In individual cases, when aligning commercial vehicles and buses with the SEG V, difficulties may arise with heavily arched front sections. If this is the case, then use a plumb bob or other suitable object to transfer the headlight centres to the ground and detect them with the sight (see Figure 7).

8.4. Documented test

Use this function to retrieve data from the vehicle database or from the **Car History**. Moreover, it is possible to create a vehicle entry manually. The test results can be assigned to a licence plate number and vehicle owner and the results can be stored. If needed, the test result can be saved as a report onto a pen drive or it can be sent by e-mail.

8.4.1. Preconditions for a Documented Test

Observe the following to perform documented tests:

- The steps in the sections Preparing headlight test [▶ 40] and Aligning the SEG V [▶ 46] are performed completely.

8.4.2. Performing Documented Tests from Vehicle Database

NOTICE

A documented test can only be done when the company data has been entered.

To perform a documented test from the vehicle database, proceed as follows:

1. Select **>Documented test<** in the main menu.
2. Observe the info window where necessary.
3. Confirm the info window with ✓ where necessary.
   *The **Vehicle selection** window is displayed.*
4. Choose 🚗 to call up the **vehicle database**.

NOTICE

You need to select at least the manufacturer, the fuel type and the model.

5. Select the requested manufacturer.
6. Select the requested fuel type.
7. Select the requested model.
8. Confirm the selection with ▶.
   If all vehicle data is not selected, then a drop-down list is displayed.
9. Select the requested vehicle type.
10. Confirm the selection with ▶.

NOTICE

The documented test can only be done if you have entered the vehicle registration number and the vehicle owner.

11. Open the virtual keypad under **Registration number** with .
12. Enter the vehicle registration number.
13. Close the virtual keypad with .

    The input will be saved automatically.
14. Repeat steps 11-13 for the **vehicle owner** and **VIN**.
15. Confirm the inputs with .

    *The **Target specifications** window appears.*
16. If required, change the data as described in the section Entering Vehicle Data [▸ 29].
17. Open the **Headlight selection** window with .
18. Perform the headlight test as described in the section Performing headlight test [▸ 56].
19. Use to call up the selection window **Finish documented test?**.
20. Use the selection window to:

    finish the measurement

    finish the measurement and send it to the pen drive

    finish the measurement and send it per e-mail

NOTICE

The message **Finish measurement and send it per e-mail** is only indicated if the Wi-Fi interface is configured.

21. Regard the window with information and instructions.
22. Finish the measurement with .
23. Abort the procedure with .

⇨ The data from the documented test are automatically saved in **Car History**.

8.4.3. Performing Documented Tests from the Car History

NOTICE

A documented test can only be done when the company data has been entered.

Proceed as follows to perform a documented test from Car History:

1. Select **>Documented test<** in the main menu.
2. Observe the info window where necessary.
3. Confirm the info window with ✓ where necessary.
4. Choose to call up **Car History**.

   A drop-down list appears.
5. Select the desired vehicle.

   *Alternatively, you can search for the vehicle with the **Search for** function using **>License number<**, **>Vehicle owner<**, **>VIN<** or **>Report date<**.*

   *With **>Report date<** selected, the device indicates all reports which have been created in that time period.*
6. Open the **Input** window with under **From date:**.

   *The **Input** window appears.*
7. Use the arrow keys ▲ and ▼ to select the requested day under **Day**.
8. Repeat step 7 for **Month** and **Year**.
9. Confirm the selection with ✓.

   The selection will be saved automatically.
10. Open the **Input** window with under **To date:**.

    *The **Input** window appears.*
11. Repeat step 7 for the requested **Day**, **Month** and **Year**.
12. Confirm the selection with ✓.

    The selection will be saved automatically.
13. Click to **>Search<**.

NOTICE

Click to **>Reset<** to view again the entries which were saved last.

14. Confirm the selection with ▶.

    A drop-down list appears.
15. Perform the measurement with ▶.

    *The **Target specifications** window appears.*
16. If required, change the data as described in the section Entering Vehicle Data [▸ 29].
17. Open the **Headlight selection** window with ▶.
18. Perform the headlight test as described in the section Performing headlight test [▸ 56].
19. Use ▶ to call up the selection window **Finish documented test?**.
20. Use the selection window to:

    finish the measurement

finish the measurement and send it to the pen drive

finish the measurement and send it per e-mail

NOTICE

The message **Finish measurement and send it per e-mail** is only indicated if the Wi-Fi interface is configured.

21. Regard the window with information and instructions.
22. Finish the measurement with ▶.
23. Abort the procedure with ☒.

⇨ The data from the documented test are automatically saved in **Car History**.

8.4.4. Managing Car History Entries

The Car History provides an extended search function according to a specific time period and it is also possible to send and delete single or several entries.

Send and delete single or several entries by using the checkbox under **Multiple selection:**. The activated checkbox is marked with green square inside it.

The second checkbox becomes visible after having activated the first checkbox. By activating the second checkbox you are able to select or unselect already registered entries at the same time. A selected entry is marked with a green line. Uncheck your selection by deactivating the second checkbox.

Open the **Selection** window with ▶. Do the following here:

1. Perform measurement

   Indicated only if an entry is selected
2. Send reports to pen drive
3. Send reports to e-mail address
4. Delete reports
5. Delete vehicle owner

⇨ All entries to the selected vehicles are displayed if you select one out of the points 2 to 5. In this menu the multiple selection function is identical to the one in the previous menu.

NOTICE

Deletion processes cannot be undone.

8.4.5. Performing Documented Tests with Manually Created Vehicle

NOTICE

A documented test can only be done when the company data has been entered.

Proceed as follows to perform a documented test for a manually created vehicle:

1. Select **>Documented test<** in the main menu.
2. Observe the info window where necessary.
3. Confirm the info window with ✓ where necessary.
4. Choose to call up the **Manually create vehicle** option.
5. Click to open the virtual keypad under **Manufacturer**.
6. Enter vehicle manufacturer.
7. Close the virtual keypad with .

   The input will be saved automatically.
8. Repeat steps 5–7 to make more inputs.
9. Confirm the inputs with .

   *The **Vehicle selection** window is displayed.*
10. Open the virtual keypad under **Registration number** with .
11. Enter the vehicle registration number.
12. Close the virtual keypad with .

    The input will be saved automatically.
13. Repeat steps 10-12 under **Vehicle owner** and **VIN**.
14. Confirm the inputs with .

