



YAMoRC®
DIGITAL

YD7432 REVERSER

REVERSE LOOP MODULE CONFIGURATION GUIDE



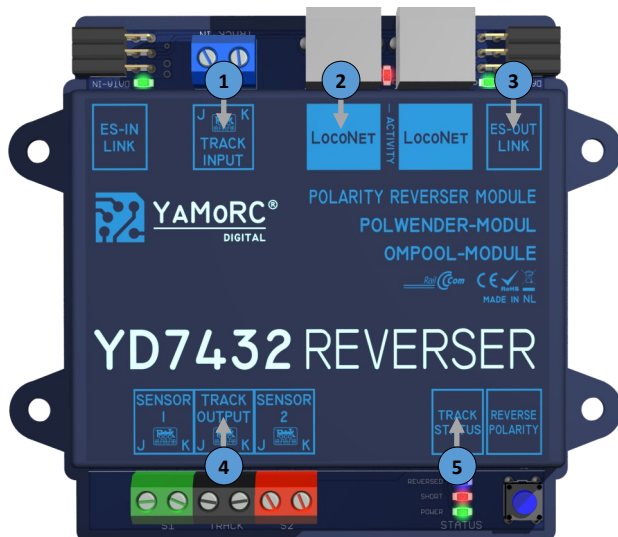
(2025-04-11)



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Made in Germany
Assembled in NL

Overview of the YD432 configuration menu

The individual configuration menus of the YD7432 are called up simply by clicking on the individual buttons. Further menu items are called up by clicking on the individual tabs. A brief overview of the menu structure is shown here.



1)  [Track Input Properties—>](#)

>[Track](#) (short-circuit detection on/off, short-circuit delay, automatic switch-on after short-circuit, switch-on delay after short-circuit)

>[Report](#) Short-circuit actions (LocoNet® GPOFF, LocoNet® Booster short-circuit, feedback address short circuit recognised)

>[Expert](#) (Select the basic switch address to determine whether switching takes place according to RCN-213 or MultiMaus®.)

2)  [LocoNet® Properties—>](#)

>[Feedback monitor](#) for all feedback devices

>[Settings](#) (Railcom® Rerailing direction)

>[Expert](#) (Normally no settings are necessary here.)

3)  [ES-OUT-Link —>](#)

>[USB Properties](#) (USB interfaces, connection, update firmware, restore factory settings)

4)  [Sensor Properties—>](#)

>[Setting](#) (sensor 1 and 2, short-circuit detection, switch mode, feedback,)

>[Control](#) (Switches, external feedback for setting the polarity)

>[Detektor](#) (Railcom feedback address, switch-off delay)

>[Expert](#) (switch-on / switch-off delay S1,S2, Trakc Out, polarity feedback, polarity default at start)

5)  [Track Status Modul Properties—>](#)

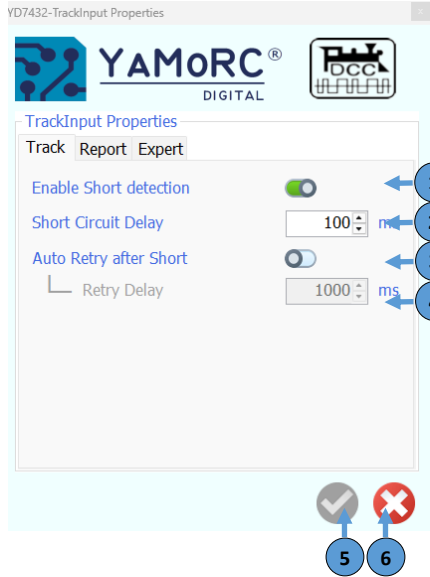
>[Module](#) (log window, language selection, LNCV module address, signalling after voltage on, signalling delay, data import/export)

>[Reporting Railcom®](#) (signalling short addresses (0x7D), signalling block address RX8 format, signalling dynamic speed, signalling signal quality)

>[Scripte](#)

