



TALKING CHESS SCHOOL

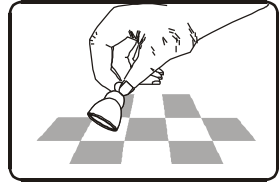
Instruction Manual

IMPORTANT INFORMATION

USE OF PLAYING PIECES

If you are using pieces with magnets in the bases and your move does not seem to have registered, press down with the **EDGE** of the pieces.

Magnets in the bases of chess and other playing pieces are **NOT** essential to the proper operation of the computer. If a magnet falls out of the base of a piece, continue to use it in the normal way without the magnet and the computer will function correctly.



RESET SWITCH

Sometimes computers malfunction due to electrostatic discharge or other electrical disturbances, or when batteries are inserted. If this happens push a thin rod into the **RESET** hole in the base of the computer and press down for about one second. This Resets the computer, clears its memory and returns it to normal operation.

NOTE: this product is not designed to be immune to the effects of electrostatic discharge, strong electromagnetic radiation or other electrical disturbances since malfunction under such conditions is non-critical. The reset switch is included in the design to allow the unit to be reset to normal operation and a new game started in the event of malfunction.

WARNING

The playing pieces supplied with this games computer may be small enough to be swallowed. Please keep the playing pieces out of the reach of small children.

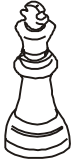
This Product conforms to the EMC-Requirements as laid down by the Council Directive 89/336/eec.

PLEASE KEEP THIS MANUAL FOR FUTURE REFERENCE.

NOT SUITABLE FOR CHILDREN UNDER AGE 3 YEARS.

CHESS PIECES & SYMBOLS

TABLE TOP MODELS



KING
 ROI
 KÖNIG
 KONING
 REY
 RE
 REI

QUEEN
 DAME
 DAME
 DAME
 DAMA
 DONNA
 DAMA

ROOK
 TOUR
 TURM
 TOREN
 TORRE
 TORRE
 TORRE

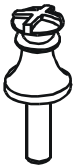
BISHOP
 FOU
 LÄUFER
 LOPER
 ALFIL
 ALFIERE
 BISPO

KNIGHT
 CAVALIER
 SPRINGER
 PAARD
 CABALLO
 CAVALLO
 CAVALO

PAWN
 PION
 BAUER
 PION
 PEON
 PEDONE
 PEÃO

CHESS PIECES & SYMBOLS

PORTABLE MODELS



KING
 ROI
 KÖNIG
 KONING
 REY
 RE
 REI

QUEEN
 DAME
 DAME
 DAME
 DAMA
 DONNA
 DAMA

ROOK
 TOUR
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PART 1 – USING THE COMPUTER

1.1 GETTING STARTED

On the underside of the computer you will find the lid of the battery compartment and a label telling you which type of battery to use. Make sure each battery is inserted the right way round: the “positive” tip (labelled “+”) must match up with a “+” sign inside the compartment. When the batteries are all in place, you should hear a “beep”. Now look at the *Liquid Crystal Display* (LCD). You should see the “White” symbol (□) in the top left-hand corner, and a number on the right, “counting down” or “flashing” on and off.



If the display doesn't look like this, push a thin object (e.g. a paper clip) into the hole marked RESET (on the underside), and press down with it.

Set up the pieces in the starting position. The white pieces must be at the end near the controls. The computer is now ready for a game. Its “level” of playing strength will automatically be set to 10. (For full details on the levels, see section 1.9.)

On level 10, whenever it is your move, you will see a number on the display, “counting down” second by second, from 10 to 0. If you want to play at the same rate as the computer, you must make your move before the 10 seconds are up. *You may, however, ignore the countdown and take as long as you like over your moves.*

If you have not just loaded new batteries, switch on the computer by pressing the **ON/OFF** key. The computer will remember the position which was on the board when you last switched off.

1.2 THE CHESSBOARD

Every square on the board is marked with a letter and a number. A horizontal row of 8 squares is called a *rank*. A vertical column is called a *file*.

