

New Shimano XTR M9100 Series Mountain Bike Components Debut new 12-speed, Ultra-Efficient Drive Train and FREEHUB System

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With the introduction of XTR M9100-series (<http://www.ridextr.com>), SHIMANO continues the legacy of innovation associated with XTR as the ultimate mountain bike racing component group. New XTR M9100 establishes the new benchmark in mountain bike race performance with unrivaled component customization for every rider and racer's potential. Engineered for the next generation of race bikes, new XTR components deliver SHIMANO'S widest range gear options with the new 12-speed drivetrain and 10-51T cassette while offering superior shifting and braking systems specifically tuned to meet the demands of all racers.



XTR M9100 1x12 with Wide Range 10-51T Cassette

New SHIMANO technologies further enhance XTR systems, including the revolutionary HYPERGLIDE+ cassette tooth design and new HG chain for improved shifting efficiency up *and* down the cassette while the MICRO SPLINE FREEHUB delivers a lightweight construction that works seamlessly with the system's new small 10-tooth cog.

DRIVETRAIN:

Optimized and built to the highest demands of racers, new XTR M9100 provides faster and smoother

shifting with Shimano's new HYPERGLIDE+ engineering and MICRO SPLINE Freehub technology. Extensive feedback from Shimano's global mountain bike athletes delivered insights that one drivetrain does not fit all racers. With that in mind, new XTR M9100 offers a range of gearing choices, single and double front chainring setups and a unique 11-speed drivetrain option that shaves valuable weight off the system without sacrificing performance and speed. Chain retention has been drastically improved as well thanks to advancements with the new M9100 rear derailleur design.

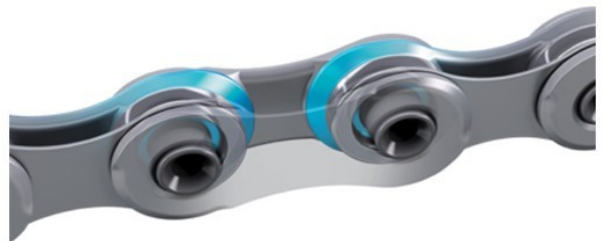
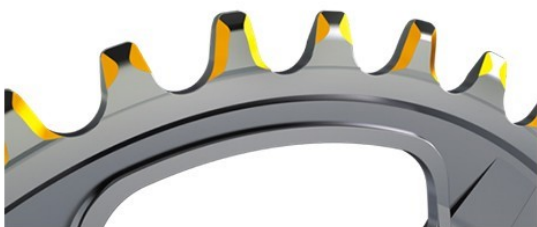
Rider-Tuned Drivetrain Options

1. 1x12 drivetrain with Wide Range 10-51T cassette
2. 1x12 drivetrain with Rhythm Step 10-45T cassette
3. 2x12 drivetrain with 10-45T cassette for wide range AND ideal gear steps
4. 1x11 lightweight drivetrain with 10-45T cassette

HYPERGLIDE+ Technology

Building on SHIMANO'S long history of shifting technology, new XTR M9100 delivers groundbreaking advancements in drivetrain performance with the introduction of HYPERGLIDE+. The newly redesigned CS-M9100 cassette guides the chain both up and down the cassette, providing faster, smoother shifting in both directions.

Adding to XTR M9100's smooth drivetrain transmission, the new CN-M9100 HG chain features an extended inner link plate that connects seamlessly with new chainring tooth shapes for Shimano's most efficient drivetrain. The new design reduces natural vibrations normally caused by the inner and outer chain plates rolling onto the chainring and provides better chain engagement, stronger retention, and smoother pedaling.



Drivetrain Components

M9100 HOLLOWTECH II crank construction offers a lighter and stiffer crank design and includes options for both front single and double front chainrings. Two Q-factor options (162mm and 168mm) are available for different rider needs and bike requirements. Chainrings are easily exchanged with the new direct-mount system and the cranks can be swapped between single and double front chainring setups.

FC-M9100-1 and FC-M9120-1

- Single front chainring
- Chainring options: 30, 32, 34, 36, 38T
- Two Q-Factor options: 162mm (FC-M9100-1) or 168mm (FC-M9120-1)
- Chainline: 52mm for both 142mm and 148mm O.L.D due to inner chain link plate design



FC-M9100-2 and FC-M9120-B2

- Double front chainring setup
- Swappable between single and double chainrings
- Chainring combination: 38-28T
- 2 Q-Factor options: 162mm (FC-M9100-2) or 168mm (FC-M9120-B2)
- Chainline: 49mm (FC-M9100-2) or 52mm (FC-M9120-B2)

CN-M9100

- New HG technology
- Extended inner link plate
- Quick link only for easy connect and tool-free assembly

Enhancing rider capabilities and providing more gearing combinations, XTR M9100 features three cassette options to cover the diverse needs of elite level mountain bike riders and racers. All feature SHIMANO's new MICRO SPLINE freehub technology that allows the use of 10-tooth cogs. The new design also allows for an aluminum freehub body construction that isn't damaged or gouged out by the cogs during use.

