

ROGUE

USER MANUAL

VELDURÒ

Welcome to the Velduro family!

This quick-start manual explains the basic operation of your Velduro Rogue. Please read this manual, even if you have been riding for years.

Quick Things to Know about your Velduro

Take It Easy at First

Yeah, full power is a blast. But trust us, get friendly with your Velduro before cranking it up. Start on the lowest assist level for your first ride and get fully used to the power then try the higher level.

Brake Earlier Than You Think

E-bikes pack more speed and more weight than regular bikes. That means you'll need more time to stop.

People Won't Expect Your Speed

You might look like you're on a regular bike, but you're zipping along way faster. Be aware and considerate of others as you approach or pass

Don't Mess With the Speed Limit

Your bike's top speed is already set for where you live.

Please read following instructions carefully before use and keep them for future reference. The illustrations in this guide might not match the actual product exactly. During assembly, it's crucial to use the torque wrench correctly to ensure all fasteners are tightened to the required torque.

This manual contains important safety information and useful suggestions about the proper use and maintenance of your e-bike.

Your Velduro Rogue adopts the AVINOX system. Please scan the QR code at the bottom right to download the AVINOX RIDE app for additional system customizing options.



Avinox ride App



<https://www.avinox-ebike.com/cn/avinox-system/downloads>

What's in the box?

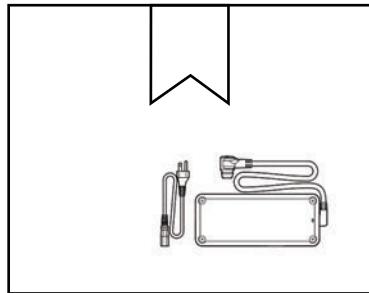
Your e-bike arrives 90% pre-assembled.

Open the carton, and you'll find:

The main ebike protected by eco-friendly wrap

The front wheel packed separately

An accessories box containing the charger and a precision screwdriver for installing the SIM card for the display screen.



Front wheel installation:

- Open & Insert Wheel:** Remove the caliper block from the front caliper, rotate and remove the thru axle. Install wheel into dropouts. Ensure axle slides through drive-side dropout and hub.
- Thread Axle:** Open axle lever fully. Turn axle clockwise 5-6 complete turns into axle nut.
- Close Lever:** Firmly close lever. The lever should leave an imprint on your hand. Critical: Closed lever must be 1-20 mm in front of fork lower.
- Settle Fork & Tighten:** Compress fork several times.



WARNING:

Do not apply the brakes until the wheels are completely installed.

Install the stem and handlebar !

Install the cover above the headtube headset. Install spacers as needed to increase height.

Finally, mount the stem onto the front fork's steerer tube. Use an H4 hex key to tighten the steerer clamp bolts in place, with a tightening torque of 6Nm.

Install the Top Cap by tightening the Fixing Bolt with a 6mm hex wrench until proper bearing preload is achieved, with a tightening torque of 5Nm.

Align the handlebars with the center of the stem, adjust to the proper angle, install the stem cap, and pre-tighten it using an H4 screwdriver. Tighten the four screws sequentially using a diagonal pattern to 6Nm, ensuring no gap remains at the top.



Pedal installation(not included):

Identify Pedals: Identify your pedals correctly before you install them, you will find L(left) / R(right) on the pedal. And confirm which tool is needed for the pedal installation: Hex Key or Open End Wrench

Open End Wrench : Slide correct sized wrench onto pedal nut.

Both pedals tighten towards the front of the bike. R (clockwise) / L (counter - clockwise) tightening.

Hex key : Insert correct key into pedal axle socket. Match R/L axle to crank arm hole, keep straight.

Both pedals tighten towards the front of the bike. R (clockwise) / L (counter-clockwise) tightening.



Battery Charging:

Open the charging port cover and connect the charger.

During charging, the bike screen will display the current battery level.

Unplug the charger and close the port cover after the battery is fully charged.

DO NOT pull the power cable by force when removing the charger.

Make sure to use the official charger to charge the battery.

Make sure not to move the bike and place the charger on a level surface while charging.

Make sure nothing covers your charger as it generates heat.

LED Indicator

Red: Charging.

Green: Fully charged.

Yellow: Abnormal.



