

MEDION®

Powerline Wi-Fi Adapter Set Powerline WLAN Adapter-Set

MEDION® LIFE® P85150 (MD 90222)



Instruction Manual Betjeningsvejledning

Contents

1.	Notes on how to use these instructions.....	3
1.1.	Symbols and key words used in these instructions	3
2.	Package contents.....	5
3.	Proper use	5
4.	Safety instructions.....	6
4.1.	Operating safety.....	6
4.2.	Electromagnetic compatibility	8
4.3.	Notes on conformity.....	8
4.4.	Transport and packaging.....	9
5.	System requirements	9
6.	Function.....	10
7.	Overview of the device.....	12
7.1.	Powerline WLAN Adapter	12
7.2.	Powerline Adapter.....	13
8.	Possible LED displays	14
8.1.	Powerline WLAN Adapter	14
8.2.	Buttons on the Powerline WLAN Adapter.....	16
8.3.	Powerline Adapter.....	17
9.	The SECURITY/RESET button	19
10.	Connection	20
10.1.	Notes on power supply.....	21
10.2.	Connecting to a network device	22

11.	Connecting the device via Wi-Fi with the Powerline WLAN Adapter	23
	11.1. Connect via WPS button	23
12.	Setting up the device via the web interface	24
	12.1. Logging on to the web interface	24
	12.2. Setup wizard	26
	12.3. Wireless Setup	30
	12.4. PLC Setting	33
	12.5. Advanced Security	35
	12.6. Access Control	36
	12.7. Maintenance	36
	12.8. Firmware Update	37
	12.9. Status	38
	12.10. Logout	38
13.	Changing the Powerline network key	38
14.	Adding further adapters to the Powerline network	40
15.	Removing a Powerline Adapter from the Powerline network	42
16.	Energy-saving mode	42
17.	Factory settings	43
18.	Troubleshooting	44
19.	Cleaning	47
20.	Disposal	48
21.	Technical data	49
22.	Legal notice	51

1. Notes on how to use these instructions



Read the safety instructions carefully before use. Note the warnings on the device and in the operating instructions.

Always keep the operating instructions close to hand. If you sell the device or give it away, make sure you also hand over these instructions and the warranty card.

1.1. Symbols and key words used in these instructions



DANGER!

Warning: immediate mortal danger!

WARNING!

Warning: possible mortal danger and/or serious irreversible injuries!

**CAUTION!**

Please follow the guidelines to avoid injuries and/or property damage!

ATTENTION!

Please follow the guidelines to avoid property damage!

**NOTE!**

Additional information on using the device.

**NOTE!**

Please follow the guidelines in the operating instructions!

**WARNING!**

Warning: danger of electric shock!

- Bullet point/information on operating steps and results
- ▶ Tasks to be performed

2. Package contents

Please check your purchase to ensure that all items are included. If anything is missing, please contact us within 14 days of purchase. The following items are supplied with the product you have purchased:

- 1 Powerline Adapter
- 1 Powerline WLAN Adapter
- 2 RJ45 network cables
- Operating instructions and warranty card

3. Proper use

The Powerline Adapters are used to transfer network signals via the sockets connected to the mains. The Powerline WLAN Adapter also provides a Wi-Fi access point for your network. This device is for private use only and may not be used for commercial purposes.

4. Safety instructions

4.1. Operating safety


- This device is not intended for use by people (including children) with reduced physical, sensory or mental abilities or by those without experience and/or knowledge, unless they are supervised by a person responsible for their safety or they have been instructed in its use by that person. Children should be supervised to ensure they do not play with this device.
- You must also comply with the operating instructions of the devices that you connect to the Powerline Adapter.
- Do not place liquid-filled containers, such as vases, on or near the device. The container may tip over and the liquid may impair the electrical safety of the device.
- Keep the device away from moisture and from water in droplet or spray form. Avoid knocks, dust, heat and direct sunlight in order to prevent malfunction. The operating temperature is 5–35°C.

- Never open the device housing; it contains no parts requiring maintenance! There is a risk of electric shock when the housing is open. This invalidates the warranty and may render the device unusable.
- Plug the Powerline Adapter into freely accessible mains sockets so that it can quickly be disconnected from the electricity network in case of danger.
- After transporting the device, wait until it has reached room temperature before switching it on. Major fluctuations in temperature or humidity can lead to condensation which could cause an electrical short-circuit.
- To avoid static charges, you should not operate the device in extremely dry conditions.
- In circumstances where there are electrostatic discharges, the device could malfunction. In this case, the device must be reset to the factory settings.

4.2. Electromagnetic compatibility

- You must comply with the European directives on electromagnetic compatibility (EMC) when making connections. Maintain a distance of at least one metre from high-frequency and magnetic sources of noise (TV set, loudspeakers, mobile phones, etc.) in order to avoid malfunctions and data loss.

4.3. Notes on conformity

 Medion AG hereby declares that the product MD 90222 (consisting of two devices) conforms to the following European requirements:

- EMC Directive 2004/108/EC
- Low Voltage Directive 2006/95/EC
- Ecodesign Directive 2009/125/EC
- RoHS Directive 2011/65/EU.

Full declarations of conformity are available at www.medion.com/conformity.

4.4. Transport and packaging

Keep the original packaging in case you need to send the device by post.

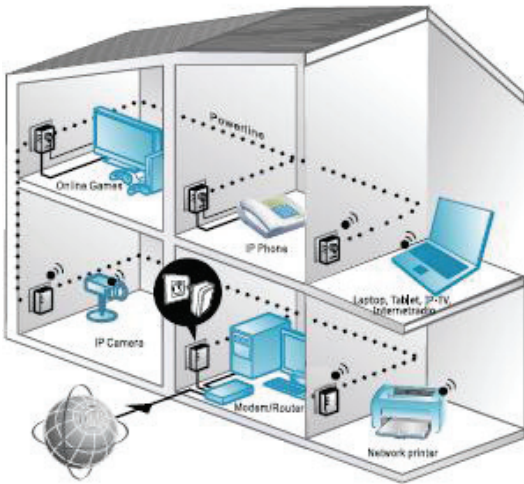
5. System requirements

Before installing the Powerline Adapter, ensure that the following conditions are met:

- At least two wall sockets (100–240 V 50/60 Hz).
- LAN connection
- WLAN adapter (if a Wi-Fi connection is required)

6. Function

You can use the Powerline Adapters to extend your existing LAN network via the mains network in your house without the need for any additional cables.



Example of use

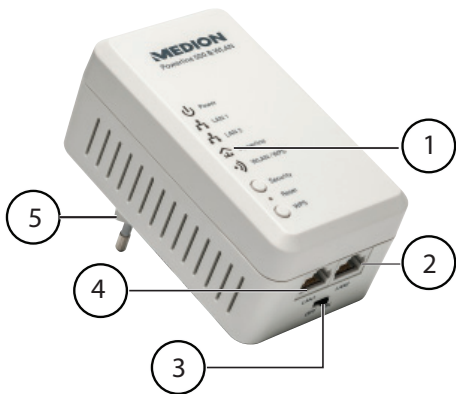
The two supplied adapters are already synchronized, the encryption is enabled and you can send and receive data without the need for any further set-up. Additional Powerline Adapters be connected to the network by means of a simple cable connection.

You can use the Powerline WLAN Adapter to connect additional devices wirelessly and thus access your network (see Chapter 11 “11. Connecting the device via Wi-Fi with the Powerline WLAN Adapter” on page 23).

The encryption function will protect your private Powerline Network from unwanted third-party access (see Chapter “14. Adding further adapters to the Powerline network” on page 40)

7. Overview of the device

7.1. Powerline WLAN Adapter



- 1) LED displays **Power, LAN1/LAN2, Powerline, WLAN/WPS; SECURITY, RESET** and **WPS** buttons
- 2) LAN 2: RJ45 LAN connection
- 3) ON/OFF: On/off switch
- 4) LAN 1: RJ45 LAN connection
- 5) Mains connection plug

7.2. Powerline Adapter

EN

DK



GPL/
LGPL





- 1) Integrated power socket
- 2) LED displays **Power**, **LAN** and **Powerline**
- 3) **SECURITY/RESET** button: encryption/resets to factory default settings
- 4) RJ45 LAN connection
- 5) Mains connection plug

8. Possible LED displays

8.1. Powerline WLAN Adapter

LED	Status	Meaning
Power 	Lights up green	The adapter is switched on.
	Flashes green	Adapter is restarting or carrying out security settings.
	Off	The adapter is not receiving power.
WLAN/ WPS 	Lights up green	Wi-Fi is switched on.
	Flashes green	Data is being transferred.
	Lights up orange	WPS successfully completed.
	Flashing orange	WPS active.
	Off	Wi-Fi switched off.

LED	Status	Meaning
LAN1/2 	Lights up green	LAN cable is plugged in, adapter is ready for data transfer.
	Flashes green	Data is being transferred.
	Off	The LAN connection is not active (no LAN cable connected, network device switched off).
Power-line 	Lights up green	An additional Powerline Adapter has been detected on the same network. Connection speed is at > 40 Mbit/sec
	Lights up orange	Connection speed is at > 20–40 Mbit/sec
	Lights up red	Connection speed is at < 20 Mbit/sec
	Off	No connection to another adapter or no devices found with the same network key

EN

DK

GPL/
LGPL

8.2. Buttons on the Powerline WLAN Adapter



Function	Button	Description
Leave network and generate random KEY	Security	Press for 12 seconds: the POWER LED flashes on and off.
Connecting to an existing network	Security	Press for 2–3 seconds: the POWER LED flashes for 2 minutes.
Resets the adapter to the factory defaults.	Reset	Press for 5 seconds until the WLAN/WPS LED flashes orange. Then the device restarts.
Starting WPS PBC	WPS	Press for 2–3 seconds: the WLAN/WPS LED flashes orange for 2 minutes.
Wi-Fi ON/OFF	WPS	Press for 10 seconds until the WLAN/WPS LED goes off.


