SmartBrake Switch

User manual · R54

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 and release the lever to wake the controller. Switch uses reverse operation: hold the lever in so the wheels can roll freely. When you release the lever, full braking is applied to the wheels.

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.

Two brake units? Switch on, switch off and charge each unit separately. They work together during use.

Operating the brake

Brake Lever Slim and Thumb Brake

1. The lever has five adjustable positions. Full braking is applied when the lever is released, in its zero position.
2. Hold the lever in to release the brake. The brake remains applied when you let go.
3. The Switch lever shows no light during normal operation, whether held in or released.
4. Thumb Brake can be used with the secondary brake for one-handed operation of the bicycle's dual braking system.

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

Brake Lever Slim and Thumb Brake

Light and situation	Meaning and action
Lever held in - no indicator light	The wheels can roll freely. No light is normal in this position.
Lever released - no indicator light	Braking is applied to the wheels. No light is normal in this position too.

The Switch lever shows no light during normal operation, whether held in or released. Check operation by testing the wheels, not by waiting for a green light. Contact SmartGroup if other signals or unexpected behaviour occur. See also the brake-unit indicators on the next page.

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.
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.

Switch describes how the lever position controls braking. Braking when the lever is released must not be understood as guaranteed protection during epileptic seizures, loss of consciousness or other medical events. Do not base safety during such events on this functional description.

Have operation, installation and limitations explained before first use. For Switch, the functional test must include both holding in and releasing the lever. No light on the Switch lever is normal and does not by itself confirm that the system is working.

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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