



# Newsletter - APRIL 2011

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ENGLISH VERISON

# MX32 and MX32ZL

The delivery of the

## *MX32 Controller*

Began at the end of 2010 and can be used with existing MX1 base stations of ordered with the MX1EC base station.

The production of the "old system" has already stopped, but the start of production of the new MX10 base station will take some more months.

In the meantime (as of about June 2011), the

## *"MX32ZL System Cab"*

Will be delivered, a cab (or controller) with a built-in command station, following the example of the MX31ZL (from 2007):

Primary supply by provided power adapter .... 120 W  
Adjustable, stabilized, operating voltage ..... 10 to 22 V  
Maximum current at rails ..... 5 A

Output at rails depends on the operation of

- Main track, Programming track,
- Decoder update and Sound Project loading.

RailCom Global Detector integrated for  
 CV Programming and Read-out on the main (Op Mode),  
 Control the presence of the vehicles,  
 Scan for new addresses on the layout,  
 Acquisition of loco decoder configuration from Memory,  
 Show the real speed on the speedometer,  
 ... and future RailCom features.

USB Host Interface so you can Use USB Sticks to  
 Update the software of the device itself,  
 Loading of data (images, languages....),  
 Update decoder software and load sound projects.

USB Client interface for direct connection to computer.

ZigBee Radio Module (optional) installed to communicate with wireless cab - MX32FU.

The MX32ZL combines in one product

*Digital System - Wireless Station - Decoder Update Device*



## Operating Mode DRIVE(FAHR) Please note these screens show the German Language Version

By **Touch** on various areas of the screen, and/r the name/address you can choose the way information is presented:

- With or without the function keys,
- with large or small loco picture, or without picture and larger font,
- with or without speedometer.



A



The **switching of control** between different vehicles can be done in various ways:

- A-Key → Disable the current address and typing the new address, if desired, and then enter a name, assignment of a locomotive picture, of function symbols, a speedometer, etc.
- Softkey III RÜF → Show the **Memory Stack**, select the vehicle by name or address, by activating
- F-Key → Activate the selected vehicle from the memory stack or from the object database.
- F-Key und U-Key → Change between vehicles in the memory stack without showing them in the display.



F



**Consist Operation** means driving a number of locos coupled together as a consist, and the members of the consist will be addressed and controlled simultaneously (e.g. speed, direction, shunting etc.). Such a consist is created by

- T-Key → Add the vehicle from the memory stack or object database to a consist, or remove it from the consist.

In consist operating, you can use the T-Key to switch between members of the consist in order to operate individual Function Keys.

A consist can be assigned a name and a picture, thus forming a new object, shown on the screen with its own picture



With the help of RailCom the real speed is measured by the decoder and displayed on the speedometer; and, on the speed, the actual speed is displayed in the colour magenta.

Note: Of course, in order for RailCom feedback to work, the decoder must be RailCom capable, and the RailCom must be switched on (CV#29, Bit 3=1, and CV#28=3). The extent of RailCom features is not the same for all RailCom capable decoders, for example the speed feedback is not implemented in most cases and may depend on the decoder version. Speed feedback is supported in all current ZIMO decoders.

On the screen of the MX32ZL the quality of the data link between the command station and the decoder is shown: a blue ball (above the speedometer) lights up for each command dispatched for the current address; a magenta-coloured (purple) ball for each acknowledgement sent via RailCom. Synchronous flashing of the balls means excellent communication, less frequent purple than blue means there are numerous failures in communication; no purple balls (as in lower picture) only blue balls: contact with the loco has been lost.

At any time you can press

- S-Key → a fast stop for the active vehicle, or a system stop for all vehicles, or complete shut-down of all power to rails.



# Address Setting Screens (ADR) . . .

Here you can make all the settings for operating a vehicle and its presentation on the screen:

Give a name, choose an image from the loco images database, allocate symbols to the Function Keys (F0...F28), adjustment of speedometer display (selecting speedo design, colours and speed curve).



## Addressing / Programming: SERV PROG and OPMODE PROG

On entry into the programming procedure, you select

- SERV PROG** – on the programming track
- OPMODE PROG** – on the main track (also known as "POM")

In service mode there is also a protection against deletion.

**Identify** → important data can be read from the decoder and displayed, such as the address, manufacturer, software version, decoder id (if appropriate - used for authorizing protected sound projects).

**Address** → here the address can be read faster than in Identify, and a new address can be written, with ACK confirmation on the programming track, or via RailCom on the main track.

**CV-Programming** → Reading and programming of CVs, as far as possible, the meaning of CVs are shown; the individual actions remain listed on the screen, and can be marked with the scroll wheel, in order to work on them again. An intermediate file (copy/paste function) makes it easy to copy a large number of CVs from one decoder address to another. For CVs which need individual bits to be set a special window opens.

