



PCI LonTalk® Adapter

PCLTA-20

Model 74401

Installation instructions

GENERAL NOTES

For using a LonTalk-PCI card some adaptations are necessary. This manual describes the procedures for using a PCI card type **Echolon PCLTA-20 PCI LonTalk® Adapter Model 74401**.

Chapter 1 describes the installation of the SPECTRA firmware on the PCI PCLTA-20 adapter. It is intended for *STK* production department.

Chapter 2 describes the procedure for installing the PCI PCLTA-20 adapter in a personal computer. It is intended for *STK* production department, *STORK/STK* service technicians and *STORK/STK* application technicians.

Technical Data

The Echolon PCLTA-20 PCI LonTalk® Adapter Model 74401 is an interface for personal computers equipped with 32-bit Peripheral Component Interconnect (PCI) interface and a compatible operating system.

The installation software for the PCLTA-20 adapter may be downloaded from the Echolon web site at:
www.echolon.com/support.

It includes a software-based control panel and a software driver for Microsoft Windows 95/98.

The control panel provides a convenient means of setting and modifying installation parameters, diagnosing card operation, and displaying error messages.

How to get help

If you need help contact your local *STORK/STK* organization or following service department:

Schablonentechnik Kufstein AG (STK)
A-6330 Kufstein / AUSTRIA
Postfach 26
Schafteuau

Tel.: 0043 (0) 5372 / 6993-0
Fax.: 0043 (0) 5372 / 6993-54
E-mail: help.stk@sbu1.storkgroup.com

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1. INSTALLING SPECTRA FIRMWARE



NOTE

For downloading the SPECTRA firmware for the PCLTA-20 adapter you need two personal computers:

PC 1 has installed the program LonMaker 2.00

PC 2 used for programming the new PCI LonTalk® Adapter

To install the SPECTRA firmware, follow the instructions below.

- * If necessary, install the NCON program on PC 2 now:
either from the CAM-CDROM:
 - Insert the CD.
 - Open the Windows Explorer and select the CDROM drive and then CAM Rev. 4.4x \ SPECTRA \ SETUP.EXE.or from the SPECTRA-CDROM:
 - Insert the CD.
 - Open the Windows Explorer and select the CDROM drive and then SPECTRA \ SETUP.EXE.
- * Turn off the PC 2 and remove the power cord.
- * Open the PC 2 case and locate an empty 32-bit PCI slot. Remove the corresponding blank panel from the rear of the PC.
- * Insert the PCLTA-20 adapter into the slot, ensuring that the edge connectors are fully mated and the slot in the rear panel mounting lug of the adapter is aligned with the threaded hole in the PC chassis.
- * Replace the screw to hold the adapter firmly in place.
- * Reinsert the power cord and restart the PC 2.
⇒ A "New Hardware Found" message will be displayed briefly when operating system recognizes the PCLTA-20 adapter.
- * Open the NCON program on PC 2.
- * On PC 1 with the operating system Windows 3.1 open the 'Datei Manager'.
- * Select the directory **c:\lnm**
- * Open the program **LNMG.EXE** and then press any key.
⇒ The program "LonMaker 2.00" will be started now.
- * Connect the LON card of the PC 1 with the new LON card of PC 2 using a 2-wire cable.
- * In the "LonMaker 2.00" on PC 1 select 'DEVICE SETUP' using the keys <ALT> + <S>.
- * In the field "Devices" select 'HOST' using the <TAB> key and the arrow keys.

