



# FRITZ!WLAN USB Stick AC 430

Configuration  
and Operation



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# Table of Contents

	Symbols and Highlighting .....	4
1	Safety Instructions .....	5
2	FRITZ!WLAN USB Stick AC 430 at a Glance .....	6
2.1	Package Contents .....	6
2.2	Operation Requirements .....	6
2.3	LEDs .....	7
3	Establishing a Wireless LAN Connection with Stick & Surf8	
3.1	Prerequisite .....	8
3.2	Transferring Security Settings to FRITZ!WLAN USB Stick .....	8
3.3	Connecting FRITZ!WLAN USB Stick to the Computer .....	9
4	Establishing a Wireless LAN Connection Manually or with WPS .....	11
4.1	Installing FRITZ!WLAN USB Stick in Windows .....	11
4.2	Establishing a Wireless LAN Connection .....	12
5	Connecting Computers Directly (Ad Hoc Network) . . . .	17
5.1	Setting Up an Ad Hoc Network in Windows 7 .....	17
5.2	Setting Up an Ad Hoc Network in Windows Vista .....	18
5.3	Setting Up an Ad Hoc Network in Windows XP .....	19
6	The FRITZ!WLAN .....	24
6.1	Starting FRITZ!WLAN .....	24
6.2	The Control Software's User Interface .....	24
6.3	Online Help .....	25



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7	Help in Case of Errors . . . . .	26
7.1	Errors During Installation. . . . .	26
7.2	WLAN Connection Is Not Established . . . . .	27
7.3	Errors during Data Exchange with Other Devices in the Network . . . . .	28
7.4	The Wireless LAN Connection is Faulty or Interrupted . . . . .	29
7.5	Setting Automatic IP Address Assignment in Windows. . . . .	31
8	Removing the FRITZ!WLAN USB Stick. . . . .	33
9	Wireless LAN Standards . . . . .	34
10	Technical Specifications. . . . .	35
11	Customer Service . . . . .	36
11.1	Documentation . . . . .	36
11.2	Information in the Internet . . . . .	36
11.3	Updates . . . . .	37
11.4	Support from the Support Team . . . . .	37
11.5	Manufacturer’s Warranty . . . . .	39
	Legal Notice . . . . .	40
	Legal Notice . . . . .	40
	Declaration of CE Conformity. . . . .	41
	Disposal Information . . . . .	42
	Index . . . . .	43



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## Symbols and Highlighting

Symbols and emphasized text are used to mark certain information in this manual.

### Symbols



This symbol marks useful hints and tips.



This symbol indicates important instructions that must be observed to avoid malfunctions.

### Highlighting

Highlighting	Example
Quotation marks designate elements in the user interface, path entries, and names of folders and files	“Home Network” “C:\Pictures” “Info”
Blue, underlined text designates addresses to be entered in the browser	<a href="http://avm.de/en/service">avm.de/en/service</a>
Blue text designates links and references within this manual	see <a href="#">page 40</a>
Bold type emphasizes important words	Do <b>not</b> click ...

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## 1 Safety Instructions



When working with the FRITZ!WLAN USB Stick, follow the instructions below to protect yourself and the FRITZ!WLAN USB Stick from damage.

- Do not install the FRITZ!WLAN USB Stick during an electrical storm.
- Unplug the FRITZ!WLAN USB Stick from the computer during an electrical storm.
- Never let liquids get inside the FRITZ!WLAN USB Stick. Otherwise, electric shocks or short circuits may result.
- Protect the FRITZ!WLAN USB Stick from dust, moisture and steam. Clean the FRITZ!WLAN USB Stick with a slightly moist, lint-free cloth. Intensive cleaning products or solvents are not suitable.
- FRITZ!WLAN USB Stick is intended for indoor use only.
- Do **not** open the FRITZ!WLAN USB Stick housing. The device contains hazardous components and should only be opened by authorized repair technicians.

## 2 FRITZ!WLAN USB Stick AC 430 at a Glance

The FRITZ!WLAN USB Stick connects your computer with a FRITZ!Box or another wireless access point via wireless LAN. The wireless connection provides the computer with access to the Internet.

