



Fig. 1

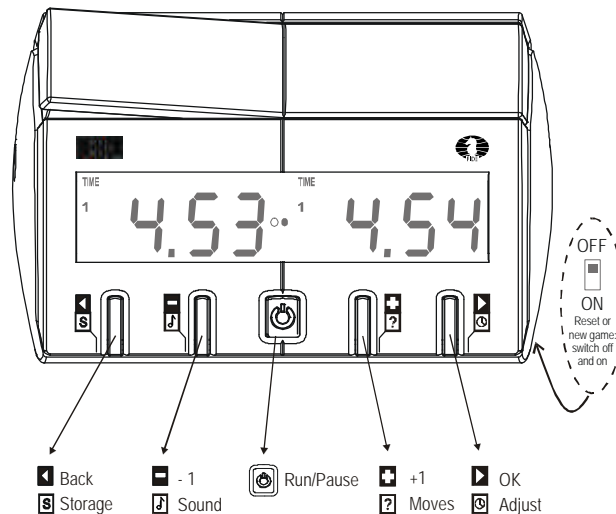
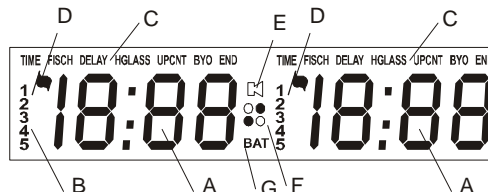


Fig. 2



DIGITAL EXCELLENCE

Version 1.10

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09-2003

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This DGT Projects product complies to the regulations for electro magnetic compatibility EMC 89/336/EEC



WWW.DGTPROJECTS.COM
 WWW.DIGITALEXCELLENCE.ORG
 WWW.DGTXL.COM

Introduction: Timing Methods

Time is an exciting aspect of many sports. This is certainly true in games such as chess, go, draughts, shogi and Scrabble®. A player's skill is determined not only by decisions, but by how quickly those decisions are made. The more a sport is seen as a contest, the more important it becomes to reduce the time a player has to perform an action. This should be realized in a way that is closest in line with the typical features of the contest and the sport that is practiced.

The DGT XL offers 11 different standard methods for timing two-player games.

The thinking times that are most commonly used are pre-programmed in the DGT Clock as options 1 to 22, but it is also possible to combine different methods by manually setting your own personal preferences (use option 00).

Whilst several methods are well known, others may be less familiar to you.

Several of these methods have been in use for a long time; others are the result of the possibilities now offered by modern electronics.

Every method has its own charm and has an influence on the manner in which a sport is experienced.

The traditional "quickie" of 5 minutes per person is different from 3 minutes using 'Bronstein' or 'Fischer' in which every move attracts an extra 3 seconds of thinking time, although the total thinking time for a game is hardly any different. We recommend players to experiment with the various methods which the DGT XL offers. It can add an extra dimension to your favorite sport.

1. TIME (Options 1 to 5)

This is the simplest way to allocate time. Each player is given one period in which they must make all moves.

2. 1 PERIOD + Guillotine (Options 6 and 7)

The first period is used to play a predetermined number of moves. The second period, the Guillotine, is used to finish the game. 1 Period + Guillotine can be used as an alternative to the traditional 'Rapid and Blitz' with a quiet start.

3. 2 PERIODS + Guillotine (Option 8)

For a less frantic game, it is possible to play a game with two periods before the Guillotine.

4. 3 PERIODS + Guillotine (Option 9)

A quiet end to a game also has its advantages. The simple traditional clock gives the players repeated one-hour periods in which to complete a predetermined number of moves.

For more than 50 years, it was standard in chess to play a serious game in two periods separated by a break. This had two disadvantages:

Games could not always be decided after two periods.

From 1990 onwards, the increasing strength of chess computers and endgame databases added what some considered an unfair advantage in the ability to analyze adjourned games.

Various proposals were made for ways to finish games in one session, without having to resort to the Guillotine method, as this method may influence the final result of the game in a way that can be unsatisfactory to the players.

The 'Bronstein' delay' and 'Fischer' methods provided a solution by giving players a predetermined amount of extra thinking time after making each move.


After the introduction of the Digital Game Timer in 1994 the application of the above-mentioned methods has been a major topic in discussions in the chess world. The results of these discussions have been translated successfully into the new DGT XL.

5. 'Fischer'- Blitz, Rapid and Slow (Options 10, 11 and 12)

This method applies from the first move, allowing a player to gain extra time apart from the standard period, as every completed move attracts extra time. By completing moves in a time that is shorter than the extra time per move, a player can build up the thinking time available for subsequent moves.

