# FLAER REVOVIA



The **REVO VIA** is the world's first Chain Performance System. A revolutionary new accessory that significantly increases the power transmitted through your drive chain to the rear wheel.

The **REVO VIA** applies micro-doses of our specially developed fluid to the chain at set time intervals while you ride, so no matter what the conditions, your chain remains perfectly optimised – all the time.

The revolutionary new **REVO VIA** Chain Performance System will ensure all your effort goes to the wheel all the time, providing gains of up to 12 watts. So, for the same effort you can ride faster, for longer and you'll recover quicker making you fresher for your next ride.

## **Product Brief**

### **Specification**

Dimensions: 94 x 46 x 44mm

Weight: 121g (dry)

Battery Life: 150+ Hours minimum (on most frequent setting)

Temperature Range: -10°C to +50°C (Temperature Stable Control)

**Activation:** Motion Sensitive

**Power:** 2 x N (LR1) Batteries

(Wake, Sleep, & Deep Sleep Modes)

**Mounting:** Flexible Frame Mount, multiple options

**Control:** 3 x Buttons, 3 x Settings including BOOST

Fluid Capacity: 27ml max (with Easy Fill)

Setting 1 – 0.03ml every 30 secs – 7.5 Hrs Riding Time Setting 2 – 0.03ml every 90 secs – 22.5 Hrs Riding Time Setting 3 – 0.03ml every 150 secs – 37.5 Hrs Riding Time

Fluid Required: Via Fluid - High efficiency, low friction, non-sticky







#### Technical Q & A

- Q. How does the **REVO VIA** know when to dispense the fluid?
- A. The **REVO VIA** dispenses the specially formulated Via Fluid onto the chain at a controlled variable rate via user input (selectable intervals) and through sensing motion of the bicycle.
- Q. How much fluid does it use in comparison to other chain lubes?
- A. The **REVO VIA** dispenses 0.03ml (or 1 drop) of fluid at intervals of 30, 90 or 150 secs, depending on the conditions and user preference.

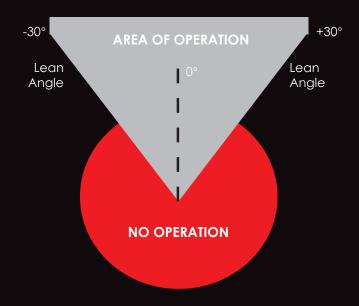
Through testing we have identified that approx. 4.35ml of fluid requires to be applied to the chain using traditional drip lubes. Most of this is excess and will require to be wiped off or will be flung off during the early stages of a race.

Compared to traditional methods the **REVO VIA** takes 1h 12mins to put on the same amount of fluid at the fastest flow rate and 6 hours at the slowest flow rate.

- Q. How much fluid fling/mess do you get using the **REVO VIA**?
- A. The system will fling no more than a traditionally applied lube. If fling occurs it is because the user preference/setting is too high for the conditions. The system should be adjusted and fling will not happen.
- Q. If the fluid does fling, how can I be sure that it will not affect my wheels and braking surfaces?
- A. If the **REVO VIA** is set too high then any potential fling will tend to fling towards the road in a particle type spray. The construction of our fluid, is a light mineral based biodegradable fluid which is water washable. This means that any fling or contaminants are easily dispersed and do not affect the environment. With regards braking surfaces, due to the washable element it does not affect braking surfaces. The heat applied to these surfaces burns the fluid off extremely quickly and does not affect performance or contaminate braking pads.

Traditional lubricants carry tack additives and surfactants which are far more harmful to the environment and any potential braking surface.

- Q. What happens if I'm going round a corner, will it dispense fluid and be dangerous for other riders following me?
- A. The **REVO VIA** is designed to activate under motion. The software is programmed to stop dispensing fluid when the system is outwith ±30° from vertical (0° Upright). This ensures no fluid dispensing on aggressive corners or when the bike is leaned over/turned upside down.



#### Q. How much does the system weigh?

- A. Unit Weight:
  - All Parts (NO Fluid) 121 grams
  - All Parts (WITH Fluid) 151 grams

#### Q. How often do I need to fill it up?

- A. The system has a capacity of 27ml. The following riding times are associated with each user defined setting
  - Setting 1 0.03ml every 30 secs 7.5 Hrs Riding Time
  - Setting 2 0.03ml every 90 secs 22.5 Hrs Riding Time
  - Setting 3 0.03ml every 150 secs 37.5 Hrs Riding Time

#### Q. How do I fill the system up?

A. The system is easily filled through an aperture on the left side of the unit. Simply remove the small rubber bung, fill to just below the hole and then replace the bung.

