

D-Link Quick Installation Guide

DHP-100

Express PowerNetwork™
Powerline Bridge



Before You Begin

You must have at least the following:

An Ethernet-enabled device, such as a laptop or desktop computer that will connect to the DHP-100.

Note: You will need at least two DHP-100 devices in order to create a powerline network.

Safety Instructions

1. Do Not operate this product near water
2. Do Not locate this product where people may walk on the Ethernet cable.
3. The AC coupler should be plugged directly into a 110 VAC wall outlet.
Do Not use an extension cord between the adaptor and AC power source.
4. Disconnect this product from wall outlet during a lightning or thunder storm.
5. Unplug from the wall outlet before cleaning. Use a damp cloth for cleaning.
Do Not use liquid cleaners or aerosol cleaners.

Check Your Package Contents

These are the items included with your DHP-100 purchase:



DHP-100 PowerLine



CD-ROM (containing Manual and Warranty)



Ethernet (CAT5 UTP/Straight Through) Cable

If any of the above items are missing, please contact your reseller.

1

Connecting The DHP-100 Powerline Bridge To Your Network

The DHP-100 is an excellent solution that can be used to extend your wireless network. In the home or small office building, use a pair of DHP-100 Powerline adapters to link two wireless remote location without the need to run Ethernet cables. Combined with a broadband Cable/DSL connection, every room with electrical outlets will have easy access to the high-speed Internet connection.



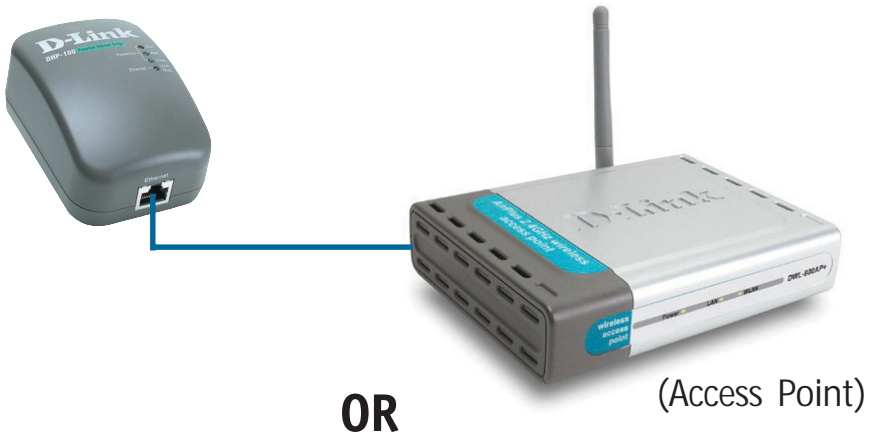
Product LED description

Powerline Col	This LED will blink when there are Powerline traffic collisions.
Powerline Act	This LED will blink when there is Powerline traffic.
Powerline Link	This LED will light solid when the DHP-100 is plugged into a power outlet.
Ethernet Link/Act	This LED will light solid when the DHP-100 is connected properly to an Ethernet enabled device and will blink when there is Ethernet traffic.

1

Connecting The DHP-100 To Your Network (continued)


You can connect the DHP-100 directly to PC's network adapter, switch, or any other Ethernet enabled device. (Note: The Ethernet Port on the DHP-100 is Auto-MDI/MDIX. Meaning you can use a straight-through or a crossover Ethernet (CAT 5) cable when connecting to another Ethernet enabled device.)



For the Encryption Software configuration, connect the DHP-100 directly to a PC.

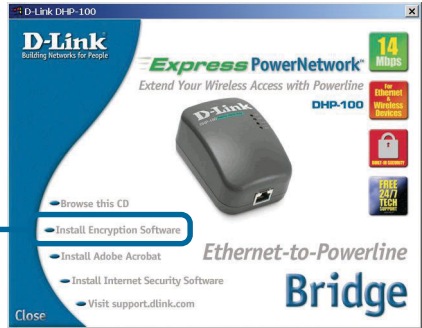
2

Installing DHP-100 Encryption Software

 To use the encryption software you will need a laptop or desktop computer running Microsoft Windows Operating System.

