Corinex Powerline Ethernet Wall Mount

Corinex

Manual

Mount to your Cable/DSL router.

I have got all that, it still doesn't work...

- Make sure that your TCP/IP settings are set to automatically obtaining IP address and gateway address.
- Switch off all computers and unplug the powerline devices, now plug your Powerline Ethernet Wall Mount back into the router before switching on your computer. This will ensure that the computer's IP address will be obtained from the router.
- Now open the web browser, if the **Not Found** page appears, try to check your **LAN settings** in the **Internet Options** of your web browser.

It works but it is slow...

A slow connection is almost always due to poor electrical connection.

- Make sure the device is connected straight into the socket and not into a power splitter or extension cable.
- Try another outlet.

If you still have trouble, please visit **www.corinex.com/support** and go to the appropriate section with the information about the product. You will find there news, manuals and software updates, as well as frequently asked questions (FAQ). If this doesn't help, you can contact the Corinex "help desk" by sending an e-mail to: **support@corinex.com**

- describing your problem
- reporting the device types and manufacturing numbers of your network adapters

Declaration of Conformity

CE 0682

Model: Corinex Powerline Ethernet Wall Mount

Manufacturer: Corinex Communications Corp.
670-789 West Pender Street
Vancouver, BC
Canada V6C 1H2

Directives which Conformity is Declared:

EMC: 89/336/EEC
(in accordance with Article 10.2 of Council Directive 89/336/EEC on the approximation of the laws of the Member States relating to electromagnetic compatibility implemented in the Federal Republic of Germany by § 4 (2) of the Electromagnetic Compatibility Act (EMVG) of 18 September 1998 as published on 24 September 1998 (Federal Law Gazette I p. 2882). This declaration does not testify to compliance with the EMC protection requirements of other laws implementing Directives of the European Community other than Council Directive 89/336/EEC.)
1999/519/EEC
LVD: 73/23/EEC
R&TTE: 1999/5/EEC

Standards which Conformity is Declared:

EN 55022
Recommendation for measurement by Dortmund University
(measurement of conducted disturbances on AC mains in traffic mode, T-ISN Method)
EN 55024
EN 60950

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

Printed name / Title: **Peter Sobotka / CEO** Place / Date: **Vancouver / Feb.04.2004**

Signature: .....

4. Check that the devices exist on the network:

- *Start the* **Corinex Setup Tool**, *click* **Network Statistics** *and see if all devices on your network are found. If all devices are listed, skip this section. If a device is missing:*
- *Make sure the Corinex Powerline Ethernet Wall Mount is plugged straight into the wall and not through a power strip or extension cord. Some types of extension cords are blocking the powerline communication.*
- *Unplug all Corinex Powerline Ethernet Wall Mounts and plug them back in again, one by one. Run the* **Corinex Setup Tool** *again.*
- *The devices may be programmed with different passwords. Setup all devices with a new password as described in the chapter 3.1.*

5. Check that the Corinex Powerline Ethernet Wall Mounts are detected by TCP/IP:

From the command prompt, run ping and type the computer name or IP address of the computer you are working on [ping your computer name]. This should return 4 good packets. Now try to ping another computer on the network. If a timeout occurs:

- *Go into the TCP/IP properties and check that the radio buttons for automatically obtaining IP addresses and gateway are checked. If not, make sure that both computers are on the same subnet.*
- *Run ipconfig /all from the command prompt on all computers to verify that all computers have valid IP addresses on the same subnet.*
- *The IP tables may be corrupted, reboot all computers and try again. If these tests work, you have basic connectivity and can use all network services. If this does not work, you may have a faulty device. Please contact your reseller or local distributor.*

I cannot share my Internet access…

To share broadband Internet access, you need a router connected to your Cable/DSL modem. This will provide a firewall with a single IP address that all computers will use as a gateway. Connect a *Corinex Powerline Ethernet Wall*

4 Troubleshooting Guide

Computer networking can sometimes be "tricky" when many components must work together for the ultimate network system to function properly. With the right tools the problems are usually easy to fix. The following tools, available on your computer or the Installation CD, will get you started.

- Corinex Setup Tool (from the Corinex Powerline Ethernet Wall Mount Installation CD)
- Ping (from the command prompt, see section 2.6)
- ipconfig (WinNT/2000/XP), winipcfg (Win9x/ME) (from the command prompt)

If it just doesn't work...

