



Your PDF Guides

You can read the recommendations in the user guide, the technical guide or the installation guide for ZYXEL PLA-400 V2. You'll find the answers to all your questions on the ZYXEL PLA-400 V2 in the user manual (information, specifications, safety advice, size, accessories, etc.). Detailed instructions for use are in the User's Guide.

User manual ZYXEL PLA-400 V2
User guide ZYXEL PLA-400 V2
Operating instructions ZYXEL PLA-400 V2
Instructions for use ZYXEL PLA-400 V2
Instruction manual ZYXEL PLA-400 V2

PLA-4xx Series

*Powerline Ethernet Adapter Series (PLA-400/400 v2/401/401 v2/
470/470 v2)*

User's Guide

Version 3.0.5
11/2007
Edition 1

ZyXEL
www.zyxel.com



[You're reading an excerpt. Click here to read official ZYXEL
PLA-400 V2 user guide](http://yourpdfguides.com/dref/3664397)
<http://yourpdfguides.com/dref/3664397>

Manual abstract:

@@ - ZyXEL Web Site Please refer to www.zyxel.com for additional support documentation and product certifications. User Guide Feedback Help us help you. Send all User Guide-related comments, questions or suggestions for improvement to the following address, or use e-mail instead. Thank you! The Technical Writing Team, ZyXEL Communications Corp., 6 Innovation Road II, Science-Based Industrial Park, Hsinchu, 300, Taiwan. E-mail: techwriters@zyxel.com.tw PLA-4xx Series User's Guide 3 Document Conventions Document Conventions Warnings and Notes These are how warnings and notes are shown in this User's Guide.

Warnings tell you about things that could harm you or your device. Notes tell you other important information (for example, other things you may need to configure or helpful tips) or recommendations. Syntax Conventions · The PLA-400, PLA-400 v2, PLA-401, PLA401 v2 and PLA-470 may be referred to as the "PLA-4xx", the "ZyXEL device", the "device" or the "powerline adapter" in this User's Guide. · The PLA-4xx Series Configuration Utility version 3.0.

5(AG) may be referred to as the "configuration utility" or the "utility" in this User's Guide. · Product labels, screen names, field labels and field choices are all in bold font. · A key stroke is denoted by square brackets and uppercase text, for example, [ENTER] means the "enter" or "return" key on your keyboard. · "Enter" means for you to type one or more characters and then press the [ENTER] key. "Select" or "choose" means for you to use one of the predefined choices.

· A right angle bracket (>) within a screen name denotes a mouse click. For example, Maintenance > Log > Log Setting means you first click Maintenance in the navigation panel, then the Log sub menu and finally the Log Setting tab to get to that screen. · Units of measurement may denote the "metric" value or the "scientific" value. For example, "k" for kilo may denote "1000" or "1024", "M" for mega may denote "1000000" or "1048576" and so on. · "e.g.," is a shorthand for "for instance", and "i.e.," means "that is" or "in other words". Icons Used in Figures Figures in this User's Guide may use the following generic icons.

The PLA-4xx icons used may not be an exact representation of your device. PLA-4xx Computer Notebook computer 4 PLA-4xx Series User's Guide Safety

Warnings Safety Warnings For your safety, be sure to read and follow all warning notices and instructions. · Do NOT use this product near water, for example, in a wet basement or near a swimming pool. · Do NOT expose your device to dampness, dust or corrosive liquids. · Do NOT store things on the device. · Do NOT install, use, or service this device during a thunderstorm. There is a remote risk of electric shock from lightning. · Connect ONLY suitable accessories to the device. · Do NOT open the device or unit. Opening or removing covers can expose you to dangerous high voltage points or other risks.

ONLY qualified service personnel should service or disassemble this device. Please contact your vendor for further information. Make sure to connect the cables to the correct ports. · Place connecting cables carefully so that no one will step on them or stumble over them. · Always disconnect all cables from this device before servicing or disassembling.

· Use ONLY an appropriate power adapter or cord for your device. · Connect the power adapter or cord to the right supply voltage (for example, 110V AC in North America or 230V AC in Europe). · Do NOT allow anything to rest on the power adapter or cord and do NOT place the product where anyone can walk on the power adapter or cord. · Do NOT use the device if the power adapter or cord is damaged as it might cause electrocution. · If the power adapter or cord is damaged, remove it from the power outlet.

· Do NOT attempt to repair the power adapter or cord. Contact your local vendor to order a new one. · Do not use the device outside, and make sure all the connections are indoors. There is a remote risk of electric shock from lightning. · Do NOT obstruct the device ventilation slots, as insufficient airflow may harm your device. · If you wall mount your device, make sure that no electrical lines, gas or water pipes will be damaged. PLA-401 v2 models only: · This power unit is intended to be correctly orientated in a vertical or floor mount position. PLA-4xx Series User's Guide 5 Safety Warnings This product is recyclable. Dispose of it properly. 6 PLA-4xx Series User's Guide Table of Contents Table of Contents About This User's Guide .

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

3 Document Conventions.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....
.....
.....
.....

... 4 Safety Warnings.....

.....
.....
.....

.....
.....
.....
.....

.....
.....
.....
.....

.....
.....
.....
.....

... 5 Table of Contents.....

.....
.....
.....

.....
.....
.....
.....

.....
.....
.....
.....

.....
.....
.....
.....

. 7 List of Tables.....

.....
.....
.....

.....
.....
.....
.....

.....
.....
.....
.....

.....
.....
.....
.....

.... 11 List of Figures

.....
.....
.....
.....

18 1.4.2 Setting Up Security ...

.....
.....
.....
.....

.....
.....
.....
.....

.....
.....
.....

..... 18 1.5 Multiple Networks ..

.....
.....
.....
.....

.....
.....
.....
.....

.....
.....
.....
.....

.....
.....
.....

19 Chapter 2 Installing the Utility.....

.....
.....
.....
.....

.....
.....
.....
.....

.....
.....
.....
.....

... 21 2.1 Overview of the Installation Process .

.....
.....
.....
.....

.....
.....
.....
.....
.....

..... 21 2.2 *Installing the Utility* .

.....
.....
.....
.....
.....
.....
.....
.....
.....
.....
.....
.....
.....
.....
.....
.....
.....
.....
.....
.....
.....

21 *Part II: Managing the PLA-4xx*

.....
.....
.....
.....
.....
.....
.....

.. 27 *Chapter 3 Firmware Tools*.....

.....
.....
.....
.....
.....
.....
.....
.....
.....
.....
.....
.....
.....
.....
.....
.....
.....
.....
.....
.....
.....

.. 29 3.1 *Firmware Detection Tool*

.....
.....
.....
.....
.....
.....
.....
.....
.....
.....

.....
.....
.....
.....

29 3.1.1 Firmware Detection Issues ...

.....
.....
.....
.....

.....
.....
.....
.....

. 29 3.1.2 Firmware Detection Procedure ..

.....
.....
.....
.....

.....
.....
.....
.....

30 3.2 Firmware Upgrade Tool

.....
.....
.....
.....

