



# SMART BRAKE ANATOMY

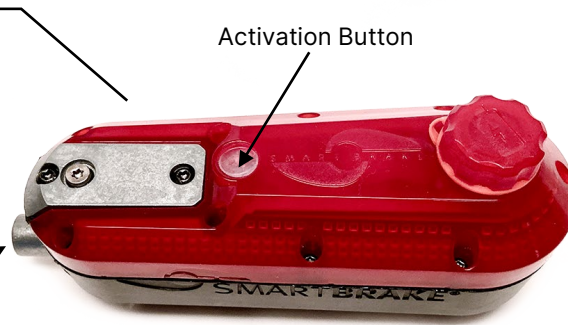
## BRAKE UNIT

Contains mechanism and electronics to receive controller signal and activate the piston to push or draw mineral oil through hydraulic lines to disc brake or rim brakes, compressing or releasing brake calipers.

Hydraulic housing port (hydraulic lines connecting to brakes not shown)

Activation Button

USB Charging Port Cover (unscrew to access port and see USB light indicator)



## BRAKES

Brake unit comes with hydraulic lines attach to either a hydraulic disc brake or rim brake

## CONTROLLERS

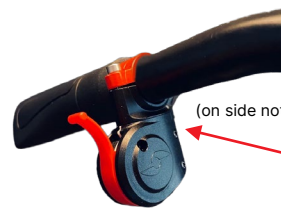
RF wireless controllers send signals to the brake unit to slow and stop or release the brakes.



Magura Rim Brake



Tektro or Magura Hydraulic Disc Brake (available as single, double or twin)



Thumb Lever

(on side not shown)



Brake Lever

Parking Brake Button (press once)

Indicator Light(s)

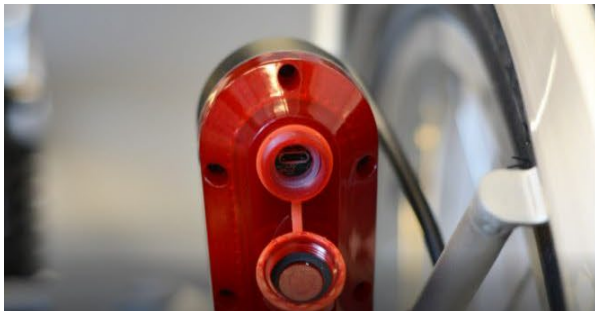
Brake Button (press and hold)



Hand Remote

# BRAKE UNIT

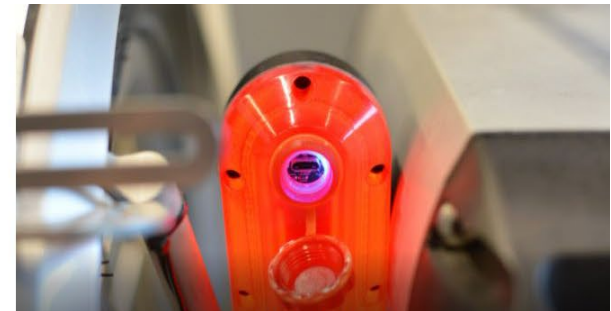
BRAKE UNIT ISSUE	POSSIBLE CAUSE	REMEDY
Flashing Brake Light + USB Light flashes <b>red</b> every ten seconds.	The brake unit battery is <25% capacity.	Charge as soon as possible.
Flashing Brake Light every second (no USB light flashing).	Fail-Safe has been activated; battery level at the Brake Unit is <15% capacity.	Turn off the Brake Unit by holding the activation button for 5 seconds. This will open the brakes but the controllers will not work as the system is turned off. Charge brake unit for ~3.5 hours.
Flashing Brake Light + USB Light flashes <b>yellow</b> every second.	Fail-Safe has been activated; battery level at controller is <15%.	Turn off the Brake Unit by holding the activation button for 5 seconds. This will open the brakes but the remotes will not work as the system is turned off. Charge the brake lever controller for ~2.5 hours.
Flashing Brake Light + USB Light flashes <b>blue</b> every second.	<ol style="list-style-type: none"> <li><b>The controller flashes when you squeeze the lever closed</b> (brake lever lights up green/blue or thumb lever illuminates green/red).</li> <li><b>The controller is completely out of power</b> and does not light up when you squeeze the lever closed.</li> </ol>	<ol style="list-style-type: none"> <li>The controller(s) has entered sleep mode. Trigger the controller a few times.</li> <li>Make sure the controller is within signal range. Synchronize the controller with the brake unit. If this doesn't work, charge the controller (brake lever) or replace the battery (thumb brake/ hand remote controllers).</li> </ol>
Brake unit activation button does not work.	The button might be stuck. When stuck there is no "click" sound when pushing it.	Try to push the button from different directions to see if it loosens.
Nothing works, even if the brake unit has been fully charged and the USB charging light is on when charging.	Defective charger, battery, or circuit board	Try another charger and/or charging cable. If it does not work, the brake unit must be serviced.



