DTS SPECIAL YAMORC YD7001 COMMAND STATION

MultibusDR5000Reloaded —User Guide (NL)

Introduction

Thank you for purchasing the DTS SPECIAL YAMORC YD7001 COMMAND STATION, or YD7001. The YD7001 is the result of a DR5000 motherboard equipped with a YaMoRC YD9401 upgrade and associated firmware 8.1.x, an upgrade option that you are offered by YaMoRC.

We have chosen to market the YD7001 as a product to enable our customers to use the advanced technology of YaMoRC. We bought a number of new DR5000 and converted it into full-function YaMoRC power stations with the YD9401 upgrade. This allows us to help our customers step up their digital adventure.

Even if you are upgrading your own DR5000, this manual is useful to you. There are no differences between the YD9401 upgrade and the DTS Special YD7001.

We hope that with this simple manual, which does not cover all "expert" settings too much, we can help you to use this multifunctional digital power station!

For support and support you can always visit our helpdesk, or in the user group of YaMoRC!
DTS Helpdesk: https://domburgtrainsupport.nl/helpdesk
User group YaMoRC: www.modelspoorforum.nl

Kind regards,
Domburg Train Support

Disclaimer DTS SPECIAL YD7001:

DTS will pay for the full warranty and support of the YD7001, distributed by DTS on the market. Defects and warranty claims cannot be recovered from both DigiKeijs and YaMoRC. By applying the YD9401 upgrade, the DR5000 becomes a full-featured YaMoRC panel.

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Chapter 1

The small print

1.1 Guarantee terms and conditions

YaMoRC and DTS products are backed by a 24-month factory warranty. Please read this user manual carefully. Damage to the pro product caused by failure to comply with this manual will void the warranty.

Important points from the small print at a glance

☐ The warranty will be void if the YD7001 Enclosure or Power Supply is opened unless indicated by a DTS or YaMoRC representative.

☐ The YD7001 must always be switched off when working on the track by disconnecting the power supply.

☐ Never connect an external power supply or other digital system to the YD7001 Track Out or Progr.Track. This will damage the internal electronics and void the warranty even if it is accidentally damaged.

☐ Never use a booster that works according **to the common ground** principle in combination with the YD7001.

☐ For the YD7001, only use electrically insulated boosters and LocoNet® accessories to prevent damage to the YD7001 or peripherals.

☐ Due to the H-bridge (which makes the digital voltage) in the YD7001, DTS88n-GND feedback modules should not be used in conjunction with the rail ground. This inevitably leads to the destruction of the YD7001.

☐ The same applies to all other detectors from other manufacturers that switch through common ground.

☐ If a 3-rail user still wants to drive and report back with the YD7001, the DTS88n-CS must be used in conjunction with 2k2 resistors on the off-passes of the busy signal module. This is also possible with the YD6016LN-CS and YD6016ES-CS modules.

☐ Defects caused by incorrect wiring installation (installation technique) are not covered by the warranty.

☐ The use of another DC power source for the YD7001 is permitted if the voltage is between 14 VDC and 19 VDC maximum and is CE marked.

☐ Use the YD7001 in a dry and dust-free environment, moisture can cause damage and malfunction.

1.2 Additional legal information

Printing errors and errors, technical or other modifications and changes to the availability of individual products are expressly reserved. Data and illustrations are not binding. All changes to hardware, firmware and software are reserved.

We reserve the right to change the design of the product, software and/or firmware without notice.

1.3 Additional important Information

On the conditions, we believe that a number of important explanations are needed. These are versions of the warranty terms and conditions where damage and defects to the YD7001 or peripherals can occur if not observed. In these cases, you are not entitled to a warranty and we will charge you for repairs if possible.

1)   Never use a voltage above **19VDCto** power the YD7001

2)   The YD7001 is **NIETsuitable** for detection with a GND module, of which the module will fail**

3)   Perform installation technical work on the model track such as soldering and wiring NOOITwith power on.

4)   The use of a USB isolator is recommended (see later in this manual)

5)   The YD7001 has been tested by us with feedback modules from DTS and YaMoRC, use of other brands are for our own initiative

** If you wish to apply mass protection to the YD7001, use a CS or AN OPTO module. AN OPTO is nothing but a CS module equipped with 2k2 Ohm resistors on each output. In this way, you can simulate a current detection via the wheels of the train, and apply mass detection. This method is almost the same as applying reed contacts or light locks. See your busy signal module manual!

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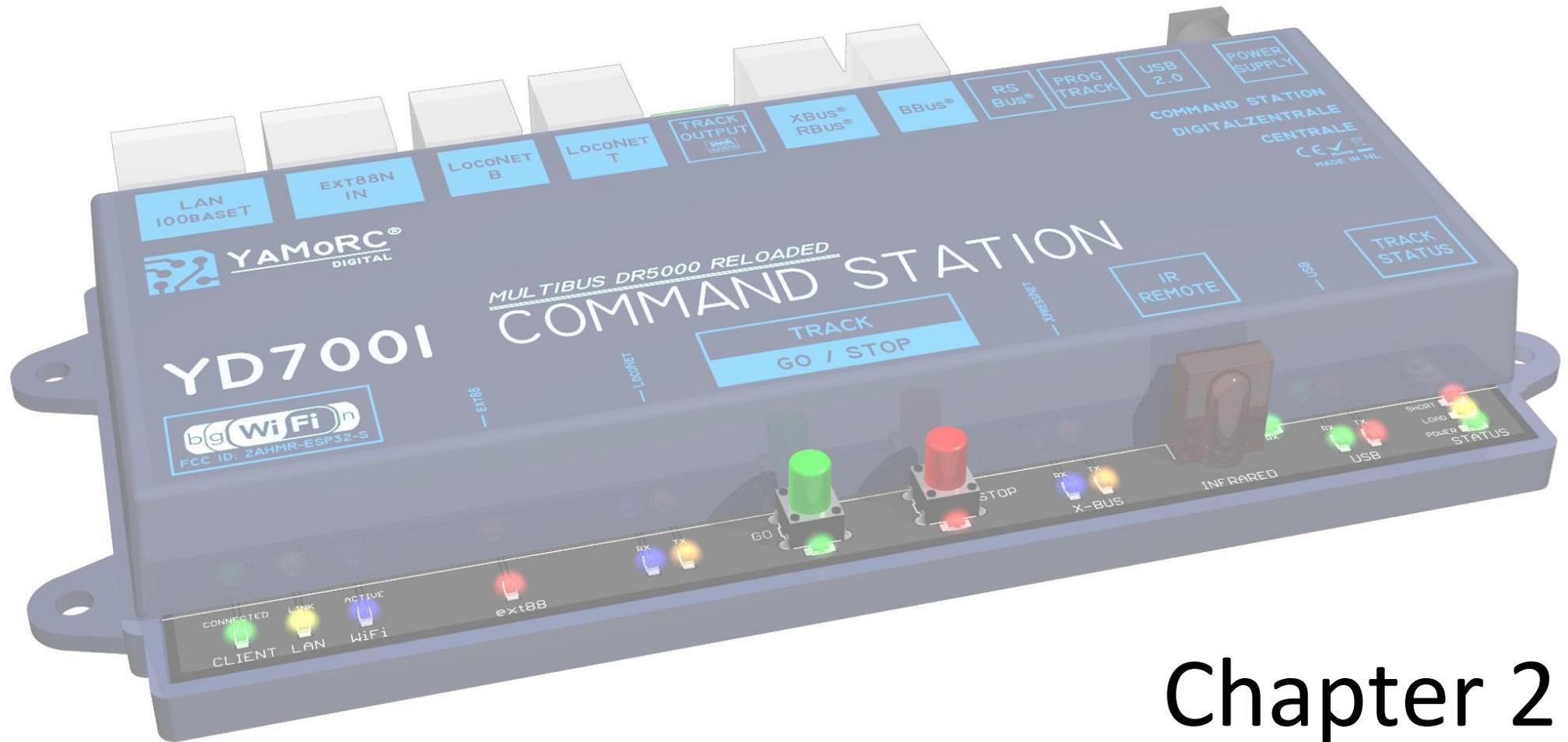
Chapter 2

The hardware YD7001 explained

2.1 Product information

☐ H-Bridge central with the DCC Protocol

☐ Maximum 3A Rail Voltage

☐ 12/28/128 snelheidsstappen

☐ 117 locomotives driving at the same time

☐ 9999 decoder addresses supported

☐ 2048 accessory addresses supported

☐ DCCExt support up to 255 DCC aspects

☐ 128 Locomotive features supported

☐ Aanwezige protocollen: LocoNet B & T, XpressNet, R-Bus, B-Bus, RS-Bus S88n

☐ XpressNet 4.0 supported

☐ Programming output

☐ RailCom

☐ RailCom POM support

☐ Multiprotocol USB interface

☐ Multiprotocol LAN interface

☐ WiFi built in

☐ Ondersteunde besturingsprotocollen: Lenz, Z21, LocoNet, LB Server, Dr. Command, Binary, Xpressnet, JMRI WiFi Throttle

☐ Infrared receiver for Uhlenbrock and Piko.

☐ ES-LINK support on EXT88n input.

☐ Software programming possible over network or USB

☐ Built-in web server with mDNS recognition.

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2.2 Explanation of the central unit

Program output

USB

Reading/writing resume   communication

LAN connection	S88n / ES-Link	LocoNet B	LocoNet T	Rail Voltage	XpressNet	BBus	RS Bus
wired network	Bezetmelder	Boosters	Brew report	DCC	R-Bus	Booster	Busy
	Programming				Multimaus		report
					Lenz		

Power Supply
Power adapter

WiFi activity   S88 Activity   LocoNet activity   Xpressnet activity   USB activity   Track status

Rail voltage ON   **Rail voltage OFF**   Infrared sensor

2.4 Railspanning

Rail voltage (volts)

The YD7001 **does not come with** a power supply as standard. We recommend the use of stable DC power supplies with a valid CE mark. From DTS we recommend using Meanwell GST desktop power supplies or SGA connector power supplies if desired. When selecting the power supply, make sure that **the power supply is supplied to the control panel up to 19VDC**. The use of another DC power supply is possible if it **has a minimum span of 14 VDC and a maximum voltage of 19 VDC**.

PLEASE NOTE that the use of power supplies without a valid CE certificate will void the warranty!

For scale Z, we recommend using a voltage of 13VDC (range 12-15VDC)
For scale N, it is recommended to use a voltage of 15VDC (range 15-18VDC)
For scale H0, we recommend using a voltage of 18VDC (range 15-18VDC)
The Rail Voltage cannot be set in the hardware of the control panel or in the software.

Maximum output current
The maximum power of the YD7001 is 3 amps.
The maximum output current can be set via the configuration software.
Click the "Track Output" menu in the software (chapter 4) to set the maximum track flow (see figure).

Track Status
Short = short circuit detected
Load = overload of the booster
Power = Power is OK
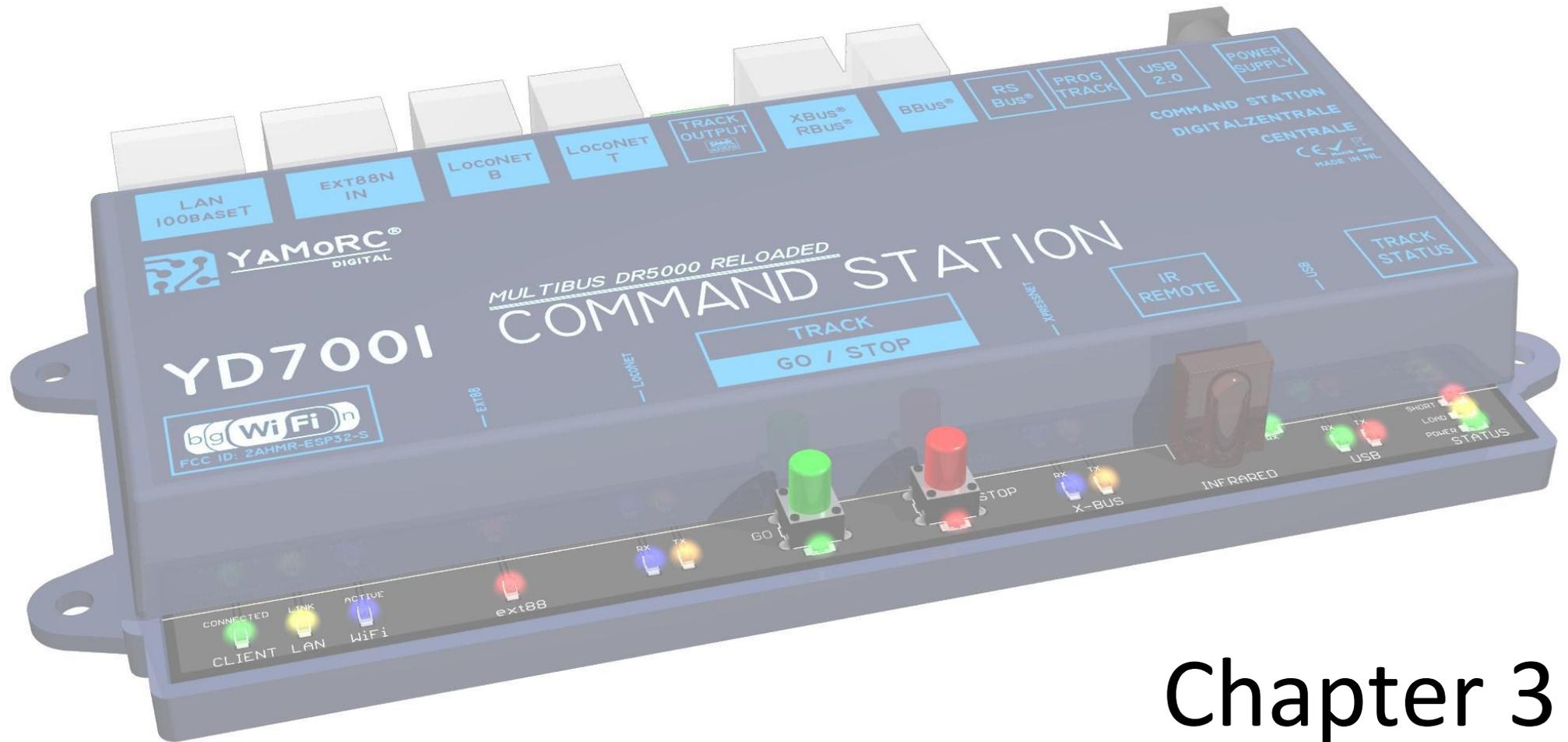
Chapter 3

Use of LAN and WiFi

3.1 Use of LAN and WiFi capabilities

Unlike the DR5000 software, the YD7001 has become more user-friendly many times. For us it is therefore not useful to bore you with technical ICT writing about the operation and setting possibilities of the YD9401 module. And we prefer not to do this, if one is at home in the ICT, further explanation from our side is not necessary. If you are not able to use ICT technology, we advise you not to change the institutions!

