



Driver Support System



- Driver Support Systems are a suite of technologies aimed at aiding and enhancing the driving experience by providing **assistance** and safety features.
- The systems utilize sensors, cameras, and advanced algorithms to offer functionalities such as lane-keeping assistance, adaptive cruise control, automatic emergency braking, and parking assistance.
- Primary purpose of **driver assistance systems** aim to enhance safety, convenience, and overall driving experience by employing advanced technologies to assist drivers in various aspects of vehicle operation.



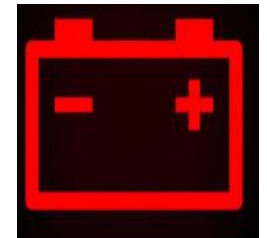
Driver Information



- Driver information systems provide real-time data on vehicle status, road conditions, and navigation, enabling drivers to make decisions and maintain better situational awareness during their journeys.
- Visual and auditory cues, (GPRS) displayed on instrument clusters or heads-up displays, keep drivers informed about navigation, speed, and vehicle status



DIFFERENT SIGNS





Driver Preception



- Driver perception is crucial as it influences how quickly and accurately drivers can respond to alerts and information provided by support systems, ensuring a seamless integration of technology with human driving capabilities.
- For example, lane departure warnings and collision avoidance systems alert drivers to potential dangers, reducing the risk of accidents caused by human error or distraction.
- Adaptive cruise control adjusts the vehicle's speed based on surrounding traffic, providing a more controlled and comfortable driving experience.



Driver Convenience



- Driver convenience and monitoring systems are integral components of modern vehicles, contributing to a more comfortable and safer driving experience.
- Driver convenience features include technologies such as adaptive cruise control and automatic parking, streamlining tasks and reducing driver workload, leading to a more comfortable and enjoyable driving experience.



Driver Convenience & monitoring



- Driver monitoring systems use sensors and cameras to track driver behaviour and detect signs of fatigue or distraction, providing timely alerts to ensure that drivers remain focused and alert while driving.
- This include amenities such as automatic climate control, advanced information systems, voice commands, and hands-free connectivity



Driver Convenience & monitoring





Driver Convenience & monitoring

- Simultaneously, driver monitoring systems play a vital role in ensuring the well-being of drivers.
- These systems employ cameras and sensors to monitor driver behaviour, detecting signs of fatigue, distraction, or impairment.
- In case of identified risks, alerts or interventions are triggered to bring the driver's attention back to the road or, in some advanced cases, initiate semi-autonomous driving functions. This helps prevent accidents caused by drowsiness or inattentiveness



Driver Convenience & monitoring



- The integration of both convenience and monitoring systems creates a holistic approach to driving experiences.
- By prioritizing comfort and safety, these technologies contribute to a more relaxed, enjoyable, and secure journey, underscoring the ongoing evolution of automobiles towards intelligent and user-centric designs



THANK YOU !!!