8.3. Powerline Adapter

EN

DK

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LGPL

LED	Status	Meaning
Power 	Green light	The adapter is switched on.
	Flashes green	Adapter is restarting or carrying out security settings.
	Flashes green every 15 seconds (other LED lights are off)	The adapter is in standby mode.
	Off	The adapter is not receiving power.
LAN 	Green light	LAN cable is plugged in, adapter is ready for data transfer.
	Flashes green	Data is being transferred.
	Off	The LAN connection is not active (no LAN cable connected, network device switched off).

LED	Status	Meaning
Power-line 	Lights up green	An additional Powerline Adapter has been detected on the same network. Connection speed is at > 40 Mbit/sec.
	Lights up orange	Connection speed is at > 20–40 Mbit/sec.
	Lights up red	Connection speed is at < 20 Mbit/sec.
	Off	No connection to another adapter or no devices found with the same network key.

9. The SECURITY/RESET button

The **SECURITY/RESET** button on the Powerline Adapter has three different functions, depending on how long you press it down:

Function	Button	Description
Leave network and generate random KEY	Security/Reset	Press for 5–8 seconds: the POWER LED flashes on and off.
Connecting to an existing network	Security/Reset	Press for 1–2 seconds: the POWER LED flashes for 2 minutes.
Reset	Security/Reset	Press for 10–15 seconds: the POWER LED flashes on and off.

10. Connection

To set up a network of Powerline Adapters, there must always be at least two adapters connected for the data transmission.

There are two options: The direct connection between two network-capable devices (of which one is connected via Wi-Fi or the LAN port) or a connection between a network-capable device and a router (to the Internet).

- ▶ Connect the Powerline Adapter to a wall outlet (100–240 V~50/60 Hz) close to the network-capable device.



NOTE

To guarantee continuous access to an existing LAN network, it is necessary to ensure the Powerline Adapter is connected to a permanent power source.

10.1. Notes on power supply



NOTE

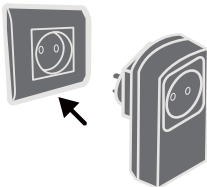
Connect the Powerline Adapter directly to the wall outlet and not to an extension cord or multiple socket (power strip) as these can adversely affect the transmission quality. You can use the integrated socket of the Powerline Adapter to operate other devices.

- ▶ Plug the Powerline Adapter into an individual socket if possible.



NOTE

If no connection is made after the connection of the adapter to the computer, try the connection again via a different wall outlet.

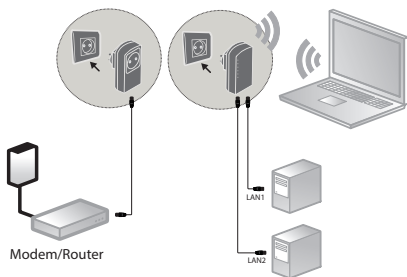


Please note that the data transmission is dependent on the utilisation and quality of the mains network:

- The longer the line between the two Powerline Adapters, the slower the data transfer.
- Depending on the capacity utilisation of the electricity network, the speed of the data transmission can vary or even be interrupted.
- On older mains networks that do not correspond to the current state of the art, the data transfer rate may be slightly slower.

10.2. Connecting to a network device

To connect two network devices such as a PC and a router within a network with the Powerline Adapter, one device must be connected to the Powerline Adapter using a LAN cable (RJ45) and the other device connected wirelessly or via a LAN cable (RJ45) to the Powerline WLAN Adapter.



Connection example

- ▶ Connect the supplied LAN cable (RJ45) to the LAN connection on the Powerline Adapter and the LAN port on the router.
- ▶ If necessary, connect the LAN port of the computer to the LAN connection on the Powerline WLAN Adapter using the second supplied LAN cable (RJ45) or connect the computer wirelessly via the Powerline WLAN Adapter as soon as this is integrated into the network.

- ▶ Plug the Powerline Adapter into an individual socket if possible.
- ▶ Switch the computer and router on.

The set-up is successful if the LED indicators **Power** and **Powerline** light up on both Powerline Adapters.

11. Connecting the device via Wi-Fi with the Powerline WLAN Adapter

11.1. Connect via WPS button

To register a device via WPS, proceed as follows:

- ▶ Press the WPS button on your Powerline WLAN Adapter for 2–3 seconds. The WPS display starts flashing orange.
- ▶ Within 2 minutes, also press the WPS button on your end device. If you are using a Windows 7 computer or upwards, you can simply connect to the “Powerline-WLAN” Wi-Fi network.
- ▶ Once the Wi-Fi encryption is successfully completed, the WPS display lights up orange.

11.1.1. Manual connection

To register a device manually, proceed as follows:

SSID (network name): Powerline-WLAN

Password: XXXXXXXXXX (9 Xs)



NOTE!

Please change the default password via the web interface of the Powerline WLAN Adapter.

12. Setting up the device via the web interface

12.1. Logging on to the web interface

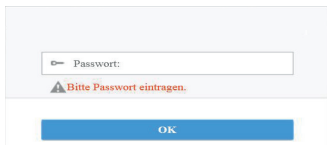
There are several ways of opening the web interface:

- **Via the network name**

To get to the web interface via the network, there must already be a Powerline network connection between Powerline Adapter and Powerline WLAN Adapter and the Powerline Adapter must be connected to a router.

- ▶ Now you can connect your PC/notebook via network cable or Wi-Fi to the Powerline WLAN Adapter.
- ▶ Open the Internet browser on a computer and type the following in the address line: "wlan.powerline".

- ▶ In the login window, enter the password for the web Interface.



The screenshot shows a login window with a text input field labeled "Passwort:". Below the field is a red warning icon and the text "Bitte Passwort eintragen.". At the bottom of the window is a blue button labeled "OK".



PLEASE NOTE:

The default password is "admin".

- ▶ Set the language for the web interface in the upper right-hand corner of the screen.
- ▶ Then click on LOGIN. The home page of the web interface appears.
- **Via the emergency IP address**

If there is no connection between the Powerline Adapter and a router, you can access the web interface via the emergency IP address.

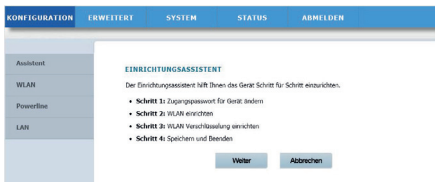
- ▶ Connect your PC or notebook to the Powerline WLAN Adapter via Wi-Fi or with a network cable.
- ▶ Now assign your PC/notebook a fixed IP address from the range 192.168.33.2–192.168.33.254 (e.g. 192.168.33.2).
- ▶ Open the Internet browser on a computer and enter the IP address <http://192.168.33.1> in the address line and follow the instructions.

12.2. Setup wizard

12.2.1. Wizard

The easiest way to make the basic settings is by using the wizard.

- ▶ To carry out the wizard, click on Wizard in the Configuration menu:



- ▶ The wizard guides you through 4 steps. Click on Next to get to the next step.

12.2.2. Change Device Login Password

Here you can assign a password to limit access via the web interface.





NOTE:

The default password is “admin”. To ensure sufficient protection for your network, you should set a different password here.

- ▶ If you do not want to set a different password, click on **Skip**.
- ▶ After you have entered the new password, click on **Next** to go to the next page.

12.2.3. Setup Wireless Connection

On this page you make the settings for the wireless network adapter of your Powerline Adapter.

- **Enable Wireless Interface**

Here you can turn the Wi-Fi network of the Powerline Adapter on or off.

- **Wireless Network Name (SSID)**

The name of the wireless network (SSID) can be up to 32 characters and can only contain letters, numbers and underscores or any combinations thereof. The SSID is case-sensitive.

- **Visibility Status**

- If you select **VISIBLE**, the SSID is discoverable by all other Wi-Fi devices.
- If you select **INVISIBLE**, the SSID is not broadcast and other Wi-Fi devices must know the correct SSID before making a connection.

- **Region**

Select the country in which you are operating the Powerline Adapter.

- **802.11 Mode**

Select the appropriate Wi-Fi mode for your wireless network. The standard setting is mixed 802.11b/g/n.

- **Bandwidth**

For all 802.11 Wi-Fi modes that are compatible with 802.11n, you can manually adjust the bandwidth here.

- **Wireless Channel**

Set the wireless channel here that the Powerline Adapter should use for broadcasting its Wi-Fi network. The standard setting is **AUTOSCAN**. In this setting the Powerline Adapter automatically seeks out the best wireless channel. After you have made the wireless settings, click **Next**:

12.2.4. Setup Wireless Security

The Wi-Fi router of the Powerline Adapter supports the encryption standards WEP, WPA-PSK, WPA2-PSK and WPA/WPA2-PSK.

- ▶ If you do not want to use any encryption, select the option **NONE** (not recommended).
- ▶ Enter the appropriate encryption algorithm for each encryption type (TKIP or AES) and a network key.
- ▶ After you have finished setting up the network encryption, click **NEXT**:

12.2.5. Save and Complete

On this page you can see the configuration of the Powerline Adapter. If you want to change any settings, click **BACK**. Click **COMPLETE** to accept the settings and to exit the wizard.