- * Press <Enter>.
- * In the top field following appears:

| | |
|----------------|-----------------|
| Device: | Host |
| Domain: | b111_007 |

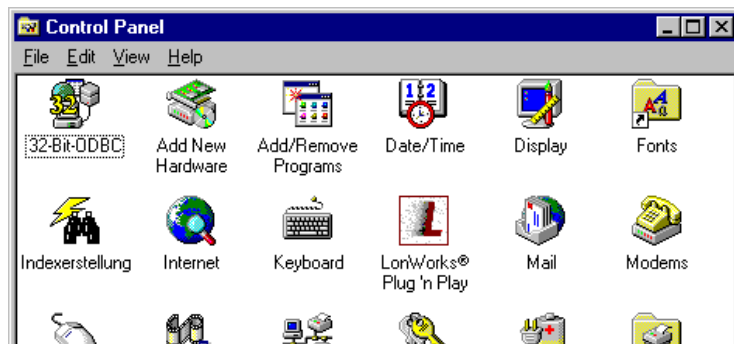
- * Select 'REPAIR' using the keys <ALT> + <R>.
- * Select 'REPLACE ICON' using the key <F4> and following window appears:

| | |
|-------------------------------|---|
| Identify device using: | <input checked="" type="radio"/> Service Pin |
| | <input type="radio"/> |
| | <input type="radio"/> |

- * Select 'CONTINUE' using the key <F2> .
- * **Do not press anything** on PC 1 yet , when following prompt will appear!

| |
|--|
| > Press the service pin now < |
| > Press Escape to cancel < |

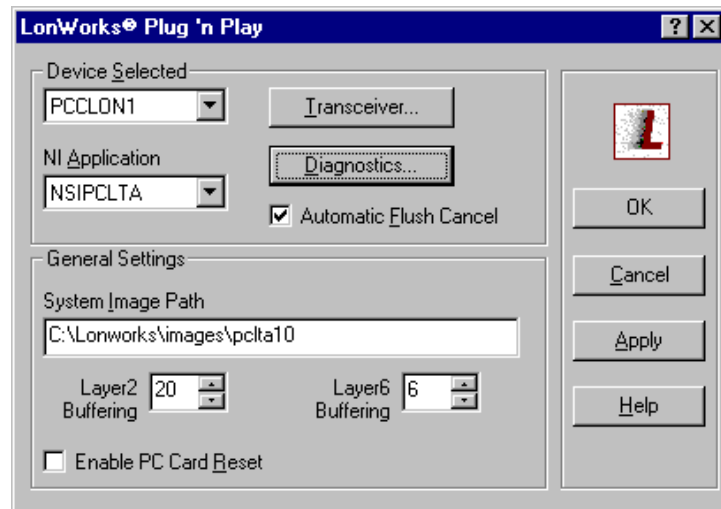
- * On **PC 2** select path Windows-START \ SETTINGS \ CONTROL PANEL and following appears:



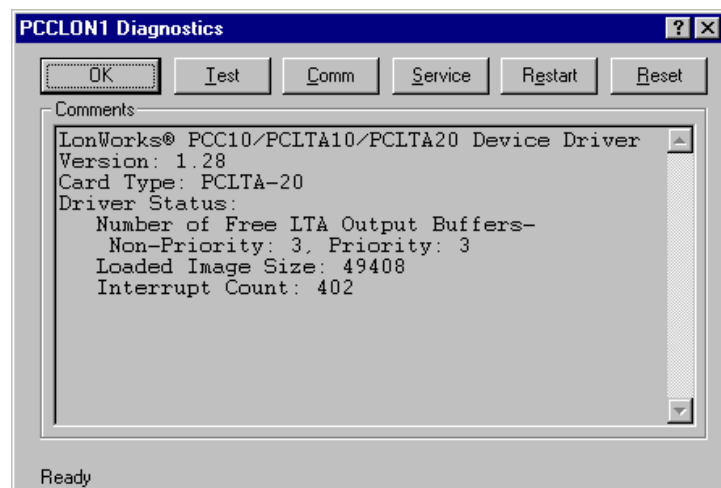
- * Click on the icon



- * Click the button 'DIAGNOSTICS...'.



- * Select 'SERVICE'.



- * Confirm it on **PC 1** (> Press the service pin now <)
- * Please wait until following message appears:

> Node successfully replaced <

- * Select 'DONE' using key <F10>
- * Select 'EXIT' using keys <ALT> + <X>
- * Select 'EXIT' using key <F10>
- * On **PC 2** close the "PCCLON1 Diagnostics" window.
- * Close the "LonWorks® Plug 'n Play" window.
- * Close the NCON program.

