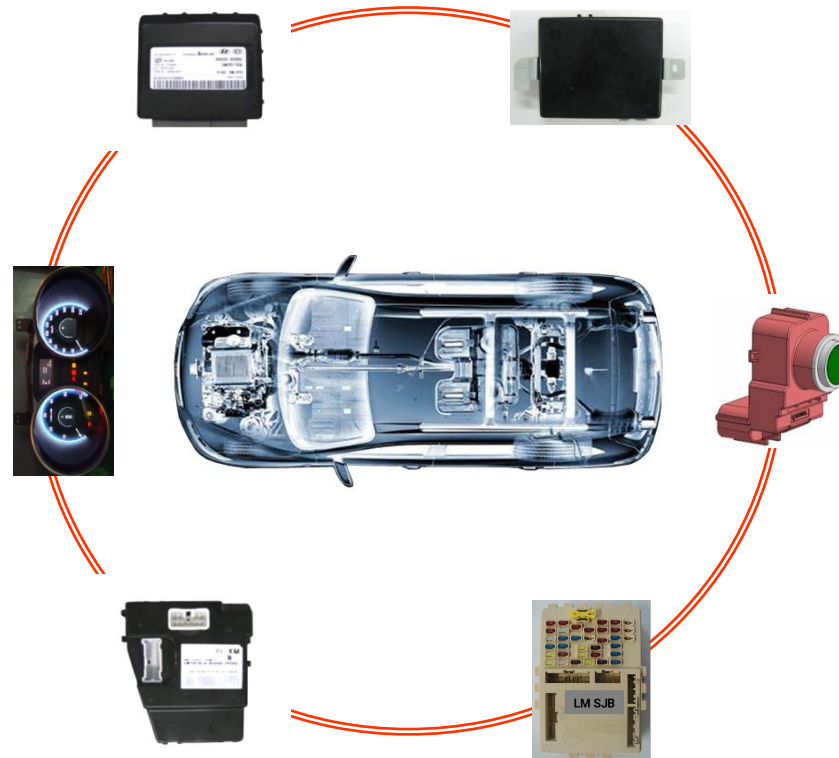
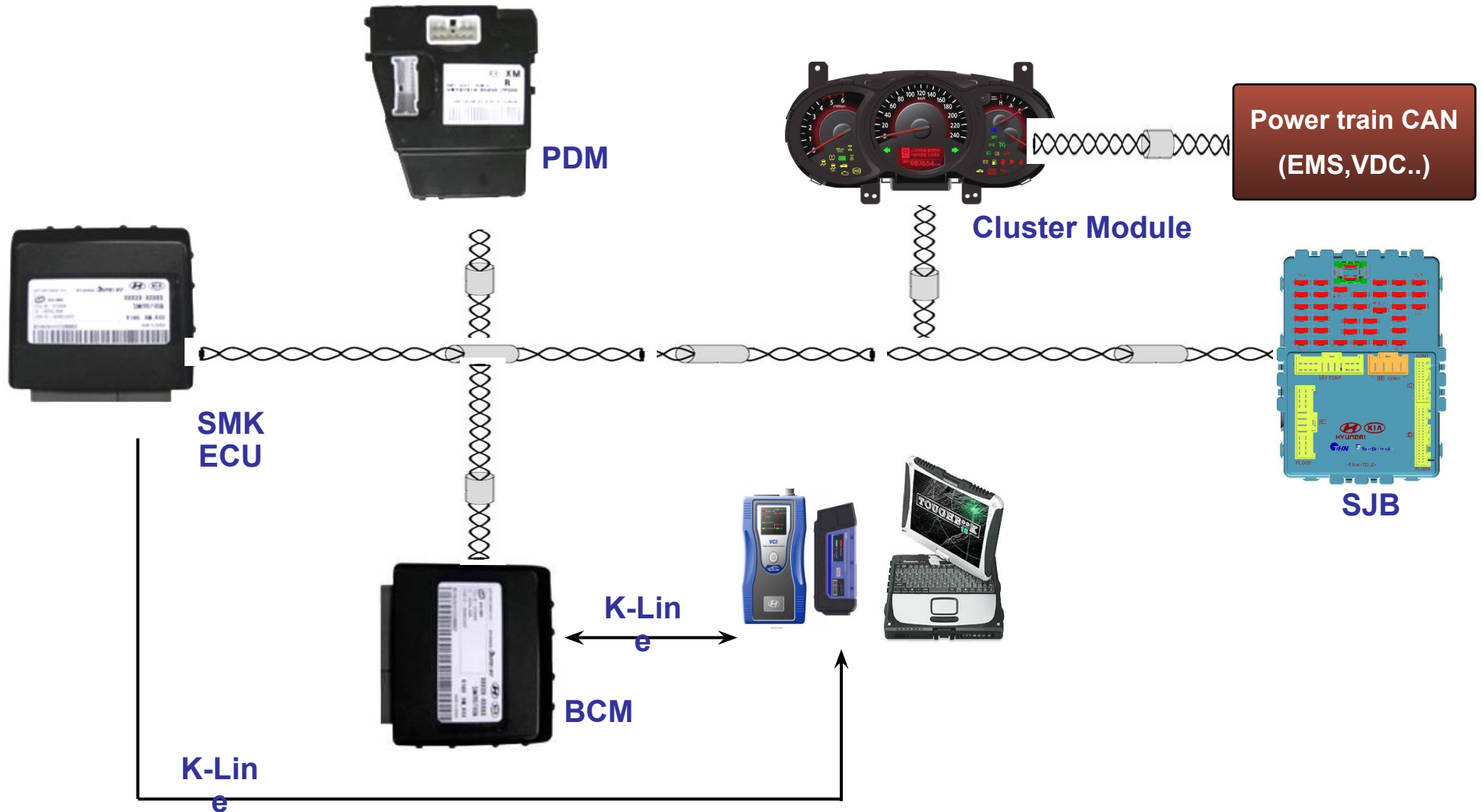


