

WIN - DIGIPE T

Das Steuerungsprogramm



Version 2015 • Premium Edition

Update Information 2015.2



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1. Summary

This Update Version 2015 International is a Free-Of-Charge Add-On for your **Win-Digipet 2015**.

The purpose of this document is, to describe all innovations of Version **Win-Digipet 2015.2** and to explain in detail how to use all new features; similar to an annex of your User Manual, which is already provided to you with Version 2015 in electronical version.

In addition the update contains also bug fixes for errors in the program. This will not be listed in detail, if these changes do not affect handling and functionality of the program.

It is required, that you are familiar with usage of the program **Win-Digipet 2015**.

For details, please check your manual of **Win-Digipet 2015**.

In case of further questions, don't hesitate to call the Hotline (Mondays, from 08.00 pm – 10.00 pm via +49-(0)172 – 20 11 009) or post your message in the International Forum of Win-Digipet (www.windigipet.de).

If not noted separately, all information is valid for all Digital Systems and model railroad scales which are supported by **Win-Digipet 2015**.

This document was created to our best knowledge. We apologize for any mistakes which could occur. In case you notice any mistakes, please bring them up on above mentioned contacts. Corrections will be made after investigation.

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2. WIN-DIGIPET 2015.2 - Installation of the update

Before you install the update **WIN-DIGIPET 2015.2** the Version 2015 has to be installed according to chapter 1.3 of the **Win-Digipet 2015** manual.

We assume that you have installed **Win-Digipet 2015** in the default directory „C:\WDIGIPET“ on your computer (resp. C:\WDIGIPET_SMALL).

If you have used a different installation directory you have to select this during the update process.

The different versions of the Update 2015.2 for the Premium Version resp. the Small Version can be found on the Win-Digipet website under Download – Updates.



Fig. 2.1 Red USB stick with the premium version of Win-Digipet 2015

The Update 2015.2 Premium Version is only executable with the red Original Win-Digipet 2015 USB-Stick – Premium Edition, the Small version only with the yellow USB-Stick.

It is important to select the correct installation directory during the update process (Default: C:\WDIGIPET resp. C:\WDIGIPET_SMALL).

Already recorded data will not be overwritten!

2.1 Data backup

If you have used Version 2015 before, you should make a backup of your data **before the update** according to section 2.2.3 or automatic backup according to section 3.12 of the manual of version 2015.

2.2 Download of the update 2015.2 from the Win-Digipet Website

On the Win-Digipet website you can find under Downloads the following versions of **Win-Digipet 2015.2**:

- 📁 **WIN-DIGIPET Update 2015.2 Premium Edition** (WDUP_2015_2.exe)
- 📁 **WIN-DIGIPET Update 2015.2 Small Edition** (WDUP_2015_2_Small.exe)

Please download the version suitable for your product.

2.3 Installation of the update 2015.2

Download the update from the website (WDUP_2015_2.exe or WDUP_2015_2_Small.exe) to your Win-Digipet installation directory (by default C:\WDIGIPET resp. C:\WDIGIPET_SMALL sein).



Execute this file by double click on its icon (e.g. via Windows-Explorer). The update file is self-executable and will be installed to the selected directory (Default C:\WDIGIPET resp. C:\WDIGIPET_SMALL). After this you delete the file WDUP_2015_2.exe resp. WDUP_2015_2_Small.exe without any consequence.

2.4 Start of Win-Digipet 2015.2

Now you can start **Win-Digipet** as usual.

After the start **Win-Digipet 2015.2** you can see the splash screen with the new version number.¹

After the complete start of **Win-Digipet** you can see the track diagram as usual.



Fig. 2.2 Info screen of Win-Digipet.

2.5 Regular Online-Updates

Since version **Win-Digipet 2015** the program provides an online update mechanism to update important program data etc..

We suggest to the execute the online update via the Startcenter regularly because the program data provided via the online update is not part of the update 2015.2 and will also be changed/added between update versions. This program data can be:

- 🔧 updated language files
- 🔧 updates decoder templates
- 🔧 updated symbol tables (also translated into the languages)
- 🔧 crane definitions (also translated)

Users with not internet access on the railroad PC can also download a data update package from the download section of the Win-Digipet website to an USB stick and import this update package using the Startcenter.

¹ Picture from <Help> <About>: The last three digits of the version might vary from the screenshot.



Since Version 2015.1 the online update is also available in the small version.
For further information regarding the online update read section 2.2.6 of the manual.

3. General

3.1 Digital systems / Hardware

The number of digital systems and other hardware on the model railroad market is ever-expanding. Due to this new digital systems will be included in Win-Digipet from time to time. The integration of these systems requires the will for cooperation by the system's manufacturer, because without the knowledge and support of the manufacturer this is not possible.

Win-Digipet 2015.2 has been extended in its support of digital systems as follows.

3.1.1 BiDiB® – Bidirectional bus

BiDiB® stands for **BiDirectional Bus** and is as bus system for controlling a model railroad. The term BiDiB® is also used for the protocol technique.

Starting from BiDiB® protocol version 0.6 some output will be handled in the protocol differently using a flat port model. When controlling outputs/macros directly without accessories the output/macro-numbering will now start with „0“ and not with „1“ as before. The dropdown selection has been changed.

The simple output and macro commands have been not available for the usage of the intelligent turntable until now. This has been changed.

Win-Digipet 2015.2 support BiDiB®-protocol-Version 0.7. Simple inputs are handled differently internal in this version compared to former versions. This is now also possible with Win-Digipet.

The newest (Beta) versions of the BiDiB-Wizard and BiDiB-Monitor support common data storage for the naming/labelling of ports/macros/accessories. Win-Digipet Version 2015.2 supports this also. In the system setting you can now select this data path.