The screenshot shows a web-based configuration interface for a Powerline Adapter. The top navigation bar includes tabs for 'KONFIGURATION', 'ERWELTET', 'SYSTEM', 'STATUS', and 'ABBRUCHEN'. The left sidebar has a menu with 'Anmeldung', 'WLAN', 'PowerLine', and 'LAN'. The main content area is titled 'WLAN ENKRIPTERING' and contains the following text and form elements:

WLAN ENKRIPTERING
 Auf dieser Seite kann die WLAN-Standardverschlüsselung ausgewählt werden.
 Hinweis: Die Verschlüsselung für WEP oder WPA (TKIP) verschlüsselt nicht die WLAN-Funktion.
 abbrechen

WLAN einschalten:

Name WLAN Netz (SSID):

Verschlüsselung:

Passwort:

Die Passwort muss zwischen 8 und 32 ASCII Zeichen oder 64 hexadezimalen Zeichen sein.

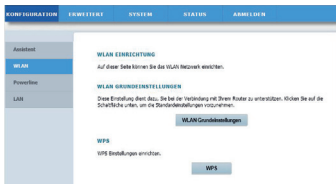
SSIDname anzeigen:

Buttons:

12.3. Wireless Setup

12.3.1. Wireless Basic

You can adjust the settings for the wireless network here.



12.3.2. Enable Wireless Interface

Turn Wi-Fi network on or off.

12.3.3. Wireless Name (SSID)

The name of the wireless network (SSID) can be up to 32 characters and can only contain letters, numbers and underscores or any combinations thereof. The SSID is case-sensitive.

12.3.4. Wireless Security Mode

The Wi-Fi router of the Powerline Adapter supports the encryption standards WEP, WPA-PSK, WPA2-PSK and WPA/WPA2-PSK.

If you do not want to use any encryption, select the option **NONE** (not recommended).

12.3.5. Passphrase

Here you can assign a network key.

12.3.6. Show encryption key

Shows the network key in the web interface.

▶ After you have made all the settings, click **OK**:

12.3.7. WPS

You can use the WPS function (Wi-Fi protected setup) to add a wireless client to your network without entering the SSID, encryption and password. To make the connection, you merely need to press the WPS button on the Powerline Adapter and then on the wireless client. To be able to use this function, the Wi-Fi client must support WPS.

12.3.8. Enabled WPS

Here you can turn the WPS function on or off.

12.3.9. WPA Mode

Here you can display the current WPA encryption.



NOTE!

If you enable the WPS function, you must use one of the encryption types WPA-PSK, WPA2-PSK or WPA/WPA2-PSK and the SSID must be transmitted.

The WPS function can be carried out via PBC, PIN and AP-PIN.

12.3.10. PBC MODE

- ▶ Select PBC from the WPS menu and then click the **PBC** button on the WPS page or press the **WPS** button on the Powerline WLAN adapter to use the WPS connection.
- ▶ Then press the WPS button on the Wi-Fi client within 2 minutes or confirm the **WPS** connection via the settings menu of the wireless client to complete the connection. After the network connection has been established via WPS, the following page appears and the wireless client is connected to the Wi-Fi of the Powerline Adapter.
- ▶ Click **APPLY** to complete the setup.

12.3.11. PIN Mode

- ▶ Select PIN from the WPS menu and enter the PIN (number code) of the wireless client on the WPS page. Then click on the **PIN** button in the settings menu of the wireless client within 2 minutes to complete the connection via WPS.

12.3.12. AP-PIN Mode

- ▶ Select AP-PIN from the WPS menu and enter the AP-PIN (number code) of the wireless client on the WPS page. Then click on the PIN button in the settings menu of the wireless client within 2 minutes to complete the connection via WPS.

12.4. PLC Setting

On this page you can see all the information (device name, MAC address, network key and network name) regarding the Powerline WLAN Adapter and the logged-on clients.

- ▶ Click the **REFRESH** button to refresh the display.
- ▶ Click **ADD MEMBER** to add a new device to the Powerline network.
- ▶ Then enter the device information and click **APPLY** to add the device to the network.

12.4.1. LAN Setup

Here you can see the information on the LAN connection of the Powerline Adapter.

In the field **IP-ADDRESS** you can select a different IP address for the Powerline Adapter's LAN network adapter.

12.4.2. Advanced Wireless

You can change the advanced settings for the wireless adapter of the Powerline Adapter here.

12.4.3. Wireless Name (SSID)

The name of the wireless network (SSID) can be up to 32 characters and can only contain letters, numbers and underscores or any combinations thereof. The SSID is case-sensitive.

12.4.4. Network Name Status

- ▶ If you select **VISIBLE**, the SSID is discoverable by all other Wi-Fi devices.
- ▶ If you select **INVISIBLE**, the SSID is not broadcast and other Wi-Fi devices must know the correct SSID before making a connection.

12.4.5. Transmission Rate

- ▶ Set the Wi-Fi transfer rate here. The standard setting is **AUTO**.

12.4.6. Transmit Power

- ▶ Set a transfer rate of 100%, 80%, 60%, 40%, or 20%.

12.4.7. User Isolation

If you enable this function, clients that are registered on the wireless network cannot communicate with one another.

- ▶ Set the function to **OFF** to allow the clients to communicate with each other.

12.4.8. Enable WMM (Wireless QoS)

This feature is not available.

If this function is disabled, the Powerline WLAN Adapter adopts the WMM priorities from the router. When WMM is activated, the streaming of multimedia content is optimised.

12.4.9. Max. Clients

Enter a number from 1–32 for the maximum number of clients that can log on to the Powerline WLAN Adapter.

12.5. Advanced Security

12.5.1. Wireless Security Mode

The Wi-Fi router of the Powerline Adapter supports the encryption standards WEP, WPA-PSK, WPA2-PSK and WPA/WPA2-PSK.

If you do not want to use any encryption, select the option **NONE** (not recommended).

12.6. Access Control

12.6.1. Add

You can add a client to the list here.

- ▶ Then enter the MAC address and a description for the client and click on **OK** to add the client to the list.

12.7. Maintenance

12.7.1. User Password

Here you can set a new password for access to the web interface of the Powerline Adapter.

12.7.2. Reboot/Restore

- **Reboot**
 - ▶ Click on the **REBOOT** button to restart the Powerline Adapter (recommended for system crash/malfunction)
- **Restore Default Settings**
 - ▶ Click on the **RESTORE** button to reset the Powerline Adapter to its factory defaults and restart the device (recommended for system crash/malfunction and loss of the password).

**NOTE:**

After a reset to factory defaults, all the settings and passwords are deleted and must be re-entered.

12.8. Firmware Update

- ▶ If you receive a software update from our service, save it onto your computer.
- ▶ Then click on **BROWSE** to execute and install the software update from your computer.
- ▶ If your settings are to be retained after the software update, clear the check mark next to the entry **CLEAR CONFIG**.
- ▶ Click on **APPLY** to start the installation.

**WARNING!**

While resetting to factory settings or applying a software update, never press the **RESET** button on the Powerline Adapter. This will lead to a system failure and thus destroy the Powerline Adapter!

12.9. Status

Here you can view all information about the ports and the Wi-Fi configuration of the Powerline Adapter.

12.10. Logout

When you are finished with the web interface, use this entry to log off from the web interface.

13. Changing the Powerline network key



NOTE

When delivered, both Powerline Adapters are paired with each other and the data transfer is encrypted by default. The Powerline network is thus already secured with a unique network key when used for the first time.

The change of the network key is appropriate if, for example, there are security concerns or if a large network is to be divided into two or more smaller networks.



NOTE

To do this, it is useful to plug all the adapters that are to receive the new Powerline network key into the same multiple socket.

Both Powerline Adapters are connected and ready for operation. The **POWER** LED lights up. This step is to be carried out on each adapter.

- ▶ Press the **SECURITY** button on the Powerline WLAN Adapter for 12 seconds or the **SECURITY/RESET** on the Powerline Adapter for about 5–8 seconds.

The device will be reset and restarts. All LEDs go off for a short while. This Powerline Adapter now generates a random, unique network key.

- ▶ Press the **SECURITY** button on the Powerline WLAN Adapter again for about 2–3 seconds or the **SECURITY/RESET** button on the Powerline Adapter for about 1–2 seconds.

The Power LED flashes green.

- ▶ Press the **SECURITY** button on the Powerline WLAN Adapter again for about 2–3 seconds or the **SECURITY/RESET** button on the Powerline Adapter for about 1–2 seconds on the **second** Powerline Adapter.

The Power LED flashes green.

Once both the **POWER** and the **POWERLINE** LED light up permanently green, the encryption has been completed successfully.

14. Adding further adapters to the Powerline network



NOTE

To do this, it is useful to plug all the adapters that are to receive the new network key into the same multiple socket.

For every additional Powerline Adapter that is to be given a new network key, proceed as follows: All Powerline Adapters that are to be configured are connected and ready for operation. The **POWER** LED lights up.

- ▶ Connect the adapter with which the existing network is to be extended to a socket. The **POWER** LED lights up.
- ▶ Press the **SECURITY** button on the Powerline WLAN Adapter for 12 seconds or the **SECURITY/RESET** button on the Powerline Adapter for about 5–8 seconds.

The device will be reset and restarts. All LEDs go off for a short while. This Powerline Adapter now generates a random, unique network key.

- ▶ Press the **SECURITY** button on the Powerline WLAN Adapter again for about 2–3 seconds or the **SECURITY/RESET** button on the Powerline Adapter for about 1–2 seconds.

The Power LED flashes green.

- ▶ Press the **SECURITY** button on the Powerline WLAN Adapter again for about 2–3 seconds or the **SECURITY/RESET** button on the Powerline Adapter for about 1–2 seconds on the adapter that is already in the existing network.

The Power LED flashes green.

When the **POWER** and the **POWERLINE** LEDs on all Powerline Adapters light up permanently green, the system extension and encryption have been completed successfully.



NOTE

Repeat the above steps for each additional Powerline Adapter.

