

**User manual**

**for**

**‘The King Element’ M823**

**Version 1.40 (November 2020)**

# 1 Important information

This user manual contains a short version of the instructions for your King chess computer (software version 1.40 from November 2020). The computer has two ‘modes’ of operation: –

- **‘Comfort’ mode** – for inexperienced chess players. On its lowest ‘level’ of playing strength in this mode, the computer can give practice to beginners or children.
- **‘Expert’ mode** – for strong players. In this mode the computer has a greater variety of levels and a wider range of special functions.

**This short manual describes ‘Comfort’ mode only.** Full-length instructions, in which ‘Expert’ mode is covered, may be obtained from the Millennium website: <http://www.computerchess.com/>.

The King Element is set to play in ‘Comfort’ mode when you first acquire it. If you want to switch to “Expert” mode, see Sections 5.4.1–3 of this manual.

Before using this product, please read the following safety notes and operating instructions completely, and pay careful attention to them. Please store this user manual with the product, so that you can refer to it later if needed. If you later give this product to another user, please also give them this manual.

## 1.1 Safety instructions

Please note that this device is not a child’s toy within the meaning of Directive 2009/48/EC. If you let your children use it, instruct them accordingly and ensure that the device is used only as intended.

- Keep the packaging bags and film away from babies and small children, as there is a danger of suffocation!
- In order to avoid damage, do not expose the device to heat, e.g. from radiators or from direct sunlight, and do not expose it to any kind of moisture.
- In order to avoid malfunctions, do not operate this device on or near devices that create magnetic fields or electromagnetic radiation, such as for example televisions, loudspeakers, mobile and cordless telephones, WiFi devices etc.
- Do not open the device under any circumstances. It does not contain any serviceable parts. In the event of malfunction, contact the service address or your local shop.

## 1.2 Notes on storage and cleaning

- Please note that real wood needs extra care. Handle the wood carefully, always store the device where it is dry and do not expose it to strong sunlight.
- When required, only clean the device’s surface with a slightly damp cloth, and ensure that no moisture can penetrate into the device.
- Do not use solvents or other aggressive or abrasive cleaning agents, as these can damage the device’s surfaces and lettering.

## 1.3 Notes on the power supply

Only operate the device with the original AC adaptor supplied with the MILLENNIUM chessboard.

Input: 100–240 V 50/60 Hz, 0.45A max

Output: 9V DC 1A

When using the AC adaptor, please observe the following:

- The power socket should be located close to the device and should be easily accessible.
- The device should not be connected to more power sources than recommended.

- The electrical contacts must not be short-circuited.
- Before cleaning the device, ensure you disconnect the adaptor from the mains.
- Regularly check the product and the AC adaptor for damage, and do not use either of them if they are damaged. Never open them up.
- Please observe any safety information printed on the AC adaptor.

## 1.4 Package contents

This user manual covers two different models, 'The King Element' and 'The King, Fischer Edition'. After unpacking, please check the contents for completeness and any possible signs of damage that could have occurred during transport. In the event of a complaint, please promptly contact the dealer from whom you obtained the product.

### 1.4.1 M823 The King Element

The package only contains the 'King Element' module.

The module itself cannot operate on its own. It operates with a MILLENNIUM Exclusive model M820. You need an M820 sensor board; the 'King Element' replaces the original clock module.

### 1.4.2 The King, Fischer Edition

The package contains the following items:

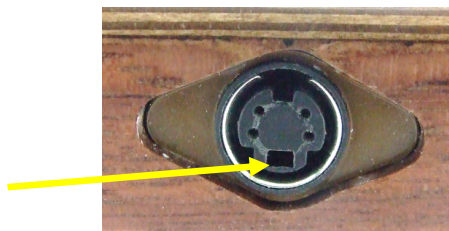
- 1 chessboard M820
- 17 white chess pieces (including an additional queen)
- 17 black chess pieces (including an additional queen)
- 1 computer unit: 'The King' (Fischer Edition) with liquid crystal display (LCD)
- 1 AC adaptor
- 1 cable with two identical connectors (to connect the computer unit to the chessboard)
- 1 instruction manual
- 1 guarantee card

## 2 Getting started

### 2.1 Connecting the cables

At the rear of the computer unit there are three sockets.