The installation of the SPECTRA firmware on the PCI card is finished now.

- * Turn off the PC 2 and remove the power cord.
- * Disconnect cable from both LON cards.
- * Remove the PCI-LON card from PC 2 and book it to the stock.

2. INSTALLING PCI CARD



ATTENTION

- ⇒ The installation software for the PCLTA-20 adapter is for the operating system Windows 95/98!
- ⇒ The installation of the software must occur before insertion of the PCLTA-20 adapter!

2.1 PCLTA-20 ADAPTER SOFTWARE INSTALLATION

To install the PCLTA-20 adapter software follow the instructions below.

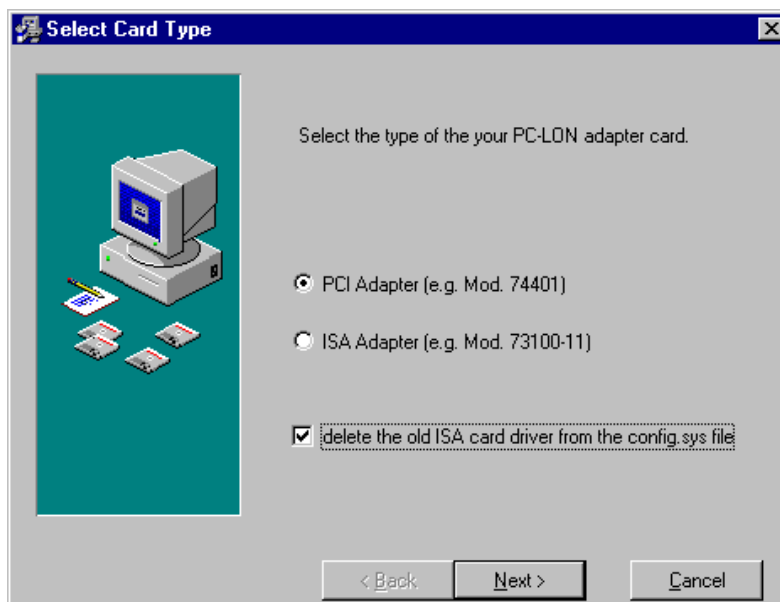
- * Close all open programs. **Do not insert the PCLTA-20 adapter into a PCI slot at this time!**

Deleting the ISA card driver

If a **PCI-LonTalk®** adapter was installed before, proceed to section *'Installing the PCI card driver'* !

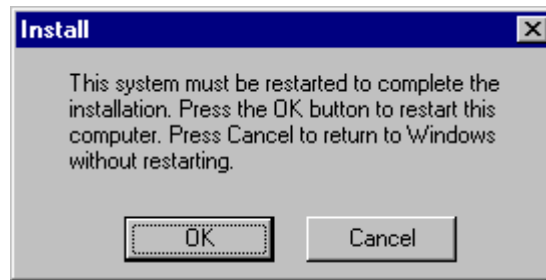
If an **ISA-LonTalk®** adapter was installed before, first the ISA card driver must be deleted from the CONFIG.SYS file. For this:

- * Start the SPECTRA Setup.exe program from the CDROM¹.
- * Click the 'SETUP' button of the WinZip® self extract prompt.
- * When prompted for the LON adapter card type mark 'delete the old ISA card driver from the config.sys file' and click the 'NEXT >' button.



¹ either from the CAM-CDROM: Open the Windows Explorer and select CAM Rev. 4.4x \ SPECTRA \ SETUP.EXE.
or from the SPECTRA-CDROM: Open the Windows Explorer and select SPECTRA \ SETUP.EXE.

