



# LCD Chess Operating Manual

## Model 375-1

Congratulations on your purchase of Excalibur Electronics' innovative LCD Chess! You've purchased both your own personal chess trainer and a partner who's always ready for a game—and who can improve as you do!

### Install the Batteries

Using a small Phillips screwdriver, remove the battery-compartment panel screw on the back of LCD Chess. Then remove the panel by pulling gently from the top. Install three fresh, alkaline AAA batteries, making sure to follow the diagram in each battery slot so that the polarity (+ or -) of the batteries is correct.

Replace the battery compartment panel. When replacing the screw, secure it gently. Do not force or over-tighten it.

**Excalibur's LCD Chess is designed so that it can be held comfortably and used with one hand.**



### Play a Game Right Away

After you have installed the batteries, the display will show the chess board with all the pieces on their starting squares. The LCD will also show **01CHESS**. This indicates you are at the first move of the game and ready to play chess. If it does not display **01CHESS**, press **RESET** using a thin pointed object.

Unless you instruct it otherwise, LCD Chess gives you the White pieces—the ones at the bottom of the board. White always moves first. You're ready to play!

Make your first move with your choice of two methods. In both methods, it's very important to understand that making a move is made up of two parts, choosing a *from* square and a *to* square.

### Move Entry Method #1

This method makes the most use of the central, *DIRECTION* rocker. The eight-direction rocker button may be difficult to use at first. It is different from some video game controllers because it allows diagonal movement.

For up, down, left and right movements, it helps if you push the button straight out away from the center of the rocker. Do not press in the center of the rocker, because you may cause a diagonal movement to occur.

1. Push the *DIRECTION* rocker in any direction and the White queen's rook (the piece on the bottom, left) will flash on and off. The LCD will also show **01FrOm**. Then move the circular rocker button—to the right, left, or diagonally—until the piece or pawn you want to move flashes on and off.

2. Push the *OPTIONS/MOVE* button immediately above the circular *DIRECTION* rocker.

3. Push the *DIRECTION* rocker to move the piece to the square you want. You'll see your piece flashing on possible *to* squares as you move it—at the same time it continues to flash on its *from* square.

*Note: Press MODE twice and it will act as a "clear" key. For example, use it to stop a square from flashing in #3 above.*

4. Push the *OPTIONS/MOVE* button again to finalize your move.

### Move Entry Method #2

1. Select the piece you want to move by pressing the *NEXT PIECE* or *LAST PIECE* key until the piece you want to move flashes.

2. Then use the center *DIRECTION* rocker button to move the flashing piece where you want it.

3. Finally, press the *OPTIONS/MOVE* key to register your move.

After you make your move, LCD Chess will reply with its move automatically. You'll see the piece flash on its *from* square and move to its *to* square. Throughout the game, the display at top keeps track of the move number and the elapsed time for each move.

### Special Features and Function Keys

Your LCD Chess partner is packed with valuable special features that can help you learn to play better and better chess—and to have a lot of fun!

Features are controlled by the *function keys*—the black keys on your LCD

Chess. But there are more special features than there are keys! So each one has two labels, one above and one below.

The black label below each key shows the primary function of the key. The blue label above the key shows its secondary function.

Below are the features available to you through the primary functions. Remember, to access any of these features, you simply push the proper key, looking at the black label *below* the key.

### Primary Key Functions

#### MODE/ON KEY

This is a special key, so both its upper and lower labels are blue. Use this key to turn on LCD Chess. Also use it to select the secondary function mode of the other keys. (See "Secondary Functions," page 3.) You can even use it as a clear or "escape" key to exit any of the special modes like *OPTIONS*, *SETUP*, *LEVEL*, *RATING*, and *CONTRAST*.

#### HINT KEY

Pressing this key displays **Hi nT** and flashes a recommended move on the screen. To make the hint move, just press the *MOVE* key. Or press *NEXT PIECE* or *LAST PIECE* to select a different piece to move.

