seam ROADNEWS



SRAM RED 22: NO COMPROMISE

Twenty-two isn't just our cool new logo; it means you get use of every gear in any combination. True 22!

When we re-introduced SRAM RED in 2012 there was simply nothing more we could add to make it better. SRAM RED was all new, redesigned throughout, with innovations we've spent the past year touting and our athletes proving. It was loaded with features and benefits that matched the needs of professionals: fast, light, aerodynamic, ergonomic, near-silent, and, of course, trim-less, with ground breaking Yaw[™] technology. **Adding two more gears to that combination was arguably the only improvement required.** The added benefit is that now, without adding weight, we maintain a system that shifts incredibly fast upfront, and with the best and smoothest gear transitions in back. And, for the first time available anywhere for the majority of standard road frames, the system gives you twenty-two gears. **Welcome to SRAM RED 22.**

Commercial availability – July 2013 MSRP*: 2.328€/ \$2,618

* Based on: RED 22 Rear Derailleur, RED 22 Yaw Front Derailleur (Braze-on with Chain Spotter), RED 22 GXP crankset (BB GXP included), RED 22 XG-1190 cassette, RED 22 chain, RED 22 Mechanical Shift/Brake Lever Set and RED Mechanical Brakeset.

SRAM RED 22:

- > Completely rebuilt and redesigned throughout
- > 11-speed Yaw[™] front derailleur no trim, rub , or rasp with chainspotter and even lighter!
- > Hydraulic brake options: Hydraulic Road Rim braking (HRR) & Hydraulic Road Disc braking (HRD)
- > Maintains lightweight leadership







SRAM RED 22 Shift Levers

- > ErgoFit textured body with reduced diameter: improve grip and finger wrap and provide better control.
- > Individual Reach Adjust™ of brake and shift lever
- > Larger carbon ErgoBlade lever improves shifting from the drops

SRAM RED 22 Rear Derailleur

- > Exact Actuation[™] shifting provides fast, accurate shifts
- > More clearance with 28t cassettes thanks to a longer B-knuckle
- > New silent shifting with optimized Aeroglide Pulleys™, ceramic bearings





SRAM RED 22 Front Derailleur

- > Yaw[™] cage rotates in line with chain: shifting speed and precision improvement and no trim
- > True 22 twenty-two usable gears in all gear combinations with no rasp or rub
 - > Integrated chain spotter

SRAM RED 22 Crankset

> Exogram[™] technology uses a large, hollow cross section all the way to the spider, minimizing weight while maximizing stiffness.

> Stiffer X Glide R[™] chainrings feature thicker construction, advanced shift timing pins and ramps, which are optimized for shifting with the Yaw[™] Front Derailleur

> Hidden bolt for increased strength and stiffness



SRAM RED Quarq 22 Power Meter

- > Power Balance[™] and ANT+[™] give you compatibility, flexibility and every available metric
- > ANT+[™] ID is clearly visible to aid pairing and operation
- > OmniCal[™]: TT chainrings can be fitted without recalibration

SRAM XG-1190 Cassette

- > Hollow steel dome makes for the stiffest gear cluster ever at the lightest weight
- > Heat-treated, high-grade tool steel provide superlative durability and a beautiful finish
- > StealthRing™ elastomer and advanced tooth profiles eliminate vibration and noise for a smooth, silent ride



SRAM RED 22 Chain

- > HollowPin[™] technology equals strength, incredible shifting efficiency, and light weight
- > 242 grams, 114 links
- > PowerLock™ silver connector, easiest install in the world

SRAM RED Brake Calipers

- > AeroLink[™] arm amplifies braking power while reducing frontal area
- > Aero design extends to the shape of the indexed four-position quick release, the bladed barrel adjuster,
- low-profile pinch bolts, and recessed spring tension adjusters

> Firecrest[™] rim compatibility (27.4mm)



SRAM RED Hydraulic Disc Brake Calipers

- > Optimized power & modulation for road & cross/ 160mm for pavement, 140mm option for off-road
- > Road specific caliper and piston ratio
- > Allows for optimization of

SRAM RED Hydraulic Rim Brake Calipers

- > Optimized power & modulation for road
- > Tools-free contact point adjust
- > Tire clearance: 28c
- > Firecrest[™] rim compatibility (27.4mm)



SRAM RED 22 Hydraulic Master Cylinder

- > All new master cylinder designed for road
 > RED 22 design and ergonomics including reach adjust
- > Fully sealed system/ Lower hand forces required
- > Standard & Moto options











