

# Chronographs

## Greetings Watch Guys (and Gals).

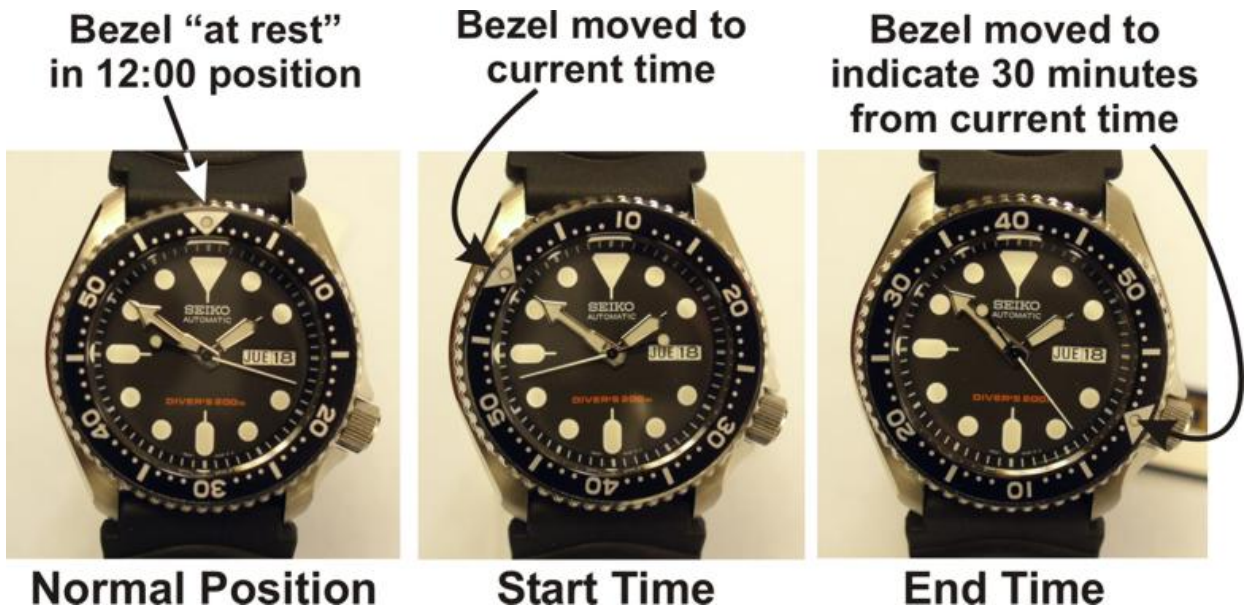
This email contains pictures, if you cannot receive email in HTML format and want to see any specific pictures, just give me a shout and I'll send them to you. If you do not wish to receive future emails, please respond to this one with the word "remove" in the subject line.

## The "Time-Writing" Watch

From the Greek, *chronos* and *graph*, this extremely popular type of wristwatch traces its origins back to the 1820s. It was a Frenchman by the name of Rieussec who invented a timekeeping device that actually "wrote" on the dial with a small pen that was attached to the index. The index was fixed in place and the dial turned. As such, the length of the arc "drawn" by the pen indicated the amount of time that had elapsed since the movement was engaged. I suppose, to be far, this was the only timepiece that could legitimately be called a "chronograph" as it actually did write.

These days, the name "chronograph" conjures up images of a watch that, besides normal timekeeping, acts as a stopwatch. That is to say, it displays both the current time *and* the elapsed time as monitored by the user. The stopwatch functions on its own, without interfering with the display of "continuous time."

Taking the above as a working definition means that a count-down bezel watch is a kind of chronograph. Take a look at the picture below. The marker at the "60" position on the bezel can be used to measure elapsed time, or to indicate a certain amount of time after the "start" of an event. Suppose we want to measure how long our drive home takes us in rush-hour traffic (*am I really the only one who ever does this?*). By placing the "60" marker of the bezel at the current position of the minute hand, we will be able to track the number of minutes of our drive. When we arrive home, we simply look at the bezel and see where the minute hand is pointing (*up to 60 minutes, if your commute is longer than one hour you have my sympathy*). This is illustrated in the middle picture below and is referred to as tracking an unknown elapsed time. The other, more common usage for this type of watch is to indicate a specific elapsed time. If you are a scuba diver, and you know you have 30 minutes of air in your tank, you would set the bezel as shown in the right picture below. You went under the waves at about 1:50 and 30 minutes will have passed at 2:20 which is where the bezel marker is placed. Most dive watches have bezels that only turn counter-clockwise so that if you should bump the bezel it would decrease your available time, never increase it (*a good safety measure*).



OK, we both know that a dive watch is not what we normally think of when we talk about chronographs. We think of watches that have buttons for us to push! Some of the earliest chronograph watches had a single button that started and stopped the seconds display hand and that was about it. The more recognizable chronograph has at least two sub-dials as in the case of the watch shown below. As illustrated in the picture to the left, the sub-dial at the 9:00 position displays continuous seconds with the “clock” or timekeeping function of the watch. The center hand displays seconds with the chronograph. The sub-dial at the 3:00 position displays accumulated minutes up to 45 with the chronograph. In the picture at the right, 5 minutes and 37 seconds have past since the chronograph function was engaged. The top plunger starts the chronograph and the bottom plunger stops it. In older chronographs there may not be a “re-set” or “Zero out” feature, one simply has to run the chronograph to the end of its cycle (*in this case 45 minutes*) and then stop it.

# Older Two-Dial Chrono



The two sub-dial configuration is still popular for chronographs, especially those sporting a “vintage” look such as the watch pictured below. Here we see the same display as the vintage watch: clock seconds at the 9:00 position, center seconds with the chronograph and accumulated minutes (*this time up to 30*) at the 3:00 position. This particular watch adds “date” functionality (*in a small window at the 6:00 position*) and the ability to re-set the chronograph. The top plunger starts, pauses, and stops the chronograph while the bottom plunger re-sets the chronograph to “zero.”



***Coming up – more about chronographs including specific uses, different styles and ultra-complicated chronos.***

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