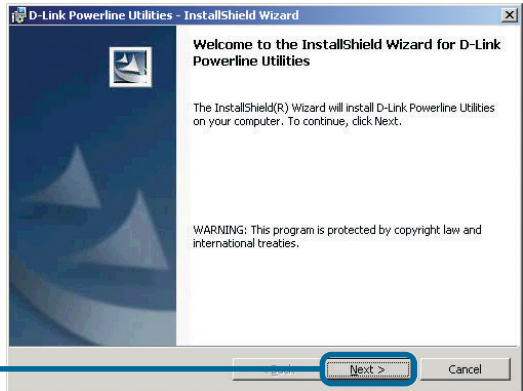
Insert the Master CD into your CD-ROM drive and the Auto-run program will appear.

Click **Install Encryption Software**



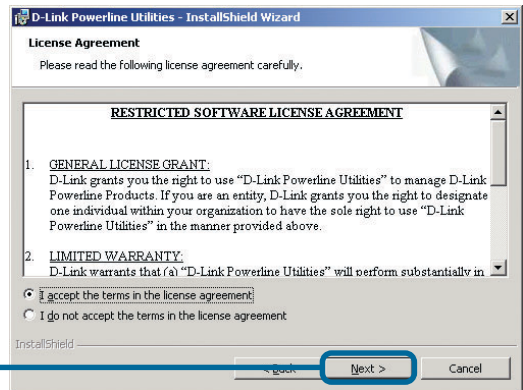
The InstallShield Wizard will begin the DHP-100 software installation.

Click **Next**



Select "I accept the terms in the license agreement"

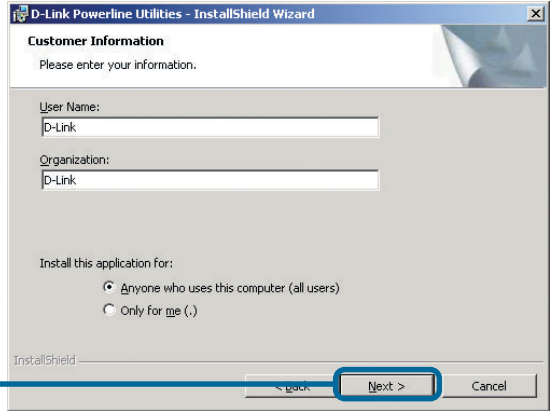
Click **Next**



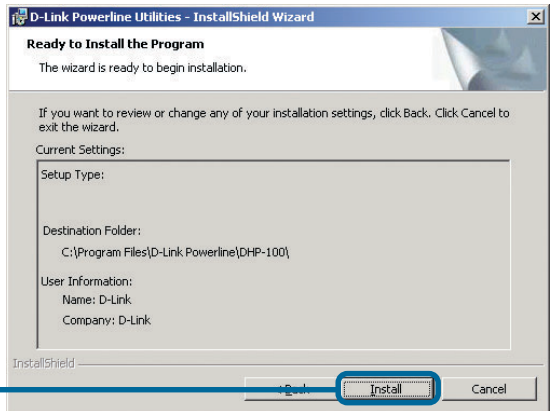
2

Installing DHP-100 Encryption Software (continued)

Insert a User Name and Organization name.

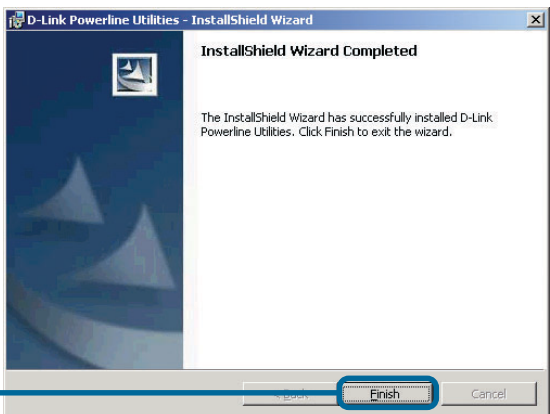


Click **Next**



Click **Install**

The encryption software installation is now complete.