.....
.....
.....
.....

.....
.....
.....
.....

.... 32 PLA-4xx Series User's Guide 7 Table of Contents Chapter 4 The ENCRYPT Button

.....
.....
.....
.....

.....
.....
.....
.....

.....

.....
.....
.....

.....
.....
...35 4.1 ENCRYPT Button Overview .

.....
.....

.....
.....
.....
.....

.....
.....
.....
.....

.....
.....
.....

35 4.2 Set Up a HomePlug AV Network with ENCRYPT

.....
.....
.....
.....

.....
.....
.....

..... 35 4.3 Setting Up Multiple Networks

.....
.....
.....
.....

.....
.....
.....
.....

.....
.....
.....
.....

37 4.4 ENCRYPT Button Behavior

.....
.....
.....

.....
.....
.....
.....

.....
.....
.....
.....

..... 38 Chapter 5 The Configuration Utility ..

.....
.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.. 41 5.1 Overview

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

..... 41 5.

1.1 Powerline Network Security

.....

.....

.....

.....

.....

.....

.....

.....

.....

..... 41 5.1.

2 Device Access Key (DAK)

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....
.....
.....
.....

.....
.....
51 6.0.2 Important Terms ...
.....

.....
.....
.....
.....

.....
.....
.....
.....

.....
.....
.....
.....

.. 52 6.0.3 Accessing Your Powerline Adapter

.....
.....
.....

.....
.....
.....
.....

.....
.....
.....

52 6.0.4 Adding a Powerline Adapter

.....
.....
.....
.....

.....
.....
.....
.....

.....
.....
.....

*.... 53 6.
0.5 Setting Up a New Network with a New Adapter*

.....
.....
.....
.....

.....
.....
.....

*... 55 6.0.
6 Splitting a Network into Two Networks*

.....

.....
.....
.....

.....
.....
.....
.....

. 56 6.1 Troubleshooting

.....
.....
.....

.....
.....
.....

.....
.....
.....

.....
.....
.....

..... 58 Chapter 7 LEDs and Troubleshooting ...

.....
.....
.....

.....
.....
.....

.....
.....
.....

..... 61 7.1 LEDs ..

.....
.....
.....

.....
.....
.....

.....
.....
.....

.....
.....
.....

.....
.....
.....

..... 66 7.3 Configuration Utility Problems .

.....
.....
.....

.....
.....
.....
.....

.....
.....

..r Network with the PLA-4xx ...

.....
.....
.....
.....

.....
.....
.....
.....

17 Figure 2 .NET Framework Installation Prompt

.....
.....

.....
.....
.....

.....
.....
.....
.....

..... 22 Figure 3 Microsoft's Agreement ..

.....
.....
.....

.....
.....
.....

.....
.....
.....
.....

.....
.....
.....

..... 22 Figure 4 .NET Framework Installation Process .

.....
.....
.....
.....

.....
.....

.....
.....

... 31 *Figure 13 Firmware Detection Tool: Result*

.....
.....
.....

.....
.....
.....

.....
.....
.....

.... 31 *Figure 14 Firmware Upgrade Tool: Start*

.....
.....
.....

.....
.....
.....

.....
.....
.....

. 32 *Figure 15 Firmware Upgrade Tool: Upgrading*

.....
.....

.....
.....
.....

.....
.....
.....

..... 33 *Figure 16 Firmware Upgrade Tool: Finish* ...

.....
.....
.....

.....
.....
.....

.....
.....
.....

33 *Figure 17 ENCRYPT Connection Procedure*

.....
.....

.....
.....
.....
.....
.....
.....
.....
.....

..... 36 *Figure 18 Adding More Powerline Adapters to Your Network .*

.....
.....
.....
.....
.....
.....

.. 37 *Figure 19 One Existing Powerline Network ...*

.....
.....
.....
.....
.....
.....
.....
.....

... 37 *Figure 20 Two Separate Powerline Networks ..*

.....
.....
.....
.....
.....
.....
.....
.....

38 *Figure 21 Example Network Setup*

.....
.....
.....
.....
.....
.....
.....
.....

.....
.....
.....
... 45 Figure 26 Priority Settings ..
.....

.....
.....
.....

.....
.....
.....

.....
.....
.....

.....
.....
. 48 Figure 27 Advanced Screen

.....
.....
.....
.....

.....
.....
.....

.....
.....
.....

.....
. 48 Figure 28 About Screen

.....
.....

.....
.....
.....

.....
.....
.....

.....
.....
.....

.....
... 49 Figure 29 Plug Your Powerline Adapter into a Power Socket ..

.....
.....

.....
.....
.....
.....

... 52 Figure 30 Connect Your Powerline Adapter to a Computer ..

.....
.....
.....
.....

..... 52 Figure 31 Click on the PLA-4xx Series Configuration Utility Icon

.....
.....
.....
.....

..... 53 Figure 32 Add a Printer to Your Powerline Network

.....
.....
.....
.....
.....
.....
.....

.... 53 Figure 33 Adding a New Adapter .

.....
.....
.....
.....
.....

. 54 Figure 34 Adding an Adapter to an Existing Network

.....
.....
.....
.....
.....

.....
.....
.....
..... 58 Figure 44 PLA-401 Lights ...

.....
.....
.....
.....

.....
.....
.....
.....

.....
.....
.....
.....

.....
.....
.....
.....

..... 61 Figure 45 PLA-400/400 v2 Lights

.....
.....
.....
.....

.....
.....
.....
.....

.....
.....
.....
.....

... 63 Figure 46 PLA-470 and PLA-470 v2 Lights ..

.....
.....
.....
.....

.....
.....
.....
.....

.....
.....
.....
.....

.....
.....
.....
.....

64 Figure 47 Wall-mounting Example

.....
.....
.....
.....

.....
.....
.....
.....

.....
.....
.....
.....

A private network uses a secret password (Network Name) to make sure that only permitted powerline adapters can communicate in your network. See Section 5.3 on page 42 for information on setting up a private network. Buildings and even streets may share a coaxial cable connection. If your powerline network uses a coaxial cable, the network will probably extend outside your premises. In this case make your network more secure with a private network name. 3 You may need to change the Network Name to create multiple powerline networks. See the next section for more information on how to set up a multiple network.

1.5 Multiple Networks Multiple powerline networks can coexist on a single powerline circuit. You might want to implement multiple powerline networks in a small office environment where you have two separate Ethernet networks.

- 1 Connect one powerline adapter to a router or switch on the first Ethernet network and assign a Network Name (for example "Password1") to this powerline adapter. Add additional powerline adapters to your network by plugging them into your powerline outlets and assigning them "Password1". This completes the configuration of your first powerline network.
- 2 Connect another powerline adapter to a router or switch on the second Ethernet network and assign a different Network Name (for example "Password2") to this powerline adapter. Again, add additional powerline adapters and assign them "Password2". You now have two private networks on your powerline circuit. Information is not shared between the two networks as only powerline adapters with the same Network Name can communicate with each other.

