# red4color-3d_2 **EMBARGO July 29, 2020, 12:01 a.m. PDT**

**Yamaha Reveals All-New YDX-MORO All-Mountain e-Bikes**

Yamaha’s First Full Suspension e-MTB will Feature New Motor, New Quad Sensor System, New Auto and Walk Modes, and Patent Pending Dual Twin™ Frame

**CYPRESS, Calif. – July 29, 2020 –** [Yamaha Bicycles](https://www.yamahabicycles.com/) is taking a massive leap into the all-mountain e-Bike segment today, announcing the coming of two new models. The YDX-MORO and YDX-MORO Pro models promise to deliver a new level of balanced power, performance and handling for riders on all types of e-mountain bike (e-MTB) trails.

With a full list of specs, components, pricing and availability to be announced in August, Yamaha is revealing select images and several key features of the all-new e-MTB models today, while also promoting an online giveaway at <https://www.yamahabicycles.com/future-ebikes/>.

Influenced by Yamaha’s unmatched experience in racing technology and e-Bike design, the all-new YDX-MORO and YDX-MORO Pro look and ride like no other e-MTB. Boasting an all-new PW-X2 drive unit, the bikes deliver the most natural feeling assist and ride experience thanks to a new proprietary Quad Sensor System, and include new Automatic, MTB and Walk Assist modes. The PW-X2 drive unit and new 500 watt-hour lithium-ion battery are secured in an all-new patent pending Dual Twin Frame™ design that delivers a superior combination of handling performance and durability, along with a new Horst link suspension design.

“This is the bike that Yamaha fans have been asking for, a full-suspension e-Bike crafted through a collaboration of Yamaha designers and engineers to create the best handling, best assist-feeling all-mountain e-Bike on the market, hands down,” said Drew Engelmann, Yamaha’s Power Assist Bicycle group sales and marketing manager. “Yamaha has designed a frame like no one else before, developed a new drive unit with all-new features, and, true to Yamaha’s engineering legacy, put together a total package that works so well together, it’s going to raise the bar for the all-mountain e-Bike segment from here forward. Yamaha just redefined the ‘all-mountain’ category – to ‘every mountain.’”

**New PW-X2 Drive Unit; Natural Assist with New Modes and Power**

Yamaha’s new PW-X2 drive unit is a compact and lightweight drive unit that delivers powerful, responsive and natural-feeling pedal assist. The smooth and natural assist is critical for MTB enthusiasts who demand a pure ride experience, and also appreciate the benefits of a pedal assist bike that allows them to ride farther and longer than other bikes.

The YDX-MORO models are Class 1 e-Bikes, delivering pedal assist up to 20 mph. They have five assist modes including Eco, Standard, High, new MTB mode, and EXPW. The new PW-X2 provides assist up to 120 rpm in Eco, Standard, High and MTB modes and 170 rpm in EXPW mode. The motor also adopts a new helical gear design, reducing noise output.

Key features connected to the PW-X2 motor on the YDX-MORO and YDX-MORO Pro include:

* Quad Sensor System: The new Quad Sensor System adds an angle sensor to Yamaha’s existing Triple Sensor System, which measures pedaling torque, cadence and rolling speed of the bicycle.
* Automatic mode: The new Quad Sensor System allowed Yamaha to develop a new Automatic mode for the YDX-MORO which, when engaged, seamlessly and automatically switches the support modes between Eco, Standard and High allowing the rider to focus on the trail and not their power assist levels.
* Walk Assist: Also new on a Yamaha Power Assist Bicycle, Walk Assist provides a slight power assist for riders to walk their bike through difficult terrain or challenging sections.
* New MTB Mode: Created to provide a direct response feeling according to the rider’s pedaling force. MTB mode is especially suited for off-road riding such as tight corners and when riding tight-line trails.
* New EXPW Mode: now provides assist up to 170 rpm, which is especially helpful in technical sections and on steep climbs when beginning from a stop and a fast movement pedal rotation is often needed to get started again.

**Patent Pending Dual Twin Frame; Combining Performance and Durability**

The YDX-MORO’s Dual Twin Frame is the first ever bike frame to feature a split design on both the top and down tubes. Allowing for a reduced saddle height and stand over height, the unique design ensures frame rigidity while optimizing weight balance.

This new design elevates the MORO’s handling characteristics while also increasing durability by cradling the battery and rear shock in a cage-like configuration. Placed in a floating docking station, the battery is more easily changed (compared to being captured inside the frame) and is protected from vertical twisting. Yamaha’s design employs a steep angle downtube design which moves the battery rearward to keep weight centered under the rider improving the handling of the bike.

