



COLUMNISTS

## ChessBase Cafe

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## Understanding Time Controls Part One

In this month's *ChessBase Café* we'll examine time controls in chess, prompted by several recent e-mails I've received. This discussion will apply primarily to chessplaying software (specifically *Fritz10*), but the main points are also applicable to online games and face-to-face tournament play.

There are three basic time controls:

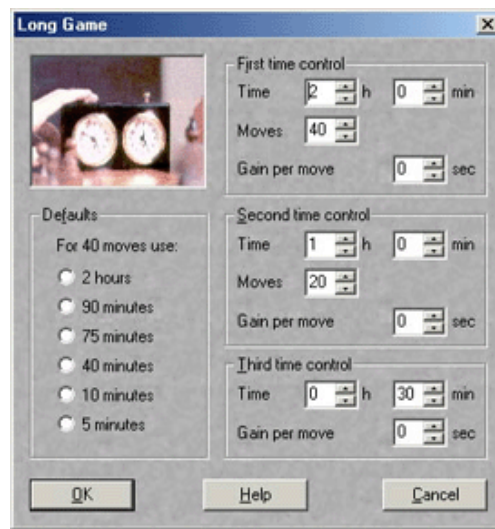
- Classical
- Blitz
- Fischer

The traditional form of time control, in which a player is required to make  $x$  moves in  $x$  minutes, is often called "classical." This harkens back to the "Golden Age" of chess, between the period when chess clocks were first introduced up to about 1930 or so. Time controls were fairly lengthy in the early part of the twentieth century; a requirement of fifteen moves per hour was fairly common even into the 1920s. By the 1960s, a much quicker standard tournament time control of forty moves in two hours became the norm for most grandmaster events.

In a classical control (or "tournament" control as it's often called), a player must make a certain number of moves within a specified amount of time or else he forfeits the game. This is known as the "primary" time control. However, if he makes the required number of moves before the specified time has elapsed, the player's unused time is added to the next (or "secondary") time control. It's easier to understand if we use a concrete example.

Let's say that a tournament announcement lists a primary time control of forty moves in two hours (120 minutes) followed by game in sixty as the secondary time control (the game must be completed with an additional sixty minutes). If a player has made just thirty-five moves when his clock's flag falls at the end of two hours, he loses the game – he must complete his fortieth move before two hours have elapsed. However, let's say that a player makes his fortieth move after an hour and forty minutes have elapsed. The twenty minutes he's not yet used are added to the secondary time control of sixty minutes, meaning that he now has eighty minutes left in which to complete the game, no matter how many moves are required.

Now let's apply this to *Fritz10*. There are various ways to bring up the dialogue for setting a classical time control. You can go to the Game menu, select "Levels," and then "Long game" from the submenu. You can also simply right-click in the Clock pane and select "Long game" from the popup menu. In both cases you'll see the same dialogue appear:



There are three main areas in this display, corresponding to a primary, secondary, and tertiary time control. The above illustration shows the program default: forty moves in two hours, followed by twenty moves in an hour, followed by game in thirty minutes. Let's say that under these controls a player uses an hour and forty-five minutes to make forty moves. His unused fifteen minutes are then carried over to the secondary time control and added to that amount of time. He now has to play his next twenty moves (reaching move sixty) in an hour and fifteen minutes (i.e. by the end of the third hour). If he takes a couple of very long "thinks" as play approaches the endgame and he makes his sixtieth move with just five minutes remaining on his clock, that unused five minutes are added to the tertiary time control. It's now "sudden death" in thirty-five. The player now has thirty-five minutes left in which to finish the game.

A fourth section of the dialogue contains preset "default" values. Instead of forty moves in two hours, let's click the radio button next to "90 minutes" and see what we get:



Note that there is no secondary time control provided. With this default setting, each player has ninety minutes in which to make forty moves. Any unused time is added to the last increment (fifteen minutes) for a "sudden death" control. Let's say that a player bangs out forty moves in eighty minutes. His unused ten minutes are added to the fifteen minutes of the next time control, making it a "sudden death" game in twenty-five limit – all of his remaining moves must be played in less than twenty-five minutes or else he forfeits when he runs out of time.

You'll need to realize that these time controls apply equally to *both* players – ergo, you need to *multiply the total possible time for each player by two* in order to see how long the game can theoretically last. In the first example above, each player has a maximum of three and a half hours to finish the game (arrived at by adding together the values of all three time controls). Therefore, the game could conceivably last a total of seven hours. In our second example, each player has a theoretical maximum time of an hour and forty-five minutes, meaning that the game could conceivably last three and a half hours.

You can set an infinite number of time controls using this dialogue. Just set the number of moves in a specified amount of time for the primary time control, then do the same for the secondary control (if desired), and a final “sudden death” increment for the third time control. (Ignore the “Gain per move” setting for now – we’ll return to it later).

