#### FUB-FUB-FB-610024-K06 V.7 Footwell module, VIN: L663164

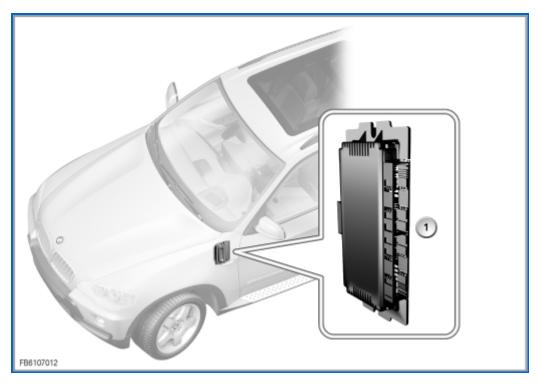
ISTA system version	4.03.21.18572	Data version	R4.03.21	Programming data	-
VIN	L663164	Vehicle	X'/E70/off-road vehicle/X5 xDrive35d/M57/AUTO/US/LL/2011/08		
Int.lev.works	-	Int.lev.(cur.)	-	Int.lev.(tar.)	-
Mileage	0 km				

### Footwell module

The footwell module in the **E70** is an electrical intersection. The footwell module processes the signals from the doors and controls the lighting. Moreover, the footwell module is also the interface to the instrument panel.

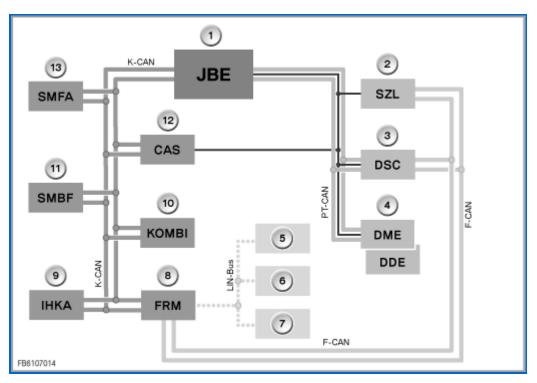
## **Brief component description**

The footwell module is located in the footwell on the drivers side. The footwell module and the junction box electronics control the power window drives.



Graphic shows installation location in the E70

Index		Explanation	
	1	Footwell module	



Block diagram for E70

Index	Explanation	Index	Explanation
1	Junction Box Electronics		Steering column switch panel
3	Dynamic Stability Control		Engine control unit
5	Drivers exterior mirror (High)	6	Passengers exterior mirror (High)
7	Door switching centre  Heating/air conditioning system  Seat module, passenger		Footwell module
9			Instrument panel
11			Car Access System
13	Seat module, driver		

# **System functions**

The footwell module picks up the signals from the doors and controls the lighting. The footwell module is also the interface to the instrument panel. Depending on the equipment version, the footwell module picks up the following signals:

- Ride height sensor
- Reversing light switch
- Brake lamp switch
- Hazard warning flasher switch
- Light switch
- Driver's door switch block
- Door contacts
- Driver's door lock

The following functions are controlled by the footwell module:

- Communication between the LIN bus and body CAN
- Storing vehicle order
- Exterior mirrors
- Exterior lighting
- Interior lighting
- Central locking system
- Front power windows

#### Communication

The footwell module enables communication to take place between the LIN bus and the body CAN.

## Storing vehicle order

The vehicle order is stored in the footwell module. The vehicle order enables the vehicle to be identified. Besides the type code number, the vehicle order contains all important equipment features on the vehicle.

#### **Exterior mirrors**

There are two equipment variations of the switch block in the drivers door:

- Basic version of the drivers door switch block
   The switch block sends its signals directly to the footwell module.
- High version of the driver's door switch block
  This switch block is connected to the LIN bus. The requests to adjust the exterior mirrors are sent via the LIN bus.

## **Exterior lighting**

The lighting functions are integrated into the footwell module. These lighting function are:

- Parking lamps
- Low-beam headlights
- High-beam headlamps
- Headlamp flasher
- Fog lights
- Rear foglamp
- Turn signals
- Hazard warning flashers
- Brake lamp
- Reversing lamps
- Parking lamps

Besides the lighting functions, other exterior lighting functions are also integrated in the footwell module:

- Lighting system monitoring
- Headlight vertical aim control

- Emergency operating mode if the footwell module should fail
- Lamp replacement
- "Follow-me-home" lighting
- Visual alarm after anti-theft alarm has been triggered
- Actuation of bi-xenon headlamps

All lighting functions except the additional brake light are activated with pulse-width modulated signals by the footwell module. These pulse-width modulated signals enable a uniform brightness of the exterior lighting.

## Interior lighting

On vehicles without a roof control panel, the footwell module actuates the interior lighting in the roof area directly. All footwell module outputs for interior lighting are pulse-width modulated. With standard equipment, the interior lighting comprises the following components:

- Front interior light
- Luggage compartment lights
- Glove compartment lighting
- Footwell lighting

The following components can also be installed as optional extra for the interior lights:

- Rear interior light
- Courtesy lighting

## **Central locking system**

The footwell module evaluates the status of the hall effect sensors in the door contacts. When the vehicle is locked or unlocked with the mechanical key element, the footwell module will recognise this request. The footwell module sends a message on the body CAN to the Comfort Access.

#### **Power windows**

The footwell module and the junction box electronics activate the power window drives. The relays for the front power window motors are located in the footwell module.

## **Notes for Service department**

The following information on the footwell module is available for service staff:

## Notes on encoding/programming

Nearly all Car and Key Memory functions are programmed inside the vehicle itself. No liability can be accepted for printing or other faults. Subject to changes of a technical nature