

Kaabo Wolf Warrior 11 Electric Scooter User Manual



Read this manual carefully BEFORE operating your scooter!

Congratulations on your new Kaabo Wolf Warrior electric scooter and thank you for purchasing it at fluidfreeride.com or at one of our retail partners.

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@fluidfreeride

Check out our support library at support.fluidfreeride.com

BEFORE YOU START

It is important to read through, understand, and adhere to all instructions and safety warnings before charging and operating this scooter.

Upon receiving and opening your box, please inspect the contents for signs of damage or loose screws from transport. If something doesn't feel right, please take a few pictures and contact your place of purchase immediately.

Your scooter comes with a 180-day limited warranty against manufacturing defects. In case of any issues beyond this time frame we will still help you out but may decide to charge a fee for spare parts or repairs.

If you have purchased your scooter from a dealer other than fluidfreeride.com, please contact them first in case of any issues. If you still need help or you have purchased directly from fluidfreeride.com, please feel free to contact us with any questions or concerns.

Make sure you understand and adhere to local rules and regulations for riding electric scooters. Riding an electric scooter comes with inherent risks and hazards. To minimize risk of falling or being injured, make sure you understand how to safely operate and control this scooter.

Always use good judgement, common sense and protective gear.

LEITMOTIF SERVICES LLC (the operator of fluidfreeride.com), Kaabo (the manufacturer) or any of our retail partners cannot be held liable for any financial losses, physical injuries, accidents, death, legal disputes and other interest conflicts resulting from the purchase or operation of this electric scooter.

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GENERAL SAFETY WARNINGS

- Always wear a helmet and protective safety equipment.
- Wear closed shoes without heels and ensure your laces are tied.
- Do not ride with more than one rider or exceed the weight limit of 150kg/330lbs in any other way.
- Only use your scooter in line with its intended purpose.
- Check your scooter for any loose parts or screws, flat tires, signs of damage or excessive wear before every ride. Stop operation immediately and contact your place of purchase if something does not feel right.
- Start riding slowly to familiarize yourself with the behavior of your scooter. Start in first gear and slowly try out the brakes. Always slow down when riding over bumps or on rough road conditions.
- Keep the scooter away from children. It is not a toy. Adult riders only.
- Do not use your electric scooter in heavy rain, on surfaces covered by more than ½ inch of water. Do not submerge the scooter in liquid or let any liquid near the battery or electrical components.
- Do not lend your scooter to anybody unfamiliar with its operation. Ensure any new riders are familiar with these instructions and are wearing proper safety gear.
- Once riding in public space, you are subject to the risks faced by all traffic participants just like when you're riding a bike.
 - Other traffic participants may not obey traffic regulations or ride carelessly.
 - o The faster you ride your scooter, the longer it will take you to stop.
 - The scooter may slip on slippery surfaces leading to subsequent injuries to the rider. Pay special attention crossing train tracks and when it is wet.
 - Always use caution, adapt your speed to road/traffic conditions and keep distance from other traffic participants.
 - Watch out for pedestrians. Do not use your scooter in any way that could harm pedestrians. Slow down when you are passing them to avoid accidents.
- You must follow all local traffic rules and regulations.

WOLF OVERVIEW

What's in the Box



Wolf Electric Scooter (with detached handle bar)







Technical Specifications

Configuration	Wolf 35Ah
Motor	2x 1200W
Battery	60V 35 Ah (LG)
Top speed	50 mph (80 kmh)
Range (eco mode)	70 miles (112 kilometers)
Brakes	Front and rear hydraulic disk brake
Suspension	Front hydraulic, rear dual springs
Tire Size	11" Tubeless
Weight – Scooter	101 lbs (45 kg)
Weight – Rider limit	330 lbs (150 kg)
Charger input/output	110-240V / 2A
Dimensions – Opened	49.2 x 24.6 x 49.2 inch (125cm x 62cm x 125cm)
Dimensions – Folded	59 x 11 x 19 inch (149cm x 27cm x 48cm)



CHARGING AND BATTERY SAFETY

Charging the Wolf

- 1. Turn your scooter off
- 2. Locate the charging port
- 3. Open the charging port cover
- 4. Connect the charger to the wall power outlet
- 5. Connect the charger to the scooter

The LED on the charger will turn red while charging and turn green when the scooter is ready for use. Remove the charger and cover the plug. Charging time with the included 2A chargers is approx. 7-10 hours when using both charging ports. A fast charger with 5A is available at fluidfreeride.com. The battery can be charged with a maximum of 10A, so you can use two fast chargers or a combination of fast charger and regular charger to even further reduce your charging time.