1. Take the AC adaptor (supplied with the MILLENNIUM M820 chessboard) and insert the small connector on the end of the cable into the right-hand socket at the rear of The King computer unit.
2. The cable with identical connectors at both ends (also supplied with the MILLENNIUM M820 board) is for connecting the computer unit to the chessboard. Please handle it carefully – note that each connector must be the right way up when you insert it into its socket. The connector has four narrow pins and one wider pin. Turn the connector so that the wider pin is at the bottom, to enable it to fit precisely into the openings in the socket. The wider opening in the socket is indicated by the arrow in the illustration below:



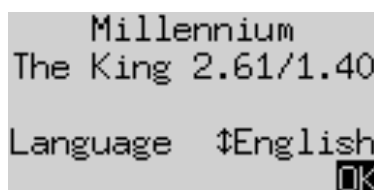
3. Plug the cable into the socket on the right-hand side of the MILLENNIUM chessboard, and also into the left socket on the rear of the computer unit.
4. Connect the AC adaptor to a power supply. A sound signal is emitted.

## 2.2 Selecting the language

The chess computer's LCD display can show its text in any of the following 7 languages:

Language	Shown on display
English	English
German	Deutsch
French	Français
Dutch	Nederlands
Italian	Italiano
Spanish	Español
Russian	Русский

After you connect the power and hear the sound signal, the LCD display shows the word 'English' together with the version number of the chess program:



To select the English language, confirm by pressing a GREEN button.

Or to choose a different language:

1. Press the down-arrow button ↓ as many times as needed until the language you want is displayed.
2. Then confirm with GREEN. (The language may later be changed, via the 'Options'. See Section 5.4.)

## 2.3 Preparing for a game

Once you have selected the language, the 'Clock' display appears:

German:



English:




You can now prepare for a game: –

1. Place the chess pieces on their starting squares. Either White or Black can play from your end. The chessboard automatically detects where each piece is located.
2. If any pieces are not correctly placed on their squares, the red lights (LEDs) at the corners of those squares will shine. Once the position is corrected, the lights go out.
3. You can now begin a game against the computer on its 'A2 Normal' level of playing strength. If you want The King to play White, give the 'Move' command as described in Sections 5.1, 5.5.

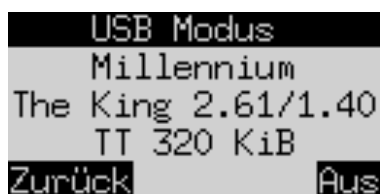
## 2.4 Adjusting the backlight

The LCD display has a backlight that you can adjust by pressing the  button as many times as necessary.

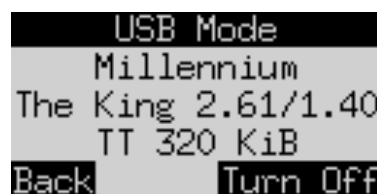
## 2.5 Switching on and off

If the computer is running and you press the On/Off button , the following display (featuring the program's version number) appears:

German:




English:



If the computer is connected to a PC or laptop via a USB cable, you can now perform operations such as loading or saving games. For this, see the 'Expert' user manual on the Millennium website.

If instead you press the GREEN button, the computer switches off.

Or if you press the RED button, it reverts to the 'info' screen (see Section 4) or the menu (Section 5.1).

*If switched off in the correct manner (as above), the computer will still retain the current game in its memory, even if you afterwards disconnect the power. The parameters (level, etc.) that you have specified will remain unchanged.* When the power is reconnected, the computer automatically switches on. To switch on when the power has *not* been disconnected, press the  button.

After switching on, you can resume play from where you left off.

