

The ModuleCircuitBoard-NormalLights is an LED module/replacement PCB for the Model 3 Y from Tesla. Compared to the original LED board, the LED module/replacement PCB is many times brighter and 100% electrically compatible. Under exchange it is described how to check the compatibility of the LED module/replacement PCB, as it is only mechanically compatible to a limited extent. The LED module/replacement PCB can be used throughout the vehicle interior, such as in the door entry, glove compartment, trunk and footwell. The latter is only possible to a limited extent if the original LED board is not dimmed, details on this under installation position. The circuit design is designed so that if an LED constant current source fails, not the entire LED

module/replacement PCB fails, but only two LEDs. This means that the LED module replacement PCB can still be operated with two LEDs even if it is defective. Additionally, the components are those that are approved for use in the automotive sector.



Key commercial data

Packing unit	1 pc
Weight per piece (excluding packing)	20g
Weight per piece (including packing)	40g
Country of origin	Germany
Warranty	2 years

Technical data mechanically

Width (W)	8,3mm
Height (H)	29,1mm
Depth (D)	9,6mm
Ambient temperature (operation)	-40°C 85°C
Ambient temperature (storage/transport)	-40°C 85°C
Ambient conditions	Vehicle interior



Technical data electric

Nominal voltage U _N	10V 18V DC
Nominal current I_N – see diagram for details	max 96mA
Nominal power P_N – see diagram for details	max 1,62W
LED dimmable	no
CAN bus compatible	yes
LED light color	4000K (Kelvin) neutral white
LED brightness	approx. 110lm (lumens)

Standards and Regulations

Standards/regulations	EN 50581: 02/13
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Safety regulations and installation notes

Ŵ	Before startup please ensure:Read the data sheet carefully.Observe the national safety and accident prevention regulations.
	 NOTE: Danger if used improperly! Do not subject the assembly to any load that exceeds the described limits. Observe mechanical and thermal limits.
1	 It is not permissible to modify the assembly. Do not repair the assembly yourself but replace it with an equivalent product. Repairs may only be carried out by the manufacturer. The manufacturer is not liable for damage resulting from violation. The assembly may only be used for its intended use. The product may not be used on the vehicle in any external application on public roads as it does not have ECE approval. Use on public roads leads to the expiration of the general operating license and loss of insurance cover.
	 NOTE: Electrostatically sensitive components! Contains parts and assemblies that can be damaged by electrostatic discharge ESD.



Installation position Model 3 partial premium interior Position: Driver/passenger side footwell light Glove compartment light Front door entry light, left/right Rear door entry light, left/right Trunk light left/right - Module Circuit Board-Normal Lights Model 3 premium interior Position: Driver/passenger side footwell light Glove compartment light Front door entry light, left/right Rear door entry light, left/right Trunk light left/right ModuleCircuitBoard-NormalLights ModuleCircuitBoard-FootwellLights Model Y premium interior Position: Driver/passenger side footwell light Glove compartment light Front door entry light, left/right Rear door entry light, left/right ModuleCircuitBoard-NormalLights ModuleCircuitBoard-FootwellLights Check for premium interior 1.sit in the vehicle 2. close all doors 3.engage driving mode "D" or "R", but do not move the vehicle! 4. press the button on the touchscreen 5. under controls Controls

ModuleCircuitBoard-NormalLights

LED module/replacement PCB for Tesla Model 3 Y



Exchange

Check for compatibility

In practice it has often turned out that in most cases the lamps in cars from the factory Shanghai are compatible.

1. Only remove one lamp from the vehicle according to the description under installation.

2. Open the lamp carefully with a screwdriver as described below.



Carefully loosen the locks using a 0.4×2.5mm slotted screwdriver. Two screwdrivers or a screwdriver and an iFixit Opening Picks are helpful for this process.

Release all four latches and separate the transparent part from the black part.

3. Press the LED board out of the black part from the back using a screwdriver.



If the LED board cannot be removed from the black part because it is connected to the housing by two solder points, the installed lamps are not compatible. However, if the LED board can be removed, you can continue witch the section replacing of the LED board.

Replacing of the LED board

1. Insert the LED module/replacement PCB into the housing in the same way as the original LED board.

2. Reassemble the transparent part with the black part.







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Footwell light driver/passenger side Model 3 Y

Notice:

In order to be able to replace the footwell light, the respective plastic cover must be removed. It is advisable to use special plastic lever tools for this, such as the tool set for levering and opening or Opening Tool from iFixit. Under the following link you will find a detailed description with a video for removing the plastic cover in the footwell up to step 3, and you can also find a lot of information about this on the Internet. The plastic cover in the driver's footwell can be removed in the same way as in the passenger's footwell, but it is slightly different. First remove all clips/screws from the plastic cover in the driver's footwell and then loosen the plastic cover completely downwards along the front side. To avoid damaging anything, you should never use force; all covers should be easy to remove. There may also be small differences depending on the model and year of manufacture.

