



**Corinex PowerNet PCI Card**

# **Corinex PowerNet PCI Card**

**Owner's Manual**

# Declaration of Conformity



Model:

## Corinex PowerNet PCI Card

Manufacturer:

Corinex Global Corp.  
#3081 168H Hamilton Street  
Vancouver B.C.  
V6B2 S2C Canada

This device complies with Part 15 rules. Operation is subject to the following two conditions:

- 1) this device may not cause harmful interference, and
- 2) this device must accept any interference received, including interference that may cause undesired operation.

This equipment has been tested and found to comply with the limits of a Class B digital device, pursuant to Part 15 of the FCC Rules.

### User Warning!

Any changes of modification to said product not expressly approved by Corinex could void the user's authority to operate the equipment.

Signature:.....

Place/Date:.....2002.....

Printed name: **Peter Sobotka**.....

Position/Title:.....**CEO**.....



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Directives which Conformity is Declared:  
EMC: 89/336/EEG  
LVD: 73/23/EEC  
93/68/EEC

Standards which Conformity is Declared:  
EN5 5022  
EN5 5024  
EN6 1000-3-2/A14  
EN6 1000-3-3  
EN6 0950

The undersigned hereby declares that the above specified equipment conforms to the above directives and standards.

Signature: *Peter Sobotka*

Place/Date: .....2002.....

Printed name: Peter Sobotka

Position/Title: CEO



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# Introduction

# 1

## 1.1 Overview

Corinex PowerNet PCI Card use 110V/220V powerline as a medium for communication. After successful installation, indoor powerline network behaves as traditional LAN (Local Area Network). Corinex PowerNet PCI Card supports 14 Mbps-network speed.

The product keeps network maintenance cost low and eliminates usage barriers while there is no need for additional wiring.

The Product is a highly integrated and requires no glue logic or external memory. It includes an interface for a boot ROM and can be used in diskless workstations, providing maximum network security and user friendly management features.

## 1.2 About this Manual

This Owner's Manual is intended to provide sufficient information to help you understand successfully install the Corinex PowerNet PCI Card products to meet your networking needs.

With the information in this guide, you should be able to:

- ✘ Analyze your network needs...
- ✘ Plan the configuration of Corinex PowerNet PCI Card options...
- ✘ Install and configure your Corinex PowerNet PCI Card according to your plan...
- ✘ Verify and optimize your Corinex PowerNet PCI Card performance...

# Installation Guide **2**

## 2.1 Installing the Card in your Computer

To insert the Corinex PowerNet PCI Card into your computer, follow the steps listed below:

1. Turn off the computer and remove its cover.
2. Insert the Corinex PowerNet PCI Card into a PCI slot.
3. Secure the Corinex PowerNet PCI Card to the rear of the computer chassis and put back the computer cover.
4. Connect PCI outlet to PCI card.
5. Put PCI outlet socket to power line outlet.
6. Turn on the computer.

## 2.2 Driver Installation

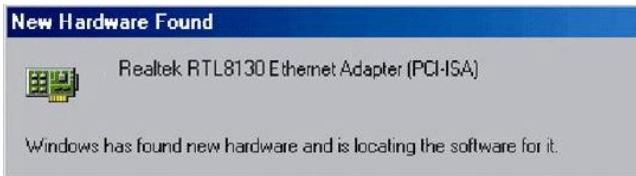
Use drivers supplied by the diskette or CD included in Corinex PowerNet PCI Card.

For W2000 system supplies easy-to-install drivers. System itself detects appropriate driver and then install it. If driver will be installed incorrect then you can find correct drivers on CD in folder W2000.

WIN9\_ and NT4 systems need drivers supplied on CD in appropriate folder. System reboot is requested and recommended after installation.

