

# ADVANTAGE FOR OVERLAY FIXED REAR VIEW AND CHANGE OF VIEW



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## ADVANTAGES TO OVERLAY FIXED REAR VIEW

- If it is not mandatory to show the fixed rear view without any overlays as long as the reverse gear is selected
  - The display of **eCall (emergency call)** message is possible
  - The display of **PDC (park distance control) tiles** in order to warn from potential collision with obstacles is possible
  - The display of **driving trajectory** in order to show driver the route the vehicle will move with a certain steering angle is possible
  - An enhanced, adaptive BMW **automatic camera view** is possible
    - early optical warning for potential collision objects **on the side of the vehicle** which are not visible in fixed rear view
    - early optical warning for potential collision objects **in the direction of steering** which are not visible in fixed rear view
    - optimized view on potential collision objects behind vehicle to estimate current distance to collision object
  - The display of **check-control messages** are possible

### **Recommendation:**

Allowing to overlay fixed rear view in order to provide driver views optimized for certain critical situations and important check-control messages for critical system failures in order to increase safety.

# BMW eCALL

## Notruf

Datenübertragung aktiv.

Anruf aktiv.

Notruf abbrechen

Tal

München

48° 08' 11"N 11° 34' 37"O, Richtung N



## Notruf

Anruf wird aufgebaut...

Notruf abbrechen

Tal

München

48° 08' 11"N 11° 34' 37"O, Richtung N



## Notruf

Notruf startet in 2 Sekunden.

Notruf abbrechen

Tal

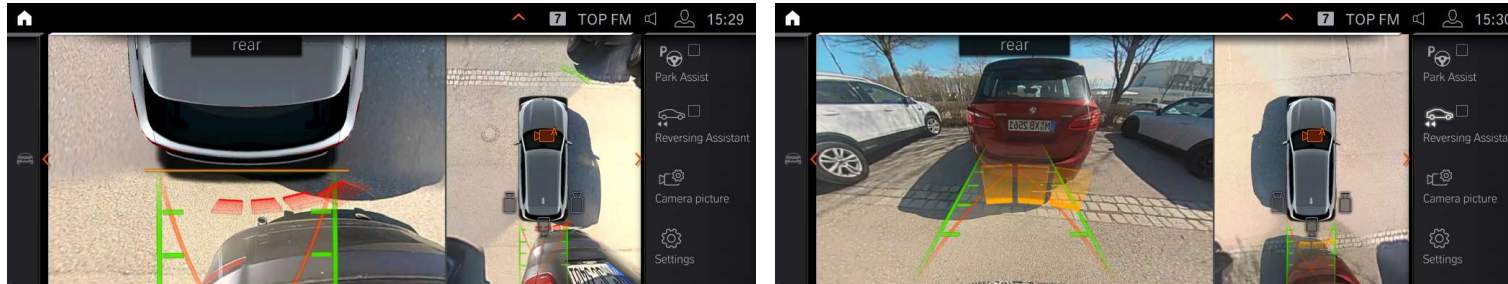
München

48° 08' 11"N 11° 34' 37"O, Richtung N



## DISPLAY OF PDC (PARK DISTANCE CONTROL) OVERLAY AND DRIVING TRAJECTORY

- If PDC sensors detect an obstacle the distance is shown in the camera views by displaying coloured tiles
  - depending on distance to obstacle the tiles are coloured from orange to red in order to warn and show the driver there could be a potential **collision**



- Depending on steering angle driving direction is shown as driving trajectory (green) in the camera view. The driver can better calculate how the vehicle will move and if a collision-free route is possible with a certain steering angle.



# BMW AUTOMATIC CAMERA VIEW

- If reverse gear is selected the „automatic camera view“ is shown as default
- **Automatic camera view** is an adaptive view. It shows the optimal camera view
  - depending on objects near the vehicle in order to immediately **warn and show** the driver where the obstacle is located

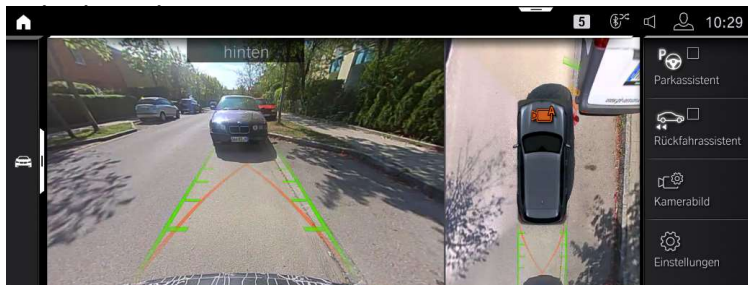


Objects are shown which are not visible in fixed rear view!



Objects are shown a way to better estimate the distance

- depending on steering angle in order to immediately **warn and show** the driver an enhanced view in the steering direction the



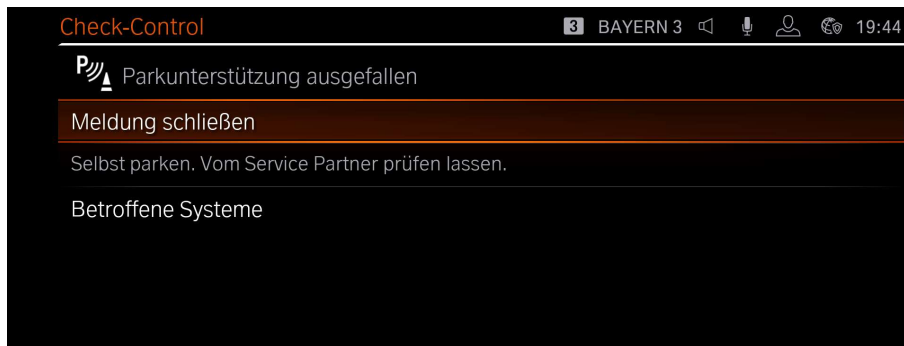
straight steering wheel



steering wheel turned → Objects are shown which are not visible in fixed rear view!

# BMW CHECK-CONTROL MESSAGE

- If there is an error in vehicle there will be a checkcontrol message shown to warn driver there are system failures (e.g. engine defect)



- Driver is immediately warned by check-control message that there is a critical system failure

## BMW TRAILER HITCH VIEW

- If driver wants to couple vehicle with a trailer BMW offers the trailer hitch view.
- **Trailer hitch view** show driver in which direction he has to steer in order to couple with the trailer