Model 3: <u>https://service.tesla.com/docs/Public/diy/model3/en_us/index.html</u> <u>https://service.tesla.com/docs/Public/diy/model3/en_us/GUID-DB0A1E3C-926E-498C-A2FD-A27B8421A471.html</u>

Model Y: <u>https://service.tesla.com/docs/Public/diy/modely/en_us/index.html</u> <u>https://service.tesla.com/docs/Public/diy/modely/en_us/GUID-1C689042-6645-4617-B270-7F2DA9A5624E.html</u>

1. After removing the plastic cover, the supply cable to the lamp must be unplugged. To do this, press the lock down and pull on the plug, as shown in the video.

2.Now try to remove the lamp from its fixation using the Opening Tool or something similar. It can sometimes happen that the lamp is very tight and cannot be removed. If this is the case, the four holders can be carefully pressed together using pliers wrench to push the lamp forward.

3. Replace the LED board as described under replacement and assemble everything in the reverse order.



Glove compartment light Model 3 Y

1. Either use the Opening Tool or a similar tool to remove the lamp from its fixation. The Opening Picks can also be used or helpful here. The lamp can be very tight.

2.Now unplug the cable by pressing the lock down and pulling on the plug. The connection cable may be very short, so insert the lamp slightly into the opening so that the connection cable can be removed more easily.

3. Replace the LED board as described under replacement and assemble everything in the reverse order.



Door entry light front/rear Model 3 Y

To do this, proceed in the same way as described under the glove compartment light section. Note: If the lamp has been unplugged, the window will move completely up at the same time, this is normal behavior.

Caution: From now on, do not close the door, otherwise the window or other things could be damaged. As soon as the lamp lights up again, the window moves back down a little to the starting position.

Trunk light left/right Model 3

1.Loosen the respective clip with the Opening Tool or a similar tool and then remove it. To disassemble, the clip should be separated into two parts so that it is easier to get the lower part into the hole.



2.Loosen the felt so that you can easily reach the back of the lamp to unplug the lamp.

3.Now try to remove the lamp from its fixation using the Opening Tool or something similar. It can sometimes happen that the lamp is very tight and cannot be removed. If this is the case, the four holders can be carefully pressed together using pliers wrench to push the lamp forward.

4. Replace the LED board as described under replacement and assemble everything in the reverse order.



Pictures





LED board. What is noticeable, however, is that the Chinese product requires too high a rated current I_N and is very likely to trigger the electronic fuse in the vehicle.





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Thank you for choosing one of our products. In the unlikely event that the warranty for the product is required, please contact us, Bachhaeubl Geraetebau.

We guarantee that this product is free of defects for a period of two years from the original purchase date. The warranty does not extend the warranty period, nor impose a new warranty. Bachhaeubl Geraetebau undertakes to repair or replace a defective product free of charge (for parts and labor) in accordance with the following conditions.

This decision is the sole responsibility of Bachhaeubl Geraetebau.

Condition:

- 1. The defective product must be accompanied by the original invoice or the original document (the receipt must show the date of purchase), as well as an error description. In the absence of a clear confirmation of purchase, Bachhaeubl Geraetebau reserves the right to reject the cost-free service and to return the product at the expense of the customer.
- 2. No changes have been made to the product, unless these have been approved by Bachhaeubl Geraetebau in writing.
- 3. The following is excluded from warranty:
 - a) Repairs performed by the customer himself or by unauthorized third parties.
 - b) Improper packaging or handling during transportation from the customer. Please note that the correct packaging of the product being repaired is the responsibility of the returning customer.
 - c) Incorrect use, including, but not limited to, regular maintenance and repair or replacement of wearing parts, use of the product for other than normal purposes, or treatment contrary to Bachhaeubl Geraetebau instructions for proper handling, maintenance or storage and damage caused by the installation or use of the product example to others as equivalent to the technical or safety standards of the country in which the product is shipped.
 - d) Accidents, lightning, water, fire, unsuitable ventilation, leakage of the battery or any other reason can not affect by Bachhaeubl Geraetebau.
 - e) Defects in the system to which this product is connected and / or the incompatibility with products from other manufacturers.
- 4. Bachhaeubl Geraetebau cannot be held liable for any loss or damage, whether direct, consequential or otherwise, except for the repair or replacement of its products.
- 5. This warranty does not affect the legal consumer rights under the applicable national law or the consumer rights against the merchant arising from a purchase contract.