



*Shutter Precision*  
*Small but powerful*

*2 0 2 4*



*Combination of Revolutionary  
and Distinctive Creation*

# FOREWORD

17-YEAR INNOVATION

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*We pursue the summit and  
present fusion of refinement and craft*

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All of the SP members love cycling. SP is an innovative and creative company, enthusing in the bicycle world and devoting efforts to developing excellent devices for riders. Initially we were from the optical and electronic industry. We enjoy our riding hobby and therefore, we brought our interests into work and joined the bicycle family in 2007. We are engineers, inventors and pioneers. We always want to bring tomorrow's technology to life and

commit to create the best.

SP is proud to be awarded ISO 9001 certification, an internationally recognized standard that ensures that our products and services meet the needs of our clients through an effective quality management system. All SP products are designed and manufactured in SP. As we seek refinement, we bring the best craft to the world.

*Bojow Lin*

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01

## INTRODUCTION



History  
Dynamo Hub Design  
Bicycle Light Design

13

## 6 SERIES DYNAMO HUB



To respond, and beyond  
Model Description & Specification

21

## 7 SERIES DYNAMO HUB



Redefining Industry-Leading Vision  
Model Description & Specification

29

## 8 SERIES DYNAMO HUB



The Desired Classic  
Model Description & Specification

43

## 8X SERIES DYNAMO HUB



The Technologically Advanced  
Model Description & Specification

51

## 9 SERIES DYNAMO HUB



Fusion of Extreme  
Model Description & Specification

61

## 4 SERIES BICYCLE LIGHT



The Unique Exquisite Illumination  
Model Description & Specification

73

## PRODUCT OVERVIEW



6 series/7 series/8 series/8X series/9 series/4 series

77

## ULTRA-ENDURANCE RACE



Tour Divide Mountain Bike Race  
Basajaun 2023--Transibérica Ultracycling  
Endurance Racing  
Endurance Cycling Race Record

89

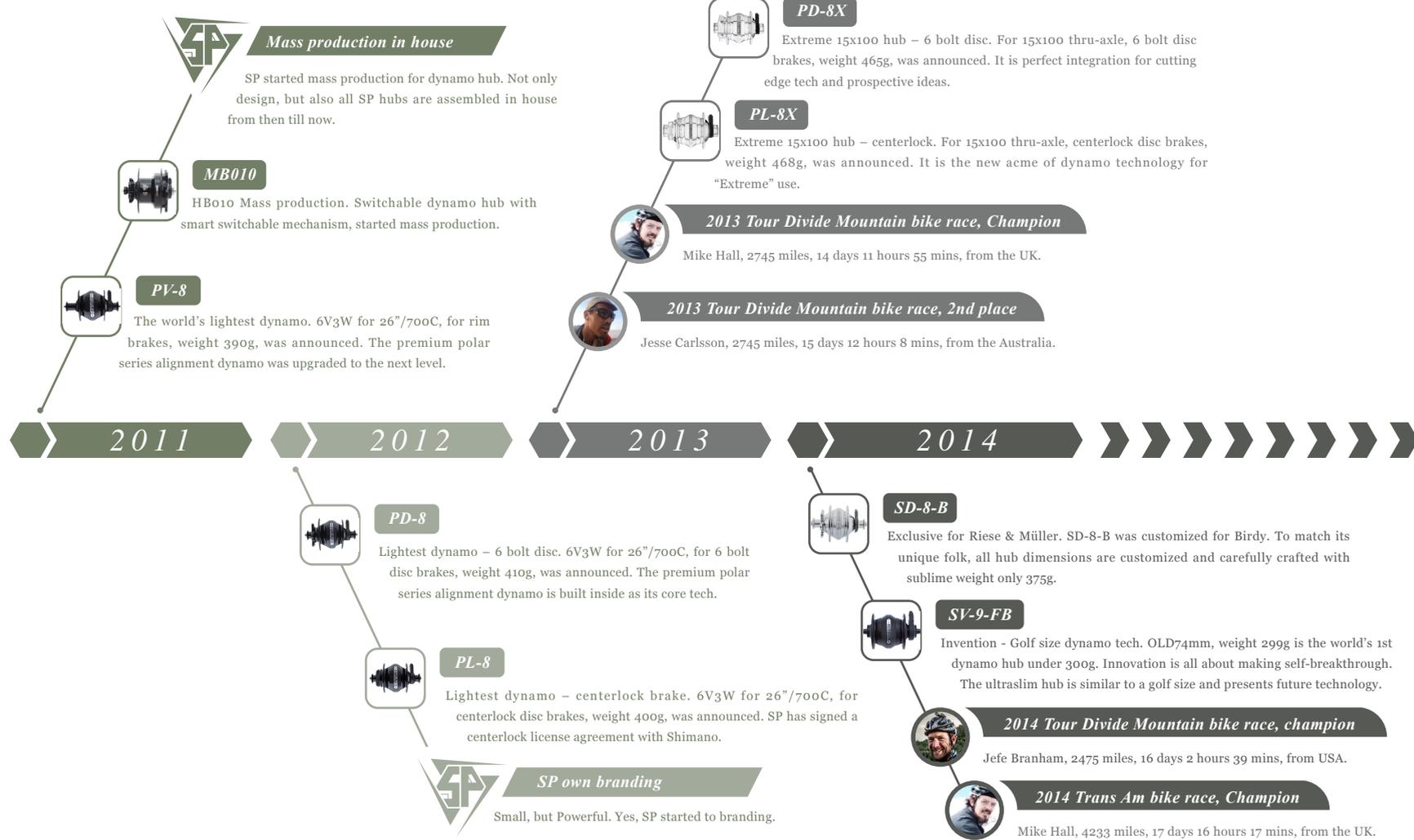
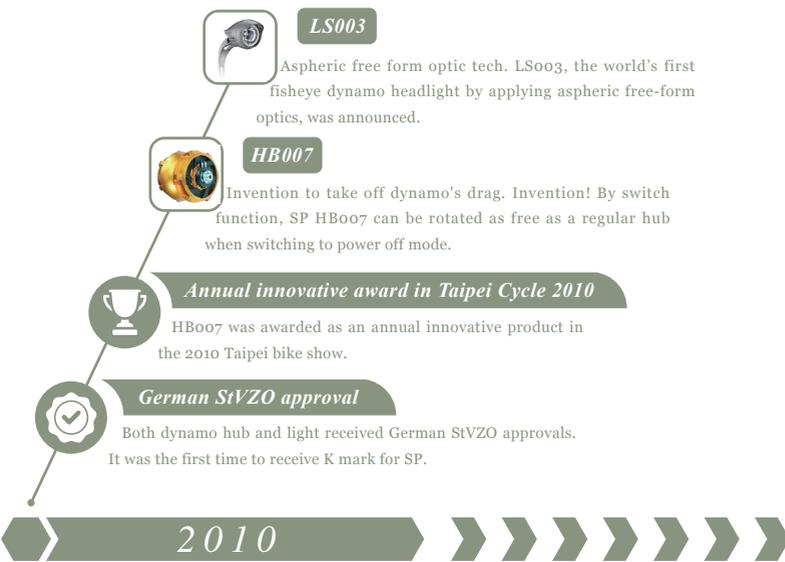
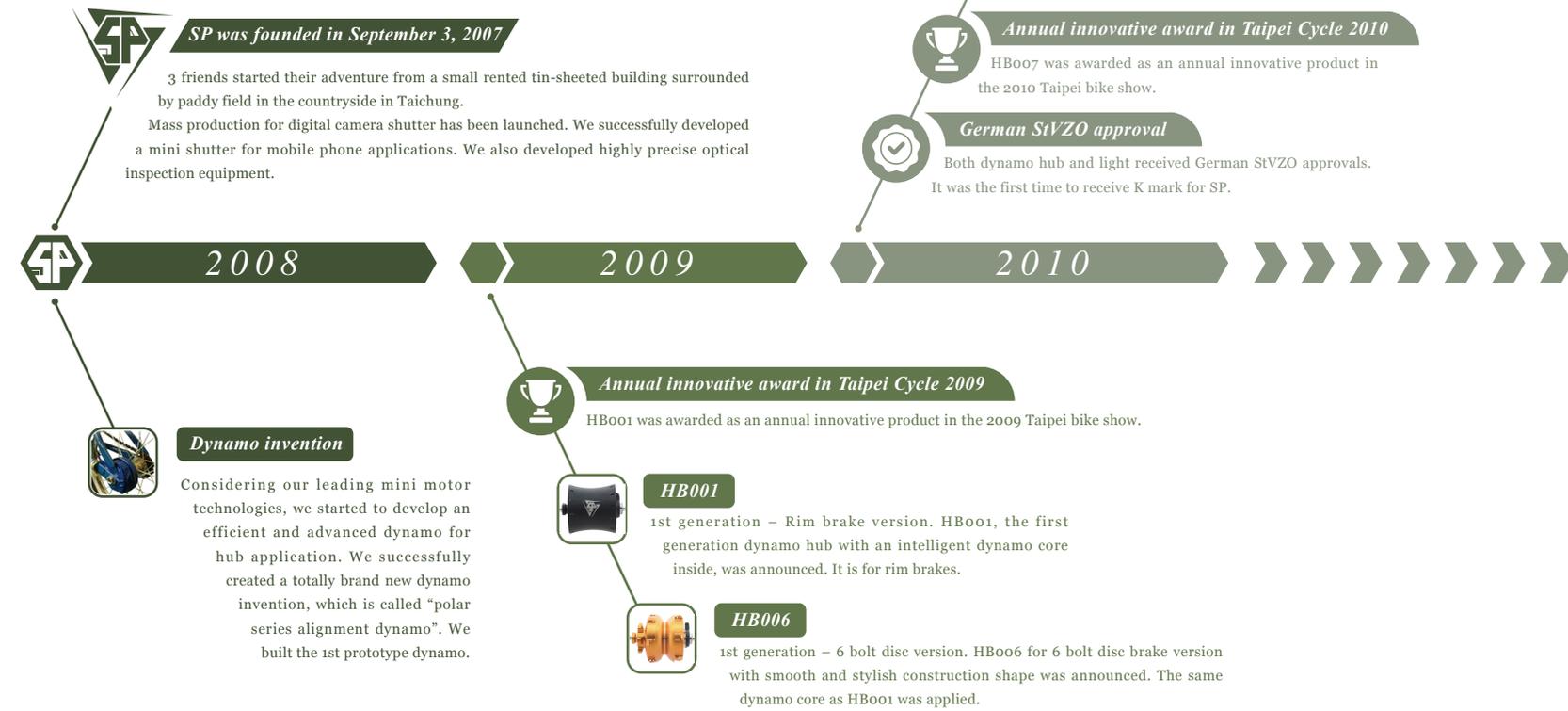
## ADDITIONAL INFORMATION



