GEOID PM500

GEOID PM500 Bike Power Meter Crankset User Manual

Model: PM500

1. Introduction

The GEOID PM500 Bike Power Meter Crankset is designed to provide accurate and reliable power data for cyclists. Featuring a dual-sensor fusion algorithm, it ensures unwavering accuracy and stability with a ±1.5% power accuracy. Constructed from lightweight 6061 aluminum alloy for the crank and CNC-machined 7075 aluminum alloy for the spider, it weighs approximately 680g (for 170mm crank + 100g spider). The intelligent power management system offers up to 300 hours of battery life per charge, with convenient magnetic charging. It monitors four core data points: Power, Cadence, Left-Right Balance, and Pedaling Smoothness, aiding in scientific training and technique refinement. The PM500 offers broad compatibility with Bluetooth/ANT+ dual connectivity and is IPX7 waterproof for reliable performance in various weather conditions.

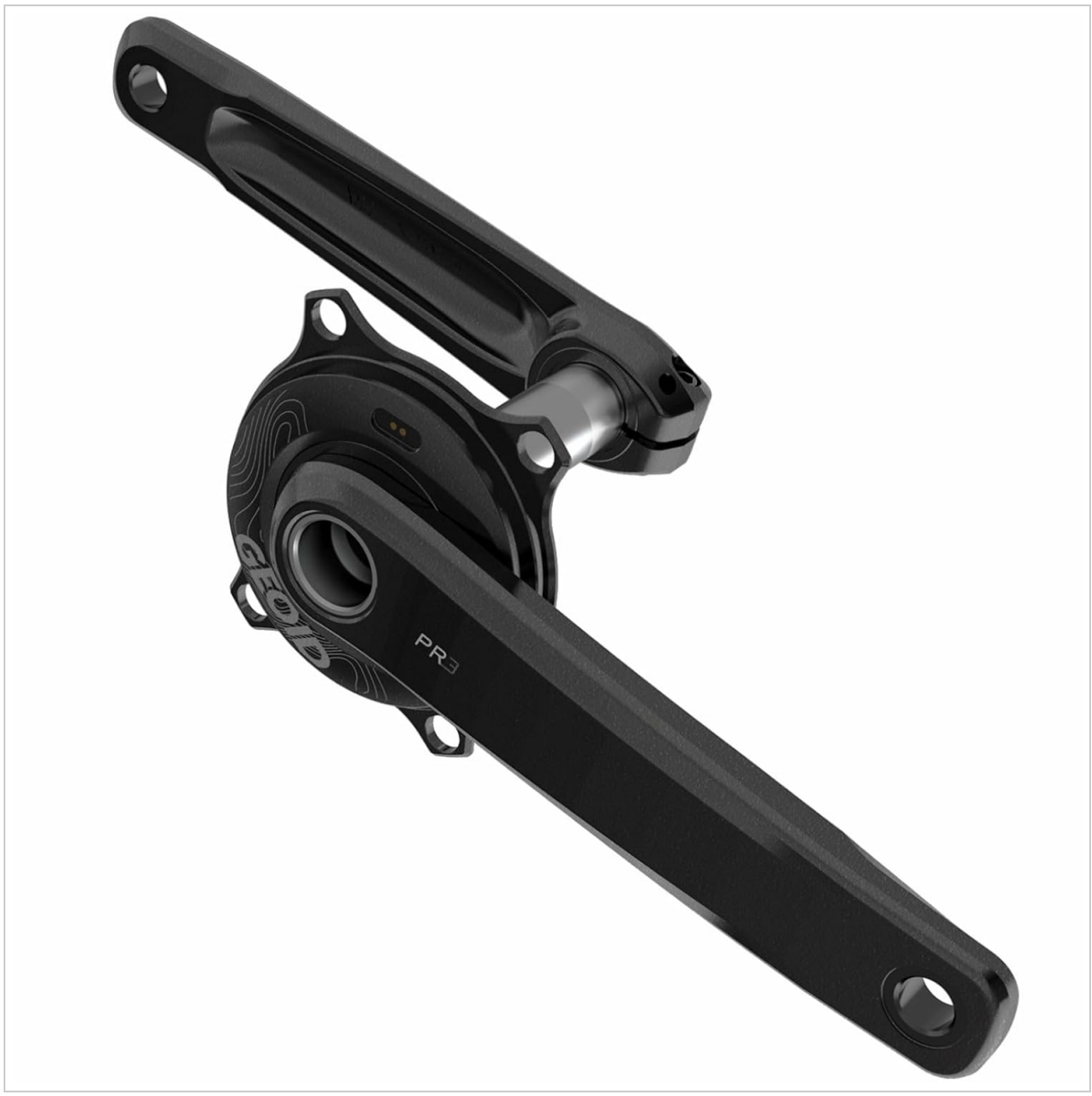

Image 1: The GEOID PM500 Bike Power Meter Crankset, showcasing its sleek design and integrated power meter spider.

2. What's in the Box

Upon opening your GEOID PM500 package, you should find the following components:

- 1 x PM500 Spider Power Meter
- 1 x Pair of Cranks (Senicx PR3)
- 1 x Screw Key
- 1 x Axle Screw
- 1 x Lockring
- 1 x Lockring Adapter
- 1 x Magnetic Charging Cable
- 1 x Quick Start Guide
- 1 x Important Information Sheet

Video 1: An overview of the contents included in the GEOID PM500 Power Meter Set package.

3. Setup

3.1. Preparation

Before beginning installation, ensure you have the following tools:

- 5 mm hex wrench
- 6 mm hex wrench
- Torque wrench
- 44 mm - 16T lockring tool

3.2. Spider Power Meter Installation (onto Crank Arm)

Follow these steps to install the spider power meter onto the crank arm:

1. Align the right crank interface with the spider power meter and place it in position.
2. Fit the lockring over the spider, aligning it with the indicated direction.
3. Use a 44 mm / 16T lockring tool together with the provided adapter to tighten the lockring clockwise. The recommended tightening torque is 35-40 N·m.

