

LED technology information

1. What is an LED upgrade? For which applications LED upgrade bulbs are available?

It's a solution for the drivers who want to upgrade their vehicle lights from halogen/conventional bulbs to LED. The road approval of LED retrofit lamps is granted in the form of a general type approval and is currently available for the low beam, high beam and position light of selected vehicle models.

2. What are the advantages of using an LED upgrade bulb over a Halogen bulb?

The advantages of an LED upgrade are numerous:

- **Better visibility:** You will get better visibility on the road for more safety for you and other drivers.
- **Bright white light:** You will have stylish bright white light to give a refreshed look to your car.
- **Longer lifetime:** You will benefit from a higher lifetime (approx. 6x longer lifetime), meaning cost saving of replacing conventional bulbs every 1-3 years.
- **Upgrading to latest technology at affordable cost** without needing to replace full headlamp or purchasing a new full-LED car.

In addition, you receive a **warranty up to 3 years** (applies only for manufacturing defect and for non-commercial use. Further information at philips.com/auto-warranty).

3. Can I upgrade my car equipped with Xenon bulb to LED upgrade bulb?

No, Philips only offer the upgrade from halogen-based headlights to Philips Ultinon Pro6000 H7-LED, H4-LED, W5W-LED bulbs.

4. Are Philips LED upgrade ranges environment friendly?

Yes, Philips LED upgrade ranges contributes to environment protection by:

- Significant energy-saving, consuming less overall resources and emitting less CO₂
- Fully compliant with RoHS/REACH, which means no hazardous materials which are harmful to the environment
- Long service lifetime means the elimination of unnecessary replacement related waste and system costs while reducing overall resource consumption.

5. Can I save money by switching to LED upgrade?

Yes, Philips LED upgrade bulbs have an extended lifetime, which means you save the cost and hassle of frequent bulb replacements. A standard Halogen bulb has approx. 500 hours of lifetime and an LED bulb, for example, the Philips Ultinon Pro6000 has a lifetime of approx. 3000 hours.

6. [Some LED upgrades in market offer 50,000 hours lifetime for headlighting whereas Philips offer only 3000 hours? Why is there such a big difference?](#)
Many LED replacement bulb brands claim 10,000h, 20,000h or even 50,000h of LED bulb lifetime. This is completely misleading the customer. These brands are communicating the life of an LED chip by itself measured at an ambient environment of 25 degrees and not the life of an LED bulb as a whole. The most critical piece of an LED bulb is the PCB (Printed Circuit Board) because it heats up a lot and if not cooled down properly, it affects the performance of the LED bulb. The lifetime of an individual component doesn't matter, what matters is the lifetime of the product overall. That's why, at Philips we offer 3-years warranty on our LED Philips Ultinon Pro6000 for our customers' peace of mind. Further information at philips.com/auto-warranty.
7. [Why most of the competitors are using Lumileds LED chips?](#)
Lumileds LED chips are today among the best performance chips you can find on the market in terms of performance and durability. In addition, there are specific automotive grade OEM LED chips, which are used by major car manufacturers worldwide. Lumileds exclusively brings these automotive grade OEM LED chips to the automotive aftermarket in its LED upgrades and these chips are used in the Philips Ultinon Pro6000 H7-LED, H4-LED, W5W-LED bulbs.
8. [It is said that LED lamps strongly dazzle oncoming traffic. How is it for Philips LED upgrades?](#)
Safety of the driver and other road users is key for us. Therefore, our bulbs feature Philips SafeBeam Technology, producing the best useable beam and glare-free pattern. Drivers get the light exactly where they need it on the road without dazzling oncoming vehicles.
9. [Where can I find more information on LED technology upgrades?](#)
For our passionate customers, we have prepared a web-series on LED-technology. See all our episodes here philips.com/LEDVideoGuide.

LED upgrade benefits

1. [Why should I buy Philips Ultinon Pro6000 products? How is it different from the competition?](#)
Philips Ultinon Pro6000 H7-LED, H4-LED, W5W-LED allow you to legally upgrade your vehicle lights to LED technology for a selected number of vehicle platforms. These LED upgrades are approved for road-use in certain countries.

Product highlights:

- Philips Ultinon Pro6000 uses Automotive OEM grade LED chips, exclusive to LUMILEDS in Aftermarket
- Up to 230% more brightness*
- Up to 6x longer lifetime*
- 3 years warranty**
- AirBoost cooling technology

*Compared to the minimum legal standard for halogen bulbs.