1. Check that the LEDs on the Powerline side labelled ***L*** *on all devices are on, if not:*

- *Make sure the power outlet is working by plugging something else into it.*
- *Make sure the power outlet is connected to other outlets used for Powerline. If this fails as well, try 2. – 5.*

2. Check the Ethernet cables:

The Corinex Powerline Ethernet Wall Mount has a LED on the Ethernet side labeled **L/A.** *If it is not on:*

- *Check if the device at the other end of the Ethernet cable is switched on.*
- *Try a different Ethernet cable.*

3. Check the connection between the Corinex Powerline Ethernet Wall Mount and the electric wires network.

Declaration of Conformity

For US Market Only

Tested to Comply With FCC Standards FOR HOME OR OFFICE USE

Model: Corinex Powerline Ethernet Wall Mount

Manufacturer:

Corinex Communications Corp.
670 - 789 West Pender Street
Vancouver, B.C.
V6C 1H2 CANADA

This device complies with Part 15 of the FCC 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 or modification to said product not expressly approved by Corinex could void the user's authority to operate the equipment.

Printed name / Title: **Peter Sobotka / CEO** Place / Date: **Vancouver / Feb.04.2004**

Signature: .....

Unit Dimensions UK Plug	52mm L x 85mm W x 100mm H
Unit Dimensions Euro Plug	52mm L x 80mm W x 100mm H
Weight	0.192kg
Interface	Standard Ethernet port RJ 45
Power input	110/120 or 220/240 V AC, 0.5A
Safety & EMI	USA: UL/FCC part 15 / Europe: CB/CE
Operating Temperature	32°F to 131°F (0° to 55°C)
Storage Temperature	-4°F to 158°F (-20° to 70°C)
Operating Humidity	10% to 85% non-condensing
Storage Humidity	5% to 90% non-condensing

Yes, there are two versions, 110/120V and 220/240V to support the various market requirements. There are even more AC plug versions available and delivered in different packages to reflect the outlet requirements of the consumer.

3.4 Powerline Ethernet Wall Mount Specifications

The following table lists the product specifications for the *Corinex Powerline Ethernet Wall Mount.*

Standard compliance	HomePlug v 1.0.1 Certified
	Windows 98/ME/2000/XP/NT, Mac OS X and Linux compatible for the Setup Tool
	IEEE 802.3
	UL and /or international standards approved
	FCC and / or CE approved
Protocol	Ethernet / HomePlug 1.0.1 TCP/IP
Port	RJ 45 (Ethernet 8 pin port)
Speed	Up to 14 Mbps
Cabling type	Ethernet cable
AC Plug type	US, UK and Euro
LED status Lights	Link and Activity on Powerline, Link/Activity on Ethernet
Unit Dimensions US Plug	52mm L x 65mm W x 100mm H

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NOTE: This equipment has been tested and found to comply with the limits for a Class B information technology equipment. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference, the end user is advised to take adequate measures.

2005-11- ver.1.2

Content

3.3 FAQ

1. Is the Corinex Powerline Ethernet Wall Mount still working if there is an electricity blackout? And will it resume the transmission automatically after the power comes back?
Corinex Powerline Ethernet Wall Mounts are operational, when the connected computers are rebooted and the power is back on.

2. Once the electricity is on after blackout, is the Powerline Ethernet Wall Mount put into operation "automatically"?
Yes, as soon as the computers are running again. If there is a problem, unplug the adapter and plug it back into the connection slot.

3. As the recommended transmission range of powerline devices is around 200 meters, what happens when the distance is over say 400 meters?
We recommend to try the line for functionality and performance, before starting operations.

4. Is there any cross talk or interference issue when using Corinex Powerline Ethernet Wall Mounts?
Within a PC or laptop we don't see any interference with any other card and/or system. OFDM is a technology, which reduces any influence coming from another device, which is connected to the electric power network. The Corinex powerline devices have also been FCC and CE approved.

5. In case the PCs are at different floors of the same building, can they use the powerline device for data transmission? And how does it work?
Powerline device works on the same physical line. If the electric wires between the two outlets used for communications in this case are connected with each other and the maximum distance is about 200m, it works fine.

6. Can we use a Corinex Powerline Ethernet Wall Mount for both 110V and 220V power networks or are there two versions of Corinex Powerline Ethernet Wall Mounts?

- Enables users to connect individual PCs or other devices with Ethernet communications links into a local area network through 110/120 V or 220/240 V electric wires (powerline) network.
- Enables PC file and application sharing
- Enables peripheral and printer sharing through the powerline network
- Enables shared broadband Internet access
- Enables sharing the bandwidth for multimedia payloads including voice, data, audio and video
- Enables gaming competition within the reach of the electric wires network
- Eliminates the requirement for special data cable wiring
- A real cost-effective and reliable solution for high speed communications in any home or small office

You can combine this type of adapters with the full line of Corinex powerline products. This manual has been prepared for *Corinex Powerline Ethernet Wall Mount* for use in combination with PCs or laptop computers.