15. Removing a Powerline Adapter from the Powerline network

If you want to remove a Powerline Adapter from the existing network, proceed as follows:

- ▶ Press the **SECURITY** button on the Powerline WLAN Adapter for 12 seconds or the **SECURITY/RESET** button on the Powerline Adapter for about 5–8 seconds.

All LEDs go out briefly and the device restarts. This Powerline Adapter now generates a random, unique network key and is thus no longer in the Powerline network.

The **POWERLINE** LED no longer lights up.

16. Energy-saving mode

If all the network devices are turned off and no more data is being transferred, the Powerline Adapters switch to standby mode after approximately one minute. The power indicator will flash.

As soon as the network devices are switched on again, the Powerline Adapters are also restarted.

17. Factory settings

The two Powerline Adapters in the set you have bought are already paired on delivery.

By changing the Powerline network key or removing individual adapters from the Powerline network, this preset will be deleted.

Here is how you can restore the factory setting:

- ▶ Press the **RESET** button on the Powerline WLAN Adapter for 5 seconds or the **SECURITY/RESET** button on the Powerline Adapter for about 10–15 seconds.

All LEDs go off for a short while. The device will be reset and restarts. The procedure is completed when the Power LED lights up permanently.

18. Troubleshooting

If errors occur, check first whether you can correct the problem yourself. The following list may help you.



CAUTION

Never try to repair the device yourself. Contact our service centre or another suitable specialist workshop if a repair is necessary.

Problem	Possible cause	Rectification
The POWER LED does not light up.	Is the Powerline Adapter correctly connected to the mains?	▶ Try unplugging the Powerline Adapter and plugging it back in again.
The LAN LED does not light up.	Is the LAN cable (RJ45) correctly connected to the adapter and the computer or router?	▶ Check the LAN card and/or DSL connection of your computer.
	Is the computer/router switched on?	▶ Switch on network devices.

Problem	Possible cause	Rectification	EN
<p>The POWER-LINE LED does not light up.</p>	<p>There is no connection between the Powerline Adapters.</p>		DK
	<ul style="list-style-type: none"> • Possibly, the power outlets being used are not suitable for making a Powerline connection. 	<ul style="list-style-type: none"> ▶ Try different power outlets. 	

Problem	Possible cause	Rectification
	<ul style="list-style-type: none"> • Maybe the adapters are not synchronised. 	<p>You can test whether the adapters are on the same network:</p> <ul style="list-style-type: none"> ▶ Plug the two adapters into adjacent power outlets on a multiple socket strip. ▶ If no Powerline LED is illuminated, the adapters are not in the same network. ▶ In this case, carry out a reset of all adapters as described under “17. Factory settings” on page 43.

19. Cleaning

- Always unplug the Powerline Adapter and disconnect all the cables before cleaning the device.
- Do not use solvents, corrosive agents or aerosol-based detergents to clean the device.
- Clean the device with a soft, lint-free cloth.

Store the packaging material in a safe place; only use this box to transport the device.



ATTENTION!

None of the parts inside the device require cleaning or maintenance.

20. Disposal

Packaging



Your device is packaged to protect it from damage in transit. Packaging materials are raw materials and can therefore be reused or recycled.

Device



Do not under any circumstances dispose of the device with the household rubbish at the end of its service life! Please consult your local authority for advice on correct and eco-friendly methods of disposal.

21. Technical data

EN

Model: MD 90222 (set with 2 devices)

DK

MD 87319 (WLAN Adapter)

Input voltage: 100–240 V ~ 50/60 Hz, 0.15 A

Power consumption: < 6 W in operation

Connections: 2 x Ethernet (LAN) 100 Mbit/s

WLAN: IEEE802.11b/g/n

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LGPL

MD 87309 (Adapter)

Input voltage: 100–240 V ~ 50/60 Hz, 0.1 A

Output voltage:

(integrated power

socket):

100–240 V~/

Maximum load 16 A

Power consumption: < 3 W in operation

< 0.5 W in standby mode

Connections: 1 x Ethernet (LAN) 100 Mbit/s

Transfer

speed:

up to 500 Mbit/s

Powerline AV standard: 128 bit AES encryption

Protocol

HomePlug AV, compatible with IEEE P1901, compatible with 200 and 500 Mbit/s Powerline Adapters, coexistent with HomePlug 1.0

Environmental requirements

Temperature

(operational) 5°C–35°C

Humidity

(operational) 10%–90%, non-condensing

Dimensions

Powerline Adapter

(W x H x D) 61 x 116 x 86 mm

Powerline WLAN Adapter

(W x H x D) 61 x 106 x 86 mm

Weight (per adapter) approx. 183 g

22. Legal notice

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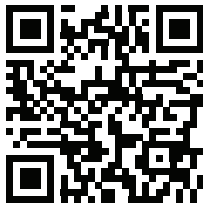
Am Zehnthof 77

45307 Essen

Germany

The operating manual can be reordered via the service hotline and is available for download via the service portal at www.medion.com/gb/service/start/.

You can also scan the QR code above and download the operating manual onto your mobile device via the service portal.



Indholdsfortegnelse

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1.	Om denne brugsanvisning.....	55
1.1.	Symboler og advarsler, der anvendes i denne brugsanvisning	55
2.	Pakkens indhold	57
3.	Korrekt anvendelse	57
4.	Sikkerhedsanvisninger	58
4.1.	Driftssikkerhed.....	58
4.2.	Elektromagnetisk kompatibilitet.....	60
4.3.	Meddelelse om overensstemmelse ...	60
4.4.	Transport und emballage	61
5.	Systemkrav	61
6.	Funktionsmåde	62
7.	Oversigt over apparatet	64
7.1.	Powerline-WLAN-adapter	64
7.2.	Powerline-adapter	65
8.	Mulige LED-indikationer	66
8.1.	Powerline-WLAN-adapter	66
8.2.	Knapper på Powerline- WLAN-adapteren	68
8.3.	Powerline-adapter	69
9.	Knappen SECURITY/RESET	71
10.	Tilslutning	72
10.1.	Anvisninger for tilslutning til lysnettet....	72
10.2.	Tilslutning til en netværksenhed	74

11.	Tilslutning af en enhed med Powerline-WLAN-adapteren via WLAN	75
	11.1. Tilslutning via WPS-knappen.....	75
12.	Konfiguration af enheden via webbrugergrænsefladen	76
	12.1. Logon til webbrugergrænsefladen	76
	12.2. Setup wizard.....	78
	12.3. Wireless Setup.....	82
	12.4. PLC Setting	85
	12.5. Advanced Security	87
	12.6. Media Access Control	88
	12.7. Maintenance.....	88
	12.8. Firmware Update	89
	12.9. Status.....	90
	12.10. Logout.....	90
13.	Ændring af Powerline-netværksnøglen ...	90
14.	Tilslutning af yderligere Powerline-adaptre til netværket	92
15.	Fjernelse af en Powerline-adapter fra Powerline-netværket.....	94
16.	Energisparefunktion	94
17.	Fabriksindstillinger	95
18.	Fejlfinding	96
19.	Rengøring.....	99
20.	Bortskaffelse	99
21.	Tekniske data	100
22.	Kolofon	102

1. Om denne brugsanvisning

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Læs sikkerhedsanvisningerne grundigt igennem, før apparatet tages i brug. Tag hensyn til advarslerne på apparatet og i brugsanvisningen.

Gem brugsanvisningen, så du altid har den ved hånden. Hvis du sælger apparatet eller forærer det væk, er det vigtigt, at denne brugsanvisning og garantibeviset også følger med.

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1.1. Symboler og advarsler, der anvendes i denne brugsanvisning



FARE!

Advarsel om umiddelbar livsfare!!

ADVARSEL!

Advarsel om mulig livsfare og/eller alvorlige, uoprettelige kvæstelser!



FORSIGTIG!

Følg anvisningerne for at undgå kvæstelser og materielle skader!

PAS PÅ!

Følg anvisningerne for at undgå materielle skader!



BEMÆRK!

Yderligere oplysninger om brugen af apparatet.



BEMÆRK!

Følg anvisningerne i denne brugsanvisning!



ADVARSEL!

Advarsel om fare på grund af elektrisk stød!

- Punktliste/oplysninger om hændelser under betjeningen
- ▶ Handling, der skal udføres

2. Pakkens indhold

Kontroller, at der ikke mangler noget i pakken, og giv os besked senest 14 dage efter købet, hvis der mangler noget. Med det produkt, som du har købt, skal du have modtaget følgende:

- 1 Powerline-adaptere
- 1 Powerline-WLAN-adapter
- 2 RJ-45-netværkskabler
- Brugsanvisning og garantibevis

3. Korrekt anvendelse

Powerline-adapterne bruges til at overføre netværkssignaler via stikkontakter, som er tilsluttet lysnettet. Powerline-WLAN-adapteren leverer desuden et WLAN-adgangspunkt for dit netværk. Denne enhed er udelukkende beregnet til privat brug og ikke til erhvervs-mæssige formål.

4. Sikkerhedsanvisninger

4.1. Driftssikkerhed

- Denne enhed er ikke beregnet til at blive brugt af personer (herunder børn) med begrænsede fysiske, sensoriske eller mentale evner og/eller manglende viden, medmindre de er under opsyn af en anden person, der har ansvaret for deres sikkerhed, eller som giver dem anvisninger om, hvordan enheden skal bruges. Børn bør være under opsyn for at sikre, at de ikke leger med enheden.
- Følg også brugsanvisningerne for de enheder, som du tilslutter Powerline-adapteren.
- Stil ikke væskefyldte beholdere som f.eks. vaser på enheden eller i umiddelbar nærhed af den. Beholderen kan vælte, og væsken kan kompromittere den elektriske sikkerhed.
- Hold enheden på afstand af fugt, vanddryp og vandstænk. Undgå rystelser, støv, varme og direkte sollys for at forhindre


driftsforstyrrelser. Driftstemperaturen er 5 til 35 °C.

