

WHYTE 909 X

£3,500

ow, you are probably thinking, £3.5k for a hardtail and the frame isn't steel or carbon? Well, we thought the exact same thing when the 909 X arrived, and even joked that maybe the X was shorthand for expensive.

So what exactly does that kind of money get you from the brand that's synonymous with great British hardtails? In short, you get a seriously cool bike. Obviously, at this price, the specification is top-notch, and includes a 130mmtravel RockShox Pike Ultimate fork and wireless SRAM GX AXS drivetrain, but it's actually the 909 X's alloy frame that's the standout feature here. And it's the exact same frame Whyte uses on all three models in the 900 series Enduro range. So if £3.5k is too much for you to swallow, you could pick up the 901 for £1,850.



But enough about money, let's take a closer look at the frame. Features like the bridgeless stays and sealed grip seat collar make the 909 X a winter-friendly ride, while the curved stays out back make it a joint-friendly one. Yes, the bendy profile of the stays provides a modicum of extra clearance for the high volume 27.5in Plus tyres that the 900 series Enduro hardtails roll on, but the real advantage of the more convoluted approach is that it makes for physically longer stays, not a longer rear end. This in turn makes them easier to flex, and stays that are easier to flex provide a more compliant frame.

Combine the high-quality frame with the high-volume 2.8in Plus size Maxxis tyres, and the Whyte 909 X offers unparalleled levels of comfort, grip and control. Now, we're not taking full-suspension levels here, as it's only the difference between a 2.4in tyre and a 2.8in, which translates to a couple of psi lower pressure in the bigger tyre. But it is a noticeable improvement and it's really appreciable on rougher trails. It's also the key reason why we'd like to see more MX hardtails at all price points, as fatter rear tyres have real world advantages on hardtails.

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Shorter-travel forks have obvious advantages on hardtails too, namely that they help limit dramatic swings in geometry, and better match the lack of travel on the rear. So the 130mmtravel RockShox Pike Ultimate is a great choice. And the Ultimate version is packed with features, like bleed ports

on the back of the lower legs that make it easy to purge any air that's been sucked past the seals. It also has Butter Cups, small inserts that sit between the damper and air-piston shafts where they attach to the lowers, that help reduce high-frequency vibrations.

And it isn't just the Pike chassis that's been given a refresh, the Charger damper has been updated to the 3 version and in the opposite leg you now get the DebonAir+ spring, where the air spring has a smaller negative chamber than, say, the Lyrik or Zeb, just to give it a more sporty response off the top, which again helps maintain a more stable ride.

RockShox forks have had oversized Torque Cap-compatible dropouts for a while now, but we can count on one hand the number of bikes that use the interface to boost stiffness. The Whyte 909 X is one such bike, the front hub making full use of the 31mm interface to shore things up. Best of all, if you want to use a standard hub to detune stiffness or simply run a different wheel, RockShox supplies bolt-in reducers that make it really easy to locate the smaller hub end caps in the dropouts and ultimately slot the 15mm front axle in.

COMPONENTS

Whyte matches the cockpit on the 909 X to the wheel size and the fork offset, both of which are unique in this test. The basic idea is that Whyte likes to fit a stem length that's shorter than the fork offset. So in this instance the fork offset is 37mm and the stem length is





35mm. That's the theory. In practice this leads to a more reactive steering response, even with the bigger footprint of the 2.8in Maxxis High Roller II front tyre. Some riders will love that direct connection with the trail, which after all, is part of a hardtail's appeal. We found that fitting a slightly longer stem calmed the steering response down a touch, which made it easier to correct mid-turn without it feeling overly sluggish and this ultimately allowed us to ride faster





and harder. Which is exactly what the 909 X has been designed for.

We're no stranger to SRAM's AXS electronic shifting but this is the first time we've used it on a hardtail. Obviously it pumps up the price of the 909 X compared to the Shimano-equipped bikes in the test, and it's definitely more of a nice thing to have, rather than need-to-have feature. Still, it was clear after just one particularly muddy ride that the SRAM chain/cassette/rear mech interface is so much quieter than Shimano's when contaminated with mud.

PERFORMANCE

Truth be told, on proper off-road trails, you simply can't ride as fast on a hardtail as you can a full-suspension bike, even one with Plus-size tyres. So all other things being equal, you don't need as powerful brakes on a hardtail. As such, the SRAM G2 brakes on the Whyte are more than adequate, not least because the rear wheel is in the air half the time. They were also less grabby than the Shimano brakes in this test, which helps with modulation.

Get on the gas and the Whyte isn't as snappy as the Identiti, but it's got noticeably more punch than the Nukeproof. Part of the delay in getting up to speed is the sluggish freehub engagement, but there's also no getting around the weight penalty of the heavier Plus-size tyres. It's a compromise that we're more than happy to accept though given how much speed the 909 X can carry. With the tyres working overtime to smooth out the trail beneath the 27.5in

wheels, smaller roots and rocks don't chip away at your speed to the same degree as on bikes with regular tyres.