PLA-4xx Series User's Guide 19 Chapter 1 Introducing the PLA-4xx 20 PLA-4xx Series User's Guide CHAPTER 2.1 Overview of the Installation Process The installation of the configuration utility does the following:

- 2 Installing the Utility This chapter guides you through the installation of the configuration utility for your PLA-4xx.
- 1 Checks for and installs Microsoft's .NET Framework version 1.1 software on your computer. This software is necessary for the installation of the PLA-4xx Series Configuration Utility.

If you already have .NET Framework version 1.1 installed on your computer this step will be skipped.

- 2 Installs ZyXEL's PLA-4xx Series Configuration Utility. This utility allows you to manage the network name (See Section 5.
- 3 on page 42 for more information) or view the devices recognized on your powerline network. At the time of writing the utility is only compatible on Microsoft Windows XP and Microsoft Windows Vista (32-bit version) operating systems. This User's Guide describes the latest version utility. This utility is only compatible with a PLA-4xx which has the latest firmware installed. If you don't already have them, download the latest firmware and utility from the ZyXEL website.

2.2 Installing the Utility Follow the steps below to install .NET Framework version 1.1 and the PLA-4xx Series Configuration Utility on your computer.

- 1 Insert the included CD-ROM into your computer's CD-ROM drive. The Setup utility runs automatically. Alternatively this can also be done manually by double clicking the setup.exe file on the CD. A prompt appears asking you to install the .NET Framework version 1.

1. Click Yes to continue with the installation. PLA-4xx Series User's Guide 21 Chapter 2 Installing the Utility Figure 2 .NET Framework Installation Prompt 2 Review Microsoft's License Agreement, select I agree and click Install to proceed. Figure 3 Microsoft's Agreement 3 The next screen allows you to see the progress of the installation. 22 PLA-4xx Series User's Guide Chapter 2 Installing the Utility Figure 4 .NET Framework Installation Process 4 Click OK to complete the installation process. Figure 5 Microsoft's Agreement 5 The Setup utility runs automatically. Click Yes or Next to continue through the initial screen. Click Cancel only if you want to abort the installation.

Figure 6 InstallShield Wizard Start Screen PLA-4xx Series User's Guide 23 Chapter 2 Installing the Utility 6 Fill in the User Name and Company Name fields (optional). If you want the utility to be only available to the currently logged in user, select Only for me(...).

Otherwise, click Next to continue and allow all users to use the configuration utility. Figure 7 Customer Information Input 7 Click Next to install the utility to the default folder, or click Change to specify a different location on your computer. Figure 8 Install Destination Folder 8 When the installation is finished, a screen appears to confirm the InstallShield Wizard has successfully installed the PLA-4xx Series Configuration Utility to your computer. Click Finish to exit the wizard. 24 PLA-4xx Series User's Guide Chapter 2 Installing the Utility Figure 9 Restart Screen 9 The following pop-up appears.

Click Yes to restart your computer, or click No to restart your computer later. If you select "No, I will restart my computer later", you will not be able to launch the utility until after a restart of your computer.

PLA-4xx Series User's Guide 25 Chapter 2 Installing the Utility 26 PLA-4xx Series User's Guide PART II Managing the PLA4xx Firmware Tools (29) The ENCRYPT Button (35) The Configuration Utility (41) Powerline Network Setup Tutorial (51) LEDs and Troubleshooting (61) 27 28 CHAPTER 3 Firmware Tools Use the Firmware Detection Tool and Firmware Upgrade Tool to ensure you have the latest firmware (version 3.0.5 or later) on your PLA-4xx(s). You need to upgrade all your PLA-4xxs to the latest firmware to ensure they can connect with each other and they are compatible with the latest version Utility. Use the Firmware Detection Tool to detect the firmware version of powerline devices on your network. If your firmware is early version (earlier than 3.0.5), then upgrade your firmware using the Firmware Upgrade Tool.

Run the tools or the Utility one at a time, as only one of these applications can access the PLA-4xx connected to your computer at any time.

- 3.1 Firmware Detection Tool Use the Firmware Detection Tool to detect the firmware on devices on your powerline network.
- 3.1.1 Firmware Detection Issues The powerline device directly connected to your computer (the local device) is only compatible with other powerline devices which have the same firmware. So if your local device is running the latest firmware, the detection tool will not be able to detect devices with older firmware. Use a local device with early version firmware to allow the detection tool to detect any powerline devices with early version firmware. This diagram shows the Firmware Detection Tool detecting the firmware on early firmware devices only, as the local device has early firmware. PLA-4xx Series User's Guide 29 Chapter 3 Firmware Tools Figure 10 Firmware Detection With an Early Firmware Local Device 3.



[You're reading an excerpt. Click here to read official ZYXEL PLA-400 V2 user guide](http://yourpdfguides.com/dref/3664397)
<http://yourpdfguides.com/dref/3664397>

0.5 1.4.5 3.0.
5 1.4.5 1.4.5 3.

0.5 This diagram shows the Firmware Detection Tool detecting the firmware on latest firmware devices only, as the local device has the latest firmware.
Figure 11 Firmware Detection With a Latest Firmware Local Device 3.0.5 1.4.5 1.4.5 3.0.

5 1.4.5 3.1.2 Firmware Detection Procedure Follow these instructions to run the Firmware Detection Tool. 3.0.5 1 Close the Utility and Firmware Upgrade Tool if either of them are open. 2 Double click on the Firmware Detection Tool to run the file. 3 Click Next to begin the firmware detection process.
30 PLA-4xx Series User's Guide Chapter 3 Firmware Tools Figure 12 Firmware Detection Tool: Start The Tool shows the firmware version(s) of devices it has detected on your powerline network. Figure 13 Firmware Detection Tool: Result The following table describes the labels in this screen. Table 2 Firmware Detection Tool: Result Screen LABEL Site DESCRIPTION This field displays · Local, if it is identifying the powerline adapter directly connected to the computer running the configuration utility. @@This shows the MAC address of the powerline adapter. You can find the MAC address of your PLA-4xx displayed on a sticker on the bottom of your device.
MAC Address PLA-4xx Series User's Guide 31 Chapter 3 Firmware Tools Table 2 Firmware Detection Tool: Result Screen (continued) LABEL Firmware Version DESCRIPTION This is the firmware version of your device. In the example firmware version given in the screen, 1-4-1454, the firmware version is shown by the numbers 145, meaning this is firmware version 1.4.5. If your device's firmware is earlier than 3.
0.5, please use the Firmware Upgrade Tool to upgrade your firmware. You can upgrade your device if this field displays ZyXEL. If Other displays then you cannot use the Firmware Upgrade Tool. Company 3.2 Firmware Upgrade Tool Use the firmware upgrade tool to upgrade firmware earlier than version 3.0.5 to the latest version firmware on the powerline device directly connected to your computer. This is necessary as devices with ZyXEL's early version firmware are not compatible with the latest Utility or with devices running ZyXEL's latest version firmware. The firmware is included in the Tool.