**Applies only for manufacturing defect and for non-commercial use. Further information at philips.com/auto-warranty.

2. [How would I recognize fake Philips LED bulbs from genuine ones?](#)

Whenever you purchase a Philips LED upgrade bulb for your headlights, you can check the authenticity using the QR code provided on the product packaging. This is an insurance for you that you get a genuine Philips LED bulb. Please visit philips.com/authenticity-check for more information to know about authentication steps.

3. [Is there a product warranty on Philips Ultinon Pro6000 H7-LED, H4-LED, W5W-LED?](#)

Yes, Philips offers 2 years + 1 year extended warranty* on Philips Ultinon Pro6000 LED headlight bulbs. Please visit philips.com/auto-warranty for more information on how to register for extended warranty.

*Applies only for manufacturing defect and for non-commercial use. Further information at philips.com/auto-warranty.

4. [How do I know if I can install Philips Ultinon Pro6000 headlight bulbs in my vehicle?](#)

Philips Ultinon Pro6000 H7-LED, H4-LED, W5W-LED have been approved for road traffic in certain countries for selected vehicle models only. Please refer to our approved compatibility list here Philips.com/roadlegalLED.

5. [I cannot find my vehicle in the “approved list”/ “compatibility list”. Can I still install the lamp in my vehicle?](#)

Unfortunately, if your vehicle model is not on the compatibility list, the LED upgrade bulb has not been tested for your car model yet. Road-approval of Philips Ultinon Pro6000 for every vehicle model is a very complex process. We are continuously working on expanding the compatibility list to make our LED technology available for as many vehicle models as possible. You can expect additional vehicle models to follow shortly. Please understand that we cannot make any statements about future vehicle models at this time. Please check our list online regularly as it's being updated: Philips.com/roadlegalLED.

6. [Can I use Philips Ultinon Pro6000 H7-LED for high beam application?](#)

Yes, the Philips Ultinon Pro6000 H7-LED is currently approved for both low and high beam application. Please find the list of approved vehicles and applications here: Philips.com/roadlegalLED.

7. [Can I use Philips Ultinon Pro6000 H4-LED for high beam application?](#)

Yes, the Philips Ultinon Pro6000 H4-LED is currently approved for both low and high beam application. Please find the list of approved vehicles and applications here: Philips.com/roadlegalLED.

8. Can I use Philips Ultinon Pro6000 W5W-LED for external usages other than position lights?

No, the Philips Ultinon Pro6000 W5W-LED is currently approved for front position light application only. However, any usage inside the car is fully allowed by regulation. Please find the list of approved vehicles and applications here: [Philips.com/roadlegalLED](https://philips.com/roadlegalLED).

9. Where can I buy LED upgrade bulbs?

You can purchase Philips Ultinon Pro6000 H7-LED, H4-LED, W5W-LED both online or offline.

10. How can I show to authorities that my LED headlight is road-legal?

A certificate is provided on the Philips Authenticity check portal when you scan the QR code on the top of the packaging. You must print the certificate and keep it in the vehicle. For certain countries, a sticker is provided in the Philips Ultinon Pro6000 packaging. You must apply the sticker to a dry, clean surface near the headlight unit that is visible inside the engine compartment.

11. What if I lose the sticker/certificate? Will my LED bulbs lose their road-legal status?

No, your LED bulbs won't lose their road-legal status. However, it is mandatory to display the sticker in a visible place inside the engine compartment/keep the certificate in the car for verification. Please contact our Customer Service for support.

12. I see Philips offers a wide range of LED upgrades such as Philips Ultinon Essential, Philips Ultinon Pro3021, Philips Ultinon Pro3022, Philips Ultinon Pro5100, and Philips Ultinon Pro9100. Can I use them in my country?

Neither the Philips Ultinon Essential, Philips Ultinon Pro3021, Philips Ultinon Pro3022, Philips Ultinon Pro9100 nor the Philips Ultinon Pro5100 is homologated by local authorities and these LED upgrades can only be used off-road (for instance, on rally- and racetracks). These Philips lamps are still designed for a safe light output (low beam), but for off-road use only. They come with the SafeBeam Technology, not to glare other users. The Philips Ultinon Pro ranges and Philips Ultinon Essential LED bulbs provide more light output than halogen bulbs and a cooler color temperature for better visibility and contrast. On public roads, always use Philips Ultinon Pro6000 LED headlight bulbs if your car model and headlight approval number are on the Philips LED compatibility list at [Philips.com/roadlegalLED](https://philips.com/roadlegalLED).