    *The **Target specifications** window appears.*
15. If required, change the data as described in the section Entering Vehicle Data [▸ 29].
16. Open the **Headlight selection** window with .
17. Perform the headlight test as described in the section Performing headlight test [▸ 56].
18. Use to call up the selection window **Finish documented test?**.
19. Use the selection window to:

    finish the measurement

    finish the measurement and send it to the pen drive

    finish the measurement and send it per e-mail

NOTICE

The message **Finish measurement and send it per e-mail** is only indicated if the Wi-Fi interface is configured.

20. Regard the window with information and instructions.
21. Finish the measurement with ▶.
22. Abort the procedure with ☒.

⇨ The data from the documented test are automatically saved in **Car History**.

8.4.6. Creating a Report

The report of the documented test can be saved on a pen drive or it can be sent per e-mail to another device.

To save the report on a pen drive, proceed as follows:

1. Insert a pen drive into the USB port on the **SEG V**.
2. Perform the steps 1 to 6 as described in section Performing Documented Tests from the Car History [▶ 50].
3. Select **>Send report<**.

   The report is saved as a PDF file on the pen drive.

The report contains the following information:

- Company data
- Customer and vehicle data
- Device type
- Date and time of the headlight test
- Test results before headlight adjustment
- Test results after headlight adjustment

NOTICE

First configure the interfaces before you can send the report per e-mail. For this perform the steps as describes in section Configuring interfaces [▶ 25].

Now the following fault messages during e-mail sending may appear despite correctly configured interfaces:

- *The device is not registered at Hella Gutmann. Please contact the Hella Gutmann Help Line.*
- *Registration was not successful. Please check the time and date settings. Please contact the Technical Help Line of Hella Gutmann if the problem occurs again.*

8.5. Quick test

In the quick test, headlights can be checked without entering specific vehicle data. The headlight settings must be known for the vehicle. The result of the test cannot be saved.

8.5.1. Preconditions for a Quick Test

Ensure the following to perform a quick test:

- The steps in the sections Preparing headlight test [▶ 40] and Aligning the SEG V [▶ 46] are performed completely.

8.5.2. Performing Quick Tests

Proceed as follows to perform the quick test:

1. Select **>Quick test<** in the main menu.
2. Observe the info window where necessary.
3. Confirm the info window with ✓ where necessary.
   *The **Target specifications** window appears.*
4. If required, change the data as described in the section Entering Vehicle Data [▶ 29].
   The headlight setting data shall correspond to the manufacturer's specifications.
5. Open the **Headlight selection** window with ▶.
6. Perform the headlight test as described in the section Performing headlight test [▶ 56].

8.6. Measured value calibration

Check the inclination calibration here. For this you can switch on or off the level sensor of the SEG V.

8.6.1. Switching On the Level Sensor

The level of the vertical and horizontal axis adjusts automatically in a way that any irregularity in the SEG V set-up area is compensated if the level sensor is switched on.

Proceed as follows to switch on the level sensor:

1. Select **>Measured value calibration<** in the main menu.
   *The window **Measured value calibration** appears.*
2. Open the list under **Level compensation** with ⌄.
3. Select **>on<**.
   The SEG V is balanced from a measuring technology standpoint.
   Perform the horizontal/vertical calibration with ▶.
   Abort the procedure with ☒.

⇨ The selection will be saved automatically.

8.6.2. Switching Off the Level Sensor

Surface irregularities of the SEG V set-up area will not be compensated if the level sensor is switched off.

Proceed as follows to switch off the level sensor:

1. Select **>Measured value calibration<** in the main menu.

   *The window **Measured value calibration** appears.*

2. Open the list under **Level compensation** with ⏬.
3. Select **>Off<**.

   Perform the horizontal/vertical calibration with ▶.

   Abort the procedure with ☒.

⇨ The selection will be saved automatically.

8.7. Performing headlight test

8.7.1. Preconditions for the Headlight Test

Ensure the following before starting a headlight test:

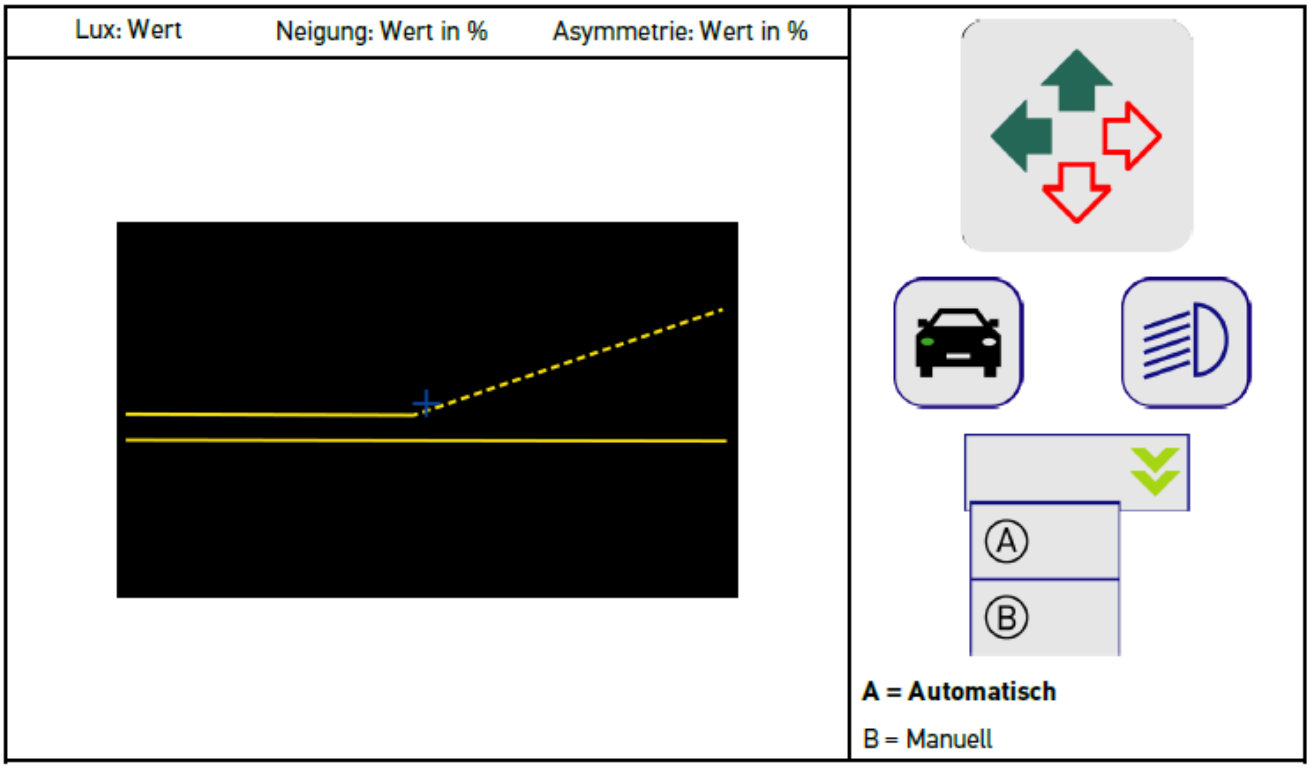
- All preconditions listed in section Preparing headlight test [▶ 40] are fulfilled.
- The device is placed correctly in front of the vehicle (see section Aligning the Optic Housing to the Vehicle [▶ 46]).
- The data records required for the documented test are entered (see section Documented test [▶ 49]).