## 2.6 Reset

To delete previous data:

1. Disconnect the computer from the power supply.
2. Hold down a RED button and reconnect the power.
3. Keep the RED button held down until the start screen appears (as in Section 2.2).

The computer is now in the same state as when you first acquired it, *except* that any games saved as in Section 5.10 will be retained. This operation may occasionally be useful in case of a problem you don't understand.

## 2.7 The buttons and their functions (summary)

Either GREEN button      Confirms an instruction.

Either RED button        Cancels an instruction.

*Note:* The RED and GREEN buttons have various uses depending on the situation. Their functions at any particular moment are indicated by the 'inverted' wording (i.e. text on a dark background) in the bottom line of the display: RED in the left corner, GREEN in the right corner. The corner of the display is blank if the button has no function in the current situation.



Switches the computer on or off.

NEW

Starts a new game.



Adjusts the display's backlighting.



Retracts moves.



Replays moves.



Moves the cursor left. Switches screens. Alters a parameter.



Moves the cursor right. Switches screens. Alters a parameter.



Moves the cursor up.



Moves the cursor down.

If held down, buttons will 'auto-repeat'.

## 3 Playing against the computer

### 3.1 Your move

#### 3.1.1 Ordinary moves

Make your move just as you would on an ordinary chessboard. The move is acknowledged with a short buzz.

Normally the computer waits for about 0.3 seconds before registering your piece on its new square. This means that you can carry the move out either by picking the piece up or by quickly sliding it. *If you slide the piece, it must not linger for too long (more than 0.3 seconds) on an intermediate square, or your move will be misinterpreted.*

To carry out a capture, either your own or the computer's piece may be picked up first.

#### 3.1.2 Special moves

- En passant capture: The captured pawn may be removed before, during or after the move of your own pawn.
- Pawn promotion: Move the pawn to the promotion square, or simply remove it from the board. Place the queen (or other piece) on the promotion square.
- Castling: First move the king, then the rook.

*In normal (i.e. 'classical') chess, this simple procedure for castling is always recommended. In 'Chess960', an alternative method is sometimes necessary. For this, see the 'Expert' user manual on the Millennium website.*

### 3.2 The computer's move

To announce the computer's move, the red LEDs on the chessboard 'blink', indicating the 'from' and 'to' squares alternately. The move is also shown in notation on the 'Game score' screen (see Section 4.3).

After you move the computer's piece, it may be necessary to complete a 'special' move. The LEDs indicate the square or squares where a piece must be placed or removed. Note also the 'prompts' at the bottom left of the screen:

f8 \_h8

In this example, the square h8 must be vacated and the black rook must be placed on f8 (to complete a castling move).




If the computer gives check, its move is followed by a double buzz, and the lights round the square of your king and the checking piece(s) will momentarily 'blink'.

### 3.3 Errors

If the position on the chessboard is incorrect – for example if you have knocked a piece over or tried to make an illegal move – the 'prompts' in the bottom line will indicate the square, or two of the squares, where something must be adjusted; and the red LEDs at the corners of the squares will shine.

If you need further guidance on where all the pieces should be placed, you can use the 'Verify' function – see Section 5.9. Until the position is corrected, you cannot start your next move.

### 3.4 Symbols displayed in the bottom line

-  (rotating hourglass): The computer is thinking about its move.
- : You are to move with White.
- : You are to move with Black.

## 3.5 Retracting and replaying moves

### 3.5.1 Retracting moves

If you want to take back the last move played, you may press the clockwise arrow button ↻. The red LEDs on the chessboard, and the prompts in the bottom line of the screen, direct you to move the piece back. For example:

`_h4 &g5`

The white bishop must be returned from h4 to g5.

You may also simply retract the move *without* first pressing the clockwise arrow button.

### 3.5.2 Retracting a sequence of moves

After retracting one move, you may also retract the previous one or a longer sequence.