The squares at the left edge carry the letter A; every other file has its own letter, from B to H. Each rank has its own number, from 1 to 8. The letter and number on a square are called its *co-ordinates*, and are used by the computer to communicate its moves to you.

1.3 MAKING MOVES

We suggest you play your first game with the white pieces. Press down with the piece that you want to move. *If you are using pieces with magnets in the base, the best way is to tilt the piece slightly and press down with it on the centre of the square.*

The computer “beeps”, and displays the *co-ordinates* of the square you have pressed. Now move your piece to its destination square, and press down with it again.

The symbol □ or ■ shows which side is to play. If the symbol “flashes” on and off, this means that the computer is thinking about its move; during this time, none of the controls have any effect, except for the **MOVE** key (see section 1.8).

The computer indicates its move by displaying the co-ordinates, e.g.:



Press the “from” square (in this case e7). The co-ordinates of this square stop “flashing”, while those of the “to” square start flashing on and off. Press this square as you place the computer’s piece there.

1.4 ERRORS

If you press a piece on its square but then decide not to move it after all, simply press the same square again.

In general, if you press a wrong key or square, you will hear the error signal (a low buzz). Simply continue by making the correct press (acknowledged by a “beep”).

If the error buzz occurs after you have pressed a square to start your move, the co-ordinates will be cleared from the display. You can then start again to make a legal move.

If you try to move a piece to a square where it cannot legally go, the computer will say: “That move is not legal.” If you like, you can ask for further explanation by pressing the **WHY?** key. The computer will then say something like:

Your bishop on f1 is not allowed to move to a5.

Or: You are not allowed to castle because the king has moved.





Now start again to make a legal move.

1.5 SPECIAL MOVES

Captures are carried out like ordinary moves. They are indicated by a flashing : symbol between the “from” and “to” squares on the LCD.

En passant captures: Press the “from” and “to” squares of the capturing pawn. The square of the captured pawn is then displayed (flashing), followed by **0**. Press this square as you remove the pawn.

Pawn promotion: Press the “from” and “to” squares of the pawn. The number **5** (= “queen”) appears “flashing” on the display. You then have these choices:

- (a) To promote to a queen, press the  key. The “to” square starts “flashing”. Press this square.
- (b) If you want to choose a different piece, press ,  or  (to display **4**, **3** or **2**). Re-press the same key to confirm. Then press the “to” square.

When carrying out the computer’s move, only (a) is possible.

Castling: First move the king, pressing its “from” and “to” squares. The computer then displays the “from” and “to” squares of the rook. Press down on the squares as you move the piece.

1.6 CHECK, CHECKMATE, ETC.

Check and the end of the game are announced by spoken messages and displayed as follows:

- +** Check
- 10** Checkmate (White wins)
- 01** Checkmate (Black wins)
- ==** Stalemate (or only the kings left)
- 50=** Draw by 50-move rule
- 3=** Draw by threefold repetition
(The computer recognizes “simple” repetition, i.e. the same pieces moving back and forth.)






However, after announcing a draw by repetition or 50-move rule, the computer allows you to continue playing.

1.7 NEW GAME

You can start a new game at any time except when the computer is thinking about its move. Press the **NEW GAME** key. The display shows:



You now have these options: –

- (a) Press **NEW GAME** again to start a game under normal conditions.
- (b) Press  if you want a game of “mini-chess”, with only the kings and pawns (starting on their normal squares). This gives practice to beginners.
- (c) Press , ,  or  for a version of mini-chess in which the kings and pawns are joined by one other piece type (knights, bishops, rooks or queens).
- (d) If you press a square on the board (or any key other than those listed above), this *cancel*s the “new game” command.

If you want the computer to play White, press the **MOVE** key to make it start the game.

1.8 INTERRUPTING THE COMPUTER AND CHANGING SIDES

If you press **MOVE** when the computer is thinking, it will immediately make the best move it has found so far.

If you press **MOVE** when it is your move, the computer will swap sides with you and make the next move.

Note that the **MOVE** key is inoperative on level 0 (i.e. when the user is playing for both sides) – see Section 3.3.

