

EXCALIBUR

LCD Chess and Checkers

Operating Manual

Model 375-2

Congratulations on your purchase of Excalibur Electronics' innovative LCD Chess & Checkers! You've purchased 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.

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



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

Play a Chess 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. A white box on the display (□) indicates it's White's move. You're ready to play!

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

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 king's pawn (the pawn in front of the king) 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.

Note: You may also use the 2nd/NEXT key to select the piece you want to move.

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 CLEAR to stop a square from flashing in #3 and #1 above, and start the move entry process over.

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

CLEAR/ON KEY

Use this key to turn on LCD Chess. 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*.

2nd/NEXT KEY

This is a special key, so it is blue instead of black. Use this key to select the secondary function mode of the other keys. (See "Secondary Functions," page 3.) Also use this key during move entry to select a piece.

NOTE: If the threat warning indicator '!' is on, the threatening move will flash while THrt is displayed.

HINT KEY

Pressing this key displays *HinT* and flashes a recommended move on the screen. To make the hint move, just press the *MOVE* key.

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 "*UNDO*," left).

UNDO 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 & Checkers 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 2nd/NEXT 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.

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.

LEVEL KEY

Use this key to set the level of play (for more information, see "*Levels of Play*"). 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 the right *DIRECTION* 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 right *DIRECTION* to turn random on or off.

Secondary Key Functions

Below are the features available to you through the secondary functions. To access any of these features, you first press the *2nd* key and then press the indicated key, looking at the blue label *above* the key. You may press *2nd* 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 right or left *DIRECTION* button.

Options Before the Game Starts

OPEN: Select one of 34 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.

TrAln: Select one of eight training positions. Positions with the Black king in the middle give you practice in checkmating 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.

PLAYr: Select between: '1'—Human vs Computer; '2'—Human vs Human; 'O'—Computer vs Computer.

HELP: When this option is turned on, all legal moves for the selected piece will be shown at one time.

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: Select between: '2'—All sound on; '1'—No sound on key presses; 'O'—No sound, except for error buzzes.

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

FLiP: Use this option to flip the chess board around.

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 sixteen 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.

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 situations 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 *lLOSE*. When you want to claim a win, draw, or want to resign—press the **2nd** key and then **NEW GAME**.

**When I LOSE is displayed
press the NEW GAME or
UNDO key.**

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 **2nd** key, then press **OPTIONS**, until the option **PLAYr** is showing. Use the right **DIRECTION** key to change the number of players to zero. Press **2nd** 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.

Replay Variation

You may automatically replay all the moves saved by LCD Chess for undoing. If you would like to replay the stored moves, first undo all the moves by setting the number of players to zero (see Auto Play, above). Now press the **UNDO**

key. Next to replay the variation and return to your original position, set the players to zero again (see Auto Play, above). Press the **MOVE** key and watch the moves as they are played back. LCD Chess will stop Auto Play when it arrives at the original position..

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 34 popular book openings—ways to begin the game—used by chess masters. Press **MODE**, then **OPTIONS**, to display **OPEN**, and then press the right or left **DIRECTION** to select the number of the opening you want to learn. (See below.) Then press the **CLEAR** 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, Scheveningen Variation
15. Sicilian, Najdorf Variation
16. Sicilian, Moscow Variation
17. Caro-Kann Defense
18. Panov-Botvinnik Attack
19. French Defense, Winawer Variation
20. French Defense, Classical Defense
21. French Defense, McCutcheon Variation
22. French Defense, Tarrasch Variation
23. Queen's Gambit Accepted
24. Queen's Gambit Declined
25. Queen's Gambit, Semi-Slav Defense
26. Queen's Gambit, Tarrasch Defense
27. Queen's Gambit, Slav Defense
28. Nimzo-Indian Defense, Rubinstein Var.
29. Nimzo-Indian Defense, Classical Var.
30. Queen's Indian Defense
31. Queen's Indian Defense, Petrosian Var.
32. Bogo-Indian Defense
33. Gruenfeld Defense
34. 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 **2nd** then **OPTIONS** until the display reads **PLAYr**. Use right **DIRECTION** to set players to 2. Press **CLEAR**, then make moves for both sides until the opening position you want to practice is reached. Now press **2nd** then **OPTIONS** until the display reads **PLAYr**. Use right **DIRECTION** to set players to 1. Press **CLEAR** 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 great-

est chess games by pressing **2nd**, then **OPTIONS** to display **GAME**, and then pressing the right or left **DIRECTION** button 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 **CLEAR** 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.

