

Software-Release 1.20 for MX10 & MX32/FU

Setting up and operating two or more locos in a consist

A long demanded and planned feature of the current ZIMO system is now available: Consists, ie the possibility of jointly controlling two or more vehicles (mostly locomotives), usually speed and direction of travel; the "MAN" function and other selected functions are also available.

The ZIMO system is a "distributed system" where, as with other digital systems, the control center is responsible for all information and processes, but the connected controllers (cabs) can takeover certain functions.

Therefore, a cab (or later, an app) is the actual "owner" of a vehicle, where it is registered (and provided with additional information) and can be controlled. This cab can also "take" a vehicle definition to another ZIMO base unit MX10 and insert it in the database saved there.

(Translators note: the MX32 screen displays are shown in German. These will be replaced by English versions in the revised manual)

The starting point for the creation of a consist is always the **Soft Key III (LoR or "loco recall memory")**, practically the favorite key of the device, the presentation of which has been redesigned with the introduction of the "Consist" feature and provided with more information.

Here, the **T-Flag** is added to the vehicles to be linked to each other in a new consist, for example "T3" (TP key + number key "3"),



For the handling of double and multi-vehicle consists, the **speed and direction adjustment** is important.

If a vehicle is moving in the wrong direction or faster/slower than the other members of the consist, the vehicle is briefly taken over by the cab using a special control (long press the TP key), and the difference is automatically stored after correction of the setting.



In one MX32 Cab, up to **9 consists (T1 ... T9)** can be defined at the same time, the number of participants in each consist is, in practice, not limited (only by the size of the recall memory).

Each MX32 cab can add another 9 consists, and **256 memory slots** are available in the system memory of the MX10. In a later software version, consist will also be stored in the MX10 without loading the MX32 memory.



In the course of the work on the "Consist" feature, the screen display in the operating mode LOCO (FAHR) was also revised.

In particular, customer wishes were taken into account, to enable the address or name to be displayed in a particularly large font and to remove the speedometer with disk.

There are now more variations (switched by touch); one of them (pictured left) shows the version with large picture and digital speedometer.



Current SW Version for ZIMO Decoder

36. 1.

(For Decoders with and without Sound)

With this version there are extensions of the decoder software. For Download see www.zimo.at, Menu "Update & Sound", "Update - Decoder".

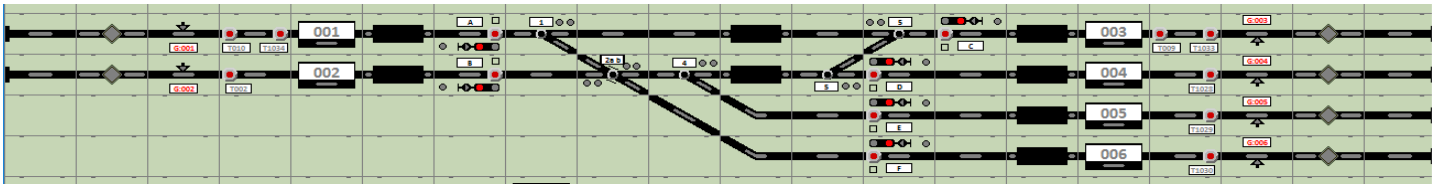
- The most important innovation is likely to be the introduction of the **ABC slow speed section**, which, by detecting the alternately asymmetrical DCC signal, extends the current ABC stop. Now the Lenz modules "BM2" are fully supported.
- In "**Swiss Mapping**", light effects which are otherwise assigned to the relevant function outputs can be suppressed, if necessary.
- (Only sound decoders) the **switch sounds of electric locomotives** can now be reproduced more realistic: with the new CVs #359, #361 and new bits in #393 the switch stages can be grouped, then only a certain number of switching stages occur immediately after each other, and then the next one only after a pause.

