



devolo Magic 2 LAN Internet From The Electrical Socket User Guide

Home » devolo » devolo Magic 2 LAN Internet From The Electrical Socket User Guide 🖺



- 1 devolo Magic 2 LAN Internet From The Electrical Socket
- **2 Product Information**
- **3 Product Usage Instructions**
- 4 Preface
- **5 Introduction**
- 6 Initial use
- **7 Configuration**
- 8 Appendix
- 9 Warranty conditions
- 10 Documents / Resources
 - 10.1 References
- 11 Related Posts



devolo Magic 2 LAN Internet From The Electrical Socket



Product Information

Specifications

• Brand: devolo

• Model: Magic 2 LAN1-1

• Version: 1.2_11/24

• Country of Origin: Germany

Product Usage Instructions

Introduction

Welcome to the fantastic world of devolo Magic! devolo Magic transforms your home into a multimedia paradise with perfect range and connectivity.

Safety

Ensure to read the safety flyer and installation guide provided with the product. This manual is available in digital form for reference.

Setting Up the devolo Magic 2 LAN1-1

The devolo Magic 2 LAN1-1 adapter can extend your home network to a Gigabit LAN internet access via your power outlets. To set up

- 1. Plug the devolo Magic adapter into a free wall socket.
- 2. Within 3 minutes, a new devolo Magic network will automatically be established.
- 3. To expand an existing network, add another devolo Magic adapter using the devolo Cockpit or Home Network App.

Frequently Asked Questions (FAQ)

- · Q: What should I do if the LED status indicator is not working?
 - A: If the LED status indicator is not functioning, you can deactivate it. For more information, refer to Chapter 4 Configuration or visit <u>www.devolo.de/devolo-cockpit</u>.
- Q: Can I use the devolo Magic 2 LAN1-1 outside of the EU, EFTA, or Northern Ireland?
 - A: The product is designed for operation within the EU, EFTA, and Northern Ireland regions. Please ensure compliance with local regulations before use.
- · Q: How far can the devolo Magic network extend?
 - A: The devolo Magic network promises coverage up to 500 meters and provides a Gigabit-LAN internet connection through your power lines.

Preface

Welcome to the fantastic world of devolo Magic!

In no time at all, devolo Magic transforms your house into a multimedia home that is ready for the future today. devolo Magic gives you noticeably higher speeds, more stability and greater range, providing the perfect Internet experience as a re-sult!

About this manual

- Chapter1: Preface covers safety-related product information as well as general information on this document.
- Chapter2: Introduction gives a brief introduction of "devolo Magic" and a presentation of the devolo Magic 2
 LAN adapter
- Chapter3: Installation shows how to successfully start using the adapter in your network and describes the devolo software as well as the reset of a devolo Magic adapter.
- **Chapter4:** Configuration describes in detail the setting options of the built-in devolo Magic configuration interface.
- Chapter5: Appendix includes tips for band-width optimization and our warranty terms.

Safety

It is essential to have read and understood all safety and operating instructions before the device is used for the first time; keep this manual and/or installation guide as well as the flyer "Safety & service" safe for future reference.

1About the flyer "Safety & service"

The flyer "Safety & service" provides cross-product and conformity-relevant safety information e. g. general safety notes, data of frequency range and transmitting power and channels and carrier frequencies for Wi-Fi products as well as disposal information.

Printouts of the flyer and the installation guide are included with each product; this product manual is provided digitally.

Furthermore, these and other relevant product descriptions are available to you in the download area of the respective product page on the Internet at www.devolo.global

Description of the icons

This section contains a brief description of the icons used in this manual.

Icon	Description
4	Very important safety symbol that warns you of hazardous electrical voltage which if not avoided can re- sult in serious injury or death.
<u>*</u>	An important safety symbol that warns you of a potentially dangerous situation involving a tripping hazard which can result in injuries.
	An important note that should be observed which can potentially lead to material damages.
	The device may only be used in- doors in dry conditions.

Icon	Description
	The device is a Class I product. All electrically conductive (made of metal) housing parts where a voltage can be applied during operation or maintenance in the event of an error must be continuously connected to the earth wire.
C€	The manufacturer/distributing company uses the CE marking to declare that the product meets all applicable European regulations and has been subjected to the prescribed conformity assessment procedures.
CA	The manufacturer/distributing company uses the UKCA marking to declare that the product meets all applicable regulations of Great Britain and has been subjected to the prescribed conformity assessment procedures.
1	Additional information, background material and configuration tips for your device.

Icon	Description	
✓	Indicates a completed course of action	

Intended use

Use devolo devices as described to prevent damage and injury.

- The device is a communication device only designed for indoors and is equipped with a PLC (PowerLine Communication) module. The devices communicate with each other by means of PLC.
- The device enable transmission of the existing Internet/data signal over the in-house wiring and integrate Internet-compatible terminal devices into the home network.
- The delivered products are intended for operation in the EU, EFTA and UK.