8.7.2. Test Screen

The following is displayed on the test screen:

- Light intensity in Lux (lx) or Candela (cd)
- Headlight inclination in %
- Asymmetry in %
- Setting recommendations via direction arrows
- Current test headlight
- Light type of the current test
- Blue cross: Zero point of device
- Yellow lines: Upper and lower tolerance limit
- Green line: Current position of the light/dark boundary
- Drop-down list: Choice between automatic or manual mode

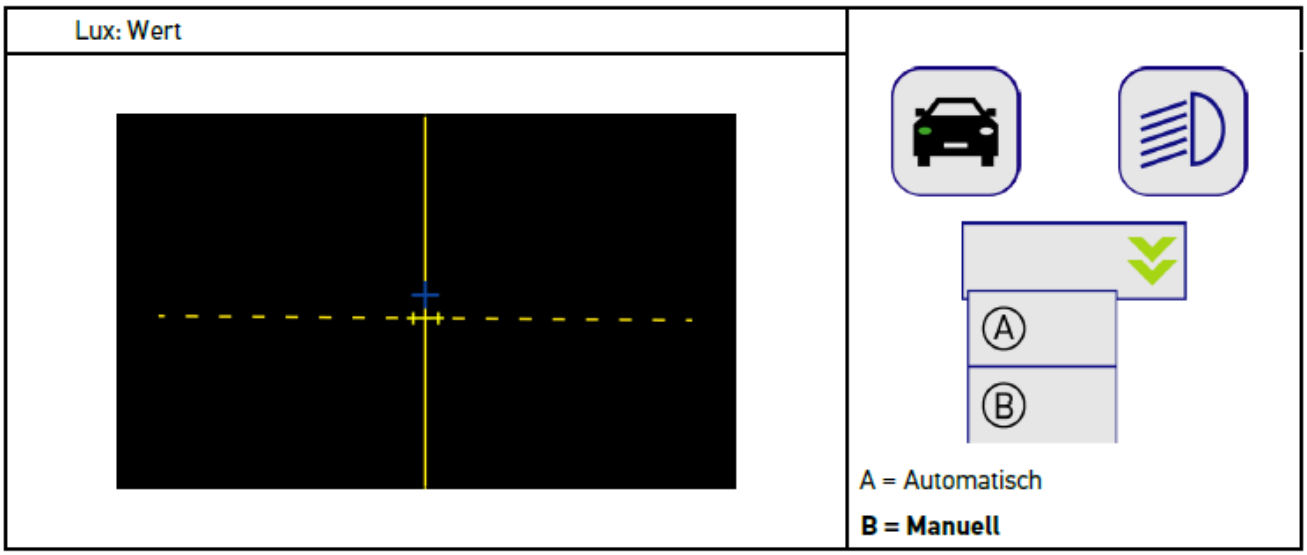
Automatic mode:



You can select between automatic or manual mode when checking or setting the light distributions.

Manual mode: The light distribution is indicated in the display as it is real. There is no evaluation by the device. The check or setting is done as on an analog headlight aiming device.

Manual mode:



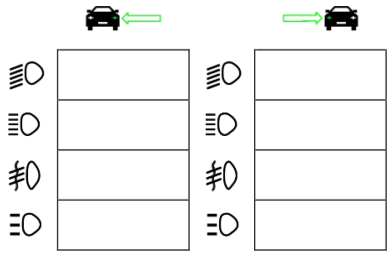
8.7.3. Performing Low Beam Headlight Tests

NOTICE

Perform the headlight test on the left and right headlight respectively.

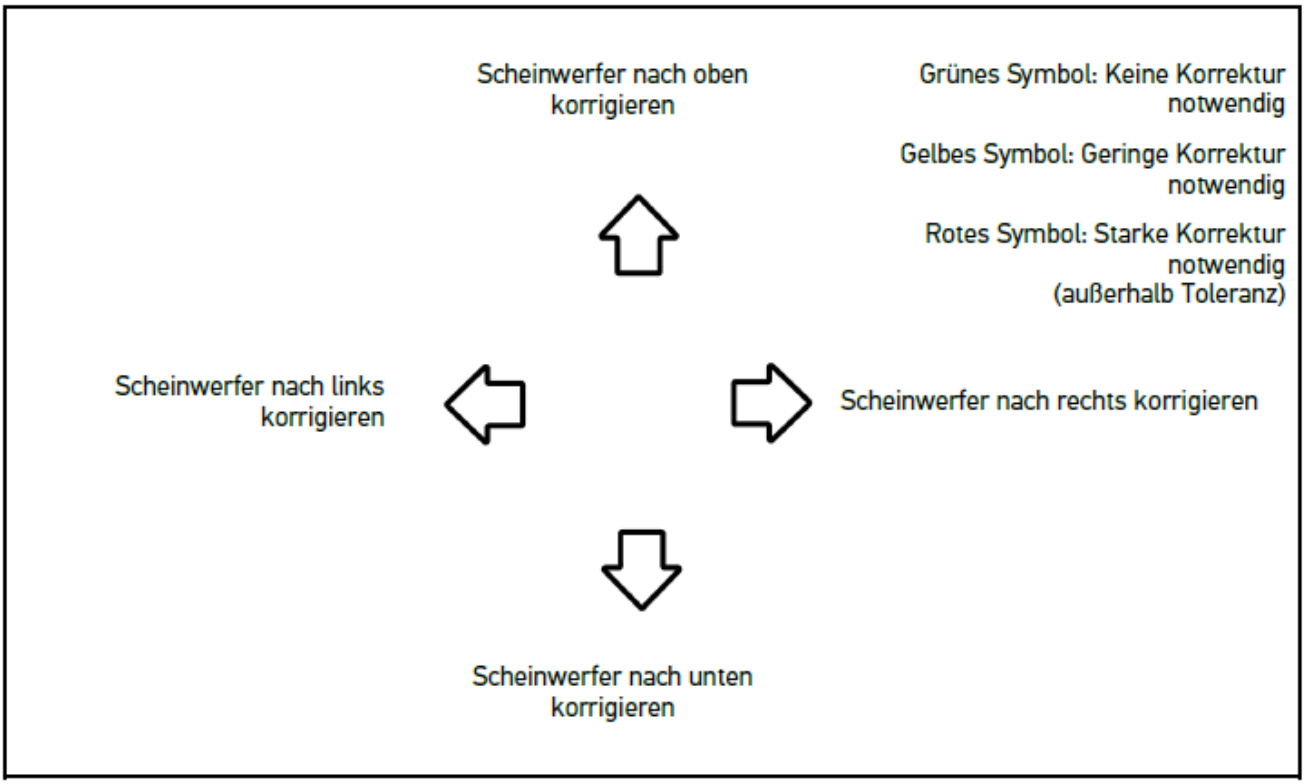
To perform a headlight test on the low beam, proceed as follows:

1. Switch on the low beam on the vehicle.
2. Start the headlight test with .



3. Observe the confirmation prompt.
4. Confirm the confirmation prompt with ✓.

   The light distribution of the headlight is displayed on the test screen.
5. In the vehicle setting options, correct the headlight setting according to the recommended settings using the direction arrows on the test screen.



   If the settings are correct, then all arrows light up green.
6. Confirm settings with .

The date and time of the adjustment are displayed next to the symbol.

7. Repeat steps 2-6 to test the second headlight.

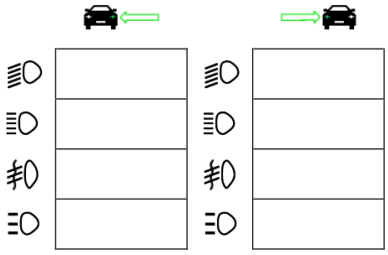
8.7.4. Performing High Beam Headlight Tests

NOTICE

Perform the headlight test on the left and right headlight respectively.

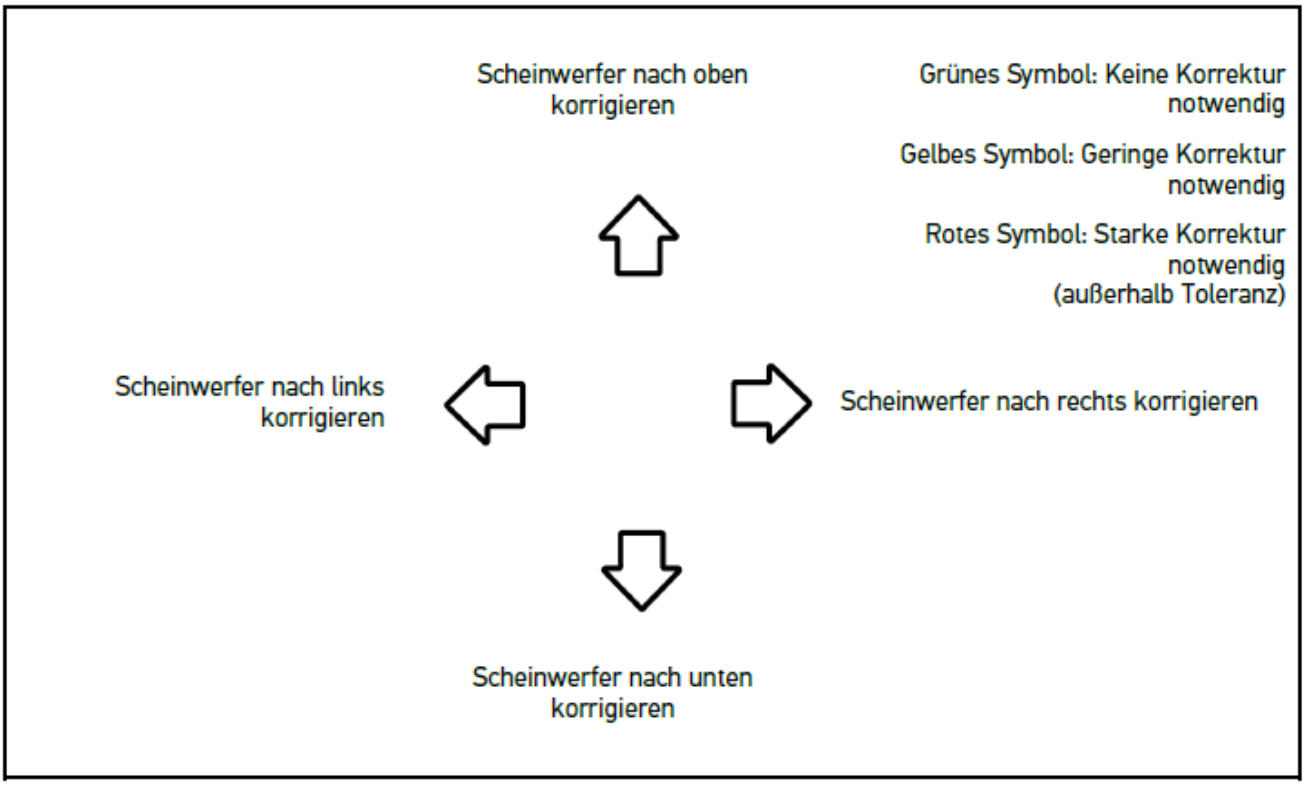
To perform a headlight test on the main beam, proceed as follows:

1. Switch on the high beam headlight on the vehicle.
2. Start the headlight test with .



3. Observe the confirmation prompt.
4. Confirm the confirmation prompt with ✓.

   The light distribution of the headlight is displayed on the test screen.
5. In the vehicle setting options, correct the headlight setting according to the recommended settings using the direction arrows on the test screen.



If the settings are correct, then all arrows light up green.

6. Confirm settings with ▶.

   The date and time of the adjustment are displayed next to the symbol.

7. Repeat steps 2-6 to test the second headlight.

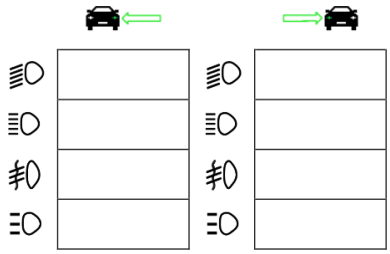
8.7.5. Performing Fog Light Tests

NOTICE

Perform the headlight test on the left and right headlight respectively.