Further topics in this newsletter:

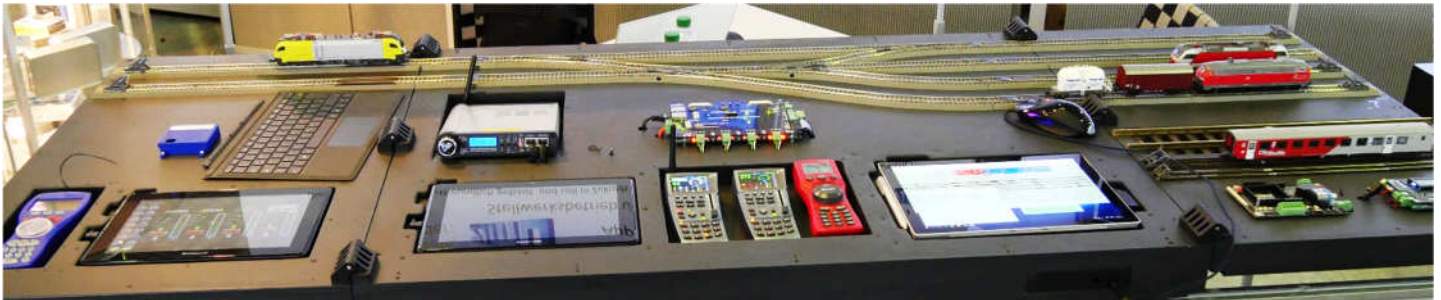
- **The new ZIMO "small demo layout"**
- **LOKPL99** – Loco board for large scale-decoder MX699LS, -LV
- **Miscellaneous**
- **ZIMO Events**



The New ZIMO "Small Demo Layout"



Track plan of the "Small Demo Layout" using the ESTWGI control panel software



The Demo Layout at the Intermodellbau Dortmund 2016

This demo system is designed to show the most important features of the ZIMO system. It is small and foldable so the transport is easy, and the system can be used not only for large exhibitions, but also for smaller events. The car boot compatible dimensions (when packed for transport) are approx. 100 x 80 x 20 cm (W x D x H).

All control units, including the power supply units, are fixed in the system or fastened with velcro. Therefore, you do not need to install anything - just plug in the central power supply cable and turn on the computers, place the vehicles on and start driving.

The "Small Demo Layout" includes:

- ZIMO MX10 Base Station and MX32FU Wireless Controller (detachable) for optional CAN bus cable or radio operation
- Roco Lokmaus connected via XPressNet cable,
- Massoth DiMAX Navigator via DiMAX radio receiver MS813102, connected to the XPressNet cable,
- ZIMO StEin module to which the track sections, as well as the switches and photoelectric sensors *) are connected,
- Windows-PC (Microsoft Surface), running the ESTWGI (Control Panel-Software by H.W. Grandjean).
- Two tablets for Roco App, RailManager, and (if required) other apps.
- Power supplies, wireless router in the hidden part of the system

This "Small Demo Layout" represents a two-track terminal station (left) and a four-track terminal station" (right) and a two-track main line (due to space limitations). Each of the 6 terminal tracks can contain a very short train with a locomotive and a long wagon/carriage or two short wagons/carriages.

*) A special feature, which until now has neither been tried nor recommended at ZIMO, is the tentative use of photo-electric sensors. "Normally", according to the usual railway logic, two track sections would be needed for each of the headways although the tracks are so short. This would be relatively expensive, so the respective second (ie, the track sections at the track ends) are replaced here by photo-electric sensors, which are arranged approximately 10 cm in front of the buffers. This also results in a higher holding point accuracy (because these sensors are not dependent on wheel-rail contact).

The ZIMO digital system and the ESTWGI on the computer are shown using the ZIMO HLU procedure, but also shown are the use of non-ZIMO controllers and apps (such as Lokmaus and Navigator).

