

HELLA 5DS 010 668-701

HELLA 5DS 010 668-701 Lighting Control Unit User Manual

For 12V/24V LED Daytime Running Lights and Position Lights

1. INTRODUCTION AND OVERVIEW

This manual provides essential information for the safe and effective installation, operation, and maintenance of your HELLA 5DS 010 668-701 Lighting Control Unit. This unit is designed to manage LED daytime running lights (DRL) and position lights in 12V or 24V vehicle electrical systems.

The control unit ensures that the special signaling pattern of daytime running lights is more recognizable in traffic than standard low beam headlights, thereby reducing accident risk. It features an extremely flat installation depth for its modules and automatically activates when the ignition is switched on. The robust metal housing protects the lighting electronics from external influences and aids in heat dissipation. This product is ECE compliant.

2. SAFETY INFORMATION

- Always disconnect the vehicle's battery before performing any electrical work to prevent short circuits and electrical shock.
- Installation should be performed by qualified personnel or a professional automotive technician.
- Ensure all connections are secure and properly insulated to prevent moisture ingress and corrosion.
- Do not modify the control unit or its wiring. Unauthorized modifications can lead to malfunction, damage, or fire.
- Mount the control unit in a location protected from extreme heat, moisture, and mechanical damage.
- Verify that the vehicle's electrical system voltage (12V or 24V) matches the unit's specifications before installation.

3. PACKAGE CONTENTS

The package contains the HELLA Lighting Control Unit and its associated wiring harness, as depicted in the product images.



Image 1: HELLA 5DS 010 668-701 Lighting Control Unit with its integrated wiring harness and connectors. The unit is black with white labels showing model information and ECE markings.

4. SETUP AND INSTALLATION

Professional installation is highly recommended for this product.

1. **Preparation:** Ensure the vehicle's ignition is off and disconnect the negative terminal of the battery.
2. **Mounting the Control Unit:** Select a suitable, dry, and secure location within the engine bay or vehicle interior, away from excessive heat or moving parts. The unit has mounting tabs for secure attachment.
3. **Wiring Connections:**
 - Identify the power supply (12V or 24V, depending on your vehicle), ground, ignition signal, and the input/output wires for the LED daytime running lights and position lights.
 - Connect the control unit's power input to a fused constant power source (e.g., battery positive).
 - Connect the control unit's ground wire to a suitable chassis ground point.
 - Connect the ignition signal wire to a source that provides power only when the ignition is on.
 - Connect the output wires from the control unit to your LED daytime running lights and position lights. The unit has 2 connections for this purpose.
 - Refer to the specific wiring diagram provided with your LED lights and vehicle service manual for precise connection points.
4. **Secure Wiring:** Route all wiring safely, away from hot or sharp components, and secure with cable ties. Ensure all connections are tight and protected from environmental elements.
5. **Testing:** Reconnect the vehicle battery. Turn on the ignition and verify the correct operation of the daytime running lights and position lights according to the unit's functionality.
6. **Final Check:** Ensure the installation complies with local regulations and ECE standards for automotive lighting.



Image 2: Top view of the HELLA control unit, displaying product labels and ECE certification marks. This view helps identify the unit during installation.



Image 3: Side view of the HELLA control unit, highlighting the mounting tabs for secure attachment within the vehicle.

5. OPERATING INSTRUCTIONS

The HELLA 5DS 010 668-701 Lighting Control Unit operates automatically:

- When the vehicle's ignition is switched on, the control unit will automatically activate the connected LED daytime running lights.
- Depending on the wiring configuration and the specific LED lights used, the unit may also manage the position light function, allowing for seamless switching between DRL and position light modes as required by vehicle operation or external light conditions.

6. MAINTENANCE

The HELLA Lighting Control Unit is designed for durability and requires minimal maintenance.

- **Regular Inspection:** Periodically check the unit and its wiring for any signs of damage, corrosion, or loose connections.
- **Cleaning:** If necessary, gently wipe the exterior of the unit with a clean, dry cloth. Do not use harsh chemicals or abrasive cleaners.
- **Environmental Protection:** Ensure the unit remains protected from direct water exposure and extreme temperatures, although its metal housing provides robust protection.

7. TROUBLESHOOTING

Problem	Possible Cause	Solution
Lights do not turn on.	No power supply to the control unit. Blown fuse in the power circuit. Loose or incorrect wiring connections. Faulty LED lights.	Check power connection to the unit and battery. Inspect and replace any blown fuses. Verify all wiring connections are secure and correct according to the diagram. Test LED lights independently.
Lights flicker or operate intermittently.	Poor electrical connection or ground. Voltage fluctuations.	Check all wiring and ground connections for tightness and corrosion. Ensure stable voltage supply from the vehicle.
Incorrect light function (e.g., DRLs stay on with headlights).	Incorrect ignition or headlight signal wiring.	Review the wiring diagram and ensure the ignition and headlight signal wires are connected to the correct sources.

If you encounter issues not listed here or if the problem persists after attempting the solutions, please contact HELLA customer support or a qualified technician.

8. SPECIFICATIONS

Model Number	5DS 010 668-701
Brand	Hella
Voltage	12V / 24V (DC)
Number of Connections	2 (AMP type)
Application	Daytime Running Light (LED) / Position Light (LED)

Dimensions (L x W x H)	12.5 x 6.1 x 13.8 cm
Weight	120 grams
Material	Metal (housing)
Compliance	ECE
Manufacturer	Hella KGaA Hueck & Co.
Country of Origin	Taiwan

9. WARRANTY AND SUPPORT

This HELLA Lighting Control Unit comes with a **2-year manufacturer's warranty** from the date of purchase, covering defects in materials and workmanship under normal use.

For warranty claims, technical assistance, or further inquiries, please contact your HELLA authorized dealer or visit the official HELLA website for customer support information. Please have your product model number (5DS 010 668-701) and proof of purchase available when contacting support.

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ASK A QUESTION ABOUT THIS MANUAL

Ask about setup, troubleshooting, compatibility, parts, safety, or missing instructions. Manuals+ will review the question and use this page's manual context to help answer it.

Name

Anonymous

Email

you@example.com

After a successful submission, we securely hash the supplied account or form email before sending it to Microsoft Advertising for conversion attribution. [Privacy details](#).

Question

Example: How do I reset this device or fix this error?

Details

Model number, symptoms, what you tried, or the section of the manual you are using.

Submit question