Go online to the World Chess Hall of Fame and Sidney Samole Museum to find out more about chess and chess greats:

www.chessmuseum.org

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 command 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 dive 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 game 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 "beachhead" 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 the **2nd** key, then the **SETUP** key. Use the **DIRECTION** button to move the black shape over a piece. Press **MOVE** to remove the piece. Press **CLEAR** to continue the game.

Adding or Changing a Piece

Press **2nd** then the **SETUP** key. Now press **SETUP** repeatedly to select the correct piece. Use the **DIRECTION** button to move it to a square. Then press **MOVE** to register the piece. Press **CLEAR** 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 **2nd** then **OPTIONS** until **CLrBr** (clear board) is displayed. Now 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 press **SETUP** repeatedly 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 **CLEAR** 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 Hint

If you missed where the computer moved, simply press **UNDO** 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 right), 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 chessboard 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.

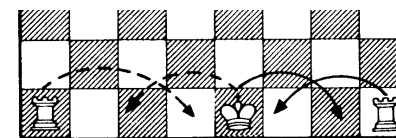
Individual Moves

Turn on the **HELP** feature under **OPTIONS** (see page 4.) All legal moves for each selected piece will be shown at one time. You will quickly "learn by doing" the movements of all pieces.

1. The Queen can move to any square along the same row, column, or diagonals on which it stands, but cannot pass over another piece.
2. The Rook can move to any square along the same row or column on which it stands, but cannot pass over another piece. See also Castling (below.)
3. The Bishop can move to any square along the diagonals on which it stands, but cannot pass over another 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 forward. On it's first move it may move two squares forward. When capturing, it moves diagonally (forward) one square. See also *en passant* (page 12.)
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:



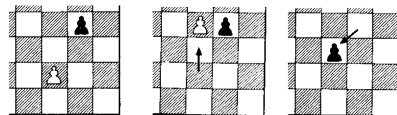
To castle your King on LCD Chess, simply move your King over two squares.

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.

CHECKERS

Changing Games

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.

Whenever *CHESS* is shown on the display, you may change to Checkers by pressing the **2nd** key, and then pressing the **NEW GAME** key. The LCD display will show *01CHECR* and will also show the checker board with all the pieces on their starting squares.

To change back to Chess press the **2nd** key, then press the **NEW GAME** key. Remember you can only change games when *CHESS* or *CHECR* is showing on the display.

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The Basics of Checkers

Each player gets 12 checkers and places his men on all of the dark squares in the first three rows in front of him. In contrast to chess, Black moves first. But like chess, the first player normally moves from the "bottom" of the LCD board. The goal of checkers is to leave your opponent with no legal move—either by taking all of his pieces or by blocking his pieces. (Here's an important difference between chess and checkers. In chess, stalemate is a draw; in checkers, stalemate is a LOSS for the player who can't move.) Each player takes turns moving. Men must be moved diagonally forward, staying on the dark squares. A piece is captured by jumping over it to an empty square on its other side. A piece can never jump over its own pieces. Captures are obligatory. When a man reaches the other side of the board, he is promoted to a

king. A king can move, and jump, backward as well as forward. A player can have more than one king. A man that promotes to a king by making a jump, cannot continue jumping as a king. It must wait for the next turn.

Play Checkers Right Away

Make sure *CHECR* is shown on the display. If it is not, see the Changing Games section (Page 12.)

Unless you instruct it otherwise, LCD Checkers gives you the Black pieces—the ones at the bottom of the board. Black always moves first. A black box on the display (■) indicates it's black's move.

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

1. Push the *DIRECTION* rocker in any direction and the right Black piece on the third row will flash on and off. The LCD will also show *01FrOm*. Then move the circular rocker button—to the left, right, or diagonally—until the piece you want to move flashes on and off.

Note: You may also use the 2nd/NEXT key to select the piece you want to move. Or press CLEAR to stop a square from flashing, and start the entry process over.

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

3. Push the *DIRECTION* rocker towards the diagonal direction you wish the piece to move. Your move will be automatically registered.

After you make your move, LCD

Checkers 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.

Pressing the *DIRECTION* rocker up or down will skip to the first piece in the row above or below the currently flashing piece.

You must capture if you can!

Remember that capturing is obligatory in the game of checkers, although if you have a choice of captures, you choose which to play. You don't need to make the move with the largest number of captures. After LCD Checkers plays its move and you have a jump to make, it will show *JP* in the move number area. But if you overlook a capture and try to make another move, LCD Checkers will remind you of the capture possibility by displaying *JUMP*. LCD Checkers knows the rules of checkers and will stick to them! Make your capture, and proceed with the game.