See image below



#### Q. How do I replace the batteries?

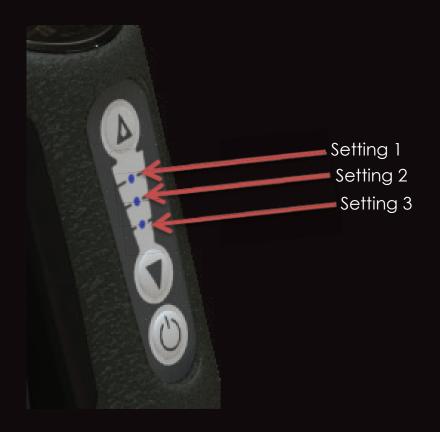
A. The batteries are easily replaced by using a small coin to remove the cap on the top of the unit - turn 20 degrees anti-clockwise to open. Remove and replace the batteries and complete the reverse process.



#### Q. What are your recommendations for settings?

A. Settings are very much user preference and are dependent on a number of factors, such as ride length, environment & conditions. As a starting point we recommend the following relating to the environmental conditions:





#### Q. How easy is it to fit?

A. The **REVO VIA** is designed for a simple installation on most bicycle frames and dérailleur mechanisms. There are multiple bicycle fitment options depending on the type of bicycle and its frame structure/geometry. The **REVO VIA** can be installed in a bottle cage location, with the bottle cage extender bracket so you can continue with two bottles, or with zip ties and rubber straps. Each kit comes with a complete installation guide and in future there will be video tutorials on how to install it. The system can be installed by either a competent technical end user or bicycle shop technician.

#### Q. Does it fit all bicycles?

A. The system is designed to be able to be fitted to most off the shelf production bicycles, with the exception of hybrid one off bicycles and those with single speed mechanisms. Where possible the design has tried to incorporate as many configurations as possible.

#### Q. Can I fill the system with another manufacturers lubricant?

A. We have developed a lubricant specifically for use with the REVO VIA. We know that the makeup/structure of our lubricant is compatible with all of the materials within the system. We are currently speaking to other manufacturers about the opportunity for them to design a lubricant that can be used in our system. Due to the unknown materials and construction of other manufacturer lubricants we cannot at this stage recommend other lubricants until we have linked with these manufacturers to understand their chemical construction. Where possible we will give manufacturers the opportunity to work with us to develop their own lubricant for the system.

# Q. Why have you chosen to use 2 x N disposable batteries instead of lithium rechargeable?

A. When designing the **REVO VIA** we tested numerous types of technologies including batteries. The system is a pumped system and therefore the current (amps) considerations for activating the pump were key along with the lifespan of the batteries and the potential charging time. Using the system and its electronics regulation we are able to achieve 150+ Hours on the most frequent pump setting using 2 x N Batteries. These batteries are also readily available across the world and if you are ever out on a ride, then they can be easily picked up in most stores. Due to the connections of the system (almost like plumbing) the system is not designed to be removed every night or couple of days therefore in order to charge a lithium type cell the end user would need to have access to a charging point close to the bicycle. In the future we will look at these options as technology and charging mechanisms change.

#### Q. Is the **REVO VIA** waterproof?

- A. The **REVO VIA** is design to be IP (Ingress Protection) 66 rated. These standards indicate:
  - IP66 Enclosure IP rated as "dust tight" and protected against heavy seas or powerful jets of water.
- The **REVO VIA** is not designed for IP67 (Submersion).

#### Q. Does fitting a **REVO VIA** take away the need for all chain maintenance?

A. The simple answer is no. Depending on your current process the **REVO VIA** will take over the lubricating and optimisation of your chain. The specially formulated fluid we use will be less contaminated than other lubricants making any cleaning far easier. We always recommend inspecting your chain for signs of wear, damage or stretch before any ride. A clean and lubricated chain is a happy and healthier chain. The **REVO VIA** is design to maximise its performance.

#### Q. How do I clean my chain before fitting a **REVO VIA**?

A. Using your favourite chain cleaner or paraffin and a small brush is the easiest way to do this, a method recommended by both chain and bicycle manufacturers. Once you've cleaned the chain, we'd suggest drizzling a little Via Fluid all along it, and wiping off the excess. This will provide an initial film of oil where it's needed – the system can then be set to 1 drop per 90 secs to maintain this film and adjusted as necessary.

#### Q. Can I remove the **REVO VIA** from one bicycle and then fit it to another?

A. The system is reasonably straight forward to install and uninstall. It is however plumbed using tubing which carries oil. In order to fit the system to another bike we would recommend that you completely remove all parts from the original bicycle and then move the whole system to the new bicycle. Accessories will be available through our network of dealers and via our website. You may be able to leave some of the accessories on both bikes making a quicker change over, however please be aware of the fluid in the tubing.

#### Q. How do I clean my **REVO VIA**?

A. If the **REVO VIA** is subject to dirt ingress, which is restricting the flow to the pump then we recommend that you drain the reservoir and then put lukewarm water in the system and pump the system through using the prime button. This should clear any contaminants and free up the pump.