To do this, you can repeat the same procedure as before. However, in a long sequence it is not obligatory to take back each individual move on the board. For example, to retract the last seven moves played, you can simply press ↻ seven times, then proceed to reconstruct the position. If you need help with this, use the 'Verify' function (see Section 5.9).

### 3.5.3 Replaying moves

A move that you have retracted can be *replayed* by pressing the *anticlockwise* arrow button ↺ and moving the piece on the board as prompted by the lights and the screen.

To replay a sequence, you may repeat this same procedure to execute each individual move. Alternatively, you may simply press ↺ several times and then reconstruct the position at the end of the sequence.

### 3.5.4 Continuing the game

At any time after retracting or replaying moves, you can resume the game from the current position on the board. Carry out a move in the normal way, or give the 'Move' command (see 5.5) to make the computer play next – you will then be playing for the opposing colour.

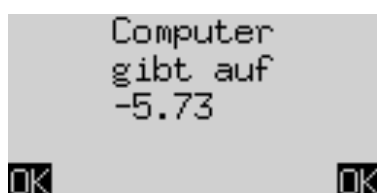
## 3.6 Result of the game

The final move is accompanied by three 'beeps', and the result is announced in the bottom line of the display:

- Mate                      Checkmate
- Stale                      Stalemate
- Draw 3x                  Draw by threefold repetition
- Draw 50                  Draw by 50-move rule
- NoMat                    Draw due to insufficient material (neither side can mate the opponent)
- TooLong                  The game cannot be continued, as it would exceed the available memory space (maximum: 256 moves for each side).

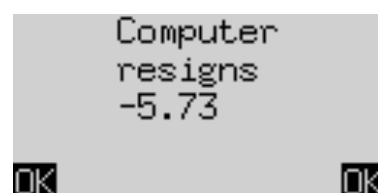
If the computer thinks its position is hopeless, it may offer its resignation. In the following example it thinks it has a disadvantage equivalent to 5.73 pawns:

German:



Computer  
gibt auf  
-5.73  
OK OK

English:



Computer  
resigns  
-5.73  
OK OK

Or if it thinks the position is very drawish, you may see:

German:



English:



In either case, after pressing a GREEN or RED button, you may continue the current game if you wish – or press NEW to start a new game.

*Note:* The computer will not resign or offer a draw when playing on its lowest level ('Play & Win').

### 3.7 Starting a new game

You can start a new game any time, except in the middle of some special operations described in Section 5.

Press the NEW button. The screen shows 'New Game?' and *either* the word 'Classic' *or* an arrangement of pieces to start a game of 'Chess 960'. To switch between these displays, use ↑ or ↓.

With 'Classic' displayed, you can begin a game of ordinary ('classical') chess by pressing GREEN or simply placing all 32 pieces on their home squares. Either White or Black may play from your end.

Instead, a press on RED would cancel the 'new game' command and leave the position unaltered.

For an explanation of 'Chess960' (also known as 'Fischer Random Chess'), and how to play it with the computer, see the Millennium website: <http://www.computerchess.com/>.

## 4 The info screens

### 4.1 Switching between info screens

In 'Comfort' mode the computer offers two different screens or 'pages' of information. The 'Clock' screen displays the thinking times for the two players. The 'Game score' screen records the moves of the game. To switch from one screen to the other, press ⇐ or ⇒.

When either of these 'info' screens is displayed, you may press GREEN to access a menu of the computer's special functions. See Section 5.1.

### 4.2 Info screen: Clock

This screen was displayed when you first connected the power and selected the language – see illustration in Section 2.4.

If the 'Timer' (see 5.4.7) is 'off', the screen shows the total thinking time taken so far by White and Black.

If the Timer has been switched on, each side is allotted 15 minutes' thinking time for the entire game, and the time counts down. If a player exceeds the time limit, the 'Clock' screen shows the following:



However, the game may be continued even after the player has 'lost on time'.

Note that your own clock time remains 'frozen' until you have carried the computer's move out. This means that the playing conditions are fair, especially with the Timer 'on' – you don't have to move your opponent's piece in your own thinking time.

