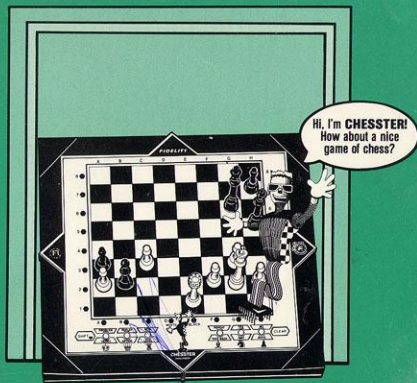


OWNER'S MANUAL / MODEL 6120  
INSTRUCTION BOOKLET



**CHESSTER**  
CHESS CHALLENGER



**FIDELITY ELECTRONICS INTERNATIONAL, INC.**

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## SECTION I - BASIC OPERATION

### 1.1 BATTERY INSTALLATION - REPLACEMENT

#### To insert or replace batteries:

1. Turn the transformer off and disconnect the power cord from the wall.
2. Locate the battery compartment on the upper side of the unit and open the battery cover. (The battery cover is located on the back of the unit.)
3. Remove the old battery pack and insert the new battery pack.
4. Close the battery cover and the transformer.
5. Turn the transformer on and check the battery level.

## INTRODUCTION

It has been our intention, with this product, to provide you with an opponent beyond comparison - a truly excellent chess program with a personality all its own - Chesster Challenger®. With his vocabulary of over 300 words, Chesster Challenger® can teach, demonstrate, assist, tease and amuse. Fidelity's state-of-the-art technology provides you with an amazing computerized opponent that plays chess with skill and cunning and the sensory playing surface enables the computer to automatically sense all game moves. Battery operation allows you to play against this chess opponent wherever you desire. The voice feature provides additional features for you to select from and enables the computer to communicate more information to you than conventional models.

Your enjoyment of the computer will be greatly enhanced if you familiarize yourself with SECTION ONE of this Owner's Manual first before attempting to engage the special features or setting up board positions. The instructions which follow help you understand how to operate the computer and how to play your first game.

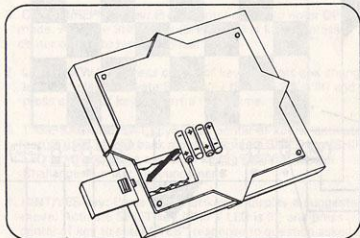
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## SECTION I - BASIC OPERATION

### 1.1 BATTERY INSTALLATION / REPLACEMENT

To install or replace batteries:

1. Be sure that the optional transformer (if applicable) is unplugged from the unit.
2. Locate the battery compartment on the underside of the unit and slide the battery cover clear of the guide notches in the case.
3. Remove and discard old batteries.
4. Ensure that the battery clips are clean and rust free.
5. Install four (4) "AA" size alkaline batteries.
6. Replace battery cover.

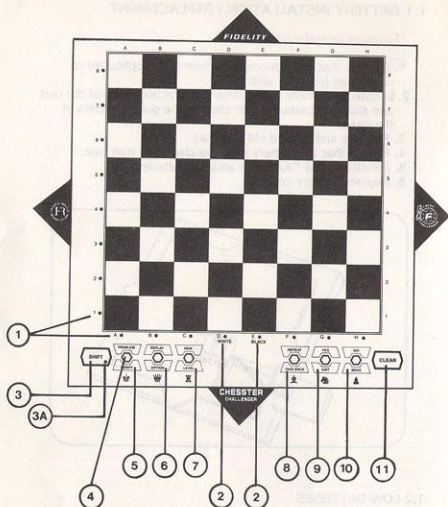


### 1.2 LOW BATTERIES

If the computer appears to be behaving erratically, or signalling impossible / illegal responses, this is a sign of low battery power and the batteries should be replaced.

### 1.3 AC OPERATION (OPTIONAL)

For AC operation, plug the transformer into an AC wall outlet and plug the transformer line cord into the game. Depending upon how frequently you play, you may wish to purchase the optional AC transformer available for this product. **DO NOT USE ANY OTHER TRANSFORMER THAN THE FIDELITY TRANSFORMER DESIGNED SPECIFICALLY FOR THIS PRODUCT. FAILURE TO DO SO CAN CAUSE DAMAGE TO THIS PRODUCT WHICH WILL VOID THE WARRANTY.** If you have difficulty locating a Fidelity transformer locally, an order form is provided in this herein for your convenience.



1. **BOARD LEDS** (light emitting diodes): One LED adjacent to each number and one LED adjacent to each letter. Computer will light one number LED and one letter LED to indicate coordinates of square it wants to move a piece from or a piece to.

