



# Newsletter - MAY 2010

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## "2010 Era"

### The MX32 controller before the first production

The production of the first series of the MX32 controllers ("2010 Era") will be started soon and delivery is scheduled for July 2010.

**Price for the first series: EUR 370,-**

**Note:** Due to the massive increases in costs (shortages of electronic components and the euro exchange rate decline), it is not unlikely that the prices may increase by at least 10% for the next batch of MX32 controllers.

ZIMO is less affected by the present exchange rate fluctuations than manufacturers who produce their complete products in China, as the ZIMO production is in-house, but the material costs are affected, such as electronic components, chassis and keyboards are also from this region - elsewhere in the world most components are simply no longer manufactured, not even at higher prices. Even our longtime main supplier of circuit boards, based in Bavaria, who was (until a few years ago) still proud of his work supporting the customer, has now abandoned local production, and everything is outsourced to the Far East companies..

As the MX10 command station is not yet available, the MX32 controller has to be used as follows:

- for **ZIMO Users**, who have an **MX1**, **MX1HS** or **MX1EC** command station: The new MX32 can be added to the existing system.
- for **ZIMO Users**, who have the **MX31ZL**: The extension of such a system with the MX32 controller is possible, and (in this case, in contrast to the MX1 users) RailCom features are available!
- for **ZIMO Beginners**:

**Limited special offer - Startset, consisting of MX1EC + MX32 for EUR 590,- (RRP).**

To provide these Startsets, a new batch of MX1EC command stations will be produced, until replaced by the new MX10.

**Note about this offer:** If, at a later time, the new MX10 is purchased, the MX1EC can re-used in the workshop or sold off on eBay to be used with older generation controllers from users who have upgraded.

### The functions of the MX32 – First release

The first release of the MX32 contains software (and therefore functionality) which is far from complete. In many areas, the work is finished, and, although much more powerful than its predecessors (especially in the user interface), some features are still lacking.

However, the implementation of future updates is very simple, via software downloaded onto a USB stick, so no on-line connection to the device is required during the update process.

Screen shots on the right: Screen display after inserting the USB stick, the files have been analyzed, and relevant content is displayed. In addition to a new software version for the MX32, pictures for rolling stock (locos etc.) and other graphics (e.g. tachometer dials, ampere scales, function symbols etc.) and text files for other languages are included.



**Note from translator:** The screen shots show the German version and (in this newsletter) the German acronyms are often used to refer to elements on the screen. Where I have translated a term to English, the German is shown in brackets.

The MX32 controller is always connected in one of several **Operating Modes**, each of these modes has a specific screen layout, and in some cases there may be several versions of this screen layout.

The current operating mode is always shown in the top left corner of the screen. In the top line of the screen, in addition to the mode, there is the current time, (absolute time, time since power on, or model time), information from the base/command station (power consumption etc.), system status (Stopped, Shutdown due to short-circuit etc.), for FU (radio) version - radio signal strength and battery charge state.

In a similar way to the top line, the right-hand side of the screen (in nearly all the operating modes), shows the position of the driving controls (including certain automated features). The current position of the slider modes is shown, the current speed, the acceleration or deceleration times, and with the help of "RailCom" (if available), the effect of automatic braking systems such as the ZIMO HLU or Lenz ABC are shown.

Using the SoftKey I, the **Help-File** for the current operating mode can be displayed on the screen.

Now follows some more detailed information for each operating mode:

The most important **Operating Mode** is **DRIVE (FAHR)**, where the control of a train (locomotive, vehicle, ...) with all its functions takes place. There are several variations of the display, which can be called up by touching (touch screen) the area of an image or name of the vehicle, and these variations are as follows -

- Large loco image (if assigned, see *ADR NAME later*) + Name/Address + Speedometer; in conjunction with "RailCom" any information about the moving train, such as power consumption, in the form of an ammeter, or a progress bar (which indicates how far it is to the next halt), as shown in the image on the right.
- Small loco image + Name/Address + Speedometer + Function Keys. The current assignment of the function keys is shown by symbols (see *ADR FUSYMB later*) and the current status of the key (latched etc.). The Shift key is used to switch between displays of F0 to F9, F10 to F19 and F20 to F28. A direct-touch operation of the keys is possible and this means that 20 keys can be accessed at the same time using a combination of 10 real keys and the 10 on the screen.
- No loco image (even if assigned), the name and/or address is displayed in large font and the display uses high contrast (black/white) to optimize readability for certain conditions (e.g. outdoors, in bright sunlight).



As in the MX2 and MX31 controllers, the locos in memory (currently active) can be displayed by pressing the F key, or the U keys (to go back).



From the **DRIVE** operating mode you can go to the following

With key A into the **ADR AKT** mode where you can add a new vehicle and address, or (A and F) to the **system attributes** for the current vehicle;

With the "E-Functions" (Key E + Number Key 1, E + 2, E + 3) to the **specific ranges of the system attributes** for the active address.