To perform a headlight test on the front fog lights, proceed as follows:

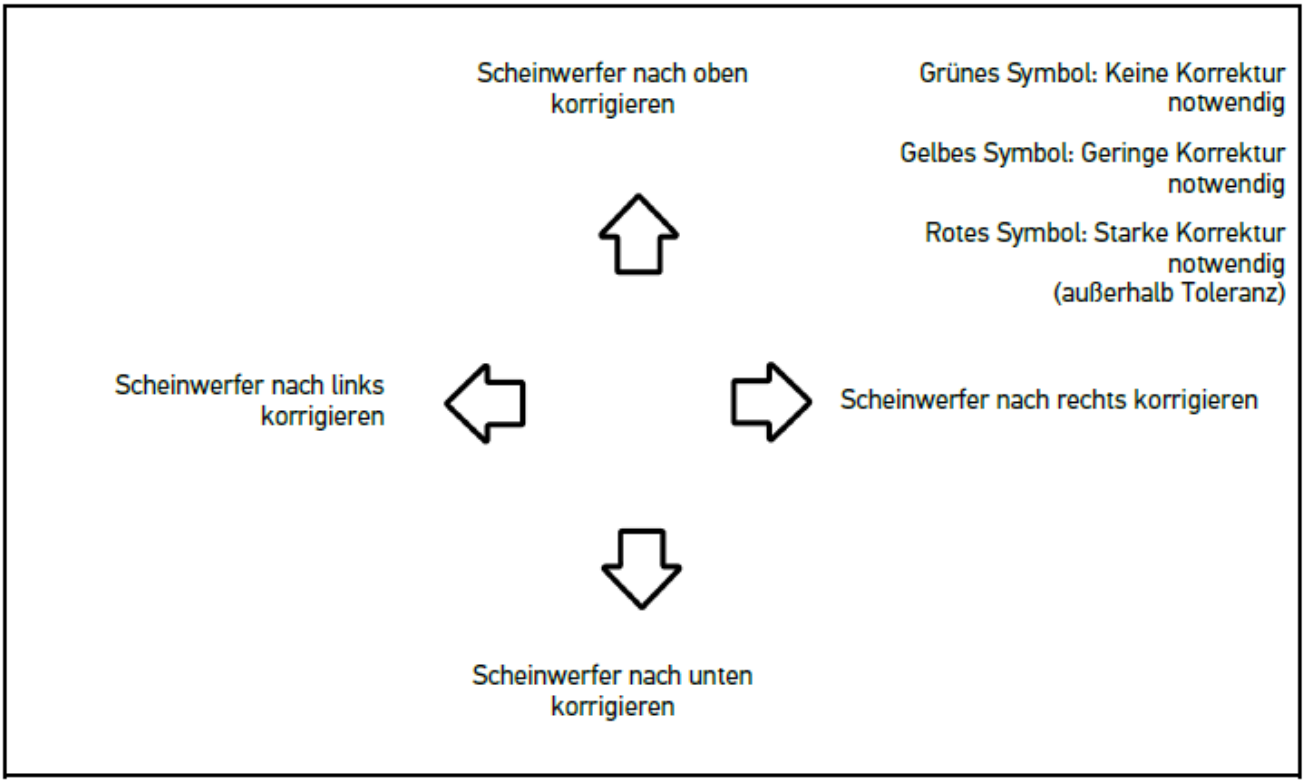
1. Switch on the front fog lights on the vehicle.
2. Start the headlight test with .



3. Observe the confirmation prompt.
4. Confirm the confirmation prompt with ✓.

The light distribution of the headlight is displayed on the test screen.

5. In the vehicle setting options, correct the headlight setting according to the recommended settings using the direction arrows on the test screen.



If the settings are correct, then all arrows light up green.

6. Confirm settings with ▶.

   The date and time of the adjustment are displayed next to the symbol.

7. Repeat steps 2-6 to test the second headlight.

8.7.6. Audi Matrix LED Headlights/HD Matrix LED Headlights

For the Audi Matrix LED headlights, adjusting screws are no longer available for setting the high beam distribution. The core of the Matrix LED headlight is the glare-free high beam, implemented with a mechanism-free system. Oncoming traffic or preceding vehicles are not blinded by high beam lights that are always on. A camera detects oncoming and preceding vehicles and omits them from the high beam distribution by dimming or switching off individual LEDs from the high beam lighting. Once a vehicle is no longer located in the line of sight of the driver, then the system switches the full beam back on again.

8.7.6.1. Performing Matrix/HD Matrix LED Headlight Test of High Beam

NOTICE

You require a diagnostic device to perform matrix/HD matrix LED headlight tests.

Certain LEDs are switched on, depending on the model, with a diagnostic device. Evaluation takes place by using the position of the light distribution. If there is a deviation, then transmit the correction value to the corresponding ECU by using the diagnostic device.

Observe manufacturer's specifications.

NOTICE

Perform the headlight test on the left and right headlight respectively.

Proceed as follows to perform the matrix-/HD matrix LED headlight test of high beam:

1. Perform the steps 1 to 8 as described in section Performing Adaptive Light Control Tests [▶ 63].
2. Call up the vehicle testing/calibration mode from the diagnostic device.
3. Follow the instructions on the display of the diagnostic device.
   The light distribution of the headlight is displayed on the test screen.
4. Enter the horizontal value in the diagnostic device.
5. HD matrix LED headlight test: Enter the horizontal and vertical values in the diagnostic device. Regard the algebraic signs (+/-) here.
6. Confirm your input with ✓.
   The date and time of the adjustment are displayed next to the symbol.
7. Repeat steps 2-5 to test the second headlight.

8.7.7. BMW Dynamic Light Spot

In the dark, the **Dynamic Light Spot** marking light system from BMW detects people from a distance and lights them in a targeted way. Two separately controlled powerful spotlights are focused as one on unlit persons. People are detected promptly in the dark, offering higher levels of safety.

8.7.7.1. Performing Night Vision Spot Light Tests

NOTICE

A diagnostic device is required to perform a night vision spot light headlight test.

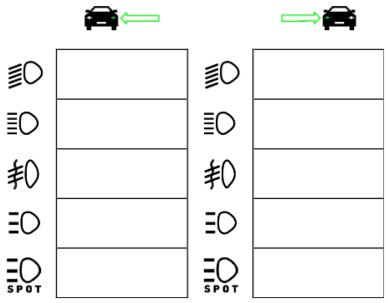
Observe manufacturer's specifications.

NOTICE

Perform the headlight test on the left and right headlight respectively.

Proceed as follows to perform a night vision spot light headlight test:

1. Perform the steps 1 to 5 as described in section Performing Adaptive Light Control Tests [▶ 63].
2. Start the headlight test with SPOT.



NOTICE

To display the spot light headlights, gently touch the display to display the scrollbar.

If the scrollbar is used to scroll down, then the spot light icon is displayed.

3. Observe the confirmation prompt.
4. Confirm the confirmation prompt with ✓.
5. Call up the vehicle testing/calibration mode from the diagnostic device.
6. Follow the instructions on the display of the diagnostic device.