2. **COLOR LEDS**: Not only used to show computer's move on D and E files, but also to indicate which side is currently at play (white or black). If you are white and it is your turn to move, the white (D) LED will flash. If the computer is black and it is black's turn to move, the black (E) LED will flash.

## FUNCTION KEYS

3. **SHIFT KEY**: This key contains LED (3A) to indicate if SHIFT is activated. If activated, the red, or upper, key functions may be used. To use the black, or lower key functions, press CLEAR key to deactivate SHIFT LED.

4. **KEY SENSOR** Located Here: Regardless of which key function you activate (red or black) press the center of key to engage that function.

5. **VERIFY/PROBLEM** key: Press center of key to verify position of chess pieces. Activate SHIFT key (SHIFT LED is lit) and press center of key to enter PROBLEM mode (for setting up mid-game positions or problems).

6. **OPTION/REPLAY** key: Press center of key to enter OPTION mode. Activate SHIFT key (SHIFT LED is lit) and press center of key to replay the last game.

7. **LEVEL/NEW** key: Press center of key to select and change levels of play. Activate SHIFT key (SHIFT LED is lit) and press center of key to start a new game.

8. **TAKE BACK/REPEAT** key: Press center of key to activate feature used to take back moves. Activate SHIFT key (SHIFT LED is lit) and press center of key to repeat Chesster Challenger's last announcement.

9. **HINT/YES** key: Press center of key to display a suggested move. Activate SHIFT key (SHIFT LED is lit) and press center of key to enter "YES" response to question asked by Chesster Challenger®.

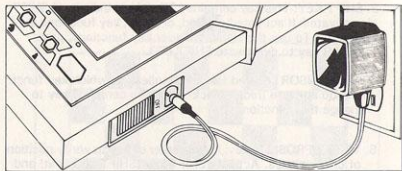
10. **MOVE/NO** KEY: Press center of key to change sides with the computer. Watch the computer play both sides or force the computer to stop thinking and make a move. Activate SHIFT key (SHIFT LED is lit) and press center of key to enter a "NO" response to a question asked by Chesster Challenger®.

11. **CLEAR** key: Press to deactivate SHIFT key; also used to cancel an illegal move indication or to clear a "FROM" square before you move to the "TO" square; also used to exit from OPTION mode and PROBLEM mode.

## 1.5 POWER ON

Set the ON/OFF switch to ON. If optional Fidelity transformer is being used, see Section 1.3.

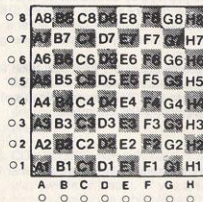
A new game is started when you first turn power on or when the NEW GAME key is pressed.



When the game is first plugged in, Chester Challenger® will introduce himself and the LED labeled WHITE will be flashing. As described in the Board Diagram, Section 1.4, this LED indicates that it is white's turn to move (in this case, to make the first move to start the game). At this point, none of the options or special features are in effect and Chester Challenger's vocabulary is activated. A new game is always started when power is turned on and turning the power off and on again resets the program to pre-game conditions and removes all previously selected options.

## 1.6 THE GAME BOARD

Set up the chess pieces with the white pieces at the bottom of the board. Each square on the chess board is designated, in accordance with international chess notation, by a letter of the alphabet designating the vertical rows (the files) and a number designating the horizontal rows (the ranks). At the beginning of a game, the white king is on square E1, and the black king is on square E8.

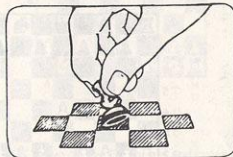


Files are vertical rows of squares.  
1 - 8

Ranks are horizontal rows of squares.

## 1.7 HOW TO ENTER MOVES

Playing chess against your 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 pieces for the computer.

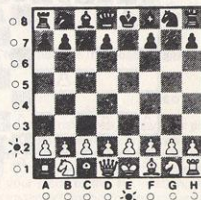


To make a move, press gently on the center of the square using the base of the piece. First press on the FROM square, then on the TO square.

## 1.8 YOUR FIRST MOVE

The following example will help you to start your first game with the computer.

Lets say you have chosen to move your white pawn, located on square E2 (at intersection of file E and rank 2), to the E4 square:



## STEP 1

First tilt the pawn and press on square E2. LEDs for file E and rank 2 will light up as shown. Therefore, the E2 square is selected.

## STEP 2

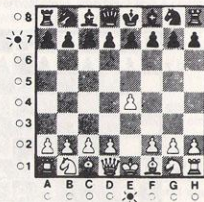
Pick up the pawn on E2 and press on square E4 (the E and 2 LEDs will go out). The computer, at that instant, has recorded the move you made and has begun to think about its move. (In this example, the computer will respond instantly so you may not even see the BLACK LED flashing).



