

EXCALIBUR

Touch Chess II

Operating Manual

Model 404ET

Congratulations on your purchase of Excalibur Electronics' Touch 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 Touch Chess. Install two 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 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, Touch Chess gives you the White pieces—the



ones at the bottom of the board. White always moves first. You're ready to play!

Besides deciding on a good move, you have to move the piece in a way that Touch Chess will recognize what's been played. Think of communicating your move as a two-step process--registering the *FROM* square and then registering the *TO* square.

Press the stylus down gently on the center of the piece on the *FROM* square. Touch Chess will display the coordinates of the *FROM* square--for example "E2." Then press the stylus down gently on the

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.

square you want to move it *to*. Touch Chess will beep, confirming that it has registered your move.

After you make your move, Touch Chess will reply with its move automatically. You'll see the piece flash on its *from* square and move to its *to* square. You're already playing a game! Enjoy the contest.

Throughout the game, the display at the bottom keeps track of the move number and the elapsed time for each move.

Putting a game "on hold"

Any time it's your move and you wish to stop playing for a while, just press the **ON/OFF** key. Touch Chess will switch off and go into a sleep mode. It will remember the last position, including the elapsed time, as long as you do not interrupt the power supply—for example, by removing the batteries. To resume play, just press the **ON/OFF** key.

NOTE: If it is not "thinking," Touch Chess will automatically turn off after a period of time, saving your game position. Use the **ON/OFF** key to resume the game.

Key Functions

ON/OFF KEY

Use this key to turn Touch Chess off and on. Touch Chess will remember the board position while it is off.

MENU/□■/KEY

Pressing the **MENU** key displays a number of options. To view a different option, press the **MENU** key again, or the **↔** or the **↓** key.

Also use this key in SETUP to change the

side to move, or to flash the piece that is threatened when the threat warning "!" **ICON** is on.

CLEAR KEY

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

HINT/→ KEY

Press this key if you want to get hints from your Touch Chess partner. It displays **HINT** and flashes a recommended move on the screen. To make the hint move, just press the **GO** key.

If the hint is a book move or a replay move, **DPEN** or **RPLAY** will be shown instead of **HINT**.

Also use this key during **SETUP** mode to select the next piece type.

UNDO/← 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 **GO** key to replay the taken-back move or moves.

Also use this key during **SETUP** mode to select the previous piece type.

↔ KEY

While in **MENU** display mode, use this key to advance to the next menu option.

↓ KEY

While in **MENU** display mode, use this key to go back to the previous menu option.

GO KEY

Press this key twice *before* you register

your move to switch sides (colors) with your Touch Chess. (Between presses, the display will show **FLIP**.) Also use **GO** to replay moves in the takeback mode (see "**UNDO/←**," on page 2).

Menu Options

Menu Options Before the Game Starts

DPEN: Use the **←** or the **→** key to select one of 32 book opening lines of play. (See page 4.)

TRAIN: Use the **←** or the **→** key to 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

NW/GAM: To start a new game, press **GO**.

LEVEL: To view the current level setting, or to change the level setting, press **GO** (see "*Levels of Play*," page 5)

SETUP: To setup or modify a position, press **GO**. (see page 8)

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

Use the **←** or the **→** keys to change the condition of the following options.

PLAYER: Select between: '1'—Human vs Computer; '2'—Human vs Human; '0'—Computer vs Computer.

SCORE: If 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.

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.

INF: When turned on, this option will display the score, depth of search (number of moves Touch 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 or 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 see a "SURE?" warning if you try to **UNDO** mistakes, add pieces in **SETUP** mode, ask for a **HINT**, or try to start a **NEW GAME** before the game is completed. Touch Chess will rate the game a loss for you if you are losing and a draw if the position is equal. If you are sure, press the key once more, otherwise press **CLEAR**. If the score is greater than 9.0, you can claim a victory with the **NW/GAM** option.

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

FLIP: Use this option to turn the chess board around.

SLEEP: Adjust the automatic shut off time with this key. Setting it to '0' will disable auto shut-off altogether.

CONTR: Adjust the display contrast to one of twelve settings.

