

"ZIMO KLUG" - *Cost-effective Update and sound load*

The new ZIMO **KLUG** - the **Compact Loading and Update Gadget** - allows the loading of new software versions and sound projects (from the ZIMO Sound Database) from the computer (ZSP software) to all **MS sound decoders and MN non-sound decoders** - currently not in MX decoders.

The performance of the software update and sound loading is the same as that of the MXULF; the data protocol is identical. Sound loading is also carried out either via the track or SUSI (approx. 1 hour or 5 min).

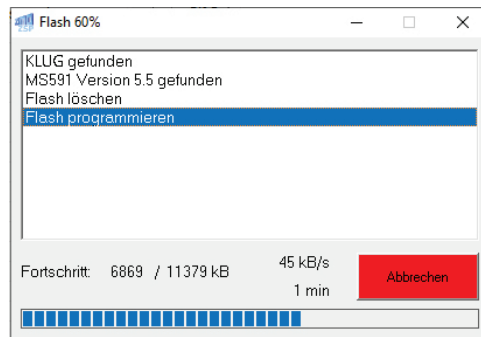
In contrast to the MXULF, the KLUG itself contains the most important **decoder interfaces for direct connection of the decoders** (PluX12 to -22, 21MTC, Next, E24, NEM-651). This means that no MSTAP board (test and connection board) is required for software updates and sound loading of the vast majority of types for small gauges.

However, MSTAPK and MSTAPG can also be connected to the KLUG for testing (motor, loudspeaker, Fu-LEDs, ...) and, for example, for direct connection of large scale decoders.

The KLUG is powered from the computer via a USB cable (USB-C on the KLUG side). No power supply unit is therefore required. Internally, the 5V USB voltage is stepped up to 10V, but test operation is limited by this type of supply compared to the MXULF.



"ZIMO KLUG"
Available from approx. 2nd half-year



Sound load window in ZSP

Editorial

From **1984**, ZIMO took part in the **International Toy Fair in Nuremberg**, initially with a modest 3x3m stand. In 2008, the trade fair management organised a special celebration for the "25-year-olds" of all sectors, including ZIMO.

During the same period, however, the "thumbscrews" for exhibitors were tightened more and more; the management of Spielwarenmesse eG probably considered Nuremberg to be irreplaceable, which is why exhibitors had to put up with everything: the annual advance payment date for stand fees, a new registration fee, harassment of small exhibitors with regard to stand allocation, access to set-up and dismantling, and so on.

Result:

From **2009** onwards, **ZIMO** was **no longer there**; at the time a monstrosity where others had been queuing for years. But in the years that followed, the realisation took hold that a stand in Nuremberg was not essential after all. In 2025, Nuremberg is practically a thing of the past for model railways (less than 10 exhibitors).

Actually, quite pleasing ...

Between 2010 and 2015, ZIMO rented a room in the DB Museum as a meeting point for all those interested in ZIMO who came to Nuremberg for the toy fair. This has also become redundant in recent years.

ZIMO will also be present at many trade fairs in 2025:

- **Leipzig** (D) 3 - 5 Oct
- **Wien Liesing** (A) 10 - 12 Oct
- **Friedrichshafen** (D) 31 Oct-2 Nov
- **Chambéry** (F) 1 & 2 Nov
- **Meursault** (F) 13 & 14 Dec

more info at zimo.at/events

Open Day 2025

Fri 14 November 2025, 2 - 5 p.m.

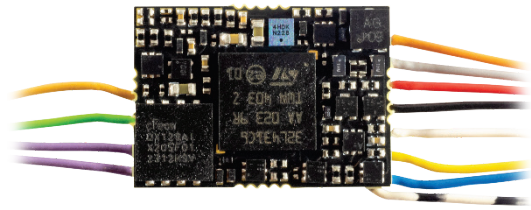
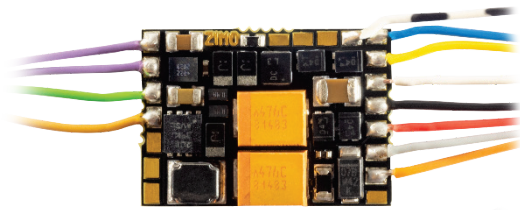
- Presentation of **new products & projects** (Peter Ziegler, 3 p.m.)
- Lecture on **Sound in general/Advanced Sound Mapping/KLUG** (Alexander Mayer, 4 p.m., 5 p.m. if required)
- **Guided tours of the building.** Please register in advance! by telephone on +43/ 1 /81 31 007-0, or by email: office@zimo.at