"BLACK" is thinking

## STEP 3

The computer will show you its move by lighting two LEDs for its FROM square (we have selected the E7 square for this example - you may get a different response). The file E and rank 7 LEDs are lit.



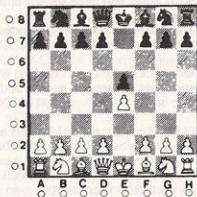
## STEP 4

Press down on the BLACK pawn on E7. The FROM LEDs will go out and two different LEDs will show you the TO location for that pawn (we have chosen the E5 square for this example).



## STEP 5

Pick up the BLACK pawn on the E7 square and press down on the E5 square. The TO lights will go out, and it is time for your next move.



For each move, remember the three basic steps: PRESS, MOVE, and PRESS AGAIN!

## NOTE

You may notice that, when moving your piece, the TO square LEDs do not light, but when moving the computer's piece, the LEDs for the TO square do light up. The reason for this is that once you have moved your piece to the TO location, the computer is instantly informed of your move and there is no need for lights. On the computer's move, the TO square is lit to show you where to place the computer's piece.

## 1.9 ACCIDENTAL WRONG MOVE

If you press down on a piece and the FROM square is lit, but you decide not to take that move, press the CLEAR key which will also turn the LEDs off, and allow you to enter another move of your choice.

If you change your mind after you have entered a whole move, (FROM and TO squares) then the computer has accepted your move and is already considering its countermove. In this case, wait for the computer to indicate its move, enter that move and press TAKE BACK! The computer will now show how to take its last move back. Continue pressing TAKE BACK for each move until you have reached the desired board position (see Section 2.9).

## 1.10 ILLEGAL MOVE

The computer will only allow moves that are in compliance with the rules of chess. Illegal moves are not accepted. The computer notifies you of an illegal move or error by beeping a double tone and flashing the LEDs corresponding to the FROM square that was pressed. To undo the error, you have several options:

1. Pick up that piece and press it down on the square you actually intended to move it to; or
2. Press the piece back down on the flashing FROM square (the LEDs indicating that square will go out) and then enter another move; or
3. Press the CLEAR key to turn the LEDs off and put the piece back down on its original FROM square. Then enter another move of your choice.

### IMPORTANT NOTE

Method 3, above, does not insure that the incorrectly moved piece has been returned to its original location., but rather leaves it up to you to replace the piece correctly.

Please note the following circumstances which will also cause the computer to beep an illegal move indication:

1. Pressing down on a piece of the wrong color (e.g. it is white's turn, and you press down on a black piece).
2. Pressing down on the wrong square when making the computer's move on the board (e.g. the computer lights the LEDs for square D8 and you inadvertently press down on square D7).
3. Pressing down on an empty square without having first pressed down on a piece which can move to that square.

## 1.11 EN PASSANT

The computer will capture a pawn "en passant" whenever it determines that such a move is desirable, and it will also recognize when you choose to move "en passant." When performing an "en passant" capture, the computer will first indicate the pawn move in the usual way, by lighting LEDs for the FROM square and then the TO square. Then it will light LEDs to indicate the square of the captured pawn, to remind you to remove the pawn from the board.

## 1.12 CASTLING

The computer will castle by first performing a king move, and then a rook move. First, the king move must be acknowledged in the usual manner by pressing the FROM square and the TO square. Then the rook move must be acknowledged by pressing its FROM and TO squares. You may castle your king in a similar manner by first pressing down on the king's FROM square and then its TO square. At this point, the computer will recognize that you wish to castle, and will light the LEDs for the rook's move to prompt you to move that piece.

Remember that castling is a king's move. If you attempt to castle by moving your rook first, the computer will acknowledge the rook's move and immediately begin thinking. To recover from such a mistake, use the TAKE BACK feature to take the rook move back (see Section 2.9).

## 1.13 PAWN PROMOTION

As in a normal game of chess, when a pawn reaches the eighth rank, it may be promoted to a higher-valued piece (usually a queen). Once you have entered the pawn's move to the eighth rank, the LED for that square will flash until you identify your promotion selection by pressing the key next to the picture of the piece you wish to promote to (i.e. to promote the piece to a queen, press the OPTION key after the lights begin to flash awaiting your choice). As soon as you make your selection, the LEDs for that square will go out and the computer will start thinking about its next move.

If one of the computer's pawns reaches the eighth rank, the computer will evaluate its present position and will promote its pawn to the piece it feels will be of most value. Since this will occur automatically, you may wish to use VERIFY mode to identify the promoted piece.

## 1.14 CHECK AND MATE

Any time there is a check situation on the board, Chesser challenger will announce "CHECK." If the computer determines that you will soon be mated, it announces the number of moves until checkmate. Once the computer's mating move is entered, it will announce "MATE." Likewise, if you checkmate the computer, the voice will announce it.