*NOTE: If the threat warning indicator '!' is on, the threatening move will flash while **Thrt** is displayed. Press **HINT** once more to view a tip on how to avoid the danger!*

#### TAKE BACK KEY

This key lets you take back a move or moves you've decided against. Press this key repeatedly to continue taking back

## **Your Excalibur LCD Chess is packed with features!**

**Each key has two labels. To activate the feature named below the key, just press the key. To enjoy the feature given above the key, first press *MODE/ON* and then the key.**

moves. After you take back a move, you can use the **MOVE** key to replay the taken-back move or moves.

### **NEXT PIECE KEY**

Press repeatedly to scan forwards to select a piece to move.

### **LAST PIECE KEY**

Press repeatedly to scan backwards to select a piece to move.

### **MOVE KEY**

Press this key to register your move, or press it twice *before* you register your move to switch sides (colors) with your computer. (Between presses, the display will read **FLIP**.) Also use **MOVE** to replay moves in the Take-back mode (see "**TAKE BACK**," left).

### **OFF KEY**

This turns the unit off, automatically saving a game in progress. Use the **ON** key to turn the unit back on. If it is not "thinking," LCD Chess will automatically turn off after a period of time, saving your game position. Use the **ON** key to resume the game.

## **Secondary Key Functions**

Below are the features available to you through the secondary functions. To access any of these features, you first press the **MODE** key and then press the indicated key, looking at the blue label *above* the key. You may press **MODE** again to stop using a secondary function.

### **OPTIONS KEY**

Pressing the **OPTIONS** key repeatedly will display all selectable options. To select or change an option, use the **LAST PIECE** or the **NEXT PIECE** key.

#### **Options Before the Game Starts**

**OPEN:** Select one of 30 book opening lines of play. (See page 6.)

**GAME:** Select one of 16 Great Games. (See page 6.)

**MATE:** Select one of 31 mate-in-2 problems. Problem 32 is a mate-in-3 problem. If you can't find the solution, make LCD Chess show you the correct moves to a problem by setting the level to 73, and then pressing the **MOVE** key twice.

**TRAIN:** Select one of eight training positions. Positions with the Black king in the middle give you practice in check-mating the Black king.

#### **Options Before and During the Game**

**TOTAL:** Your LCD Chess normally shows the time taken for each *move*. Turning this option ON will instead show the total *game* time.

**SCORE:** Your display normally shows the number of the current move. If instead you want to see the piece-score of your current position, turn this option on. The scoring totals the following values: Pawns—1, Knights—3, Bishops—3, Rooks—5, and Queen—9.

**PLAY:** Select between: '1'—Human vs Computer; '2'—Human vs Human;

**‘O’**—Computer vs Computer.

**Thrt:** If this option is turned on and the ‘!’ warning is on, the threatened square will flash to warn you.

**HELP:** When this option is turned on and a hint is available, the hint *from* square will flash on every move.

**Info:** When turned on, this option will display the score, depth of search (number of moves LCD Chess is "thinking ahead"), best move it is considering playing, and clock times. These will be displayed while the computer is thinking at its higher levels.

**CLrBr:** Use this option to clear the chess board for easier problem setup. Pressing **SETUP** now, will enter setup mode with the chess board cleared of all pieces except a White king. You must also place a Black king on the board to exit setup mode.

**Sound:** Press this key to turn the key-press beep on or off. Error buzzes and move signals will always sound.

**SLEEP:** Adjust the automatic shut off time with this key. Setting it to ‘O’ will disable auto shut-off altogether.

### **SETUP KEY**

Press this key to promote a pawn that reaches your opponent’s back rank to a piece other than a queen. (The promotion to a queen is the most common, so it is automatic.) You can also use this key to set up special positions (see page 10.)

### **□/■ KEY (CONTRAST)**

Press this key repeatedly to adjust the display contrast to one of eight settings. This allows you to compensate for differences in lighting and battery strength.

### **NEW GAME KEY**

Use this key to start a new game.

### **RATING KEY**

LCD Chess rates your play! Use this key to view your current rating. Also use it to enter game results for a new rating if the ‘O’ symbol is on, showing you played a ratable game with no hints or take-backs.