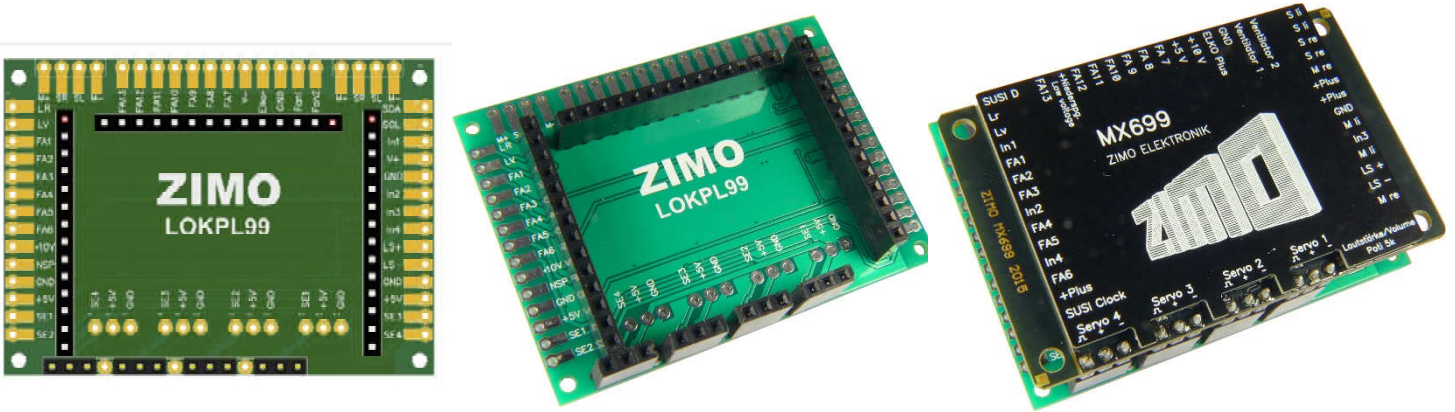


The Demo Layout at the NMRA Train Show Indianapolis 2016

On the right in front, separate from the system, there is an MXULF (decoder software update and sound loader) with MXTAPV (test and connection platform) with programming tracks in several length.



LOKPL99 – New circuit boards for Large Scale Decoders MX699LS and -LV



CAD drawing of the circuit board (with visible connection labels),the finished board LOKPL99,board with attached decoder MX699LV

The circuit board for the **MX699** large scale sound decoders (in the pin-mount versions **-LS** and **-LV**) was developed in cooperation with Scale 1 manufacturers. It therefore has an arrangement of the solder pads suitable for many models. New compared with the old circuit boards (designed for MX695) is the inclusion of the servo connectors.

There is (at least until further notice) only one version of the circuit board since an additional low voltage generated on the board does not appear to be necessary. The decoders of the MX699 family already provide at least two low voltage connections (which can of course also be accessed via the new circuit board) - 5 V and 10 V, and in the -V versions the switchable low voltage (1.5 - 6.5 - 14 - 19 V).

The MX699LLS and MX699LLV can also be plugged in if required.

The energy storage system of the MX699 works In digital mode AND in analogue mode.

- By **3 internal supercaps** with a sum voltage of 8V, which offers about the same triple discharging reserve as with 5V. This allows the motor, light, and sound to run for several seconds (depending on the consumption), the sound amplifier is always supplied with full 10 V, thus without reducing the sound volume.
- And, if necessary, an additional **external gold cap module** (with 7 gold caps and a module voltage of 17 V). The ZIMO modules GOLMRUND or GOLMLANG or self-built modules (just 7 Goldcaps in series) are inexpensive (because the necessary electronics is located in the decoder); they supply motor and lights with almost full driving voltage.

Tips and Latest News ...

A typical FAQ at the ZIMO customer service:

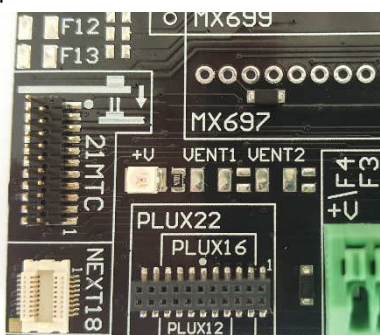
MXTAP Rev. B or Rev. C ???

or: "MTC Decoder correctly plugged in"

In the first place: there is NO DIFFERENCE between the versions "Rev.B" and "Rev.C" of the "Decoder Test and Connection Boards" MXTAPS and MXTAPV visibly, but only in the lettering.



However, this improved inscription gives an important indication at one point: at the bottom left at "21MTC".



Here is a picture of what is absolutely essential: Decoders with the 21-pin MTC interface must be inserted with the decoder board, as indicated in the sketch on MXTAP and in the photo below.

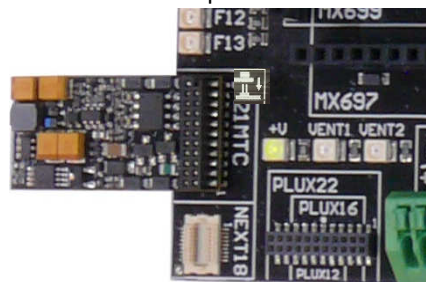


Image MXTAPV Rev. B with additional label

The socket strip of the MTC decoder is thus facing upwards; as is the case with the installation in most locomotives (but not in all ...).

