



RhB-Ge 4/4 II - Sound Version User Manual

Congratulations on your purchase of the Ge4/4 II with built-in sound decoder - made by Zimo.

Basically the models with the locomotive address "03" are used for NMRA/DCC, as well as for Motorola*.

Function key assignment:

F0 = White front light in direction of travel
F1 = Sound on/off
F2 = Whistle long
F3 = Rear light red
F4 = Air pump 1
F5 = Shunting radio / shunting gear
F6 = Dark rear light for double traction
F7 = Dark front light for double traction
F8 = Conductor's whistle
F9 = Brake squeal

F10 = Station announcement
F11 = Station announcement
F12 = Station announcement
F13 = Station announcement
F14 = Air pump 2
F15 = free for future applications
F16 = "Mute" button (gentle fading out of the sound)
F17 = Uncoupling
F18 = Coupling

Reset the decoder:

You can restore the factory values in both DCC and Motorola* mode. To do this, write the value 8 to CV 8.

Features of the sound decoder

Multiprotocol capable:

The sound decoder automatically understands and recognizes both the Märklin*/Motorola* data format and the data format based on the NMRA/DCC standard.

Load control:

In digital mode, the speed is maintained uphill, downhill and with different train loads with the same control position.

Braking sections:

The braking sections of Lenz*, Märklin*, Roco* and Zimo* are supported

Analog operation:

DC operation: A trouble-free operation with pulse width or phase angle control devices cannot be guaranteed.

Setting options (CVs) for DCC-Digital:

| CV | Value range |
|---|----------------|
| 1 Address (= short address) | Value 1-99 |
| 2 Starting voltage (minimum creep speed) | Value 0-252 |
| 3 Acceleration time (from standstill to maximum speed) | Value 0-255 |
| 4 Braking time (from maximum speed to standstill) | Value 0-255 |
| 5 Maximum speed | Value 0-252 |
| 6 Center speed (at medium speed) | Value 0-252 |
| 7 Decoder version number (readable only on read-capable amplifiers/centrals) | |
| 8 Reset function (reset all values to factory setting) | Value 8 |
| 17 + 18 Long address (Requirement: according to CV29 setting long address is switched on, i.e. bit 5 is set) | Value 100-9999 |

29 Settings

Bit 0 - Direction of travel: 0 = normal, 1 = reverse

Bit 1 - Number of speed steps: 0 = 14, 1 = 28/128

Note: 128 speed steps are always active if the system transmits the corresponding information.

Bit 2 - DC operation (analog): 0 = OFF, 1 = ON

Bit 3 - RailCom ("bidirectional communication") 0 = deactivated, 1 = activated

Bit 4 - Individual speed characteristics: 0 = OFF, CV # 2, 5, 6 are active. 1 = ON, after CVs # 67 - 94

Bit 5 - Decoder address: 0 = main address according to CV #1, 1 = long address according to CV #17+18

Bits 6 and 7 remain 0!

266 Total volume

Value 0-255

For further decoder settings, please refer to the operating instructions "small decoders" available for download at www.zimo.at. The decoder used in this model is based on the MX649.

Warranty:

The warranty can only be provided if evidence of purchase (in the form of a copy of the invoice) is available and is based on the statutory requirements.

The warranty includes the free removal or replacement of the defective model or model part which can be proven to be based on design, manufacturing or material defects. Further claims are excluded.

Warranty claims expire

- in the event of wear and tear or normal wear and tear of wearing parts.
- for installation/conversion of parts not approved by the manufacturer
- when used for a purpose other than that intended by the manufacturer.
- due to non-observance of the instructions contained in the instructions for use.

The warranty period shall not be extended by repair or replacement.

Warranty claims sent in freight collect will not be accepted.

Disposal:

Products marked with a crossed-out dustbin must not be disposed of with normal household waste at the end of their lifecycle, but must be disposed of at a collection point for the recycling of electrical and electronic equipment. The symbol on the product, the instructions for use or the packaging indicates this. The materials are recyclable according to their marking. With the reuse, material recycling or other forms of recycling of old appliances you make an important contribution to the protection of our environment. Please ask your local authority for the responsible disposal point or send us the components to be disposed of.

Not suitable for children under 14 years because of swallowable small parts. Improper use may result in injury due to functional edges and tips! Only for use in dry rooms. Errors and changes due to technical progress, product update or different production methods are reserved. Any liability for damage and consequential damage due to improper use, non-compliance with these operating instructions, operation with transformers or other electrical devices that have not been approved for model railways, modified or damaged, unauthorised intervention, force, overheating, exposure to moisture, etc. is excluded; in addition, the warranty claim expires.

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Motorola is a registered trademark of Motorola Inc., Illinois

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Important information: This user manual is part of the product and must be kept for later use!

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