### **How to Update Your Rating:**

While viewing your rating with the ‘O’ symbol on, the first press of the **OPTIONS** key shows:

**Win**—If you won the game, press the **RATING** key to see your new rating. Or press **OPTIONS** a second time to show:

**LOSE**—If you lost the game, press the **RATING** key to see your new rating. Or press **OPTIONS** a third time to show:

**DRAW**—If you drew the game, press the **RATING** key to see your new rating. Or press **OPTIONS** to return to your unchanged rating display.

### **LEVEL KEY**

Use this key to set the level of play (for more information, see “*Levels of Play*,” at right). Use the **DIRECTION** button to change the level by one (by pushing Left or Right) or by ten (by pushing Up or Down). Also use the **LEVEL** key to enter level option mode.

### **How to Change Level Options:**

When the level is displayed, pressing the **OPTIONS** key shows:

**FAST:** In this mode, LCD Chess uses a more selective search for thinking. It may miss a tactical move, but it can look more deeply into the position. Press **NEXT PIECE** to turn FAST on or off. Or press

the **OPTIONS** key again to show:

**rAnd:** Allows the computer to randomly choose between two good moves so that you get to practice and play against different responses. Press the **NEXT PIECE** key to turn random on or off.

### Playing the Black Pieces

When you want to play the Black pieces (to let LCD Chess move first) press the **MOVE** key before you make your first move as White. You'll see the White and Black pieces switch places immediately!

### Draw Messages

During the game, your LCD Chess will display the word **DrAw** if a three-time repetition of position occurs, or if there has been no pawn moved and no exchanges for 50 moves. When either of these situation takes place, the rules of chess state that a player can claim a draw. If you wish, you can ignore the message and continue the game. When a stalemate is reached, the display will read **StAlE**.

### Game-Ending Messages

LCD Chess will announce mate in two (**MatE2**) and mate in three (**MatE3**). It will display **+MatE** when executing a checkmate. When you checkmate LCD Chess, it will display **LOSE**. When you want to claim a win, draw, or want to resign—press the **MODE** key and then **NEW GAME**.

### Screen Symbols

When a '+' appears on the screen, it is a reminder that you are in check. When an 'O' appears on the screen, the game you are playing can be rated. When an '=' appears, it indicates you are in two human player mode. And lastly when an '!' appears on the screen, you are being

warned that one of your pieces is threatened with capture. (This is similar to the friendly "en garde" warning sometimes used by human players when they are attacking an opponent's queen.)

### Levels of Play

Generally, the higher the level you select, the better your LCD Chess will play, and the longer it will think during its moves. The first four levels (1, 2, 3 and 4) are beginner levels and take approximately 4, 8, 12 and 16 seconds per move, respectively. Level 5 is a fixed 1-ply (one-half move) search. Levels 6 through 72 take about 1 second per level number, so level 10 will average about 10 seconds per move. The amount of time taken will vary depending on the position, and the stage of the game.

Level 73 is an infinite level. LCD Chess will take as long to move as you want it to, or until it finds a mate position in its search. Level 73 is good for problem solving (like the MATE problems available under **OPTIONS**), or it can be used to play against. When you are tired of waiting, press the **MOVE** key while the computer is thinking, and the computer will stop thinking and play the best move it's found so far.

### Auto Play

If you would like to watch the computer finish a game for you automatically, push the **MODE** key, then press **OPTIONS**, until the option **PLAYr** is showing. Use the **LAST PIECE** key to change the number of players to zero. Press **MODE** to exit the **OPTIONS** mode. Now press the **MOVE** key twice and watch the game play itself. You may stop auto play at any time by pressing the **MOVE** key, which

will set the number of players back to one.

## Book Opening Trainer

LCD Chess makes it easy for you to learn the same openings that world chess champions play! At the beginning of a game, you may choose to learn one of 30 popular book openings—ways to begin the game—used by chess masters. Press **MODE**, then **OPTIONS**, to display **OPEN**, and then press the **LAST PIECE** or **NEXT PIECE** keys to select the number of the opening you want to learn. (See below.) Then press the **MODE** key to return to normal play.