CE conformity

A printout of the simplified CE declaration of this product is separately included. The complete CE declaration can be found under www.devolo.global/support/ce.

UKCA conformity

A printout of the simplified UKCA declaration of this product is separately included. The complete UKCA declaration can be found at www.devolo.global/support/UKCA.

devolo on the Internet

For detailed information on our products, visit www.devolo.global .

There you will find product descriptions and documentation, and also updates of devolo software and your device's firmware.

If you have any further ideas or suggestions related to our products, please don't hesitate to contact us at support@devolo.global

Introduction

devolo Magic

Home is where devolo Magic is – in no time at all, devolo Magic transforms your house or flat into a multimedia home of the future with noticeably higher speed, more stability and greater range, providing the perfect Internet experience as a result!

Be inspired by products that are astonishingly easy to install, with impressive, innovative technology and unbeatable performance.



Fig. 1 devolo Magic throughout the home

Be ready for the technology of the future today devolo Magic embodies the new generation of the tried-and-tested Powerline technology (PLC) based on the cutting-edge G.hn architecture. G.hn was developed by the International Telecommuni-cation Union (ITU) with ongoing development pro-vided primarily by the HomeGrid Forum industry association. devolo Magic products are certified according to HomeGrid standards and are compatible with other HomeGrid-certified products.

Like the HomePlug AV technology used in established devolo dLAN devices, devolo Magic uses the household mains supply for data transmission and secures ideal performance and stability in locations where network cables are not viable or desired and/or the Wi-Fi frequently falls short due to ceiings and walls.

To set up a devolo Magic network, you need at least two devolo Magic devices. For technical reasons, devices from the devolo Magic series are not compatible with dLAN devices.

Introduction to the devolo Magic adapter

Unpack – plug in – get started and be ready for the new generation of tried-and-tested Powerline technology

- Speed and stability thanks to consistent data transmission speed at up to 2400 Mbps over distances of up to 500 meters, the devolo Magic 2 LAN promises entertainment at the highest level.
- Security with 128-bit AES Powerline encryption
- Energy-efficiency the integrated PowerSave mode cuts energy consumption automatically during low data traffic.
- A devolo Magic 2 LAN transforms any electrical socket in your household electrical wiring into a Gigabit LAN Internet access point.
- Its integrated electrical socket can be used (like a normal wall socket) to supply power to an additional network device or a power strip.
- The Gigabit LAN port on the devolo Magic 2 LAN lets you connect a stationary network device such as a game console, television or media receiver to your Internet access point over the Powerline network (e.g. Internet router).

The devolo Magic 2 LAN features

- · One Gigabit network connection
- One indicator light

The LED status display can be disabled. You can find more information about this in Chapter 4 Configuration.

- One PLC/reset button (next to the network connection)
- · One integrated electrical socket



Fig. 2: devolo Magic 2 LAN ¹⁻¹ with country-specific connector and power socket

Pairing

devolo Magic adapters that are in factory default condition, i.e. have been purchased or successfully reset (see Chapter Resetting a devolo Magic adapter or removing it from a devolo Magic net-work), automatically start to attempt to pair with another devolo Magic adapter when reconnected to the mains supply.

Starting up a new devolo Magic network

After plugging the devolo Magic adapters into available power sockets, a new devolo Magic network is established automatically within 3 minutes.

Expanding an existing devolo Magic network by adding another devolo Magic adapter

In order to use a new devolo Magic 2 LAN in your devolo Magic- network, first you have to connect it to your existing devolo Magic adapters devices as a network. This is accomplished by using a shared password, which can be assigned in various ways

- Using devolo Cockpit or the devolo Home Network App (see Chapter 3.5 Installation of devolo software)
- Using the web interface (see Chapter 4.3 Powerline)
- Using the PLC/reset button as described below.
 - 1. To do so, plug the new devolo Magic adapter into an available power socket and, for approximately 1second, press the PLC/reset button on a devolo Magic adapter in your existing devolo Magic network.
 - 2. The new devolo Magic adapter pairs automatically so no button needs to be pressed. The LED of this adapter now also flashes white.

After a short time, the flashing LED becomes a steady white light. The devolo Magic adapter has been successfully integrated into your existing devolo Magic network.

For each pairing operation, only one additional devolo Magic adapter can be added at a time. You can find detailed information about installing devolo Magic adapters in Chapter 3.4 Connecting the devolo Magic2 LAN.

Resetting a devolo Magic adapter or removing it from a devolo Magic network

- 1. To remove a devolo Magic adapter from your devolo Magic network and successfully restore its entire configuration to the factory default settings, press and hold the reset button longer than 10 seconds.
- 2. Wait until the LED flashes white and then disconnect the devolo Magic adapter from the mains supply.

