



Doehler & Haass Programmer



1st generation



2nd generation

Technical data of the 1st generation

Dimensions in mm

145 x 100 x 40

Current Supply (Power)

7-18 Volt AC or 10-25 Volt DC.

The Programmer works with every model railroad transformer, yet we recommend a notebook power supply, because it is stabilized and supplies sufficient power (max. 4.75 A).

Doehler & Haass offers for that purpose the specifically tested power supply PWR-100W with a slide switch for voltages from 12 to 24 Volt DC.

Output Current

Continuous output track (electronic short circuit protection)about 1 A

Continuous output SUSI (electronic short circuit protection)about 1 A

Connections

Power Screw terminals (the two left or the two right terminals are connected to each other respectively) or socket for power supply

SX-BUS presently without function

Mobile Station ... presently without function

USB Computer interface (USB-2 / USB-cable A/B required)

Track with connections 1 – GND – 2

Track will be connected to clips 1 und 2. Clip GND serves for tapping of the internal ground voltage (0 Volt), e.g. for metering.

Indicators

LED 1.....	Power supply	lights up constantly when working flashes quickly by short circuit or overload flashes slowly by undervoltage
LED 2.....	Update indication	lights up when update was started
LED 3.....	Track power.....	lights up when track power ON
LED 4.....	SUSI indication.....	lights up when SUSI-power ON
LED 5.....	USB indication.....	lights up when USB-interface is connected

Operating Elements

Button T1..... Push button for Programmer update

The following data applies to both generations

Please note that the Programmer has a USB 2.0 interface. You can therefore connect it to every USB 2.0 or USB 3.0 port of your computer.

Following connection options are **not recommendable**, maybe they lead to difficulties

- The Programmer is connected to USB 1.0 or USB 1.1 port.
- The Programmer is connected to USB 3.0 hub, which is not connected to USB 3.0 port.

Operating instructions of the programmer

The Programmer can currently only be controlled from the computer (the SX-BUS is not implemented in the program).

The Programmer permits operating locomotive decoder in for following system formats:

System name	Address range	Speed steps	Functions
SelecTRIX 1	1-99	31	1
SelecTRIX 1 +1 ZK *)	1-99	31	9
SelecTRIX 1 +2 ZK *)	1-99	31	17
SelecTRIX 2	1-9999	127	32
DCC short addresses	1-99	14	28
DCC short addresses	1-99	28	28
DCC short addresses	1-99	126	28
DCC long addresses	100-9999	14	28
DCC long addresses	100-9999	28	28
DCC long addresses	100-9999	126	28
MM1 addresses	1-255	14	0
MM2 addresses	1-255	14	4
MM2 addresses	1-255	28	4
FN addresses	1-119	15	1

*) ZK = additional channel

Just 1 locomotive can be operated at any time! (The Programmer cannot substitute a central unit.)

All CV-values (except addresses) can be changed during operation by the so called POM (**P**rogramming **O**n The **M**ain). In case of bidirectional communication is supported by the loco decoder and is activated accordingly, all CV values can be read out during the operation.

The **loading of sound projects** to a **sound decoder (SD..)** can be done via **SUSI as well as via the track**. The **loading of sound projects** to a **sound module (SH...)** can not be done via the track, but **only via the SUSI**.

For comfortable programming we recommend our Programmier-Adapter. It allows the easy connection of our decoders with the Programmer and is plugged directly into the Programmer.
<http://doehler-haass.de> Products > Digital System > Programmier-Adapter.

When used without a Programmier-Adapter:

The Programmer must **not** be connected to both the track and the SUSI of a sound component **at the same time (either – or)**.

Software „Doehler & Haass Programmer“

On the D&H website there is a software (ZIP file) available under

<http://doehler-haass.de> Products > Software > Programmer for downloading.

The software does not need to be installed, it is sufficient to unpack the ZIP archive and start the application with „DoehlerHaass.Programmer.exe“.