The following example specifies Corinex PowerNet PCI Card installation process for Windows 98:

1. Windows informs you about new hardware found after restart:



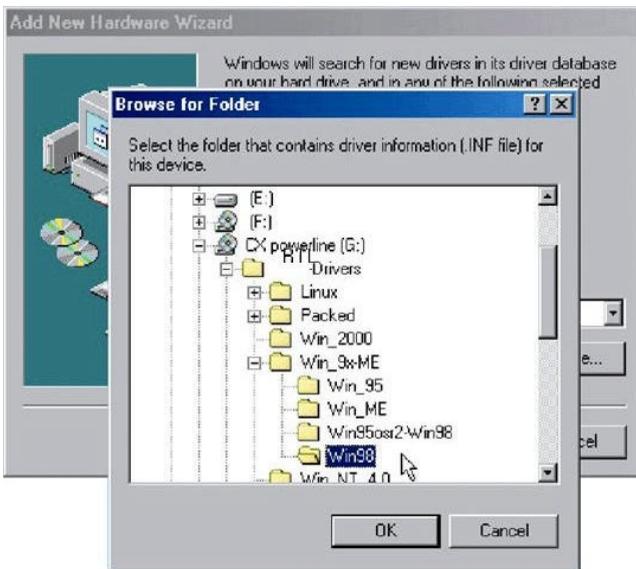
2. The system requires PowerNet PCI Card driver installation:



3. Searching for the appropriate PCI Card driver starts after inserting installation CD into CD-ROM drive. Mark Search for the best driver for your device button and enter the Next button:



4. A driver is stored on CD and path is in this case: CX powerline\RTL-Drivers\Win\_9x-ME\Win98 (choose a file appropriate for your current Windows installed). Click OK button.



5. Specification of localization is what follows. After setting the correct path, enter the Next button.



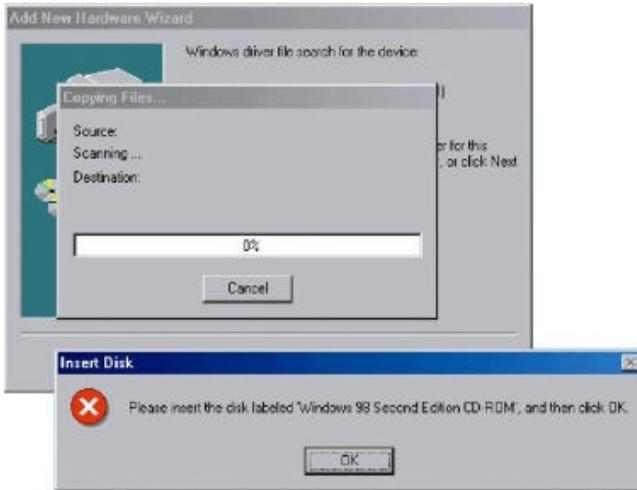
6. Mark The updated driver Realtek RTL8130 Ethernet Adapter (PCI) button and confirm it by entering Next button.



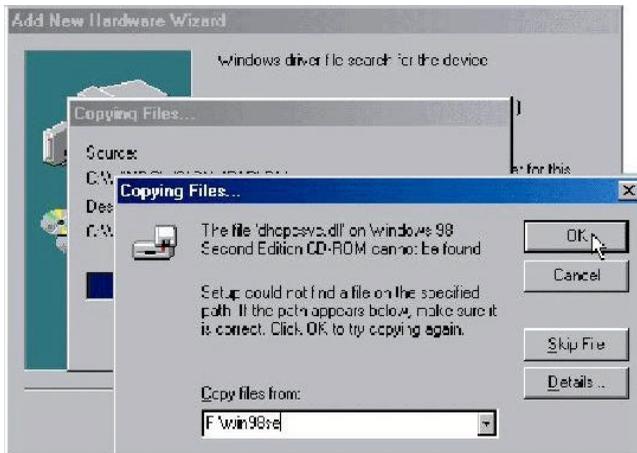
7. Installation of the best driver is prepared. Enter Next button.

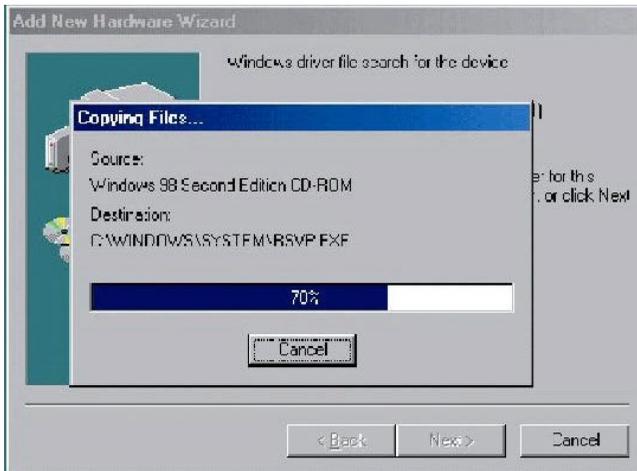


8. Driver installation for legacy Windows version requires also Windows installation CD:



9. The driver installation requires dhcpcsvc.dll library from Windows installation CD-ROM, or to enter correct path to Windows installation file on your harddisk. Enter OK button.