Warranty  
SP Worldwide Partners

# HISTORY TIMELINE

7-Year challenging and pioneered adventure in Dali Factory



# HISTORY TIMELINE

## 5-Year creative achievement in Wufeng Factory

**2015**

**Wufeng factory**  
We moved to Wufeng factory in Taichung and expanded capacity. This is the first our own factory.

**SV-9**  
Ultraslim dynamo – Rim brake. OLD100mm, for rim brakes, weight 309g was announced. It has demonstrated an enormous improvement from the preceding series.

**SL-9**  
Ultraslim dynamo – centerlock. OLD100mm, weight 323g is the lightest centerlock dynamo hub. It is extremely light with an outstanding performance.

**2015 Tour Divide Mountain bike race, 2nd place**  
Jay Petervary, 2745 miles, 14 days 12 hours 3 mins, from USA.

**2015 Tour Divide Mountain bike race, 3rd place**  
Neil Beltchenko, 2745 miles, 14 days 12 hours 23 mins, from USA.

**2015 Tour Divide Mountain bike race female group, Champion**  
Lael Wilcox, 2745 miles, 17 days 1 hour 51 mins, from USA.

**2015 Trans Am bike race, Champion**  
Jesse Carlson, 4233 miles, 18 days 23 hour 8 mins, from Australia.

**2015 Trans Am bike race, 2nd place**  
Carlos Mazon, 4233 miles, 21 days 10 hour 0 mins, from Spain.

**2016**

**Hub shell production by SP**  
A Taiwanese hub shell supplier pirated SP product immorally and stopped offering hub shells to SP. SP invested advanced premium machines and started to make hub shells in house.

**2016 Tour Divide Mountain bike race, Champion**  
Mike Hall, 2745 miles, 13 days 22 hour 51 mins, from UK.

**2016 Trans Am bike race, Champion**  
Lael Wilcox 4233 miles, 18 days 0 hour 10 mins, from USA.

**2016 Trans Am bike race, female group, 2nd position**  
Sarah Hammond, 4233 miles, 21 days 7 hour 34 mins, from Australia.

**PD-8X-M**  
Premium 12x100 – 6 bolt disc. For 12x100 thru-axle, OLD100, for 6 bolt disc brakes was announced. It is a great combination from ideas to cutting-edge technology.

**PL-8X-M**  
Premium 12x100 – centerlock, For 12x100 thru-axle, OLD100, for centerlock brakes was announced. A sophisticated precision instrument matched to a comely visage, the 8X is hub dynamo updated, redefined and refined.

**Sell directly to OEMs**  
We stopped global distributor relationship with Kun Teng industry Co., Ltd. SP sells our own brand SP hubs to all customers.

**2017**

**Sell directly to all riders**  
To serve more users, we set up web store at SP website and send by DHL. Hope more people can enjoy the convenience and comfort from SP.

**PD-8X-150**  
Hub for snow bike. 15x150mm, for 6 bolt disc brakes was announced. It offers unique riding experience and bike handling precision. Ideal for snow bike riding.

**PD-8X-110**  
Hub for boost bike. 15x110mm, for 6 bolt disc brakes was announced. It is a brand new hub body with perfect symmetrical design. Ideal for boost 110 riding.

**2018**

**PD-7**  
Industrial-leading 100x12 hub. for 12x100 thru-axle, for 6 bolt disc brakes, weight 419g was announced. It represents not only cutting edge dynamo tech, but also premium mechanical design. Its size and weight is similar to 8 series.

**PL-7**  
Advanced 100x12 hub – centerlock. For 12x100 thru-axle, for centerlock disc brakes, weight 409g, was announced. The 7 series is pioneering industry-leading vision.

**2019**

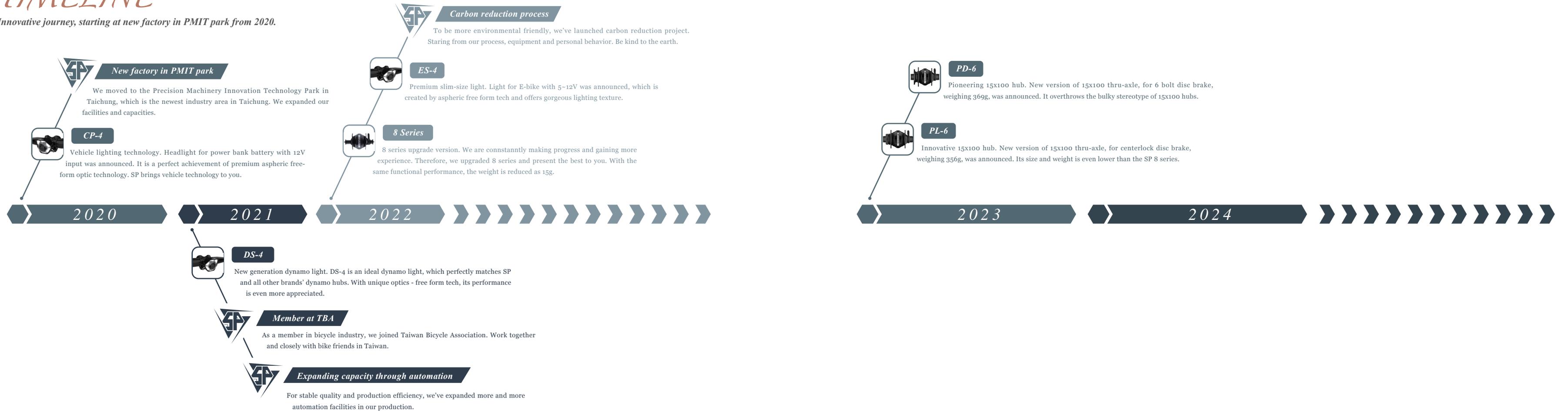
**Certified to ISO9001**  
We are very proud to announce that we are ISO9001 certified. As we seek for refinement, we bring the best craft with excellent quality for you.