Playing the Black Pieces

When you want to play the Black pieces (to let Touch Chess move first) press the **GO** 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 Touch 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 show **STALE**.

Game-Ending Messages

Touch 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 Touch Chess. When you want to claim a win, draw, or want to resign—press the **MENU** key and then **GO**.

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.) To see which of your pieces is threatened, press the **MENU** key.

Auto Play

If you would like to watch the computer finish a game for you automatically, press the **MENU** key repeatedly until the option **PLAYR** is showing. Use the **←** button to change the number of players to zero. Press **CLEAR** to exit the **MENU** mode. Now press the **GO** key twice and watch the game play itself. You may stop auto play at any time by pressing the **GO** key. Doing so will set the number of players back to one.

Book Opening Trainer

Touch 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 **MENU** key to display **OPEN**, and then press the **←** or **→** 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 since 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
5. Scotch Game
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 Exchange Variation
17. Queen's Gambit Declined
18. Lasker Defense, Queen Gambit Declined
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. Queen'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

Touch Chess also allows you to set up any book opening you want—or even an

opening you invent—to practice. Press **MENU** repeatedly until the display shows **PLAYR**. Use **→** 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 **MENU** repeatedly until the display shows **PLAYR**. Use the **→** button to set players to 1. Press **CLEAR** and play against the computer in this position.

Levels of Play

Press **MENU** repeatedly until the display shows **LEVEL** then **GO** to see the current level. When you are finished reviewing the level or changing the level, press **CLEAR** to return to normal play.

At this point you may use the **↑** or **↓** button to change to a different level type. There are six types of levels.

Beginner Level Type

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

B 001 B 002 B 003 B 004

B 005 B 007 B 010 B 015

Fixed Time Level Type

Press the **←** or **→** 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 **GO** key is pressed, or a mate is found.

F 001 F 002 F 003 F 005

F 010 F 015 F 020 F 030

F 045 F 100 F 130 F 200

F 230 F 300 F 500 F Inf

Sudden Death Level Type

Press the **←** or **→** button to select the amount of time in minutes for the entire game. If you run out of time you lose or forfeit, F \square R \square F \square T 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 05 S 10 S 15 S 20

S 30 S 45 S 60 S 90

Tournament Level Type

Press the **←** or **→** 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, F \square R \square F \square T 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 030 45 T 045 40 T 100 40 T 130
35 T 130 45 T 155 40 T 200 45 T 225**

Ply Level Type

Press the **←** or **→** 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 Sober Level Type

Press the **←** or **→** button to select the number of moves to mate the program will search. **^** \square **N** \square **E** 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 **MENU** repeatedly until **RATE** is shown. 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 **RATE** option.

1. Press the **MENU** key repeatedly until you see **RATE** appear.
2. Press **←** or **→** button to turn the option On.
3. 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 **UNDO** a bad move, nor use **SETUP** to improve your position. You also cannot use the **NWGAM** option 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 Touch Chess computer has the chess clock built in to it.

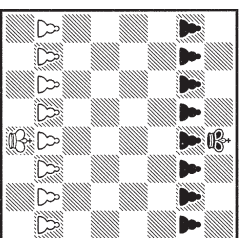
If you attempt to use the **HINT** or **UNDO** keys during your rated game, Touch Chess will ask "SURE?". It will do the

same thing if you try to start a New Game, use **SETUP**, or change the **LEVEL**. Touch Chess will rate the game a loss for you if you are losing and a draw if the position is equal. If you are sure, press the key once more, otherwise press **CLEAR**.

During a rated game if you are winning by 9.0 or more points and want Touch Chess to resign, press **MENU** then **GO**. Touch Chess will show "SURE?". Touch Chess will then wait for you to press **GO** once more.

Piece Training

There are five special mini-games and three mate training positions. The most famous and successful chess teachers in the world take their beginning students from the simple to the complex by having them play "mini-games" of chess that concentrate on just one or more types of pieces. Even advanced players practice these basics, just as a concert pianist continues to practice the scales so that they remain second nature. Like any great trainer, Touch Chess will play you these special practice games.