1120 Vienna, Schönbrunner Str. 188, Reception on the 2nd floor

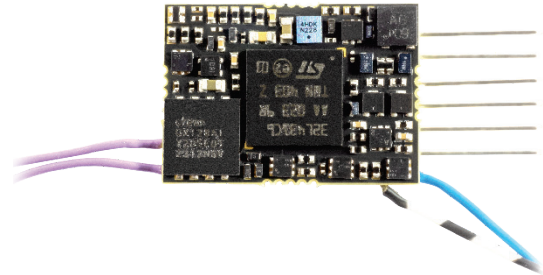
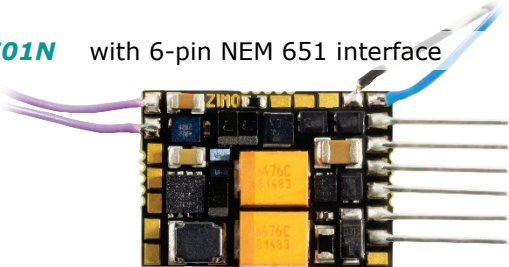
The latest miniature decoders

MS501 - The smallest sound decoder in the world (as far as we know ...)

- **MS501** Wired version (pictures top side, bottom side)



- **MS501N** with 6-pin NEM 651 interface

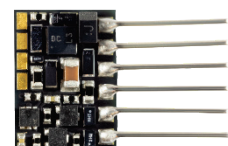
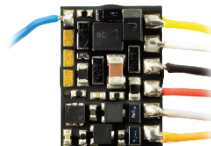


- 13.4 x 9.5 x 2.4 mm (area 127.3 mm²)
- 0.7 A total and motor current continuous (1.5 A peak)
- 4 (amplified) function outputs
- SUSI pins (SUSI, servos or logic level inputs/outputs) on solder pads
- Speaker output 1 Watt / 8 Ohm
- Energy storage (16V electrolytic capacitors or 16V tantals up to 1000 µF) can be connected directly, external STACO (currently STACO4) up to 150,000 µF for additional requirements

MN150 - The smallest ZIMO non-sound decoder

Decoder pictures
on this page
approx. 2.5 x enlarged.

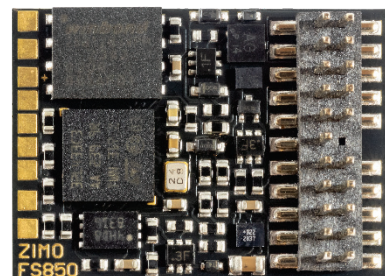
- **MN150** wired versions (open, with NEM652, with NEM 651)
- **MN150N** with 6-pin interface to NEM-651
- 8.2 x 5.9 x 2.1 mm
- 0.5 A total and motor current, continuous (1 A peak)
- 4 (amplified) function outputs



NEW: ZIMO Function Sound Decoders

FS850 - The PluX22 function sound decoder for control cars and motorless power cars

- **FS850, -R** wired versions (open, with NEM652)
- **FS850P22** with PluX22 interface
- 21 x 15 x 3.6 mm
- 1 A total and motor current continuous (1.5 A peak)
- 10 (amplified) function outputs
- SUSI pins (SUSI, servos or logic level inputs/outputs)
- 1 switch input
- Loudspeaker output 3 watts / 4-8 Ohms
- Energy storage (16V elcos or 16V tantalum capacitors up to 1000 µF) directly connectable, with additional requirements external STACO (currently STACO4) up to 150,000 µF



Further development of the software for ZIMO decoders

In addition to the (unavoidable) bug fixes ... the most important major points in progress:

- Implementation of the registration of new decoders on the digital system according to RCN-218, including equipping the sound projects with the appropriate GUI data for controllers and apps.
- Implementation of special procedures for diesel-mechanical traction units (with feedback effect of the switching pauses on the course of acceleration, consideration of different accelerations, etc.)
- Control of train formations via the train bus (according to T4T), which is being realised for the first time in a concrete project.

