Fritz 10.0 Manual



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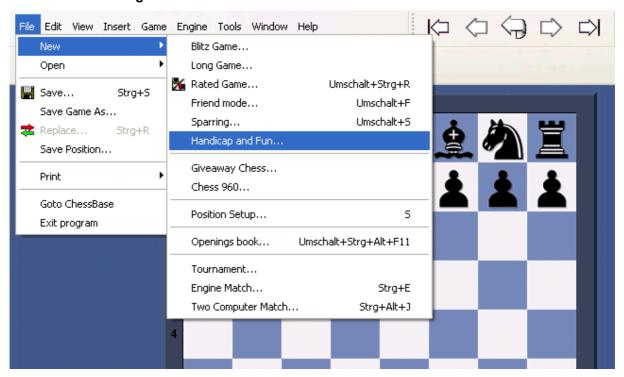
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First Steps

Playing a game

After you install the program it is automatically set to play games against you. So you can immediately start entering moves.

Menu: Game - New game



The pieces are reset in the initial position and the program is ready to play against you. You can select from a number of different kinds of games: blitz, long (tournament) games, friend mode, etc. In addition there are chess variants like Giveaway (you have to try to lose all your pieces) and Chess 960

Pressing Ctrl-N will start a new game of the kind you last played.

- ▶ To move a piece, move the mouse onto it, click and hold down the left mouse key and deposit the piece on a new square. You can also click the piece and then the destination square (or first the destination square and then the piece).
- ▶ To castle, move only the king two squares to the left or right. The rook will automatically be moved to its square.
- If an "en passant" capture is possible you should give the file on which it can be made.
- When you promote a pawn the program will offer you a choice of pieces.

The program only accepts legal moves. If you try to execute a move that does not conform to the rules of chess, the piece will simply jump back to its original square.

The program will automatically reply with its own move after a few seconds.

To take back a move click the takeback button

in the menu bar or below the board





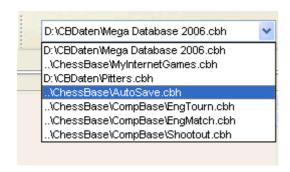
You can also use "Undo move" in the "Edit" menu, or press Ctrl + <= (Ctrl cursor left) You can *offer a draw* or *resign* in the "Game" menu, if the situation is completely hopeless.

Help

This program is a tough cookie, even for strong grandmasters. You will probably want to use some of the chess help available during the game. You should also try the special *Friend* mode, in which the program tries to play at exactly your level of skill. If you really want to destroy the program, you can use the Handicap levels. There it can play like a real moron.

Autosave

All games are automatically saved in the database called *Autosave*, which can be found in the directory My Documents\ChessBase. It is also in the dropdown list of the database window.



All the games played on the chess server will be automatically saved in a file called MyInternetGames.

Help and coaching during the game

During a game you can ask the program for advice.

Hint The program will analyse the position and offer advice

Suggestion The program will suggest a move

Threat Displays the direct threat

Explain all moves Shows a list of all legal moves and what they achieve

Position tutor Generates a brief strategic description of the current

board position.

<u>Threatened squares</u> Displays attacked and threatened squares in colour

Shows the plan or threat automatically with a coloured

arrow

<u>Kibitzers</u> Opens a new window with a different <u>engine</u> which you

can consult

<u>Expected move</u> Displays which move the program is currently

expecting

Levels of skill

Full-strength playing levels

- Blitz games
- Long games

In both these levels it is advisable to use the function "optimise playing strength" if you want to get the most out of the program. You can also use **File – New – Rated game** and play serious tournament games in which the program will give you an objective assessment of your playing strength.

Reduced playing strength levels

- Friend mode
- Sparring
- Handicap and fun

Apart from the above, the program can be set to play games with a fixed time limit or search depth per move. Click **Game – Levels** to reach these settings.

Chess variants

- Givaway chess
- ▶ Chess 960

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Value of the pieces

The value of the chess pieces is a very elementary and essential strategic criterion. In top games even a material difference of a single pawn can be decisive. The piece values are calculated in *pawn units*:

Piece	Value in pawn units 1.0
Pawn	3.0
Knight	3.0
Bishop	5.0
Rook	9.0
Queen	0.0

The program give its positional evaluation in pawn units, always from the point of view of White. If the program is displaying a value of +1.30 this means that it considers the white position to be better by the equivalent of 1.3 pawns. If White is actually a pawn up then the additional 0.3 is the result of positional considerations (mobility, deployment of pieces, king safety, pawn structure, etc.). A display of -3.00 means that White is a piece down - either a bishop or a knight, which are both equivalent to three pawns.

Position setup

Menu: New - Position setup

This opens a dialog box in which you can enter a completely new position.



The operation is quite simple:

- ▶ Choose a piece type in the columns on the right and put one or more of that piece on the board by clicking on squares. The right mouse key changes the colour of the piece deposited, a second click deletes the entry. You can also drag pieces off the board to delete them.
- You can drag a piece that is on the board from one square to another, holding down the mouse key in the process.
- You can **clear** the board completely or **reset** the starting position.
- ▶ The buttons "Copy/Paste ASCII", "Copy/Paste FEN" are used to enter diagrams that exist in one of the common text description forms. Mark the position in a word processor or browser and press Ctrl-C to copy it into the Windows clipboard. After that you can switch to position entry and click the paste button. The position will appear on the board. The copy buttons will copy a text description of the diagram into the Windows clipboard. FEN stands for "Forsyth-Edwards Notation", and the similar EPD for "Extended Position Description".

Example of a ASCII position description:

wKd6,Rc8,g8,Pg2, bKh7,Qe1,Pd4,e3,h5,h6 Example of the FEN description of the same position: 2R3R1/7k/3K3p/7p/3p4/4p3/6P1/4q3 w - - 0 1

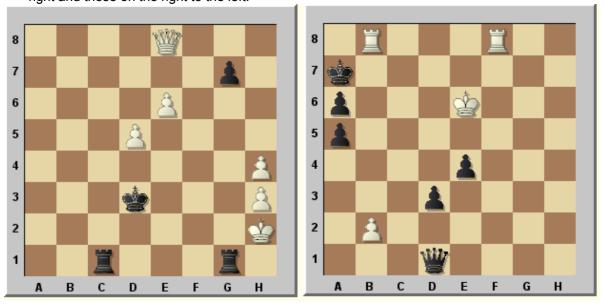
You can copy either of the above descriptions out of the Help file and paste it in the position setup.

After you have set up the position you should, if relevant, give the castling status of each side. In a few cases it may be important to know that the side to move can take en passant. Type in the file on which the capture can be made. You can also tell the program which side has the move and whether it should start counting moves from 1 or a higher number. Click "OK" to end position setup.

Mirroring the position

These buttons below the pieces allow you to change the postion in two ways:

- ▶ White <-> Black mirrors the position vertically, i.e. between white and black, and changes the side to move.
- ▶ **King <-> Queen** mirrors the position horizontally, so that the pieces on the left are moved to the right and those on the right to the left.



This is the position in our example above mirrored vertically (with Black to play) and horizontally.

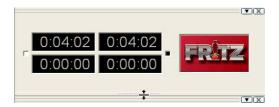
General operation

Screen layout

Menu Window - Standard layouts - [select layout]

When you first start the program certain "factory settings" are loaded. You can change the screen layout and many other aspects of the program in many different ways. Or you can choose one of the many standard layouts available in the menu "Window" – "Standard layouts". However you can also manually rearrange the windows to make your own layout – and store it for future use if you like it.

The individual program windows ("panes") can be changed freely. To resize a window, move the cursor onto a horizontal or vertical separation bar. It will turn into a "resize cursor". You can now press and hold down the left mouse button to resize the window.

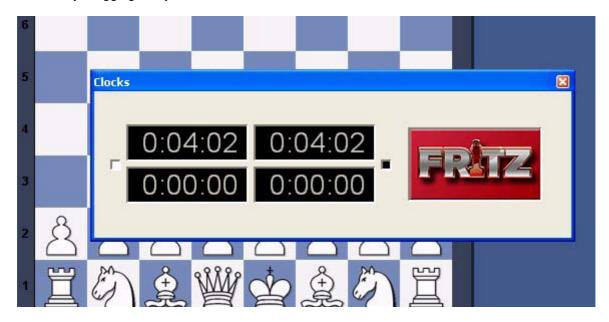


The program will adjust the other elements correspondingly, so you will never "lose" a window or have it partially covered by another one.

The individual window "panes" can also be moved to a different position on the screen. Move the mouse cursor onto the two parallel lines below the separation bar. It will turn into a hand. Press and hold down the left mouse button. You can now drag the window to some other place on the screen.



Normally the program will make sure you move a window to a reasonable place. Once the window is close to its destination the light grey outline will snap into place. However you can "undock" the window by dragging it anywhere on the screen.



Double-click the bar at top of the window to return it to its original location.

Note

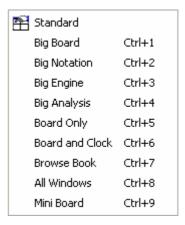
You can move (or rearrange) the menu and button blocks at the top of the screen.

The program has a number of <u>preset layouts</u> which are useful in different situations.

Standard Layouts

Menu Window - Standard layouts - (layout)

Here you can find a number of preset layouts which are useful in different situations. Whenever you start the program it uses the last layout from the previous session. Note that if you have "lost" some elements of the board window then Ctrl+8 is a good "panic switch" that opens all the windows that are available.



Layout	Description
Standard	The standard "factory setting" with all the most important windows
Big board	Maximizes the size of the board to fit the current window. The other elements become smaller.
Big notation	The program window is maximised and the notation window enlarged for game replay.
Big engine	The engine window is given maximum space, a small variation board is installed.
Big analysis	A large analysis board is opened, so you can analyse the position.
Board only	All windows are closed, only the board is left. This is especially impressive in "Full screen" mode ("View" menu).
Board and clock	Only the board and the clock
Browse book	Large board and large book window, ideal for studying the opening.
All windows	Opens and arranges all important windows, including evaluation profile and chatter.
Mini board	The program window with only the board is placed at the top right-hand corner of your screen.

It is useful to get familiar to the keyboard shortcuts Ctrl+1, Ctrl+2, etc. for the layouts you need. Notation The program window is maximised and the notation window enlarged for game replay.Big engineThe engine window is given maximum space, a small variation board is installed.Big analysisBoard onlyAll windows are closed, only the board is left.

This is especially impressive in "Full screen" mode ("View" menu). Browse openings bookLarge board

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Mini The program window with only the board is placed at the top right-hand corner of your screen.It is useful to get used to the keyboard shortcuts Ctrl+1, Ctrl+2, etc. for the layouts you need.

Window Pane Icons

The program has additional icons for the important window panes.



Clicking on the X symbol closes the window.

Clicking on the arrow opens a small menu.

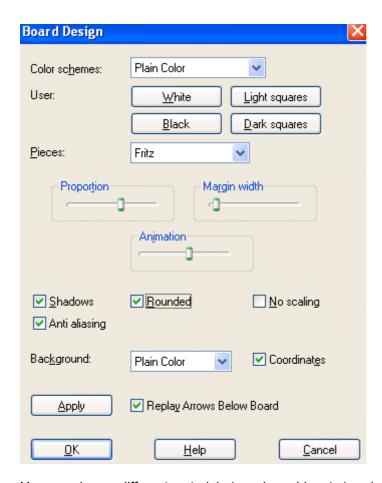


This menu allows the user to quickly hide or display window panes if and when they are needed.

Board design – 2D

Menu: View - Board - 2D

The 2D boards can be resized by changing the size of the board window. You can also view this dialog if you **right-click on the board**.



You can choose different materials (wood, marble, etc.) and colour schemes for the light and dark squares, and the background. You can configure the board to have co-ordinates around the board and the game replay control buttons below it.

There are also a number of different pieces styles. You can further improve the appearance of the screen diagrams by setting "ClearType" in the Windows "Display properties" – "Effects" menu. Since the diagram pieces are glorified chess fonts this will improve their appearance appreciably.

Here are the specifics of "Board design":

- **Colour schemes** selects the colour and texture of the dark and light squares of the chessboard. If you want to mix your own colours, click "plain colour" and select the colours you want for the squares and pieces. You can also use different material by clicking "User BMP" in the colour schemes.
- ▶ Pieces selects the piece design from several sets. "Habsburg" is classical European, "USCF" is a set in the style of American chess publications, and "Oldstyle" a nostalgic set that was used in books earlier in this century.
- **Proportion** regulates the relative size of the pieces with respect to the board.
- Margin width determines how wide the sides of the board should be.
- **Animation determines** how fast the pieces glide over the board.
- **Shadows** gives the pieces a shadow, so they appear to be slightly raised above the board.
- ▶ Rounded makes the pieces appear slightly rounded.
- No scaling switches to older "Fritz" piece fonts with fixed sizes. Here too you can use your own bitmap material by clicking "User BMP".

- Coordinates displays the board coordinates 1–8 and A–H on the left and bottom edges of the board.
- ▶ Replay arrows below board puts recorder-style replay and forward buttons below the board.



The buttons allow you to jump to the beginning or end of the game, or move one move backwards or forwards. The red takeback button allows you to enter a new move and overwrite the old ones without a query by the program (normally it will ask you whether you want to overwrite or start a new line).

Board design (Old 3D)

Menu: View - Board - Old 3D

This switches to a three-dimensional "wire-mesh" chessboard. This can be used if you do not have a graphics card with accellerator and DirectX for the photo-realistic <u>3D chessboards</u>. The "old" 3D board should run on any graphics card.

In the 3D view you can change the viewing angle and distance to the board, as well as the lighting conditions. To do so click the 3D board window with the **right mouse key**.

In the control panel you can tilt and turn the board, adjust the lens perspective and move it closer or further away.



Click "More" to get a new control panel which allows you to adjust the light (height and intensity), the square size and margin, the colours and contour lines of the pieces, shadows, glide speed, etc.

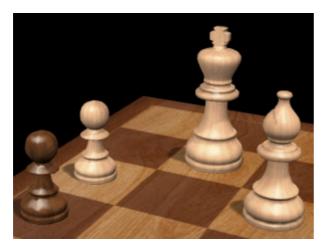
Board design - 3D

Menu: View - Board - 3D

This switches to a photo-realistic three-dimensional chessboard. The high-resolution textured virtual reality board requires DirectX 8.0 or higher and a graphic accellerator. If this is not available you should use the "old" 3D board, which has a simpler virtual reality board.



This is what a small section of the 3D board looks like when you zoom in:



Note that when you switch on a 3D board a new window appears with a 2D chessboard, which you can use to execute moves or follow the game.

There are other pieces and textures to choose from. Use the control panel at the bottom left to move, tilt and zoom in or out.



- Click on the golden sphere and, holding the left mouse button down, move the mouse cursor around to tilt the board.
- ► The four arrow icons around the sphere move the board up, down, left or right.
- + and zoom in and out.
- ► The small chessboard is the "panic reset". It will center the chessboard and make it fit in the current window.
- Note that you can also zoom by holding down the Ctrl key and turning the mouse wheel.
- You can right-click the board (or left-click the edge) and then move the mouse cursor around to change the board angle.

Ctrl + right-click defines what should be in the center of the window.

Keyboard controls

You can also control the board using only the keyboard:

- the comma and period keys turn the board;
- ▶ "i" and "o" zoom in and out;
- v" and "y" move the board up or down;
- ▶ "9" and "0" move it left or right.

Memory keys F6 and F7

Before you change the angle or position of the 3D board you may want to press F6. That "remembers" the current position. After you have changed everything you can return to the previous setting by pressing F7.

Screenshot

This will produce a screenshot of the board, without any controls. You will get a dialog in which you can set the resolution. Using a large factor will give you extremely high-resolution image, which is stored in the JPG format on your hard disk.

Settings

This takes you to a dialog in which you can change all the settings of the 3D graphics board.

Here are some details:

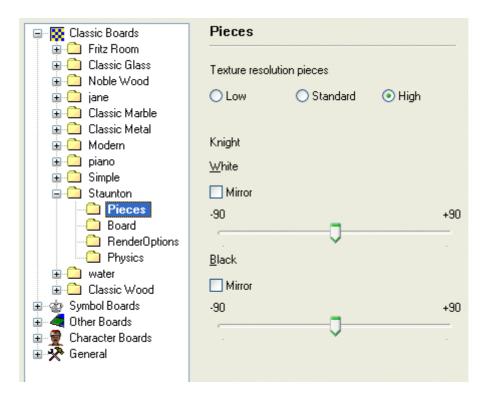
- Light: you can set the height of the light source and the intensity of the ambient lighting.
- ▶ White, black, light/dark squares, background, margin. Here you can change the colours of the individual components.
- Grating, shadows: Should the pieces have contour lines, should they cast shadows?
- **Simple/normal/detailed:** You can choose how complex the piece design should be. Highly detailed pieces require a lot of computing power.
- **Symmetry:** determines the rotation symmetry of the pieces.
- ▶ Animation: How fast should the pieces glide across the board? 1 is very slow, 9 very fast, 4 the normal default value.
- Square: This is given in millimetres and changes the relation to the pieces (the king is always 88 mm in size).
- Margin: gives the width of the edge of the board in millimetres.
- Defaults: sets everything back to the default values.

3D board - Settings

3D Settings (bottom left of the 3D board window)



This produces a dialog in which you can select one of many 3D designs and then optimize it for your screen and graphics card.



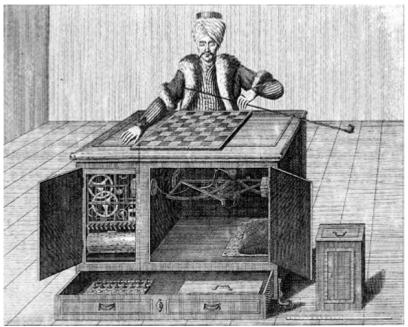
Here is a short description of what some of the main categories are. Note that you may find additional boards in your Settings dialog, especially after major updates.

- ▶ Fritz Room this is a classical Spanish chess room, with a table, chairs, pictures, bookshelves, etc. You can use the 3D control functions to explore the room, or zoom into the board and analog clock to play a game of chess.
- ▶ Glass, wood, marble, metal, modern, silver, simple, classic, Prague these are chessboard and piece sets in various materials, designs and styles. Some are in very high detail and can take your graphics card to its limits. But you can also generate spectacular chessboard pictures using the "Screenshot" function at the bottom of the window.
- Symbol boards have very flat symbol pieces that are used with the board in an upright position, much like the graphic 2D board, except that the symbols have clear 3D forms.
- ▶ Egypt, Shredder, etc. are boards with imaginatively sculptured pieces, for instance ancient Egyptian figures perched on the top of a pyramid.
- ▶ Mia, Turk these are new and very ambitious simulations of a futuristic Metropolis-like robot or the famous Chess Turk built in the 18th century by the Hungarian engineer Baron Wolfgang von Kempelen.



The Turk was a very famous chess-playing automaton, which was constructed in 1769 by Wolfgang von Kempelen (1734-1804) to entertain the Austrian Empress Maria Theresa. It was built in the form of a maplewood cabinet, 4 feet long by 2 feet deep and 3 feet high, with a figure dressed in a cloak and turban seated behind it.

The cabinet doors could be opened to reveal internal clockwork mechanisms, and appeared to have no place in which to conceal a human player. But still the machine was able to play a strong game of chess against any opponents (even Napoleon tried his hand against it).



Contemporary copper engraving of von Kempelen's Turk

The point of the illusion was that a chess player was actually able to conceal himself very cleverly during the inspection of the machine, and then operate the Turk with the help of levers during the game.

3D board - Board and pieces

3D Settings - Board, Pieces

Here you can set different materials for the pieces and the board. You can also set the resolution for the textures, making sure that your graphics card is able to handle the complexity of the 3D graphics.

Show Time in 3D – This option in the "Board" settings displays a 3D clock below the front edge of the board.

Note: If you deactivate "View toolbar", switch to full screen mode (Ctrl-Alt-F), and in addition close all other window panes (Ctrl-5) you will get a spectacular full-screen chessboard which is a pleasure to replay games on. If the board is too bright or too dark you can change it using the Gamma setting.

3D board - Render Options

3D Settings - Render Options

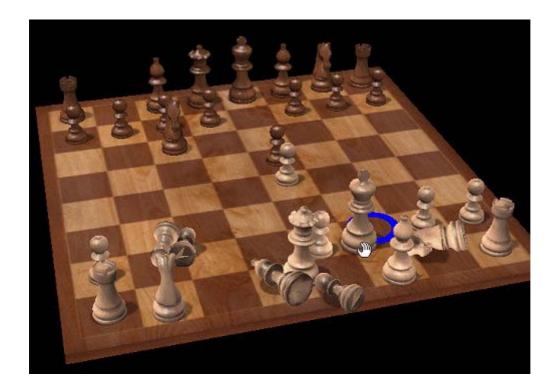
Here you can change a numer of general 3D effects. You can switch piece shadows on or off, make them rendered or calculated in real time. You can also switch on reflections on the pieces or on the board. Experiment with these settings to get a really nice display. The final quality is dependent on the power of your graphics card.

3D board - Physics

3D Settings - Physics

In this dialog you can enable and then influence the real-time physical calculation of the movement of

the pieces. You can set the interactive forces of the pieces, the static and dynamic friction, the restitution or ease at which they tip over, etc.



If you want to test the physics settings just grab a piece and push it around between the other pieces. They will tip over and roll around, giving you a good idea of what each of the settings is doing.

3D board - Info

True 3D Settings - System/GPU Info

Here you can check the performance of your graphics card.

Clipboard will copy the values to the Windows clipboard so you can paste it into other applications (e.g. a word processor or email client). It is important that you send this in to ChessBase technical support in case you have problems with the 3D functions.

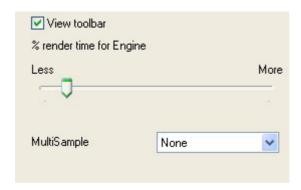
The support address is info@chessbase.com.

Adjust thinking time

Fritz's animated 3D displays demand a lot of resources from the computer.



A powerful graphics card is necessary to guarantee smooth performance. The performance of the 3d graphics display can be adjusted using the menu **Settings - General**.



You can use the slider to decide how much processor time the CPU uses to render the 3D images. If the graphics module is given a large amount of time there will be less resources remaining for the chess engine, which leads to a weakening of the playing strength. If you want the chess engine to play strong chess in 3D graphics mode you should choose a low value for the rendering.

If you enable the display of the picture's refresh you will see as a permanent display in the top left corner how often the graphics are redrawn.

If you are using a multiprocessor system the 3d graphics will be handled by one of the CPUs. The chess engine will then be able to use 100% of the resources of the other CPUs.

It can take a long time for the Chess Turk to be displayed, depending on the computer's hardware configuration. This time can be speeded up by selecting a simpler 3D display before ending the program. This setting is then stored. The next time the chess Turk is selected it will take less time to load him.

Save and load layouts

Menu: Window - Save layout / Load layout

If you have created your own ideal layout, you can save it and load it again later. Enter a name for the layout when the save box appears. You can save as many layouts as you want.

XP Style

Menu:Tools - Design - XP Style

This menu selects the standard Windows XP layout for the representation of the program graphics and dialogs.



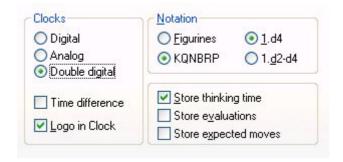
This setting is only available under Windows XP/Vista.



