DGT

DIGITAL GAME TECHNOLOGY

DGT Centaur manual

Contents:

TOPSCHACH.de

1. Introduction

Congratulations on your purchase of Centaur. Your perfect Chess friend!

Games are the most fun when you have a fair chance of winning. This usually means you look for an opponent of similar strength. Centaur uses a unique system to analyse your moves during the game and uses that information to match your personal playing level. Depending on the mode you choose you may also give yourself a stronger opponent to challenge yourself.

This computer features a special circular LED indication to indicate where you need to move the pieces. You don't need to spend your time staring at the display. So you can focus all your attention to the game.

To the side of the playing field we have placed a special e-paper display. On this display you can see the previous moves in a move-list, view hints, see the score and also change the settings. This e-paper has a nice smooth contrast, which is not only easy on the eyes, but also ensures that the screen can be viewed from any angle and is clearly visible in any light.

All of this is combined in a lightweight plastic housing, so it is easy to move around and play a game wherever you want.

Have fun playing!

2. Getting started

After pressing the "*Play-Pause*" button Centaur will turn on. During start-up Centaur will make a beeping sound and the lights in the board will light up. The screen will flash black and white a couple of times. To turn Centaur off press and hold the "*Play-Pause*" for 3 seconds.

After you have started Centaur and have already placed the pieces in their starting position the computer will detect this automatically and be ready for play. Simply play your first move and the game will start. If the pieces haven't already been set up, the computer will be ready for play after all pieces have been placed.

By default the computer will be set to a "*Friendly mode*".

Press the "*Ok/Menu*" button to enter the main menu. To navigate the menu use the "*Up*" and "*Down*" buttons and use the "*Ok/Menu*" button to select a submenu. When the cursor is in front of an option pressing the "*Ok/Menu*" button will activate or deactivate the current selection.

Clock time computer
Battery status
Ponder indication

Chess board

Clock time player
Score of current position

Move list

Hint for current position

Up

Ok / Menu
Back
Down

Play-Pause / On-Off
Hint / Alternate move
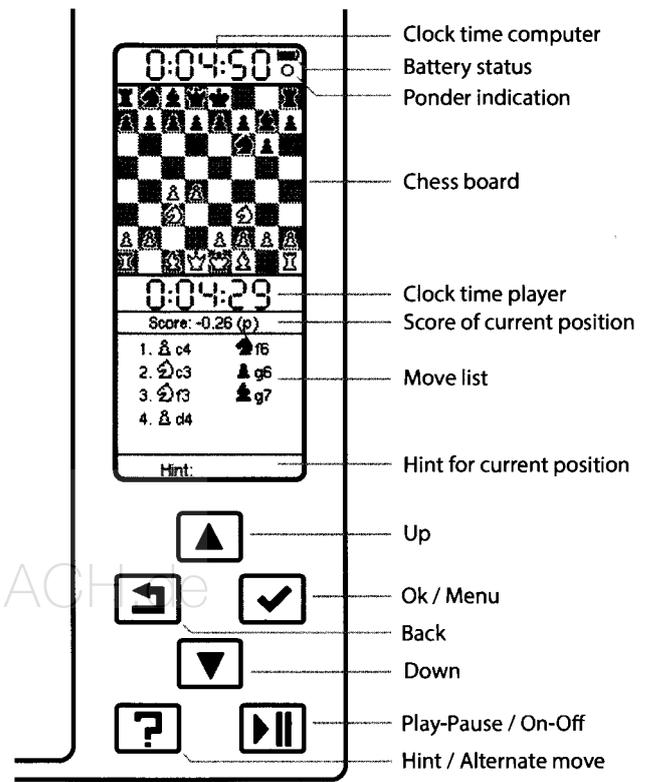
Figure 1. Button overview.

3. Use of the Centaur

In this chapter the different functionalities of Centaur will be explained.

Hints
Centaur can provide hints for your current position. By pressing the "Hint/ Alternative move" button during your turn, Centaur will show a hint and two alternate options. When a move is then executed on the board the hint screen will disappear. This move does not have to be one of the hints shown.

It is also possible to turn on "Hint" in the screen settings. When turned on, by each turn a hint will be displayed at the bottom of the screen.

