



Product description

What is it ?

Automatic lighting system :

- **Immediately** switches on the headlight as soon as light becomes poor.
- Switches them off again when sufficient light is restored.

Tunnel



Underground car-parks



Nightfall

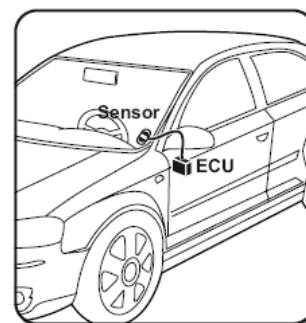


Dark weather



How does it work ?

- **An optical sensor**, fitted on the windscreen, permanently detects **light levels**
- When the **light drops** to less than 1,000 lux, the electronic control unit **activates** the vehicle's lighting **automatically** :
 - side light and low-beam lights
 - rear lights
 - dashboard lighting
 - license plate lighting
- When the light returns to 3,000 lux, the lights are automatically switched off in less than 20 seconds.
- The system can easily be switched off to return to manual mode using the **on/off switch** on the sensor.



Product contents

- **Optical sensor** :
 - compact sensor for aesthetic integration in the vehicle.
 - on/off switch integrated on the sensor
- **Electronic control unit**
- **Wiring cables** :
 - protection of electric circuit with fuses
 - color-coded wires
- **Fitting instructions**





Product advantages

Easy to install

Ready-to-use product for quick and easy installation:

- All wiring cables supplied, with **colour-coded wires**.
- **ECU mounted** on self-adhesive patch.
- **No unit adjustment or resetting** necessary.
- No special tools required.
- Average estimated installation time: **1 hour**.



The following installation assistance is available:

- **Detailed illustrated installation guide** in this document
- **Technical support hotline** :



A universal product

- Can be installed in **any type of passenger car, 4WD vehicle or light van (12V)**.
- Compatible with steering-column-mounted lighting management (control stalk) or dashboard lighting management (lighting dimmer).
- Compatible with athermal (tinted) windshields.
- Compatible with other aftermarket accessories.
- Can be installed in multiplexed vehicles except post-2002 PSA models.



Not for installation in post-2002 Peugeot and Citroën models, as the special multiplexing used in these models prevents dashboard lighting information being retrieved when the light/on&off system is installed.

Technical specifications

Power supply	12V (rated voltage: 8V~16V)
Activation level of the lights	≤ 1,000 lux (+/- 25%)
Extinction level of the lights	≥ 3,000 lux (+/- 25%)
Extinction time delay	< 20 seconds
Electric power consumption	< 300 mA
Operating temperature	from -40°C to +85°C
Homologation	E-mark



Installation guide



Installation time

1 hour

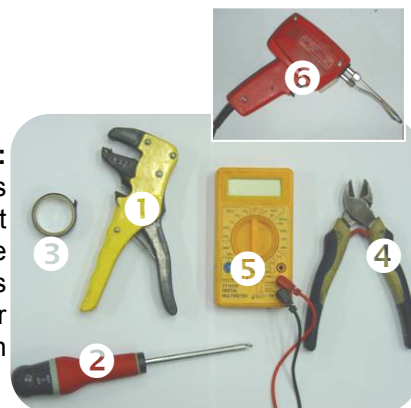


Tools required:

1. Wire stripper pliers
2. Screwdriver set
3. Insulating adhesive tape
4. Wire-cutting pliers
5. Multimeter
6. Soldering iron

Kit components:

1. Lighting wiring cable
2. Electronic Control Unit (ECU)
3. Optical sensor + cable
4. ECU power cable



As the battery must be disconnected before installation, some data may be lost (radio station settings, vehicle locking code, etc.)

1. Preparing for installation



- Before installing the system, check that all of the vehicle's lighting is working properly:
 - Low beam lights
 - Side lights
 - Rear lights
 - Dashboard lighting
 - License plate lighting
- Remove the cover under the dashboard to access the control stalk or lighting dimmer connections and the fuse block.

