WHYTE REVIEWS



REVIEWS OF THE YEAR 2022-2023 £ FREE

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INNER



BESTOF BRITISH!

The verdicts from the UK's best independent bike testers



Winner







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E-MOUNTAIN BIKES



FULL SUSPENSION MOUNTAIN BIKES

"It's not because Whyte was late to the 29er party. Au contraire. Its original T-129 was a genuine game changer when it was introduced a decade ago." - MBR, T-140 29 RS review



HARDTAIL MOUNTAIN BIKES

"Whyte's reputation for producing benchmark trail and enduro bikes is second to none."



GRAVEL BIKES

"Both bikes are ahead of the pack when it comes to more technical terrain." - Cycling Plus, Friston + Dean review



"The best British design, built to perform, engineered to last, award-winning handling and proven through the worst conditions"

ABOUT WHYTE WHO WE ARE

We're an award-winning British bike company that has been engineering ground-breaking, innovative bikes that ride in a league of their own for over 22 years.

HOLISTIC DESIGN

We design the entire bike, folding the sum of its every part into the whole; we call this holistic approach our 'Total Geometry' concept as confidence isn't as simple as a slack head angle or even as straight forward as a low bottom bracket.

Bikes ride brilliantly when everything is combined to work perfectly in unison.

And not just the measurements and angles of how all the tubes that make up the frame are put together – but also all the components, too. The forks, the wheels, the bars, stem, cranks, and more. They all add up.

So we've spent more than 22 years refining our approach to them all to give you the best, most confident and capable ride possible.

THE WHYTE DIFFERENCE

For us, making bikes that ride and perform exceptionally so you can have your best ride, every ride, is only part of the story.

Another is engineering them to continue to keep doing that flawlessly ride after ride, and year after year no matter how hard you push them or what conditions you ride through.

So we sweat all the fine details that matter in the real world: phosphate-coated and marine-grease packed bearings, fully sealed cable ports and seat clamps, masses of mud clearances, and many more.

The best British design, built to perform, engineered to last, award-winning handling and proven through the worst conditions. That's the Whyte difference.

6 REASONS WHY BUY WHYTE?

> Whatever bike you choose, with Whyte you can be sure you're buying right.



AWARD-WINNING **HANDLING** Have your best ride, every ride.

THE BEST BRITISH 2 ENGINEERING Built to perform, engineered to last.

FOUR YEAR EXTENDED WARRANTY Standing behind what we make for the long haul.

4

LIFETIME PIVOT BEARING WARRANTY Have pivot peace of mind – for life.

THE BEST 5 **RIDER SUPPORT** Need help? Our team of UK experts will get you sorted.

23 YEARS OF INNOVATION Changing the game since 2000.

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E-MOUNTAIN BIKES

The most reliable, best-handling electric mountain bikes (e-MTBs) you can buy.



MHYTE



WHYTE E-160 RSX

Whyte improves the performance of its mid-travel electric trail bike with centre of gravity research

hyte's E-160 RSX electric mountain bike is the brand's do-it-all 150mm travel offering that is designed for trail riding, epic backcountry missions and enduro racing.

By rotating the Bosch Performance Line CX motor counter-clockwise (when viewed from the driveside) and fitting the 750Wh PowerTube battery partially beneath it, Whyte has lowered

"Whyte has excelled itself with the way the E-160 rides" the E-160's centre of gravity (CoG) in a bid to improve cornering performance while

maintaining stability.

Whyte has excelled itself with the way the E-160 RSX rides. Clearly, all the research and development around the CoG, plus the hard work on a sorted rear shock tune, along with well-balanced geometry, culminate in a rather special package on the trails.

MOTOR & BATTERY

Bosch's Performance Line CX Gen4 Smart System motor and PowerTube 750Wh battery are fitted to the E-160 RSX. The motor boasts 250W of nominal power and 85Nm of peak torque, and its outputs can be customised using Bosch's eBike Flow smartphone app. Thanks to the slide-in-rail battery system, the E-160 is also compatible with Bosch's 625Wh and 500Wh PowerTubes, without the need for additional parts or modifications.

PERFORMANCE

Point the E-160 RSX uphill and it's an efficient, drama-free affair. Little of the motor's drive or rider's energy is lost to unwanted suspension bob.

One of the best electric mountain bike motors, Bosch's Performance Line CX gives support that feels natural in either scenario. Masses of power and torque (in eMTB or Turbo modes) are delivered right up to the speed limiter.

That efficiency is matched with the rear suspension's smoothness. High-frequency bumps, such as embedded sharp stones, are absorbed with finesse, and that ease of suspension action enhances traction impressively. Coupled with the sticky compound and aggressive tread pattern of the Minion DHR II rear tyre, there are few technical inclines the E-160 will struggle to ascend.

It's on the downhills where the magic

GREAT BRITISH BIKES



really happens. By lowering the frame's centre of gravity and giving it a matching ground-hugging bottom bracket height, there's little I encountered on the even the gnarliest trails that upset the E-160.

Hooking around successive turns feels inspiring. The low-slung weight makes

"Whyte's E-160 RSX is one of the best-handling electric bikes I have tested"

changing direction almost effortless because it's so quick to transition from one

lean angle to another. Clearly, the low CoG and bottom bracket height have a tangible and positive effect on cornering, and at the bottom of trails littered with turns I was invariably grinning from ear to ear.

Point the E-160 towards high-speed, gnarly terrain and the handlebar and pedal contact points remain remarkably level. Both the front and rear wheels feel as though they're working overtime to iron out the trail and isolate the rider from destabilising inputs.

This mega-stable platform makes riding the gnarliest trails much easier, or significantly quicker. The rider then does less to keep the bike under control, and can focus more on the important bits, such as where the trail is going or when to brake, rather than having to work to keep it from being bounced off-line.

THE BOTTOM LINE

Whyte's E-160 RSX is one of the best-handling and riding electric bikes I have tested to date, possibly toppling the mighty Specialized Turbo Levo in terms of how it feels out on the trails.

The masterfully calm and composed handling, that's also responsive to rider inputs, makes its performance and feel, no matter the trail, close to irreproachable.

Our Rating $\star \star \star \star \star$

Masterful in almost every way, the E-160 RSX is a benchmark performer

- Pros: Calm and composed; intuitive feel that's easy to ride; fun in tighter terrain; hides its weight well; sorted spec
- Cons: Chain-slap noise; bottle cage mount positioning; a steeper seat tube angle would improve climbing performance

Read the full review



WHYTE

HEAD-TO-HEAD BORDED BOR

We hit the trails on two bikes with the same motor but different frame materials and geometry, to see which approach works best for lapping climbs and smashing descents



E-BIKES

MAGIE

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JARGON

PROGRESSIVE Suspension that has a high leverage ratio at the start of its travel (easy to compress) and a lower leverage ratio at the end of its travel. This allows the rear shock to react to small bumps, without it bottoming-out excessively when faced with bigger hits or harsh landings

REACH

The horizontal distance from the centre of the bottom bracket to the centre of the top of the head tube. This dictates how stretched-out vou feel when stood up on the pedals

hether you're hurtling down your favourite trail, picking lines instinctively and getting into a flow state, or you're riding blind, a good bike should remove at least some of the guesswork, making it easier and more fun to try new ways down the hill, get a bit sketchy or push that bit harder. Not only does an enduro e-bike have to do that on the descents, but it must also make the way up to the trailhead faster and less

fatiguing. So, how do our two bikes measure up?

Seeking similarities

We'll focus on the commonalities to begin with, the most obvious being the high-powered Bosch motor. Boasting 85Nm of peak torque and up to 340 per cent assistance, the Performance Line CX is the current benchmark for natural-feeling power assistance. Bosch have worked hard on their latest Smart System tech, and two of the four modes - Tour+ and eMTB - now react to rider input, adjusting output according to how much effort you put in. While this might sound like an obvious feature to include, only Bosch have so far managed to create such a powerful and rewarding system, where pedalling harder increases motor assistance in a meaningful way.

Both bikes also use Bosch's most energydense PowerTube 750 battery. With 750Wh on tap, our 76kg tester managed to exceed 2,000m of ascending (and therefore descending) on a single charge with each bike in Tour+ mode. Up assistance to eMTB or Turbo, however, and that range drops off significantly, to the point where exceeding 1,100m of climbing can be tricky on full power. Bosch's eBike Flow smartphone app allows you to tune the assistance further.

Feeling Horst

Less obviously, but just as importantly, the Cube and Whyte also share the same Horstlink rear suspension layout. This system, made famous by Specialized's FSR bikes, places a secondary pivot between the main pivot and rear-wheel axle, thus 'disconnecting' the wheel from the mainframe. Thanks to the adaptability of the Horst-link design, manufacturers can tune the suspension kinematics of their bikes to suit specific needs.

In this case, both brands have made their bikes relatively progressive. The Stereo Hybrid 160's leverage ratio ramps up by 28.3 per cent as it goes through its travel, making it well suited to both coil- and air-sprung shocks. With 22 per cent progression, the E-160 is more suited to air shocks. Anti-rise (how much the suspension is influenced by braking forces) is between 50 and 65 per cent on both, so their rear ends should remain active when you're on the anchors. Both have similarly low anti-squat figures (how much the suspension is affected by pedalling forces), too - around 80 per cent at sag – which should help them feel smooth when travelling over rough terrain, but with a tendency to bob when you're pedalling (which isn't as much of an issue on an e-bike, because the motor can compensate for any energy losses to unwanted suspension movement).

Specs appeal

Take a deep dive into the bikes' componentry and there are yet more similarities. A Fox 38 fork and Float X rear shock feature on both. While the Whyte gets non-Kashima-coated Performance Elite versions, the internal damper tech and external adjustments are the same as on the showier Factory kit on the Cube. It's the same with the drivetrains. Although the Whyte is fitted with SRAM's entry-level wireless groupset, GX Eagle AXS, it's functionally identical to the pricier and slightly lighter XX1 Eagle AXS, and you won't notice a difference in performance between the

£8,499

Frame 'C:62 HPC carbon fibre front triangle, 6061-T6 aluminium alloy rear triangle, 160mm travel Sizes M, L (tested), XL **Drive system** Bosch Performance Line CX Smart System motor and PowerTube 750Wh battery Fork Fox 38 Factory, 170mm travel Shock Fox Float X Factory Wheelset lewmen Advanceo SL A.30 wheels, Schwalbe Magic Mary Super Trail ADDIX Soft (f) and Schwalbe Big Betty Super Trail ADDIX Soft (r) 27.5x2.4in tyres Drivetrain SRAM XX1 Eagle AXS (1x12) Brakes Magura MT7, 203mm rotors Bar/stem Newmen Advanced 318.25, 780mm/ Cube Performance E-MTB, 45mm

Seatpost/saddle Fox Transfer Factory/Cube Natural Fit Venec Weight 24.17kg, large size without pedals

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DETAILS

CABLE MANAGEMENT

GABLE MARNALIMENT Cube run the dropper post cable and rear brake hose through the frame via the headset. As well as looking neat, they say this boosts strength (as it removes the need for holes in the head/down tube).

FRAME CONSTRUCTION

The 'C:62' carbon fibre the Stereo 160 is made from is the brand's highest-spec material.

PARTS SPEC Getting SRAM's halo XX1 Eagle AXS drivetrain on a sub-£10k bike is a real win, especially given the quality of the rest of the spec.

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WHYTE







two. That's where the similarities end and rifts between the two bikes begin to appear, though.