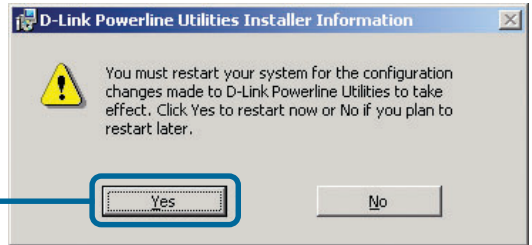


Click **Finish**

2 Installing DHP-100 Encryption Software (continued)

Restart your computer.

Click **Yes**



3 Using DHP-100 Encryption Software

After the computer has restarted, you can now setup encryption for your DHP-100. By default, the DHP-100 uses 56-bit DES encryption with a password of “HomePlug”. This means that out of the box, the DHP-100 will automatically work with other DHP-100s. For security purposes, it is recommended that you change the password. Follow the steps below to do so.

There should be a D-Link DHP-100 icon on your desktop



Double-Click on the Icon

(Alternatively, you can go to Start->Program->D-Link PLC->D-Link Configuration Utility)

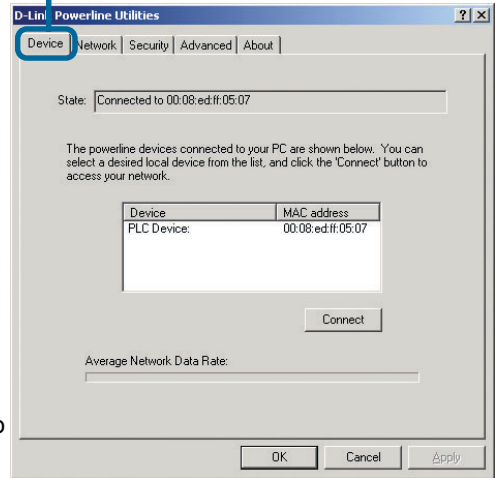
3

Using DHP-100 Encryption Software (continued)

Click Device

The **Device** dialog screen provides a list of your D-Link PowerLine devices connected to the computer where the utility is running and average data rate performance of your powerline network.

In most cases, one device only is listed. In case you have more, click on one of them and hit **Connect**. Make sure that the **State** box indicates that your PC is connected to the same device. Now you are ready to manage the powerline network connected to this device, ensure its privacy and measure its data rate performance.

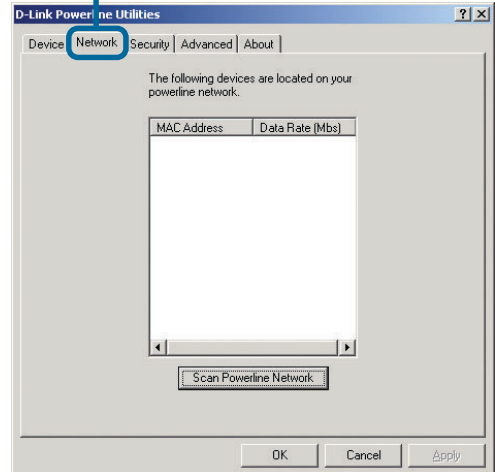


The progress bar will change into a status bar indicating the network average data rate. The color of the bar reflects the average performance of the powerline network :

- Green : Good performance
- Yellow : Average performance
- Red : Poor performance

Click Network

The **Network** dialog screen provides detailed information about your powerline network. The text list box shows all PowerLine devices found on your powerline network identified by their MAC addresses. In most cases, one device only is listed. A second column indicates their data rate measurements in Mbps. Press **Scan Powerline Network** button to refresh the listed information.