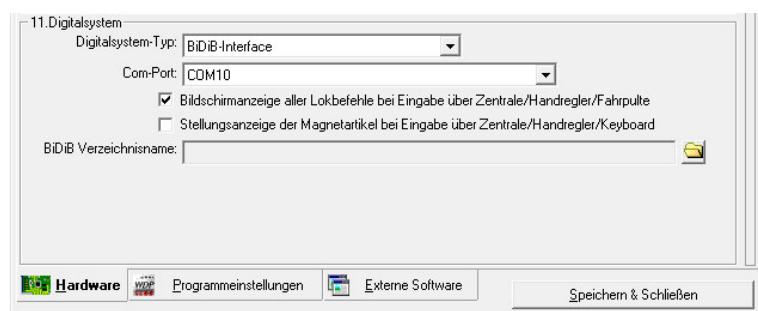


Fig. 3.1 Dialog for selecting the common BiDiB data folder

In normal installations this path is

„c:\users\username\.bidib“

As result of this you now chose the ports/macros by name and not only by number.

Win-Digipet 2015.2 reads and uses there the labels/names, which have been assigned by the mentioned tools. A name/label transfer the other way around is not included.

3.1.2 DinaSys Turntable Controller

The DinaSys Turntable Controller has no built in 180° (Turn) function.

In Win-Digipet 2015.2 it is possible to perform such a 180° turn by installing a turn symbol in the track diagram using solenoid device address 201. The function is only possible if



an intelligent turntable has been configured for the according turntable, because only in this program part the total number of turntable positions is known.

Further information can be found on the manufacturer's website: <http://www.picommit.de/>

3.1.3 Märklin Central Station 2

The communication to the Märklin Central Station 2 was until now only possible using the UDP (User Datagram Protocol) communications protocol. Märklin extended the port capabilities by a communication via TCP (Transmission Control Protocol).

TCP is for our usage a safer way for the communication. This does not mean that the data is encrypted. But it is secured, that the data will reach the receiver in correct order without duplicates.

When using TCP no destination address has to be configured in the Märklin Central Station 2. In Win-Digipet 2015.2 the system setting for the Märklin Central Station 2 and the network wizard have been extended by a selection box for TCP or UDP.

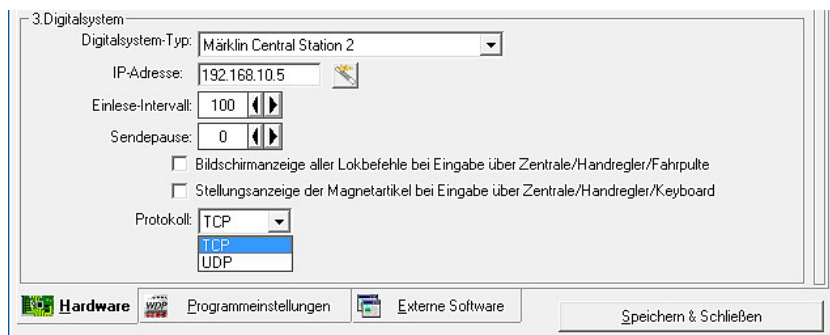


Fig. 3.2 The settings for the Märklin Central Station 2

3.1.4 Märklin Central Station 3 (ArtNo.: 60216/60226)



Fig. 3.3 The Märklin Central Station 3

Central Station 3 (plus) can be used in Win-Digipet 2015.2 starting from Firmware 1.2. Starting with this firmware version all necessary commands are available in the CS 3 (plus). The communication is possible via TCP or UDP

A S88N-port is only available in the Central Station 3 (plus).

For using the S88 Bus in Win-Digipet it is important to select the correct device in the

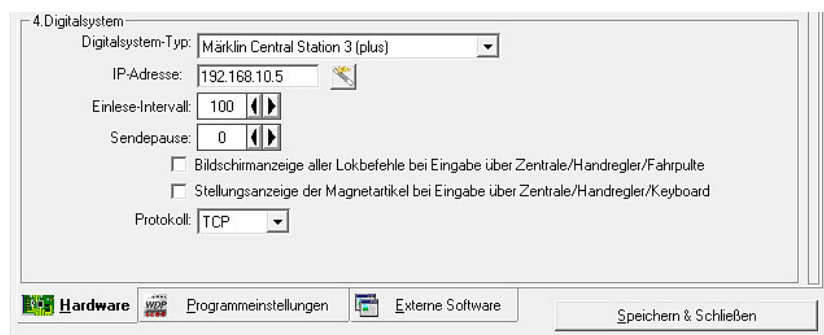


Fig. 3.4 The settings for the Märklin Central Station 3

feedback configuration. The S88 connected to the CS3 (plus) have not to be configured for device/line "Master-CS3" but "Slave/Device/GFP" using the device number of the track format processor (GFP) of the CS3 plus (by default No. 1).

The device number of the GFP in the Central Station 3 (plus) can be found in the system settings of the CS3 plus.

You can connect a "Märklin Link s 88" (ArtNo. 60883) to a CS3 as well as to a CS3 plus.

The calculating scheme for the counting of feedback modules used feedback modules with 8 inputs. Users using feedback modules with 16 contacts have to make some calculations.



If you use feedback modules with 16 inputs you have to register 2 modules (with 8 inputs) per each 16 input module.

At the moment (19.12.2016) the current firmware of the Central Station 3 (plus) does only provide the information for F0-F15 when transferring data records from the CS3 (plus) to the PC. Thus also icons can automatically only be transferred up to F15.

A transfer of vehicles from the vehicle database of Win-Digipet to the Central Station 3 database is not possible using the current firmware. The control of function F0 to F28 is possible for all data records created manually in Win-Digipet.

