

- 
- 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® XP, Windows® 7
  - USB interface, Baudrate 57.600 Baud.
  - LAN interface.
  - Additional information and data protocol on the supplied data medium.
  - Small, space-saving housing with mounting possibilities.
  - Further development of the USB Interface 23150.
  - Free PC software: CV editor for easy configuration of decoder settings, control panel for testing of settings.

# *Digital* --- *plus* by *Lenz*

## Brief Information LAN/USB Interface

Art. no. 23151  
1<sup>st</sup> edition, 10 11

**Lenz**  
ELEKTRONIK GMBH

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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:



Interface



Cable 1

Connecting  
cable for the  
XpressNet



Cable 2

Connecting cable  
for the USB port



CD "Information und  
Software for  
Interface 23151"

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

## **Important advice, please read first!**

The Interface 23151 is a component of the *Digital plus by Lenz*<sup>®</sup> system and was submitted to intensive testing before delivery. Lenz Elektronik GmbH guarantees fault-free operation if you follow the advice below:

The Interface 23151 may be used only with *Digital plus by Lenz*<sup>®</sup> components. Any use other than the one described in this operating manual is not permitted and all guarantees shall become null and void if the Interface 23151 is used inappropriately.

Connect your Interface 23151 only to devices which are designed for this purpose. This operating manual will inform you which devices are suitable. You must not operate the Interface 23151 with any other devices (including those of other manufacturers) even if they use the same connectors. *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 model railway control.

Do not expose the Interface 23151 to damp or direct sunlight.

Please contact us if you have any questions which this operating manual does not answer:

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

Phone: +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](mailto:info@digital-plus.de)

If you experience any problems with the Interface 23151, please contact us, providing the following information:

- The devices you are using (LZV100, LZ100, Compact etc.)
  - The version number of these devices and your Interface 23151.
-

## Connecting the interface to the XpressNet and to the PC

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 Interface as this could damage the components. In this case all guarantees shall become null and void!***

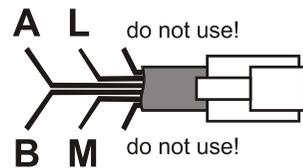
### **Connection to the XpressNet**

Use cable1 included in the package to connect the XpressNet.

Plug one end into the "XpressNet" socket of the Interface 23151 and connect the other end to an adapter LA152.



If you want to connect the Interface 23151 to the terminal screws LMAB of a LZ100/LZV100 command station, 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 interface 23151 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.

## **XpressNet address of the Interface 23151**

The factory setting of the Interface's XpressNet address is 22. This setting can be changed through the Web Interface in the framework of the XpressNet specification. Related information can be found in the file

Information\_LAN\_USB\_Interface\_23151\_01.pdf

contained on the CD which forms part of the delivery.

You need the "Acrobat Reader<sup>®</sup>" to read and print this file.

## **Connection to the USB port of the PC**

Your PC needs a free USB port to operate the interface 23151.

The USB connection can be used in parallel to the LAN connection.

Use the connecting cable for the USB port (cable 2) to connect the Interface 23151 to your PC. Before connecting the Interface 23151, 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 (  ).

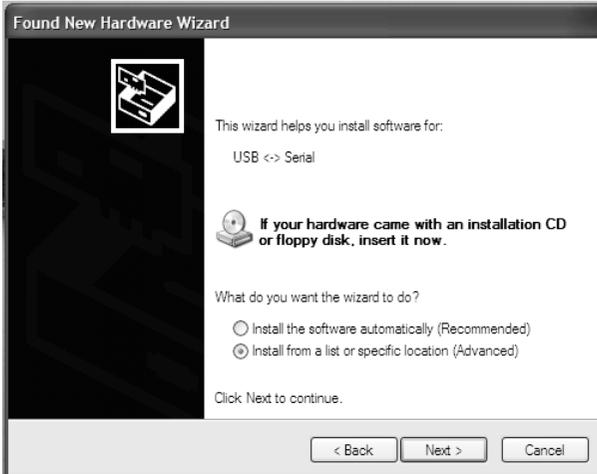


Plug the USB "A" plug into the free USB port of the PC.