1.9 LEVELS OF PLAY

The computer has 72 levels of playing strength. When first switched on, it is set to level 10.

“Countdown” levels: On levels 5, 10, 15, 20, 25 and 30, the computer will always make its move within a fixed number of seconds – 5 seconds on level 5, 10 seconds on level 10, and so on. On these levels, you are invited to play to the same time limit as the computer. Your thinking time “counts down” on the display. When you are down to 5 seconds, you hear three warning beeps. If your time runs out, you hear six beeps. After that, however, the computer will still accept your move.

“Fun” levels: Levels 1-4 are for beginners (Level 1 is weakest.) The computer often makes deliberate mistakes. Its moves take 1-3 seconds.

Additional levels: The following table gives the computer’s average thinking time per move.

Novice levels (6-9, 11-14, 16-19, 21-24):	4 seconds
Intermediate levels (26-29, 31-48):	30 seconds
Stronger levels (49-71):	2-3 minutes
Advanced level (72):	4-5 minutes

Level 0: This is a special case (see Section 3.3).

CHANGING LEVELS

To inspect the current level, press the **LEVEL** key. The display shows **L** followed by the level number. You may now increase the number by re-pressing **LEVEL**, or decrease it by pressing **TAKE BACK**. Each press alters the number by 1; if you hold the key down, the number changes more quickly.

When the display shows the level that you want, press any other key or any square. This clears the level from the display, and the game may continue.

1.10 VERIFYING THE POSITION

If you want to check where the pieces should be (e.g. after knocking some of them over), press the **VERIFY** key. The centre of the display shows: **u**. If you now press on any square, its contents are displayed using the following code:

1 = Pawn	4 = Rook
2 = Knight	5 = Queen
3 = Bishop	6 = King
0 = vacant square	

The symbol □ or ■ gives the colour of the piece.

When you have verified as many squares as you want, re-press **VERIFY** (or press any other key) to return to the game.

1.11 TAKING MOVES BACK

If you think your last move was a mistake, you may take it back; first carry out the computer's reply, then retract the computer's move and your own, as follows:

Press **TAKE BACK**. The LCD displays the last move in reverse, with the "to" square flashing. Press this square; its co-ordinates stop flashing, while those of the "from" square start to flash. Move the piece back to its "from" square, and press it down.

If the move was a capture, the computer will now direct you to replace the captured piece, using the same code as when pieces are "verified" (see Section 1.10). For example:



In this example, a black bishop was captured on f6. Press the square as you put the piece back. Similarly, if the move promoted a pawn, the computer reminds you to replace the pawn on the "from" square.

If the move was castling, you are directed to move the king back first, then the rook.

After taking back one move, it is normally possible to take back the previous move for the other side if you wish.

Note: When moves are taken back, the players' castling rights are restored where appropriate. (However, any data relevant to repetition of moves or the fifty-move rule will be lost.)

1.12 HINT

If you press the **HINT** key (also labelled ■), the computer suggests a move for you. If you then re-press **HINT**, the computer directs you to carry the move out, by "flashing" the "from" and "to" squares.

If you don't want to take the computer's advice, press any other key or a square. Then make whatever move you choose.

1.13 SOUNDS

If you prefer to play without sound signals, press the **SOUND** key. (To switch the sound on again, repeat the same key-press.)

When the sound is off, the LCD displays ? in cases where it would normally give its error buzz or its "illegal move" message. Press any key or square to clear the ? then correct the error.

Note that when you press the **TEACHING** key to activate the teaching function (see Section 2.2), this automatically switches the sound on. (Conversely if you switch the sound off, the teaching function is switched off too.)

To alter the volume of the sound, press the **VOLUME** key. You have a choice of three settings; if you press the key repeatedly, the volume switches from medium to high, then low, then medium again.

1.14 SWITCHING ON AND OFF

You may switch the computer off in the middle of a game, by pressing the **ON/OFF** key when it is your turn to move. The computer will retain the position in its memory while using a minimum of current. If you don't press any square or key during an interval of 8 minutes 30 seconds, the computer will switch itself off automatically (unless it is in the middle of computing a move). After switching on again, you can continue the same game.