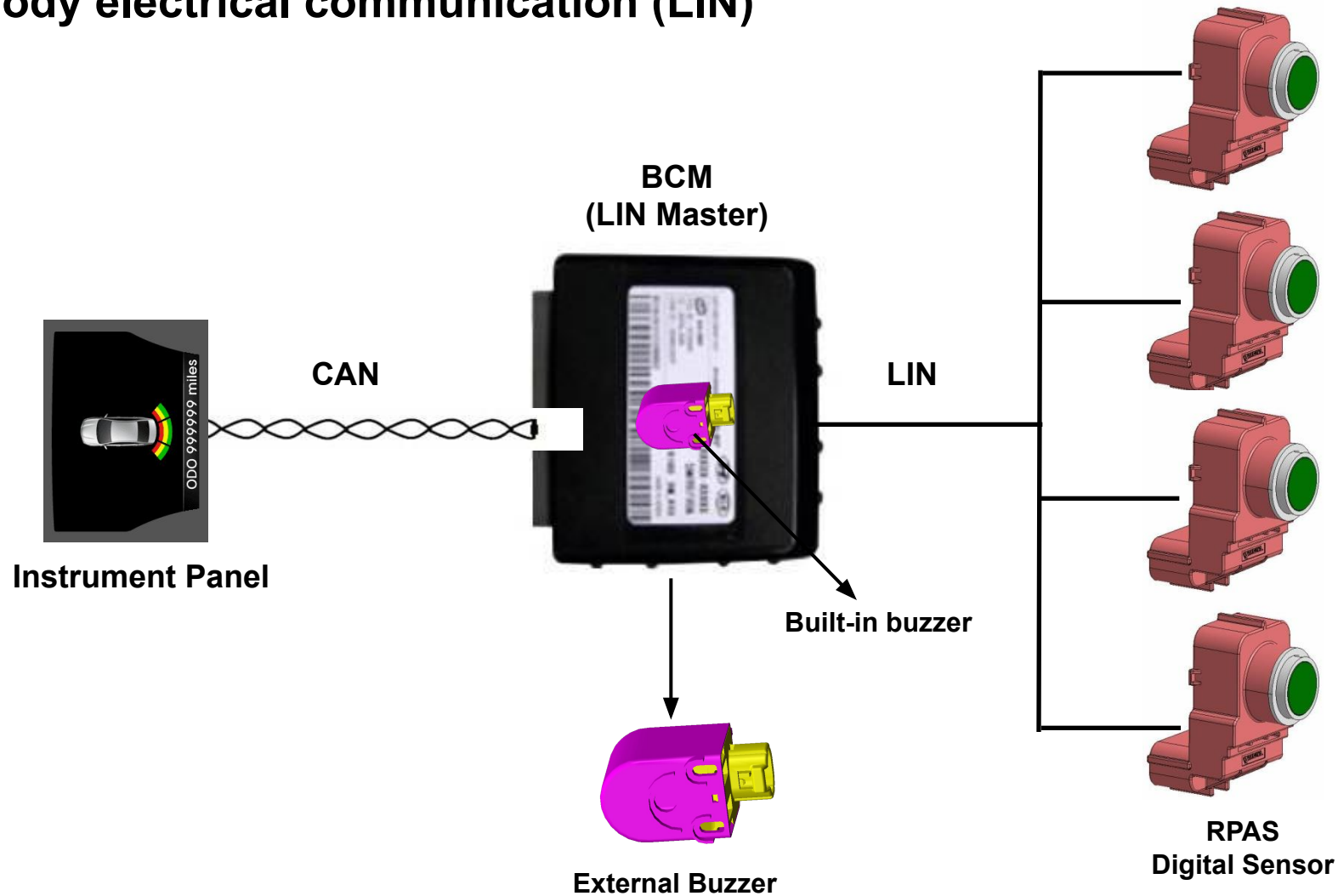
Body Electrical



Body electrical communication (CAN)



Body electrical communication (LIN)



Components (BCM)

✓ Main Features

1. CAN communication with SJB / Built-in RPAS module
2. Built-in RKE receiver (External receiver antenna)
3. Buzzer installed inside BCM



At the rear of the center fascia panel



Connector

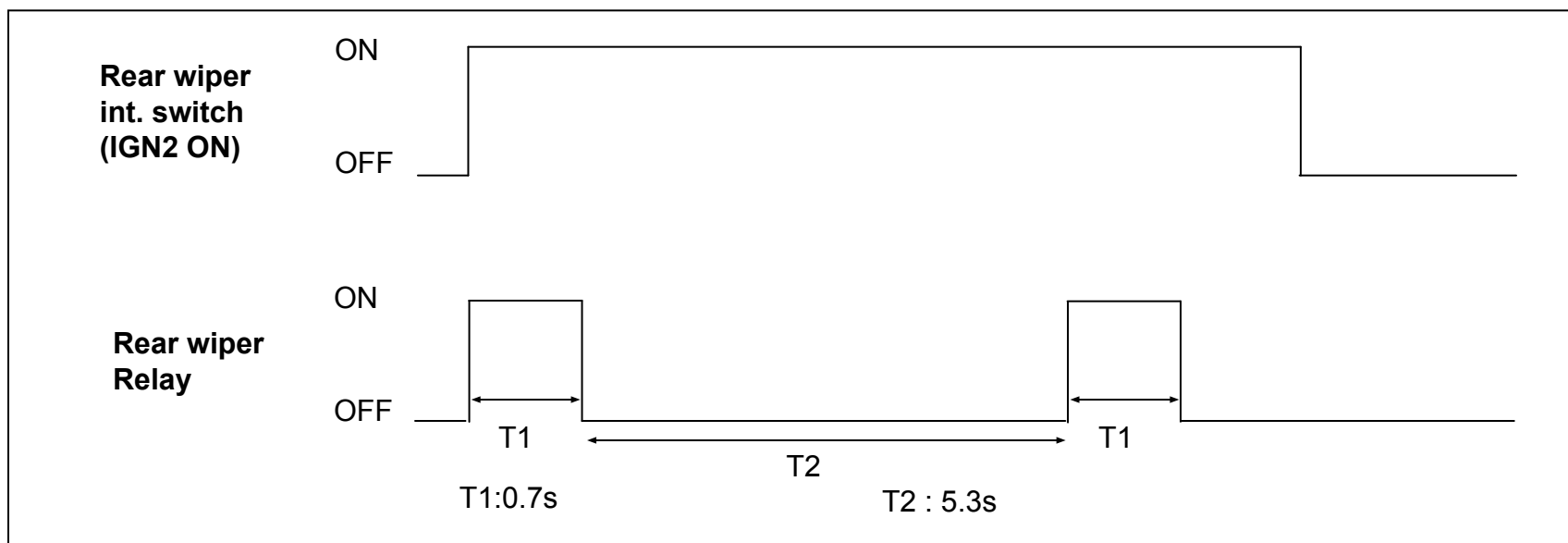
Main BCM Control Features - New Features and Changes Only



Rear Intermittent Wiper Control (INT)

1) Detailed Input/Output

Classification	Input/Output Type	Detail
BCM Input	Digital signals	IGN2 Rear wiper int. switch
BCM Output	CAN output: BCM □ SJB	Rear wiper relay (Output from SJB)



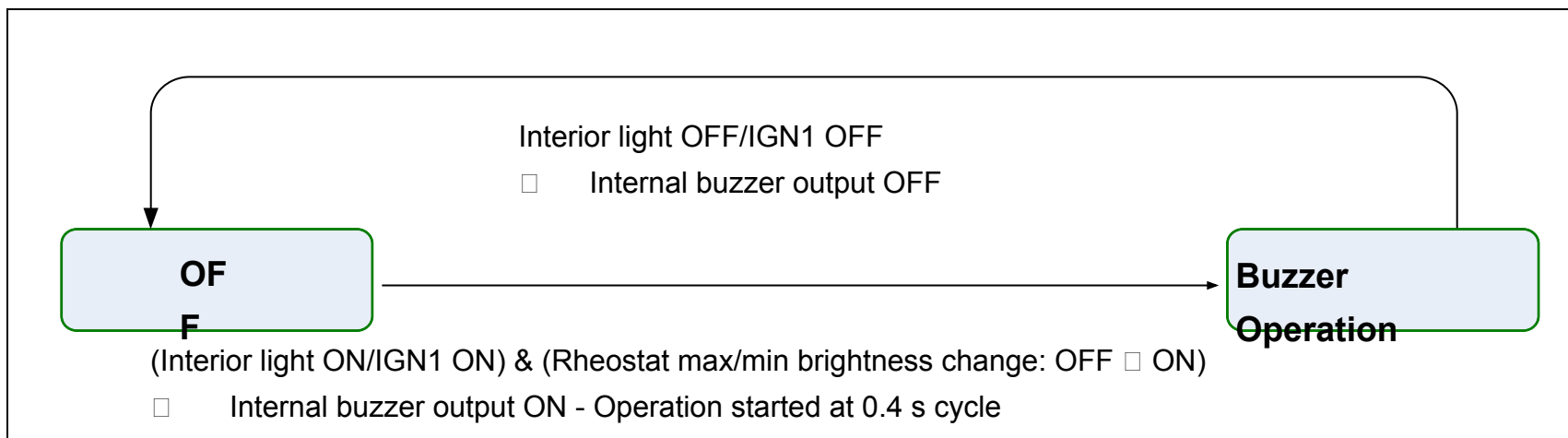
Main BCM Control Features - New Features and Changes Only

Internal Buzzer Control

1) Detailed Input/Output

Classification	Input/Output Type	Detail
BCM Input	Digital signals	IGN1
	CAN signal: CLUM → BCM	Tail light ON Rheostat max/min brightness change signal
BCM Output	Digital output	Buzzer in BCM in operation for 0.4 s

2) Description of Detailed Features



Main BCM Control Features - New Features and Changes Only

Decayed Room Lamp Control

1) Detailed Input/Output

Classification	Input/Output Type	Detail
BCM Input	Digital signals	IGN1 Key In switch
	CAN signal: SJB → BCM	Four door switch state signal
BCM Output	Digital output	Photosensitive room lamp output for 30 s

2) Others

- ① After the battery removal and installation, if IGN1 is on and four door switch is on (open), the room lamp is switched on.
- ② After the battery removal and installation, if IGN1 is off and four door switch is on (open), the maximum operation time of the room lamp is 20 minutes.

