

## **Instruction manual to use an electronic brake set**

Stopskate® EBS 480B, EBS 480B, EBS 480B and STRONG versions.

Thank you for purchasing our Stopskate® in-line electronic brake set. We appreciate your confidence and believe that you will be satisfied with our product and that its use will bring you even more joy, comfort and above all safety when skating on inline skates.

Carefully read these operating instructions, assembly instructions and follow the instructions in the manual. Compliance with the instructions in this manual is also one of the conditions for making a possible complain in case of the defect of the product.

Only by following these instructions will your inline skating be safe and the Stopskate® braking system will provide you with reliable and long-lasting in-line skating experience.

## **Stopskate®EBS 480 and EBS 480 STRONG brake set**

Stopskate® brake set for in-line skates is designed for smooth and safe slow down on both flat and downhill slopes \*. It is a supplementary braking system designed for the public, which has already mastered the basics of in-line skating. The braking system is designed for normal fitness and recreational riding on fitness in-line skates. It is not suitable for racing or free style inline skating, U-ramp, downhill or steep slopes, or other extreme skating.

Braking with the Stopskate® brake set is efficient, comfortable and above all safe!

The Stopskate® EBS 480 brake set is mounted according to the assembly instructions on adult 4 wheeled inline skates with a diameter of 80 to 100 mm and the classic frame construction and mounting. \* Refer to the assembly instructions for exact compatibility specifications.

## **Description of the pictures in the picture attachment**

### **Brake caliper (pic. 1)**

1. Body of the caliper
2. on/ off switch and charging indicator
3. USB charging connector
4. Carrier mounting screws
5. Caliper mounting bolt
6. Brake segment
7. Segment carrier
8. Braked wheels
9. Frame of the skates

### **Remote hand control (pic. 2)**

1. Body of the remote control
2. Sliding regulator
3. ON / OFF switch and charging indicator
4. Full STOP button
5. USB charging connector
6. Battery discharge indicator, STOP button usage and the segment carrier arrest when the home position is set
7. Strap

### **Position of the feet when braking (pic. 3)**

Position before and during braking with EBS 480 brake system.

### **Function description**

The Stopskate® EBS 480 brake set, depending on intensity on the remote control, continuously brakes two inner (middle) wheels at the same time on both skates when driving on inline skates (pic. 1). The brake system resting simultaneously on the two inner wheels at the same time ensure that the rotation of the wheels slows down and, if necessary, until the skates stop completely and safely. After the manual control is released new ride can start again. Each of the brake calipers, as well as the remote control, powered by integrated battery inside of the device. These batteries are chargeable via the USB connector included in the package.

### **Usage of the Stopskate® Brake Set**

If you have installed the Stopskate® EBS 480 brake set on your skates and have made the correct adjustments and set up, use the included charger to charge it for the first time. The first time need to be full recharge done. The full battery charge will be visible by the indicator light, which is integrated in the switch itself of each of the two brake calipers (pic. 1). If the on / off switch glows red when the power cord is connected to the charger, the battery is discharged. Disconnect the charger power cable from the brake caliper when the battery is fully charged and glows green.

While driving, the battery level indicator (residual capacity approx. 15%) in the brake calipers will send an acoustic signal and the light indicator on the remote control next to the slider will flash. In this case, the ride needs to be stopped and the batteries recharged. Battery life per full charge depends on many factors, such as frequency and intensity of braking. However, approximate time is 2-4 hours of drive.

Also the remote control battery needs to be recharged before driving. The battery indicator is integrated into ON / OFF lever of (pic. 2) and works in the same way as the brake caliper indicator.

The batteries in the remote control will last approximately 4 hours of operation. The optical signalization, which is next to the slider, warns you in time to recharge the battery. If the controller battery has less than 15% capacity, the indicator light on the slider will flash red. Occasional visual inspection of the condition is required. In the event of a complete discharge (not recommended), the acoustic signal on the brake calipers will start to signal this condition and do not use the device at this time and ensure that the batteries are charged!

Turn the switch to the "ON" position before driving. Also on both brake calipers move the switch lever to the "ON" position. In about 5 seconds the brake pads are automatically adjust to their home position. This action signal is acoustic.

Then press the slider on the remote control once to check if the brake system functions properly. At the same time, the brake segments automatically adjusts to the working position on the roller wheels.

After above steps are done, the Stopskate® EBS 480 brake system is ready to be used and you can now skate safely.

### **Usage of the FULL STOP button**

At the bottom of the remote control is located the STOP button. You can use the STOP button for example when putting on skates, climbing stairs or walking in the difficult terrain. To activate this function, press the slider on the controller and then the STOP button. To release the stop function, press the STOP button only. The STOP function signals by the LED on the slider.