## 1.15 CHESSTER'S VOICE

Chesster Challenger®'s most amazing feature is his personality, or voice, which has been developed not only to amuse you, but to assist you as well. See Section II for details on how to activate the desired "vocabulary(s)." For your convenience and enjoyment, his personality has been broken down into four "vocabularies" from which you may choose: 1) Character Mode, 2) Coaching Mode, 3) Demonstration Mode, 4) Move Assistance Mode. In this way, Chesster Challenger® will only make the type of announcement you want to hear.

**1. CHARACTER MODE (OPTION B1)** - After Chesster Challenger® is activated, he is automatically programmed to make "character" announcements. This mode, or vocabulary, contains the fun portion of Chesster Challenger®'s personality including entertaining remarks about events that occur during the game. This vocabulary should be activated if you are looking to amuse yourself and/or your friends during a game.

**2. COACHING MODE** - This vocabulary is designed to provide helpful comments during a game for beginners or players who have been inactive for awhile.

**3. DEMONSTRATION MODE** - This feature will walk you through your first move. If both DEMONSTRATION and COACHING modes are activated during a game, the computer will also tell you how each piece you press on (from its starting position) is supposed to move. To hear each piece announcement before you begin to play, simply press on the piece on its starting square, listen to the advice, press CLEAR, and then press on the next piece you are interested in learning about.

**4. MOVE ASSISTANCE MODE** - Designed for beginners to chess or visually handicapped players, this vocabulary allows Chesster Challenger® to literally announce all moves and key presses to assist the user. Any one of the four vocabularies may be activated in any combination. If you choose to DEACTIVATE all four vocabularies, Chesster Challenger® will only make the type of announcements you would find in competitive play (i.e. Check, Checkmate, Stalemate, etc.) along with warnings if you have erred in some way during play.

### NOTE

Chesster Challenger®'s beep tone will continue to function if all four "voice" modes are deactivated. If you wish to deactivate all sounds except for warning messages and legal announcements, deactivate options B1, E1, G1, and H1 and then press LEVEL & CLEAR (to exit to OPTION Mode).

## SECTION II - SPECIAL FEATURES

### 2.1 SHIFT

Just as a shift key on a typewriter will activate upper case letters, the SHIFT key on your computer will select the upper (or red) key functions. If the SHIFT LED is lit, any red key functions may be selected. If the SHIFT LED is unlit, any lower (black) key functions may be selected. **WHETHER THE SHIFT LED IS LIT OR UNLIT, ALWAYS PRESS ON THE CENTER OF THE KEY TO SELECT ANY DESIRED FUNCTION.** See illustration below. **IMPORTANT:** When pressing a key, always push down the indicated area so the computer can register your action correctly.



### 2.2 PROBLEM (SHIFT LED LIT)

By activating the PROBLEM function you will enter PROBLEM Mode. PROBLEM Mode is used to make changes - to remove or add pieces during a game; to relocate pieces from one square to another; or to set up problems for the computer to work out. using PROBLEM Mode, you can alter the board set-up at any time before or during a game. You can, for example, change the direction of the game, strengthen your side or the computer's, resurrect lost pieces, or even move your king out of an imminent checkmate situation. You can also set up mate puzzles for the computer to solve using MATE-FINDER levels.

While you are in PROBLEM Mode, the function keys become chess piece selector keys. Each function key is used to select the type of chess piece that is pictured beneath it.

You may enter PROBLEM Mode whenever it is your turn to move. To learn how to use this feature, try the following drill:

1. Activate NEW (SHIFT LED lit) and set up the pieces in their initial positions.
2. Activate PROBLEM to enter PROBLEM Mode.

- Now activate the key above the pawn (♟) symbol. Note that the 2 LED and the E-H LEDs are all lit steadily. This indicates that all white pawns occupy squares A2 through H2. Press the key above the pawn symbol again and the 7 LED will be lit with the A-H LEDs flashing. This shows that all black pawns occupy squares A7 through H7.
- Press square H7. Note that the H LED goes out. By pressing down on this flashing square, you have erased the black pawn from that square. Pressing square H7 once more will turn the H LED on steadily. Now a white pawn occupies that square. Pressing square H7 a third time will cause the H LED to flash, indicating a black pawn now occupies square H7.

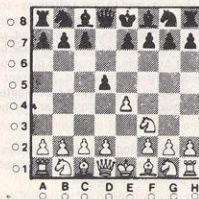
By the above illustrations it can be seen that:

A unlit file LED means no piece of that type occupies the square in that rank.

A steadily lit file LED means a WHITE piece of that type occupies the square in that rank.

A flashing file LED means a BLACK piece of that type occupies the square in that rank.