Main BCM Control Features - New Features and Changes Only

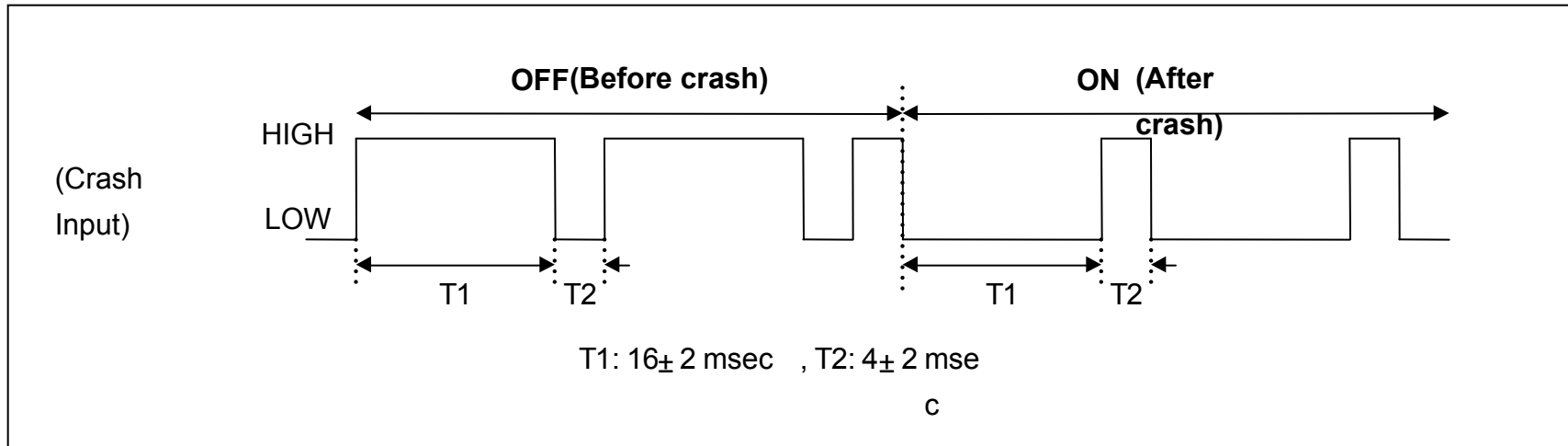
Crash Unlock Control

1) Detailed Input/Output

Classification	Input/Output Type	Detail
BCM Input	Digital signals	IGN1
	PWM signal: From ACU	Crash signal
BCM Output	Digital output	Door unlock relay

2) Description of Detailed Features

① ON/OFF judgment condition for the collision input signal



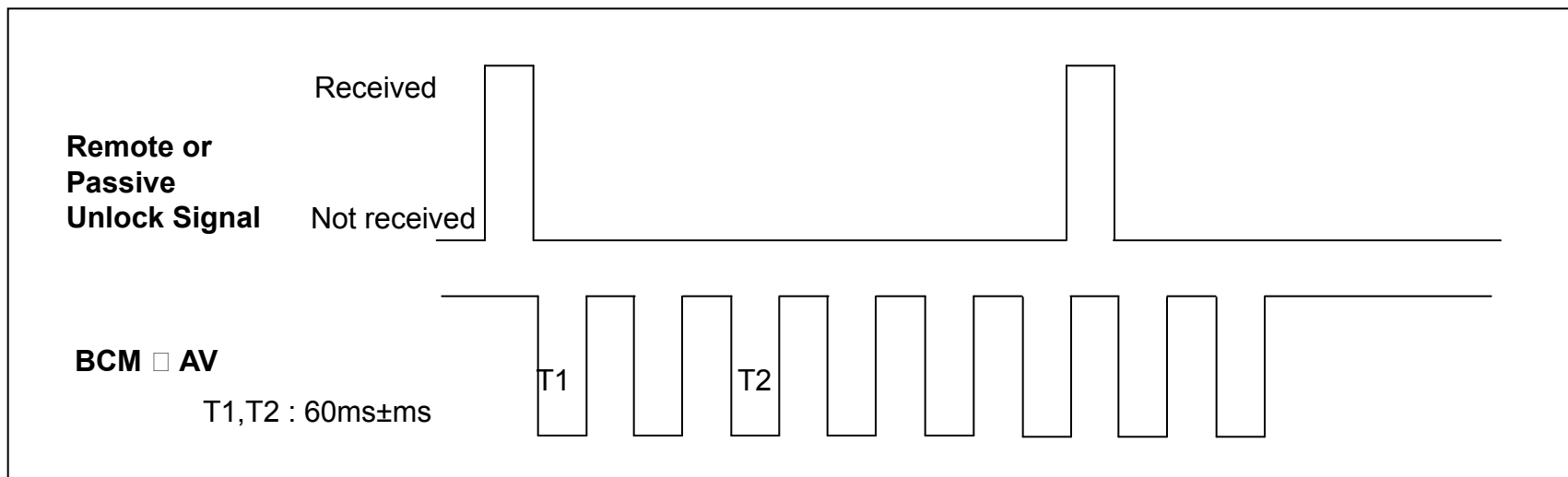
Main BCM Control Features - New Features and Changes Only

AV Unlock Signal Control (Door Unlock Signal)

1) Control Condition

- ① When the remote unlock, smart key unlock or passive unlock signals are received, the door unlock state signal is transmitted to the AV system 8 times.