Nevertheless, the YD7001 is very powerful in the network field. Now it is possible to use multiple protocols side by side! So you no longer have to choose from 1 protocol, but you can use it all at the same time. And this offers more possibilities than before with the DR5000. In the next chapter we will explain this in a little more detail at a low level. You can adjust the LAN settings using the configuration software (the YD7001 will automatically recognize the IP address). This requires the YD7001 to be connected to the home network.

If the YD7001 does not recognize its IP address, it must be searched for in the network router and then entered below. If you do not have sufficient knowledge of network technology, the
default settings will not be changed. **Incorrect changes can cause the internal network module to fail.**

Z21®/WLANMAUS®

Select this option if you want to operate with the Z21® App or with the Roco® WLANMAUS®.

LocoNet® Binary

Select to connect external applications (such as iTrain/Rocrail) via

LocoNet® TCP / IP

LocoNet® about LBServer

Select to connect external applications (such as JMRI) over LocoNet® TCP/IP

WIThrottle

Select this option to use the WIThrottyle app from JMRI

XpressNet® LAN

Select to connect external applications via XpressNet® LAN.

YD Command

Select this option to connect future YaMoRC applications.

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3.2 Connecting the YD7001 to the network

The YD7001 control panel is equipped with a built-in network module as standard, allowing the control panel to be accessed over a LAN or wireless network. This makes it possible to connect programs such as iTrain with network support over your own internal network without using the USB cable.

Once the panel is connected to your network, your YD7001 will automatically get an IP address from your router. So you don't have to do anything about the settings yourself to work over your network. The default settings are sufficient to use all the possibilities. So do not change the settings unless you know what you are doing, or when you are asked by a specialist.

Typically, the YD7001 Network Module takes a 20-30 second to boot. The LED's below the WiFi symbol tell you the status:

Network module Status

Client = Clients are active

LAN = LAN is actief

WiFi = WiFi is actief
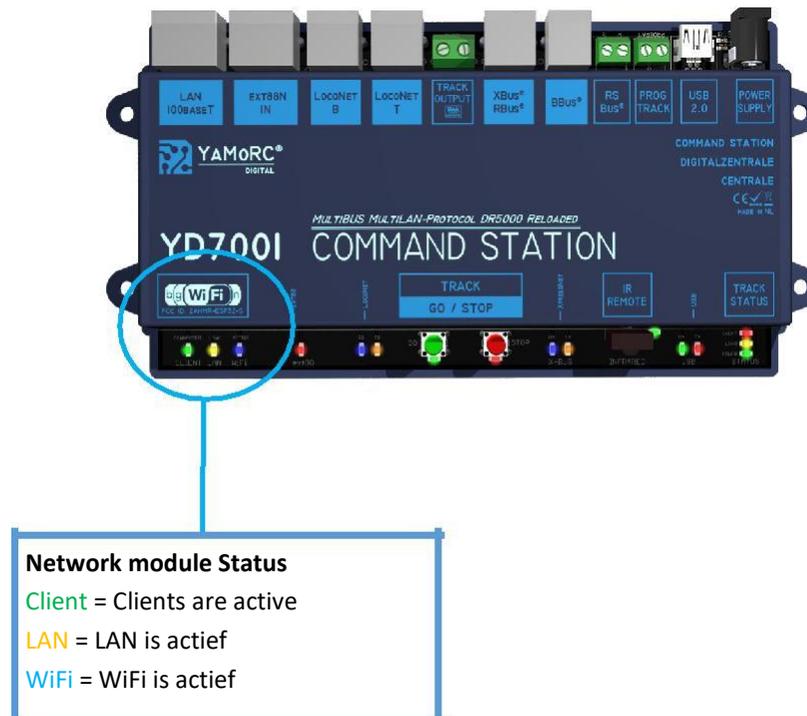
3.3 Connect the YD7001 to your computer

You can connect your YD7001 to your computer in 3 ways to control your model track with software.

USB connection

To date, the most common and easy way to connect the YD7001 to your computer. By using the USB cable, the YD7001 will have three serial ports (COM port), of which you must use the LocoNet for controlling via model track control software. Refer to your software manual for how to log in to a LocoNet panel. In most cases, the interface called "Intellibox USB" will be used.

USB Kent so its pros and cons. Some prefer to use the LAN connection because it would be more stable. Our experience is that it is very different for each compu-ter.

LAN control

By connecting the YD7001 to your network via LAN, you can control the YD7001 over your network. This has benefits like no USB cable, more stable plug connection.

There are two ways to set up the LAN in the software:

1) **Intellibox TCP/IP interface *??? ITrain has YaMoRC onboard :)***

2) Roco Z21

In both cases, you must enter the IP address of the YD7001 into the software!

WiFi connection

By many as the ideal way, but experts will strongly discourage you from using it. The disadvantage of driving over WiFi is the unreliability of the signal. As soon as the signal is broken by an external factor, there is also no control and control between central and software. We also do not recommend using WiFi to control via software. Wi-Fi is ideal for use with Apps and hand controllers.

3.4 the choice between USB and network control when using the software

To use one of the options, we need to indicate in the YD7001 software whether we want to connect via USB or network. The default setting is USB, but then we cannot access the configuration software over the network.

To set this up, we connect the YD7001 to the computer with the USB cable and open the YD7100 software. If there is a connection, an IP address and serial number will appear on the software near the WiFi module. (1)

Then click Track

Then the following pop-up appears and we can choose between USB, Network and Demo (2). After you have made a selection, click the green check box (3) to make the settings final
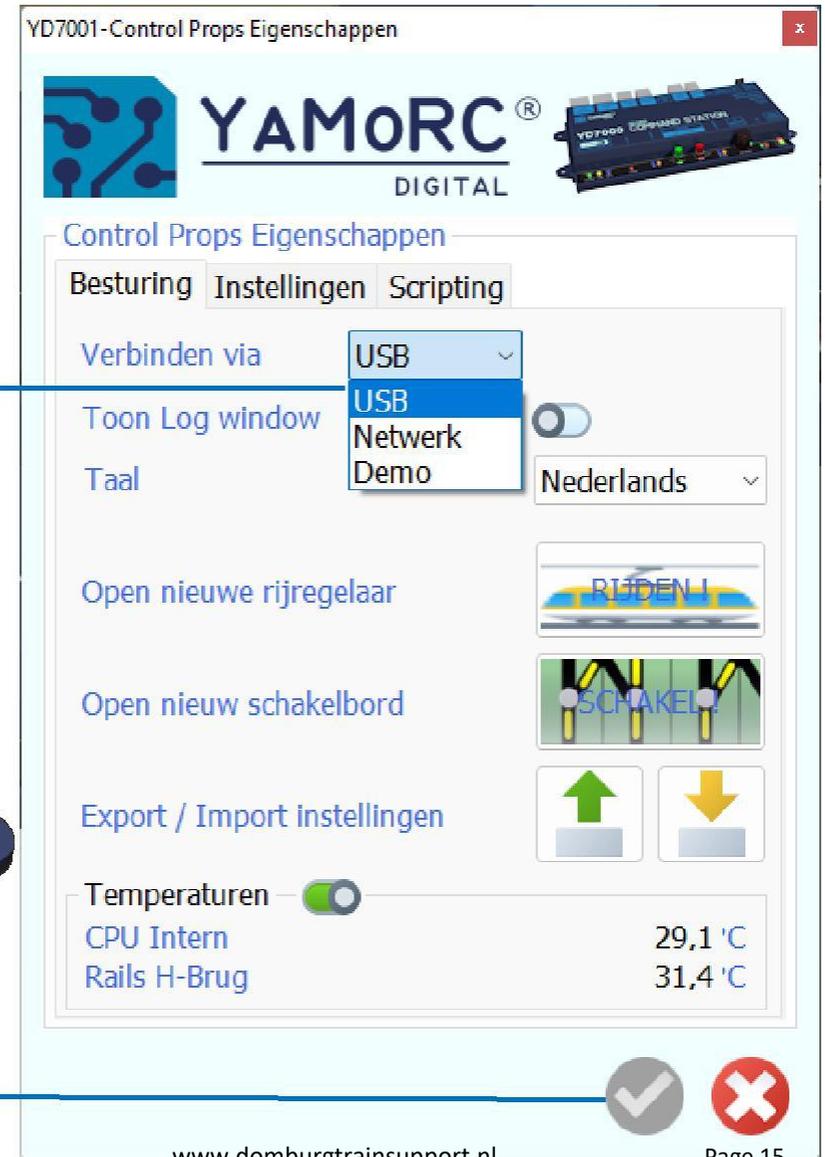
3.5 the choice between USB and network control when using iTrain

When using iTrain, you have the choice to control the YD7001 in 3 ways.

The preference is LAN control. This gives you more stability than using the USB. However, not everyone has a LAN connection or a network near the model track. For these cases, we recommend using the USB. In all cases avoid driving the model lane over WiFi, this is far from stable to control a mo-delbahn. If the WiFi is lost, there will be no control, with all the consequences.

When operating over LAN, it is preferable to use the interface "LocoNet TCP/IP". But you can also use the "Roco Z21" in-Interface. The IP address you need to enter in iTrain can be found under the LAN button of the

YD7001 config. On the image at the bottom right with the blue IP box.