PART 2 – LEARNING FROM THE COMPUTER

2.1 EXPLAINING THE MOVES

If you are learning Chess, the computer can show you what legal moves you have available. Press **WHERE?**, and the LCD shows:



Now press down with one of your pieces. If this piece cannot move, the LCD will show: - - - -, and the computer will say (e.g.) “Your rook on h1 cannot move.” If your piece has any legal moves, the computer will tell you one of them, e.g. “Your knight on b1 could move to c3.” The move also appears in the display.

You now have these options: –

- (a) Press any square to which your piece could move; the computer assumes you are moving it to that square. If it is a “special” move, the computer prompts you to complete it.
- (b) Press the same piece again; the computer announces a different legal move, if this piece has one. You can keep pressing it, to see all its moves in rotation.
- (c) Press a different piece, to discover whether and where it can move. When a “special” move is possible (see section 1.5), it will be explained fully, e.g.:

You could castle. Your king on e1 could move to g1, and your rook on h1 could move to f1.

If you press **WHERE?** again, the display is cleared and the game continues normally.

2.2 TEACHING AND WARNING MESSAGES

Certain typical kinds of weak move are frequently made by novices. If you want the computer to point out these mistakes when you make them, press the **TEACHING** key. The computer says “Teaching on”, and the “teaching” symbol (⊙) appears on the LCD.

You will now find that after you make a move, the display remains unchanged for a few moments. If the computer decides that you have made a mistake, it

asks “Are you sure?” and briefly displays: **SUR**E . (After that, the co-ordinates of your move will “flash” on the display.) You now have 3 choices:

- (a) Retract your move, by pressing **TAKE BACK** and proceeding as in Section 1.11.
- (b) Press **MOVE**, to let your move stand.
- (c) Press **WHY?** for explanation.

If you press **WHY**, the computer will give you a message such as one of the following:

I can safely take that piece.	
You could win material worth three pawns.	[Display: 3]
That move loses material worth one pawn.	[Display: - 1]
I can checkmate you.	[Display: - -]

If your move brings about a draw when you could expect to win, the computer says “The game is a draw”, and displays: ===== . If the message is “You could checkmate me”, the display is:



After any of these messages, you have the same 3 choices as before: retract your move (press **TAKE BACK**), let it stand (press **MOVE**), or ask for more explanation. If you press **WHY?** again, the computer demonstrates a move (the good one you missed, or the one that takes advantage of your error).

Re-pressing **WHY?** switches between the 2 explanations. Finally you must retract or confirm your move.

WARNINGS OF THREATS

If you like, the computer can warn you of its own threats as well as pointing out your mistakes. If you want it to do this, press the **TEACHING** key a second time. The computer says “Teaching level two”, and the © symbol starts “flashing” on and off.

From now on, after making its move, the computer will sometimes say “Be careful!” and display: **CAR**E . You can then press the **WHY?** key for an explanation, e.g.:

I am threatening to checkmate you.

If you press **WHY?** again, the computer indicates the particular move that is threatened, e.g.:

My queen on d8 could move to h4.

Consider your next move carefully and carry it out.

NOTE: Occasionally the spoken message and the LCD display will give different items of information. Suppose the computer is threatening to capture a pawn with check, after which it can capture a rook (worth 5 pawns). The computer may say, “I am threatening to win material worth 1 pawn”, while the display shows **6**.

To switch off the “teaching” function, press **TEACHING** a third time.

2.3 EXERCISES

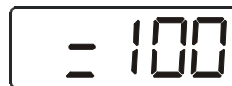
The book that accompanies your computer contains 100 exercise positions in which you are invited to find the correct move. You can carry out the exercises on the computer’s chessboard, and receive a score for your performance.

