devolo

MAGIC

Manual
devolo Magic 2 LAN triple

devolo Magic 2 LAN triple

Contents

1 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 result!

1.1 About this manual

Carefully read all instructions before setting up the device and store the manual and/or installation guide for later reference.

After a brief introduction to „devolo Magic" and to the devolo Magic 2 LAN triple in **Chapter 2**, **Chapter 3** tells you how to successfully start using the adapter in your network.

Chapter 4 describes in detail the setting options of the built-in configuration interface.

Tips for bandwidth optimisation, information about environmental compatibility of the device, as well as our warranty terms, can be found in **Chapter 5** at the end of the manual.

Description of the icons

This section contains a brief description of the icons used in this manual and/or on the rating plate, the device connector, as well as the icons used on the package:

Icon	Description
⚡	Very important safety symbol that warns you of imminent electrical voltage which if not observed can result in serious injury or death.
♨	An important safety symbol that warns you of a potentially dangerous situation involving a burn hazard which can result in minor injuries or damage to property.
⚠	An important note that should be observed which can potentially lead to material damages.
⌂	The device may only be used indoors in dry conditions.

Icon	Description
$C\epsilon$	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.
	It is used to prevent the occurrence of waste electrical and electronic equipment and to reduce this type of waste through reuse, recycling and other forms of utilisation. The European Community WEEE Directive establishes minimum standards for handling waste electrical and electronic equipment in the EU.
i	Additional information, background material and configuration tips for your device.
✔	Indicates a completed course of action

1.2 Intended use

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

Products

devolo products are communication devices designed for indoors.* Depending on the product, they are equipped with a **PLC-** (**P**ower**L**ine **C**ommunication) and/or a Wi-Fi module. Computers, laptops, smartphones, tablets, smart TVs and other devices connected this way are integrated into a home network over the existing electrical wiring and/or Wi-Fi without any complicated wiring. devolo devices must never be used outdoors because the high temperature fluctuations and moisture can damage both the product and the power line. devolo products may not be installed at a height above **two metres** unless an additional fas-tening mechanism is available. The products are intended for operation in the EU, Switzerland and Norway.

* The only exceptions are devolo outdoor products, which are suited for the outdoor use thanks to their IP certification.

Software

devolo devices can be used only with the free, downloadable programs approved and available on devolo AG's website (www.devolo.com) and in app stores (iOS and Google Play). Any modifications to the product-specific firmware or software could damage the products and, in the worst-case scenario, render them unusable and negatively affect conformity.

Always use the most up-to-date software version to make sure you have the latest security functions and device updates. The installed devolo software notifies you automatically if a new software version is available.

Accessories

Use only the provided accessories.

1.3 CE Conformity

CE   This product complies with the technical requirements of the directives **2014/35/EU**, **2014/30/EU**, **2011/65/EU** und **2009/125/EC**.

This product is designed for use in the EU, Switzerland and Norway.

A printout of the simplified CE declaration of this product is separately included and can also be found under
www.devolo.com/support/ce.

1.4 Safety notes

It is essential to have read and understood all safety and operating instructions before the devolo device is used for the first time; keep them safe for future reference.

DANGER! Electrical shock caused by electricity
Do not reach into the electrical socket, do not open the device and do not insert any objects into the electrical socket or into the ventilation openings

Users do not need to carry out any maintenance on devolo devices. In the event of damage, disconnect the devolo device from the mains supply by pulling it or its plug out of the electrical socket. Then contact qualified specialist personnel (after-sales service) exclusively. **Damage** is deemed to have occurred, for example,

● if the power plug is damaged.
● if the devolo device has been showered with liquid (such as rain or other water).
● if the devolo device is inoperable.
● if the housing of the devolo device is damaged.

i *Do not plug devolo devices directly into each other. Devices that are plugged into each other can experience a decrease in transmission rate.*

⚡ **DANGER! Electric shock caused by electricity**
Device must be plugged into a power socket with a connected earth wire

devolo devices may be operated only on a **mains power supply** as described on the **rating plate**.

To disconnect devolo devices from the mains supply, unplug the device from the electrical socket.