ROADNEWS

| | SHIFTER | SHIFTER/ BRAKE HYDRO Rim | REAR DERAILLEUR | FRONT DERAILLEUR | CRANKSET | |
|-----------------------|---|---|---|---|---|--|
| Technology | Yaw™/ Double-Tap™/ Zero-Loss™ on Front and Rear/ ErgoDynamics™ Fit/ In- dependent E-Z Access Shift/ Brake lever Reach Adjust™ | Hydro [®] / Yaw™/ Dou- ble-Tap™/ Zero-Loss™ on Front and Rear/ ErgoDynam- ics™ Fit/ Independent E-Z Access Shift/ Brake lever Reach Adjust™ | Exact Actuation™/ AeroGlide Pulleys™/ High Grade Ceramic bearings™ / WiFLi | Yaw™ Shifting/ Hybrid Cage/ Integrated Chain Spotter | Exogram™ Hollow Crank Arm and Spider w / X Glide R™ Chain- rings/ Hidden Bolt Spider Tab | |
| Speeds | 11 Rear/ 2 Front | 11 Rear/ 2 Front | 11 | 2 | 2 | |
| Weight | 280g (Pair) | Weight included in the Hydraulic Rim and Disc Brakesets | 145g | 69g Braze-On, Chain Spotter with hardware 12g | 557g (BB30 172.5mm 53x39 BB not included)/ 609g (GXP 172.5mm 53x39 BB not included) | |
| Material // Finish | Carbon/ Titanium/ Textured Hood Covers | Carbon/ Titanium/ Textured Hood Covers | Carbon Cages/ Car- bon Inner links/ Aero Designed Titanium Hardware // Falcon Grey & Black Anodized Finish | Aluminum Outer Cage/ Tool Steel Inner Cage/ Composite Tail // Falcon Grey & black Anodized Finish | Carbon Arms/ Machined Alloy Rings | |
| Compatibility | SRAM RED 22 & Force 22 Yaw™ Front Derailleurs/ Exact Actuation™ Rear Derailleurs | SRAM RED 22 & Force 22 Yaw™ Front Derailleurs/ Exact Actuation™ Rear De- railleurs/ SRAM RED 22 HRR & HRD | SRAM RED 22 & Force 22 Rear Shift/Brake levers | SRAM RED 22 & Force 22 Front Shift/Brake levers | SRAM RED 22 & Force 22 Yaw™ Front Derailleurs/ SRAM RED 22 & PC1170 chains | |
| MSRP | 556€ /\$625 (Pair) | 860€* /\$968 (Hydraulic Rim) 998€* /\$1,122 (Hydraulic Dics) | 333 € /\$375 (short- cage) | 128€ /\$144 (Chain spotter included) | GXP 420€ /\$472 BB30 460€ /\$517 | |

* For the pair. Includes Shift/Brake hydraulic levers + Hose + Calipers

| | POWER METER | BOTTOM BRACKET | BRAKESET | HYDRAULIC RIM BRAKESET | HYDRAULIC DISC BRAKESET | CASSETTE | CHAIN |
|-----------------------|--|---|---|--|--|--|--|
| Technology | Quarq™/ Power Balance™/ Om- niCal™/ ANT+™/ X Glide R™ Chainrings | GXP/ Press-Fit GXP/ BB30/ Press-Fit 30 | Aerolink™/ Aero QR/ Barrel Adjuster | Hydro ^R / Connect- amajig® | Hydro ^R / Connect- amajig® | Powerdome X™/ X Glide™ Cogs/ StealthRings™ | PowerChain™/ Powerlube™/ Powerlock™/ HollowPin™/ Chrome Hard- ened Pins |
| Speeds | 2 | N/A | N/A | N/A | N/A | 11 | 11 |
| Weight | 778g (GXP 172.5mm 53x39 BB not included) | 53g (BB30)/ 105g (GXP) | 240g (Pair) | 387 grams per wheel (Lever, Caliper, Housing 600mm) | 449 grams per wheel (Lever, Caliper, Hose and 160mm HSX rotor) | 151g (11-25T) | 242g (SRAM RED 22/ 114 links) |
| Material // Finish | Carbon Arms/ Machined Alloy Spider & Rings | CNC Alloy Cups / High Grade Geramic Bear- ings | Cold-Forged Aluminum Arms/ Aero Designed Pinch Bolt/ SwissStop® Pad Compound // Falcon Grey & black Anodized Finish | Forged Aluminum Arms/ SwissStop® Pad Compound | Forged Aluminum Disc Caliper/ Stain- less steel backed pads/ Titanium Hardware | High Grade Tool Steel Cog Cluster/ Heat Treatment Process/ Heat Treated Aluminum lowest Range Cog/ Elastomer Rings | Nickel Silver/ Silver Power- Lock™ |
| Compatibility | SRAM RED 22 & Force 22 Yaw™ Front Derailleurs | GXP/ BB30 cranksets | SRAM Road Shift/Brake levers | SRAM RED 22 Hy- draulic Shift/Brake levers | SRAM RED 22 Hy- draulic Shift/Brake levers | SRAM RED 22 chain & SRAM PC- 1170 chain | SRAM RED 22 & Force 22 Front & Rear derailleurs, Cranksets and cassettes |
| MSRP | GXP 1.845€/ \$2,045 BB30 1.890€/ \$2,095 | GXP 196€ /\$220 BB30 196€ /\$220 | 327€ /\$368 (Pair) | Calipers included in the Shift/Brake Levers MSRP | Calipers included in the Shift/Brake Levers MSRP Rotor (160 or 140): 64€ /\$72 (single) Spac- ers (set): 18€/\$20 | 312 € /\$351 | 56 € /\$63 |

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