



RIFLE TEST PUSHING THE RIGHT BUTTONS

The Weihrauch HW100 is 20 years old and Mike Morton checks out the very latest incarnation, the HW100KT with adjustable laminate stock

KEY SPECS



MAKER: Weihrauch (weihrauch-sport.de)
MODEL: HW100KT Adjustable Laminate
SUPPLIED BY: Hull Cartridge (weihrauch.co.uk)
PRICE: £1,195
TYPE: Pre-charged pneumatic
CALIBRE: .177, .20 (special order) and .22 (on test)
MAGAZINE: Two rotary, 14 shots each
SHOT COUNT: 50 in .177, 75 in .22
OVERALL LENGTH: 95.8cm, including HW moderator
BARREL LENGTH: 31cm
WEIGHT: 3.4kg
STOCK: Thumbhole, laminate, adjustable
LENGTH OF PULL: 37cm
TRIGGER: Two-stage, adjustable
TRIGGER PULL: 10.7oz
SAFETY: Manual, resettable
POWER: 11.34 ft-lb
ACCESSORIES: Drop-down handle, Picatinny rail

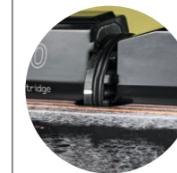
It's hard to believe, but the Weihrauch HW100 is celebrating its 20th birthday this year, and it's probably fair to say that while not all airgun shooters will have owned one of these exemplary rifles, almost all airgun shooters will at least have heard of it.

It's testament to the original design that the more recent versions of this gun look similar to the first: an HW100 owner from yesteryear would certainly recognise one today. But over the past two decades the HW100 has been subjected to a number of refinements, notably adding a

quick-fill system and some valve improvements to make it more air-efficient. It's also been released in a variety of barrel lengths and stock options, and in this review I'm looking at the most up-to-date version of this airgun icon – the HW100KT Adjustable Laminate with push-button operation.

WHAT'S IN A NAME?

Just like the detailed nomenclature that manufacturers provide with telescopic sights, the formal name of this rifle, the Weihrauch HW100KT Adjustable Laminate, is trying to tell you a few useful things all at once. 'HW' is the manufacturer's nod to its founder,



The magazine can be rotated clockwise in the action, allowing you to position the witness mark anywhere it's clearly visible

Hermann Weihrauch, and '100' is the model number. 'K' stands for 'kurtz', meaning 'short', indicating that this is a carbine, with an overall length that's 10cm less than the rifle variant.

'T' refers to the type of stock, which is a thumbhole. The stock is adjustable, and in this case 'Adjustable' refers specifically to the height-adjustable cheekpiece, although the position of the butt pad can be tweaked too. 'Laminate' means the stock has been made of laminated wood, so no surprises there. The 100 has existed in this format before, but the significant change this time round is the fact that the cheekpiece uses a



The cheekpiece is adjustable for height, and the old hex key system has been replaced with tool-free button activation with this model

The standard sidelever can be augmented with an optional drop-down biathlon-style handle which makes it easier to grab hold of

The thumbhole stock is ergonomic and offers good control, and it's easy to adopt a thumb-up hold even without a dedicated thumb shelf

The action block features a conventional dovetail rail, but a Picatinny riser rail has been included for those who prefer that system

The HW100 comes complete with Weihrauch's famous moderator, which does an excellent job of keeping the noise down

push-button system to alter its height, which I'll return to in more detail later.

THE STOCK

If you're an out-and-out traditionalist, then you'd probably prefer a walnut stock, while purely practical-minded shooters might go for a synthetic, but for anyone else a laminate stock is an excellent happy medium, offering strength, good looks and resistance to warping, while still being made of a natural material.

The laminate stock on this rifle is ambidextrous, and the finish is a pleasing two-tone with alternating layers of a medium brown wood dye and a medium blue-grey dye. Beauty is in the eye of the beholder of course, but I think this stock is very aesthetically appealing. It's colourful enough not to be bland, but not so garish that it would stand out in the woods or open field if you wanted to take it hunting.

At the rear of the stock is a grippy butt pad that's attached to a Delrin-type backing plate that can be slid up or down once the central hex bolt has been slackened off. Something that some HW100 owners may not be

aware of is the fact that if the pad is taken off completely, you will see an internal metal plate with a series of teeth on the edges. These allow the pad to be reattached to the rifle at an angle other than the standard zero degrees straight down top to bottom. This is useful if you have a tendency to hold the rifle canted slightly to one side. In this case, you just need to reattach the butt pad with a similar degree of cant in the opposite direction, then when you shoulder the rifle you should be holding it perfectly neutral.

Moving forward, we come to arguably the star of the show in the shape of the height-adjustable cheekpiece. Positioning your head so your shooting eye is perfectly in line with the centreline of the scope is crucial to good shooting in general and eliminating parallax error in particular, and being able to properly support your head at the right height is key to this.