Features usable in Win-Digipet			
Track protocol	Motorola	Mfx	DCC
Locomotive addresses	1-255	1-9999	1-9999
Solenoid device addresses	1-320	Only recognition	1-2048
Special functions per address	F0-F4	F0-F28	F0-F28
Feedback system	S88-N ² , CAN-Bus		
Number of feedback contacts	1024 (64*16 Module with 16 feedback contacts each)		
Port	Ethernet		
Feedback of manual input at the digital system to Win-Digipet	Locomotive and solenoid device commands		
Included since Version	2015.2		

Further information can be found on the manufacturer's website: www.maerklin.de

² a S88N-port is only available at the CS3 plus.

3.1.5 Tams Red Box



Fig. 3.5 Die Red Box der Firma Tams Elektronik

The two USB-ports of the Redbox can be used by different programs at the same time (we suggest not to do this while using automatic operation). For the USB port you need to install the manufacturer's driver. This driver creates a virtual serial port. The port number (COM 1-16) can be identified using the port utility in the Startcenter of **Win-Digipet**.

The calculating scheme for the counting of feedback modules used feedback modules with 8 inputs. Users using feedback modules with 16 contacts have to make some calculations.

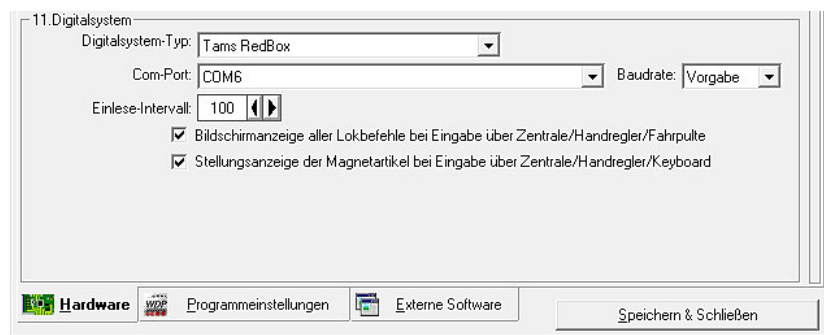


Fig. 3.6 The settings for the Red Box of Tams Elektronik



Features usable in Win-Digipet			
Track protocol	Motorola	DCC	m3 ³
Locomotive addresses	0-255	1-9999	1-9999
Solenoid device addresses	1-1020	1-2040	None
Special functions per address	F0-F4	F0-F28	F0-F15 ⁶
Feedback system	S88-N ⁴		
Number of feedback contacts	832 (52 Module with 16 feedback contacts each)		
Port	USB		
Feedback of manual input at the digital system to Win-Digipet	Locomotive and solenoid device commands		
Included since Win-Digipet Version	9.1, 2015.2 ⁵		

Further information can be found on the manufacturer's website: www.tams-online.de

³ m3 – is as special format for controlling mfx locomotives (since Firmware 1.4.5)

⁴ S88-N uses another connector than old S88, for further informations see: <http://www.s88-n.eu/>

⁵ When selecting Tams Master Control you can use the RedBox starting from WDP 9.1, starting with Version 2015.2 you can select the RedBox directly within Win-Digipet

4. System settings

4.1 Automatic creation of data for restore in cases of crash

Of course it is one of the main goals while programming Win-Digipet to create a perfect program which will never crash. But in reality situations might occur where the program or the complete operation system crashes. Until now the program data/state had been only saved when the program was closed properly. In case of a crash a restart of the program would have presented you the state of the last start before and any changes of train/solenoid device states/positions would have been lost. This resulted in a lot of cleanup.

In Win-Digipet 2015.2 we introduce now an automatic creation of restore data. The program will try to store this data every 60 seconds.

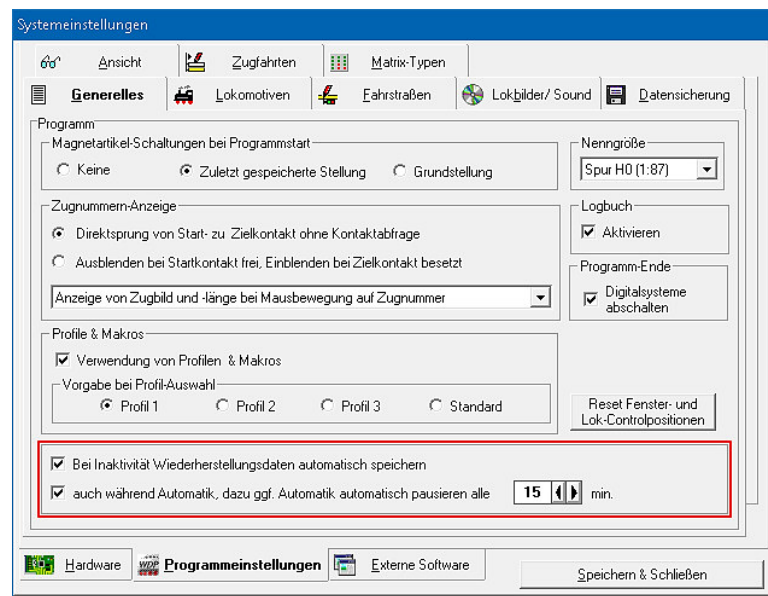










Fig. 4.1 activating the automatic creation of restore data

The following data is saved for restore:

-  The Track diagram
-  The train number displays
-  The state of the intelligent turntable
-  The state of your vehicles
-  The tractions/train compositions
-  Joystick state
-  The current dispatcher state
-  The settings

The automatic creation of restore data is only possible if:

-  No route is active



- ✖ The simulation is turned off

Furthermore the following editors have to be closed:

- ✖ Routes editor
- ✖ Tour editor
- ✖ Tour automatic editor
- ✖ Profile editor
- ✖ Macro editor
- ✖ Editor of the intelligent turntable
- ✖ Vehicle editor/database

After a program or system crash you will be informed as user, that program has now been started with restore and you will be asked to take a look at the current vehicle positions and states.

