VISTAR Powershift

FAQ - About Classified

What is Classified and what makes it different from traditional drivetrain brands?

Classified is a Belgian drivetrain company redefining shifting by replacing the front derailleur with an internal 2-speed hub. This allows riders to enjoy wide gear ranges, higher efficiency with using a large chain ring, better chainline, and instant gear changes —all wirelessly and under full load.

How does the Classified Powershift Hub work and what are its key benefits?

The Powershift Hub replaces the front derailleur with a wireless 2-speed planetary system inside the rear hub. It shifts instantly—also under torque—between two gear ratios (1:1 and 0.7), improving performance, simplifying the drivetrain, and reducing maintenance.

What stepsize does the internal gearing in the Powershift Hub have?

1:1 and 1:0,7, so a direct-drive and an underdrive. These ratios mimic a typical 2x chain ring set-up on both gravel and road bikes. (Provide examples of chainring size pairs typically used on both applications)

What are the main advantages of removing the front derailleur with the Powershift system?

Removing the front derailleur improves reliability in relation to avoided chaindrops and improved shifting performance, faster and under full load. Aerodynamics benefits, less mechanical complexity, and better chainline efficiency are also affected. Riders get the gear range of a 2x system with the simplicity, weight savings, and aesthetics of a 1x setup.

FAQ - About Classified

Can Powershift be used with existing drivetrains and shifters?

Powershift is designed to work seamlessly with a wide range of drivetrain brands, including TRP, SHIMANO, SRAM and Campagnolo. With multiple remote options available, it can be easily integrated into most modern road and gravel bikes.

FAQ - Vistar // Powershift Key Benefits

What benefits do I get from Vistar // Powershift?

Unlike traditional 2x drivetrains that depend on a front derailleur to shift between chainrings, the Vistar // Powershift system utilizes QuantumShift technology to deliver seamless, front-derailleur-free gear changes. By simultaneously shifting the internal hub (from a 1:1 to a 0.7 ratio) and the cassette, QuantumShift ensures intelligent gear sequencing and a consistent cadence—even under full pedaling load. This coordination between the hub and rear derailleur results in smooth, efficient transitions without interrupting performance.

Why 1x15 and 1x16? Are there 15 speeds for gravel and 16 speeds for road?

In any 2x drivetrain setup, gear overlap is inevitable. For example, a 2x12 configuration doesn't provide 24 truly distinct gear ratios - in practice, you'll get around 14 to 16 effective gears, depending on the cassette's specifications.

The Vistar // Powershift system with QuantumShift technology delivers 15 or 16 truly usable, sequential gears without redundancy. It automatically manages the shift between the cassette and the internal hub, ensuring each shift moves you to the next most logical gear. There's no need to think about when to shift the Powershift hub—QuantumShift handles it for you, keeping your cadence smooth and consistent.

And because the Powershift hub shifts instantly under load—faster than any front derailleur—you can shift at any time, even during intense climbs. Just focus on the ride ahead and keep pedaling.

FAQ - Vistar // Powershift Key Benefits

What sets Vistar // Powershift apart from regular 2x12 and 1x12 groupset?

Based on a 12-speed cassette and a single chain ring on the crankset, combined with the instant and under full load shiftable Classified Powershift hub, it effectively provides riders with 15 or 16 efficiently spread gears in a logic sequence – offering enhanced chain line efficiencies, under the rider's fingertips.

How does QuantumShift work?

QuantumShift allows riders to go through the full gear range with just 2 buttons for up- and down-shifting. Every cassette gearshift feels the same, whereas in 2 occasions the Powershift Hub and the derailleur are shifting simultaneously. Therefore, the Powershift Hub is able to shift within 150ms and under full load, the rider doesn't notice/feel the QuantumShift.

QuantumShift will always give you the logical following gear when you shift, so you can keep your cadence optimal.

FAQ - Personal Settings

Can I overrule QuantumShift at any time?

At any given moment you can manually shift the Powershift Hub to make an instant big gear change. QuantumShift automatically resumes its shifting profile from any point forward, unless you adjust the set-up to a full manual mode in the CMD-app. QuantumShift will then not be used.