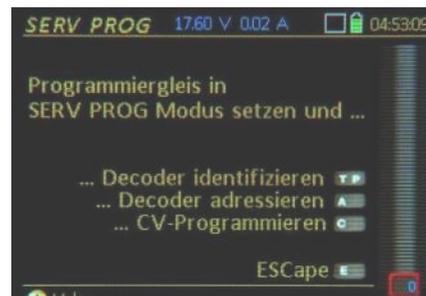
In addition there are several ways to make the programming of decoders more efficiently, especially when you have a large number to program.

- Storing CV Sets in memory, which can also be named, to make it easier to find them again.
- Such CV Sets can be assigned a "topic" (e.g. motor control, shunting functions, US lighting ...), which facilitates the retrieval.
- Certain standard CV Sets will be available already stored in the device, such as CV Sets for special types of motor (Faulhaber, Rotary, Märklin High Performance...).
- CV Sets can be exported and imported (via USB stick or direct connection to the PC), and then processed externally on the PC (using ZIRC), or delivered as part of a Sound Project, etc.

With RailCom in Op Mode (also known as Programming On the Main, or "PoM") CVs can be read and programmed (written), and each time the CV is written, there is an acknowledgement; Feedback via RailCom is shown in a magenta colour.



CV programming „Service Mode“ and „Operation Mode“ is largely the same, the latter is even faster. The **Programming Track** will soon be a thing of the past!



## The Object Database

All vehicles (= decoders = address) that are active are automatically stored in the object database, and will remain there permanently, unless explicitly deleted.



The object database provides an overview of all the vehicles, and those that have responded to the global detector in the MX32, via RailCom, as present on the layout are shown in magenta, so these may be selected and controlled.



## Operating Mode Switch(W)

Behind the ZIMO traditional name of SWITCH (WEI), there is the control of the entire range of accessories such as switches (points), signals, uncouplers, lights, turntables etc.

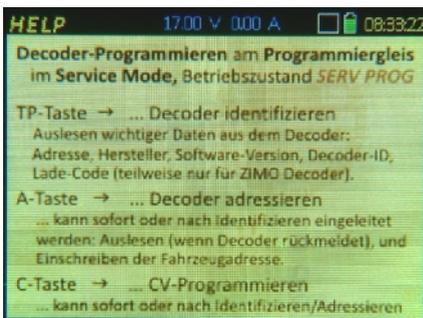
- W-Key → In the lower part of the **DRIVE(F)** – screen, the current **SWITCH(W)** - panel appears. The number keys on the controller are then assigned to the accessories shown here.



Basically, the operating mode **SWITCH(W)** is **object oriented**; i.e. NOT by the specific decoder address, but by the specific accessory such as a switch (point), signal etc. These objects are organized into "**Panels**"; for example, all the switches in the approach to a station in one panel. The panel may also include more than 3 lines (9 objects) by switching to a full screen, or scrolling down through the lines. This is similar to viewing the memory stack of vehicles in a list on the panel.

In the setting mode, you can define which 3 objects will show in each single line of the panel, the symbol for the object (straight/curved, left/right handed...), direction, address and sub-address of the accessories, decoder etc.

The current "Panel" is the forerunner of a proper **Control Panel on the Screen**, which will be implemented in a future version of the software.



## Context sensitive Help System

- Softkey I **Help** → In most situations, the relevant help screen is displayed. The scroll wheel is used to see more content.

Operation of the device is still possible while reading the Help screens, at least in the modes DRIVE(F) and SWITCH (W).



## Software Update from USB Stick

The use of a USB stick for updating the software avoids the direct connection to the computer which is a common source of errors....

From the ZIMO Website [www.zimo.at](http://www.zimo.at) under the menu "**Update & Sound**" you can download the latest zip files for the MX32 software, into the root of the USB stick (not inside a directory). The USB stick is then inserted into the MX32 and the stick will be automatically detected and read.

- A-Key → the contents of the USB stick are displayed, normally these are the MX32 software and the language files: in the same way you can load new vehicle images (which can be created by the user) into the device.

Scroll Wheel and A-Key → Find and mark the files to be loaded.



## Statement about "RailCom" and "RailComPlus"

From today's perspective, ZIMO, together with a number of key manufacturers of decoders and digital system, and model railway manufacturers (Roco and Fleischmann), do NOT support "RailComPlus".

The announced licensing and approval conditions set by Lenz GmbH und ESU GmbH are UNACCEPTABLE, because they prevent the free exchange of ideas and concepts and limit and delay the technical progress in the field of digital control of model railways.

We build and continue to provide RailCom capable products (WITHOUT "plus" to mean "RailComPlus"), but with very well known and new features. We also reserve the right to introduce a new form of bi-directional communication.

More information on this subject coming soon

RailCom and RailComPlus are trademarks of Lenz GmbH.