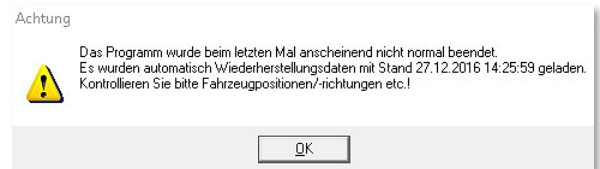


Fig. 4.2 Restart with restore data

A further option relating to the restore data creation is the option to pause the automatic operation from time to time to allow the program to get to a steady state (no active routes) for the creation of the restore data.

This option is important because during an active automatic in most cases you would never achieve a state where no route is active. And thus restore data would never been created.

Using this option you can select an interval between 1-120 minutes (default value 15 minutes) after which the automatic will be paused until all trains have stopped and the creation of restore data will then be performed.

In the main toolbar a toolbar button has been added. The tooltip of this button shows you the time stamp of the last restore data creation. If you press this button restore data will be created if possible.

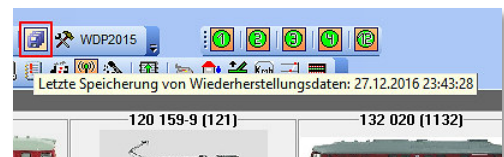


Fig. 4.3 Symbol and tooltip for restore data

4.2 Replacement of the directory selection tool

The directory selection which has been used in former program versions has been replaced due to performance issues by a normal Windows folder selection dialog.

The button for selecting a folder can be found in the system settings under:

- ☛ Selection of the Collection and Collection picture path
- ☛ Selection of the Win-Digipet picture path
- ☛ Selection of the path for automatic backup at the end of the program

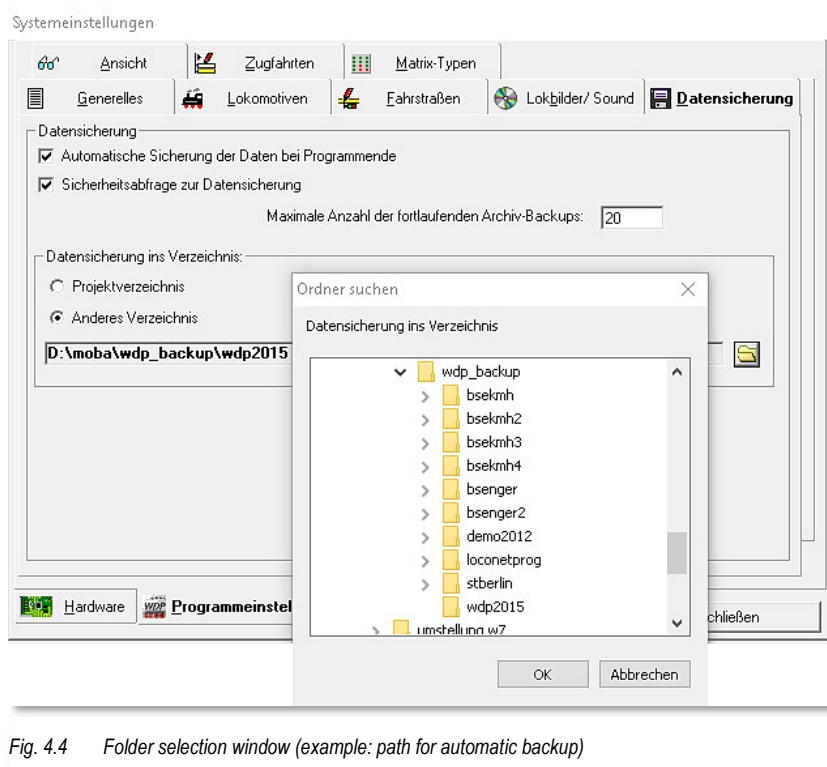


Fig. 4.4 Folder selection window (example: path for automatic backup)

5. Vehicle database

5.1 Vehicle picture format

In the selection dialog for selecting „own“ vehicle picture you can now select also PNG pictures beside the already available BMP and JPG pictures as data source.

5.2 Assigning of macros to locomotive function buttons

You can now assign one or two macros to a function button of a locomotive.

If you assign just one macro, then the macro will be executed each time you press the button. If you select two macros (On/Off-Macro), then you will achieve a different behavior:

- ☛ Function button gray „off“ → A button press will start Macro 1 → button color will change to green
- ☛ Function button green „on“ → A button press will start Macro 2 → button color will change to gray

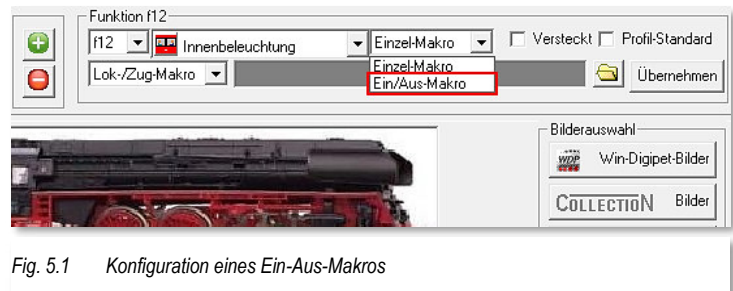


Fig. 5.1 Konfiguration eines Ein-Aus-Makros

5.3 Visualization of active locomotive/train macros

Until now an active locomotive/train macro was only visible in the train inspector. Starting from Win-Digipet 2015.2 the play button in the locomotive control will flash, while a locomotive/train macro is active.

5.4 Changed symbol in the toolbar of the vehicle database

The button for initiating the transfer of vehicle database between Win-Digipet and your digital system has been changed because the old button's icon has been used for two different functions within the database editor.

