

# LMX 64

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TECHNICAL  
DOCUMENTATION  
2023



 **LMX BIKES**  
ELECTRIC FREERIDE

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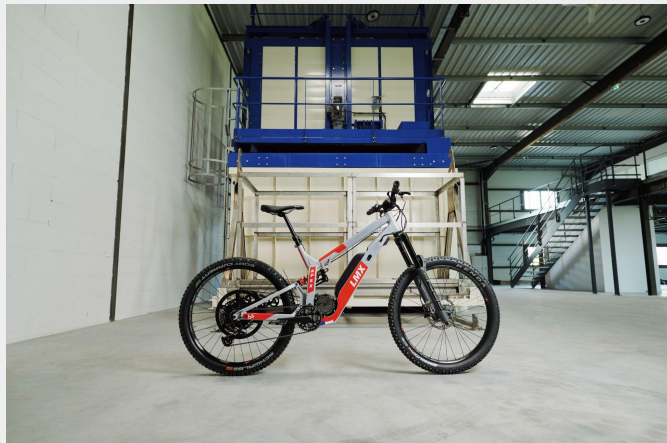
# ABOUT LMX BIKES

BPI French Tech certified, LMX has been manufacturing **freeride electric two-wheelers** since 2016.

**Know-how** ⇒ **Design - Manufacturing - Assembly** *Made In* 

**Mission** ⇒ Offer **high-performance, light** and **accessible** products, while respecting an **excellent offroad reliability**

Workshop located in Jonage (Rhône, France), near Lyon

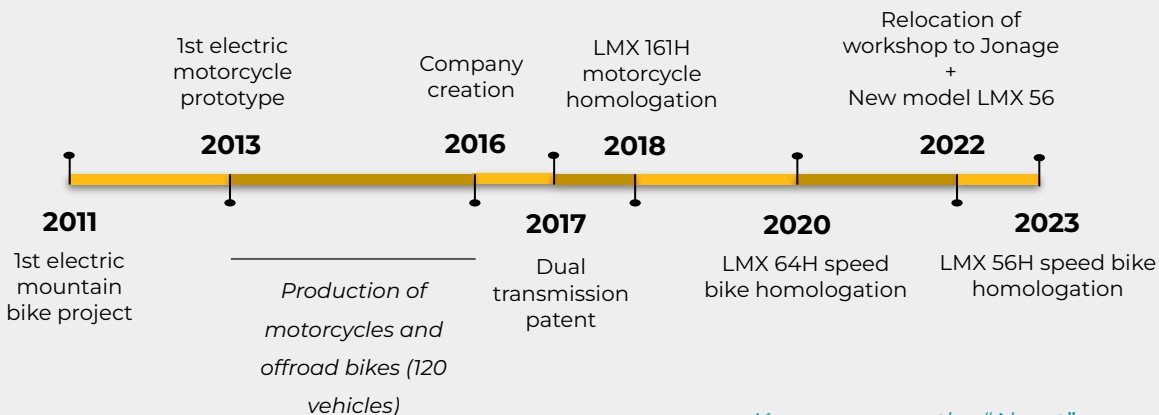


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Our team shares the same vision of an electric future for motorsports.

Thanks to the solid technical foundations of our two models, we regularly deploy new ranges to adapt our products to the uses of all our customers. ”

*Adam Mercier, director of LMX Bikes*



[Know more on the "About" page](#)

# THE LMX TEAM

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LMX is a team of enthusiasts who work every day with the aim of growing the company to offer drivers ever more innovative and efficient vehicles.

Maintaining our independence and developing our know-how are part of LMX's daily missions. Thus, we take care of the design, manufacture, assembly, sales, marketing and maintenance of the LMXs in-house.