- Åbn aldrig enhedernes kabinet - de indeholder ingen dele der skal vedligeholdes! Hvis kabinettet er åbent, er der risiko for livsfarlige elektriske stød. Dette vil ophæve garantien og kan ødelægge enheden.
- Sæt Powerline-adapterne i frit tilgængelige stikkontakter på dit lysnet, så de i farlige situationer hurtigt kan kobles fra lysnettet.
- Efter transport af enheden skal du vente med at tage den i brug, til den har nået omgivelsestemperaturen. Ved større udsving i temperatur eller fugtighed kan der dannes fugt som følge af kondensering, hvilket kan medføre en elektrisk kortslutning.
- For at forhindre statisk elektricitet bør enheden ikke anvendes under meget tørre forhold.
- Under forhold med statisk elektricitet kan der forekomme fejlfunktioner på enheden. I så fald skal enheden nulstilles til fabriksindstillingerne.

4.2. Elektromagnetisk kompatibilitet

- Ved tilslutning skal direktiverne for elektromagnetisk kompatibilitet (EMC) overholdes. Hold mindst en meters afstand fra højfrekvente og magnetiske støjkilder (fjernsyn, højttalere, mobiltelefon osv.) for at forhindre funktionsforstyrrelser og tab af data.

4.3. Meddelelse om overensstemmelse

 MEDION AG erklærer hermed, at sættet 90222 bestående af to enheder er i overensstemmelse med følgende EU-direktiver:

- EMC-direktivet 2004/108/EF
- Lavspændingsdirektivet 2006/95/EF
- Direktivet for miljøvenligt design 2009/125/EF
- RoHS-direktivet 2011/65/EU.

Den komplette overensstemmelseserklæring kan findes på www.medion.com/conformity.

4.4. Transport und emballage

Opbevar originalemballagen, så du har adgang til den, hvis enheden skal transporteres.

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5. Systemkrav

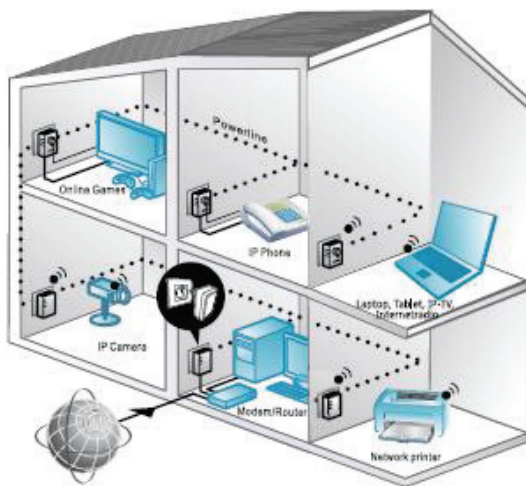
Inden du installerer Powerline-adapteren, skal du kontrollere, at følgende krav er opfyldt:

- Mindst to stikkontakter (100-240 V~50/60 Hz).
- LAN-stik
- WLAN-adapter (hvis der ønskes en netværksforbindelse via WLAN)

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6. Funktionsmåde

Med Powerline-adapterne kan du udvide dit eksisterende LAN-netværk via dit hjemms lysnet uden at skulle trække yderligere kabler.



Anvendelseksempel

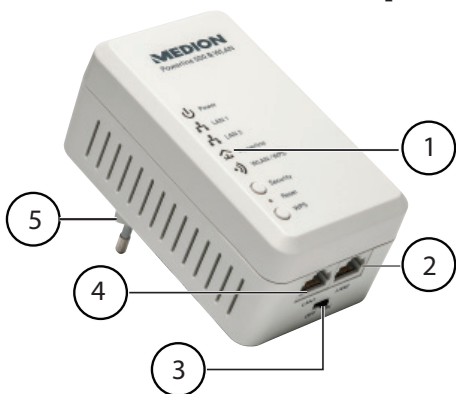
De to medfølgende adaptere er på forhånd synkroniseret, krypteringen er aktiveret, og de kan sende og modtage data uden yderligere konfiguration. Det er også muligt at tilslutte yderligere Powerline-adaptere til netværket via enkel kabeltilslutning.

Med Powerline-WLAN-adapteren kan andre enheder oprette forbindelse trådløst og på den måde få adgang til dit netværk, se kapitel 11 „11. Tilslutning af en enhed med Powerline-WLAN-adapteren via WLAN“ på side 75.

Ved hjælp af krypteringsfunktionen kan du beskytte dit private Powerline-netværk mod uautoriseret adgang (se kapitlet „14. Tilslutning af yderligere Powerline-adaptere til netværket“ på side 92)

7. Oversigt over apparatet

7.1. Powerline-WLAN-adapter



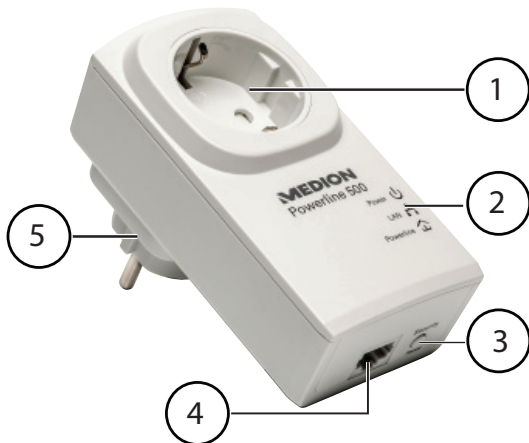
- 1) LED-indikatorerne **Power**, **LAN1/LAN2**, a **Powerline**, **WLAN/WPS**; knapperne **SECURITY**, **RESET** og **WPS**
- 2) LAN 2: RJ-45 LAN-stik
- 3) ON/OFF: Tænd/sluk-knap
- 4) LAN 1: RJ-45 LAN-stik
- 5) Stik til tilslutning til lysnettet

7.2. Powerline-adapter

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- 1) Integreret stikkontakt
- 2) LED-indikatorerne **Power, LAN** og **Powerline**
- 3) Knappen **SECURITY/RESET**: Kryptering/nulstiller enheden til fabriksindstillingerne
- 4) RJ-45 LAN-stik
- 5) Stik til tilslutning til lysnettet

8. Mulige LED-indikationer

8.1. Powerline-WLAN-adapterer

LED	Status	Betydning
Power 	Lyser grønt	Adapteren er tændt.
	Blinker grønt	Adapteren genstarter eller foretager sikkerhedsindstillinger
	Slukket	Adapteren forsynes ikke med strøm.
WLAN/ WPS 	Lyser grønt	WLAN aktiveret
	Blinker grønt	Der overføres data
	Lyser orange	WPS gennemført
	Blinker orange	WPS aktiv
	Slukket	WLAN deaktiveret
LAN1/2 	Lyser grønt	Et LAN-kabel er tilsluttet, adapteren er klar til dataoverførsel.
	Blinker grønt	Der overføres data.
	Slukket	LAN-stikket er ikke aktivt (der er ikke tilsluttet et LAN-kabel, netværksenheden er slukket).

LED	Status	Betydning
Pow- er-line 	Lyser grønt	Der er blevet fundet endnu en Powerline-adapter på det samme netværk. Forbindelseshastigheden er > 40 Mbit/sek.
	Lyser Orange	Forbindelseshastigheden er på 20-40 Mbit/sek.
	Lyser rødt	Forbindelseshastigheden er < 20 Mbit/sek.
	Slukket	Der er ikke forbindelse til en anden adapter, eller der blev ikke fundet nogen enheder med samme netværksnøgle.

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8.2. Knapper på Powerline-WLAN-adapteren



Funktion	Knap	Beskrivelse
Forlad netværket, og generer en tilfældig KEY	Security	Tryk i 12 sekunder, så LED'en POWER kortvarigt slukkes og tændes igen.
Opret forbindelse til det eksisterende netværk	Security	Tryk i 2-3 sekunder, så LED'en POWER blinker i 2 minutter.
Nulstiller adapteren til fabriksindstillingerne.	Reset	Tryk i 5 sekunder, indtil LED'en WLAN/WPS blinker orange. Derefter genstarter enheden.
Start WPS PBC	WPS	Tryk i 2-3 sekunder, så LED'en WLAN/WPS blinker orange i 2 minutter.
WiFi TIL/ FRA	WPS	Tryk i 10 sekunder, indtil LED'en WLAN/WPS slukkes


8.3. Powerline-adapter

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LED	Status	Betydning
Power 	Lyser grønt	Adapteren er tændt.
	Blinker grønt	Adapteren genstarter eller foretager sikkerhedsindstillinger
	Blinker grønt hvert 15. sekund (de andre LED-indikatorer er slukket)	Adapteren er i standbytilstand.
	Slukket	Adapteren forsynes ikke med strøm.
LAN 	Lyser grønt	Et LAN-kabel er tilsluttet, adapteren er klar til dataoverførsel.
	Blinker grønt	Der overføres data.
	Slukket	LAN-stikket er ikke aktivt (der er ikke tilsluttet et LAN-kabel, netværksenheden er slukket).

LED	Status	Betydning
Pow- er-line 	Lyser grønt	Der er blevet fundet endnu en Powerline-adapter på det samme netværk. Forbindelseshastigheden er > 40 Mbit/sek.
	Lyser orange	Forbindelseshastigheden er på 20-40 Mbit/sek.
	Lyser rødt	Forbindelseshastigheden er < 20 Mbit/sek.
	Slukket	Der er ikke forbindelse til en anden adapter, eller der blev ikke fundet nogen enheder med samme netværksnøgle.