Reading the indicator light
The integrated indicator light (LED) shows the status for the devolo Magic 2 LAN by illuminating and/or flashing:

	LED	Flashing behaviour	Meaning	LED status display (w eb interface*)
1	Red LED	Lights up for up t o 2 sec.	Start-up process	Cannot be disabled
2	Red LED	Flashes at interv als of 0.5 sec. (o n/off)	Status 1 The reset of the devolo Magic adapter was successful. The PLC/reset button has been pres sed and held for 10 seconds.	Cannot be disabled
			Status 2 The devolo Magic adapter (once again) has the f actory default settings. Since the last re- set, no pairing with another devolo Magic adapter has ta ken place. Connect the adapter with another devolo Magic adapter to create a full- fledged PLC network as described in Chapter 2.3 Pairing.	

	LED	Flashing behaviour	Meaning	LED status display (w eb interface*)
3	Red LED	Lights up steady	Status 1 The other network nodes are in standby mode a nd cannot currently be accessed over the mains supply. The PLC LEDs of the other devolo Magic adapters flash white only for a short time.	Can be disabled
			Status 2 The connection to the other network nodes has b een interrupted. There may be electromagnetic o r radio frequency interference on the power line. In this case, put the devolo Magic adapters closer to each other or try to shut off the source of interference.	
4	Red and white LED	Flashes at interv als of 0.1 sec. re d/2 sec. white	Data transmission rate not in optimum range **	Can be disabled

	LED	Flashing behaviour	Meaning	LED status display (w eb interface*)
5	White LE D	Status 1: Flashe s at intervals of 0.5 se c. (on/off) Status 2: Flashe s at intervals of 1 sec. (on/off)	Status 1 This devolo Magic adapter is in pairing mode and the system is searching for new devolo Magic adapters. Status 2 Someone has triggered the "Identify device" function on the web interface or in the devolo Home Network App. This function identifies the devolo Magic adapter being sought.	Cannot be disabled
6	White LE D	Lights up steady	The devolo Magic connection does not have any issues and the devolo Magic adapter is ready to operate.	Can be disabled
7	White LE D	Flashes at intervals of 0.1 sec. on / 5 sec. off	The devolo Magic adapter is in standby mode.***	Can be disabled
8	Red and white LED	Flashes at intervals of 0.5 sec. red/ 0.5 sec. white	The devolo Magic adapter is carrying out a firmw are update.	Cannot be disabled

- Information about the web interface can be found in Chapter 4 Configuration.
- Information on improving the transmission rate can be found in Chapter 5.1 Bandwidth optimization.
- A devolo Magic adapter switches to standby mode after approximately 10 minutes if no active network device
 (e.g. computer) is connected to the network interface. In this mode, the devolo Magic adapter cannot be
 accessed over the electrical wiring. As soon as the network device (e.g. computer) connected to the network
 interface is switched on again, your devolo Magic adapter can also be accessed over the electrical wiring again.

Check whether the adapter is connected to the mains supply correctly and whether the pairing operation has been carried out successfully. For more information about this, refer to 3.4 Connecting the devolo Magic2 LAN.

Network connection

You can use the network connection on the devolo Magic adapter to connect it to a PC or television using a standard network cable.

Integrated electrical socket

Always use the integrated electrical socket on the devolo Magic adapter when connecting other consumers to the mains supply. In particular, electronic devices with mains adapter can negatively affect PLC performance. The integrated mains filter in the devolo Magic adapter filters any such external interference and reduces any impairment of PLC performance.

Initial use

This chapter tells you everything you need to know to set up and use your devolo Magic 2 LAN. We describe how to connect the adapter and briefly describe the devolo software.

For more information, please visit our website www.devolo.global.

Package contents

Please ensure that the delivery is complete before beginning with the installation of your devolo Magic 2 LAN

Starter Kit

- 2 devolo Magic 2 LAN1-1
- 2 network cables
- Printed installation guide
- Printed flyer "Safety & Service"
- Printed simplified UKCA/CE declaration a Online manual

Extension

- 1 devolo Magic 2 LAN1-1
- 1 Network cable
- Printed installation guide
- Printed flyer "Safety & Service"
- Printed simplified UKCA/CE declaration a Online manual devolo reserves the right to change the package contents without prior notice.

System requirements

- Operating systems supported devolo Cockpit: a from Windows 7 (32-bit/64-bit), a from Ubuntu 13.10 (32-bit/64-bit), a from Mac (OS X 10.9)
- Gigabit network connection
- Network connection

Please note that your computer or other device must have a network card or network adapter with a network interface.

To set up a devolo network, you need at least two devolo adapters.

Important notes

Use the devolo devices, the devolo software and the provided accessories as described to prevent damage and injury.

It is essential to have read and understood all safety and operating instructions before the device is used for the first time.

In this context, please read the chapter 1.2 Safety as well as the supplied flyer "Safety & service".

The flyer is also available in the download area of the respective product page on the Internet at www.devolo.global.