Options

Options – Clocks and Notation

Menu: Tools - Options - Clocks and Notation



Digital / Analog / Double digital: Choose the type of chess clock you want.

Logo in clock: Displays the logo of the active chess engine to the right of the chess clock. **Figurine / KQNBRP:** Choose between letters and figurines for piece names. This applies to the screen and printed notation.

1.d4 / 1.d2-d4: Choose either short or long algebraic notation. The latter always gives the start and destination squares of the move. It is more easily understood by beginners, and it is automatically set if you specify that you are an beginner when you install the program. In short algebraic the start square is not given if the move is unambiguous.

Store thinking time: The time each side uses is recorded after each move in the notation.

Store evaluations: This causes the program to record after every move its evaluation and the search depth. The form is value/depth.

Store expected move: The program records the move it expected whenever the opponent plays something different.

Options - Game

Menu: Tools - Options - Game

Here you can set a number of parameters relating to the games.

Resign: "Late" means that the program will have to see three times in a row an $\underline{\text{evaluation}}$ of 6.5 $\underline{\text{pawn}}$ $\underline{\text{units}}$ or worse for itself before it throws in the towel. "Early" means it has to see minus 4.8 three times. "Never" means exactly that.

Note that the program will not resign if it sees that it's being mated. Why spoil the fun?

Draw: This has the same type of options as resigning – Early, Late and Never.

Single click entry: It's a blitz game, you are completely winning, but your time is running out. Use the single-click entry to avoid this situation.

- Normal: If you click a square to which only one piece can move it is immediately moved there. If more than one piece can move to the square then you must click it for the move to be executed. If you click g1 or g8 and short castling is legal it will be automatically executed.
- Aggressive: Same as normal, but if more than one piece can move to the clicked square the piece

that last moved will automatically be chosen. This allows you to execute a long check sequence or a king march very rapidly. A second difference: if you click a piece that can make a number of moves, if one of these captures the piece the opponent has just moved, then the capture is automatically executed.

• **Note:** You can use a special technique called "dropping". This entails picking up a piece while your opponent is still thinking and holding it over the destination square. As soon as the opponent's move comes you let go of your piece, using practically no time on your clock. It is a slightly dangerous technique – if the opponent plays something unexpected you may let go the piece and then face disaster. Still dropping is used extensively in fast games on the chess server.

Coach: You can influence the quality of the coaching here:

- Calc. time: When you use the functions Hint and Suggestion in the Help menu the program must do a quick calculation. If you give it more time the quality of the coaching will improve.
- ▶ Threshold: When you make a mistake the coach appears. Here you can tell the program how serious the mistake must be (in pawn units) for the coach to appear.

Show openings: Shows the ECO codes and names during the opening phase of the game. The names appear in the status bar at the bottom of the screen.

Flip board on new game: The program likes to play occasionally with white. It will flip the board around when you start a new game, just like a human player. You can switch this option off if you always want to play white (you can flip the board manually with Ctrl-F).

Mark move with arrow: Your opponent's moves are marked with a yellow arrow, so you can catch them more easily. This is especially useful when you play on the Internet.

Always promote to queen: This is a timesaver for blitz games, where selecting a promotion piece (almost always a queen) can waste valuable seconds.

<u>Options – Multimedia</u>

Menu: Tools - Options - Multimedia



This allows you to configure the multimedia elements of the program.

Talk: You can allow the program to chat you up during the game, or you can make it shut up, if the incessant remarks are getting on your nerves. The remarks depend on what is happening on the chessboard – whether you have improved your position, blundered, made an aggressive advance, taken the program out of book, etc. The program will also comment on the opening that is being played.

Announce moves: The program will speak the moves as it executes them if you want. This is useful if you are using the DGT intelligent sensor board, or you have a sight impediment, or if you are simply playing a slow tournament game and want to be alerted when the computer makes a move.

Board sounds: This switches on or off sound effects (e.g. moves, captures, ticking clock, coughs, etc.) that are used during the game.

Find TALK.CHT: If you want the program to talk to you during the game you may have to tell it where the TALK-files are located. Click "Browse" and search for the file Talk.cht. This is especially important if you have copied the TALK-files on your hard disk.

In the dialog that appears click the "Find ${\tt TALK.CHT}$ " button and show the program where the talk files are located.

- Once the program has found the Talk files you should test them to see that everything is working properly.
- If you want a break from the chatter you can click "Shut up". You can reactivate it later in the same dialog.

3D sound: If you have a sound system that supports surround, then you should switch this on for 3D sound effects.

Chatter (messages): During a game the program will chatter in written form, in the status bar at the bottom of the window (you can also open a special <u>chatter window</u> for them). As with the spoken "Talk", these remarks depend on the progress of the game and the last move played. They are, however, not identical to the spoken commentary.

Music/JSBach: If you switch "Music" on then at different times – e.g. when you start, when you win a game or a title in a rated game – you will hear a short piece of music. If you like Baroque music you can have the strains of Johann Sebastian Bach in the background while you play against the program.

Copy Talk files to hard disk

The "Talk" files consist of spoken remarks the program uses during the game. They are normally run from the CD. If you have enough hard disk space you can copy them there, using the following procedure:

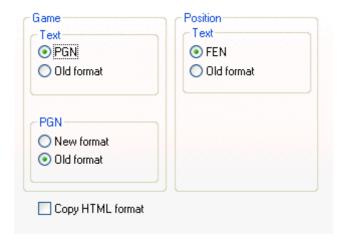
Create a directory anywhere on your hard disk for the Talk files. Call it, e.g., \TALK Copy the directories ECO and TALK (including their contents) from the program CD into that directory. Copy the two files TALK.CHT and ECOSND.CHT into the new directory (TALK). Remove the *write protection* from these two files (files on a CD are always write protected). This is

done by marking them in the explorer, then right-clicking them and selecting "Properties". Click off the attribute "Read-only".

In the menu Tools – Options – Multimedia click the "Find ${\tt TALK.CHT}$ " button. Show the program where the talk files are located.

Options - Clipboard

Menu: Tools - Options - Clipboard



In this dialog you can specify in which format you want games and positions to be stored in the Windows clipboard. From there they can be pasted (with Ctrl-V) into a text editor or paint program.

Game

Edit – Copy game (or Ctrl-C) copies the game notation into the Windows clipboard. You can specify whether it should be in <u>PGN</u> or standard, and if it is PGN whether it should be the old form, which is easier to read, or the newer version, which is better for some chess programs.

This is the standard format:

```
(60) RyCooder (2614) - Klosterfrau (2424) [B40]
```

Rated game, 3m + 0s Main Playing Hall, 17.02.2002 1.e4 c5 2.Nf3 e6 3.d4 cxd4 4.Nxd4 Qb6 5.c3 a6 6.Nd2 Qc7 7.f4 Qxf4 8.Nc4 Qxe4+ 9.Be2 Bc5 10.b4 Ba7 11.Nd6+ 1-0

This is a PGN header

[Event "Rated game, 3m + 0s"] [Site "Main Playing Hall"] [Date "2002.02.17"] [Round "?"] [White "RyCooder"] [Black "Klosterfrau"] [Result "1-0"] [ECO "B40"] [WhiteElo "2614"] [BlackElo "2424"] [PlyCount "21"]

This is the old PGN notation

e4 {1} c5 {0} 2. Nf3 {1} e6 {0} 3. d4 {2} cxd4 {1} 4. Nxd4 {0} Qb6 {0} 5. c3 {5} a6 {5} 6. Nd2 {3} Qc7 {7} 7. f4 {2} Qxf4 {5} 8. Nc4 {7} Qxe4+ {6} 9. Be2 {2} Bc5 {10} 10. b4 {2} Ba7 {2} 11. Nd6+ {Klosterfrau resigns (Lag: Av=0.9s, max=4s) 1} 1-0
 e4 {1} c5 {0} 2. Nxd4 {0} 4. Nxd4

This is the new PGN format

1. e4 {[%emt 0:00:01]} c5 {[%emt 0:00:00]} 2. Nf3 {[%emt 0:00:01]} e6 {[%emt 0:00:00]} 3. d4 {[%emt 0:00:02]} cxd4 {[%emt 0:00:01]} 4. Nxd4 {[%emt 0:00:00]} Qb6 {[%emt 0:00:00]} 5. c3 {[%emt 0:00:05]} a6 {[%emt 0:00:05]} 6. Nd2 {[%emt 0:00:03]} Qc7 {[%emt 0:00:07]} 7. f4 {[%emt 0:00:02]} Qxf4 {[%emt 0:00:05]} 8. Nc4 {[%emt 0:00:07]} Qxe4+ {[%emt 0:00:06]} 9. Be2 {[%emt 0:00:02]} Bc5 {[%emt 0:00:10]} 10. b4 {[%emt 0:00:02]} Ba7 {[%emt 0:00:02]} 11. Nd6+ {Klosterfrau resigns (Lag: Av=0.9s, max=4s) [%emt 0:00:01]} 1-0

Position/Text

The current position is copied into the clipboard either as FEN or in the traditional text description. Both are described in the <u>position setup</u>.

Copy HTML format

If you switch on this option then the program will generate HTML code when you press Ctrl-C in a game. This you can paste in a word processor, HTML editor or email client.

The program copies the game in many different fomats in the clipboard. These include plain text, PGN and RTF. In many applications there is a "Paste Special" which allows you to select the one you want. They are all present at the same time in the clipboard. "Copy HTML format" simply ensures that this is also available.

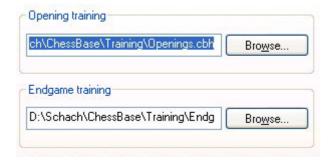
Below you can see what the HTML code looks like in the clipboard. The background colour is a pale yellow, the game header is in headline size three, and the moves are in a separate paragraph without line breaks. The output should look very nice

```
<HTML>
<HEAD>
<TITLE>ChessBase HTML output
<META NAME="GENERATOR" CONTENT="Fritz 9">
</HEAD>
<BODY BGCOLOR=#FFFDE8>
<P><H3>(141) Zukertort, Johannes Hermann - Blackburne, Joseph Henry [A13]
London, 1883
</h3>
</h3>
1.c4 e6 2.e3 Nf6 3.Nf3 b6 4.Be2 Bb7 5.0-0 d5 6.d4 Bd6 7.Nc3 0-0 8.b3 Nbd7 9.Bb2 Qe7 10.Nb5 Ne4
11.Nxd6 cxd6 12.Nd2 Ndf6 13.f3 Nxd2 14.Qxd2 dxc4 15.Bxc4 d5 16.Bd3 Rfc8 17.Rae1 Rc7 18.e4 Rac8
19.e5 Ne8 20.f4 g6 21.Re3 f5 22.exf6 Nxf6 23.f5 Ne4 24.Bxe4 dxe4 25.fxg6 Rc2 26.gxh7+ Kh8 27.d5+ e5
28.Qb4 R8c5 29.Rf8+ Kxh7 30.Qxe4+ Kg7 31.Bxe5+ Kxf8 32.Bg7+ Kg8 33.Qxe7 1-0

</BODY></hTML>
```

Options - Training

Tools - Options - Training



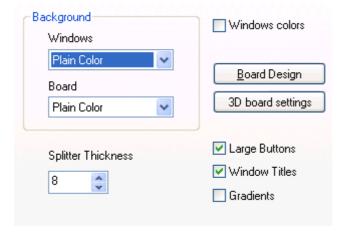
You can create your own databases for the openings and endgame training. These can be stored anywhere on your hard disk. But you must tell the program where they are.

Use the "Browse" button to find the files and click "OK" to save.

Options - Design

Menu: Tools - Options - Design

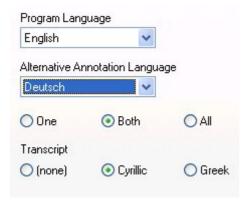
You can set a number of options that affect the appearance of the program.



- ▶ Background Windows: Choose different materials and colours for the background of the windows. "User BMP" allows you to use any picture for the windows.
- ▶ **Background Board:** Select a material, colour or picture ("User BMP") for the area around the board.
- Windows colours: Apply the windows background, colours, and character styles set in the Windows control panel. Users with sight impairment can use a setting with high contrast and large buttons. All settings will become fully active the next time you start the computer.
- **Board design:** Set the board colours. You can get directly to that screen by right-clicking the board and selecting "Board design".
- **3D board settings:** Change the settings of the 3D board.
- **Large buttons:** Display large buttons in the toolbars at the top of the screen.
- **Window titles:** This turns the window titles on or off (e.g. for low-resolution monitors).
- Gradients: If you have plain colour for the windows or board, "gradients" will texture them from light to dark.
- **Splitter thickness:** Set the width of the separation bar between the windows.

Language

Menu: Tools - Options - Language



You can set the language you want for the program, and for game commentary (when you enter text

commentary you can specify in which language you are annotating the game).

You can choose to display commentary in one, two or all languages. If a game contains no commentary in the languages you specify then the other languages are shown.

Options – Version

Menu: Tools - Options - Version



There are many different <u>chess engines</u> that can run under the program interface. Here you can set which of the engines will represent the program by default.

Tournament version

This switches to a special mode in which the area surrounding the board turns red when the program has made a move. This is useful as a signal for a human operator, especially when the program is playing against a human opponent and it is not acceptable to have a sound signal switched on. The option is only meaningful for such encounters, and not of relevance to normal users.

Log file: this causes the program to keep a log file of the game, so that everything can be checked meticulously after an important tournament games. The file can be printed out and given to the arbiter.

PGN: here you can specify a file for a PGN record of the game. It is updated every time a move is made, and contains the moves and the evaluation of the program. This function is useful for publishing games on the internet.

Operating time: you can specify how much time the program should deduct from its own thinking time in order to compensate for the lag of a human operator, who needs some time to register and enter the move of the opponent (and execute the computer moves on the official chessboard).

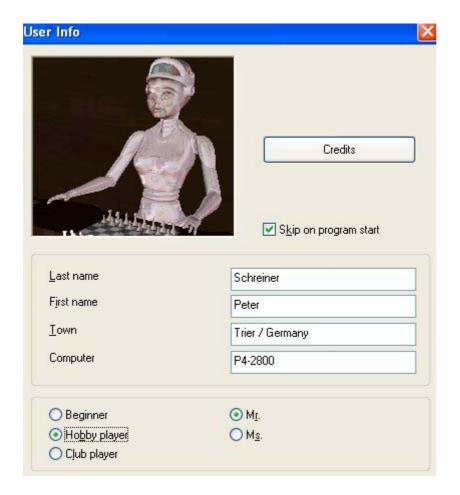
User Info

Menu: Tools - User info

When you start the program for the first time it will ask you for your full name, your town, and the name of your computer (e.g. "Pentium 400/128"). It also asks you whether you are a beginner, a hobby player, or a club player.

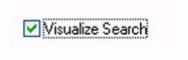
If you choose the first it will start in "Friend mode", set long algebraic notation, and put co-ordinates around the chessboard.

The user information is used when saving games and for the chatter messages on the screen. It can easily be changed by clicking "User info" in the "Tools" menu.



Option Engine

Menu: Tools - Options - Engine - Visualize Search



During the Infinite Analysis (ALT-F2) it uses graphics to display not only tactical manoeuvres, but also possible plans for both sides on the Board.

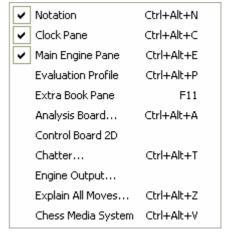
Program windows

Window "panes"

Menu: Window - Panes

This opens a submenu in which all the the program windows are listed. They are called "panes" because most are normally nested in the main program window that is currently being used.

The individual panes can be switched on or off. You can also close them directly by right-clicking them and selecting "Close".



Here's a description of each window element:

Notation The game notation, variations and commentary.

Clocks Chess clocks with optional engine logo.

Main Engine Provides information on the thought processes of the chess

engine during the game. It can include a variation board.

Evaluation profile Graphically displays the evaluation and times used in the course

of the game.

Extra Book pane A separate window for the openings book "tree" with full statistics

for each move (normally this is a rider in the notation pane).

Analysis Board Displays a separate board for analysis.

<u>Control board 3D</u> This produces a second board which you can use to follow the

game (especially if the main board is in 3D and hard to read).

Extra Book A separate window for the openings book "tree" with full statistics

for each move (normally this is a rider in the notation pane).

Chatter Displays the program's written remarks during the game.

Engine output Reserved for additional messages directly from the engine.

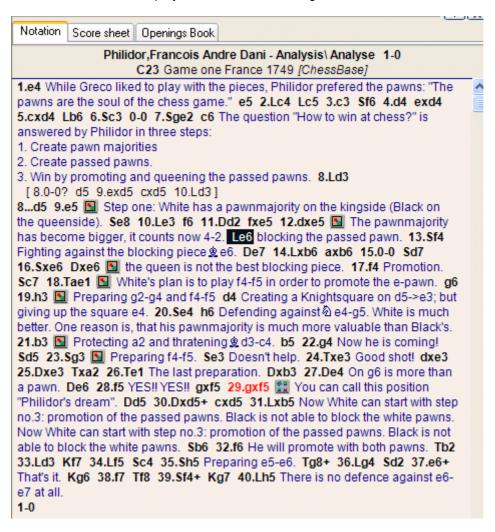
Explain all moves Explains all the moves in the current position.

<u>Chess Media System</u> A special audio and video system that allows you to see a player

or teach who moves the pieces on the graphic chessboard.

The Notation window

The notation window displays all the moves of the game.



There may be variations and commentary embedded. You can jump to any place in the game by simply clicking on the notation – the board will follow. The cursor keys can also be used to navigate the moves.

At the top of the notation window there is a tab for "Openings book". This allows you to browse through the openings book.

Score sheet notation

In regular games with no commentary you may find it better to use the score sheet style of notation. Click on the rider above the notation to select it. Note that this notation can be printed out very nicely using the menu *File – Print scoresheet*.

Notation Score sheet Openings Book		
☐ Philidor,Francois Andre Dani	Analysis\ A	nalyse
ournament <u>Game one France</u>	•	•
ound Date <u>1749</u>	F	Result <u>1-0</u>
co <u>C23: Bishop's Opening: 2Bc5</u>		
1_e4 e5	26 <i>Tel</i>	Dxb3
2 Lc4 Lc5	27 <i>De4</i>	De6
з <u>c3</u> Sfб	28 <i>_f</i> 5	gxf5
4 <u>d4 exd4</u>	29 <i>gxf</i> 5	Dd5
5 <u>cxd4 Lb6</u>	_ 30 <u>Dxd5+</u>	cxd5
6 <i>Sc3</i> 0-0	_ з1 <u>Lxb5</u>	Sb6
7 <u>Sge2 c6</u>	32 <u>f6</u>	Tb2
8 <i>Ld3 d5</i>	33 <u>Ld3</u>	<i>Kf</i> 7
9 <u>e5 Se8</u>	34 <u>Lf5</u>	Sc4
10 <u>Le3 fб</u>	35 <u>Sh5</u>	Tg8+
11 <u>Dd2fxe5</u>	_ 36 <i>Lg4</i>	Sd2
12 <u>dxe5</u> <u>Le6</u>	37 <u>e6</u> +	Kg6
13 <u>Sf4 De7</u>		<i>Tf</i> 8
14 <u>Lxb6 axb6</u>		Kg7
15 <u>0-0 Sd7</u>	_ 40 <i>Lh5</i>	
16 <u>Sxeб Dxeб</u>	41	
17 <u>f4 Sc7</u>	42	
18 <u>Tael</u> g6	_ 43	
19 <u>h3 d4</u>	44	
20 <u>Se4 h6</u>	_ 45	
21 <u>b3</u> <u>b5</u>	_ 46	
22 <u>g4</u> Sd5		
23 <u>Sg3</u> <u>Se3</u>	48	
24 <u>Txe3 dxe3</u>	49	
25 Dxe3 Txa2	50	

Some users may encounter problems with the screen notation and printing. Specifically the chess symbols are not correct.

- ▶ Cause: The program uses special TrueType fonts for the chess notation and the board pieces. These may sometimes not be installed properly together with the program. This is especially the case if you do not have administration right to install fonts on the system.
- **Solution:** Manually install the fonts using the Windows control panel. All the chess fonts are to be found in the directory \FONTS on your program DVD.

The book window

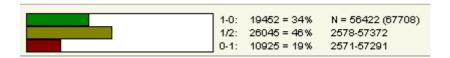
In the initial phase of a game the program plays out of an "openings book". This can consist of millions of openings positions, and for each of these the program has full information on which moves were played, how often, and with what results. The program stores its own experience with openings variations it has played. It learns from success and defeat.

You can consult the openings book by clicking on the "Openings book" tab at the top of the notation window (if an openings book is not loaded, click the button and select one from your hard disk).

Notation Score	sheet Oper	nings	Book				
A	N	%	Av	Perf	Fact	Prob	[%]
Fritz9.ctg	143400	57	2575	2621			
1.e4	59931	57	2569	2620	0	36.7	37.3
1.d4	56422	58	2578	2627	0	36.3	37.0
1.Sf3	13429	57	2581	2628	-1*	12.6	12.9
1.c4	12298	58	2585	2629	-1*	12.3	12.6
1.g3?	897	55	2571	2616	0	1.5	0
1.b3?	211	52	2566	2586	0	0.3	0
1.f4?	99	42	2563	2529	0	0	0
1.Sc3?	45	46	2533	2581	0	0	0
1.b4?	28	43	2571	2543	0	0	0
1.e3?	16	50	2574	2587	0	0	0
1.d3?	10	40	2570	2546	0	0	0
1.a3?	9	28	2559	2448	0	0	0
1.c3?	4	25	2548	2450	0	0	0
1.g4?	1	50	-	-	0	0	0
1.a4?	0		-	-	0	0	0

This is what you see in the openings book tree:

- **Moves:** (Tree icon) Sometimes a move will appear in grey, which means that it was never played, but leads to a position that results from some other line.
- N: (N) The header displays the total number of games which led to the current board position. The N column displays the number of games in which each move was executed.
- %: Percentage score achieved by the move, always from the point of view of the colour to play. If the number of games is low, the percentage is given in grey because it does not have great statistical significance.
- Av: Elo average of the players of the move. If only a small percentage of the players had a rating, then the number is given in grey.
- ▶ **Perf**: Elo performance of the move. This is the rating a player would have achieved in a fictitious tournament, playing the move in all his games.
- ▶ Fact: The factor or "weights" allocated to each move control the probability with which it will choose the move in a game. The value can range between −125 to +125. The values are initially set to zero, but may change when the program actually plays games in the individual variations. You could say that the program is *learning from experience*. The weights can be manually modified by right-clicking a move and selecting "Change weight". To reset all weights click Edit − Openings book − Reset weights. After that, the program will use only the purely statistical information to select its moves.
- ▶ **Prob** and [%]: The first value is the purely statistical probability of the move, based on the number of times it was played and the results achieved in the games that went into the book. This is the probability of the move being played by the program as long as the weights have not been changed either manually or by automatic learning. The value on the right [%] is the practical probability of the program playing the move. This is a product of the statistical evaluation and the weights. If you change the latter you can see how the [%] value (but not the "Prob") changes. In *Book options* you can determine how much the weights influence the probability of play.



At the bottom of the Openings Book window there is a graphic display of the percentage wins, losses and draws that were achieved with the highlighted move.

