SmartBrake for Spike

User manual · R52

A series · serial number A###

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Read the complete guide before first use. Select the correct system variant and firmware version.

Before every ride

1. **Switch on the brake unit**
   Press the activation button once. Wait for calibration to finish. The safety brake engages.

2. **Wake the controller**
   Press the pole trigger lever once. Once connected, the safety brake releases. The brake is released when the lever is not held in.

3. **Test both braking systems**
   Test every controller and two independent braking systems before every ride. Check that each brake applies and releases. Start stationary and familiarise yourself with the system at low speed in a safe area.

Always activate SmartBrake before use. If the brake unit is not switched on, the brakes may be locked or inoperative. This can endanger you and others. Never rely on only one braking system.

Operating the brake

Pole trigger

1. The lever has five adjustable positions. Press it fully in for full braking.
2. Press four times quickly, within five seconds, for the parking brake. Press once to release.
3. The indicator lights are visible on the back of the controller. The adapter fits a Swix ski-pole handle.

Hydraulic lever on Hybrid

The hydraulic lever operates as a conventional hydraulic brake lever, including when the SmartBrake unit is deactivated. Use Torx T20 on the screw under the lever to adjust pad clearance from the rim or disc, including as the pads wear.

If the main controller loses its signal, the safety brake engages. It releases when the connection returns. According to R52, loss of signal from an assistant controller does not activate the safety brake.







Controller indicator lights

Pole trigger

Light and situation	Meaning and action
Steady green when you press the lever and the brake unit is on	R52: the brake engages and the controller is working normally. No action required.
Flashing green when you operate the controller	No connection to the brake unit. Switch on the unit or move the controller closer. If this does not help, see the pairing page.
Steady red when you press the lever and the brake unit is on	Low controller battery, approximately 25% remaining. Replace the battery as soon as possible.
Flashing red when you operate the controller and the brake unit is on	The controller battery is empty. The brake is locked in safety mode. Replace the battery. Switch off the brake unit to release the brake.

Brake-unit indicator lights

Light and situation	Meaning and action
Red brake light flashes every five seconds while the unit is active	Low battery, approximately 25% remaining. Charge the brake unit when possible.
Flashing red at the USB port and locked wheels	The brake-unit battery is empty and the safety brake is active. Hold the activation button until pressure releases and the light flashes twice. Fully recharge. A lever or pole trigger may still show steady green when pressed.
Flashing green at the USB port and locked wheels	The safety brake is active because the controller has no connection, its battery is empty, or the brake unit is in assistant mode. Follow the steps below.

If the wheels are locked

1. Move the controller closer to the brake unit and activate it.
2. Replace the controller battery if it is empty.
3. If the connection cannot be restored, hold the activation button until the motor stops and the light flashes twice. The brake releases. Prevent the vehicle from rolling.
4. If the unit is in assistant mode, see the reset instructions on the pairing page.

Safety brake and switching off

The safety brake may engage because of critically low battery in a controller or brake unit, loss of signal from the main controller, a technical fault or power failure. Read the indicator lights to identify the cause.

Switch off after your ride

Hold the activation button until the brake unit flashes red twice, then release it. You will hear the brake release. Keep the vehicle stable and prevent it from rolling.

After 30 minutes without activation

If the controller is not activated within 30 minutes, the brake unit enters power-saving mode. The parking brake engages and the unit switches off. This is the R52 description; automatic release after five seconds is not part of this manual.

Charging, batteries and cleaning

• Use the supplied charger for the brake unit. The charging-port indicator is red during charging and turns green when fully charged, after approximately three hours.

• The stated active operating time for the brake unit is 20-25 hours.

• Each wireless controller uses one CR2032 battery. The source states up to 20 hours with the lever held in before replacement is needed.

• During long-term storage, charge the brake unit at least every four months.

• Clean the system with a damp cloth.

Pairing a controller

The controller is paired on delivery. A depleted battery does not erase pairing. Pair again after a reset or when using a new controller.

1. Start with the brake unit switched off.
2. Hold the activation button until the brake light comes on, approximately eight seconds. Release the button. The light stays on.
3. Press BRAKE or pull the controller lever. Pairing is complete when the brake light goes out. Move the controller closer and repeat if needed.
4. At the next start-up, activate the controller once to wake the system. Test the brakes before use.

Resetting from assistant mode

The source troubleshooting instructions describe resetting to administrator mode: hold the activation button for approximately 25 seconds. Release when the brake light comes on. If the problem remains, pair the controller again. Contact SmartGroup if you are unsure about your system configuration.

Need help?

Contact post@smartgroup.no or visit smartgroup.no/support. Provide the serial number inside the USB cover, system variant and firmware version.

Scope and limitations

This guide describes operation of the specified SmartBrake variant. Use the system only in a combination of vehicle, brakes and controllers documented for your configuration. References to bicycles, wheelchairs or roller skis do not confirm that every variant fits every such vehicle. Confirm the configuration with SmartGroup or the supplier before use.

Automatic brake activation is not a guarantee against accidents or injury. This functional description does not establish that the system detects or handles every fault or hazardous situation. Follow the requirement for two independent braking systems and a functional test before each ride.

If braking is unexpected, braking performance is absent, or damage or another fault occurs, stop safely using the available brakes. Do not continue the ride until the cause has been established. Contact SmartGroup about product faults or incidents and provide the serial number, variant, firmware version and an account of what happened.

Important safety information

Using SmartBrake involves risks, including injury, paralysis or death. Learn correct operation and follow all safety instructions. Follow the documented intended use and configuration for your variant. Do not use it for other purposes.

• Always use and test two independent braking systems before every use. Never rely on only one system.

• Wear a correctly fitted helmet and appropriate protective equipment.

• Monitor all signals and warnings and respond to unsafe conditions as described in the manual.

• Check that the product is fully charged, correctly installed and working before use.

• Start at low speed in a safe area.

• Do not use the product until all components are installed, charged and updated.

• Do not modify the product without written approval. This may cause malfunction or injury or invalidate the warranty.

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