Not only do they have different-size wheels, with the Whyte rolling on bigger 29in hoops and the Cube on smaller 650b (aka 27.5in) wheels, but the brands' tyre choices are poles apart. The E-160 has Maxxis rubber and the Stereo Hybrid 160, Schwalbe, but it's not the manufacturer of the tyres, but their compounds and casings, that differentiate the two. The Whyte's front tyre is a Maxxis Assegai with EXO+ casing and sticky 3C MaxxGrip compound, famed for its all-weather, all-surface traction, while out back there's a Minion DHR II with less tacky but faster-rolling 3C MaxxTerra rubber and a DoubleDown casing tough enough for the rigours of e-biking. Cube, on the other hand, spec Schwalbe's Super Trail casing and ADDIX Soft compound front and rear. Although the Magic Mary and Big Betty tyres have excellent tread patterns, the lightweight casings and less grippy rubber let down the Cube's otherwise impressive spec list.

Along with the carbon fibre frame, the lighter tyres do tip the scales in the Stereo Hybrid 160's favour, though. Without pedals, our size-large bike weighed 24.17kg, compared to the E-160's chunkier 26.32kg.

Alternate angles

The disparities between the two bikes deepen when you analyse their geometry. Whyte have worked their hardest to lower the E-160's centre of gravity, rotating the front of the motor upwards so that the battery fits partially beneath it. This should improve how the bike corners and make it extra stable on rough terrain. Of course, a low centre of gravity alone doesn't make for a good bike, but here it's complemented by Whyte's geometry figures. A slack 63.8-degree head angle and long 483mm reach and 446mm chainstays help keep things stable, while a 326mm bottom bracket height (all large frame, 'low' flip-chip position) adds to the low-slung cornering feel.

At 65 degrees, the Cube's head angle is much steeper than the Whyte's. The BB is also higher (335mm), despite its smaller wheels. While the reach figure is similar (479.8mm, large), the chainstays are shorter (441.5mm). On paper, all this should add up to a less stable feel on the trail. The Stereo Hybrid 160 does have a steeper seat tube angle than the E-160, though, its 76-degree figure beating the Whyte's 75.3

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degrees, which should make seated climbing easier and more comfortable.

Trail-bound

While geometry numbers, suspension charts, spec lists and headline weights give an indication of performance, it's on the trail where a bike's mettle is proven. Point these two machines uphill and differences are instantly apparent. The Whyte's riding position is traditional, in terms of how your bodyweight is shared between the saddle and handlebar, with a bias towards the seat. Your feet are also placed in front of your hips, rather than directly beneath them. This detracts from climbing performance and comfort, as it means you need to make more weight shifts to keep the front wheel from going too light and wandering or lifting. On steep ascents this is exaggerated further, as more weight is transferred to the rear wheel, compressing the bike's suspension beyond the sag point.

Riding the Whyte in isolation you wouldn't necessarily notice this, but when you swap to the E-160 from the Stereo Hybrid 160 it feels like stepping out of a Mini Cooper and into a stretch limousine. The Cube's seated climbing position is positively upright, with the bar and front wheel close to the centre of the bike, and bodyweight evenly distributed between saddle and bar. Add in the steeper seat tube angle, and the Stereo Hybrid 160 is a surprisingly proficient climber, with smaller movements needed to keep it on course or to stop the front wheel from lifting or the rear one from spinning. Agility is the Cube's strong point, but the flipside to this is that when things do get close to the edge of control on particularly technical climbs, the bike is much harder to rein back in, with only soft, finessed weight shifts doing the trick.

Bringing up the rear

On both bikes, the suspension feels similar which is unsurprising, given their doppelganger kinematics - working hard to create good levels of comfort and grip on a wide range of trail surfaces. The Whyte is marginally smoother than the Cube, with an extra plushness that means it handles being pummelled into highfrequency, low-amplitude bumps well. Its custom-tuned Float X damper is impressive, blending great small-bump sensitivity with big-hit capability. While we used full travel frequently, we rarely felt a corresponding loss of control or composure. The only sign it had happened was the position of the O-ring on the stanchion, and harsh bottom-outs were few and far between. Although the additional progression of the Hybrid Stereo 160 would improve the E-160's handling further, it does well with the leverage ratios it has.

The Cube's progressive suspension makes up for some of its shortcomings elsewhere, helping to compensate for its less long, low and slack geometry and make it feel more stable and confidence-inspiring on chunky trails, with no



HORST-LINK Four-bar linkage suspension design with a secondary pivot on the chainstay, below and in front of the rear axle. This means the wheel isn't directly connected to the mainframe, helping to reduce the effect of pedalling and braking forces on the suspension. Invented by former motorcycle racer Horst Leitner, the Horst-link was popularised by Specialized (who bought the patent) on their 'FSR' bikes

Bosch Performance Line CX Smart System motor and PowerTube 750Wh battery Fork Fox 38 rformance Elite, 160mm travel ock Fox Float X Performance Elite Wheelset DT Swiss HX 1700 wheels, Maxxis Assegai 3C MaxxGrip EXO+ 29x2.5in (f) and Maxxis Minion DHR II 3C MaxxTerra DD 29x2.4in (r) tyres Drivetrain SRAM GX Eagle AXS (1x12) rakes Magura MT7, 203mm rotors Bar/stem Race Face Turbine R,

800mm/Race Face Atlas, 35mm Seatpost/saddle Crankbrothers Highline 3/fi:zi'k Terra Aidon Weight 26.32kg, large size

without pedals www.whyte bikes.com

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DETAILS **SMART SYSTEM**

X X IS

Bosch's latest e-MTB hardware and software hardware and software suite - found on both bikes here - combines the existing Performance Line CX motor with a new battery, controller options and eBike Flow app, which lets you customise how the drive unit performs, record rides and more.

BATTERY PLACEMENT

DATEM PLACEMENT Whyte use Bosch's rail system, where the battery slides into the down tube on a rail that isn't structurally integral to the frame. They say this means the down tube is stronger and stiffer than one with a battery 'window'.

FRAME CONSTRUCTION

The E-160's 6061-T6 aluminium tubes are hydroformed – a process that uses high-pressure hydraulic fluid to press them into moulds – into complex shapes and are multi-butted (ie. wall thickness varies along their length) to give the best balance of strength and weight.







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fear of bottoming-out or losing control. It also means there's no price to pay for heavy gas-toflat landings, making the Stereo Hybrid 160 a solid companion through harder hits and big, successive bumps. However, while the Cube's suspension does a lot of the donkey work when it comes to smoothing out bumpy surfaces, its ride is undeniably raw in feel, with smaller, sharper bumps resonating through the bar and pedals, creating harshness.

We had to run the Super Trail tyres at higher pressures than the EXO+/DD rubber on the Whyte, so that the lighter casings wouldn't puncture or roll in corners, and this will have influenced the ride feel. However, we don't think this was the only factor, and reckon it's likely that the carbon fibre frame, wheels and perhaps the bar, too, all play their role in making the Stereo Hybrid 160 less forgiving than we'd like. One of carbon's benefits as a frame and component material is that, by manipulating the way the fibres and resin are laid up, you can tune the ride feel. Here, it feels like stiffness and strength-to-weight ratios have been prioritised over comfort-boosting 'compliance'.

In contrast, the Whyte has a smooth ride, and that's not just down to its suspension. While aluminium has a reputation for unyielding stiffness, careful tube shaping can introduce a decent amount of 'give'. Here, the frame construction, combined with some well-chosen parts – including tyres that feel well-damped and high-end alloy wheels from DT Swiss – results in a bike that balances vibrationabsorption with precision well.

Eating up the bumps

If smoothness is the E-160's entrée, the main course is its stability. Over bumpy, gnarly terrain it remains perfectly poised and balanced. The contact points stay impressively level as the front and rear wheels work overtime to absorb the trail's contours, isolating you from the rough. The less you do, the faster and better the Whyte feels, and it's happy to take



on most of the heavy lifting for you. Get things wrong or work the bike too hard, and there's virtually no price to pay, as the stable chassis filters out any rider-based mistakes. The upshot is that hard trails feel easier, or can be ridden significantly faster, as you don't have to focus on keeping the bike under control, but rather, deciding which line will be fastest or most fun.

The Cube, on the other hand, has a nervous, almost skittish feel on steeper, faster, gnarlier descents. Its steering is twitchy and requires constant micro-adjustments. With its shortfeeling cockpit and steeper head angle, it lacks the Whyte's stability, and requires lots of rider input to stay on track. However, a fine balance needs to be struck. Bigger, more assertive movements and weight shifts can affect the Stereo Hybrid 160's trajectory to the point where it can shoot off-line. Continual small, light and intentional inputs get the most from the bike, but this is a fatiguing way to ride.

Cornering contest

Both bikes feel great in the turns, but for different reasons. The Whyte squats firmly into your chosen arc, not budging until you want it to. It's still responsive to changes in direction, though – in fact, surprisingly so, considering its low-slung BB and high level of stability. Swapping from one edge of the tyre to the other is quick and effortless, with no twitchiness. How much the bike moves is directly related to the

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CENTRE OF GRAVITY The theoretical point where an object's weight is concentrated. This doesn't have to be within the object's outline. The lower its centre of gravity, generally, the more stable a bike is and the better it corners.



effort you put in, and in this respect the E-160 hides its 26.32kg weight well. The Cube chops and changes direction quickly, requiring less rider input to change its course than the longer, slacker bike, which makes weaving in and out of trees at lower speeds great fun. Its smaller wheels help here, too, while its supportive, poppy suspension gives plenty to drive against in banked turns or to generate grip.

When the chips are down

With its pearlescent paint job, svelte tubing and toptier components, the Stereo Hybrid 160 has big appeal on the showroom floor, but we'd take the impressively rounded, and rather exceptional, performance of the E-160 over the glossy looks of the Cube any day. By lowering the bike's centre of gravity as far as they could and matching it with correspondingly progressive geometry, Whyte have made one of the best-handling e-bikes we've ridden to date. It feels masterfully calm and composed on every trail or feature, but is also super-responsive to rider inputs. This makes its performance as close to irreproachable as you can get, and there's a real magic to the way it descends.

The Cube's raw-feeling ride is hard to ignore and harder yet to master, requiring lots of care and precision to get it to ride as well as its parts list and price tag suggest it should. Its spec shortcomings can

IT FEELS MASTERFULLY CALM AND Composed, but is also super-Responsive to rider inputs

be solved with upgrades – such as tougher, betterdamped tyres – but its frame feel and geometry are set in stone, and, unfortunately, these play the biggest role in how the Stereo Hybrid 160 performs. It's not all bad news, as if you ride tighter, flatter trails then the Cube will perform well, but that's not the type of terrain it's been designed for.

NEXT MONTH

£1,600 TRAIL BIKES We see if you can get a decent full-suspension bike without spending an absolute fortune On sale 22 December

MEUK VERDICT ★ ★ ★ WHYTE E-160 RSX £7,999

Masterful in almost every situation, the E-160 RSX sets a new benchmark for bighitting e-bike performance on a reasonable budget

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The Stereo Hybrid 160 has a harsh, raw-feeling ride that needs patience and skill to master, but it is good on flatter, tamer tracks



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WHYTE E-160 RSX

Whyte's 29er Trail e-MTB gets more travel, a 750Wh battery, and Bosch smarts but has it kept its outstanding handling?

hyte's E-150 has always been one of the best 29er trail e-bikes thanks to its uniquely planted yet playful handling. With the new E-160, the innovative UK brand has managed to keep that pitch-perfect vibe alive while adding a big 750Wh battery and Bosch Smart System tech.

FRAME & MOTOR

While it looks similar to the Whyte E-150, the E-160 mainframe is almost entirely new. There's a larger headtube, a reshaped top tube with a saddle gusset rather than a bracing pipe and the seat post clamp is conventional rather than internal. The downtube is also reshaped to incorporate a sliding battery rail

"With the new E-160, the innovative UK brand has managed to keep the pitch-perfect vibe alive" tery rail mount that Whyte has co-developed with Bosch for easy tool-free removal of the big mount is

750Wh battery. The motor mount is new too, but still keeps the finned Bosch Performance CX block in the wind for maximum cooling and rotates it upwards as well.