The FRITZ!WLAN USB Stick can also connect your computer directly with other computers, without a wireless access point. Then the computers can exchange data in what is called an ad hoc network.

### 2.1 Package Contents

- FRITZ!WLAN USB Stick AC 430
- USB extension with docking station
- printed quick guide

### 2.2 Operation Requirements

In order to operate the FRITZ!WLAN USB Stick AC 430, your computer must fulfill the following requirements:

- a free USB port (USB 2.0 or higher)
- Operating system Windows 8.1 or 8 (32- or 64-bit edition), Windows 7 (32- or 64-bit edition), Windows Vista (32-bit) or Windows XP with Service Pack 3 or higher (32-bit). Installation of the latest service packs and updates is recommended.
- pentium-class computer or notebook (500 MHz CPU or better)
- at least 64 MB RAM and 5 MB free memory on the hard drive

## 2.3 LEDs

LED	Condition	Meaning
USB	glows <b>green</b>	The FRITZ!WLAN USB Stick was detected by the operating system.
WLAN	flashes <b>yellow</b>	The FRITZ!WLAN USB Stick is exchanging data with another wireless device.

### 3 Establishing a Wireless LAN Connection with Stick & Surf

With Stick & Surf you can establish a secure wireless connection to your FRITZ!Box quickly and conveniently. You do not have to make any settings on the computer.

When you use the FRITZ!WLAN USB Stick on the computer for the first time, the device drivers are installed automatically.

#### 3.1 Prerequisite

You can use Stick & Surf with every FRITZ!Box that has a port for USB devices.

For instructions about establishing wireless LAN connections to other wireless access points, read from [page 11](#).

#### 3.2 Transferring Security Settings to FRITZ!WLAN USB Stick

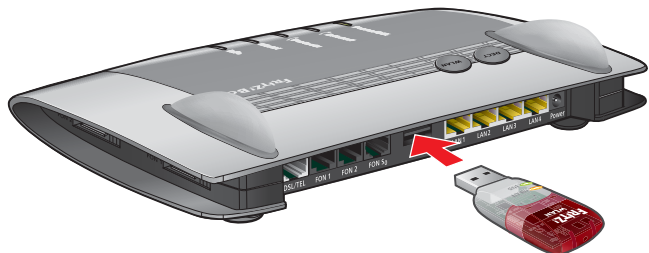
First transmit the wireless LAN security settings of the FRITZ!Box to the FRITZ!WLAN USB Stick.



The wireless LAN security settings are required on the FRITZ!WLAN USB Stick only in order to establish the wireless LAN connection; they will be deleted afterwards.

1. Insert the FRITZ!WLAN USB Stick into the USB port on your FRITZ!Box.

The “Info” LED begins flashing.



2. When “Info” lights up, remove the FRITZ!WLAN USB Stick from the FRITZ!Box.

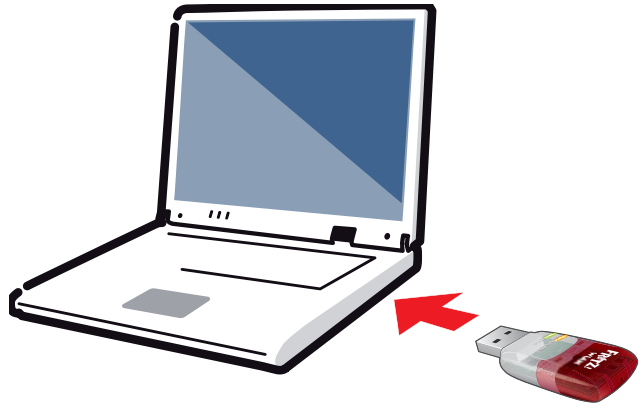
The WLAN security settings of the FRITZ!Box are now saved on the FRITZ!WLAN USB Stick.



### 3.3 Connecting FRITZ!WLAN USB Stick to the Computer

Once the wireless LAN security settings have been transmitted to the FRITZ!WLAN USB Stick, connect it to your computer.

1. Start your computer.
2. Insert the FRITZ!WLAN USB Stick into a USB port on the computer.



3. Windows detects the FRITZ!WLAN USB Stick automatically.

When you insert the FRITZ!WLAN USB Stick in your computer for the first time, the device drive installation starts automatically. Continue with the next step.

