CA600 Firmware Update 11/7/2019

#1 Virtual Power (VPower)

- Non power meter users can try power training using only the CA600.
- Calculates power from GPS speed, weight, grade and wind speed/direction.
- Downloads wind speed and direction information via the Cyclo-Sphere Control App every hour for your GPS location.
- Enable in the Cyclo-Sphere Control App's CA600 Wind Information setting.
- The wind resistant force is calculated by wind speed of your bicycle and CdA.
- Input personal CdA . Normally it's 0.3 or 0.4.
- Virtual Power settings are easily accessed from the CA600 Menu / Bike / Tools. Simply long push the Center button short cut.
- Analyze power data in Cyclo-Sphere Analysis Web or App
- Compare other CA600 users V Power with Virtual Partner

#2 Virtual CdA

- Used in conjunction with any Power Meter (including V Power) or Pedaling Monitor.
- Calculated from Power, Wind, and Speed data
- A CdA number or graph with number can be selected in the data fields.
- Three resistance levels from high (0.4x) to low (0.2x) depending on riding position.
- The TT position example displays as 0.2 or the "Aerographic" with a Good confirmation when maximizing aerodynamics.
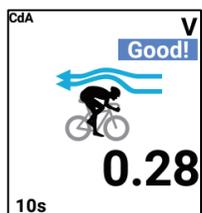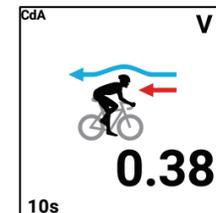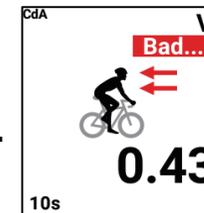
#3 Auto Cue Point
- When using a Strava course file, there are no left/right and cue points.
- Provides an upcoming turn message and cue point for an upcoming climb automatically.
- When you select the Strava course file, it calculates and shows cue points.
- Detects corners of 90 degree's by GPS tracking, under 90 degree's may not be detected.
- Detects climb location and difficulty level - same as Tour de France (HC, 1st, 2nd,3rd and 4th).
- It will show climbing start location with a Valley icon and distance/grade/elevation gain.
- Detects grade changing points.
- An additional navigation function only, detection not guaranteed.
- Not a turn by turn navigation feature found with Ride with GPS or Easy Route course files.

Cue Sheet

16.7 mi	0.8mi,5.2%	
Distance 0.8mi,Grade 5.2%, Elevation Gain 228ft		
17.5 mi	0.8mi,5.2%	4
Distance 0.8mi,Grade 5.2%, Elevation Gain 228ft		
29.2 mi	Left	

▲ | Next | ▼
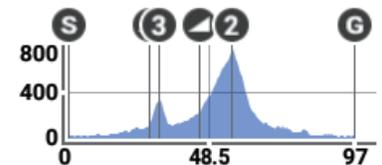
#4 Lap List
- Designed for Criterium Circuit Racing.
- You can select Power/NP/Speed/HRM.
- Green 8 x 6 data field required.
- 7 line lap list with 3 line scroll with left and right button zoom
- Great for Training Programs – Set an Auto-Lap for each Time Interval

Time Lap	Pwr LapAv W	Pwr 3s W
0:15	217	211

LapList

Lap	Time	Pwr W
18	00:00:30	144.3
17	00:00:30	241.1
16	00:00:30	70.8
15	00:00:30	182.5
14	00:00:30	79.6
13	00:00:30	199.7
12	00:00:30	97.4

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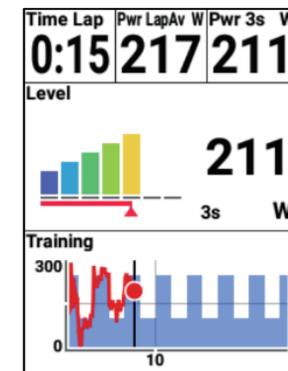
#5 Arrival Time

- Arrival time calculator based on 60 sec. average power during navigation.
- Arrival time or clock in the data fields.
- Higher power will speed up arrival time.
- Break time or zero power will delay the arrival time.
- Calculates power data with your profile weight information, wind and grade fluctuations of the course.
- Limit speed is 60 km/h.

#6 Course File Elevation Gain

- Shows Elevation Gain along with Course Distance in the Course Profile Summary.
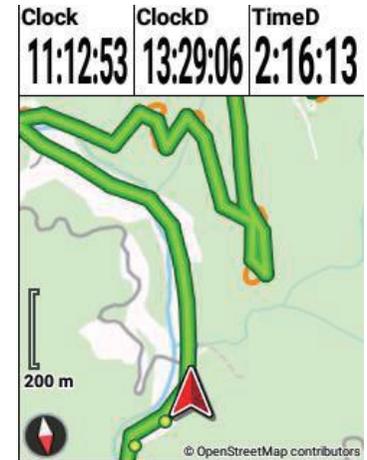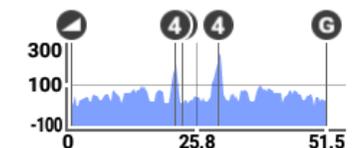
CA600 Firmware Update 11/7/2019

#1 Virtual Power – Virtual Power provides non-power meter users power estimation via the CA600 and Cyclo-Sphere Control App. Power is calculated from GPS speed, weight, grade, wind speed, and wind direction. Wind speed and wind direction information is provided via the Cyclo-Sphere Control App every hour for your GPS location. Enable Virtual Power in the Cyclo-Sphere Control App's CA600 Wind Information setting. Virtual Power settings can also be accessed from the CA600 Menu / Bike / Tools or long push the Center button short cut. Virtual Power post ride power data analysis is viewable in Cyclo-Sphere.

#2 Virtual CdA – (Drag Coefficient) -CdA is an index related to the aerodynamics of the rider and bike that combines the drag coefficient Cd, with the frontal projected area, A. This value will read lower when you ride in a stance that has low air resistance or you are on a bicycle with advanced aerodynamics. If an ANT+ power meter or a Pioneer Pedaling Monitor is connected, Virtual CdA is estimated using the power information, wind, speed, and Virtual Settings input directly into the CA600 or via the Cyclo-Pshere Control App. Numeric or graphic metric displays are available for real-time viewing. Post ride analysis is not yet available for Virtual CdA.

#3 Auto Cue Point – A new option in the Course Menu. Generates "Mountain Cue Points" and "Left or Right Turn Points" automatically when a course is chosen. "Mountain Cue Points" are assessed as HC, 1st, 2nd, 3rd, or 4th based on their height from base to peak. Individual cue points for the base and peak, course distance, average gradient, and elevation gain are added to messages. Cue points are not generated automatically when "Mountain Cue Points" or "Left or Right Turn Points" already exist in the course files.

#4 Lap List – Specially designed for Criterium Circuit Racing. Select Lap Avg for Power, NP, Speed, or Heart Rate. The 8 x 6 Graphic data field is required. When in Zoom, provides 7-line lap list with 3-line scroll.

#5 Arrival Time - Additional Navigation option provides arrival time calculation based on 60 sec. average power during navigation. Choose Arrival Time Destination or Remaining Time Destination in a data field. Higher power will speed up arrival time. Break time or zero power will delay the arrival time. Calculates power data with your profile weight information, wind and grade fluctuations of the course.

#6 Course File Elevation Gain - Shows Elevation Gain along with Course Distance in the CA600 Course Profile Summary.

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