

## ZIMO N scale layout for exhibitions now fitted with „StEin“

Conversion from MX7/MX8/MX9 to StEin: first deployment at Intermodellbau Dortmund

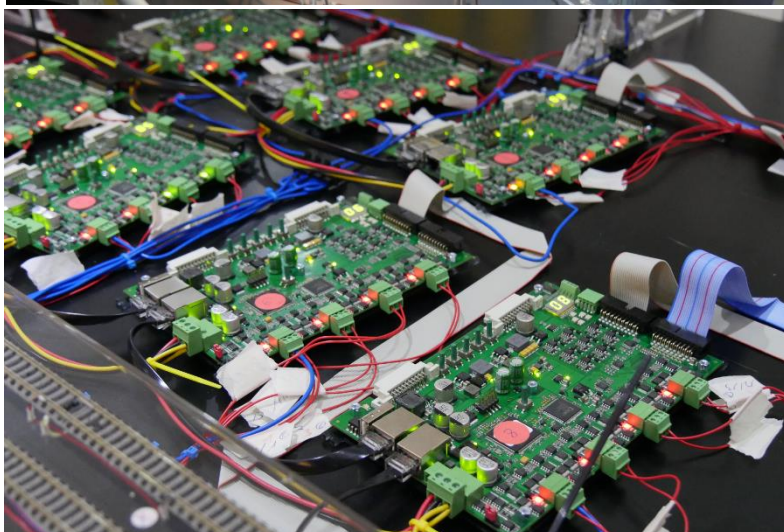
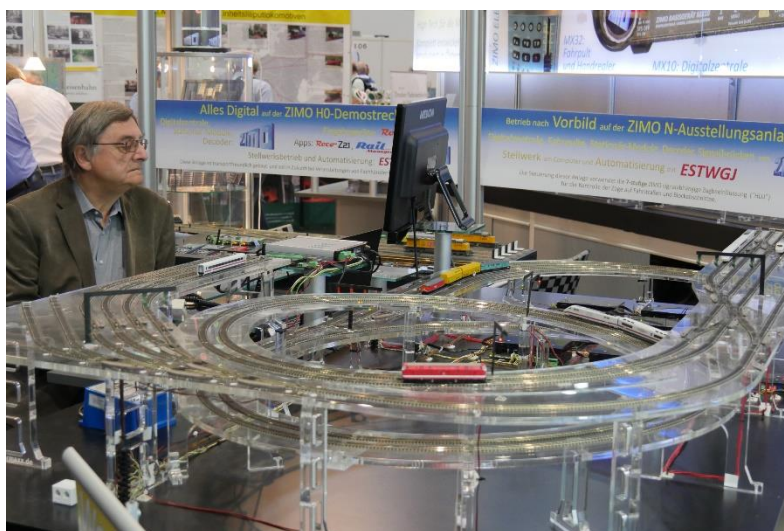
The N scale layout for exhibitions was built in 2012 to demonstrate and test the **ZIMO control system** together with the interlocking software **ESTWGJ (by H.W. Grandjean)**. Based on the developing state at that time, the layout was equipped with accessory modules and track section modules MX8 and MX9 to control the switches (occupancy detection and loco number identification) and to control the track sections ("signal controlled speed influence" by HLU").

*Right picture: The layout in N-gauge 2017: last presentation with MX8, MX9 in Leipzig (October 2017).*

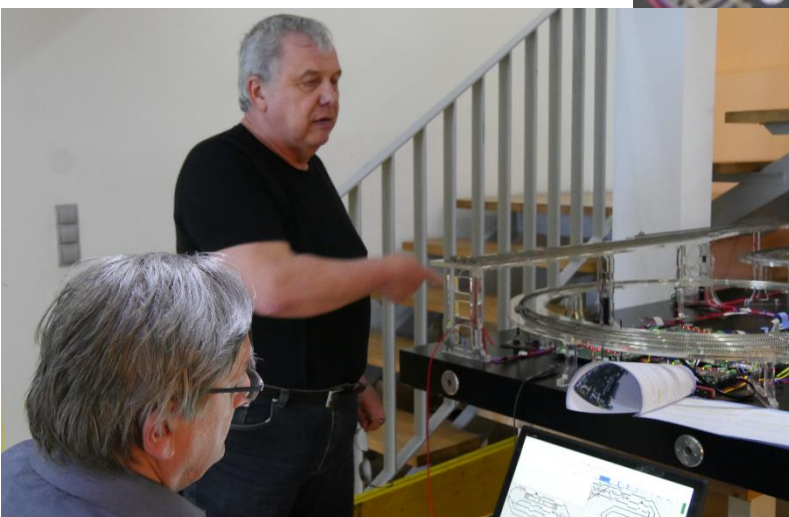
In the meantime the StEin-modules are ready for serial production and can be used for all new applications instead of MX8 and MX9. They provide a series of advantages compared to the "old" modules, for example the usage of RailCom (with local and global RailCom detector) and almost lost-free supply of the track sections, i.e. almost without waste heat and voltage drops.