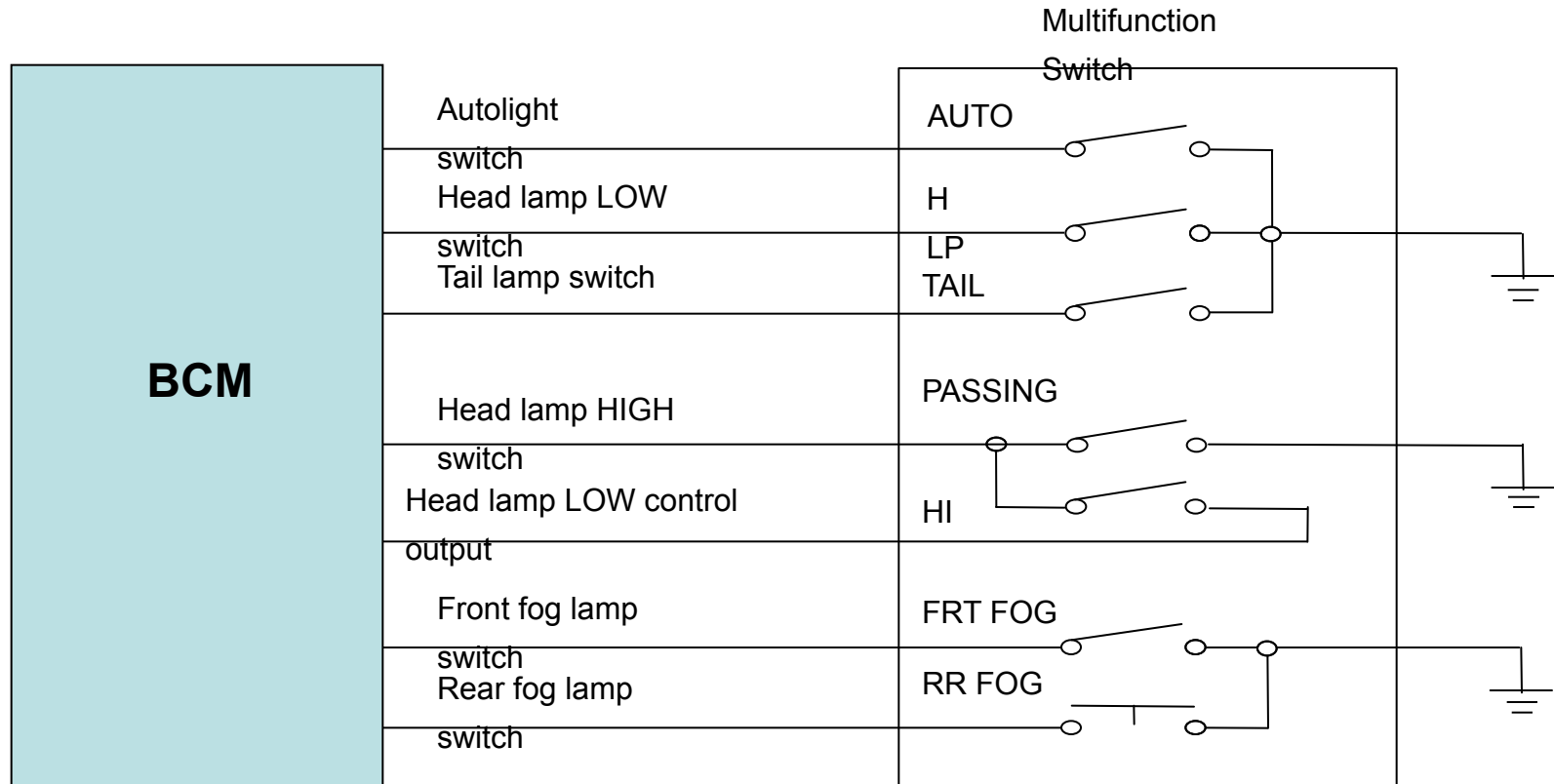
2) Time chart



Main BCM Control Features - New Features and Changes Only



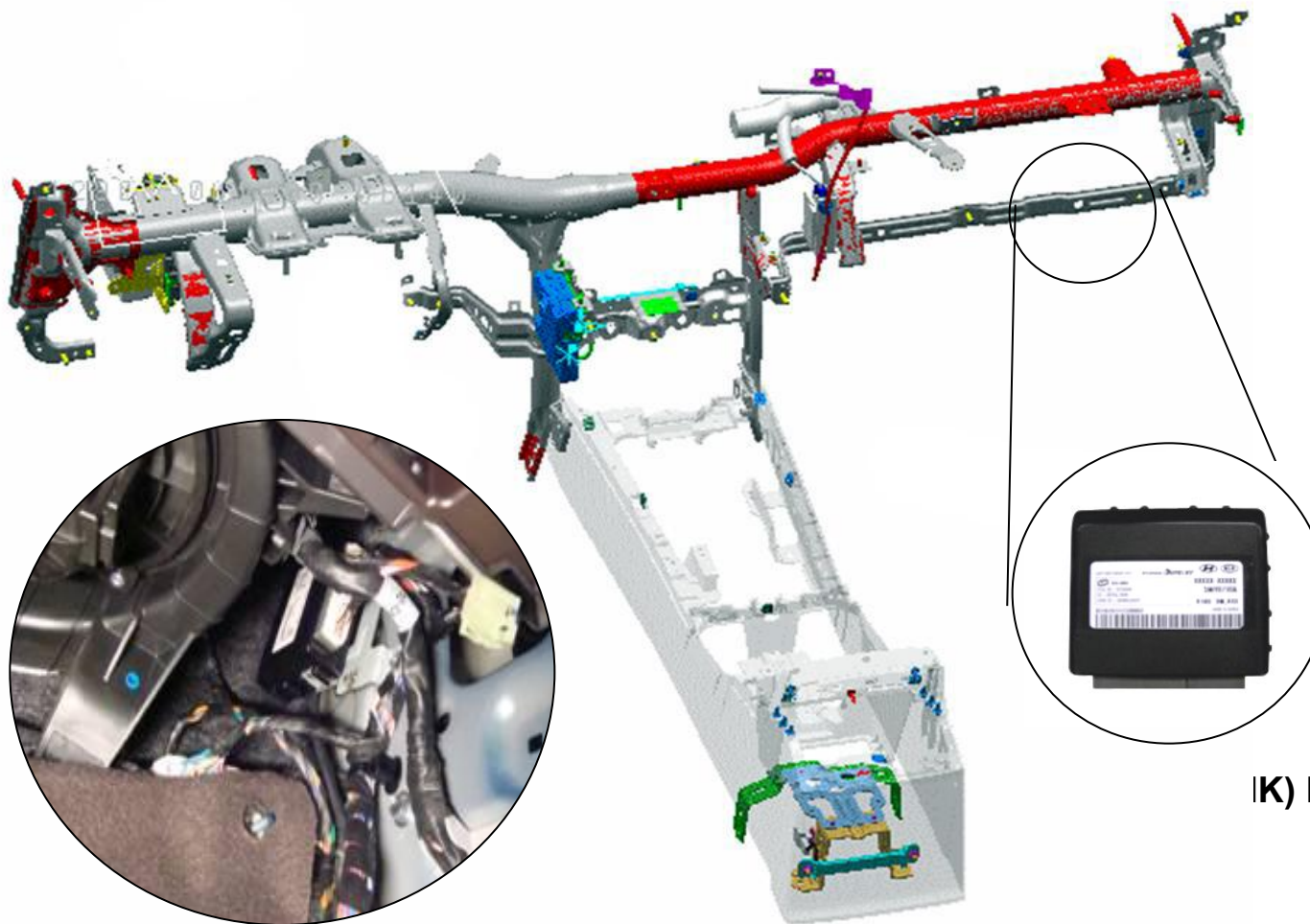
Head Lamp Control



BCM User Option Control

No.	Item	Feature	Applicable Mode	Default Value
1	Automatic door lock	This function locks all doors when a specific velocity is reached.	DISABLE	
			15km/h	○
2	Automatic door unlock	This function automatically unlocks all doors for a specific condition.	DISABLE	
			KEY OFF(OUT)	○
			Gear lever shift	
3	Automatic door lock (Gear lever shift)	This function locks all doors when the transmission lever is shifted from P position to another position.	DISABLE	○
			ENABLE	
4	Automatic door unlock (Driver's seat knob linked)	This function automatically unlocks all doors in the case of unlock using the driver's seat knob when all doors are locked.	DISABLE	○
			ENABLE	
5	Horn answer back	This function operates the burglar horn in the case of the entry to the remote alarm state.	DISABLE	○ (SMK Specification)
			ENABLE	○ (RKE Specification)
6	Alarm state activation/deactivation by key	Alarm activation/deactivation in the case of lock or unlock using a mechanical key	DISABLE	○
			ENABLE	
7	Auto light control	This function automatically switches on the tail light and head lamp according to the input values of the illuminance sensor	DISABLE	X
			ENABLE	○

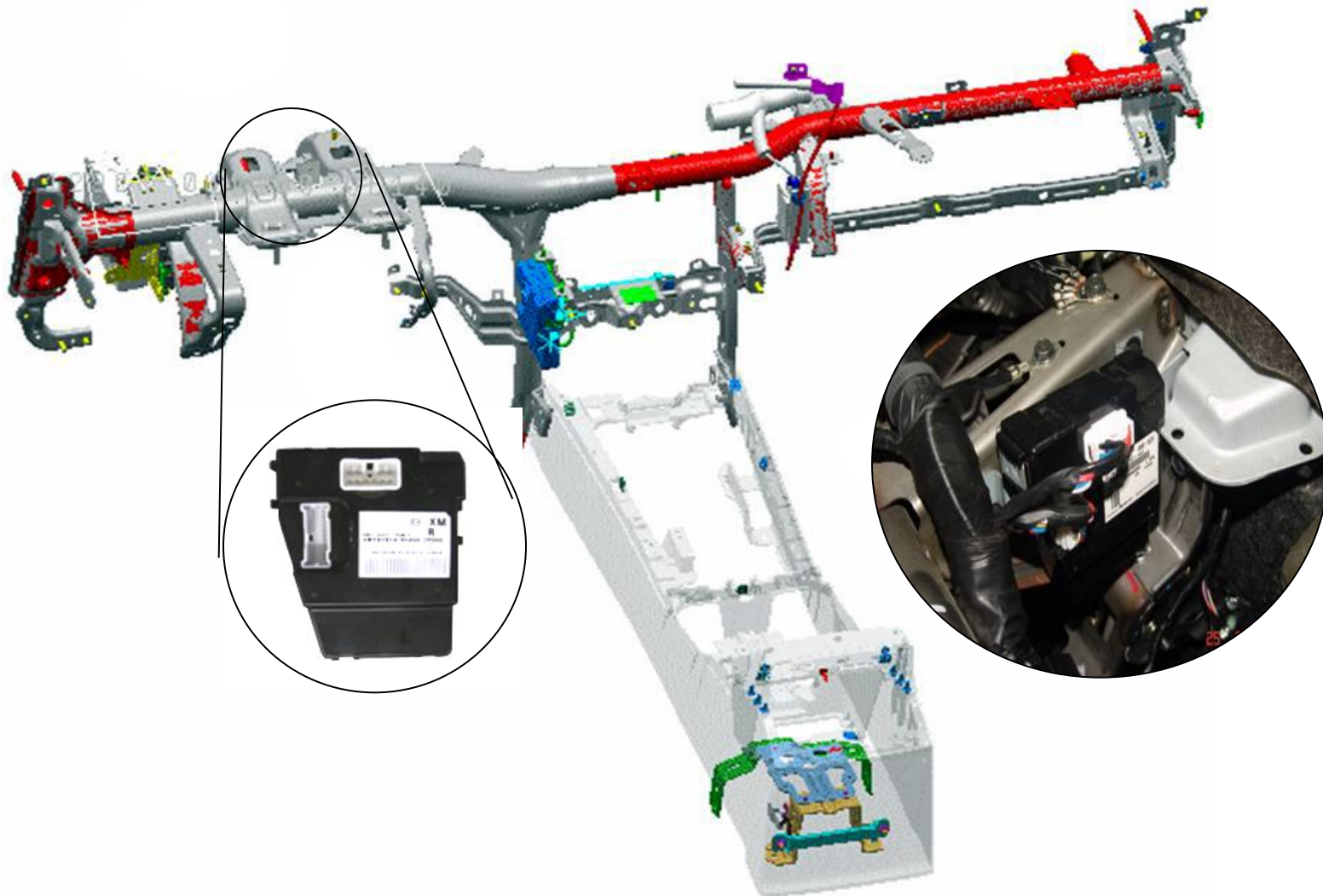
Components (smart key ECU)