9. Knappen SECURITY/RESET

EN

Knappen **SECURITY/RESET** på Powerline-adapteren har tre forskellige funktioner alt afhængigt af, hvor længe der trykkes på den:

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Funktion	Knap	Beskrivelse
Forlad netværket, og generer en tilfældig KEY	Security/Reset	Tryk i 5-8 sekunder, så LED'en POWER kortvarigt slukkes og tændes igen.
Opret forbindelse til det eksisterende netværk	Security/Reset	Tryk i 1-2 sekunder, så LED'en POWER blinker i 2 minutter.
Reset	Security/Reset	Tryk i 10-15 sekunder, så LED'en POWER kortvarigt slukkes og tændes igen.

10. Tilslutning

Hvis du vil oprette et netværk med to Powerline-adapttere, skal der altid tilsluttes mindst to adapttere til dataoverførslen.

Du har her to muligheder: En direkte forbindelse mellem to netværksenheder (heraf én enhed tilsluttet trådløst eller via LAN-stikket) eller en forbindelse mellem en netværksenhed og en router (til internettet).

- ▶ Tilslut Powerline-adapteren til en stikkontakt (100-240 V~50/60 Hz) i nærheden af netværksenheden.



BEMÆRK

For at kunne sikre permanent adgang til et eksisterende LAN-netværk, skal Powerline-adapteren konstant forsynes med strøm.

10.1. Anvisninger for tilslutning til lysnettet



BEMÆRK

Tilslut Powerline-adapteren direkte til stikkontakten og ikke til en forlængerledning eller en stikdåse, da dette kan have en negativ indvirkning på overførselskvaliteten. Du kan tilslutte andre enheder til Powerline-adapterens integrerede stikkontakt.

- ▶ Tilslut så vidt muligt Powerline-adapteren til en individuel stikkontakt.



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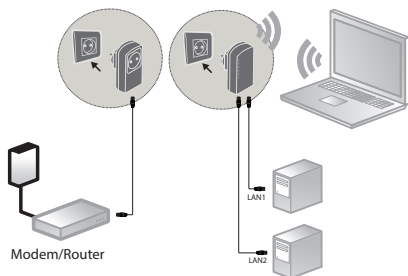
Hvis der ikke oprettes nogen forbindelse, efter at adapteren er tilsluttet computeren, kan du forsøge at foretage tilslutningen via en anden stikkontakt.

Bemærk, at dataoverførslen er afhængig af dit lysnets belastning og kvalitet:

- Dataoverførslen bliver langsommere, jo længere strømledningen mellem de to Powerline-adaptre er.
- Afhængigt af lysnettets belastning kan dataoverførselens hastighed variere, eller overførslen kan blive afbrudt.
- Ved anvendelse af ældre lysnet, som ikke svarer til teknologiens aktuelle niveau, kan dataoverførslen eventuelt være noget langsommere.

10.2. Tilslutning til en netværksenhed

Hvis du vil forbinde to netværksenheder som f.eks. en pc og en router inden for et netværk med Powerline-adapteren, skal én enhed forbindes med Powerline-adapteren via et LAN-kabel (RJ-45), og den anden enhed skal forbindes med Powerline-WLAN-adapteren trådløst eller via et LAN-kabel (RJ-45).



Tilslutningseksempel

- ▶ Tilslut det medfølgende LAN-kabel (RJ-45) til Powerline-adapterens LAN-stik og til routerens LAN-stik.
- ▶ Forbind eventuelt computerens LAN-stik med Powerline-WLAN-adapterens LAN-stik via det andet medfølgende LAN-kabel (RJ-45), eller forbind på et senere tidspunkt computeren trådløst med Powerline-WLAN-adapteren, så snart den er forbundet med et netværk.

- ▶ Tilslut så vidt muligt Powerline-adapterne til hver deres individuelle stikkontakt.
- ▶ Tænd computeren og routeren.

Konfigurationen er gennemført, når LED-indikatorerne **Power** og **LAN** lyser på begge Powerline-adapttere.

11. Tilslutning af en enhed med Powerline-WLAN-adapteren via WLAN

11.1. Tilslutning via WPS-knappen

Hvis du vil tilslutte en enhed via WPS, skal du gøre følgende:

- ▶ Tryk på WPS-knappen på din Powerline-WLAN-adapter i ca. 2-3 sekunder. WPS-indikatoren begynder at blinke orange.
- ▶ Tryk inden for 2 minutter på WPS-knappen på din terminalenhed. Brug f.eks. en computer med Windows 7 eller nyere, og opret forbindelse til WLAN-netværket „Powerline -WLAN“.
- ▶ Hvis WLAN-krypteringen blev gennemført, lyser WPS-indikatoren orange.

11.1.1. Manuel tilslutning

Hvis du vil tilslutte en enhed manuelt, skal du gøre følgende:

SSID (netværksnavn): Powerline-WLAN

Adgangskode: XXXXXXXXXX (9 gange X)



BEMÆRK!

Du bør ændre standardadgangskoden via Powerline-WLAN-adapterens webbrugergænseflade.

12. Konfiguration af enheden via webbrugergænsefladen

12.1. Logon til webbrugergænsefladen

Du kan åbne webbrugergænsefladen på flere forskellige måder:

- **Via netværksnavnet**

For at du kan få adgang til webbrugergænsefladen via netværket, skal der på forhånd være oprettet en Powerline-netværksforbindelse mellem Powerline-/WLAN Powerline-adapterne, og Powerline-adapteren skal være tilsluttet en router.

- ▶ Nu kan du tilslutte din pc/notebook til WLAN-Powerline-adapteren via netværkskabel eller WLAN.
- ▶ Åbn webbrowseren på en computer, og indtast føl-

gende på adresselinjen: „wlan.powerline“.

- ▶ Indtast adgangskoden til webbrugergrænsefladen i logonvinduet.



A screenshot of a login window. At the top, there is a text input field with the label "Passwort:". Below the field, there is a red warning icon and the text "Bitte Passwort eintragen.". At the bottom of the window, there is a blue button with the text "OK".



BEMÆRK:

Ved leveringen er adgangskoden „admin“.

- ▶ Indstil sproget for webbrugergrænsefladen i skærmens øverste højre hjørne.
- ▶ Klik derefter på LOGIN. Webbrugergrænsefladens startside vises.

• Om nød-IP-adressen

Hvis der ikke findes nogen forbindelse mellem Powerline-adapteren og en router, kan du få adgang til webbrugergrænsefladen via NØD-IP-adressen.

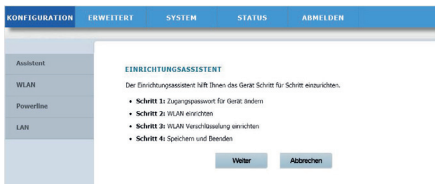
- ▶ Forbind din pc/notebook med WLAN-Powerline-adapteren via WLAN eller netværkskablet.
- ▶ Giv nu din pc/notebook en statisk IP-adresse fra området 192.168.33.2 -192.168.33.254 (f.eks. 192.168.33.2).
- ▶ Åbn webbrowseren på en computer, og indtast på adresselinjen IP-adressen <http://192.168.33.1> og følg anvisningerne.

12.2. Setup wizard

12.2.1. Wizard

Det er nemmest at foretage de grundlæggende indstillinger ved hjælp af guiden.

- ▶ Hvis du vil starte guiden, skal du i menuen Konfiguration klikke på Wizard:



- ▶ Guiden består af 4 trin. Klik på Næste for at gå til det næste trin.

12.2.2. Change Device Login Password

Her kan du indtaste en adgangskode for at begrænse adgangen til webbrugergrænsefladen.

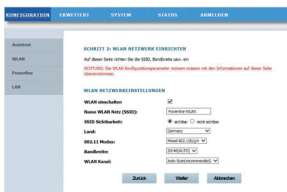




BEMÆRK:

Ved leveringen er adgangskoden „admin“. For at sikre en tilstrækkelig beskyttelse af dit netværk bør du angive en anden adgangskode her.

- ▶ Hvis du ikke vil angive en anden adgangskode, skal du klikke på **Skip**.
- ▶ Når du har angivet en ny adgangskode, skal du klikke på **Next** for at gå til den næste side.



12.2.3. Setup Wireless Connection

På denne side kan du konfigurere indstillingerne for din Powerline-adapters trådløse netværksadapter.

- **Enable Wireless Interface**

Her kan du slå Powerline-adapterens WLAN-netværk til eller fra.

- **Wireless Network Name (SSID)**

WLAN-netværkets navn (SSID) kan være op til 32 tegn langt og kan indeholde bogstaver, tal og understregningstegn eller kombinationer af disse. Der skelnes mellem store og små bogstaver.

- **Visibility Status**

- Hvis du vælger **VISIBLE**, er SSID'et synligt for andre WLAN-enheder.
- Hvis du vælger **INVISIBLE**, overføres SSID'et ikke, og andre WLAN-enheder skal kende det, inden de opretter forbindelse.

- **Region**

Vælg her det land, hvor du anvender Powerline-adapteren.

- **802.11 Mode**

Vælg her den passende WLAN-tilstand for dit WLAN-netværk. Standardindstillingen er Mixed 802.11b/g/n.

- **Bandwidth**

For alle 802.11 WLAN-tilstande, der er kompatible med 802.11n, kan du her indstille båndbredden manuelt.