Only use the STOP button for as long as necessary! Keep in mind that using the STOP function will greatly reduce the battery capacity on the brake calipers! For safety reasons, the STOP button is slightly recessed.

### **Driving, braking and stopping**

Practice first while driving very slowly in a flat or any other safe place.

Please note:

1. Before braking or stopping, push the left or right skates forward so that your front and rear stability is improved (pic. 3).

2. The remote control, which you hold in your right or left hand, is to be pressed up to about 1/3 slowly. After gaining confidence and safe feeling, you can use the controller slider in its entirety if necessary.

Brake smoothly and hard enough to prevent the wheels from locking!

Before starting the braking, you should also count on the fact that the skates will try to "lag" and push your body forward. Therefore, try to count on this effect in advance and eliminate it by shrugging your legs more and spreading the weight evenly on both skates equally. The center of gravity will be in the middle of the skates and all wheels of both skates will be fully loaded and in contact with the road surface. You will increase your stability by pushing one of the skates upfront. It is very important to distribute the weight evenly on both skates.

After a short time, you will get the necessary feeling and experience and braking will not cause any problems.

When braking, also do not lift the rear or front wheels on the skates and leave them all loaded and in full contact with the ground! Try to keep the weight distribution between the 50/50 skates. This will prevent increased wear of the wheels due to skidding.

Full operation test should be done for a very slow ride first, and with gained confidence, the speed can be increased.

Always take into account a longer stopping distance, which depends on many factors such as speed, weight, terrain, wind. The braking distance is 8 to 12 m. Brake very smoothly and sensitively.

Although Stopskate® brake system is very efficient and effective, it is designed to stop slow speed. It will not stop immediately! Always maintain a speed that you can safely handle.

We recommend starting to brake well in advance. Bring to the required speed before cornering and drive through the curve without braking. It is necessary to train the brakes in longer turns with a larger radius!

Do not forget to turn off the switches on both brake calipers after you have finished skating. Also, turn off the power switch on the remote controller. If you do not switch off the brake calipers and turn off the control, the brake calipers will send audio sign.

At home, then simply recharge the batteries in the brake calipers and the remote control using the charger included. Handle USB connectors very carefully and sensitively when inserting or removing the cables.

The Stopskate® EBS 480 brake set is self-adjusting. As the brake segment gradually wears, the position automatically adjusts to the correct distance from the roller wheels. This happens every time the brake calipers switch on.

If the brake segment already show big wear, it is necessary to replace it with a new one on time. Always both segments at the same time!

Excessive wear on the brake segment can be detected visually or by less effective braking. Braking with a very worn segment can be also uncomfortable and dangerous.

Replaceable pads, wheels and other spare parts are available from the store where you purchased the Stopskate® EBS 480 brake set, or you can buy these segments and parts at very affordable prices in our e-shop: <https://www.stopskate.com/en/eshop/>

On this website, you will also find additional information such as instructional videos and photos to help you install the brake set and videos to see how to brake correctly and safely with the Stopskate® EBS 480 brake set. Please share your experience with our new product and write us your feelings and comments to help us improve the brake system in the future.

### **Important Notice!**

- Always brake very smoothly and control the slider on the manual controller sensitively. This will prevent the roller wheels from jamming, eventually falling and premature wear of the brake segments and roller wheels.
- It is always necessary to move one skate forward while pushing the slider to increase the stability.
- Check the battery and wear level of the brake segment and the functioning of the entire system before each journey. Check that the wheel retaining bolts are tight.
- Brake only when it is necessary. Excessive or very intensive braking accelerates wear of the braking segment, depletion of batteries and excessive wear of the skate wheels.
- The brake set is not designed for descending long or steep slopes \*.
- Do not use the brake set in normal traffic.
- Using the brake set does not relieve the user of the ability to brake in other ways, if necessary.
- The brake set function is to slow down and stop during normal recreational driving. Not suitable for racing, free style, U-ramp etc.
- Do not brake backwards
- Do not use the brake set in a humid environment such as rain or dusty environment. Do not use the brake set on slippery or uneven surfaces.
- Always brake timely and at suitable space.
- Install the brake set only on suitable inline skates \*.
- When replacing worn wheels, make sure that the two rollers braking (middle) are in contact with the road when skating. Their diameter must always be the same or even better if bigger than the diameter of the other wheels! For this reason, do not use the recommended replacement wheels on skates.
- Always replace the entire set of wheels or just the two middle wheels on each skate, preferably STOPSKATE PERFORMANCE.
- Do not interfere with the construction of the device outside the permitted adjustment or replacement of the brake segment.
- Skates that have poor quality of wheels may cause uneven braking effect or rapid wear of the wheels or brake segment due to horizontal vibration of the wheels. To solve this problem, you must replace those wheels with new quality wheels or STOPSKATE PERFORMANCE wheels.