Now play a move. If your move is not the correct opening move, an error buzz will sound. To learn the correct move press **HINT**. When the computer comes back with its move, you will briefly see the word **OPEN** on the screen if you have another opening move to make. If the word **OPEN** does not appear, you may continue normal play. You have completed the training for that opening line.

The names of the openings are:

1. Ruy Lopez, Exchange Variation
2. Ruy Lopez, Closed Defense
3. Ruy Lopez, Open Defense
4. Ruy Lopez Archangel Defense
5. Giuoco Piano
6. Scotch Game
7. Four Knights
8. Petroff Defense
9. Vienna Game
10. Sicilian, Classical Defense
11. Sicilian, Accelerated Dragon
12. Sicilian, Rossolimo Attack
13. Sicilian, Dragon Variation
14. Sicilian, Moscow Variation
15. Caro-Kann Defense
16. French Defense, Winawer Variation
17. French Defense, Classical Defense

18. French Defense, Tarrasch Variation
19. Queen's Gambit Accepted
20. Queen's Gambit Declined
21. Queen's Gambit, Semi-Slav Defense
22. Queen's Gambit, Tarrasch Defense
23. Queen's Gambit, Slav Defense
24. Nimzo-Indian Defense, Rubinstein Var.
25. Nimzo-Indian Defense, Classical Var.
26. Queen's Indian Defense
27. Queen's Indian Defense, Petrosian Var.
28. Bogó-Indian Defense
29. Gruenfeld Defense
30. King's Indian Defense

The moves and explanations of these famous openings are given in many books on chess.

## Entering Your Own Opening

LCD Chess also allows you to set up any book opening you want—or even an opening you invent—to practice. Press **MODE** then **OPTIONS** until the display reads **PLAYr**. Use **NEXT PIECE** to set players to 2. Press **MODE**, then make moves for both sides until the opening position you want to practice is reached. Now press **MODE** then **OPTIONS** until the display reads **PLAYr**. Use **NEXT PIECE** to set players to 1. Press **MODE** and play against the computer in this position.

## Great Games

At the beginning of the game, you may select one of sixteen of the world's greatest chess games by pressing **MODE**, then **OPTIONS** to display **GAME**, and then pressing the **LAST PIECE** or **NEXT PIECE** key to select a game number.

Along with the game number, you will see the position of the game after the first two moves were played. Press the **MODE** key to return to normal play starting at move three. You take the winning side. The display will show your total great-

game score in two digits (zero at the start) on the left. On the right, the display also shows the amount of points you will win if you play the correct next great-game move.

If you don't play the correct great-game move, an error buzz will sound and the points for this move will be divided in half. If the bonus goes to zero, the correct move will automatically flash. Most moves start with 4 bonus points, but some brilliant moves start with 8 points.

The number, players, locations, and dates of the great games are given below, along with a brief explanation of each game.

(All game explanations are © 2000 by Al Lawrence; all rights reserved.)

### **1. Adolf Anderssen vs. Lionel Kieseritsky, London, 1851**

This marvelous attacking game, a King's Gambit, is widely known as "The Immortal Game." Both players show the 19th-century preference for attack at all costs, and Anderssen was one of the most ingenious attackers of all time. After 18. Bd6, he gives away both of his rooks and his queen! In the final position, his tiny force is deployed in just the right way to bring the complete Black army to its knees.

### **2. Adolf Anderssen vs. J. Dufresne, Berlin, 1852**

Again we see Anderssen bamboozling his opponent. The game starts as an Evan's Gambit, a form of the Giuoco Piano. White's 19th move, Rad1!! is one of the most celebrated in the history of the game. With his reply, ... Qxf3, Black actually wins a knight and threatens mate. You'd think that would be enough! But Anderssen follows with a rook and queen sacrifice that forces checkmate in a shower of brilliant blows. This classic is known as the "Evergreen Game."

### **3. Paul Morphy vs. Duke Karl & Count Isouard, Paris, 1858**

While in Paris at the opera, the brilliant, unofficial world champion from New Orleans plays an offhand game against two noblemen. In this case, we're sure it was over before the fat lady sang! In a Philidor Defense, the team of two played a weak 3. ... Bg5 that left Morphy with superior *development* (more of his pieces are deployed) and the *bishop pair* (two bishops against a bishop and knight). These two important advantages were all Morphy needed. After Black wastes even more time with another pawn move, 9. ... b5?, Morphy hits the duo with a series of brilliant sacrifices to mate. Victory of mind over material is the poetry of chess.