6. 'Fischer'- Tournament (Option 13)

The 'Fischer'- Tournament method is the most complex in the way thinking time is regulated. In addition to the extra time available per move, the player is also allotted an extra amount of principal thinking time after a predetermined number of moves has been completed. For this option a move counter is available. This counts the number of completed moves (that is: the sum total of the moves played by both white and black). The allocation of new principal thinking time occurs only at the appropriate moment if the DGT XL is carefully operated.

***Note:** The DGT XL remembers, through the operation of the lever at the start of a game, which player is playing white. The icons **Error! Not a valid bookmark self-reference.** and  in the display (Fig. 2 F) clearly show which player is to move. This has consequences for the moment when a player exceeds the available thinking time for the first time. If black is the first to exceed the allotted time for the first period then white receives a double bonus. The correct operation of the lever is important in the 'Fischer' and 'Fischer Tournament' options.*

7. 'Bronstein'- Blitz, Rapid and Slow (Options 14, 15 and 16)

The oldest proposal from the chess world for a solution to the problem of limited thinking time came from IGM David Bronstein.

His method applies from the first move. The principal thinking time is reduced by delay. Before the principal thinking time is reduced the player has a fixed amount of time to complete a move. It is not possible to increase the thinking time by playing more quickly as it is in the 'FIDE' and 'Fischer' methods.

8. 2 PERIODS + 'Fischer' (Options 17 and 18)


This method also applies from the first move. Starting the game in a traditional way, the player has to complete a predetermined number of moves within a fixed period of time. By playing the last period using 'Fischer', situations where time trouble influences the result of the game too much can be avoided.

Always ensure that the lever is in the correct position before a game begins.

9. 'GO' using the Canadian Byo-yomi method (Options 19 and 20)

This method is derived from the original Japanese Byo-yomi method of the game 'GO'. When playing with traditional clocks was the method that was most commonly used, an official who would be in control of the time using a stopwatch would always accompany the players.

The player gets an extra 5 or 10 minutes of extra thinking time to complete a predetermined number of moves, usually 10 or 15, after the standard thinking time has been used up.

*When the Byo-yomi method is active it is possible to reload the Byo-yomi time for the player whose time is currently counting down by pressing and holding the **BACK** button  for three seconds. After this Byo-yomi time has appeared in the display a player must indicate their turn is over.*

10. Scrabble® + Upcount (Option 21)

In Scrabble, games have to be finished, even if a player exceeds the available thinking time. The more time a player uses after exceeding the available thinking time, the bigger the number of points that will be subtracted.

You can use Upcount as an independent method by choosing manual settings (option 00). This way, the display will show 0 seconds when starting the game.

11. Hourglass (Option 22)

The thinking time for the player to move decreases, while simultaneously the opponent's thinking time increases.

This method offers an exciting alternative to the traditional 'quickie'.

12. Internet Chess (Option 23)

In combination with a DGT Electronic Chess Board, the DGT XL can be used for playing games on Internet Chess servers, or as a computer controlled clock for playing against chess programs. When option 23 is activated, the clock accepts game timing instructions or messages from the server. For these functions, the board driver version 1.10 or later (dgtbdll.dll) must be used. This driver and additional information is available on www.dgtprojects.com

Operation

1. Batteries

The DGT XL requires 2 AA (penlight) batteries. We recommend alkaline batteries. To insert the batteries, remove the cover from the battery compartment on the bottom of the timer by clicking on it.

NOTE: If you do not plan to use your timer for a long period, we recommend that you remove its batteries.



If 'BAT' (Fig. 2G) appears on the timer display, the batteries are nearly discharged and should be replaced as soon as possible. When this message first appears, the batteries still contain enough energy to allow the current game to be completed.

See the below paragraph 9 how to check the battery condition.


2. Switching on the DGT XL

Switch the time on and off with the ON/OFF switch on the bottom of the DGT XL. If you want to reset the clock after a game you will have to switch off the clock first using the ON/OFF switch.

3. Choosing an option number



When you switch on the timer, the display shows the option number that was last selected. Press the  (+1) or  (-1) buttons in order to change the number on the timer's display (Fig. 1).

4. Activating an option number


When the selected option number appears in the display, press  (OK) to activate this number. The starting time will now appear in the display. To check the option number during a game, see paragraph 9.

For details on manual settings (option 00), see the Manual Settings section.

5. Buzzer


The DGT XL has an automatic sound signal, which indicates that a player approaches and exceeds the time limit. Switch the buzzer on or off by pressing and holding the sound button  firmly for three seconds. The symbol  in the display (Fig. 2 E) shows the sound signal is switched on.