The new cassettes also employ a new Beam Spider construction for improved power transfer and is built with a strategic application of aluminum, titanium, and steel materials for an optimal blend of weight savings, rigidity, and durability.

CS-M9100 – Wide Range Cassette or “Rhythm Step” Cassette

- 10-51T – 12-speed Wide Range offers 510% gear range
- 10-45 T– 12-speed Rhythm Step offers 450% gear range



CS-M9100-11 – Lightweight Cassette

Built on the 10-51-tooth, 12-speed platform, this cassette offers the same Micro-Spline design to work with a small 10-tooth cog but decreases weight by up to 76 grams.

- 10-45 –Lightweight XTR offers 450% gear range
- 57 grams lighter than 12-speed, 10-51 cassette
- Compatible with both short and long cage XTR M9100 rear derailleurs, short cage reduces weight by 3 grams
- Allows for use of the wide flange FH-M9125-B, reducing weight 3 grams while improving handling and durability
- Reduces chain length by 6 links, reducing weight another 13 grams

MICRO SPLINE FREEHUB System

Designed specifically for SHIMANO's 12-speed XTR drivetrain, the MICRO SPLINE FREEHUB delivers a lightweight construction that works seamlessly with the system's new small 10-tooth cog. As the name suggests, MICRO SPLINE features smaller freehub splines that help eliminate damage on the lightweight aluminum freehub.

The new hubs also feature SHIMANO's quieter SCYLENCE technology that provides rapid acceleration and higher rigidity for quick, 7.6-degree engagement. The freehub body is constructed of two driver plates that completely disengage when you stop pedaling, eliminating any freehub ratchet sounds while coasting.



SHIMANO offers a variety of hub options with the MICRO SPLINE, SCYLENCE, and CENTER LOCK technology including XTR-level M9110 and M9110-B hubs with a straight pull option (M9110-BS) as well as a more affordable non-series hub option (MT900-B) that will include a straight pull option as well (MT900-BS).

HB-M9110/-B and FH-M9110/-B – XTR hubs

- Boost and Non-Boost options
- 28 or 32 hole options
- Compatible with 12-speed and 11-speed M9100 cassettes
- O.L.D. - 100 mm (HB-M9110), 110 mm (HB-M9110-B)
- O.L.D. - 142 mm (FH-M9110), 148 mm (FH-M9110-B)

HB-M9110-BS and FH-M9110-BS – Straight pull XTR level hubs

- Boost only
- 3-cross spoke pattern only
- Compatible with 12-speed and 11-speed M9100 cassettes
- O.L.D. - 110 mm (HB-M9110-BS)
- O.L.D. - 148 mm (FH-M9110-BS)

HB-MT900-B and FH-MT900-B – Non-XTR series hubs

- Boost only
- 28 or 32 hole options
- Compatible with 12-speed and 11-speed M9100 cassettes
- O.L.D. - 110 mm (HB-MT9110-BS)
- O.L.D. - 148 mm (FH-M9110-BS)

HB-MT900-BS and FH-MT900-BS – Non-XTR series hubs for straight pull

- Boost only
- 3-cross spoke pattern only
- 28 only
- Compatible with 12-speed and 11-speed M9100 cassettes
- O.L.D. - 110 mm (HB-MT9110-BS)
- O.L.D. - 148 mm (FH-M9110-BS)

FH-M9125-B - SHIMANO offers a Wide Flange rear hub option that provides improved durability through more balanced spoke tension and more rigidity with wider spoke bracing. The Wide Flange design also reduces weight of the drivetrain as it was designed specifically for use with the lightweight 11-speed cassette.



- Drive-side flange moved 4.7mm outboard
- MICRO SPLINE technology
- SCYLENCE technology
- CENTER LOCK technology
- Boost only
- 28 or 32 hole options
- Compatible only with CS-M9100 -11 cassette

Derailleurs

New XTR features three rear derailleurs that enhance shifting performance and are optimized for wide range cassettes with use in single or double front chainring systems. The derailleurs feature bigger 13-tooth pulleys and include Shimano's proven Shadow RD+ low profile technology. Different cage lengths (SGS versus GS) are optimized for different gear ratios, providing optimal systems to work with the new 10-51 wide range cassette, 10-45 rhythm step cassette and one derailleur optimized for 2x12.