The **Operating Mode ADR AKT** (reached by Key A from **DRIVE**) has two meanings:

- Deactivates the current vehicle and replaces its (in memory) with a new vehicle address for activation with new system attributes all in the same step, alternatively, a vehicle from the stored database can be selected and activated.
- Make changes to the **system attributes** for the same address in one session: *NAME, IMAGE (BILD), FZEIN, FUSYMB, FZTACHO, etc.* are those settings, which can be called up by the "E Functions" (traditional ZIMO name); see later for details.

Note: "system attributes" have nothing to do with decoder programming! It is only concerned with the way the loco is displayed in the controller. However: the operating mode for decoder programming on the main - *DRIVE PROG* - can be reached from *ADR AKT* and all *ADR* conditions.



Screen shot left: After typing a new address, specify the protocol (MM or DCC), the number of speed control steps (14, 28, 128) to be used (DCC default is 128), and then it is possible to activate the address immediately, by pressing the F key, or continue entering the name, in the operating mode *ADR NAME* (key A or TP). Escape is also possible with the E key, in which case the entry is cancelled.

As is shown on the screen, the function of each key is described and there is further information in the Help Screen which is activated by pressing Soft-Key I



If you continue from the *ADR ACT*, you can add further system attributes to this address (either all attributes or only some can be entered):

in *ADR NAME* a name is added to the address (or modified);

after that comes the *ADR BILD* where any image held in the internal Picture Gallery (organized by country, operator, type of loco etc.) can be added.

In *ADR FUSYMB* various symbols for the F keys F0 .. F9, F10 .. 19, etc., can be attached (in key shape or not) and displayed in the *DRIVE (FAHR)* mode, when the function key display is selected, (see the example in the *DRIVE (FAHR)* screen shot). These images are selected from a Picture Gallery. It is also possible to distinguish between D and M keys where D=duration (latched), M=momentary (non-latched) .



In *ADR FZEIN* more system attributes can be added, including acceleration and deceleration times (AZ, BZ, not to be confused with the decoder settings in CV#3 and CV#4, which have similar names), or the number of functions used such as pulse chain procedures etc.



*ADR TACHO* is at the end of the system attributes and defines the speedometer design (colours and type of presentation) and this is applied automatically for other meters such as the ammeter. Also defined here is which speed to be displayed for each speed step, only needed if "RailCom" is not available to give the feedback, and for the shunting mode, when a disc with reduced scale e.g. 0 to 30 kmph is displayed.



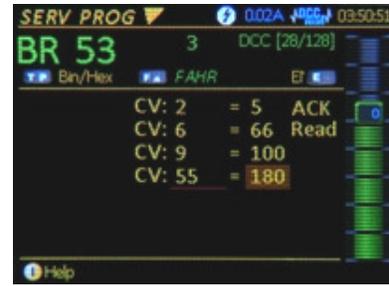
Taste F



As mentioned already, individual system attributes can be selected and modified using the E key, when a screen with the various attributes appear (NAME, BILD, FUSYMB etc.) and can be selected by pressing the appropriate number key.

A **clipboard** exists in the controller and can be used to copy/paste system attributes (e.g. FUSYMB) from one loco to another.

In **Operating Mode SERV PROG** (reached by pressing Key E + MN from *FAHR*), decoder programming can be carried out on the programming track (in "Service mode"). Through the use of command line storage and stored CV sets, this is more user friendly than in previous products.



The **Operating Mode OPMODE PROG** (reached by pressing E + F from *FAHR*) enables decoder programming on the main line (also called "Programming on the Main" or "PoM") and this mode is displayed using similar screens as in Service Mode.

There will be more information about these modes and other screens will be in future publications!

The MX32 can be configured (to some extent) by the user by downloading loco images, or the speedometer graphic (via the USB stick). An excerpt from the current collection of images is shown below.

By the way, for loco pictures .... We are looking for **"informal co-workers"**, from the ZIMO Community to contribute **loco pictures**; and, as a reward for this (for a certain number of "good" pictures), we plan to offer a free ZIMO loco decoder!

**We ask anyone interested to register there interest!**

Of course such images of locomotives must be created using defined standards, which are still being worked out. Sample images will be available soon, but the basic requirements will be something like this :-

- Must have a black background, black locos need to have a light-grey outline or cloud around them,
- Locos should be coming from the left, with the front on the right (into the screen).
- Angled either directly from the side or showing the front of the loco (perspective),
- In the perspective case, underline the wheels horizontally,
- Left justified for short locos, left truncated for long locos (e.g Big Boy).
- In the upper 3rd of the image, only the high standing elements should be visible, e.g. chimney, pantograph etc., otherwise black.
- Right edge of the image should only be occupied by small parts (e.g. coupling, buffers, etc.) and no flat elements in the last 5 px,
- Not yet resolved is the question of how to display the rail (or no rail) and the position of this in the bottom of the image.
- Uniform standard for related images for one company or era (e.g. RhB).
- Output in jpg format (highest resolution possible), large bitmap (bmp) and small bitmap (bmp).