Alternative moves
The "Hint/ Alternative move" button can also be used to ask for alternate moves during the computer turn. When the computer indicates it's move, press the "Hint/ Alternative move" button to view the suggested alternatives. The screen will disappear when a move is executed on the board. You may always execute a different move, than the move indicated by the computer. The alternative move button shows possible alternatives, but executing any other legal move is allowed.

Takeback move
Centaur allows takebacks on all moves. To takeback a move during your turn simply return the piece to its previous position, this is the same for a computer move. This action can be repeated to return to a position multiple moves ago.

A takeback can be done at any moment during your, or the computers turn. For a proper takeback it is required that the pieces are moved to their previous position in the sequence that the pieces on the board moved. Simply put, takebacks for white and black need to be alternated.

Piece promotion
When a pawn reaches the last row on the opposing side the piece may be promoted. A screen will appear showing the pieces you may promote to. Select the piece using the "up" and "down" buttons and press the "Ok/Menu" button. The screen will disappear and you may continue.

Illegal moves
If a piece is moved to an illegal position the board will show three question marks in the move list and wait until there has been no activity for 5 seconds. After that the computer will give a beep sound and prompt the user, asking to continue with, or fix the illegal move.

If you are unsure about the reason for the illegal move notification, check if you have: moved pieces legally, the king hasn't been put into check or if any pieces are in undetectable positions.

Move incorrectly registered
In some rare cases a move could be incorrectly registered by the board, it can usually be fixed by picking up and resetting the piece. Or returning the piece to its previous position and repeating the move.

Power saving
After 30 minutes of inactivity by the user Centaur will turn off. If the sound is turned on, Centaur will make a beep sound when this occurs.

Forced shutdown
If during use Centaur does not respond to any input and you are unable to turn it off normally. It is possible to initiate a forced shutdown. To do this, press and hold the "Play-Pause" for 10 seconds.
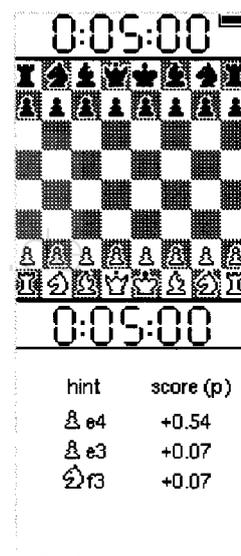
Figure 2. Hint screen.

4. Game time and clock settings

If you want to play a game under time constraints Centaur has multiple pre-set time options.

If game time is used, Centaur will manage the time taken for each move itself, based on the time it has left. If game time is turned off, Centaur will use a predetermined time for each move based on the play mode the computer is in. For "*Friendly*" this is 1 sec, for "*Challenging*" this is 2 sec. and for "*Expert*" this is 10 sec.

To start the time you press the "*Play/Pause*" button. Playing your first move will also start the clock but for the computer (your first move is therefore free). The same button is used to pause the clock at any moment during the game.

When a side reaches "*0:00:00*" on the clock, a flag will be shown. The clock will not "*Freeze*" so the game can still be continued.

Please note that the clock display must be turned off or on in the screen menu separately.

5. Game mode

Centaur has three play modes: "*Friendly*", "*Challenging*" and "*Expert*". By default Centaur is set to friendly mode.

In "*Friendly*" the chess computer will give you a fair chance of winning. The computer will analyse your moves and will select moves of similar strength during the match. In essence this mode means that you are playing against a player of similar skills. This is the perfect mode for a nice relaxed and enjoyable game of chess!

As the name suggests the "*Challenging*" mode will give you more of a challenge, this is the perfect mode if you want to improve your skills. The computer will still play around your skill level, but will choose stronger moves more often.

In "*Expert*" mode the computer will play at full strength and will not adapt to your skill level.

6. Screen settings

The information displayed on the play screen can be changed according to your preferences. Each element can be turned on or off separately.

If for example you want a longer move list, it is possible to turn off the board, the move list will use the extra space on the screen. Turning off the other elements such as the clock, score or hint will also result in more space for the move list.

It is also possible to select the Large option for the move list. The moves will be displayed in a big font and using bigger icons.

Turning off the hint section of the screen does not mean no hints can be requested. Pressing the hint button will still display three hints for the current position.

```
  Game mode

Level:
◉ Friendly
  Challenging
  Expert
Play as:
● White
  Black
To move:
  Computer
● Player
```

Figure 3. Game mode menu.