System requirements: PC with Microsoft® Windows® 10.

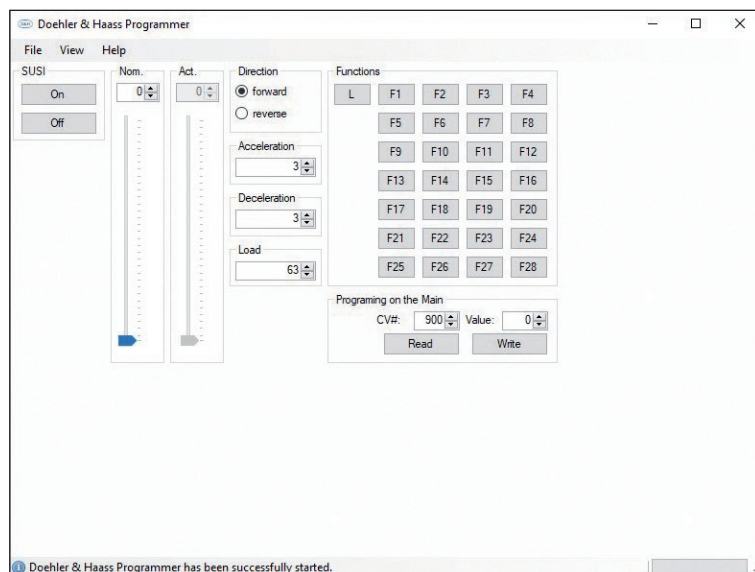
Operating Modes

The program enables the following operating modes:

- SUSI module control
- SUSI module programming
- Locomotive decoder control
- Locomotive decoder programming

SUSI module control

About: *View > SUSI module control*



The actual speed stage follows the target speed stage with the set acceleration/deceleration and is used to simulate the acceleration values of the decoder (the controller for the actual speed level cannot be operated and is only used to display the currently output speed level).

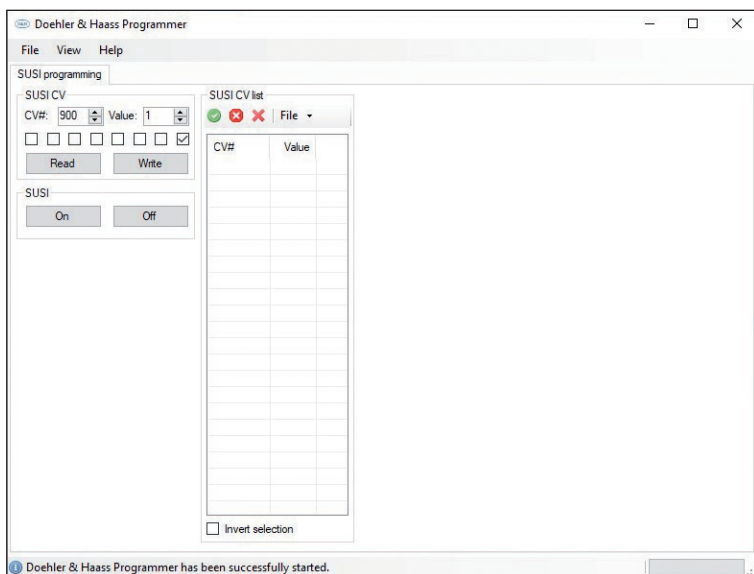
The values for Acceleration / Deceleration should be the same as the setting of the decoder used, in order to correspond to operation in the installed state.

According to the SUSI definition there is only the setting of 127 speed steps. The locomotive decoders convert the set speed level accordingly (e.g. 14 – 28 – 126 to 127 for DCC).

The CVs can be read out and changed at any time during operation, regardless of whether the decoder supports bidirectional transmission or not, since these are only the signals at the SUSI interface.

SUSI module programming

About: [View > SUSI module programming](#)



This setting allows essentially a quick access to all CV values and their saving.

Reading out all SUSI CVs (CV 897 to CV 1024) is carried out by clicking the green hook.

