53451 LokProgrammer

Quick start guide
Second Edition, February 2012

Hardware Version	V3.0
Software Version	2.x.x
Software Version	4.x.x

Please note: This is only small amount of information about the product.

The complete manual of the LokProgrammer is to be found on the included DVD.

1. Properties of LokProgrammer

Thank you for purchasing a LokProgrammer set. The LokProgrammer is an accessory for the use with LokSound Decoders.

LokProgrammer consists of two core components: An interface module, that represents the physical connection between the PC and the locomotive, and the software, that can be run on any PC using MS Windows.

This combination allows you to easily manipulate and adjust the many features and properties of LokSound decoders with your PC. Thanks to the graphic interface of MS Windows you can achieve the optimal adaptation of LokSound decoders even if you have very little or no experience in programming digital decoders.

LokProgrammer also allows you to modify all sound fragments and sound effects stored on the decoder as often as you desire.

ESU provides hundreds of different sound files, which can be directly used or adjusted according to your own needs. The files can be downloaded from our website www.esu.eu.

2. System Requirements

In order to use this software you need a commercially available PC with the following requirements:
- Microsoft XP SP3 or higher
- Installed Microsoft .Net Framework Version 3.5 (incl. SP1)
- Optical CD-ROM drive
- USB 2.0 Port or a free serial interface (COM-Port)
- Internet connection to execute online updates

To connect the LokProgrammer to the PC a serial port (so-called COM-Port) is required.

For this reason we have included an appropriate cable in delivery for the LokProgrammer. Should you use a notebook or a modern PC, there might only be USB connection ports. Only (!) in this case, you should you the attached USB adapter cable.

3. Connecting the LokProgrammer

There are two options to connect the LokProgrammer to a PC, depending on which connection you prefer to use.

3.1. Serial interface (COM-Port)

If your PC has a real serial interface (COM-Port), exactly this one should be used. Windows usually offers an appropriate driver software and the mature technology can be used without any problems.

Figure 1 shows how to connect the enclosed grey cable (having a DB9-plug, resp. socket on both ends) with the LokProgrammer.
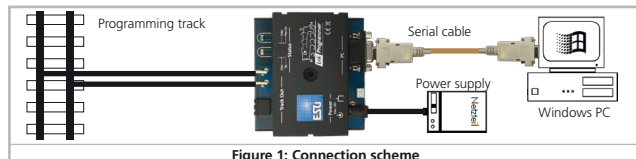

Figure 1: Connection scheme

3.2. USB Connection

Unfortunately modern PCs and notebooks do not offer any more serial interfaces. In this case, the connection should be made via a USB-socket.

Figure 2 shows how to connect the LokProgrammer with the help of the enclosed USB2.0 adapter cable to a PC.
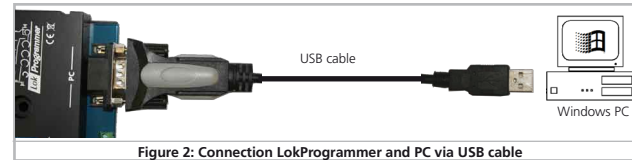

Figure 2: Connection LokProgrammer and PC via USB cable

⚠️ Please do only use the enclosed USB2.0 cable with a FTDI chipset. The use of any other adapter cable may lead to connection failures or communication problems.

3.3. Power supply

There are two alternative options for the power supply:
- Use the power supply provided with the LokProgrammer. Wire the output of the power supply to the power supply terminals of the LokProgrammer as shown in figure 3.
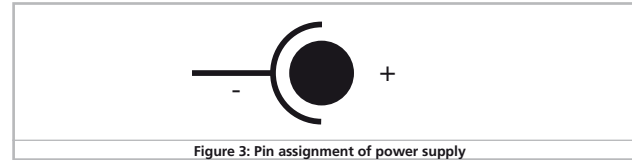

Figure 3: Pin assignment of power supply

- Use the AC light power output of a model train transformer or a regulated DC power supply and wire it to one of the two screw terminals of the LokProgrammer. We recommend this option for programming large gauge locomotives, particularly gauge 1 models.

⚠️ Never connect to both terminals at the same time. This could lead to the destruction of the LokProgrammer!

The green "power" LED lights up once power is connected.

3.3. Programming track connection

There are two options to connect the LokProgrammer to the programming track:
- Use both the mini-sockets. Those are meant for 2.6mm mini banana plugs
- Use the enclosed 2-pin connection plug measuring 5.08mm to create a track connection.

⚠️⚡ Please make sure that the programming track is completely isolated from the rest of the layout! Please also make sure that e.g. a locomotive never ever bridges the programming track output of the LokProgrammer and the main track of the layout powered by a booster. The LokProgrammer will be immediately destroyed!