When driving over USB, make sure that the USB cable is up to 1 meters long. In iTrain, select the "DR5000" interface, then select the "**Loconet USB**" interface. Then enter the COM port that you see in the upper right image in the blue USB box.
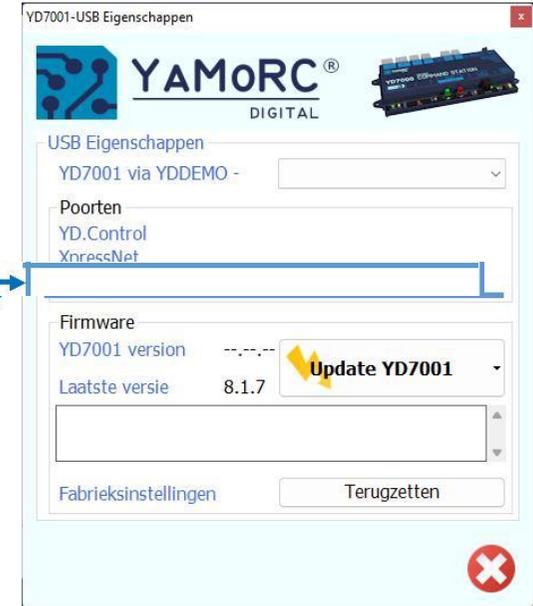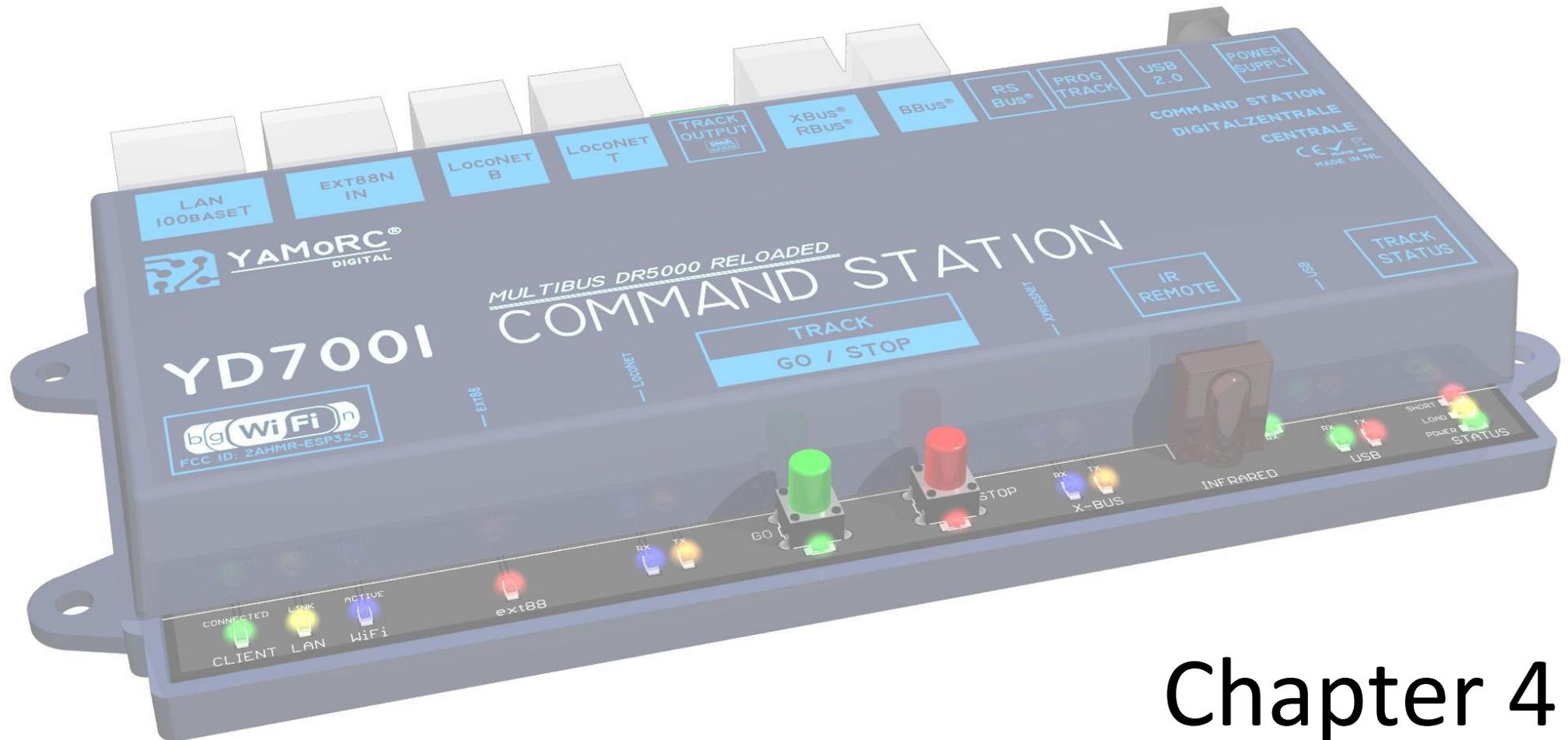
Chapter 4

Installation of the software

4.1 different ways to configure your YD7001

The YD7001 can be set up in several ways.

Software configuration

If you have a Windows computer, or a Windows emulation, you can use the YD7001 configuration software. This way of setting up is still our preferred option, because for the time being not all the features of the software will be available on the web server.

Web server

By connecting to your computer with the WiFi module YD9401, you can contact the web server using your Internet browser. This is especially useful if you do not have Windows at your disposal.

In the next chapters we will discuss how to use them!

4.2 Installation of the software

Do not connect the YD7001 to the PC yet! Install the software you want to use first.

The software can be downloaded from the YaMoRC website.

http://yamorc.de/products/?singleproduct=1254

After you have successfully downloaded the software, it is important to first extract the downloaded file and save it to your hard drive.

Then start the installation with a double click on "setup" or "setup.exe".

Make sure that you always have administrator rights on your PC.

Important!
Do not connect the YD7001 to the PC via USB until the software and driver have been successfully installed.
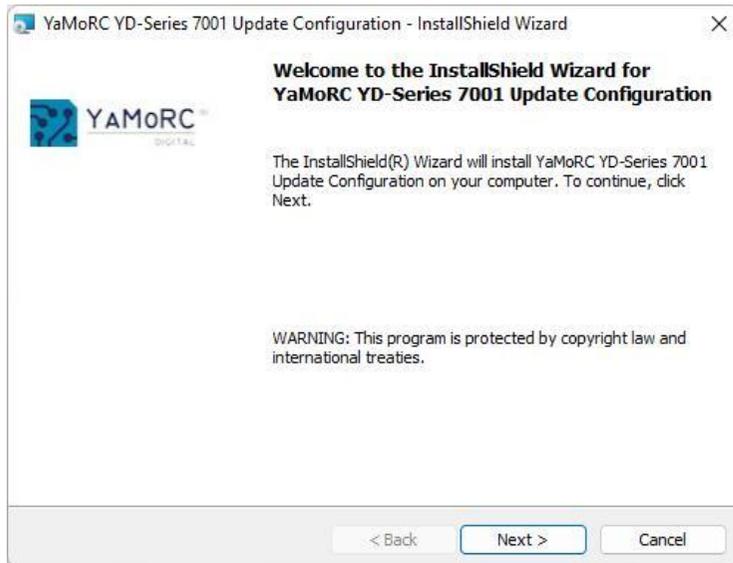
After a few seconds, this screen appears. Click "Next".
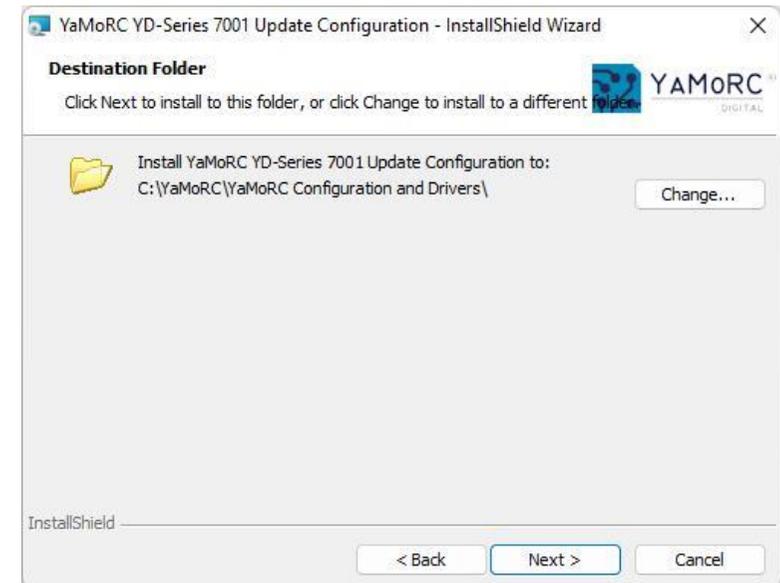
If you want to change the location of the software, you can change it on the Next screen. To change the location, click "Change...". If you do not want to change the location, leave the settings unchanged and click "Next".

Below is an overview of the settings. Click "Install" if you agree.
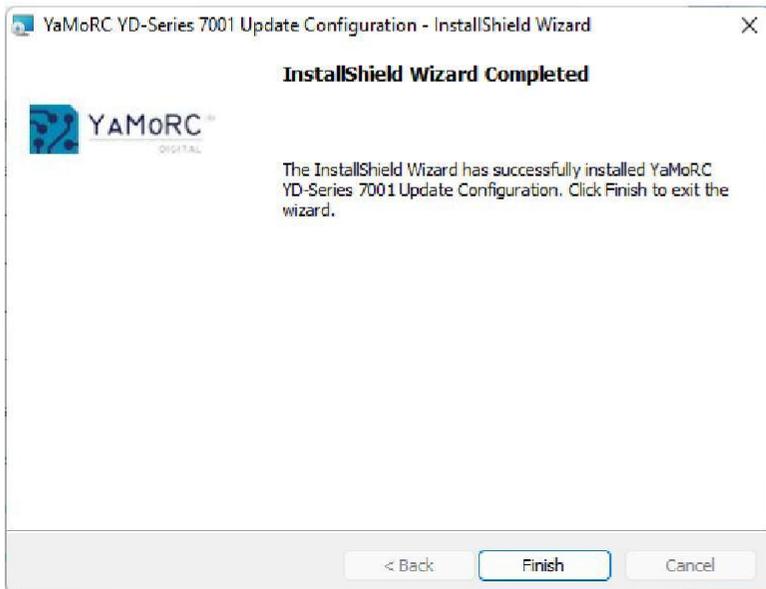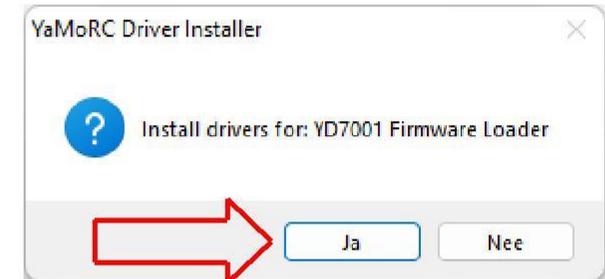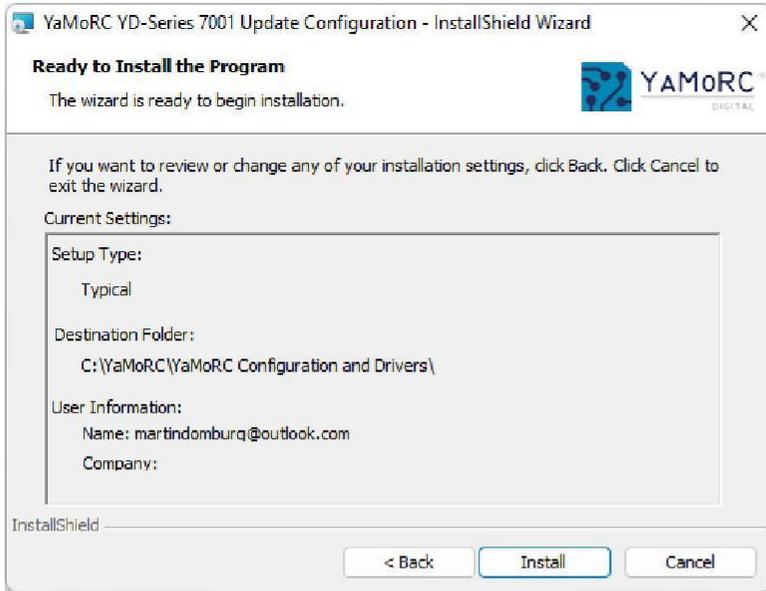
The configuration software is now installed. Windows will ask you a few times if you want to install the YaMoRC drivers. Click here above all on "YES"

Once this is done, the last screen will appear. Click "Finish" and the drivers and configuration program have been successfully installed.

4.3 starting up the software

1. Connect your power supply to the DR5000, the power LED should be green.

2. Connect your DR5000's the computer with the USB cable, the USB LEDs light up

3. On your desktop, click the YD7001 Configuration icon.

4. The DR5000 software will now appear on your desktop.

5. If the power supply and USB are OK, the software will display an activation screen for the first time

6. Click on the activation screen and enter the activation code provided by us or YaMoRc.
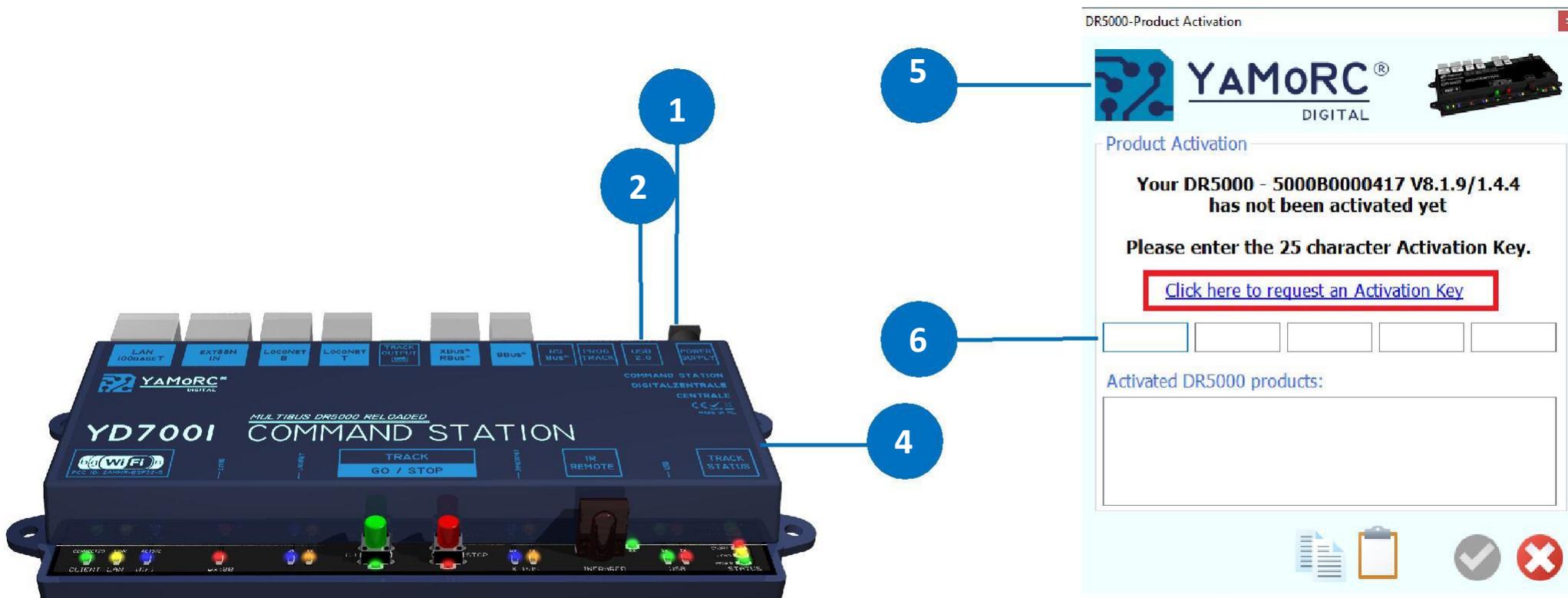
4.4 Software overview