Kings & Pawns Training

First make sure you are at the start of a game. Now press **MENU** until **TRAIN** is displayed. Then press the **→** key. The

mini-games always include the king and pawns for both sides. In fact, one mini-game contains just this material (see figure on left).

The other four mini-games use kings and pawns, but add a different single piece to the exercise—knight, bishop, rook, and then queen.

Start with the basic king and pawns mini-game.

Make your first move. Your object, as in regular chess, is to checkmate the king. Normally, this means both sides will try to force a pawn through to the other side of the board safely to promote it to a queen. You'll learn lots of principles, tricks, and traps in this training mode that will win you many full-fledged chess games!

Checkmate Training

The main objective in the game of Chess is to checkmate your opponent's king. Touch Chess, has three special positions that are shown after the five piece training mini games. The Black king will be in the center of the board in those positions. Select one of those positions to practice and improve your technique to checkmate your opponent's king.

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 **MENU** repeatedly until **SETUP** is shown, and then press **GO**. Then

repeatedly press the square of the piece you wish to remove until the square on the display is empty. Press **CLEAR** to continue the game.

Adding or Changing a Piece

Press **MENU** repeatedly until **SETUP** is shown, and then press **GO**. Now press **HINT/→** repeatedly to select the correct piece. Then repeatedly press the square until the piece appears as the correct color on the chessboard. 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 Touch 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 **MENU** repeatedly until **CLRR** (clear board) is displayed. Then press the **GO** key. You'll see that the display chessboard will have no pieces, and **KING** is displayed.

On the chessboard, press the square the White king is on. Next press the square the Black king is on once to place a White king there, and then again to change the White king to a Black king.

Next, pick out another piece in the problem or position you want to set up. Now press **HINT/→** key repeatedly to select the correct piece. Then press the square on the chessboard where this piece should stand. Press the square repeatedly until the piece appears in the right color on your display.

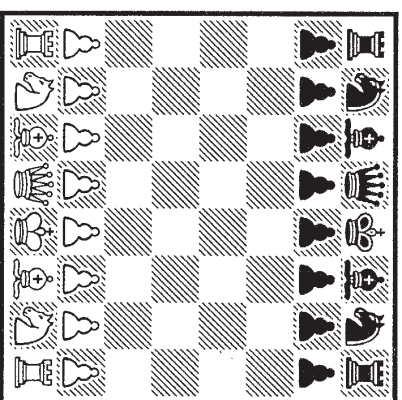
Follow this procedure until all the pieces in the problem or position are completely set up.

Make sure that Touch Chess knows which color is to move. You may change the color of the side to move by pressing the **MENU/□■/.**key. The display will show **SIDE** and the color icons **□■** will show the side to move.

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

NOTE: You must place a White and Black king on the board to exit **SETUP** mode with the **CLEAR** key.

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."



The starting position

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 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.

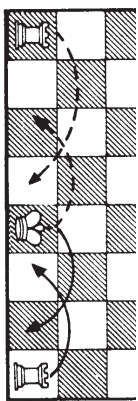
Individual Moves

Turn on the **HELP** feature (see page 3.) 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 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 forward. 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)

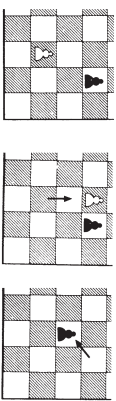
Special Moves

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 on next the page:



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, there may be more than one Queen on the board at the same time.

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

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Battery Information

- Your Touch Chess uses 2 "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.

FCC Notice

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

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.

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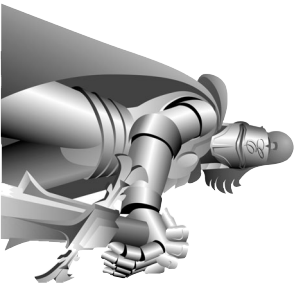
The only authorized service center in the United States is:

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

www.ExcaltburElectronics.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 WITHHOUT RECEIVING AN ESTIMATE FOR SERVICING. WE CANNOT STORE YOUR UNIT!



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