You do not need to download the firmware separately. 1 2 3 4 Connect the powerline device to be upgraded to your computer. Close the Utility and Firmware Detection Tool if either of them are open. Double click on the Firmware Upgrade Tool to run the file. Click Next to begin the firmware upgrade process.
Figure 14 Firmware Upgrade Tool: Start 5 Wait several minutes while the firmware is upgraded. 32 PLA-4xx Series User's Guide Chapter 3 Firmware Tools Figure 15 Firmware Upgrade Tool: Upgrading 6 If your firmware is successfully upgraded, the following screen appears. Click Finish to close the Tool.
Figure 16 Firmware Upgrade Tool: Finish 7 To check your firmware is successfully upgraded, run the Firmware Detection Utility again and check your firmware version. 8 Repeat this upgrade process for each powerline device you need to upgrade.
PLA-4xx Series User's Guide 33 Chapter 3 Firmware Tools 34 PLA-4xx Series User's Guide CHAPTER 4 The ENCRYPT Button Use the ENCRYPT button to automatically set up a secure powerline connection between your powerline devices. 4.1 ENCRYPT Button Overview The ENCRYPT button allows you to set up a secure powerline connection with other HomePlug AV compliant powerline devices which also support the ENCRYPT feature. No other powerline setting changes are required to connect. You can use the ENCRYPT button to: · set up a new powerline network · separate an existing powerline network into multiple networks 4.
2 Set Up a HomePlug AV Network with ENCRYPT You can connect a number of devices on a powerline network, but you can use the ENCRYPT button on only two devices at a time. The PLA-4xx and PLA-400 v2 are shown below as examples. 1 Place a powerline device close to another powerline device so you have time to set up each one. After you set up the first powerline device, you have 120 seconds to set up the second powerline device. 2 You can disconnect them from your computer or modem (or other networking equipment) if you need to move them close to each other, but the powerline devices need to be plugged into power outlets.
3 Press the ENCRYPT button at the rear of your powerline device for more than 10 seconds until the power () light flashes. This resets the network name to a random value and removes your device from any network it may belong to. 4 Press the ENCRYPT button at the rear of your powerline device for 1~2 seconds. The power () light will blink as the powerline device tries to set up a connection. PLA-4xx Series User's Guide 35 Chapter 4 The ENCRYPT Button Figure 17 ENCRYPT Connection Procedure press 2 seconds press 2 seconds within 2 minutes 5 Repeat step 4 in this section for the other powerline device you wish to connect. This must be done within 120 seconds of pressing the ENCRYPT button on the PLA-4xx. 6 Check the lights on the two powerline devices. The power () and HomePlug () lights should be blinking while the devices are connecting. Several times all lights blink simultaneously and the HomePlug () light also shows red. Wait for about one minute while your powerline devices connect.

If the power () light does not blink when you press ENCRYPT, you have probably pressed the ENCRYPT button for too long. Try again, pressing the ENCRYPT button for 1~ 2 seconds. If the HomePlug () lights on both powerline devices do not light up, the powerline devices are not connected. Repeat steps 4 and 5 in this section. If that doesn't work, see the Troubleshooting in Section 7.5 on page 68 for suggestions. 7 To add more powerline devices to your network, press the ENCRYPT button on device C (shown below) for more than 10 seconds until the power () light flashes. 8 Then repeat steps 4 and 5 in this section using any powerline device (A or B) you have connected using ENCRYPT and the powerline device you want to connect (C). You must use the ENCRYPT button on both devices. 36 PLA-4xx Series User's Guide Chapter 4 The ENCRYPT Button Figure 18 Adding More Powerline Adapters to Your Network A B A OR B C 9 If you disconnected your computer or modem (or any other networking product connected to your powerline device) in step 1 of this section, you can now reconnect them.

This sets up your powerline network between your powerline devices. 4.3 Setting Up Multiple Networks You can use the ENCRYPT button to set up multiple powerline networks using your existing powerline network. For example, you have already set up a powerline network in your home (A) which accesses a printer (B). Now you want a separate powerline network connection from your laptop to your printer (C).

Figure 19 One Existing Powerline Network A C B 1 Click the ENCRYPT button on (A) for more than 10 seconds until the power () flashes.



[You're reading an excerpt. Click here to read official ZYXEL
PLA-400 V2 user guide
http://yourpdfguides.com/dref/3664397](http://yourpdfguides.com/dref/3664397)

This disconnects (A) from (B).) light PLA-4xx Series User's Guide 37 Chapter 4 The ENCRYPT Button 2 Click the ENCRYPT button on (A) and (C) for 1~2 seconds and within two minutes of each other. 3 Wait for about one minute while (A) and (C) connect. 4 Check the LEDs on both (A) and (C).

When the power () and HomePlug () lights stop blinking and the power () light shines steadily, the devices are connected. Figure 20 Two Separate Powerline Networks B A C Congratulations. You now have two separate powerline networks as shown above. If the HomePlug () lights on both powerline devices do not light up, the powerline devices are not connected. Repeat the connection process, making certain you press the ENCRYPT buttons for the correct time and within two minutes of each other. If that does not work see Section 7.5 on page 68 for suggestions. 4.4 ENCRYPT Button Behavior The following table summarizes the actions that occur when the ENCRYPT button is pressed for specific lengths of time. Table 3 Time ENCRYPT Button is Pressed and Action TIME less than 3 seconds ACTION POWER LIGHT BEHAVIOR HOMEPLUG LIGHT BEHAVIOR The HomePlug () light turns on if your device is connected to another powerline device or a powerline network.

The HomePlug () light blinks red one time and then turns off when it disconnects from the powerline network. The power () light blinks until The device joins a network. It shares the same network name the device is connected. This as other devices on the network. may take a minute. The device leaves any network it is associated with and its network name assumes a random value. The power () light blinks several times and then shines steadily. more than 10 seconds 38 PLA-4xx Series User's Guide Chapter 4 The ENCRYPT Button See Troubleshooting in Chapter 7 on page 68 for suggestions on problems with the ENCRYPT button and the lights. PLA-4xx Series User's Guide 39 Chapter 4 The ENCRYPT Button 40 PLA-4xx Series User's Guide CHAPTER 5.1 Overview 5 The Configuration Utility This chapter shows you how to use the Configuration Utility (or Utility) to secure, manage and set up Quality of Service (QoS) on your powerline network.

The PLA-4xx is designed as a plug-and-play network expanding solution. This means that once you complete your hardware connections, the PLA-4xxs in your network (without additional configuration) are able to communicate with each other by sending and receiving information over your home's electrical wiring (A). Figure 21 Example Network Setup A All HomePlug AV compliant powerline adapters within range can join your network. The range varies depending on the quality of your home's wiring. See Section 5.

1.1 on page 41 for more information on enhancing your powerline network security. 5.1.1 Powerline Network Security When the PLA-4xxs communicate with each other, they use encryption to protect the information that is sent in the powerline network.

