

## **APPENDIX G USER MANUAL**



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# CinQo

INSTALLATION  
AND  
USER GUIDE



**QUARQ**  
THINK FAST

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Patents pending.

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**FCC Statement of Compliance:**

Statement of Compliance for FCC and Industry Canada:

Quarq Technology, Inc.  
Model#: Quarq CinQo  
IC: 7716A-CNQ1  
FCC ID: WAY-CNQ1

*This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation.*

*Warning: Any changes or modifications not expressly approved by Quarq Technology could void the user's authority to operate this equipment.*

*"This device complies with Industry Canada and Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation."*

*The term "IC:" before the radio certification number only signifies that Industry Canada technical specifications were met.*

## Online Resources

[www.quarq.us/support](http://www.quarq.us/support)

- Quarq CinQo installation video
- Current manuals
- Warranty information

[www.quarq.us/cinqo](http://www.quarq.us/cinqo)

- Current product information

## First Steps

Follow the instructions for mounting the CinQo on your crankset if you did not receive it pre-assembled.

Install the crankset and bottom bracket assembly according to manufacturer's instructions.

## Install Magnet

Install the cadence magnet on the frame (see pic).



The CinQo's cadence sensors are located on the back of the CinQo under the five bumps. The CinQo is supplied with a neodymium magnet and 3M dual sided adhesive. The magnet should be in line with the cadence sensors and within ½ inch (12 mm) from the sensors. Do not allow the magnet to physically touch the sensors.

On most frames, the magnet can be placed directly on the chainstay. The magnet may be placed on the downtube, however there is a greater chance it may be knocked off if the chain drops to the inside.

Depending on the bike, "creativity" may be required in magnet attachment. You may also use epoxy or other suitable adhesive to attach the magnet. Ceramic magnets (dull dark grey) may also be used but are generally weaker and may need to be placed closer to the reed switches.

## Pairing

The CinQo will shut off after a period of inactivity (about 10 minutes). A magnet moving past the cadence sensors will wake it up. When awake, the CinQo broadcasts ANT+Sport messages.

To pair the CinQo with an ANT+Sport computer, wake the CinQo and then follow the instructions with your computer. Each CinQo has a unique serial number, so once your computer is paired, it will remember the CinQo's serial number each time. The CinQo does not lose its serial number when the battery is replaced.

## Zeroing

The CinQo is basically a scale and must be zeroed from time to time. You can zero the CinQo two ways:

AutoZero: Spin the crank backwards for 2-3 complete revolutions. This may be done while rolling or stopped with one or both feet clipped in. Best practice is to give the crank a spin backwards for several revolutions before you start each ride and at times during the ride when it is convenient. If the temperature varies greatly during your ride, you should autozero from time to time.

Manual Zero: The CinQo may also be zeroed manually by sending the "Calibrate" command from an ANT+Sport compatible bike computer. When you use the ANT+Sport Calibrate command, the CinQo will return the Zero Offset value to the computer. This should be done stationary, with no force on the pedals. The Zero Offset will vary a bit from day to day, but will typically be in the range of +/- 300. Refer to your computer manual with for exact instructions.

## Battery

The CinQo is powered by a CR2450 battery. Under normal conditions it will last about 500 hours of riding. The CinQo shuts off after about 10 minutes of inactivity.

The CinQo battery can be replaced without any special tools. To replace the battery, unscrew the lid counter-clockwise. Do not try to pry the lid off. The battery should sit with the "+" facing out. Be sure to snug up the lid once the battery is replaced.

## Chainring Bushings

Part of the CinQo's secret sauce is the chainring bushings (patent pending). These bushings should fit nicely in the spider bolt eyes and turn freely (not sticky) and should have no slop. Be sure to apply grease to the bushings when installing the chainrings on the CinQo to prevent corrosion. The bushings and chainrings may need to be cleaned and greased periodically.

## Care and Cleaning

The CinQo is designed to be very durable and can be cleaned similarly to other bike parts. Wipe down with soap and water or other bike cleaner (avoid harsh chemicals). Do not use a high pressure washer.

## **TROUBLE SHOOTING**

### **NOT PAIRING:**

1. Battery. The battery must be installed correctly ("+" out) and have sufficient charge. Check to make sure it is installed correctly and the battery and contacts are free of corrosion.
2. Magnet. If the battery is good, then the next step is to make sure the CinQo is awake and receiving measuring cadence. The magnet should be installed according to the instructions above. Once the cadence sensors have been activated, the CinQo will be transmitting messages and it ready to be paired.
3. Pairing. The pairing process will vary by manufacturer of your bike computer. Refer to your instruction manual with your computer.

### **CADENCE, BUT NO POWER:**

Zero the CinQo by AutoZero (spin crank backwards) or Manual Zero (calibrate command from bike computer)  
Inspect, clean and grease bushings.

### **HIGH OR LOW POWER VALUES:**

If the CinQo appears to be reading high or low power values, perform the auto or manual zeroing functions. If the problem persists, inspect, clean and grease bushings.

### **DATA DROPS:**

If you notice data drops while riding, check the placement of your computer. Placing your computer on the stem or right side of handlebars may eliminate or minimize any data drops.

Please contact technical support at: 1-800-660-6853 or [www.quarq.us/support](http://www.quarq.us/support) with any additional questions.