

User Manual - Net Data Logger NDL5

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Chapter 1

Packing list

Congratulation for your decision for a ZES NDL5. Please check the content of the package at first. The following parts are components of the standard equipment:

- 1x NDL5
- 1x Crossover Network cable
- 1x Standard Network cable
- 1x RS232 cabel
- 1x Standard line cord
- 1x Data cord NDL5 to LMG
- 1x Line cord from NDL5 to LMG or standard line cord

Chapter 2

General

The ZES ZIMMER Electronic Systems NDL5 is build for measuring with an LMG powermeter, for measurement data logging and for remote controlling by TCP/IP. For correct function you need to install the TCP/IP network protcoll to your PC! You need TCP/IP to include the NDL5 into the Windows-Explorer's list of data drives.

Ndl5conf is the configuration tool for the ZES NDL5. You can setup all parameters of the NDL5 (e.g. network address...). The 'ndl5conf' tool is saved at the NDL5 hard disk. To start this software you need a serial connection from your PC to the NDL5 'remote' port.

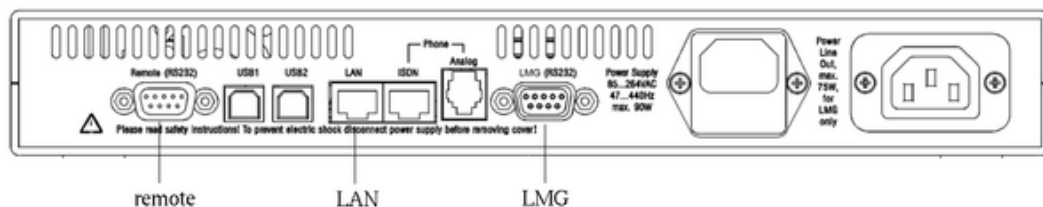


Figure 2.1: NDL5 back panel

Chapter 3

Beginning of operation

3.1 Quick start

At first sight the quick start looks bulky but we need to setup something to get network connection from LMG to NDL5. If you need more detailed description ask your ZES specialist. For more detailed information about PC-Networks and protocols there is a wide range of technical literature at the market.

There are two ways to use the NDL5: one is to connect the NDL5 directly to the PC, the other is to connect the NDL5 to your local network.

3.1.1 Connecting the NDL directly to the PC

Attention: The description for this kind of connection is based on a PC that is not connected to a local network! Otherwise you may need to do some other changes to your PC configuration! If your PC is not connected to any LAN you unconsidered can change network settings. Otherwise changes may result in network problems. In any case you should keep all changes in mind to reset all to the original settings afterwards!

- Use the provided cross over cable to connect the PC-LAN port to the NDL5-LAN port.
- Choose the protocols folder of the PC's system network settings. Here must be an entry for the TCP/IP protocol (see pic. 3.1). If there is no TCP/IP entry you need to install the protocol.
- mark the entry 'TCP/IP' and choose properties. Now you see a new window for protocol configuration like pic. 3.2.

