USER MANUAL

LASER HANDLEBAR ALIGNER

A spring clamp and a laser line on the front wheel: the bars are straight or they are not, no guessing by eye. This manual covers fitting, reading the beam and checking the saddle.

BARS Ø 22.2 TO 31.8 MM · USB-C CHARGING · ABS AND SILICONE PADS



01 · BEFORE YOU START

WHAT'S IN THE BOX, GETTING STARTED

ITEM	QTY	DETAILS
Laser aligner	1	ABS body, spring clamp, silicone pads. About 11 × 7.6 × 5 cm
USB-C cable	1	Depending on version

What this tool does

Clamped at the centre of the handlebar, it projects a **laser line in the plane square to the bar**. Pointed at the front wheel, that line must run along the middle of the tyre and through the hub axle: if it drifts, the bar is not square to the wheel. Pointed backwards, it gives a reference to check that the saddle sits on the frame's centre line.

Know the parts

Spring clamp	Two hooked arms with non-slip silicone pads: they centre the tool on the tube without scratching, on aluminium or carbon.
Switch	On / off rocker on the side of the body.
USB-C port	Charges the internal battery.
Laser window	On the front face of the body. Keep it clean.

Compatibility

- Handlebars from **22.2 to 31.8 mm** in diameter: flat and riser bars on MTB, gravel and city bikes, drop bars at stem height.
- The tool sits next to the stem, on a round, clear section of tube (no computer, bell or thick tape).



The two hooks grip the tube; the body ends up square to the bar on its own.

SAFETY

- Never look into the laser window and never point the beam at the eyes of a person or an animal.
- Switch the tool off before handling it or taking it off the bar.
- Charge from a standard USB port, away from rain. Do not open the body.
- Every stem bolt is finished with a torque wrench, to the value marked on the part.

You will also need

- Hex keys for the stem bolts
- Torque wrench
- Work stand or a wall to hold the bike upright
- Microfibre cloth for the laser window

02 · PROCEDURE

ALIGNING THE BARS WITH THE FRONT WHEEL

1. **Charge the tool** before first use, with the USB-C cable on a standard USB port.
2. **Stand the bike upright,** in a work stand or against a wall, in a dimly lit spot: the line reads better. Front tyre inflated, wheel straight in the fork.
3. **Clip the tool onto the bar,** against the stem, laser window facing forward and down. Both pads must sit flat on the tube.
4. **Switch on.** A red line appears on the front tyre and hub.
5. **Read the line.** Bar square: the line follows the **middle of the tread** and passes through the **hub axle**. Offset or angled: the stem is not in line with the wheel.
6. **Correct.** Loosen by half a turn the bolts that clamp the stem to the fork steerer (not the handlebar bolts). Hold the wheel between your knees and turn the bars until the line falls on centre.
7. **Tighten to torque.** Retighten the bolts alternately, in small passes, up to the value marked on the stem (often 5 to 6 Nm). On a carbon steerer, a torque wrench is essential.
8. **Check again** with the laser: tightening can shift the stem slightly. Switch off, then remove the tool by spreading the arms.



Tool at the centre of the bar, line projected on the front wheel: it must follow the middle of the tyre.

WATCH OUT

- The front wheel must be straight in the fork before any reading: a loose or buckled wheel gives a false reference.
- The tool must be at the centre of the bar, on a round section of tube. Sitting on a bend or on thick tape, it tilts and the line drifts.
- Never force a bolt on a carbon stem or handlebar.

WHEN TO CHECK

After transport, a crash, stem removal or reassembly while travelling. Thirty seconds is all it takes.

03 · GOING FURTHER

SADDLE, CARE, TROUBLESHOOTING

Checking the saddle

1. **Align the bars first** (previous page): the saddle is checked against a straight handlebar.
2. **Turn the tool round on the bar,** laser window facing backwards, then switch on: the line runs along the top tube, the seatpost and the saddle.
3. **Read.** The line must split the saddle in two along its whole length. If not, loosen the saddle clamp, re-centre, retighten to the marked torque.

The laser gives a centre-line reference, not a measurement: to recover a saddle height or setback in figures, use the Velkyne saddle measuring and positioning tool.

If something goes wrong

SYMPTOM	LIKELY CAUSE, FIX
No line	Flat battery: recharge. Check the switch.
Blurred, wide line	Dirty or scratched window: clean with microfibre.
Line invisible	Too much light: shade it or move indoors.
Tool tilts or slips	Dirty pads, tube outside 22.2 to 31.8 mm, or resting on a bend.
Line still off after adjusting	Front wheel not straight, or tool not at the centre of the bar. Go back to step 2.

Care

- Switch off after each use and recharge when the line grows faint.
- Wipe the laser window and the pads with a microfibre cloth, no solvent.
- Store dry, away from knocks and heat (not in a car in the sun).

On video

Independent tutorials on stem alignment, scan to watch.

Simple Trick To Align Handlebars Perfectly Straight
RJ The Bike Guy · English

Align Bicycle Handlebars Perfectly
The Bike Sauce · English

Need help?

velkyne.com/contact
Our team answers your questions about use and compatibility.

A reference, not an impression.
Bars two degrees off cannot be seen, but they can be felt after an hour. The line does not negotiate.

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