2. Locating the electrical connections



- Using the multimeter, locate each of the lighting switch's or dimmer's output wires.
2 wires on most models currently on the road, although there may be up to 7 on some multiplexed vehicles
- Check whether the output current is 12V and whether it is positive or negative.
- Locate +ACC, the ground and permanent + (+12V)
These are generally located at the fuse block, radio or control stalk.



Installation guide

2. Locating the electrical connections (continued)



Decide which circuit diagram matches the vehicle you are working on

Simple positive diagram:

and

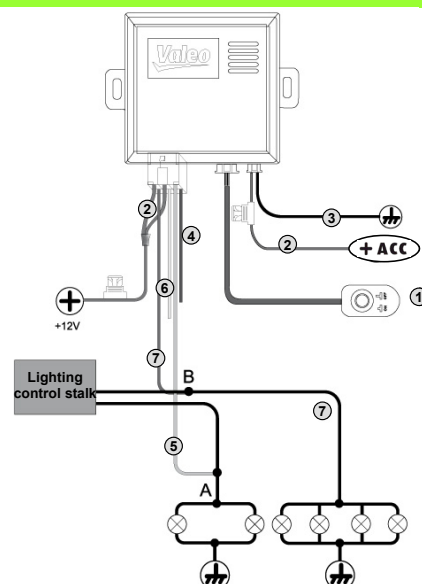
- The light switch's or dimmer's output current is **positive**.
- There are only **2 vehicle lighting wires** from the light switch or dimmer.

Lighting connection cable :

- ② **Red** +12V
- ④ **Purple** Not used
- ⑤ **Green** A : low beam
- ⑥ **Yellow** Not used
- ⑦ **Blue** B : licence plate light + side lights

Other cables :

- ① **Sensor**
- ② **Red** +ACC
- ③ **Black** Ground



Complex positive diagram:

and

- The light switch's or dimmer's output current is **positive**.
- There are **more than 2 vehicle lighting outputs** from the light switch or dimmer.

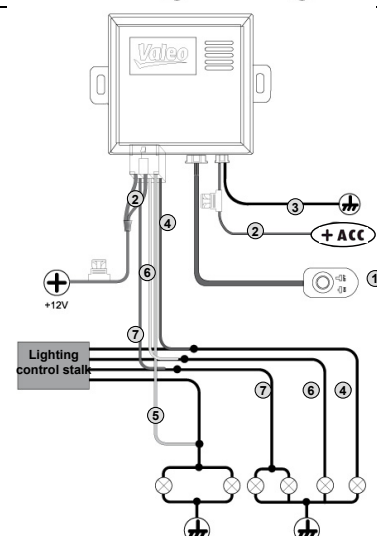
Ex: multiplexed vehicles may have up to 7 different output wires for lighting.

Lighting connection cable :

- ② **Red** +12V
- ④ **Purple** Right side light
- ⑤ **Green** Low beam
- ⑥ **Yellow** Left side light
- ⑦ **Blue** Licence plate light

Other cables :

- ① **Sensor**
- ② **Red** +ACC
- ③ **Black** Ground



Negative diagram (similar to the simple positive):

- The light switch's or dimmer's lighting output current is **negative**.



In this case, you must connect a **power relay** to the light/on&off unit's wiring cable to **convert the product's output current from + to -**.

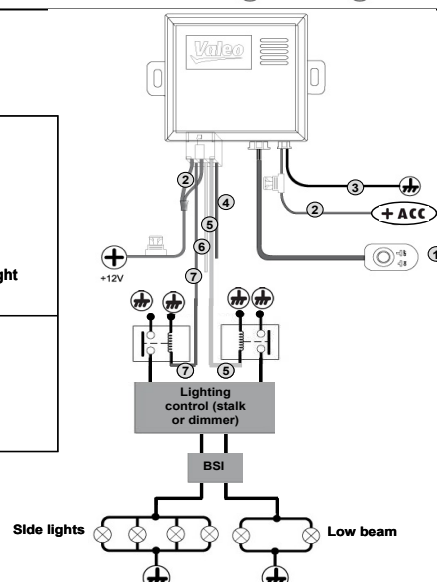
Ex: some recent Opel/Vauxhall models

Lighting connection cable :

- ② **Red** +12V
- ④ **Purple** Not used
- ⑤ **Green** Low beam
- ⑥ **Yellow** Not used
- ⑦ **Blue** Licence plate light + side lights

Other cables :

- ① **Sensor**
- ② **Red** +ACC
- ③ **Black** Ground





Installation guide

3. Connecting the lighting wires



- Disconnect the battery:
 - Switch off the engine first.
 - **Wait for 2 minutes** before you disconnect the battery, to give the vehicle's computers sufficient time to power off completely.