How to navigate the tree

- Use the up/down cursor keys to move the headlight bar up and down.
- Use the right/left keys to move forward and backwards in the variations.
- Click a move with the mouse to move forwards in a variation.
- ▶ Right-click a move to annotate it.
- In the same menu you can exclude a move from tournament games. The move appears in red. Repeat the action to make it playable again.
- Press F11 to open and close the tree display window.

Chess clocks

Right-click the clock window to select

Chess players use a double clock to record the times taken by both sides. The clock on the left records White's time, the one on the right records Black's time.



The double digital clock shows the total time at the top and the time for the last move below.



You can right-click the clock window and switch to an analog clock. You can also add an engine logo.



There is also a photo-realistic "Garde" chess clock. You can zoom in and out, and also press the left mouse button to tilt and swivel it.



Note: You can set the time controls for "Blitz" or "Long games" by right-clicking the chess clocks.

Engine window

This program provides you a wealth of information on the engine thought processes during the course of a game. This is the "search information" and reflects what the computer has found while calculating its next move.



- On the top left you can see which chess engine is currently calculating the moves (the actual name will be displayed). Right-clicking the engine name will allow you to switch engines.
- ▶ The move it is calculating is 24...Kf8, and this is the first of 20 legal moves.
- ▶ The "Stop/Go" button allows you to stop and then restart the calculation, or force a move.

- ▶ With the "+" and "-" buttons you can increase or decrease the number of lines that are calculated in parallel (these buttons disappear during a regular game and are only available in analysis mode).
- In the second line there is a lamp which turns red when the engine finds something dramatic (i.e. when the value suddenly rises or falls dramatically). An arrow pointing up or down denotes a "fail high" or "fail low", which simply means that the computer has discovered something good or bad in the position but doesn't yet know what it is.
- The number to the right of the lamp gives the position value, above +-1.98. The evaluation is expressed in pawn units, always from the point of view of White (i.e. +-1.98 is good for Black). A value of 3.00 pawns would mean that White is a piece up either a bishop or a knight, which are both equivalent to about three pawns. Rooks are worth five and the queen about nine pawns. If the values deviate from whole numbers this is the result of additional positional considerations (mobility, deployment of pieces, king safety, pawn structure, etc.). In addition to the precise pawn values, the evaluation is also given in standard chess symbols: +- means White is winning, -+ means Black is winning, = means the position is drawish.
- ▶ The search depth tells you how many moves deep the search has progressed. The value is in "ply" or half-moves. The first number gives you the "brute force" depth, the second is the depth to which certain critical lines have been investigated. The value is in "ply" or half-moves. For instance a display of "depth = 12/30" means that the program has looked at every continuation to a depth of 12 ply (six moves), while some promising or dangerous continuations are being examined up to a depth of 30 ply.
- After it has played a move, the chess engine shows you which move it expects you to choose (in the field after the depth field).
- ▶ Finally you can see the speed at which it is running: "634kN/s" means the program is generating and evaluating 634,000 positions per second ("kilo nodes per second"). Right-click this display if you want to see the total number of positions instead.
- In the section below the search information you see the "principle variation", i.e. the best continuation the program has found so far. Together with the search information the total number of positions is also given. In the above example the engine has looked at 4.061 million positions to come up with the third line. You can right-click the display and select more or less information, and decide whether the history of the search should be scrolled. You can also insert a small "variation board" on which you can play through the main line the program is considering.

Right-click menu in the engine window

If you right-click the engine window, you get a menu with a number of functions or options to set.

Some of the items will only be

Some of the items will only be available when the program is in <u>Analysis mode</u> (Alt-F2).

Engine	
Lock Engine	Strg+Alt+I
Increase number of lines	+
Decrease number of lines	-
Next Best	Υ
Analyse threat	X
Clip analysis	
Copy to notation	
Scroll main line	
Variation Board	
Choose Font	
Properties	
Close	

- Engine: This allows you to switch engines.
- **Lock Engine:** Normally, in analysis mode, the engine automatically follows the board. However,

- you can "lock" it to a particular position and then move around the game without the engine following. Click again to unlock.
- ▶ Increase/Decrease lines: Many engines can calculate more than one line simultaneously. Press "+" or "-", or click the "+" or "-" buttons at the top of the search window to increase or decrease the number of lines it is considering.
- ▶ Next best: When it is calculating multiple lines the program is sharing it resources for different moves. If you click "next best" or press Y, it will discard the best move it has found so far and devote its full attention (processing power) to the next best move. This function is not available in all engines.
- ▶ Threat: This function shows you the immediate threat (i.e., what the opponent could do if no defensive move is made. The threat is always calculated on the level currently set).
- ▶ **Clip analysis:** Copies the current analysis into the Windows clipboard, from where you can insert it into a text processor.
- **Copy to notation**: Copies the analysis into the game notation.
- **Scroll main line:** The program will normally display the entire history of the search (i.e., all lines it has checked so far). You can switch this off and watch only the latest line.
- **Variation board:** This inserts a small board on which you can play through the main line.
- ▶ **Choose font:** Allows you to set the font size for the chess notation.
- Properties: This allows you to adjust the engine parameters.
- Close: Closes the engine window.

The Kibitzer

Menu: Engine - Add Kibitzer (Ctrl-K)

A "Kibitzer" is a person who watches a game in progress without making any moves himself. A kibitzer is also notorious for giving advice and knowing everything better.

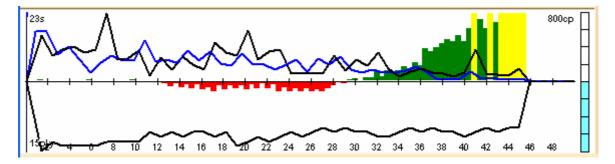
You can add a kibitzer by selecting an engine in the select box that appears. A new engine window appears in which it can work parallel to the one already loaded. You can use one or more kibitzers (up to six) to help you in your game against the primary engine, or you can use them for a second opinion on a position you are analysing. Remember that they will be sharing the processor power, so the quality of analysis sinks with every added kibitzer.

Click "Remove kibitzer" or "Remove all kibitzers" to close the additional engine. You can also right-click a kibitzer and "Close" it.

Kibitzer cannot be combined with the "Explain all moves" window.

Evaluation profile

The evaluation profile graphically displays the evaluation and times in the course of the game.



This is how to read the evaluation profile:

Bar above line: advantage for White

Bar below line: advantage for Black

Green bar: advantage for opponent Red bar: advantage for the computer

Yellow bar: goes beyond the scale of the current window. The scale is given in "centi-pawns" = 1/100ths of a pawn.

Superimposed in the evaluation profile is the time each side has used.

Blue graph: time used by White

Black graph: time used by Black

The scale is in seconds.

Additional features

- ▶ The graph below the horizontal axis gives the search depth of the program.
- On the right there is a "thermometer" showing the evaluation graphically.
- You can click on the evaluation profile to jump to that position in the game. This is useful if you want to quickly go to the position in the games where the tables turned. There is a little blue pointer which always shows you where you are in the game.
- You can right-click to hide/show the time and/or the evaluation profile.
- Right-click on Zoom to enlarge the display.

Chatter window

Menu: Window - Panes - Chatter



During a game the program will also chatter in written form, ("Don't you think that's a wee bit daring?"). This is normally displayed in the status bar at the bottom of the screen, but you can give it a separate window where it is easier to read. As with the spoken "Talk", these remarks depend on the progress of the game and the last move played.

Here are some examples from well over a thousand that might be used:

[&]quot;Another game? Sure, why not. Why not indeed."

[&]quot;Normally I'd fight you to the death, but in this case I'll make an exception. I accept the draw."

[&]quot;I can't believe it. How could anyone play so badly! I resign. Congratulations."

[&]quot;Damnation, a check. You know how I hate that, Frederic!"

[&]quot;Outplayed by a human! How very, very embarrassing!"

[&]quot;I believe you have taken back three moves now."

[&]quot;Wooosh, right across the board!"

Move entry

Chess notation

One of the most important factors in the advancement of chess knowledge was the invention of an efficient notation to describe moves. It is done with the help of piece names, eight file letters (a - h) and eight rank numbers (1 - 8).

To record a move you need the following:

- A move number. Move 1 is a move by White and then one by Black. Each of the components is called a "ply" or "half-move".
- ▶ A piece letter (for king, queen, rook, bishop and knight). You can also use "figurines", small images of the pieces.
- Co-ordinates designating where the piece moves to.

The piece names are

King	K
Queen	Q
Rook	R
Bishop	В
Knight	N

The initial for pawns is omitted, only the move co-ordinates are given.

- In **long algebraic notation** you use the piece letter, followed by the start and destination squares. Example: 1.Ng1-f3.
- In **short algebraic notation** you use only the destination square whenever possible. Example: 1.Nf3, because only the knight on g1 can move to f3. If there is an ambiguity, you have to supply an additional letter or number. Example: 5.Nbd2 if two knights can move to d2, one from b1 and one from f3. If the knights are on b1 and b3 you would write N1d2.
- Pawn moves are given without a letter for the pawn. Example: 1.d2-d4 or 1.d4
- Captures are denoted with an "x". Example: 3.Nf3xd4 or 3.Nxd4.
- Checks are marked with a "+", checkmate is "#".

You can switch between long and short algebraic notation in the menu Tools – Options – Notation.

Entering moves with single click



In blitz games against the computer you may have a winning endgame, but you cannot enter the moves quickly enough. To avoid this unsatisfactory situation, we have implemented a special single click entry mode:

If you click a piece that has only one legal move, then it is immediately executed.

- If you click on a piece that has more than one legal move, but if one of these captures a piece that has just moved, then that move is automatically executed (typical recapture sequence). Otherwise you must use a second click to show the program which square the piece must move to.
- If you click on a square to which only one piece can move, then the program executes that move. If more than one piece can move to the square, then you must use a second click to show the program which piece except if one of the pieces has executed one of the last two moves. If that is the case, then this piece is automatically chosen. This allows you, for instance, to give a series of checks very rapidly.
- If you click the squares g1 or g8 and short castling is legal, then it is executed.

Dropping

There is a special technique called *"dropping"*. This entails picking up a piece while your opponent is still thinking and holding it over the destination square. As soon as the opponent's move comes you let go of your piece, using practically no time on your clock. It is a slightly dangerous technique – if the opponent plays something unexpected you may let go the piece and then face disaster. Still dropping is used extensively in fast games on the chess server.

Premove

While your opponent is thinking you can already enter one or more moves, especially when they are obvious. It is marked with a green arrow and immediately executed when it is your turn. This saves a lot of time and is especially useful in endgames, where you might pre-enter an entire series like a2-a4-a5-a6-a7-a8. Note that right-clicking the board will delete clear all pre-moves.

Move Input

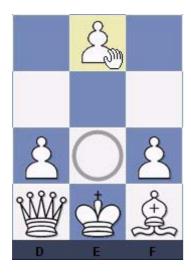
When entering moves on the 2D board the source and destination squares are clearly marked in the "mouseover" mode.

What does "mouseover" mean? For instance, if you move the mouse cursor over the program's buttons a small text box with information is displayed. Mouseover offers additional information which is relevant to the position where the cursor is.

The following examples show the meaning of Mouseover while entering a move.



White selects the pawn on e2 and moves it while holding down the mouse button. The source field e2 is marked with a circle. When the mouse moves over the square e3 the square is coloured.



If White continues to move the pawn to the square e4, this potential destination field is then coloured. The program is using graphical aids to help avoid illegal moves on the chess board.

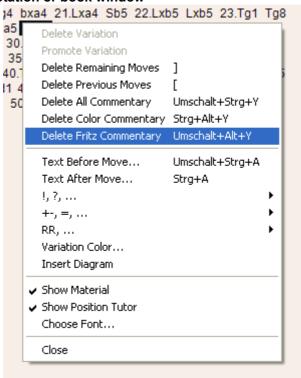
Entering moves on the keyboard

Because of the beautiful graphical interface of the program, you will probably want to enter moves using the mouse. There is, however, an interesting alternative. You can type in moves on the keyboard, a facility some experienced chessplayers might prefer.

To enter moves on the keyboard type in the start and destination square, e.g. g1f3.

Edit and annotate game

Right-click the game notation or book window



There are a number of functions and annotation tools for you to use. Remember that all changes are made in memory only. You must "save" or "replace" the game, as described in the previous sections, if you want to store them on disk.

Delete variation

This removes a line (and all its sublines) from the game. It applies to the line in which the notation cursor is currently located.

Promote variation

This raises the current variation to the next-higher level, making its parent line the subline instead.

Delete previous/remaining moves

Removes all moves before or after the current board position. If you delete previous moves, the program automatically inserts a position description so it can load the game fragment later.

Delete all commentary

Removes all variations and text commentary from the game.

Delete color commentary

Removes all coloured arrows and squares from the game.

Delete Fritz commentary

This deletes the search information the program sometimes inserts into the game (when you tell it to do so).

Text before/after move

Both functions give you a text editor in which you can type in commentary, which can be inserted before or after a move. The tabs at the top of the editor allow you to specify the language(s) to use for annotating the game. In the menu "Tools" – "Options" – "Language", you can specify which language(s) should be displayed when you load a game.

This inserts chess commentary symbols (e.g., "!!" = an excellent move, "??" = a blunder) or position evaluation (e.g., "+-" = White is winning, "-/+" = Black is better), which appears in the notation of the game and is saved with the moves. RR commentary symbols appear before a move (e.g., "Better is" or "With the idea").

Variation colour

This allows you to change the colour of individual variations, (e.g., to mark special lines or keep your own analysis in a special colour).

Insert diagram

Marks a position for a diagram in the printout. You can also mark it by pressing Ctrl-A (insert text after move) or Ctrl-D. When you print out the game a diagram will appear in this position.

Show material

Inserts a material balance display at the bottom of the notation window. In our example White has a knight for a bishop and pawn.

Takes back material

Black has no isolated pawn any more on: a5 White should play on the king side

Black should play on the queen side





Show position tutor

Another useful coaching function is switched on by right-clicking the notation window and selecting "Show position tutor". This fires up a special chess engine which has a lot of chess knowledge. It generates a brief strategic description, in plain text, of the current board position.

Black has a slightly cramped position

Choose font

Allows you to set the font face and size for the chess notation. Be sure to select one that begins with "Figurine..." so that the chess figurines and commentary symbols are displayed correctly.

Graphic commentary

The program uses coloured arrows and squares to illustrate tactical points and make strategic themes and plans more clear. You can manually enter these using a combination of mouse and keyboard. Press the Alt key and click a square or draw a line from one square to another. This will give you a

green square or arrow. Alt+Ctrl does the same in yellow, use Alt+Shift for red. Clicking on the area around the board will remove the arrows and colored squares. All of this is great for chess lectures.

Keyboard

Entering moves on the keyboard

Because of the beautiful graphical interface of the program, you will probably want to enter moves using the mouse. There is, however, an interesting alternative. You can type in moves on the keyboard, a facility some experienced chessplayers might prefer.

To enter moves on the keyboard type in the start and destination square, e.g. g1f3.

Keyboard input for commentary symbols

In order to enter chess commentary symbols into your text annotations, you must use special keyboard shortcuts. If they do not work properly. it means that the TrueType font "Figurine..." has not been installed correctly. In that case you may not be able to see the left-most column in the table below.

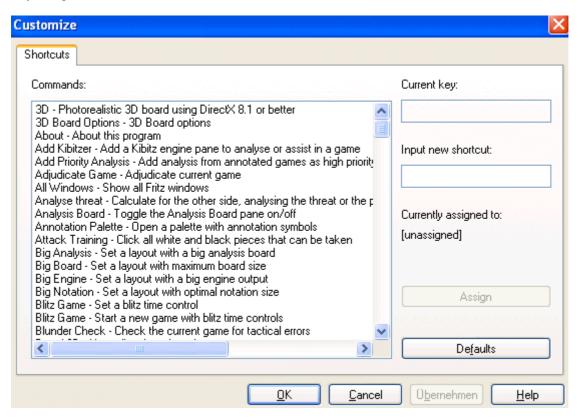
Char.	Keyboard	Meaning	
₾	Ctrl-K	King	
₩	Ctrl-Q	Queen	
4	Ctrl-N	Knight	
<u>\$</u>	Ctrl-B	Biahop	
Ħ	Ctrl-R	Rook	
Å	Ctrl-P	Pawn	
\rightarrow	Ctrl-A	with attack	
\uparrow	Ctrl-I	with initiative	
\rightleftharpoons	Shift-Ctrl-C	with counterplay	
Δ	Ctrl-Alt-I	with the idea	
0	Ctrl-S	space advantage	
\oplus	Ctrl-Z	time, time trouble	
C	Ctrl-Alt-D	development advantage	
\Leftrightarrow	Ctrl-L	file	
7	Shift-Ctrl-D	diagonal	
\odot	Ctrl-Alt-Z	zugzwang	
\blacksquare	Ctrl-Alt-C	centre	
\times	Shift-Ctrl-W	weak point	
	Ctrl-O	only move	
L	Ctrl-W	with	
	Ctrl-Alt-W	without	
«	Ctrl-Alt-Q	queenside	
>>	Ctrl-Alt-K	kingside	
\perp	Ctrl-E	endgame	
ⅎ	Ctrl-Alt-P	pair of bishops	
₽	Ctrl-Alt-O	bishops of opposite colour	
•	Ctrl-Alt-E	bishops of same colour	
<u>&</u>	Ctrl-M	with compensation	
<u>±</u>	Ctrl-1	White is better	
<u>±</u>	Ctrl-2	White is slightly better	
∞ _	Ctrl-3	unclear	
=	Ctrl-4	Black is slightly better	
\mp	Ctrl-5	Black is better	
	Ctrl-Alt-B	better is	
1/2	Ctrl-Alt-R	draw	
ð	Shift-Ctrl-P	passed pawn	
0	Ctrl	isolated pawn	

Customize keyboard

Menu: Tools - Customize...

There are many shortcuts that make the operation of the program quicker and more effective. For instance, Ctrl-N starts a new game, Ctrl-F flips the board, and pressing the Spacebar forces the computer to make a move.

You can customize the keyboard and assign your own shortcuts, even for functions that do not have any assigned to them.



All commands are listed on the left. You can select one and give it a keyboard shortcut by simply pressing the corresponding keys in the input window on the right.

If the function already has a shortcut, this will be displayed under "Current key".

Help during the game

The chess coach

The chess coach helps you during a game. There are three basic coach functions, all to be found in the **Help menu**.



You can ask for a https://example.com/html/
https://example.com/html/
html/
html

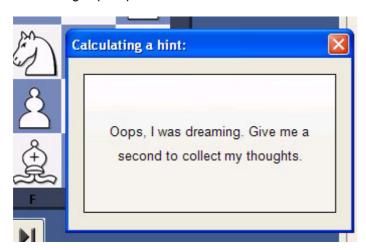


- ▶ The coach also gives move suggestions.
- ▶ If you make a blunder or a poor move, the coach appears and offers to help. You can switch this function on and off in the "Help" menu "Coach is watching".

<u>Hint</u>

Menu: Help - Hint (you can also press F2)

"Hint" brings up a special window with extensive advice on the current position.



You can click buttons to find out which enemy pieces are attacking your pieces, which of your pieces are under attack, and which are undefended. The engine's "plan" shows you the threat you are facing from the opponent, and "Suggestion" gives a constructive suggestion on what you should play next.

The quality of the hint assistance depends on the search depth, which you can adjust in the "Game" options.

Suggestion

Menu: Help - Suggestion (or press "?")

The program will do a quick check and then suggest a move for you. The move is displayed as an arrow on the chessboard.



The quality of the hint asssistance depends on the search depth, which you can adjust in the "Game" options.

Explain all moves

Menu Help - Explain all moves.

This will opens a new window with a list of all legal moves in the current position, sorted according to their value. The best move is listed first. The program will periodically recompile the list, searching one move deeper in the process.

```
-0.17 depth=8

26.Tc1 Is good
26.Txa5 An exchange
26.Tgg1 The rook likes it better here
26.Dd1 Overprotects a1
26.De1 Overprotects a1
26.Df1 A much better square for the queen
26.Tb1 Is fine
26.Tag1 Is ok
26.Tf1 Is fine
26.Tf1 Is fine
26.Tf1 The rook is less active here
26.Te1 The rook is less active here
```

For each move there is a short characterisation. If you click any of the moves, the principal variation that would follow displays at the top of the screen, along with the resulting evaluation. Coloured arrows and squares on the board (to illustrate the point) may appear.

You can double-click a move to execute it on the board.

Click "Explain all moves" again to get rid of the display – or right-click and "close" the window.

Position tutor

Right click notation window - "Show position tutor"

This starts a special chess engine which has a lot of chess knowledge. It generates a brief strategic description, in plain text, of the current board position. The information is displayed at the bottom of the notation window.

Black has a slightly cramped position

Dynamic Hints

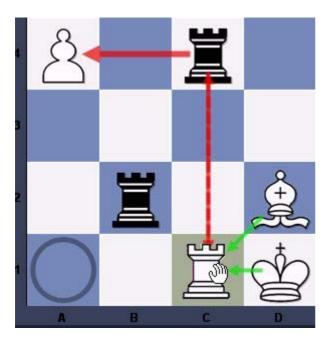
When moves are made the balance of power on the board can be shown with arrows. This can be selected by the menu *Help - Dynamic Hints*.



Possibilites for attack and defence manoeuvers are shown for every square when you move the mouse cursor over it. This *"mouseover"* effect gives assistance in understanding the balance of power on the board.

This information is shown in two colours. Green arrows are defensive manoeuvers, red arrows are attacks. There are further differences shown by the type of line. A solid line shows a direct attack or defence. Dotted lines show a possible attack or defence that depends on the next move made.

If a red line is drawn thicker it is a move that will win material.

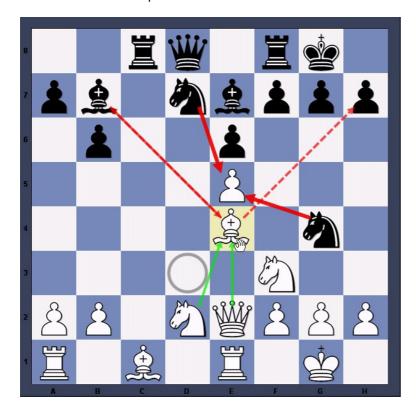


In this example the player has moved his rook from a1 (marked with a circle) to c1, and he has left his mouse cursor hovering over c1. The green arrows from the bishop and the king show that the rook on c1 is sufficiently defended.

The dotted line from c1 to c4 shows that White has the possibility of capturing the black rook if he does not make a move to avoid it.

The thick red arrow from c4 to a4 shows that the pawn can be captured immediately, winning material for Black.

Here is another example with a "full board":



White has moved his bishop from d3 to e4 without releasing the left mouse button. d3 is marked by a circle, e4 is marked by a coloured background.

The green arrows show that the knight on d2 and the queen on e2 are defending the bishop..

The dotted red line between b7 and e4 show capture possibilities. Since both bishops have a chance to capture each other the line has two arrow heads.

There is also a dotted red line from e4 to h7, showing that the bishop has the chance to capture the pawn in the next move.

There are thick red arrows from d7 and g4 to e5. This shows that after the white bishop has been dropped on e4 (by releasing the mouse button) either one of the knights can capture the pawn.

This means that the dynamic tips can be an effective help <u>during a move</u> by showing what consequences there will be on the board.

Opening Hints

The menu *Help -> Opening Hints* can be used to display useful information in the beginning of a chess game. This phase is usually called the "opening".

