

Talking LCD Chess Operating Manual

Model 375V

Congratulations on your purchase of Excalibur Electronics' 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! Talking and audio sounds add another dimension to your LCD Chess computer for increased enjoyment and play value.

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.

Play a Game Right Away
After you have installed the batteries, the

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 **o1CHESS**. This indicates you are at the first move of the game and ready to play chess. If it does not display **o1CHESS**, 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!

The way you select and make your move is very simple, but 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.

IMPORTANT NOTE:

When you are in check, you have very few moves. If you find you can't select the move you want to make, look for the '+' check sign. You probably forgot you are in check.

• Push the *DIRECTION* rocker in any direction and the White queen's knight (the piece on the bottom, left) will flash on and off. The LCD will also show **o1FrOm**. Then move the circular rocker button—to the right, left, up, down or diagonally—until the piece or pawn you want to move flashes on and off.

NOTE: If you have trouble getting to the piece you want using the *DIRECTION* button, you may press the *REPEAT* key to select a piece for movement.

- Push the MOVE button immediately above the circular DIRECTION rocker.
 FrOm, will disappear and time will start counting.
- 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.
- Push the *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*. But there are more special features than there are keys! So a key may have

two labels.

The label below a key shows the primary function of the key. The label above a 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 press the proper key, looking at the label *below* the key.

Primary Key Functions

ON/MODE KEY

MOdE2 will be displayed, reminding you the second mode for keys is in effect. (See "Secondary Functions," page 3.)

If the Threat Warning indicator ? is on, the threatening move will flash while **MOdE2** is displayed.

Also use this key to turn on LCD Chess.

HINT KEY

Press this key if you want to get hints from your LCD Chess partner. It displays **Hi nT** and flashes a recommended move on the screen. To make the hint move, just press the *MOVE* key. Or press the circular *DIRECTION* rocker to select a different piece to move.

If the hint is a book move or a replay move, **OPEn** or **rPLAY** will be shown instead of **Hi nT**.

TAKEBACK KEY

This key lets you take back a move or moves you've decided against. Press this key repeatedly to continue taking back moves. After you take back a move, you can use the **MOVE** key to replay the taken-back move or moves.

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* and then the 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 **FLI P.**) Also use *MOVE* to replay moves in the takeback move mode (see "*TAKEBACK*," left).

CLEAR KEY

Use this key to exit any of the special modes like OPTIONS, SETUP, and LEVEL. Also use this key during move entry to clear your move entry , to start the move entry process over.

OFF KEY

This key turns the unit off, automatically saving a game in progress. 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.

REPEAT KEY

If you didn't see where LCD Chess moved, use this key (before any other) to hear the move announcement. Also this key usually repeats the last phrase said.

Secondary Key Functions

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

using a secondary function.

SETUP KEY

Press this key to enter SETUP mode and 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 8.)

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. You must turn the **rATE** Option On, and play a Tournament or Sudden Death level to have your rating change.

LEVEL KEY

Use this key to set the level of play (for more information, see "Levels of Play," page 6). Use the **RIGHT** or **LEFT DIRECTION** button to change the level. Use the **UP** or DOWN **DIRECTION** button to change the level type.

OPTIONS KEY

Pressing the *OPTIONS* key displays the last changed option. To select or change an option, use the *LEFT* or the *RIGHT DIRECTION* button. To view a different option, use the *UP* or the *DOWN DIRECTION* button.

Options Before the Game Starts

OPEn: Select one of 32 book opening lines of play. (See page 5.)

TrAl n: 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

SCOr E: 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; '0'—Computer vs Computer.

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

NOTE: When the HELP option is on, possible capturing moves are shown by flashing the captured pieces central black figure. Do not confuse this with selecting a capture move, which flashes the entire piece that is to be captured.

I nFO: 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.

rATE: Turning this option ON will enable your rating to be updated if you select a tournament level type of a sudden

death type level to play against. Turn this option off, when you want to practice on those levels. During a rated game the 'O' symbol will appear as a reminder. When the 'O' symbol is on, you will hear an "ARE YOU SURE" warning if you try to TAKEBACK mistakes, adding pieces in Setup mode, ask for a Hint, or try to start a NEW GAME before the game is completed. If the score is greater than 9.0, you can claim a victory with the *NEW GAME* key.

CLrBr: Use this option to clear the chess board for easier problem setup. Pressing the *SETUP* key 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.

SPECH Use this option to turn most of the speech off. Some warnings such as Check and Are You Sure, will still be heard however.

SndEF: Use this option to turn the sound effects off.

AnnC: Use this option to turn the move announcements off.

COACH Turn this option on to hear a warning message if one of your pieces is under attack. The threat warning '!' will be enabled when COACH option is On.