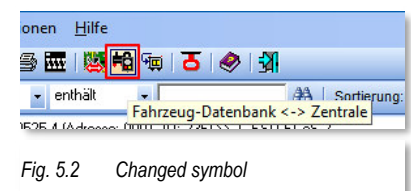


Fig. 5.2 Changed symbol

6. Track diagram editor

6.1 Colored counters

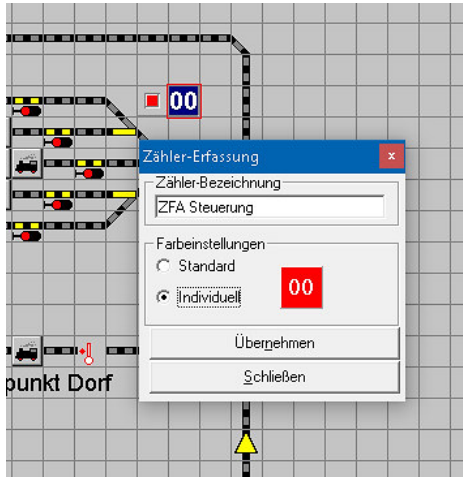


Fig. 6.1 colored counter configuration in the track diagram editor

The color of each counter can be changed to your needs within the track diagram editor. The well-known window for the configuration of the counter's name has been enhanced by color configuration settings.

If you select the radio button „individual“ you can open the color selection dialog with a click. If you click on the symbol with the left mouse button you can select the background color of the counter and if you use the right mouse button you can select the text color of the counter.

Unchangeable is the color the SX(Selectrix)-Displays. These displays will always have with text with dark-green background.

If you use such SX-displays, you should not use these color combination for ordinary counters to avoid mix-up within your track diagram.

6.2 Printing the track diagram

Many users wished enhancement for the track diagram print routine. This has been realized within Win-Digipet 2015.2. The following changes have been made:

- A Button for the page setup has been added. You can now select also larger paper sizes (e.g. A3). The larger pages will then also contain more symbols than the smaller ones. Of course your printer must be able to support such larger paper sizes.
- Additional scale steps are now available. Beside the well-known scale steps 50% and 100% now also 25%,33% and 200% are possible.
- The frame around the printout can be hidden.
- You can also hide the header.
- You can choose to show the background color.

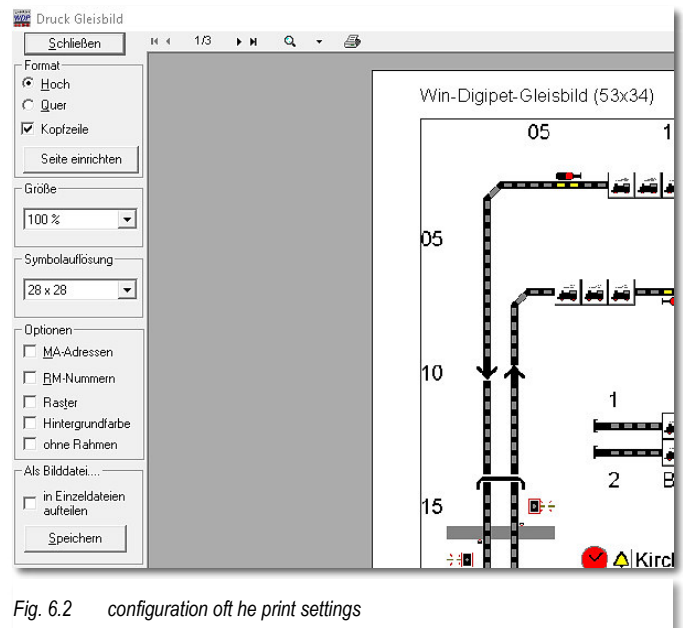


Fig. 6.2 configuration of the print settings



- You can now export the track diagram picture in BMP, JPG and PNG format. The default file format is PNG.
- By default the picture export will now be saved to one picture file. Optionally you can choose to export the picture split to several picture files according to the current print preview.
- The export/printout uses now by default the symbol 28x28 as source. This will result in finer graphics.
In Win-Digipet 2015.2 Small Version the symbol size 20x20 is used, because this version does only support symbol sizes 16x16 and 20x20.
Optionally you also select the symbol sized 12,16,20,24 as sources for your printout/export. This might be necessary if you have created your own symbols and have not created each symbol for each scale step.
- The selection of colored or gray level printout has been removed from the window and has not been chosen in the configuration dialog of your printer, because most systems had ignored the program settings regarding the color mode.



The print preview might look a little bit „pixeled“. This is a result of the print preview tool. The real printout had better quality in our tests.

7. Main program

7.1 Printing the track diagram

The printout of the track diagram can now also be started from the main program. When opening the File menu you can find the according menu item. In contrast to the print routine in the track diagram the printout in the main program will also show the correct state of solenoid device and counters as well as the occupation of train number displays.

7.2 Turning momentary contacts off

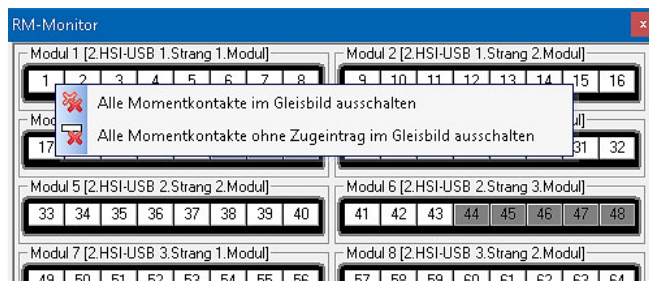


Fig. 7.2 Turning of momentary contacts in the track diagram editor

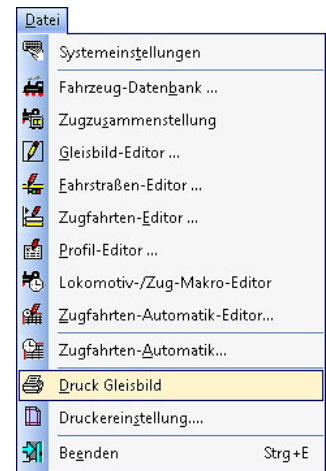


Fig. 7.1 printout within the main program

In the feedback monitor the function “Turn off all momentary contacts in the track diagram” was already available. A second similar command has now been added. This second command will just turn of the momentary contacts where no train is placed at the moment within the track diagram.