- CAUTION! Damage to the device caused by ambient conditions
 Only use device indoors in dry conditions
- DANGER! Electric shock caused by electricity

Device must be plugged into a power socket with a connected earth wire (PE)

CAUTION! Damage to the device caused by unpermitted voltage ranger
 Only operate devices on mains power supply as described on the rating plate.

Technical data

For the permitted voltage range for operating the device and the power consumption, refer to the type plate on the rear of the device.

For further technical data of this product, please refer to the data sheet in the download area of the respective product page on the Internet at www.devolo.global.

Connecting the devolo Magic 2 LAN

In the following sections we describe how to connect the devolo Magic 2 LAN and integrate it into a network. We clarify the exact procedures based on potential network scenarios.

Starter Kit – Automatic set-up for a new devolo Magic network

- 1. Connect one devolo Magic 2 LAN to your Internet access device's network connection (e.g. your Internet router).
- 2. Connect the other devolo Magic 2 LAN to the network connection of your computer or another network device using a network cable.

CAUTION! Tripping hazard

Lay the cable in a barrier-free manner and ensure that the electrical socket and the connected network devices are easily accessible

3. Plug both devolo Magic adapters into available power sockets within 3 minutes. As soon as the LEDs on both adapters flash white at regular intervals of 0.5 sec., they are ready to operate and automatically start the process of establishing an encrypted connection to each other (see Chapter 2.3.1 Reading the indicator light).

If the LEDs on both devolo Magic adapters light up in white, then your devolo Magic network has been set up according to your individual specifications and is protected from unauthorised access.

Addition – Expanding an existing network by adding another devolo Magic adapter

Before you can use the devolo Magic 2 LAN in your devolo Magic network, first you have to connect it to your existing devolo Magic adapters as a network. This is accomplished by using a shared password.

CAUTION! Tripping hazard

Lay the cable in a barrier-free manner and ensure that the electrical socket and the connected network devices are easily accessible

- 1. Connect the devolo Magic 2 LAN to the network connection of your computer or another network device using a network cable.
- 2. Plug the devolo Magic 2 LAN into an available power socket. As soon as the LED flashes white at regular intervals of 0.5 seconds, the adapter is ready to operate but not yet integrated into a devolo Magic network (see Chapter 2.3.1 Reading the indicator light).
- 3. Within 3 minutes, press the PLC/reset button on a devolo Magic adapter in your existing devolo Magic network for approximately 1 sec.
- The new devolo Magic adapter pairs automatically so no button needs to be pressed. The LED of this adapter

now also flashes white.

- If the LEDs light up white on both devolo Magic adapters, the new adapter has been successfully integrated into your existing devolo Magic network.
- For each pairing operation, only one additional adapter can be added at a time.

Changing the network password

A network password can also be changed in the following ways

- Using the web interface of the devolo Magic adapter (see Chapter 4.3 Powerline)
 or
- Using devolo Cockpit or the devolo Home Network App. For more information, refer to the following chapter.

Installation of devolo software

Installing devolo Cockpit software

devolo Cockpit finds all accessible devolo Magic adapters in your devolo Magic network, displays information about these devices and encrypts your devolo Magic network individually. You can use the software to navigate to the integrated web interface.

Operating systems supported by devolo Cockpit (Version 5.0 or later)

- from Windows 7 (32-bit/64-bit) or later,
- from Ubuntu 13.10 (32-bit/64-bit),
- from Mac (OS X 10.9)

You can find the product manual, software and additional information on devolo Cockpit online at www.devolo.global/devolo-cockpit

Downloading the devolo Home Network App

The devolo Home Network App is devolo's free app also for checking and configuring WiFi, PLC and LAN connections for the devolo Magic adapter (using a smartphone or tablet). The smartphone or tablet connects to the devolo Magic adapter at home over Wi-Fi.

- 1. Download the devolo Home Network App to your smartphone or tablet computer from the corresponding store.
- 2. The devolo Home Network App is placed in your smartphone's or tablet's app list as usual. Tapping on the devolo Home Network App icon brings you to the start menu.

You can find more information about the devolo Home Network App online at www.devolo.global/home-network-app

Removing the devolo Magic adapter from a network

- To remove a devolo Magic adapter from your network and successfully restore its entire configuration to the factory default settings, press the PLC/reset button longer than 10 seconds. Wait until the LED flashes white and then disconnect the adapter from the mains supply.
- Keep in mind that all settings that have already been made will be lost!
- To integrate the mains supply into another network, proceed as described in Chapter

Addition – Expanding an existing network by adding another devolo Magic adapter.

Configuration

The devolo Magic 2 LAN has a built-in web interface that can be called up using a standard web browser. Here, you can read out device information and configure some settings for operating the devolo Magic adapter.