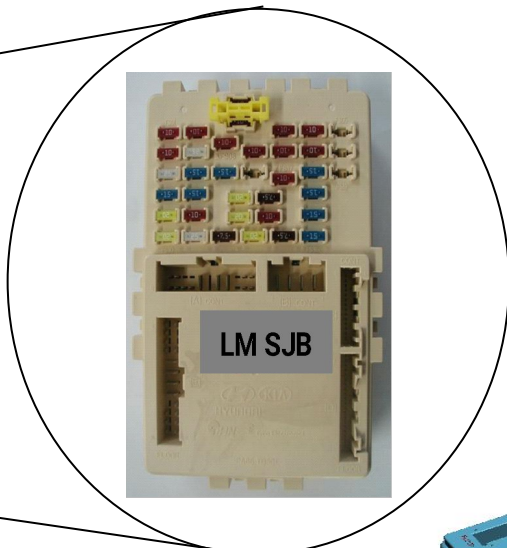
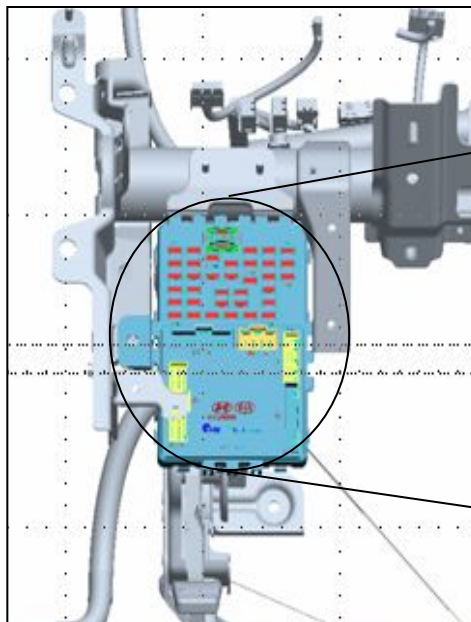
IK) ECU

At the right side of the blower motor

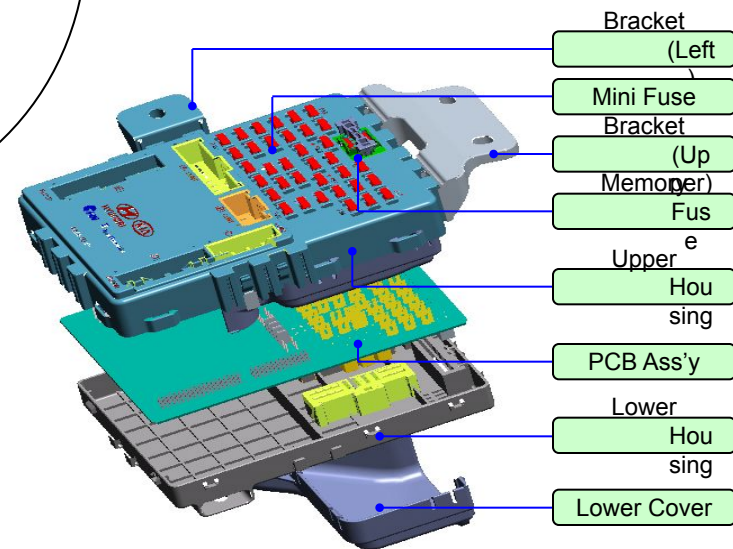
Components (PDM)



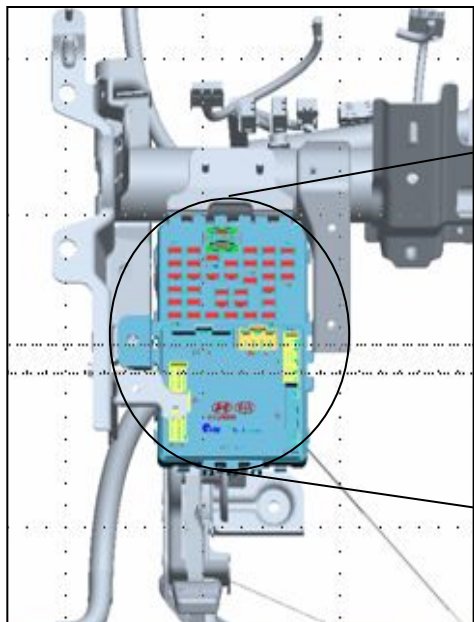
Components (SJB)



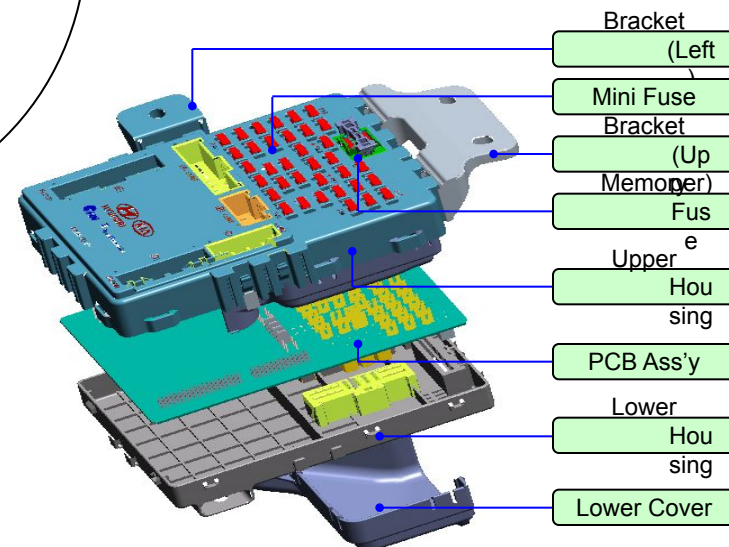
SJB Module



Components (SJB)



SJB Module



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Components (Cluster)

✓ Main Features

1. Control of the warning lamps on the instrument panel
(Direct control & CAN signal input control)
2. Trip computer control
3. Cluster text alarm display control (Applied from Feb. 2010)
4. Gate for the body electronic CAN & power-train CAN