Example

The connection of two computers over the powerline by using two *Corinex Powerline Ethernet Wall Mounts*:

1. Install *Corinex Powerline Ethernet Wall Mount* on each one of the two computers (see Installation Guide).
2. For connectivity enter the properties for this network connection (see the user guide of your operating system) and set up an 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
3. You can check the connection by a simple ping procedure addressing the IP address of the second PC.

1 Introduction

1.1 Overview

The *Corinex Powerline Ethernet Wall Mount* is a network interface adapter, using the 110/120 or 220/240 V electrical wires in premises as a medium for communications. After successful installation, the indoor Powerline network behaves like a traditional LAN for computers. The *Corinex Powerline Ethernet Wall Mount* supports up to 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 highly integrated and requires no other external electronic components.

1.2 About this Manual

This Owner's Manual is intended to provide sufficient information to help you understand how to successfully install the *Corinex Powerline Ethernet Wall Mount* to meet your networking needs. With the information in this manual, you should be able to:

- Analyze your network efficiency
- Plan the configuration of *Corinex Powerline Ethernet Wall Mount* options
- Install and configure your *Corinex Powerline Ethernet Wall Mount* according to your plan
- Verify and optimize your *Corinex Powerline Ethernet Wall Mounts'* performance

2 Installation Guide

2.1 What this Package Contains

When you receive your *Corinex Powerline Ethernet Wall Mount,* check to be sure that your package contains:

- Corinex Powerline Ethernet Wall Mount with the right AC plug
- Ethernet cable
- This manual
- Installation CD

We are constantly innovating our products. For the latest hardware/software changes, downloads and additional information on your device, please visit
www.corinex.com/support
We also advise you to visit our Corinex Authorized Powerline Partners Program web page (**cappp.corinex.com**), as you can find there valuable information about complex applications and installations, along with the partners in your area, who are providing installation services.

2.2 System Requirements

- A Macintosh or IBM compatible PC
- One available 10/100 Mbps Ethernet port for connection
- CD-ROM drive
- Windows 98/ME/2000/NT/XP, Mac OS X or Linux operating system

network and identifies the devices shown under **Device Address** *in the window as belonging to the network. The function and performance of the devices between the local device / adapter 00:50:C2:14:EB:C1 and the devices identified in the network is displayed in the window under* **Connection Quality**.

5. All devices in your network must be programmed with the same network encryption key. Run this utility on all computers with a powerline networking device attached. If you have a powerline device that is not normally connected to a computer, it must first be connected to a computer and set up with a network encryption key.

3.2 Powerline Ethernet Wall Mount

The *Corinex Powerline Ethernet Wall Mount* introduces a new and innovative solution for high speed communications, using the electric wires within premises as a medium for communication. This unique technology offers users a wide range of networking options by using digital powerline technology enabling up to 14 Mbps of "traffic" between nodes within the network.

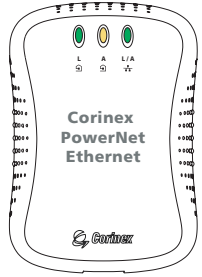
the password is case sensitive so remember exactly how it was typed as it will be needed for the next device being set up. Type your password in the **Network Encryption Key** box and click **Next**. If you don't want to use encryption, uncheck the box **Encrypt frames**.

4. Click **Next** again to program the *Corinex Powerline Ethernet Wall Mount* with the new encryption key. This will take a few seconds. The next screen will look similar to the following screen. The white box will list the MAC addresses of all other installed powerline devices on the network that are programmed with your chosen network password. If no other devices have been programmed, the list will be empty. If you use also other than Corinex HomePlug certified devices in the network, these devices may be set at the default status. This default setting makes sure that HomePlug devices find each other in a network and connect and communicate automatically with each other. In order to generate your private and secure network, all HomePlug certified devices in the network must be set to the same network encryption key, either to the default key "HomePlug" or your own selection.

The adapter with the MAC address 00:50:C2:14:EB:C1 acts as local device in the

2.3 Physical Description

Front Panel
LED Definition



(LEDs from left to right)

Powerline

L: Green	On:	Link
A: Yellow	On:	Link
	Off:	No Link
	Blinking:	receiving/transmitting data

Ethernet

L/A: Green	On:	Link
	Blinking:	receiving/transmitting data

2.4 Installing the Powerline Ethernet Wall Mount

To connect the Corinex Powerline Ethernet Wall Mount to your computer, follow the steps listed below:

1. Plug the *Corinex Powerline Ethernet Wall Mount* into an AC outlet.
2. Plug the Ethernet cable into the *Corinex Powerline Ethernet Wall Mount* and the Ethernet slot or card on your PC.