This allows Whyte to drop the battery

base right down in front of the motor for the lowest center of gravity possible. A move that's now been copied by several other brands including the Scott Patreon.

Whyte's signature attention to weather-proofing detail carries on with sealed cable/hose ports on the mainframe, a rubber seal around the seat post clamp and lifetime warrantied bearings throughout. The rubber 'filler cap' for the battery charge port is also well protected from filth. The piggyback shock on the RSX spec means you'll need a compact bottle in a side mount to squeeze into the remaining space.

PERFORMANCE

It only takes a few meters and the first turn or rock or root section to make that price seem totally reasonable in terms of ride quality though. Whyte's unique rolled motor design has always given them an edge when it comes to putting weight as low as possible for a double handling win. The heavy belly gives unshakeable stability for carving or drifting flat-out turns, which contrasts with how easy it is to flick the lighter top of the bike over in the first place. The super-short stem means counter steer flick initiation or tweaking lines for traction halfway through a featherweight



finesse move not an awkward heave. In other words, even with the bigger battery, the impeccable balance of frame and fork geometry is still as pitch-perfect as ever. That makes the E-160 both massively assured and calmly

"It's got a killer spec and the suspension tune is truly pheomenal"

centered when all hell is breaking loose, but also pop and play agile like a far lighter bike. Most

of all it just feels totally natural and vice free at all speeds, with none of the wrestling, wrangling, and high siding threats that a lot of higher center of gravity rigs throw at a rider.

The suspension is nothing short of sensational either. The latest Fox 38 offers a brilliant balance of sensitivity and support from its slurping and squelching VVT damping and it's structurally accurate without battering your palms and arms either.

The RSX is ready to not just go, but go super hard right from the shop floor.

VERDICT

Whyte's 29er wheeled hardcore trail e-MTB came into this year still holding its crown as one of the best handling powered bikes around. The new E-160 increases travel, battery size, and sophistication and give more rider room and electronic upgrade potential. It's got a killer spec and the suspension tune is truly phenomenal however hard you ride. Most of all this beautifully blended package is just super easy, natural, and hugely entertaining to rave around the trails on, for longer than you could before.

BikePerfect Verdict $\star \star \star \star \star$

More range from a bigger, easier to remove battery in a sleeker, stiffer frame with superb suspension and beautifully balanced handling, plus all Bosch's latest Smarts mean Whyte's new E-160 is one of the best all-round e-MTBs I've ridden. It's not cheap though.

Pros

- + Superbly poised handling balance
- + Exceptional suspension performance
- + Big 750Wh battery
- + Bosch Smart System tech
- + Excellent aggro spec
- + Fully weatherproofed

Cons

- Expensive for an alloy-framed bike
- Kiox 300 head unit is an extra upgrade
- No mullet version of the RSX







WHYTE E-160 RSX

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Whyte's new e-bike packs a punch but can it float like a butterfly and take the sting out of the trail?

Enduro e-bike with an alloy frame, 29in, MX and 27.5inwheel options Frame travel is 150mm and the bike is named for its 160mmtravel fork Latest version gets the biggest Bosch 750Wh battery across the range, with slicker entry port and cabling to make battery removal verv easv Low and slack

EED TO

 Low and slack geometry tilts the bike firmly downhill, complemented with race-ready tyres and components
 RSX comes with Fox Performance Elite suspension, SRAM AXS GX drivetrain and DT Swiss wheels stumbled across a Loris Vergier soundboard the other day. At the click of your mouse you get access to all kinds of suspension and riding insights, like "cac-cac-cac-cac," "wrah-wrah-wrah," and so on. I mention it now, because I couldn't ride the new Whyte E-160 without making sounds like this. It's such an exuberant bike to ride, it draws out the inner child in you and makes you want to slap corners like Loris, something that took me completely by surprise on a bike that weighs more than 26kg.

While you digest that number, on what is probably the heaviest e-bike I have ever ridden, you'll need to know what's changed on this iteration of one of our favourite ever e-bikes.

By a mile, the best improvement Whyte has introduced is to make the battery slide in and out more easily. You can put your steel-toe-cap boots away, because there's no chance it'll come careering out and break your foot now, so controlled is the release mechanism. How easy is it to get the battery out? Simply remove the single hex bolt to slide off the black plastic cover underneath the BB, pull on the nylon webbing strap inside and the 750Wh battery slides out as smoothly as a melted Calipo. There's no mass of cables to get tangled up in now, and re-entry is just as pleasant a process, thanks to a flip-lock lever that packs the battery in tight and ensures there's no rattle. The previous-generation bike would have scored full marks in our last E-Bike of

the Year test, but for the crappy battery removal... this year we might have to turn it up to 11.

Also new to the bike are 29in wheels. and it's a testament to how quickly things have moved on in the e-bike space that just two years ago, smaller wheels were still in vogue. You can get the bike with 27.5in wheels if you prefer, although principally this is an option for smaller riders, says Whyte. There's an MX option too that I'd love to try, because my shorts did make contact with the rear wheel on one steep section of trail. And try it we will, because Whyte will supply a different shock extender link if you want to mullet the bike, matching the geometry across the different wheel sizes.

The grunt behind the new bike is the Bosch Performance Line CX Gen 4 motor, arguably a superior beast to the Shimano EP8, and now you get access to the biggest 750Wh battery available. There are two other battery options on offer aftermarket (625Wh and 500Wh), and all three fit in the bike thanks to the Rail system - unscrew two bolts high up the down tube and you can reposition where the battery makes its connection,

It's an exuberant ride that draws out your inner child



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WHYTE







The riding is both exciting and composed

before tightening it all back up again. It means riders could potentially have multiple battery sizes to hand, and take out the most appropriate for the ride they're doing. But given all the bikes in the range come with the biggest battery, which is more than enough for almost any kind of ride, we suspect few will bother to get an additional one.

Naturally there's a big new down tube to accommodate the extra energy, and Whyte's added an oversized head tube to give the frame more stiffness. The little brace joining the top tube to the seat tube has gone, as has the cabling channel that used to run along the top of the down tube. Put all that together and

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you have a bike that's much cleaner and less industrial-looking. Pretty? Not quite.

The frame stays constant throughout the range, of course, but plenty changes from model to model. The bare bones are that you get three different spec levels to choose from: the top-end RSX with Fox Performance Elite suspension and SRAM GX AXS electronic shifting; midlevel RS drops the suspension to Fox's Performance line with the original Grip damper: while the S level switches to a RockShox set-up with a Zeb up front and Deluxe Select R shock, and mechanical GX shifting. Inside that architecture you can opt for full 29in wheels, mullet or 27.5in. To Whyte's credit, they all come with the big battery too.

The rest of the spec on the top-end bike here is almost perfect, Whyte hasn't fallen into the trap of thumbing on tyres with lightweight casings to save weight, no matter how tempting it must have been – instead you get Maxxis EXO+ up front and Double Down in the rear. The DT Swiss wheelset, Whyte bar and stem



and SRAM Code brakes all scream raceready too. I'd be happier if the dropper post was longer though, 150mm on the size Large means a lot of the post pokes out from the very short seat tube, and the 220mm rotor up front should be matched on the rear, rather than the smaller 200mm.

In terms of geometry, Whyte's thinking is that low bottom bracket heights lend a bike better downhill characteristics, and we couldn't agree more. The BB here is a diminutive 336mm in the low setting, and it helps make you feel comfortably in control on steep and rowdy trails, something worth sacrificing the occasional pedal pin for. The rest of the geometry is pretty similar to the old bike, it's long and slack as an enduro bike should be.

HOW IT RIDES

My daily ride is one of the original lightweight e-bikes, the Kenevo SL, a machine that weighs sub-20kg and prides itself on riding like a 'normal' pedal bike. Coming straight off that whippet I was absolutely expecting the Whyte here to feel like a tank - grippy and fast for sure, but not lively and playful. I was 50% wrong. The E-160 RSX is surprisingly agile, keen to get off the ground and manoeuvrable whether you're cruising on mellow singletrack or charging through rougher terrain. In my head I'd had a rough ceiling for the weight of an e-bike, where anything north of 23kg was just too heavy, but I'm happy to be set right by the E-160. The only time this bike feels heavy is when vou're dragging it out of your car or hoiking it into a workstand. Everywhere else, the weight is unremarkable.

Why is it still nimble then, we ask ourselves? A lot has been written about the importance of weight placement, getting it as low as possible, and Whyte still follows that mantra, tilting the motor upwards at the front to let the battery slide in next to it. The longer 750Wh battery naturally makes it harder to get the weight lower, but Whyte says it actually sits even closer to the motor now, because the cables and connectors are at the top of the down tube, not taking up room at the bottom.

In my mind the suspension response is the most important factor though. balancing the fork and the rear suspension, and here Whyte has absolutely done the business. The bike is dynamic, you can punch it through corners and feel like you're nailing the tightest of lines. I said earlier I was 50% wrong, but I was also 50% right - the grip and speed it generates is indeed amazing. The E-160 devours choppy terrain, eating up the hits like they're not there and scavenging grip wherever it goes. I found myself holding high lines that would have me sliding sideways on lesser bikes too.

So the spec is nearly faultless, the ride is both exciting and composed, and the price is good in these extraordinary times. I did experience more hand buzz on the new bike than I'd anticipated, but whether this is the result of the stiffer front end, increased speed or the fact I didn't have enough time fettling the suspension, is hard to tell. For the verdict on that you'll have to wait for our E-bike of the Year test.

Jamie Darlow



Devours rough terrain, while still being nimble and playful. Rear suspension feels superlative. Now comes with a huge battery and great specification.



SPECIFICATION

Frame 6061 hydroformed alu, 150mm travel Shock Fox Float X Performance Elite DPS Fork Fox Float 38 Performance Elite Grip 2, 44mm offset, 160mm travel Motor Bosch Performance Line CX Gen 4, 85Nm max torque Battery Bosch 750Wh internal PowerTube Display Bosch Smart System LED Remote Wheels DT Swiss EX1700 Spline wheelset, Maxxis Assegai FXO+ / Minion DHR II Double Down 29x2.5/2.4in tyres Drivetrain Race Face Aeffect 36T 165mm chainset, SRAM GX AXS r-mech and 12-speed shifter Brakes SRAM Code RSC, 220/200mm Components Whyte Custom 800mm bar Whyte Enduro 35mm stem, Crankbrothers High-Line 3 150mm post, Fizik Terra Aidon saddle Sizes M, L, XL Weight 26.2kg (57.7lb)

GEOMETRY

(LOW SETTING) Size ridden L Rider height 6ft lin Head angle 63.7° Seat angle 69.3° Effective SA 77.6° (@ 750mm) BB height 336mm Chainstay 446mm Front centre 833mm Wheelbase 1,279mm Down tube 635mm Reach 484mm

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WHYTE E-180 WORKS MX W/BOSCH RACE MOTOR

Whyte's top-tier e-bike gets Bosch's latest

motor and terrain-flattening suspension

£9,788 • 29/27.5in • whyte.bike

NEED TO KNOW

Flagship bike in the E-180 range gets the new Bosch CX Race motor Supenson travel Is 180mm front, 170mm rear, with **RockShox Ultimate** components Mixed wheel sizes combine a 29in front wheel with a 27.5in rear Battery capacity is 750Wh, and now easily removable Limited to three frame sizes: M, L and XL

here's nothing quite like the heat of competition to focus the mind. And it's the ability to concentrate intensely on a single task that enables racers to deliver outstanding performances in extreme circumstances. Having such a narrow focus also helps push product

development forward. So it's with competition in mind that Bosch has delivered its new Performance Line CX Race Limited Edition motor, the grey magnesium casing shedding the best part 250g over the standard version. And because the production process to make it lighter is more complex, Bosch will only produce a limited-edition run.