The various options are easily accessible by clicking on the elements
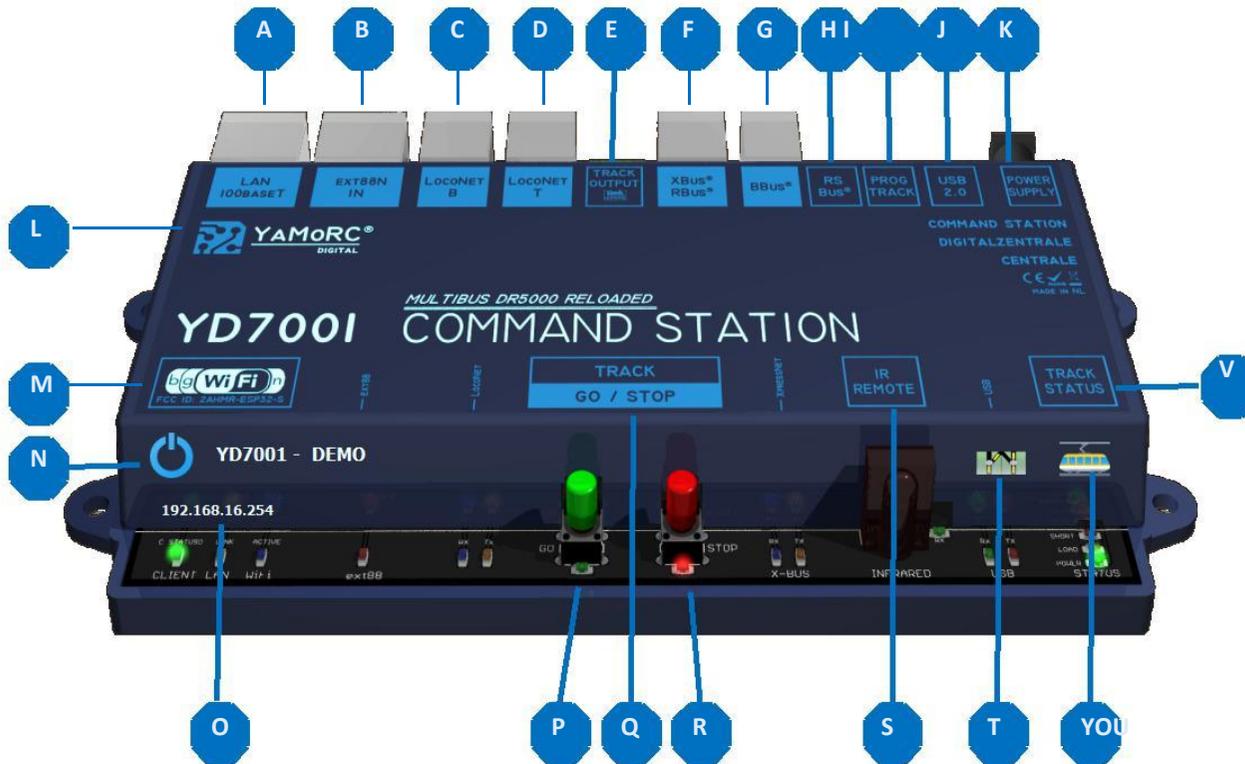
A	LAN network module settings
B	S88 SETTINGS/ ES-LINK
C	LocoNet B settings
D	LocoNet T settings
E	Settings for the DCC signal
F	XpressNet settings
G	B-Bus settings
H	RS Bus settings
I	Programming function to change CV's
J	USB settings, firmware update capability
K	Power information
L	Go to the YaMoRC website
M	WiFi network module settings
N	Exit software, in addition to the serial number
O	IP address of the YD7001
P	Switch on track voltage
Q	Controls capabilities and settings
R	Switch off track voltage
S	Infrared settings
T	Accessory Switch Panel
YOU	Axle driving controller
V	Booster status such as consumption and temperature

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4.5 Reset to factory settings

It is always possible to reset your YD7001 to factory settings. We recommend that you always back up your settings in advance (see page 26). You can always perform a restore if restoring the factory settings does not produce the desired result.

To reset your YD7001 to factory settings, in the software, open the USB 2.0 (see page 23, option J). At the bottom of the pop-up that appears when you click on the USB, you will find the option to reset your YD7001.

Note: the YD9401 Network Module WILL NOT reset to factory defaults, this can be done from the WiFi Network Module Menu (page 42)
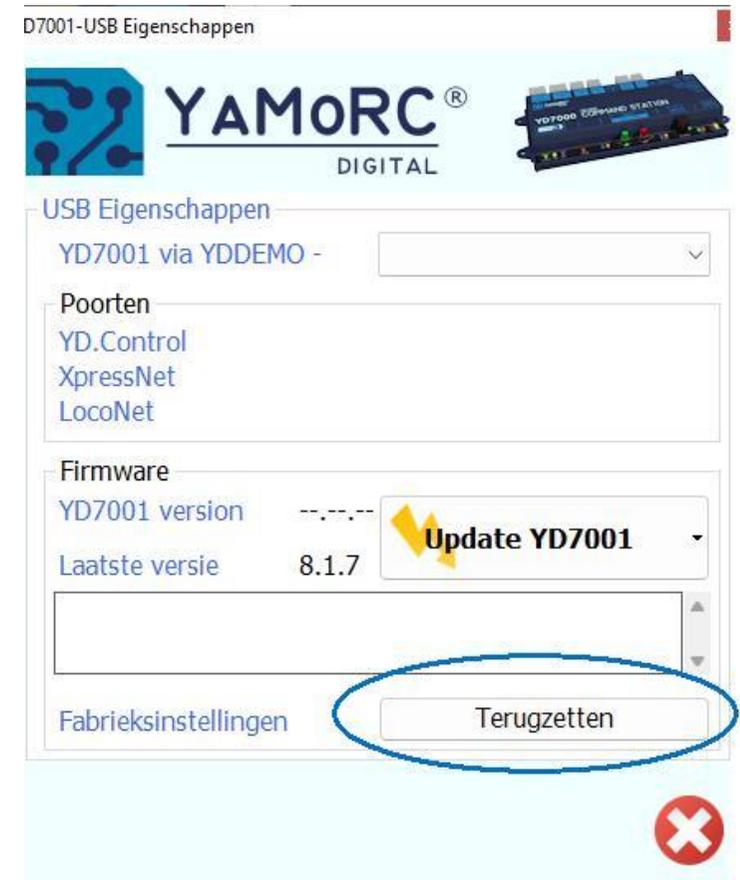
4.6 updating YD7001 firmware

The development of the YD7001 software and firmware is always going on. Firmware updates allow you to equip the control panel with the latest software. The new firmware is integrated into the new configuration software. You must install the latest version of the configuration software before the latest firmware update is available. Downloading and installing the software is explained in Chapter 4.2

Follow the steps below to update the firmware in the YD7001:

1. Disconnect the YD7001 from the PC.
2. Download the new software from the YaMoRC website.
3. Install the newly downloaded software.
4. Connect the power supply to the YD7001.
5. Connect the YD7001 to the PC with the USB cable.
6. Open the configuration software.
7. Go to the USB2.0 menu.
8. Use the "UPDATE YD7001" button to activate the firmware update.

It is recommended to export the settings before updating. This way you always have the possibility to return to a previous in-direction. For instructions, see page 26.

IMPORTANT: Do not disconnect the YD7001 from the PC or power supply when updating the firmware! This may render the YD7001 unusable. If this happens, contact your dealer first for advice!
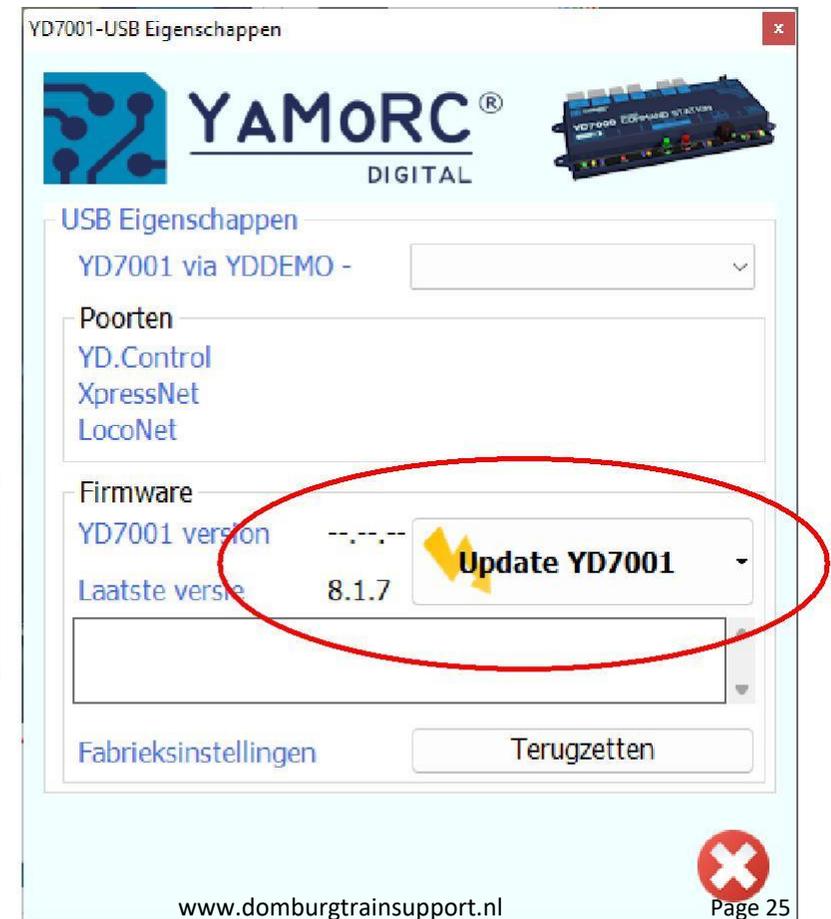
4.7 Export and import settings

Before making any major changes to your YD7001, such as firmware update, or restoring settings, we recommend that you export your YD7001 settings first. If desired, you can restore previously created settings by importing them. For this, YaMoRC has a handy

Tool built-in which you can find by opening the control panel in the software (page 23, option Q)

Follow the steps below to export the settings :

1. Connect the power supply to the YD7001.
2. Connect the YD7001 to the PC with the USB cable.
3. Open the configuration software.
4. Go to the Track menu.
5. Use the 1 button to export the settings.
6. Select a folder and name the file.
7. Click Save.

Follow the steps below to infuse the settings :

1. Connect the power supply to the YD7001.
2. Connect the YD7001 to the PC with the USB cable.
3. Open the configuration software.
4. Go to the Track menu.
5. Use the 2 button to import the settings.
6. Select the file from your explorer that you want to import.
7. Click Open.

The files that are saved and loaded are of the XML file type.
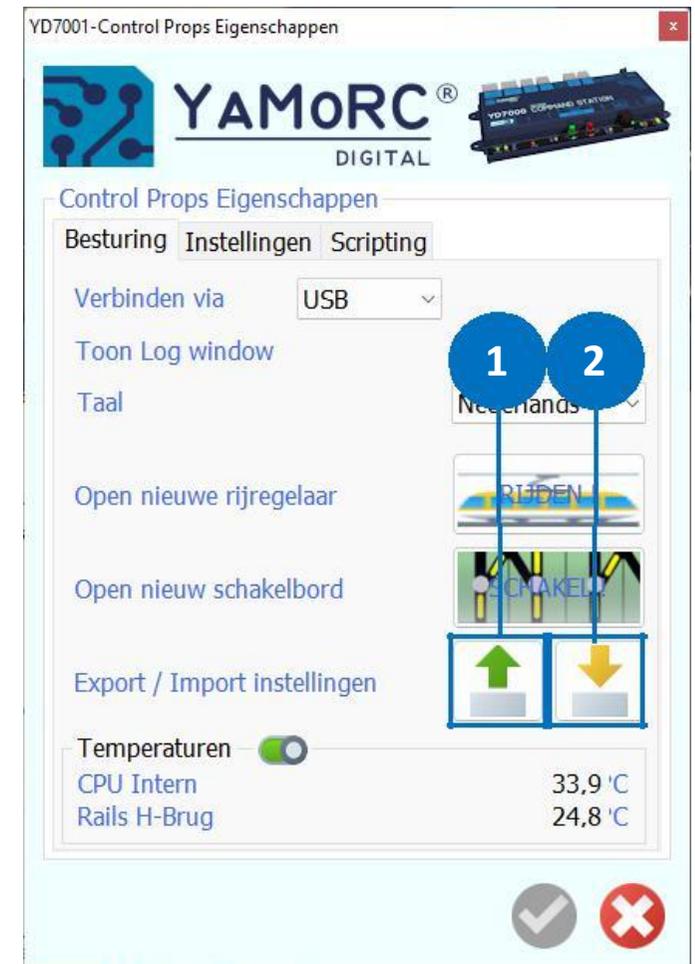
4.8 Webserver

The YD7001 is the first module in the YaMoRC product line to offer a web server, thanks to the YD9401. The YD7001, or the associated modules, can be configured via the web server. The big advantage of this is that you can also use Linux, MacOS, or Android to steal the modules.