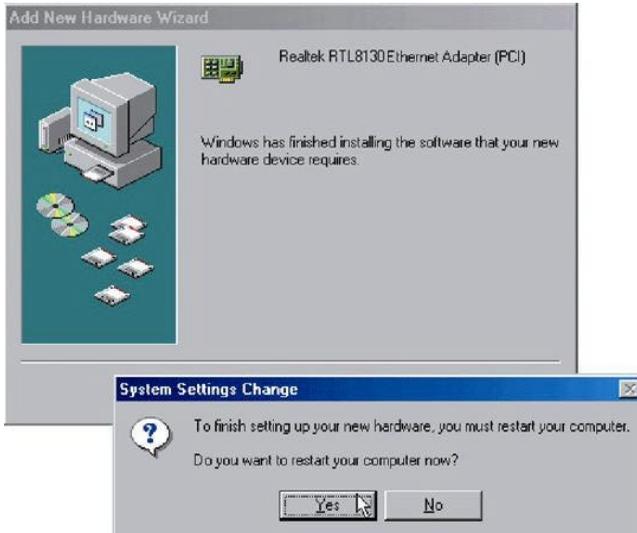




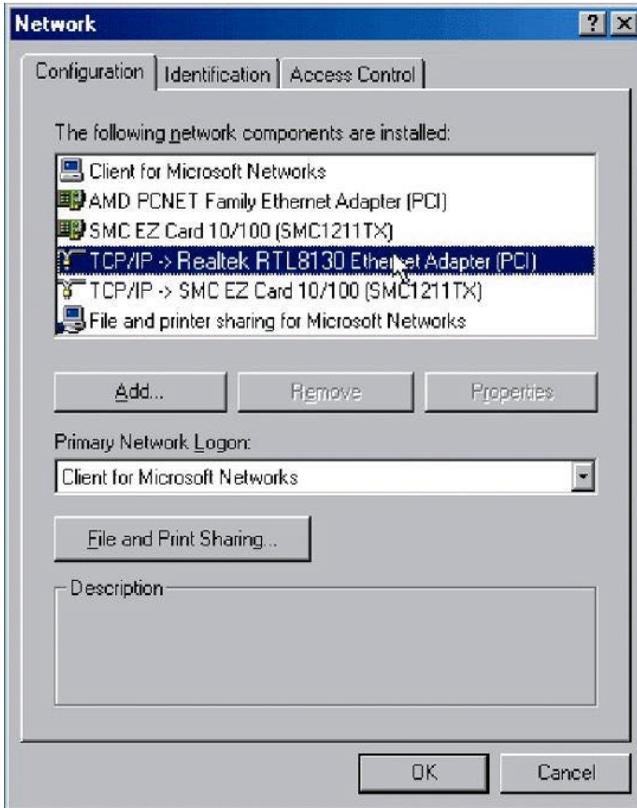
10. Completion of installation requires to enter Finish button.