The power socket and all connected network devices should be easily accessible so that you can pull the power plug quickly if needed.

♨ **CAUTION! Heat development during operation**
Certain housing components can become very hot in certain situations. Attach device so that it is touch-proof, observing optimal positioning

devolo devices should only be installed at locations that guarantee adequate ventilation. Slots and openings on the housing are used for ventilation:

● **Do not cover** devolo devices during operation.
● Do not place **any objects on** devolo devices.
● Do not insert **any objects** into the **openings** of devolo devices.
● devolo devices must **not** be placed directly **next to** a naked **flame** (such as fire or candles).
● devolo devices must **not be exposed to direct heat radiation** (e.g. radiator, direct sunlight).

⚠ **CAUTION! Damage to housing from cleaning agents containing solvents**
Clean only electroless and with dry cloth

1.5 devolo on the Internet

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

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.com!

2 Introduction

2.1 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.
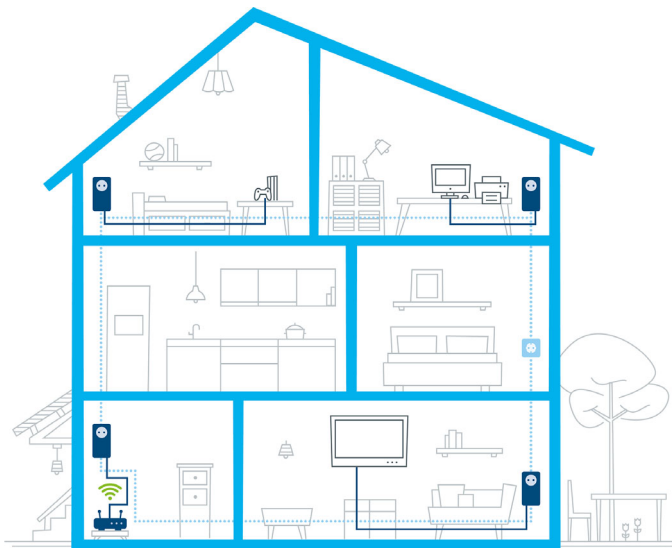
Fig. 1 devolo Magic throughout the home

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 Telecommunication Union (ITU) with ongoing development provided 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 ceilings 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.*

2.2 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 triple 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 triple 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 3 Gigabit LAN ports on the devolo Magic 2 LAN triple 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 triple features

● Three Gigabit network connection

● One indicator light

> **ℹ** *The LED status display can be disabled. You can find more information about this in Chapter* **4 Configuration** *or in the product manual for the devolo Cockpit software available online at* www.devolo.com/cockpit.

● One PLC/reset button (next to the network connection)

● One integrated electrical socket

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

2.3 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 network**), 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 triple 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 Netwok App** (see Chapter **3.4 Installation of devolo software**)

● Using the **web interface** (see Chapter **4.2.2 Powerline**)

● Using the **PLC/reset button** as described below.

❶ To do so, plug the new devolo Magic adapter into an available power socket and, for approximately 1 second, press the PLC/reset button on a devolo Magic adapter in your existing devolo Magic network.

❷ 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 **3.3 Connecting the devolo Magic 2 LAN triple**.

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

❶ 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.

❷ Wait until the 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!*

2.3.1 Reading the indicator light

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

	LED	Flashing behaviour	Meaning	LED status display (web interface*)
1	Red LED	Lights up for up to **2 sec.**	Start-up process	Cannot be disabled
2	Red LED	Flashes at intervals of 0.5 sec. (**on/off**)	**Status 1:** The reset of the devolo Magic adapter was successful. The PLC/reset button has been pressed and held for 10 seconds. **Status 2**: The devolo Magic adapter (once again) has the factory default settings. Since the last reset, no pairing with another devolo Magic adapter has taken place. Connect the adapter with another devolo Magic adapter to create a full-fledged PLC network as described in Chapter **2.3 Pairing**.	Cannot be disabled