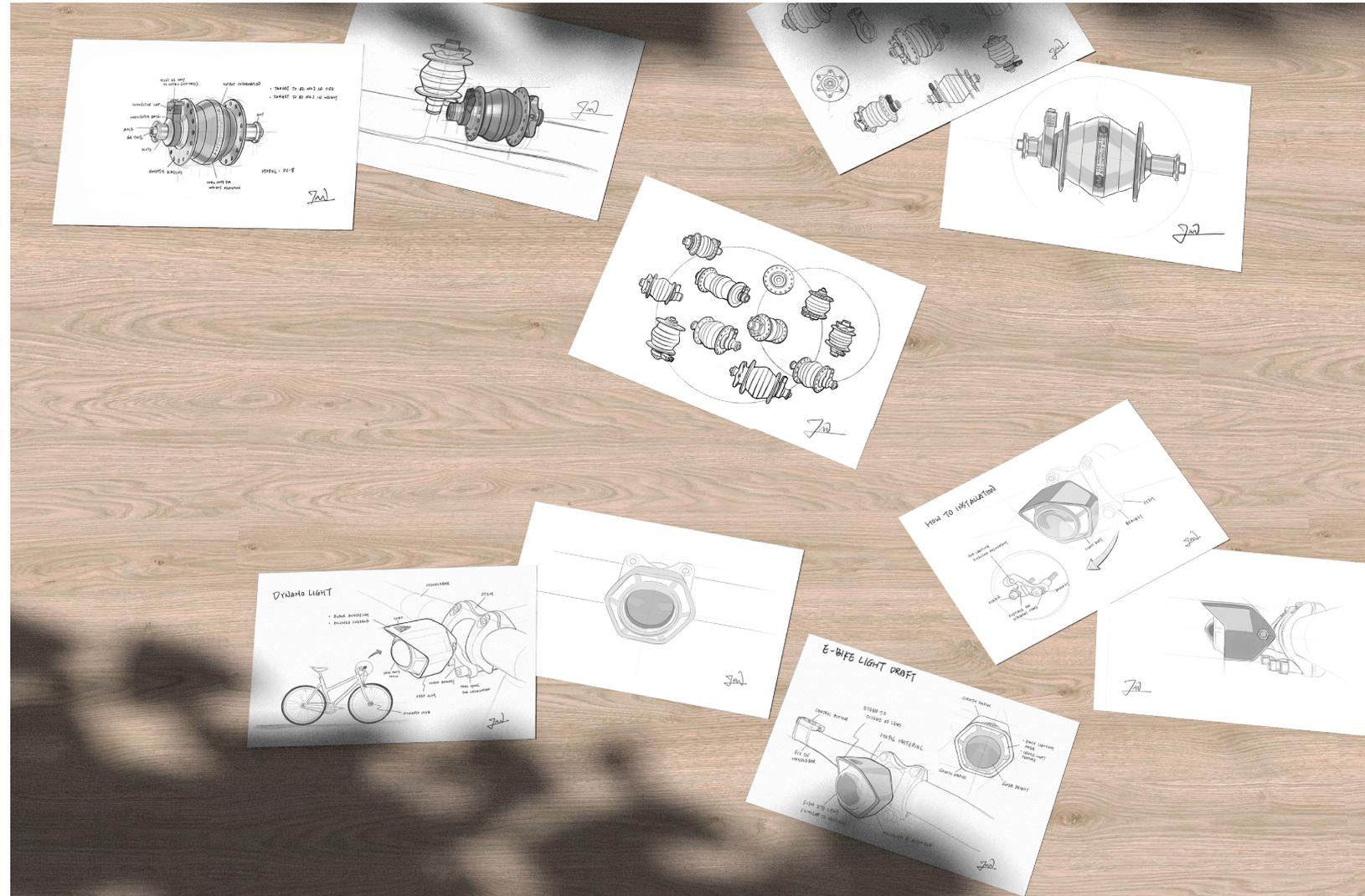
**EP-4**  
Aspheric optic + high beam tech. Light for E-bike with 12V was announced which offers daytime running lights, low beam, wide beam and high beam functions for riders. Super slim and bright. The brightness is up to 2230 lm.

**Direct after-sale service**  
To offer better service for SP users, we launched direct after-sale service. We work with DHL to collect and send back.

# HISTORY TIMELINE

Innovative journey, starting at new factory in PMIT park from 2020.





# DESIGN

## DYNAMO HUB DESIGN BICYCLE LIGHT DESIGN

### WE BRING IN THE ADVANCED VEHICLE TECHNOLOGY

We always focus on “Small, but Powerful”. As a pioneering bicycle component producer, we bring the advanced vehicle technology – Free Form Optic Tech to SP lighting devices to achieve the “Small, but Powerful” concept in reality. The intelligent optics makes the illumination performance brilliant and gorgeous. The premium craft is fulfilled by design elements with unique and smooth multi-angle shape. From structure to aesthetics, we strive for perfect integration. SP lighting devices realize a completely new concept of optical systems and achieve extremely slim in size and powerful in performance.

### ALL OUR AIMS ARE ABOUT RIDERS NEEDS AND DESIRES

SP is an innovative and creative team, enthusing in the bicycle world and devoting efforts to developing excellent devices for riders. Painstaking innovation has made an optimal hub dynamo reality. The hub's intelligent light weight design was tempered throughout with thorough attention to structural performance. The smooth oval shape of the hub was optimized for balance. We look everything in detail and concern overall aspects to optimize the product performance.

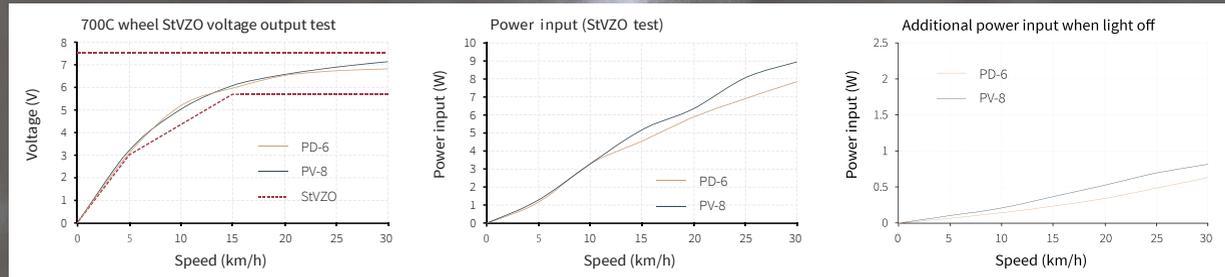
# 6 SERIES

SP TECHNOLOGY ADVANCED



We fabricate the lightest dynamo hub in the world.” This is not just what we aim for, but what we have done. It’s coded in our DNA. We pursue the lightweight and turn them into reality. We conquer and take back our throne if someone ever exceeds us. The 6 series is the evidence that we once again break the weight record. This series is not for simply roaming through the city, it’s for more fierce, intense use. The purpose of this dynamo is to explore the wilderness. But instead of being robust in its appearance, it has an elegant silhouette and tasteful stance. The hub smartly combine the modernness and utility.

## 6 SERIES DYNAMO HUB 6V3W FOR 646~716mm



The new 6 series is strictly state of the art. With substantial time of contemplation, SP engineers accumulate the success experience from our 7 and 8 series and weave them with the 8X series' DNA. The "Mixed-breed" turned out to be a smart idea. It breaks the bulky stereotype of 15mm TA dynamo hubs. The weight is up to 100g lighter than the original 8X series. Light is the power, with the 6 series, you can chase wind to the highest mountain till the farthest sea. The riding experience can be more smooth and lightweight. It's about life. It's about journey.





**PL-6**

COLOR ● ○ 24H/28H/32H/36H

-  15 mm thru-axle.
-  This hub is ideally suited for 26"/700C wheels at 6V3W output.
-  The best match for Centerlock disc brakes.
-  The weight is incredibly light. ONLY 356 grams!
-  O.L.D.100mm.
-  Spoke P.C.D 52mm
-  Flange Diameter 60mm

The 15 mm thru-axle hub is ideally suited to 26"/700C wheels at 6V3W output and perfect for centerlock disc brakes. We have developed a centerlock version of 15 mm thru-axle as PL-6 to our broader audience. The heart of PL-6 is the unique dynamo rated 78% efficiency at 15km/h. PL-6 is also parsimonious with your physical exertions. The weight is only 356 grams, which is the lightest 15 mm thru-axle for centerlock at the current market.



**PD-6**

COLOR ● ○ 24H/28H/32H/36H

-  15 mm thru-axle.
-  This hub is ideally suited for 26"/700C wheels at 6V3W output.
-  The best match for 6 bolt-disc brakes.
-  The weight is incredibly light. ONLY 369 grams!
-  O.L.D.100mm.
-  Spoke P.C.D 52mm & 58mm
-  Flange Diameter 60mm & 66mm

The 15 mm thru-axle hub is ideally suited to 26"/700C at 6V3W output and perfect for 6 bolt disc brakes. Technology should make life easier. PD-6, a 6-bolt disc brake version of 15mm thru-axle, as an innovative hub is devised to render a clean and pure silhouette with a low weight and a sturdy construction. The meticulous design of PD-6 is able to withstand the hefty pressures produced by disc brakes while preserving a simple, clean and pure appearance.