“ALL IT TAKES IS A QUICK PRESS OF THAT BUTTON TO SET IT UP PERFECTLY AGAIN”



Slide the magazine securing catch rearwards to insert a mag, then forwards to lock it in place and engage the indexing mechanism

Adjustable cheekpieces naturally need to be free to move, after which they need to be locked in place securely, the usual means of achieving this being a hex bolt.

This time Weihrauch has supplied a tool-free system, where the cheekpiece can be freed to move at the press of a button and then locked firmly in place when the button's released. It may sound like a small improvement, but it's more important than it seems.

If you adopt a different shooting stance to normal, it's likely that your head may no longer be at the optimum height, but all it takes is a quick press of that button to set it up perfectly again. Or it might simply be the case that when you were setting up the rifle you didn't quite get the height right in the first place. If you find this out in the field, then instead of scrambling to find a suitable hex key, you can simply readjust the height on the fly.

While the eggshell-sheen laminate stock is smooth to the touch, the drop-down pistol grip has been treated to some relatively aggressive stippling that really helps you keep hold of the rifle.

There's no additional stippling on the forend, but instead the stock has a deep groove running down each side, into which you can comfortably curl the fingers of your leading hand.

I prefer to adopt the thumb-up position when shooting a rifle and am always grateful to see either a proper thumb shelf, or at least a suitable area where I can place my thumb.

There's no dedicated provision for thumb-up shooting with this stock, but the woodwork sweeps up towards the back of the action in a gentle curve, giving you a comfortable area to rest your thumb should you prefer shooting this way. And for those who like to adopt a conventional hold, the pistol grip feels perfectly natural when wrapping your fingers round it, whether you're right- or left-handed.

Like the HW100's walnut and synthetic stablemates, the laminate stock does not come with sling swivel studs, but several aftermarket sets are available. Another clever item that's available as an aftermarket accessory is a front stock screw that incorporates a sling swivel stud, and this allows you to fit a bipod without the need to drill the stock to fit a separate stud.

It would be great to see Weihrauch include one of these as an extra.

THE ACTION

The rifle has an overall length of 95.8cm, including the HW moderator that comes as standard and has a barrel length of 31cm. Laminate is a little heavier than walnut, and the overall weight is 3.4kg, although this is certainly very manageable. Other items included in the box are two 14-round rotary magazines, an optional Picatinny rail, a biathlon handle, a quick-fill probe and a device to vent the air from the cylinder.

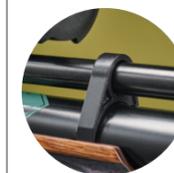
The action is finished in gloss black with a series of hash marks, similar to the graduations on a ruler, on top of the separate front and rear portions of the block. These marks can be used as a handy visual reference point when mounting or remounting a telescopic sight.

The carbine-length barrel on the HW100KT has a lustrous black finish, while the air cylinder is semi-gloss black. The rifle is available in .177 and .22 calibres, with .20 being available as a special order. The barrel is screw-cut with a

standard 1/2in UNF thread should you want to remove the moderator and fit a thread protector or other muzzle device.

Unlike earlier HW100s, in which it was supplied as a separate component that had to be screwed in place by the user, the air cylinder comes pre-attached to the action. The Weihrauch instruction manual recommends purging and removing the cylinder from the gun either after every 20 fills, or if the rifle hasn't been used for four weeks or more to remove any condensation. While I'm sure this is excellent advice, in practice I suspect that most shooters will leave it in place – but they won't be able to say they haven't been warned!

The fill port is protected with a Delrin-type plug, replacing the metal component that was used on older models, while the filling probe is a simple press fit, identical to the one supplied with the HW110. You can keep track of your remaining pressure via the gauge that's mounted at the front of the air cylinder. This means it's near the muzzle, which is never the best place to locate a gauge, but at least



Weihrauch is one of the few airgun manufacturers to use a barrel band, which offers additional protection against the odd bump

the long silencer ensures you're always aware of where the barrel is pointing. The maximum fill pressure is Weihrauch's standard 200 bar.

SCOPING UP

Mounting a scope is fairly straightforward, as the dovetail rail offers 200mm of clamping area. And because the rotary magazine sits beneath the rail, the clamping area is uninterrupted, meaning even the longest scopes can easily be accommodated. For those shooters who prefer the Picatinny system, a section of rail is included that can be secured in place over the dovetail. This will affect the overall height, so take this into account when choosing your set of mounts.

In my case I used a set of high PCP-only 30mm Blueprint mounts, attaching them directly to the dovetail. My choice of scope was my own Athlon 4-14x44, which is a first focal plane optic and one I predicted would let me extract maximum accuracy from the .22 test rifle.

I know there are some who like to mount their scopes as close as they can to the barrel, especially in .22, as this can help reduce the amount of required holdover or holdunder, but getting a more comfortable upright head position is of more importance to me. With this particular scope fitted, the point of balance was exactly underneath the trigger guard, pretty much perfect for any type of shooting.