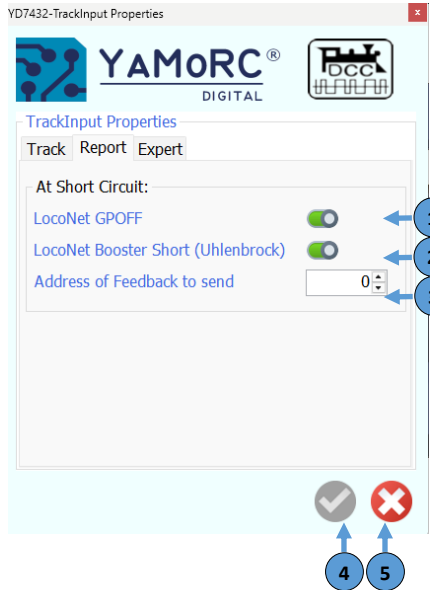
>[Expert](#) (Use channel 2 for address detection, polarity counter, address detection time)

Track Input Properties Track menu



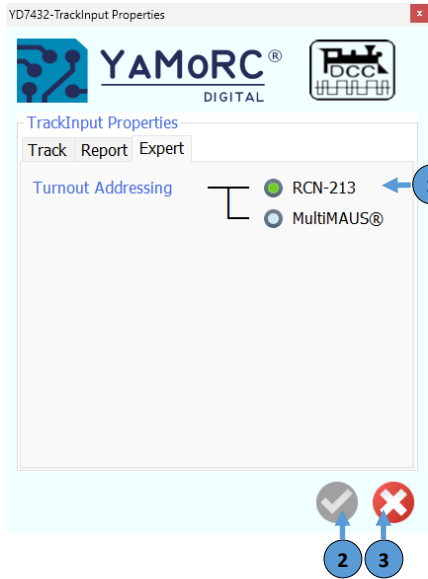
- 1) **Use short-circuit detection**
This switch can be used to specify whether the YD7432 also reacts to a detected short circuit and reverses the polarity of the reverse loop in addition to the control via S1 and S2.
- 2) **Short-circuit delay**
The time specified here delays the switch-off of the track output in ms after a short circuit has been detected.
- 3) **Automatic switch-on after short circuit**
If this switch is activated, the YD7432 automatically switches the track output ON after a short circuit.
- 4) **Switch-on delay after short circuit**
This input field is used to specify the delay time before the YD7432 automatically reactivates the track output after a short circuit.
- 5) **Save settings**
The settings are only applied permanently once the green tick has been activated.
- 6) **Close menu**

Menu Track Input Properties Report



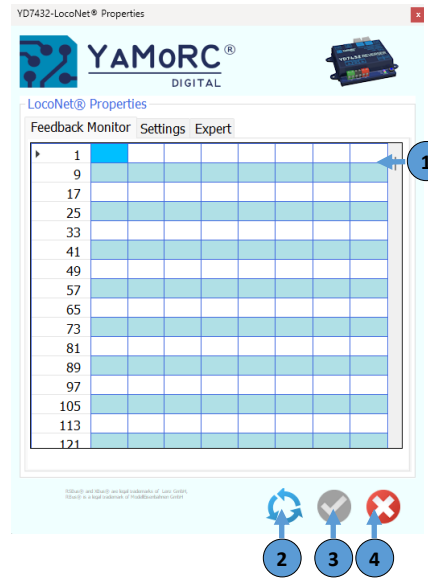
- 1) **LocoNet® GPOFF**
Send LocoNet® OPC_GPOFF report (general command to switch off ALL boosters or the control centre globally).
- 2) **LocoNet® "Booster Short" (Uhlenbrock®)**
This switch activates the extended short-circuit signalling according to the Uhlenbrock standard.
- 3) **Feedback address**
The feedback signal entered here becomes active as soon as the YD7432 reports a short circuit.
- 4) **Save settings**
The settings are only applied permanently once the green tick has been activated.
- 5) **Close menu**