### **4. Wilhelm Steinitz vs. Kurt von Bardeleben, Hastings, 1895**

Wilhelm Steinitz, the first official world champion, begins this game as a Giuoco Piano. He maneuvers deftly to keep his opponent from castling into safety. Then he sacrifices his pawn on d5 so that he can make the square available for his knight. But the most brilliant move of the game is 22. Rxe7+. At first glance, it simply looks like a blunder. All of White's pieces are attacked, and if Black wasn't in check, he could play ... Rxc1+ with mate next. But if Black can't take the rook—with either his king or queen—he loses in all variations. And by not taking it, he is eventually mated anyway. If you're interested in these complex lines, you can find a complete explanation of this classic game in many books.

### **5. Alexander Alekhine vs. O. Tenner, Cologne, 1911**

World Champion Alekhine was a chess fanatic (he even named his cat "Chess") and one of the greatest attacking players of all time. Here he plays the unusual Bishop's Opening and seems to be developing quietly. Black even appears to be getting a good game just at the time Alekhine is able to play the swashbuckling 11. Nxe5, allowing Black to capture his queen. Black's king is forced to march to the center of the board, an unhealthy spot for a monarch when so many pieces are still on the board, where he is mated. It's important to understand that such sacrifices don't just happen illogically. White's pieces again had a dominating com-

mand of the board, and Black allowed White's pressure on f7, Black's most sensitive defensive square when he hasn't castled, to build into an explosion.

#### **6. Gaudersen vs. Paul, Melbourne, 1928**

This "miniature" of only 15 moves, starts off as a French Defense in which White plays the Advance Variation, placing his pawns on d4 and e5. Black's 8th move, castling, was in this case a blunder because his kingside is attacked by many pieces and not effectively defended. White's sparkling 9. Bxh7+ is an example of a bishop sacrifice that's happened so often it has a name—the "Greek Gift." White's 14. Nxe6+ is an example of a *discovered check*, the diver bomber of the chessboard. White's amusing 15th move is a very rare example of checkmate with the *en passant capture*.

#### **7. Edward Lasker vs. George Thomas, London, 1910**

This masterpiece, a Dutch Defense, features a famous example of the king's walk to mate. Edward, an American distant cousin of the great world champion Emmanuel Lasker, gets his pieces activated against Black's kingside while the English champion Thomas *develops* (gets his pieces off the back rank and into play) too slowly. By 10. Qh5, White is already threatening an all-out blitzkrieg. His brilliant queen sacrifice 11. Qxh7 is followed by a devastating *discovered double check*, 12. Nxf6++. Then Black's king has to walk the plank, all the way across the board to g1, the normal spot for the White king! Here he breathes his last.

#### **8. Wilhelm Steinitz vs. A. Mongredien, London, 1862**

This games starts out as a Center Counter (also called Scandinavian Defense). Black loses too much time developing his pieces, while White gets his into play aggressively. Indeed, White's army dominates the all-important center of the board as well as the king's side. This sets the stage for a mating attack. White's two-move maneuver 13. Rf3 and 14. Rh3 is called a *rook lift*, and is a typical attacking strategy. This rook then sacrifices itself on h7 in a way that allows Steinitz to bring his other rook quickly into the fray. White is a rook down, but all of

his forces take part in the assault, while the Black queen's rook and bishop seem to be waiting for the next game. They don't have long to wait.

#### **9. Aaron Nimzovich vs. S. Alapin, Riga, 1913**

Another French Defense. In this one, the great Latvian player and writer Nimzovich (after whom the Nimzo-Indian Opening is named—see page 6) plays an opponent who wastes time stealing a pawn with 9. ... Qxg2. "Nimzo" plays a punishing 12. O-O-O!, sacrificing his knight. He finishes up with a convincing queen sacrifice that forces checkmate.