This means the function will turn only off all momentary contacts that do not belong to a train number display or where the train number display is empty.

This function is available in the feedback monitor when pressing the right mouse button on of the feedback contact indicators. A context menu will open.

7.3 Highlighting feedback contacts in the track diagram

Feedback contact can be localized with the feedback monitor easily in the train track diagram by pressing on feedback contact indicator with the left or middle mouse button.

This function is now also available in all other editors where you can enter feedback contact numbers. By pressing the middle mouse button in the according text box can force the program to highlight all occurrences of the entered contact number with in the track diagram with red borders.

This new function caused a little change within the booster configuration window. In the booster configuration window you opened the feedback contact delay configuration with the middle mouse button. This function is now available using the right mouse button.

7.4 Switch routes and tours devices by push key (external switchboard)

A big enhancement for the users of external switchboards is the possibility to execute routes via two push buttons (start and destination).

This feature was a request of our users and has been realized in Win-Digipet 2015.2. You can register up to two push buttons in the routes/tours editor. These push buttons are connected to the PC/digital systems using ordinary feedback contact inputs.

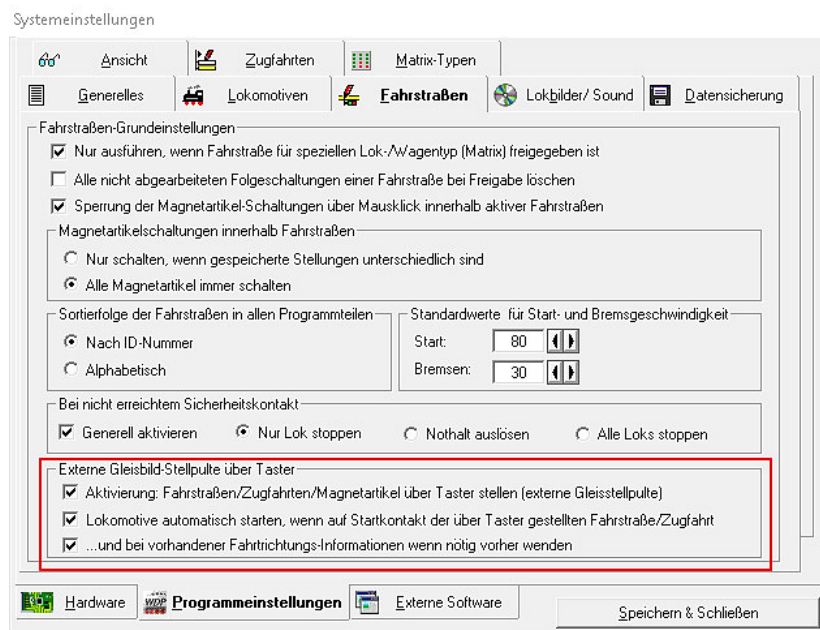


Fig. 7.3 Three options for switching routes and tours via push buttons

For activating the option to start routes/tours via external switchboards you have to activate the checkbox „Switch routes, tours...“ on the index card Routes within in the system settings of Win-Digipet.

This option enables to start routes/tours via external push buttons. Three options are available:

- ☛ Switch routes, tours and solenoid devices by push button(s) (external switch desk)
- ☛ Start locomotive automatically, if on the start contact of the route/tour which is switched via push key
- ☛ ...and if driving direction information is available and necessary turn

The first option needs to be activated if you want to use any of the external switchboard functionalities.

In previous pressing a push button opened start/destination window just showing the first route assigned to this button. Version 2015.2 shows all routes/tours with identical push button configuration (in same order) when pressing the assigned button(s).

The behavior of the start/destination window after opening depends on your choice for the 2nd option. If this option is not activated, then you can choose and start the desired route/tour yourself from the list.

If the 2nd option is activated the start/destination will try to activate the first appearing route/tour. If this one is not switchable (due to switch conditions etc.), the 2nd list item will be tested and so on. If no switchable list item has been found, the window will close

7.4.1 Registrations in the route and tour editor for activating routes/tours via external push button

You can register in the route as well as in the tour editor up to two push buttons/feedback contacts for activating these.

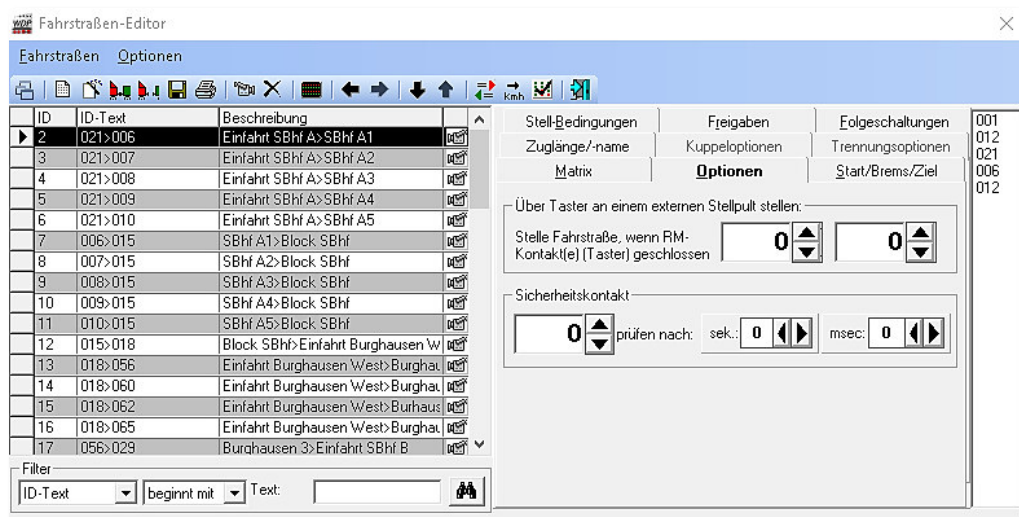


Fig. 7.4 A route shall be activated by (up to) two push buttons

The button registration will be handled as follows:

- ☛ If you register just one push button contact for a route or tour, the program will react in the same way as in previous versions:

Pressing button → Activation of the registered route/tour

- ☛ If you register two buttons:

Pressing both buttons → Activation of the registered route/tour

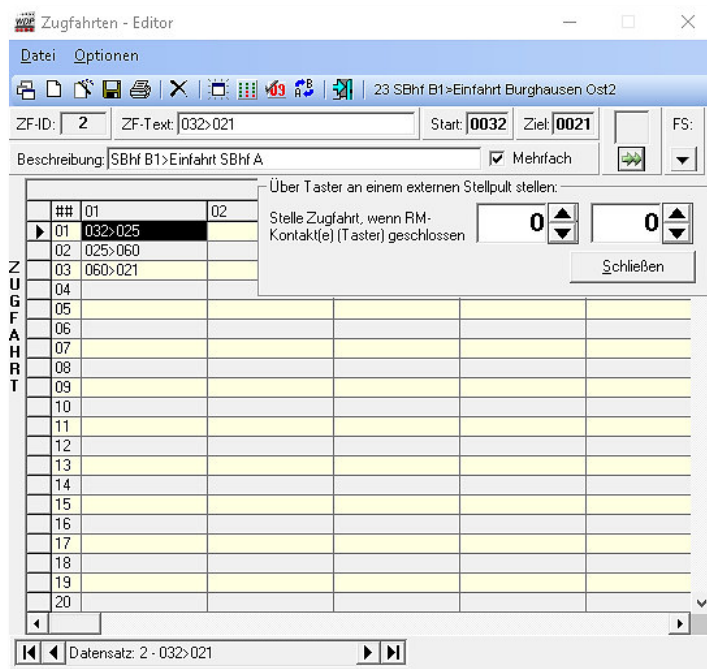


Fig. 7.5 A tour shall be activated by (up to) two push buttons

- But if you have registered for a route 1 the contact combination $x+y$ and if you register then for a second route/tour the same contact combination but with order $y+x$, then Win-Digipet expects, that you press the button in the registered order. This means for calling route 1, press x , hold x down and then press y . For route 2 press y , hold y down and then press x . Using this rule Win-Digipet can distinguish between these two routes/tours.

7.5 Tour event inspector

You can see within the tour event inspector, if a tour is in state red. This means the next routes cannot be switched at the moment. Within a (multiline) tooltip you can see which of the routes of the next row in the tour cannot be switched including the reasons. You can make the tooltip visible by moving the mouse over the according row in the tour event inspector.



Fig. 7.6 Tooltip showing the reasons for the current red stat in the tour event inspector

7.6 Tour automatic

During active tour automatic (TA) the automatic inspectors lists all tested rows of the tour automatic.

For all rows using the time setting „By arrival” the window will write “Departure time after arrival not reached!” if the train is waiting for the end of the waiting time.

Now the window will also list the remaining time to inform you how long the train will wait.

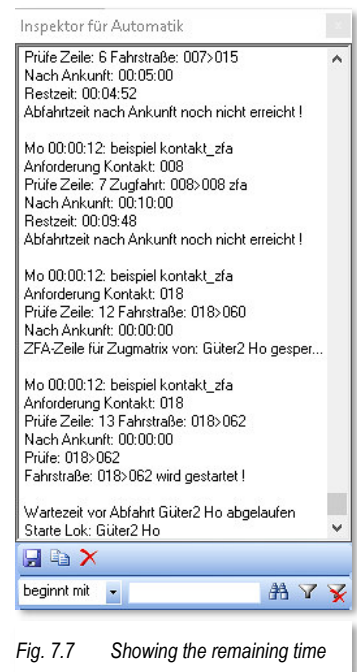


Fig. 7.7 Showing the remaining time

7.7 Dialog Intelligent Turntable

7.7.1 Synchronization and position indication

For turntable decoders with fixed position numbering like the DinaSys turntable we included a new option in the dialog for the intelligent turntable configuration.



Fig. 7.8 Synchronisations setting for intelligent turntable

The option „Rotate numbering by 180°“ can be used if this fixed numbered turntable decoders have the turntable cabin on the opposite site than the normal numbering.

In the same dialog you have the possibility to register a counter which will show afterwards the current turntable position within the track diagram.

7.7.2 Decoder for turntables

In the past we received from time to time question from users, who asked us to implement the control for self-made or not very well known decoders in the intelligent turntable logic. Because of this we included a new turntable type in the intelligent turntable configuration window which should be usable for many decoder types.

It is recommended, that these decoders are able to send the turntable to a position with buttons within the track diagram. Some of decoders calculate automatically the shortest turn direction to their destination and some of them need a direction command from the program.

The new decoder type is simply called „Other turntable decoder“.

Some requirements have to be met to guarantee a proper operation within Win-Digipet:

- All turntable connectors need to be selectable via push button commands from the track diagram (especially no semicircle selection like for the Märklin decoders)
- Additionally you have to register not only all used turntable connectors, but also all turntable connectors opposite of these if not used also (example a turntable with 48 connections uses only connections 1-3, then you need to register also 25-27). Without this Win-Digipet wouldn't be able to send locomotive forward as well as backwards to all positions.