Battery Maintenance

- We recommend to charge your scooter after every use. This is not required.
- A lithium-ion battery is a consumable device. Please replace with a new battery once capacity drops below 50% of what you experienced initially. Contact your place of purchase for a replacement.
- Make sure the battery is charged and that the scooter is turned off before storing your scooter for extended periods at a time.
- Store your scooter in a dry and cool place. Do not keep it outdoors or in outdoor sheds for extended periods of time as excessive cold, heat, sunlight, rain, or other environmental conditions may impact safe operation and reduce the scooter's lifespan.
- Charge your battery at minimum every 3 months to prevent it from running completely empty. Once the battery runs completely empty due to slow discharge while in storage, it may have to be replaced.
- Batteries perform poorly at low temperatures. For instance, if the temperature is around 0°F (-18°C), battery capacity reduces by 50%.
 Capacity will restore to normal when temperatures rise.
- Battery life and riding ranges will vary depending on usage, climate, conditions, rider weight, and/or riding style, proper care and maintenance.

Battery Disposal

- Do not dispose of your battery by way of landfilling, incineration or household trash.
- We recommend disposing through a local recycling program suitable for lithium-ion batteries. Contact your local waste management service for more information.
- Mishandling of used batteries may do tremendous harm to the environment. You must abide by local laws and regulations to properly dispose of used batteries.

Charging and Battery Safety Warnings

- Use caution when using outlets to prevent electric shock.
- Do not leave the charger plugged in for extended period of times (>24 hours).
- Only charge your scooter in a safe, clean, and dry environment. Keep the charger and scooter away from inflammable materials as they may get hot.
- Only use the original battery packs and the original charger supplied with your electric scooter. Contact your place of purchase if you need a replacement. Use of other models or brands may not be safe.
- Do not touch any part of the charging prongs and keep them away from metal objects to prevent short circuit which may result in battery damage or physical injuries and death.
- Do not place the battery in direct contact with heat or near high temperatures. Do not expose the battery to direct sunlight. Do not leave the scooter in a car where the battery might get hot.
- Do not pierce the battery with sharp objects. Do not subject it to impact or force.
- Stop charging if the battery fails to recharge within the approximate charging time. This will prevent the battery from overheating, rupturing, or igniting.
- Do not charge the battery in temperatures below 32°F (0°C) or above 104°F (40°C) as this can hamper performance, result in breaking, overheating, rupturing, or igniting and could cause personal injury or property damage.
- Do not charge your scooter if the charging port on the scooter is damaged or wet. Do not charge if there is excessive heat, odor or leakage coming from the battery or it looks abnormal in any way.
- If the battery leaks and you accidentally get in touch with the liquid, rinse thoroughly with water and then seek medical care.
- Never attempt to disassemble, modify, perform repairs or maintenance on the battery. You run the risk of damaging the protective and safety components that prevent incidents, personal injury or property damage. Professionals only!

- Mishandling or misuse of the battery can result in lower performance, shorter lifespan, rupturing, igniting, or other incidents and could increase the risk of serious personal injury.
- Do not discharge the battery using any other product than the scooter it comes with. Doing so could result in damage to the other product or the battery and reduced lifespan. The battery could overheat, rupture, or ignite and cause personal injury or property damage.

SET UP, UNFOLDING & FOLDING

Folding Mechanism Introduction

The Wolf is equipped with an advanced folding mechanism that will be very durable and tight if set up correctly. It should have been properly adjusted at the factory, but you should verify this during your initial set up.

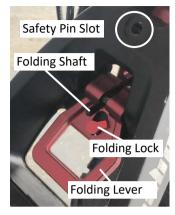
When properly configured there should be NO stem play or wobble.