## A real diversity of professions and know-how

DESIGN/R&D

MANUFACTURING

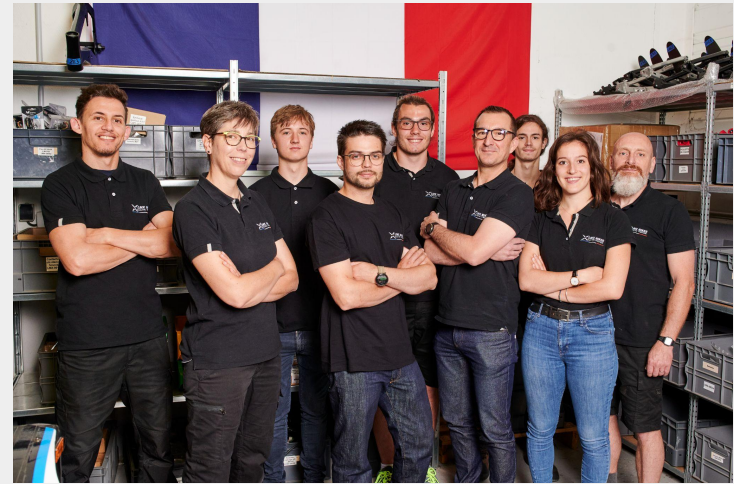
ASSEMBLY

MARKETING/COM

SALES DEPARTMENT

MAINTENANCE

ACCOUNTING





**FRENCH INNOVATION AT THE SERVICE OF SPORTING PLEASURE**



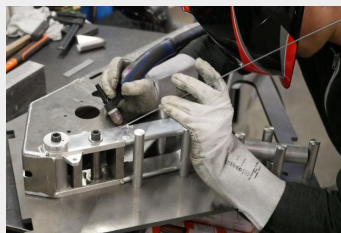
# LMX FRAMES MADE IN THE ALPS

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The LMX 64 frames are designed and produced in Isère (38), from aluminum sheets cut in Meyzieu, which are then heated and folded in our workshop before the welding phase. We also heat the frames internally, using our two ovens.

Finally and after sanding them, comes the stage of finishing with powder coating.

This extremely solid paint is carried out by a specialized company located in Saint-Marcellin (38). The frame of your LMX can also be mounted as such in raw brushed aluminum, for an authentic look.



## INTENSIVE USE OF 6061-T6 ALUMINUM

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The chassis, swingarm and rear buckle are made from aircraft grade aluminum. One of the main advantages of this material is its high resistance to corrosion, stress and fatigue. LMX vehicles can therefore withstand falls and withstand shocks.

Aluminum is also an infinitely recyclable material, unlike carbon. Thus, the use of this material is therefore at the heart of the philosophy of LMX Bikes.

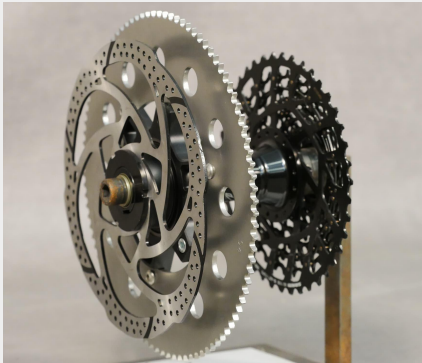
# TECHNOLOGY : PATENTED LMX TRANSMISSION

*"The LMX 64's patented dual freewheel transmission makes possible the concept of a reliable, powerful and lightweight off-road speed bike"*

Thanks to a double freewheel system, the hub of your LMX incorporates two chains independent of each other :

✔ 1 chain for pedaling

✔ 1 chain motor side



## ADVANTAGES

- Wear is limited as well as breakage on the side of the pedaling chain
- Totale independence of the different assistance modes up to 45km/h
- A validated and patented LMX technology used since 2017



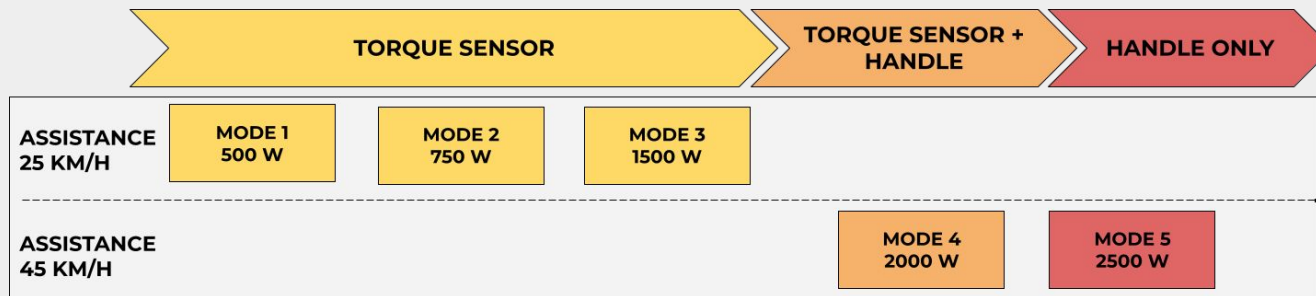
# TECHNOLOGY : THE LMX DOUBLE ASSIST

In addition to a torque sensor, the LMX 64 has a handlebar throttle.

Ideal for rediscovering the sensations of freedom of the motorbike !

These two types of assistance allow you to extend your outings and make sporting pleasure last :

- **Pedaling torque sensor** delivers power proportional to the effort and the assistance mode selected on the screen.
- **Throttle on the handlebars** which allows you to give gas at any time to pass an obstacle or go back up hill, like on a real small motorcycle !