Calling up the built-in web interface

You can access the built-in web interface for the devolo Magic 2 LAN in different ways:

- Using the devolo Home Network App on your smartphone or tablet, you can access the device's web interface by tapping on the corresponding adapter symbol for the devolo Magic2 LAN.
- Using the devolo Cockpit software, you can access the web interface of the devolo Magic adapter by clicking on the tab for the device's configuration page.

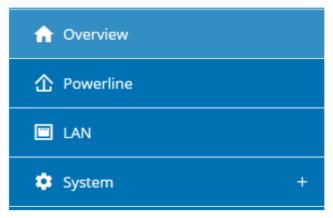
Then the program determines the current IP address and starts the configuration in the web browser.

You can find more information on devolo software in Chapter 3.5 Installation of devolo software.

Menu description

All menu functions are described in the corresponding interface as well as in the associated chapter in the manual. The sequence of the description in the manual follows the structure of the menu.

The central web interface areas are displayed at the edge of the screen. Click a menu to switch directly to that menu.



Logging in

The web interface is not password protected. As-signing a login password is mandatory when logging in for the first time to prevent unauthorised access by third parties.

You can find more information on the login process in Chapter 4.5 System.

Enter your existing password each time you login again and confirm by pressing Log in.



Logging out



Log out of the web interface by clicking Log out.

Language selection



Select the desired language in the language selection list.

Making changes

Once you make a change, two icons are shown on the corresponding menu page

- Disk icon: Your settings are being saved.
- X icon: The operation is being cancelled. Your settings are not being saved.

Required fields

Fields with a red border are required fields. This means entries must be made in these fields to continue with the configuration.

Help text blank fields

Fields that have not been filled in yet contain greyed out help text, which indicates the required content for the field. This help text disappears immediately once content has been entered.

Default settings

Some fields contain default settings which ensure the greatest amount of compatibility and ease of use. Default settings are identified with an * in drop-down menus.

Default settings can of course be replaced with customised information.

Recommended settings

Some fields include recommended settings.

Recommended settings can of course be replaced with customised information.

Invalid entries

Entry errors are either highlighted by a red border or error messages are shown.

Buttons

- Click the Disk icon to save the settings for the respective web interface area.
- Click the X icon or use the Menu path above the buttons to exit the respective web interface area.

- · Click the Recycle bin icon to delete an entry.
- · Click the Arrow icon to refresh a list.

Overview

In the Overview area, you will find information on hardware and software for the devolo Magic adapter and network details.





System

• Name: Device name

• Serial number: Device serial number

• MAC address: MAC address of the device

Firmware version: Firmware version of the device
System uptime: Operating time since the last re-start

Powerline

• Local device: Status information "connected" or "not connected"

• Network: Number of devices connected to the network

Connections

The table lists all available and connected devolo Magic adapters for your network along with displaying the following details

Device ID	MAC address	Transmit (Mbps)	Receive (Mbps)
1		256	393
2		944	438
3		256	393
4 (this device)	MOREOUS ELECTION		
5		169	103

- Device ID: number of the respective devolo Magic adapter in the devolo Magic network
- MAC address: MAC address of the respective devolo Magic adapter
- Transmit (Mbps): Data transmission rate
- Receive (Mbps): Data reception rate

LAN—Ethernet

Port: network connection; if a connection has been detected, the speed (10/100/1000 Mbps) and the mode (half/full duplex) are specified; otherwise, the status "unconnected" is specified.

LAN - IPv4

- DHCP: Display indicating whether DHCP is switched on or switched off
- Address: IPv4 address in use to access the Internet
- **Netmask:** The subnet mask used in a network separates the IP address into a network address and a device address.
- **Default gateway:** Within the IP environment, this function is usually provided by the router. All IP packages which did not found any other routing information are forwarded to the default gateway. Therefore, clients which do not support dynamic routing send all IP packages to be routed to the default gateway.
- Name server: address of the name server in use to decode a name (e. g. www.devolo.global)

LAN - IPv6

Link-local address: selected by the device itself and is valid for the "Link-locale Scope" range. The address always begins with FE80. It is used to establish connections within a local network without the need for a global IP address.

Protocol: Display indicating which address configuration protocol is in use — SLAAC or DHCPv6. Under IPv6 two dynamic address configurations exist

- StateLess Address Auto Configuration (SLAAC)
- Stateful Address Configuration (DHCPv6)

The router (as gateway) specifies which of these two proceedings is used. This is done using the M bit in the Router Advertisement (RA) and means "Managed address configuration".