### 4.3 Info screen: Game score

This screen shows the most recent moves, for example:

German:

```
22 ♖e3-g3 ♜c6-b5
23 ♜d2-g5 ♜d6-e5
24 ♜g5xe5 ♜e8xe5
Wert: +0.27 00:05
25. ♜ ♜ Menu
```

English:

```
22 ♖e3-g3 ♜c6-b5
23 ♜d2-g5 ♜d6-e5
24 ♜g5xe5 ♜e8xe5
Score: +0.27 00:05
25. ♜ ♜ Menu
```

The number +0.27 is the computer's evaluation of the position: The King believes it has a small advantage, worth 0.27 of a pawn. Further examples of what may appear in this place on the screen are:

- |       |  |
|-------|--|
| -1.89 | The computer has a disadvantage nearly equivalent to 2 pawns.        |
| Book  | The position is in the computer's 'book' of standard chess openings. |
| +M 7  | The computer can force checkmate in 7 more moves.                    |
| -M 4  | The opponent can force checkmate in 4 more moves.                    |

The number 00:05 is the time (mm:ss) taken by the computer over its last move.

Moves that have been retracted (see Section 3.5) are indicated as follows:

```
13 a4-a5 >>---
```

In this example, Black's 13<sup>th</sup> move has been retracted.

*Note:* The 'score' is not shown when The King is playing on its lowest level ('Play & Win').

## 5 Special functions

### 5.1 The menu

If you press a GREEN button when one of the 'info' screens is shown (see Section 4), the menu of special functions appears. In 'Comfort' mode there are 9 of them: 'Comfort levels', 'Elo levels', 'Options', 'Move', 'Hint', '2 Players', 'Position setup', 'Verify' and 'Save/Load game'.

Four functions at a time are listed, with one of them highlighted (i.e. displayed on a dark background), e.g.:

German:

```
Komfort Stufen
Elo Stufen
Funktionen
Zug ausführen
Info ↑ Eingabe
```

English:

```
Comfort levels
Elo levels
Options
Move
Info ↑ Enter
```

By repeatedly pressing ↑ or ↓, you can display them all in rotation and highlight each one in turn.

To select an item, highlight it and press a GREEN button.

To return from the menu to the info screen, press a RED button.

*Note:* When operating the special functions, remember that the uses of the RED and GREEN buttons are always indicated by the 'inverted' wording at the left and right of the bottom line. Notice also the arrow signs:

- |    |  |
|----|--|
| ↑  | The ↑/↓ buttons are currently enabled for menu operations. |
| ↑↔ | All 4 direction buttons (↔↔↑↓) are enabled.                |
| ↔  | Indicates that a parameter can be altered with ↔ or ⇌.     |

## 5.2 Menu: Comfort levels

If you select this item, The King offers you a choice of 4 levels of playing strength:

German:

```
A0 Spiele & Siege
A1 Freundlich
*A2 Normal
A3 Stärker
Abbruch ↑ OK
```

English:

```
A0 Play & Win
A1 Friendly
*A2 Normal
A3 Advanced
Cancel ↑ OK
```

Here, the \* shows that the computer is currently set to play on level A2. By means of the ↑/↓ buttons, any line on the screen can be 'highlighted'. To switch to a new level, highlight it and press GREEN.

To return to the 'info' screen without changing the level, press RED.

These are 'Adaptive' levels: the computer adapts its play to its opponent's strength. If your play during a game improves, The King starts offering more resistance. On the weakest level (A0), even complete newcomers to chess can benefit from practising against the computer.

Stronger levels can be selected from the 'Elo' category (see 5.3).

## 5.3 Menu: Elo levels

After selecting this item, you can choose between 9 levels in 3 categories: 'Normal', 'Advanced' and 'Club'. To display them all and 'highlight' each one in turn, press ↑ or ↓ repeatedly.

