393: Infotainment control module (ICM)

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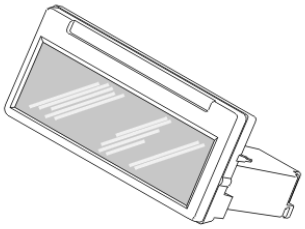
System overview

Infotainment control module (ICM)



The infotainment control module (ICM) acts as a gateway between the CAN and MOST networks. It also acts as the master control module in the MOST network and checks the other control modules.

The infotainment control module (ICM) consists of a display / printed circuit board. There is also a remote control for the infotainment control module (ICM).

The infotainment control module (ICM) controls functions run on the MOST network via its user interface. The command is transmitted from the

infotainment control module (ICM) to the other control modules in the network. These implement the requested functions, for example sound playback, changing sound sources and radio settings.
The infotainment control module (ICM) also controls the Security function on MOST.

For information about the functions controlled by the infotainment control module (ICM) but implemented by other control modules in the MOST network, see Design and Function for each control module and for the MOST network.

The infotainment control module (ICM) is in the center console. The control module is removed from the center console for replacement.

The infotainment control module (ICM) communicates with other control modules via:

- CAN communication
- LIN communication and
- MOST communication.

MOST communication is via a fiber optic communication link.

The control module checks activations and input and output signals via an integrated diagnostic system. A diagnostic trouble code (DTC) is stored if the infotainment control module (ICM) detects a fault.
Any diagnostic trouble codes (DTCs) are stored in the control module memory. This information can be read off using VIDA via the data link connector (DLC) in the vehicle.

A simple way to ensure that the infotainment control module (ICM) is powered and grounded is to check that the display is lit when the ignition key is in positions I or II.

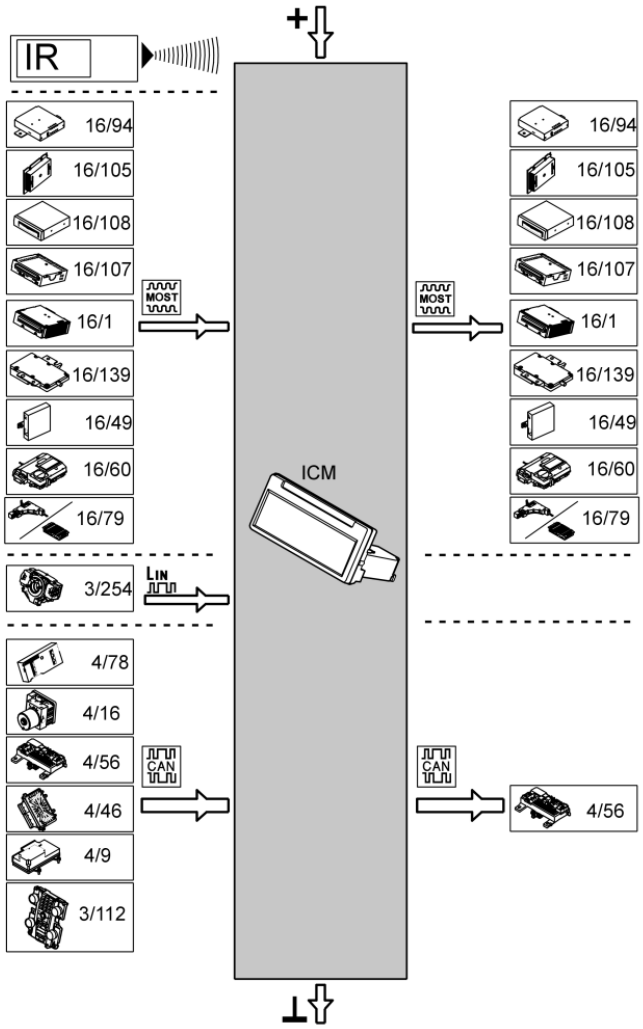
For further information, also see Signal specifications.

Signals

The table below summarizes the input signals to and output signals from the infotainment control module (ICM). The signal types are divided into infrared signals (IR), MOST communication, LIN communication and CAN communication. The

illustration below displays the same information with the Volvo component designations.

Input signals	Output signals
Via infrared signals: ■ Remote control.	**Via infrared signals:** —
Via MOST communication: ■ AM/FM tuner module (AFM) (16/94) ■ Audio module (AUD) (16/105) ■ Multimedia module (MMM) (16/108) ■ Media Player Module (MPM) (16/107) ■ Integrated audio module (IAM) (16/1) ■ Global positioning system module (GPS) (16/139) ■ Traffic message channel module (TMC) (16/49) ■ Phone module (PHM) (16/60) ■ Subwoofer module (SUB) (16/79).	**Via MOST communication:** ■ AM/FM tuner module (AFM) (16/94) ■ Audio module (AUD) (16/105) ■ Multimedia module (MMM) (16/108) ■ Media Player Module (MPM) (16/107) ■ Integrated audio module (IAM) (16/1) ■ Global positioning system module (GPS) (16/139) ■ Traffic message channel module (TMC) (16/49) ■ Phone module (PHM) (16/60) ■ Subwoofer module (SUB) (16/79).
Via LIN communication: ■ Steering wheel module (SWM) (3/254).	**Via LIN communication:** —
Via Controller Area Network (CAN) communication: ■ Accessory electronic module (AEM) (4/78) ■ Brake control module (BCM) (4/16) ■ Central electronic module (CEM) (4/56) ■ Engine control module (ECM) (4/46) ■ Supplemental Restraint System Module (SRS) (4/9) ■ Climate Control Module (CCM) (3/112).	**Via Controller Area Network (CAN) communication:** ■ Central electronic module (CEM) (4/56)



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