*Right picture: the new StEin-modules are inserted and connected, in this special case the acrylic-covers are still not put on.*

The „**new thing**“ of the „**StEin-concept**“ is that it combines the attributes of ALL stationary equipment. This facilitates the installation and start-up, ensures a comfortable monitoring of the control technology and simplifies the troubleshooting.



*Left picture: Mr. Grandjean (ESTWGJ) and Mr. Ostalnik (ZIMO, developer of the StEin software) putting into operation the interlocking by computer.*



On the N scale layout, which had 6 track-section modules MX9, 2 accessory modules MX8, as well as one terminal loop module, we now use **7 units** of the same type, "StEin", specifically **StEin88V**.

The ZIMO N scale layout for exhibitions is now prepared for the Intermodellbau 2018; but there is still a lot of work; get informed on the **BLOG**, which will be accessible via [www.zimo.at](http://www.zimo.at), facebook and [blog.zimo.at](http://blog.zimo.at).

## StEin vs. MX8/MX9: An attempt to compare the costs on the N scale layout

The upgrading of the ZIMO layout provides a good reason to compare the costs of an "old" layout with those of a "new" one. The fact that StEin only has 8 track outputs, while the "old" MX9 had 16, may lead to the conclusion that the StEin must be a lot more expensive.

The following table compares the "old" and "new" components, and refutes this assumption:

ZIMO layout with MX8/MX9 (until 2017)		ZIMO layout with StEin (as of 2018)	
6 x MX9V – track section module	2,520.00 EUR	3 x StEin88V - StEin full featured	1,755.00 EUR
20 x MX9AZN – add-on boards	680.00 EUR	4 x StEin80G - StEin partial featured	1,540.00 EUR
2 x MX8S – accessory modules	630.00 EUR	14 x reflex light barrier	~ 100.00 EUR
1 TRAFO15 – MX8 power supply	100.00 EUR		
1 MX7/3 – terminal loop module	220.00 EUR		
<b>TOTAL MX8/MX9</b>	<b>4,150.00 EUR</b>	<b>TOTAL StEin</b>	<b>3,395.00 EUR</b>

This comparison is based on the price list of February 2018. Decisive for the favourable performance of the StEin-concept is that point detectors (in this case a reflex light barrier by a Czech manufacturer) are used, which reduce the number of necessary track sections (from about 70 to about 50); otherwise, the result of the comparison would be approximately 1:1.

Additional cost benefits will be achieved in the course of the future face lift of the layout: by using expansion boards *STEINE8W* and *STEIN80G* the number of StEin-modules can probably be reduced by 1 or 2 modules.

*NOTES:* At the moment, the N scale layout is equipped with 7 STEIN88V (instead of 3 STEIN88V and 4 STEIN80G), because those were available – if you plan economically this will not happen...

Also not implemented at the moment are the low-priced signal boards ICA16LP, because we already have assembled decoder-featured signal bridges.

## New and reissued conversion kits for G scale

### SETVT98

It is the successor of the ZIMO conversion kit of 2009, the first one at all for a PIKO vehicle in G scale.

Already then, model railroaders were impressed by the playback of the motor sound, which was professionally recorded on a museum run. The specialty was the acceleration interrupted by gear shifting.