The screen shows the computer's estimated playing strength on each level, e.g.:

German:

```
Stärker 1450 Elo
*Stärker 1600 Elo
Stärker 1750 Elo
Abbruch ↑ OK
```

English:

```
Advanced 1450 Elo
*Advanced 1600 Elo
Advanced 1750 Elo
Cancel ↑ OK
```

In this example, the 'highlighted' level corresponds to an international ('Elo') rating of 1600.

To select a new level, highlight it and press GREEN. To return to the 'info' screen with the level unchanged, press RED.

## 5.4 Menu: Options

### 5.4.1 Overview of the options


The 'options' are a set of special features that you have the possibility to modify. In 'Comfort' mode there are 9 of them. To inspect them, select 'Options' from the menu. This displays four options from the list, e.g.:

German:

```
Menü      ≠Komfort
Sprache    Deutsch
Brett drehen X
Lehrer     X
Info      ↑≠ Menü
```

English:

```
Menu      ≠Comfort
Language   English
Invert board X
Tutor      X
Info      ↑≠ Menu
```

One line of the screen incorporates a 'blinking' character (  ). This is the *cursor*. By repeatedly pressing  $\uparrow$  or  $\downarrow$ , you can move the cursor up and down and view all 9 options in rotation.

#### 5.4.2 Altering an option

To alter an option, bring the cursor to the appropriate row and use the  $\Leftarrow/\Rightarrow$  buttons.

*Example:* you want to switch the 'Tutor' feature 'on', and adjust the contrast of the LCD display.

Bring the cursor to the 'Tutor' line. For the 'Tutor' option, there are just two 'settings', i.e. 'Off' ( X ) and 'On' (  $\checkmark$  ). Press  $\Leftarrow$  or  $\Rightarrow$  to switch between them.

Next, press  $\downarrow$  twice to bring the cursor to the 'Contrast' line. This parameter has ten different settings. By repeatedly pressing  $\Leftarrow$  or  $\Rightarrow$ , you can cycle through them until the desired degree of contrast is obtained.

Having finished your alterations to the options, press GREEN to return to the menu or RED to return to the info page.

#### 5.4.3 Options: Menu

Using  $\Leftarrow$  or  $\Rightarrow$  you can choose between 'Comfort' and 'Expert'. Choosing 'Expert' will display a menu of 12 functions and place the computer in 'Expert' mode. For this, see the full-length instructions obtainable from the Millennium website: <http://www.computerchess.com/>.

#### 5.4.4 Options: Language

There is a choice of 7 different languages for the screen messages. They are listed in Section 2.2. Keep pressing  $\Leftarrow$  or  $\Rightarrow$  until the desired language appears.

#### 5.4.5 Options: Invert board

If White is playing 'up the board', the corresponding line on the Options screen shows:

German:

Brett drehen X

English:

Invert board X

If instead you want Black to play 'up', change the 'X' to ' $\checkmark$ ' and rearrange the pieces accordingly. The 'Verify' function (see 5.9) can help you with this.

*However*, this operation is unnecessary at the start of a game. The computer automatically detects whether the black or white pieces have been arranged at your end, i.e. whether the board is 'inverted' or not.

#### 5.4.6 Options: Tutor

Switch the Tutor function 'on' if you want the computer to point out your errors.

If the tutor is 'on' (  $\checkmark$  ) and the computer thinks you have made a weak move, the display shows a warning. For example:

German:

```
Schlechter Zug?  
0.00  
♟d8-h4+  
+M 2  
Zurück Weiter
```

English:

```
Bad move?  
0.00  
♟d8-h4+  
+M 2  
TakeBack Continue
```

The screen shows:

- the computer's assessment of the position before your move (compare Section 4.3);
- its own possible reply;
- its assessment of the position following that reply.

In this example, the position was previously rated as equal, but The King can now deliver checkmate in two moves.

You may now press RED (or ↻) and take your move back, as indicated by the lights. Or if you want your move to stand, press GREEN (or ↺).

*Note:* The 'Tutor' is not activated when The King is playing on its lowest level ('Play & Win').