6. Starting a game

After activating the option number, press the Run/Pause button  to start the timer. Ensure the lever is in the correct position before the game begins. This is especially important when playing 'Fischer' or 'Bronstein', as the clock will 'know' who is to play white and who is to play black by recognizing the initial


position of the lever. The display will show which side has started the game playing white.


7. Color indication

Central in the display of the DGT XL the icons **Error! Not a valid bookmark self-reference.** and  indicate which player is playing which color (Fig. 2 F). To set this default, ensure the lever is in the correct position before starting the timer. White is always the side where the lever is lifted at the start of a game. The automatic move counter will respond to this position.

When playing 'Fischer' in multiple periods where transitions to the next period are dependent on a predetermined number of moves, it is extremely important to set the correct color indication, as otherwise the automatic adding of extra time per move will fail during transitions.


8. Temporarily stopping the timer



During the course of a game, you can temporarily stop the timer by pressing the Run/Pause button .

Restart the timer by pressing the Run/Pause button  again.

If the lever position is changed on a stopped clock, the time correction procedure is started, to check or change the main times, move numbers or period numbers.



9. Move counter, Option Check, Battery condition




During the course of a game, you can check the number of completed moves by pressing the  (Moves) button. The display will show the number of moves played so far.

When holding the  button, after 3 seconds the active option number will be showed. If one of the stored user programs is active, this will be indicated by a leading . Again after 3 seconds the battery condition will be showed, as a value, where at 100 or lower, the battery warning is lit and batteries must be replaced. At approx. 85 the clock stops working.




During these checks, the timer will continue normally.

10. Time corrections


During a game you can change the time that is currently displayed by pressing the Pause button  and subsequently holding the Adjust button  for three seconds until the left digit flashes.

To change the flashing digit (the number of hours of the left player), press  or . As each desired digit appears in the display, press . This causes the next digit to flash.

The sequence of digits is as follows: Hours, tens of minutes, minutes, and in the similar position in the display tens of seconds and seconds. First change the left player's time, then the right player's time.

When you have changed and accepted both players' times, the move counter will appear in the display. You can change it as well by pressing the  or  buttons. When changing the move counter of the right player it is possible that the player color icons **Error! Not a valid bookmark self-reference.** and  will change as well, as the logical result of the input of the number moves and the position of the lever.

If more periods are programmed or active, the period number can now be changed. The Fischer Tournament Program is completely derived from the input of the number of moves.

When the digits have stopped flashing, you can start the timer by pressing the Run/Pause button . The timer continues using the changed times.




13. Message Display

In combination with a DGT Electronic Chess Board, the DGT XL can display messages, i.e. computer moves or move errors, when used in combination with chess programs.








In all modes the clock accepts messages from the computer. See Timing Methods par. 12 Internet Chess for further information

Manual settings: Option 00

Option 00 offers the maximal freedom to set the DGT XL according to your personal preferences. It is possible to choose from the different timing methods, as well as to set your own preferred default settings, or just to combine different systems. The maximum number of personal default settings is 5; they can all be saved and recalled at a time to your own choice.

When starting the DGT XL select option 00 using the  or  buttons and press  to activate it.

1. Activating a default setting

To activate a default setting hold the Store button  for a few seconds while the option digit is flashing.  (Load) will appear in the left display. Then select one of the five default settings (1..5, Fig. 2 B) by using the  or  buttons. Finally, press  to confirm your choice. By pressing the Run/Pause button  briefly this default setting is activated. By pressing the Run/Pause button  again, the timer will be activated for the start of a new game.

2. Manual settings

In a manual setting you can create up to five consecutive periods, setting a standard method (Time, Fischer, Bronstein Delay, Hourglass, Upcount, Byo-yomi) for each period with desired values for both time and number of moves.

A manual setting can be saved after input.

Choose Option 00.

On the left the number 1 will appear (Fig. 2 B) to indicate the first period has to be set.

Select a timing method (Fig. 2 C) by proceeding to the desired method using the **+** or **-** buttons. Confirm by pressing **▶**.

Set the standard time for the player on the left in the left display. Use the **+** or **-** buttons and confirm by pressing **▶**. It is possible to return to the previous digit using the **◀** (BACK) button. Set after each other: Hours, tens of minutes, single minutes, tens of seconds, seconds. Continue to the right display and repeat the procedure for the player on the right.

When using 'Fischer' or 'Bronstein' Delay, subsequently set the extra time per move or the delay time per move in minutes and seconds. When using 'Fischer', you will also have to set the number of moves for the first period afterwards.

When using 'Fischer' the following is of particular importance: When using 'Fischer', it is possible to choose when to start the next period. If you set the number of predetermined moves as 00, the next period will start as soon as the first player has run out of time. However, if you set a number between 01 and 99, the next period will start as soon as the player has individually completed this number of moves.