Pair and Activate:

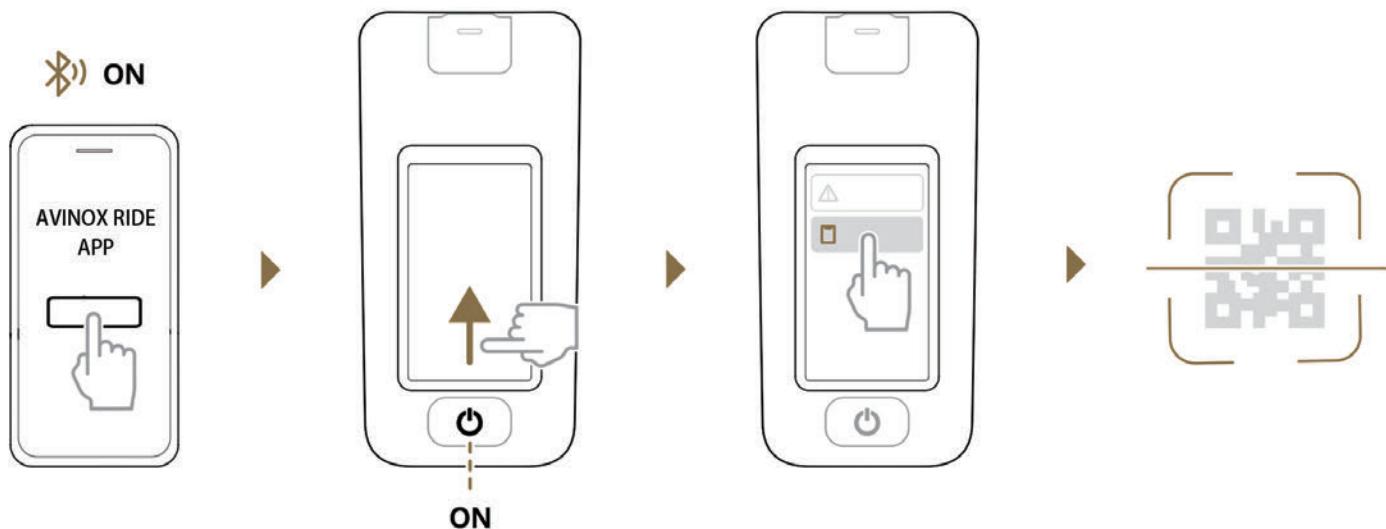
To pair your Velduro electric bike with the Avinox Ride App, follow these steps:

Enable Bluetooth on your phone and open the Avinox Ride app.

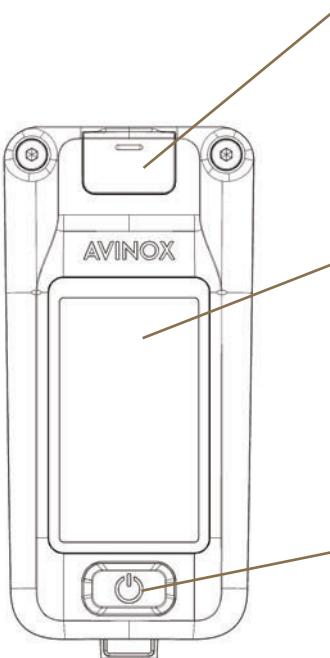
Turn on your Velduro electric bike and swipe up.

Follow the on-screen prompts in the app to begin the pairing process.

Scan the provided QR code to complete the connection.



Display Screen and USB-C Charging Port:



Type-C charging port (65W)

Gently pry open the plastic cover from the front of the Display. Use the USB-C cable to connect the control display with an external device, and then power on the control display to charge the connected device.

Touch screen

After the control display is powered on, it will show the home screen page.

Tap or swipe on the screen to interact with the control display.

Home Screen: Display the basic information.

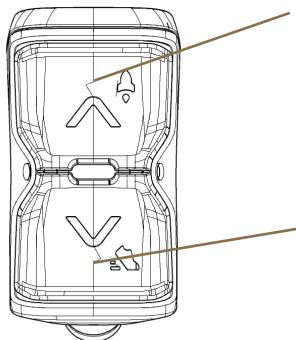
Swipe left/right: Enter the ride data pages, which can be customized in the app.