For large scales (0, 1, G):

Now **3** smoke generators to choose from

All ZIMO smoke generators are designed **exclusively for use with ZIMO MS950 and MS990 large scale decoders**. Only these have the necessary outputs for direct operation of the heating elements and fans.

The smoke generators therefore only need a small amount of their own electronics and no microcontroller (and therefore no firmware that needs to be loaded), namely only to the extent necessary for overtemperature protection. This results in **favourably priced package solutions**. The connection between the ZIMO smoke generator and the ZIMO large scale decoder is easy to establish using a ribbon cable (4- or 6-pin).

Together with the new RAUSI2 (a smaller version - with slightly less tank capacity - of the RAUSI1), there are now 3 variants: two sizes in the case of the single types. In the case of the dual type, there is currently (only) one type.

RAUSI1

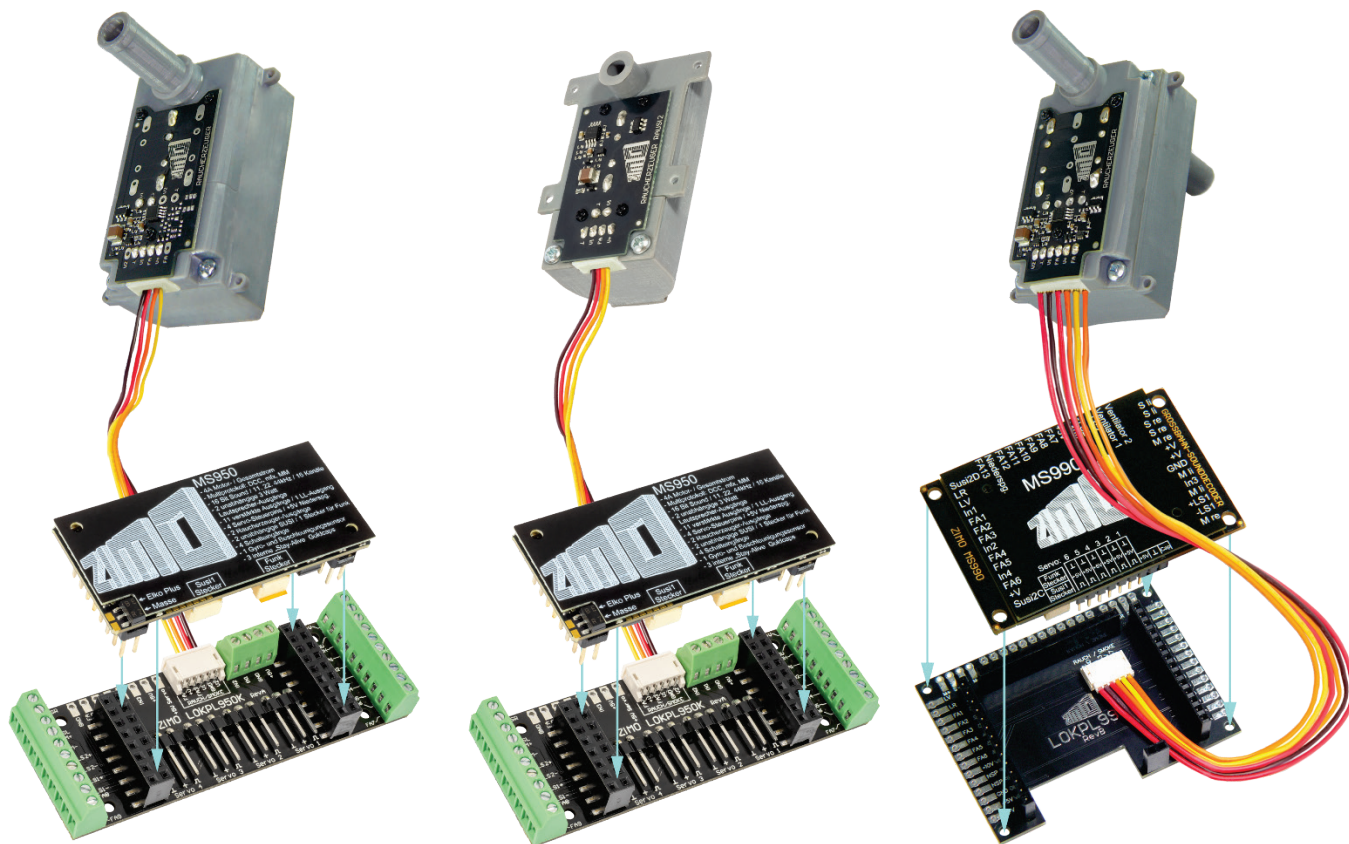
49 x 29 x 27 mm
Gauges 0, 1, G, ...
4 ml tank
approx. 12 minutes