*Chasing wind to the highest mountain  
till the farthest sea.*

# 7 SERIES

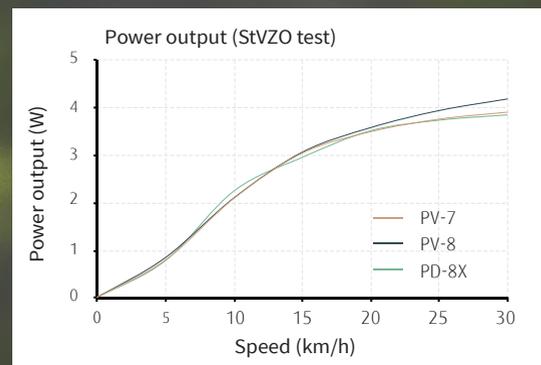
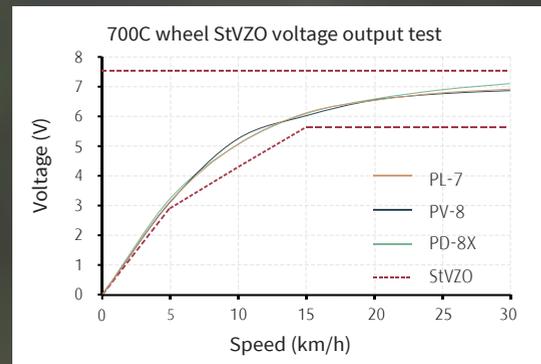
SP CRAFT SPIRIT



At SP, we always seek to expand the technological boundaries of dynamo technology. The new 7 series hub dynamo is the next generation product for 12 mm thru-axle and the offspring of the 8X series. It represents a clear improvement over its predecessors incorporating not only cutting edge dynamo technology, but also premium mechanical design. In creating the 7 series hub, intelligent lightweight construction was tempered throughout with painstaking attention to compact build. The compact form factor optimizes for balance and yet attains an unprecedented weight of only 419g. The 7 series is pioneering industry-leading vision. It is the lightest 12 mm TA dynamo hub currently available.

## 7 SERIES DYNAMO HUB

6V3W FOR 646~716mm



SP has been committed to innovation. Each year, we expand the frontiers of dynamo technology further. Since the 1st generation of 12 mm thru-axle- 8X-M series hub dynamo, we have never ceased our efforts to improve. The 7 series is the culmination of intensive two-year effort and represents a glorious departure from 8X-M. While possessing the same 6V3W output as 8X series, the 7 series manages an amazing weight loss of 60g. The 7 series defines an entirely new vision of dynamo hubs. SP respects the 6V3W German standard. All SP dynamo hubs are compatible with standard dynamo products including dynamo lights and converters for USB powered devices. As you can see from the table, the 8, 8X and 7 series offer similar power output from 0 to 25 km/hr. Above 25 km/hr, the 7 series has slightly higher output than the 8 and 8X series. This means another breakthrough in our dynamo technology. Therefore, we proudly present the 7 series to you!





**PL-7**

COLOR   24H/28H/32H/36H

-  12mm thru-axle.
-  This hub is ideally suited for 26"/700C wheels at 6V3W output.
-  The best match for centerlock disc brakes.
-  The weight is incredibly light. ONLY 409 grams!
-  O.L.D.100mm.
-  Spoke P.C.D 52mm
-  Flange Diameter 60mm

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This 12 mm thru-axle hub is ideally suited to 26"/700C wheels at 6V3W output and perfect for centerlock disc brakes. The new 7 series redefines an entirely new vision of dynamo hubs weaving innovation, style and craft into reality. As new generation for 12 mm thru-axle, it manages an amazing weight loss of 60g across comparable specifications, and only has 409g.



**PD-7**

COLOR   24H/28H/32H/36H

-  12mm thru-axle.
-  This hub is ideally suited for 26"/700C wheels at 6V3W output.
-  The best match for 6 bolt-disc brakes.
-  The weight is incredibly light. ONLY 419 grams!
-  O.L.D.100mm.
-  Spoke P.C.D 52mm & 58mm
-  Flange Diameter 60mm & 66mm

.....

This 12 mm thru-axle hub is ideally suited to 26"/700C wheels at 6V3W output and perfect for 6 bolt disc brakes. For all new 7 series, we packed more innovation, more durable features, and more surprises into this dynamo hub than ever before. The PD-7 is the lightest weight on the 12 mm thru-axle.



# 8 SERIES

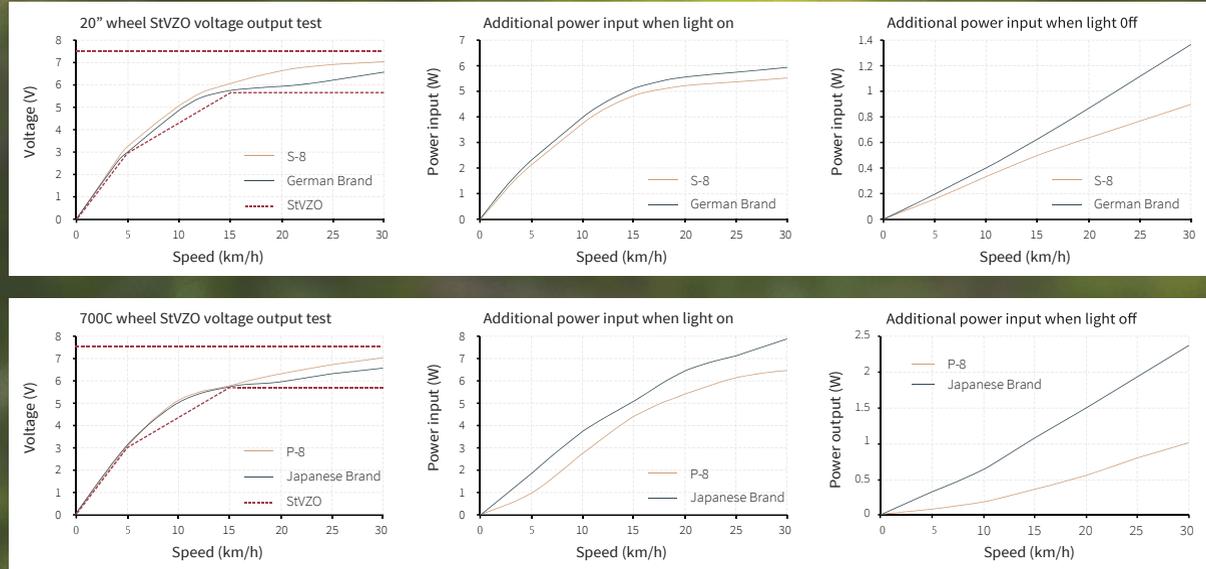
SP EXQUISITE CHOICE



The SP 8-series hub dynamo incorporates the best technical advancements and seeks to attain perfection in the field of hub dynamos. The strong will of innovation has made an optimal hub dynamo into reality. The SP- 8's technological advances are well hidden under its durable shell. The intelligent light weight design was tempered throughout with painstaking attention to structural performance. The smooth oval shape of the hub was optimized to reach a supreme equilibrium , while attaining an unprecedented weight of only 350g.

**S -8 DYNAMO HUB**  
6V3W FOR 400~536mm

**P -8 DYNAMO HUB**  
6V3W FOR 646~716mm



S-8 Series dynamo hubs are not only the smallest in its appearance, but also are the lightest at the market. This model is designed for wheel size from 400 to 536mm at a 6V3W rating. It is also ready for use with 700C wheels at 6V2.4W output. Meet small and light.

P-8 Series dynamo hubs are the most efficient on the market attaining 72% at 15km/hr. P-Series dynamo hubs are ideally suited to wheel size from 646 to 716mm at 6V3W output. They are very light weight from as low as 375g. The design concepts of SP 8 series contain invention, perfection, evolution, and innovation. These elements create a dream dynamo hub.





**SD-8**

COLOR   24H/28H/32H/36H

-  5.2mm quick-releases type.
-  This hub 's output is 6V3W for wheel size 400~536mm.
-  The best match for 6 bolt-disc brakes.
-  The weight is incredibly light. ONLY 375 grams!
-  O.L.D.100mm.
-  Spoke P.C.D 52mm & 58mm
-  Flange Diameter 60mm & 66mm

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This QR type hub is ideally suited to 20" wheels at 6V3W output or 26"/700C wheel at 6V2.4W output and perfectly for 6 bolt disc brakes. The hub body was engineered based on two hub shells that rely on an intelligent joining construction, which enables the hub to withstand the hefty stresses produced by disc brakes, while preserving a simple, clean and pure appearance.



**SD-8-B**

COLOR   32H

-  5.2mm quick-releases type.
-  This hub is ideally suited for wheel size from 400~536mm at 6V3W output.
-  The best match for 6 bolt-disc brakes.
-  The weight is incredibly light. ONLY 375 grams!
-  O.L.D.100mm.
-  Spoke P.C.D 58mm
-  Flange Diameter 66mm

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This QR type hub is ideally suited to 20" wheels at 6V3W output and perfect for 6 bolt disc brakes. SD-8-B is customized for Birdy, the genuine classic of Reise & Müller. This model rotates the opposite side from other dynamos as Birdy's distinct disc brake is at the reverse side. To match its unique folk, all hub dimensions are customized and carefully crafted with sublime weight only 375g. It offers not only the excellent dynamo functions, but also the superb shape with urban styling concept.