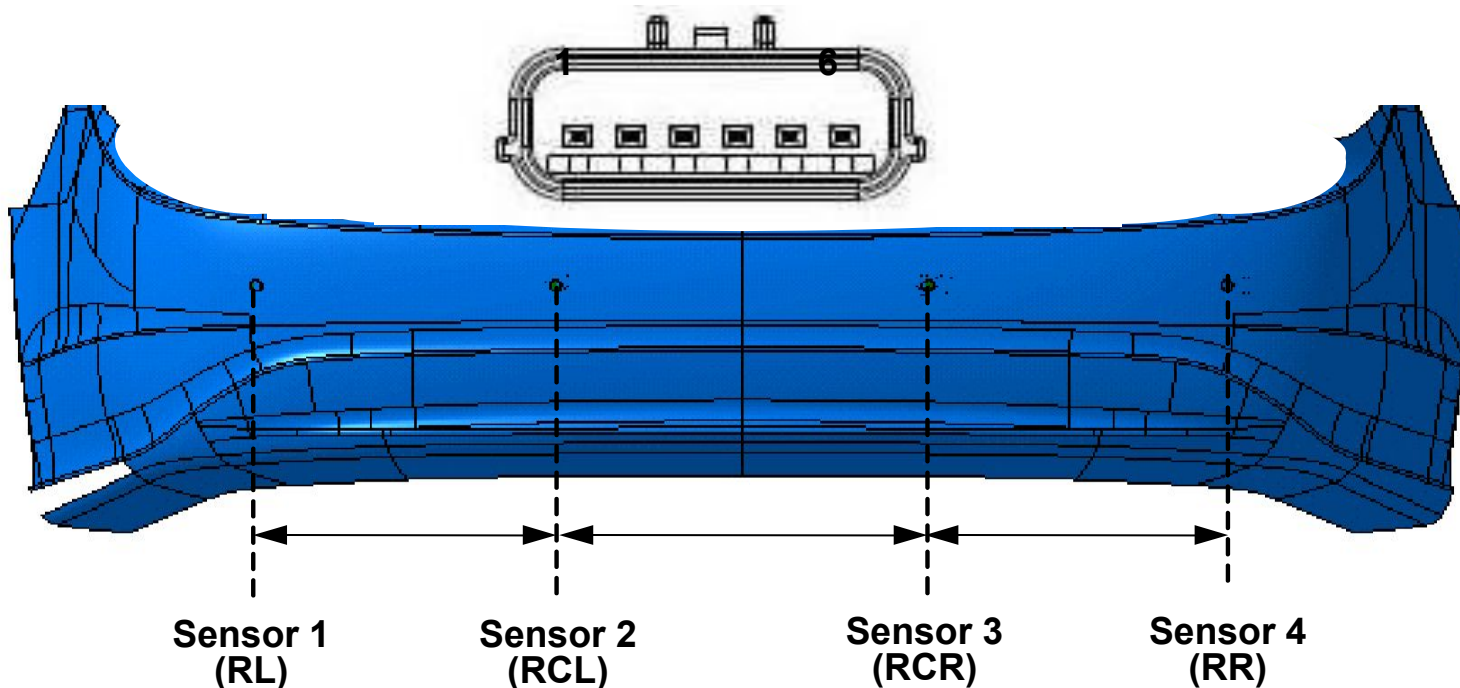
※ Supervision cluster expected to be applied from Feb. 2010



Components (RPASM : Rear Parking Assist System Module)

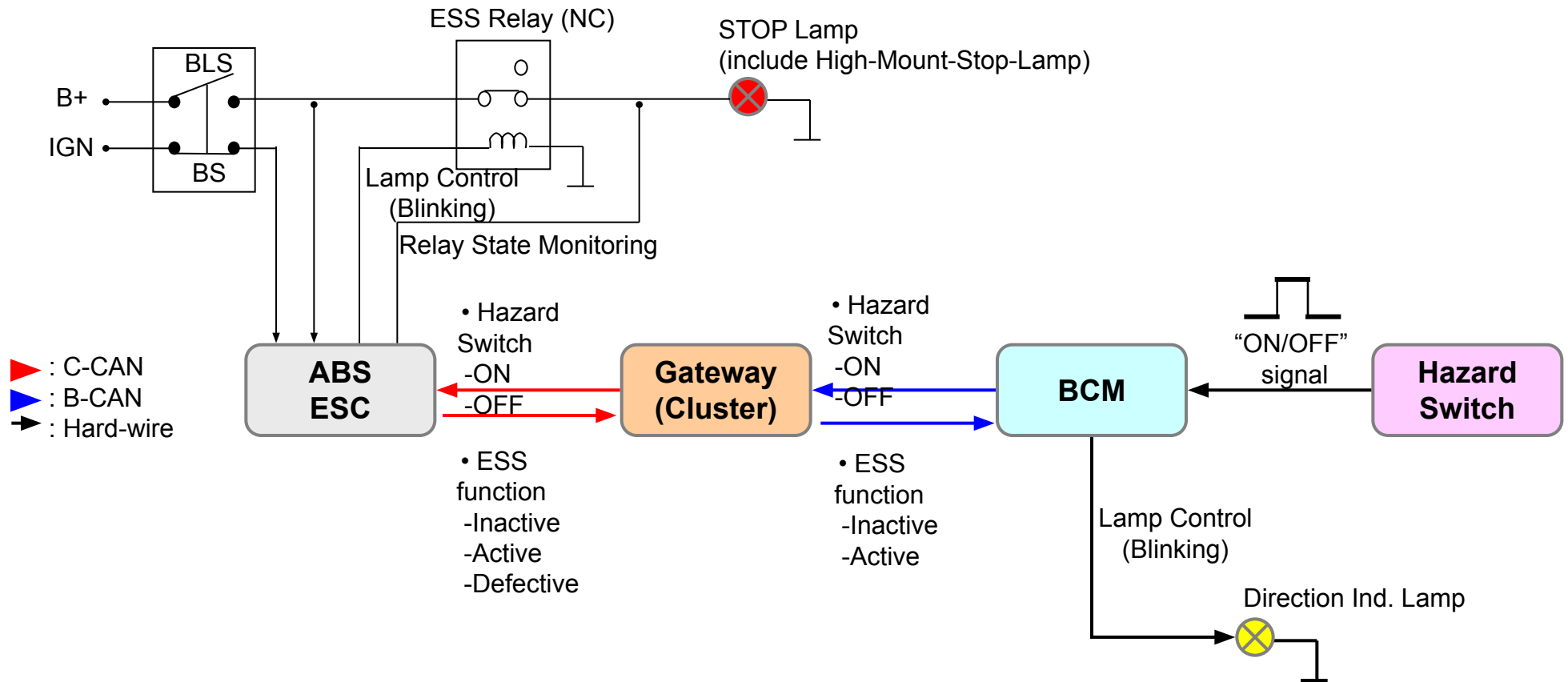
✓ Main Features

1. Transmission of the data on the distance to the obstacle upon the distance measurement request of the BCM (As a slave module)
2. Transmission of fault data to the BCM
3. IGN ON, R gear engagement and distance measurement request of BCM (master module) □ LIN communication started