One of the first bikes available with the new Bosch Performance CX Race motor is the Whyte E-180 Works. It's the top-end bike in the E-180 range, and because the Race motor is the same size and shares the same mounts as the standard version, it slots straight into any bike that currently runs a Bosch motor. Now, if you've just had a lightbulb moment, I hate to break it to you, but the CX Race motor is currently not available as a standalone item.

And the new CX Race motor isn't just about saving weight, it also gets a dedicated Race mode. To accommodate the extra mode within the current Smart System, Bosch has dropped the Eco setting. So the four power modes on the CX Race version of the E-180 are Tour+, eMTB, Turbo and Race.

So what's the difference between Turbo and Race? One of the most noticeable features of Race mode is that it gives you a pumped-up version of Extended Boost. In simple terms Race mode delivers a slightly longer overrun period, roughly equivalent to one full revolution of the pedals. And it gives it to you at a higher power output. So when you stop pedalling, the motor keeps pushing you forward for longer, and in some cases the bike actually accelerates. This is a little unnerving at first, and it's why it is always a good idea to cover your brakes when riding in Race mode.

The benefits are equally apparent though. The extra surge of power is there to get you up and over bigger trail obstacles, where you don't have the necessary ground clearance to keep the cranks spinning. It makes getting the front end up easier too, which is really handy on a 26kg (57.5lb) bike like the Whyte E-180. So if you race, and are timed on technical ups, as well as downs, it will be a real boon. Riders that come from a trials background will love it too, as it will open up new possibilities on previously impossible climbs.

In Race mode the bike gets up to speed more quickly too, offering 400% assistance, so if you crank out of a corner, or stall on a climb, it makes it that much easier to maintain race pace or get back on it. This also helps overcome the extra drag of the super-soft compound Maxxis MaxxGrip tyres on the E-180.

The Race and Turbo modes are both customisable. So you can change



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the dynamic setting to adjust the initial acceleration, the overall level of assistance, and even the torque in 5Nm increments down from the 85Nm max. The real benefits of the Race motor are in the firmware not the hardware, so hopefully that means a Race mode for the standard CX motor will be an option at some point.

HOW IT RIDES

Crack open the magnesium casing of the Race motor and the internals are identical to the current Performance Line CX unit, so I was surprised at how much quieter the Race motor was. Yes, it's a little louder on the initial acceleration phase, but once up to speed it's less distracting than the CX motor on the Whyte E-160.





On flatter trails the surge of power in Race mode when you first start pedalling really helps to maintain speed, and allows you to quickly correct errors in line choice or braking points. On steeper descents where the terrain transitions rapidly from steep chutes to flat shelves, you can actually hear and feel the Extended Boost kicking in, even when you are not pedalling. And this is simply because the pitch of the bike is changing beneath you, which has the same effect as doing a quick half crank of the pedals. It's not uncontrollable, because you're already on the brakes, so the bike never gets away from you, even though you can feel it pushing beneath you. It's something to be cognisant of though, and you can always switch to Turbo mode on the descents if the Extended Boost feels too pronounced in Race mode.

And it's on the descents where the E-180 really excels. It's built solid, the frame exceeding the current safety standard by nearly 250%. Hence the weight. And because the suspension feels very fluid and the 750Wh battery sits low in the frame, the bike masks its bulk better than a XXL black t-shirt.

The build kit on the Works bike will make you feel like a SRAM-sponsored athlete. Well, not the part where you get the bits for free, but you get the gist. Highlights include the Code RSC brakes with massive 220mm rotors front and rear for maximum stopping power. With 170mm frame travel and the big 180mm RockShox Zeb up front, you can



lean back and let the E-180 do a lot of the work for you. And shorter riders will have no problems getting far enough back either, as the smaller 27.5in rear wheel gives lots of bum clearance.

To keep things simple, there's no display on the E-180. But the plug-andplay nature of the Bosch Smart System means you could always add a Kiox display unit later if you wanted to.

One thing is crystal clear though, speed and gradient rapidly become your best friends on the E-180. The bike is so effective at ironing out the rough stuff, if you are not absolutely pinning it, it will numb all but the most technical terrain. This character trait makes the Whyte E-180 Works a pure shuttle bike if ever there was one. With the internal rail system, you can run different battery capacities, and now that it's easier than ever to swap out the battery, you'll run out of juice long before the E-180 does. *Alan Muldoon*

mbr 1ST IMPRESSION

HIGHS

Monster truck suspension performance, with enough pop to keep it lively. Bosch CX Race motor adds an extra gear for climbing and racing. Top-end SRAM build kit leaves nothing to be desired.



SPECIFICATION

Frame 6061 aluminium, 170mm travel Shock RockShox Super Deluxe Ultimate RCT Fork RockShox Zeb Ultimate 180mm travel Motor Bosch Performance Line CX Race Battery Bosch Powertube 750Wh **Display** Bosch LED Remote Wheels Hope Pro 4 hubs, Hope Fortus 30 rims, Maxxis Assegai EXO +/DD 29/27.5x2.5in tyres **Drivetrain** Race Face Aeffect e-bike 36t, 165mm chainset. SRAMXX1AXS r-mech and shifter, SRAM XG-1275 10-50t cassette Brakes SRAM Code RSC 220/220mm **Components** Race Face Turbine R 800m bar, Race Face Atlas 35mm stem, Crankbrothers Highline 3150mm

post, Fizik Terra Aidon saddle Sizes M, L, XL Weight 26,08kg (57,5lb)

GEOMETRY

(HIGH SETTING) Size ridden M Rider height 5ft 11in Head angle 63.9° Seat angle 71.3° Effective SA 76.8" BB height 356mm Chainstay 440mm Front centre 815mm Wheelbase 1,255mm Down tube 736mm Seat tube 430mm Top tube 600mm Reach 459mm

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THE BEST BRITISH FULL SUSPENSION MOUNTAIN BIKES

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First rides

SWINGING A LEG OVER WHAT'S HOT THIS MONTH

WHYTE T-140 RS

£4,099 • 29in • whytebikes.com

NEED TO Know

New 29in version of Whyte's popular T-140 trail bike Frame travel is 135mm, all models run 140mm forks. hence the name Whole ride feels absolutely spot on straight away with a tenacious yet flowing trail connection • At 15.3kg (33.7lb) it at the heavy end for trail riding Three sizes only – no XS or S sizes in 29in

Worth the wait and with input from a local hero, Whyte's new 29er goes straight to the top

hyte's new T-140 RS 29er plugs a very obvious mid-travel, big-wheel hole in the UK brand's line-up. And it does so with an outstandingly sorted, 'favourite from the first ride' feel, especially if you're really into technical trail riding.

If you're wondering where this bike has been, it's not because Whyte was late to the 29er party. Au contraire. Its original T-129 was a genuine game changer when it was introduced a decade ago and the S-120 was arguably ahead of the down-country curve.

Yes, a faster rolling, bigger-wheel version of Whyte's multi-**mbr**test winning T-130 and T-140 trail bikes has definitely been missing for a while though. And with the brand largely caught up in corporate cost saving exercises, ahead of a sale that went through last year, the project got delayed. Covid wasn't the best time to develop a new bike either.

But it's finally here and while the alloy front end looks similar to existing Whyte frames, it's all new. The most obvious difference is the sleeker, straight top tube and external seat collar. The back end shares dropouts with the T-160, but again it's new; the T-140 sporting a bridgeless seatstay design to keep the chainstay length well under 440mm.

The addition of weather-sealed cable/hose entry points, super wide main pivot and lifetime warranty on the pivot bearings will also allow you to sleep easy when it starts raining again.

Whyte retains its signature four-bar linkage/shock-yoked suspension, where the switchable 'Shape.It' shock chip knocks 0.7° off the head angle and 8mm off the BB height in the low setting.

HOW IT RIDES

It's the dynamics of that linkage however, and the tuning of the Fox Performance Elite DPS shock, that Whyte designer (also two time and current National Enduro Series champion) Sam Shucksmith spent most of his lockdown locking down.

And considering how many brands have refined the classic four-bar linkage suspension layout since it appeared on bikes 30 years ago, and how good most of them feel, the fact that Shucksmith's work makes the Whyte feel noticeably better is seriously impressive. We could – and did – pull lots of parallels out of comparable bikes from Canyon and Specialized during testing, but the bottom line is that the Whyte just feels more right, more of the time.

It's slightly more sensitive to grab grip in desperate climb and corner moments. But with a split second more advance when it delivers the power to edge you up, or out of a corner. Mid-stroke support is impeccable too. Firm enough to really flex your feet around the pedals as you carve a berm or pump a roller, but never choking so it blows them off or pitches the bike forward.

While it doesn't actually give a full 140mm of travel (it's 5mm off) the end stroke is controlled enough to keep the bike on line and holding speed even on big slap and drop trails. The Fox 34 Performance Elite Grip 2 fork







FULL SUSPENSION

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consistently enjoyed proving it's the best in class, by matching that 'just right' performance up front too. That said, I needed more pressure than Fox's set-up chart suggested – no surprise on a bike that wants to pile into punishing sections as hard as the Whyte.

Handling and frame dynamics are a key part of a balanced package. The short offset fork and stubby stem are subconsciously reactive. The 480mm reach on the size L, plus the optional extra slack head angle and low BB height, control and hunker you down into suspension that's already hoovering the trail for grip.

Dialled oil flow, flex/stiffness balance in the subtly ridged main tubes, the smaller diameter 31.8mm bar and stem, and the Fox 34mm – not 36mm – fork legs with 2.5in Maxxis Minion DHF side knob tyres all feed into the feel.

Each component helps to get those big fat Whyte grips closer to the ground through corners. It's such a reassuring feeling you leave your fingers off the brakes for a split second, then realise they're not needed after all.





Even the short, stiff, rear end and tougher EXO+ casing on the less grippy Dissector rear tyre play their part. You can hench up the back to survive bigger impacts that a longer travel bike would suck up better. Also pushing out of turns or harnessing pedal inputs works better than most longer travel bikes.

The result is a bike that feels like a dialled-in favourite even before you start playing with the extra adaption options the Performance Elite spec fork and shock provide. In fact, apart from an occasional flick of the pedal-platform lever on the Float DPS shock for the smoothest climbs, I'd suggest most riders are best leaving the dials alone.

After all, Sam rode a development bike to the top step of the podium of a Southern Enduro Series race just to prove he'd got the bike working as well as an alloy 140mm travel bike could.

And this is where the whole question of mid-travel bikes, materials and their performance positioning could work against the T-140. Especially given that the T-140 is a bit lighter than Whyte's T-160, primarily due to fork and shock choice. That's also a heavy bike even for 160/150mm travel and at 15.3kg, the T-140 is nearly half a kilo heavier than the £500 cheaper Trek Fuel EX 8.

It's over 1kg heavier than the Canyon Spectral CF8 in either 125 or 150mm format which come with full carbon frames for just £400 more too. And while I can honestly say I prefer the way the Whyte feels under power, up climbs and through corners a full carbon frame



will always turn heads, even if it comes in a box for self assembly not from your local dealer. The heavy NX rear cassette and plain gauge spokes are black marks on the spec too, and Whyte still forces smaller riders onto the older 27.5in wheeled T-140 platform as there's no XS or S for the 29er.

In short, the increased control and capability that make the T-140 29 so special for a mid-travel bike could push many riders towards a longer travel bike 'just in case'. There are also some extremely capable shorter travel bikes that are far lighter and more suited to longer, faster rides, while not getting dropped dramatically on descents.

But when it comes to aggressive, engaging all-round feel and impeccable balance, Whyte's new T-140 RS 29er is a brilliant new benchmark for just how well an alloy, mid-travel bike can ride. Even if you'll need to look past weight and material comparisons on the shop floor to benefit from the dialled details that really matter out on the trail.