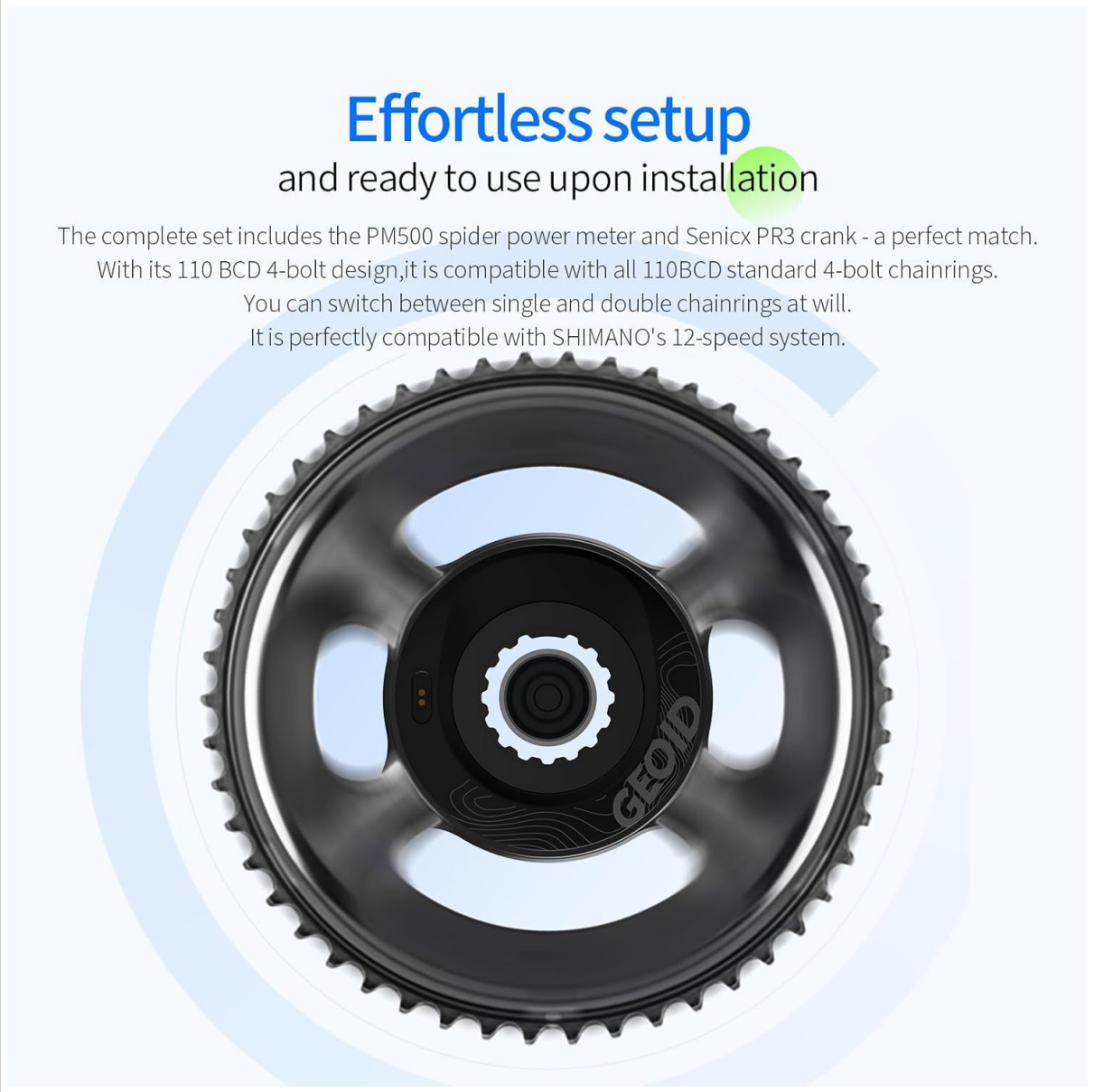

Image 2: Illustration of the spider power meter assembly, highlighting the effortless setup.

Video 2: Detailed steps for installing the spider power meter onto the crank arm.

3.3. Crankset Installation (onto Bike)

Install the assembled crankset onto your bike by following these instructions:

1. Please confirm that your bike's bottom bracket is Shimano standard 24mm. If not, replace the bottom bracket before proceeding.
2. Apply a small amount of grease to the bottom bracket shell.
3. Insert the drive-side crank into the bottom bracket. You may need to gently tap it to ensure the crank is fully seated.
4. Slide the left crank arm onto the spindle of the right crank assembly. Make sure the left crank is positioned 180 degrees opposite the right crank.
5. Then thread the spindle bolt into the left end of the spindle (clockwise thread). Note that the slot on the left crank should be at its widest position.
6. Use the supplied preload tool to tighten the spindle bolt (clockwise thread). Confirm the tightening torque with a torque wrench to 1-1.5 N·m. Do not overtighten, as this may cause poor rotation.
7. Tighten the two left-crank fixing bolts using a 5 mm hex wrench. Do not tighten one bolt fully at once; instead, tighten both alternately in small increments. Confirm the final torque with a torque wrench to 12-15 N·m.
8. After installation, reinstall the chain.