The *Corinex Powerline Ethernet Wall Mount* adapter is equipped with an automatic switch enabling an Ethernet slot or card on the PC to be connected to the adapter via a standard cable or to connect a cable modem or DSL modem via a "cross cable" to the adapter.

2.5 Installing the Setup Tool

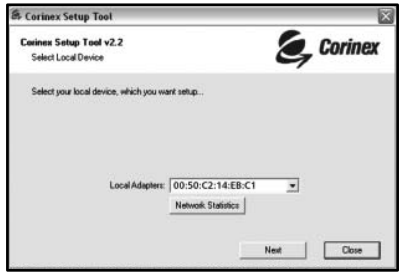
1. Insert the installation CD. The CD should automatically start the installation process. If the installation program does not start automatically, start the application by selecting **My Computer**, usually found on the desktop or laptop start up screen. Navigate to the **CD** drive and double click on the drive. The **Installation CD menu** will appear. Click on **Install Setup Tool**.

3 User Guide

3.1 Setup Tool User Guide

The Setup Tool allows the user to setup a private and secure powerline network. Follow the steps on the screen of this guide and your secure network will be set up correctly.

1. Make sure that your *Corinex Powerline Ethernet Wall Mount* is connected to the computer and start the Setup Tool from the Start menu by selecting the software folder and select **Corinex Setup Tool**. The following screen will appear.



2. Detecting the device takes a few seconds. If there are more locally connected powerline devices, select the device you want to configure from the list. Click **Next**.

3. Now the following screen should be displayed. This is the screen where your network password is selected. Choose a password between 4 and 24 characters,

to check the connection to the AC outlet or use a different AC outlet.

- If the setup does not work, refer to the troubleshooting guide, but first, try unplugging the powerline device and reboot the computer as this sometimes fixes the problem.

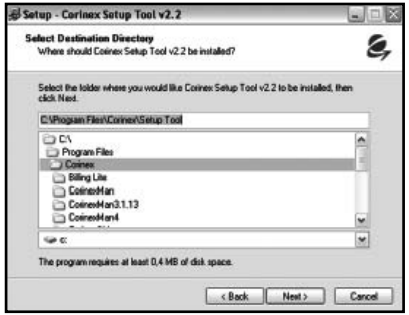
2.7 Running the Setup Tool

The setup so far allows transmission of data encrypted with a universal key. To set your private and personal encryption keys for the network, run the **Corinex Setup Tool** provided on the CD (refer to chapter 3.1 for details). **This prevents anyone from intercepting your transmitted data.**

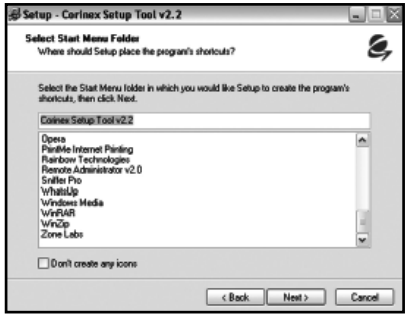
Note: By clicking on **Read Documentation** you can read the manuals and additional documents included on the Installation CD.

2. The following welcome screen will be displayed. Click **Next** to continue.

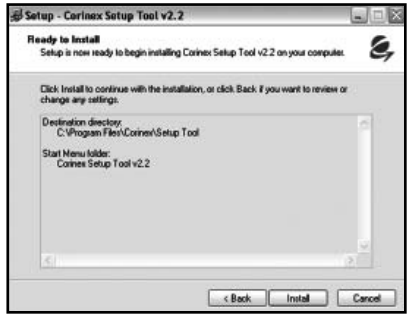
3. The next screen will ask where the Setup Tool should be installed. Click **Next** to continue.



4. This screen will ask where Setup should place the program's shortcuts. Select the **Start Menu Folder** or simply click **Next**.



5. The following screen will appear to inform you that Setup is ready to begin installing the Setup Tool on your computer. Click Install.



2.6 Testing the Setup

To verify that the connection is working correctly, use the standard **Ping** utility. In Windows, click on menu **Start** -> **Run**, then write the command **ping IPADDRESS -t**, where IPADDRESS is the IP address of the computer to which the Powerline Ethernet Wall Mount is connected to, e.g. **ping 192.168.4.1 -t** . (This command will be stopped by pressing keys **CTRL+C**).

- Ping the IP address of the computer to which the *Powerline Ethernet Wall Mount* is connected. If this fails, there is a problem with the Ethernet network card or with the TCP/IP protocol.
- Repeat the same process with the other computers on the powerline network.
- If all nodes can ping themselves, try pinging another computer on the powerline network. If this fails, there is a problem with connections on the powerline. Try