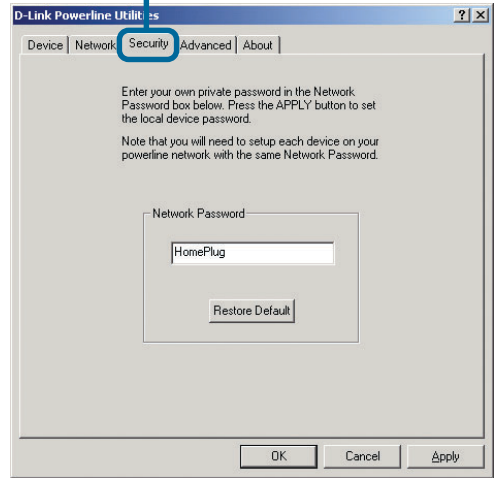


3

Using DHP-100 Encryption Software (continued)

Click **Security**

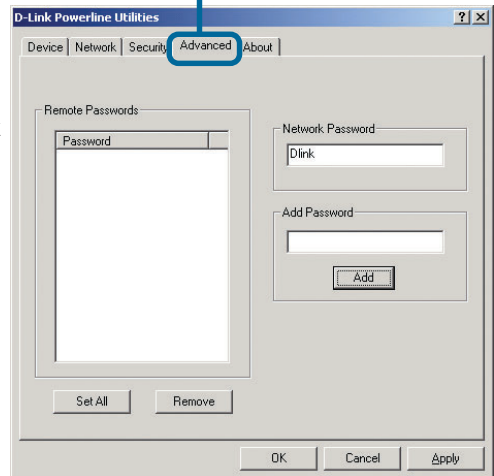
All PowerLine devices are shipped using “HomePlug” as a network password. The **Security** dialog screen allows you to change this network password and set your own private password and apply it to the PowerLine device connected to the computer where the utility is running. Hit **Restore Default** button to restore the original network password “HomePlug”. Hit **Apply** or **OK** buttons to set the password into your local device.



! Your private network password must have between 4 and 24 characters. The password is case sensitive. The password can include any letters of the alphabet, numbers or punctuation marks. Remember this password as it will be needed when adding other powerline devices to the network later.

Click **Advanced**

The **Advanced** dialog screen allows you to set up a network password remotely on other PowerLine devices through the powerline. Type your private network password into the **Network Password** text box. The other devices on the network with PowerLine capabilities will have a different password printed on either the box itself or in the documentation. Find the passwords for all devices you want to manage and type them one by one into the **Add Password** text box and hit **Add**. This will add the passwords to **Remote Passwords** text list box. Hit **Set All** to apply your private network password to all devices that are listed in the **Remote Passwords** text list box and to your local device connected to the computer where the utility is running as well. Select a password and hit **Remove** to remove it from the list.

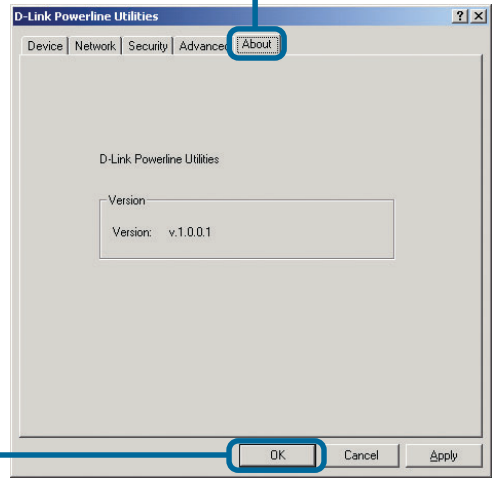


3

Using DHP-100 Encryption Software (continued)

Click **About**

The **About** dialog screen shows the software version.



Click **OK**

! You have now completed the installation for you DHP-100. Please be sure to configure all other PowerLine devices on your network to use the same password, in order for them to communicate with each other.

Specifications

Connectors

- Data Port: RJ-45 (MDI/MDIX)
- Power Prongs

Diagnostic LEDs

- Ethernet Link/Act Indication+
- Powerline Collision Indication
- Powerline Activity Indication
- Powerline Link Indication

Data Rate

- Up to 14Mbps

Access Methods

- CSMA/CA

Operating Frequency

- 100MHz

Dimensions

- 95 x 60 x 40mm

Weight

- 7.6 oz

Modulation Scheme

- OFDM (Orthogonal Frequency Division Multiplexing) with automatic Channel adaptation and FEC (Forward Error Correction)

Encryption

- 56-bit Data Encryption with Key Management
- Software works on Windows OS Platform Only