To do this, press the **EXERCISE** key. The display shows **E**, followed by the number of an exercise position. You can increase the number by re-pressing **EXERCISE**, or decrease it with **TAKE BACK**. (If you hold either key down, the number changes more quickly.) When the display shows the number of the exercise you want to solve, press **NEW GAME**. The flashing ↓ symbol shows that the computer is handling an exercise position.

Arrange the pieces on the board according to the diagram in the book. Carry out the move that you think is correct, pressing the squares in the normal way. If you have found the solution, the computer says so and announces your score, e.g.:

That is the move to checkmate me. You win 6.

Then the LCD shows your percentage score for all the exercises you have attempted so far, e.g.:



If your move is wrong, the computer will display **no** and say something like: “That is not the move!” You may then “take back” your move (see Section 1.11) and try a different one. Alternatively you can press the **WHY?** key for further explanation, e.g. “That move can not checkmate me.” You now have another chance to take your move back and try again. If instead you re-press **WHY?**, the computer will tell you the correct move. You can then retract the wrong move and carry out the correct one.

Scoring: You score 6 points for solving the exercise at your first try, 4 for the second try and 2 for the third try. If you try more than 3 times, or if the computer shows you the solution, you score 0.

You can inspect your percentage score for the exercises even during an ordinary game. To do this, press **SCORE** at any time *except* when the computer is displaying its own move. The next press on a key or square clears the score from the display.

Next exercise: If you have solved (e.g.) Exercise 31, a press on the **EXERCISE** key will display number 32. If you want to solve that exercise, press **NEW GAME**. If you go to a different exercise instead (or have just solved Exercise 100), the scoring starts again from zero.

If you have not carried out the correct move for the last exercise, the **EXERCISE** key displays the same number as before.

PLAYING ON FROM AN EXERCISE POSITION

Suppose the exercise is “White mates in three moves”, and you have played the correct first move of the solution. You may want the computer to reply for the Black side, so that you can bring about the actual checkmating move. Or suppose you have played a *wrong* move, and you want to see how the game could continue.

In either case, press the **MOVE** key. The computer will make a move for the opposing side, and you can carry on playing – just as in a normal game, except that some of the commands such as **LEVEL** and **HINT** will not work. The computer will be playing on Level 50 (average 1 minute 40 seconds per move in the more complex positions), and will give you “teaching” messages as in Section 2.2. When one side gives checkmate, the display shows your current percentage score.

PART 3 – ADDITIONAL FEATURES

3.1 STYLES OF PLAY

The computer has 5 styles. Style 1 is the most *passive* (holding pieces back), 5 is the most *aggressive* (advancing them towards your king). Style 3 is “normal”.

To inspect the current style, press the **STYLE** key (also labelled ♔). The LCD will show the “style” symbol (i.e. □ and ■ together) and the current style number (see example on right).



If you want to change styles, keep re-pressing the **STYLE** key until the required number appears. Then press a different key or square, and play can continue.

3.2 EVALUATING THE POSITION

When the computer is displaying its move, you may press the **SCORE** key (also labelled ♔) for an evaluation of the position. The LCD will normally show ↑ together with a number. The number indicates the size of the advantage which the computer thinks one player has; 100 units are roughly equal to the value of one pawn. If instead the display shows **OPEN**, this means that the position is in the computer’s library of standard chess openings. After pressing any square or a key, you can carry out the computer’s move.










3.3 PLAYING BOTH SIDES

On Level 0, the computer will not play any moves of its own; it will simply let you carry out moves for both sides. So (for example) you can play against a friend, with the computer just acting as a “referee” (making sure the moves are legal, reminding you to complete any “special” moves, announcing the result, etc.). Note that on Level 0 there are no “hints” or “teaching” messages.

3.4 SETTING UP A POSITION

You may rearrange the pieces to set up a special position (e.g. a chess problem). Start by pressing the **SET-UP** key. The flashing symbol # appears, to show that the computer is in “set-up mode”. In this mode you may do any of the following:


- (a) If you want to clear the whole board, press **MOVE**. The display shows: **Cb**. Press **MOVE** again to confirm. (Any other press would cancel).