Swipe up: Enter Settings to add accessories, set the recording mode and more.

Screen power button: Press and hold to power on/off. Press and hold for 5 seconds to force power off.

When powered on for the first time, follow the prompts to select the language and activate the system. After powering on, press to switch the assist modes between Off, Auto, Eco, Trail, and Turbo.

Display controller:

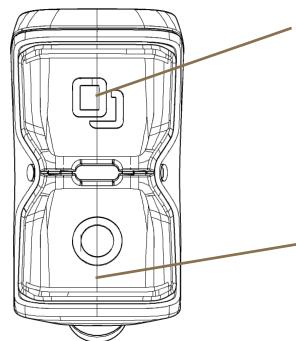


Assistance Level Increase Button:

Press to switch the assist modes in the order of: Off > Auto > Eco > Trail > Turbo. Press and hold to activate Boost mode and the bike screen will display a countdown while emitting a beep sound. Press the power button or assistance level increase/decrease buttons to exit Boost mode.

Assistance Level Decrease Button:

Press to switch the assist modes in the order of : Turbo > Trail > Eco > Auto > Off. Press and hold and then release the button to activate Walk mode. Once activated, press and hold the button to get power assistance to help pushing the bike uphill. Press any other button to exit Walk mode.



Screen Switch Button (customizable): Press to control the bike screen to slide right. Swipe up on the bike screen to enter Settings, and then you can customize functions for the button in Customize Controls.

Function Button (customizable): Press to control the bike screen to slide left. When the bike screen is on Settings page, press to return to previous page. Swipe up on the bike screen to enter Settings, and then you can customize functions for the button in Customize Controls.

Assist Mode:

Standard Mode

The four standard modes provide different assistance levels for various riding conditions:

Auto: Automatically adjusts assistance based on riding conditions, offering moderate help to extend range.

Eco: Gradual acceleration and low assistance(save battery).

Trail: Moderate acceleration and stronger assistance.

Turbo: Maximum assistance. Be aware your battery will deplete faster in turbo mode.

Boost Mode

Besides standard modes, the drive system has Boost mode—providing extra short-term assistance for higher torque/power (great for obstacles or steep climbs).

Press & hold \wedge to activate. Assistance stops when pedaling ceases.

Exit by pressing the power or assistance adjustment buttons.

Walk Mode

Press & hold \vee to activate. Hold the button for power assistance when pushing the bike or starting on inclines. Auto-holds to prevent rolling back on slopes.

Assistance turns off automatically when you release or speed exceeds 6 km/h.

Stationary Gear Shifting

Works in Walk mode: After activation, press the shift lever, lift the rear wheel, then press \vee twice to shift gears quickly.

Warnings

Use Walk mode only when pushing the bike—improper use risks accidents/injury.

Keep your body away from the rotating crank/pedals when using Walk mode for pushing or shifting.

Nano-SIM card installation

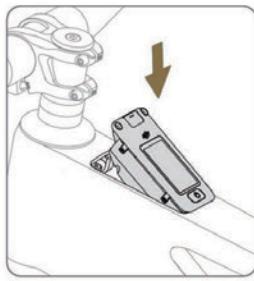
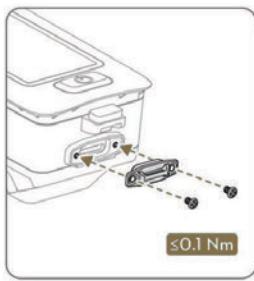
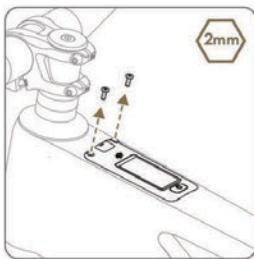
Use 2mm Hex Key to remove the two screws from the component on the bar.

Lift the display upwards from the front side as shown by the gold arrow.

Detach the SIM card cover from the back side and remove the two screws with Phillips screwdriver included in the your accessories box.