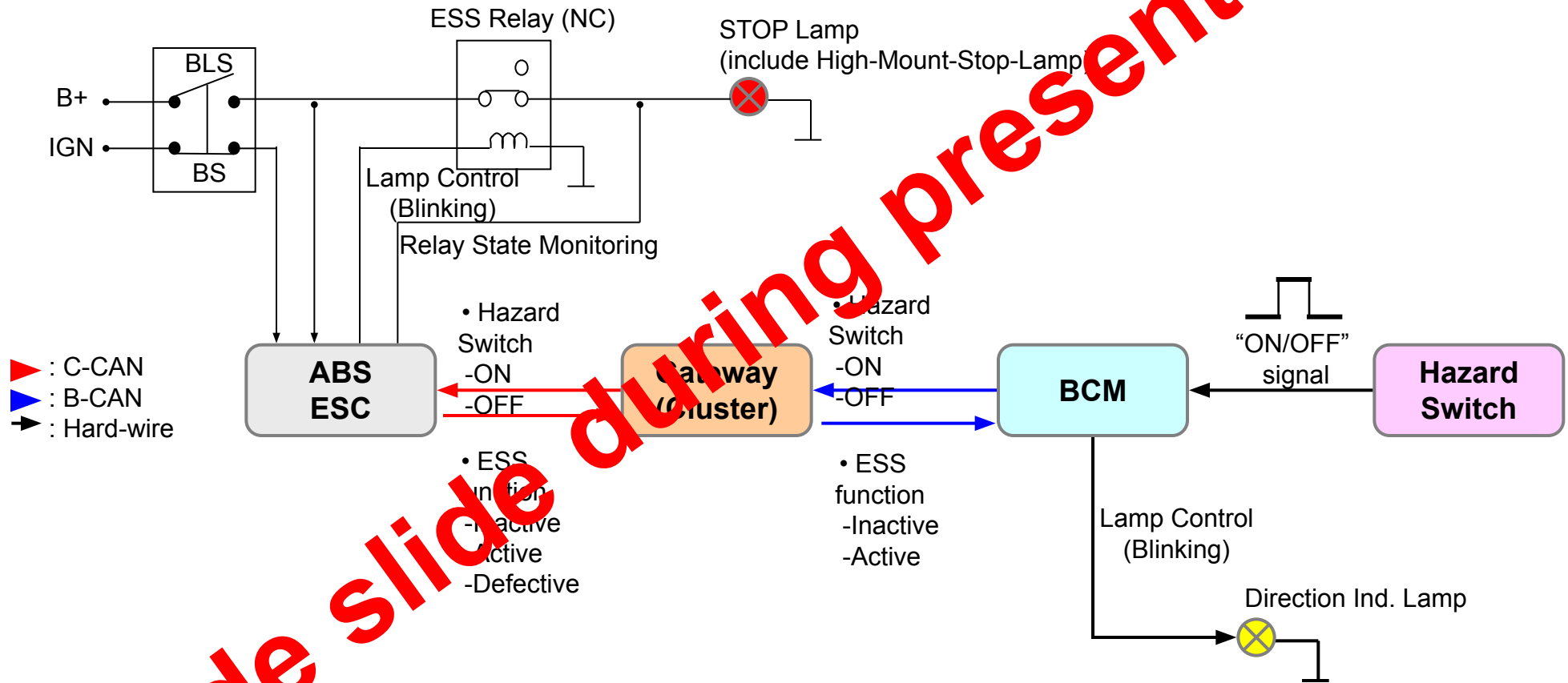
※ Sensor beam width: 100° horizontal and 40° vertical
(for a single sensor)

ESS (Emergency Stop Signal)



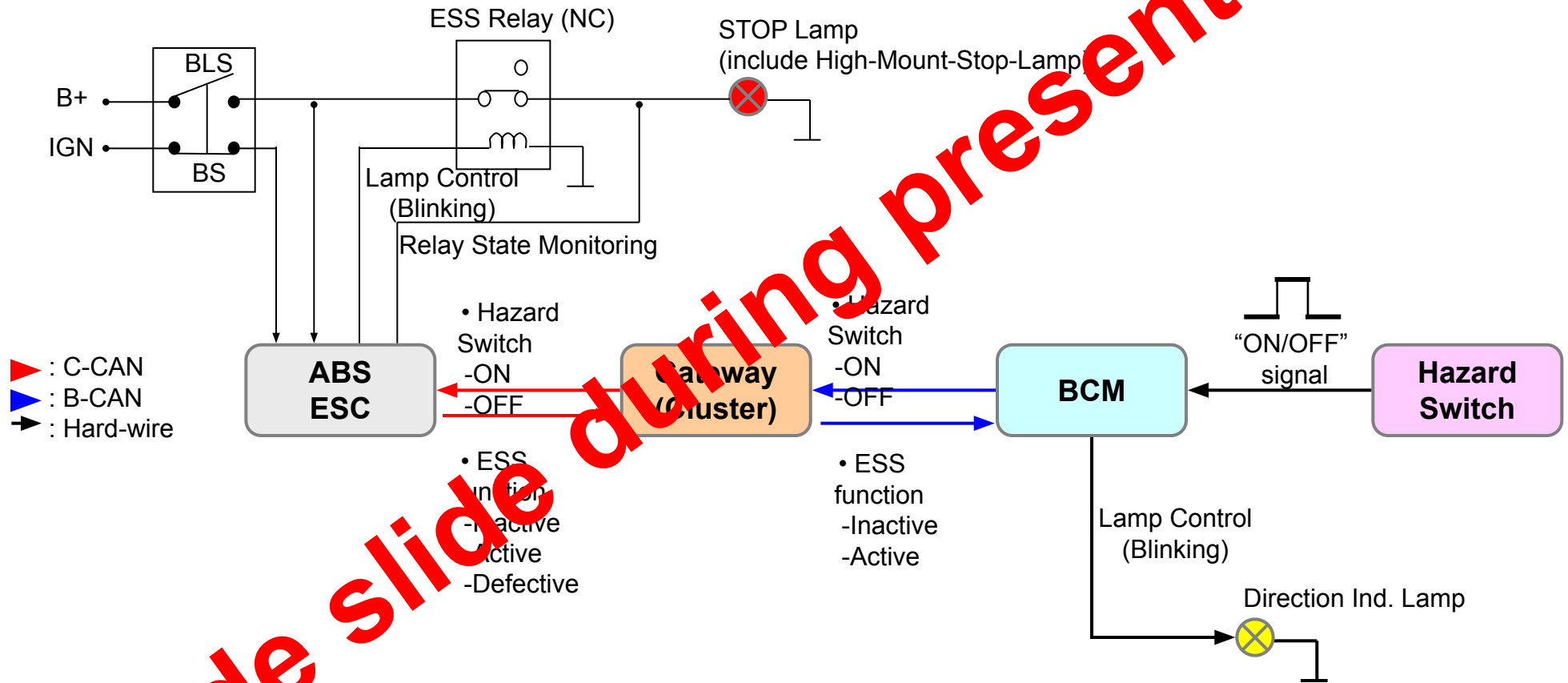
※ Applicable region (Time): Korea (Aug. 2009) / Europe (Feb. 2010)

ESS (Emergency Stop Signal)



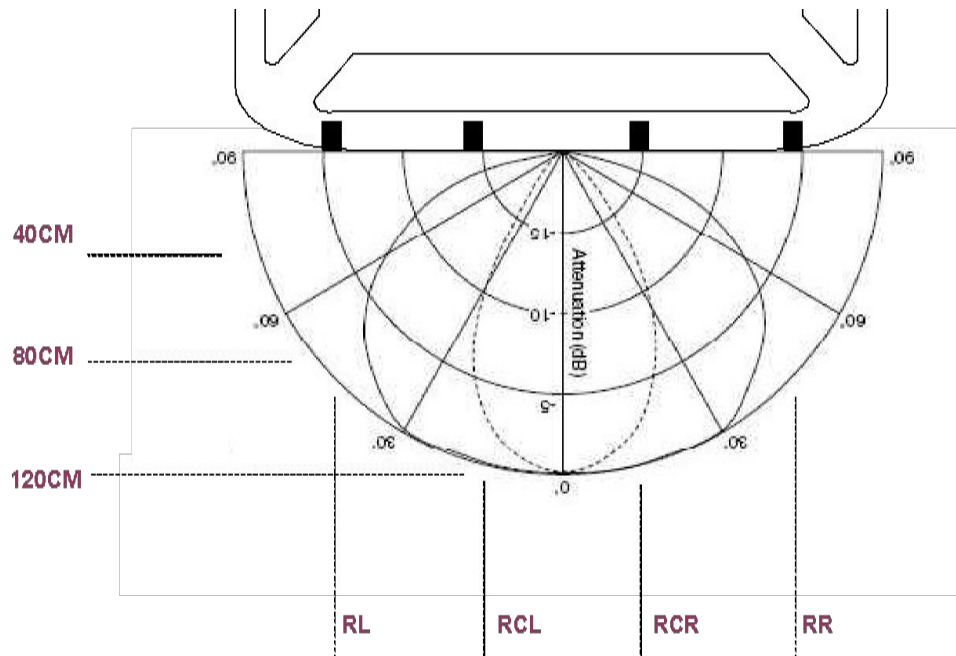
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ESS (Emergency Stop Signal)

