

## General information for service staff on radios: E87, E90, E91, E92, R56

General information is given for the following radios:

- BMW "Business CD" radio
- BMW "Professional" radio
- MINI "Wave" radio
- MINI "Boost CD" radio

An additional service mode is available for high-speed diagnosis.

### Operation

There is a description of how to operate the radios in the Owner's Handbook.

The key functions within service mode are the same as those for the functions in normal radio mode. The softkeys are used for navigation and selection. The possible options appear on the display.

#### *Note: Saving settings*

All changes to settings are saved on exiting the relevant menu item.

### Service mode

Proceed as follows to call up service mode:

- Terminal 30 g ON
- Switch radio off
- Switch radio back on
- Press the button for manual tuning within 8 s and hold it down for at least 8 s
- The radio switches to service mode.

The following functions can be called up and executed with the radio in service mode:

- Serial number display
- Software status display
- Revision index display
- Display and settings for speed-dependent volume control
- Display and settings for aerial selection
- Frequency display, signal strength and station quality
- Display of status and increment of digital sound processor
- Display and settings for minimum volume for traffic announcements
- Display test
- Display and settings for reception areas
- Display and settings for Car and Key Memory
- Settings for alternative frequency AF tracking
- Display of a test mode for development

#### - **Serial number display**

When service mode starts up, the serial number always appears first. The serial number cannot be set via the service mode.

Serial numbers are structured as follows:

Serial number: AABBBBCDDDDDDDD

- A: Supplier code, 2-digit
- B: Module code, 4-digit
- C: Manufacturer code, 1-digit
- D: Serial number, 7-digit

### Software status display

The device data and the current software status are displayed. The display may vary on different radios.

The software status can be displayed as follows:

XXX XX-XXX 425.1

(The last 4 digits indicate the current software status of the radio.)

### Revision index display

The revision index (RI) is displayed. The revision index starts with start of series production at BMW/MINI. The RI is a series of ascending consecutive numbers. The display may look like this: RI\_\_29

- RI: Revision Index
- 29: Revision 29

### Display and settings for speed-dependent volume control

For BMW "Professional" and MINI "Boost CD" radio only:

The factor for increasing the volume as the speed of the vehicle increases is displayed. The value indicates the extent to which the volume will be increased.

The settings are selected using the function keys. The value may vary between 1 and 6. Value 1 is a minimum increase. Value 6 is a maximum increase. Depending on the model concerned, the basic setting will be between 2 and 3.

### Display and settings for aerial selection

Only for BMW "Business" with CD drive, BMW "Professional", MINI "Wave CD" and MINI "Boost CD" radios: the selected aerial is displayed. The default setting is AUTO. The Scan button can be used to switch through aerials 1 to 4. Aerial diversity must be fitted for this function.

Aerial 1 is the roof-mounted aerial, aerials 2 to 4 are rear window aerials.

On exiting the menu, the default value AUTO should be reset.

### Frequency display, signal strength and station quality

The signal strength and quality of each radio station are displayed.

Depending on the selected frequency range, the number of individual digits will vary.

The display is structured as follows:

- Frequency range (e.g. FM, AM)
- Frequency (e.g. 102.7)
- Signal strength (e.g. 12)  
The value may vary between 0 and 15. A value of 0 indicates that no signal strength can be measured. A value of 15 indicates that the maximum signal strength has been achieved.
- Station quality (e.g. 10)  
The value may vary between 0 and 15. A value of 0 indicates poor reception quality. A value of 15 indicates the best possible reception quality.

### Display of status and increment of digital sound processor

For BMW "Professional" radio only:

Indicates whether a digital sound processor (DSP) is fitted.

DSP = 0, DSP not installed (stereo system, HiFi system)

DSP = 1, DSP installed (top HiFi system)

The volume currently set is also displayed. The display may vary between 0 and 63.

- Stereo system: Volume from 0 to 48
- HiFi system: Volume from 0 to 56
- Top HiFi system: Volume from 0 to 63

### **Display and settings for minimum volume for traffic announcements**

For BMW "Professional" and MINI "Boost CD" radio only:

The value by which the volume will be increased is displayed. Permissible values are between -9 and +9. A value of 0 indicates an increase equal to the factory setting. A value between -9 and +9 indicates a corresponding increase or decrease.

### **Display test**

This function can be used to test the display. Various test displays can be called up using the function keys (test cards, chessboard pattern).

Press the ON/OFF button to exit this menu item.

### **Display and settings for reception areas**

Reception areas can be selected in this menu.

BMW "Professional" / MINI "Wave CD" radio

- ECE for Europe
- US for US release

BMW "Professional" / MINI "Boost CD" radio:

- ECE for Europe
- US for US release
- JPN for Japan
- OCN for Oceania

### **Settings for alternative frequency AF tracking**

For BMW "Business" and MINI "Wave CD" radio only:

The RDS function can be selected in this menu. The following settings are possible:

- RDS OFF, AF OFF  
RDS function not available for customer as key and function. No softkey available, although traffic announcements or program type function are. This means that it is possible to process RDS data.
- RDS ON, AF OFF  
RDS function available for customer as key and function, AF tracking deactivated
- RDS ON, AF manual  
RDS function available for customer as key and function, If RDS function has been switched on, AF tracking only available if mute selected via button
- RDS ON, AF automatic  
RDS function available for customer as key and function, AF tracking automatic if RDS function has been switched on

### **Display of a test mode for development**

Only for BMW "Professional" and MINI "Boost CD" radio:

Test operations are displayed in this menu.  
Important: Do not make any changes in this menu.  
The default value is Line Tool.

### **Display and settings for Car and Key Memory**

The Key Memory function can be selected in this menu. Switching this function on also activates the Car and Key Memory functions for the radio.

*Note: Saving and exiting*

To exit service mode, switch off the radio.  
All settings in the menu items are saved on exiting.