- Fitting the brake set to other types of in-line skates other than those mentioned here, is only possible, if the compatibility condition is met.
- Full braking efficiency is achieved only after "braking" - about 30 to 40 brakes. New brake segments must first "sit" (adapt to the wheels and create a certain material structure), so braking is initially less efficient, as is the case with new car brake pads. Such circumstances must be taken into account. Do not use new segments while driving full speed – first new pads need to adjust.
- When skating, wear protective equipment such as knee and elbow pads, helmet, etc.

**The manufacturer accepts no liability and is not responsible for defects, accidents and other damages caused by:**

- Wrong assembly
- Incorrect adjustment
- Incorrect usage
- Not following the instructions
- Mechanical damage or general wear

**Note:**

*Stopskate®s.r.o warranty applies only to the replacement of defective products. Stopskate®s.r.o. shall not be in any circumstances be liable for personal injury, death or damage to property, indirect, contingent or consequential damages or payments arising from the use of Stopskate®s.r.o products.*

**Segment capture:**

New brake segments must be first driven in. Therefore, perform the first 20 to 30 brakes very smoothly and only at 1/3 of the power of the brake set, that is about 1/3 of the slider. Once the segment captures, it is possible to use the full power of the set in situations that require it.

**Maintenance:**

The Stopskate® brake set requires minimal maintenance.

Charge the batteries in the brake calipers and the remote control before each ride. Check that the wheel mounting bolts are tight. Also, make sure that the brake pads are not worn out. If so, replace them with new ones. If necessary, clean the brake pads and their surrounding area from any trapped dust or other impurity so that the skate wheels can rotate freely. Be careful not to damage the brake calipers and the remote control mechanically or otherwise when handling, transporting or driving. Charge the brake set batteries with the switches in the OFF position!

**Notice:**

Do not use headphones while driving due to the acoustic signal. Also, deaf people should not use this braking system. Do not use this brake set in a noisy environment.

Recharge the batteries in the brake calipers and the remote control before putting the skates off for a long time, for example in winter. This will prevent damage to the batteries by completely discharging them.

The brake calipers and the remote control are NON-REVERSIBLE! The battery replacement may only be done by the manufacturer or in the authorized service center.

**Recommendation:**

You can extend the service life of the braked wheels by removing them and turning them back 180 ° after a certain period of time and marked wear. It is advisable to put new brake segments into the carriers at the brake calipers with the wheels turned. If the wheels are skidding during very intensive braking, there may be areas on the circumference of the wheels and thus a malfunction of the braking system.

We recommend fitting your inline skates with durable wheels STOPSKATE PERFORMANCE, which you can find in our e-shop. The lifetime of these wheels is much higher, than those commonly used for inline skates, and ensuring the perfect functioning of the entire braking system.

**Contents of the package Technical data**

Brake caliper 2x

Remote control 1x Brake caliper

Charger 3xUSB 1x Dimensions: 129x61x26

USB cable 3x Weight: 126 g (130 g STRONG)

Pack of screws A 1x Li-ion battery 3.7 V

Spacer Pack and Frequency Field: 2412 MHz

Spacers B 1x

Pack of spare brake pads C 1x Remote control

Pack of Allen keys No. 2 and 4 mm D 1x Dimensions: 86x40x18,5

Spacer 1x Weight: 54 g

User manual 1x Li-ion battery 3,7V

Frequency field: 2412 MHz

**Operating conditions:**

Air temperature 5 ° C - 40 ° C

Absolute humidity up to 25 g / m<sup>3</sup>

Recommended weight of skater EBS 480 up to 80 kg EBS 480 STRONG up to 100 kg

Maximum weight of skater EBS 480 90 kg EBS 480 STRONG 110 kg

We own the certificate by the Czech Metrology Institute in Prague.

Warranty and post-warranty service is provided by the seller/ manufacturer.

The 2-year warranty applies only to defects in the material that affect the functionality of the brake set.

- except for reserved types of brake sets and sets intended for children's skates
- the specification of the wheel holders suitable for mounting the Stopskate® brake set is provided on the set packaging and in the assembly instructions
- the specification of suitable types of skates is stated on the packaging and in the assembly instructions
- skating can be continued after the batteries have run out, but the braking set can no longer be used!

- extreme skating includes, but is not limited to, descending long or steep slopes, free skating, skating on the outside of the skate more than  $35^\circ$  from the vertical plane, e.g. when extremely sharp turns, reloading when cornering, etc.
- the longer slope for this purpose means a road with a slope up to  $5^\circ$  and a length greater than 100 m. A steep slope for this purpose means a road with a slope greater than  $5^\circ$