### SV-8

COLOR ● ○

20H/24H/28H/32H/36H

-  5.2mm quick-releases type.
-  This hub 's output is 6V3W for wheel size 400~536mm.
-  The best match for Rim brakes.
-  The weight is incredibly light. ONLY 357 grams!
-  O.L.D.100mm.
-  Spoke P.C.D 52mm
-  Flange Diameter 60mm

The model is designed for 20" wheels at a 6V3W rating. It is also ready for use with 26"/700C wheels at 6V2.4W outputs. It is perfect for rim brakes. After the speed reaches 15 km/h, SV-8 (for 26"/700C) output is almost the same as the 6V3W hub. Therefore, SV-8 offers sufficient power for racers during the races.



### SV-8-FC

COLOR ● ○

20H/28H

-  5.2mm quick-releases type.
-  This hub is ideally suited for wheel size from 400~536mm at 6V3W output.
-  The best match for Rim brakes.
-  The weight is incredibly light. ONLY 350 grams!
-  O.L.D.74mm.
-  Spoke P.C.D 52mm
-  Flange Diameter 60mm

This QR type hub is ideally suited to folding bikes at 6V3W output and perfect for rim brakes with OLD 74mm. From 2018, SP SV-8-FC is the only dynamo hub that you can find at Brompton's official website. It is super light and small. Ideal for handmade Brompton bikes. The hub has endured many rigorous experiments to meet the severe standard of Brompton. It erected the benchmark for all the other models.



**PD-8**

COLOR   24H/28H/32H/36H

-  5.2mm quick-releases type.
-  This hub is ideally suited for 26"/700C wheels at 6V3W output.
-  The best match for 6 bolt-disc brakes.
-  The weight is incredibly light. ONLY 395 grams!
-  O.L.D.100mm.
-  Spoke P.C.D 52mm & 58mm
-  Flange Diameter 60mm & 66mm

.....

This QR type hub is ideally suited for 26"/700C wheels at 6V3W output and perfect for 6 bolt disc brakes. Compact without compromise. The dynamo hub has everything, and more than it can offer. With smoothness, you won't easily get tired. To see is to believe : Begin your clear course with PD-8. It brings the next level of comfort.



**PL-8**

COLOR   24H/28H/32H/36H

-  5.2mm quick-releases type.
-  This hub is ideally suited for 26"/700C wheels at 6V3W output.
-  The best match for Centerlock disc brakes.
-  The weight is incredibly light. ONLY 385 grams!
-  O.L.D.100mm.
-  Spoke P.C.D 52mm
-  Flange Diameter 60mm

.....

This QR type hub is ideally suited to 26"/700C wheels at 6V3W output and perfect for centerlock disc brakes. As the pioneer of the dynamo industry, one of our missions is to popularize SP dynamos to a broader audience to enjoy the premium device. Therefore, we have developed PL-8 for the centerlock brake version. All structural dimensions are all well simulated to meet outstanding standards.



### PV-8

-  5.2mm quick-releases type.
-  This hub is ideally suited for 26"/700C wheels at 6V3W output.
-  The best match for Rim brakes.
-  The weight is incredibly light. **ONLY 375 grams!**
-  O.L.D.100mm.
-  Spoke P.C.D 52mm
-  Flange Diameter 60mm

COLOR ● ○

20H/24H/28H/32H/36H

.....

This QR type hub is ideally suited to 26"/700C wheels at 6V3W output and perfect for rim brakes. What makes the SP PV-8 unique is its inspiring dynamo concept called polar series alignment dynamo. It incorporates physical limits, premium craft, cutting edge tech and our passions. It is the perfect construction for the rim brake system. The exterior shape is minimalist, but the construction engineering behind it is complex.



Sensing the delightfulness in your daily life



# 8X SERIES

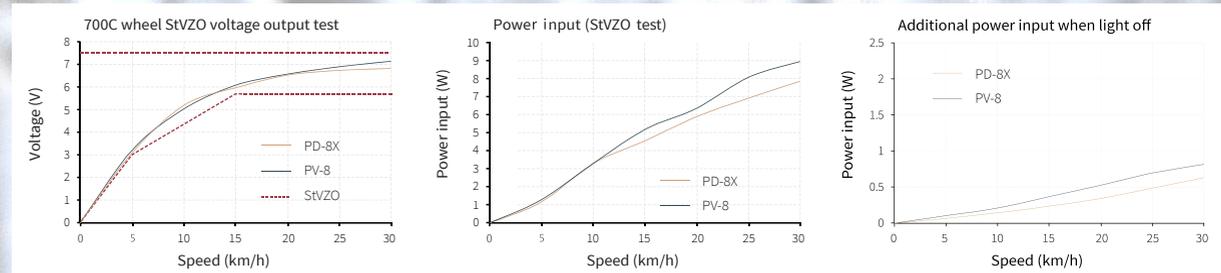
SP EVOLUTION PHILOSOPHY



The 8X is the union of a precision 6V3W dynamo with the modern 15 mm thru-axle (6 bolt or centerlock) disc specification. It is a perfect integration of “avant-garde” technology and muscular aesthetics. Being the most efficient in its class, the 8X is also light in weight. With meticulous surface treatment and design, the 8X is gorgeous in motion and has a vigorous stance. Not stopping at slipping a 15mm thru-axle into a tested hub dynamo design, the 8X incorporates inter alia increased bearing diameters for added mechanical strength and expanded flange distances for more resilient wheel builds.

## 8X SERIES DYNAMO HUB

### 6V3W FOR 646~716mm



Technology should make life simpler and easier. SP engineers have devoted considerable time and resources to create a mechanical design strategy for overcoming technical challenges. These efforts have culminated in an innovative mechanical design which relies on super quality bearings and precise assembly processes. Our computer aided modeling simulations indicate that we have perfected the interplay between bearing and limited internal space, making the 8X bearing assembly as durable as the time tested. The appearance treatments create the gorgeous and fine texture on the 8X. This is for custom, stylish and purpose-built bikes.





### PD-8X-110

COLOR   24H/28H/32H/36H

-  15mm thru-axle.
-  This hub is ideally suited for 26"/700C wheels at 6V3W output.
-  The best match for 6 bolt-disc brakes.
-  The weight is incredibly light. ONLY **480** grams!
-  O.L.D.110mm.
-  Spoke P.C.D 58mm
-  Flange Diameter 66mm

The 15 mm thru-axle hub with OLD110mm is ideally suited to 26"/700C wheels at 6V3W output and perfect for 6 bolt disc brakes. We are inspired at the current market, which lets us develop a 15 mm thru-axle boost version of 8X series. PD-8X-110 with a brand new perfect symmetrical hub design can offer better riding efficiency and bike handling precision. Ideal choice for Boost 110.

### PD-8X-150

COLOR   24H/28H/32H/36H

-  QR 15mm thru-axle.
-  This hub is ideally suited for 26"/700C wheels at 6V3W output.
-  The best match for 6 bolt-disc brakes.
-  The weight is incredibly light. ONLY **530** grams!
-  O.L.D.150mm.
-  Spoke P.C.D 58mm
-  Flange Diameter 66mm

The 15 mm thru-axle hub with OLD150mm is ideally suited to 26"/700C at 6V3W output and perfect for 6 bolt disc brakes. We dedicate the perfect integration for cutting edge tech and prospective ideas to our widespread SP family. We are inspired by some fat bike lovers to make PD-8X-150 with premium surface treatment and design, which is gorgeous in motion and striking at standstill. PD-8X-150 is the ideal choice for fat bikes.

Challenge the limit with you



# 9 SERIES

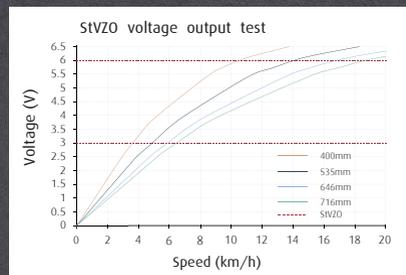
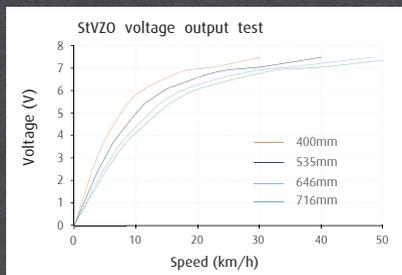
SP ULTRASLIM DESIGN



Innovation is all about making a self-breakthrough. Undoubtedly, the previous SP 8 series had established many new records in the field of dynamos, in terms of its size, weight, and efficiency. However, further advancement has always been our goal. As a result, SP 9 series has now successfully challenged the 8 series by achieving unprecedented dynamo characteristics. The SP 9 series, the ULTRASLIM dynamo hub, presents future technology and is able to provide cyclists with the best dynamo performance.

## 9 SERIES DYNAMO HUB

6V1.5W FOR 400~716mm



### SUITABLE FOR ALL DIFFERENT SIZED WHEELS

**From wheel size 400 mm (16") to 536mm (20"):** The 9 series output perfectly matches German StVZO 6V3W/ 20" regulation. As can be seen from the table, from wheel size 400 mm (16") to 536 mm (20"), the 9 series output is designed to meet StVZO regulation.