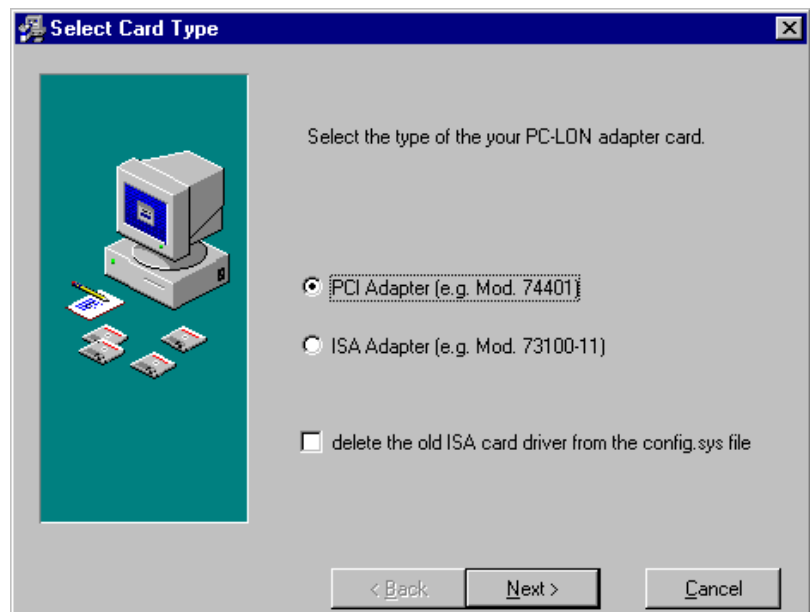
- * When prompted for a restart, click the button '**CANCEL**' !



- * Now install the PCI card driver. For this continue with the next section '*Installing the PCI card driver*'.

Installing the PCI card driver

- * Start the SPECTRA Setup.exe program from the CDROM.
- * Click the 'SETUP' button of the WinZip® self extract prompt.
- * When prompted for the driver type, select 'PCI Adapter' and click on the '**NEXT >**' button.



- * When prompted with a list of languages, click on the desired language. Then click 'NEXT' and 'YES'.
- * When prompted for a destination directory, confirm the default directory `c:\lonworks` with 'YES'.
- * When the 16-bit Application Support prompt appears, select 'YES'.
- * If the installation software discovers the SYSTEM.INI entry that loads the PCI-bus driver, it will comment out the entry and display the message, "SETUP has modified your SYSTEM.INI file by removing the following entry: device=echImpa.386."

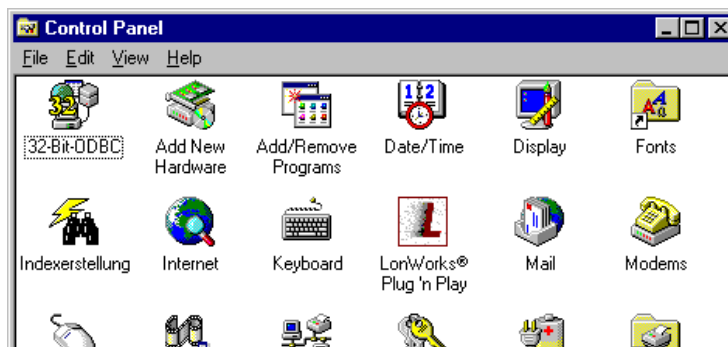


NOTE

It is not possible to use the ISA-bus protocol analyzer card and the PCLTA-20 adapter card on the same PC!

- * When the DOS virtual-mode device driver prompt appears, select 'YES'.

- * Click the 'FINISH' button.
- * The software installation is complete. At the prompt to restart the computer click on the 'OK' button.
- * Select path Windows-START \ Settings \ Control Panel. The icon "LonWorks® Plug 'n Play" must be available now (see illustration).



- * Next insert the PCLTA-20 adapter into the PCI-slot. For this continue with chapter 2.2.