LED upgrade installation

1. How do I know if the Philips Ultinon Pro6000 LED headlight bulbs fit my vehicle?

Our product has been tested on many vehicle models. Please refer to our list of road-approved "vehicle compatibility list" here [Philips.com/roadlegalLED](https://philips.com/roadlegalLED).

2. How do I install Philips Ultinon Pro6000 H7-LED, H4-LED, W5W-LED in my vehicle?

Please refer to our installation user manual to know the steps of installation.

3. [What should I do if I face problems while installing the lamp in my vehicle?](#)

You can address your issue to our Philips Consumer Support Center at [Philips.com/AutomotiveSupport](https://philips.com/AutomotiveSupport).

4. [I see Philips offers LED CANBus adapters? Do I need one?](#)

When upgrading your vehicle to LED upgrade bulbs, a few challenges may occur, such as an error message on the dashboard, flickering, or a dimming effect. These error messages do not mean that the LED bulb itself is faulty. These are common errors when upgrading to LED technology. Therefore, we have developed smart solutions to overcome those challenges. Philips' unique CANbus adapters ensure the vehicle's lighting systems function smoothly, for reliable electrical performance over time. To check whether your vehicle requires an LED CANbus adapter for correct installation, please visit Philips compatibility list here: [Philips.com/roadlegalLED](https://philips.com/roadlegalLED).

5. [Have the lamps been tested for radio interference?](#)

Yes, the lamps are tested for radio interference and meet all relevant standards.

6. [Do Philips Ultinon Pro6000 H7-LED, H4-LED, W5W-LED sockets have polarity?](#)

Philips Ultinon Pro6000 LED H7-LED, H4-LED sockets are polarity free and may be mounted either way around. Philips Ultinon Pro6000 W5W-LED socket does have polarity and needs to be mounted as per the instructions included in the box.

7. [How difficult is the mounting?](#)

Mounting difficulty depends on the vehicle model/headlamps. Please take a look at [Philips.com/roadlegalLED](https://philips.com/roadlegalLED) to download the step-by-step installation guide.

8. [Where can I find the approval number of the headlamp?](#)

Please check out our instructions on [Philips.com/roadlegalLED](https://philips.com/roadlegalLED) to know where to find the headlamp approval number on your vehicle.

9. [What are Philips accessories and why do I need them?](#)

Some vehicles might require a CANbus adapter or adapter ring for proper installation and functioning of the LED bulb in the vehicle.

For general information: When upgrading your vehicle to LED upgrade bulbs, a few challenges may occur, such as an error message on the dashboard. The error message does not mean that the LED bulb itself is faulty. These are common errors when upgrading to LED technology. Therefore, we have developed smart solutions to overcome those challenges. Philips' unique CANbus adapters ensure the vehicle's lighting systems function smoothly, for reliable electrical performance over time. A CANbus adapter is needed to remove the error message on the dashboard or light flickering issues. Please refer to the list on [Philips.com/roadlegalLED](https://philips.com/roadlegalLED) where we provide detailed overview of vehicle models, the tested headlight number and the required installation accessories. Please note only the combination of Philips Ultinon Pro6000 LED bulbs used with approved original Philips accessories (where required) are considered road-legal.

10. [Where can I find if I need a CANbus adapter or adapter rings for my car?](#)

Please refer to the list on [Philips.com/roadlegalLED](https://www.philips.com/roadlegalLED) where we provide detailed overview of vehicle models, the tested headlight number and the installation accessories required for them. Please note only the combination of Ultinon Pro6000 LED bulbs used with approved original Philips accessories are road-legal.

11. [How do I install Philips CANbus adapters and adapter rings?](#)

Please take a look at [Philips.com/roadlegalLED](https://www.philips.com/roadlegalLED) to download the step-by-step installation guide.

12. [Can I use other or different accessories with Philips Ultinon Pro6000 H7-LED, H4-LED bulb?](#)

The road approval of the Philips Ultinon Pro6000 H7-LED, H4-LED bulbs for vehicle models that require accessories is only valid when it is installed with the original Philips accessories. Using other, non-approved accessories where accessories are needed will result in the approval certificate being invalidated and your use of the Philips Ultinon Pro6000 bulb would not be considered road-legal. Please refer to our road-approved “vehicle compatibility list” to verify if your vehicle needs additional accessories and use only approved accessories.

