# Surround View System / 360 Camera (code 501)

- In the USA, the Parking Assist Package consists of Parktronic with active parking assist, and surround view system
- Parktronic with Active Parking Assist is known from other models such as C218 / R231
- Surround View System (or 360 camera) provides the customer with many views around the vehicle to assist with vehicle maneuvers and increased observation of obstacles or pedestrians
- The customer can select from many views to meet the current situation using the COMAND ® controller and COMAND ® display



- 4 digital cameras are placed around the vehicle
  - Trunk
  - Front grille
  - Left door mirror housing
  - Right door mirror housing
- Cameras
  - horizontal angle of vision > 180°
  - vertical angle of vision > 123°
  - transmit image information to control unit via LVDS
- 360° camera control unit (N148) evaluates all images and processes accordingly
- N148 sends image details to COMAND ® display using FBAS
- Through combining camera images control unit is able to provide a 'top view' or birds eye view as well as the individual camera views
- Through information such as steering angle / parktronic sensor information superimposed lines can be placed over the image for guidance



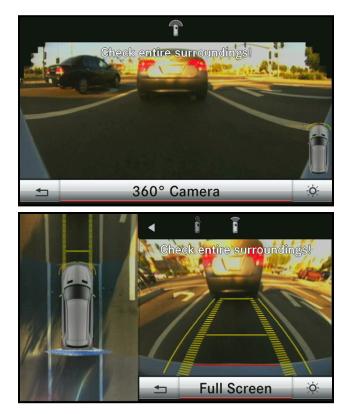




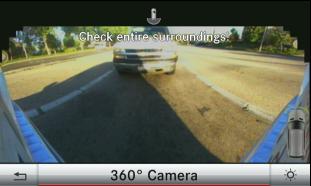
FBAS Color Video Baseband Signal LVDS Low voltage differential signal

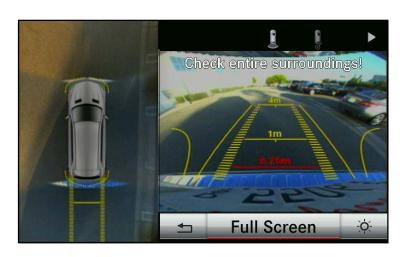
- N148 provides power to the four cameras when N148 is required to display images over COMAND ® display
- Camera images are displayed automatically when reverse is engaged providing this has not been deselected in COMAND ® settings
- Camera images can be manually selected in System menu
  - If activated at speeds < 17 mph, images displayed</li>
  - If activated at speeds > 18 mph. images are not displayed until vehicle speed drops below
    17 mph
  - If images are displayed < 6 s, and vehicle speed exceeds 17 mph, message displayed
  - If images are displayed > 6 s, and vehicle speed exceeds 17 mph, COMAND ® display returns to last selected application, e.g. Radio display and no message
- On GL model the rear camera is protected against soiling by a motorized camera cover (Surround view & RVC)
- This motorized camera cover is operated by the rear control module through CAN message sent from N148 via EIS, in addition COMAND ® can also request camera cover operation for cleaning purposes the customer can request through menu

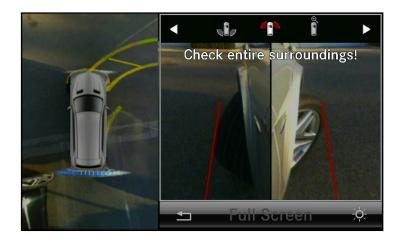
- N148 monitors door latch position and will disable a camera image for an open door
- To ensure door mirror cameras have sufficient ambient light during darkness, SAM will monitor the ambient brightness and actuate ambient illumination in the outside mirror housings when needed





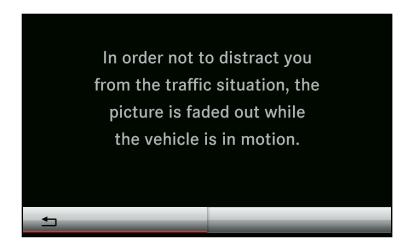
















Rear camera cover