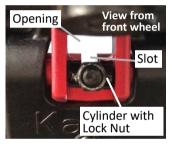
Please note the terminology on the right.

The Folding Shaft is outfitted with a Cylinder and a Lock Nut facing the front wheel. It extends through an Opening in the front stem and slides down a Slot holding it in place when the Folding Lever is pushed downwards.

Make sure that the Cylinder is always in horizontal position as depicted on the right.

We highly recommend you have a look at our video with folding and adjustment instructions: go to support.fluidfreeride.com and search for *Wolf folding*.





Unboxing and Set up

Carefully open the box and take the scooter out with both hands. We recommend you get two additional hands as the scooter is large and heavy.

Pay attention as the handlebar is not yet fixed to the front stem but only loosely connected via the cable work.

For the first unfolding and set up, it is easiest if you place the scooter on a box or pedestal so that it balances and both wheels are in the air.

After you unfolded the scooter, attach the handlebar with the included headset plate and the four Allen bolts.

Unfolding and Folding

1. Lift up the front stem



Lift up the Folding Lever and push the Folding Shaft downward with your thumb. The other side of the Folding Shaft will move upward.



Slowly bring the front stem in a vertical position while ensuring the Cylinder enters through the Opening.



 Push the front stem forward at the handlebar and pull the Folding Lever upwards so the Folding Shaft moves all the way down into the Slot.



5. Push the Folding Lever down – you will feel some resistance. Secure the locking mechanism with the Folding Lock.



Insert the safety pin into the Safety Pin Hole. The safety pin carries no load, but it will prevent the Folding Lever from opening when inserted.



7. Wiggle the front stem to confirm there is no play. If there is play, or the Folding Shaft does not move downwards into its Slot, you need to adjust the position of the Cylinder and Lock Nut on the Folding Shaft. Please have a look at the above referenced video.

In order to fold your scooter, follow these steps in reverse order.

OPERATION

Driving Mode Selection



Located underneath the main display on the right side of the handlebar you can find two switches to configure driving modes:

The ECO/TURBO switch regulates the power of your scooter. By pressing down the button, ECO mode is activated which will reduce torque and top speed to maximize range. When the button is not pressed, TURBO mode is activated and there is no restriction of power.

The SINGLE/DUAL switch toggles single or dual motor drive. By pressing down the button DUAL motor drive is activated. When the button is not pressed, SINGLE (rear) motor drive is activated.

For Maximum range, select ECO mode and SINGLE motor drive. For maximum power and speed, select TURBO mode and DUAL motor drive.

Display Settings

The Wolf scooter is equipped with the following display:



- 1. Speedometer shows the speed at which you are travelling.
- 2. Battery Indicator shows remaining battery charge
- 3. Gear shows the selected gear.
- 4. Gear Selector press to set gear (1=slow, 2=medium, 3=fast).
- 5. *Power Button* to turn the scooter on or off press button for 2 seconds.
- Accelerator pull to accelerate. The stronger you pull, the faster it
 accelerates. The scooter is delivered in "Non-Zero Start" setting (KickAnd-Go is ON), i.e. the accelerator only works if the scooter is already in
 motion.
- 7. Mode Button. Press to select various display options

MODE	COMMENT
TIME	Time since powering on the scooter.
TRIP	Distance travelled since powering on the scooter.
ODO	Total distance travelled.
VOL	Current battery voltage.
СНА	Number of times battery has been charged (inaccurate as only full
	discharges are counted)

Detailed P-settings mode. To access P-settings to make various advanced changes, press MODE [7] for 2-3 seconds. Cycle through the P-settings using the MODE button [7]. In order to change a P-setting press GEAR button [4]. To return to operating mode, wait a few seconds.