Guy Kesteven

mbr 1ST IMPRESSION

Exceptional overall balance, superb suspension tune, tough and weatherproofed frame



SPECIFICATION

Frame Custom 6061 alloy, 135mm travel Shock Fox Float DPS Performance Elite (210x47.5mm) Fork Fox Float 34 Performance Elite GRIP2, 140mm travel Wheels Whyte double sealed 110/148mm hubs, Race Face AR30 rims, Maxxis DHF EXO/Dissector EXO+ 29 x 2.5/2.4in tyres Drivetrain SRAM X1 32T 170mm chainset, SRAM GX r-mech and shifter, SRAM NX 10-50t cassette

Brakes SRAM G2 R, 180/180mm

Components Whyte alloy 780mm bar, Whyte 35x31.8mm Gravity stem, Bike Yoke Divine 160mm post, Whyte custom saddle Sizes M, L, XL Weight 15.3kg (33.7lb)

GEOMETRY

LOW SETTING Size ridden L Rider height 5ft 1lin Head angle 64.6° Seat angle 71° Effective SA 76° (@ 740mm) BB height 330mm Chainstay 435mm Front centre 814mm Wheelbase 1,249mm Down tube 756mm Seat tube 445mm Top tube 636 mm

WHYTE



WHYTE T-140 RS

Have Whyte hit the perfect ride vibe sweet spot with their new mid-travel 29er trail bike?

espite being one of the first brands to crack the category a decade ago, Whyte have been missing a mid-travel trail 29er from their range for a long time. However, their new T-140 has been definitely worth the wait (and the weight) for anyone after one of the best trail mountain bikes available with an impeccably balanced, blended and sorted ride vibe.

FRAME

The T-140 definitely looks similar to previous Whyte models but losing the reinforcing strut ahead of the extended seat tube gives it a much sleeker look

"One of the best trail mountain bikes available with an impeccably balanced, blended and sorted ride" and a lower standover height. The collar and internal cable routing

are all tightly rubber sealed and the belly and chain stays are rubber armored too.

The main frame tube set is all-new with the relatively slim downtube getting a subtle reinforcing ledge just along the top of the Whyte logo.

The seat tube is curved to keep the rear wheel tucked in for a 436mm chain stay

length. The super wide main pivot makes maximum use of the single chainring specific space that Whyte pioneered way back when. The yoked, two-position shock and short seatstay-mounted suspension linkage setup is typical Whyte and the bearings are covered with a lifetime warranty.

PERFORMANCE

Whyte have done a very good job of hiding the weight dynamically though, in fact they've done an exceptional job with the ride dynamic altogether. Acceleration can be a chore and legs and lungs will inevitably burn sooner for less speed compared to lighter bikes on smoother/steeper climbs, but overall the Whyte feels surprisingly agile and lively.

Some of that comes from a pitch perfect suspension balance that Whyte's head designer spent "a pandemic's worth of work on" trying ten different tunes before settling on the sweet spot for the Float DPS inline shock. Fully open it's exceptionally fluid for rolling up and over stutter roots and rocks on climbs and will swallow serious slaps without blowing through on faster descents.

This balanced fluidity is flawless matched by the chassis and 34 fork though. I initially thought a stiffer 36 might be a



better match for a bike that liked pushing so hard. However, the more nuanced ride of the 34 syncs brilliantly with the feel of the tire carcass, mainframe and even the slimmer bar and stem. The curated compliance means superb adhesion across the sketchiest root and rock mess, where stiffer bikes skipped and slid off line. Braking and drive traction is

"Whyte's T-140 felt like my all time favorite bike straight away"

exceptional to the point where I was picking the Whyte as an advantage on technical climbs compared to a Canyon Spectral 125, I was ing it with despite a

back to back testing it with, despite a 1.2kg weight penalty. The handling is set up to make the most of the grip too, turning in instantly through the short stem to I was regularly mowing apexes I expected to go wide on at first on. The steepest seat angle Whyte have ever used also sorts out climbing poise without shuffling around in the saddle.

VERDICT

With just a basic sag and damper setup Whyte's T-140 felt like my all time favorite bike straight away. It's not the fastest on big, straight, slap trails and I'd love to try a lighter version (just swapping to lighter wheels for some of the testing made a big difference). The cheap, heavy cassette spec is definitely deserving of some time on the 'naughty step' too.

The way the frame, suspension and geometry blend together is truly outstanding though, creating a gloriously alive and addictive overachiever that immediately overrides 'sensible' stat or spec comparisons on the trail.

BikePerfect Verdict ★ ★ 🛧 🖈

It's heavy and has some spec annoyances, but superb suspension and spot on geometry make Whyte's new mid-travel 29er an instant trail rallying favorite

Pros

- + Brilliantly tuned suspension
- + Awesome dynamic balance
- + Fox Performance Elite dampers
- + Fully weatherproof
- + Top tire spec

Cons

- Heavy
- NX rear cassette and splined freehub
- No XS or S sizes in 29er
- Lacks internal storage

Read the full review





MX in aluminium, which is no bad thing in terms of crashproofing, and helps ensure there's a solid parts package bolted to it. Canyon's website shows alloy Torques with 650b or 29in wheels, but at the time of writing, if you're looking for mixed wheels, there's no option except lighter but pricier carbon fibre. Nukeproof only offer the Giga in carbon, too, which won't appeal to all. They claim this allows them to tune frame stiffness and create the intricate tube shaping required for the upper side of the down tube.

CASH CONVERTERS

None of these enduro bikes comes cheap, but what does all that cash get you? Let's look at the suspension first. Whyte's G-180 RS MX comes with a RockShox ZEB Select+ WHICH IS NO BAD THING IN TERMS OF CRASH-

fork and Super Deluxe Select+ air shock. Technically speaking, Whyte should have named the G-180 MX the 'G-190', as their bikes' names are derived from their fork travel, and the ZEB specced here boasts a massive 190mm of bounce. There's scope to tune the air spring (pressure and volume) of both units, as well as the lowspeed compression damping (the fork has an incremental dial while the shock has a handy lever that firms it up for climbing) and rebound speed.

Both the Giga and the Torque use Fox's 38 Performance Elite fork. Like the ZEB Select+, the 38 has broad, stiff 38mm upper tubes (stanchions), but its GRIP2 damper offers more adjustment than the RockShox fork's Charger

40

A formidable machine when the going gets rough, the Whyte G-180 RS MX packs a serious punch when it comes to spec, confidence and fun on the trail

2.1RC cartridge. If you like twiddling dials, there's both

SRAM's Code Rs are decent brak

es could've done with a re

but the rear stoppers on all three

2.1 RC cartridge. If you like twiddling dials, there's both high- and low-speed compression and rebound damping to play with. While that sounds appealing, our main tester found himself having to run both Fox forks with the adjusters fully open.

The Canyon and Giga use Fox rear shocks, too. The Giga gets an air-sprung Float X2 while the Torque comes with a DHX2 coil. Both feature the same low-speed compression lever to firm them up. The Torque's shock offers more control over its damping, as it's the top-end Factory version, with high- and low-speed compression and rebound adjustment. However, it takes longer to set up, as you have to find the right spring for your weight and riding style (Canyon do provide additional springs, which helps), rather than just adjusting the air pressure.

Last year, all three bikes touted 12-speed SRAM Eagle drivetrains. This year, only the Whyte does – GX Eagle, which works really well. The Canyon, the middle-priced bike, gets the Shimano XT treatment, while the Giga, the priciest of the three, comes with Shimano's cheaper SLX drivetrain. That's nothing to complain about, though, as both feel similar and neither skipped a beat during testing. As for brakes, Canyon and Nukeproof have gone for Shimano XT and SLX, respectively, while Whyte spec SRAM Code Rs. As long as the Shimano stoppers have been bled well (we had to re-bleed both rear brakes), they're seriously impressive. The same can be said for the Codes, although, again, the rear bleed wasn't great from the get-go. What



of the all-important tyres? All three bikes sport close-toidentical rubber, which is hard to find fault with. Up front, all use a Maxxis Assegai in the 3C MaxxGrip compound and 2.5in width. While the Whyte and Canyon use the EXO+ casing, Nukeproof have opted for the heavier DoubleDown carcass. At the rear, all three use the same tyre – a Maxxis Minion DHR II 3C MaxxTerra in a 2.4in width and with the DD casing, which adds peace of mind.

EDGING AHEAD

You can pore over spec sheets and geometry charts all you want, but when all's said and done, it's how a bike behaves on the trail that really matters. While it's the downhill performance that most people focus on when it comes to enduro bikes, they still need to climb well enough, too. Of the three here, the Torque feels the sprightliest uphill. It doesn't hurt that it's marginally lighter than the G-180 and Giga, but really it's the steep seat tube angle coupled with the bob-free back end that make things feel decently efficient. The Whyte isn't too bad either. We found we could simply let it work away, finding traction, while we sat and pedalled. The Nukeproof was the only bike of the three on which we found ourselves consistently reaching for the shock lever to firm up the rear end on steeper pitches, where it would otherwise hunker down into its travel. On more gradual gradients, though, it'll cruise up just fine. Unleash this trio on mellower jump trails and each one

brings something slightly different to the party. The G-180

aluminium alloy 167mm trave Sizes M*, L, XL Fork RockSho ZEB Select+. 190mm trave Shock RockShox Super Deluxe Select+ RT Drivetrain SRAM GX Eagle with Truvativ Descendant 7K cranks (1x12) Wheelset Race Face AR 30 rims on alloy hubs Maxxis Assegai 3C MaxxTerra EXO+ 29x2.5in (f) and Maxxis Minion DHR II 3C MaxxGrip DD 4in (r) tyres Brakes SRAM R. 220mm

SPEC

£4.199

Frame 6061

Bar/stem Whyte 35, 800mm/ Whyte Enduro 35,

35mm Seatpost/saddle BikeYoke DIVINE dropper, 160mm/ Whyte Weight 15.9kg

(medium, without pedals) https://whyte. bike



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SPECIFICATION

Frame 6061-T6 aluminium Fork RockShox Judy Silver TK, 120mm travel Wheels Sealed bearing 100/135mm hubs. Whyte Trail 25 rims, Maxxis Forekaster/Rekon Race 29x2.35/ 2.25in tyres Drivetrain Whyte Forged 2-piece 32T. 170mm chainset, Shimano Deore 1x10sp r-mech and shifter, SunRace 11-46t cassette Brakes Tektro HD M275 two-piston, 180/180mm Components Whyte allov 760mm bar.

Whyte 45mm stem, Whyte alloy post, Whyte Custom saddle **Sizes** M, L, XL

Weight 14.05kg (30.97lb) Contact whytebikes. com

GEOMETRY

Size tested L Head angle 67.2° Seat angle 72.6° Effective SA 74° BB height 303mm Chainstay 440mm Front centre 755mm Wheelbase 1,195mm Down tube 745mm Seat tube 495mm Top tube 645mm ou won't find mounts for a rack or a kickstand on the Whyte 429. And that's because it's been designed by mountain bikers, for one thing and one thing only... mountain biking.

As such, this entry-level 29er trail hardtail has all the technology pioneered on Whyte's full-suspension bikes. It gets a dedicated single chainring frame design, so while you will find routing for a dropper post, there's no way to fit a front derailleur. And who needs one anyway, given how good the latest generation of 1x drivetrains are?

Whyte also pioneered shorter offset forks with equally short stems and longer reach measurements to give riders more confidence descending, and the 429 hardtail benefits from the exact same concept. And it's not just the headline technology that Whyte has got right; the 429 was the only bike in this test where we didn't have to hack the seatpost down just so we could drop the saddle low enough for descending.

That's not to say that the 429 frame design is perfect though, as there's limited clearance between the chainstays, even with the slender 2.25in Maxxis Rekon Race rear tyre. The frame should also have a much shorter seat tube and a lower top tube, to go with its more progressive steering geometry.