How do I switch between manual and QuantumShift mode?

Switching between manual and QuantumShift mode can be done via the CMD app. Simply connect your device to the app, navigate to the settings menu, and select your preferred shifting mode. The app allows you to toggle seamlessly between Manual mode, which gives you full control over gear changes, and QuantumShift mode, which automates gear sequencing for optimized performance. Changes take effect immediately, allowing you to customize your riding experience to suit your preferences.

FAQ - Specs and Compatibility

What kind of frame is compatible with Vistar // Powershift? Will it fit any frame?

Any frame that is compatible with flat mount disc brakes compatible with Vistar // Powershift.

What wheelsets can I use with this set-up?

This setup is compatible with Classified wheelsets as well as any wheelsets designed to accommodate the Powershift Hub.

Are there specific levers for road and gravel?

A single lever design is engineered to be fully compatible and optimized for both road and gravel use.

What chain should be used with the Vistar system?

The Vistar system is designed to operate optimally with the KMC 12-speed chain.

Are there specific road and gravel derailleurs and Powershift Hubs?

The TRP Vistar derailleurs are tailored to their respective applications. The road derailleur features 11T/11T pulleys and supports a maximum cassette capacity of 34T, optimized for precise shifting on paved surfaces. The gravel derailleur uses 12T/14T pulleys and accommodates cassettes up to 40T, suited for the wider gear range demands of off-road riding. The Powershift Hub is universally compatible and designed to perform seamlessly with both road and gravel setups.

FAQ - Specs and Compatibility

What cassettes are available?

The Powershift Hub uses a proprietary cassette interface. TRP offers specific cassette options tailored for the Vistar // Powershift system. For road applications, 12-speed cassettes include 11-30T, 11-32T, and 11-34T, providing a tight gear range ideal for smooth pavement and performance riding. Gravel options feature wider-range cassettes such as 11-36T and 11-40T to accommodate varied off-road terrain.

What chainring options are available?

For gravel setups, the available chainring sizes are 44T, 46T, and 48T, designed to provide optimal cadence and power across varied terrain. For road applications, chainring options include 50T and 52T, tailored for efficient performance and speed on paved surfaces.

What is the chainline specification?

The chainline measures 45.0 mm with a Q-Factor of 146 mm for road applications. For gravel setups, the chainline is 49.7 mm with a Q-Factor of 154 mm.

What is the maximum compatible disc brake rotor size?

The maximum rotor size supported is 160 mm

What brake caliper mounting standard is used?

Both the front and rear brake calipers utilize the Flat Mount standard.

FAQ - Specs and Compatibility

Is the Vistar derailleur compatible with the Universal Derailleur Hanger (UDH)?

Both the Vistar road and gravel derailleurs are designed to mount using the standard derailleur hanger provisions found on most frames. Therefore, frames equipped with a Universal Derailleur Hanger (UDH) are fully compatible with the Vistar derailleur system.

Are Vistar components compatible with other groupsets?

The Vistar // Powershift system is designed as a fully integrated ecosystem and is not currently compatible with other groupsets.

How are the components paired?

Component pairing is managed seamlessly through TRP's CMD app, enabling efficient and user-friendly system setup.

I already have a Classified Powershift hub, can I upgrade to a full Vistar // Powershift group, using my current Powershift hub?

Yes, you can upgrade to the full Vistar // Powershift group using your existing Classified Powershift hub. However, you will need to install a compatible Vistar-specific cassette and ensure the Smart Axle firmware is up to date.

FAQ - Specs and Compatibility

Can I use Vistar // Powershift on a e-bike?

Yes, Vistar // Powershift is fully compatible with e-road and e-gravel bikes.

Is integration with the e-bike controller possible?

No, TRP Vistar // Powershift does not currently support integration with e-bike motor controllers.

Is the Smart Thru-Axle Universal? Can I use any thru-axle?