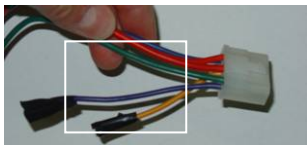


- Connect the vehicle's lighting output wires to the wiring cable provided, referring to the wiring diagram (see previous page).

The wire colours provide wiring guidance

Check that all of the vehicle's lighting outputs are connected

- Side lights
- Low beam lights
- Rear lamps
- Dashboard lighting
- License plate lighting



- Cut off and insulate any unused wires

4. Installing the light sensor



- Locate the sensor's mounting position in the windscreen's corner, inside the vehicle, ensuring the following:
 - on a translucent area (not on a stippled or tinted area of the windscreen)
 - near to the driver, for easy switch access
 - avoid the airbag deployment area (windscreen pillar)

- Clean and degrease the interior of the windscreen, to ensure that the sensor adheres to it and works correctly.



- Attach the sensor (self-adhesive pad) and feed the cable into the windshield pillar.



Take care not to obstruct any airbag, if one is fitted.



Installation guide

5. Installing the ECU



- Connect the different wires (lighting connections, power, and sensor cable) to the ECU.



- Fix the ECU under the dashboard, near to the fuse block.

The ECU is fixed by a self-adhesive patch under its base, but we recommend screwing it into place or attaching a clamping ring to ensure it is held firmly, depending on how it is mounted in the vehicle.

6. Start-up & operating test



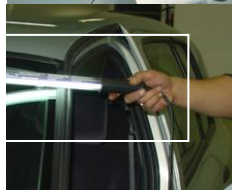
- Reconnect the battery and switch on the engine again
 - ➔ On multiplexed vehicles, **wait for 1 minute** before switching on the engine, to ensure that the vehicle's computers are reinitialized properly.



- Check that the sensor is working correctly:



- ➔ In a **light environment**: cover the sensor and check that the front lights, rear lamps, dashboard lighting and license plates switch on immediately.



- ➔ In a **dark environment**: shine a lamp on the sensor and check that the front lights, rear lamps, dashboard lighting and license plates go out after a few seconds.



- ➔ Deactivate the system (set its switch to the "off" position) and check that the lights can be switched on manually (using the lighting switch or dimmer).



After installation

Recommendations in daily use



On some vehicles fitted with **mechanical control stalks**, the headlights can only be switched to the high beam position when the lighting switch is in the low beam position. When the light on&off system is used **on these vehicles**, the driver must move the **lighting switch to the low beam position manually in order for the high beam lights to remain lit**.



The driver must do likewise for the **fog lamps**, which are switched on, on some models, when the lighting switch is already in the low beam position.



To ensure **the best possible performance** from the system:

- Keep the sensor away from liquids
- Do not handle the sensor after installation
- Do not expose the sensor or ECU to impacts
- Keep the windscreen clean

Troubleshooting



The lights remain lit in daylight:

- Check that the sensor is not installed in a dark or shaded area
- Check that the sensor's surface is clean
- Check that the sensor's cable is not damaged



The lights do not switch on when the vehicle enters a dark environment:

- Check that the sensor is activated (its switch is in the "on" position)
- Check that it is wired correctly
- Check that the fuse has not been damaged during installation



The dashboard (or one of the other lighting systems) does not switch on with the vehicle's headlights:

- Check that it is wired correctly
- Check that all the wires controlling lighting have been connected to the ECU



When the sensor is off, the vehicle's lighting does not work:

- Check that it is wired correctly
- Check that the sensor's on/off switch is not damaged
- Check that the vehicle's lighting fuse was not damaged during installation