If the device driver is already installed, a wireless LAN connection between the computer and FRITZ!Box is established automatically. The Stick & Surf logo appears. Continue with step 6.

4. In the “AutoPlay” window, click “FRITZ!WLAN USB Stick AC 430 Installation”.


This window does not always appear. In some versions of Windows the device driver installation is performed automatically without requiring any user intervention.

5. Confirm the questions that appear during the course of installation by clicking “Yes”, “Install” or “Continue”. Such questions are generally security prompts from Windows “User Account Control”.

6. After the device driver is installed, a wireless LAN connection between the computer and FRITZ!Box is established automatically.

The Stick & Surf logo appears on the screen.



The wireless LAN connection has been established successfully when the FRITZ!WLAN icon in the Windows taskbar  turns green.

Every time the computer is started the connection is resumed automatically.



For more information on the FRITZ!WLAN software, see [page 24](#).

## 4 Establishing a Wireless LAN Connection Manually or with WPS

This chapter describes how to install the FRITZ!WLAN USB Stick on the computer and establish a wireless LAN connection to any wireless access point, also known as a wireless router.

You can establish the wireless LAN connection automatically with WPS, or manually on the computer.

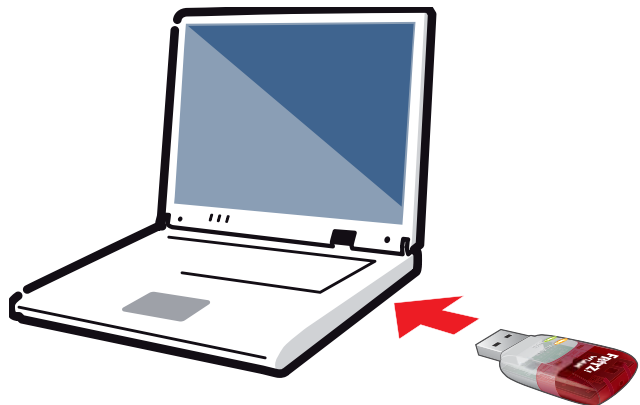
It is simpler to establish wireless connections to a FRITZ!Box using Stick & Surf, see [page 8](#).

### 4.1 Installing FRITZ!WLAN USB Stick in Windows

The FRITZ!WLAN USB Stick can be installed in Windows 8.1, 8 and 7 (32-bit and 64-bit editions), Windows Vista (32-bit edition) and Windows XP with service pack 3 or higher (32-bit).

1. Start your computer.
2. Insert the FRITZ!WLAN USB Stick into a USB port on the computer.

Windows will detect the FRITZ!WLAN USB Stick automatically.



3. In the “AutoPlay” window, click “FRITZ!WLAN USB Stick AC 430 Installation”.

This window does not always appear. In some versions of Windows the device driver installation is performed automatically without requiring any user intervention.


4. Confirm any questions asked during installation by clicking “Yes”, “Install” or “Continue”, for instance, the security prompt by Windows’ user account control.

Installation of the device driver is complete when the message “Installation of the wireless LAN hardware has been completed successfully” appears.

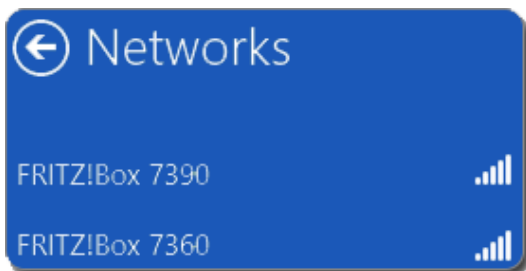
## 4.2 Establishing a Wireless LAN Connection

Once you have installed the FRITZ!WLAN USB Stick, you can establish the wireless LAN connection.

### Establishing a Wireless LAN Connection in Windows 8.1 and Windows 8

1. Move the mouse cursor to the upper right corner of the “Start” page and click “Settings”.
2. Click the wireless LAN icon .

A list appears on the screen, showing all wireless networks found in the vicinity of the FRITZ!WLAN USB Stick.