SOUnd: Use this option to turn the sound On or off.

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

FLi P: Use this option to turn the chess board around.

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 also display +MATE when executing a checkmate or when you checkmate LCD Chess. 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.)

Auto Play

If you would like to watch the computer finish a game for you automatically, press the *MODE* key, then press *OPTIONS*, then UP *DIRECTION* button until the option **PLAYr** is showing. Use the *LEFT DIRECTION* button to change the number of players to zero. Press *CLEAR* 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. Doing so 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 32 popular book openings—ways to begin the game—used by chess masters. Press *MODE*, then *OPTIONS*, to display *OPEn*, and then press the *LEFT* or *RIGHT DIRECTION* button to select the number of the opening you want to learn. (See below.) 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, Open Defense
- 2. Ruy Lopez, Zaitsev Defense
- 3. Ruy Lopez, Exchange

- 4. Scotch Game
- 5. Scotch Four Knights
- 6. Giuoco Piano
- 7. Two Knights Defense
- 8. Four Knights
- 9. Petroff's Defense
- 10. Sicilian Alapin Variation
- 11. Sicilian, Najdorf Variation
- 12. Sicilian, Dragon Variation
- 13. Sicilian, Keres Attack
- 14. Caro-Kann Defense
- 15. Panov-Botvinnik Attack
- 16. Caro-Kann Excannge Variation
- 17. Queen's Gambit Declined
- 18. Lasker Defense, Queen Gambit Declind
- 19. Queen Gambit Declined Exchange Var.
- 20. Slav Defense
- 21. Queen's Gambit Accepted
- 22. Nimzo-Indian Defense, Classical Var.
- 23. Nimzo-Indian Defense, Rubinstein Var.
- 24. Semi-Slav Defense
- 25. Oueen's Indian Defense
- 26. Queen's Indian Defense, Petrosian Var.
- 27. Bogolubow Indian Defense
- 28. Catalan
- 29. Gruenfeld Defense
- 30. King's Indian Defense
- 31. Modern Benoni Defense
- 32. Benko Gambit

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* then *UP DIRECTION* button until the display reads **PLAYr**. Use *RIGHT DIRECTION* button 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 *MODE* then

OPTIONS then **UP DIRECTION** button until the display reads **PLAYr**. Use **RIGHT DIRECTION** button to set players to 1. Press **CLEAR** and play against the computer in this position.

Levels of Play

Press *MODE* then *LEVEL* to see the current level. Press *CLEAR* to return to normal play.

There are six types of levels. Press *MODE* then *LEVEL* and use the *UP* or *DOWN DIRECTION* button to change to a different level type.

Level types Fixed, Beginner, Sudden, and Tournament can be adjusted for three different strengths. While viewing the level, use the *OPTIONS* key to select 'E' for Easy, 'A' for Average, and 'H' for Hard.

Beginner Level Type

Press the LEFT or RIGHT *DIRECTION* button to select 1, 2, 3, 4, 5, 7, 10, or 15 seconds per move.

B:E0:01 B:E0:02 B:E0:03 B:E0:04 B:E0:05 B:E0:07 B:E0:10 B:E0:15 B:A0:01 B:A0:02 B:A0:03 B:A0:04 B:A0:05 B:A0:07 B:A0:10 B:A0:15 B:H0:01 B:H0:02 B:H0:03 B:H0:04 B:H0:05 B:H0:07 B:H0:10 B:H0:15

Fixed Time Level Type

Press the *LEFT* or *RIGHT DIRECTION* button to select 1, 2, 3, 5, 10, 15, 20, 30, 45 seconds, and 1:00, 1:30, 2:00, 2:30, 3:00, 5:00 minutes per move. FIXED

Time Level "inf" is infinite time, and will only stop thinking when the *MOVE* key is pressed, or a mate is found.

F:E0:01 F:E0:02 F:E0:03 F:E0:05
F:E0:10 F:E0:15 F:E0:20 F:E0:30
F:E0:45 F:E1:00 F:E1:30 F:E2:00
F:E2:30 F:E3:00 F:E5:00 F:Ei:nF
F:A0:01 F:A0:02 F:A0:03 F:A0:05
F:A0:10 F:A0:15 F:A0:20 F:A0:30
F:A0:45 F:A1:00 F:A1:30 F:A2:00
F:A2:30 F:A3:00 F:A5:00 F:Ai:nF
F:H0:01 F:H0:02 F:H0:03 F:H0:05
F:H0:45 F:H1:00 F:H1:30 F:H2:00
F:H2:30 F:H3:00 F:H5:00 F:H1:nF

Sudden Death Level Type

Press the *LEFT* or *RIGHT* DIRECTION button to select the amount of time in minutes for the entire game. If you run out of time you lose or forfeit, FOrFt will be shown on the display. After every move, you receive a bonus 10 seconds to make up for the time it takes to enter your move.