**THE MOST POWERFUL FREERIDE SPEED BIKE ON THE MARKET !**





# THE 45 KM/H SPEED BIKE THAT UPGRADES YOU



**29 kg**

Easy loading on a bike rack



**2,000 W** motor power  
(2,500 W peak)



**850 Wh** battery capacity



**Electric motorization**

No emissions and discreet

Limited operating and maintenance costs



**Approved 45 km/h moped**

Freedom of movement

Accessible : no need for a motorcycle license

“

**The LMX 64 perfectly combines power, range and lightness, representing a modern interpretation of off-road two-wheelers.**

Its easy handling allows unparalleled maneuverability to regain the driving sensations and speed of an enduro mountain bike, for extended outings in duration and distance.

Electric motorization also allows you to focus on trajectories, improvisation and fun.”

*Adam, director of LMX Bikes*

[Know more about the LMX 64](#)

# LMX 64 : TWO DRIVETRAINS FOR TWO USES CASES

The versatility of the LMX 64 makes it a perfect ally for all your rides, whether leisure or sporty !

**“ I want to play sports and pedal without being restrained ”**

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More than a powerful E-Bike, the 45 km/h speed bike allows you to savor urban trips as well as sporting walks: paths, forests, hills, cobblestones ... everything is a source of new sensations!

No more 25 km/h limit ! You can now have fun, while being road approved.



**“ I want to rediscover the sensations of an all-terrain motorcycle ”**

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Its power and lightness make the LMX 64 ultra versatile : it's a completely versatile two-wheeler ! Like a bicycle, it can be a real small motorcycle with its accelerator when you need it.



# POWER TRAIN

Central motor, brushless type

**Peak power 2.5 kW**

**Nominal power 2 kW**

Maximum torque 23 Nm at the motor - 191 Nm at the wheel

Air cooling

ECU : FOC Advanced Brushless Controller



# BATTERY

**Removable, easy and quick replacement**

Weight : 4.3 kg

52 V / 17 Ah

**Capacity : 850 Wh** using 70 lithium-ion cells (Samsung 18650)

Autonomy assistance from 40 to 100 km

Autonomy without pedaling: between 25 and 35 km

Full recharge 4 h

4 A external charger with 230 V power supply

500 charge-discharge cycles up to 70% of initial capacity



## FRAME

Frame material / rear buckle / swingarm **6061-T6 aluminum** (aviation quality)

Full frame weight : 4.5 kg

Wheelbase : 1220 mm (size M), 1290 mm (size L)

Caster angle 65 °

**Made in France**



## SCREEN

**5 assistance modes**

**Color LCD display indicating :**

- Power
- Speed
- Odometer
- Battery capacity (%)



## BRAKES

**Formula Cura 4-e disc brakes**

Front 203 mm / Rear 203 mm

Discs 2.3 mm

4 front pistons / 4 rear pistons



# SUSPENSIONS

## FORK

### **Formula Selva S**

Air Technology

Diameter 35 mm

### **180 mm travel**

Settings : pressure, compression, rebound and lockout



## DAMPER

**DNM** (brand)

### **180 mm travel**

Compression, rebound, preload settings

2 eccentric plate settings



# RIMS

## FRONT WHEEL

Rim 30mm x 27.5 "

## REAR WHEEL

Rim 30mm x 27.5 "

**LMX hub : Double transmission chain technology (LMX patent pending)**

## TIRES

Schwalbe 27.5 "x 2.6" homologated



# LMX 64 Apex

## The LMX 64 at its best

An edgy look and a premium performance-oriented build !

**€8,800 including tax - street legal version**

Bonuses and government aid deductible in France

### EQUIPMENTS

#### *SUSPENSIONS*

- ★ ZEB Fork
- ★ Bos shock absorber

#### *BRAKES*

- ★ Formula Cura 4-e

#### *TRANSMISSION PART CYCLE*

- ★ SRAM NX 12 speeds

#### *TRANSMISSION ENGINE PART*

- ★ Reinforced carbon belt

#### *OPTIONS INCLUDED*

- ★ Telescopic seat post
- ★ Offroad tires
- ★ Wellgo premium aluminum pedals





**LMX CLOSER TO YOU THANKS TO OUR DEALERS**



# YOUR LMX DEALER

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LMX Bikes is growing and more than ever wants its two-wheelers to be accessible to its customers, in France and abroad.

Our resellers :

- Make possible a privileged relationship with our customers in their region.
- Provide information, carry out tests and support the commercial part.
- Provide after-sales service and maintenance thanks to their technical expertise.



[En savoir plus sur Les Revendeurs LMX](#)



# FIND US ONLINE

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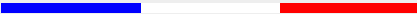
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# CONTACT

A mountain biker wearing an orange and grey full-body suit and a black helmet is performing a wheelie on a black LMX mountain bike. The bike is tilted vertically, with the front wheel high in the air. The background is a dense forest of green ferns and trees. The text 'CONTACT' is overlaid on the left side of the image, with a horizontal line in blue, white, and red below it.

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