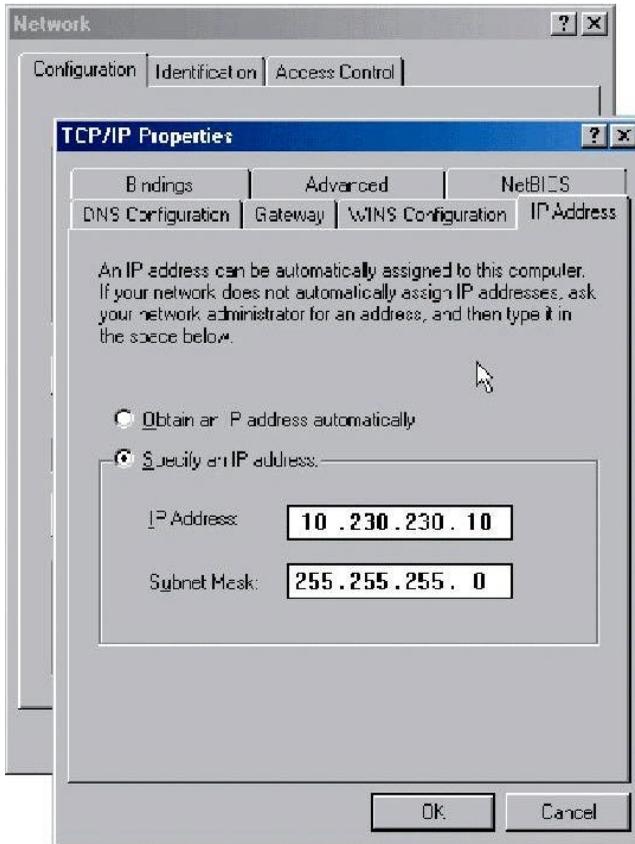
11. The system requires to restart your computer after completion of installation. It is not needed for W2000.



12. It is necessary to configure network settings for your new networking hardware. Set TCP/IP protocol for realtek RTL8130 Ethernet Adapter (PCI) and Primary Network set as Client for Microsoft Networks . Enter OK button.



13. Set appropriate IP address and subnetmask, or ask your system administrator for required information.



14. Restart your computer again. It is not required for W2000.



After successful installation of Corinex PowerNet PCI Card driver for hardware device, your computer is able to manage all parameters of the network card as standard NIC.

# User's Guide 3

## 3.1 Corinex PowerNet PCI Card

The Corinex PowerNet PCI Card introduces a new and innovative solution for data communications. This unique technology offers users a wide range of networking options by using digital power line technology enabling 14 Mbps data rate.

- ✍ II Enables users to connect individual PC's into a local area network through a 110V/220V electric power line network
- ✍ II PC file and application sharing
- ✍ II Enables peripheral and printer sharing through a 110V/220V electric power line network
- ✍ II Shared broadband Internet access
- ✍ II Bandwidth for multimedia payloads including voice, data, audio and video
- ✍ II Networked gaming
- ✍ II Eliminates the requirement for special data cable wiring
- ✍ II Cost-effective and reliable solution for data communication in your office and/or home

This User's Guide is used for Corinex PowerNet PCI Card for using in personal computer.

### Example

Interconnection of two computers over powerline by Corinex PowerNet PCI Card:

1. Install Corinex PowerNet PCI Card on each of two computers (see Installation Guide).

2. Install card to PC-s with Win2000 - all is plug&play - for older operating system you can install drivers. You can find inside network settings new connection for PCnetFast PCI card.
3. For connection enter the properties for this connection and set up IP address manually. For example: 192.168.4.1 mask: 255.255.255.0 and another PC set up 192.168.4.2 mask: 255.255.255.0
4. You can check the connection by simple ping to other side.

## 3.2 FAQ

1. Is the Corinex PowerNet PCI Card still working if there is an electricity blackout?  
PowerNet is supplied from PC power supply. When UPS is connected to PC, it will work without any interruption.
2. Once the electricity is on after blackout, is the PowerNet put into operation "automatically".  
Yes, we can compare the situation to Ethernet card. When OS Windows starts correctly you don't see any problem.
3. As the transmission range of PowerNet is around 150-200 meters, how does it work when the distance is over say 400 meters?  
We recommend to measure the line before starting operations.
4. Is there any cross talk or interference issue when using Corinex PowerNet ?  
Within PC we don't see any interference with any other card and/or system. The OFDM technology reduces any influence coming from another device which is connected to power linenetwork. To confirm the above there is a requirement such a device should pass EMC approval.
5. In case the PCs at the different floors of the same building are connected, can they use the PowerNet device for the data transmission ? and how does it work ?  
PowerNet works on the same electric phase - the same physical line. This is the basic condition. If there is the same electric line

between the offices and maximum distance is about 200m it works fine.

6. Can you see any impact on the transmission of the signal if the electricity power (no matter 110V or 220V) is unstable.  
No.
7. Can we use Corinex PowerNet Card for both 110/220V Power Network or are there two versions of Corinex PowerNet.  
We support both 110V and 220V on the same device (PCI, USB, Ethernet).