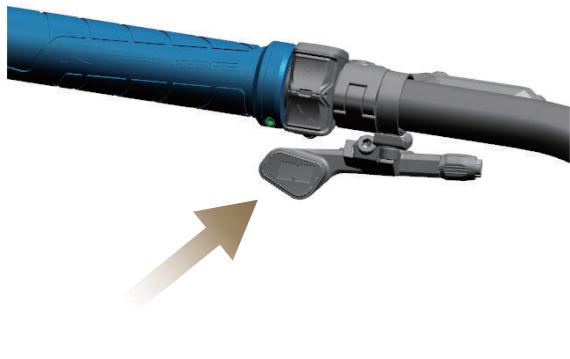
Insert SIM card into the slot, making sure the insertion depth is ≤ 0.75 mm.

When removing from the frame, it is recommended to pry up the control display using a tool instead of pulling the Type-C port cover.



Dropper seatpost:

How to use: Press dropper lever under the brake on your left side. Press again to raise the dropper back.



Fork adjustment:

Before riding, set up the fork according to your weight.

While riding, you can further adjust as needed, based on your experience and terrain conditions.

To adjust air spring pressure, 1. Remove the air cap.

2. Attach a high pressure shock pump to the air inflation valve and inflate to the recommended pressure.

3. Reinstall the air cap.



Fork Recommended Air Pressure

Weight	Rogue X	Rogue R
55-64kg	80-87psi	80-87psi
64-73kg	87-95psi	87-95psi
73-82kg	95-104psi	95-104psi
82-91kg	104-113psi	104-113psi
91-100kg	113-121psi	113-121psi
100-109kg	121-130psi	121-130psi
109-113kg	130-135psi	130-135psi

Note: If you are not well trained in cycle assembly, this procedure must be checked by a cycle technician.

Note: The max fork pressure of both Rogue R&X should be under 200PSI.

Shock adjustment:

Before riding, set up the shock according to your weight.

While riding, you can further adjust as needed, based on your experience and terrain conditions.

To adjust air spring pressure,

To achieve the best performance from your FOX suspension, adjust the air pressure to attain your proper sag setting. Sag is the amount your suspension compresses under your weight and riding gear. Sag should be set to ~30% of total shock travel.

1. Remove the air cap.
2. Attach a high pressure shock pump to the air inflation valve and inflate to the recommended pressure.
3. Reinstall the air cap.



Note: If you are not well trained in cycle assembly, this procedure must be checked by a cycle technician.

Note: The max shock pressure of both Rogue R&X should be under 350PSI.

Tire adjustment:

Before riding, inflate the tires to the recommended pressure according to the total weight (rider+bike). Prepare a Presta valve pump with an air pressure gauge.

Your bike comes with inner tubes but is **tubeless ready**. You can convert to tubeless by removing the inner tubes, installing tubeless valves, and adding sealant. This upgrade reduces the risk of flats and allows lower tire pressures for better traction.



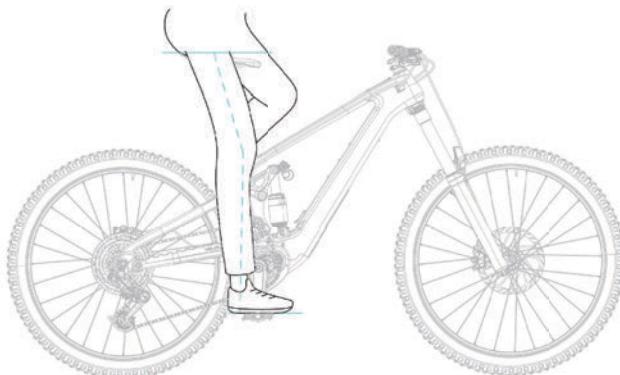
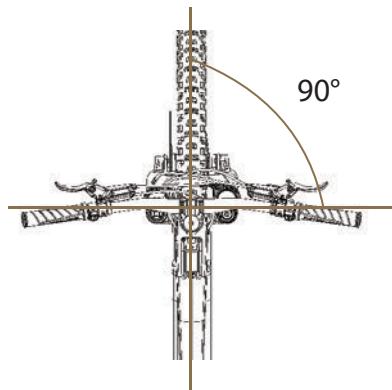
Weight	Front Wheel	Rear Wheel
50kg	19psi	22psi
60kg	20psi	23psi
70kg	21psi	24psi
80kg	22psi	25psi
90kg	23psi	27psi
100kg	25psi	28psi
110kg	26psi	29psi
120kg	27psi	31psi

Note: if you are not well trained in cycle assembly, this procedure must be checked by a cycle technician.
Note: The max tire size for the Rogue is F29x2.6,R27.5x2.6 or R29x2.5, **but recommended as 2.4inch.**

Before Your First Ride:

Before starting your first ride, make sure that all assembly and adjustment has been properly completed.