Standards

- IEEE 802.3
- IEEE 802.3U
- HomePlug 1.0

Frequency Band

- 4.3 to 20.9 MHz

Certifications

- FCC Class B
- UL Listed
- CE
- HomePlug 1.0

Operating Temperature

- 32°F to 158°F (0°C to 70°C)

Power Source

- 110 or 220 VAC, 60Hz/50Hz

Subject to the terms and conditions set forth herein, D-Link Systems, Inc. (“D-Link”) provides this Limited Warranty for its product only to the person or entity that originally purchased the product from:

- D-Link or its authorized reseller or distributor and
- Products purchased and delivered within the fifty states of the United States, the District of Columbia, U.S. Possessions or Protectorates, U.S. Military Installations, addresses with an APO or FPO.

Limited Warranty: D-Link warrants that the hardware portion of the D-Link products described below will be free from material defects in workmanship and materials from the date of original retail purchase of the product, for the period set forth below applicable to the product type (“Warranty Period”), except as otherwise stated herein.

1-Year Limited Warranty for the Product(s) is defined as follows:

- Hardware (excluding power supplies and fans) One (1) Year
- Power Supplies and Fans One (1) Year
- Spare parts and spare kits Ninety (90) days

D-Link’s sole obligation shall be to repair or replace the defective Hardware during the Warranty Period at no charge to the original owner or to refund at D-Link’s sole discretion. Such repair or replacement will be rendered by D-Link at an Authorized D-Link Service Office. The replacement Hardware need not be new or have an identical make, model or part. D-Link may in its sole discretion replace the defective Hardware (or any part thereof) with any reconditioned product that D-Link reasonably determines is substantially equivalent (or superior) in all material respects to the defective Hardware. Repaired or replacement Hardware will be warranted for the remainder of the original Warranty Period from the date of original retail purchase. If a material defect is incapable of correction, or if D-Link determines in its sole discretion that it is not practical to repair or replace the defective Hardware, the price paid by the original purchaser for the defective Hardware will be refunded by D-Link upon return to D-Link of the defective Hardware. All Hardware (or part thereof) that is replaced by D-Link, or for which the purchase price is refunded, shall become the property of D-Link upon replacement or refund.

Limited Software Warranty: D-Link warrants that the software portion of the product (“Software”) will substantially conform to D-Link’s then current functional specifications for the Software, as set forth in the applicable documentation, from the date of original retail purchase of the Software for a period of ninety (90) days (“Warranty Period”), provided that the Software is properly installed on approved hardware and operated as contemplated in its documentation. D-Link further warrants that, during the Warranty Period, the magnetic media on which D-Link delivers the Software will be free of physical defects. D-Link’s sole obligation shall be to replace the non-conforming Software (or defective media) with software that substantially conforms to D-Link’s functional specifications for the Software or to refund at D-Link’s sole discretion. Except as otherwise agreed by D-Link in writing, the replacement Software is provided only to the original licensee, and is subject to the terms and conditions of the license granted by D-Link for the Software. Software will be warranted for the remainder of the original Warranty Period from the date or original retail purchase. If a material non-conformance is incapable of correction, or if D-Link determines in its sole discretion that it is not practical to replace the non-conforming Software, the price paid by the original licensee for the non-conforming Software will be refunded by D-Link; provided that the non-conforming Software (and all copies thereof) is first returned to D-Link. The license granted respecting any Software for which a refund is given automatically terminates.

Non-Applicability of Warranty: The Limited Warranty provided hereunder for hardware and software of D-Link’s products will not be applied to and does not cover any refurbished product and any product purchased through the inventory clearance or liquidation sale or other sales in which D-Link, the sellers, or the liquidators expressly disclaim their warranty obligation pertaining to the product and in that case, the product is being sold “As-Is” without any warranty whatsoever including, without limitation, the Limited Warranty as described herein, notwithstanding anything stated herein to the contrary.

Submitting A Claim: The customer shall return the product to the original purchase point based on its return policy. In case the return policy period has expired and the product is within warranty, the customer shall submit a claim to D-Link as outlined below:

- The customer must submit with the product as part of the claim a written description of the Hardware defect or Software nonconformance in sufficient detail to allow D-Link to confirm the same.