2.2 PCLTA-20 ADAPTER HARDWARE INSTALLATION



ESD WARNING

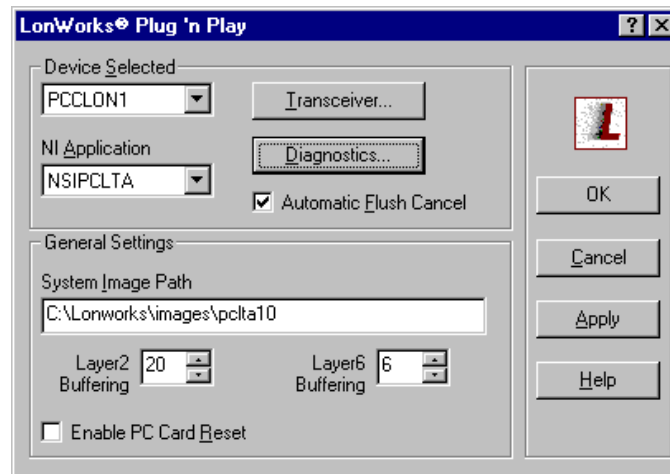
The card is sensitive to static electricity! Before installing or removing the PCLTA-20 adapter, discharge any static electricity!

- * Turn off the PC and remove the power cord.
- * Open the PC case and locate an empty 32-bit PCI slot. Remove the corresponding blank panel from the rear of the PC. Set aside the screw.
- * Insert the PCLTA-20 adapter into the slot, ensuring that the edge connectors are fully mated and the slot in the rear panel mounting lug of the adapter is aligned with the threaded hole in the PC chassis.
- * Replace the screw to hold the adapter firmly in place.
- * Reinsert the power cord and restart the PC
 - ⇒ A "New Hardware Found" message will be displayed briefly when operating system recognizes the PCLTA-20 adapter.
- * Select path Windows-START \ Settings \ Control Panel.

- * Click on the icon



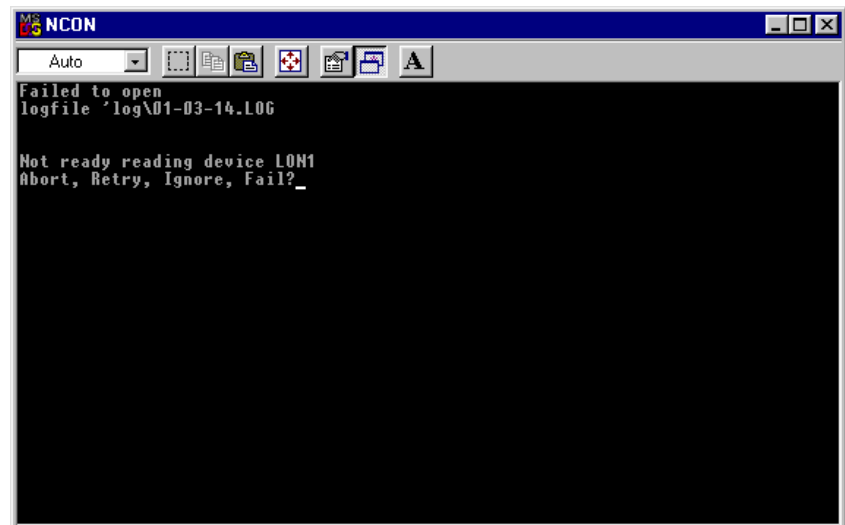
and following appears:



- * Manually initialize the PCLTA-20 adapter by clicking on the 'APPLY' button.
- * Close the "LonWorks® Plug 'n Play" window.
- * Check the correct installation by opening the NCON program.

**NOTE**

If you forget to click the 'APPLY' button, the error message 'Not ready reading device LON1' will appear when starting the NCON program (see illustration).



3. SOFTWARE REMOVAL PROCEDURE

To remove the PCLTA-20 software,

- * Select path Windows-START \ Settings \ Control Panel.



Add/Remove
Programs

- * Click on the icon .
- * Select "LonWorks®PCLTA-10/20/PCC-10 for Windows 95/98" from the list under 'Install/Uninstall' tab.
- * Click the 'Add/Remove.....' button.
- * Confirm file deletion. Most of the PCLTA-20 software will be removed automatically.
- * If necessary, edit the CONFIG.SYS file to remove any references to the stub driver!