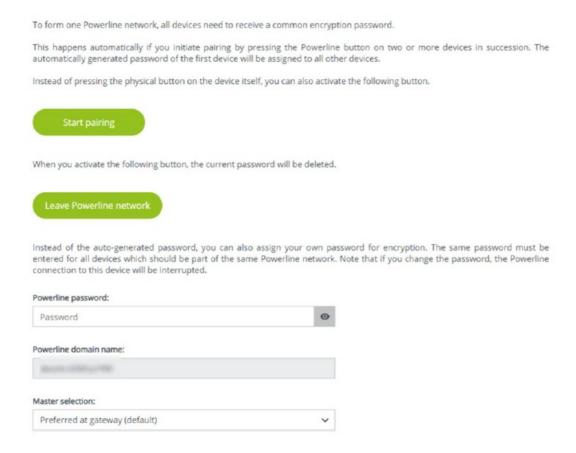
- M-Bit=0: SLAACM-Bit=1: DHCPv6
- SLAAC address: Global IPv6 address in use to access the internet

• DNS server: address of the name server in use to decode a name (e.g. www.devolo.global)

You can find more detailed information on the displayed network details in Chapter 4.4 LAN.

Powerline

In the Powerline area, you will find functions and information on the topic of Powerline and adapter pairing.



Powerline network

In order to use a new devolo Magic 2 LAN in your devolo Magic network, first you have to connect it to your existing devolo Magic adapters devices as a network. This is accomplished by using a shared password. This can be assigned in different ways

- Using devolo Cockpit or the devolo Home Network App (see Chapter 3.5 Installation of devolo software),
- Only using the PLC button (see Chapter 2.3 Pairing and 3.4.2 Addition Expanding an existing network by adding another devolo Magic adapter)
- Using the web interface, in the Powerline menu; as described below

Pairing – Using on-screen button

- 1. Click Start pairing to start the pairing operation. This may take some time.
- 2. As soon as the new devolo Magic adapter is integrated into your existing network, it appears in a list of available and established connections (see Chapter Connections).

Pairing – Using custom password

You can also assign your network a custom PLC password you pick yourself. Enter this password for each devoloMagic adapter in the Powerline password field and confirm your entry with OK.

Note that the custom password is not assigned to the whole PLC network automatically. Instead, you must assign

it separately to each of your devolo Magic adapters.

Powerline domain name

The Powerline domain name determines the name of your PLC network.

Unpairing – Resetting or removing an adapter from a network

- 1. To remove a devolo Magic adapter from your devolo Magic network, click Leave Powerline network.
- 2. Wait until the PLC LED flashes white and then disconnect the devolo Magic adapter from the mains supply.

Compatibility mode

Using as VDSL connection may negatively impact the performance of the bandwidth connection by crosstalk of the signal.

Compatibility Mode

In rare cases, VDSL connection problems can be caused by crosstalk with the powerline signal. If automatic compatibility mode is enabled, the device will try to detect this situation and adjust its output signal accordingly, which should provide the best balance between performance and mitigation of crosstalk.

Automatic compatibility mode (recommended)

If automatic mode is disabled, or cannot reliably detect crosstalk, a static mitigation profile will be used instead. Select the profile which matches the type of your VDSL connection, or select "Full Power" for no mitigation at all.



In order to mitigate any potential negative effects the device provides the following options:

Automatic compatibility mode

If the option Automatic compatibility mode (recommended) is enabled, the device can automatically adjust the output signal to avoid interference as much as possible. This option is configured by default.

Manual compatibility mode

If an interference has not been eliminated despite activating the automatic setting, please disable it and set the compatibility mode as well as the signal transmission profile manually:

- MIMO
 - Full power
 - VDSL 17a (default)
 - VDSL 35b
- SISO
 - Full power
 - VDSL 17a (default)
 - VDSL 35b

Get in touch with your internet provider to find out which signal transmission profile is the best option for your internet connection.

The MIMO operating mode and the VDSL 17a signal transmission profile are configured by default.

LAN

You make changes to the network settings in the LAN area.

IPv4 Configu	uration
☐ Get IP configurat	ion from a DHCP server
Address:	
192,168,1,248	
Netmask:	
255.255.255.0	
Default gateway:	
192.168.1.254	
Name server:	
192.168.1.254	
IPv6 Configu	uration
Address:	Ade(3.2/58.52aa-0.babe F4ff fe16.2583
Prefix:	64
All changes except t	the name server will have effect after system reboot.

You can access the web interface for the devolo Magic 2 LAN using its current IP address. This may be an IPv4 and/or IPv6 address, which is either entered manually as a static address or automatically retrieved from a DHCP server.

IPv4 Configuration

- In the factory default settings, only the DHCP enabled option for IPv4 is enabled. This means that the IPv4 address is retrieved axiomatically from a DHCP server. The currently assigned net-work data is visible (greyed out).
- If a DHCP server is already present on the network for giving out IP addresses (e.g. your Internet router), you should enable the DHCP enabled option so that the devolo Magic 2 LAN automatically receives an address from it.
- If you want to assign a static IP address, make entries accordingly for the Address, Subnet mask, Default gateway and Name server fields.
- Confirm your settings by clicking the Disk icon.
- Then, restart the devolo Magic adapter to ensure that your changes take effect.