Note: This is only possible if an openings book has been loaded.



If this option is selected during the opening, the program uses green arrows to show the most important moves in the position.



This example shows the board after the first moves of the French defence, 1.e4 e6 2.d4 d5. It is now White's turn, and the green arrows show four plausible moves he can make.

Note: The arrows are not based on calculations made by the program, but on data read from the openings book. For this reason the *Opening Hints* can only be displayed when an openings book <u>has been loaded</u>.

Threat

Menu: Help - Threat (or Shift-T)

Displays the immediate threat, (i.e., what the opponent could do if no defensive move is made). The threat is displayed as a red arrow on the board.

Please note: a kibitzer can be set to display the threat in every position that occurs on the board. Right-click the engine window of the kibitzer and select "Threat".

Threatened squares

Menu: Help - Threatened squares



Displays the status of each piece on the board.

- A *red* square means that the piece is under attack and not sufficiently defended, or that it is being attacked by a piece of lesser value. This is usually a pretty serious danger signal and means you must take active measures to avoid losing a piece.
- Yellow means that the piece is under attack, but it is just sufficiently defended. You must be careful about removing any defending piece.
- Green means the piece has enemy contact but is well defended. Usually it is okay to remove a defending piece.

Help with your moves

With the "threatened squares" function switched on, the program will, in addition, help you with the move you are about to make. When you click a piece, all squares to which it can legally move are displayed in the corresponding colour codes:

- red for danger squares on which you will almost certainly lose material,
- yellow for contested squares, and
- green for safe ones.

Spy

Menu: Help - Spy

In "spy" mode the program uses a red arrow to display what it is planning to do on its next move. This feature helps beginners and intermediate players avoid dropping pieces or getting thrashed quickly. It is highly recommended as a training tool. Games played in spy mode tend to achieve a higher level of play.

The Kibitzer

Menu: Engine - Add Kibitzer (Ctrl-K)

A "Kibitzer" is a person who watches a game in progress without making any moves himself. A kibitzer is also notorious for giving advice and knowing everything better.

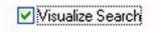
You can add a kibitzer by selecting an engine in the select box that appears. A new engine window appears in which it can work parallel to the one already loaded. You can use one or more kibitzers (up to six) to help you in your game against the primary engine, or you can use them for a second opinion on a position you are analysing. Remember that they will be sharing the processor power, so the quality of analysis sinks with every added kibitzer.

Click "Remove kibitzer" or "Remove all kibitzers" to close the additional engine. You can also right-click a kibitzer and "Close" it.

Kibitzer cannot be combined with the "Explain all moves" window.

Visualize Search

Menu: Tools - Options - Engine - Visualize Search



While Fritz is thinking about a move, either during a game or during game analysis, the program gives detailed information in the engine window, for example the evaluation, the search depth and the best continuation line.

The variation board offers a display of the best line, which can be played through in the variation board.

The option "Visualize Search" goes one step further. During the Infinite Analysis (ALT-F2) it uses graphics to display not only tactical manoeuvres, but also possible plans for both sides.



This example shows how the function works.

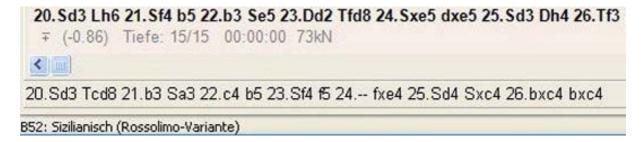
The orange arrows show the plans that the progam prefers for White, the blue arrows show the plans that have been calculated for Black.

Possible destination squares are coloured green if they play a special role in the tactical manoeuvres. In the above example the square f5 is very important, and so the move f7-f5 is displayed as Black's main plan.

Note: This function is currently only available for the Fritz engine, and is not supported by other engines..

It is recommendable to give the program more time to think in critical positions. The more time Fritz has, the more informative his resuts will be.

Below the engine window the currently examined variation line is always displayed.



In this example the Fritz engine is thinking about how to react if 20.Nd3 is answered by 20...Rcd8, even though the best line is 20...Bh6. The advantage of this display is that it is kept up to date even if the best line remains unchanged for a long time.

Levels of skill

Blitz games

In blitz chess all the moves of the game must be played within a certain time, which is usually given in minutes.



In addition, you can give a bonus (in seconds) for each move. This is added to the time allocation as soon as the move is executed. It prevents one side from winning a game purely on the basis of the other side running out of time.

You can also give the human opponent a time advantage – for the entire game, or for each move. This can compensate for move entry time, or be a handicap which allows you to think longer than the computer.

▶ **Note:** You can set the time controls by right-clicking the <u>chess clocks</u> and selecting either "Blitz" or "Long game".

Long (tournament) games

Menu: Game - Levels - Long games



In tournament chess you are required to execute a certain number of moves in a given time. Usually the game has a number of phases, e.g., two hours for the first 40 moves, one hour for the next 20, and 30 minutes for the rest of the game (a very common tournament control).

You can use "Long game" to adjust the time allocations or number of moves per phase. You can also select one of the common levels predefined in the dialog box ("Defaults"). If you set the time of the second and third time controls to zero, they are ignored as the first time control is always used.

Overstepping each of these time controls means you lose the game. If you use less than the specified time in any phase, it is added to the next phase.

Sparring

Menu: Game - Levels - Sparring

"Sparring" is an excellent training level for moderately advanced players.



The program plays a reasonably strong game, but at the same time makes tactical errors. If the

program finds a move that allows the opponent to gain a tactical advantage in a clever way, it will play that move. It is a very realistic human style, the kind you encounter in a chess club.

You can select the grade of difficulty of the tactics that will be offered. *Very easy* is for players with an Elo of around 1400 and usually involves finding forks and two move combinations. *Normal* is meant for players between 1700 and 1900, and *very hard* is for players from 1900 all the way up to GMs.

When you use the "Sparring" mode, there is a choice from very easy to really hard. You can also specify whether the program should "point out wins" (i.e., flash a red light below the board when there is a good move available for you).



Alternately, the program will not warn you, but the message "you missed something" appears in the notation. This allows you to play through the game later and see where you missed a chance. "Sparring" is good for moderately advanced players to top club players. The chess clock only records the time in sparring mode, and has no further relevance, so you can think for as long as you like.

Friend mode

Menu: Game - Levels - Friend mode



In this mode the program automatically adjusts its level of play to match that of the opponent. When you start, it asks you for your "Handicap". This is similar to golf and is measured in 100ths of a pawn. If you give a high value (e.g., 200 = two pawns) the program will reduce its strength considerably.

Afterwards the program will adjust your handicap to reflect your real playing strength. The smaller your handicap, the stronger you are. Top players will indeed achieve a negative handicap. If after about six games the program sets your handicap to below -400 (= minus four pawns), you are advised to practice elementary chess tactics and to concentrate on avoiding material loss. You should consider using the coach functions "Threatened squares" and "Show threat".

The "Friend mode" can be used by beginners and strong players alike. The chess clock only records the time and has no further relevance, so you can think for as long as you like.

Handicap and Fun

Menu: Games - Levels - Handicap and fun

On a fast computer, this program is stronger than 99.99% of all chess players. If you are a beginner or an occasional player this would normally mean merciless beatings in every single game. That can be

pretty frustrating, and indeed put you off chess.

For this reason, there are a number of predefined handicap levels in which you can reduce the playing strength and modify the style of of the engine in many different ways. By moving the sliders you can increase or decrease the base strength, force king attacks and piece trading, influence the direction of play, etc.



- ▶ **Predefined opponents:** You can pick from a list of pretty weird opponents (moron, patzer, drunk, fraidy cat, desperado, etc.). Each has his own personality and displays a different kind of strategic blindness.
- ▶ Playing strength: You can set a base playing strength in Elo rating points. Unfortunately, it is not possible to go down as far as would sometimes be necessary. You can, however, load the Fritz 1.20 engine which is weaker than all the other engines.
- ▶ **King's attack:** This determines whether the program will be primarily concerned with attacking your king, even if it means neglecting its own safety.
- Piece trading: Should the program trade pieces at every opportunity?
- ▶ Playing direction: Should it keep moving forward or keep retreating its pieces?
- King and queenside: The pieces are moved towards the king or queen side of the board.
- ▶ **King's defence:** Should the program be concerned about its king's safety, or should it simply ignore this?
- ▶ Piece play: You can specify which pieces the program should use. The slider at the bottom

determines how often the program should move these pieces.

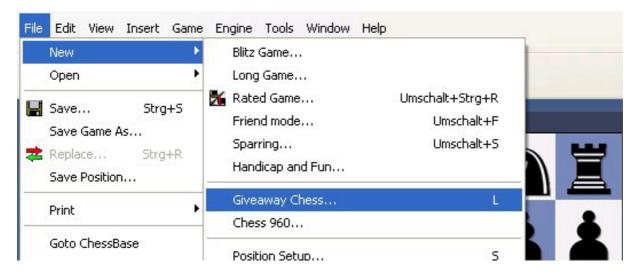
▶ Blunder range: You can specify how much material the program should be willing to sacrifice for the opportunity to fulfil the other criteria. For instance, if you have set maximum piece play with the queen and a blunder range of 1.0, this means that the program will sometimes sacrifice a pawn in order to be able to move the queen. A setting of 3.0 or more will make it sacrifice a whole piece for the privilege.

The chess clock only records the time and has no further relevance, so you can think for as long as you like.

Giveaway chess

Menu: Games - Levels - Giveaway chess

Also known as Losing Chess, Suicide Chess, Killer Chess or Take-all Chess, this is one of the best-known variants of the game. The rules are simply: capturing is compulsory. If a player can capture in more than one way he can choose any of the capture moves. The king has no special role and can be taken just like any other piece. There is no check, checkmate or castling. Pawns may also promote to Kings.



The first player to lose all his pieces wins the game. If a player is stalemated he also wins.

Full rules

The rules of Giveaway chess are the same as those of chess except for the following additions:

- Capturing is compulsory.
- When a player can capture, but has different choices to capture a piece, they may choose among them.
- The king plays no special role in the game, i.e,
 - it can be captured, just like any other piece;
 - there is no check or checkmate:
 - there is no castling;
 - pawns may also promote to king.

Advice

In Giveaway chess there are well-known long sequences of moves that win. Experts have proved that certain opening moves lose by force, e.g. 1.b4, 1.d3, 1.d4, 1.e4, 1.f4, 1.h3, 1.h4, 1.Nf3 and 1.Nc3. But these forced sequences are very difficult to find and the program does not have them in an openings book. This means you can still have fun with the game.

Chess 960

Menu: Games - Levels - Chess 960

This is a variant of shuffle or random chess defined by the legendary Bobby Fischer. In the starting position the pawns are placed as usual on the second and seventh ranks. The other pieces are placed on the first and last ranks in a semi-random fashion, but equally for both sides.

There are two conditions: the rooks must be on each side of the king, and the bishops must be on different coloured squares. This means that there are 960 different starting positions, a fact that has given the game its name.

Here is a possible Chess 960 position:



In Chess 960 each side may castle once during the game. Castling involves both the king and rook, which end up on the traditional squares after the move is completed: Kg1-Rf1 or Kc1-Rd1. The conditions for castling are similar to orthodox chess: the squares between the two pieces must be empty, and neither the pieces nor the squares they cross or land on may be under attack. Obviously the destination squares of the king and rook must also be empty.

Note that sometimes the king or the rook will not move during castling. For instance in the above position when the bishop has left the square d1, White can castle by just moving the rook from b1 to d1. To enter this just move your king to the left, onto the rook.

When castling remember the following:

- All the squares between the king and castling rook must be vacant.
- Castling cannot capture any pieces.
- The king and castling rook cannot "jump" over any pieces other than each other.
- In some starting positions, the king or rook (but not both) do not move during castling.

You can "draw lots" and let the program select a random starting position; or you can continue playing with the previous position; or you can enter a number to get a position you know.

Rated games

Menu: File - New - Rated game

This switches the program into a special mode for serious tournament games which gives you an objective assessment of your playing strength.



In rated games, you will not be able to take back moves or receive any help from the program. You can only offer a draw or resign.

The only buttons available during a rated game are: Stop, draw offer, resign, Contra!, J'adoube



All rated games are automatically saved in the directory $\ChessBase\CompBase\AutoSave$. After a certain number of games you will get an evaluation of your performance and, if the evaluation is good, a title award from the computer.

In the rated game dialog box you can set the playing strength. If you set "unleashed" you will be playing against the program at its highest playing strength, and can gain Elo points fastest. But if you are not a very strong player, it is advisable to select a playing strength that is close to your own. You can also choose a weaker engine and set the strength of that down if the normal engine is too strong for you.

Doubling

In rated games you can play for (virtual) money, starting with \$100. If the "Doubling" option is on, you can double the stake at any stage of the game, just as one can in the game of backgammon. When you double, you offer your computer opponent the choice between resigning or continuing with the stake doubled. Of course, the program has the same right and will offer to double the stake at strategic moments.

In the beginning, any side may double. After the first double offer, the right goes to the other side. If your opponent doubles and you accept, only you may double again, now offering to play for the fourfold sum. Your "account" (the amount of money you have left) is displayed in the rated game dialog box.

Titles in rated games

After you have played a certain number of <u>rated games</u> you will be awarded a title. The one you receive depends on the number of games and the results. For instance, if you are able to score over 2200 in more than 30 games, you will receive the title of *Candidate master*. The program also displays your Elo rating based on the performance in these games. This rating is constantly updated. If you click the "More" button in the *Rated game* dialog box, the individual results you have achieved so far appear.

Title	Games	Elo rating
Amateur, hobby player	5	0
Ambitious hobby player	10	1200
Strong hobby player	16	1300
Club player	20	1350
Serious club player	24	1500
Experienced club player	24	1600
Strong club player	28	1700
Club tournament winner	28	1800
Club champion	30	1900
City champion	30	2000
District champion	30	2100
Candidate master	30	2200
FIDE master	30	2300
International Master	40	2400
Grandmaster	40	2500
Super-Grandmaster	40	2600
World championship candidate	40	2700
World champion	40	2800
Computer world champion	50	3000

Optimise playing strength

Menu: Game - Levels - Optimise strength

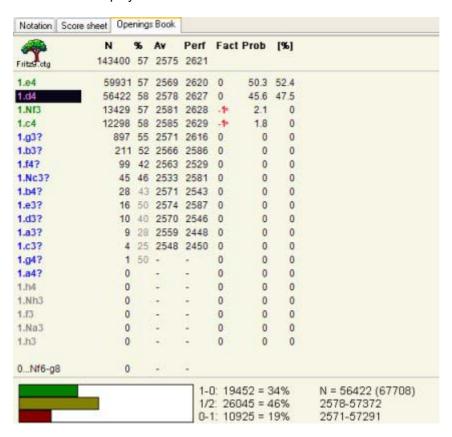
This function is only available in Blitz or long games with time controls. It configures the program for maximum playing strength. This is done as follows:

- The Multimedia functions are switched off.
- ▶ The hash table size is optimised.
- ▶ The opening book options are configured for serious play.

The openings book

The openings book

In the initial phase of a game, the program plays out of an "openings book". This can consist of millions of openings positions, and for each of these, the program has full information on which moves were played, how often and with what results. The program stores its own experience with openings variations it has played. It learns from success and defeat.



The openings book is called the "tree" as the branching variations in the opening resemble the structure of a tree. The files that make up a tree are pretty large. The program requires about 80 bytes to store a position and all the information associated with it. You can leave the files on the program CD. However, in this case, the program will not be able to modify the book as it plays games (i.e., it cannot learn). Thus, it is advisable to copy them to your hard disk.

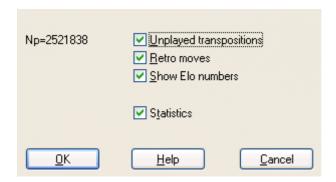
Some things to note:

- The size of the openings tree is limited only by the amount of disk space available. It is important to note that access to the information is always extremely fast, even if the files are truly gigantic.
- ▶ Existing openings trees can be easily extended, simply by <u>importing games</u>. This means that whenever a series of high quality games are available, the program can read them and extend its openings knowledge.
- ▶ The tree recognises all transpositions, even those that did not occur in the games from which the tree was generated. Sometimes you may be able to switch from one known position to another with a move that has never yet been played.
- ▶ The tree can handle reversed colours perfectly. For instance after 1.d3 d5 2.d4, the program is likely to reply 2...c5! and play the entire Queen's Gambit as Black.
- The openings tree is not just an instrument to make the program strong, it is also a very powerful training tool for chess players. For this reason each move can be marked with chess symbols like "!" and "+=".

Note: If you are using Windows XP it is very important to keep all your databases and openings books in the standard directory (My Documents\ChessBase) suggested by the program. Otherwise the operating system will try to back up the giant files every time you close the program.

Book display options

To configure the tree window, right-click a free area and select **Properties** in the menu that appears. A dialog box appears in which you can enable or disable a number of elements of the tree window display.

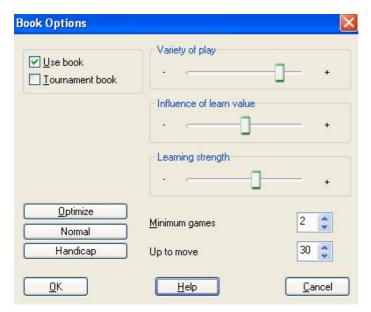


- ▶ The top left of the dialog box displays the **number of positions** in the tree ("Np = ").
- Unplayed transpositions are moves that were not actually played in the games, which were merged into the tree, but which lead to another known position.
- **Retro moves** are the moves leading to this position from other positions in the trees.
- **Show Elo numbers** can be switched off to speed up the book display (on slow computers).
- **Statistics** will produce exact details for each move as a bar graphic at the bottom of the screen. It shows in how many games the move occurred and what percentage of these games were won, drawn or lost. The graphics make it easy to take in the information at a glance.

Unplayed transpositions and retro moves should only be used if needed. Because of the many disk accesses they tend to slow down the tree display operations.

Book settings

Menu: Tools – Book settings (or press F4)



- **Use book** determines whether the openings book will be used.
- ▶ **Tournament book** instructs the program not to play moves that have been excluded from tournament play. If the option is off, the moves might sometimes be played.
- Minimum games tells the program how many games must be available for a move for it to be played.
- **Up to move number** determines how long it should be in book.
- **Variety of play** determines which moves will be chosen: only the ones with the highest statistical values, or the seldom moves as well (slider right = varied).
- ▶ Influence of learn value determines how the learning weights in the tree influence the probability of a move being played (right = maximum).
- Learning strength determines how strong the weights are adjusted on the basis of individual games (right = maximum).
- Optimize sets the last three parameters to their original values, for optimal playing strength.
- **Normal** is for informal games.
- ▶ Handicap for games on the handicap levels.

Extended book options

Right-click the tree window (on a free space) for extended openings book options:



Search games displays a list of all games in which the current board position occurred.

- **Sort** allows you to resort the list according to different criteria (number of games, percentage, Elo average and performance).
- **Delete whole tree** removes the tree from your hard disk.
- **Weed tree** removes moves which were played in very few games.
- ▶ Remove book marks takes out all the evaluation symbols that encourage or discourage the program in its choice of lines.
- ▶ Allow move adding makes it possible to add moves to the tree by executing them on the board.
- **Properties** allows you to set certain display options, like "unplayed transpositions" (moves that have not been actually played, but which lead to another known position) and "retro moves" (moves leading to this position from other positions in the trees).
- ▶ Choose font allows you to set a different font and size for the tree.
- ▶ Close closes the tree window (the book remains active). Click "Window" "Panes" "Openings book" or Ctrl-Alt-B to reactivate the window.

Tournament move

A tournament move appears as green in the openings tree window

	N	1000		Perf 2621	Fact
Fritz9.ctg	143400				
1.e4	59931	57	2569	2620	0
1.d4	56422	58	2578	2627	0
1.Nf3	13429	57	2581	2628	-1*
1.c4	12298	58	2585	2629	-1*
1.g3?	897	55	2571	2616	0
1.b3?	211	52	2566	2586	0
1.f4?	99	42	2563	2529	0
1.Nc3?	45	46	2533	2581	0

Tournament moves are played by the program if directed in the <u>book options</u>. It will not play a move that has been excluded from tournament play and which appears red in the tree.

If you right-click a move you can change its status (e.g., by selecting "Don't play in tournaments").

ECO chess openings classification

ECO stands for the "Encyclopaedia of Chess Openings" and is used by almost all chess players and publications all over the world. Individual openings variations have a code consisting of a letter (A - E) and a two-digit number. There are also names for most of them. Examples:

- A51 Budapest Gambit, Fajarowicz Variation
- B72 Sicilian Dragon: 6 Be3, lines with h3+Bc4 and sidelines

The ECO classification used by this program was improved by leading openings expert **GM Dr. John Nunn.**

The program can create an openings key based on the ECO code. In the database window, click **New – Openings index** and choose "Fine" for the openings index. If you choose "coarse" instead, you will get a less formal classification with well-known names like "Sicilian", "Pirc", "French Defence", etc.

When you save a game, the correct ECO code is automatically inserted.

Copy openings book to hard disk

Menu: Edit - Openings book - Copy tree to hard disk

This will copy an openings tree from the CD to your hard disk, making access faster. Doing this also allows the program to learn from the games it has played and by reading databases.

Import old book

Menu: Edit - Openings book

- "Import book" merges the contents of a different book into the current one.
- "Import old book" converts a book in the older (FBK) format and imports the contents.

The program will also convert and import books from the programs Genius, Rebel and Chessmaster. If a move is already in the openings book it will be marked as a preferred *tournament move*.

Importing games to the openings book

Menu: Edit - Openings book - Import games

This is a very powerful function. It allows you to build giant opening trees with a minimum of effort. You can, for instance, import all the games of your main database, or all from a specific variation (to create a highly specialised book).

The games of the database will be merged to a tree of positions. Crucial for the size of the resulting tree is the length of the variations which are put into the tree. It is not very meaningful to put entire games into it, so you should truncate them at a specific point.



The program allows you to limit the length of the variations in two different ways.

You can specify that every variation should be "n" moves long.

It is more sensible to limit the variations relative to the ECO classification. This results in long variations for theoretical main lines (ECO classification position found late in the game) and short variations for side lines (i.e., early deviations).

Obviously, if you choose a shorter length – absolute or ECO-relative – the tree will be compact. But then you are liable to lose some valuable information. If you choose a very large value then the tree will be gigantic, and it will contain a lot of superfluous information. A good practical value for importing games is ECO-relative 20.

You can also include variations (i.e., analysis that might be included in the games), but these are not included in the statistical analysis.

Import analysis into openings book

Menu Edit - Openings book - Add priority analysis

imports the variations of a specified database and marks the moves as preferred tournament moves. In effect, the program is learning from the analysis of the grandmasters. The analysis is incorporated as (green) *tournament moves*. In the dialog box that appears you can specify how the individual lines will be treated:

- ▶ Repertoire White: Every white move becomes a tournament move, black moves are ignored.
- Repertoire Black: Every black move becomes a tournament move, white moves are ignored.

Moves that are annotated with a question mark are not played in tournament mode, and appear red in the book window.

! = Only move: This option makes moves that are annotated with an exclamation mark the only moves that will be played. They appear green in the book window, while all alternatives become red (i.e., they won't be played in serious tournament games).

Openings book, learning from a database

The program learns from the games it plays. But you can also enhance the book in other ways.