Encryption is like a secret code. If you do not know the secret code, you cannot understand the message. The HomePlug AV standard uses 128-bit AES (Advanced Encryption Standard) to safely transmit data between powerline adapters. PLA-4xx Series User's Guide 41 Chapter 5 The Configuration Utility For the powerline adapters to communicate with each other they all need to use the same network name. This network name allows the powerline adapters to understand the encrypted information sent in the powerline network. By default the PLA-4xxs are all configured with the network name HomePlugAV, this allows you to simply plug the devices in and not worry about setting up security. If you want to enhance the security on your powerline network, you can change the network name on the powerline adapters you want to allow to communicate in your powerline network. 5.1.2 Device Access Key (DAK) In order to manage the powerline adapters on your powerline network you must enter the adapters' password in the PLA-4xx Series Configuration Utility.

This password is called the DAK (Device Access Key) password. This password is printed on the powerline adapter itself. You don't need to enter the DAK password for the powerline adapter directly connected to the computer running the utility (local powerline adapter), you only have to add the remote powerline adapters' passwords (those in your powerline network, but not directly connected to your computer). 5.2 Starting the Configuration Utility To launch the PLA-4xx Series Configuration Utility simply double click on the configuration icon on your desktop. Figure 22 PLA-4xx Series Configuration Utility Icon Alternatively, start the utility by browsing to it from the start menu. @@@@ Save Click this to apply your changes. @@@@ This field displays the MAC address of the PLA-4xx which is the Central Coordinator of the powerline network. The powerline adapters in your powerline network automatically select the Central Coordinator. Central Coordinator MAC The information provided in the following table reflects transmission rate information about the powerline adapters which communicate in your powerline network.

The powerline adapters listed in this table are all the powerline adapters in your powerline network except the powerline adapter selected in the Configuration page of the configuration utility. In other words, if the Local powerline adapter is selected in the Configuration screen, then this table will display the rates of transmission from the powerline adapter connected to the computer running the configuration utility to all the Remote powerline adapters. Site This field displays: · Local, if it is the PLA-4xx directly connected to the computer running the configuration utility. · Remote, if it is a PLA-4xx in your powerline network but not directly connected to the computer running the configuration utility. This field displays the MAC address of your powerline adapter.

The MAC address of your powerline adapter can be found by looking at the label on your device. It consists of six pairs of hexadecimal characters (hexadecimal characters are "0-9" and "a-f"). In the case of the PLA-4xx, this label is on the bottom of the device. This field displays how fast information is sent from the powerline adapter selected in the Configuration screen to this powerline adapter. The rate is given in the following format: "application data transmission rate / raw data transmission rate".

Application data reflects more accurately how fast devices are transmitting application relevant traffic (for example Internet Protocol (IP) traffic). Raw data refers to the whole payload of the packets transmitted across the powerline network. This field displays how fast information is received from the powerline adapter selected in the Configuration screen to this powerline adapter. The rate is given in the following format: "application data transmission rate / raw data transmission rate".



[You're reading an excerpt. Click here to read official ZYXEL](http://yourpdfguides.com/dref/3664397)

[PLA-400 V2 user guide](http://yourpdfguides.com/dref/3664397)

<http://yourpdfguides.com/dref/3664397>

Application data reflects more accurately how fast devices are transmitting application relevant traffic (for example Internet Protocol (IP) traffic). Raw data refers to the whole payload of the packets transmitted across the powerline network. MAC Address Transmit Rate (Mbps) Receive Rate (Mbps) 5.6 Advanced Screen This feature is only available with the latest version utility. Go to the ZyXEL website to download the latest utility and firmware for your ZyXEL HomePlug AV adapter. 46 PLA-4xx Series User's Guide Chapter 5 The Configuration Utility You can configure the powerline adapters on your network to give priority to network traffic depending on its importance.

When you set the priority of a powerline adapter, you set how quickly messages FROM your powerline adapter are sent in your powerline network. Transmissions TO your powerline adapter do not receive any priority. For example, if you have a file server on your home network to deliver music and movie files to computers in your home, you should set the priority of the powerline adapter connected to this server to Medium. If video traffic is delivered too slowly, quality problems may occur. On the other hand, a powerline adapter attached to a printer should have a low priority setting since the slow delivery of messages will not affect the print job. Similarly, if you want to prioritize any downloads from the Internet, set the priority on the powerline adapter attached to your Internet gateway to High. Allocate priority settings based on application type as follows. Table 6 Priority Settings PRIORITY LEVEL High Medium Normal Low APPLICATION Voice Application Video and Audio Applications Data Applications Data Applications The figure below shows an example powerline home network connected to the Internet. · Device A is a printer and does not handle traffic with high importance, so the powerline adapter connected to it can be set to low priority. · Device B is a file server, delivering audio or movie files to other users on the network.

The powerline adapter attached to it should have a medium setting. · Device C, a home computer which connects to the Internet, can receive a normal priority setting as it usually sends simple requests for data. For example, when you surf the Internet, your computer sends requests to open web pages. · Device D is a modem attached to the Internet. It should receive a high priority setting if you want faster downloading through your network.

· Although device E receives audio or movie files, it does not send a lot of traffic, so the powerline adaptor attached to it can be set to a low priority. PLA-4xx Series User's Guide 47 Chapter 5 The Configuration Utility Figure 26 Priority Settings Internet C D B E A Use this screen to configure priority settings for traffic from the powerline adapters on your network. Figure 27 Advanced Screen 48 PLA-4xx Series User's Guide Chapter 5 The Configuration Utility The following table describes the labels in this screen. Table 7 Advanced Screen LABEL Adapter DESCRIPTION This field identifies which powerline network information is displayed. Different powerline networks are identified by the Ethernet interface (network card) on your computer which is connected directly to a powerline adapter.

Typically there is only one connection. However, if your computer has two network cards and both are connected to a powerline adapter, then you have two powerline networks. This field displays: · Local, if it is the PLA-4xx directly connected to the computer running the configuration utility. Site MAC Address @@ You can find the MAC address of your PLA-4xx displayed on a sticker on the bottom of your device. Priority Save Select a priority setting from the drop-down box for traffic FROM your selected device. The options, in order of importance, are High, Medium, Normal and Low. Click this to apply your changes. The new Priority setting is applied to the selected powerline adapter. 5.7 About Screen Use the About screen to view information regarding the configuration utility and firmware version of the PLA-4xx you are connected to.

Click the icon in the top right corner of the utility to view the About screen. Figure 28 About Screen Upgrade to latest version firmware and utility. The following table describes the labels in this screen. Table 8 About Screen LABEL Utility version: Firmware version DESCRIPTION This field displays the software version of the configuration utility. This field displays the firmware version of the device you selected in the Device Selection field of the Configuration screen. In the example firmware version given in the screen, 3-0-3052, the firmware version is shown by the numbers 305, meaning this is firmware version 3.0.5. If your device's firmware is earlier than 3.0.

5, please use the Firmware Upgrade Tool to upgrade your firmware. This field displays the date when the firmware was released. Click the button in upper right corner to close the About window. Released Close PLA-4xx Series User's Guide 49 Chapter 5 The Configuration Utility 50 PLA-4xx Series User's Guide CHAPTER Use this tutorial to expand your existing powerline network. 6 Powerline Network Setup Tutorial 6.

