

ADAS

Terms Reference Guide



I-CAR[®]

ACC
Adaptive Cruise Control

ICC
Intelligent Cruise Control:
Assists with acceleration and/or braking to maintain a safe distance from the vehicle ahead. Some systems can come to a stop and continue.

ADAS
Advanced Driver Assistance System:
An electronic system that gives the driver a safer and more comfortable driving experience. Includes camera technology, as well as other sensors like radar, laser, or ultrasound.

AEB
Automatic Emergency Braking, Autonomous Emergency Braking

CMBS
Collision Mitigation Braking System

FCA
Forward Collision Avoidance

FEB
Forward Emergency Braking:
Monitors the proximity of vehicles in front, detecting situations where a collision is possible. Braking is then automatically applied to avoid the collision or reduce its impact.

AFLS
Adaptive Front Lighting System

SRH
Steering Responsive Headlights

ABL
Active Bending Light System:
Automatically turns the headlight beam to the right or left depending on the vehicle's direction.

ALC
Adaptive Light Control

IHC
Intelligent Headlight Control:
Detects oncoming traffic and vehicles in front by automatically adjusting the headlights, including high and low beams.

ANV
Automotive Night Vision

NVA
Night View Assist:
Thermal camera or active infrared lighting captures images to be displayed on the dashboard. This increases the driver's perception and viewing distance during nighttime.

APS
Automatic Parking System

IPAS
Intelligent Parking Assist System

PA
Parking Assistance

Remote Parking:
Designed to help a driver park his or her vehicle. Some systems perform the entire job automatically, while others help the driver know when to turn the steering wheel and when to stop.

Backup Camera

RVC
Rear-View Camera:
Provides view of area behind vehicle when in reverse. Could include trailer assistance, a system that assists drivers during backing maneuvers with a trailer attached.

BOP
Back-Over Protection, Back-Over Prevention

Rear AEB
Rear Automatic Emergency Braking:
Combines ultrasonic and rear-view camera technologies to increase safety while backing up so the driver doesn't hit a pedestrian, vehicle or other object.

BSD
Blind Spot Detection

BSW
Blind Spot Warning

BLIS
Blind Spot Information System

BCW
Blind Spot Collision Warning:
Provides information about a vehicle's blind spots, which cannot be seen easily by the driver. Some systems feature an alarm, while others include cameras that transmit images onto the dashboard display.

CAS
Collision Avoidance System

CDW
Collision Detection Warning

FCW

Forward Collision Warning

FCWS

Forward Collision Warning System

FCA

Forward Collision Avoidance:

A system that use a variety of sensors to determine whether a vehicle is in danger of colliding with another object. They can sense the proximity of other vehicles, pedestrians, or other objects on the road, and take preventive actions, such as pre-charge the brakes, apply tension to the seat belts, or take over steering.

CIB

Crash Imminent Braking, Collision Imminent Braking:

Automatically applies the brakes in a crash if the driver does not respond to warnings.

CMS

Camera Monitor System:

Additional vehicle monitors or displays that present a better view of the vehicle's external surroundings.

CTA

Cross-Traffic Alert

RCTA

Rear Cross-Traffic Alert:

Multiple sensors or wide angles cameras near the front or rear of the vehicle, detecting oncoming cross traffic.

DDW

Drowsy Driver Warning

DFW

Driver Fatigue Warning

DDD

Driver Drowsiness Detection

DMS

Driver Monitoring System:

A detection system that uses cameras or other sensors to determine if a driver is paying attention to the road. A majority of these systems track eye blinking rates and gaze direction, while some can detect sleepiness by the driver's head nods.

EDA

Emergency Driver Assistant:

A system that monitors a driver's behavior, and takes control of the brakes and the steering, bringing the vehicle to a stop if it finds the driver is not able to safely drive the vehicle.

EVWS

Electric Vehicle Warning Sound:

Sounds designed to alert pedestrians of nearby moving electric vehicles, which make very little noise.

AHBC

Adaptive High Beam Control

GFHB

Glare-Free High Beam

HLA

Head Lamp Assist

IHBC

Intelligent High Beam Control

LA

Lighting Automation:

Allows drivers to drive with the high beam on at all times, adjusting light distribution if it detects other traffic on the road as to not blind approaching drivers.

HDC

Hill Descent Control:

Adjusts speed by applying the brake or shifting to lower gears while descending down a hill.

HUD

Head-Up-Display:

A transparent display of information on the front windshield, allowing drivers to keep their eyes on the road rather than having to look away for the information.

ISA

Intelligent Speed Adaptation, Intelligent Speed Advice:

Monitors vehicle speed, typically using Traffic Sign Recognition and map data to determine the allowed speed limits, and warns the driver to adjust speed if it is higher than the allowed limit.

LCA

Lane Change Assist

BSM

Blind Spot Monitoring:

Senses a vehicle approaching a different lane with a flashing indicator on the side mirror.

LCA

Lane Centering Assist

LD

Lane Detection

LKA

Lane Keeping Assist:

Keeps a vehicle in the center of the lane by using a forward-facing camera to detect lane markings with an electric steering system.

LDW

Lane Departure Warning

LDWS

Lane Departure Warning System:

Uses a forward-facing camera to detect lane markings, and warns the driver if the vehicle leaves the lane without proper use of the turn signal.

MOD

Moving Object Detection:

Multiple cameras located around the vehicle detect moving objects around the vehicle, typically during parking.

Obstruction Warning System:

Detects obstructions near vehicle during [forward or rear] parking maneuvers.

OD

Object Detection:

A computer vision algorithm that detects objects in view of a camera, such as pedestrians, vehicles, animals, or cyclists.

PAEB

Pedestrian Automatic Emergency Braking:

Automatically applies brakes to a vehicle if a pedestrian is detected in front or rear of the vehicle.

PD

Pedestrian Detection

PDS

Pedestrian Detection System:

Cameras that detect pedestrians in front or behind the vehicle.

PLD

Parking Line Detection

PSMD

Parking Slot Marking Detection:

Detects markers on the road surface to determine the exact location of parking spaces.

Rear Automatic Braking:

Detects potential collision while traveling in reverse and automatically applies the brakes to avoid or lessen the severity of impact. Some systems include pedestrian detection.

SAD

Semi-Autonomous Driving:

Primarily autonomous, but requires the driver to monitor and take control of the vehicle if the automated driving system cannot safely operate the vehicle.

SVC

Surround View Camera

SVPA

Surround View Park Assist:

Multi-surround view cameras that capture and display 360 degrees surrounding the vehicle in one integrated view on a dashboard display.

TA

Turning Assistant:

Monitors opposing traffic when turning at low speeds, and autonomously applies the brakes in unsafe situations.

TJA

Traffic Jam Assist:

Adapts speed and optionally takes control of steering in lower-speed, dense traffic situations.

TLR

Traffic Light Recognition:

Camera-based technology that detects and analyzes traffic lights, either to inform the driver or to provide information to the vehicle for autonomous driving.

TSR

Traffic Sign Recognition:

Camera-based technology that detects and analyzes the traffic signs next to the road, often displaying the information on the dashboard.

UPA

Ultrasonic Park Assist:

Solely uses ultrasonic sensors to detect distance.

WWDW

Wrong-Way Driving Warning

WWDA

Wrong-Way Driving Alert:

Uses Traffic Sign Recognition (TSR) to detect wrong-way traffic sign indicators, and warns the driver if he or she is driving in the wrong direction.

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