The tools for this are in the menu **Edit – Openings book**:

- Import book merges the contents of a different book into the current one.
- Import old book converts a book in the old (FBK) format and imports the contents.
- Import games merges the games of a selected database into the tree, including full statistics.
- Learn from database adds the statistics from a selected database without actually importing the moves into the tree.
- ▶ Add priority analysis imports the variations of a specified database and marks the moves as preferred tournament moves.

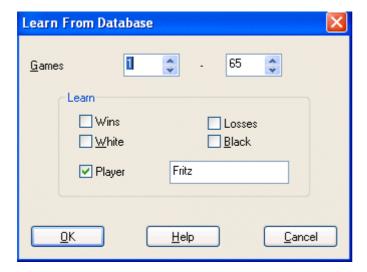
The program allocates "weights" to the individual lines of the book. These weights control the probability with which the program will choose the move in a game. The value can range between – 125 to +125. The values are initially set to zero. The weights are given in the "Engine" column in the book window.

Learning from a database

With this function the program learns from the experience of other players. It looks at the games of a database and pretends it has played them itself. On the basis of the results it changes the weights of individual variations.

Edit - Openings book - Learn from database

displays a dialog box in which you can set a number of learning parameters.



- Wins: Only won games are used, the program increases the weights of white moves if White won and black moves if Black won.
- ▶ Losses: Only losses are considered. If White lost, the white moves are reduced, and if Black lost, the black moves are reduced.
- **White:** The program evaluates the games from the point of view of White only. The weights for white moves are increased if White won, and decreased if White lost.
- ▶ Black: The weights for black moves are increased if Black won, and decreased if Black lost.
- ▶ Player: Only considers the games of one specific player in the database.

These five options can be combined in any way you like. You can also restrict the import to a certain number of games in the database by selecting "Games" at the top of the dialog box.

Database functions

The database window

This program has sophisticated database functions and can store any number of games in many different databases. These may be games you play against the program, but also historical and topical games which are available in very large numbers from the manufacturer, ChessBase. The games are automatically classified according to all kinds of criteria. And you have powerful search tools that are able to locate any game in a very short time.

Menu: Window - Database window

This opens the separate database window with a list of games. You can also get there from the main board by pressing F12 or Esc. These keys will get you back to the board window. There are also buttons in both menu bars that will do the same.

The database window always displays the contents of the currently opened database. You can switch to other databases, create new ones, copy games, have the program analyse them, create tournament tables, indexes, etc.

Here are the main functions:

Menu: File - Open - Database (or Ctrl-0)

Use this command to browse for the database you want. The databases can be in many different formats – CBH, CBF, PGN, etc. You can convert games from one format to another by copying them into a database with the format you require.

Menu: View - Filter games (or Ctrl-F)

Produces a "<u>search mask</u>" in which you can tell the program to look for particular games. At the top of the list there are a number of tabs that lead to the different indexes.

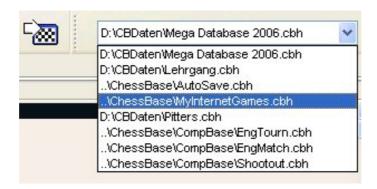


- Games gives you the simple games list.
- ▶ **Openings** produces a list of openings. Double-click an opening to go to the sub-lines or the games of that opening. If you are not familiar with the "ECO" openings index you can click "New" "Openings index" and choose a descriptive ("coarse") classification with well-known names like "Sicilian", "Pirc", "French Defence", etc.
- ▶ Themes gives you an index of middlegame themes ("critical positions", "pawn structures", etc.).
- ▶ Tactics is an index of tactical themes, like sacrifices, checkmates or brilliant moves.
- **Strategy** contains indexes like outposts, winning ideas, pushing pawns, etc.
- **Endgames** has different common endgame categories.

Please note: many ChessBase data CDs have different, often more extensive and specialised games indexes.

Recent databases

Right-click the button bar at the top of the database window and select "Recent database" to get a dropdown list of the databases you last opened.



You can simply click an entry to jump to a recent database.

Games list



In the games list, you can see the game numbers, names of the players, their ratings (which may be left out if there is too little space in the list), the tournament, round and the annotator (in square brackets).

Behind this you will sometimes find "medals", a coloured band which helps to characterise the game. The next columns give the ECO code, date, result and number of moves. On the right is a column that tells you what the game contains:

V = the game contains variations (alternate lines)

C = the game contains text commentary

A = it contains graphic annotations (coloured squares and arrows)

F = the game contains correspondence chess commentary

I = critical positions (special annotation) are marked in the game

T = the game contains training commentary

S = the game contains commentary symbols (!, !?, etc.)

G = another game is quoted in the notation

R = a "repertoire" game

M = the game contains multimedia elements (sound, pictures, videos)

P = the game starts from an entered position (studies, problems)

The above letters may also be small, if the variations, commentary, etc. are not extensive. For instance "Vca" means a lot of variations, but relatively little text commentary and graphic annotation.

Load and replay games

Menu: Window - Database window

Opens the database window with a list of games. You can also open this from the main board by

pressing F12 or Esc.

Menu: File - Open - Database (or Ctrl-0)

Select the large database. This is on your Program DVD, but it can be installed on your hard disk.

Double-click a game in the list

In the list of games that appears, you can double-click a game, or single-click on it and press Enter. This takes you back to the main chessboard screen, with the game loaded in the notation window.

Replay the game with replay buttons

You can use the replay buttons at the top of the screen or below the chess board.



If the replay buttons are not visible, right-click the menu bar and select them.



If there are no replay buttons beneath the board, right-click the board or area around it and select "Replay arrows below board".

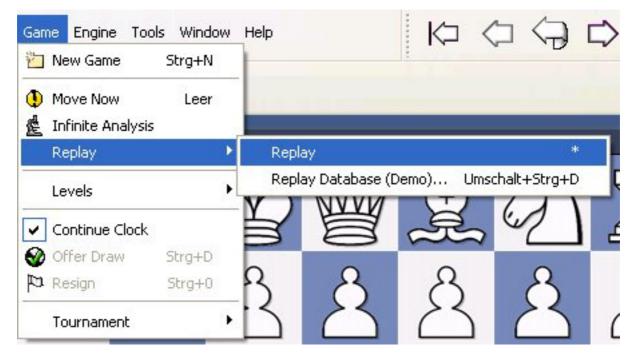
The takeback button in the middle has a special purpose: The program will not query what to do with a new move you enter but simply overwrite the old ones.

Menu: Game - Replay game

This will automatically play through the moves of the current game. You can adjust the speed in the control window that appears.

Menu: Game - Replay database

This is a special demo mode that allows you to browse for a database and have the program replay games from there, one after the other.

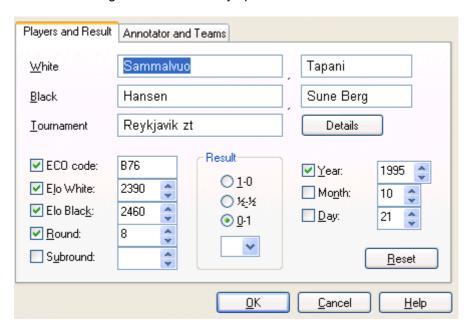


You can set the speed of play, have music in the background, and even have the camera angle change automatically. This is a great demo, especially if you are using the character boards (Mia, The Turk).

Save game

Menu: File - Save game (or Ctrl-S)

This will save a game in the currently open database.



You can also call up the Save dialog and enter all the game data in advance, i.e., before you actually save the game. Click *Edit – Edit game data*. You can also edit the game data in the games list, without actually loading the game. Right-click it and select *Edit – Edit game data* (or press F2).

Players' names (White/Black)

Type in the last name and first name(s) of the white and black players. You should try to use the standardized spellings, especially when entering the games of internationally known players. To facilitate the standardization of names you can use the players database which contains the names of over 100,000 players – practically everyone who has an international rating. Type in a name or part of it and then click the question mark button on the right. A list of names appears from which you can choose the correct one.

Tournament

In the tournament line you normally enter the name and place of the tournament. If you want to do it properly you should click *Details*. A special dialog appears where you can add a number of other important details.

Title, Place: Type in the official name and place of the tournament. If the tournament has no name, (e.g., New York 1924) then enter the place in both lines. Only one will appear in the games list. **Date:** The year, month and day are for the tournament, not the individual game (this is entered in the Save dialog). Usually the day of the opening ceremony or the first round defines the tournament date. If the exact date is not available, you can leave the month and day empty and the program will only store the year.

Complete: Select this item if you have all the games of a tournament. A tournament marked as complete will have the (green) check mark shown at the right in the tournament list.

Nation: Click the pull-down button on the right to produce a list of national abbreviations and select the one you want.

Rounds: Enter the number of rounds. In special tournaments, (like knockouts and Grand Prix) you can specify "subrounds" in the Save dialog. This allows the program to sort games properly according to rounds. It can also generate clean progress tables in open tournaments if the rounds are properly entered.

Category: Enter a category between 1 and 25. This is displayed in the tournament list. **Type:** Specify match, tournament, Swiss, team, knockout, simul, etc. This too is displayed in the tournament list.

Time controls: Specify the speed of play (blitz, rapid, normal or correspondence chess).

ECO code

The ECO code is automatically inserted by the program. You can correct it if you disagree with the program.

Elo ratings

Enter the ratings for White and Black, if available.

▶ Round, subround

Specify the round and, in case of knockouts or Grand Prix, the subround.

▶ Date (year, month, day)

Here you specify the year, month and day on which the game was played. This is not to be confused with the tournament date. If the exact date is not available leave the day or month empty.

Result

Enter 1-0 (White won), $\frac{1}{2}$ - $\frac{1}{2}$ (draw) or 0-1 (Black won). If you haven't entered a complete game, i.e., if the moves merely represents analysis, then you may want to use an evaluation symbol instead of the result. By clicking the arrow in the result box, you get the menu shown on the right of evaluation symbols from which you can choose.

Reset

This clears all data from the Save dialog.

Annotator and Teams

Click the *Annotator and Teams* tab at the top of the Save dialog to enter data in this form.

Annotator

If you have entered variations and text annotations you should type in your name here. The program will automatically offer you the user name that is entered in the menu *Tools – Unser info*.

White/Black teams

If a game is part of a team championship, you should enter the names of the teams here.

Source

You can give a source for the game. If you want to do so properly, you should click *Details* for a more extensive dialog box.

Note

- Games cannot be stored in a database which is on a CD. Remember to create a new database for your games, which you will probably not want to store at the end of a database of historic games.
- All games you play against the program are automatically stored in a file called autosave.cbh. You can always access this database and check games you may not have manually saved.

Copying Games

We're going to look at how to copy games from one database to another. It works very much like the process of copying files in Windows Explorer or copying text in a word processor.

There are two terms we'll use in this description:

Source database -- the database you're copying games from **Target database** -- the database you're copying games to

Your first step is to go to the game list window (shortcut: F12 on your keyboard).

Open the source database (File menu/Open/Database).

Highlight the games you want to copy; there are a number of ways to do this. You can hold down the CTRL key on your keyboard and single-click on the individual games you'd like to copy. If the games are in a "block" (that is, adjacent to each other in the database), you can hold down the SHIFT key and

use the down cursor (down arrow) key to highlight them after single-clicking on the first game in the "block".

But if you want to copy all of the games in a database, you can use a menu item or keyboard command to highlight the whole shebang. Go to the Edit menu and choose "Select all", or else you can use CTRL-A on your keyboard. All of the games in the game list will then be highlighted.

Once you've highlighted the games you want to copy, go to the Edit menu and select "Copy" (or else hit CTRL-C on your keyboard). It'll look like nothing happened, but what you've just done is tell the program that you want to copy the highlighted games.

Next you'll open the target database (again, File menu/Open/Database). You then go to the Edit menu and select "Paste" (or hit CTRL-V on your keyboard).

You'll see this dialogue appear:



This is a confirmation dialogue, asking you to confirm that you do indeed want to copy the games.

Click the "OK" button. The games are copied and your newly copied games will appear at the end of the target database.

Autosave database

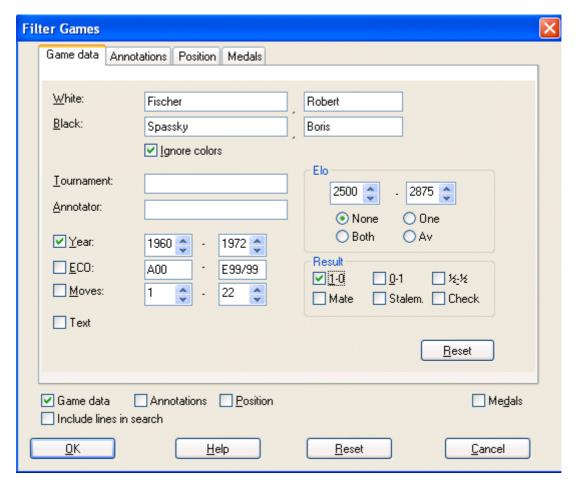
All the games played against the computer are automatically saved in a special "autosave" database. This is physically located in the directory **c:\[user]\My documents\ChessBase** (if you did not specify another database during installation).

The autosave database is always present in the history list at the top of the database window.

Search for names, tournaments, etc.

Menu: View - Filter games (or Ctrl-F)

Produces a "search mask" in which you can tell the program to look for particular games. By clicking on the tabs at the top of the search mask, you can define all kinds of different categories.

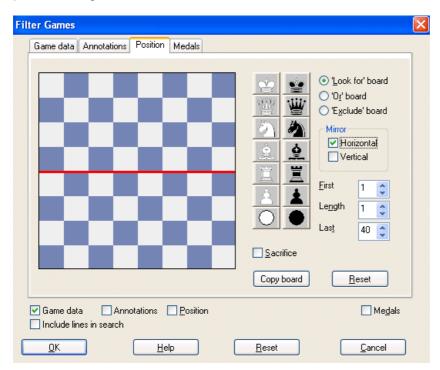


- ▶ White/Black: Enter the name or part of it ("kasp" is sufficient to find Kasparov's games). You can use wildcards: "*asparov" will get you all Kasparov's games as well. The search is case sensitive, but typing a small letter at the beginning will work, since it is automatically changed into a capital.
- ▶ Ignore colours: If you enter the name of one player and click this on then all his games will be shown. If "Ignore colours" is off, then only his white or black games are listed. With two players clicking "Ignore colours" on will give you all games of both players against each other, while clicking it off will only retrieve the ones in which the first player had white and the second black.
- **Tournament, Annotator:** Here you can search for specific tournaments or games with commentary by certain annotators. The search is case sensitive.
- **Year:** To search for the games of a particular period, enter the years here.
- You can search for the games from a particular ECO key, e.g., "C43" "C45".
- **Moves:** You can search for long and short games here.
- **Text:** retrieves <u>database texts</u>. These are not games but text reports which may contain pictures, videos, positions and links to games, keys, other texts, etc.
- ▶ **Elo:** When searching for the games of players who lie within a certain <u>Elo range</u>, you can specify whether one player, both players or the average should lie within the given range.
- ▶ **Result:** retrieves games in which White won, Black won or which were drawn, and games that ended in mate, stalemate or a check.

Search for positional fragments

Menu: View - Filter games (or Ctrl-F)

Produces a "search mask". Click "Position" to look for games which contain specific positions or positional fragments.



To deposit pieces on the board, click a piece type on the right and then a square on the board. Clicking with the right mouse button deposits a piece of the opposite colour. The two "jokers" at the bottom can be used to indicate that any piece of that colour should be present.

In the above example, the program will retrieve all games in which White executed a bishop sacrifice on h7 or Black on h2. Note that when you load one of the retrieved games the program will jump straight to the position in which the sacrifice occurred.

- ▶ Look for, Exclude and Or boards: You can enter different pieces for each of these. In the first case the program will look for the positional fragment. In the second it will make sure the positional fragment *did not* occur in the games it retrieves. On this board you can enter multiple pieces per square. On the "Or board" you can enter a second position the program should look for simultaneously.
- ▶ Mirror: horizontal/vertical: Rotate the boards horizontally or vertically and simultaneously search for the same fragment at the top or bottom (e.g., find bishop sacrifices on h7 or h2), or on the left and right.
- ▶ First, length, last: Restricts the search to a specific phase of the game. In the above case, the program will start looking from move five of the game and stop at move 40. The position must occur for one move (length).
- **Copy board**: Transfers the current position on the main board to the "Look for" board. You can modify it before you start the search.

Search for game commentary

Games can contain text commentary, which is generated by the program or which you can type in yourself. Apart from that, the games of ChessBase Magazine are extensively annotated with text, chess commentary symbols and graphic elements.

Menu: View - Filter games (or Ctrl-F)

Use this command to open the Filter Games dialog. Click the "Annotations" tab to search for game commentary.

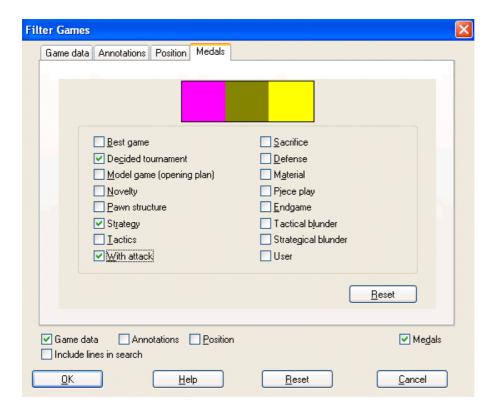
- ▶ Text1, Text2: Enter two text strings and the program will search for all games in which either occurred.
- **Whole word:** Check this to search for an exact match only. In the example on the right, the program will not find "brilliantly".
- **Symbols:** Enter commentary symbols like "!" and !?".
- **Deleted:** Check to retrieve deleted games.
- **Position:** List games that start from a special position (e.g., problems and studies).

You can also search for games that contain variations, training positions, multimedia, coloured squares and arrows ("Colors"), marks for pawn structure, piece paths, critical positions, etc.

Search for medals

Menu: View - Filter games (or Ctrl-F)

Use this command to open the Filter Games dialog. Click the "Medals" tab to search to search for games which were marked as being especially interesting. The medals include categories such as novelty, pawn structure, attack, defence, sacrifice, blunders, etc.



You can search on multiple categories. Note that the program will retrieve games in **all** marked categories.

Archive database

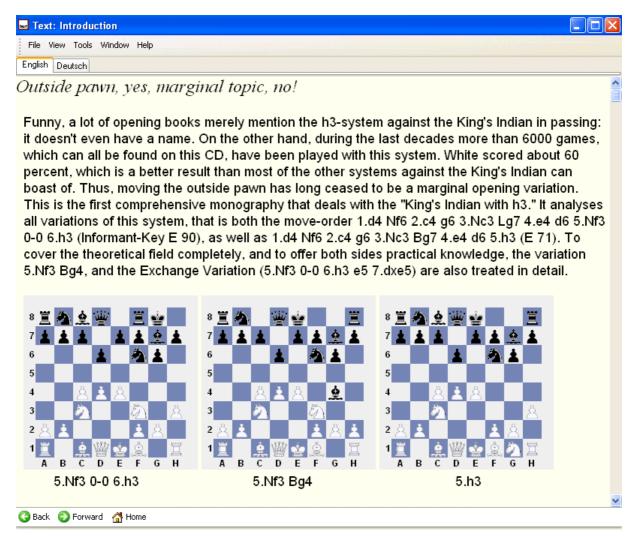
Menu: Tools - Database - Backup Database (or Ctrl-Z)

Click this in the database window. All files that make up the current database will be compressed into a single "archive file" (with the ending .cbv).

All ChessBase programs can open and unpack these archive files into a normal database. Archive files are compressed and can be sent as a single file by email. They are also the best way to publish games on the Internet.

Database text

A database text is not a game but text reports, which may contain pictures, videos, positions and links to games, keys, other texts, etc. It appears like a game in the database list, an can be loaded in the same way. But it produces a new window for the report.



This is an example of a database text from ChessBase Magazine, with video sequences from a tournament in Dortmund. When you click a video icon the sequence is replayed for you. ChessBase Magazine usually includes up to an hour of video.

Database texts are only available in the CBH database format.

Database formats

This program reads and writes all ChessBase file formats, including the old CBF format, the normal multimedia CBH format, the ChessBase archive format CBV, the international PGN format, and EPD positions (these can only be imported into a database). When you copy games from one format to another they are automatically converted.

The program uses the openings book tree format CTG, but it can import old books in the FBK format. **PGN** is an internationally accepted text format which can be read and edited with a simple ASCII editor. On the Internet you will find many games in PGN format. Even if these files contain a lot of additional text – tournament reports, tables, general messages – they can still be accessed directly, without any prior conversion. Just make sure the file has the ending "PGN". The program will ignore all the text in between the games.

Note:You can convert games from one format to the other by copying them into a database with the required format.

ChessBase Magazine

ChessBase Magazine is published every two months. This unique, electronic publication contains over 1000 games from the best tournaments throughout the world. A majority of them are extensively annotated, often by world class players and often with easy-to-understand text commentary. There are special sections for opening surveys, gambits, tactics, middle and endgames, blunders. ChessBase Magazine presents the ultimate training material for ambitious players.

The Magazine is also the ideal upgrade tool for the openings tree. Every two months you can execute the function *Edit* – *Openings book* – *Learn import games* or *Learn from database* and the program's knowledge of openings theory will be completely up to date.

ChessBase Magazine also contains exciting multimedia reports from current tournaments, private interviews with top players, and video commentary of their games.

With this program you can enjoy all aspects of ChessBase Magazine, including the text reports and the multimedia sequences. A special "reader" is also included on the CD, which has many of the important functions of the ChessBase program.

ChessBase

This program has a number of functions that come from the chess database program ChessBase, which is the standard tool of top players all over the world. Our chess playing programs are perfect for amateurs who want to look after their own games and browse around in the games of the masters. But if you decide to start working seriously with very large databases you should consider acquiring ChessBase.

This is what ChessBase give you beyond the functions of this program:

- ▶ Parallel operation on many databases and games, easy copying of any number of games via drag & drop, navigation between databases in the "database window".
- ▶ Powerful search functions, e.g., material distribution, moves, manoeuvres, sacrifices, and structures. Creation of search boosters to drastically speed up the search.
- Access to super-fast players, annotators and tournament keys. Endgame keys.
- ▶ Players encyclopedia with data on all rated players and thousands of portraits.
- Input text with the built-in WYSIWYG editor, with hypertext functions (load pictures, jump to games, play multimedia files, etc.).
- Create full openings reports in any position with a single mouse click. The report contains all important historical and current GM games, all critical continuations, repertoire recommendations,

- typical plans, etc.
- Create player portraits at a click of the mouse, including photos, Elo development, best tournaments, openings repertoire, great combinations, commentary, mate combinations, etc.
- Automatic elimination of doubles, sort games according to different criteria, powerful clipboard functions.
- Full administration of your correspondence chess games, with printing of postcards or letters.
- Advanced printing functions, e.g. ECO-style printing of openings surveys. Creation of ASCII, RTF and HTML files, with diagrams, ideal for tournament reports on the web.
- ▶ Creation and maintenance of theme keys, access to tactical and strategic motifs. Sophisticated theme keys are included and can be modified with ChessBase.
- Copy variation trees from one game to another with drag & drop.
- ▶ Enter spoken commentary to game moves and training positions. Design full training courses.
- Extensive statistical displays, e.g. of players: most successful tournaments, openings preferences, best and worst results against specific players, etc.
- Integrity test for damaged databases.
- ▶ Easy global editing of game data, e.g. to standardise players' and tournament names.