No Light



Yellow Light



Blue Light

# BRAKE LEVER CONTROLLER

BRAKE LEVER ISSUE	POSSIBLE CAUSE	REMEDY
Brake lever flashes <b>red</b> every ten seconds.	Brake lever battery level <25%.	Charge as soon as possible.
Brake lever flashes <b>red</b> every second.	Fail-Safe has been activated; battery level at controller is <15%.	Charge immediately.
Brake lever has <b>green/blue</b> flash when squeezing the lever.	<ol style="list-style-type: none"> <li><b>Brake lever isn't within signal distance of the brake unit.</b></li> <li><b>Brake unit isn't powered on.</b></li> </ol>	<ol style="list-style-type: none"> <li>Move the controller within signal distance and sync the controller and brake unit together.</li> <li>Turn on the brake unit - the brake unit must be powered on to receive signals from the controller.</li> </ol>
Brake lever has constant <b>yellow</b> light signal.	The brake Lever is in 'bootloader' mode.	Wait 2 minutes then try using brake lever.
Brake lever is functional but there is no light signal.	Possible defect with light source.	Contact distributor/ Smart Brake to coordinate service.
Brake lever is not functioning and there are no light signals.	Drained battery	Charge the brake lever for ~2.5 hours.
Brake lever has charged for 2.5 hours and is still not functioning and there are no light signals.	Possible defect with charger or battery.	Try charging the brake lever using another charger. If the problem persists, please contact distributor/ Smart Brake to coordinate service.



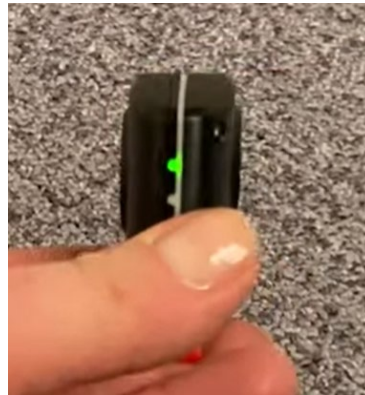
Red Light



Green/Blue Light

# THUMB LEVER CONTROLLER

THUMB LEVER ISSUE	POSSIBLE CAUSE	REMEDY
Thumb lever flashes <b>red</b> every ten seconds.	Thumb lever battery level <25%.	Charge as soon as possible.
Thumb lever flashes <b>red</b> every second.	Fail-Safe has been activated; battery level at controller is <15%.	Charge immediately.
Thumb lever has <b>green</b> flash when squeezing the lever.	Thumb lever lost connection with brake unit.	Move the controller within signal distance and sync the controller and brake unit together.
Thumb lever has <b>red</b> and <b>green</b> light signal.	The brake Lever is in 'bootloader' mode.	Wait 2 minutes then try using thumb lever.
Brake lever is not functioning and there are no light signals.	Drained battery	Remove battery cover by unscrewing the 3 screws located under the latch using a Torx T8 screwdriver. Remove the old battery and insert a new <b>CR2032</b> battery (sold at most major retailers, grocery stores, online). Replace cover and tighten screws.



Green Light

# HAND REMOTE CONTROLLER

HAND REMOTE ISSUE	POSSIBLE CAUSE	REMEDY
See <b>red</b> flash while pushing the 'Brake' button on the remote and brake unit doesn't respond despite it being powered on.	Thumb lever lost connection with brake unit.	Move the controller within signal distance and sync the controller and brake unit together.
Nothing happens when the button on the hand remote is pushed; the brake unit is confirmed to be powered on.	Drained battery	Use a coin or metal washer to rotate and remove the battery cover from the hand remote; remove the old battery and insert a new <b>CR2032</b> battery (sold at most major retailers, grocery stores, online). Replace battery cover.
Brakes activated when I didn't press any buttons on the hand remote controller.	Fail-Safe was activated because hand remote was out of range of the brake unit (more than 65-98 feet).	<p>Move so that the hand remote is in range of the brake unit. The signal will be restored, the brake cycle will end, and the wheels will no longer be locked.</p> <p><b>NOTE:</b> The Fail-Safe will activate within 2 seconds of signal loss. This is to ensure the parent or companion is always within range of the user.</p>

# OTHER ISSUES

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**ISSUE****CAUSE****REMEDY**

Smart Brake system in '**Sleep Mode**'.

After 60 minutes of inactivity the brake unit(S) and controller(s) will go into power save mode (standby). In this mode, the system stops sending out signals to conserve the battery.

'Wake' the brake unit(s) by pushing the activation button on the unit(s) once.

'Wake' the controller by triggering the brake after the brake unit has been activated.

**NOTE:** If you have multiple controllers on your system, you must wake all controllers after sleep mode – otherwise the Fail-Safe will be activated.

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