Now the kit was reissued, with current technique; the components are;

- 1 ZIMO large scale sound decoder MX696S, loaded with the VT98 / 5081 sound project,
- 1 speaker VISATON FRS5, preconfigured for direct connection with the decoder,
- 2 screws 3 x 10 mm to mount the speaker,
- 1 energy storage device GOLMRUND,
- 1 SCHRAUB10 and 1 SCHRAUB20 adaptors
- 2 light boards (with integrated function decoders),  
one for the motor car and one for the cab car (VT, VS),

**Price: 237.00 EUR (RRP).**



### SETBR24 in preparation

For the new PIKO model there will be an alternative to the combination of non-sound decoder and sound-component that is provided by the manufacturer; with many advantages: Goldcap energy storage system, 10 Watt audio, connections for servo for further equipment (e.g. couplers), etc.

The preloaded sound project was made by **Matthias Henning**, one of the most renowned sound providers for German model railways.

**Price: 226.00 EUR (UVP).**

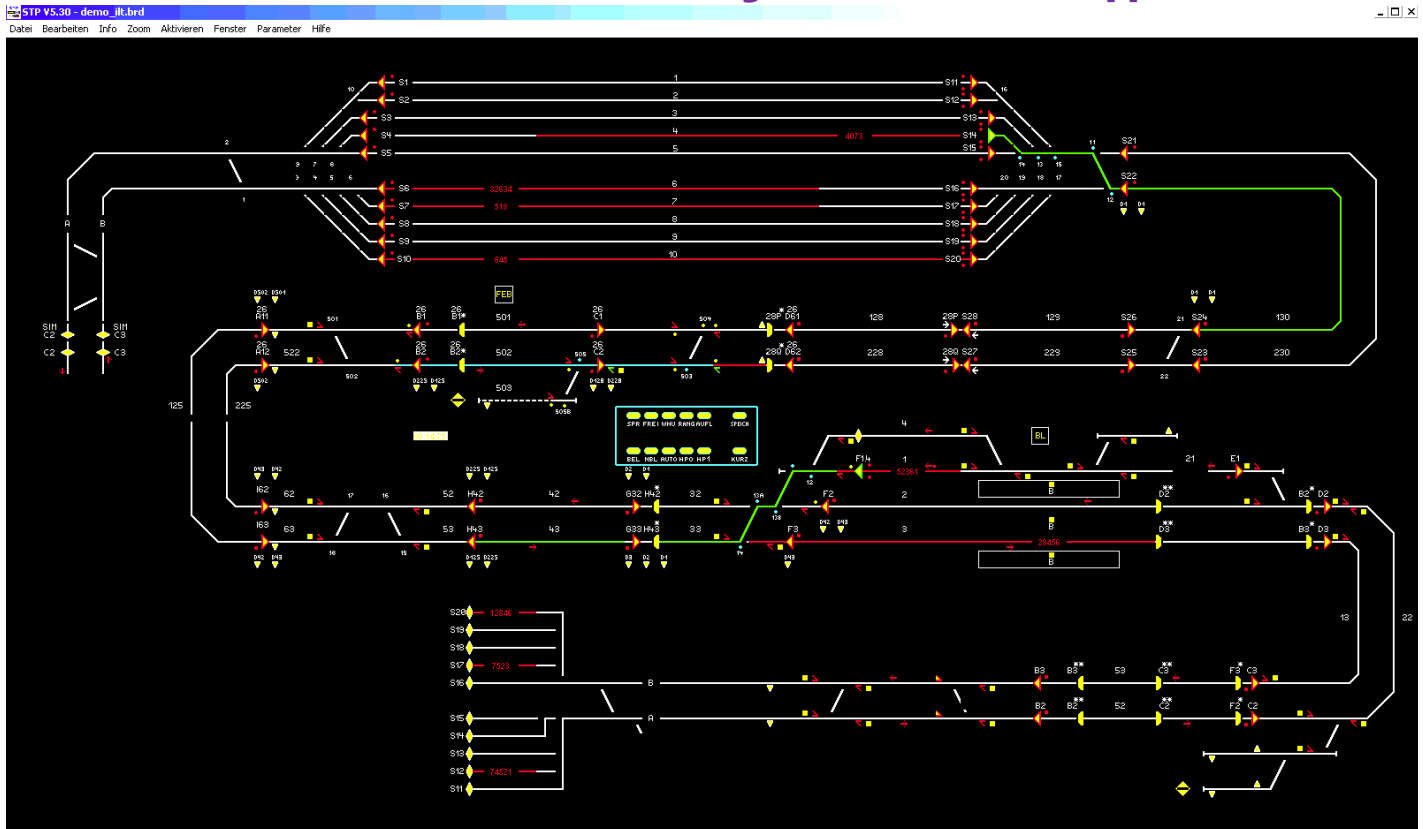


Components:

- 1 ZIMO large scale sound decoder MX696KS
- 1 speaker VISATON FRS5,
- 2 screws 3 x 10 mm to mount the speaker,
- 1 energy storage device GOLMRUND

# STP – The interlocking software for professional model railroaders

## New: STP V5.4 with Iltis-design and ZIMO StEin support



New versions of the interlocking-software STP and the software to program decoders P.F.u.Sch. were presented end of March. Now also the "new" ZIMO-generation is fully supported (MX10, StEin). What is new:

### STP V5.40

- The **StEin-module** can be used to control track sections (HLU), for occupancy detection and loco number identification as well as to control switches and signals.
- Usage of contact inputs on the StEin-module, to save track sections (automatic changes of the HLU-limit within a track section if contact is activated)
- Up to 4 contacts per track section can be specified per railway line, only one contact per track section for each route section.
- The occupancy detector **Roco 10808** can be integrated in STP for track sections which do not need HLU.
- Combination **StEin + MX9 + MX8** is possible

- Simplified display of all possible destinations by holding the starting key
- 4 more individually adjustable colours in the editor
- Additional display of train information with vehicle category and long name of the train
- The MX10 is activated directly by Ethernet, so no STP CANKey is needed.

**NOTE:** For this STP-Version you need a MX10 software version 01.22.153 or higher. An appropriate version should be available for download from the ZIMO webpage shortly. With the software version 01.22.150 there are still problems with the control of switches via MX8 and DCC-accessory decoders.

Wert eingeben

Geschwindigkeitsstufe (0-7):

☐ H (0) ☐ L (2)

☐ HU (5) ☐ LF (7)

☐ U (1) ☐ F (3)

☐ UL (6) ☐ A (4)

Kontaktnummer (StEin): 12

Fahrstufe (Kontakt):

☐ H (0) ☐ L (2)

☐ HU (5) ☐ LF (7)

☐ U (1) ☐ F (3)

☐ UL (6) ☐ A (4)

OK Abbruch

### P.F.u.Sch. V3.60

- Programming and reading of decoders on the main track (RailCom) via MX10
- Programming and reading of decoders on the programming track via MX10 (experimental, but working)
- Controller on MX10
  - Control panel on MX32

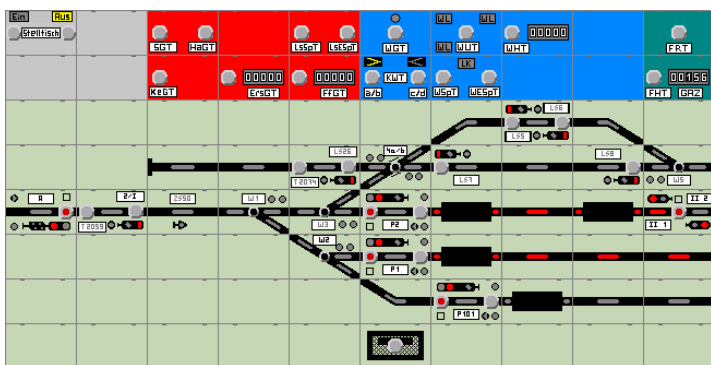
More information and supply for Updates on: [www.stp-software.at](http://www.stp-software.at).