Track Input Properties Expert menu



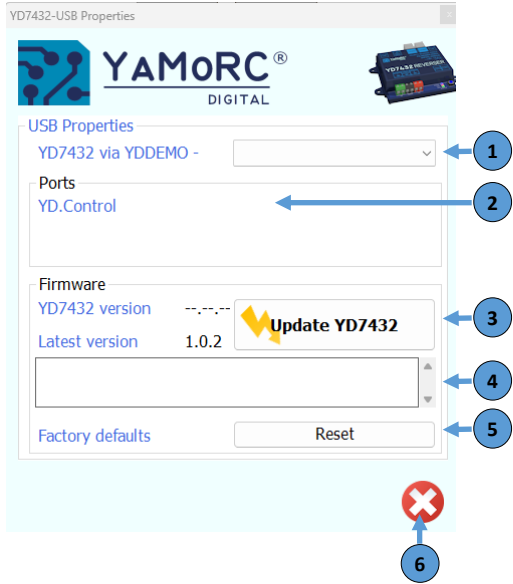
- 1) **Switches Basic address**
Here you can select whether the accessory commands (points, etc.) are processed according to the Roco® Multimaus control centre specification or according to RCN-213 (factory setting).
- 2) **Save settings**
The settings are only applied permanently once the green tick has been activated.
- 3) **Close menu**

LocoNet® properties menu Feedback monitor



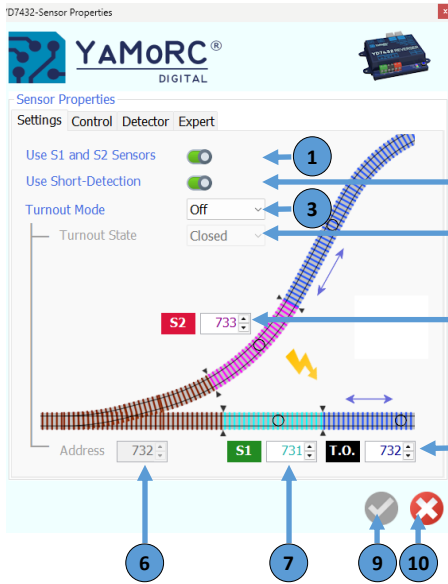
- 1) **LocoNet® feedback monitor**
If a sensor is recognised as occupied, this is indicated by a red square.
- 2) **Delete** the current display on the feedback monitor.
The current feedback display is deleted.
- 3) **Save settings**
The settings are only applied permanently once the green tick has been activated.
- 4) **Close menu**

ES-OUT-Link USB properties menu



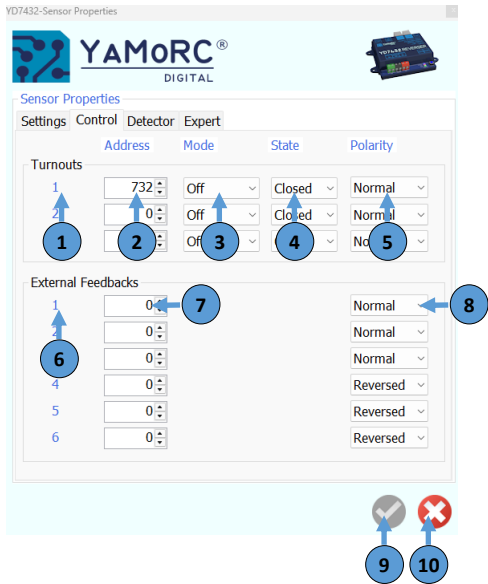
- 1) **Select how the YD7432 is connected**
- 2) **USB interface via which the YD7432 is connected**
- 3) **Update YD7432.**
*This "Update YD7432" button starts the YD7432 update process. Once the update process has been started, follow the instructions in the dialogue until it is completed. The two information displays show the firmware installed on the YD7432 (e.g. YD7432 version 1.0.0) and the firmware version contained in the current software version of the tool (e.g. latest version 1.0.0). **Important!** An active USB connection, e.g. via the YD9100, is required to carry out the firmware update!*
- 4) **Update process display field**
If the update process is running, information on the progress of the update is displayed here.
- 5) **Factory setting.** If this button is pressed, the YD7432 is reset to the factory settings.
Attention! All individual configurations will be lost!
- 6) **Close menu**