- **Wireless Channel**

Indstil her den WLAN-kanal, som Powerline-adapteren skal transmittere sit WLAN-netværk på. Standardindstillingen er **AUTOSCAN**. Ved denne indstilling søger Powerline-adapteren automatisk efter den bedste WLAN-kanal. Når du har foretaget WLAN-indstillingerne, skal du klikke på **NEXT**:

12.2.4. Setup Wireless Security

Powerline-adapterens WLAN-router understøtter krypteringsstandarderne WEP,WPA-PSK, WPA2-PSK og WPA/WPA2-PSK.

- ▶ Hvis du ikke vil bruge nogen kryptering, skal du vælge indstillingen **NONE** (anbefales ikke).
- ▶ Angiv for hver kryptering den tilsvarende krypteringsalgoritme (TKIP eller AES) og en netværksnøgle.
- ▶ Når netværkskrypteringen er gennemført, skal du klikke på **NEXT**:

12.2.5. Save and Complete

På denne side vises Powerline-adapterens konfiguration. Hvis du vil ændre indstillingerne, skal du klikke på **BACK**. Klik på **COMPLETE** for at anvende indstillingerne og afslutte guiden.

The screenshot shows a web interface for configuring a Powerline adapter. The top navigation bar includes 'KONFIGURATION', 'EINSTELLUNGEN', 'SYSTEM', 'STATUS', and 'HILFE'. The left sidebar has 'Anschluß', 'WLAN', 'Profilen', and 'LAN'. The main content area is titled 'WLAN ENKRYPTIERUNG' and contains the following text and form elements:

WLAN ENKRYPTIERUNG
Auf dieser Seite kann die SSID, das Drahtlos-Netzwerk und die WLAN-Funktion konfiguriert werden.
Hinweis: Bei Verwendung der WEP oder WPA-PSK(WEP) Verschlüsselung wird die WPA Funktion deaktiviert.

WLAN einschalten:

Name WLAN Netz (SSID):

Verschlüsselung:

Passwort:

SSID broadcast anzeigen:

Das Passwort muss zwischen 8 und 62 ASCII Zeichen oder 64 Hexadezimalzeichen lauten.

Buttons: **OK** and **Abbrechen**

12.3. Wireless Setup

12.3.1. Wireless Basic

Her kan du tilpasse indstillingerne for WLAN-netværket.



12.3.2. Enable Wireless Interface

Slår WLAN-netværket til eller fra.

12.3.3. Wireless Name (SSID)

WLAN-netværkets navn (SSID) kan være op til 32 tegn langt og kan indeholde bogstaver, tal og understregningstegn eller kombinationer af disse. Der skelnes mellem store og små bogstaver.

12.3.4. Wireless Security Mode

Powerline-adapterens WLAN-router understøtter krypteringsstandarderne WEP, WPA-PSK, WPA2-PSK og WPA/WPA2-PSK.

Hvis du ikke vil bruge nogen kryptering, skal du vælge indstillingen **NONE** (anbefales ikke).

12.3.5. Passphrase

Her kan du angive en netværksnøgle.

12.3.6. Show encryption key

Viser netværksnøglen i webbrugergænsefladen.

- ▶ Når du har foretaget alle indstillinger, skal du klikke på **OK**.

12.3.7. WPS

Via WPS-funktionen (WiFi-Protected-Setup) kan du tilføje en WLAN-klient til netværket uden at angive SSID, kryptering og adgangskode. For at oprette forbindelsen skal du så blot trykke på WPS-knappen på Powerline-adapteren og bekræfte på WLAN-klienten.

Hvis du vil anvende denne funktion, skal WLAN-klienten understøtte WPS.

12.3.8. Enabled WPS

Her kan du slå WPS-funktionen til eller fra.

12.3.9. WPA Mode

Her kan du få vist den aktuelle WPA-kryptering.



BEMÆRK!

Hvis du aktiverer WPS-funktionen, skal du anvende en af krypteringerne WPA-PSK, WPA2-PSK eller WPA/WPA2-PSK, og SSID'et skal overføres.

WPS-funktionen kan udføres via PBC, PIN og AP-PIN.

12.3.10. PBC MODE

- ▶ Vælg PBC i WPS-menuen, og klik derefter på **PBC**-knappen på WPS-siden, eller tryk på **WPS**-knappen på Powerline-WLAN-adapteren for at oprette WPS-forbindelsen.
- ▶ Tryk derefter inden for 2 minutter på **WPS**-knappen på WLAN-klienten, eller bekræft WPS-forbindelsen via WLAN-klientens indstillingsmenu for at oprette forbindelsen. Når netværksforbindelsen er oprettet via WPS, vises den følgende side, og WLAN-klienten er forbundet med Powerline-adapterens WLAN-netværk.
- ▶ Klik på **APPLY** for at afslutte konfigurationen.

12.3.11. PIN Mode

- ▶ Vælg PIN i WPS-menuen, og indtast WLAN-klientens PIN-kode (talkode) på WPS-siden. Klik derefter inden for 2 minutter på **PIN**-knappen i WLAN-klientens indstillingsmenu for at oprette forbindelsen via WPS.

12.3.12. AP-PIN Mode

- ▶ Vælg AP-PIN i WPS-menuen, og indtast WLAN-klientens AP-PIN-kode (talkode) på WPS-siden. Klik derefter inden for 2 minutter på PIN-knappen i WLAN-klientens indstillingsmenu for at oprette forbindelsen via WPS.

12.4. PLC Setting

På denne side vises alle oplysninger (enhedsnavn, MAC-adresse, netværksnøgle og netværksnavn) om Powerline WLAN-adapteren og de klienter, der er logget på den.

- ▶ Klik på **REFRESH** for at opdatere visningen.
- ▶ Klik på **ADD MEMBER** for at tilføje en ny enhed til Powerline-netværket.
- ▶ Indtast derefter enhedsoplysningerne, og klik på **APPLY** for at tilføje enheden til netværket.

12.4.1. LAN Setup

Her kan du se oplysningerne om Powerline-adapterens LAN-forbindelse.

I feltet **IP-ADDRESS** kan du angive en anden IP-adresse for Powerline-adapterens LAN-netværksadapter.

12.4.2. Advanced Wireless

Her kan du foretage de avancerede indstillinger for Powerline-adapterens WLAN-adapter.

12.4.3. Wireless Name (SSID)

WLAN-netværkets navn (SSID) kan være op til 32 tegn langt og kan indeholde bogstaver, tal og understregningstegn eller kombinationer af disse. Der skelnes mellem store og små bogstaver.

12.4.4. Network Name Status

- ▶ Hvis du vælger **VISIBLE**, er SSID'et synligt for andre WLAN-enheder.
- ▶ Hvis du vælger **INVISIBLE**, overføres SSID'et ikke, og andre WLAN-enheder skal kende det, inden de opretter forbindelse.

12.4.5. Transmission Rate

- ▶ Her kan du indstille WLAN-overførselshastigheden. Standardindstillingen er **AUTO**.

12.4.6. Transmit Power

- ▶ Indstil her en overførselseffekt på 100%, 80%, 60%, 40% eller 20%.

12.4.7. User Isolation

Hvis du aktiverer denne funktion, kan klienter, der er logget på WLAN-netværket, ikke kommunikere med hinanden.

- ▶ Indstil funktionen til **OFF**, hvis klienterne også skal kunne kommunikere med hinanden på netværket.

12.4.8. Enable WMM (Wireless QoS)

Denne funktion er ikke længere tilgængelig.

Når denne funktion er deaktiveret, overtager Powerline-WLAN-adapteren WMM-prioriteterne fra routeren. Når WMM er aktiveret, optimeres streaming af multimedieindhold.

12.4.9. Max. Clients

Indtast her et tal fra 1-32 for det maksimale antal klienter, der kan logge på Powerline-WLAN-adapteren.

12.5. Advanced Security

12.5.1. Wireless Security Mode

Powerline-adapterens WLAN-router understøtter krypteringsstandarderne WEP, WPA-PSK, WPA2-PSK og WPA/WPA2-PSK.

Hvis du ikke vil bruge nogen kryptering, skal du vælge indstillingen **NONE** (anbefales ikke).

12.6. Media Access Control

12.6.1. Tilføj

Her kan du tilføje en klient til listen.

- ▶ Indtast derefter MAC-adressen og en beskrivelse af klienten, og klik på **OK** for at føje klienten til listen.

12.7. Maintenance

12.7.1. User Password

Her kan du angive en ny adgangskode for adgangen til Powerline-adapterens webbrugergrænseflade.

12.7.2. Reboot/Restore

- **Reboot**

- ▶ Klik på knappen **REBOOT** for at genstarte Powerline-adapteren (anbefales ved systemnedbrud/fejl-funktion)

- **Restore Default Settings**

- ▶ Klik på knappen **RESTORE** for at nulstille Powerline-adapteren til fabriksindstillingerne og genstarte den (anbefales ved systemnedbrud/fejlfunktion og hvis du ikke kan huske adgangskoden).



BEMÆRK:

Efter en nulstilling til fabriksindstillingerne er alle indstillinger og adgangskoder slettet, og de skal angives igen.

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12.8. Firmware Update

- ▶ Hvis du modtager en softwareopdatering fra vores service, skal du gemme den på din computer.
- ▶ Klik derefter på **BROWSE** for at indlæse softwareopdateringen fra din computer og installere den.
- ▶ Hvis du vil bevare dine indstillinger efter softwareopdateringen, skal du fjerne markeringen fra punktet **CLEAR CONFIG**.
- ▶ Klik på **APPLY** for at starte installationen.



PAS PÅ

Under en nulstilling til fabriksindstillingerne eller en softwareopdatering må du aldrig trykke på knappen **RESET** på Powerline-adapteren. Dette vil medføre en systemfejl, og Powerline-adapteren vil blive ødelagt!

12.9. Status

Her vises alle oplysninger om forbindelserne og om Powerline-adapterens WLAN-konfiguration.