0.1 Overview After setting up your first home powerline network (instructions for that are in the Quick Start Guide for your ZyXEL powerline adapter) you may want to extend the network or create a new one by adding additional powerline adapters. This tutorial shows you the following. · How to start up your new powerline adapter. You need to do this before you can begin the next sections.

· How to make your existing powerline network bigger by adding new powerline adapters. · How to make a new network separate from your existing network with new powerline adapters. · How to make a new, separate powerline network with the powerline adapters you have. The tutorial uses the PLA-4xx Series Configuration Utility to set up your powerline adapter. If you haven't already installed the utility, see Chapter 2 on page 21 for instructions. If you do not have the CD with the utility, the utility software is also available for download at www.zyxel.com. Navigate to the powerline products section of the ZyXEL website to find this software. Follow the instructions provided by the software to install it on your computer.

See the product specifications in the User's Guide for a list of hardware and software compatible with the utility. The PLA-4xx in this tutorial is an example only. Your powerline adapter may be different. PLA-4xx Series User's Guide 51 Chapter 6 Powerline Network Setup Tutorial 6.0.2 Important Terms Network Name The network name allows a powerline adapter to connect with other powerline adapters that have the same network name. It provides security for your powerline network. The network name uses English letters or numbers, from 8 to 64 characters long, with no spaces allowed.



[You're reading an excerpt. Click here to read official ZYXEL PLA-400 V2 user guide](http://yourpdfguides.com/dref/3664397)
<http://yourpdfguides.com/dref/3664397>

DAK = Device Access Key. The DAK Password lets you access the powerline adapter.

You can find the DAK Password on a label on your powerline device. DAK Password 6.0.3 Accessing Your Powerline Adapter 1 Attach the power cord that came in the package to your powerline adapter. 2 Plug the power cord of the powerline adapter you want to add to your network into a power socket and, if needed, switch the power socket on.

Figure 29 Plug Your Powerline Adapter into a Power Socket 1 2 3 Connect the powerline adapter to your computer. 4 Use a LAN or Ethernet cable (shown below) to connect the LAN or Ethernet port on your adapter to the same kind of port on your computer. Figure 30 Connect Your Powerline Adapter to a Computer 3 4 5 Open the PLA-4xx Series Configuration Utility on your computer. Go to Start > (All) Programs > Zyxel PLA-4xx Series Configuration > PLA-4xx Series Configuration Utility, or click on the icon on your desktop shown below. 52 PLA-4xx Series User's Guide Chapter 6 Powerline Network Setup Tutorial Figure 31 Click on the PLA-4xx Series Configuration Utility Icon 6 You are now ready to extend your powerline network or set up a second network. · See Section 6.0.4 on page 53 to add a new powerline adapter to your network. · See Section 6.0.5 on page 55 to set up a second network with your new adapters. · See Section 6.0.6 on page 56 to set up a second network with your existing adapters. 6.

0.4 Adding a Powerline Adapter This section shows you how to add a new powerline adapter to expand your existing network. The figure below shows the family computer with Internet access on a powerline network. Expand the network by adding a new powerline adapter connected to a printer. Figure 32 Add a Printer to Your Powerline Network Internet You do not need to know the network name of the new adapter to add it to your network. 1 Connect your computer to the powerline adapter you want to add to your network and open the PLA-4xx Series Configuration Utility (see Section 6.0.3 on page 52). 2 The utility should open to the configuration tab. On this screen in the Site column your new powerline adapter should appear as Local (A).

Check the Local adapter's MAC address (B). It should match the MAC address listed on the label on the back of your powerline adapter. PLA-4xx Series User's Guide 53 Chapter 6 Powerline Network Setup Tutorial Figure 33 Adding a New Adapter A B 3 Select your adapter by selecting Local and type the network name for your existing network in the Network Name field (C). Figure 34 Adding an Adapter to an Existing Network C 4 Click Save and click OK on the pop-up. Figure 35 Network Name Pop-up 5 Your new adapter will now have the same Network Name as your existing network and so has now joined your existing network.

6 Connect the adapter to the device you want to add to the network, for example, your Internet refrigerator in the kitchen. 7 Plug the adapter's power cord into a power outlet and, if required, switch the power outlet on. 8 Repeat this procedure for all additional powerline adapters that you want to add to your existing or new powerline network. 54 PLA-4xx Series User's Guide Chapter 6 Powerline Network Setup Tutorial 6.0.

5 Setting Up a New Network with a New Adapter This section shows you how to use your new powerline adapters to set up a new powerline network separate to your existing network. The figure below shows two powerline networks in a house. The first network (1) shows the home computer connected to a printer and access to the Internet. The second network (2) has no Internet access but with a media adapter such as the ZyXEL DMA-1100P you can use your TV to watch movies and play games which are stored on a computer. Figure 36 Add New Adapters to Make a Second Network Internet 1 2 1 Connect your new powerline adapter and open the configuration utility as shown in Section 6.0.5 on page 55. The screen shown below appears. 2 Type a Network Name that is different from the Network Name for your existing network. Make sure you use the same new Network Name for all new adapters you want to add to your new network.

PLA-4xx Series User's Guide 55 Chapter 6 Powerline Network Setup Tutorial Figure 37 Making a New Network with the New Adapter 3 After you have set up a new network, you are ready to connect each powerline adapter on your new network to devices, for example, a computer or a games console. 6.0.6 Splitting a Network into Two Networks This section shows you how to split your existing network into two networks. This is useful if you want to set up a second powerline network in your home, for example, in your study connecting a laptop and printer. See Figure 36 on page 55 for an example. To set up your existing powerline network you had to set each powerline adapter with the same network name. To move some of these adapters to a new network, you need to give them a new network name. 1 Connect a powerline adapter to your computer and open the PLA-4xx Series Configuration Utility (see Section 6.0.3 on page 52). 2 The utility should open to the configuration tab as shown below. A list of powerline adapters on your network displays. These adapters all have the same network name as the adapter you are connected to. The adapter you are connected to will appear as Local in this table.

All others are listed as Remote. Figure 38 Local/Remote Adapters on a Powerline Network 56 PLA-4xx Series User's Guide Chapter 6 Powerline Network Setup Tutorial 3 To set up a new powerline network, type the DAK Password and change the Network Name on all powerline adapters you wish to add to your network. · Look for the DAK Password on a label on your powerline adapter. The DAK Password lets you access the adapter. · Select the Remote adapter you want to add (A) and type the DAK Password in the DAK Password field (B).

· Then type the new network name in the Network Name field. Figure 39 Adding an Adapter to Your New Network A B 4 Click Save. · If you do not type the DAK password or type it incorrectly either of the following popups appear. Click OK and type the DAK Password correctly in the DAK Password field.