S:E:05 S:E:10 S:E:15 S:E:20 S:E:30 S:E:45 S:E:60 S:E:90 S:A:05 S:A:10 S:A:15 S:A:20 S:A:30 S:A:45 S:A:60 S:A:90 S:H:05 S:H:10 S:H:15 S:H:20 S:H:30 S:H:45 S:H:60 S:H:90

Tournament Level Type

Press the **LEFT** or **RIGHT** DIRECTION

button to select the the amount of time in HOURS:MINUTES format to play the number of moves shown on the left side of the display. If you run out of time before you play the indicated number of moves, you lose or forfeit, FOrFt will be shown on the display. After every move, you receive a bonus 10 seconds to make up for the time it takes to enter your move.

40 T:E0:30 45 T:E0:45 40 T:E1:00 40 T:E1:30 35 T:E1:30 45 T:E1:55 45 T:E2:25 40 T:E2:00 40 T:A0:30 45 T:A0:45 40 T:A1:00 40 T:A1:30 35 T:A1:30 45 T:A1:55 40 T:A2:00 45 T:A2:25 40 T:H0:30 45 T:H0:45 40 T:H1:00 40 T:H1:30 35 T:H1:30 45 T:H1:55 40 T:H2:00 45 T:H2:25

PLy Level Type

Press the *LEFT* or *RIGHT DIRECTION* button to select the depth of search from 1 to 8 ply. A ply is one half move.

PLY 1 PLY 2 PLY 3 PLY 4 PLY 5 PLY 6 PLY 7 PLY 8

MAtE Solver Level Type

Press the *LEFT* or *RIGHT DIRECTION* button to select the number of moves to mate the program will search. **nOnE** will appear if no mate is found.

MAtE 1 MAtE 2 MAtE 3 MAtE 4 MAtE 5 MAtE 6 MAtE 7 MAtE 8

Note: You can only change the level while it is your turn to play.

Rating

To view your rating, press *MODE* then *RATING*. Your current rating appears on

the display.

To have your rating change, you must complete a rated game on a tournament or sudden death level.

When you are ready to play a rated game, select the **FATE** option.

- 1. Press **MODE** to see ModE2.
- 2. Press *OPTIONS* then the *UP DIREC-TION* button repeatedly until you see **FATE** appear.
- 3. Press *LEFT* or *RIGHT DIRECTION* button to turn the option On.
- 4. Press CLEAR.

Finally select the Tournament Level or Sudden Death Level you wish to play against.

When O appears on the display, the game you are playing can be rated. Since the game you are playing is rated, you cannot ask for a HINT, nor TAKEBACK a bad move, nor use SETUP to improve your position. You also cannot use the *NEW GAME* key to start over during a rated game.

These conditions attempt to allow you to experience what it is like to play a game against an opponent in a rated tournament. In rated tournaments a chess clock is always used, so that you play your moves within agreed upon time limits. Your LCD Chess computer has the chess clock built in to it.

If you attempt to use the *HINT*, *SETUP*, *TAKEBACK*, or *NEW GAME* keys during your rated game, LCD Chess will ask "ARE YOU SURE", and say what result (draw, win, or loss) will be scored if you press the button one more time.

During a rated game if you are winning by 9.0 or more points and want LCD Chess to resign, press *MODE* then *NEW GAME*. LCD Chess will say "ARE YOU SURE I LOSE". LCD Chess will then wait for you to press *NEW GAME* once more.

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 a *SETUP* key. Use the **DIRECTION** buttons to move the king cross over a piece. Press *MOVE* to remove the piece. Press *CLEAR* to continue the game.

Adding or Changing a Piece

Press *MODE* then a *SETUP* key. Now press *SETUP* repeatedly to select the correct piece and use the \square / \blacksquare key to select the correct color.

Use the **DIRECTION** buttons 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 *MODE* then *OPTIONS* then the UP direction button 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** buttons 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.) Repeatedly press the *SETUP* key 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 \square / \blacksquare .

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."

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

Turn on the **HELP** feature (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.

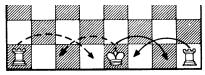
- 1. The Queen can move to any square along the same row, column, or diaganols on which it stands, but cannot pass over an enemy piece.
- 2. The Rook can move to any square along the same row or column on which it stands, but cannot pass over an enemy piece. See also Castling (below.)
- 3. The Bishop can move to any square along the diaganols 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 forward. On it's first move it may move two

squares forward. When capturing, it moves diaganolly (forward) one square. See also *en passent* (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)

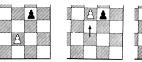
Special Moves

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:



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 passent* 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, there may be 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.

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.

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.

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

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!