ATTENTION: Incorrect plugging (with the plug in front) can damage the decoder (a frequent consequence is a defective function output FA3).

Decoder Software Update and Sound Loading with Roco Z21

The Roco Z21 Digital Centre has the ability to update and load ZIMO decoders, but it is only designed for those types that are actually built in Roco vehicles, ie MX630, MX645, MX646, MX648 and more recently MX649!

In other cases, it does not work or is only partial working. In particular, it is not possible with ZIMO large scale decoders because of the increased power consumption required.

Reminder (on this occasion):

MX699LLS, -LLV (in addition to the also available -LS, -LV)

MX699 pin strip version with 2 lengths:

Among the previously known names **MX699LS** and **MX699LV**: pin strip length **6 mm** above base (i.e., 10 mm over the board).

Under the new designations **MX699LLS** and **MX699LLV**: with - long - pin strips **12 mm** above base (16 mm over board).

A new Sound Provider: René Skov

Self presentation:

I am 40 years old and I have founded the companies Fyns-modeltog and Danske-Loksounds in 2010.

The reason why I started the company was that I was not satisfied with the pre-installed sound projects from the manufactures, I thought "I can do that better". So a friend of mine said, then do it.

Today, my Sound library contains all three different GMs. My locomotives that has been driving in Denmark, there was 59 of those, but they got three different exhaust systems. And - of course - the recording of the Danish versions of the MZ locomotives as well. Also including are the ME locomotives, MO motor wagon, The DSB Litra F and the Litra S steam locomotive and many more diesel locomotives, that has been driving in Denmark over the last 70 years.



I have good contacts to the DSB, and off course small railroad clubs, that is maintaining and keeping the old locomotives ready to run.

My experience with sound goes many years back: I started working with sound back in 1989 and through the 1990's. I also have played and recorded music in a band and been a technician on a radio station.

Today I own the model railroad shop Fyns-Modeltog, and off course together with that is the Danske-Loksounds. I have a repair department, and have many tasks along the week with customer's trains. And I also do support on the digital part for all our customers.

One of the biggest projects I have done lately is delivering the sound project and setup for the Danish model train producer MCK, who just have launched the ME locomotive.

The Next ZIMO Events

DELITZSCH

ZIMO Sound & ZIMO System – Workshop with Winfried Reinecke

28. September 2016, 9:00 - ca. 18:00 *Close to Leipzig!*

Hotel „Zum Weissen Ross“
Rossplatz 2-3, 04509 Delitzsch

Register at ZIMO office@zimo.at



RIESA

FREMO Treffen (35 Jahre FREMO) www.fremo-net.eu

29. September 2016 - 2. October 2016

ZIMO Info Table, occupied part time, small decoder sale
Closed event for Fremo Members only!

LEIPZIG

Modell-hobby-spiel 2016 www.modell-hobby-spiel.de

30. September - 3. Oktober 2016

ZIMO Stand 3-K95

WIEN

Open Door at ZIMO

14. October 2016, ab 14 Uhr

ZIMO ELEKTRONIK GmbH
Schönbrunner Straße 188, 1120 Wien

The tour includes the visit of ZIMO production plant, and the development areas, demonstrations at the exhibition facilities, and presentations on ZIMO Sound & System,

Important: Register at ZIMO using office@zimo.at



On the "Modellbahn Wien" this year there is **NO ZIMO exhibition stand.**

It was a long-standing tradition and practice that ZIMO also offered items for sale as well as demonstration and consulting (the actual exhibition purpose).

But after the introduction of the cash register law and the obligation to provide invoices, this is no longer possible in the usual way.

A ZIMO decoder sale is still taking place: planned at **Ferro-Train** and **Kreis**.

BAUMA

"Kleinserie Bauma"

14. – 16. October 2016

ZIMO is represented by Heinz Däppen and Heinz-Willi Grandjean

WUPPERTAL

25. Wuppertaler Modelleisenbahntage <http://www.ecsw.de/>

5. – 6. November 2016

Wuppertaler Stadtwerke, Schützenstraße 34, 42281 Wuppertal
ZIMO is represented by Heinrich Schild und Winfried Reinecke

KÖLN or near by

ZIMO Workshop planned, shortly before or after IMA

KÖLN

Internationale Modellbahn Ausstellung (IMA)

17. – 20. November 2016