Figure 40 Incorrect DAK or No DAK · If you have correctly entered the DAK Password, click OK on the pop-up. Figure 41 Correct DAK 5 The settings for the adapter will now grey out and the adapter will disappear from the table after a few minutes. PLA-4xx Series User's Guide 57 Chapter 6 Powerline Network Setup Tutorial Figure 42 An Adapter on Your New Network 6 Go back to step 3 in this section to set the same, new Network Name for all remote adapters you want to add to your new network. 7 Check you have added the adapters correctly by changing the network name for the local adapter. All adapters with the new Network Name now appear in the list of adapters on your network. These adapters are now part of your new network.



[You're reading an excerpt. Click here to read official ZYXEL PLA-400 V2 user guide](http://yourpdfguides.com/dref/3664397)

<http://yourpdfguides.com/dref/3664397>

Figure 43 Adapters on a New Powerline Network · If you want to access any of your new powerline networks using the PLA-4xx Series Configuration Utility, change the Network Name on your local adapter to the network name for the network you want to access. The adapters on that network will then display in the adapter table, allowing you to select and configure each one. 6.1 Troubleshooting The HomePlug () LED (light) should light up on your adapter when it successfully connects to other adapters on your network. If it does not, try the following measures. · Make sure the adapter is plugged in to a power socket and the power socket is turned on. · Check you have entered the correct network name for your network. 58 PLA-4xx Series User's Guide Chapter 6 Powerline Network Setup Tutorial · Check your powerline adapter is connected to the same electrical circuit as other powerline adapters on your network. PLA-4xx Series User's Guide 59 Chapter 6 Powerline Network Setup Tutorial 60 PLA-4xx Series User's Guide CHAPTER 7 LEDs and Troubleshooting This chapter describes the behavior of the LEDs (lights) and offers some suggestions to solve problems you might encounter. 7.

1 LEDs The following sections describes the lights on the PLA-400 and PLA-400 v2, the PLA-401, PLA401 v2 and the PLA-470. 7.1.1 PLA-401/PLA401 v2 The following figure is the front panel of the PLA-401. Use the lights to determine if the PLA4xx is behaving normally or if there are some problems on your powerline network.

Figure 44 PLA-401 Lights The following table describes the behavior of the lights on the PLA-401. Table 9 PLA-401 Lights LIGHT POWER HomePlug ICON STATUS On Off On Blinking Off DESCRIPTION The PLA-401 is on and receiving power. The PLA-401 is not receiving power. The PLA-400 detects another powerline adapter. The PLA-401 is communicating with another powerline adapter.

The PLA-400 is not detecting another powerline adapter. PLA-4xx Series User's Guide 61 Chapter 7 LEDs and Troubleshooting LIGHT ETHERNET ICON STATUS On Blinking Off DESCRIPTION The ETHERNET port is on and ready and the PLA-401 detects a device connected to it. The PLA-401 is communicating with a router, modem, switch or a computer connected to it. The PLA-401 does not detect any devices connected to its ETHERNET port. The following table describes the behavior of the lights on the PLA-401 v2. Table 10 PLA-401 v2 Lights LIGHTS POWER ICON COLOR Green STATUS On DESCRIPTION The PLA-401 v2 is on and receiving power. It also indicates a successful connection using the ENCRYPT button. The PLA-401 v2 is starting up. It also indicates the PLA-400 v2 is trying to connect with another device using the ENCRYPT function. Blinking at the same time as the HomePlug light indicates an unsuccessful connection if you have used the ENCRYPT button.

The PLA-401 v2 is not receiving power. The PLA-401 v2 detects another powerline adapter. The data transfer rate is greater than 40 Mbps. The PLA-401 v2 detects another powerline adapter. The data transfer rate is between 10~40 Mbps. The PLA-401 v2 detects another powerline adapter. The data transfer rate is between 0~10 Mbps. Blinking The PLA-401 v2 is communicating with another powerline adapter. Data is being transmitted and/or received. Blinking at the same time as the POWER light indicates an unsuccessful connection if you have used the ENCRYPT button.

The HomePlug port does not detect another powerline adapter. The ETHERNET port is on and ready and the PLA-401 v2 detects a device connected to it. The PLA-401 v2 is communicating with a networking device connected to it. The PLA-401 v2 does not detect any devices connected to its ETHERNET port. Blinking Off HomePlug Green Amber Red Green/ Amber/ Red On Off ETHERNET Green On Blinking Off 7.

1.2 PLA-400/400 v2 The following figure is the front panel of the PLA-400 and PLA-400 v2. Use the lights to determine if your PLA-4xx is behaving normally or if there are some problems on your powerline network. 62 PLA-4xx Series User's Guide Chapter 7 LEDs and Troubleshooting Figure 45 PLA-400/400 v2 Lights The following table describes the behavior of the lights on the PLA-400. Table 11 PLA-400 Lights LIGHTS POWER HomePlug ICON STATUS On Off On Blinking Off ETHERNET On Blinking Off DESCRIPTION The PLA-400 is on and receiving power.

The PLA-400 is not receiving power. The PLA-400 detects another powerline adapter. The PLA-400 is communicating with another powerline adapter. The PLA-400 is not detecting another powerline adapter. The ETHERNET port is on and ready and the PLA-400 detects a device connected to it. The PLA-400 is communicating with a router, modem, switch or a computer connected to it. The PLA-400 does not detect any devices connected to its ETHERNET port. The following table describes the behavior of the lights on the PLA-400 v2. Table 12 PLA-400 v2 Lights LIGHTS POWER ICON COLOR Green STATUS On DESCRIPTION The PLA-400 v2 is on and receiving power. It also indicates a successful connection using the ENCRYPT button.

The PLA-400 v2 is starting up. It also indicates the PLA-400 v2 is trying to connect with another device using the ENCRYPT function. Blinking at the same time as the HomePlug light indicates an unsuccessful connection if you have used the ENCRYPT button. The PLA-400 v2 is not receiving power. Blinking Off PLA-4xx Series User's Guide 63 Chapter 7 LEDs and Troubleshooting Table 12 PLA-400 v2 Lights (continued) LIGHTS HomePlug ICON COLOR Green Amber Red Green/ Amber/ Red Blinking STATUS On DESCRIPTION The PLA-400 v2 detects another powerline adapter. The data transfer rate is greater than 40 Mbps. The PLA-400 v2 detects another powerline adapter. The data transfer rate is between 10~40 Mbps. The PLA-400 v2 detects another powerline adapter. The data transfer rate is between 0~10 Mbps.

The PLA-400 v2 is communicating with another powerline adapter. Data is being transmitted and/or received. Blinking at the same time as the POWER light indicates an unsuccessful connection if you have used the ENCRYPT button. The HomePlug port does not detect another powerline adapter. The ETHERNET port is on and ready and the PLA-400 v2 detects a device connected to it.

The PLA-400 v2 is communicating with a networking device connected to it. The PLA-400 v2 does not detect any devices connected to its ETHERNET port. Off ETHERNET Green On Blinking Off 7.1.3 PLA-470/PLA470 v2 The following figure is the front panel of the PLA-470 and PLA-470 v2.

