

**XBB Lightswitch Ver.4**  
**F.A.Q**

Operation of the XBB Lightswitch is dependent of the including patented sensor that senses the magnetic field that appears when current flows through a wire. To detect the activation of the high beam lights, the magnetic field of the signal wire must exceed a strength that is equivalent of 400mA of current. As long as the current is exceeding 400mA, the outputs of the XBB will remain activated. When the current disappears or falls below 400mA the outputs will be turned off.

The sensor attaches to the signal wire for the high beam lights, if it's a vehicle that uses halogen lights, the sensor is to be connected to the wire that powers the light. If the high beam is of Xenon type, the sensor is to be attached to the solenoid that adjusts the light or reflector position.

**ATTENTION!**

An important step in the installation procedure is to ensure that the sensor is correctly attached to the signal wire and the engine is on idle BEFORE you insert the fuse for the power supply. If you relocate the sensor, the system needs to be reinitialized by removing and reinserting the fuse. The higher voltage at idle is the reason why we need the engine at idle when initializing the system.

**If you have any questions or problems with your product, you should contact your retailer!**

**Q: My auxiliary lights/LED-Module is blinking even though my high beam lights are deactivated. Why?**

A: The sensor is probably picking up noise from another magnetic field in the vehicle. An extra shield of mu metal usually fixes the problem. If you didn't receive an extra piece of mu metal along with your product, please contact your retailer or send us an email at [support@xbb.nu](mailto:support@xbb.nu) and you will receive one.

**Q: The LED is flickering with a red color, the moment i install the sensor. Why?**

A: This may be caused by several reasons:

1. The sensor connector is not correctly attached to the corresponding connector on the XBB unit.
2. The sensor is not attached to the correct wire.
3. Faulty sensor.

**Q: There is a constant +12v signal(?) on the outputs even though the high beam lights are deactivated. Is my XBB unit faulty?**

A: No. The output is in a high impedance state for measuring wire status, for example short circuit. The current is very low.

**Q: The device seems to be working properly, but the green LED is blinking at a slow pace meanwhile the high beam lights is activated ?**

A: This is correct. The blinking LED indicates that the unit is working as it should/properly.

**Q: My auxiliary lights / LED-module is blinking and acting strangely. Why?**

A: Check the grounding of the XBB and any connected auxiliary lights. It is very important that the ground wires have a good connection to chassis or the batteries negative pole.

If the connection is good and the wires are of correct dimension, it is possible that the sensor needs to be shielded with another layer of mu metal.

**Q: My LED-Module blinks at the same time as the turn signal!**

A: You have connected the sensor to a common ground for the high beam lights and turn signal lights, disconnect the fuse and mount the sensor to over the correct wire.

**Q: My vehicle uses a negative signal wire. Is this a problem for the XBB Lightswitch?**

A: No, this is not a problem.

**Q: What is recommended wire dimension?**

A: We recommend 4mm<sup>2</sup> wire for the supply and at least 2,5mm<sup>2</sup> for the auxiliary lights. Use R2G4 or RKUB. Use the shortest wire possible to avoid voltage drop.

**Q: XBB warns of low battery voltage, i.e. 4 quick blinks in a row. But when i measure the battery voltage I get 12V?**

A: A low voltage warning is activated when the voltage drops below 11,7V. Long and thin wires may cause a voltage drop that causes this alarm. Replace the supply wires to the XBB with 4mm<sup>2</sup> wire and keep it as short as possible. Please also check battery status and alternator voltage.

**Q: My vehicle have Bi-Xenon but it uses a electric motor instead of a solenoid. Is this a problem?**

A: Yes, unfortunately. The electric motor does not provide a constant current while the high beam is activated, which is required for correct operation with XBB Lightswitch.

**Q: May I use the XBB Lightswitch to control an external relay?**

A: Yes, this is supported with output 2 and 3. Note that output 1 does not support this.

**Q: The current of my LED-Module exceeds 10A or 120W, is there a way to connect this to the XBB Lightswitch?**

A: Yes, you may connect several outputs in a parallel configuration for extra current capacity.

**Q: Sometimes my auxiliary lights doesn't respond even though there has been no problem in the past. Why?**

A: The sensor is designed for a wire dimension of 0,5 – 2,5mm<sup>2</sup>. If your vehicle has a wire thinner than this dimension, the sensors built in mechanical tension may be too loose. Please use a cable tie to fix the sensor to the wire.

**Q: I need the ability to deactivate the auxiliary lights even though my high beam lights are activated. Is this possible?**

A: Yes, this can be done. There is a terminal connection marked SW, in the 3-pin terminal. By grounding this input, the outputs are deactivated, no matter what the sensor measures. You can connect a switch between SW and ground. See the electrical schematic.

**Q: Is my vehicle supported by XBB Lightswitch?**

A: There are hundreds of different models of cars from different manufacturers. Many cars has different options for low and high beam lights.

We have not tested every possible combination, so it's hard to tell. Most vehicles with halogen high beam lights and Bi-xenon that uses a solenoid, usually works.

Customers have reported success with LED-lights, but some more advanced models may be problematic, especially when using automated turn on/off of the high beam lights.

We would greatly appreciate if you, after a successful installation, would send us some information regarding your installation to [support@xbb.nu](mailto:support@xbb.nu) or on our page on Facebook.

This helps us and future customers.

**Information we would like:**

Car Model?

Year of manufacture?

What kind of high beam lights the vehicle has?

Which side of the engine compartment the sensor is installed at?

Color of the signal wire and connector markings?

**Thank you and good luck.**  
**Innoware Development AB**  
**[www.xbb.se](http://www.xbb.se)**