

## Important notes

The aim of this document is to communicate the practical experience with known communication fault patterns. The statements on possible fault causes are the most likely causes. Depending on the equipment, software version and model, deviating symptoms can occur.

At any rate, exact questioning of the customer is required. This is the only way to pinpoint the real cause. Incorrect or deficient customer statements can lead to misinterpretations.

## MOST in general

Failure of a control module always causes an audio failure in the MOST framework. Background: All audio signals are sent as digital signals across the fiber-optic cable (MOST bus). If the light flow is interrupted, not only the synchronization in the MOST ring but also all data transfer is interrupted. The interruption in the light flow frequently originates from a control module and is rarely of mechanical origin. Every MOST bus node receives the light signal from its predecessor and passes it on with its own diode to the next.

## Audio symptoms

- **Sustained noises in the CD changer**

The MOST ring is permanently interrupted. Use the ring fault diagnosis function (see below: ring fault diagnosis).

- **Brief audio failures**

- **These failures are followed by a magazine check from the CD changer and the sound returns**

1. **Stationary vehicle:** The cause is the CD changer or a power module isolation.
2. **On engine start:** The cause is the CD changer or a poor state of charge of the battery.
3. **As of terminal 15:** the cause is the CD changer.

- **The stored radio station lists are lost here.**

The cause is the antenna tuner.

- **These audio failures occur in the radio mode, do not occur in other audio sources, and otherwise the communication systems work normally.**

The cause is probably the antenna tuner.

- **Sustained noise from the loudspeakers**

- **These noises only come from the front door loudspeakers or from the back shelf.**

The ASK supplies the front door loudspeakers and the back shelf.

Noises from these loudspeaker can also originate from other audio control modules (telephone, navigation system, etc.). Bridging these audio control modules can pinpoint the fault.

- **These noises only come from the central loudspeaker at the front, from the woofers under the seats or from the rear door loudspeakers.**

The cause is the amplifier (Top-Hi-fi).

- **These noises only occur in the radio mode, not with other audio sources.**

The cause is the antenna tuner.

## Monitor failures

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- **With a terminal change "Ignition off" to "terminal R", the entire screen remains black (status bar not visible).**

The MOST CAN gateway receives no terminal status from the CAN bus.  
Possible causes are the instrument cluster and the CAS.

- **During operation, the entire screen goes black (status bar not visible) and its starts again with the BMW logo.**

The Control Display has run a reset. It this happens frequently: replace the

Control Display.

- **The part of the screen that displays the navigation information flickers white and works again.**

The cause is the navigation computer or the roadmap CD.

- **The part of the screen that displays the navigation information goes black and stays black.**

In most cases, the cause is the navigation computer.

## Special cases

- **The vehicle sends an emergency call after the driver's door is opened or after a longer immobilization period.**

Possible cause: airbag control module, button or cable to the button

- **CD changer reads CDs in after every vehicle start.**

After 'going to sleep', excessive closed-circuit current is measured, which leads to isolation of the power module.

## Pinpointing the fault

To pinpoint the fault in unclear cases, it is recommended to use the FOC coupler (Fiber-Optic-Cable coupler) to exclude individual control modules. The FOC coupler is located in the glove compartment (small cover). The FOC coupler can be used to bridge control modules from the MOST framework. In the event of a fault, this finds the control module responsible.

(Order FOC coupler [diagnosis interface MOST 61 13 6 917 541] or take from another E65.)

## Ring fault diagnosis

The ring fault diagnosis is suitable in the event of a fault to find an interrupt in the fiber-optic cable framework. However, the fault must be present.

More details on the ring fault diagnosis can be found in the functional description **MOST bus : ring fault diagnosis** in the function selection:

**Complete vehicle -> Body -> Bus functions -> MOST functions -> Ring fault diagnosis.**