12.10. Logout

Hvis du ikke bruger webbrugergænsefladen længere, skal du logge af ved hjælp af dette punkt.

13. Ændring af Powerline-netværksnøglen



BEMÆRK

Ved leveringen er de to Powerline-adaptre parret, og dataoverførslen er som standard krypteret. Powerline-netværket er dermed beskyttet med en unik netværksnøgle med det samme, når det tages i brug.

En ændring af netværksnøglen er f.eks. på sin plads, hvis der er potentielle sikkerhedsproblemer, eller hvis et større netværk skal laves om til to eller flere mindre netværk.



BEMÆRK

I forbindelse med denne procedure er det praktisk at sætte alle adaptre, der skal have den nye Powerline-netværksnøgle, ved siden af hinanden i den samme stikdåse.

Begge Powerline-adapttere er tilsluttet og klar til brug. **POWER**-LED'en lyser.

Dette trin skal udføres på samtlige adapttere på Powerline-netværket.

- ▶ Tryk på WLAN Powerline-adapteren på knappen **SECURITY** i 12 sek., eller tryk på Powerline-adapteren på knappen **SECURITY/RESET** i ca. 5-8 sekunder.

Enheden nulstilles og genstarter. Alle LED-indikatorer slukkes kortvarigt. Denne Powerline-adapter har nu genereret en tilfældig, unik netværksnøgle.

- ▶ Tryk på WLAN Powerline-adapteren på knappen **SECURITY** igen i ca. 2-3 sekunder, eller tryk på knappen **SECURITY/RESET** på Powerline-adapteren i ca. 1-2 sek.

Power-LED'en blinker grønt.

- ▶ Tryk på WLAN Powerline-adapteren på knappen **SECURITY** igen i ca. 2-3 sekunder, eller tryk på knappen **SECURITY/RESET** på Powerline-adapteren i ca. 1-2 sek. på den **anden** Powerline-adapter.

Power-LED'en blinker grønt.

Når både **POWER**- og **POWERLINE**-LED'en lyser grønt konstant, er krypteringen gennemført.

14. Tilslutning af yderligere Powerline-adapttere til netværket



BEMÆRK

I forbindelse med denne procedure er det praktisk at sætte alle adapttere, der skal have den nye netværksnøgle, ved siden af hinanden i den samme stikdåse.

For hver yderligere Powerline-adapter, som skal have den nye netværksnøgle, skal du gøre som følger:

Alle Powerline-adapttere, som skal konfigureres, er tilsluttet og klar til brug. **POWER**-LED'en lyser.

- ▶ Tilslut den adapter, som det eksisterende netværk skal udvides med, til en stikkontakt. **POWER**-LED'en lyser.
- ▶ Tryk på WLAN Powerline-adapteren på knappen **SECURITY** i 12 sek., eller tryk på Powerline-adapteren på knappen **SECURITY/RESET** i ca. 5-8 sekunder.

Enheden nulstilles og genstarter. Alle LED-indikatorer slukkes kortvarigt. Denne Powerline-adapter har nu genereret en tilfældig, unik netværksnøgle.

- ▶ Tryk på WLAN Powerline-adapteren på knappen **SECURITY** igen i ca. 2-3 sekunder, eller tryk på knappen **SECURITY/RESET** på Powerline-adapteren i ca. 1-2 sek.

Power-LED'en blinker grønt.

- ▶ Tryk på WLAN Powerline-adapteren på knappen **SECURITY** igen i ca. 2-3 sekunder, eller tryk på knappen **SECURITY/RESET** på Powerline-adapteren i ca. 1-2 sek. på den adapter, der allerede er på det eksisterende netværk.

Power-LED'en blinker grønt.

Når både **POWER**- og **POWERLINE**-LED'en på alle Powerline-adapttere lyser grønt konstant, er både udvidelsen og krypteringen gennemført.



BEMÆRK

For hver yderligere Powerline-adapter skal du gøre som beskrevet ovenfor.

15. Fjernelse af en Powerline-adapter fra Powerline-netværket

Hvis du vil fjerne en Powerline-adapter fra det eksisterende netværk, skal du gøre som følger:

- ▶ Tryk på WLAN Powerline-adapteren på knappen **SECURITY** i 12 sek., eller tryk på Powerline-adapteren på knappen **SECURITY/RESET** i ca. 5-8 sekunder.

Alle LED'er slukkes kortvarigt, og enheden genstarter. Denne Powerline-adapter har nu genereret en tilfældig, unik netværksnøgle og er derfor ikke længere på Powerline-netværket.

POWERLINE-LED'en lyser ikke længere.

16. Energisparefunktion

Hvis netværksenhederne slukkes og ikke længere overfører data, skifter Powerline-adapterne efter ca. ét minut til standbytilstand. Power-indikatoren blinker.

Hvis netværksenhederne tændes igen, startes Powerline-adapterne også.

17. Fabriksindstillinger

De to Powerline-adapttere, som følger med dit sæt, er parret på forhånd ved leveringen.

Hvis du ændrer Powerline-netværksnøglen eller fjerner individuelle adapttere fra Powerline-netværket, ophæves denne forudindstilling.

Sådan gendanner du fabriksindstillingen:

- ▶ Tryk på WLAN Powerline-adapteren på knappen **RESET** i 5 sek., eller tryk på Powerline-adapteren på knappen **SECURITY/RESET** i ca. 10-15 sekunder.

Alle LED-indikatorer slukkes kortvarigt. Enheden nulstilles og genstarter. Proceduren er gennemført, når Power-LED'en lyser konstant.

18. Fejlfinding

Hvis der opstår en fejl, bør du først prøve, om du selv kan løse problemet. I den forbindelse kan den følgende oversigt være en hjælp.



PAS PÅ

Forsøg under ingen omstændigheder selv at reparere enheden. Hvis en reparation bliver nødvendig, skal du henvende dig til vores servicecenter eller et andet egnet specialværksted.

Problem	Mulig årsag	Afhjælpning
POWER- LED'en lyser ikke	Er Powerline-adapteren tilsluttet korrekt til lysnettet?	▶ Du kan eventuelt prøve at fjerne Powerline-adapteren og sætte den i igen.
LAN- LED'en lyser ikke	Er LAN-kablet (RJ-45) tilsluttet korrekt til adapteren og computeren/routeren?	▶ Kontroller eventuelt LAN-kortet og/eller din computers DSL-forbindelse.
	Er computeren/routeren tændt?	▶ Tænd netværkshederne.

Problem	Mulig årsag	Afhjælpning
POWERLINE -LED'en lyser ikke	Der er ingen forbindelse mellem Powerline-adapterne.	
	<ul style="list-style-type: none"> • Muligvis egner de anvendte stikkontakter sig ikke til at etablere en Powerline-forbindelse. 	<ul style="list-style-type: none"> ▶ Prøv med en anden stikkontakt.

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Problem	Mulig årsag	Afhjælpning
	<ul style="list-style-type: none"> • Adapterne er muligvis ikke synkroniseret. 	<p>Du kan teste, om adapterne er på det samme netværk:</p> <ul style="list-style-type: none"> ▶ Sæt de to adaptere i to stik ved siden af hinanden i en stikdåse. ▶ Hvis ingen af Powerline-LED'en lyser, er adapterne ikke på det samme netværk. ▶ I så fald skal du foretage en nulstilling af alle adaptere som beskrevet under „17. Fabrik-sindstillinger“ på side 95.

19. Rengøring

- Frakobl altid Powerline-adapteren og alle forbindelseskabler før rengøring.
- Brug ikke opløsningsmidler eller ætsende eller gasformige rengøringsmidler.
- Rengør enheden med en blød, fnugfri klud.

Gem emballagen, og brug kun denne emballage ved transport af enheden.



PAS PÅ!

Enheden indeholder ingen dele, der kræver vedligeholdelse eller rengøring.

20. Bortskaffelse

Emballage



Enheden er placeret i en emballage for at beskytte den mod transportskader. Emballagen er lavet af råstoffer og kan således genbruges eller bringes tilbage i råstofkredsløbet.

Enhed



Når enheden er nået til slutningen af dens levetid, må du under ingen omstændigheder smide den ud som almindeligt husholdningsaffald! Forhør dig hos de lokale myndigheder om, hvordan du kan bortskaffe enheden på en miljømæssigt korrekt måde.

21. Tekniske data

Model: MD 90222 (sæt med 2 enheder)

MD 87319 (WLAN-adapter)

Indgangsspænding: 100 – 240 V~50/60 Hz, 0,15 A

Strømforbrug: < 6 W drift

Tilslutninger: 2 x Ethernet (LAN) 100Mbit/s

WLAN: IEEE802.11b/g/n

MD 87309 (adapter)

Indgangsspænding: 100 – 240 V~50/60 Hz, 0,1 A

Udgangsspænding

(integreret stikkontakt): 100 - 240 V~/

Maksimal belastning 16 A

Strømforbrug: < 3 W drift

< 0,5 W standbytilstand

Tilslutninger: 1 x Ethernet (LAN) 100Mbit/s

Overførsels-

hastighed: op til 500 Mbit/s.

Powerline AV-standard: 128-bit AES-kryptering

Protokol

HomePlug AV, kompatibel med IEEE P1901, kompatibel med 200 og 500 Mbit/s Powerline-adaptore, sameksisterende med HomePlug 1.0

Omgivelsesbetingelser

Temperatur (drift)	5° C-35° C
luftfugtighed (Drift)	10 %-90 %, ikke-kondenserende
Mål	
Powerline-adapter (B x H x D)	61 x 116 x 86 mm
Powerline WLAN-adapter (B x H x D)	61 x 106 x 86 mm
Vægt (pr. adapter)	ca. 183 g

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