RD-M9100-SGS

- Long cage derailleur
- 51T max cog size
- Works with both 10-51 and 10-45-tooth cassettes

RD-M9100-GS

- Short cage derailleur
- 45T max cog size
- Works with both 11-speed and 12-speed 10-45-tooth cassettes
- Better ground clearance (28mm shorter cage)

RD-M9120-GS

- Designed for front double chainring setup
- 45T max cog size
- Compatible with 2x12 speed



Continuing the company's dominance in front derailleur technology and performance, XTR M9100 delivers the newly designed **FD-M9100-D/E/M** side swing front derailleur with three mounting options: Direct mount, E mount, and Mid clamp. All three derailleurs work with 49 and 52mm chain lines

For racers looking for single front chainring insurance, Shimano presents the lightweight and adjustable **SM-CD800** chain guide. This unique guide allows for easy height adjustment as well as chain line adjustments by loosening a single bolt and turning a thumb screw. Then, tightening the bolt locks both adjustments at the same time. The chain guide is available in three mounting types: Direct, E, and ISCG05.

Shifters and Levers

Enhancing lever access and shifting speed, the new RAPIDFIRE PLUS shift levers offer light operation force and more versatility. Shimano's new I-Spec EV lever design features greater flexibility in mounting for a clean and ergonomic cockpit. And for double chainring systems, the lever simplifies front shifting with a lightweight and compact design that shifts up and down with a single lever.

SL-M9100-I and SL-M9100

- 20% quicker lever access time
- 35% less shifting operation force compared to M9000
- 14mm slide range and 60-degree rotation for I-SPEC EV (SL-M9100-I)

SL-M9100-IL and SL-M9100-L

- Front double shifting with single lever design
- 2-WAY RELEASE with instantaneous push and pull movements
- Natural finger position and intuitive shifting operation



SL-MT800-IL – SHIMANO introduces its first seatpost dropper remote and it features ideal ergonomics where other dropper levers fall short. It enables quick adjustment with a lighter and more natural feel and is compatible with most dropper posts on the market since the cable clamps at the lever end. The dropper remote can be installed in the same position as a left shift lever using Shimano's I-SPEC EV system design and offers 7mm of cable stroke.

BRAKING SYSTEM:

Further improving Shimano's legendary mountain bike braking system, new XTR increases brake rigidity for greater bike control and optimizes braking performance for different riding styles. The 2-piston XC brake system offers a lightweight package with high rigidity while the Enduro-style 4-piston design prioritizes power and smooth braking feel.

To improve rigidity at the lever, Shimano moved the brake clamp position inboard, creating an extra point of contact between the bar and the lever. This added bracing drastically increases efficiency and control over the bike while offering quick brake engagement. The new design minimizes impact on cockpit real estate, creating space between the clamp and support point for mounting other handlebar accessories.

BL-M9100 and BR-M9100

- Lightweight XC brake design
- 26 grams lighter than M9000 including RT-M900 rotors
- 10% more rigid
- 2-piston hydraulic brake caliper



BL-M9120 and BR-M9120 – The new Enduro-specific, 4-piston design features the same brake power rating as Shimano Saint (BR-M8020) brakes with greater modulation tuned for Enduro riding

- Powerful Enduro brake design
- 4-piston hydraulic brake caliper
- Uses new XTR finned pads or Saint brake pads



RT-MT900 – The new Ice-Technologies Freeza rotor construction boosts heat dissipation by 20 degrees Celsius thanks to a heat dissipating paint on exposed aluminum layer segments.

- 140mm and 160mm rotor optimized for XC and focused on weight reduction
- 180mm and 202mm rotor optimized for Enduro and focused on cooling

PEDALS:

PD-M9100 – The new M9100 XC pedals improve rider stability with wider edge-to-edge contact areas while improving mud shedding through rounded contact points and off-set bindings. Shimano's Rider-Tuned design offers two axle length options including a new 3mm shorter axle to minimize the Q-factor for XC riders who are running Boost drivetrains. This new shorter axle also matches the Q-factor of Shimano's SPD-SL road pedals, providing a smooth transition for road riders diving into gravel.

- Two axle length options: 52mm and 55mm
- Wider edge-to-edge platform
- Step in and out consistency
- Offset binding for improved mud shedding
- 1mm cleat spacer included
- Weight: 310g (52mm), 314g (55mm)

PD-M9120 – A wider contact area on the new M9120 trail and enduro pedals improves stability while the expanded rearward shoe-pedal contact area better accommodates the sneaker-style flat outsoles used in enduro and gravity riding. The Rider Tuned 1mm cleat spacer creates a better interface with shoes of varying outsole design and lug height.

- Wider contact area than PD-M9020
- Expanded rearward shoe-pedal contact area
- 1mm cleat spacer included
- Weight: 398g



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