Please note the status indicator at the bottom of the active window.

This Process can be cancelled at any time by clicking the red cross.

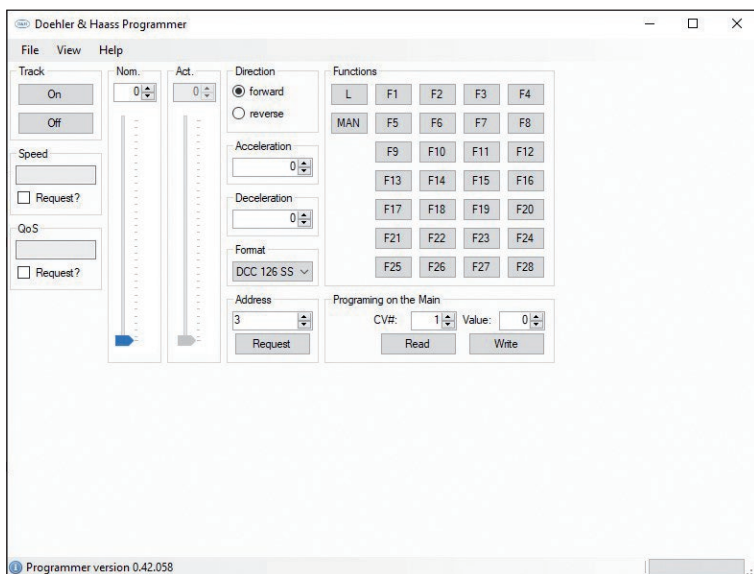
Displayed CVs can be archived by file [save](#).

All CVs can be read and written again by file [open](#).

The CVs can be read out and changed at any time during operation, regardless of whether the decoder provided for this purpose supports bidirectional transmission or not, since this only concerns the signals at the SUSI interface.

Locomotive decoder control

About: [View > Loco decoder control](#)



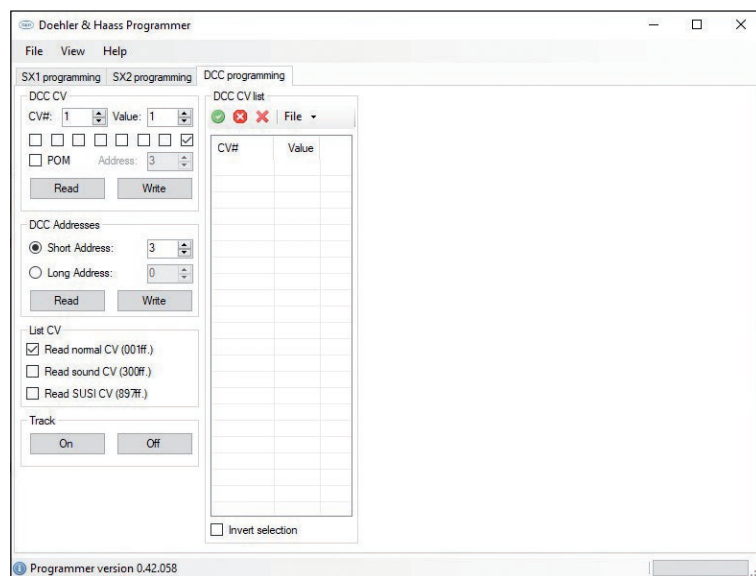
The bar for the speed step display automatically adapts to the operating mode.

The actual speed step follows the set speed step with the set acceleration/deceleration and is used to simulate a manual controller or a computer control (the controller for the actual speed step cannot be operated and is only used to display the currently output speed step).

All CV values can be changed during operation via the so-called POM (**P**rogramming **O**n The **M**ain). If the locomotive decoder supports bidirectional transmission and this is also activated accordingly, all CV values can also be read out during operation.

Locomotive decoder programming

About: [View > Loco decoder programming](#)



The decoders can be programmed in system formats SX1 / SX2 / DCC.