#### **10. Jose Capablanca vs. Herman Steiner, Los Angeles, 1933**

The handsome Cuban World Champion Jose Capablanca had a deceptively simple style. Here we see him playing the old-fashioned Four Knights' game and opening up his opponent's kingside pawn protection by move 11! His first rook sacrifice, 17. Rxf6!, can't be refused and forces Black's king into a deadly crossfire. With 23. Qxb7!, Capa offers a second rook, which can't be taken immediately because of 23. ... Qxf6? 24. Qb4 checkmate. But Black is forced to take the rook a move later and mate follows on the same square.

#### **11. Mikhail Botvinnik vs. Paul Keres, The Hague, 1948**

Botvinnik won the world championship a record three times. His opponent here is possibly the strongest 20th-century chess player who did not become world champion. The opening is a Nimzo-Indian. White's *doubled pawns* are potentially a long-term weakness, but in the short term they control a good many all-important central squares. White plays cleverly to keep a grip on the position and breaks through on the queenside with his pawn-push 17. c4-c5. This gives him a chance to bring his queenside rook into action. He swings it against the kingside, sacrificing it on g7 to win. In the final position, Black's king will be mated by the White queen, supported by the bishop on c1. Where did Black go wrong? Take a look at his "unemployed" queen and rook on a8 and b8!



### **12. J. Banas vs. P. Lukacs, Trnava, 1986**

In a Four Knights' Game, Black gets his king into safety by castling and takes advantage of White's awkward piece placement by sacrificing his knight with 9. ... Nf3+. Then he allows White to take his bishop on c5. But by that time, White's king is surrounded. In the final position, after 13. ... Ng4, White's only effective defender, his knight on e3, is forced from its square, allowing ... Qg2 mate.

### **13. Anatoly Karpov vs. Victor Kortchnoi, Moscow, 1974**

Twentieth-century chess perfected defense. It is no longer typical to see top-level players playing *only* for the attack. In fact, Kortchnoi at the time of this game was one of the best in the world, and his *forte* was defense. Many fine players would attack him ingeniously, only to break up on his rock-like fortifications. Still, World Champion Karpov crushes him in only 27 moves with a mating attack! In a classic manner against Black's Sicilian Dragon defense (so named probably because of the "tail" of control Black's bishop makes from g7 to a1), Karpov plays the St. George attack, castling queenside and prying open the h-file to slay the dragon.

### **14. Boris Spassky vs. Tigran Petrosian, Moscow, 1969**

Spassky won the world championship from Petrosian in the match that produced this game. In this English Opening that becomes a Queen's Gambit, you'll see that once again White gets a *strong center* and quick *development* of his pieces. As early as 13. Rd1, you can sense that Black is in danger. His king has no piece defenders; his forces seem passive while White's are aggressively coordinated. As often happens in such situations, White breaks through with a pawn push in the center, in this case 15. d4-d5!. It clears the board for White's more active forces. Petrosian, one of the best defenders of all time, tries repeatedly to trade queens, but White wisely rebuffs these offers, which would take much of the power off the board. White's d-pawn becomes a star, advancing all the way to the 7th rank. Because of this queening threat, White is able to sacrifice his queen for one of Black's defending rooks. In

the final position, it's hopeless for Black because White will either promote his pawn to a queen or capture whatever Black uses to block on d8.

### **15. Robert Fischer vs. Reuben Fine, New York, 1963**

Nine years before winning the world championship, Bobby Fischer played this Evan's Gambit (a variation of the Giuoco Piano) against his famous elder. Bobby sacrifices two pawns in order to get his pieces out quickly. Then he plays 14. h2-h4!, sacrificing another pawn to force the Black queen away from the g7-square. After that, Black's king will be stuck in the center and in danger of the h4-d8 diagonal. Bobby's final move, 17. Qg3!, forces Fine to resign, because he must move his queen from the critical black diagonal h4-d8. Even on 17. ... Qxg3, White ignores the capture of his own queen and plays 18. Bf6 mate!