SUSPENSION

Leading the charge on the 429 is a 120mm travel RockShox Judy fork. It shares the same chassis as the Judys on the Kona and Specialized, so extending it by an extra 20mm of travel does reduce stiffness slightly. Given the price-point there's no faulting its performance though. Simply dial in the sag with a shock pump, set the rebound damping to control the return speed of the fork and you're good to go. Best of all, RockShox forks are super reliable, so if anything should go wrong getting it fixed will be relatively straightforward.

COMPONENTS

One component that's easily missed but has a massive impact on the long-term durability of the 429 is the Whyte twopiece chainset. All of the other bikes in the shop bought category use older square taper crankams, which aren't as strong, stiff or as durable. It's why Voodoo and Vitus both use a two-piece configuration. It's simply better.

What did Whyte sacrifice to fit such a good chainset? Well, it certainly wasn't the contact points, as the grips and saddle are both spot on. The 760mm handlebar has a great profile too and, as we mentioned earlier, the seat post slides up and down with ease, thanks to the perfect frame finish and topquality quick release. Even the wheels are half decent, the 25mm wide 29in rims big enough to accommodate the Maxxis tyres. If we had to guess on the compromise, we'd point to the 10-speed 11-46t SunRace cassette as it doesn't offer the same gear range as the Kona or the Specialized. Other than that, the Whyte 426 certainly isn't wanting for anything. Even the bigger 180mm rear rotor helps add extra stopping power to the Tektro hydraulic brakes, which aren't as powerful as the Shimano brakes on the Specialized.

PERFORMANCE

With the fast rolling rear tyre and stiffer two-piece chainset, the Whyte 429 feels direct and purposeful when you get on the gas, without offering a white-knuckle ride on all the fun stuff. It doesn't feel as balanced as the Kona though even when we ran the 120mm RockShox Judy fork a little firmer to maintain the desired dynamic geometry. You can ride it just as hard though, as the elevated front end puts you in a very commanding position. And while the curvy rear stays don't offer stacks of tyre clearance, their increased length does offer a more forgiving ride. Not as forgiving as a fatter rear tyre though, so ideally the 429 would have both. Versatile, capable and sleek, the Whyte 429 is no one-trick pony. Drop the stem for a more bum-up, head-down riding position and watch the miles disappear beneath your wheels just as effortlessly as you carve flowing singletrack and steeper descents.











VERDICT

When it comes to trail hardtails, Whyte pretty much wrote the rule book. But like all great texts, there comes a time for a second edition. So as accomplished as the Whyte 429 is, we think it would be even better with a shorter seat tube and more space between the chainstays to comfortably fit a fatter rear tyre. Small revisions then, not a complete rewrite that would fundamentally change the attitude of this otherwise great 29er trail hardtail. It was enough to cause Whyte to narrowly miss out to Kona for the win in this test though.

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MHYTE

powerful and reliable

WHYTE 629 V4

£1,999

SPECIFICATION

Frame 6061-T6 aluminium Fork RockShox 35 Gold RL, 120mm travel Wheels Sealed bearing 110/148mm hubs, WTB ST 127 TCS 2.0 rims, Maxxis High Roller II 3C/Forekaster

Maxxis High Roller II 3C/Forekaster 29x2.3/2.35in tyres Drivetrain SRAM X1 Eagle 32T, I70mm chainset, SRAM NX Eagle r-mech and 12sp shifter, SRAM PG-1230, 11-50t cassette Brakes SRAM Guide T four-piston, 180/180mm Components Whyte

6061 alloy 780mm bar, Whyte 35mm stem, KS RAGEi 170mm post, Whyte Custom saddle **Sizes** M, L, XL **Weight** 14.41kg (31.761b) **Contact** whyte.bike

GEOMETRY

Size tested XL Head angle 64.5° Seat angle 72.6° Effective SA 75.7° BB height 300mm Chainstay 450mm Front centre 835mm Wheelbase 1,285mm Down tube 785mm Seat tube 483mm Top tube 695mm Reach 505mm hyte's reputation for producing benchmark trail and enduro bikes is second to none. This UK brand's

design team doesn't seem to sit still, constantly refining dimensions, geometry, and specs. And it's not just the latest e-bikes and long travel rigs getting the attention – Whyte still has a strong focus on hardtails.

With no XC race bikes in its line up now, Whyte's aluminium trail 29ers are the brand's only hardtail offering in this wheel size. They sit alongside the much revered and test-winning 900 series bikes, which run 27.5in wheels and 2.8in rubber. And with Whyte making a shift from defining its bikes by model years, the latest evolution of the 629 is marked as V4 (dictating Version 4). There are two bikes using this frame platform – both SRAM and RockShox equipped, where the 629 tested here is the range topping model.

The V4 frame has had some genuinely useful refinements to its sorted predecessor, and fork travel remains the same at 120mm. Seat tubes have been shortened on all three frame sizes (by a whopping 50mm on the XL), allowing for longer stroke droppers while increasing standover clearance. There's also Improved clearance between the stays that allows for tyres up to 2.6in wide.

Sizing and geometry are areas which Whyte spends plenty of time on and the 629 certainly is the outlier for a 120mm travel hardtail. Sure, the 64.5° head angle paired with a short 44mm offset fork crown is now a common sight, but the long 450mm chainstays and 1,285mm wheelbase certainly aren't. Yes, the size XL is long – in every way – with a 505mm reach matched to a stubby 35mm stem. Factor in the low 300mm BB height and you really do feel centred and sitting in the bike.

SUSPENSION

With only 120mm travel you could misread this hardtail's intentions but the 629 is a carefully curated blend of numbers when it comes to suspension and geometry. The RockShox 35 Gold RL fork, with its 35mm stanchions and DebonAir spring means business, especially when it partners up with Whyte's frame layout and sizing.

There's enough travel to soak up medium-sized hits and the fork's stout stature helps the bike stay on track, resisting deflections in tight chewed-up turns. Torque Caps on the front hub help boost stiffness too. Would a longertravel fork make it even better? We're not convinced, and think it might even cause the bike to lose some of its magic.

COMPONENTS

There's nothing remarkable about the transmission; it's tried and tested – albeit heavy – SRAM NX Eagle, with a 12-speed 11-50t cassette and 32t chainring. Whyte has considered ground clearance though and fitted shorter 170mm crank arms to work with the low BB height.

The Whyte is the only bike on test with four-piston brakes, and SRAM's Guide Ts dish out modulation and power. As a result, stopping distances were noticeably shorter than on the other three bikes.

Whyte has not fitted huge rubber to this 29er, opting instead for a 3C compound 2.3in Maxxis High Roller up front paired to a faster rolling 2.35in Forekaster out back – so if you want increased cushioning or pedal clearance, bigger volume tyres are an easy addition.

PERFORMANCE

II HE

Take a quick spin round a parking lot and you might not instantly 'get' the Whyte 629, especially if you're coming from a smaller bike. But show it some trails, be they man-made or off piste, and everything makes instant sense.

The combination of a low bottom bracket, long reach and lengthy chainstays really do keep you centred on the bike, giving you bucket loads of confidence. So whether you're weaving through rooty singletrack or crashing down rock gardens, the Whyte always carries speed and remains calm and composed. The 35mm stem and short offset fork are a sweet combination, giving calm yet precise steering control, which just encourages you to ride harder in every situation.

VERDICT

Point the Whyte 629 up a greasy climb, down a sketchy chute, or into a series of sweeping trail centre berms and it never feels fazed. Slamming the 170mm dropper and using all the space the long reach gives, allowed us to steer the bike into terrain we wouldn't normally take a 120mm hardtail – and with ample braking power we were always in control and at ease.

On longer rides, the compliant ride quality and comfortable grips and saddle meant

we didn't get battered, even though there's scope for larger tyres to further smooth things out.





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HARDTAIL



Conclusion

n the introduction to this test, we discussed the different approaches that all four brands have taken when designing a 29er trail hardtail. Fork travel is the most noticeable variation, but add in a mix of chainstay lengths and tyre specifications and the results reveal four bikes with quite distinct personalities.

One area of consistency though, is hardware. Dropper posts, 1x drivetrains and a rethink of cockpit dimensions have brought a huge dose of ability to 29er trail hardtails, and all the kit on the bikes here tick those boxes, with very few complaints.

At £1,599 the Kona Honzo is currently the cheapest bike on test and stays true to its original concept – it's manoeuvrable, fun in the tight stuff and has bags of personality and pep. The only thing that's really missing is a model that sits between this entrylevel bike we tested and the top end Honzo DL at £2,399. We're cool with the 11-speed transmission, but feel the frame deserves a spec with more powerful brakes and a stouter fork that still comes in below the £2K mark.

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With three models in the range Nukeproof has no such issues and we quickly warmed to the Scout's smooth, compliant yet solid-feeling ride. The build kit is stellar too, with a strong gravity-focus. With this in mind we consider that its sizing feels a touch dated, as riders looking to push the Scout frame to its limits would definitely benefit from a shorter seat tube and a shade more reach.

Merida's engaging ride quality and feature-packed frame instantly impressed us – making it a very compelling choice. With its low weight and sweet handling the Big Trail 600 ripped, especially in drier conditions. It's game for wet, steep stuff too, especially if you upgrade to softer compound tyres. Also Merida offers the Big Trail in five frame sizes, so if you're 6ft 2in or over we'd recommend taking advantage of that and upsizing to the XXL.

So that just leaves one bike. With its relatively narrow 2.3in tyres and 120mm travel fork, the Whyte 629 V4 doesn't have the look of a hardcore hardtail. But don't be fooled by its limousine-like proportions, as the Whyte soon became the reference point for this test. It rarely put a foot wrong and had us pushing hard, searching for limits – ours and its – both uphill and down.

Yes, Whyte's price hike over the



course of the test from £1,750 to £1,999 makes it the most expensive bike in test, but given that it also has a sublimely forgiving ride quality, an enlightened blend of geometry figures and a well chosen spec it's the one hardtail here that that had us completely hooked. Also all of the brands here are in the same boat, so there's potential for price increases from Kona, Merida and Nukeproof as we head further into 2022.

The hike still stalled us though, questioning the 629's value and made us evaluate the bigger picture. With aluminium hardtails from boutique brands now nudging the £3,000 mark - with spec's not a world apart from the Whyte's - we remain convinced that the rating should remain unchanged. The Whyte 629 V4 is the bike that impressed us the most and in many ways mirrors its stablemate, the 905, in setting new hardtail standards, this time for 29ers. Ultimately the Whyte 629 V4 is balanced, composed, stable and precise, and whether you're a relative beginner, or an experienced trail rider, you'll instantly become addicted to its ways...

You'll instantly become addicted to its ways...

WHYTE 905

If your riding dictates a more enduro-focused

on stout 27.5in wheels, with meaty 2.8in tyres,

hardtail then the 905 should hit the spot. Rolling

the Whyte 905 has more cushioning and traction

than the 629, especially when combined with the

130mm travel RockShox Pike Select RC fork. It's

also a perfect 10-rated mbr test winner and the

£2,099

TEST

RANGE FINDER

Our test winner's stablemates

WHYTE 529 V4 £1,650

Using the same V4 frame as our test winner, the 529 is an excellent entry point to some serious trail riding. A 120mm RockShox Recon RL fork leads the charge, and with a dropper post and the same bar and stem as the 629, the riding position is mirrored too. Pair the SX Eagle 12 drivetrain with powerful four-piston Tektro disc brakes and the 529's spec isn't left wanting.



ALL THE INFO

Specification & geometry

While all are 29er trail hardtails, there's a marked difference in chainstay lengths on our four test bikes. At one end of the spectrum we have the Kona with super-short 415mm stays, at the other end Whyte's eyebrow-raising 450mm rear end.