Note: You can only set up modules via ES-LINK from firmware version 8.2.3, more information about ES-LINK can be found later in this manual

Using the web server is very simple:

1) Connect to the YD7001 by choosing the correct WiFi network. By default, the connection is called YD7100-(serial number)

2) Enter the WiFi password, default is 12345678

3) After the connection is established, you may be notified that there is no Internet. This is correct, please click on "always allow"

4) Open your Internet browser and type in the address bar: http://YD7001.local and click enter

The browser will now search the network for a device named (mDNS) YD7001 and will load the web server if successful.

Loading may take a little longer in the beginning, your browser's memory needs to be loaded for a while. If it takes you too long, do not click Refresh, but click Previous and start over. After the web server loads, you'll find the different options you can choose from!

Android usage

Unfortunately, the mDNS name does not work on android, here you will need to enter the IP address in the search bar preceded by HTTP://

The default IP address is **http://192.168.16.254**

If it does not work, there is a spare IP address http://192.168.4.1

You can then view or change the IP address of your network in the web server at "YD9401".
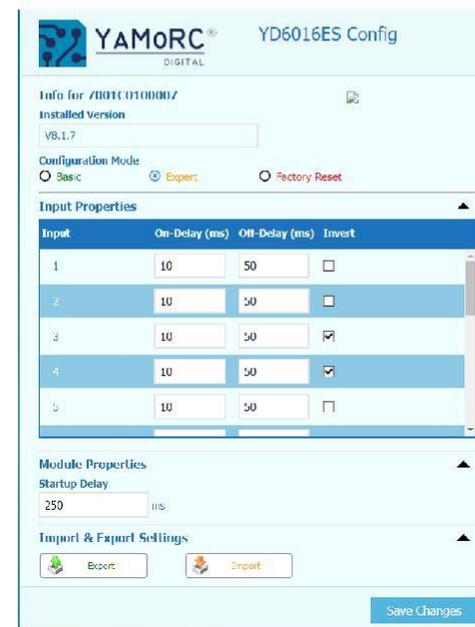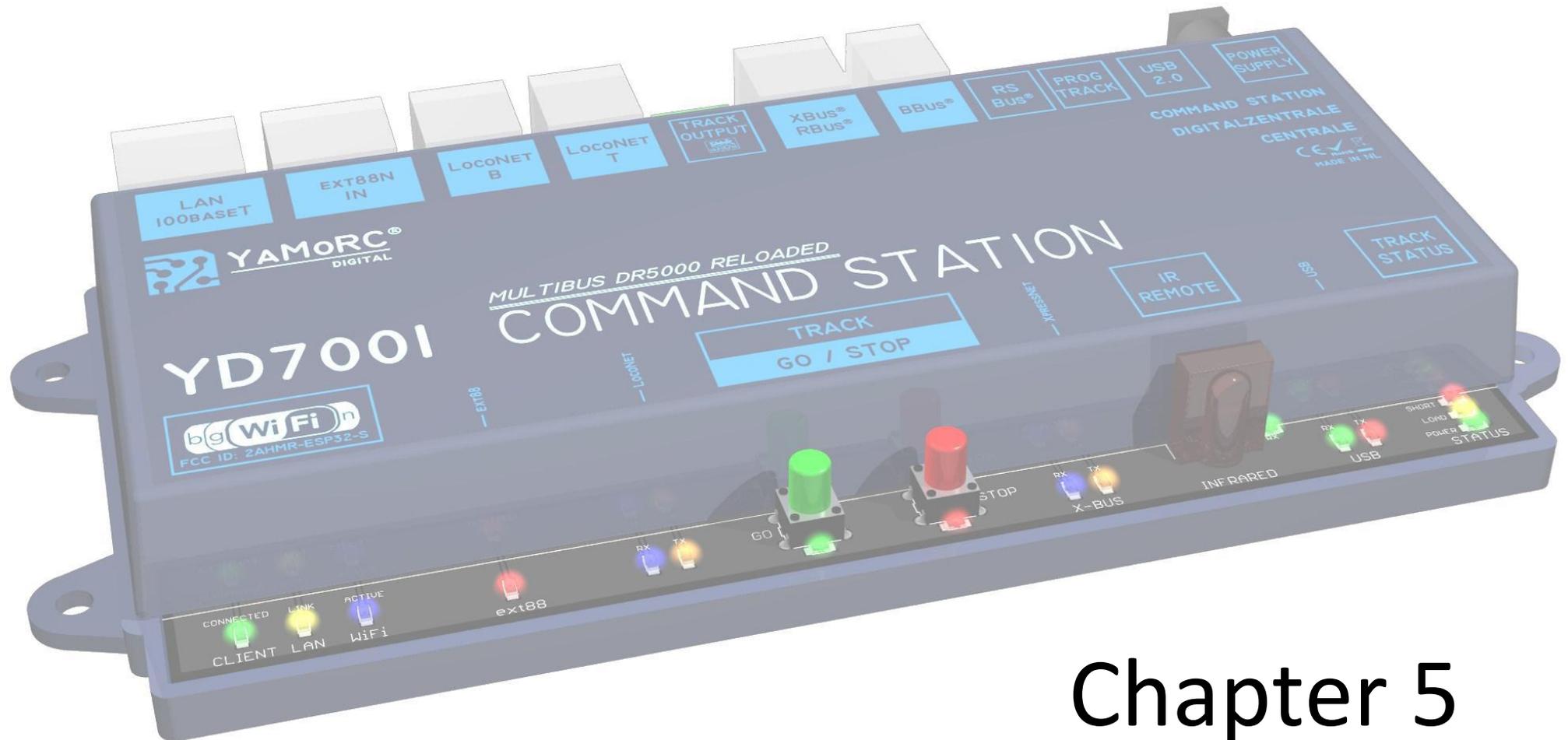
Chapter 5

Smart settings

5.1 What do we want to set up?

The YD7001 can do a lot, it is a multibus central with the possibility to serve as many beginners as experts at their fingertips. Of course it'n beautiful that such a central station can do so much, but do you need everything?

We also wondered when we started this chapter, so we are going to try to define the institutions as best we can for you. Starting from the assumption that we will cover the most important set-up possibilities in detail.

The first is a second image as it is shown on page 23
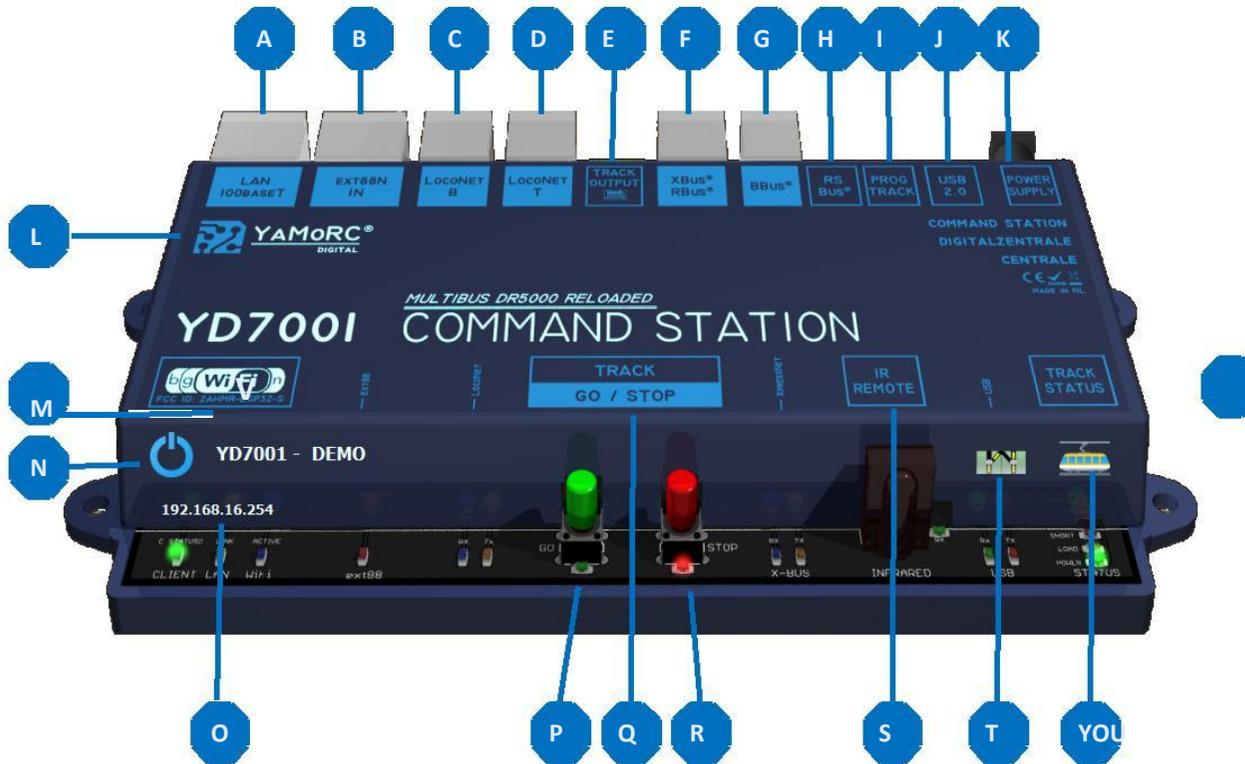
A	LAN settings
B	S88 SETTINGS/ ES-LINK
C	LocoNet B settings
D	LocoNet T settings
E	Settings for the DCC signal
F	XpressNet settings
G	B-Bus settings
H	RS Bus settings
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T	Accessory Switch Panel
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V	Booster status such as consumption and temperature

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5.2 LAN Settings

When we look at number a we see the LAN settings. When we click on the LAN we will see a pop-up with a few tabs:

Basic

Here you can set which protocols you want to turn on or off, as well as whether you want to use a static IP address or a dynamic IP address. The default settings are shown in the lower left corner.

Advanced

This allows you to see the network settings such as IP address, DNS server and third-country matches.

<u>Do not change these settings unless you really know what you are doing, or at the direction of a DTS or YaMoRC specialist</u>
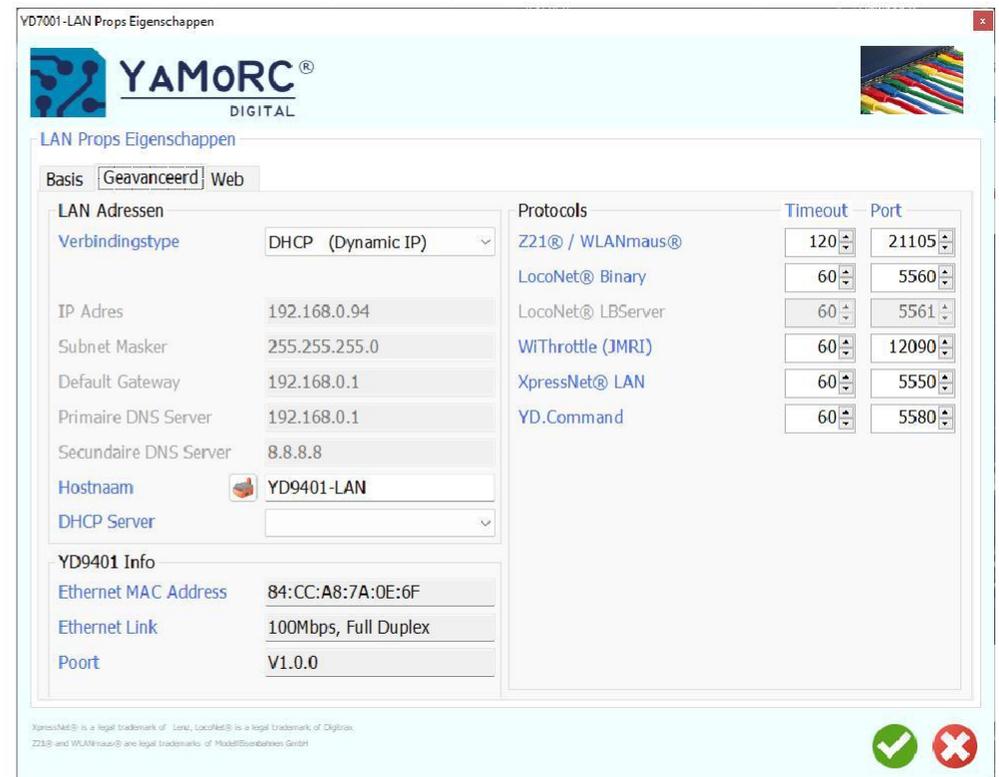
5.3 EXT88N

S88 is probably the simplest form of detection, a matrix of signals, simple and effective. YaMoRC uses the S88 uietraard as he should work traditio-neel. In addition, the S88 connection from firmware 8.2.3 can also be used as an ES-LINK (See page 53).

