

RaceRanger: Age-Group Athlete FAQs

In January 2027, every cyclist competing in the Loan Market Oceanside Tauranga Half, Strength Meals Co AquaBike and Tauranga Half teams event will use RaceRanger.

This will be the first time RaceRanger has been used across an entire age-group field, giving our athletes access to the same cutting-edge technology now commonly used in professional triathlon around the world. RaceRanger has already been used at more than 100 professional events, including the IRONMAN Pro Series, T100 World Tour, Challenge Roth and the Paris 2024 Paralympics.

We understand that using new technology can create questions, so we have answered the most common ones below.

What is RaceRanger?

RaceRanger is an electronic system designed to help athletes understand how far they are from the cyclist ahead.

Two small devices are fitted to each bike—one at the front and one at the rear. The system accurately measures the distance between bikes and uses lights on the bike ahead to help the following athlete understand their position.

RaceRanger also provides live athlete tracking, giving race control greater visibility of where athletes are on the bike course and allowing friends and family to follow their athlete's progress.

Why are age-group athletes using it?

The intention is to give age-group athletes access to the same technology used in professional racing while improving:

- ☐ clarity around drafting distances;
- ☐ fairness and confidence on the bike course;
- ☐ live tracking for friends and family; and
- ☐ athlete safety and event management.

It removes much of the guesswork involved in estimating the distance between bikes, both for athletes and race referees.

Will RaceRanger automatically give me a drafting penalty?

No. RaceRanger does not automatically issue penalties and does not replace race referees.

Referees will continue to observe athletes on the course, use their experience and make live decisions. RaceRanger simply provides them with additional and more accurate information to assist their decision-making.

A red light does not automatically mean that you will receive a penalty.

What do the different lights mean?

The lights appear on the rear RaceRanger unit of the bike ahead of you.

For a standard 12-metre drafting zone:

- ☐ Orange light: You are approaching the drafting zone but remain a safe distance behind.
- ☐ Blue light: You are getting close to the drafting zone.
- ☐ Flashing red light: You are inside the drafting zone.

The lights are there to help you manage your position and remove the need to visually estimate the distance between bikes.

Does seeing a flashing red light mean I have been caught drafting?

No. The red light simply tells you that you are currently within the designated drafting distance.

There are legitimate reasons why an athlete may enter the drafting zone, including when beginning an overtake. Athletes are permitted to enter the zone when making a pass, provided they continue progressing forward and complete the pass within the time allowed under the event rules.

Full drafting rules, including the applicable distance and overtaking time, will be confirmed in the Athlete Guide and pre-race briefing.

What happens when the course becomes congested?

Race referees understand that there may be times when maintaining the full drafting distance is temporarily difficult or impossible.

This can happen:

- ☐ near the beginning of the bike leg;
- ☐ in narrow or technical sections;
- ☐ when athletes are entering or leaving aid stations;
- ☐ around turnaround points;
- ☐ when athletes of different speeds come together; or
- ☐ when congestion develops unexpectedly.

Referees will continue to use common sense and assess the complete situation. They will consider whether an athlete is deliberately gaining an advantage, whether they are attempting to pass or drop back, and whether the congestion is outside the athlete's reasonable control.

RaceRanger does not remove referee judgement. The system is designed to provide better information—not penalise athletes for unavoidable situations. RaceRanger also allows designated sections of a course to be treated as non-policing zones where appropriate.

What should I do when I see a red light?

Stay calm and safely assess the situation.

You should either:

1. continue moving forward and complete your pass within the permitted time; or
2. ease back and re-establish the required distance.

Do not make sudden movements, brake abruptly or compromise your safety simply because a light has changed.

Will RaceRanger make it harder to race?

The system is intended to make racing easier and clearer.

Rather than trying to judge whether you are approximately 12 metres behind another cyclist, the lights provide a simple visual indication of your position. Every athlete will be using the same system, so no athlete will be disadvantaged.

Will drafting data be published after the race?

Individual age-group drafting data will not be publicly released after the event.

RaceRanger information is there to support athletes, race control and referees. It is not intended to create a publicly available list or ranking of athletes based on drafting information.

Will friends and family be able to track me?

Yes. RaceRanger will provide live tracking during the bike leg, allowing supporters to follow their athlete's location around the course.

Tracking information and instructions will be provided closer to race day.

Does RaceRanger improve athlete safety?

Yes. Race control will have a live view of athletes' locations while they are on the bike course.

This gives the event team additional visibility if an athlete stops moving, leaves the course or appears to be experiencing difficulty. It provides another valuable layer of information alongside our existing event safety systems.

When will I receive my RaceRanger units?

You will collect your RaceRanger units at registration.

Each athlete will receive a front and rear unit, along with instructions explaining how to attach them to their bike.

Do I fit the units myself?

Yes. Participants will be able to fit the units directly to their own bikes.

The fitting process has been designed to be simple, and instructions will be provided. RaceRanger staff will also be onsite during registration to demonstrate the process, assist with fitting and answer questions.

Every unit will be checked for correct fit and operation when bikes are racked in transition.

Where do the devices attach?

The front unit is generally attached to the left front fork. The rear unit is attached to the rear of the seatpost or seat tube, with its lights clearly visible to the cyclist behind.

Athletes with bottles, storage systems or equipment mounted behind their saddle may need to adjust their setup slightly to leave sufficient room for the rear unit. RaceRanger staff will be available to help with unusual bike configurations.

Will the devices affect my bike's performance?

The devices are small and lightweight, and every athlete will carry the same equipment.

The current combined weight of the front and rear units is approximately 135 grams. Because the entire field will be using RaceRanger, there will be no competitive disadvantage between athletes.

What happens to the units after the bike leg?

RaceRanger staff will remove and collect the devices from bikes while athletes are completing the run.

AquaBike athletes and team cyclists will receive specific collection instructions in the Athlete Guide and at registration.

Please do not remove, swap, cover or interfere with the units during the event.

What happens if my unit appears not to be working?

Continue racing safely and follow the normal drafting rules.

RaceRanger is an additional aid—it does not remove an athlete's responsibility to follow the competition rules. Referees will also continue officiating the race as normal.

Any device issues can be reported to an official or RaceRanger staff member when it is safe to do so.