	49-52	79-84	75-84	53-60	52-60	57-62	55-62
B	34-60	39-60	50-74	46-72	41-67	50-68	39-76	51-78	36-47	39-48	53-78	40-74	36-52	37-51	41-56	33-54
C	24-33	26-38	27-49	31-45	33-40	37-49	30-38	35-50	27-35	30-38	36-52	27-39	26-35	30-36	29-40	21-32
D	13-23	14-25	8-26	12-30	27-32	29-36	26-29	28-34	22-26	20-29	29-35	23-26	11-25	13-29	16-28	12-20
E	6-12	6-13	6-7	6-11	7-26	6-28	6-25	6-27	6-21	6-19	6-28	6-22	6-10	6-12	6-15	6-11
F	0-5	0-5	0-5	0-5	0-6	0-5	0-5	0-5	0-5	0-5	0-5	0-5	0-5	0-5	0-5	0-5

SECTION VI — GENERAL INFORMATION

TEST PROGRAM

A miniaturized computer, as part of the solid state electronic system within the game, analyzes each position. After considering all possible chess moves, the computer makes a decision which it has determined to be the best available move.

Since the sophisticated program used in this decision-making process is thoroughly tested, the possibility of computer error is remote. If you suspect that your game is responding improperly, we suggest that you play the Test Program listed below to ensure correct functioning of the unit. If you still suspect improper response after playing the Test Program, we ask that you write down the series of moves and forward same to our Customer Service Department.

PLAYER'S MOVE

1. Press RE Key
2. Press LV Key
3. Select Book Opening F7
4. Press FROM E2 to E4
5. Press FROM G1 to F3
6. Press FROM F1 to C4
7. Press FROM F3 to H4
8. Press FROM A2 to A3

CHALLENGER'S® RESPONSE

Display 

Display 

Display 

E7 to E5

B8 to C6

F8 to C5

D8 to H4

H4 to F2,

CHECK AND MATE

TRANSFORMER

The transformer provided with your Sensory Chess Challenger® has been specifically designed for use with this game. We strongly recommend against the use of any transformer or power source other than the transformer provided by the manufacturer.

SPECIFICATIONS

POWER SOURCE: Operates on 110, 220, or 240 volt AC house power (depending upon transformer used), 50-60 Hz, 10 watts.

ELECTRONICS: All solid state.
READ OUT: Voice reproduction via 2-inch, 8-ohm speaker; 7-segment alpha-numeric display; 65 L.E.D. indicators.

KEYBOARD: 6-key tactile and 72 pressure sensitive.

SIZE: 13 x 11-1/2 x 3-3/16 inches.

WEIGHT: Housing, transformer, chess pieces, literature, dress box: 6 pounds.



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