Here are a couple of “undocumented” ideas for you to use when setting “Long” time controls in *Fritz10*. A popular time control a half-century or more ago was forty moves in two hours, followed by twenty moves an hour *for as many hours as the game lasted*. In other words, there was no final “sudden death” time control. If a player made it to move forty before two hours had elapsed, the unused time was added to the secondary time control (sixty minutes). The player now had to reach move sixty before a third hour had elapsed. If he got to move sixty with time remaining (and, obviously, the game hadn’t yet ended), another hour was tacked on to the unused time to provide a mark by which the *eightieth* move must be played. This could continue (theoretically) *ad infinitum*. To set this kind of time control in *Fritz10*, fill out the first and second time controls while setting no values for the third:



Another idea is to skip a secondary time control entirely. In this case you’d have a primary time control, followed by a “sudden death” value. Back in the early 1990s, I frequently played in quad tournaments in Baltimore that had a very odd time control: forty moves in eighty minutes, followed by “sudden death” game in thirty. Here’s what that time setting would look like in *Fritz10*:

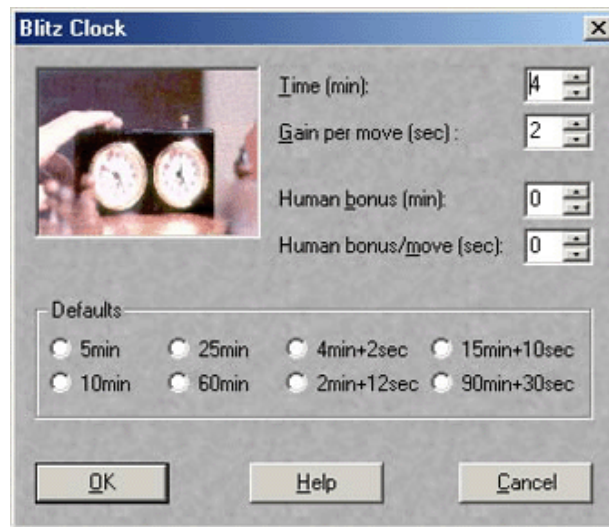


Of course, many people in today’s fast-paced world find such “classical” time controls impossibly long; hence, the popularity of speed or “blitz” chess. Although the term “blitz chess” refers primarily to games in which each player has a time limit of five minutes total, *Fritz10* uses “blitz” as a blanket term for all games that use a “sudden death” (or “game in x”) format. In sudden death games, each player has x minutes in which to make all his moves. If either player’s flag falls before a win or draw is achieved, that player forfeits.

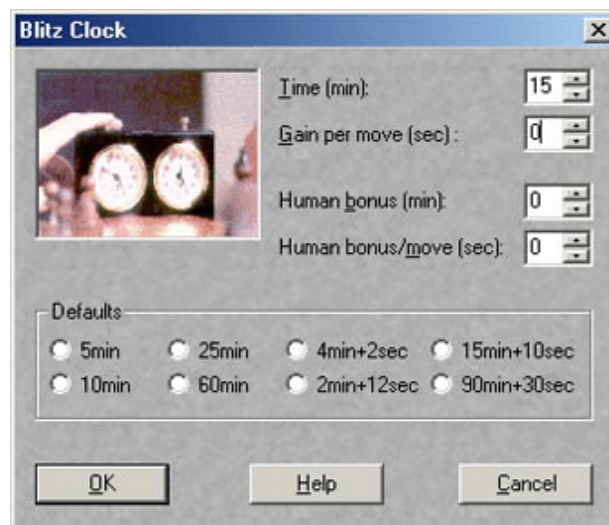
That’s pretty simple, straightforward, and easily understood. As with classical controls,

just multiply the time control by two to determine the total possible game length. For example, if the sudden death time control is game in sixty, each player has an hour in which to play all his moves and the game could last up to two hours total.

To set a “sudden death” time control in *Fritz10*, go to the Game menu, select “Levels,” and then “Blitz game” from the sub-menu, or right-click on the Clock pane and select “Blitz game” from the popup menu. In both cases, you’ll see the following dialogue:



For now, ignore the “Gain per move” setting. This refers to the “Fischer” time control and we’ll examine it in detail later. For a “straight” sudden death time control, set “Gain per move” to “0” and simply type the desired number of minutes per player in the “Time (min)” box. If you wanted to play a game in which each player has fifteen minutes total to make all his moves, you would set the dialogue as shown below:



There are four “straight blitz” defaults provided as shortcuts: five, ten, twenty-five, and sixty minutes (the other four are “Fischer” controls). There are also two additional settings to use in games you play against a chess engine in *Fritz10*. Some players feel that a human player is at a time disadvantage in games against a computer, because the human has to physically manipulate the mouse to make a move. In contrast, the computer can move instantaneously. Two “bonus time” settings are included in order to provide a “handicap” for the human player. The “Human bonus (min)” setting gives the human player a fixed “total” time handicap. For instance, let’s say you’ve set the sudden death control at game in ten for each player; you might set the “Human bonus (min)” at “1.” This will “spot” you a minute – you’ll now have eleven minutes to complete the game compared to the computer’s ten. Your extra minute is a “handicap” to provide you with some extra time to move the mouse. The second setting “Human bonus/move (sec)” gives you a bonus of  $x$  seconds every time you make a move. Once you complete a move on the board, that number of seconds is *added to your remaining time*. Typically you’ll set this value to “1” or “2” to compensate for the one or two seconds it takes to make a move on your on-screen chessboard.

In fact, that’s *exactly* how the “Fischer” time control works. We’ll examine that form of

time control in detail in our next *ChessBase Café*.

Until next month, have fun!

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All the ChessBase software described by Steve in this column, as well as many more ChessBase programs, are available in the [USCFSales Online Catalog](#).

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***Steve wants your questions!! Send it along and perhaps it will be answered in an upcoming column. Please include your name and country of residence.***

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