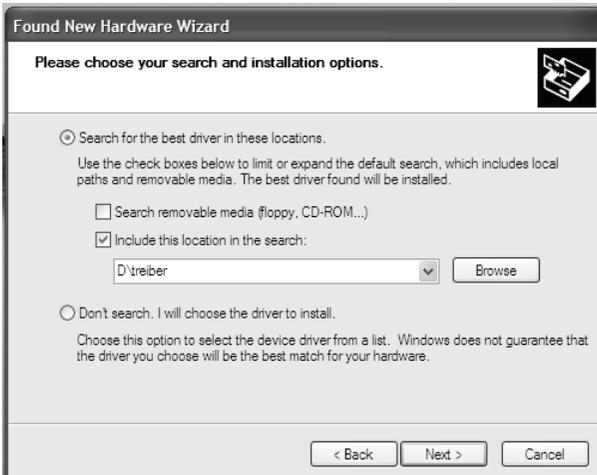


## Installing the driver for Windows XP®:

Your PC will detect the new hardware and start the "Found New Hardware Wizard":



Select "Install from a list or specific location" and click "Next". This window will pop up:



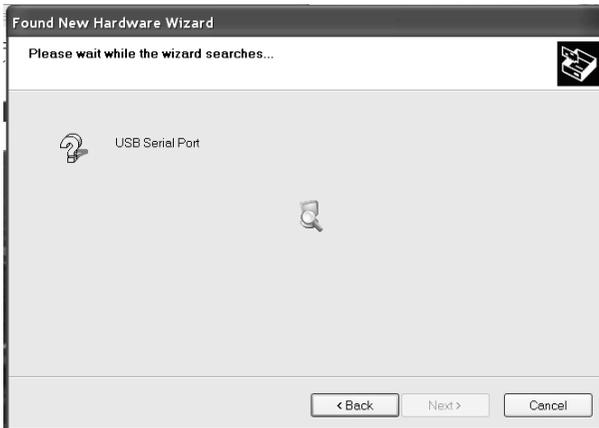
Insert the supplied CD into the CD-ROM drive. Click "Search for the best driver in these locations" and enter "D:\treiber" in the field below. Here,

"D" stands for the drive letter of the CD-ROM drive (replace "D" with the letter of your CD-ROM drive as appropriate). Click "Next".

Click "Installation fortsetzen" ("Continue installation"):



The driver software is now installed.



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

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Click "Finish".

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



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

Information on how to set up your PC for use with the USB interface can be found in the program description.

## **Installing the driver for Windows 7<sup>®</sup> and MAC<sup>®</sup> :**

The driver for Windows 7<sup>®</sup> and MAC<sup>®</sup> is installed automatically. Make sure that the computer is connected to the internet when connecting the interface for the first time so that the operating system is able to detect and install the drivers.

## **Using the Ethernet (LAN) interface**

You need a commercial Ethernet cable to use the LAN interface.

Which cable you use depends on whether you want to connect the Interface directly to a PC or to a router.



Further information on the use of the Ethernet interface can be found in the file

23151\_Information\_LAN\_USB\_Interface\_E\_01.pdf

contained on the CD which forms part of the delivery.

You need the "Acrobat Reader<sup>®</sup>" to read and print this file.

## **Data protocol between USB interface and PC**

A detailed description of the communication and protocol between the PC and the Interface can be found in the file

XpressNet und Interface 23151.pdf

contained on the CD which forms part of the delivery (this documentation is in German language).

You need the "Acrobat Reader<sup>®</sup>" to read and print this file.

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## **Application software for Interface**

Information on the supplied software can be found in the file  
23151\_Information\_LAN\_USB\_Interface\_E\_01.pdf  
contained on the CD which forms part of the delivery.  
You need the "Acrobat Reader<sup>®</sup>" to read and print this file.

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 Interface 23150, 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 Interface 23150, 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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© 2011 Lenz Elektronik GmbH  
Hüttenbergstraße 29  
D – 35398 Gießen  
Tel: 06403 900 133  
Fax: 06403 900 155  
info@digital-plus.de  
www.lenz-elektronik.de



**Lenz**  
ELEKTRONIK GMBH