	LED	Flashing be-haviour	Meaning	LED status display (web interface*)
3	Red LED	Lights up stea-dy	**Status 1**: The other network nodes are in standby mode and cannot currently be accessed over the mains supply. The PLC LEDs of the other devolo Magic adapters flash white only for a short time. **Status 2**: The connection to the other network nodes has been interrupted. There may be electro-magnetic or 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.	Can be disabled
4	Red and white LED	Flashes at in-tervals of **0.1 sec**. **red/2 sec**. **white**	Data transmission rate not in optimum range **	Can be disabled

	LED	Flashing be-haviour	Meaning	LED status display (web interface*)
5	White LED	**Status 1**: Flashes at intervals of **0.5 sec.** (**on/off**) **Status 2**: Flashes 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 Netwok App. This function identifies the devolo Magic adapter being sought.	Cannot be disabled
6	White LED	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 LED	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 firmware 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 **5.2 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 **3.3 Connecting the devolo Magic 2 LAN triple**.*

2.3.2 Network connections

You can use the network connections on the devolo Magic adapter to connect it to your PC, game console and television using standard network cables.

2.3.3 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.

3 Initial use

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

3.1 Package contents

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

● **Starter Kit**:
  ○ 1 devolo Magic 2 LAN triple
  ○ 1 devolo Magic 2 LAN [1-1]
  ○ 2 network cables
  ○ Hard copy of installation guide
  ○ Hard copy security flyer
  ○ simplified CE declaration

or

● **Extension**:
  ○ 1 devolo Magic 2 LAN triple
  ○ 1 Network cable
  ○ Hard copy of installation guide
  ○ Hard copy security flyer
  ○ simplified CE declaration

devolo AG reserves the right to change the package contents without prior notice.

3.2 System requirements

● Operating systems supported by devolo Cockpit:
  ○ from Windows 7 (32-bit/64-bit),
  ○ from Ubuntu 13.10 (32-bit/64-bit),
  ○ from Mac (OS X 10.9)
● 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 Magic network, you need at least two devolo Magic adapters.

3.3 Connecting the devolo Magic 2 LAN triple

CAUTION! Damage to the device caused by ambient conditions
Only use device indoors in dry conditions

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

> *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 additional technical information on our products, refer to the product area at* www.devolo.com.

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

❶ Connect the devolo Magic 2 LAN $^{1-1}$ to your Internet access device's network connection (e.g. your Internet router).

❷ Connect the devolo Magic 2 LAN triple to the network connection of your computer or another network device using a network cable.

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

❸ 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.

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

Before you can use the devolo Magic 2 LAN triple 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.

❶ Connect the devolo Magic 2 LAN triple to the network connection of your computer or another network device using a network cable.

❷ Plug the devolo Magic 2 LAN triple 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**).

❸ 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.*

3.3.3 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 **4.2.2 Powerline**)

or

● Using **devolo Cockpit** or the **devolo Home Network App**. For more information, refer to the following chapter.

3.4 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.com/cockpit.

Downloading the devolo Home Network App

The devolo Home Network App is devolo's **free app** also for checking and configuring WiFi, Magic 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.

❶ Download the devolo Home Network App to your smartphone or tablet computer from the corresponding store.

❷ 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.com/devolo-app.

3.5 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 **3.3.2 Addition – Expanding an existing network by adding another devolo Magic adapter**.

4 Configuration

The devolo Magic 2 LAN triple 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.

4.1 Calling up the built-in web interface

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

● Using the **devolo Home Network App** on your smartphone or tablet, you can access the web interface of the devolo Magic adapter by going to the devolo Home Network App **overview page** and tapping on the **gear/arrow**.

▌ ■ *You can find more information on devolo Home Network App in Chapter* **3.4 In-stallation of devolo software**.

● 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 **3.4 Installation of devolo software**.

4.2 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.

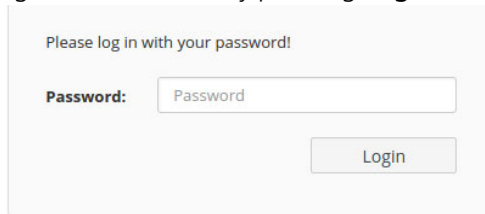ⓘ Overview

⌂ Powerline

⬚ LAN

⚙ System

Logging in

The web interface is not password protected. Assigning 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* **4.2.4 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.