Before using this feature to create your own positions, familiarize yourself with PROBLEM Mode by performing the following steps to set up the sample board positions pictured below:



- Repeat steps 1 and 2 from previous page (see Section 2.2).
- Activate the key above the pawn symbol (♟). Note that the 2 LED and the A-H LEDs are lit steadily.
- Press down on the white pawn located at square E2. (E LED will flash). Press the E2 square again and the LED will go out. You have now erased a pawn from the E2 square.
- Move the WHITE pawn to square E4 and press down. The 4 and E LEDs will light steadily. The computer has now recorded a WHITE pawn on the E4 square.
- Press the key above the pawn symbol again. (7 LED is lit and A-H LEDs are flashing). Press the BLACK pawn on square D7 (the flashing D LED will go off). You have now erased the pawn on D7. Move this BLACK pawn to square D5 and press down. (The D and 5 LEDs will light steadily). Press down on the D5 square again and the D LED will flash. The computer has now recorded a BLACK pawn on square D5.
- Press the key above the knight (♞) symbol. Note that the 1, B, and G LEDs are steadily lit to show the location of WHITE knights.
- Press down on the WHITE knight located on square G1 (the G LED will flash). Press down on square G1 again (the G LED will go off). The computer has now recorded that square G1 is now unoccupied.
- Move the WHITE knight to square F3 and press down on that square. (The F and 3 LEDs will light steadily). The computer has recorded a WHITE knight located on the F3 square.
- Press CLEAR to exit the PROBLEM Mode.

#### NOTE

The computer always assumes WHITE is to move upon exiting the PROBLEM Mode. If the position you have arranged calls for BLACK to move first, activate SHIFT, YES. The computer will now expect BLACK to move first. If you are moving first, enter your move. If the computer is moving first, press MOVE.

By completing the above steps, you have successfully entered the positions pictured above into the computer's memory.

If the position you want to record in the computer's memory involves only a few pieces (as opposed to a rather full board as

in your example), activate **OPTIONS** and then activate (SHIFT) **VERIFY**.

You may now create a board position from an empty board.

### 2.3 VERIFY (SHIFT LED UNLIT)

**VERIFY** enables you to verify the positions of all pieces, both white and black, at any time before or during a game, or whenever it is your turn to move. To verify the position of any piece type, first activate **VERIFY**. Press the key above the picture of the piece type you are interested in (e.g. to verify the position of rooks on the board, activate **VERIFY** and then the key above the (R) symbol. Each time you press one of the piece symbol keys, a new row (rank) LED is lit and column (file) LEDs light to show where a piece is located in that rank. If the piece is **WHITE**, the file(s) LED lights steadily. If the piece is **BLACK**, the file(s) LED flashes. For any given piece symbol selected, the computer will automatically only show you the ranks which are occupied by one or more of those pieces you are looking for. Unoccupied ranks will be skipped over. If there are no pieces of that type on the board at all, only the 8 LED in the upper left hand corner of the board will light to indicate this. By repeating this process for each piece type, every piece on the board can be correctly located. To return to normal play, press **CLEAR**.

### 2.4 REPLAY (SHIFT LED LIT)

At any point during a game, or at the end of a game, you may take back all moves played and see them replayed (unless **NEW** is activated, which will erase the computer's memory) by activating **REPLAY**. Once **REPLAY** is activated, the board LEDs will light up the **FROM** square of the first move in the game and the coordinates of that move will also appear in the display. Enter the move indicated and the second move of the game will be shown in the same fashion.

As each move is entered, the computer will display the next move played. At the end of the move sequence, the computer will emit a series of beeps.

If you have taken back moves and decide you would like to see one or more of them replayed, see Section 2.11, **HINT**.

### 2.5 OPTION (SHIFT LED UNLIT)

- 4 As the option function is activated, the 1, 2, 3, and 4 LEDs will
- 3 light. See Section III for an explanation of the various game
- 2 options from which you may select.
- 1

### 2.6 NEW (SHIFT LED LIT)

Activating **NEW** returns all pieces back to their initial starting positions and the computer is ready to begin a new game of chess. Please note, however, that if you have just finished a game and you have made any level and/or option selections, these selections **WILL REMAIN IN EFFECT** for the next game if you only activate **NEW**.

This function is especially handy for those who tend to select the same options for most games - in this respect, the **NEW** function will provide you with an easy shortcut.

To start a new game **WITHOUT** the previous level or game options selected (**FULL RESET**), activate **OPTION** (SHIFT LED unlit) key, and then **ACTIVATE NEW** (SHIFT LED lit). By doing this, you are erasing all previous entries and options and starting a completely new game (same as turning the computer off and then turning it back on again). **NOTE:** whether you are turning the computer on or using the **Full Reset** option, the computer will always be set on level **A1**, and the pieces will be returned to their initial starting positions.

