

Timekeeping 101

We're often asked..."What's up with this timekeeping and how's it done?" Certainly fair questions from one that hasn't run a "timekeeping" Enduro.

The hard fact is that timekeeping is really a thing of the past and no longer done in the age of computers and roll charts. Before technology interrupted Enduros, timekeeping was done in the ol' onboard computer (our brain) as we rode along. Now it's all done for you before you even leave the gate. You just have to ride either fast or slow to stay "on your minute".

All Enduros have a "key time" and everything is based on this. While the Key Time is the starting time of the run it's actually the "Ghost Rider" time. This means that a rider, while riding on his/her actual minute will be keeping time on the Key Time or the "Ghost Rider Minute" For example... the key time is 8:00 and a rider draws a start time of 8:30 meaning he/she leaves the start line at 8:30 or 30 minutes after Key Time. When this rider leaves the start line at 8:30 his/her clock or watch should read 8:00 or in the case of using a computer he/she starts the computer running at 8:30 (when his minute comes up), thus starting the internal clock in the computer at 8:00 (actually 0:00). Each check has a key time and mileage. When a rider arrives at a check and his/her watch is set at key time, his/her watch will match the checks Key Time if he/she is on time. If the rider doesn't use Key Time and his/her watch is set to 8:30 at the start he/she would have to mentally subtract 30 minutes to see if they're on time. So riding the Ghost Rider Minute (Key Time) eliminates having to make time adjustments in one's head. I only point this out as a lot of riders that use computers also use a roll chart as a backup. A computer will handle all the timing but should it fail then the backup comes into play and roll charts are based on Key Time and not adjusted for each riders minute.

Riding your minute....Your Minute is the 59 seconds between the start and end of your riding minute. In timekeeping Enduros a rider is penalized for being early or late...more for being early than late (1 point for each minute late and 2 points for the first minute early and 5 points for each additional minute early). Time is recorded at each check and this is where one needs to be on time. Between checks doesn't matter and there are cases where a rider will want to take advantage of the rules/circumstances and ride early.

Computers:

One can spend the money and purchase an Enduro computer such as an ICO Checkmate or Watchdog.

With a computer mounted on your handle bars and programed, all the rider has to do is keep the early late indicator centered by riding faster or slower. Your computer will tell you on a continuous basis if you're early or late. We are not able to control time so we must control our speed meaning when you're riding too fast you "get early" and need to slow

down and when riding too slow you “get Late” and need to speed up. Most riders ride at the top of their minute because late is hard to make up but early is easier to fix.

Roll Charts:

Instead of spending all that money on a computer a lot of riders use a Roll Chart. Roll Charts can be purchased at most timekeeping Enduros or you can make your own with an [Enduro Roll Chart program](#) (free download). A roll chart can be set up for every minute or only the minutes that possible checks may fall on. The latter is called “riding the possibles” and popular with most riders as it list only the times and mileages for possible checks as opposed to 240 lines for a 4 hour Enduro. A route sheet is easy to follow as seen in this example:

Minutes (ghost / rider time)	Miles	Speed average
00	0.0	12
10	2.0	17
16	3.7	17
22	5.4	17
28	7.1	17
34	8.8	17
40	10.5	17
46	12.2	17
52	13.9	17
52	13.9	24
53	14.3	24

When you leave the start line your clock should read 8:00. So even if you start at 8:25 you clock should read 8:00 when minute 25 comes up on the start clock. This is Key Time or the Ghost Rider minute and all course signs are based on this.

Using the chart to the left ... at 8:10 you should be at mile 2.0 and at minute 16 you should be at mile 3.7 and so on down the line

Time marches on and you can't speed it up or slow it down so you maintain by adjusting your speed to get to the next line milage at the same time your clock does.

The line on the right is the speed average you are trying to maintain. Every line on the chart with the exception of the first two is a possible check location.

Note the speed change

Of course you need an odometer and large digit watch and a roll chart holder like this one:



Once you make your roll chart or purchase one, you put in in the holder clamped to the handlebars and “roll it forward” as you progress on the course. The goal is to arrive at the mileage on the minute shown next to it. For example (using the above roll chart) at minute 46 you should arrive at mile 12.2 (this is a possible location for a check). For accuracy no two odometers count the exact same distance (odometer error) so your odometer should be resettable by tenths (as opposed to only being able to reset to zero) this is necessary so you can make adjustments for differences in your odo and the one used to set up the course. There are mileage signs posted at each 5 miles and here is where you would check your odo and set it to the mileage on the sign. After about 10 miles you will probably have figured out the error and can keep it adjusted close as you go. For example at each five mile marker you need to dial you odo back one-tenth of a mile you would really only need to adjust at each five mile maker but if you had to dial it back 4 tenths you have a large enough difference that every tenth of a mile you would dial it back a little less than a tenth to stay close. Too much...There are aftermarket electronic odometers that you can add in the error and they will automatically calibrate to that difference and then read the same as the odometer that ran the mileage.

Just want to ride and stay close to on time but don't care to get a computer or roll chart? Then use the most basic timekeeping method....Don't pass the riders on the minute in front of you and keep ahead of the riders on the minute behind you.

I'm sure this all may sound complicated but in realty it's pretty simple once you become familiar with it. One thing you will find among your fellow Enduro riders is help. Ask anyone with knowledge and they will most likely take the time to answer your questions.

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