What's more of interest though, is that the chainstay lengths on all of these test bikes don't vary with frame size, unlike many of the forward thinking full-suspension designs from brands such as Norco, YT and Forbidden.

To give a more balanced ride across the full range of frame sizes we'd like to see this concept applied to hardtails too. A short rear centre may keep the Kona lively and suit sizes small and medium perfectly, but is it compromising stability on the larger sizes? And is the balance and poise that the 450mm stays bring to the Whyte 629 longer than ideal on a size M? Hard question to answer, but we will say that size specific stays should be the next evolutionary step in hardtail development.

Mighty Whyte

keep on coming...

the hits just



	Kona	Merida	Nukeproof	Whyte
A Head angle	66.5°	65.1°	64.5°	64.5°
B Seat angle	74°	74°	71.7°	72.6°
C Effective seat angle	76.8°	75.8°	73.3°	75.7°
D BB height	312mm	308mm	303mm	300mm
E Chainstay	415mm	435mm	435mm	450mm
F Front centre	787mm	790mm	794mm	835mm
G Wheelbase	1,202mm	1,225mm	1,229mm	1,285mm
H Down tube	750mm	760mm	760mm	785mm
Seat tube	455mm	455mm	515mm	483mm
J Top Tube	645mm	653mm	675mm	695mm
K Reach	479mm	475mm	475mm	505mm

Make/Model	Kona Honzo	Merida Big Trail 600	Nukeproof Scout 290 Comp	Whyte 629 V4
Price	£1,599.00	£1,675.00	£1,799.99	£1,999.00
Weight	14.77kg (32.56lb)	13.86kg (30.55lb)	13.95kg (30.75lb)	14.41kg (31.76lb)
Contact	konaworld.com	merida-bikes.com	nukeproof.com	whyte.bike
FRAME				
Sizes	S, M, L, XL	S, M, L, XL, XXL	M, L, XL	M, L, XL
Size tested	L	XL	XL	XL
Frame material	6061 butted aluminium	Aluminium	Triple butted aluminium	6061-T6 aluminium
Suspension fork	RockShox Recon RL, 51mm offset	Marzocchi Bomber Z2, 44mm offset	Marzocchi Bomber Z2, 44mm offset	RockShox 35 Gold RL, 44mm offset
Rear shock	N/A	N/A	N/A	N/A
Front travel	120mm	140mm	130mm	120mm
Rear travel	N/A	N/A	N/A	N/A
WHEELS				
Hubs	Shimano 110/148mm	Shimano MT400/410 B 110/148mm	Sun Ringle 110/148mm	Sealed bearing 110/148mm
Rims	WTB ST i30 TCS	Merida Expert TR 29	Sun Ringle Duroc 35 Comp	WTB ST i27 TCS 2.0
Spokes	Stainless	Stainless	Stainless	DT Swiss Champion 2.0mm
Front Tyre	VeeTire Flow Snap Tackee 29x2.35in	Maxxis Dissector DC EXO 29x2.4in	Maxxis Assegai MaxxTerra EXO, 29x2.5in	Maxxis High Roller II 3C EXC 29x2.3in
Rear Tyre	VeeTire Crown Gem DCC 29x2.3in	Maxxis Dissector DC EXO 29x2.4in	Maxxis Dissector MaxxTerra EXO+ 29x2.4in	Maxxis Forekaster DC EXO 29x2.35in
GROUPSET				
Chainset	Shimano Deore 30t 175mm	Race Face Ride 32t, 175mm	Shimano Deore M6100 32t, 175mm	SRAM X1 Eagle 32T, 170mm
Bottom bracket	Shimano BSA	Race Face BSA	Shimano BSA	SRAM DUB BSA
Derailleur	Shimano Deore	Shimano Deore M6100	Shimano Deore M6100, SGS	SRAM NX Eagle
Shifter	Shimano Deore 1x11sp	Shimano Deore M6100 1x12sp	Shimano Deore M6100-IR 1x12sp	SRAM NX 1x12sp
Cassette	Shimano Deore 11-51t	Shimano Deore M6100 10-51t	Shimano Deore M6100, 10-51t	SRAM PG-1230 Eagle, 11-50
Brakes	Shimano M4100 two-piston	Shimano M4100 two-piston	SRAM Level T two-piston	SRAM Guide T four-piston
Rotor sizes	180/160mm	180/180mm	200/180mm	180/180mm
COMPONENTS				
Handlebar	Kona XC/BC 780mm (35mm)	Merida Expert TR 780mm (35mm)	Nukeproof Neutron V2 800mm (31.8mm)	Whyte 6061 alloy 780mm
Stem	Kona XC/BC 50mm	Merida Expert TR 50mm	Nukeproof Neutron AM 45mm	Whyte 35mm
Seatpost	TranzX + Rad 200mm	Merida Comp TR 175mm	Brand X Ascend 170mm	KS RAGEi 170mm
Saddle	Kona Trail	Merida Comp SL	Nukeproof	Whyte Custom
Rating	8	B	B	

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WRECKED & RATED BIKETEST



bike's dynamic geometry feeling calmer. While this could, potentially, compromise front-end comfort and bump-swallowing, it's not an issue here, because the Ragley's alloy frame is so comfortable and compliant. Even with its lower-volume tyres, the Mmmbop dulls vibrations and trail feedback noticeably better than the 905, and there's never the same sense of small square-edged impacts being really jarring and hitting your feet and legs with sharp jabs at speed. The Whyte is no 'nail', it's just that the Ragley frame is exceptionally supple and comfy. This smoothness translates to more effective absorption of small bumps and rough surfaces out of the saddle, and a slightly more planted feel on the ground, without the Mmmbop ever feeling so 'soft' that it lacks responsiveness or precision.

The stiffer Shimano/Race Face drivetrain on the Ragley ensures that power transfer feels tighter and more positive, too (with the flexier NX cranks on the Whyte not seeming to add any extra comfort). This is boosted by the Mmmbop's zippier Nukeproof Neutron wheels, which feel like they accelerate quickly and aren't too heavy when you're slogging up tarmac climbs and smooth fireroads.

So, Ragley's easy-to-manual bike is stiff and solid, but also smoother, feels faster across the ground in most scenarios, and its parts spec works better overall. Sounds like we have a test winner, right? It's not that simple, and you can't write off the 905 that easily, because in terms of handling, Whyte's lower-to-the-ground, corner-schralping design is always more fun and engaging, as well as more stable and assured over demanding terrain. If the trails lack flow, the 905 miraculously eggs you on to find some, and the rider position and balance (front to rear, with the longer stays) is spot-on.

We love how your feet sit really low and right 'inside' the bike, and the steering feel is perfect, too. Basically, Whyte have nailed the handling here, with the fork's increased trail (how far the tyre contact patch 'trails' behind the steering



axis) acting like a steering damper that keeps you from twitching around, while the low centre of gravity means it's simultaneously easy to tip the bike from side to side. The resulting ride feels natural from the off. You can fling your weight through turns much better than on the Ragley, as well as cut and swap from side to side in a livelier fashion, if you want to play and jib about on the trails. A further benefit, if you're into hitting jumps, is that with your feet lower to the ground, it's easier to compress your bodyweight to pump the face of the lip for more airtime.

THE VERDICT

If Ragley's Mmmbop had the same low BB as Whyte's 905, we reckon it'd be a superior bike. It's tough and durable, the parts selection is top-notch, and the frame is noticeably smoother and more comfortable. Regardless of the BB height, it's still a more efficient bike for long rides and one that feels faster on shallower, flowy terrain and when climbing. The Whyte is also seriously hamstrung by its fatter Maxxis tyres, which surf on mud and will be a winter deal-breaker if you live somewhere with thick, slimy soil.

All that said, you simply can't ignore the 905's exceptional handling, especially when the terrain gets steeper and more challenging. Even with inferior parts in places and a less fluid feel over rough ground, the Whyte puts

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CURVY STAYS The Whyte's S-shaped seatstays are designed to help absorb impacts and vibrations, and also to provide more

tyre clearance.

JARGON



such a smile on your face at times that it's hard not to love it. It's one of the few hardtails that you can ride almost as hard and fast downhill as a full-sus bike, mainly because you're in the same stable, planted position, with feet and hips low through flat turns and berms, and a weight-rearward bias down the steepest trickiest, janky sections.

A priority for 650b hardtails is to be chuckable and reactive to body shifts, so we've given the Whyte the nod here, while acknowledging it's not perfect. More so than the Mmmbop, with its decent but not outstanding handling, the 905 just seems to help out with whatever you want to do and wherever you want to point it. On top of this, its steering reacts in exactly the way you expect it to, every single time you turn the bar, and it balances a planted and undeflectable feel with the ability to switch direction quickly and precisely. Plus, the low BB and shorter fork mean the rider position remains stable, no matter how hectic the trails get.

There are drawbacks with some of Whyte's kit, however. In particular, there's no way to sugar-coat

the 2.8in-wide tyres simply not working well in the UK winter if you ride anywhere with thicker or slimier soils and greasy surfaces that lack the grit and friction of sandier or thinner dirt. The 35mm (internal) WTB rims mean you can't easily swap the plus-size rubber for something skinner, either, because the wheels'

ITS CORNER-SCHRALPING DESIGN IS FUN AND ENGAGING, AND IT FEELS ASSURED OVER DEMANDING TERRAIN

width will cause 2.5in or narrower rubber to splay out too much at the base – pulling the BB so low to the ground that there'll be a danger of too many pedal strikes, even with 170mm cranks – and will also alter the tyre profile, potentially reducing grip and cornering consistency. Remember to factor this into any buying decision between this pair.

NEXT MONTH

BIKE PARK BOMBERS Big-hitters from Intense, Propain and YT battle it out On sale 16 March

 MBUK
 VERDICT

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 *

 RAGLEY
 MMMBOP 1.0
 £1,999.99

Smooth-riding, tough and well-specced, the Mmmbop is a sorted package for the cash, although we'd prefer a lower BB height for a more dynamic cornering feel







The 905's handling and ride quality are superb, although some kit choices aren't perfect, and Whyte's latest bikes aren't as good value as previous generations, either



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Do you go for 1x or 2x gearing for gravel riding?

bike TEST

Do you go for 1x or 2x gearing for gravel riding? We tested two of Whyte's latest affordable alloy gravel adventure bikes to find out

WORDS GUY KESTEVEN IMAGES MICHAEL KIRKMAN

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tretching from rough commuter roads to mountain bike territory, the 'gravel' category covers a vast range of potential uses and riders. Unsurprisingly that means manufacturers are lining up various options. While geometry, fixtures, tyre clearance and performance priorities are important to finding the right bike, one of the main decisions is whether you go for a bike with a double or single chainring.

Running a single chainring with a wide-range cassette first caught on in mountain biking. The front mech-free simplicity suits wider tyres and the sudden changes of speed and terrain make bigger jumps between gears an advantage. Whyte was one of the first manufacturers to produce 'SCR' – Single Chain Ring – mountain bikes to maximise the clearance and stiffness advantages of gaining extra space in the bottom bracket area. So who better to get a pair of bikes from?

Whyte also pushed SCR early in its cyclocross bikes – proto-gravel machines that pioneered fat tyre compatibility and long, slack geometry – before single rings became standard in cross. Along with 3T, Whyte also went early on the road with 1x, but the big gaps between gears have always been a harder sell here. Even single-ring evangelist SRAM





The Friston's kinked seatstays and its handlebarmounted remote control for the dropper seatpost

has softened its zealotry on gravel, introducing Wide Range 2x partly as a response to the success of Shimano's 2x GRX gravel components.

But while gears are the obvious difference between Whyte's Friston and Dean 'adventure/ gravel' bikes that's only part of a story that can tell us a lot about where gravel is – and where it's going.