Multiple captures

If you have a multiple capture, after you complete the first jump the display shows the coordinate of the square you are on and *JP* to remind you to continue the capturing sequence.

Turn your Men into Kings!

At the start of the game, each of the 24 pieces is referred to as a man. When a

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man reaches the far side of the board, he is crowned king and becomes much more powerful than an ordinary man because a king can move both backward and forward. LCD Checkers is well versed in the movement of kings and the crowning process, so it will automatically crown your man to turn it into a king. A man that promotes to a king by making a jump, cannot continue jumping as a king. It must wait for the next turn.

Playing the White Pieces

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

Undoing Moves

LCD Checkers does not have as good a memory as LCD Chess, so it only permits it's last move and your last move to be taken back.

Getting Hints

Pressing the **HINT** key displays *HinT* and flashes a recommended move on the screen.

Changing Sides

If during a game you find yourself losing, you can change sides with LCD Checkers. Pressing the **MOVE** key twice before you register your move will switch sides (colors) with your computer. (Between presses, the display will read *FLiP*.)

Levels of Play

Generally, the higher the level you select, the better your LCD Checkers will play, and the longer it will think during its

moves. The first two levels (1 and 2) are beginner levels and search a fixed 1 and 2 ply (one-half move). Levels 3 through 15 take 2,3,4,5,7,8,15,20,25,30,40,50 and 60 seconds per move.

Level 16 is an infinite level. LCD Checkers will take as long to move as you want it to, or until it can no longer search. Level 16 is good for problem solving, 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.

Note: Since there are only 16 levels, only the left and right DIRECTION rocker are used to change the level by one.

Options for Checkers

Just like LCD Chess, LCD Checkers has numerous options that can be viewed by pressing the **2nd** key and then the **OPTIONS** key repeatedly. Use the right or left **DIRECTION** button to select or change an option.

TOTAL: same as Chess (see page 3).

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: Men—1, Kings—1-1/2.

PLAYr: same as Chess (see page 4).

InfO: same as Chess (see page 4).

CLrBr: same as Chess (see page 4).

SOUnD: same as Chess (see page 4).

SLEEP: same as Chess (see page 4).

FLiP: same as Chess (see page 4).

Auto Play

If you would like to watch the computer finish a game for you automatically, push the **2nd** key, then press **OPTIONS**, until the option *PLAYr* is showing. Use the right **DIRECTION** key to change the number of players to zero. Press **2nd** 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.

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 man to a king.

Removing A Piece

Press the **2nd** key, then the **SETUP** key. Use the **DIRECTION** button to move the black shape over a piece. Press **MOVE** to remove the piece. Press **CLEAR** to continue the game.

Adding or Changing a Piece

Press **2nd** then the **SETUP** key. Now press **SETUP** repeatedly to select the correct piece. Use the **DIRECTION** button to move it to a square. Then press **MOVE** to register the piece. Press **CLEAR** to continue the game.

Setting Up Special Positions

This is another terrific feature that allows you to solve problems that you make up yourself. It also allows you to enter game positions you want to play, or that you want LCD Checkers 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 **2nd** then **OPTIONS** until *CLrBr* (clear board) is displayed. Now press the **SETUP** key. You'll see that your display board is automatically cleared.

Press **SETUP** repeatedly to select the piece type and color you want to place on the board. Use the **DIRECTION** button to move the correct square and press **MOVE** to register it on the square.

Follow this procedure until all the pieces in the problem or position are completely set up.

Make sure that LCD Checkers knows which color is to move. You may change the color of the side to move by pressing / .

Finally, press **CLEAR** to play or to have LCD Checkers analyze the position.

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

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.

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.

InterTAN WARRANTY

InterTAN warrants that this product will be free from defects in materials and workmanship for a period of ninety (90) days from the date of purchase. Within this period, simply take the product and your proof of purchase to any InterTAN store or dealer and the product will be repaired without charge for parts and labour. InterTAN reserves the right to charge for transportation. Any product which has been subject to misuse or accidental damage is excluded from this warranty.

This warranty is only applicable to a product purchased through InterTAN's company

owned stores and dealers and to a product that is presented for repair in a country where InterTAN offers the product for sale. While this warranty does not confer any legal rights other than those set out above, you may have additional statutory rights which will vary under the laws of the various countries, states, provinces and other governmental entities in which InterTAN operates. This warranty is subject to all statutory rights you may have in the country of purchase.

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