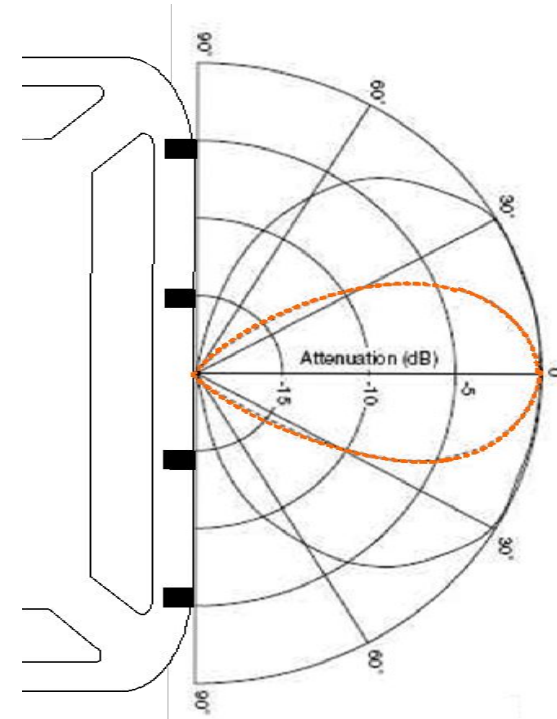


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RPAS (Rear Parking Assist System)

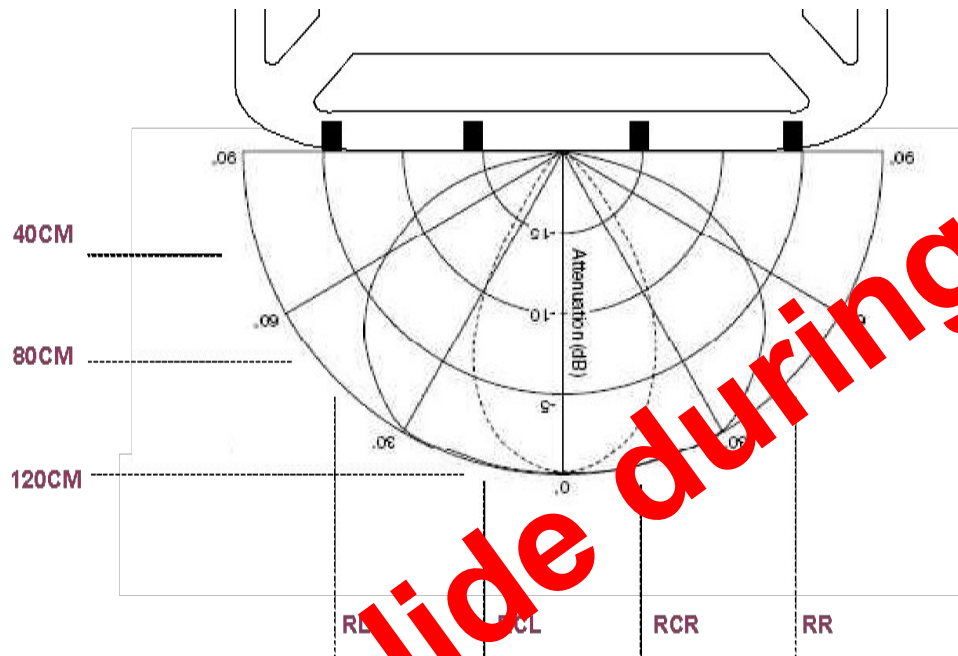


Horizontal Detection Range

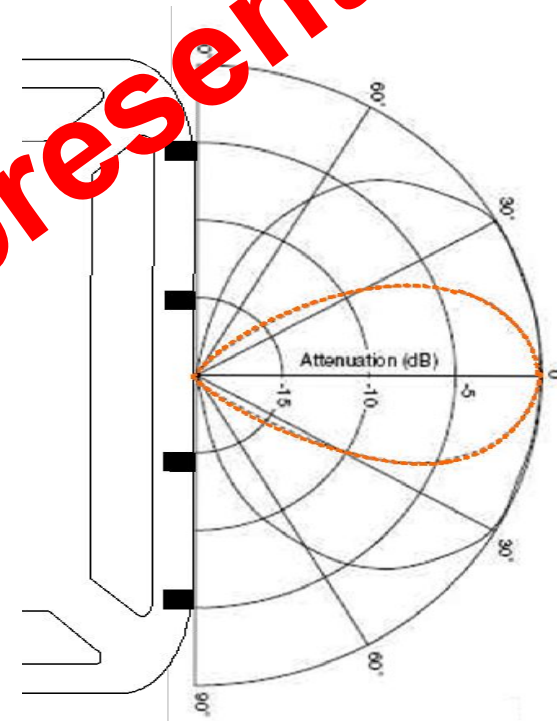


Vertical Detection Range

RPAS (Rear Parking Assist System)



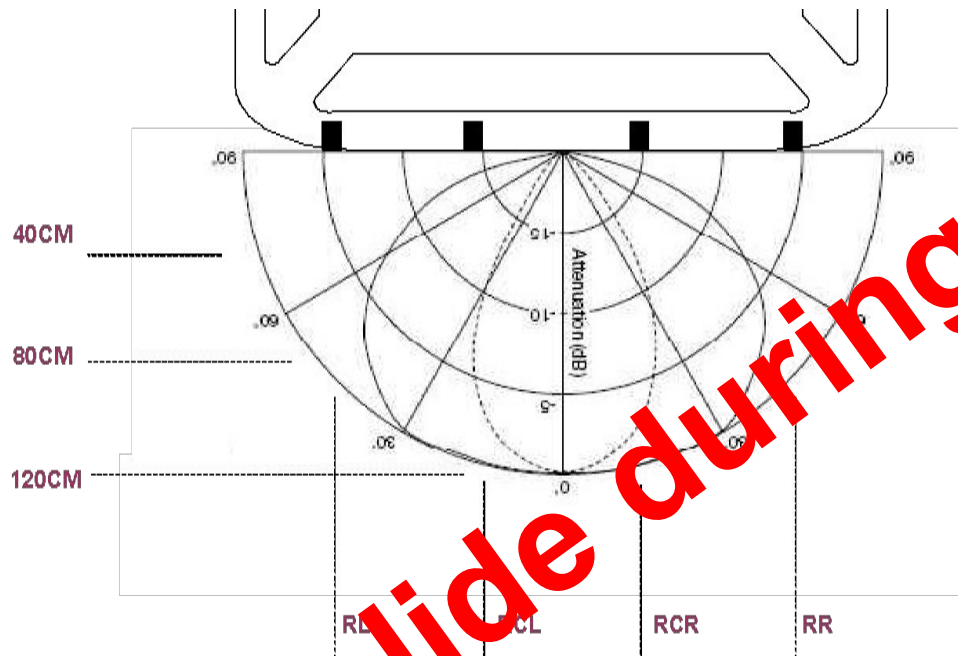
Horizontal Detection Range



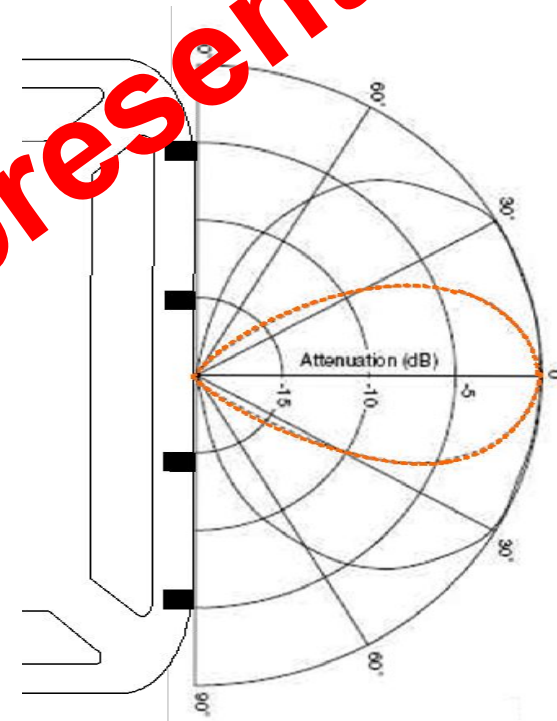
Vertical Detection Range

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RPAS (Rear Parking Assist System)



Horizontal Detection Range



Vertical Detection Range

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