IPv6 Configuration

- Address: Display indicating the global IPv6 address in use to access the internet.
- **Präfix:** Display indicating the prefix length in bit. A prefix is the first bit of the IPv6 address. Example: 2a00:fe0:313:25:f606:8dff:fe4f:6aee with prefix 64 means that the prefix here is 2a00:fe0:313:25.

System

In the System area, you can configure the settings for security and other devolo Magic adapter device functions.

Status

Here you can view the most important information on the devolo Magic adapter, including the current date and time, time zone and MAC address of the adapter.

Date and Time	
Local time:	23.10.2022 21:33
Time Server 1:	ptbtime1.ptb.de
Time Server 2:	ptbtime2.ptb.de
Time Server 3:	ptbtime3.ptb.de
MAC address	
Ethernet:	

Management

System Information

System information lets you enter an user-defined name in the Device name (hostname) field. This information is particularly helpful if multiple devolo Magic adapters are to be used and identified in the network.

System / Management		
System Information		
Device name:		
HomeOffice		
Max. 63 char.		
Hostname:		
HomeOffice		
Your device will be shown on your home gateway under this name.		
Password		
Set a new password to protect this webinterface.		
Enter old password:		
Old password	•	
Enter new password:		
Password	•	

Password.

• You can set a login password for accessing the web interface.

Confirm new password: Confirm password

- By default, the built-in web interface of the devolo Magic 2 LAN is not protected by a password. We recommend
 assigning a password when the installation of the devolo Magic 2 LAN is complete to protect it against
 tampering by third parties.
- To do so, enter the desired new password twice. Now the web interface is protected against unauthorised access with your custom password!

Identify Device

The devolo Magic adapter can be located using the Identify device function. Click Identify to make the white PLC LED for the corresponding adapter flash for 2 minutes to make it easier to identify by sight.

LED

Enable the LED disabled option if the LEDs on the devolo Magic adapter are intended to be switched off for normal operation. An error status is indicated by corresponding flashing behaviour regardless of this setting.

Identify Device
Activate this button to identify this device. The Powerline LED will flash in white for two minutes.
Identify
LED
You can disable the LED. This applies to normal operation, e.g. when the device is connected to a Powerline network or has entered standby mode. The LED still indicates ongoing pairing or connection problems.
☑ LED enabled
Power Saving
Allow device to enter power saving mode if reduced ethernet traffic is detected. Warning: Latency might increase when very slow traffic is detected.
☐ Power saving enabled

Power saving

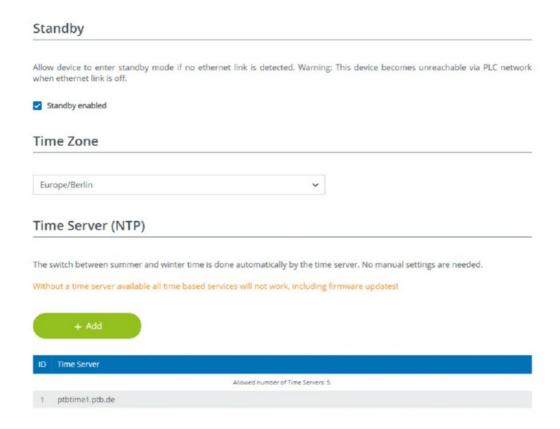
If Power save mode has been enabled, the devolo Magic 2 LAN switches to Power save mode automatically whenever reduced data transmission over ethernet is detected.

The latency (time for transmitting a data packet) may be negatively affected.

Power save mode is disabled in the devolo Magic 2 LAN factory default settings.

Standby

- If Standby mode is enabled, the devolo Magic 2 LAN automatically switches to Standby mode if no ethernet connection has been enabled, i.e. if no network device (e.g. computer) is switched on and connected to the network interface and if Wi-Fi is disabled.
- In this mode, the devolo Magic 2 LAN is not accessible over the Powerline network. As soon as the network device (e.g. computer) connected to the network interface is switched on again, your adapter can also be accessed over the electrical wiring again.



Standby mode is enabled in devolo Magic 2 LAN factory default condition.

For information on the LED behaviour of the devolo Magic adapter in standby mode, refer to Chapter 2.3.1 Reading the indicator light.

Time zone

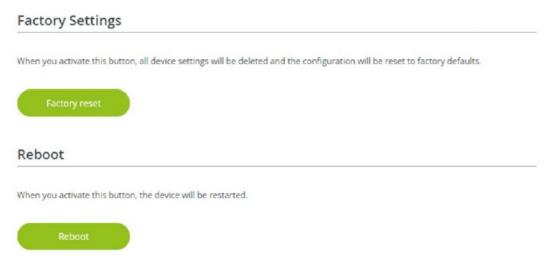
Under Time zone, you can select the current time zone, e.g. Europe/Berlin.

Time server

The Time server (NTP) option lets you specify a time server. A time server is a server on the Internet whose task consists of providing the exact time. Most time servers are coupled with a radio clock. Select your time zone and time server; the devolo Magic 2 LAN automatically switches between standard time and summer time.