**From wheel size 646 mm(26") to 716 mm(28"):** According to German StVZO, it requires 3 V output at a low speed of 5 km/h. If the 9 series is set on wheel sizes of 646 mm (26") and 716 mm (28"), it offers 3V output speed at 5.8 km/h and 6.4 km/h respectively. To have 3 V output, it only needs to slightly increase 1.4 km/h on its speed.

Furthermore, according to German StVZO 6V3W regulation, it requires 5.7 V output at 15 km/h. If we set the 9 series on wheel sizes of 646 mm (26") and 716 mm (28"), this 9 series offers 5.7 V output when speed at 15.7 km/h and 17.7 km/h respectively. To have 5.7 V output, it only needs to slightly increase 2.7 km/h on its speed. As for 6V3W, the German StVZO approved hubs in the current market normally offer 6V3W output at around 17 km/h.

### REAL OUTPUT:

6V3W FOR 400~536mm

6V2.4W FOR 646~716mm





## SV-9-FC

COLOR ● ○ 28H

-  5.2mm quick-releases type.
-  This hub 's output is 6V3W for wheel size 400-536mm.
-  The best match for Rim brakes.
-  It reaches an unprecedented light weight. **ONLY 299 grams!**
-  O.L.D.74mm.
-  Spoke P.C.D 45mm
-  Flange Diameter 53mm



The QR type hub with OLD74mm is ideally suited to 20" wheels at 6V3W output and perfect for rim brakes. SV-9-FC weight is 299g. Is it a miracle or mystery? No, it is all about SP's commitments. Every detail has been meticulously considered to accomplish such an enhancement. The ULTRASLIM dynamos, presents future technology and is able to provide cyclists with the best performance.



**SV-9**

COLOR ● ○ 20H/24H/28H/32H/36H

-  5.2mm quick-releases type.
-  This hub 's output is 6V3W for wheel size 400~536mm.
-  The best match for Rim brakes.
-  The weight is incredibly light. **ONLY 309 grams!**
-  O.L.D.100mm.
-  Spoke P.C.D 45mm
-  Flange Diameter 53mm

The QR type hub is ideally suited to 20" wheels at 6V3W output or 26"/700C wheels at 6V2.4W output and perfect for rim brakes. SP not only seeks to become No. 1 in specification, but also intends to closely monitor the quality of every single dynamo to ensure every dynamo is durable and reliable. SV-9, weight 309g, is for rim brakes, suitable for all different sized wheels from 20" to 28". It will certainly surprise you.



**SL-9**

COLOR ● ○ 24H/28H/32H/36H

-  5.2mm quick-releases type.
-  This hub 's output is 6V3W for wheel size 400~536mm.
-  The best match for Centerlock disc brakes.
-  The weight is incredibly light. **ONLY 323 grams!**
-  O.L.D.100mm.
-  Spoke P.C.D 45mm
-  Flange Diameter 53mm

The QR type hub is ideally suited to 20" wheels at 6V3W output or 26"/700C wheel at 6V2.4W output and perfect for centerlock disc brake. SP 9 series has now successfully challenged the 8 series by achieving unprecedented dynamo characteristics. SL-9 is the world's lightest centerlock dynamo, weighing 323g only. We are always devoted to dynamo evolution. Further advancement has always been the goal.

*Enjoy your life with a gentle pace*



# 4 SERIES

SP INNOVATIVE BREAKTHROUGH



Free-form optical technology is already applied in many premium vehicle lighting systems, but it's rare in the bicycle industry. Shutter Precision has applied advanced free-form optical technology, more precisely, "fish eye" optics on the new 4 series' light to challenge industry standards with its gorgeous brightness and luxurious appearance. As a pioneering bicycle component producer, we seek to leverage the most advanced technology to provide safe, pleasant and user-friendly componentry to cyclists.



**LOW BEAM**



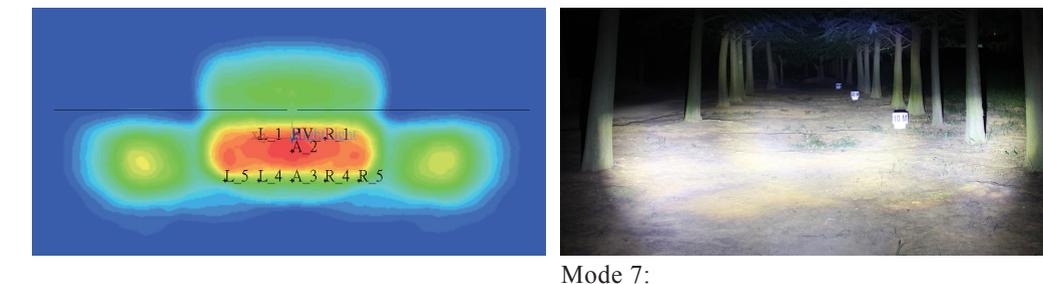
We design the low beam based on German regulation StVZO. With numerous tests and modeling, we successfully obtained the German approval. The key of the regulation is to have a clear cut-off line. Offering great brightness on the road but at the same time, the light should be friendly to opposite people.

**WIDE BEAM**

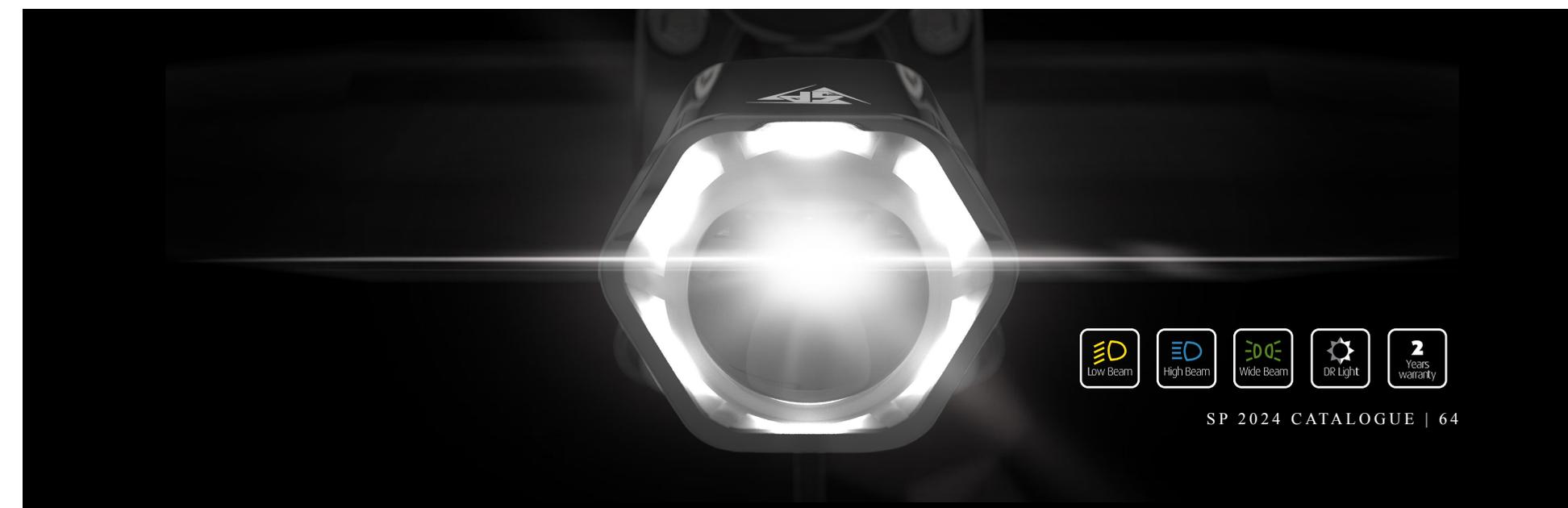


Starting from Mode 4, the wide beam is on. You even have different widebeam selections depending on how much brightness you need. This user-friendly feature can adapt to different riding conditions. The width of the wide beam is three times wider than the German regulation, which provides a wider and clearer vision while turning, and thus increases the security. It provides the user with reliable riding experience.

**HIGH BEAM**



The high beam function provides a more agile application. It extends the reaction time while high speed riding. You can add some extra brightness by simply pressing on the high beam button. It will be turned off once your finger leaves the button. The easy-to-turn-off design is for the safety of the other road users not to get blinded by the intense light.