### 2.7 LEVEL (SHIFT LED UNLIT)

Your computer has 25 levels of play for you to choose from. Level **A1** is automatically selected when the computer is first turned on. The first time you activate **LEVEL**, the 1 and A LEDs will light to confirm this. To select an alternate level, activate **LEVEL** and press down on the appropriate board square. For your reference, a diagram of the board squares used to activate each level is shown with brief descriptions inside each square. A more detailed explanation of the various levels follows the diagram.

## 2.7.1 CHART OF PLAY LEVELS

PRESET TIME CONTROL Avg. Time/Move (Total Number Moves/Time)	SELECT ANY SQUARE FOR INFINITE LEVEL				FIXED DEPTH LEVELS		MATEFINDER LEVELS
AVG. RESPONSE 3.5 MIN (40/2.5 HR)					SELECT	8 PLY	MATE IN 8
A8	B8	C8	D8	E8	F8	G8	H8
AVG. RESPONSE 3 MIN (40/2 HR)					ANY ONE	7 PLY	MATE IN 7
A7	B7	C7	D7	E7	F7	G7	H7
AVG. RESPONSE 2 MIN (30/60 MIN)					OF THESE	6 PLY	MATE IN 6
A6	B6	C6	D6	E6	F6	G6	H6
AVG. RESPONSE 1 MIN (60/60 MIN)					SHADED	5 PLY	MATE IN 5
A5	B5	C5	D5	E5	F5	G5	H5
AVG. RESPONSE 30 SEC (60/30 MIN)					SQUARES	4 PLY	MATE IN 4
A4	B4	C4	D4	E4	F4	G4	H4
AVG. RESPONSE 15 SEC (60/15 MIN)					FOR	3 PLY	MATE IN 3
A3	B3	C3	D3	E3	F3	G3	H3
AVG. RESPONSE 10 SEC (60/10 MIN)					INFINITE	2 PLY	MATE IN 2
A2	B2	C2	D2	E2	F2	G2	H2
AVG. RESPONSE 5 SEC (60/5 MIN)					LEVEL	1 PLY	MATE IN 1
A1	B1	C1	D1	E1	F1	G1	H1

## 2.7.2 PRESET LEVELS (A1-A8)

Playing levels with preset time controls may be selected by activating LEVEL, one of the A file (A1-A8) squares and CLEAR. For your convenience, the chart of playing levels shows the average response time for each of the preset levels within the appropriate square (i.e. select square A1 for an average response time of 5 seconds per move), and the overall time control the computer is using (i.e. square A1 will make 60 moves within 5 minutes).

## 2.7.3 FIXED DEPTH LEVELS (G1-G8)

Fixed depth levels may be selected by activating LEVEL, one of the G file (G1-G8) squares and CLEAR. On these levels, the only preset condition is the computer's ability to look ahead. For example, level G2 restricts the computer's look ahead to two plies or two half-moves (one half move equals one move for one player). As you utilize the fixed depth levels, you will always know how far ahead your opponent is analyzing its next move. Using these levels can train you to improve your ability to see further into a game and you can measure your success by your number of wins.

## 2.7.4 MATE-FINDER LEVELS (H1-H8)

Mate-Finder levels may be selected by activating LEVEL, one of the H file (H1-H8) squares and CLEAR. These levels allow you to set up mate problems for the computer to solve. For example, if you set up a problem and want the computer to search for a mate in 6 moves, set the computer to level H6. On this level, the computer will search for a mate in 6 moves. If a mate in 6 is found, the computer will announce it, at the time that the move is displayed. If you want to see the computer's next move, or the mate it has already found, activate level H5 (because the problem is now a mate in 5). Enter the opponents move and the computer will display the next move to mate, OR if no mate exists, the computer will announce that no mate is found.

## 2.7.5 INFINITE LEVEL

To select Infinite level, and any board square in files B, C, D, E or F. This level allows the computer unlimited time for each move. The computer will continue to search, looking deeper and deeper until it finds a forced mate or until the search is halted by you. When halted, the computer will make the best move it has found thus far in its search. You can halt the computer's thinking at any time by activating MOVE. If you would like to see how deep the computer is searching before you force it to respond, see Section 4.2.

## 2.8 REPEAT (SHIFT LED LIT)

If you wish to hear the computer's last voice announcement repeated, activate REPEAT. This function repeats the last announcement made, and can be used more than once, if necessary.

## 2.9 TAKE BACK (SHIFT LED UNLIT)

The TAKE BACK function allows you to take back any move you make or any move made by the computer. The computer will allow you to take back up to 200 half moves (100 moves per side) in a single game. To use this function, simply activate TAKE BACK when it is your turn to move, and the LEDs indicating the TO square of the last move will light. Press down on the indicated square and the LEDs showing the FROM portion will light. Press that square and the LEDs will go out. You have thus completed the take-back of the computer's last move. At this point, you are permitted to enter an alternate move for the computer's side if you wish, or take back your last move.