#### 5.4.7 Options: Timer

If the timer is 'on', the thinking time for each player counts down from 15 minutes. See Section 4.2.

#### 5.4.8 Options: Contrast

For this option, the settings range from 0 (very weak contrast) to 9.

#### 5.4.9 Options: LED brightness

The brightness of the red LEDs has settings from 0 (dimmiest) to 9 (brightest).

#### 5.4.10 Options: Sound

There are six possible volume settings for the sound signals, labelled "Off" and 1–5.

#### 5.4.11 Options: Cable on right

Normally the computer assumes that as you look at the chessboard, the cable between the board and the computer unit is at the right-hand side. If you want to rotate the board physically so that the cable is plugged in on your left, you can switch this option from '✓' to 'X'.

Then 'Invert board X' (see 5.4.5) will still mean that White is playing away from your end.

### 5.5 Menu: Move

If you select this item when it is your turn to move, the computer will compute and play the next move itself, and you can then take over the other colour.

If you want the computer to play White, select 'Move' to begin the game.

If you select 'Move' when it is the computer's turn, it will cut short its calculations and play immediately.

### 5.6 Menu: Hint

Select 'Hint' if you want the computer to suggest a move for you. For about 2 seconds the move is indicated by the lights on the chessboard and also appears in notation at the bottom left of the screen, e.g.:

German:

T:2c3


English:

H:2c3


You can now decide whether to follow the advice or play another move instead.

### 5.7 Menu: 2 Players

If this function is selected, the computer doesn't play any moves of its own. It allows you to carry out moves for both White and Black – so it can be used for a game between two humans. The computer merely checks the legality of the moves, keeps a record of the game, and performs the functions of a chess clock.

To show that The King is in '2 player' mode, a pair of 'faces' (  ) appears in the bottom line of the screen. The computer exits from this mode if you select '2 Players' again, give the 'Move' command (see 5.5), or alter the 'level' (see 5.2–3).

## 5.8 Menu: Position setup

To construct a special position on the computer's chessboard, select 'Position setup' from the menu. The screen then shows 6 items of data. One of them is accompanied by the 'blinking' cursor (  ). Repeated presses on  $\uparrow$  or  $\downarrow$  bring the cursor to each item in turn.

German:

```
* 001 Zug Nummer
✓ Weiß am Zug
h1 00-0 a1 00-0-0
h8 00-0 a8 00-0-0
Abbruch ↑↓ OK
```

English:

```
* 001 Move number
✓ White to move
h1 00-0 a1 00-0-0
h8 00-0 a8 00-0-0
Cancel ↑↓ OK
```

Simply place the pieces on the desired squares of the chessboard. You may also want to alter the properties of the position, as follows.

To change the colour to move:

- Bring the cursor to the 'White to move' line.
- Press  $\leftarrow$  or  $\rightarrow$  to switch between ✓ (White) and X (Black).

To specify the move number:

- Bring the cursor to the 'Move number' line, and press GREEN. (The \* is replaced by  $\$$ .)
- The left arrow  $\leftarrow$  or right arrow  $\rightarrow$  increases/decreases the number in steps of one. The up arrow  $\uparrow$  or down arrow  $\downarrow$  increases/decreases the number in steps of ten.
- When ready, press GREEN to confirm. (The \* reappears.)

To specify whether (for example) Black has the right to castle with the rook on a8:






- Bring the cursor to the right-hand item in the fourth row.
- Press  $\leftarrow$  or  $\rightarrow$  to switch between 'a8' (yes) and '--' (no).

*Note:* For castling to be enabled, the king and rook don't have to be on their home squares for 'classical' chess. They can be on any squares from which castling is possible in 'Chess960'. For this, see the 'Expert' user manual on the Millennium website.

When the pieces are in place and any changes to the properties are complete, press GREEN to confirm the new position. (Instead, a press on RED would return to the situation before you selected 'Position setup'.)

You can now play from this position; make a move, or give the 'Move' command to make The King do so (see 5.5).