By tucking the rear shock into the twin tube frame construct, riders gain the benefit of more clearance when standing over the bike, while also keeping the bike’s center of gravity low to help with cornering and maneuverability.

Within this exclusive frame design, the drive unit is rotated in alignment with the downtube angle – better aligned with the axel path and the ground. The drive unit simply fits better within the frame than competing models. Placed more vertically in the frame, flex is decreased, clearance is increased, and the rear center measurement is shortened, keeping the chain stay short. Because the drive unit is in a fixed position in the frame, it is tucked in and tracks with the frame while cornering.

**Yamaha’s First Ever Dual Suspension e-MTB; Balanced Ride and Handling**

The YDX-MORO’s geometry was designed to deliver big hit capability with short travel feel and improve rider control when tackling obstacles on the trail. With a neutral rider position and low center of gravity, the bike’s new Horst link suspension is fully active regardless of the rider’s input. Whether pedaling or braking, the horizontally positioned rear suspension provides traction to the trail, predictable feeling in corners, and a connected feeling to the ground even over rough terrain, allowing for aggressive riding with predictably fun handling. The long and low geometry also allows the rider to navigate down steeper trails without losing traction on the front end of the bike.

The horizontal positioning of the rear shock results in a reduced saddle height, lower stand-over height, and makes it easier to put a foot down (similar to MX-style riding) while navigating obstacles.

“The all-new YDX-MORO models represent the forward thinking, design capability, legendary performance, and manufacturing quality the Yamaha brand is known for delivering across multiple outdoor recreation segments in the U.S. and around the world,” said Rob Trester, who leads the Yamaha Power Assist Bicycle group in the U.S. “The all-mountain category is one of the fastest growing segments in e-Bikes, and the YDX-MORO and YDX-MORO Pro are ready to capture the excitement and passion of riders and Yamaha’s bicycle retail partners.”

The all-new YDX-MORO will be available in Desert Yellow and the YDX-MORO Pro will be available in Podium Blue/Nickel.

Yamaha is the pioneering leader in e-Bikes, and the YDX-MORO models represent the latest innovations in the brand’s ever expanding e-Bike lineup. Yamaha launched the world’s first electrically power assisted bicycle in 1993, and is the only manufacturer with 27-years of experience designing complete e-Bikes from frame to motor. Recently, the brand also launched the new Civante road bike, which is Yamaha’s first U.S. model offered in the Class 3 category.

Yamaha Power Assist Bicycles is part of the Smart Power Vehicle Division of Yamaha Motor Corporation, USA. The Yamaha Bicycles lineup includes a variety of power assist bicycles for fitness, fun, commuting and serious recreation. View Yamaha’s full line of Power Assist Bicycles at [www.YamahaBicycles.com](http://www.YamahaBicycles.com) and find a local retailer at [Yamaha’s dealer locator](http://www.YamahaBicycles.com/store-locator).

To receive future updates on Yamaha’s YDX-MORO models, along with its full power assist bicycles lineup, follow Yamaha Bicycles on social media at [www.instagram.com/YamahaBicycles](http://www.instagram.com/YamahaBicycles), [www.facebook.com/YamahaBicycles](http://www.facebook.com/YamahaBicycles), [www.twitter.com/YamahaBicycles](http://www.twitter.com/YamahaBicycles). #YDXMORO and #YamahaBicycles

**About Yamaha Motor Corporation, USA**

Yamaha Motor Corporation, USA (YMUS), is a recognized leader in the outdoor recreation industry. The company's ever-expanding product offerings include Motorcycles and Scooters, ATV and Side-by-Side vehicles, Snowmobiles, WaveRunner Personal Watercraft, Boats, Outboard Motors, Outdoor Power Equipment, Power Assist Bicycles, Golf Cars, Power Assist Wheelchair Systems, Surface Mount Technology (SMT) and Robotic Machines, Unmanned Helicopters, Accessories, Apparel, Yamalube products and much more. YMUS products are sold through a nationwide network of distributors and dealers in the United States.

YMUS has a corporate office in California, two corporate offices in Georgia, facilities in Wisconsin and Alabama, and factory operations in Tennessee and Georgia. Additional U.S.-based subsidiaries include Yamaha Marine Systems Company (YMSC) with divisions Bennett Marine (Florida) and Kracor Systems (Wisconsin), Skeeter Boats (Texas), with division G3 Boats (Missouri), and Yamaha Precision Propeller (Indiana).

For more information about Yamaha, visit Yamaha-Motor.com.



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