GOD'S OWN (CYCLING) COUNTRY

Yorkshire is a great place for cycling with a diversity of rapidly changing terrain and landscapes with excellent back roads and rights of way running through them. These can not only transport you into the wilds within minutes even from its major cities, but they can also reveal new options even in areas you've ridden for decades. Having already tested the two Whytes on my normal test routes, I chose just such a recently discovered loop for the final head-to-head comparison and photoshoot.

As I arrive in Kirkby Malzeard on the Dales' eastern edge, my test wingman Ryan has already got himself a coffee and checked out the food shops for later before we roll through the village and into a side road. While I've spent a lot of time on Whyte bikes, the geometry does still take some adjusting to at first, the long reach stretching me out over the short stem and there's a lazy feel to the 70-degree head angle and 460mm bar. Ryan's Friston gets a 500mm bar that feels huge on the road.

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Ryan's already grumbling about the wider gaps between the gears on his Friston's 1x setup compared with my 2x Dean, and the Friston's Maxxis tyres on wider rims are also dragging more. But when we turn down an ancient drovers' track that turns into a rocky descent, the first drawback of the Dean's twin chainrings becomes obvious.

Even with the rear mech clutch, the chain is thrashing around on the chainstays and I'm hovering precariously above the high, fixed saddle. Ryan has dropped his saddle using the handlebar remote so he can make the most of the Friston's confident, mountain bike-inspired handling. His 1x set up is also totally silent as he blasts past me.

I'm grinding gears between the chainrings as we claw up a steep slope while Ryan's sequential setup is simplicity itself, letting him concentrate on choosing the perfect line over rocks. He shows off again on the next off-road section where deep sand provides a playground to showcase just how much the Friston, in particular, likes fooling around. Both bikes are ahead of the pack when it comes to more technical terrain, though, and we're having a blast flying through the sun-strobed woods and across a slipperv shallow ford.

Whyte has chosen the Dean's 46/30T chainrings and 11-36 cassette well. While most 2x setups have several duplicated gears, the only overlap here is in the small-to-small gear you should never use. As

we inch our way up a steep road out of the woods its smaller steps to a lower bottom gear help me stay at the ideal cadence and I spin between dry stone walls all the way up to the moors.

While you'd think the lack of a front mech, cable and shifter would make the 2x bike heavier, the system's smaller cassette means there's normally only a few grams in it. Other heavier kit on the cheaper Dean still makes it nearly a kilo weightier than the Friston, and

as the road turns from

tarmac to rocky track,

While both bikes'

wide riser bars have

been great for extra

control on descents,

they're not quite so

good for hiding you

from headwinds, and

Ryan is rolling more easily on his bigger tyres.

RYAN'S ALREADY **GRUMBLING ABOUT** THE WIDER GAPS BETWEEN THE GEARS ON HIS 1X FRISTON COMPARED WITH MY 2X DEAN

it's not just the weather blowing as we crest Fountains Earth Moor. But the views down into Nidderdale are stunning, and as we swing towards the crags on the next horizon we're rewarded with a healthy tailwind.

Ever larger rocks all over the tracks mean we're now in mountain bike territory, and it's no surprise the Dean's lighter front tyre gets holed on a rock as \rightarrow

WHYTE FRISTON V4 £1850

SPECIFICATION

Weight 10.34kg (54cm) Frame 6061 Forke Solo hydroformed alloy Fork Full carbon disc Gears Whyte 38T, SRAM Apex 1 shifters and rear derailleur, SRAM XG1150 10-42T

11-speed cassette. Brakes SRAM Apex 1 hydraulic disc. 160mm rotors Wheels WTB ST i25 TCS 2.0 rims with DT Swiss Champion spokes and double-sealed cartridge bearing hubs **Finishing kit** Whyte by Control Tech alloy 500mm riser bar, Whyte 80mm alloy stem, TranzX 80mm travel dropper seatpost, Whyte Custom tripledensity saddle Maxxis Rambler T45c tyres

HIGHS

Super-confident handling

LOWS Wide-bar handling; big gaps between gears

BUY IF

You want a gravel bike that's fun, versatile and will push to the limits of mountain biking

GRAVEI



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<u>BIKE TEST</u>



HOW TO SINGLE RING YOUR BIKE

While just taking off one chainring will give you a lx setup of sorts, you're almost certain to have a compromised gear range and the chain is unlikely to stay on in the rough. Even fitting a narrow/ wide tooth chainring (we'd recommend a 38-427 ring depending how hilly your riding is) to secure the chain will leave your gear spread limited. That means you'll need to add a wider cassette, with 10/11-42T the go-to choice, but that'll almost certainly need a longer cage mech to cope with the bigger gears. So, yes, it is reasonably easy to do - but it can work out quite expensive.

the Whyte's long-reach geometry makes bombing into the first descent just a little too tempting.

Thankfully Whyte has set up both bikes tubeless so two tyre plugs later and I'm rolling again, albeit a little more cautiously. Ryan is feeling smug about the Friston's dropper post, silent chain and bigger tyres as we weave through the rocks and sand traps of the final seven kilometres of trail. My faster tyres and closer gears do give me some payback on the back roads into Kirkby Malzeard, however, and I'm first back to the butchers Ryan scoped out earlier for the steak pie I'd been thinking about for a while.

GX APPEAL

Whyte's Friston sits between its Glencoe V3 with its 1x, 650b tyres and the same fork as the Dean – and Whyte's top-of-the-range Gisburn V4, which has the same frame and fork but a Shimano GRX groupset. Whyte has done a great job making sure the Friston has all the qualities that make its GX – Gravel Adenture – bikes more capable than most

THE FRISTON'S LONG AND LOW FRONT END DELIVERS HANDLING THAT Stays straight While others TRIP UP WHEN THEY TAKE A HIT production gravel bikes.

Its slack, long and low front end delivers handling that stays straight while other bikes get bullied off line or trip up when they take a hit. The extra reach also positions you centrally for confident cornering that's boosted further by its low-slung bottom bracket. This debuted on Whyte's 2010 Saxon Cross before being

taken on by other brands. The plugged internal cable routing and guides are single-ring specific and the Friston also gets a neat rubber seal around the seat clamp. The brace-free back end does mean there are no conventional mudguard mounts but there's clearance for 50mm tyres. The full-carbon fork has triple bolt bosses for bags or bottles.

Whyte has used its own 1x chainset, SRAM's least expensive Apex gears and levers and plain gauge spokes – but these are quality DT items and the brass nipples are easily adjusted if they're bent out of shape. The WTB rims' 25mm internal width supports the Maxxis tyres well and they're set up as tubeless. Trimming costs on wheels

MHYTE









SPECIFICATION

Weight 11.24kg (54cm) Frame 6061 hydroformed alloy Fork Alloy disc Gears Whyte 46/30T chainset, Shimano GRX 600 shifters, GRX 400 derailleurs, 11-36T 10-speed cassette Brakes Shimano GRX 600 hydraulic disc, 160mm rotors Wheels Whyte RG-7 double-sealed cartridge bearing hubs Finishing kit Control Tech 460mm riser bar. Whyte 80mm stem, 27.2mm alloy seatpost, Whyte Custom triple-density saddle, Schwalbe G-One Bite 40c TL Easy tyres

HIGHS

Smooth, confident ride; great price

LOWS Chain slap in the rough; reduced tyre room; stiffer, mount-free fork

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and transmission leaves room in the budget for a dropper seatpost with a neat remote control inboard of the left-hand brake lever on the 500mm wide bar.

SLIP SLIDIN' AWAY

The extra leverage offered by the wide bar through the short, size-specific stem helps you make the most of the stable front end and its low centre of gravity, which in turn lets you take the tyres to their sliding limit and bring them back safely.

Being able to drop the saddle gives you space to properly chuck the bike around, which liberates the Friston over rocky lips, sand traps and twisting singletrack. The smooth carbon fork and multibutted frame help shrug off the knocks on rougher tracks, making the Whyte feel more alive than some of the dull, entry-level carbon bikes that will cost

you more.

THOUGH THE DEAN HAS A LESS OFF-ROAD FEEL. IT IS STILL SIGNIFICANTLY MORE STABLE AND SUREFOOTED THAN MOST GRAVEL BIKES

The Friston's wider rims and tougher Maxxis tyres meant we didn't have any punctures despite pushing past sensible speeds on rocky moorland trails. They roll well too, and the Friston is fine joining the dirt dots together on the road as long as

you bring your hands into the middle of the bar to reduce drag. When you factor in the dropper post the weight is reasonable too, so while the jumps over the 11-speed cassette can mean more spinning and stomping than on the Dean, it's a quicker, more eager climber and a more responsive bike overall.

The Friston's mountain bike vibes might be overkill for gravel, but if you like to push the limits you'll love the confidence it gives. SRAM's Apex does a fine job fine, while the dropper post, cargo fixtures, clearance for 50mm tyres and a responsive ride that's smooth over rough terrain make it versatile, great value and tons of fun.

AND RELAX...

The Dean is Whyte's cheapest GX bike but it shares the same relaxed 70-degree head angle and long 425mm reach (54cm) alloy frame as the other bikes in the range. The extensively shaped tubes include a flat leaf spring-style top tube and a down tube with rubber-sealed internal cable routing.

The frame has fittings for three cages and top tube bosses but lacks the spray guard mount under the down tube and the Friston's rubber seal on the seat tube. The back ends are different too, with braces between the stays and narrower necks at the mainframe end to give clearance for the twin rings and mounting points for mudguards, though tyre clearance is down to 45mm. The Dean's alloy fork



doesn't have triple mounts, but the same short offset geometry does keep it stable over tricky terrain.

The big difference is the double chainset Whyte uses along with Shimano's GRX 400 gears and brakes, though you do get higher-spec GRX 600 shifters and levers. The smaller jumps between gears suits road riding and less challenging surfaces and the tiny treads of the 40mm tyres reflect this. The bar and stem are size specific, so smaller riders will get conventional width bars, with only XL frames getting a 480mm bar.

ROCKY ROLLER

Though the Dean has a less off-road feel than the Friston, it's still more stable and surefooted than most gravel bikes. That lets us push the pace on loose rocks, gravel, sand and slippery fords and it's a predictable bike even when loaded for bikepacking. That does mean it needs more of a knee-in to get it to commit to corners, and some will find the handling too slow for the road. You also need to remember the long top tube reach when sizing.

It takes some watts to get the 11.3kg weight rolling but the frame is enjoyably buoyant and Schwalbe's fast-rolling tubeless tyres help sustain speed once rolling. The curved frame and stays absorb shock well when things get rough although the chain slap can get noisy at times. The alloy fork is smooth too, though not as damped as the Friston's carbon fork.





In spite of the mech's clutch there was some chain slap, and though we punctured, a couple of plugs sorted it

While most affordable gravel bikes are quite generic, the Dean's confident, long-reach geometry, tubeless tyres and speed sustain help it to take technical trails in its stride. Aside from chain slap, Shimano's GRX was flawless with plenty of braking power. Fixtures for accessories and sealed cable routing make it a good value, versatile all-rounder.

A TOUCH OF FRISTON

While this test's original aim was to highlight the differences between 2x and 1x transmissions, heading into the wild taught us a lot of other things – primarily that with the right kit to make the most of Whyte's slacker, longer and lower geometry you really can take a gravel bike into the sort of mountain bike territory that first inspired that geometry in the first place and come back grinning.

Even the double-ring Dean is a lot lighter and rolls faster than a similarly priced cross-country mountain bike. Its mudguard mounts and its greater number of more closely spaced gears make it a better choice for riders who want an every-day workhorse and a weekend explorer.

But if you always take any singletrack shortcut or just want to make the most of the charismatic confidence offered by Whyte, then the Friston is worth finding the extra money for. It's an outstanding ride and its practical, weatherproof details make it ideal for the long haul. and