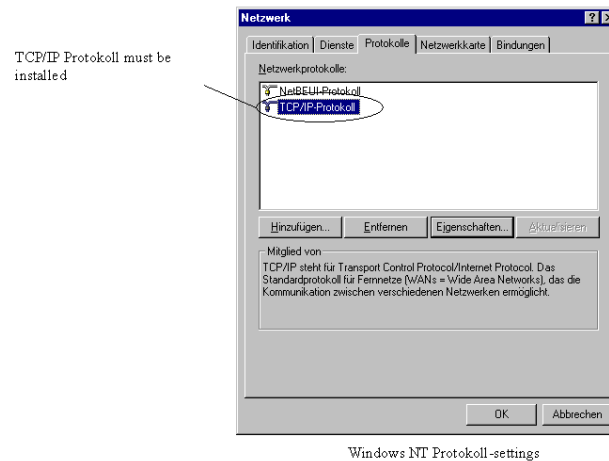


Figure 3.1: Windows NT protocols

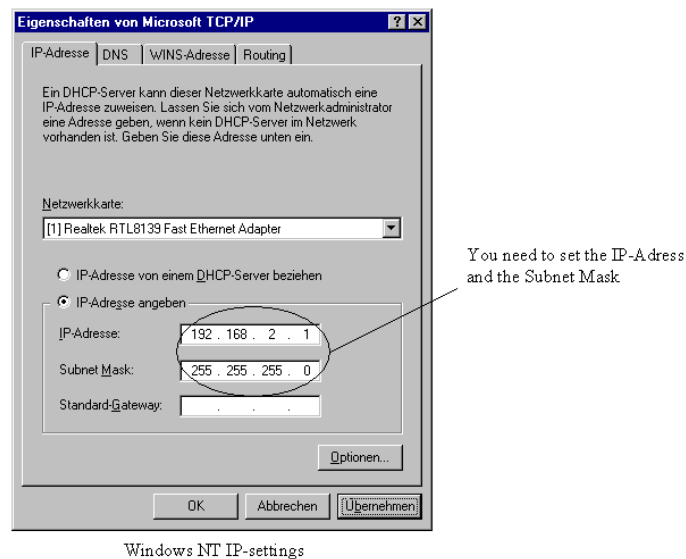


Figure 3.2: Windows NT IP-settings

- Setup PC IP-address to 192.168.2.1. and the subnet mask to 255.255.255.0. In most cases you need to reboot your Windows PC after saving your changes.
- NDL5 factory settings are: 'TCP/IP-address: 192.168.2.39' and 'Subnet mask: 255.255.255.0'.

Configuration of PC and NDL5 is now done. Please check correct function according to chapter 3.1.3.

3.1.2 Connecting the NDL5 to an existing LAN

- In this case your PC is already configured to work at the local network (please check system settings).
- Ask your system administrator for a free TCP/IP address and the subnet mask. Setup the NDL5 to both values like following:

Configuration of the NDL5

Copy the '..\ndl5conf_pc' folder of the provided CD to your PC. Connect the NDL5 'remote' port to your PC's com1 port with a standard RS232 cable (DON'T USE A NULL-MODEM CABLE!). Start the 'ttermpro.exe' program. Now you can power on the NDL5. After about 15 seconds you see some start messages at the ttermpro program. After starting the NDL5 prompts you with e.g. 'NDL5-00010305 login:'. Type in the user name 'config' and press 'ENTER'. Now the configuration tool starts like pic 3.3. With the cursor keys select the field 'NDL5 - TCP/IP address:' and press 'ENTER'. Type in the permitted¹ TCP/IP address and press 'Enter' to accept. Proceed in this way with the subnet mask. After all press 'F10' to save the new settings and close configuration.

- Connect the NDL5 -LAN port to a free connector of your local network (DON'T USE THE PROVIDED CROSSOVER CABLE).

Network configuration of PC and NDL5 ist done now. Please check function like described in capter 3.1.3.

3.1.3 Testing network configuration

Start your MS-Windows Explorer. On the left side you find an entry for the network environment. Double click this item to see more details. According to pic. 3.4 you should find an entry 'NDL5'. This describes the workgroup NDL5 in which each NDL5 of your network will be shown. Windows may need a longer time to refresh this entries so don't worry if you cannot find your NDL5 immediately after power on. If you find and double click an entry like 'NDL5-00...' you can see your NDL5 data path at the right EXPLORER window. If