Reading out all SUSI CVs (CV 897 to CV 1024) is carried out by clicking the green hook.

Please note the status indicator at the bottom of the active window.

This Process can be cancelled at any time by clicking the red cross.

Displayed CVs can be archived by file [↓ save](#).

All CVs can be read and written again by file [↓ open](#).

If the locomotive decoder supports bidirectional transmission, the CV values can be read out with this method via a check mark in the „POM“ field, which leads to a considerable acceleration of the readout (all CVs in about 5 seconds). However, the track voltage must be switched on beforehand for this.

Software „Doehler & Haass Update“

On the D&H website there is a software (ZIP file) available under <http://doehler-haass.de> Products > Software > Update for downloading.

The software does not need to be installed, it is sufficient to unpack the ZIP archive and start the application with „DoehlerHaass.Update.exe“.

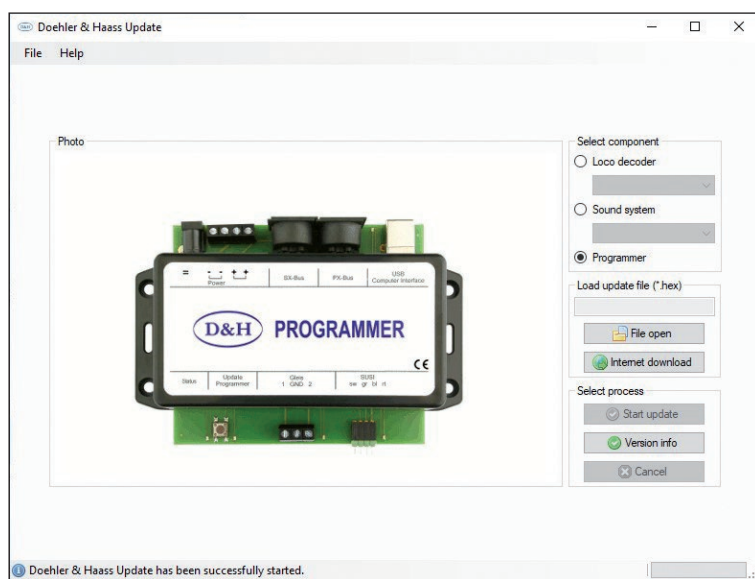
System requirements: PC with Microsoft® Windows® 10.

Operating Modes

The program enables the following operating modes:

- Update of the Programmer
- Update of locomotive decoders

Programmer updating



After the file has been loaded the Programmer will be switched in the „Update operation mode“ pushing button T1 for e.g. 1.5 sec. The update process will be initiated by *Start update* and lasts about 3 seconds.