Configuration

Here you can restart the devolo Magic adapter and/or reset it to the factory default settings.



- 1. To remove a devolo Magic adapter from your devolo Magic network and successfully restore its entire configuration to the factory default settings, click Factory reset.
- 2. Wait until the PLC LED flashes white and then disconnect the devolo Magic adapter from the mains supply.

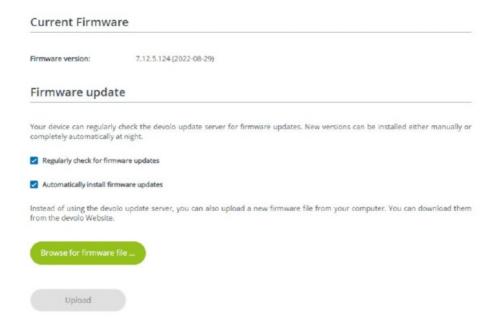
Keep in mind that all settings that have already been made will be lost!

Reboot

In order to reboot the devolo Magic 2 LAN, click Reboot button.

Firmware

The firmware of the devolo Magic 2 LAN includes the software for operating the device. If necessary, devolo offers new versions on the Internet as a file download. The firmware update can be initiated automatically or manually.



Regularly check for firmware updates

The devolo Magic 2 LAN can look for up-to-date firmware automatically. To do this, enable the option Regularly check for firmware updates.

The devolo Magic 2 LAN lets you know when a new firmware version becomes available and asks if firmware should be updated.

Automatically install firmware updates

With the option Automatically install firmware updates enabled, the devolo Magic2 LAN 1-1 automatically installs the firmware it has found.

Manually initiate a firmware update

- 1. In order to manually update the firmware, visit the devolo website.
 - 1. Download the appropriate file for the devolo Magic 2 LAN to your computer.
- 2. Next, click on Browse for firmware file... and select the downloaded firmware file.
- 3. Confirm your settings by clicking the diskette icon. After a successful update, the devolo Magic 2 LAN restarts automatically.

Ensure that the update procedure is not interrupted.

The currently installed firmware of the devolo Magic adapter is displayed on the overview page (see 4.2 Overview).

Appendix

Bandwidth optimization

To significantly improve the transmission capacity of the network, we recommend that you comply with the following "connection rules"

- Plug the devolo Magic2 LAN directly into a wall socket. Avoid using power strips. This may impair the transmission of the PLC signals.
- If there are several sockets in the wall directly next to each other, they behave like a power strip. Individual sockets are optimal.

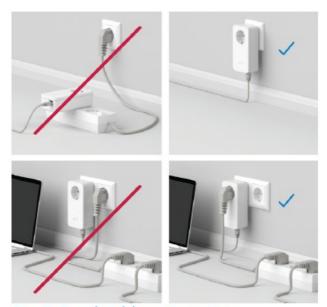


Fig. 3: Bandwidth optimisation

Warranty conditions

If your devolo device is found to be defective during initial installation or within the warranty period, please contact the vendor who sold you the product. The vendor will take care of the repair or warranty claim for you. The complete warranty conditions can be found at www.devolo.global/support.

Documents / Resources



devolo Magic 2 LAN Internet From The Electrical Socket [pdf] User Guide Magic 2 LAN Internet From The Electrical Socket, Magic 2 LAN, Internet From The Electrical Socket, The Electrical Socket, Socket

References

- <u>Internet überall devolo stoppt die WLAN Schwäche | devolo</u>
- devolo Cockpit: Powerline-Netzwerk verwalten | devolo
- devolo Home Network App: Intuitiv zum Heimnetzwerk
- Support zu Fragen rund um devolo Produkte | devolo

- d_Internet anywhere devolo cures weak Wi-Fi | devolo
- d_Internet anywhere devolo cures weak Wi-Fi | devolo
- d_Internet anywhere devolo cures weak Wi-Fi | devolo
- d Internet überall devolo stoppt die WLAN Schwäche | devolo
- d Internet überall devolo stoppt die WLAN Schwäche | devolo
- <u>devolo Cockpit: Powerline-Netzwerk verwalten | devolo</u>
- devolo Home Network App: Intuitiv zum Heimnetzwerk
- □ Support zu Fragen rund um devolo Produkte | devolo
- d Internet anywhere devolo cures weak Wi-Fi | devolo
- d dLAN Cockpit software for devolo Powerline products | devolo
- devolo Home Network App: Intuitive home network | devolo
- d Support & Contact | devolo
- User Manual

Manuals+, Privacy Policy

This website is an independent publication and is neither affiliated with nor endorsed by any of the trademark owners. The "Bluetooth®" word mark and logos are registered trademarks owned by Bluetooth SIG, Inc. The "Wi-Fi®" word mark and logos are registered trademarks owned by the Wi-Fi Alliance. Any use of these marks on this website does not imply any affiliation with or endorsement.