4.2.1 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

MT number: Device type number

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

LAN – Ethernet

LAN ports 1-3: network connections; 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

Netmask: IPv4 network mask in use

Default gateway: IPv4 gateway in use

Name server: DNSv4 server in use

LAN – IPv6

Link-local address: Link-local address in use

SLAAC address: SLAAC address in use

Name server: DNSv6 server in use

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: 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

■ *You can find more detailed information on the displayed network details in Chapter* **4.2.3 LAN**.

4.2.2 Powerline

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

Powerline Network

To form one Powerline network, all devices need to receive a common encryption password.

This happens automatically if you initiate pairing by pressing the Powerline button on two or more devices in succession. The automatically generated password of the first device will be assigned to all other devices.

Instead of pressing the physical button on the device itself, you can also activate the following button.

[Start pairing]

When you activate the following button, the current password will be deleted.

[Leave Powerline network]

Instead of the auto-generated password, you can also assign your own password for encryption. The same password must be entered for all devices which should be part of the same Powerline network.

| Powerline password: | Password | 👁 |
| Powerline domain name: | C4XztpxXpen6tk67P6BiTnpiwYXpQpnY | |

Compatibility Mode

You can select a compatibility mode to avoid rare connectivity issues caused by crosstalk with other technologies, such as VDSL.

[MIMO | SISO]   [VDSL 17a (default) ▾]

In order to use a new devolo Magic 2 LAN triple 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 **3.4 Installation of devolo software**),
- Only using the **PLC/reset button** (see Chapter **2.3 Pairing** and **3.3 Connecting the devolo Magic 2 LAN triple**)
- Using the web interface, in the **Powerline** menu; as described below:

Pairing – Using physical button and on-screen button

❶ First, press the PLC/reset button on a devolo Magic adapter in your existing network.

❷ Then, click **Start pairing** to start the pairing operation. This may take some time.

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 devolo Magic 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

❶ To remove a devolo Magic adapter from your devolo Magic network, click **Leave Powerline network**.

❷ Wait until the LED flashes red 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.

Select from among the following settings in order to mitigate any potential negative effects.

Operating mode:

● MIMO
● SISO

Signal transmission profiles:

● 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.

4.2.3 LAN

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

IPv4 Configuration

☑ DHCP enabled

IPv6 Configuration

☐ DHCPv6 enabled

Address:	::
Prefix:	0
Default gateway:	::
Name server:	::

All changes except the name server will have effect after system reboot.

You can access the web interface for the devolo Magic 2 LAN triple 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 network 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 triple automatically receives an address from it.

If you want to assign a static IP address, make entries accordingly for the **Address**, **Subnetmask**, **Default gateway** and **Name server** fields.

Confirm your settings by clicking the **Disk** icon.

Then, restart the devolo Magic adapter (see Chapter **4.2.5 Reboot**) to ensure that your changes take effect.

IPv6 Configuration

If you want automatic IP address assignment and there is already a DHCP server present on the network for giving out IP addresses (e.g. your Internet router), enable the **DHCPv6 enabled** option to ensure that the devolo Magic 2 LAN triple automatically receives an address from this device.

If you want to assign a static IP address, make entries accordingly for the **Address**, **Prefix**, **Default gateway** and **Name server** fields.

Confirm your settings by clicking the **Disk** icon.

Then, restart the devolo Magic adapter (see Chapter **4.2.5 Reboot**) to ensure that your changes take effect.

4.2.4 System

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

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 Information

Device name (hostname):   devolo-002

Password

Set a new password to protect this webinterface.

Enter new password: Password

Confirm new password: Confirm password

Identify Device

Activate this button to identify this device. The LED will flash fast in white for two minutes.

Identify

Password.

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

By default, the built-in web interface of the devolo Magic 2 LAN triple is not protected by a password. We recommend assigning a password when the installation of the devolo Magic 2 LAN triple 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 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 regard-

less of this setting (see Chapter **2.3.1 Reading the indicator light**).