### **16. Lajos Portisch vs. Johannessen, Havana, 1966**

During the first half of this game, a Queen's Gambit Slav, the great Hungarian grandmaster Lajos Portisch locks up the center with a d4-e5 structure by move 14. This gives him a "beach-head" on e5 and makes it hard for Black to counterattack in the center, which is the standard antidote for an attack on the wing. The next stage starts with 16. h4. Portisch announces his intention to attack on the kingside. He refrains from castling his own king into safety because he knows it's safe enough in the center, at least for the time it will take him to break through with his attack. When Black tries to trade off pieces with 17. ... Bxf3, Portisch sacrifices a knight for an unstoppable attack with 18. Bxh6 and then calmly moves his king to the second rank to bring his other rook into the game. His Rxh4 was another brilliant sacrifice that crushes any hope of defense. In the final position, Black resigns because White will simply play 26. Rxh6+, winning the Black queen. If 26. ... Qxh6, then White plays 27. Qxh6+ and will mate on h7.

**Computers can sometimes "lock up" due to static discharge or other electrical disturbances. If this should happen, use a slim, pointed object to press the button marked "RESET."**

### **Using Setup Mode**

At any time during a game when it is your move, you may change the position on the board by adding a piece, removing a piece, or changing any of the pieces—for example, from a queen to a knight.

#### *Removing A Piece*

Press **MODE** then the **SETUP** key. Use the **DIRECTION** button to move the black shape over a piece. Press **MOVE** to remove the piece. Press **MODE** to continue the game.

#### *Adding or Changing a Piece*

Press **MODE** then the **SETUP** key. Now press **NEXT PIECE** or **LAST PIECE** to select the correct piece. Use the **DIRECTION** button to move it to a square. Then press **MOVE** to register the piece. Press **MODE** to continue the game.

#### *Setting Up Special Positions*

This is another terrific feature that allows you to solve problems that you see in magazines or newspapers, or that you make up yourself. It also allows you to enter game positions you want to play, or that you want LCD Chess to look at, perhaps using the Infinite Search level.

Normally, it is easier to start from an empty board to set up such problems. So

first, press **MODE** then **OPTIONS** until **CLrBr** (clear board) is displayed. Then press the **SETUP** key. You'll see that your display board is automatically cleared, except for a White king.

Use the **DIRECTION** button to move the White king to the correct square and press **MOVE**. Continue by placing the Black king on it's square. (You can't leave the **SETUP** mode until both the White and Black king are placed.) Black pawns will be the next piece to place, but you may use the **NEXT PIECE** and **LAST PIECE** keys to select the piece type you want to place on the board. To change the piece's color, use the **□/■** key. Don't forget to press **MOVE** to register the piece on the board.

Follow this procedure until all the pieces in the problem or position are completely set up. Finally, press **MODE** to play or to have LCD Chess analyze the position.

Make sure that LCD Chess knows which color is to move. When you first enter setup mode, you may change the color of the side to move by pressing **□/■**.

### **Operational Hints**

If you missed where the computer moved, simply press **TAKEBACK** and then **MOVE**. This will not affect being able to rate your game.

### **General Rules of Chess**

1. The two players must alternate in making one move at a time. The player with the white pieces moves first to start the game.
2. With the exception of castling (see below), a move is the transfer of a piece

from one square to another square which is vacant or occupied by an enemy piece.

3. No piece, except the Knight may cross a square occupied by another piece.

4. A piece moved to a square occupied by an enemy piece captures it as part of the same move. The captured piece must be immediately removed from the chess-board by the player making the capture.

5. When one player moves into a position whereby he can attack the King, the King is in "Check". His opponent must either

a) move the King

b) block the path of the attacking piece with another piece, or

c) capture the attacking piece.

6. The game is over when there is no escape for the King from an attacking piece. This is known as "Checkmate".

7. The game is over when the king of the player whose turn it is to move is not in check and the player cannot make any legal moves. This is known as "Stalemate" and is considered a drawn game.

### Individual Moves

1. The Queen can move to any square along the same row, column, or diagonals on which it stands, but cannot pass over an enemy piece.

2. The Rook can move to any square along the same row or column on which it stands, but cannot pass over an enemy piece. See also Castling (right.)