Full information is available at our web site: www.chessbase.com.

Analysing games

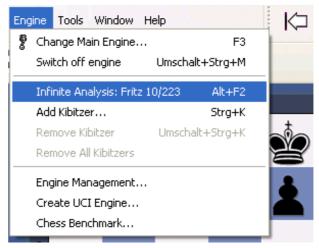
Infinite analysis

Menu: Game - Infinite analysis (or Alt-F2)

This puts the program into a special mode where it does not reply when you enter a move but instead simply analyses the position on the board. You can now enter all the moves of a game.

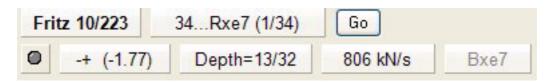
Clicking the same menu or pressing Alt-F2 again switches back to normal game mode. There is also a button in the toolbar at the top to start and stop infinite analysis.





Evaluation of the position

Chess engines evaluate positions with the help of a numeric value. The evaluation is expressed in $\frac{\text{pawn units}}{\text{pawn units}}$, always from the point of view of White. If the program is displaying a value of +1.30, this means that it considers the white position to be better by the equivalent of 1.3 pawns. If White is actually a pawn up, then the additional 0.3 is the result of positional considerations (mobility, deployment of pieces, king safety, pawn structure, etc.). A display of -3.00 means that White is a piece down – either a bishop or a knight, which are both equivalent to about three pawns. Rooks are worth five and the queen about nine pawns. Of course the king's value is unlimited – lose it and you've lost the game.



In this example the evaluation of the position is - + 1.77, i.e., well over one pawn or a minor piece. The negative value means that Black is up by 1.77 pawns. This is always the case: positive values favour White, negative values favour Black.

In addition to the precise pawn values, the evaluation is also given in standard chess symbols:

= The position is about equal

± White is slightly better

± White is clearly better

+- White is winning

-+ Black is winning

F Black is clearly better

Black is slightly better

Full analysis

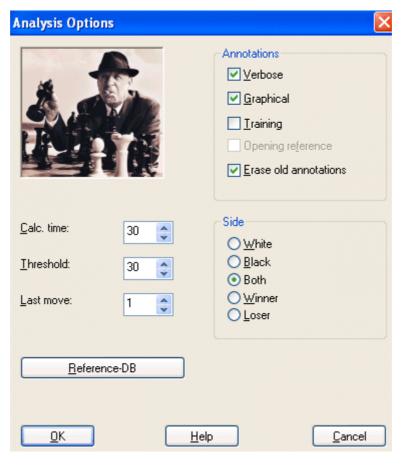
Menu: Tools - Analysis - Full analysis

This is a very powerful function which has repeatedly won awards (specifically in 1996, 1997 and 1998 the Herschberg Award of the International Computer Chess Association) for the best computer generated commentary of a chess game.

The program not only annotates games in very high quality and in natural language, it is also the only program that can identify tactical categories and "tries". The latter are inferior moves which were not played but which are of great interest to human players. "Naturally White cannot capture the bishop because of..." is typical for the kind or didactic commentary you will get.

The evaluation profile also gives you a clear picture of how the game developed and when decisive mistakes were committed. Remember that you can click on any place in the evaluation profile to jump to that position in the game.

You can call up the automatic analysis for the game loaded on the main screen, but you can also use it in the database window. There you can select several games for analysis.



In the dialog box there are a number of different options. If you simply click "OK", the analysis will start. You can stop the automatic analysis by clicking the "Stop" button that appears in the menu bar. These are the options you have:

- ▶ Calc time: This is the minimum time the program will spend on a move. If it creates variations, the same amount of time is spent on each move of the main line. Naturally, the more time you allocate the better the quality of the analysis.
- ▶ Threshold: Here you specify when the program should consider a move a mistake. If you enter a high value (e.g. 300 = three pawn units), then only grave blunders will be considered. If you set a very low value the number of "Better is..." commentaries and variations will increase.
- Last move: This sets a limit for the analysis. Analysis always starts at the end of the game and

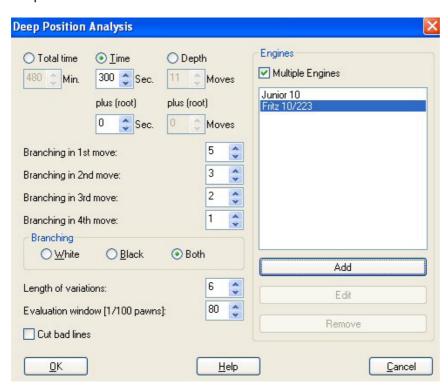
goes backward, ending with this move (i.e., "1" = analyse from move 1 of game).

- ▶ Reference DB: If the program has access to a large database, it can generate some very interesting reference commentary, quoting recent games that are similar to the current one and identifying the novelty in it. Click the "Reference DB" button and show the program which database to use.
- **Storage:** This is relevant when you automatically analyse a number of games from the games list. the program must know whether the annotated games should replace the original entries or if they should be appended as new entries to the end of the database.
- **Erase old annotations:** Should the program add annotations to any that are already present in the game, or should it delete previous annotations and start with a clean game notation?
- Verbose/Graphical/Training: Normally the program annotates games with the help of variations and commentary symbols. If "verbose" mode is on it will also include commentary in natural language ("This throws away the game" or "Black must return material"). "Graphical" allows the program to include coloured arrows and squares in its annotations. "Training" makes it generate quiz questions like "How would the (inferior) move x be refuted?" or "Why didn't White play x takes y?" These questions come up when you are replaying the game. The program will even set time allowances and award points for training positions.
- **Side:** Here you can restrict the analysis to the player of the white or black pieces, or to the winner or loser.

Deep position analysis

Menu: Tools - Analysis - Deep position analysis

This function is used to analyse a specific position. It is very good for getting deep and detailed analysis of a critical position, and especially interesting for correspondence players. *Deep position analysis* generates a detailed analysis tree for this position. You can determine how deep and broad the tree should be and what moves should be included or excluded from the analysis.



Time/depth: The precision of the analysis is determined by time available per move, or by the fixed calculation depth you allocate. Time per move is more flexible since it allows the program to go much deeper in certain positions (e.g., in the endgame). If on the other hand you are doing the analysis in the background then fixed depth is better since the analysis will be fully executed even if the program is only getting very little CPU resources.

Plus (root) allows you to add extra time or search depth to the root position, so that it is analysed more deeply than positions that occur in the search.

Branching: The branching factors for the 1st, 2nd and 3rd moves define how many alternative moves are given. The higher the values, the broader the analysis tree. However, the program may change the branching factor if it thinks the position merits that. This is dependent on the evaluation window described below. If there are moves present after the position, these will *always* be considered.

Branching: White, Black, both determines whether alternatives should be given for one or both sides. Example: you want to show that in a certain position White is winning by force. Then you are not too interested in white alternatives and should set branching for Black only.

Length of variations: Sets the length of analysed variations.

Evaluation window: This value, given in 100ths of a pawn, determines when a variation will be discarded. The value 80, for instance, means that moves which are 0.8 pawns worse than the best move will not be investigated any further, even if the branching factor would allow it. At the end of deep position analysis, all the variations that have been generated are sorted and the strongest moves becomes the main line.



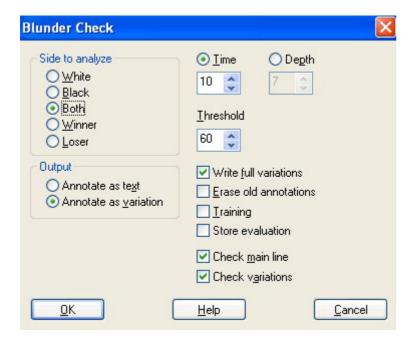
Cut bad Lines means that bad continuations, as recognized by the Alpha-Beta algorithm, are ignored and not examined any deeper.

Note

- You can influence the analysis by entering continuations to the game. These moves and variations will always be taken into consideration. If you do not enter any moves then the program is free to look at any lines it thinks are worthwhile.
- If you annotate a move with a "?" then it will *not* be taken into consideration. So this is an excellent way to exclude lines you know will lead to nothing, but which the program would otherwise analyse extensively.
- ▶ You can use more than one engine to analyse a position. The engines are used in the order in which they are listed if you have four engines and two lines then the first two engines will be used for these.
- It is often better to give let the program analyse many alternatives for one side only. For instance if you want to know if White can force a win in a given position you may set a branching factor only for Black to see if the program can find any defence against the best white attack.

Blundercheck

Menu: Tools - Analysis - Blunder check



This does not provide a full analysis of a game, but simply a tactical examination, one that reveals glaring errors. There are a number of options in the blunder check dialog box:

- ▶ **Side to analyse:** You can restrict the analysis to the player of the white or black pieces, or to the winner or loser (similar to the automatic analysis).
- Output: If the game you are checking already contains annotations, you may not want the program's analysis buried in the variations. Select Annotate by Text to make it easier to find the remarks in the notation.
- ▶ Full variations, Erase old annotations, Training: Select these choices to erase the old analysis, and have the variations written out in full. You can also specify to have training positions generated.
- ▶ Storage, Time/depth, Threshold: You can determine the average search depth per move. Enter the minimum time the program should spend on a move. The threshold defines when a move is considered a mistake. If you enter a high value (e.g., 300 = three pawn units), then only grave blunders will be considered. If you set a very low value, the number of commentaries and variations will increase. If you set the threshold to zero, the program will annotate every move, even if there is nothing to say.
- Check main lines/variations: Select the main line of the game to be checked, the variations, or both.
- ▶ Storage: If you are blunder-checking one or more games in the database window (mark many and execute "Blundercheck"), then you can specify how to store the games after they have been checked. You can put them back into the same place in the database (i.e., replace the original games); or append to the database (i.e., store again as a fresh copy).

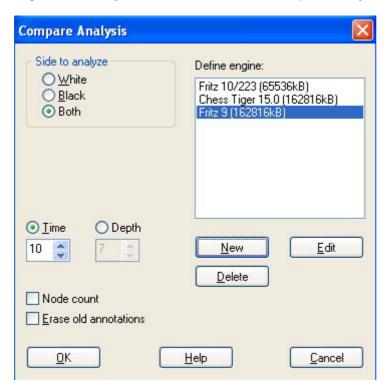
Games in which the blunder check has revealed serious errors are marked with the black "Tactical blunder" <u>medal</u>; they can be easily found in the games list and with the <u>search mask</u>.

The name of the engine that was used in the blunder check is entered as a text commentary before the first move. If you analyse the game again with a different engine, the name of the engine with every new variation appears.

Compare analysis

Menu: Tools - Analysis - Compare analysis

The automatic comparison of the analysis of two different engines has two main uses. First, it is an excellent way of evaluating the strengths and weaknesses of the engines. On the other hand, from a chess point of view, it is very interesting to compare the conclusions of two different engines. One might be tactically more reliable, the other more positionally sound.



It is also interesting to compare two versions of the same engine. The "compare analysis" function allows you to check what each finds at a specific search depth, or how many position nodes each of these engines actually checks to reach a certain search depth.

You can set a variation colour for each engine (when loading it) so that it is easy to tell at a glance which engine produced the individual lines.

How to load engines:

- **New** allows you to select engines from the list of all available engines.
- ▶ Edit allows you to change the settings for the engines already loaded (hash table size, variation colour).

You can use "compare analysis" on a number of games (in the database window). In this case, specify whether the analysed games should replace the original entries or if they should be appended to the end of the database.

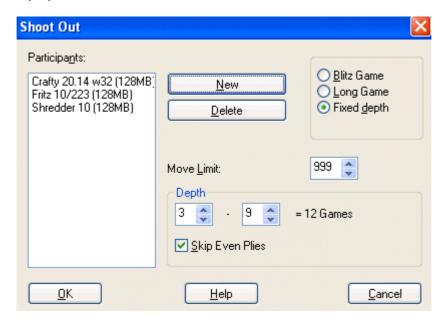
Please note: You can load an engine more than one at a time and then use *Edit – Parameters* to set different engine parameters. In this way you can find out how the settings affect the performance of the engine.

Shootout

Menu: Tools - Analysis - Shootout

This allows you to use one or more engines to play out the rest of the game. It is used to test different

engines – which lets them play out a tactical, strategic or endgame position at different depths – but also for analytical purposes.



- New is used to include new engines in the shootout.
- **Delete** is used to to remove them from the list.
- Move limit: You can set a maximum game length and average search depth for each move.
- **Depth:** If you set depth = 5 9, new games will be played at each ply depth. Using two engines, the program will switch sides at each ply depth.
- ▶ Skip even plies allows you to avoid the weakness of some engines at even plies. In the above example, setting 5 9 plies and skipping even plies results in three games (at a search depth of 5, 7 and 9). Since sides are changed after each game, we have a total of six games in the shootout. The games from a shootout analysis are saved in the engine-engine database.

Chess problems, mate search

Menu: Tools – Analysis – Mate search (or Ctlr-M)

This allows you to solve chess problems ("White to play and mate in n moves"). There is a special mate solving engine which can also handle selfmates in which White must force Black to mate him, and helpmates, in which both sides co-operate to mate Black.



In the dialog box for the mate search, select an engine (only engines which are specialised for mate searches will be displayed) and specify the kind of problem you are solving.

"Parameters" allows you to set certain options, especially for very deep mate problems which would otherwise take too long.

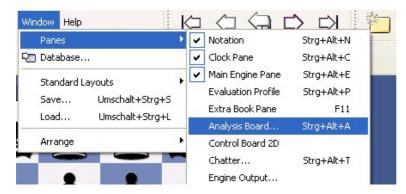
- "Heuristic search" allows you to specify the maximum number of flight squares the black king can have.
- "Threat with check" specifies how deep a mate threat should be for it to be considered.

The program not only displays the key move of the problem, but also generates a complete solution, with all alternative defences by Black. If the problem has more than one solution (i.e., it is "cooked"), then alternate solutions will be given as lines to the first move of White. "Last move" specifies whether the last move of the problem, which is usually obvious, should be included or not.

The Analysis board

The program has a special function that many users are not well acquainted with.

It is to be found in the menu "*Window – Panes – Analysis board*". You can also switch the analysis board on and off by pressing the key combination Ctrl-Alt-A.



The analysis board appears as an extra "pane" in the board window and can be used to analyse the game that is currently loaded. You can move the analysis board to a convenient place, as you can do with all the panes of the Fritz program – by grabbing the top of the pane and "docking" it on some other part of the screen.

Anyone who has worked with previous versions of Fritz may be forgiven for asking what the analysis board could possibly be useful for. After all Fritz in its regular layout offers some of the finest analysis functions available in current chess software. You can switch on one or more engines, let them analyse one or more lines, copy the main move or entire variations into the game notation with a single mouse click, you can lock the engine to a particular position and then continue studying the game while the engine is working. It is even possible to play through the main line the engine is displaying on a small variation board. And there is a wealth of additional automatic analysis functions, like blunder check, deep position analysis, shootout, compare analysis, etc. (all in the menu "Tools"). So why do we need an additional analysis board?

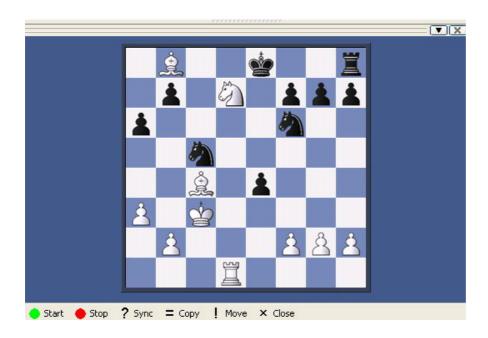
Well, one important advantage is that you have an additional board to work on. It is like using a pocket chess set when watching a GM game. You have the original position in view and can experiment with lines on the pocket chess.



The biggest advantage of the analysis board becomes clear when you are logged into the **Playchess server** and are watching a game. Theoretically you could periodically "unplug" the transmission (by pressing Ctrl-U) and start analysing on the main board.

But then you do not know when new moves are played. And once you plug back into the transmission the board jumps straight to the current position in the game.

With the analysis board things become considerably easier. You can watch the game and, without disturbing the position, try out lines on the second board.



There are a number of buttons below it to support the analysis. Here is a description of what each of them do.

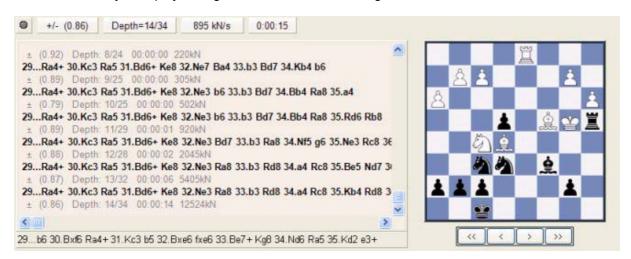
- Start this activates the analysis board (which is initially empty) and copies the position from the
 main board onto it. You can start moving pieces on the analysis board, using the Fritz engine to
 help you if you wish. The new lines appear in a copy of the main game notation, but the position
 on the main board remains unchanged.
- Stop this ends the analysis session, empties the analysis board and jumps to the main game notation. If you restart the analysis board you will see that the previous analysis is still there.
- ? Sync this jumps back to the position on the main board, which is useful when you are in a deeply nested variation tree and want to get back to the original position quickly.
- = Copy This copies the current game and all the analysis it contains into the analysis board.
- ! Move This copies the first move of your analysis to the main board. For instance if you are
 playing against Fritz and using an analyis board on the side you can try out a line and then click!
 Move if you decide to play it against the program.
- X Close This will close the analysis board. To reopen it in its original location press Ctrl-Alt-A.

Note that the analysis board is only there for quick, temporary analysis. The variations you can see in the analysis notation will not be saved together with the game.

Variation board

You can activate the variation board by right-clicking in the engine window and selecting "Variation board" from the popup menu.

The size of the variation board will vary with the size of the engine pane. The purpose of the variation board is to allow you to play through the best variation the engine has found thus far in its search.



You'll notice a set of VCR buttons below the variation board; these are your controls for playing through moves on this board.

You can step forward and backward through the variation one move at a time by using the single arrow VCR buttons.

If you want to jump right to the beginning or end of a variation, you can use the double arrow buttons for that purpose.

Training

Opening Training

Menu: Tools - Training - Opening training

The program has special training functions for openings and endgames. In both you keep playing a position against the computer until you learn how to handle it.



In the list of openings that appears you can choose one you want to learn. The position that defines the opening appears on the board to the right. Click OK if it is the one you want to practice. The position is transferred to the main board and you can start playing against the computer. Every time you press Ctrl-N (for "New game") the same position appears on the board – until you switch off the opening training mode.

There are three options on the top left:

- Learn moves: This brings the initial position on the main board, and you are expected to play the main line from scratch. This is of course given below the board in the picture above.
- Change sides: This will switch sides whenever you start a new game so you can learn both sides
 of the opening.
- Detailled: You get a more detailled set of openings (as in the picture above) rather than the basic set.

When you practice an opening against the computer, if you enter a move that is not part of current theory the <u>coach</u> will appear and warn you. It will offer you the following alternatives:

- **Show move:** This shows you the main line continuation in the position.
- Ignore: Lets the move you have entered stand. Of course this means you are deviating from the main line.
- Take back: This takes back the move you have entered and allows you to try again.

Note: you can extend the opening training database.

Endgame Training

Menu: Tools - Training - Endgame training

This is similar to the openings training, except you get instructive endgame positions. In the list of endgames that appears you can choose one to practise. The position is transferred to the main board and you can start playing against the computer. If you do not succeed in achieving the goal you can press Ctrl-N to start a New game. The same endgame postion will be set up and you can try again. Here you have only one option: Change sides. This allows you to try both sides of the endgame.

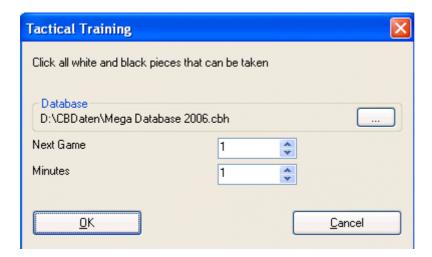
Note: you can extend the endgame training database.

Tactical Training

Menu: Tools - Training - Attack/Check/Defence training

There are certain basic skills in chess, like the ability to spot tactical patterns quickly and reliably, that can be honed. The program has modules to help you train and improve your abilities in this area. The special trainings modules automatically generate practise positions, presenting you with positions in which you must spot all pieces that are attacked, in check or not defended. The positions are taken from any database you select.

Click on *Tools – Training* and select one of the three options: Attack, Check or Defence.



In the dialog that appears you can select a database and a start game number. The program keeps track of the games it has already gone through and offers you the next one when you start again. You can also set the maximum time you get per position.

The above picture shows the dialog that appears for Attack training. The others work in basically the same way (except that the task given is different). This is what you have to find

- Attack here you are required to click all white and black piece that can be captured by the enemy;
- Check click all pieces that can deliver check to the enemy king by moving to a checking square;

▶ **Defence** – click all squares which are not defended by at least one friendly piece.

Clicking on squares will mark them green, clicking again removes the mark. If you solve the problem in the allocated time the program will automatically present a new position. If not it will show you the correct solution. You also get statistics of your results, and can proceed to the next training position. Click on the red "Stop" button on the top left to end the training session.



In the above example we are supposed to mark all white and black pieces that are under attack. The correct solution is almost there, except that the white bishop on g5, which is attacked by the pawn on h6, has not been marked. If we click on that piece the solution is complete and the program will load a new position. Otherwise it will display the solution, with the bishop marked in yellow.

Theme Blitz

Menu: Tools - Training - Theme blitz

In this mode the game starts from the position you have on the board. This might be an opening, or a middle or endgame position.

- ▶ To start a theme blitz get the starting position on the board, either by entering moves or entering a position.
- Now click *Tools Training Theme blitz*. The position will be displayed in a dialog.
- Click OK to get to the board window and play out the position against the computer.
- ▶ When you have finished *press Ctrl-N* (= new game) to try again. The same starting position will be set up for the new game.
- If you click "Change sides" in the theme blitz dialog the sides will be switched every time you start.
- If you click "Learn moves" then you will get the initial position of the game every time you press Ctrl-N, and you are expected to play to the theme position on your own. If you enter a move that is not part of the variation the coach will appear and warn you. This works just like the openings training function.

Extend training database

The opening and endgame training that come with the program can be extended or replaced by training files you create yourself.

The basis is two normal databases which should be kept in the directory *Program*

Files\ChessBase\Training. They should be called Openings.cbh and Endgames.cbh. You can also keep them in a different location, but then you must set the path in the Training options.

Practical tips

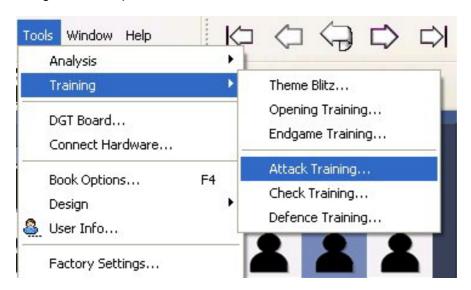
- ▶ For the openings training enter the moves of the main line of each opening and save the game. Give it a name to describe the opening (e.g. Benoni Defence Classical Variation". You can use the White and Black fields to format the names nicely.
- You can enter variations, which the program will choose at random on its side of the opening.