In addition to the options such as the S88-Bus monitor, to check the detectors, you will most likely use the "Settings" tab. Sets how much mo-module you have connected to the bus. This is very important because the S88 is unable to communicate this number to the panel, as with LocoNet and Xpress-Net. This is completed in option **1 and 2**. Fill in only how many modules you have with 16 inputs (1) and how many modules you have with 8 inputs (2). The soft-ware will automatically calculate the number of contacts.

In addition, option 3 allows you to choose whether the YD7001 will read all detectors every time. You do not need to check this unless you need it. In general, the software (iTrain, etc.) does this automatically when connecting.
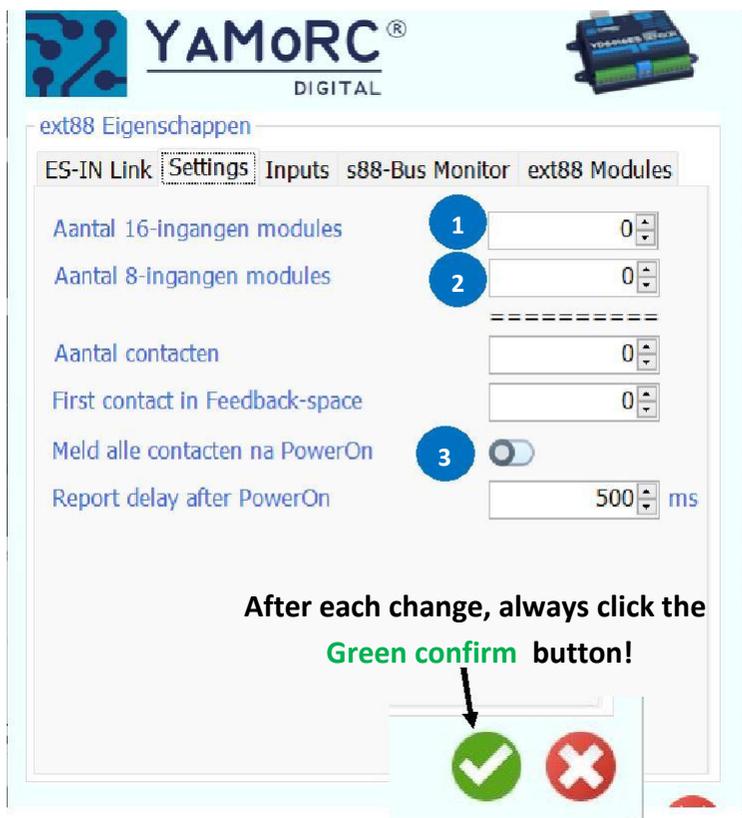
ES-LINK

YaMoRC uses Extended S88 to communicate with other modules such as the YD8008, YD8116 and other YaMoRC modules. See section 7.10.
On the YD7001 this feature works from firmware 8.2.3!

Settings

Adjust the settings of your S88 bus here.

Inputs

Determine whether you want to use inputs to activate an action with a switch. See section 7.1.1

S88-Bus Monitor

A feedback monitor to check the feedbacks

Ext88 Modules

This option is no longer available from version 8.1.8 of the software.

5.3.1 Use EXT88n to control Accessories

With the YD7001 it is possible to easily switch between magnetic item addresses via feedback modules connected to the EXT88n bus.

For this function, the first 8x16 feedback inputs (up to 128 feedback inputs) are provided on the EXT88n bus. If this function is used, be aware that the feedback modules for connecting buttons or switches
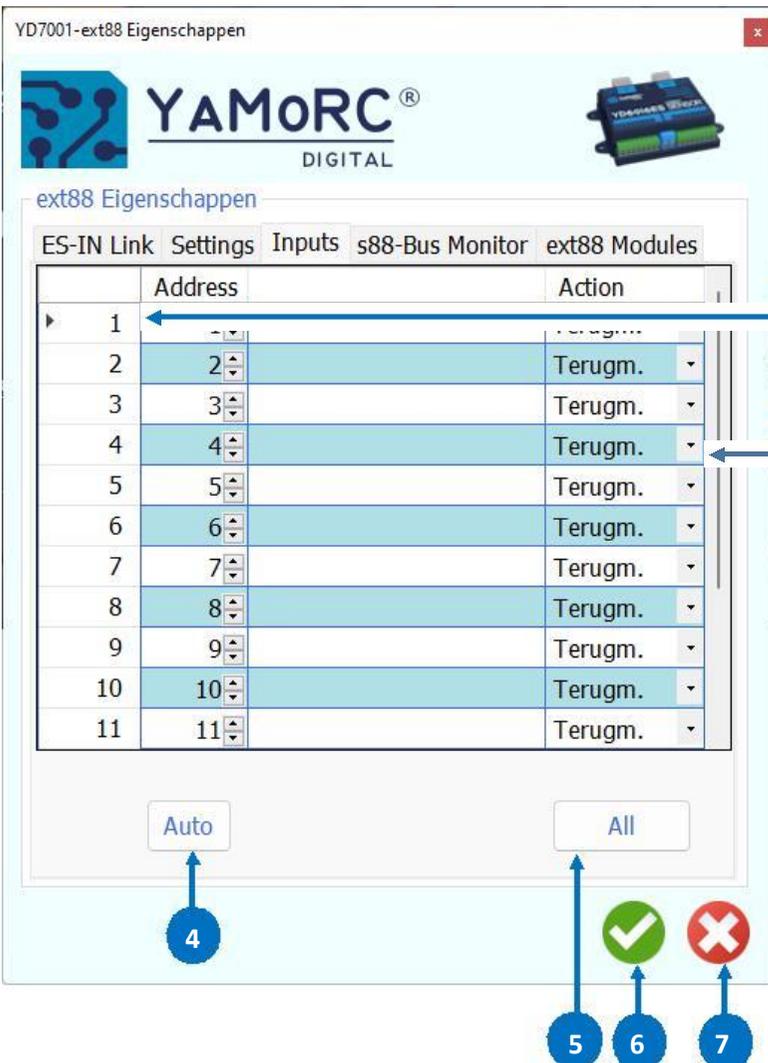
1) The module input

2) The DCC address of the device to be switched.

3) Function selection to use the feedback unit. **Terugm.**
   The input is used as a feedback detector.

   Switch |/ the action will take a device at "on" straight ahead and "off" bending switch **|** the action will put a device in the "straight ahead" position .
   Switch/ the action will place a device in the "deflating" position .

4) Number automatically from the selected line, all addresses.

5) Set all Actions to the same as last selected.

6) Confirm your selection and write it to the memory.

7) Cancel the operations and exit the screen

With this ES feature, it is possible to create a switchboard and connect to the system in addition to tablet control, hand controllers and software. The great thing about this is that the software will get what change or turn you on your tablet.

To use this feature, you must use YD6016ES-CS module. The switch used to trigger the input provides a 2k2 Ohm resistor to simulate a message. This method of connection is simulating the use of a reed contact or switch as shown in the YD6016ES-CS manual.

5.3.2 S88-Bus Monitor

The feedback monitor is a powerful tool to check whether busy detectors are functioning. This allows you to check whether you have connected the detectors correctly, or which addresses are assigned to a section.

1) The address range of the detector addresses in groups of 8

2) After reading the bus, squares appear here, which are filled at the moment a detection is detected at the address.

3) Addresses assigned to the R-Bus® (Roco Bus) colors yellow.

4) Addresses assigned to RSBus colors purple.

5) Please confirm your changes

6) Cancel your changes

.

5.4 LocoNet® B

The LocoNet B connector will usually be used when you have connected a LocoNet booster to the YD7001. But you can also use it to program LocoNet modules. This's done in the LNCV tab, where you can enter the product part number (1), read or write the module address (2), and then set the CV's (3). With the products of YaMoRC you will not need these options, these LocoNet Modu lessons can be programd via software over USB or the web server.

What is important to know is the feedback monitor, because here you can be wrong! As you can see in the picture below (4) the first two driving are blue in color. The legend (5) tells you what this means. This tells you that addresses 1 to 16 have been reserved by the S88 bus. This is because in this case the S88 settings indicate that there are 16 S88 feedback points. My first LocoNet module should now be programd at address 17. If you see this as well, but do not use the EXT88n connection for S88 detectors, set the number of detectors to the number 0 here. Then you can use the addresses again for LocoNet.

Note: We are not talking about S88 module connected to a LocoNet module as a slave, but which are explicitly connected to the EXT88n socket.

The other tabs "Boosters" and "Settings" are not recommended to make changes unless you know what you are doing, or to designate a co-worker from DTS or YaMoRC.
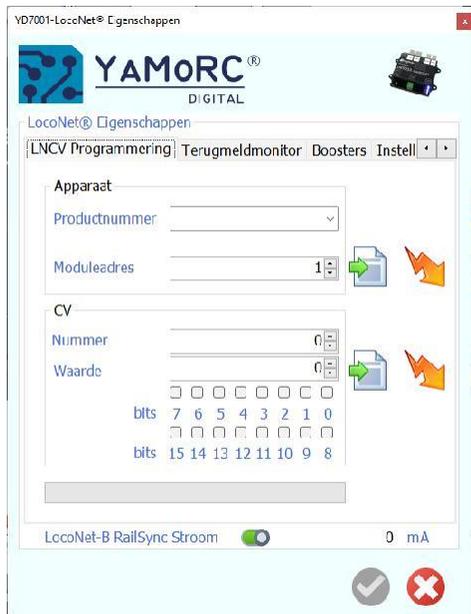
After each change, always click the
Green confirm button!
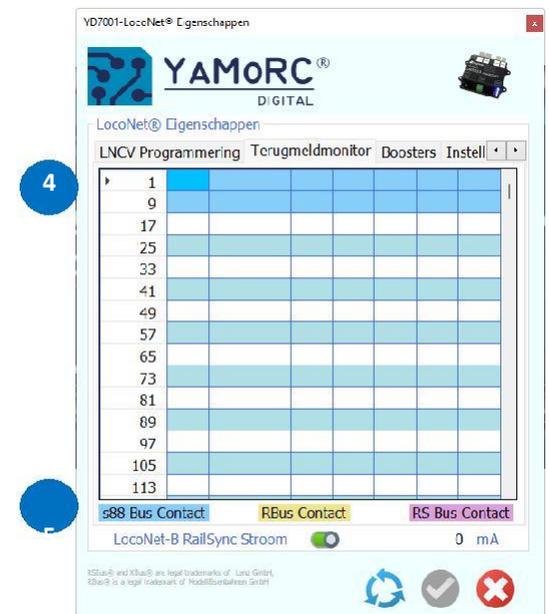
5.5 LocoNet® T

The LocoNet T connection will usually be used when you have connected a LocoNet back detectors to the YD7001. But you can also use it to program LocoNet modules. This's done in the LNCV tab, where you can enter the product part number (1), read or write the module address (2), and then set the CV's (3). With the products of YaMoRC you will not need these options, these LocoNet Modu lessons can be programd via software over USB or the web server.

What is important to know is the feedback monitor, because here you can be wrong! As you can see in the place below (4) the first two driving are blue in color. The legend (5) tells you what this means. This tells you that addresses 1 to 16 have been reserved by the S88 bus. This is because in this case the S88 settings indicate that there are 16 S88 feedback points. My first LocoNet module should now be programd at address 17. If you see this as well, but do not use the EXT88n connection for S88 detectors, set the number of detectors to the number 0 here. Then you can use the addresses again for LocoNet.

Note: We are not talking about S88 module connected to a LocoNet module as a slave, but which are explicitly connected to the EXT88n socket.

The other tabs "Expert" and "Settings" are not recommended to make changes unless you know what you are doing, or to designate a co-worker from DTS or YaMoRC.

After each change, always click the
Green confirm button!
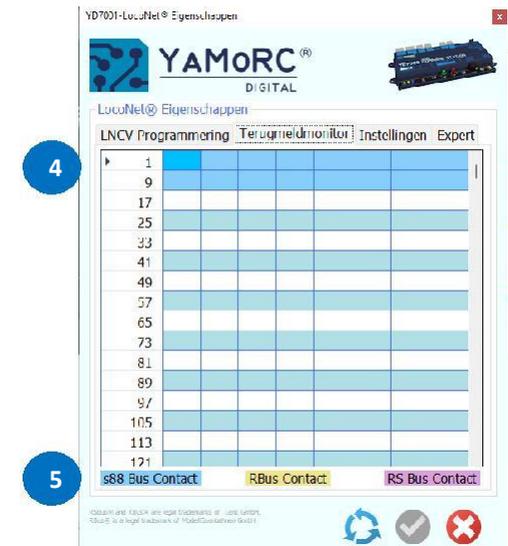
5.6 Main Track settings

The highest short address of the locomotive that can be addressed.