*Note (1):* You cannot confirm the new position if it contains any of the following faults:

- A king is missing. This is indicated in the bottom line by: 
- A pawn is on the 1st or 8th rank – indicated by (e.g.) 
- There are too many pieces of the same colour or type – indicated by (e.g.) 
- The side to move is giving check – indicated by  or 

*Note (2):* The first move from the position you have constructed cannot be a capture *en passant*. To create a position where such a move is possible, set up the immediately preceding position, then carry out the move that allows the capture.

## 5.9 Menu: Verify

The 'Verify' function displays half the chessboard in diagrammatic form, with the pieces in the correct current positions. To switch between the two halves of the board, press  $\uparrow$  or  $\downarrow$ .

This function can help you adjust the pieces on the chessboard in case of confusion. To return to the 'info' screen, press RED.

## 5.10 Menu: Save/load game

The computer's memory contains 9 'slots' in which games can be saved (stored). A saved game can later be loaded (retrieved), so that you can continue it or play through the moves (using  $\hookrightarrow$ ), etc.

To use this feature, select 'Save/load game' from the menu. The screen shows something like this:

German:

Spiel	123456789
Laden	✓✓-----
Sichern	↑↑↑↑↑↑↑↑
Züge	38
Abbruch	↔
	Laden

English:

Game	123456789
Load	✓✓-----
Save	↑↑↑↑↑↑↑↑
Moves	38
Cancel	↔
	Load

The 'blinking' cursor (■) can be moved right/left and from one line to the other by means of the 'direction' buttons ( $\leftrightarrow$   $\uparrow$   $\downarrow$ ).

In the above example, slots 1-3 are occupied, while 4-9 are vacant. The game in slot number 1 is 38 moves long.

To save the current game: place the cursor on the 'Save' line, bring it to the slot where you want the game to be saved, and press the GREEN button. This will erase any game that was stored in the slot previously.

To clear an occupied slot: 'Save' to this slot when the current game is still in the starting position with no moves played.

To load a game: Place the cursor on the 'load' line, bring it to the desired slot and press GREEN.

To return to the menu without any saving or loading, press RED.

## 6 Disposal



Dispose of packing materials in an environmentally friendly manner by using the relevant collection containers provided for the purpose.



Within the European Union, the device must be disposed of properly at the end of its service life, according to EC Directive 2012/19/EU. Suitable parts of the device will then be recycled, reducing environmental pollution. For more information, please contact your local waste disposal company or your municipal administration.

## 7 Warranty, servicing and contact with manufacturers

For Germany/Austria/Switzerland:

Please contact our office in Germany, either by telephone +49 (0) 2773 7441 222 or at [support@computerchess.com](mailto:support@computerchess.com).

If you purchased the product in a country other than Germany, Austria or Switzerland, and need service, please contact the shop where you purchased the product.

For any questions or feedback, you can also email us at [quality@computerchess.com](mailto:quality@computerchess.com).

## 8 Technical specifications

PRODUCT:	Millennium King Element
ITEM NO:	M823
HARDWARE:	ARM Cortex M7 CPU configurable from 10–300 MHz
SOFTWARE:	Chess Program © Johan de Koning (NL) Version 1.40 (November 2020)
OPENING BOOKS:	‘Master’ book by M.Uniacke © Applied Computer Concepts Ltd (UK) – approx. 300,000 positions ‘Aegon 1994’ book © C. de Gorter (NL) – approx. 61,000 positions

NOTE: This product is not protected against the effects of electrostatic charges, strong electromagnetic radiation or other electrical interference, as malfunctioning as a result of these conditions is not critical.

Modification of specifications (especially in respect of technical advances) reserved and errors excepted.

This user manual was carefully compiled, and its contents carefully checked for accuracy. If, despite all expectation, these instructions nevertheless contain errors, this shall not constitute grounds for any claims. This user manual, including excerpts thereof, may not be reproduced without prior written permission.

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