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 disabled

Powersaving

Allow device to enter powersaving mode if reduced ethernet traffic is detected. Warning: Latency might increase when very slow traffic is detected.

☐ Powersaving enabled

Standby

Allow device to enter standby mode if no ethernet link is detected. Warning: This device becomes unreachable via PLC network when ethernet link is off.

☑ Standby enabled

Powersaving

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

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

Powersave mode is disabled in the devolo Magic 2 LAN triple factory default settings.

Standby

If **Standby** mode is enabled, the devolo Magic 2 LAN triple 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 triple 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 the devolo Magic 2 LAN triple 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***.*

Firmware update

> *The currently installed firmware of the devolo Magic 2 LAN triple is displayed on the overview page (see* **4.2.1 Overview***).*

The firmware of the devolo Magic 2 LAN triple 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**.

Firmware update

Your device can check regularly for firmware updates on the devolo update server. New versions can be installed either manually or completely automatic at night.

☑ Regularly check for firmware updates

☑ Automatically install firmware updates

Instead of using the devolo update server, you can also upload a new firmware file from your computer. You can download them from the devolo Website.

Browse for firmware file ...

Regularly check for firmware updates

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

The devolo Magic 2 LAN triple 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 Magic 2 LAN triple automatically installs the firmware it has found.

Manually initiate a firmware update

❶ In order to manually update the firmware, visit the **devolo website** (www.devolo.com).

❶ Download the appropriate file for the devolo Magic 2 LAN triple to your computer.

❷ Next, click on **Browse for firmware file…** and select the downloaded firmware file.

❸ Confirm your settings by clicking the **diskette** icon. After a successful update, the devolo Magic 2 LAN triple restarts automatically.

⚠️ **Ensure that the update procedure is not interrupted.**

4.2.5 Reboot

Here, restart the devolo Magic adapter and/or restore it to the factory default settings.

Reboot

When you activate this button, the device will be restarted.

Reboot

Factory Settings

When you activate this button, all device settings will be deleted and the configuration will be reset to factory defaults.

Factory reset

Reboot

To restart a devolo Magic adapter, click **Reboot**.

Factory Settings

❶ 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**.

❷ Wait until the 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!*

5 Appendix

5.1 Technical specifications

Security	**128 Bit AES**
Device port	3x RJ45 (Gigabit Ethernet port)
Power consumption	Maximum: 5.9 W Typical: 5.0 W Stand-by: 30.9 W
Power supply	internal 196-250 V AC 50 Hz
Temperature (Storage/Operating)	-25°C to 70 °C / 0°C to 40°C
Dimensions (in mm, without plug)	143x72x41 (HxWxD)
Ambient conditions	10-90% Humidity, non-condensing
Certifications	CE

5.2 Bandwidth optimization

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

● Plug the devolo Magic 2 LAN triple 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.
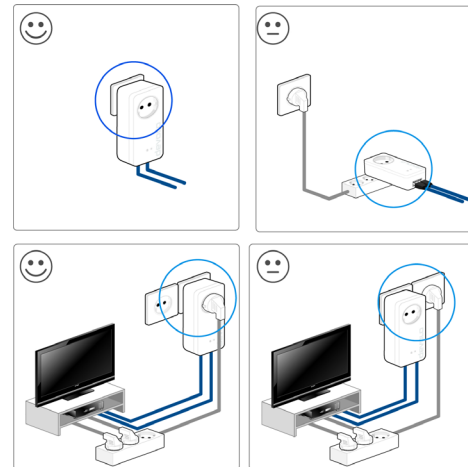

Fig. 3: Bandwith optimization

5.3 Disposal of old devices

To be used in the countries of the European Union and other European countries with a separate collecting system:

The icon with crossed-out wastebasket on the device means that this product is an electrical or electronic device that falls within the scope of application of the European Community WEEE Directive. These types of devices may no longer be disposed of with household waste. Rather they can be given to a municipal collection point free of charge. Contact your municipal government to find out the address and hours of the nearest collection point.

5.4 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.com/warranty.

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