To enter an alternate move for the computer, enter the desired move as you normally would and proceed with your next move. To take back your last move, simply press the TAKE BACK key again and proceed as outlined above. You may effectively take back as many moves as you like using this procedure.

As you take back moves, the computer will remind you to return a captured piece to the board by lighting up the square LEDs of the previously captured piece. Return the captured piece to the board and press down on the indicated square. If you do not recall the identity of the captured piece, press down on the indicated square and use the VERIFY key to find out what type of piece belongs on that square.

To take back all moves played in a game thus far or an entire game, see Section 2.4, REPLAY.

## 2.10 YES (SHIFT LED LIT)

The YES function serves several purposes: 1) If the computer announces a question, you may respond positively by activating YES. 2) While the computer is waiting for you to make a move, activating YES raises the volume of the computer's "voice." Each time you press YES, the computer says "all right" and the voice volume will increase, until the computer announces "thank you" to signal that the maximum volume setting is achieved.

## 2.11 HINT (SHIFT LED UNLIT)

If it is your turn to move and you would like the computer to suggest a move, activate HINT. The computer will indicate a suggested move using the board LEDs. If you opt to make the suggested move, enter it as you normally would. If you decide to make a different move, simply make the move of your choice.

If you have taken back moves and you decide that you would like to see them replayed, activating HINT key will cause the computer to indicate the last move taken back in the display window. Simply enter that move on the board and the computer will display the next move taken back. As you enter moves taken back, the computer will continue to display the next move until you have reached the

## SECTION III - GAME OPTIONS

last move made in the game. At that point the computer will emit a series of beeps to signal that you have entered the last move played thus far.

If you decide to stop playing moves forward at some point before the last move made, stop entering moves at the desired position and press CLEAR to continue a regular game from that position. To see an entire game replayed, see Section 2.4, REPLAY.

### 2.12 NO (SHIFT LED LIT)

The NO function serves two purposes: 1) If the computer announces a question, you may respond negatively by activating NO. 2) While the computer is waiting for you to make a move, activating NO lowers the volume of the computer's voice. Each time you press NO the computer announces "NO", and the voice volume decreases until the computer announces "I'm sorry" to signal that the minimum volume is achieved.

### 2.13 MOVE (SHIFT LED UNLIT)

If during a game you decide to change sides with the computer, activate MOVE when it is your turn to move. The computer will then take over your pieces and make a move. At this point, you may enter a move for the computer's side and continue to play the same game. If you would like to watch the computer play against itself, activate MOVE, enter the move displayed, and continue to repeat this procedure. Activating MOVE while the computer is thinking will force it to move instantly at any level.

### 2.14 CLEAR (SHIFT LED NOT APPLICABLE)

The CLEAR function has many uses:

1. If you accidentally activate an unwanted FROM square, press  
clear and you are free to activate the desired square.
2. Press CLEAR to erase illegal move indication.
3. Press CLEAR to exit OPTION Mode, HINT, REPLAY, PROBLEM Mode, VERIFY Mode, AND LEVEL SELECT Mode.

In addition to the keys and special features described previously, a number of additional options may be selected to enhance your enjoyment of the computer. The game options are user selectable (before the start of a new game or whenever it is your turn to move during a game), and can be activated by pressing various squares on the playing surface. When Option Select Mode is chosen by activating OPTION, normal game play is suspended and squares A1 through H1 are used to select options as illustrated below:

EASY MODE A1	VOICE MODE B1	MONITOR MODE C1	BLACK FROM BOTTOM D1	VOICE COACH MODE E1	CANCEL BOOK F1	VOICE DEMO MODE G1	VOICE MOVE ASSIST H1
A	B	C	D	E	F	G	H

Activate OPTION to enter Option Select Mode. Whenever you are in this mode, the 1, 2, 3, and 4 LEDs are steadily lit. After activating OPTION, select the option(s) of your choice by PRESSING DOWN ON THE SQUARE DESIGNATED FOR THAT PARTICULAR OPTION.

The LED below that square will light to confirm that you have selected that option. You may choose a number of options at the same time, as desired. After selecting your option(s), always press the CLEAR to exit option Select Mode.

As each option is selected by pressing the desired square, the LED below that square will light to indicate the selected option. If you decide after selecting an option that you would rather not have that option in effect, simply press the OPTION square again. The LED below it will go out to indicate that it is no longer in effect.