7. Custom games

With Centaur it is also possible to set-up custom game positions. This can be used to recreate an interesting position or puzzle, but also special matches with for example extra queens.

There are two ways of creating custom games. The first option is to essentially replay the game up to the position you wish to make. Ignore the computer moves until you have the position you wish to play. When the position is set-up simply continue playing as normal.

If you wish to avoid replay an entire game. Go to the menu and select "*Set pieces*". A screen as shown in figure 4 will be displayed. Use the cursor to select the type of piece you wish to place, and then place the piece on the board. The board will automatically detect the piece and place or change the piece in the computer accordingly. The board on the screen can be used to check if the right piece is selected.

8. Warranty information

Centaur is finished with a high quality printed surface. When treated with care it will give you many years of trouble-free performance. To clean the Centaur a lightly moistened soft cloth should be used. Do not use abrasive cleaning liquids.

Centaur complies with our highest quality standards. If, despite our care in choosing components, materials, production or transport, your Centaur shows a hardware defect in the first two years after purchase, please contact your retailer.

The warranty is only valid if Centaur has been used in a reasonable and prudent manner as intended to be used. The warranty does not apply if Centaur has been misused or if any unauthorized repair attempts or software modifications have been undertaken without prior express written consent of DGT support or one of the DGT authorized service centres. A list of service centres can be found at the DGT website.
If you have any questions about Centaur that are not covered by this manual please consult the support section of our website.

By pressing the "*Up*" or "*Down*" button the next piece can be selected and placed. Repeat this until you have created the position you wish to use, and then press the "*Ok/Menu*" button. You now have the possibility of changing the playing sides, computer strength and who starts the next turn.
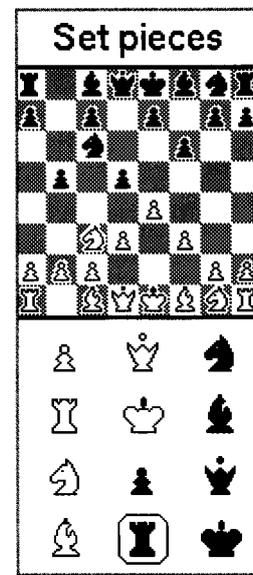
Figure 4. Set pieces menu.

9. Disclaimer

Digital Game Technology spared no efforts to ensure that the information in this manual is correct and complete. However there shall be no liability for any errors or omissions. Digital Game Technology reserves the right to change the specifications of the hardware and software described in this manual without prior notice.

No part of this manual may be reproduced, transmitted nor translated in any language in any form, by any means, without the prior written permission of Digital Game Technology.

10. Precautions

Centaur uses a detection mechanism that sometimes can be influenced by external factors. External interference could result in detection issues, such as pieces not being detected or pieces appearing in the wrong spot.

If detection issues occur when using your Centaur, this may be because your board is placed too close to plasma screens, LCD monitors, speakers, power adapters or other similar devices.

11. Open Source software

The DGT Centaur uses the following Open Source software:
• Python, the Python Software Foundation (PSF) licence is applicable.
• Python-Chess, the GNU Public Licence version 3 (GPL3) is applicable.

DGT would like to thank the many software developers who have made it possible for us to develop the Centaur for the many chess lovers around the world.

12. Technical specifications

Board size	444.5 x 400.5 mm (17.5" x 15.8")
Field size	48 x 48 mm (1.9" x 1.9")
Power	Supplied via the USB cable
Housing	Clear PC plastic chassis with a high quality printed chess board surface
Net weight	2.2 Kg (77.6 oz.) Chess computer only
Gross weight	2.6 Kg (91.7 oz.) Chess computer, chess pieces, cable, documentation and packing

CE   The Centaur complies with the directives: 2004/108/EC and 2011/65/EU.

This product is marked with the recycling symbol indicating that, at the end of its life, the product must be disposed at an appropriate waste collection point according local regulations. Do not dispose the product in the normal domestic unsorted waste stream.

This product is not suitable for children of 0 – 3 years of age. Includes small parts. Choking hazard.

This Smart Board complies with the regulation of the German "Der Grüne Punkt" Trademark of Duales System Deutschland GmbH.