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- Interface for connecting a PC to the *Digital plus by Lenz*® system.
 - All system functions can be controlled via the PC (with suitable software).
 - Operating system requirements: Windows® 2000 or Windows® XP
 - USB interface.
 - Baud rate 57,600 Bd.
 - Supplied software:
Configurator for setting the XpressNet address
PC control panel
CV editor for easy configuration of decoder settings.
 - Additional information and data protocol on supplied data medium.
 - Small, space-saving housing.
 - All required cables included.

Digital
plus
by Lenz

Information USB Interface

1st edition, 01 05

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Welcome!

We would like to congratulate you on your acquisition of the USB interface. Please make sure all components have been received:

			
USB interface	Connecting cable for the XpressNet	Connecting cable for the USB port	CD "Information and software for USB interface"

If a component is missing, please ask your specialist supplier for a supplementary delivery.

Important advice, please read first!

The USB interface is a component of the *Digital plus by Lenz®* system and was submitted to intensive testing before delivery. Lenz Elektronik GmbH guarantees fault-free operation if you follow the advice below:

The USB interface may be used only with components of the *Digital plus by Lenz®* system. Any use other than the one described in this operating manual is not permitted and all guarantees shall become null and void if the USB interface is used inappropriately.

Only connect your USB interface to devices which are designed for this purpose. This operating manual will inform you which devices are suitable. Even if other devices (including those of other manufacturers) use the same connectors, you must not operate the USB interface with these devices. *The fact that the connectors are similar does not automatically mean that you may use them for operation*, even if you are dealing with devices for controlling model railways.

Do not expose the USB interface to damp or direct sunlight.

If you have any questions which this operating manual does not answer, please contact us:

Postal address: Lenz Elektronik GmbH
Hüttenbergstraße 29
D-35398 Gießen

Telephone: ++49 (0) 6403 900 133 The recorded message will
inform you of times when we
are available

Fax: ++49 (0) 6403 900 155

E-mail: info@digital-plus.de

If you experience any problems with the USB interface, just contact us, stating the following information:

- The devices you are using (LZ100, Compact etc.)
- The version numbers of these devices and your USB interface

Connecting the interface and installing the USB driver

Use only the cables supplied for the connection.

Important advice!

You may not make any other electrical connections between the PC and the model railway layout apart from those via the USB interface as this could damage the components. In this case all guarantees shall become null and void!

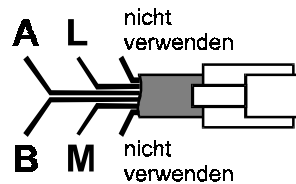
Connection to the XpressNet

Use this cable included in the package to connect the XpressNet.

Plug one end into the USB interface socket "XpressNet" and connect the other to an adapter LA152.



If you want to connect the USB interface to the terminal screws LMAB of a LZ100 or LZV100, simply cut the cable in the middle and connect the cable wires to the corresponding terminal screws. The pin assignment is shown in the illustration on the right.




Upon successful connection of the USB interface to the XpressNet, the red LED will shine. This LED indicates that an XpressNet connection has been established and that communication with the command station is now possible.

Connection to the PC

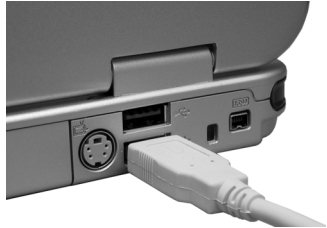
Your PC needs a free USB port to operate the USB interface.

Use the connecting cable for the USB port to connect the USB interface to your PC. Before connecting the interface, please make sure that your PC is switched on so that it is able to detect the new hardware and install the driver.

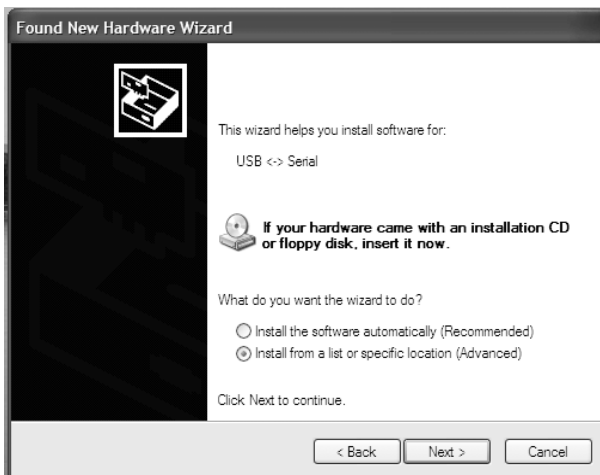
Plug the USB "B" plug into the socket marked with the USB logo ().



