

## Quick start guide

3. Edition, February 2020

Hardware Version V3.6  
Software Version 2.7.9  
Software Version 5.x.x



# LOK PROGRAMMER

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

### 1. Properties of LokProgrammer

Thank you for choosing to buy an ESU LokProgrammer. The LokProgrammer is the ideal tool for programming all ESU decoders.

LokProgrammer consists of two core components: an interface module that establishes the physical connection between the PC and the decoder or the locomotive, and a software component that runs on a PC under MS Windows.

With this combination, it is possible to conveniently adapt the diverse properties and setting options of the ESU decoders. Thanks to the graphical user interface of Windows, even those who have had little or no experience with the "programming" of digital decoders can optimally adapt a decoder.

In addition, with the LokProgrammer it is possible to change all the noises stored on a Lok-Sound decoder using the initial project. For this purpose, we provide hundreds of sound projects on our homepage, which you can either take over or adapt as you wish.

### 2. System Requirements

The LokProgrammer software requires a commercially available MS Windows PC as the basis. This should have the following requirements:

- Operating system: Microsoft Windows 8.1 or higher
- Installed Microsoft .Net Framework version 3.5 (incl. SP1) or higher
- A USB 2.0 or USB 3.0 port
- Internet connection to carry out the installation

### 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. USB Connection

The use of current components and operating system requires a connection to the LokProgrammer to your PC via a USB port.

Fig. 1. shows the connection of the LokProgrammer with the PC using the enclosed USB-A 2.0 FTDI on RS232 cable.

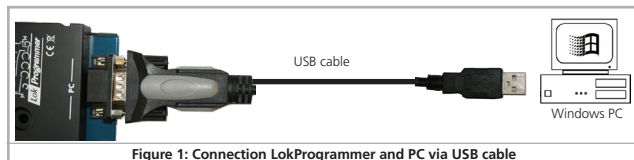


Figure 1: Connection LokProgrammer and PC via USB cable

⚠ Only use the enclosed USB-A 2.0 to RS232 cable with a chipset from FTDI. The use of other adapter cables can lead to disconnections or cause malfunctioning communication

#### 3.2. Power supply

There are two alternative options for the power supply:

- Use the supplied power adapter. Its output must be connected to the power supply socket of the locomotive programmer. The pin assignment shows Fig. 2.
- Use a regulated DC power supply or a DC transformer. Two screw terminals are provided on the LokProgrammer for this. For programming this connection is recommended for gauge 1 locomotives.

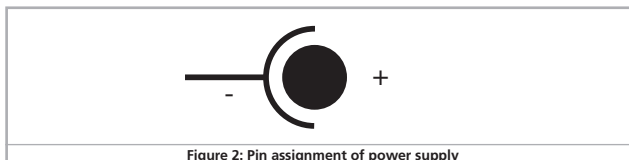


Figure 2: Pin assignment of power supply

⚠ 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 the enclosed, two-pin connector with a pitch of 5.08mm for manufacture the rail connection.
- Use the two mini sockets. These are designed for 2.6mm mini banana plugs.

⚠ Please make sure that the programming track is completely isolated from the rest of the system is! Make sure that at no time, even when crossing a vehicle, the Programming track output of the LokProgrammer with that supplied by the system booster Track can be bridged!

The immediate consequence would be a destruction of the LokProgrammer!

### 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 correctly connected and supplied with power.

The software can then be installed. You can find the installation file of the LokProgrammer on our homepage <http://www.esu.eu/> under „Download> Firmware and Software> LokProgrammer PC software“ (<http://www.esu.eu/download/software/lokprogrammer/>). On this page you will find the latest version (highest version number) as well as the Software version 2.7.9. We recommend downloading and installing both versions.

The two software versions offer the following options::

- The LokProgrammer software version 5.x.x. is suitable for programming all locomotive Sound and LokPilot decoder V4.0 or higher, as well as all SwitchPilot decoders and others ESU decoders. The software runs under Windows 8.1 or higher.
- The LokProgrammer software version 2.7.9. is suitable for programming all older ones Lok-Sound and LokPilot decoders, especially the LokSound V3.5 and LokPilot v3.0 family. This software runs on Windows 2000, Windows XP and Windows 7, Windows 8 and Windows 10.

i If you want to edit all ESU decoders, you can easily use both software packages Install and use in parallel on your computer. To do this, install one after the other both software packages.

#### 5.1. Installation of the USB-Cable driver

If you're using Windows 8.1 or later and have an internet connection, Windows usually finds the required driver fully automatically. He is either in the Windows scope of delivery included or loaded automatically from the Microsoft website. No special driver needs to be installed.

If the automatic driver installation fails, you will of course find the ones you need Drivers on our homepage [www.esu.eu](http://www.esu.eu/) under „Download> Firmware and software > LokProgrammer PC software “.

### 6. Starting the Program

The installation program creates an entry in the start menu or if desired the desktop. Therefore click on „Start> LokProgrammer 5> LokProgrammer 5“ or on „Start> LokProgrammer2> LokProgrammer“ to start the respective software. Alternatively, you can also open an ESU project file directly by double-clicking it. Files with the ending \*.esu are used with the LokProgrammer software 2.7.9. opened, files with the ending \*.esux are opened with the current version of the LokProgrammer.

### 7. Internet Update

Every time the program starts, the software will try to connect via the internet to search for program updates. Make sure that you have a functioning Internet have set up connection. Please always use the latest LokProgrammer software version.

⚠ Only with this you can benefit from innovations and bug fixes.

Alternatively, you can regularly visit our [www.esu.eu](http://www.esu.eu/) in the „Download> Firmware“ area and software> LokProgrammer PC software “check whether a new version is available.

### 8. Support and Assistance

Should you ever be stuck, your first point of contact is of course yours ESU specialist dealer from whom you bought your LokProgrammer. He is your competent one Partner for all questions about model railroading.

i We also offer our customers on our homepage in the „Support> FAQ“ section under „Support> Tips & Tricks“ lots of help in using the LokProgrammer.

We can be reached in many ways. Preferably send us an email or contact our support forum at [www.esu.eu/forum](http://www.esu.eu/forum).

#### USA & Canada (English support), please contact:

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