You can influence the choice by giving commentary symbols. A "!" will double the number of times the move is played, a "!!" will triple it. Moves marked "?", "??" and "?!" will never be played by the computer.

Delete Training Results

Fritz offers training for beginners.

Using the menu *Tools - Training - Attacking Chess/Defensive Chess* you can train yourself to recognize certain powerful combinations on the chess board.



The results are stored by the program and displayed after every cycle.

Is it possible to cancel the results and go back to the beginning?

Yes. In the folder \Documents and Settings\<username>\Application Files\ChessBase\Chessprogram10 there are a series of configuration files. If you delete the file "Highscore.cbini" the results so far will be cancelled.

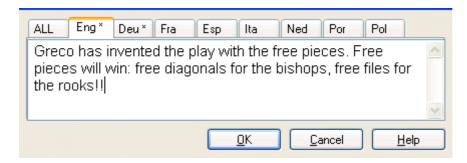
Commentary

Text commentary

Menu: Insert - Text before/after move

An annotation is text that you can enter to comment on a move or position. This is how you type in text:

- ▶ Right-click the notation and select "Text after move". You can also press Ctrl-A.
- Right-click the notation and select "Text before move". You can also press Shift-Ctrl-A. In both cases, a text editor appears in which you can type in your annotations.



You can use most of the normal Windows edit functions while entering your annotations. For instance you can press Ctrl-X and Ctrl-C to cut or copy bits of text, and Ctrl-V to paste them. You can even insert text from a different source by copying it to the Windows clipboard and then pasting it into your own text.

You can also use all the special chess commentary symbols, which can be typed in from the keyboard.

Some points to note

- You can resize the text input box.
- ▶ Text commentary can be written in different languages. Before typing it in, you can specify whether it is neutral or in one of the given languages: English, German, French, Spanish, Italian, Dutch or Portuguese.
- In the menu *Tools Options Language* you can determine which languages should be displayed when you load a game. "All" is language independent and will always be displayed.
- You can **mark a position for a diagram** by inserting a Ctrl-D character into the text. When you print out the game a diagram will appear in this position.

Commentary symbols

In chess there is a system of commentary that uses special symbols to annotate moves or positions. The advantage is that they can be read in any language and immediately understood by chessplayers all over the world.

The program knows all the international chess commentary symbols. Here are the most important ones:

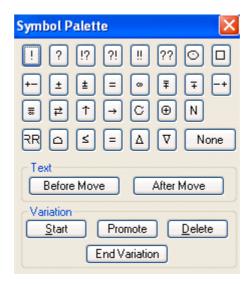
Symbol	Meaning Good move		
!			
!!	Very good move		
?	Bad move		
??	Very bad move, blunder		

!?	Interesting move
?!	Dubious move
=	The position is about equal
±	White is slightly better
± +-	White is clearly better
	White is winning
₹	Black is slightly better
Ŧ	Black is clearly better
-+	Black is winning
↑	With attack
\rightarrow	With initiative
⇄	With counterplay

Commentary Palette

Board window: View - Annotation Palette

There is a special annotation palette that helps you insert chess commentary symbols with a single click.



- The first line contains move evaluations (good move, blunder, etc.) that appear after a move.
- The next two lines are mainly position evaluations (White is better, unclear). They also appear after a move.
- ▶ The symbols in the fourth line (better is, with the idea, etc.) are automatically inserted before the move.
- ▶ "None" removes any symbols attached to the current move.

When you move the mouse cursor onto a symbol its meaning is displayed.

▶ Text before move / after move

Use this to enter text commentary in front of or behind the current move.

Start variation

Takes back the current move and allows you to add an alternate line (equivalent to pressing "T").

Promote variation

The current variation is promoted to the next-higher level, and that variation becomes the subvariation.

Delete variations

Removes the current variation and all subvariations from the game.

End variation

Ends the variation and jumps to the main line, where you can continue entering the moves of the main

Medals

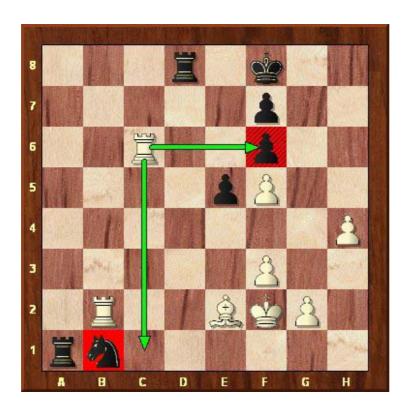
If a game has some interesting aspect, it may receive a "medals". The medals appear as coloured stripes in the games list. The main use of the medals is to search for games that all belong to certain categories.

C39	1851	1/2-1/2	40	
C52	1851	1-0	23	VCAI
C52	1851	1-0	25	

Medals are sometimes awarded automatically by the program. But in most cases they are already in the game, put there by the contributors to the ChessBase games collections.

Graphic commentary

The program uses coloured arrows and squares to illustrate tactical points and make strategic themes and plans more clear.



These are entered using a combination of mouse and keyboard:

Press the Alt key and click the Mark square green, square or draw a line from a to draw green arrow b.

Press Alt + Shift and click the Mark square red, draw red arrow square or draw a line from a to

Mark square yellow, Press Alt + Ctrl and click the

- If you draw a line with the same colour again, the original line is erased.
- A right-click on the area around the board erases all graphic elements from the current position. The graphic commentary is stored together with the game and appears automatically during replay.

Chess Media System

The Chess Media System allows chess teacher and lecurers to comment on games while moving the pieces, drawing arrows and marking squares on the graphics chessboard. Using a video camera or simply a microphone, chess experts can hold lectures or comment on games, while moving the pieces on the board. These lectures can be recorded and viewed offline. The lectures can be transmitted live over the Internet and broadcast on the Playchess server, or they can be recorded and distributed on CDs and DVDs.



How exactly does the ChessBase Media System work. It makes use of the Windows Streaming Media format (the files have the ending .wmv and .wma) to capture video and/or audio files on the fly. Whatever is done on the chessboard is recorded by the program and instructions are embedded in the multimedia stream. When the file is replayed everything is faithfully repeated on the graphic chessboard.

There are different way of viewing a lecture:

▶ If you have the lecture on a CD or DVD, like the ones of Garry Kasparov, Viktor Kortschnoi and other great teachers and trainers, then you simply open a file using "File – Open – Chess Media File". The program will open a chess media window and you can sit back and watch the game.

If the lecture is on Playchess then you load the game. The program will detect the Chess Media broadcast and open the media window. Usually lectures and broadcasts have names like "TV ChessBase". Note that no multimedia broadcasts are available in the main playing hall and in other tournament rooms. They are generally to be found in "Broadcasts", in "Training and Teaching" and in the "Chess Media System" room. In the latter there are a lot of recorded lectures.

If the Media System window does not open by itself you can do this manually, using "Window – Panes – Chess Media System". There are buttons at the bottom of the screen for opening new files, playing, stopping, etc.



At the bottom of the media window there are some buttons which allow you to open a new file, start, stop and pause the replay, change the volume, and move the slider to jump to a different position in the multimedia file. Note that if you do this it will take a few seconds for the position on the board to synchronise (it is stored at regular intervals in the media file).

Note that you can pause the game at any stage and use Ctrl-S to <u>save</u> it in a separate database. You can also <u>start an engine</u> and analyse the position on the board. But make sure to save your analysis in a separate database before you continue or it will be overwritten by the game that is being replayed in the media file.

System requirements

In order for you to watch and hear the Chess Media lectures you need to have a working sound system on your computer; and to have the *Windows Media Plaver Version 9.0* or higher installed. This is available free of charge on the Microsoft web site. It is probably already installed on your computer.

Computer chess

Engines

The chess playing part of this program is separate from, and independent of the graphical interface. The playing part is called the **"chess engine"**. The engine can be changed (Menu <u>Tools – Engine</u>), and the interface can support more than one engine at a time. You can stage engine matches and engine tournaments.

ChessBase regularly publishes new engines, keeping you completely up-to-date with the strongest chess playing software in the world.

Current top engines (October 2006)

Fritz 10

A very strong new version of the program that held classical chess world champion Vladimir Kramnik to a 4:4 draw in Bahrain in October 2002, and drew against Garry Kasparov in New York in 2003. Fritz 9 has a large amount of chess knowledge, which enables it to find good plans and ideas even in positions where there are no tactical opportunities. The authors are Frans Morsch (Holland) and Mathias Feist (Germany).

Deep Fritz

A special version that supports multiprocessor systems.

Junior 9.0 / Deep Junior 9

The many times computer chess world champion, which played to a draw against Garry Kasparov in New York in 2003. Authors: Amir Ban., Shay Bushinsky (Israel).

Shredder 9.0

Winner of a large number of world championship titles. Author: Stefan Meyer-Kahlen (Germany).

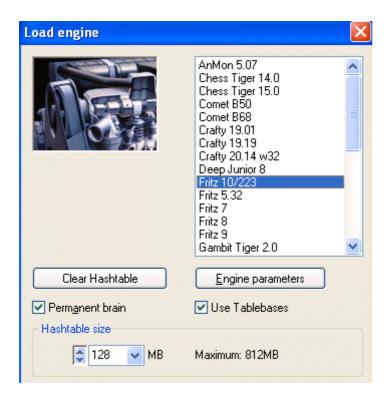
▶ Hiarcs 9.0

A positionally very strong engine written by Mark Uniacke (England).

Load Engine

Menu: Engine - Change main engine

This brings up a dialog box in which your can load engines and set different engine parameters.



- ▶ Clear hash tables: This removes all information from the hash tables (which might have been filled in an earlier search).
- **Engine parameters:** click to set the engine parameter available for the selected engine.
- ▶ Hash table size: This is important if you are looking for optimum strength, especially in longer time control.
- **Permanent brain** is the term for thinking on the opponent's time. This is an advantage because the engine often guesses what the opponent is going to play and then has already calculated its reply.
- **Tablebases** are special endgame databases which allow the program to play five-piece endings perfectly (even find them in the search).

Switch off engine

Menu: Engine - Switch off engine



Normally when you enter a move the program will start playing against you. You can also switch to infinite analysis, in which case the engine will calculate in the background while you enter moves for both sides.

If you want to turn the engine off altogether you can do so with "Switch off engine". After this the engine will not run in the background, which is useful if you are running a number of program at the same time.

UCI Engines

What is UCI?

This program was designed as a multi-engine system. This means that the graphical user interface and the actual chess engine (the module that calculates moves) are strictly separated. They use a predefined interface to communicate with each other. *UCI* stands for *Universal Chess Interface*. It is a new communications standard defined by Stefan Meyer-Kahlen. The UCI interface is closely related to the "Winboard" protocol. This means that existing Winboard engines can be very easily adapted by the authors to run under our interface. For these programmers the new UCI interface has the following advantages:

- The engine can be run under an interface which has numerous advanced testing facilities that allow them to improve the strength of the engine.
- The engine runs at full performance and strength without the need of additional adapters.
- The engine will become available to a large number of users, who are able to install it without the need for complicated configuration, as is often the case with Winboard.
- ▶ The UCI protocol may be used without any license fees, for private and for commercial purposes.

Please note

A UCI Engine is installed using the menu *Engines – UCI Engine*. The dialog has two purposes: A new UCI engine can be selected and made available to the program.

The parameters of an engine that has already been installed can be modified. The modified engine can then be saved under a different name.

With regard to renaming engines there are certain restrictions. The original engine name must be contained in the new name. If the engine is saved with the standard settings the name must be left in its original form, i.e. you will not be able to edit the engine name at all. On the other hand if you change the default parameters then the name must also be changed (retaining the original name as part of the new one). The name of the engine author cannot be removed. However you do not need to modify it when you change the parameters.

Example: Let us assume that you are using the UCI version of Shredder 6.0 under the Fritz interface. You change certain parameters of the engine. You will want this engine to appear with a different name in the list of engines. The standard name is "Shredder 6". You can for instance change it to "Shredder 6 tactics monster" because that contains the original name. But you cannot change it to "Fred's chess engine" because that does not.

Installing a UCI engine

Before a UCI engine is displayed in the engine dialog (F3) it has to be installed. This is done in a few simple steps:

Select the option *Create UCI engine* in the *Engine* menu.

Next you must tell the program where the UCI engine is located. This is done by point and click in the file selector that appears. Use "Browse" and locate the UCI engine on your hard disk.

The name of the engine and its author are automatically given. Simply click "OK" to install the engine, which will then be displayed in the engine list.

Note that the UCI engine can be stored in any directory on any partition of your hard disk.

Modifying engines

Many UCI engines allow you to modify a number of search and evaluation parameters which influence the playing style of the engine. To change the parameters proceed as described above. In the *Create UCI engine* dialog click on the button *Parameters*.

Each UCI engine will display the parameters which can be changed, and which vary for different engines. If you change any of the parameters the input fields for "Name" and "Author" become active and can be modified, within the constraints described above.

After clicking "OK" the new engine is registered and will appear in the engine list, together with the

other UCI and native chess engines.

Please note: modifying and storing an engine with a different name does not create a new copy of the engine on your hard disk. Only the modified parameters are stored under the new name and applied to the engine when this is started.

Load logo

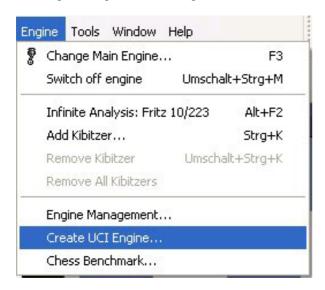
You can install different logos for different UCI engines, which are then displayed in engine matches. For this it is necessary that

- ▶ the logo is in BMP format
- the size is not larger than 100 x 50 pixels
- the file name of the logo is the same as that of the engine
- it is in the same directory as the engine

Set UCI Priority

Fritz was conceived as a multi-engine chess program and allows many different chess engines to be integrated. The user interface and the chess program itself are strictly separated and communicate with one another via a standard interface. Many chess engines can be downloaded from the Internet that use the UCI protocol. UCI is a protocol that was devised by Stefan Meyer-Kahlen and stands for *Universal Chess Interfacet*.

Fritz fully supports engines that use the UCI protocol. The menu *Engine* -> *Create UCI Engine* opens a dialog to integrate a UCI engine.



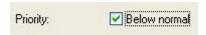
The installation is carried out via an intuitive dialog.



The program must first be told where the UCI engine has been stored on the computer. The button

"Browse" opens a folder tree that can be used to select the folder which contains the engine. After the path has been selected the fields "Name" and "Author" are automatically filled, as long as the engine contains this data. There is a button entitled "Parameters" which can be used to alter the engine's playing style.

In Fritz 10 there is a new parameter to determine the priority of a UCI engine. What does it mean if the priority is set to lower?



This has to do with the distribution of the processor time. The communication between the user interface and the chess engine is carried out by a separate program, the Engine Interface. The Engine Interface runs with low priority to give the chess engine the maximum amout of ressources. Some UCI engines have problems with the default setting because they use too many ressources and the Engine Interface cannot receive the evaluation results and similar data. The setting "Lower priority" solves display problems that arise when certain UCI engines are used.

Even when the lower priority is set a UCI engine receives all the processor speed it needs and brings its best performance. This setting does not adversely affect the performance of a UCI engine! This is easy to test by analysing the same position with both settings. There is no change in the engine's speed, it only makes the usage smoother.

So why can the priority be lowered for the UCI engines and not for Fritz (and the other engines sold by Chessbase)? The native Chessbase engines are linked as DLL's to the user interface, which means that unlike the UCI engines they are not external processes. No external protocol is necessary, and no priority must be set.

Hash tables

Hash tables are memory areas in which the program can store positions and evaluations while it is calculating the moves of a game. If the program encounters the same position again, it can simply take the evaluation from the hash tables, rather than analysing the position all over again. Hash tables increase the playing strength of the program considerably. This is especially true of tactically strong engines like Fritz, Junior or Shreddder. Some run at well over 500,000 positions per second, and will fill the hash tables very quickly. After that, the search slows down. This is not the case in a slower, positionally oriented program, which processes less positions per second, and takes much longer to fill the hash tables.

For slower time controls and deep analysis the engines need large hash tables. Tournament games with an average of three minutes (180 seconds) per move would ideally require over 256 MB for the hash tables. On blitz levels 16 to 64 MB is enough.

Some engines work best with hash tables sizes that are powers of two. This means that 64 MB of hash tables is much more valuable than 63 MB. Hash table sizes are set in the "Load engine" menu.

Some technical notes

- ▶ The Windows operating system takes unused memory and uses it for internal purposes (e.g., to cache file and speed up the hard disk). If you set very large hash tables, Windows has to free the memory the first time you activate the engine. To do so, it writes the contents to the hard disk, closes files, etc. The process can sometimes take a while, and during that time the hard disk will run constantly.
- After the memory required for the hash tables is free the hard disk should show no more activity (except for short seeks in the openings). This applies to subsequent games as well.
- If there is constant disk activity during the game, then the hash tables you have set are too large. Windows has installed part of the tables on your hard disk, which slows the program down drastically. You will notice that the search depth remains very low.
- If there is no disk activity at all when you first start an engine, this generally means that you have

been too timid with the hash tables size. You may want to increase the size to get optimum playing strength.

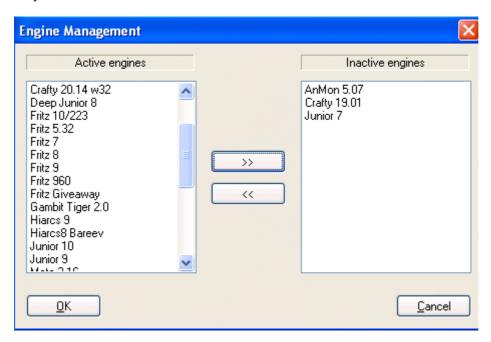
If you are playing an important tournament game with large hash tables, you should start the engine once to force Windows to release the required memory. Press Alt-F2 to start the engine, and Alt-F2 again to stop it when everything is quiet.

Engine management

Menu: Engine - Engine management

One of the great strengths of the ChessBase programs is that there is a strict separation between the interface, which provides the graphics and functionality, and the chess engines, which calculate the moves. This makes it possible to provide many interesting chess engines by talented programmers all over the world. The authors themselves do not have to bother about the interface, they can concentrate fully on improving the intelligence of their engines.

If you have collected a large number of engines, the list from which to choose becomes long and unwieldy. The function Engine management helps you "archive" engines and activate them only when they are needed.

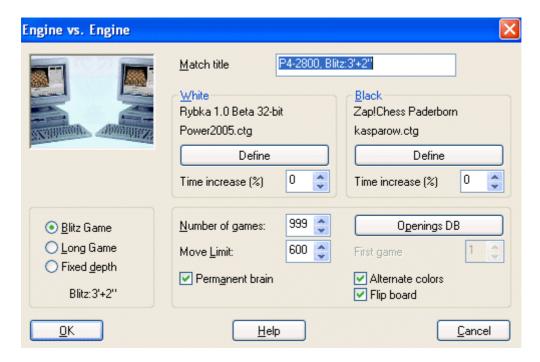


- Active engines: these are the ones that will be visible when you load an engine.
- Inactive engines: are those that are parked away for later use.
- The buttons >> and << are used to move engines from one window to the other.

Engine matches

Menu: File - New - Engine match

This allows you to stage automatic engine matches between two computer opponents. You can also play an engine against itself, that is, to test the quality of different openings books. In the engine dialog box you can specify which engines should play, which books they should use, time limits, number of games, etc.



- Match title: This is the title that will appear in the tournament column of the games list.
- ▶ **Define:** These two buttons allow you to select and configure the engines. You can set the hash table size, the use of endgame tablebases, the openings book and possibly the engine parameters. You can give an Elo rating for the engine. The left engine has white in the first game.
- ▶ Blitz/long/fixed: You can stage engine blitz matches, or play the games at tournament time controls. It is also interesting to set a fixed depth which can be set to different values for each engine.
- Number of games: You can specify how many games should be played.
- ▶ Move limit: This limits the length of individual games. The number gives the number of ply (half-moves) after leaving the openings book. In the database, the games are stored without a result, but with an evaluation symbol.
 - **Tip:** If you want to check an openings book, set the move limit to "1". The program will go to the ends of different lines, calculate one move and save them with an evaluation symbol.
- Permanent brain: You can specify whether the engines should continue working while the opponent is thinking. This, however, means that each engine will be using 50% of the processing power.
- ▶ Openings DB: This is a special feature which allows you to select a database of games. The engines load each game, jump to the end and play on from there. This function allows you to stage "theme tournaments" and also conduct interesting experiments, like the "Nunn match", in which each side must play ten representative openings positions with black and with white. These positions are included on your program CD (Nunn.cbf) and were selected by Grandmaster John Nunn. They have become the standard for testing chess engines without the influence of the openings book.
 - **First game:** If you use an openings database, you can specify which position the match should start from.
- ▶ Alternate colours: After every game the sides are switched, so that each engine plays one game with white and one with black. If both programs are using the same openings book, or if you are using an openings database like the Nunn match, each engine will play the same opening with white, and then with black.

Information during the match

While an engine match is running there is a lot of information available to keep you briefed on its progress. These are to be found at the top of the screen.

- On the top left you see the names of the two engines.
- ▶ The "X" button allows you to stop the match.
- Click the middle button when you want to "adjudicate" a game. This is useful when one side is

- clearly winning but the game will drag on for many hours before it is decided.
- ▶ The third button will generate a tournament table, giving you an overview of the engine match so far.

On the top of the screen there is more information: You can see names of the programs, the current score, number of draws, and the result in percentage. You can also see the tournament performance in Elo, with the standard deviation in square brackets, and the certainty (in percent) that the performance lies within this margin of error.

Where the games are stored

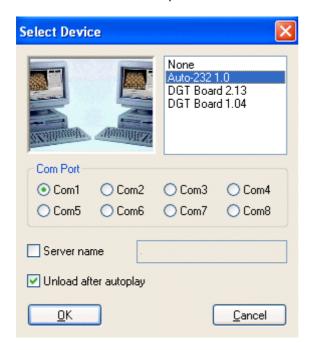
A special engine-engine database is used to store all games from engine matches. It is by default, the database c:\My Documents\[User]\ChessBase\CompBase (unless you have specified otherwise during the installation).

The engine-engine database is called "EngMatch" and is always present in the history list at the top of the database window.

Engine matches on two PCs

Menu: Tools – Connect hardware (or Alt-Shift-J)

You can play engines against programs using the **Auto232 device driver**. To do this, you must connect two different computers with a serial cable (null modem).



Playing with a null modem cable (serial port)

After clicking the correct Com port, start an Auto-232 match on both computers using *File – New – Two computer match*. In the dialog box, specify the players and the name of the match. One of the PCs must be defined as the "Master". During the match you will find information on its progress in the area just below the status line, at the top of the screen (exactly as in engine matches). The Auto232 function is fairly complex and only for expert users.

The autoplayer on a dual system

It is possible to conduct autoplayer games on a dual system without any relevant performance loss. Each program gets a full CPU and has access to all the resources allocated to it. Permanent brain works perfectly. Of course, the system is only meaningful if you are using different GUIs for the two

programs. If both run under the standard GUI, it is better to start a regular engine match.

- Start both programs and position them on the screen so that you can see the relevant information and follow the match.
- Start an autoplayer match as described above, defining one program as master and one as slave.
- Click "Server name" and enter a dot (period) in the input line.