¹ask your system administrator for TCP/IP address and subnet mask

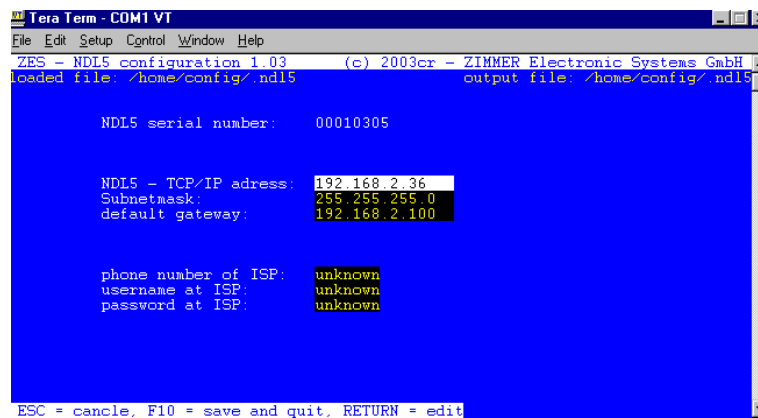


Figure 3.3: Programm 'ndl5conf'

every thing works fine until now your configuration is perfect. Now you can assign a drive letter to your NDL5. Use the 'tools' menu and select the 'map network drive' function to assign a drive letter to your NDL5 (see pic. 3.5. Mark the 'Reconnect at logon' selector to automatical reconnect the NDL5 each time you start windows. This requires a running NDL5 of course.

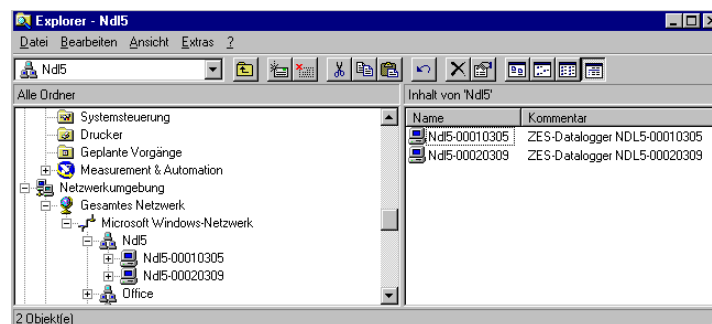


Figure 3.4: Windows NT Explorer

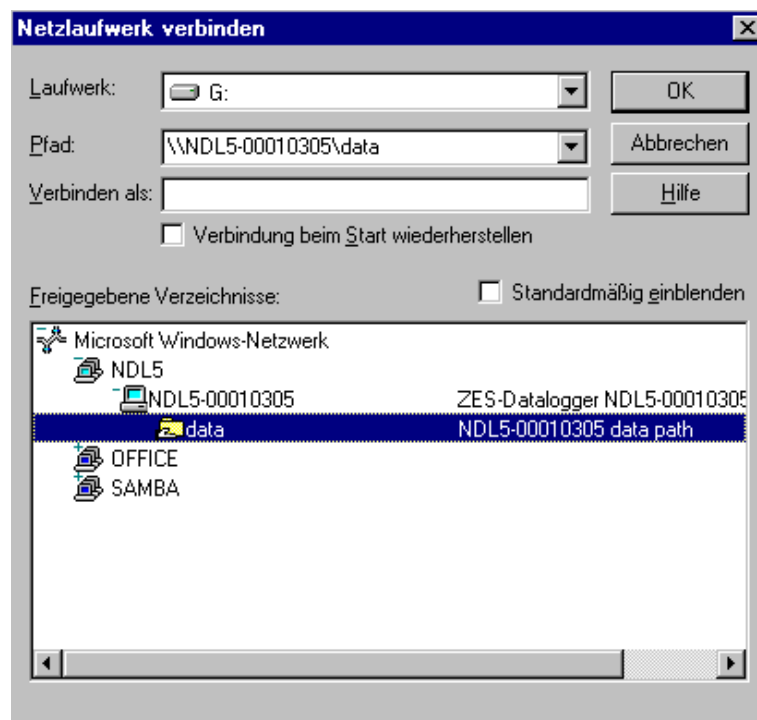


Figure 3.5: Map Network Drive