Legislation on LED upgrade

1. [What does “road-approved” or “road-legal” mean with respect to LED replacement?](#)

It means that the product has been approved for public road use in certain countries. The approval has been granted by the Ministry of Transport for our Philips Ultinon Pro6000 LED retrofit lamp in selected vehicle models.

2. [What does ABG general type approval mean?](#)

It is a general type approval, short form “ABG”, issued by the Federal Motor Vehicle Office “KBA” for vehicle parts in Germany.

3. [What is StVZO §22a?](#)

This is the German law regulating all components that are permitted for vehicles.

4. [Is the replacement of halogen H7, H4 or W5W lamp with H7-LED, H4-LED or W5W-LED only road-approved for certain vehicle models? If yes, where can I find the list of “approved models”?](#)

Yes, it is only approved for certain vehicle models. You can see our current list of road-approved vehicles list here [Philips.com/roadlegalLED](https://www.philips.com/roadlegalLED).

5. [Why is the headlight upgrade to LED not allowed for all vehicle models?](#)

EU member states have not issued the required legislation for LED upgrade bulbs, so they cannot be used on public roads in the EU. However, Philips Ultinon Pro6000 H7-LED, H4-LED, W5W-LED have been approved for road usage in certain EU countries and for selected vehicle models by the respective Ministry of Transport. Check here [Philips.com/roadlegalLED](https://www.philips.com/roadlegalLED) for “approved compatibility list”.

6. Can I travel to other countries with my H7-LED, H4-LED or W5W-LED installed? Or do I need to remove my LED lamp?

Yes, you can drive a vehicle registered in certain countries across the border without replacing the Philips Ultinon Pro6000 H7-LED, H4-LED, W5W-LED bulbs (excluding countries with left-hand traffic such as the UK or Ireland).

7. Does the national approval have a time limit?

No. If you install Philips Ultinon Pro6000 H7-LED, H4-LED, W5W-LED in your car, you can legally use the product in your vehicle on public roads without any time limit.





8. Do I need to change anything in my vehicle documents if I install the Philips Ultinon Pro6000?

No. Philips Ultinon Pro6000 does not require any modification of the vehicle documents to install the bulb. However, there're may some local specific requirements for control purposes, please refer the user manuals to check if there's any requirement that applies in your country.

9. Which authority has approved the use of Philips Ultinon Pro6000 in selected vehicles?

The approval for our Philips Ultinon Pro6000 H7-LED, H4-LED, W5W-LED was granted in accordance with the national regulation issued by the Ministry of Transport. It enables the use of LED retrofit bulbs in selected vehicle models. This regulation aims to improve safety on public roads, providing strict criteria for the installation and performance of LED bulbs in vehicles.

10. What do these symbols on the packaging mean?

	Approved for use on public roads in certain countries for selected vehicle models only. Further information at: Philips.com/roadlegalLED
	Philips Automotive Grade Quality products are designed and developed following strict quality-control processes, leading to consistently high production standards. All our products are best-in-class quality, which allows us to be an Original Equipment Manufacturer (OEM).
	Philips LED cooling technology. It avoids overheating of LED bulbs and ensures consistent and optimal light performance on road throughout your journey.
	Most cars have limited space in the headlight unit. Our super-compact design ensures compatibility with a wide range of car models.

11. I've read that Philips made the upgrade from halogen to LED legal on public roads in 2020?
When and where was it?

Since July 2020, South Korean drivers have been able to upgrade their headlights from halogen to LED following approval of the second-generation Philips Ultinon Essential. Developed by Lumileds, the bulb brings superior LED brightness with a stylish white light.

Philips Ultinon Essential gen2's homologation in July 2020 (H7 bulb size) broke new ground for the use of LED headlamps on public roads in Korea. For the first time anywhere, motorists can legally fit an H7-compatible LED bulb to any existing car model and drive on the national road network. And South Korean motorists' upgrade options expanded further in October 2020 with certification of the second-generation Philips X-treme Ultinon LED, delivering even more brightness and driving enjoyment. Lumileds now offers so much choice in road-legal upgrade LED lighting.