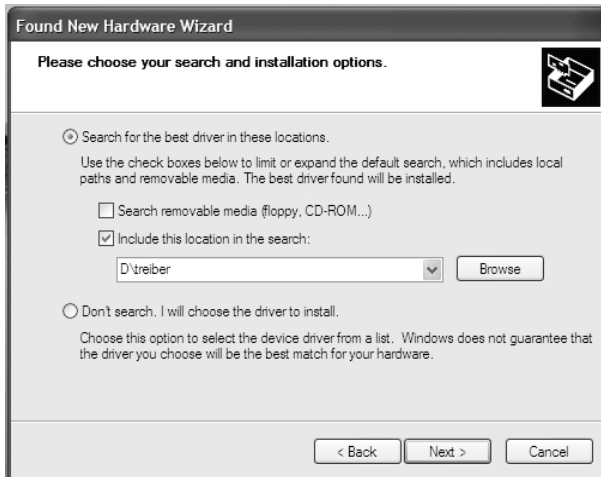
Plug the USB "A" plug into the PC's free USB port.



Your PC will detect the new hardware and start the "Assistenten für das Suchen neuer Hardware" ("Assistant for searching new hardware"). This window will pop up:



Select "Install software from a list or special source" and then click "Next". This window will pop up:

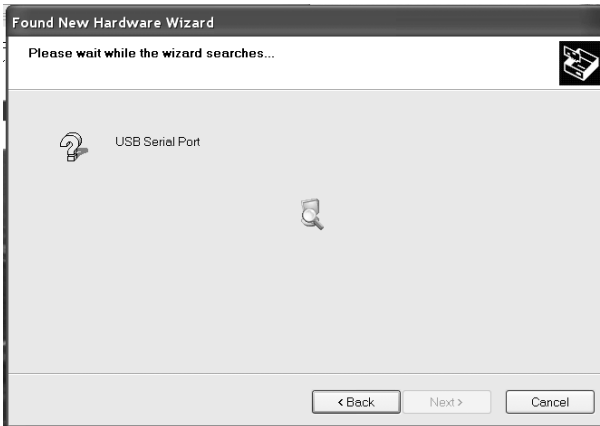


Insert the supplied CD into the CD-ROM drive. Click "Search the following source" and enter "D:\treiber" in the field below. Here, "D" stands for the drive letter of the CD-ROM drive (replace "D" with the letter of your CD-ROM drive as appropriate). Then, click "Next".

Click "Continue installation":



The driver software is now installed.



Upon successful installation of the driver software, this window will pop up:



Click "Finish".

Important advice:

Under Windows® XP, your PC will now repeat this installation procedure. This is normal - simply repeat the above steps.

Upon successful installation, the new USB hardware will be displayed in the system tray:



The required USB driver is now installed on your PC. Proceed to install the application software. You should leave the CD in the CD-ROM drive.

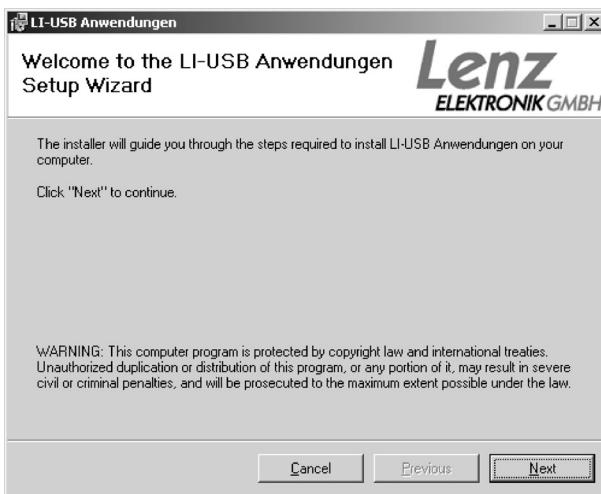
Installing the supplied application software

1. Insert the supplied CD "Information and software for USB interface" into the CD-ROM drive, if you have not already done so.
2. Click "Start" and then "Execute".
3. Enter:
"D:\Anwendungen\LI-USB.msi" and press "Enter"

(Replace "D" with the letter of your CD-ROM drive as appropriate.)