## 4 SERIES LIGHT MODE

MODE	LIGHT PERFORMANCE	POWER CONSUMPTION	POWER CONSUMPTION (ADD MODE 7 / HIGH BEAM)	BRIGHTNESS	BRIGHTNESS (ADD MODE 7 / HIGH BEAM)
MODE 1	Low beam (low)	2W	8W	290lm	990lm
MODE 2	Low beam (medium)	3W	9W	390lm	1090lm
MODE 3	Low beam (high)	4W	10W	510lm	1210lm
MODE 4	Low beam (high) + Wide beam (low)	8W	14W	1090lm	1790lm
MODE 5	Low beam (high) + Wide beam (medium)	10W	16W	1290lm	1990lm
MODE 6	Low beam (high) + Wide beam (high)	12W	18W	1530lm	2230lm



**CP-4**

-  For powerbank, compatible with 12V output.
-  The daytime running light makes your ride more secure.
-  This light has a switchable low beam from 290lm to 510lm.
-  With the high beam, the brightness can reach up to 2230lm!
-  We added separately 13° light beam for both sides, so that's 26° more!
-  With a remarkable brightness, the light is incredibly light weight with only **83 grams!**

SP takes care of your needs! To serve broader cyclists, we've developed CP-4 as the power bank (battery) version. This light can even change modes for different riding situations. While riding fast, you may not have enough time to react to unexpected conditions. The wide beam, which is almost 3 times wider than the StVZO standard, provides longer time for you to react no matter what kind of dangers- such as a kangaroo in Australia desert or a bear in the mountain suddenly popping up in front of you.



**EP-4**

-  For ebike, compatible with all 12V motors.
-  The daytime running light makes your ride more secure.
-  This light has a switchable low beam from 290lm to 510lm.
-  With the high beam, the brightness can reach up to 2230lm!
-  We added separately 13° light beam for both sides, so that's 26° more!
-  With a remarkable brightness, the light is incredibly light weight with only **83 grams!**

EP-4 is SP's first headlight for E-bikes. The magic aura which reflects through the sophisticated lens distinguishes the light from its contemporary. Like CP-4, the EP-4 has a 7-mode switch. You can easily change between different modes with a simple click. With high beam function, its brightness is up to 2230 lm. You'll be surprised that with such a compact size, it can generate such brightness. Its super slim mechanical size is just to be hidden under the E-bike control panel.



## ES-4

-  For all ebikes, compatible with 5-12V motors.
-  The daytime running light makes your ride more secure.
-  It lights up your path with 390lm!
-  It's even lighter than its siblings. Just **81** grams!
-  The compact housing is only 50x45x42mm.

ES-4 is the second launched SP light for E-bikes. It's designed like a car headlight and even better. The free-form optic technology, more precisely, the fish-eye lens, the main characteristic of the 4 series, is optimized. The ES-4 is certified with StVZO regulation. This ensures the safety of the rider as well as the other road users. Its light beam has a clear cut-off line-the main factor to get the StVZO approval. This is also one of the main features of other SP lights.



## DS-4

-  This light is optimized for a AC 6V dynamo hub system.
-  The daytime running light makes your ride more secure.
-  It lights up your path with 390lm!
-  It's even lighter than its siblings. Just **81** grams!
-  The compact housing is only 50x45x42mm.

DS-4 is an ideal dynamo light. It is not only suitable for SP dynamo hubs, but also perfectly matches with all other brands' dynamo hubs. Its optic tech is more progressive. Its craft is more elevated. Its lighting texture is more elegant. And with attention to every detail, its performance is even more appreciated.



PRODUCT OVERVIEW



MODEL	PL-6	PD-6	PD-7	PL-7	PD-8
WEIGHT	356g	369g	419g	409g	395g
OUTPUT	6V3W For 26"-700C				
AXLE TYPE	15mm thru-axle		12mm thru-axle		QR
BRAKE TYPE	Centerlock Brake	Disc Brake	Disc Brake	Centerlock Brake	Disc Brake
SPOKE P.C.D	52mm	52mm&58mm		52mm	52mm&58mm
FLANGE DIAMETER	60mm	60mm&66mm		60mm	60mm&66mm
O.L.D	100mm				
MAX HUB DIAMETER	59mm			58mm	
SPOKE HOLES	24H/28H/32H/36H				
COLOR	Black/Silver				

PRODUCT OVERVIEW



MODEL	PL-8	PV-8	SD-8	SD-8-B	SV-8	SV-8-FC
WEIGHT	385g	375g	375g	375g	357g	350g
OUTPUT	6V3W For 26"-700C		6V3W For 20" 6V2.4W For 26"/700C	6V3W For 20"	6V3W For 20" 6V2.4W For 26"/700C	6V3W For 20"
AXLE TYPE	QR					
BRAKE TYPE	Centerlock Brake	V Brake	Disc Brake		V Brake	
SPOKE P.C.D	52mm		52mm&58mm	58mm	52mm	
FLANGE DIAMETER	60mm		60mm&66mm	66mm	60mm	
O.L.D	100mm					74mm
MAX HUB DIAMETER	58mm					
SPOKE HOLES	24H/28H/32H/36H	20H/24H/28H/32H/36H	24H/28H/32H/36H	32H	20H/24H/28H/32H/36H	20H/28H
COLOR	Black/Silver					

PRODUCT OVERVIEW



MODEL	PD-8X-110	PD-8X-150	SL-9	SV-9	SV-9-FC
WEIGHT	480g	530g	323g	309g	299g
OUTPUT	6V3W For 26"-700C		6V3W For 20" 6V2.4W For 26"/700C		6V3W For 20"
AXLE TYPE	15mm thru-axle		QR		
BRAKE TYPE	Disc Brake		Centerlock Brake	V Brake	
SPOKE P.C.D	58mm		45mm		
FLANGE DIAMETER	66mm		53mm		
O.L.D	110mm	150mm	100mm		74mm
MAX HUB DIAMETER	59mm		50mm		
SPOKE HOLES	24H/28H/32H/36H			20H/24H/28H/32H/36H	28H
COLOR	Black/Silver				

PRODUCT OVERVIEW



MODEL	CP-4	EP-4	ES-4	DS-4
WEIGHT	83g		81g	
DIMENSION (L) X (W) X (H)	50mm x 45mm x 42mm			
OPERATION VOLTAGE	12V DC		5-12V DC	6V dynamo hub system
PRODUCT TYPE	Power bank light	E-bike light	E-bike light	Dynamo light
MODE	6+1		1	
COLOR	Black			

# ULTRA-ENDURANCE RACE

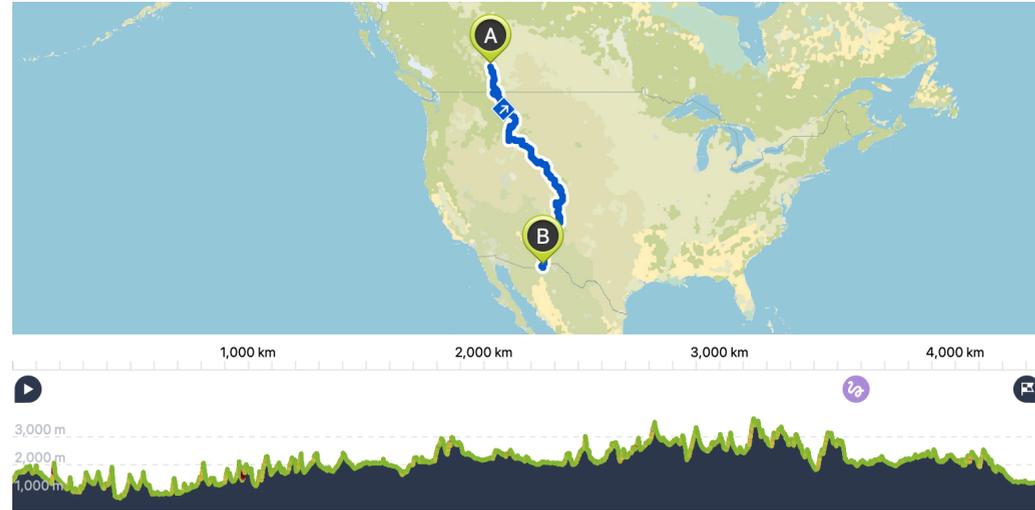
## SOLO, SELF SUPPORTED RACE

**L**ots of endurance bike races in the world. They are always in a solo, non stop, self supported race in summer. There is no finish time cut-off. The Trans Am bike race is one of the most famous endurance races in the road bike category. Tour Divide mountain bike race is one of the most famous endurance races in the mountain bike category. It is always solely under your own human power with no outside support.

**R**acers must carry everything they need to survive, e.g. warm clothes, wet weather gear, sleeping equipment, food, water and more. As is the case for most bikepacking events, riders are allowed to make use of commercial services along the way, but support crews or team cars are definitely not allowed. Riders alone have to find their own food and water, sort out bike issues out in the wilderness with frozen hands, carry all the equipment and spares they need to be safe, and find safe places to catch a few hours of sleep along the way.