Sensor properties menu Settings



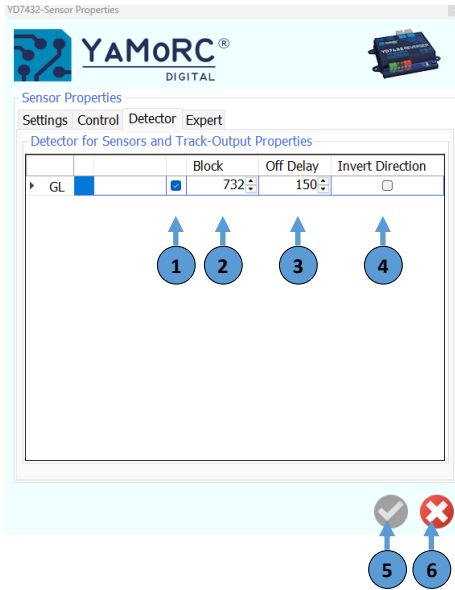
- 1) **Use S1 and S2 sensors**
The reverse loop polarity is reversed by analysing the sensor tracks S1 and S2.
- 2) **Use short-circuit detection**
This switch can be used to specify whether the YD7432 reacts to a detected short circuit and reverses the polarity of the reverse loop.
Note: *Although it is possible to operate the YD7432 using short-circuit detection alone, we do not recommend using "Short-circuit detection" as the sole operating mode.*
- 3) **Turnout Mode**
The action triggered by the accessory address (switch address) is defined here.
 - OFF** *There is no action.*
 - Follow** *The polarity of the reverse loop follows the switch position.*
 - Set** *S1 and S2 set the points according to the occupancy signal.*
 - Both** *Both actions are analysed.*
- 4) **Turnout State**
This selection field is used to define the polarity of the reverse loop depending on the switch position for the "normal" polarity.
- 5) **S2 Feedback address**
An individual feedback address for the sensor 1 track section can be assigned here. If there is a connection to a LocoNet[®]-capable control centre, this feedback can be evaluated.
- 6) **Accessory address (Turnout address)**
An individual accessory address (turnout address) can be assigned here with which the turnout is switched at the reverse loop input. At the same time, this accessory address (points address) influences the polarity of the reverse loop, taking point 3 into account.
- 7) **S2 Feedback address**
An individual feedback address for the sensor 2 track section can be assigned here. If there is a connection to a LocoNet[®]-capable control centre, this feedback can be evaluated.
- 8) **Feedback address Track Out (T.O.)**
An individual feedback address for the Track Out (T.O.) track section can be assigned here. If there is a connection to a LocoNet[®]-capable control centre, this feedback can be evaluated.
- 9) **Save settings**
The settings are only applied permanently once the green tick has been activated.
- 10) **Close menu**

Sensor Properties Control menu



- 1) **Turnout** (static display, no entry can be made here)
The YD7432 can be controlled via accessory addresses (Turnout addresses). Up to three accessory addresses can be used for control. Each accessory address can be assigned an individual action and the polarity of the reverse loop that is executed when switching.
- 2) **Address**
An individual accessory address can be assigned here.
- 3) **Turnout Mode**
The action triggered by the accessory address (switch address) is defined here.
 - OFF** *There is no action.*
 - Follow** *The polarity of the reverse loop follows the switch position.*
 - Set** *S1 and S2 set the points according to the occupancy signal.*
 - Both** *Both actions are analysed.*
- 4) **Setting the course**
This selection field is used to set the switch position.
- 5) **Polarity**
This selection field is used to define the polarity of the reverse loop depending on the switch position.
- 6) **External sensors** (static display, no entry can be made here)
The YD7432 can be controlled via external sensors. Up to six sensors can be used for control. Each sensor can be assigned the polarity of the reverse loop that is switched when the sensor is triggered.
- 7) **Feedback number**
An individual feedback address can be entered in this input field.
- 8) **Polarity**
This selection field is used to determine the polarity that the reverse loop switches when the sensor is actuated.
- 9) **Save settings**
The settings are only applied permanently once the green tick has been activated.
- 10) **Close menu**