3. The Bishop can move to any square along the diagonals on which it stands, but cannot pass over an enemy piece.

4. The Knight move is in the shape of an "L", moving two squares up or down, and then one square over. Or it can be one square up or down, and then two over.

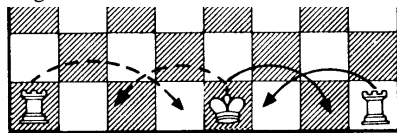
5. The Pawn can move one square for-

ward. On it's first move it may move two squares forward. When capturing, it moves diagonally (forward) one square. See also *en passant* (below.)

6. The King can move one square in any direction, as long as it is not attacked by an enemy piece. See also Castling(below)

### Special Moves

1. Castling is a move of both the King and either Rook which counts as a single move (of the King) and is executed as diagrammed below:



To castle your King on LCD Chess, simply move your King over two squares.

*Castling cannot occur if:*

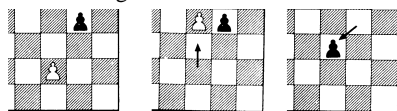
a) the King has already been moved.

b) the Rook has already been moved.

c) there is any piece between the King and the Rook.

d) the King's original square, or the square which the King must cross, or the one which it is to occupy is attacked by an enemy piece.

2. A Pawn may make an *en passant* capture if it is a reply move to a double pawn move, and it is a Pawn which is side-by-side with the Pawn which made the double pawn move. The capture of a white Pawn is diagrammed below:



3. A Pawn can be promoted if it advances all the way to the far side of the board. It is immediately promoted, as part of the

same move, into a Queen, Rook, Bishop, or Knight, whichever its owner chooses. Since a Queen is the most powerful piece, it is nearly always chosen as the promotion piece. Through the promotion process, a player may have more than one Queen on the board at the same time.

## ***Special Care***

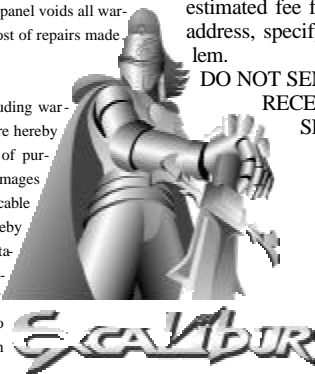
- Avoid rough handling such as bumping or dropping.
- Avoid moisture and extreme temperatures. For best results, use between the temperatures of 39°F and 100°F (4°C and 38°C).
- Clean using only a slightly damp cloth. Do not use cleaners with chemical agents.

## ***Limited One-Year Warranty***

EXCALIBUR ELECTRONICS, INC., warrants to the original consumer that its products are free from any electrical or mechanical defects for a period of ONE YEAR from the date of purchase. If any such defect is discovered within the warranty period, EXCALIBUR ELECTRONICS, INC., will repair or replace the unit free of charge upon receipt of the unit, shipped postage prepaid and insured to the factory address shown at right.

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

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



## ***Battery Information***

- Your LCD Chess uses 3 “AAA” batteries.
- Do not mix old and new batteries.
- Do not mix alkaline & standard or rechargeable batteries.
- Install batteries so that the polarity (+ and -) matches the diagrams in the battery compartment.
- Use only batteries of the same type and equivalency.
- Remove exhausted batteries from the unit.
- Do not short circuit battery terminals.

Excalibur Electronics reserves the right to make technical changes without notice in the interest of progress.

The only authorized service center in the United States is:

**Excalibur Electronics, Inc.**  
**13755 SW 119th Ave**  
**Miami, Florida 33186 U.S.A.**  
**Phone: 305.477.8080**  
**Fax: 305.477.9516**

**[www.ExcaliburElectronics.com](http://www.ExcaliburElectronics.com)**

Ship the unit carefully packed, preferably in the original carton, and send it prepaid, and adequately insured. Include a letter, detailing the complaint and including your daytime telephone number, inside the shipping carton. If your warranty has expired and you want an estimated fee for service, write to the above address, specifying the model and the problem.

**DO NOT SEND YOUR UNIT WITHOUT  
RECEIVING AN ESTIMATE FOR  
SERVICING. WE CANNOT  
STORE YOUR UNIT!**

**375-010712-01**