RAUSI2

45 x 24 x 25 mm
Gauges 0, (1, G, ...)
3.5 ml tank
approx. 10 minutes smoke

RAUDU1 (Dual)

49 x 29 x 31 mm
Gauges (0), 1, G, ...
4 ml tank
approx. 8 minutes smoke



For example, to be combined with

MS950 - (small) large scale decoder
via plugged-in loco board LOKPL950K

MS990L - (large) large scale decoder
via plugged-in loco board LOKPL990

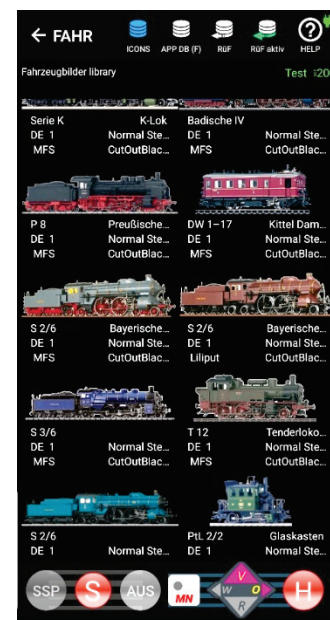
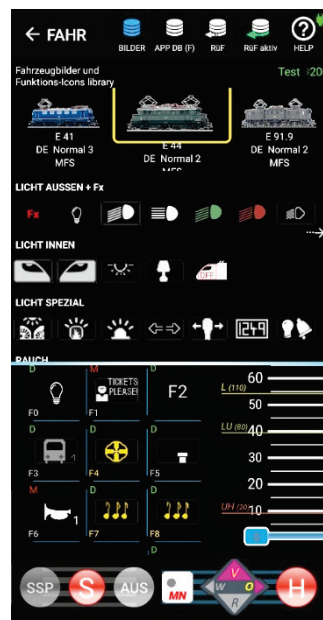
The ZIMO App - Development

Currently, the procedures for the assignment of vehicle images - from the new **Rolling Stock Library** - and the assignment of function symbols - from the **Function Symbol Library** - are being implemented.

This area also includes the copy & paste of images and symbols between vehicles, which often facilitates the creation of GUIs.

In future, the ZIMO app will also be used in parallel with the ZIMO controllers (i.e. the same address set twice), because the large screen makes it much more convenient to select images and symbols on the smartphone - e.g. by fast scrolling - than on the controller.

Pre-issue (unfinished libraries→



New decoder packaging

The new packaging is primarily optimised for specialist dealers so that they can present the ZIMO decoders well in the shop. But there is also an extended range of information for the end consumer.

PS: the transparent boxes, which are popular with many users and are ideal for re-use as small parts containers, are still part of the packaging.

NEW NOW: *The ZIMO Load Code Shop*



At www.zimo.at/shop you can *purchase and generate load codes online*, around the clock and from anywhere – whether you are a retailer or a private individual.

With 26 'products', i.e. sound providers for "small" or large railway decoders, you have access to load codes for over 360 so-called 'coded' sound projects, many of which are already in outstanding 16-bit quality. You can find the sound projects in the ZIMO Sound Database (www.zimo.at/soundprojekte/).

On the website, select the sound provider for your desired sound as the product and choose whether the load code should be for small or large scale decoders. Then enter the decoder ID of your ZIMO sound decoder, which you can read from CVs 250-253, in the fields provided.

After registering and paying by card or PayPal, you will receive the load code immediately in the order information and via email.

New in the ZIMO team



Christian Natter
Software development



Jonas Gahlert
Software development



Johanna Schneidhofer
Apprentice