I-CAR®

ADAS TERMS

REFERENCE GUIDE

I-CAR.com/ADAS

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

ACC
Adaptive Cruise Control

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

AFLS
Adaptive Front Lighting System

AHBC
Adaptive High Beam Control

ALC
Adaptive Light Control

ANV
Automotive Night Vision

APS
Automatic Parking System

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.

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.

BLIS
Blind Spot Information System

BOP
Back-Over Protection, Back-Over Prevention

BSD
Blind Spot Detection

BSM
Blind Spot Monitoring
Senses a vehicle approaching a different lane with a flashing indicator on the side mirror.

BSW
Blind Spot Warning

CAS
Collision Avoidance System

CDW
Collision Detection Warning

CIB
Crash Imminent Braking, Collision Imminent Braking
Automatically applies the brakes in a crash if the driver does not respond to warnings.

CMBS
Collision Mitigation Braking System

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

CTA
Cross-Traffic Alert

DDD
Driver Drowsiness Detection

DDW
Drowsy Driver Warning

DFW
Driver Fatigue Warning

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.

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.

FCW
Forward Collision Warning

FCWS
Forward Collision Warning System

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.

GFHB
Glare-Free High Beam

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

HLA
Head Lamp Assist

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.

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.

IHBC
Intelligent High Beam Control

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

IPAS
Intelligent Parking Assist System

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.

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.

LCA
Lane Change Assist

LCA
Lane Centering Assist

LD
Lane Detection

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.

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.

MOD
Moving Object Detection

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

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.

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.

PA
Parking Assistance

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.

RCTA
Rear Cross-Traffic Alert

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

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.

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 pedestri-an detection.

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.

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.

SRH
Steering Responsive Headlights

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.

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.

WWDW
Wrong-Way Driving Warning

ADAS COURSES
FROM I-CAR

I-CAR.com/ADAS

ADAS Operations and Service

AUTEL® MaxiSys® Diagnostic Tablet and Calibration Kit

Bosch Scan Tool and Advanced Driver Assistance Systems (ADAS) Calibration Kit

Calibration Requirements for Blind Spot and Parking Assist Systems

Calibration of Front Facing Cameras and Front Radar

Camera Calibration, Inspection, and Initialization Requirements

Incorporating ADAS in Your Business

Nissan LEAF Technologies and Repair Considerations

Post Repair Advanced Driver Assistance Systems (ADAS) Testing

Requirements and Considerations for Achieving an Accurate ADAS

Windshields and Advanced Driver Assistance Systems (ADAS)

ADAS Diagnostics - When the Calibration Fails

Understanding OEM Calibration Procedures and How to Locate Them

Damage Discovery for ADAS Sensor Mounting Locations

Static ADAS Calibration 3-Day Hands-On Skills Development

Ford ADAS Calibration 2-Day Hands-On Skills Development

I-CAR®