The Smart Thru-Axle is a proprietary component specifically designed for use with the Powershift Hub. It integrates the wireless receiver and battery that power and control the hub, with energy transferred via induction coils. The axle must be configured to match your frame's dropout specifications in both length and thread pitch. Using a non-compatible thru-axle will disable the functionality of the Powershift system.

Can I pair a head unit?

The bar-end unit communicates via the ANT+ protocol and can be paired with any compatible head unit. Once connected, the head unit can display real-time information such as the current gear and battery status.

If I swap in a different rear wheel with a Classified Powershift Hub, do I need to re-pair it?

FAQ - Specs and Compatibility

Since the Smart Thru-Axle contains both the power source and wireless communication, there's no need to re-pair. Simply install your existing Smart Thru-Axle into the new Powershift Hub, and you're ready to ride.

Which chains are compatible with the system?

The system is fully compatible with KMC X12 chains.

What cassettes are compatible?

Only TRP's proprietary cassettes designed for Classified's Powershift cassette interface are compatible with the system.

Can I replace components?

Both complete components and individual replacement parts are available for purchase at trpcycling.com and through authorized local bike shops.

What brake pads are compatible, and what options are available?

The system uses TRP flat mount brake pads in a universal flat mount shape. Available TRP options include the F10RS semi-metallic pads and the F12RS resin pads. Alternative brands with the same flat mount design can also be used if TRP pads are not available.

Do the brakes work with mineral or DOT brake fluid?

FAQ - Specs and Compatibility

TRP brakes are specifically designed to be used with TRP mineral oil. Using DOT fluid will cause irreversible damage to the system and void the warranty. Additionally, other mineral oils may lead to reduced performance or long-term degradation—only TRP mineral oil is recommended to ensure optimal performance and maintain warranty coverage.

What maintenance does the Vistar // Powershift system require?

The Vistar // Powershift system is designed to be low-maintenance. It requires only standard routine bike upkeep, such as drivetrain cleaning and lubrication, brake pad inspection and replacement, and regular checks of bolts and fasteners. Electronic components, including the derailleur and Smart Thru-Axle, should be kept clean and periodically checked for firmware updates via the TRP CMD app.

Can I purchase a spare or replacement battery for my Vistar derailleur?

Spare batteries for the Vistar derailleur are available for purchase at trpcycling.com.

FAQ - Batteries

Where can I check the battery status for the derailleur and the Smart Thru-Axle?

Battery levels for both the derailleur and Smart Thru-Axle can be monitored via the TRP CMD app.

How do I charge the TRP removable battery?

The removable battery is charged using the proprietary Vistar battery charger. It reaches a full charge in under one hour.

How long do the batteries last?

The derailleur's removable battery is rated to last approximately 10,000 shifts.

Do the batteries drain when the bike is parked or during transport?

Both the derailleur and Smart Thru-Axle feature sleep modes to minimize battery drain when not in use. The systems are reactivated by either moving the bike or pressing any button on the shifters. For extended storage or transport, it is recommended to remove the derailleur's removable battery. Prior to long-term storage, please ensure the batteries in both the derailleur and Smart Thru-Axle are fully charged.

How do I charge the battery in the Smart Thru-Axle?

The Smart Thru-Axle features a micro-USB charging port located on the rear of the handle. A full charge typically requires up to four hours.

FAQ - Batteries

Why is the battery of the Powershift Hub positioned in the Smart Thru-Axle?

The Powershift Hub itself does not contain a battery; instead, the battery is housed within the Smart Thru-Axle. This design facilitates seamless communication between the bar-end unit and the Smart Thru-Axle, enabling rapid wheel changes without the need to re-pair components. In race scenarios, quick wheel changes are essential, so Classified engineered the system to require pairing only once during the initial setup, ensuring maximum efficiency and reliability.

Does the use of induction coils result in high power consumption during shifting?

The Powershift Hub employs an electric signal and a low-power actuator solely to initiate shifts. The system is engineered so that the necessary shift force is generated by the hub's rotation, ensuring that power consumption remains minimal and does not increase even under higher load conditions.

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