4. LED on LokProgrammer

The two LEDs on the LokProgrammer indicate the following:

Green LED: Is lit continuously when supply voltage is available. Is blinking when the LokProgrammer receives data from the PC.

Yellow LED: Blinks quickly when voltage is applied to the programming track and data is transferred via the programming track. Blinks slowly if the LokProgrammer detects a high current and has subsequently disconnected the programming track.

5. Installing the Software

Make sure that the LokProgrammer is connected as described above and power supplied.

Now the software can be installed. Please consider that the software provided on the data medium is highly probable out of date. This is no mistake, but results from the steady continuous further development of our LokProgrammer software. However, you should first install the software anyway; at the program's first start the software will search for new versions and offer you respective updates when your PC is connected to the internet.

As soon as you insert the DVD into the drive the installation program is starting automatically. The software of the LokProgrammer includes two parts, which cab be individually selected in the selection screen:
- LokProgrammer software version 4.x.x. is suited for the programming of all LokSound V4.0 and LokPilot V4.0 decoders (latest decoder generation). The software runs on Windows XP, Windows Vista and Windows 7.
- LokProgrammer software version 2.x.x. is suited for the programming of all older LokSound and LokPilot decoders (especially LokSound V3.5 and LokPilot V3.0 family) as well as Switch-Pilot decoders. The software is compatible with Windows 2000, Windows XP and Windows 7, however it does not run under Windows Vista.

ℹ️ If you would like to edit all decoders, it is possible to install and use both the software packages simultaneously on you PC without any problems. Just install the software packages one after another.
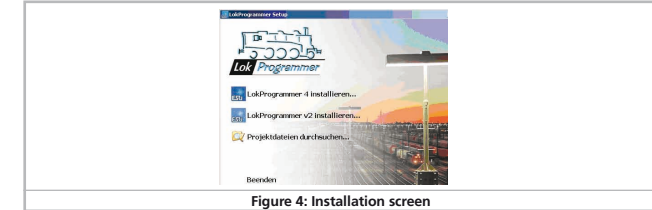

Figure 4: Installation screen

5.1. Installation of the USB-Cable driver

If you have carried out the connection of the LokProgrammer as described in chapter 3.2., you probably have to install a driver for the USB cable. The following rule applies:

If you use Windows 7 (32 Bit or 64 Bit version), the operating system will usually find the required driver full automatically:
- The driver is either directly supplied by Windows or will be automatically downloaded from the Microsoft website. You do not have to install one of the delivered drivers by ESU!
- If you use Windows 2000 or Windows XP, the installation program will offer the installation of the driver. In this case, you should set the checkmark with "USB driver" and "FTDI USB adapter" in figure 5. Please do only install the driver on the first occasion. If you have an older LokProgrammer version installed, a repeated driver installation will normally not be necessary.
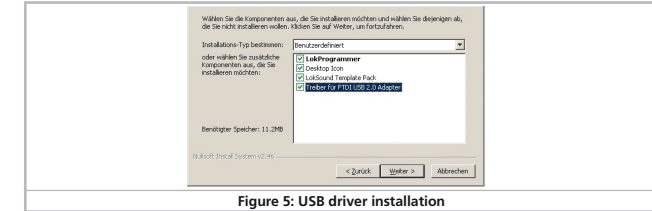

Figure 5: USB driver installation

6. Starting the Program

The installation program creates an entry in the start menu. Click on „Start-Program-LokProgrammer2-LokProgrammer", to start software version 2.x.x. or „Start-Programme-LokProgrammer4-LokProgrammer" to start software version 4.x.x.

Alternatively, you can directly open an ESU file by double-click. Files with extension *.esu will be opened by LokProgrammer software 2.x.x., files with extension *.esux will be opened by LokProgrammer software version 4.x.x.

7. Internet Update

The Lokprogrammer software contains a function for automatic updates. This update is automatically executed after the very first program start via internet connection. Please make sure that you have a functional internet connection that updates can be searched.

⚠️ Please always use the latest LokProgrammer software version. Only then you will be able to benefit from improvements and bug fixes.

Alternatively, you can regularly check the "download" section of our website www.esu.eu under "Software" – "LokProgrammer" for new update versions.

8. Support and Assistance

Your model train dealer or hobby shop is your competent partner for all questions regarding your LokSound decoder. In fact he is your competent partner for all questions around model trains. There are many ways to get in touch with us.

Send an email or fax or contact our support forum under www.esu.eu/forum. You will find many hints under "Support / FAQ" and even feedback from other users that may help you with your particular question.

USA & Canada (English support), please contact:

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