Use the lights to determine if the PLA-470 or PLA470 v2 is behaving normally or if there are some problems on your powerline network. Figure 46 PLA-470 and PLA-470 v2 Lights 64 PLA-4xx Series User's Guide Chapter 7 LEDs and Troubleshooting The following table describes the behavior of the lights on the PLA-470. Table 13 PLA-470 Lights LIGHTS POWER ICON COLOR Green STATUS On DESCRIPTION The PLA-470 is on and receiving power.



[You're reading an excerpt. Click here to read official ZYXEL](http://yourpdfguides.com/dref/3664397)

[PLA-400 V2 user guide](http://yourpdfguides.com/dref/3664397)

<http://yourpdfguides.com/dref/3664397>

It also indicates a successful connection using the ENCRYPT button. The PLA-470 is starting up. It also indicates the PLA-470 is trying to connect with another device using the ENCRYPT function. Blinking at the same time as the HomePlug light indicates an unsuccessful connection if you have used the ENCRYPT button. The PLA-470 is not receiving power. The PLA-470 detects another powerline adapter. .

The PLA-470 is communicating with another powerline adapter. Data is being transmitted and/or received. Blinking at the same time as the POWER light indicates an unsuccessful connection if you have used the ENCRYPT button. The HomePlug port does not detect another powerline adapter. The ETHERNET port is on and ready and the PLA-470 detects a device connected to it. The PLA-470 is communicating with a router, modem, switch or a computer connected to it. The PLA-470 does not detect any devices connected to its ETHERNET port. Blinking Off HomePlug Green On Blinking Off ETHERNET On Blinking Off

The following table describes the behavior of the lights on the PLA470 v2. Table 14 PLA470 v2 Lights LIGHTS POWER ICON COLOR Green STATUS On
DESCRIPTION The PLA470 v2 is on and receiving power. It also indicates a successful connection using the ENCRYPT button.
The PLA470 v2 is starting up. It also indicates the PLA470 v2 is trying to connect with another device using the ENCRYPT function. Blinking at the same time as the HomePlug light indicates an unsuccessful connection if you have used the ENCRYPT button. The PLA470 v2 is not receiving power. Blinking Off
PLA-4xx Series User's Guide 65 Chapter 7 LEDs and Troubleshooting Table 14 PLA470 v2 Lights (continued) LIGHTS HomePlug ICON COLOR Green
Amber Red Green/ Amber/ Red Blinking STATUS On DESCRIPTION The PLA470 v2 detects another powerline adapter.

The data transfer rate is greater than 40 Mbps. The PLA470 v2 detects another powerline adapter. The data transfer rate is between 10~40 Mbps. The
PLA470 v2 detects another powerline adapter. The data transfer rate is between 0~10 Mbps.

The PLA470 v2 is communicating with another powerline adapter. Data is being transmitted and/or received. Blinking at the same time as the POWER light indicates an unsuccessful connection if you have used the ENCRYPT button. The HomePlug port does not detect another powerline adapter. The ETHERNET port is on and ready and the PLA470 detects a device connected to it. The PLA470 is communicating with a router, modem, switch or a computer connected to it. The PLA470 does not detect any devices connected to its ETHERNET port. Off ETHERNET On Blinking Off 7.2 Power and Light Problems The PLA-4xx does not turn on. None of the lights turn on.

1 Make sure you are using the power cord included with the PLA-4xx. 2 Make sure the power cord is connected to the PLA-4xx and plugged in to an appropriate power source. Make sure the power source is turned on. 3 Disconnect and re-connect the power cord to the PLA-4xx. 4 Remove the powerline adapter from the outlet. Then connect an electrical device that you know works into the same power outlet. This checks the status of the power outlet. 5 If the problem continues, contact the vendor. The ETHERNET light does not turn on. 1 Check the hardware connections.

See the Quick Start Guide. 2 Inspect your cables for damage. Contact the vendor to replace any damaged cables. 3 Check the Ethernet adapter on your computer and make sure it's enabled and working properly. 4 If the PLA-4xx is connected to an Ethernet switch or router, make sure the device is working correctly, and that the LAN network is working and configured correctly as well.

66 PLA-4xx Series User's Guide Chapter 7 LEDs and Troubleshooting The HomePlug light does not turn on. 1 Check all PLA-4xxs on your network have the latest firmware installed. PLA-4xxs with the latest firmware cannot communicate with PLA-4xxs using earlier versions of the firmware. Go to Section 5.4 on page 44 for instructions on installing the latest firmware.

2 Use the PLA-4xx Series Configuration Utility to detect all other HomePlug devices on your powerline network. Make sure that the network name (sometimes called the network password) is the same on all of your powerline adapters. See Section 5.3 on page 42 for instructions on checking the network name. 3 Check the DAK password and MAC address for all powerline adapters are typed correctly in the utility. See Section 5.3 on page 42 for instructions on checking the DAK and MAC address. 4 Make sure that all your powerline adapters are HomePlug AV compliant. Check the package it came in or ask your vendor. This PLA-4xx can not detect earlier versions of HomePlug powerline adapters such as HomePlug 1.

0 or 1.0.1. (Although they can coexist on the same electrical wiring without interfering with each other.) 5 Make sure that the powerline adapters on your network are all on the same electrical wiring. Connect another powerline adapter into an outlet close to your PLA-4xx's power outlet. They are probably now on the same electrical wiring. Check the HomePlug light. If it now lights up your powerline adapter was probably previously on separate electrical wiring. Ask an electrician for more information on the electrical wiring in your building.

6 If your powerline network is using coaxial cable, check all powerline adapters are on the same coaxial cable. 7 If your powerline network is using electrical wiring (not coaxial cable), check you do not have a power meter between powerline adapters. Powerline signals cannot pass this. The POWER and HomePlug light blink at the same time. · You have pressed the ENCRYPT button for more than three seconds.

Try setting up a connection again, this time pressing the ENCRYPT buttons on both devices for less than three seconds. 7.3 Configuration Utility Problems The PLA-4xx Series Configuration Utility displays an error during installation. · Make sure your computer is using Windows XP or Windows Vista (32-bit) operating system. At the time of writing, this is the only compatible operating system for the configuration utility.

PLA-4xx Series User's Guide 67 Chapter 7 LEDs and Troubleshooting The PLA-4xx Series Configuration Utility does not display all or any of my devices. · Inspect the LEDs on your PLA-4xx and make sure that the ETHERNET and HomePlug LEDs are on or blinking. See Section 7.2 on page 66 for troubleshooting LED related problems. · Check all ZyXEL HomePlug AV devices on your network have the latest firmware installed. The latest utility cannot communicate with PLA-4xxs using earlier versions of the firmware. Go to Section 5.4 on page 44 for instructions on installing the latest firmware. · Check you are using the latest version utility. Earlier version utilities cannot communicate with PLA-4xxs using the latest firmware.

If you do not have the latest utility, download it from the ZyXEL website. · If the device is not a ZyXEL device, then the DAK and Network Name will be greyed out.



[You're reading an excerpt. Click here to read official ZYXEL
PLA-400 V2 user guide
http://yourpdfguides.com/dref/3664397](http://yourpdfguides.com/dref/3664397)