- (b) To insert a piece, press the corresponding “piece type” key (     ), then press the piece down on its square. As long as the symbol  is displayed, all pieces inserted will be white. To switch from  to  (or vice versa), press **WHITE/BLACK**.

The computer uses its standard code (6 = king, 5 = queen, 4 = rook, 3 = bishop, 2 = knight, 1 = pawn, 0 = empty square) to confirm which piece type you have selected or inserted.

- (c) To clear an individual square, press it *without* first pressing a “piece type” key.

When the position is ready, press **SET-UP** again. The computer now exits from “set-up” mode (the # symbol disappears). Continue play by making a move or pressing the **MOVE** key. (Note: There can be no castling with a piece that has been inserted on the board in “set-up” mode; the computer will assume that the piece has already moved.)

If the symbol  is displayed when you exit from “set-up” mode, it will be White’s turn to move next. So before exiting, you may need to press **WHITE/BLACK** to switch to the right colour.

ILLEGAL POSITIONS

When you exit from “set-up” mode, the program tests that:

- (a) each player has one king;
- (b) the player whose turn it is to move is not giving check; and
- (c) there are no pawns on the 1st or 8th rank.

If the position does not pass these tests, it is illegal and play cannot proceed. The LCD displays: **??**. You now have these choices:

- (a) You can check the locations of the pieces (see Section 1.10).
Then proceed to (b) or (c).
- (b) You can press **SET-UP** again, to return to “set-up” mode and alter the position to make it legal.
- (c) If you want to abandon the position you have been setting up, you can start a new game in the usual way.

3.5 SOLVING CHESS PROBLEMS

The computer can solve chess problems for mate in two moves, unless they involve promoting a pawn to a knight, bishop or rook.

“Set up” the problem position as described in the previous section. Select level 72. Then press **MOVE**. On discovering the forced mate, the computer will play the first move of the solution. If you play a move for the opposing side, it will reply with a checkmating move. (If there is no forced mate, the computer will simply make the best move it can find.)

IV / 12 / 04

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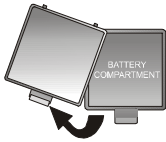
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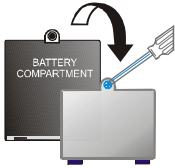
E-Mail: info@computerchess.com

Visit us in the Internet: **www.computerchess.com**

BATTERY INSTALLATION



Design A



Design B

- 1 Place the game face down on a flat surface and locate the battery compartment on the bottom of the unit.
- 2 Depending on the model, open the battery compartment door by pressing on the tab with your thumb and lifting up as show in Design A or by use of a Phillips head screwdriver as shown in Design B.
- 3 When inserting batteries, make sure that the positive tip of each battery matches up with the + sign inside the battery compartment.
- 4 Close the battery compartment cover.

TO ENSURE PROPER FUNCTION:

- DO NOT MIX OLD AND NEW BATTERIES.
- DO NOT MIX ALKALINE, STANDARD OR RECHARGEABLE BATTERIES.
- DO NOT USE RECHARGEABLE BATTERIES.
- BATTERY INSTALLATION SHOULD BE DONE BY AN ADULT.
- NON-RECHARGEABLE BATTERIES ARE NOT TO BE RECHARGED.
- RECHARGEABLE BATTERIES ARE TO BE REMOVED FROM THE TOY BEFORE BEING CHARGED (IF REMOVABLE).
- RECHARGEABLE BATTERIES ARE ONLY TO BE CHARGED UNDER ADULT SUPERVISION (IF REMOVABLE).
- ONLY BATTERIES OF THE SAME OR EQUIVALENT TYPE AS RECOMMENDED ARE TO BE USED.
- BATTERIES ARE TO BE INSERTED WITH THE CORRECT POLARITY.
- EXHAUSTED BATTERIES ARE TO BE REMOVED FROM THE TOY.
- THE SUPPLY TERMINALS ARE NOT TO BE SHORT-CIRCUITED.
- DO NOT DISPOSE OF BATTERIES IN FIRE, BATTERIES MAY EXPLODE OR LEAK.