

PIONEER Power Meter

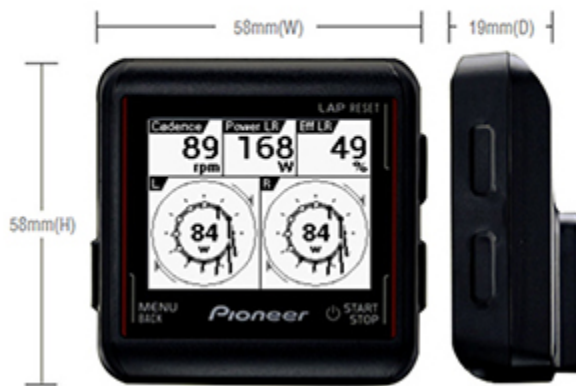
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PIONEER SGX-CA500 Cyclo Computer & pedal monitoring system (notice in the photo above the blue pioneer sensor on the crank)

When I first saw PIONEER on the label I thought we would be looking at something related to a ROCKING stereo. I was surprised to see that PIONEER has developed a power meter for your bike. This power meter is very unique and has so much to offer that I took a considerable amount of time using it on an indoor trainer, riding with it casually, and racing with it. Here is what I found: The PIONEER power meter gathers information from the pedal monitoring system. I took the device to TOP GEAR my favorite bike shop to have them assemble the crank. There are magnetic sensors on both sides of the crank. At this point DURACE and ULTEGRA are the only crank that works with the pedal monitoring system. Once it is setup the syncing with the computer display was very simple. There are several companies that offer power meters. Pioneer is the only one that has the portability to show power output, efficiency, and dead spots on the go, with 12 points in the screen. This constant, and consistent collection of data is the reason that top cycling teams like UHC & Belkin are using this system. I bet we will see some riders at KONA this year with the system. (See photo above and below)

The DISPLAY



This is about the size of the palm of your hand. A good sized screen allows monitoring of 5 separate pieces of data. The ability to toggle between outputs is easy and can be adjusted on the fly. The mounting is setup to be very simple for your cycling handle bars. I mounted it on the front of my aero bars. This was tricky on a TT bike. Luckily I have an XLAB torpedo with an attachment that allowed me to place the computer out in front of my hands ahead of the bike. I am able to view the screen easily and clearly. The most valuable piece of information that is shown in the display is the LEFT and RIGHT flares. Every 10 degrees it registers the power or lack of power (dead spots) this is a constant reminder to keep the most efficient pedal stroke. In using this device I had several things confirmed to me about my own riding. This system brought to my attention some serious deficiencies. One example is that my left leg is my weaker leg. Secondly I need to constantly remind myself to push down and pull up. The Pioneer Cyclo Meter gives information from every pedal stroke to show what is needed to create better power and efficiency. Seeing the actual numbers confirmed to me what my power output is for each leg independently. This is not just a number. The right and left circular visually shows dead spots that are in 12 different points. The data that is available through this is incredible. ONE WARNING- do not get sucked in! The data is so helpful that you may be tempted to take your eyes off the road for an extended period of time. In order to get used to it I went on a bike path without cars. I also spent a considerable amount of time playing with the system with my bike on a stationary indoor trainer. See my handlebar setup in transition below.



I am very impressed with the long battery life in this device. I would use it for about 1 or 2 hours day after day and thought it may need a charge after using it 5 or 6 times. It had lost less than half of the total battery life. It lasts 12 hours legitimately maybe longer.

The upload of data from my rides is very impressive. The GPS detail is mapped out showing my course. I am able to match that with what my power output was at certain points in the ride. The data is extensive and is all displayed in the CYCLO SPHERE. Here is a short list of what the Analysis provides:

Accumulated Stress	: 27.2
Intensity	: 0.82
Interval Intensity	: 99.1 [%]
Work	: 258.9 [kJ]
Avg. Cadence	: 70.2 [rpm]
Avg. Speed	: 32.1 [km/h]
Max. Heart Rate	:
Avg. Heart Rate	:
Max. Pedaling Power	: 417.5 [W]
Avg. Pedaling Power	: 175.6 [W]
Max. Pedaling Efficiency	: 59.0 [%]
Avg. Pedaling Efficiency	: 32.0 [%]
nPower	: 187.6 [W]
Avg. Power Balance (L : R)	

This is just a sample of some of the data available. The depth of analysis is overwhelming. I truly cannot think of anything that this system is missing. Now with wifi syncing and the ability to link up with STRAVA after you download. The Pioneer Cyclo Meter is a comprehensive training and performance tool. The SGX-500 will work with other power meters, but for the full experience you will want to have the crank power meter installed by a pro. Go

to <http://www.pioneerelectronics.com/PUSA/Cycle+Sports> for all the details and a dealer near you that can help you create the ultimate cycling training system.



display



mounting for TT BIKE



data



battery life



accuracy



custom settings



data upload



Excellent!



Summary