On the climbs there's little separating the Whyte and the Nukeproof. The Whyte is more comfortable, the Nukeproof more stable. Get into axle-deep braking bumps, however, and the fatter tyres and compliant frame of the 909 X really take the edge off impacts. In fact, the only downside of the Plus-size tyres is that they don't cut through deep slop as effectively as a 29er with regular tyres, so the Whyte 909 X probably isn't as good of a pure winter bike as the Nukeproof Scout 290 or even the Whyte 629. Still, if you're looking for one bike to conquer all trails and it just has to be a hardtail, then Whyte's 909 X should be top of your wish list.

VERDICT

Who said Plus-size tyres were dead? Clearly Whyte doesn't think so and after testing the 909 X we wholeheartedly agree that they still have a seat at the wheel size table. Not only do the higher-volume tyres provide some much-needed cushioning, they increase grip and control massively too. And taken with the dialled geometry and finely tuned flex in Whyte's alloy frame, the 909 X is the closest thing here to riding a soft-tail. Does the high-end build kit with electronic shifting advance things even further? Not really, so the smart money is still on the 905 at £2,099.

A more pressing question though is if the 909 X would be even better as a 909 MX? We certainly think so.

Conclusion

rail hardtails have come a long way since the early days of mountain biking. But if there is one thing that's obvious from this test, it is that there's still plenty of room for improvement. And, at the risk of sounding like a disgruntled teacher scribbling an end-of-year report for a child who clearly has talent, the bikes in this test all show potential, but must try harder if any are to achieve a distinction.

And the crazy part is; we think the blueprint for success is glaringly obvious. Design your trail hardtail around a 29in front wheel and a 120mm-travel fork to improve rollover and maintain stability in the geometry, then fit a 27.5in rear wheel with a Plus size tyre for better traction, comfort, strength and control. It really is that simple. And it's not enough to just go MX, the Plus-size rear tyre is essential to make it work.

With that in mind, brands could even use interchangeable dropouts to make the MX Plus frame compatible with 29in rear wheels. That way you could change the wheel size and tyre width depending on the season or terrain. More mud clearance in winter with 29in when the trails are softer and slower. more comfort and traction with 27.5in Plus come summer when the trails are rock-hard and rolling faster.

And there are other features from this test that we'd like to see included. Like the adjustable dropouts from the Identiti AKA that allow the rider to tweak the weight distribution of the bike really easily, rather than being locked into one predetermined set-up. Yes, we are aware that the main reason most brands don't use adjustable dropouts is the increased cost involved. So we'd settle for the size-specific chainstays lengths on the Nukeproof Scout.

Testing the Identiti also highlighted the potential to go shorter on the chainstay lengths rather than matching them to full-suspension bikes. And that's because hardtails pivot around the rear axle as the suspension compresses, making it much easier to load the front end, so even with shorter stays the bike can still feel

The Whyte 909 X's high-volume tyres give it a distinct advantage

really balanced. Also, we found the responsiveness of the shorter stays on the AKA to be really fun, so there's an argument for keeping the rear wheel tucked in tight to the back of the seat tube, at least on the smaller frame sizes.

Riding the three bikes back-toback also highlighted the need for a rapidly engaging freehub. With no rear suspension and the associated pedal kickback to contend with, the faster you can get on the gas, the better to maintain speed as the lack of rear suspension means that even small bumps are constantly chipping away at your momentum.

And while smaller wheels and tyres still have their place for more dirt-jump style riding, on an out-and-out trail bike their day has long since passed. 29ers dominate XC and trail riding for good reason, but hardtails are a unique case. With no rear suspension, you need more tyre volume on the rear, so Plus size is the way to go. You can literally feel this in your bones when you ride the Whyte 909 X; its high-volume tyres give it a distinct advantage here, while the geometry, frame feel and handling are all on point too, making it the winner of this test by a small but appreciable margin. At £3.5k though, you could easily buy a very capable full-suspension bike that would out-ride the Whyte in almost every department. Food for thought, if you're thinking of having one bike to rule all trails.



RANGE FINDER

Our test winner's stablemates

WHYTE 901 ENDURO

£1,850

While it's nice to have all the best kit, the entrylevel Whyte 901 still has everything that makes the top-end 909 X so darn good. You get the exact same alloy frame, with identical geometry and sizing. It has 27.5in wheels, where the 35mm rims are shod with the same 2.8in bumpabsorbing Maxxis tyres, so traction and control will be on par too. There's even an additional XS frame size, so smaller riders can enjoy the exceptional ride quality too.