   The light distribution of the headlight is displayed on the test screen.
7. In the vehicle setting options, correct the headlight setting according to the recommended settings using the direction arrows on the test screen.

   If the settings are correct, then all arrows light up green.
8. Confirm the setting with ▶.

   The date and time of the adjustment are displayed next to the symbol.
9. Repeat steps 2-8 to test the second headlight.

8.7.8. Performing Adaptive Light Control Tests

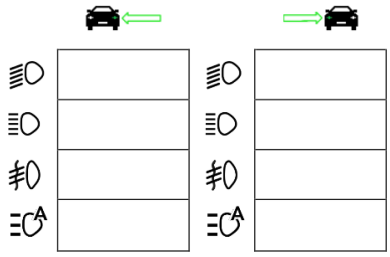
Many modern vehicles have adaptive light control. In these systems, the light distribution of the headlights is automatically adjusted to different conditions. To test these light systems, observe the instructions from different manufacturers.

NOTICE

Perform the headlight test on the left and right headlight respectively.

To perform a headlight test on headlights with an adaptive light system, proceed as follows:

1. Perform the steps 1 to 6 as described in section Performing Quick Tests [▸ 55].
2. Open the list under **Adaptive light system** via ⮟.
3. Select **>Yes<**.
4. Open the **Headlight selection** window with ▶.
5. Switch on headlights with an adaptive light system on the vehicle.
6. Start the headlight test with .



7. Observe the confirmation prompt.
8. Confirm the confirmation prompt with ✓.

   The light distribution of the headlight is displayed on the test screen.
9. If necessary, activate the vehicle test mode via the diagnostic device.
10. In the vehicle setting options, correct the headlight setting according to the recommended settings using the direction arrows on the test screen.

    If the settings are correct, then all arrows light up green.
11. Confirm the setting with ▶.

    The date and time of the adjustment are displayed next to the symbol.
12. Repeat steps 2-7 to test the second headlight.

8.7.9. Performing Headlight Test with a 10-meter Panel

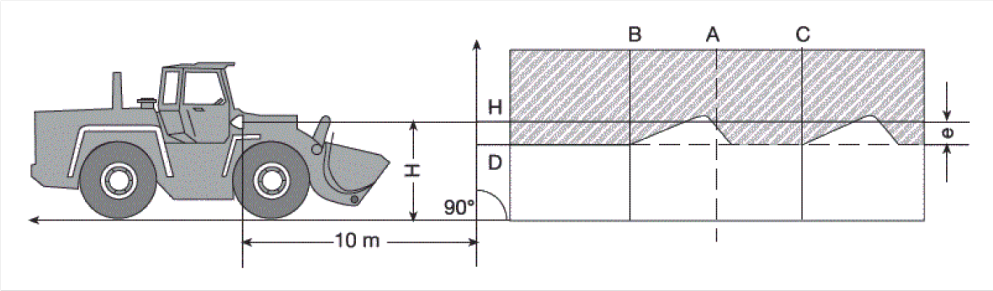
The headlight test with the 10-metre wall is mainly used for vehicles for which the upper edge of the mirror on the headlights is higher than 140 cm above the floor surface.

NOTICE

Observe national regulations.

Proceed as follows to set the headlights:

1. Position the vehicle on an even surface (does not need to be horizontal) at a 10 m distance from a vertical, light-coloured wall.
2. Draw lines on the test wall as explained below.



***Line A**: Extend the geometric center line up to the test wall and mark with a vertical line.*

***Lines B and C**: Measure the distance X of the headlights (center to center) at the vehicle and mark the dimension symmetrically to line A.*

***Line H**: Measure the height from the floor to the headlight center and mark it on the test screen parallel to the setup area.*

***Line D**: Mark in distance "e" below line H. **For main headlights**: "e" = H/3 cm | **for front fog lights**: "e" = H/3 + 7 cm.*

3. Cover the right headlight.
4. Align the left headlight vertically.

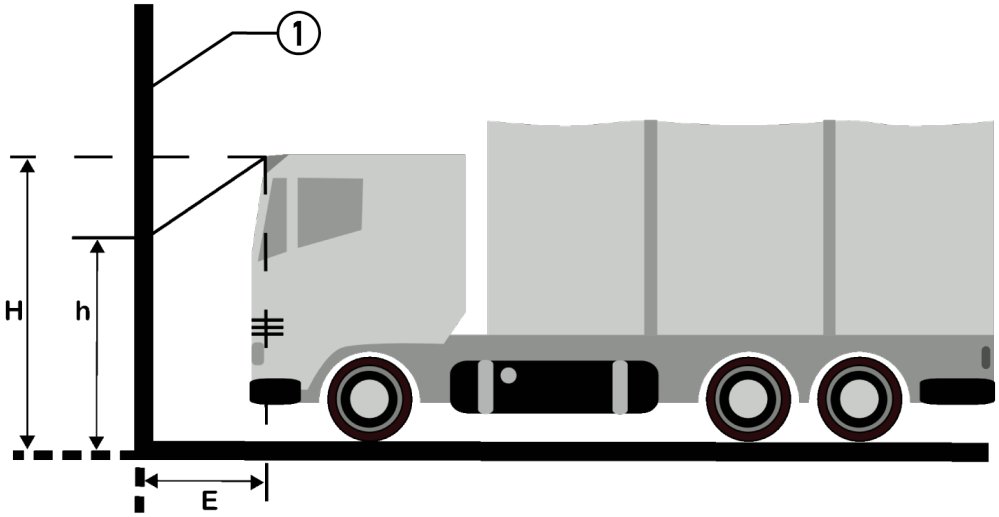
   The horizontal part of the light-dark border shall touch line D.
5. Align the left headlight horizontally.

   The sharp bend between the horizontal and the ascending part of the light-dark border must fall on line B.
6. Cover the left headlight.
7. Cover the right headlight vertically.

   The horizontal part of the light-dark border shall touch line D.
8. Align the right headlight horizontally.

   The sharp bend between the horizontal and the ascending part of the light-dark border shall fall on line C.