P-SETTINGS	
P0	Tire diameter (11 inch). Do not change.
P1	System voltage. Default set to 60V.
P2	Motor magnetic pole setting. Default is 15. Do not change.
Р3	Speed signal selection. Default is 0. Do not change.
P4	Distance / speed unit. 0=km, 1=miles
P5	Start setting. 1=non-zero start (Kick-and-Go), accelerator won't work if scooter not in motion; 0=immediate start (CAUTION while using this!)
P6	Cruise control. 0=cruise control OFF, 1=cruise control ON.
Р7	Soft acceleration. 0=maximum power to start, 5=lowest power to start
P8	Speed limit as % of top speed, i.e. 100=no speed limit.
Р9	Motor torque: 1=50% of max torque, 2=75% of max torque, 3=max torque
PA	Electric (regenerative) braking strength (E-ABS). 0=no EBS function, 1=EBS is the weakest, 5=EBS is the strongest
PB	Display brightness (0=off, 5=highest illumination)
PC	Scooter auto-turn off time in minutes (1-30 minutes).
PD	ABS (anti-lock braking system) setting. 0=ABS off, 1=ABS on

We highly recommend you have a look at our **video with in-depth explanations of all settings**: go to support.fluidfreeride.com and search for *Wolf display*.

Cruise Control. Cruise control allows you to maintain your driving speed automatically without continuing to hold down the accelerator. In order to use Cruise Control, activate it first in the P-settings [P6].

While driving, keep the accelerator steady for a few seconds until Cruise Control kicks in and scooter travels at constant speed without driver holding down the accelerator. When you activate the brakes Cruise Control will be cancelled. CAUTION: Ride in a position where you can immediately access the brake to cancel Cruise Control if necessary.

ABS. When enabled, ABS will prevent wheels from blocking by rapidly engaging and disengaging the brake. It is not automatic, that means ABS will engage whenever you brake, not just when your wheels are about to block and skid. Note that electric braking (PA) will be disabled when ABS is enabled.

WARNING: Due to increased vibration and force on scooter components when using ABS, do frequently check that all bolts are properly fastened.

Riding

Before using your scooter, make sure to visually inspect it for any signs of damage or loose parts/screws. Every scooter is individually tested before shipping from the factory, but we recognize that it has travelled far and in rare cases, it can get damaged during transport. If something does not feel right, reach out to your place of purchase.

Pull the brake levers and ensure there is sufficient tension on the brakes BEFORE your first and any subsequent ride.

- 1. Set you scooter to ECO mode and single motor mode for your first ride so you can get slowly used to its power.
- 2. Ensure you have sufficient runway ahead of you. Do not use the scooter indoors.
- 3. Put both of your hands on the handlebar.
- 4. Step with one foot on the scooter, kick it lightly with your other foot to bring it slightly in motion.
- 5. Step with your second foot onto the board, hold on tight and pull the accelerator. Do prepare for strong acceleration and start slowly.

Braking

The Wolf electric scooter has front and rear hydraulic disc brakes.

For braking, use the rear brake first for decelerating (the left braking lever on the handlebar) before engaging the front brake (the right lever) to come to a full stop.

When travelling at higher speeds, exercise caution when braking as the brakes are sensitive. This is especially true for the front brake as you risk falling over the handlebar if your center of gravity is too high while performing a hard stop with the front brake alone.

BATTERY VOLTAGE AND CHARGING STATUS

The battery voltage display can be accessed by short pressing the mode button – it will appear at the bottom of the screen when the VOL symbol is displayed.

The live reading of battery voltage will greatly improve your understanding of battery health and charging status vs. just looking at the battery percentage, which is just a rough translation of battery voltage. You will see the voltage fluctuating down (when you accelerate) and up (when you idle) during your ride.

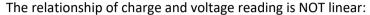
You will learn over time how to interpret your voltage display to make the right conclusions about the status of battery charge.

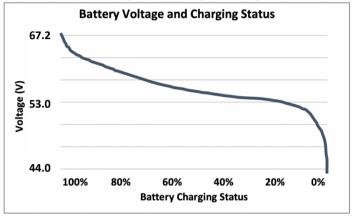
The theory is as follows: When your battery is fully charged using the accompanying 67.2V charger, the display will show 67.2V (+/- 0.5V due to inaccuracies in measurement). The battery will shut down at 44V as configured in the controllers.

If you Battery is around 54V and you put lots of load on the motor (e.g. accelerating uphill for heavy riders), the voltage may drop momentarily below the controller shut off point set to 44V. This will lead the controllers to shut down to protect the battery. You will need to connect your scooter to a charger to reactivate.

We recommend that whenever battery is low, keep an eye on the display to see how Voltage fluctuates downwards when you draw a lot of power.

