

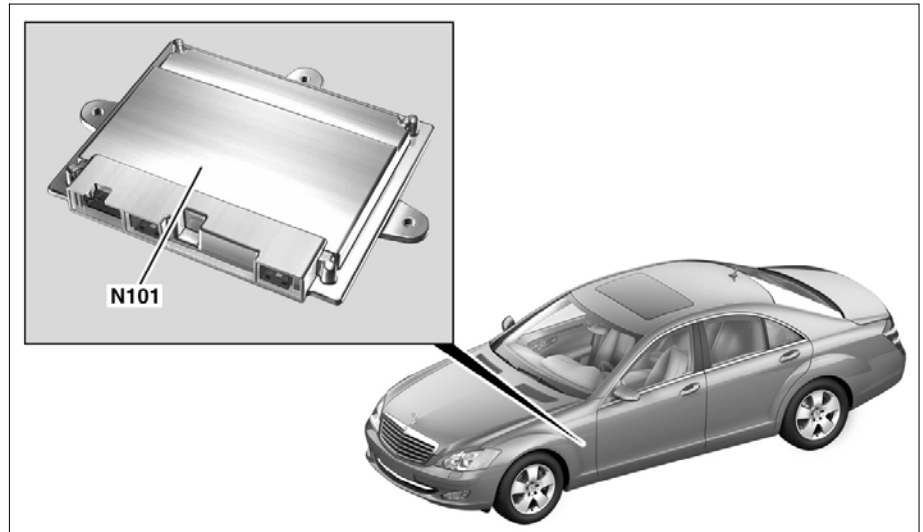
**MODEL 216.3, 221.0 /1**  
**with CODE (610) Night vision assist**  
**as of model year 2009**  
**/YoM 08**

**Shown on model 221.0 up to 31.5.09**

*N101 Night vision assist control unit*

#### Location

The Night View Assist control unit is located on the left on the A-pillar behind the paneling in the driver footwell.



P54.30-8487-05

#### Task

The Night View Assist control unit performs the following tasks:

- **Reading in of sensors, pickups and signals**
- **Evaluation of input factors**
- **Output of signals**
- **Actuating components**

**i** For vehicles up to 31.5.09, the Night View Assist control unit is a subscriber to the vehicle dynamics CAN (CAN H).  
 For vehicles as of 1.6.09, the Night View Assist control unit is a subscriber to the chassis CAN (CAN E).

#### Reading in of sensors, pickups and signals

The input factors are read in via the following connections:

- **Low voltage differential signal (LVDS)**
- **Vehicle dynamics CAN (up to 31.5.09)**
- **Chassis CAN (as of 1.6.09)**

**i** The following information is read in and processed:

- Status of Night View Assist button (S1s9)
- Status of low beam actuation (up to 31.5.11)
- Data from rain/light sensor (B38/2)
- Vehicle speed
- Light source identification by the multifunction camera (A40/11) (as of 1.6.09)
- Vehicle dynamics (as of 1.6.09 up to 31.5.11)
- Status of adaptive high beams (as of 1.6.11)

#### Evaluation of input factors

The integrated microprocessor evaluates the information read in. The pictures taken by the Night View Assist camera are processed accordingly. The information read in is also used for fault detection and system diagnosis.

#### Vehicle dynamics CAN (up to 31.5.09)

The Night View Assist control unit actuates the following components:

- Left infrared emitter (E1e11)
- Right infrared lamp (E2e11)

The Night View Assist control unit transmits the request via:

- Vehicle dynamics CAN
- ESP control unit (N47-5)
- Chassis CAN
- Central gateway control unit (N93)
- Interior CAN (CAN B)

#### LVDS

The Night View Assist control unit receives the pictures recorded by the Night View Assist camera (B84/2) via the digital video interface (LVDS line).

#### Vehicle dynamics CAN (up to 31.5.09)

The Night View Assist control unit reads in the signals via the vehicle dynamics CAN.

The functions resulting therefrom are described in the corresponding function descriptions (see block diagram or function schematic).

#### Chassis CAN (as of 1.6.09)

The Night View Assist control unit reads in the signals via the chassis CAN.

The functions resulting therefrom are described in the corresponding function descriptions (see block diagram or function schematic).

#### Output of signals

The Night View Assist control unit sends the processed picture data via the digital video interface (LVDS line) to the instrument cluster. The Night View Assist camera is controlled by the Night View Assist control unit via the control channel of the digital video interface (LVDS line).

#### Actuation of components

The actuation of the components takes place via the following connections:

- **Vehicle dynamics CAN (up to 31.5.09)**
- **Chassis CAN (as of 1.6.09)**

#### Chassis CAN (as of 1.6.09)

The Night View Assist control unit actuates the following components:

- Left infrared lamp
- Right infrared lamp

The Night View Assist control unit transmits the request via:

- Chassis CAN
- Central gateway control unit
- Interior CAN
- Front SAM control unit


- Front SAM control unit with fuse and relay module (N10/1)

The corresponding signals are sent by the Night View Assist control unit via the vehicle dynamics CAN.

The functions resulting therefrom are described in the corresponding function descriptions (see block diagram or function schematic).

The corresponding signals are sent by the Night View Assist control unit via the chassis CAN.

The functions resulting therefrom are described in the corresponding function descriptions (see block diagram or function schematic).

	Wiring diagram, Night View Assist control unit	Model 221 Model 216	PE54.30-P-2103-97SAA PE54.30-P-2103-97CAA
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