Einstellmaße bei Höhe der Abblend- und Fernscheinwerfer über 140 cm									
H [m]	**E = 10 m**			**E = 5 m**			**E = 2,5 m**		
	h [m]	mit Toleranz		**h** [m]	mit Toleranz		**h** [m]	mit Toleranz	
		h_{max}	h_{min}		h_{max}	h_{min}		h_{max}	h_{min}
1,5	**1,00**	1,10	0,95	**1,25**	1,30	1,22	**1,37**	1,40	1,36
1,6	**1,07**	1,17	1,02	**1,33**	1,38	1,30	**1,47**	1,50	1,46
1,7	**1,13**	1,23	1,08	**1,42**	1,47	1,39	**1,56**	1,59	1,55
1,8	**1,20**	1,30	1,15	**1,50**	1,55	1,47	**1,65**	1,68	1,64
1,9	**1,27**	1,37	1,22	**1,58**	1,63	1,55	**1,74**	1,77	1,73
2,0	**1,33**	1,43	1,28	**1,67**	1,72	1,64	**1,83**	1,86	1,82
2,1	**1,40**	1,50	1,35	**1,75**	1,80	1,72	**1,92**	1,95	1,91
2,2	**1,47**	1,57	1,42	**1,83**	1,88	1,80	**2,02**	2,05	2,01
2,3	**1,53**	1,63	1,48	**1,92**	1,97	1,89	**2,11**	2,14	2,10
2,4	**1,60**	1,70	1,55	**2,00**	2,05	1,97	**2,20**	2,23	2,19
2,5	**1,67**	1,77	1,62	**2,08**	2,13	2,05	**2,29**	2,32	2,28
2,6	**1,73**	1,83	1,68	**2,17**	2,22	2,14	**2,38**	2,41	2,37
2,7	**1,80**	1,90	1,75	**2,25**	2,30	2,22	**2,47**	2,50	2,46
2,8	**1,87**	1,97	1,82	**2,33**	2,38	2,30	**2,57**	2,60	2,56
2,9	**1,93**	2,03	1,88	**2,42**	2,47	2,39	**2,66**	2,69	2,65
3,0	**2,00**	2,10	1,95	**2,50**	2,55	2,47	**2,75**	2,78	2,74
3,1	**2,07**	2,17	2,02	**2,58**	2,63	2,55	**2,84**	2,87	2,83
3,2	**2,13**	2,23	2,08	**2,67**	2,72	2,64	**2,93**	2,96	2,92
3,3	**2,20**	2,30	2,15	**2,75**	2,80	2,72	**3,02**	3,05	3,01
3,4	**2,27**	2,37	2,22	**2,83**	2,88	2,80	**3,12**	3,15	3,11



	Name
1	Test surface

9. General information:

9.1. Troubleshooting table

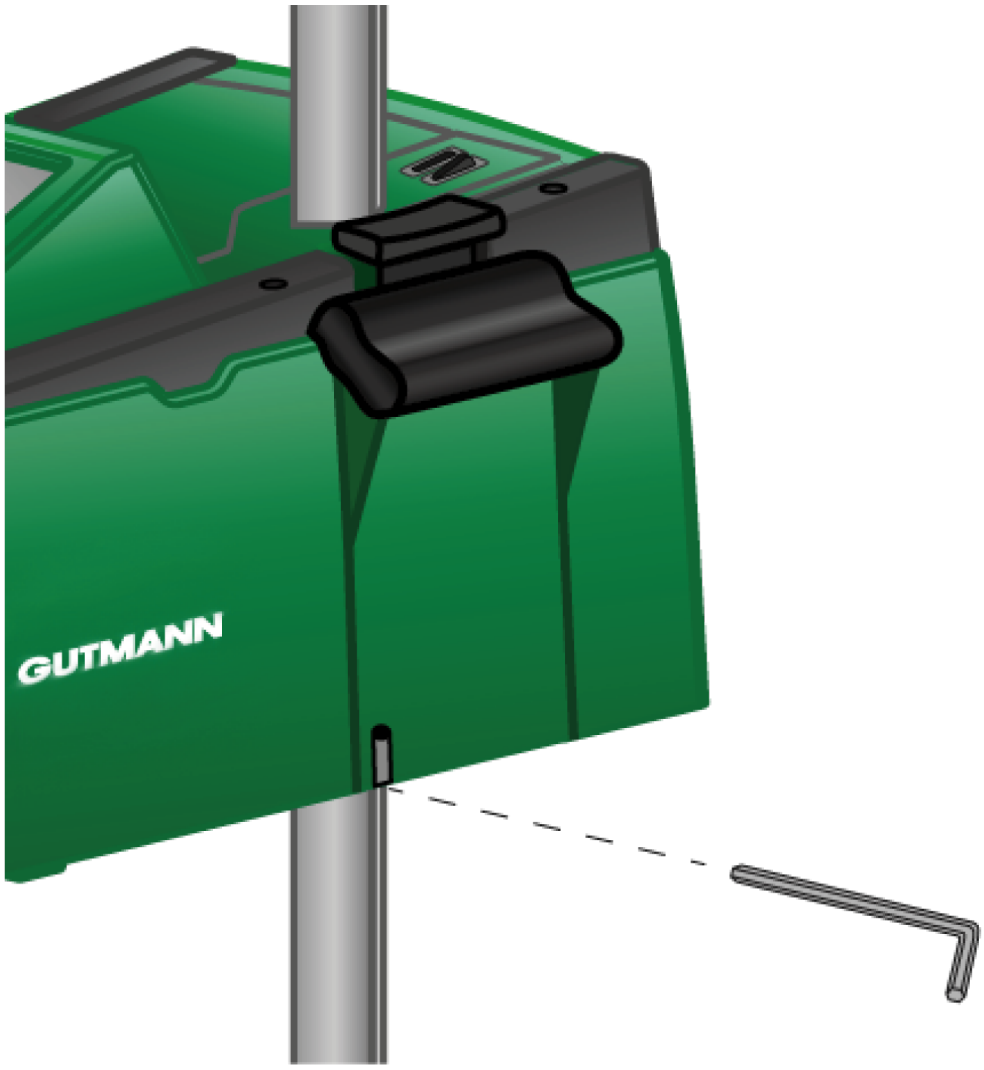
The following list will help you to solve minor problems yourself. Select the relevant problem description and check and perform the steps listed under **Solution** in sequence until the problem is solved.

Problem	Solution
The device does not boot.	• Check the cable connection to the device and plug socket. • Ensure voltage supply. • Charge the battery for 15 minutes and then restart the device.
The program crashes or does not function.	• Press and hold the ON/OFF button for 30 s to restart the device. • Perform a software update.
No measurement possible.	Enter the company data as described in section Entering Company Data [▶ 32].
Display is dark.	• Check the cable connection to the device and plug socket. • Ensure voltage supply. • Charge the battery for 15 minutes and then restart the device. • Press and hold the ON/OFF button for 30 s to restart the device. • The display is possibly defective. Please inform a Hella Gutmann trading partner or the Technical Help Line of Hella Gutmann.

9.2. Care and Maintenance

Like every device, the **SEG V** shall be handled with care. Therefore regard the following:

- Regularly clean the device with non-aggressive cleaning agents.
- Use commercial mild household cleaning detergents and a moistened, soft cleaning cloth.
- Replace damaged cables/accessories immediately.
- Only use original spare parts.