Autoplayer via network

It is possible to play two computers against each other using a network connection. For this you require Windows NT, Windows 2000 or higher. In the Auto232 driver, enter a dot (period) as the "Server name", as shown above. It is not necessary to enter an address on the host computer, but you must enter the the IP address of the host on the slave computer.

The Nunn Match

The use of an opening database in an engine vs engine match has some interesting applications. For instance, you can start a theme tournament to test the quality of your favourite openings system, store various lines in the database and then have the program play them out against itself. Or, you can store a series of games or positions you want to analyse in a database and start the program working on them. It can also be used to conduct the well-known "Nunn test".

GM John Nunn has selected a series of ten openings to test engine strength. The opening database required to conduct the match is to be found on your program CD, and is automatically installed on your hard disk (in the directory \testsets). If you start a match between two engines using this "Opening DB" and "Alternate colours", you will get 20 games which give you a very good idea of the pure playing strength of the engines.

There are a number of reasons for this kind of experimental match, which eliminates the use of traditional openings books:

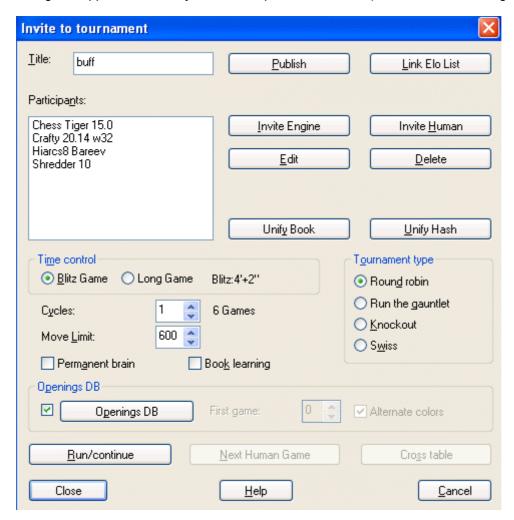
- ▶ With the amount of effort going into the production of optimised openings books, and with the advent of learning books, the measurement of the playing strength of the chess engine itself has been pushed into the background. A large number of computer vs computer games are decided by the openings book.
- It is possible to improve the results of one program against a competitor by simply "booking" the opponent (i.e., including lines in the books that are aimed at a specific program). Such "killer openings" appear repeatedly on the boards of testers and drastically improve the score of a program, without need for improvement in the playing strength of its engine.
- It is important to define a fixed set of games that should be played in a test, rather than to use a random set of games, where there is a danger of selective reporting. A Nunn match is only valid if exactly twenty games are submitted. It is entirely reproducible and transparent to everyone. This is even more true if the precise hardware configuration is known, and the thinking times and evaluation of each move recorded, which the program does automatically.

Engine tournaments (with humans)

Menu: File - New - Tournament

This program can stage entire tournaments with many participants, fully automatic. This is the best way to rank chess engines. It is in some ways better than engine matches, since some programs may have problems with one rival while doing much better against others. In engine tournaments, each program meets a variety of opponents, and the overall playing strength is determined. Setting up a match can be done quickly and easily. You invite engines to a tournament, set a time control, specify the number of rounds, start the tournament and leave the computer to do everything else by itself.

When you click "New" – "Tournament" you are asked for a file name (ending with: .TRN). After that, a dialog box appears in which you can set up the tournament (or continue an existing one).



- ▶ **Title:** Enter a name for the tournament. This will appear in the tournament column of the games list.
- **Publish:** This allows you to <u>publish the games</u> automatically and live on the Internet.
- Link Elo list: If you link the tournament to an existing Elo rating list, then the Flo ratings of the programs are saved with the games and proper cross tables generated.
- Invite engine: You can choose from the engines installed on your system. For each engine, you can select an openings book, set the book and engine options, hash table size, etc.
- Invite human: Allows a human being to participate in the tournament. You can play your games whenever you like. Simply open the tournament and click "Next human game".
- **Edit:** This allows you to edit the settings you entered when inviting an engine.
- **Delete:** Removes an invited participant.
- Unify book/hash: All engines use the same openings book or the same size of hash tables.
- ▶ Blitz/tournament game: The tournament is played at blitz/tournament time controls.
- Cycles: Gives the number of rounds in a Swiss tournament, or the number of times each player must play against all other players in a round robin.
- **Permanent brain:** The engines are allowed to <u>think on the opponent's time</u>. This means each participant will use 50% of the processing power during the entire game.
- **Book learning:** The openings books that are being used are modified and improved in light of the games that are played. This means that the engines will start avoiding lines that went badly for them, and try to force ones in which they scored well.
- **Round robin:** In this tournament type, each player must play against all other participants ("cycles" determines how many times).
- ▶ Run the gauntlet: This allows engines to be included into a running tournament. They will play against all other engines (which have already played against each other), and will do so as often as specified in "cycles".

- Knockout: Players are eliminated in matches against each other; the winner goes on to the next
- **Swiss:** The engines play n rounds (determined by "cycles") against each other, where n is less than the number of opponents in the tournament. In the Swiss system the opponents are chosen according to their running scores, that is, those with approximately equal scores are paired against each other.
- ▶ Run/Continue: If you need to use your computer during a tournament you can interrupt it and resume later. Click "File" "Open" "Tournament", select the tournament in the file selector and click the "Run/Continue" button in the tournament dialog box.
- Next human game: If you are participating in the tournament, click this when you are ready to play your games. You can also do so in the menu "Game" "Tournament" "Next human game".

Tournament database

The program saves all $\underbrace{\text{engine tournaments}}$ automatically in a tournament database. You will find this in the directory c:My documents\ChessBase\CompBase\EngTourn, unless specified otherwise during the installation of the program.

Publish tournament on the Internet

Menu: File - New/Open - Tournament - Publish

With this function you can <u>stage entire tournaments</u> with many participants, human and computer, fully automatic. These tournaments can be published live on the Internet. The program will update the web pages automatically at regular intervals. It will even include a Java script diagram of the current game, so that visitors can play through it on their browsers.

When you start or resume a tournament, click the "Publish" button to get the following dialog box:



- Publish tournament: This must be checked if the tournament is to be published.
- **Update:** Allows you to determine whether the web site should be updated after every game or at regular intervals (e.g., every five minutes).
- **Server address:** Specify the FTP address of your web server (e.g., myserver.com).
- **Subdirectory:** It is advisable to create a subdirectory for the tournament on your server. If you leave this empty, the tournament will be published on the root directory.
- ldentification: This is your user name on the server.
- **Password:** The password will give the program access to your domain.
- **Test:** Makes a test connection to your server.

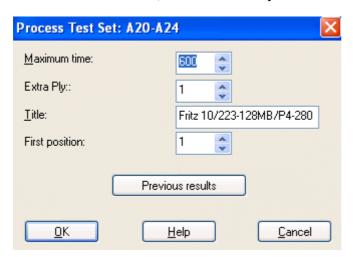
Process test set

Menu: Tools - Analysis - Process test set

Solving a series of test positions is an objective way of evaluating the strength of an <u>engine</u>. But, it is a tedious task to enter each of the positions, start the engine, and then protocol the solution times. You can run a whole database of test positions automatically. The solution times and values are automatically recorded together with the moves. Even the engine name is noted behind the first move of the solution.

After installing the program, you will find a test set of 200 difficult tactical positions for you to experiment with. It is in the directory *ChessBase\Testsets*. This is how to run a test set:

- Switch to the database window and open a database of test positions. The database should *only* contain positions, and no games. Each position should have the first move of the solution. If there are two solutions, then the alternative move should be given as a variation.
- In the board window, click *Tools Analysis Process test set*. The following dialog box appears:



Maximum time: Defines the maximum length of time the program should work on each position. **Extra ply:** When the engine finds the solution, then it should not stop immediately. The correct move may have come up by chance. The program should at least finish calculating the current ply depth. This corresponds to the setting *Extra ply = 1*. If you want to be sure, you can make the program go one or two plies deeper. This may, however, greatly extend the processing time.

First position: Allows you to specify from which position the program should start. Thus, if you have interrupted a session, you can easily continue at a later time.

Previous results: The program keeps a record of the results achieved by each engine that has run the test. It displays these in a sorted list. This contains the following results:

- ▶ The number of positions solved in the allocated maximum time per position.
- ▶ The average solution time of all the positions that were solved.
- ▶ The average solution time of all the positions (including those not solved).

This last value, which of course is influenced by the maximum time set, is the most illuminating. While the program is working you see the current results (how many positions solved, percentage, average time) in the area just below the status bar at the top of the board window.

In the displayed ranking list (click "Previous results"), you can delete the results of individual engines, or all results. You can *clip* the results (i.e., copy them into the clipboard and insert them in a spreadsheet program).

The unsolved positions are marked in the database with "medals". Positions that were not solved in the current test run are marked with black medals for "Tactical blunders". Those not solved by any program, get the "User" medal (blue-green). You can see the medals in the database list and search for them with the search mask. This is the best way to get a list of unsolved positions. To load one position after another, switch to the board window and press F10.

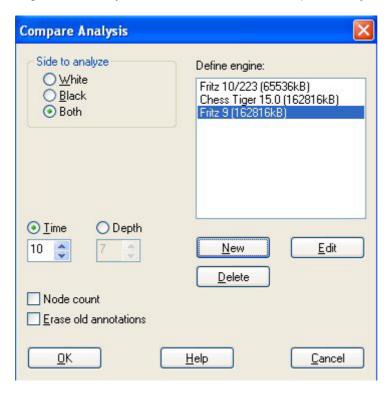
Note

You can define a position as solved if one or more moves are *not* played. This is done by annotating them with a "?". For instance if the notation says 1.Ne5? (1.Ng5?) then the position is solved when neither of these moves is in the main line.

Compare analysis

Menu: Tools - Analysis - Compare analysis

The automatic comparison of the analysis of two different engines has two main uses. First, it is an excellent way of evaluating the strengths and weaknesses of the engines. On the other hand, from a chess point of view, it is very interesting to compare the conclusions of two different engines. One might be tactically more reliable, the other more positionally sound.



It is also interesting to compare two versions of the same engine. The "compare analysis" function allows you to check what each finds at a specific search depth, or how many position nodes each of these engines actually checks to reach a certain search depth.

You can set a variation colour for each engine (when loading it) so that it is easy to tell at a glance which engine produced the individual lines.

How to load engines:

New allows you to select engines from the list of all available engines.

Edit allows you to change the settings for the engines already loaded (hash table size, variation colour).

You can use "compare analysis" on a number of games (in the database window). In this case, specify whether the analysed games should replace the original entries or if they should be appended to the end of the database.

<u>Please note:</u> You can load an engine more than one at a time and then use *Edit – Parameters* to set different engine parameters. In this way you can find out how the settings affect the performance of the engine.

Permanent brain

"Permanent Brain" is the term used to denote the program thinking on the opponent's time. After it has executed a move, the program tries to guess what the opponent will play, and starts calculating a reply to that. If it has guessed right, it will play its reply quickly - sometimes immediately. The program shows the move it is expecting in the engine window.

In engine tournaments, if two engines are playing against each other, using permanent brain slows down the side that is computing the next move (because it has to share resources with the other side's permanent brain).

Expected move

After the program has executed a move, it already expects the opponent to make a certain reply. In fact, it continues to calculate on the opponent's time, under the assumption that this move will be played. If the opponent actually plays it, the program can execute its next move much more quickly – sometimes instantaneously.

You can see what the program expects you to play in the engine window:



The expected move (Ne7) is displayed in the engine window. It is not available in the restricted playing levels like Sparring, Friend and Handicap.

Engine parameters

Menu: Engine - Change Main Engine - Engine parameters

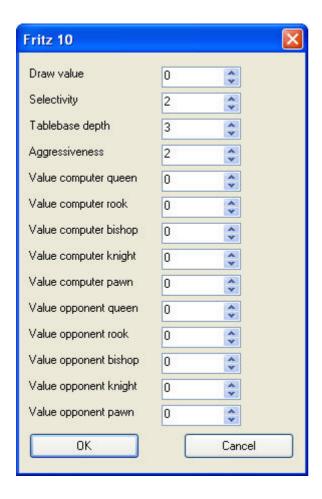
Many of the engines available have special parameters you can set. To do so, click the button "Engine parameters" in the engine window. Now, you can change the settings that affect the playing style of the engine. Each engine will present the parameters that are relevant to its algorithms.

Here are examples of the parameters you can set in most engines to influence their playing style. You will often be able to achieve a higher performance in specific situations (e.g., playing very fast games, solving tactical positions or studies). Different parameters may be available in different engines, not all of the ones given below may appear in your default.

<u>Note:</u> The default configuration of the Fritz engine has been carefully tested. It is possible that in some circumstances other settings lead to better results, but for the best overall performance and strongest play it is recommende that you leave the default settings unchanged.

Engine Parameters of the Fritz Engine

You can modify the parameters of the Fritz engine. When you load an engine with the function key F3 you should select the engine (in this case Fritz 10) that you want to load. There is a button entitled "Engine Parameters" which opens the following dialog:



Draw value = 0: Fritz plays as usual.

Draw value > 0: Fritz tries to play for stalemate. This might be useful in a situation where a drawn game is enough to win a tournament.

Draw value < 0: Fritz tries to avoid stalemate. For instance, with a setting of –100 (centipawns) Fritz would be prepared to sacrifice a pawn to avoid stalemate.

Selectivity: The higher the selectivity, the more nodes are cast away during the search. The program is faster, but more vulnerable tactically. With lower values the program sees more, but it plays weaker because it no longer gets to the same search depth. When the value is set to 0 the null move algorithm is turned off, which is useful for certain test positions.

Tablebase Depth: The higher this value is, the later and more rarely the tablebases are accessed. Tablebase accesses slow down the program, but they give perfect information about how to play in endgames with few pieces on the board.

Aggressiveness: This influences the engine's playing style. If the value is set higher the engine tends to play more aggressively, attacking rather than defending.

Piece Values: The remaining parameters can be used to alter the value of the individual pieces. This can either be done symetrically, by giving for example an identical value for the computer's and the opponent's knight, or asymmetrically.

Save: This saves the engine modifications. This opens a dialog to select the filename for the stored parameters. The extension of the configuration file is *.param.

Load: This opens a dialog to load previously stored engine parameters. The parameter files can be found in the folder Engine Parameter.

Defaults: This button restores the engine's factory settings.

Tip: You can set up engine-engine matches or engine tournaments to test your modifications against other engines.

Save stores the new parameters for the engine. **Restore** deletes the changes you have just made. **Defaults** switches back to the normal parameters.

Please note: The default parameters are the one the programmers consider the strongest for general play.

Please note: The default parameters are the one the programmers consider the strongest for general play.

Endgame databases

Many chess programs can play all important major piece endings with four and five men on the board *perfectly*. This is to be taken literally. On the program DVD, you have the most important endgame databases. They contain full information on every legal position that is possible in these endings. At any stage, the program knows whether the position is won, lost or drawn, and how many moves it takes to win or lose (assuming perfect play by both sides).

The endgame databases are in the Nalimov format and are know as "Tablebases". They are in the directory \TBs on your DVD program.



Eugene Nalimov from Novosibirsk (currently in Redmond) wrote the powerful algorithms to generate the endgame tablebases.

Access to the tablebases improves the playing strength of the program in the endgame considerably. Whenever it hits on one of the five-piece endings in the search, it can stop and get a completely accurate assessment of the position from the tablebases. It does not have to generate thousands of follow-up positions. But, accessing the tablebases is quite slow (in comparison to the move generation and evaluation). You can speed things up by copying the tablebases onto your hard disk.

Use the endgame database to practice the endings or to study difficult positions. Not even the greatest experts in the world can give you more reliable analytical help.

Endgame Turbo

ChessBase has a product, the *Endgame Turbo*, which consists of five DVDs filled with Nalimov Tablebases. With the help of the Endgame Turbo, all five and a number of six-piece endgames will be played with absolute perfection. Since the positions are also indentified in the search the program played the entire endgame, including positions with more than six pieces on the board, much more accurately.

Copying the endgame databases onto your hard disk

Menu: Tools - Options - Tablebases

Accessing the endgame databases (Nalimov tablebases) from a hard disk is much faster than from the CD. It is advisable to install them onto your hard disk, if you have enough space.

Create a directory (e.g., e:\cbdata\tbs) on your hard disk and copy the content of the directory \TBS from the program CD into the new directory.

Then set the path in the "Options" dialog box:



Note that you can put the tablebase files into different directories, partitions or even different hard disks on your computer. Use the "Browse" button to locate the directories.

The **cache** memory is used to speed up access to the tablebases during a game. A value between one and eight MB is advisable.

Benchmark

Menu: Tools - Chess Benchmark

The speed of the hardware that the engine is running on, has great influence on its playing strength. Obviously, a 3 GHz Pentium is going to give you a much better performance than one running at 1.7 GHz. But the optimum configuration of the hardware also plays an important role. For instance, the amount of first and second level cache, the speed of access to memory, and other such factors, can lead to considerable variance. Two computers with exactly the same processor may produce quite different results.

A built-in chess benchmark helps you measure the chess specific performance of your hardware. In order to make the results reproducible it is always conducted with a standard chess engine. The results of the chess benchmark test depend to a great extent on the size of the hash tables. It also varies according to the number of applications you have running in the background. You should use the test to check the effectiveness of your current configuration.

Typical chess benchmark values for a 2.6 GHz Pentium with 128 MB hash tables is 1.4 (i.e. it is 1.4 times faster than a P3 running at 1 GHz. You should get a kilonodes per second value of abround 600. The Centrino and Athlons will give you much better values, since they are better suited to the kind of (integer) calculations used by chess engines.

The nodes-per-second value of the chess benchmark gives you the number of positions the engine is

generating and evaluating per second. This value (in "kilo nodes") is independent of hash tables, and depends almost solely on processor speed. Some engines will give you up to two million nodes per second on modern hardware. But remember that the lower node counts of some engines does not necessarily mean that they are weaker. Usually they are simply processing more chess knowledge. **Fritz Chess Benchmark.exe**

On the program DVD there is a utility called *Fritz Chess Benchmark*.exe. This is what is running during a chess benchmark as described above. The utility can also be started independently, which means you can copy it onto a memory stick and run it on different computers when you are purchasing a new one. This will help you make sure you select a machine that gives you good values for chess calculations.

Engine Interface

The program's engine interface has been adapted to the latest Windows specifications, for example *Windows Vista*.

This means that all current and future engines will don be stored in the folder \Program Files\Chessbase\Engines but in \Program Files\Common Files\Chessbase\Engines.

This is the folder where the new Fritz 10 engine and the latest version of Crafty will be installed.

Older chess engines installed by previous program versions will remain in the folder **\Program Files\Chessbase\Engines**.

UCI Engines

UCI engines can still be installed in any folder in any partition anywhere on the computer.

The UCI configuration files with the extension *.uci must always be stored in the folders

\My Documents\ and \Settings\<username>\Application Files\Chessbase\Engines.UCI.

Connect hardware

Menu: Tools - Connect hardware

The program makes contact with the outside world via a serial cable to the outside world. Currently, two drivers are included:

- Auto232: You can play engines against other programs interface using a serial cable (null modem).
- ▶ **DGT-Brett:** This driver allows you to use the intelligent sensor board produced by the Dutch company DGT. The board can identify different pieces (i.e., it can tell whether there is a white bishop or a black knight on a square). If you switch on "Announce moves" in the <u>Tools Options Multimedia</u> menu, the program announces its moves verbally, so you don't even have to look at the screen.



The connection between the board and the PC can be over 10 meters long, and many of the functions (new game, setup position) can be executed without touching the PC.



The program can also be connected to the *DGT XL Chess Clock*. This clock displays the time and also the moves that are played. This means you can play on the DGT board, with the clock attached, and you can read the moves of the chess engine off the display of the chess clock.

FAQ

Copy tree to hard disk not available?



It only works when you have loaded a book from CD/DVD and does not yet exist on hard disk.

If you want to copy a book from CD/DVD drive, then load it first. You can do this by clicking on the tab "Openings book" on top of the annotation window.

If there is already a book loaded, right click on an empty spot in the window pane and select "Close book file".

A button "Load book" appears. Click on the button and select the book from CD/DVD. The file should have the extension *.ctg

After you have loaded the book, the function "Copy tree to hard disk" will be available.

3D board problems

Although the 3D board has been tested on a variety of different graphical cards, errors may occur on cards on which the program has not been tested. This part is rather complex and the programmer needs a lot of information in order to find a solution. For this reason, a special function has been build in the program which sents all the necessary information straight to the programmer.

Below the 3D board is the button "**Settings**". In the dialog, click on tab "**Info**". Here you will find the button "Mail to support".

Click on it to create a mail with your computer configuration. It is helpfull if you add a description of the problem in this mail before you actually sent it. Or use the -> Clipboard button. Open your mail program and use Ctrl-V to paste this information into the textfield.

Letters on the board?

You get letters on the board instead of pieces ?In case you notice letters instead of chess pieces on the board, please try to reinstall the true type fonts which are contained in the folder "Fonts" on the Program DVD manually.

Use the Control Panel -> Fonts function.

Reference database

You set a database as the Reference database in the Full analysis, but the program does not use it?

The database which is used as the reference database needs to have an openings key installed.

You can easily check this in the database window. Click on the tab "Openings". If there is no key installed, you will see 4 buttons to install one. It is best to either select the Big key or install one from

the Mega database, the Big database or the database which is delivered with the chess playing program.

If you click on the button "Select key" you will be looking for a file with the extension *.cko which should be present in one of the mentioned databases.

Possibly not an original program CD?

You need to adjust the drive initial (e.g. D: or E:) manually to the correct one.

When the program has validated the program CD/DVD properly, you will get the reply "Thanks".

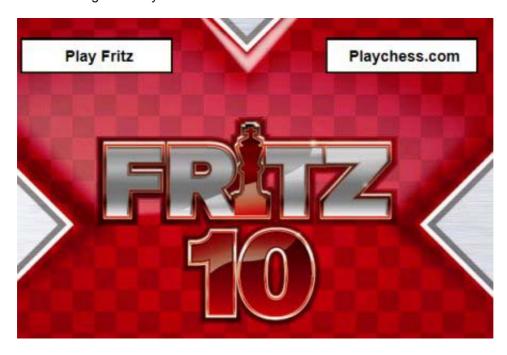
How do I upgrade my program?

It is important that you use the last upgrade of the program for many reasons. Problems may be fixed in newer versions, but the functionality of the program can also be increased.

The upgrade is available via the Playchess server. If you do not already have one, you should create an account.

Start the chessplaying program.

There are two possibilities. On the right you have "Play Fritz" or whatever the name of the program is and on the right is "Playchess.com"



Click on *Playchess.com* and then on the button "Create new account". The account should be validated with a serial number. This is the number which is printed on the frontpage of the paper manual and has 5 groups of 5 digits. Enter this number at the Playchess server. As soon as you have done this, the program will inform you if an upgrade is available. In case to be certain, you can use menu: *Help - Query upgrade*.

After the download of the upgrade file, the program will ask to log off. Do this and wait patiently until the program responds with the message "Internet upgrade ok".

Serial Number

On the outside cover of the printed booklet which you get with the DVD you will find a serial number –

five groups of five letters and numbers. The program will ask you to enter this code after the installation is completed. It validates your program and make you eligible for updates and support. It also gives you a full year's access for an account on the Playchess server.



Keep your serial number in a safe place. You will need it for future updates. Do not give anyone else access to it – this may cause problems when you upgrade or play chess on the server.

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