Update of locomotive decoders

Decoder capable for update: DHxx, DHPxxx, FHxx, SDxx, SHxx and SPxx

Decoder not cable for update: DHFxxx, DHLxxx and DHSxxx

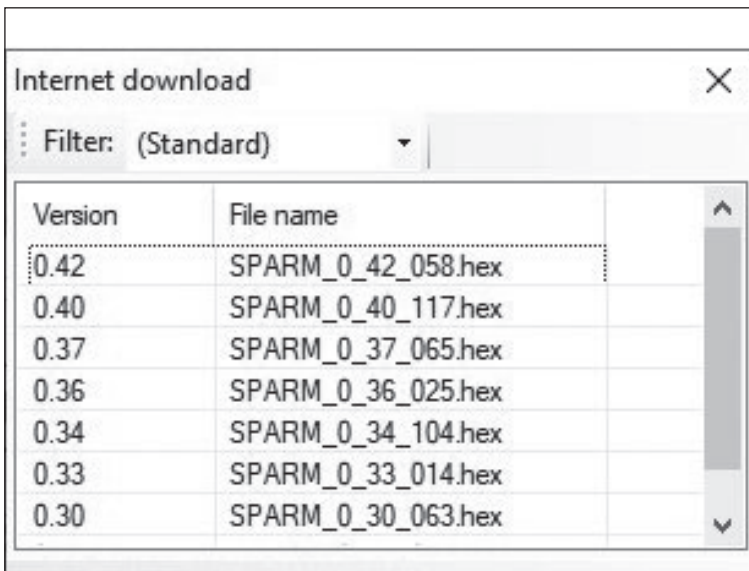
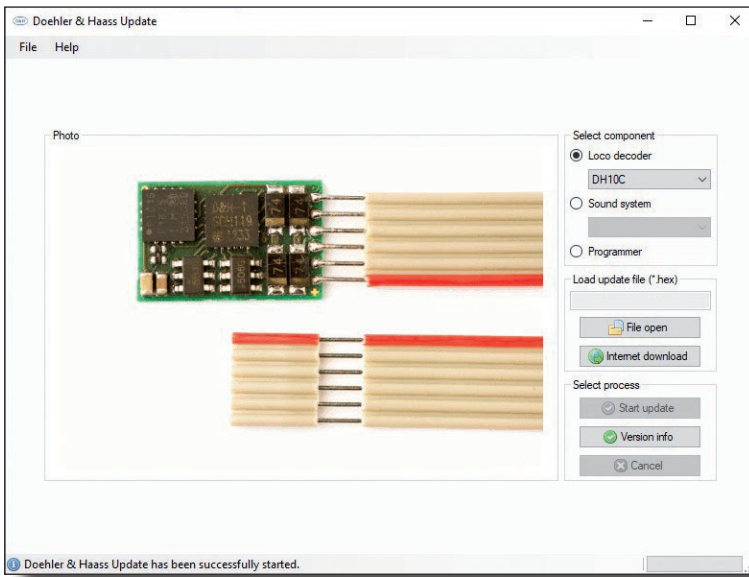
Advice:

If the decoder is equipped with a buffering, it could happen that updating does not work. That depends on the type of the decoder, on the buffering and on the connection mode.

In case of doubt it is advisable to remove buffering before updating.

Updating will be initiated by: *Loco decoder* > *select decoder (e.g. DH10C)* > *Internet download* > *select xx.HEX* > *double click*.

The following update process will be initiated by *Start update*.



Keep operating instruction for later use!

Super-Soft-Drive (SSD)[®] is a registered trademark of the company Doehler & Haass GmbH & Co. KG, D-81249 München

SelecTRIX[®] is a registered trademark of the company Gebr. Märklin & Cie. GmbH, D-73033 Göppingen

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Safety Instructions

This product is not recommended for children under 14 years of age.

Warranty

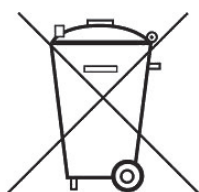
Each component is checked for complete functionality before delivery. If an error still occurs, please contact the dealer from whom you purchased the component or the manufacturer (**Doehler & Haass**) directly. The statutory warranty period of 24 months applies.

Support and assistance

If you have any problems or questions, please send an e-mail to the address.

technik@doehler-haass.de

You will usually receive an answer within a few days.



Dieses Produkt darf am Ende seiner Nutzungsdauer nicht über den normalen Hausmüll entsorgt werden. Bitte benutzen Sie die Entsorgungsstelle Ihrer Gemeinde.

This product must not be disposed off with normal household waste at the end of its useful life. Please use the disposal point in your municipality.

Ce produit ne doit pas être éliminé avec les déchets ménagers normaux à la fin de sa vie utile. Veuillez utiliser le point d'élimination de votre autorité locale.



Nicht geeignet für Kinder unter 3 Jahren wegen der Gefahr des Verschluckens sowie der Verletzung durch scharfkantige Teile!

Not suitable for children under 36 month because of the danger of swallowing the product and of injuries due to sharp-edged parts.

Ne convient pas aux enfants au-dessous de 3 ans, dus au risque d'avaler le produit ou bien d'être blessés par des pièces à arêtes vives!

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