Assemble the bike in strict accordance with the instructions. Complete the initial setup of the bike. Properly adjust the tires and suspension. It is recommended that the seat be adjusted to the proper height according to the riding position shown in the illustration. The handlebar must be kept 90 degrees (perpendicular to the front wheel) and locked. E-bikes are significantly different from ordinary bicycles. Before riding, be sure to fully understand the functions of each component such as the brakes, transmission, seat and drive system. Read the safety guidelines carefully before use. Strictly observe the intended use of the e-bike, load limitations and all relevant laws and regulations.



Bike Maintenance:

To keep your bike working well and safe to ride, have an authorized Velduro retailer check and maintain it regularly.

- Fixing and maintaining a bike needs professional skills and tools. For safety, please ask an authorized retailer for help with repairs not in this manual.
- How long parts last depends on how and how often you ride. Have an authorized retailer check the bike and parts for wear regularly.
- Don't try to fix or maintain the bike unless you know the right steps. Wrong steps can damage the bike and cause accidents.
- If the bike is damaged, stop using it right away. Have an authorized retailer inspect it completely.
- Always turn off the system when checking or maintaining the bike.
- When using a repair stand, don't clamp it to the frame. This could damage the frame. Please clamp to the extended seatpost

Clean your bike regularly

- Wipe your bike with a damp cloth and mild soap. Don't use strong chemicals or alcohol.
- Check the manufacturer's instructions for how to clean the gears and derailleur properly and regularly.
- Make sure all port covers are closed when cleaning.
- Don't use a high-pressure washer on electrical parts, bearings, or seals.

After cleaning your bike, lubricate the transmission and moving parts as needed (follow manufacturer instructions). Consult an authorized retailer for advice on suitable lubricants and recommended lubrication frequency.

Thru-axle: Lubricate regularly—frequency depends on how often you remove the wheels.

Regular Inspection:

Bike mechanical parts don't last forever—using them past their lifespan can cause sudden damage.

Inspect your bike regularly to avoid accidents from damaged parts.

Some parts can be inspected and maintained by yourself without special tools or skills. For others, use an authorized retailer or professional bike shop as the manufacturer directs.

- Check the manufacturer's instructions for more details on servicing parts.
- Maintain the fork regularly as the manufacturer directs.
- The maintenance timelines in this manual are just a guide—inspect your bike promptly based on how and how often you ride.
- After long rides, bad weather, or rain, fully inspect and maintain your bike.

First Inspection

- Have an authorized retailer inspect your new bike after you've used it for some time.

Every Ride

- Check that tire pressure, spoke tension, suspension air pressure is within the correct range.
- Check immediately when there is cracking noise or other abnormal noises.

Every Month

- Check that handlebar grips are secure.
- Check that the transmission works normally. Use professional tools or ask a bike shop to check if the chain is stretched.
- Check the speed sensor for dirt or foreign matter.
- Check brake rotors and pads for wear. Replace if needed.

- Check tires for damage or wear.
- Check spokes for looseness or damage.
- Check if cranks are loose. Tighten to the correct torque if they are.

Every Six Months

- Check frame for cracks or damage.
- Check and lubricate the hub, headset, and other friction parts.
- Clean and tighten cranks, chainring, and cassette.
- Check frame for internal cracks.

Every Year

- Inspect and service the headset.
- Inspect and service the pivot bearings.
- Replace brake fluid yearly as per the manufacturer's instructions to maintain braking performance.
- Better to return your bike to the dealer shop for complete service.

ATTENTION -On the rear wheel, your Avinox sensor disc needs to be 0.8-1.8mm distance away from the frame sensor. If the distance is larger than this then your Avinox system may not be able to accurately detect the motor system. 'Tip' - if needed place a small washer behind the sensor on the frame to bring it closer to the Sensor disc.