Programming a non-zero amount of moves for a "Fischer" period only has effect, if all previous periods (if any) were programmed as "Fischer" with non-zero moves.

If you just want to set one period, then proceed to END by pressing **+** or **-** buttons and confirm by pressing **▶**.

If you want to set multiple periods, then first choose the timing method you want to use for each period and then complete the procedure per period as indicated above. After you have set the last period, finish by pressing END.

Note: Not all sequences of methods are allowed to be set. If logically a sequence of settings is impossible, it is impossible to select these settings. If, for example, the second period has been specified as Upcount, it is impossible to set a third period after Upcount.

If you want to save the set time, hold the STORE button **S** for a few seconds. **P** (Program) will now appear in the left display. Continue choosing the number (1 to 5) (Fig. 2 B) of the default setting using **+** or **-** buttons and confirm by pressing **▶**. You can start the game by pressing Run/Pause **⏸**.

Below you will find two examples of setting a program. On our Internet site, www.dgtprojects.com, you will find more examples.

3. A simple example

Suppose you want to play a game with 15 minutes for the player on the left and 30 minutes for the (slightly weaker) player on the right. Suppose you want to save this as default setting number 3.

- Select option number 00
- Confirm by pressing **▶**
- Select TIME
- Confirm by pressing **▶**

4

- Set as follows: 0, **▶**, 1, **▶**, 5, **▶**, 0, **▶**, 0, **▶**, 0, **▶**, 3, **▶**, 0, **▶**, 0, **▶**
- Select END
- Confirm by pressing **▶**
- Hold the **S** button for a few seconds
- Select default setting number 3
- Confirm by pressing **▶**.

4. A complex example

Suppose you want to play in 3 periods. 40 moves in 1 hour and 30 minutes, followed by 20 moves in 30 minutes, and finish playing "Fischer" with an extra 20 seconds attracted per move. Suppose you save it as default setting number 5.

- Select option number 00
- Confirm by pressing **▶**
- Select TIME
- Confirm by pressing **▶**
- Set as follows: 1, **▶**, 3, **▶**, 0, **▶**, 0, **▶**, 0, **▶**, 1, **▶**, 3, **▶**, 0, **▶**, 0, **▶**, 0, **▶**
- This completes period 1
- Again select TIME
- Confirm by pressing **▶**
- Set as follows: 0, **▶**, 3, **▶**, 0, **▶**, 0, **▶**, 0, **▶**
- This completes period 2
- Select 'FISCH'
- Set as follows: 0, **▶**, 1, **▶**, 0, **▶**, 0, **▶**, 0, **▶**, (= 10 minutes standard time) 0, **▶**, 2, **▶**, 0, **▶** (=20 seconds extra per move) 0, **▶**, 0, **▶** (=number of moves 0, for a final period using 'Fischer' set 0 as the number of moves, for multiple periods set the number of moves per period)
- Select END
- Confirm by pressing **▶**
- Hold the **S** button for a few seconds
- Select default setting number 5
- Confirm by pressing **▶**.

List of options

Option	Clock type	Basic + extra time
00:	Manual set to store max 5 personal settings of max 5 periods. Free mix of timing systems (main time, additional time, amount of moves).	
01	TIME	5 min
02	TIME	10 min
03	TIME	25 min
04	TIME	1H
05	TIME	2H
06	TIME fb. Guillotine	1H45 fb. 15 min
07	TIME fb. Guillotine	2H fb. 1H
08	TIME (2x) fb. Guillotine	2H fb. 1H fb. 30 min
09	TIME (3x) fb. Guillotine	2H fb. 1H fb. 1H
10	"Fischer" Blitz	3 min + 2 sec/move
11	"Fischer" Rapid	25 min + 10 sec/move
12	"Fischer" Slow	90 min + 30 sec/move
13	"Fischer" Tournament	100 min/40moves fb. 50 min/20moves fb. 10 min; All + 30 sec/move
14	"Bronstein" Delay Blitz	5 min, 3 sec/move free
15	"Bronstein" Delay Rapid	25 min, 10 sec/move free
16	"Bronstein" Delay Slow	1H55, 5 sec/move free
17	TIME fb. "Fischer"	2H TIME fb. 10 min + 30 sec/move
18	TIME (2x) fb. "Fischer"	2H TIME fb. 1H TIME fb. 15 min + 30 sec/move
19	Go: Canadian Byo-yomi	1H fb. 5 min byo-yomi
20	Go: Canadian Byo-yomi	2H fb. 10 min byo-yomi
21	Scrabble®	25 min TIME, fb. upcount
22	Hour Glass	1 min each
23	Internet Chess	Computer controlled

H = Hours

fb. = Followed by