LOADING UP

The two 14-shot magazines that come with the rifle are made of metal, with an outer O-ring being used to ensure the pellets are securely held in place. I like to ensure these O-rings are treated to a very thin layer of silicone grease, taking care not to add any more than is necessary, as this will just attract dirt. The magazines are simple to load, but make sure you hold them the right way round. The central cut-outs that engage with the indexing rotor should be facing you, and all 14 pellets should then be inserted nose-first.

In order to load the rifle, the action must be cocked and the magazine locking catch slid to the rear. The safety catch can then be applied before you insert the magazine. It's worth labouring the point that the safety catch can only be applied once the rifle has been cocked.



The cheekpiece can be slid up or down at the press of a button, making it easy to adjust for different shooting stances on the fly

It would be nice to be able to apply the catch before cocking, but one benefit of this system is the fact that if you can't apply the safety, then you know the rifle's not been cocked.

You can now go ahead and insert the magazine from the right-hand side of the action. After you've done this, remember to push the locking catch forwards so the indexing system engages. If you don't, you'll only be able to fire the first shot. One very positive feature is the fact that the system will not let you double-load a pellet into the breech, as the rotary magazine will simply not cycle until a pellet has been fired.

It can sometimes be tricky to keep count of how many shots you've fired with any magazine-fed rifle, but HW100 magazines have a witness mark machined into the edge. If you insert the magazine into the action



The polymer trigger blade feels nice under the pad of a finger, while the trigger itself is a lovely unit that's set quite light out of the box

and keep the sidelever fully open, you can then rotate the mag clockwise so you can see the mark at a recognisable location. I like to line up the witness mark so it's just visible above the woodwork, but you can use any position that works for you.

The magazine and the witness mark will rotate clockwise when shots are taken, and when the mark reappears in the same location as your start point you know you've already taken your final shot.

IN ACTION

The basic sidelever is a straight bar rather than a spoon-tipped type, although it angles away from the stock at the end, making it easier to hold. This system works well, and the lever is spring-loaded so it pops back almost to the fully rearward position, requiring just the slightest movement of a single finger to cock the rifle.

To make the cocking process even simpler, Weihrauch now includes a biathlon-style drop-down handle, and while this is optional I suspect most shooters will want to fit it.



The safety catch is sensibly located well away from the trigger, but can only be applied once the rifle's been cocked



When loading the 14-shot magazine, just make sure the face that engages with the indexing rotor is pointing towards you

This component is a relatively new addition to the HW100, negating the need to buy an aftermarket handle, as was the case with earlier 100s. As with the rest of the rifle, the level of engineering is excellent, with the handle slotting securely into a recess in the tip of the lever and being held in place with a single screw.

The trigger blade is gently curved and has a gently rounded surface, matching the largely ambidextrous nature of the rifle. The blade is made of polymer, which may upset some traditionalists, but it's perfectly formed with no uncomfortable seam line down the middle and is pleasing to the touch. The trigger is sublime to use, with a modest amount of first-stage travel, which comes to a definite stop, followed by a clean second-stage break, with a trigger pull of 10.7oz as measured by my Lyman digital gauge. This is perfect for the range, but it would be better to adjust it heavier for field use.

I've owned, shot and tested a fair few HW100s and HW110s over the years, and have never found them to



The butt pad is adjustable for height, and if it's removed completely it can be repositioned at a different angle to avoid canting the rifle

be particularly pellet-fussy, a reputation that was borne out by the .22 test rifle. The first pellets I grabbed from my cabinet were JSB-made Air Arms Diabolo Field, and while another type may have delivered even better results, I really didn't see the need as these performed so well in this rifle.

The HW100 doesn't have a regulator, but does have a self-regulating valve system. Shooting from a 200 bar fill, the HW100KT Adjustable Laminar recorded a velocity spread over a 10-shot string of just 5.6ft/sec – a very good result from a brand-new rifle that has probably not yet been fully bedded in.

As for accuracy, when shooting off a bench, the rifle gave me 30- and 40-yard five-shot groups measuring 4mm and 12mm

centre-to-centre respectively in wind-free conditions. The sidelever and trigger were a joy to use, and the magazines cycled perfectly across the several weeks of testing that I carried out with this gun.

I particularly like the geometry of the stock, as it's good for a traditional hunting stance with the leading hand forward, as well as a more target-orientated hold with the leading hand supporting the rifle just in front of the trigger guard. The forend is long enough to let you use sticks with ease as well.

I really do love this rifle. If the gun's handling and accuracy are the icing on the cake, then the push-button cheekpiece is the cherry on top. If you're in the market for a high-end mechanical PCP, then I suggest it's time to take a bite out of this latest slice of airgun excellence. ●



The rifle comes with Weihrauch's latest style of moderator, which has a flanged fitting of the same diameter as the barrel

THE AIRGUN SHOOTER VERDICT

"Whether you're a hunter, target shooter or precision plinker, the HW100KT Adjustable Laminar is a supremely versatile rifle that absolutely pushes all the right buttons"