- The original product owner must obtain a Return Material Authorization (“RMA”) number from the Authorized D-Link Service Office and, if requested, provide written proof of purchase of the product (such as a copy of the dated purchase invoice for the product) before the warranty service is provided.
- After an RMA number is issued, the defective product must be packaged securely in the original or other suitable shipping package to ensure that it will not be damaged in transit, and the RMA number must be prominently marked on the outside of the package. Do not include any manuals or accessories in the shipping package. D-Link will only replace the defective portion of the Product and will not ship back any accessories.
- The customer is responsible for all in-bound shipping charges to D-Link. No Cash on Delivery (“COD”) is allowed. Products sent COD will either be rejected by D-Link or become the property of D-Link. Products shall be fully insured by the customer and shipped to **D-Link Systems, Inc., 53 Discovery Drive, Irvine, CA 92618**. D-Link will not be held responsible for any packages that are lost in transit to D-Link. The repaired or replaced packages will be shipped to the customer via UPS Ground or any common carrier selected by D-Link, with shipping charges prepaid. Expedited shipping is available if shipping charges are prepaid by the customer and upon request.

D-Link may reject or return any product that is not packaged and shipped in strict compliance with the foregoing requirements, or for which an RMA number is not visible from the outside of the package. The product owner agrees to pay D-Link’s reasonable handling and return shipping charges for any product that is not packaged and shipped in accordance with the foregoing requirements, or that is determined by D-Link not to be defective or non-conforming.

What Is Not Covered: This limited warranty provided by D-Link does not cover: Products, if in D-Link’s judgment, have been subjected to abuse, accident, alteration, modification, tampering, negligence, misuse, faulty installation, lack of reasonable care, repair or service in any way that is not contemplated in the documentation for the product, or if the model or serial number has been altered, tampered with, defaced or removed; Initial installation, installation and removal of the product for repair, and shipping costs; Operational adjustments covered in the operating manual for the product, and normal maintenance; Damage that occurs in shipment, due to act of God, failures due to power surge, and cosmetic damage; Any hardware, software, firmware or other products or services provided by anyone other than D-Link; Products that have been purchased from inventory clearance or liquidation sales or other sales in which D-Link, the sellers, or the liquidators expressly disclaim their warranty obligation pertaining to the product. Repair by anyone other than D-Link or an Authorized D-Link Service Office will void this Warranty.

Disclaimer of Other Warranties: EXCEPT FOR THE LIMITED WARRANTY SPECIFIED HEREIN, THE PRODUCT IS PROVIDED “AS-IS” WITHOUT ANY WARRANTY OF ANY KIND WHATSOEVER INCLUDING, WITHOUT LIMITATION, ANY WARRANTY OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NON-INFRINGEMENT. IF ANY IMPLIED WARRANTY CANNOT BE DISCLAIMED IN ANY TERRITORY WHERE A PRODUCT IS SOLD, THE DURATION OF SUCH IMPLIED WARRANTY SHALL BE LIMITED TO NINETY (90) DAYS. EXCEPT AS EXPRESSLY COVERED UNDER THE LIMITED WARRANTY PROVIDED HEREIN, THE ENTIRE RISK AS TO THE QUALITY, SELECTION AND PERFORMANCE OF THE PRODUCT IS WITH THE PURCHASER OF THE PRODUCT.

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CE Mark Warning: This is a Class B product. In a domestic environment, this product may cause radio interference, in which case the user may be required to take adequate measures.

FCC Statement: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. 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 communication. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Register online your D-Link product at <http://support.dlink.com/register/>

Technical Support

You can find the most recent software and user documentation on the **D-Link** website.

D-Link provides free technical support for customers within the United States for the duration of the warranty period on this product.

U.S. customers can contact **D-Link** technical support through our web site or by phone.

D-Link Technical Support over the Telephone:

(877) 453-5465

24 hours a day, seven days a week

D-Link Technical Support over the Internet:

<http://support.dlink.com>