The display will start blinking whenever you are getting close to empty. If that happens while are you are still a few miles away from your destination, you can switch to ECO and single motor mode and cruise along to preserve battery charge.





This curve shifts downwards the more power you are using. E.g. an aggressive driving style will reduce your voltage reading at the same battery charge status. Note that an aggressive driving style will also reduce range (the distance you can travel at a given charging status).

If you prefer it plain and simple, you can always go with the battery percentage to check your charge. Be aware that the last 30% will go much faster than the first 30%.

SCOOTER MAINTENANCE & TRANSPORT

- Never perform maintenance on this product while the unit is powered on or charging. Always power off before performing maintenance. Do not attempt to perform repairs or modify the scooter but contact your place of purchase or refer to a professional repair facility.
- Recommended tire pressure: 45-50 PSI. The tires are tubeless and require special tools for tire replacements. Just like with a car or motorcycle. Local ATV or motorcycle repair shops should be able to help you out.
- Materials will stretch over time. If you feel play developing in the folding mechanism, adjust its tightness by changing the position of the Cylinder on the Folding Shaft.
- If you have a flat, you can first try to use high strength tire sealant (available at fluidfreeride.com), before resorting to replacing the tire.
- Clean stains on your scooter's body with a damp cloth. Do not use alcohol, gasoline, kerosene or other corrosive and volatile chemicals. Do not wash with high pressure cleaners. Make sure the scooter is turned off and unplugged during cleaning and ensure no moisture enters the charging port.
- When transporting your scooter, please take into account that it contains lithium-ion batteries that are considered a hazardous material.
- Always exercise caution and follow applicable rules and regulations when transporting your scooter. It is very likely that you will not be allowed to take your scooter including battery on a plane.

Disc Brake Maintenance

Check the integrity of hydraulic systems frequently (no leakage of oil) to ensure brakes are working properly.

If there is <u>insufficient tension</u> when pulling the brake lever (the lever should fully engage when pulled about halfway to the handlebar), or brakes are losing tension over time, check for leaks. It is most likely that air bubbles in the hydraulic tube need to be removed. This can be easily done at home with a refill kit provided by your place of purchase.

If your hydraulic <u>disc brake is rubbing</u>, please first ensure that this is not caused by a bent rotor. Put your scooter up on a box so the wheels are spinning freely. Put a light source behind the rotor so you can easily see if the rotor is bent or if it can be fixed by slightly aligning the brake pads. Also check the rotor for play and tighten the mounting bolts if necessary.

The position of the caliper can be adjusted as follows:



- 1. Loosen the two Mounting Bolts until the caliper is able to move freely side to side
- 2. Pull the brake lever to center the caliper over the rotor.
- 3. Re-tighten the two bolts **without** much force while the brake lever is held tightly
- 4. Release the brake lever, spin the wheel to see if it did the job.
- 5. If it works well, move to step 7.
- 6. If the brake is still rubbing, loosen 1 bolt at a time (just a quarter to half a turn following step 4) and manually adjust the caliper with your hands so the brake does not rub anymore. Once they do not rub tighten **without** much force.
- 7. Tighten the screws all the way (6 Nm force) to finish the job.

CAUTION: BE CAREFUL WITH YOUR FINGERS WHEN OPERATING NEXT TO THE MOVING ROTOR!

A local bike shop or your place of purchase will be able to help out further if needed.

DECLARATION OF CONFORMITY

This product complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

(1) This product may not cause harmful interference, and (2) this product must accept any interference received, including interference that may cause undesired operation.

FCC RELATED INFORMATION:

This product has been tested and found to comply with the limits for a Class B digital product, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This product generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this product does cause harmful interference to radio or television reception, which can be determined by turning the product off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the product and receiver.
- Connect the product into an outlet on a circuit different from that to which the receiver is connected.
- Consult your place of purchase or an experienced radio/TV technician for assistance.

NOTE: INFORMATION, SPECIFICATIONS, WARNINGS AND ALL OTHER DETAILS INCLUDED IN THIS MANUAL ARE SUBJECT TO CHANGE AT ANY TIME, WITHOUT PRIOR WRITTEN NOTICE.





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