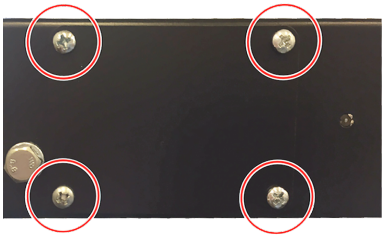


To readjust the column guidance, use an Allen key with width SW 6 for the opening.

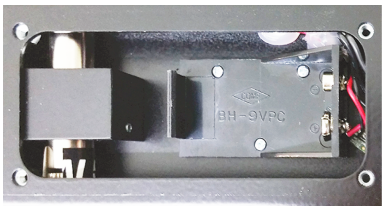
9.2.1. Replacing the 9-V Monobloc Battery

Proceed as follows to replace the 9 V block battery:

1. Switch off the device and remove all connecting cables.
2. Remove the 4 screws from the battery compartment cover.



3. Pull out the 9 V block battery.



4. Dispose of the old 9 V block battery in an environmentally friendly way.

NOTICE

Pay attention to correct installation direction/polarity.

5. Insert a new 9 V block battery.
6. Assembly in reverse order.

9.3. Service Parts and Accessories

The following accessory parts are available for maintenance, breakdown assistance and optional upgrade of the device:

Service Parts and Accessories	Order no.
Clamping claw	9XD 181 854-001
Handwheel for column locking mechanism	9SG 855 454-011
Hand wheel for sight holder	9SG 855 498-001
Clamping piece for column	9XD 857 744-001
Wheel replacement set (3 wheels)	9XS 862 004-001
Caster base	9XS 860 998-001
Wheel-mounted base from device number 2273	9XS 860 998-101
Feet without rollers	9XS 860 999-021
Rotary handle	9XS 861 032-001
Sight arm cover	9XS 861 061-001
Lateral part (set 2 pcs. – lateral covers of sight)	9XS 861 065-001
Sight arm	9XS 861 436-001
Handle piece for clamping shoe	9SG 126 786-001
Guide tube for laser sight	9XS 861 113-001
Hybrid laser sight	8PV 861 112-031
Protective shields for hybrid laser sight	9EV 857 067-031
Stainless-steel column with arrestor	8XT 861 234-041
Control lever/button	9ST 861 074-001
Fresnel lens	9EL 857 597-001

Service Parts and Accessories	Order no.
Protective shield (behind the Fresnel lens)	9EV 857 067-011
Bracket for Fresnel lens and protective shield	9FH 861 011-001
Slidings (column guide)	9XD 861 016-001
Clamping piece (arrestor of the optical housing on the column)	9XD 861 861-001
Tension spring (for functionality of the clamping piece)	9KD 857 587-001
Green hood for optical housing	9XS 861 127-091
ON/OFF button	9ST 863 241-011
Battery (12 V)	9XS 863 241-021
Power cord (1500 mm)	9XS 863 241-031
Display (8.4" touch screen)	9XS 861 127-101
Disengage bearing cup for column locking mechanism	9XS 861 009-001
Guide axis for clamping plate	9XS 861 173-001
Clamping washer for guide axis	9XS 861 250-001
Clamping piece for column	9XD 857 744-001
Protective cover for optical housing	8XS 002 500-031

Further spare parts on request.

9.4. Checking the Device

The **SEG V** shall be checked in intervals of two years. The **SEG V** shall only be calibrated or maintained by an authorized institution. In the event of questions regarding testing or maintenance, contact a national calibration authority, a Hella Gutmann trading partner or the Technical Help Line of **Hella Gutmann**.

9.5. Disposal

NOTICE

The guidelines listed here are exclusively valid within the European Union.

In compliance with Directive 2012/19/EU of the European Parliament and Council of 4 July 2012 relating to Waste Electrical and Electronic Equipment (WEEE), and the German national statute governing the distribution, return and environmental disposal of electrical and electronic equipment (Electrical and Electronic Equipment Act – ElektroG) of 20 October 2015 in its current version, we are obliged to take back this device, distributed by us after 13 August 2005, at the end of its service life free of charge and to dispose of it in accordance with the above-mentioned directives.

Since, in the case of the present device, this relates to exclusively commercially used equipment (B2B), it shall not be handed over to a public disposal facility.

The device can be disposed of at the following address (specifying the date of purchase and the device numbers):

Hella Gutmann Solutions GmbH

Am Krebsbach 2

79241 Ihringen

GERMANY

WEEE reg. no.: DE 25419042

Phone: +49 7668 9900-0

Fax: +49 7668 9900-3999

E-mail: info@hella-gutmann.com

9.6. Technical data

Supply voltage	115-230 V ~/50-60 Hz
Supply	Lead battery, internal power adapter
Transmitting power	14 dBm
Frequency	2.4 Ghz
Battery run time	8 to 10 h
Battery capacity	7.2 Ah
Display	Construction type: LCD-TFT Size: 8.4 inch
Input	Touch screen
Ambient temperature	Recommended: 10 to 35 °C Working range: 5 to 35 °C
Operating system	Linux
Weight	approx. 40 kg
Dimensions	1730 x 620 x 690 mm (H x W x D)
Interfaces	• USB • Wi-Fi
Adjustment track lens centre/ground	250 - 1450 mm

Measuring distance to vehicle	300 - 700 mm
Light intensity	0-150000 Candela (cd)
Light output	0 to 240 Lux (lx)

9.7. Declaration of conformity SEG V

EU DECLARATION OF CONFORMITY (DoC)

We, Hella Gutmann Solutions GmbH
Am Krebsbach 2
D-79241 Ihringen

declare under our sole responsibility that the product:

product name:	SEG V
trade name:	Hella Gutmann Solutions

to which this declaration relates, is in conformity with the essential requirements and other relevant requirements of the RED directive (2014/53/EU), The RoHS directive (2011/65/EU) and the EMC directive (2014/30/EU). The product is in conformity with the following standards and/or other normative documents:

EMC:	EN IEC 61326-1
Laser Safety:	IEC 60825-1:2014
Safety:	IEC 62368-1:2014
RED:	ETSI EN 300 328 V 2.2.2
	EN 62311:2020

Place and date of issue (of this DoC) Ihringen, 29/11/2022

Signed by or for the manufacturer .....

Name (in print): Stefan Turnschek
Title: product safety officer

BD-Nr.: 0078_1

9.8. FCC Compliance Statement

Compliance statement (part 15.19)

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Warning (part 15.21)

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

Information to the User (Part 15.105 (b))

Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

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