Standard speed levels with which the locomotives be addressed.

Different speed steps per loc
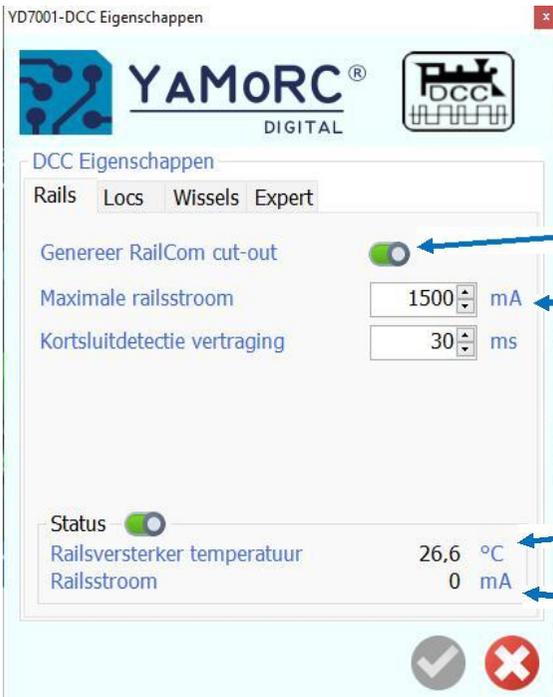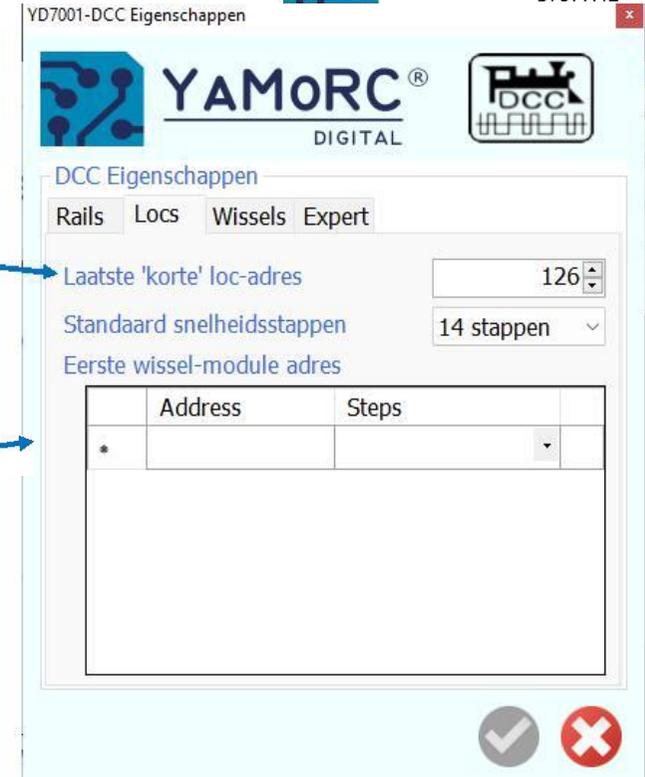
Generate RailCom® breaks

Maximum current supplied by the track output to the rails.

Short circuit delay for switching off the track output.

Internal amplifier temperature.

The current current flow in milliamps supplied by the central unit.

The "changes" tab is a very important one to remember!

Here you will find a very important institution where many are experiencing problems, the RCN-213 setting. The RCN-213 states that all addresses start from 1, where Roco has set default to the first address 5, following Lenz.

Does your accessory switch even though the decoder unit is set at address 1 to a command at address 5? Then set the setting to RCN-213, your accessory will switch back to address 1.

First switch   (magnet part address)to be addressed.

Accessory addresses standards according to RCN 213

Multimaus® (address shift with +4)

Minimum accessory activation time.

Maximum accessory power-on time.
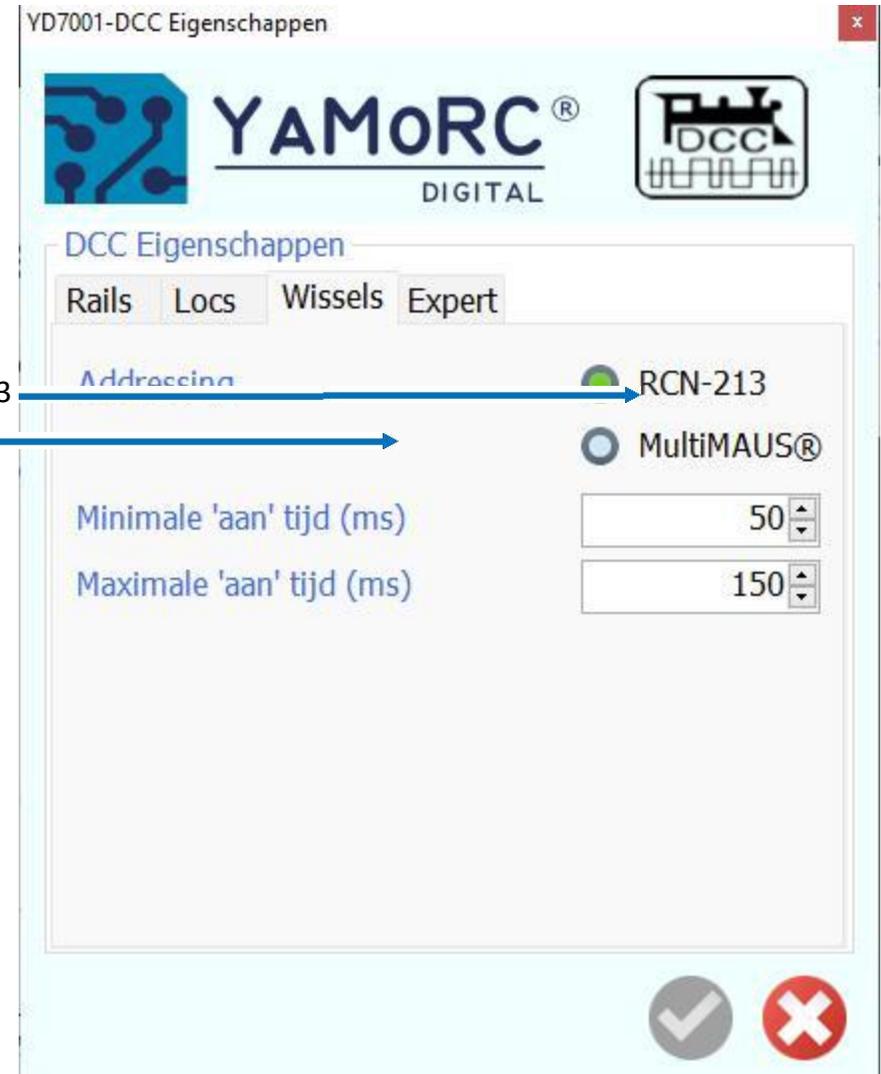
The Expert tab has multiple options. This allows you to customize the RailCom and other steering options to your own taste.

PLEASE NOTE:

We recommend that you only make changes to the advice of DTS or YaMoRC.
Changing these values may affect the operation of your system.

5.7 XBus / R-Bus® & XpressNet® instellingen

Z21®
LZ 100®
LH 200®
Compact®
Z21®
DR5000

When you use a Roco® Multimaus or
A Roco® Lokmaus used, use
Then Z21 4.0 as an institution!

YD7001-XpressNet® / FB-Bus Eigenschappen

XpressNet®
© by Lenz Elektronik GmbH

XpressNet® / FB-Bus Eigenschappen

Instellingen | Monitor RBus | FB-Module Programmeren | Expert

Zet XpressNet® aan of uit

Turn XpressNet® on or off

XpressNet® Centrale/Versie   Z21®   3.6

Choose here for which you want to use the XpressNet®, the default version is 4.0

Wisselcommando's omdraaien

Turn all the shuttle commands's

64

Feedback detector base module

Terugmeldbasismodule

RBus

FB-Bus scannen aan

Activate the detection of the connected R-Bus® feedback modules.

Eerste contact in de Terugmeld-ruimte   16

First feedback contact of the connected R-Bus® module (the complete R-Bus® feedback chain can be placed anywhere in the feedback range of 1-2048).

Meld alle contacten na PowerOn

When the track output is switched on (green button), all inputs are signaled via the different buses.

Wachttijd na PowerOn   700   ms

Wait time after switching on before the contacts are reported.

XpressNet® and XBus® are legal trademarks of Lenz GmbH,
RBus® is a legal trademark of ModellEisenbahnen GmbH

® R-Bus, B-Bus are trademarks which are registered in the name of Modelleisenbahn GmbH. XpressNet and RS-Bus is a trademark registered in the name of Lenz

5.7.1 XBus/R-Bus® XpressNet® programmeren

It is possible to use the YD7001 to speak to and program your Roco or Digikeijs R-Bus® modules as you are used to with the Roco® Z21 cen-trale. Be sure to disconnect everything from the R-Bus® and connect only the module to be programd to the YD7001.

Unlike LocoNet, R-Bus® requires the modules to be inserted into the bus. Creating splits or a mix of module addresses is possible, but not reliable. The R-Bus® functions at its best if the modules are in series and follow up in numbering.

® R-Bus, B-Bus are trademarks which are registered in the name of Modelleisenbahn GmbH. XpressNet and RS-Bus is a trademark registered in the name of Lenz
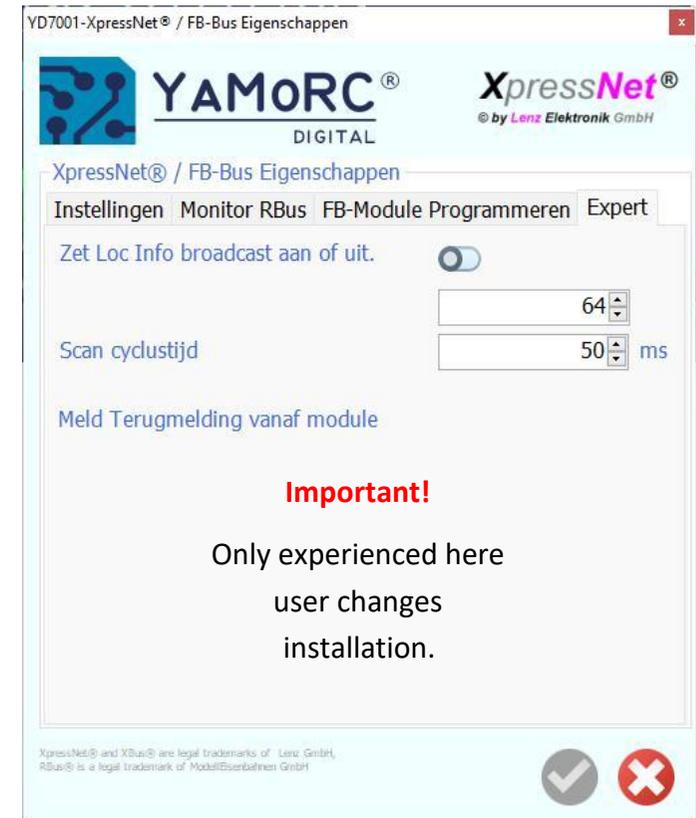
5.8 PB-Bus®

Here you can set the short-circuit delay of the PB-Bus in milliseconds.

It will also show how many boosters have been detected, and on which number a short circuit may have occurred.

5.9 RS-Bus®

Turn RS-Bus® on or off.

First contact in the RS-Bus®. The complete RS-Bus® feedback chain can be placed anywhere in the 1-2048 feedback range.

Activate LDT® timing (in case of LDT®-RS Feedback issues).

When the track output is switched on (green button), all inputs are signaled via the different buses.

Wait time after switching on before the contacts are reported.

This wizard allows you to address and configure RS-Bus® feedback modules.

® R-Bus, B-Bus are trademarks which are registered in the name of Modelleisenbahn GmbH. XpressNet and RS-Bus is a trademark registered in the name of Lenz Elektronik GmbH

5.10 USB 2.0

Note:

To be sure, it is recommended to export the settings before each update.
If the update goes wrong, you can use the export to restore your settings

The serial number of the connected YD7001.

The assigned COM ports of the YD7001.

The current firmware version of the YD7001.

Start the firmware update.

The latest available firmware version.

Status of the firmware update.

Return the YD7001 to its factory setting.

5.11 WiFi Settings

In this menu you can make various settings to the WiFi network module.

We recommend that you change the password to **a Union password for you**.

Remember that all YD7001 have the same password by default.

To confirm this change, complete a new password in step 1, and then click the green check mark (2).

You now need's to enter the new password on all your devices and apps to connect to the YD7001 over WiFi again!

You may be allowed to change the SSID, the name of your network.

Do not change any of these settings unless you really know what you are doing, or at the direction of a DTS or YaMoRC specialist

5.12 Infrared settings

Decoder addresses related to infrared remote control.