The programme for the installation of "LI-USB Server", "LI-USB CV Editor", "LI-USB Fahrpult" and "LI-USB Configuration" will be started.

Follow the instructions on the screen:



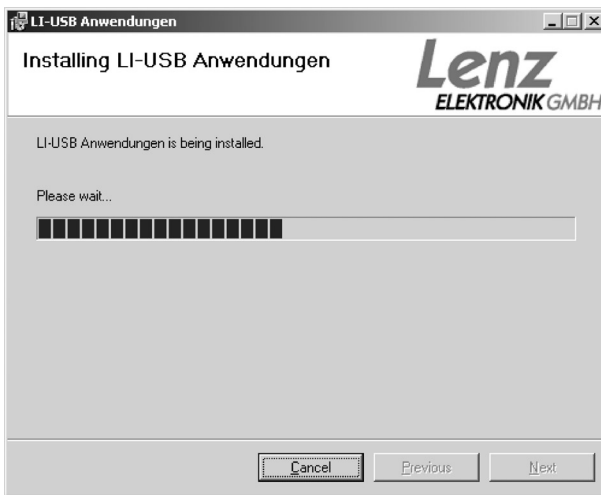
Click "Next".



The proposed default installation folder is "C:\Programme\LI-USB\". This can be changed as desired.



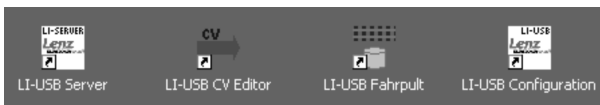
Click "Next".



The LI-USB applications are now installed on your PC.



Upon successful installation of the applications, this window will pop up. Click "Close" to exit the installation. Upon successful installation, four new icons will be displayed on your desktop:



Application software for the USB interface

You can find detailed information on the supplied software in the file "Software USB Interface_GB_01.pdf" on the installation CD. This file is located in the folder "Doku\GB\"

You need the Adobe Acrobat Reader® to read and print this file. If this programme is not already installed on your PC, you can find the installation file for the Adobe Acrobat Reader® on the supplied CD in the directory "Adobe".

Data protocol between USB interface and PC

You will find a detailed description of the communication and the protocol between PC and interface in a PDF file on the supplied data medium. File name:

"XpressNet und USB - Interface.PDF".

Demonstration programmes

The interface may include one or several demonstration programmes that explain how your model railway can be controlled via the PC. These demonstration programmes were made available to us by several software manufacturers. Lenz Elektronik GmbH cannot guarantee that these programmes will work correctly or answer any questions regarding their installation and function. If you have any questions, please contact the respective software manufacturer.

All rights reserved. Error and changes due to technical progress, product maintenance or changes in production methods excepted. We accept no responsibility for direct or indirect damage resulting from improper use, non-observance of instructions, use of transformers or other electrical equipment which is not authorised for use with model railways or which has been altered or adapted or which is faulty. Furthermore, we accept no responsibility for damage resulting from unauthorised modifications to equipment or acts of violence or overheating or effects of moisture etc. In all such cases, guarantees shall become null and void.

The customer uses the USB interface, the supplied applications and documentation at his or her own risk. Lenz Elektronik GmbH is not liable for damage caused or incurred by the user or third parties as a result of such use. In no event shall Lenz Elektronik GmbH be liable for lost sales or profits or the loss of data or direct, indirect, special, logical, accidental or punitive damages resulting from the use or the inability to use the USB interface, the supplied applications and documentation, irrespective of any theoretical liability. This is also true if Lenz Elektronik GmbH was informed about the possibility of such damages.

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