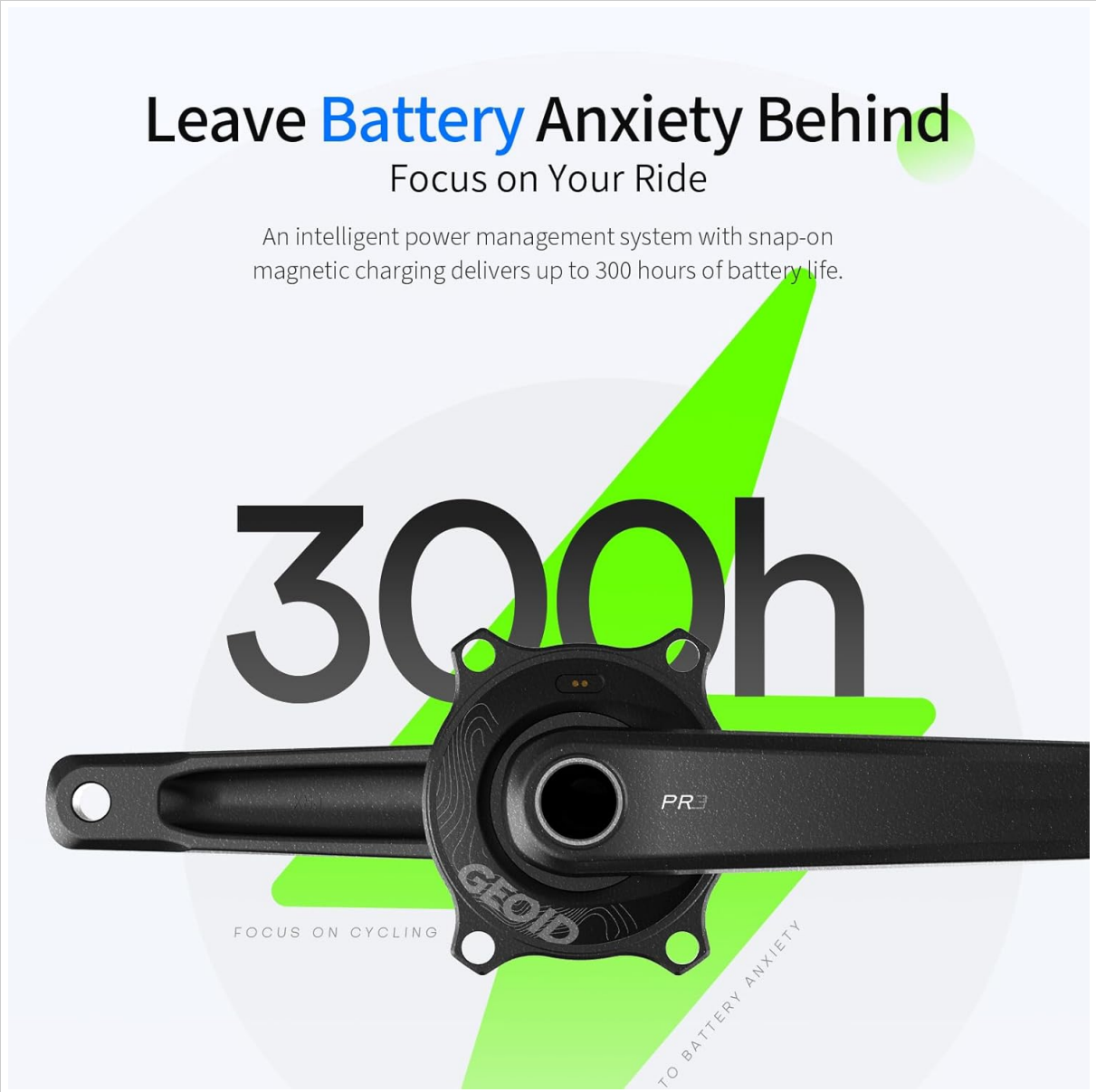

Image 3: The GEOID PM500 Crankset installed on a road bike, ready for use.

Video 3: Step-by-step guide for installing the GEOID PM500 Crankset onto a bicycle.

4. Operating

4.1. Pairing with Bike Computer

To ensure proper function, the power meter must be charged and woken up before first use. Please charge the device before first use to wake it up.

1. Rotate the crank to keep the power meter awake.
2. On a bike computer that supports power meter devices, search for the corresponding ANT ID and connect to the device.