Enter the addresses corresponding to the desired channel of the infrared remote control.
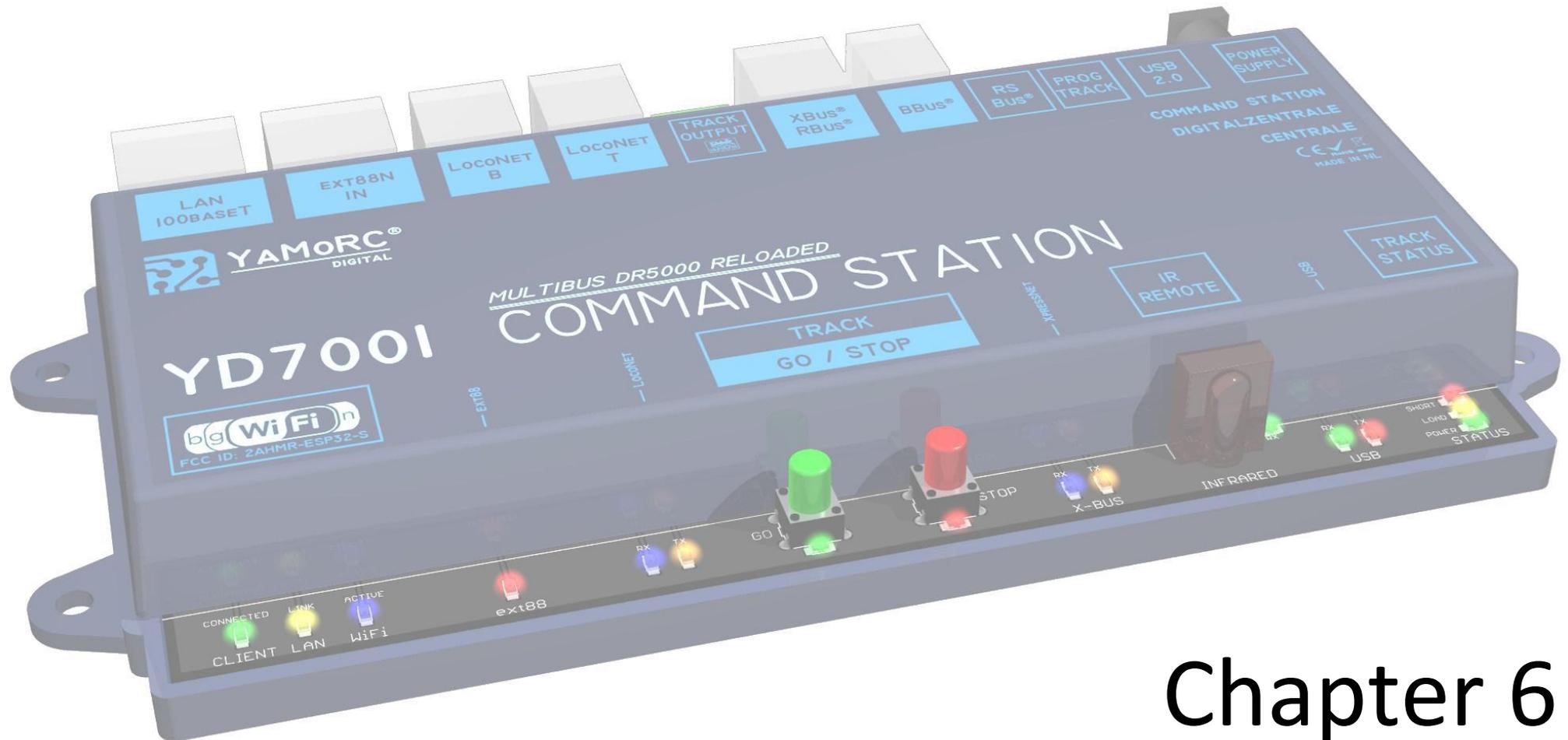
Chapter 6

Programming the decoder unit

6.1 Programming track settings

With the YD7001, it is possible to program a decoder, both loc and accessory decoder, over the programming output or via Program on main (POM)

We always prefer to change settings on the programming track. 's this way, programming commands are always confirmed, which is not the case with POM.

In addition, we advise you to use the free program Decoderpro3 which can be downloaded from the JMRI website (https://www.jmri.org/). This gives you great convenience in changing settings to decoders.

Options:

Programming track: Programming via the Program Track.

LOC POM: Programming via the main track

Accessory POM: Program accessory decoders via main track

Address of the decoder unit to be programd with POMte

Reading the set value

Write down the set value

The number of the CV to be changed

The value of the CV to be changed

Status bar and result of the action

Export and import settings

Recorded current from the programming track

6.2 Testrijden

Confirm the address

Location address of the locomotive

Switch track voltage on or off

Front lights on (F0)

RailCom detector address

Current speed step

Function keys F1 through F32 in the first function keys tab
F33 through F64 in the second tab

Contamination of the model track (RailCom)

Cruise control

Direction and control

YD7001 - Rijden met loc: 3

YaMoRC® DIGITAL

Programmeer Eigenschappen

CV Programmering | Testrijden | Instellingen | Expert

Locadres   3   Dispatch   Go   Stop

1-32   33-64

Blok: 1638►

000

QoS: 20 %   Actueel: 8

F1 F2 F3 F4
F5 F6 F7 F8
F9 F10 F11 F12
F13 F14 F15 F16
F17 F18 F19 F20
F21 F22 F23 F24
F25 F26 F27 F28
F29 F30 F31 F32

Chapter 7

Row Controller

7.1 Cruise control and control panel

The Track option is the place to be if you want to test your locomotives (4) or accessories (5). You can also go here to indicate how you want the Config software to connect to the YD7001 (1). You have the choice of USB and network, please note that these changes will not take effect until you restart the software.

What's also a useful tool is the Log Window (2), which tells you in a separate screen everything that is given to commands. A useful tool to use during test work. You can also select the language (3), import and export the settings (6), or see the internal temperature of the CPU and Booster (7).

Two very useful other options can be found in the "Settings" tab. This allows you to set whether the rail voltage should be switched on or off immediately after start-up (9) or to set a start-up delay of the YD7001 (10).
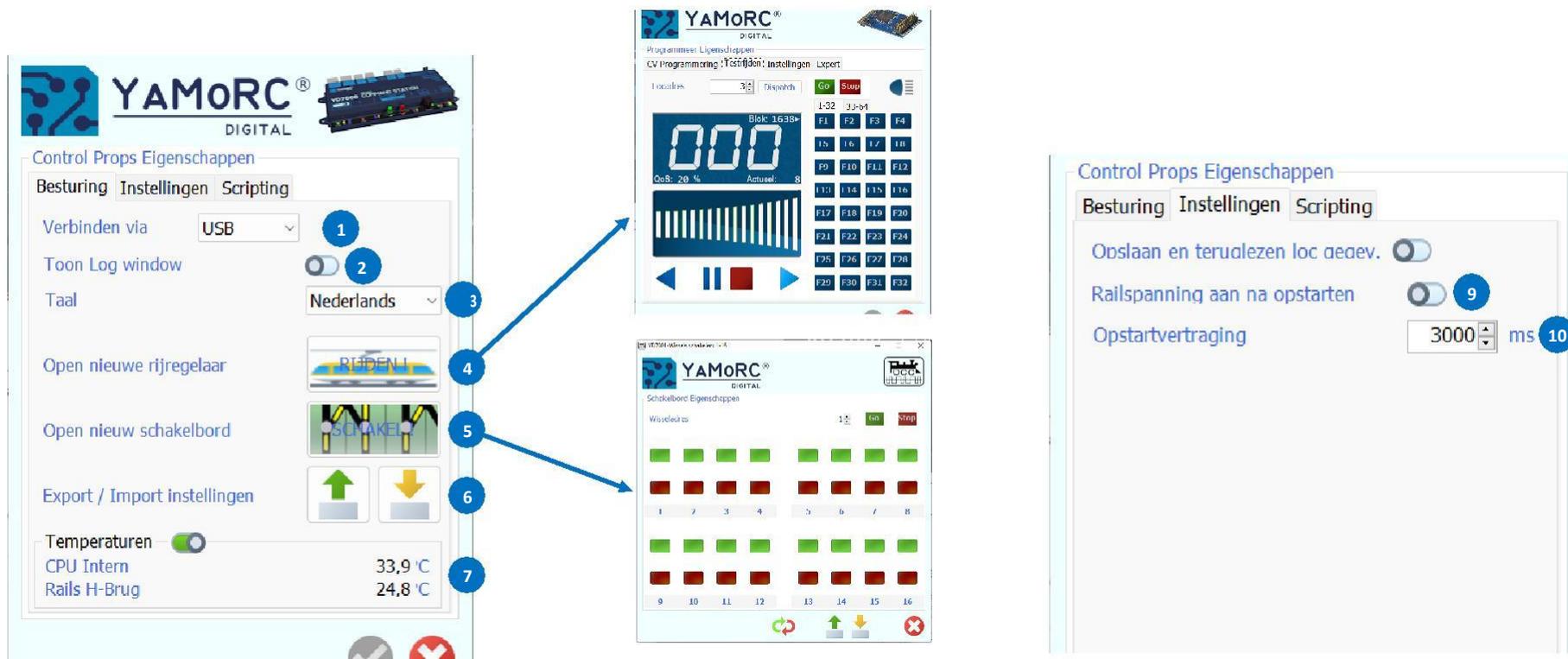
7.2 functions and operation of the cruise control

Confirm the address

Location address of the locomotive

Switch track voltage on or off

Front lights on (F0)

RailCom detector address

Current speed step

Function keys F1 through F32 in the first function keys tab F33 through F64 in the second tab

Contamination of the model track (RailCom)

Cruise control

Direction and control

Hoofdstuk 8 **ES-LINK, Slimme S88**

8. ES-LINK, slimme S88

A special innovation of YaMoRC is the ES-LINK. ES stands for Extended S88 and LINK, of course, for coupling. It is a strong replacement for the standard patch cables when it comes to linking modules within the YaMoRC range.

On all new modules of YaMoRC you will find a 6-pin connector, as in the yellow frame of the image directly above. The YD6901 or the YD6902 can be used to connect the modules to a YD6016LN module, YD9100 usb configurator, or the YD7100 and YD7001 control panel. On the YD7001 we use the YD6902 RJ45 adapter.

The procedure:

1. Insert the YD6902 adapter into the ES-LINK connector of the YD8x module.

2. Connect the YD6902 to the EXT88n input of the YD7001 using a patch cable (Internet cable).

3. Connect your YD7001 to the computer and click the EXT88n symbol in the YD7001 Config software.

4. A pop-up will appear, showing which modules are connected to the active ES-LINK connection.

5. Click on the desired module, the config will go to the background and the desired config will open for you now.

6. After you have finished, click the cross of the active screen to return to the YD7001 Config.
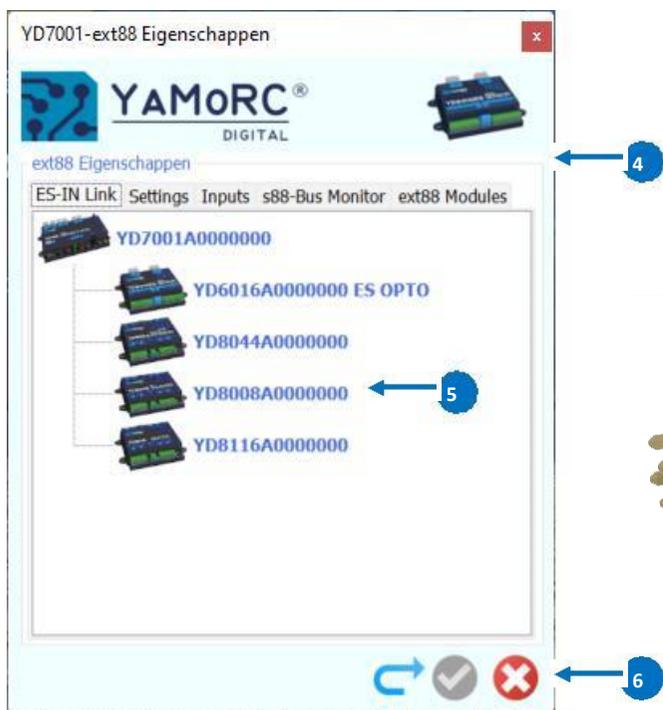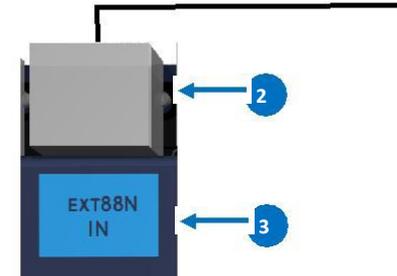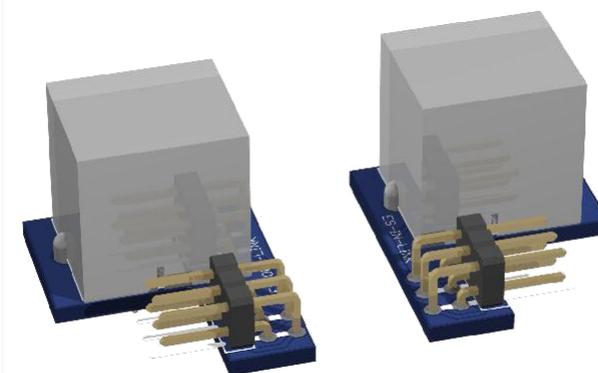
YD6901 ES-LINK ADAPTER   YD6902 ES-LINK ADAPTER RJ45