WHYTE 529 TRAIL HARDTAIL

£1,650

Looking for something a little less aggressive than Whyte's 900 series Enduro hardtails? Then check out the Whyte 529 Trail Hardtail. Designed around 29in wheels and 2.4in tyres, this alloy hardtail shares a lot of its stablemate, the 909 X's, test-winning DNA, including the comfy, curvy stays and 130mm-travel fork. Other highlights include the 12-speed SRAM SX Eagle drivetrain and tan-wall Maxxis Ardent tyres.





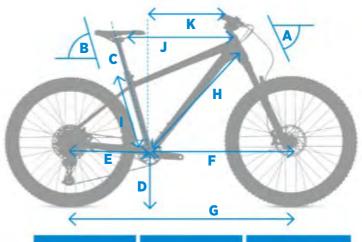
ALL THE INFO

Notes on the numbers

Bike geometry and sizing are measured with the bike static, so with zero suspension sag. It's not perfect, but better than trying to guess how much sag the rider will ultimately run. And while this approach works just fine when comparing apples to apples, you need to

understand that while the angles on a full-suspension bike slacken and the reach gets shorter under the weight of the rider, hardtails get steeper and longer.

It's the main reason we opted for bikes with 440-450mm reach measurements, which is shorter that we'd typically run on a full- susser, but we knew that the reach would increase by just over 10mm as the forks compressed. It's also why good trail hardtails typically start out slacker than full-suspension bikes.



	Identiti	Nukeproof	Whyte
A Head angle	64.5°	64.2°	64.4°
B Seat angle	73.5°	71.3°	74.2°
C Effective seat angle	73.5°	73.6°	74.2°
D BB height	298mm	307mm	298mm
E Chainstay	420-435mm	435mm	440mm
F Front centre	770mm	782mm	766mm
G Wheelbase	1,190-1,205mm	1,217mm	1,206mm
H Down tube	717mm	742mm	722mm
Seat tube	450mm	440mm	440mm
J Top tube	625mm	634mm	620mm
K Reach	440mm	451mm	451mm

Make/Model	Identiti AKA XT/LTD	Nukeproof Scout 290 Elite	Whyte 909 X
Price	£3,250	£2,499.99	£3,500
Weight	13.52kg (29.81lb)	14.03kg (30.93lb)	13.61kg (30.01lb)
Contact	identitibikes.com	nukeproof.com	whytebikes.com
FRAME			
Sizes	S, M, L	M, L, XL, XXL	S, M, L, XL
Size tested	М	L	M
Frame material	Double-butted aluminium	Custom-butted aluminium	6061-T6 custom-butted aluminium
Suspension fork	MRP Ribbon Air, 44mm offset	Fox 36 Float Rhythm, 44mm offset	RockShox Pike Ultimate, 37mm offset
Rear shock	N/A	N/A	N/A
Front travel	140mm	140mm	130mm
Rear travel	N/A	N/A	N/A
WHEELS			
Hubs	Identiti 110/148mm	DT Swiss 370 110/148mm	Alloy sealed 110/148mm
Rims	Halo Vapour 35	DT Swiss M1900	WTB ST i35
Spokes	Stainless	Stainless	DT Swiss Champion 2.0
Front Tyre	Schwalbe Hans Dampf ST Addix Soft 27.5x2.35in	Schwalbe Magic Mary ST Addix Soft 29x2.35in	Maxxis High Roller II EXO 3C 27.5x2.8in
Rear Tyre	Schwalbe Hans Dampf ST Addix Soft 27.5x2.35in	Schwalbe Nobby Nic DD Addix 29x2.35in	Maxxis Rekon EXO DC 27.5x2.8in
GROUPSET			
Chainset	Shimano XT M8100 34t, 170mm	Shimano SLX M7100 30t, 170mm	SRAM GX Eagle 32t, 170mm
Bottom bracket	Shimano XT M8000 BSA	Nukeproof BSA	SRAM DUB BSA 73mm
Derailleur	Shimano XT M8100	Shimano SLX M7100	SRAM GX AXS
Shifter	Shimano XT M8100 12sp	Shimano SLX M7100 12sp	SRAM GX AXS Eagle
Cassette	Shimano M8100 10-51t	Shimano SLX M7100 10-51t	SRAM XG 1275 10-52t
Brakes	Shimano XT M8120, four-piston	Shimano SLX M7120, four-piston	SRAM G2 R, four-piston
Rotor sizes	203/180mm	203/180mm	180/180mm
COMPONENTS			
Handlebar	Renthal FatBar 35 Carbon 800mm	Nukeproof Horizon V2 800mm	Whyte 6061 Alloy 780mm
Stem	Renthal Apex 40mm (35mm clamp)	Nukeproof Horizon 45mm (31.8mm clamp)	Whyte Gravity 35mm (31.8mm clamp)
Seatpost	KS Rage-i 150mm	Brand-X Ascend 170mm	Whyte Drop.it 150mm
Saddle	Gusset S2 AM	Nukeproof Neutron	Whyte Custom
Rating	R	(A)	9