As an option you can also register push buttons for turn direction presetting. This is only necessary if the used turntable decoders do not calculate the shortest way to selected position itself.

7.7.3 Logic of the intelligent turntable

In previous versions you could achieve the situation that the locomotive was turned in the wrong direction by operating the turntable as follows.

You have e.g. sent the locomotive standing on the turntable from connector 1 to connector 10. If you mention now when reaching connector 10 with the turntable, that



you wanted to send the locomotive to connector 11, you would simply think you can press track connector 11?

In the past this would have led to situation, that the locomotive would have been turned to connector 11 but with wrong direction. The intelligent turntable logic was designed in that way, that the program assumed, that when you sent a locomotive from connector x to connector y, that the locomotive has entered the turntable at x without any turning. But in our example our locomotive has not entered the turntable at connector 10 (its direction was opposite to the direction that it would have when entered via connector 10). Its direction was the direction to leave the turntable and not to enter it.

The logic of the intelligent turntable (iTT) monitors now permanently which locomotive is currently on the turntable. This means the program will recognize which locomotive is on the turntable with which direction.

Let's come back to our example. The program will now recognize when you command the turntable from connector 10 to 11 (after it has been sent from 1 to 10 before without leaving of the locomotive), that the locomotive has not left the turntable and has not changed its direction.

Thus the turning logic will react no correct and will send the locomotive to connector 11 with correct direction. But if the locomotive has left the turntable in the meantime or another locomotive is on the turntable, the iTT will behave as normal.


7.8 Conditions

We grouped/resorted the conditions within the context menu to achieve a better overview.

7.8.1 Changed conditions

Some conditions for the dispatcher and the tour automatic inspector have been renamed:

- ☛ Matrix on contact → Matrix on train number display
- ☛ Train length on contact → Train length on train number display
- ☛ Train name on contact → Train name on train number display
- ☛ Loco on contact → Loco on train number display
- ☛ Number of vehicles on contact → Number of vehicles on train number display



An auxiliary condition of these conditions was in the past, that these conditions were only true if the e.g. the train name was on the contact **AND** the contact was occupied.

Now these conditions do not include the auxiliary condition "Contact occupation" any more.

Thus any user who has used on these conditions and needs the auxiliary condition "Contact occupation", **needs to edit** his/her conditions and add a separated condition "Contact occupied" with an AND link.

7.8.2 Condition feedback contact free/occupied

This condition has been enhanced by the possibility/option to include all contacts of an iTND into the condition. This is only possible if the contact is equal to the main contact of an iTND.

7.8.3 Condition Loco maintenance/operating hours

The condition Loco maintenance/operating hours is an interesting enhancement of the old condition “Loco maintenance”. You can now not only check if a locomotive needs a maintenance, but you can now check how long it has been operated or how long it will last to the next maintenance.

The old condition was also only available in the tour automatic, because it monitored just the locomotive on the start contact of the according tour automatic row. We enhanced the condition by the possibility to enter a contact number. Thus you can now use this condition also in the dispatcher or also to monitor other train number displays in the tour automatic. If you do not enter a contact number in the tour automatic the program will use the start contact of the according TA row as before.

Example:

A car system vehicle needs charging after 120 minutes of operation (Default maintenance necessary). And your layout has several height levels. After 100 minutes of driving time the vehicle can still be operated on an equal height level, but it cannot climb to another level due the battery performance.

Then you could define a condition in the dispatcher or tour automatic to block the level change route after the “Hours of operation” are larger than 100 minutes or the “Time till maintenance” is lower than 20 minutes

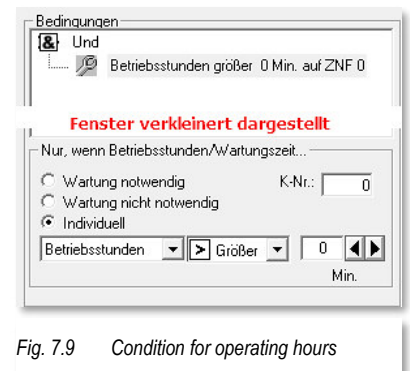


Fig. 7.9 Condition for operating hours

7.8.4 Condition route/tour active

Using the condition route/tour active you can check if a route/tour is active. For automatic shunting we extended the conditions by the possibility to check if not any type of route is active by also if a...

- Normal route
- Coupling route
- Division route

is active.

7.9 Decoder-Programmer

The decoder programmer has been enhanced by a search function. You can now search for labels within the configuration value tree.

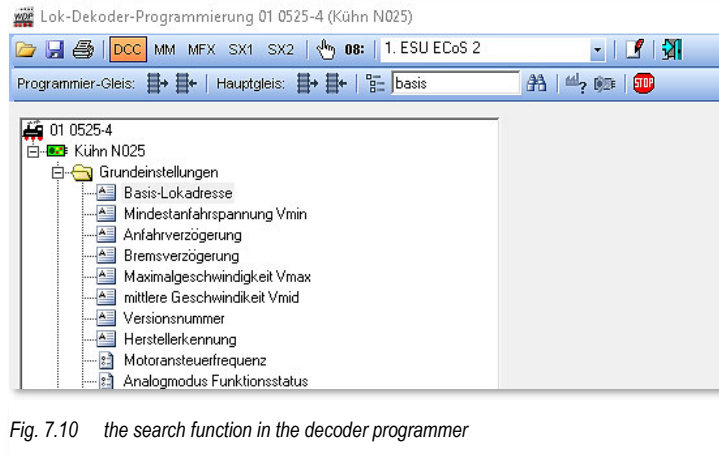


Fig. 7.10 the search function in the decoder programmer