LocoNet® Properties Detector menu



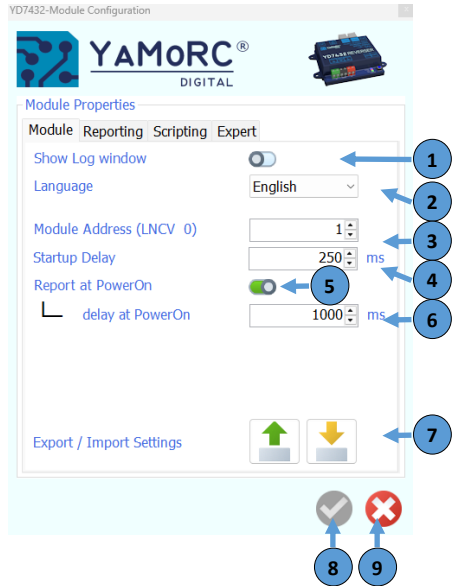
- 1) **RailCom® DCC address message active**
This tick can be used to deactivate the address message via RailCom®.
- 2) **Block address**
An individual block address can be assigned here in which the locomotive address and all other RailCom® data (current speed, QoS messages) are reported.
- 3) **Off Delay**
Switch-off delay feedback block address.
- 4) **Invert direction**
If this box is ticked, the detected rerailling direction is inverted.
- 5) **Save settings**
The settings are only applied permanently once the green tick has been activated.
- 6) **Close menu**

Sensor properties Expert menu



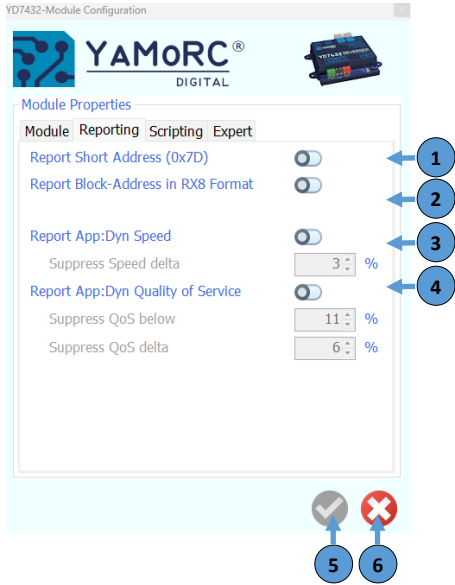
- 1) **Switch-on delay**
Switch-on delay in mS Feedback S1 and S2. This time elapses after pressing S1 or S2 before the "Occupied status" is signalled to the control panel. This time can be used to minimise "flickering".
- 2) **Switch-off delay**
Switch-off delay in mS feedback unit S1 and S2. This time elapses after S1 or S2 becomes free before the "free status" is signalled to the control panel. This time can be used to minimise "flickering".
- 3) **Polarity message Feedback address**
An individual feedback address can be assigned here. This feedback address reports the polarity status of the reverse loop to the control centre via LocoNet®. The selection field can be used to specify when the feedback is sent (reversed or normal).
- 4) **Start polarity**
This selection field is used to specify the polarity with which the YD7432 starts (normal or reverse).
- 5) **Save settings**
The settings are only applied permanently once the green tick has been activated.
- 6) **Close menu**

Track Status Module Properties menu



- 1) **Show log window**
All commands sent from and to the YD7432 are logged in the log window and saved if necessary. The log window is a useful function for troubleshooting.
- 2) **Language**
Selection of the menu language. You can choose between German, English and Dutch.
- 3) **LNCV Module address**
An individual LocoNet[®] module address can be assigned here. The address must be unique.
- 4) **Start delay**
Waiting time in mS until the YD7432 switches on the Track Out.
- 5) **Report switch feedback** to the control centre after voltage ON.
- 6) **Signalling delay** in mS
After this time, the reading of the module's sensors is started and the sensors are transmitted to the control centre. (track voltage ON)
For larger LocoNet[®] networks, it may be useful to set the time differently (in 130ms increments).
- 7) **Export / Import settings**
The **Export button** can be used to export the current configuration of the YD7432 and save it to any location. A previously saved configuration of the YD7432 can be re-imported using the **Import button**.
Attention! The current configuration of the YD7432 will be overwritten.
- 8) **Save settings**
Die veränderten Einstellungen werden erst dauerhaft übernommen wenn der grüne Haken betätigt wurde.
- 9) **Close menu**