*Explore the unseen  
Good luck to all brave racers.*



## TOUR DIVIDE MOUNTAIN BIKE RACE

A NON STOP,  
SELF-SUPPORTED  
MOUNTAIN BIKE RACE

### **RULES** AS FAST AS POSSIBLE IN A SOLO, SELF-SUPPORTED FASHION

1. Who: Any determined cyclist may challenge the Great Divide Route at any time, in either direction, to qualify for the Tour Divide (TD) General Classification (GC).
2. When: All summer long...however, an informal common start date known as the ‘Grand Départ’ traditionally kicks off in the 2nd week of June from both termini.
3. Spirit: Above all, attempts are intended to be solo / self-supported, self-timed, and observed as one stage, i.e. the clock runs non-stop. The challenge is complete upon arrival to the opposite GDMBR terminus from start. There are no required checkpoints or designated rest periods on course. There is no finish time cut-off, however, current convention considers a competitive Divide Route finish time as approximately 1.5 times (x) course records. Currently this = 25 days (~110 mi/day) for men, and 29.5 days (93 mi/day) for women.
4. Modus operandi: To complete the Route...

Rules from Tour Divide Mountain Bike Race website; for further info, please visit their official website : [tourdivide.org/](http://tourdivide.org/).

It is a solo, self-supported ultra-cycling challenge to race all 2,745 miles of Adventure Cycling Association’s epic Great Divide Mountain Bike Route. There are no compulsory rest periods or specified distances racers must travel daily. The race clock runs non-stop. He or she who can ride the fastest while making fewer, shorter stops usually wins. With an average time-to-completion of three weeks in the saddle, this grand tour is the longest, most challenging mountain bike race on the planet. It’s a contest for the ultra-fit but only

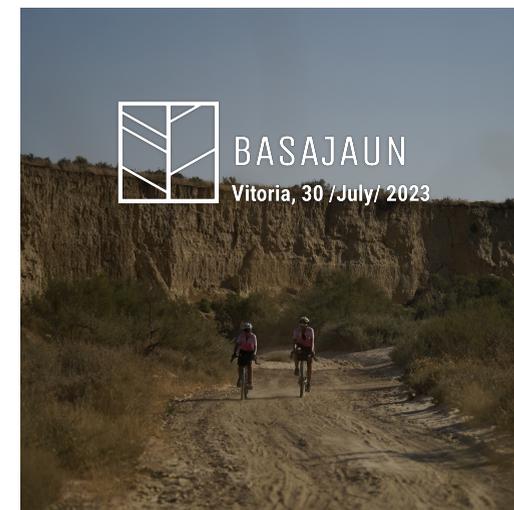
if ultra-prepared for myriad contingencies of backcountry biking. The Great Divide Route is geographically divided into five regions. The diverse nature of the regions makes for an incredible visual, sometimes spiritual experience. The route offers something different every day — whether it be riding conditions, scenery, points of interest, or folks along the way. It is a route to be enjoyed for its diversity. (source from Tour Divide Mountain Bike Race website)

## BASAJAUN 2023- TRANSIBÉRICA ULTRACYCLING

Transibérica Ultracycling starting from 2018 has three different routes named for Basajaun, Transpyrenees and Transibérica, which is conceived to be a personal adventure, a collective ride.

**C**arlos Mazón is the initiator of the Transibérica Ultracycling. He says that this project is based on his personal experience like the Trans AM Mountain Bike Race and designed from the deep love of cycling and the value conveyed through Mike Hall and his legacy. It's all about the spirit of bikepacking.

Basajaun is one of the races, which is set up as an unsupported gravel challenge on the edge of Europe. The route is about 780 km with and 15.000m elevation gain and crosses some of the most remote and challenging places in Europe: Urbasa Natural Park, Irati forest, Bardenas Reales and Sierra de la Demanda. The height is above 2,000m and it's 70% off-road. This route is from the lush forest to the arid plains. You will experience the heat in Bardenas, and the cold temperature close to 0 degrees in Sierra de Cameros. The big contrast is in both terrain and temperature, plus you need to prepare everything by yourself. That's why this event is so attractive.



## ENDURANCE RACING

**NOT ONLY FOR ENTHUSIASTS**

Professional racers rely on dynamos  
When training and racing.

Dynamo hubs offer advantages for endurance racing and randonneuring:

- \* Dynamo output offers power for lighting and USB charging for GPS as well as smart phones.
- \* Weight saving: Dynamo hubs are lighter than batteries
- \* Time saving: No concerns about changing/ charging batteries.
- \* Convenience & safety: Power is constant. No worries about power shortages.

Weight and efficiency are the key points for racers considering dynamo hubs as a companion in the race. With unprecedented weight and efficiency, SP is the leading brand in dynamos. There are many endurance races and randonneuring events throughout the world each year. More and more racers trust SP and use our product on their races. This is a brilliant choice. SP appreciates cyclists who choose SP.





## THANKS FOR ALL LEGENDS RIDING SP DYNAMOS DURING THE RACE!

- 2013 Tour Divide mountain bike race (2745 miles), 1st position: Mike Hall
  - 2013 Tour Divide mountain bike race (2745 miles), 2nd position: Jesse Carlsson
  - 2013 England-wales-england (1259 miles), 1st position: Aidan Harding
  - 2013 Highland Trail 430 (430 miles), 1st position: Aidan Harding
  - 2014 Tour Divide mountain bike race (2745 miles), 1st position: Jefe Branham
  - 2014 Highland Trail 550 (560 miles), 1st position: Phil Simcock
  - 2015 Trans Am bike race (4233 miles), 1st position: Jesse Carlsson
  - 2015 Trans Am bike race (4233 miles), 2st position: Carlos Mazon
  - 2015 Tour Divide mountain bike race (2745 miles), 2st position: Jay Petervary
  - 2015 Tour Divide mountain bike race (2745 miles), 3st position: Neil Beltchenko
  - 2015 Tour Divide mountain bike race (2745 miles), female group, 1st position: Lael Wilcox
  - 2015 Tour Divide mountain bike race (2745 miles), female group, 2st position: Bethany Dunne
  - 2015 Highland Trail 550 (560 miles), 1st position: Tom Rowntree
  - 2016 Tour Divide mountain bike race (2745 miles), 1st position: Mike Hall
  - 2016 Trans Am bike race (4233 miles), 1st position: Lael Wilcox
  - 2016 Trans Am bike race (4233 miles), female group, 2st position: Sarah Hammond
- And more excellent racers...



## WARRANTY

SP does not license our dynamo technology to other brands. SP only produces and sells dynamo hubs under the SP brand. SP provides warranty service only for SP products and not for other brands. When you choose, please be certain that it is an SP product. It goes without saying that our warranty applies only to genuine SP products. Choose the best, choose SP and enjoy the best.

### WARRANTY STATEMENT

During the warranty period, SP will provide warranty service free of charge. SP products that fail under normal use and conditions will be repaired or replaced at SP's discretion.

### WARRANTY PERIOD

2-year warranty: SP products are covered under warranty for 2 years from the date of purchase.

### WARRANTY COVERAGE

SP will provide repair and/or replacement services for SP products that fail under normal use and conditions. The warranty does not apply to SP products that fail due to accident, abuse, mishandling, improper usage (including use contrary to the product description or instructions, beyond the extent of the product's intended use, or for tooling or testing purposes), alteration, abnormal mechanical or environmental condition, acts of nature or improper installation.

### The warranty does not cover damages in the following cases.

~Mis-installation: The warranty will not cover damage caused by mis-installation. Before using SP dynamo hubs, please ensure proper installation as mis-installation can result in damage to hubs. Please make sure that the hub is properly installed to your fork. If the quick release (QR) is not properly adjusted and securely fastened, the hub may be damaged. When installing an SP dynamo hub, the wiring plug must be securely fastened to the plastic base connector on the hub in a manner that the connector assembly and wiring are not under stress. Should the hub axle rotate and stress the connector (often due to insufficient tension in the adjustment of the QR), it is important to realign the wiring harness by loosening the QR and adjusting the wiring so it is not under stress - and increasing the tension adjustment of the QR so it does not rotate under use.

~Accident: Instances where the hub is struck by foreign objects in an accident are not considered normal use circumstances and are not covered under the SP warranty. For example, the plastic connector base may be damaged when struck by a stone in a crash...

~Improper maintenance: SP hubs are explicitly not user serviceable. Please do not attempt to service the hub. Unauthorized repair or modification will void this warranty. This includes any form of disassembly of the hub or its parts. SP hubs are not designed to withstand pressure washing - which can be detrimental to the hub bearings.

~Abnormal use circumstances: The hub should not be used for abnormal riding. For example, bearings are not 100% waterproof. SP hubs are not suitable for crossing rivers where the waterline rises above the hub.

### OTHER INFORMATION

If a defect occurs outside the warranty period or does not meet warranty conditions, we offer out-of-warranty service. We also provide service for bearings that are not defective but have simply worn out due to extensive use. This standard maintenance service can be ordered at the SP online store.



## SP PARTNERS

You are all welcome to be one of SP family members. Please find SP distribution partners in your local area. Get the excellent dynamo hubs and the best service from SP international partners. Or you can contact us directly if you cannot find SP partners in your local areas. You are always welcome to contact us. We are all glad to offer help.

Enjoy SP comfort and feel our enthusiasm for perfection!



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