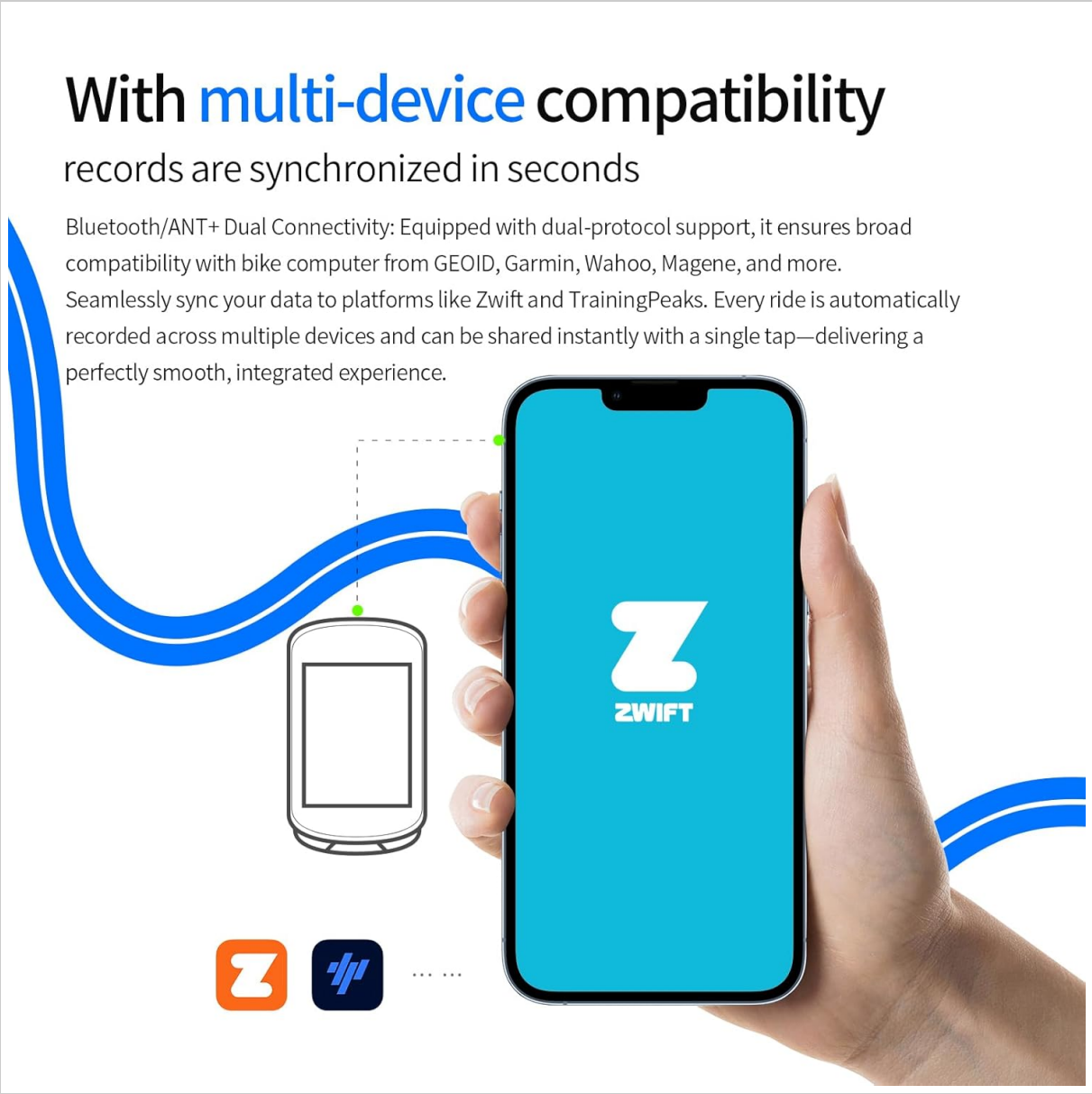

Image 4: The GEOID PM500 offers multi-device compatibility, syncing data seamlessly with various bike computers and apps.

Video 4: Instructions on how to pair the GEOID PM500 Power Meter with a compatible bike computer.

4.2. Zero Point Calibration

To ensure measurement accuracy, perform zero point calibration after each installation or long ride.

1. After correct installation, pedal several times before calibration.
2. Use the compatible bike computer with zero-point calibration function to calibrate.
3. Connect to the power meter, then tap the