If you decide you want to cancel an option after you have already pressed CLEAR to exit Option Select Mode, simply activate OPTION again to get back into that mode. Note that the LEDs for options A1, B1, C1, D1, and H1 are lit if they have been selected and are in effect. To cancel any of these, press the appropriate option squares and the LEDs in the squares will go out. Then press CLEAR to exit Option Select Mode. Note: This rule does not apply to options E1, F1, and G1 because they represent either a one-time selection (Clear Board and Cancel Book) or an option which must be entered separately each time for it to take effect (Change Color). If either of these options was chosen by you, therefore, and you go back into Option Select Mode, their LEDs will NOT be on, even though they were selected.

### 3.1 SQUARE A1 - EASY MODE

Activate OPTION, Square A1, and CLEAR. 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 of its thinking on your time - while you are contemplating your next move. This feature is part of what makes your computer such a tough opponent. For example: If you set the computer on level A1 to give it roughly 5 seconds per move, but you take two minutes to consider your move, and the computer guesses what you are going to play, the computer will have used the whole two minutes to think about its reply. You might as well have selected a higher level.

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.

### 3.2 SQUARE B1 - VOICE CHARACTER MODE

Activate OPTION, square B1, and CLEAR. To select Chesster Challenger's<sup>®</sup> "character" vocabulary, activate this option (see Section 1.15, Chesster's Voice).

### 3.3 SQUARE C1 - MONITOR MODE

Activate OPTION, square C1, and CLEAR. This option allows humans to play both sides of the game, while the computer acts as refereechecking each move by each legality and keeping track of times taken per move by each player. REPLAY, TAKE BACK, and MOVE features will also function, but after the computer makes the move, MONITOR Mode will remain in effect. To exit MONITOR Mode and continue playing the game against the computer, activate OPTION, square C1, and CLEAR. Then simply make your next move and the computer will respond as in a regular game.

### 3.4 SQUARE D1 - BLACK FROM THE BOTTOM

Activate OPTION, square D1, and CLEAR. Option D1 allows you to play with the black pieces set up at the bottom of the board. If you choose this option, be sure to set the pieces up correctly. Use VERIFY to be certain of where the pieces should be placed. Once you have verified proper piece locations, activate MOVE to make the computer start thinking. SWITCHING TO THIS OPTION DURING A GAME IS NOT ADVISED.

### 3.5 SQUARE E1 - VOICE COACHING MODE

Activate OPTION, square E1, and CLEAR. To select the "coaching" vocabulary, activate this option (see Section 1.15, Chesster's Voice).

### 3.6 SQUARE F1 - CANCEL TOURNAMENT BOOK

Activate OPTION, square F1, and CLEAR. Choosing option F1 locks out the computer's tournament opening book library. If this option is in effect, the computer will select from a greater variety of book opening lines. If this option is not activated, the computer will play only those opening lines it feels are best.

### 3.7 SQUARE G1 - VOICE DEMONSTRATION MODE

Activate OPTION, square G1, and CLEAR. To activate the "demonstration" vocabulary, activate this option (see Section 1.15, Chesster's Voice).

### 3.8 SQUARE H1 - VOICE MOVE ASSISTANCE MODE

Activate OPTION, square H1, and CLEAR. To activate the "move assistance" vocabulary, activate this option (see Section 1.15, Chesster's Voice).

The computer has the ability to announce forced mates against its opponent. In addition, the computer can recognize and claim three different type of draws: draw by stalemate, draw by the 50-move rule, and draw by three-time repetition. Please refer to the appropriate sections that follow for details regarding the specific draw announcements.

## SECTION IV MATE & DRAW ANNOUNCEMENTS

### 4.1 CHECKMATE

When a check situation occurs on the board, the computer will announce "CHECK." If the computer recognizes that you will soon be mated, it announces the number of moves until mate. Once the computer's mating move is entered, it will announce "MATE." Likewise, if you checkmate the computer, it will be announced.

### 4.2 DRAW BY STALEMATE

A game is drawn by stalemate if the player whose turn it is to move has no legal moves, but his king is not in check. The computer claims this draw by announcing stalemate. If this occurs, the game is over and cannot be continued. If desired, however, you may replay the game (see Section 2.4), take back moves (see Section 2.9), or change position in PROBLEM Mode (see Section 2.2).

### 4.3 DRAW BY THE 50-MOVE RULE

If 50 consecutive moves have been played in a game without either side having moved a pawn or captured a piece, a 50-move rule draw may be claimed by the side whose turn it is to move. If the computer detects that such moves have been made, it will claim a draw by announcing it.

### 4.4 DRAW BY THREE-TIME REPETITION

If the same position occurs three times in a game of chess where the same side has the move each time, the game is drawn by repetition of position. If the computer is about to make a move that will result in the same position being repeated for the third time, or if the computer recognizes that its opponent has made a move that results in a third repetition, it claims the draw by announcing the appropriate type of draw.

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