Menu Track Status Module Properties Report Railcom[®]



- 1) **Digitrax[®] Specification for reporting 'short' locomotive addresses**
Standard: Report 0x7D in the high-value byte. Alternative: Report 0x00 in the high-value byte
- 2) **Block addresses are only sent by Digitrax[®] in even numbers**
However, the YD7432 can also send linear (even and odd) block addresses, which extends the signalling range by 2048.
- 3) **Report app dynamic speed**
If this switch is active, the speed is signalled to the control centre via RailCom[®]. Not every locomotive decoder supports this function.
Suppress speed delta*
A "Delta" value can be set in the selection field so that not too many messages are sent to the control centre if the value changes quickly.
- 4) **Reporting app Dynamic signal quality (QoS messages)**
If this switch is active, the QoS messages are signalled to the control centre via RailCom[®]. Not every locomotive decoder supports this function.
The messages are reported by the decoder in %.
0% *All commands have been received (track or locomotive clean).*
100% *of the commands have not arrived (track or locomotive dirty).*

Suppress QoS messages

If this selection field defines the percentage below which the QoS messages are not analysed. QoS messages below this value are not reported to the control centre.

Suppress QoS messages delta*

A "Delta" value can be set in the selection field so that not too many messages are sent to the control centre if the value changes quickly.

- 5) **Save settings**
The settings are only applied permanently once the green tick has been activated.
- 6) **Close menu**

***Example:**

1. last measured value =10
 newly measured value = 6 **Delta = 4**
2. last measured value:=3
 newly measured value =9 **Delta = 6**
3. last measured value:==12
 newly measured value =1 **Delta = 11**

Parameter "Delta" = 6 the values 2. and 3. are reported, 1. is suppressed.

Please note! Not all functions are supported by all decoders. Please refer to the respective decoder instructions for details

Menu Track Status Module Properties Expert



- 1) **Use Railcom® channel 2 for address recognition**
If this function is activated, the address is recognised via RailCom® channel 2, allowing a maximum of 4 addresses to be detected simultaneously by one detector.
- 2) **Polarity counter**
The number of bits to be counted before a positive polarity is signalled is defined here. The lower the value, the faster the detection. Normally, no change is required here.
- 3) **Address detection time**
Waiting time before an address is reported. Normally no change is required here.
- 4) **Save settings**
The settings are only applied permanently once the green tick has been activated.
- 5) **Close menu**

Warranty

24 months warranty from date of purchase

Dear Customer,

Congratulations on your purchase from YaMoRC. YaMoRC's high quality products have been manufactured using modern manufacturing processes and have been subjected to careful quality control and tests.

Therefore, when purchasing a YaMoRC product, the company YaMoRC grants you a manufacturer's warranty of 24 months from the date of purchase in addition to the national warranty rights to which you may be legally entitled to, from your YaMoRC specialist dealer as contractual partner.

Warranty conditions:

This warranty applies to all YaMoRC products purchased from a YaMoRC dealer. Warranty services are only provided if proof of purchase is presented. Proof of purchase is the purchase receipt from the YaMoRC specialist dealer. It is therefore recommended to keep your purchase receipt safe.

Content of the guarantee/exclusions:

The warranty includes, at YaMoRC's discretion, the free repair or free replacement of the defective part, which can be proven to be due to design, manufacturing, material or transport faults. For this purpose, you must send the decoder to us properly stamped. Further claims are excluded.

The warranty claims are void:

1. in the case of general wear and tear at expected locations (e.g. screw terminals).
2. in the case of modification of YaMoRC products with parts not approved by the manufacturer.
3. in the case of modification of parts, especially by opening the housing.
4. if the product is used for purposes other than those intended by the manufacturer.
5. if the instructions given by YaMoRC in the operating manual have not been thoroughly read by the user & risked mis-use of the product.

The warranty period is not extended by the repair or replacement delivery. Warranty claims can only be made to your dealer enclosing any warranty certificate, proof of purchase and a description of the fault. Products sent directly to YaMoRC products will neither be treated nor returned free of charge.



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