Battery Maintenance:

- Charge the battery between 0°C–40°C (32°F–104°F). Charging in this range extends battery life.
- Store the battery in a cool, dry place away from direct sunlight, between 0°C–40°C (32°F–104°F).
- Check battery level and cycle counts regularly. After 500 cycles, capacity may drop slightly but won't affect riding.
- Charge the battery when it drops below 10% to avoid shortening its life.
- If stored for long, battery life may decrease. Fully charge and discharge it at least once every 3 months to maintain performance.

- Unplug the battery when fully charged. Overcharging can damage battery cells.
- Charging in high temperatures shortens battery life. Let the battery cool to room temperature after riding before charging. Charging between 0°C–40°C (32°F–104°F) greatly extends its life.
- Remove the battery from the frame for long-term storage and keep it away from children.
- For long-term storage, discharge the battery to 30%. Storing it too full shortens life; storing it too empty may cause over-discharge.
- Before transport, discharge the battery to below 30%. Use a dedicated case for long trips or shipping to prevent damage. Never transport a damaged battery.

Warning

- Stop using the battery if the charger port or cable is worn or damaged.

Riding Safety:

Weight Limit

Total weight limit: 144KG

Rider weight limit: 120KG

Maximum permissible total weight: 120KG

The weight of EPAC: 24KG

After assembling your bike, review the Safety Guidelines and this manual thoroughly. Understand all safety warnings and complete pre-ride safety checks. Ensure you're fully familiar with the bike's features before you start riding.

- E-bikes accelerate faster than standard bikes. Stay vigilant about terrain and obstacles while riding.
- Avoid sudden, heavy front-wheel braking—this can lift the rear wheel and cause a fall.
- Watch for road hazards like potholes, road edges, drains, or debris that could damage wheels.
- Shift gears correctly: Press the shift lever, then pedal forward to move the derailleur.
- Don't move the bike backward if the chain is on the large cassette—this can damage the drivetrain.
- Keep your body clear of the chainring's sharp teeth, moving chain, and spinning wheels.
- Brake rotors and motors can get hot during use—do not touch them.

After an impact, ensure your safety first, then inspect for frame deformation/damage, loose bolts/parts, battery port/securement issues, display errors, wheel attachment/alignment, handlebar/stem damage/fixation, component centering, and transmission functionality before continuing to ride.

Storage and Transportation :

Storage

Make sure to power off the drive system when storing the bike for an extended period. It is recommended to clean and service the bike before storing for an extended period. Store the bike in a dry, cool, and well-ventilated environment.

Transportation

Make sure to inform yourself of all applicable laws and legal regulations regarding electric bikes in the destination country or region if you need to transport the bike.

Be aware that the electric bike is heavier than a regular bike. Be careful when carrying or lifting it.

Transporting the battery may be subject to restrictions and require special packaging. Make sure to inform yourself of all applicable local laws and legal regulations or consult the authorized retailer or official customer service for more information.

Make sure to remove all movable and loose parts before transporting the bike. Make sure to protect the ports to prevent the ingress of water spray and dust when transporting the battery separately.

Install the Bashguard(optional)

To install the bashguard, use an H5 screwdriver to unscrew the four screws on the motor bottom cover, then remove the motor bottom cover. Then, take the two dedicated screws that come with the bashguard and pass them through the pre-drilled screw holes on the right side of the motor bottom cover. Finally, secure the dedicated screws to the motor bottom cover with nuts, with locking torque of 2 N·m



Replacing Battery of e-shifter:

If you have a slotted battery cover, use a coin to turn the battery cover counter-clockwise to open the battery cover. If there is no slot, use your finger to turn and open the battery cover. Remove the cover. Remove the battery. Insert a new CR2032 battery with the positive + sign facing outward. Reinstall the battery cover. Use your finger or a coin to turn the cover clockwise to lock it into place.



Replacing Battery of Screen Controller:

The indicator of the wireless controller will flash red when the battery level is too low.

To replace, first use a 2.5mm tool to open the controller cover. Then, carefully take out the old CR1620 battery without using metal tools. Next, insert a new CR1620 battery correctly. Finally, close the cover and tighten it to 0.5-0.6 Nm.

DO NOT use metal tools to remove the battery as it may cause a short circuit.

Make sure to clean the installation area and the bolts after multiple disassembly. Otherwise, it may cause abnormal noise during attaching and detaching.



DEFY THE LIMIT.

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