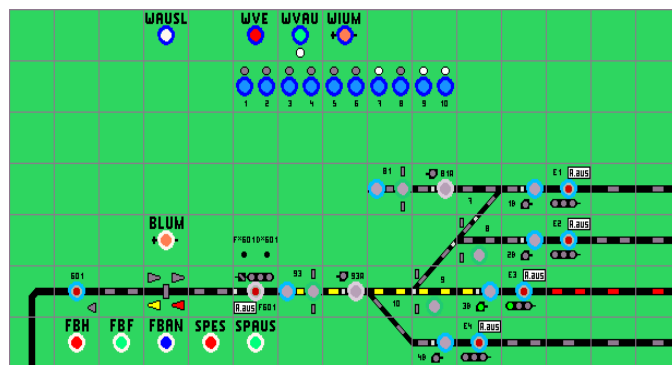
STP Software



# Lots of news in **ESTWGJ** version 7.1



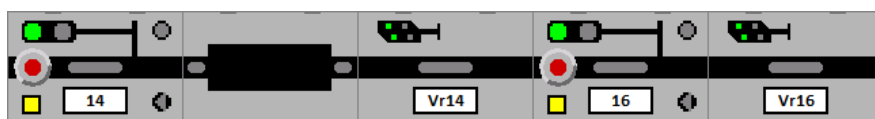
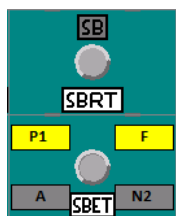
**ESTWGJ-DrS**



**ESTWGJ-Dmo67**

**ESTWGJ** is the pioneer of the interlocking systems regarding applications with MX10 and StEin: The central command station **MX10** is supported in all areas. Also, the new track function module "StEin" can be used with **ESTWGJ**. It reads free and occupied track sections and how the switches are set; signal aspects can be controlled via I<sup>2</sup>C bus. Instead of special stopping sections you can use sensor inputs. The new module by **Roco "Z21-Detector"** (10808, produced by ZIMO) can also be used with **ESTWGJ**.

The domain of **ESTWGJ** is a complete replica of the technology used in real pushbutton control, as far as optics and function are concerned. The current changes are the following:

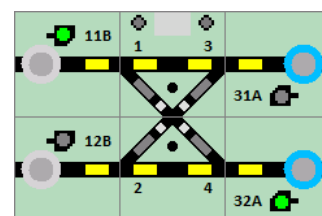


Extended functions for the central signal box

Autom. route setting on the main signal

double track connection

Further information [www.ESTWGJ.com](http://www.ESTWGJ.com)



## The sound decoder capable of mfx **MS450P22**

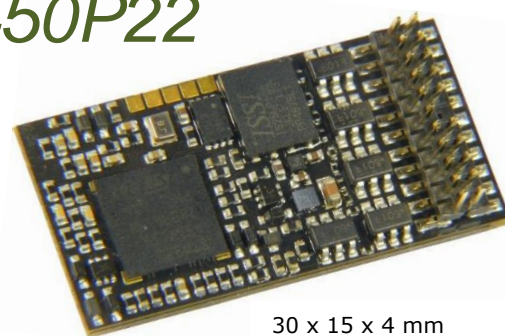
### Shipping has started!

In this product development phase the decoder can only be used in a Roco BR85 007 (three rail AC version, art.no. 78270 and 78271) as it is not possible at the moment to load another sound project and it is not fully functional in DCC (e.g. no RailCom, HLU, ABC).

Of course the decoder can be updated when the corresponding software is released, so that it is possible to upgrade the decoder to its full range of DCC and mfx functions and can be loaded with all sound projects available in the ZIMO Sound Database.

The technical data is similar to MX645P22, but with significant improvements concerning the sound.

Allowable track voltage .....	min. 10 V
MS450 .. AC-analog .....	impulse max. 35 V
Max. continuous motor current: .....	1,2 V
peak motor current for about 20 sec .....	2,5 A
Max. total function output, continuous .....	0,8 A
Sound sample memory .....	128 Mbit (360 sec with 16bit/22kHz)
Number of independent sound channels .....	16
Sound amplifier output (Sinus) .....	3 Watt
Speaker impedance .....	min. 4 Ohm



30 x 15 x 4 mm



mfx registered at Märklin CS3 (box in the middle)

### Zuzenhausen - ZIMO seminar „beim Dachsenfranz“



June, 21<sup>st</sup> 2018, 9 a.m. - ~ 5 p.m.  
ZIMO Sound & ZIMO System

with Winfried  
Reinecke



Registration: [office@zimo.at](mailto:office@zimo.at)

## Delay in delivery

Sadly the wait for delivery of ordered decoders is longer than it should be.

This is due to increasing demand, but also highly complex products, that have to be produced additionally: 100 "StEins" fully occupy the production line for 2 days (and nights)

We are working on a solution ...