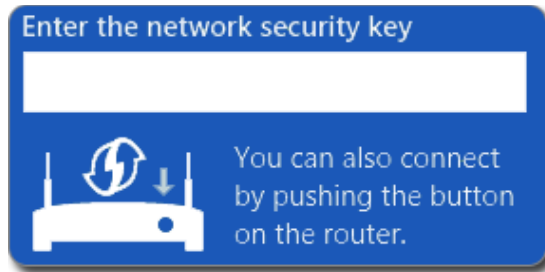


3. Select a wireless access point.

4. Click “OK”.

The input field for the network key appears.

If the wireless access point (router) supports WPS, the following message will also appear: “You can also connect by pushing the button on the router”.



5. Enter the network key of the wireless access point and click “OK”. On a FRITZ!Box the preconfigured network key is located on the base of the device.

**or**

If the wireless access point supports WPS, press the button on the access point that enables WPS. The network key is transferred to the computer automatically.



On a FRITZ!Box without a “WPS” button, press the “WLAN” button until the “WLAN” LED starts flashing.

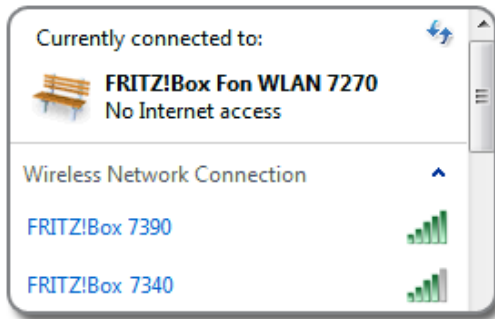
The WLAN connection will be established.

Every time the computer starts the wireless LAN connection is resumed automatically.

## Establishing a Wireless LAN Connection in Windows 7 / Windows Vista

1. Click the WLAN icon  or  in the Windows task bar.

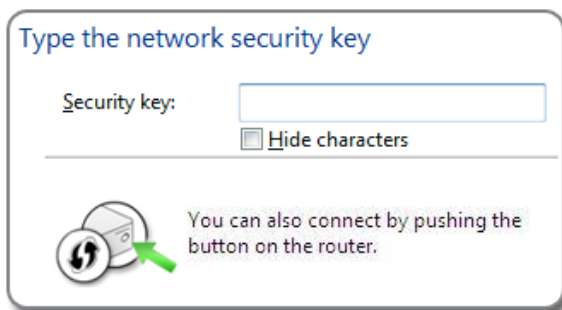
A list appears on the screen, showing all wireless networks found in the vicinity of the FRITZ!WLAN USB Stick.



2. Select a wireless access point.
3. Click "OK".

The input field for the network key appears.

If the wireless access point (router) supports WPS, the following message will also appear: "You can also connect by pushing the button on the router".



4. Enter the network key of the wireless access point and click “OK”. On a FRITZ!Box the preconfigured network key is located on the base of the device.

**or**

If the wireless access point supports WPS, press the button on the access point that enables WPS. The network key is transferred to the computer automatically.



On a FRITZ!Box without a “WPS” button, press the “WLAN” button until the “WLAN” LED starts flashing.

The WLAN connection will be established.

Every time the computer starts the wireless LAN connection is resumed automatically.

### Establishing a Wireless LAN Connection in Windows XP

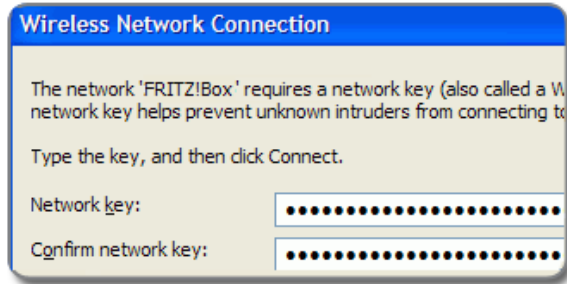
1. Click the WLAN icon  in the notification area of the Windows task bar.

A list appears on the screen, showing all wireless networks found in the vicinity of the FRITZ!WLAN USB Stick.



2. Select a wireless access point and click “Connect”.

The input field for the network key appears.



3. Enter the network key of the wireless LAN access point twice and then click “OK”.

The wireless LAN connection is established and resumed automatically every time the computer is started.



On a FRITZ!Box the preconfigured network key is located on the base of the device.



## 5 Connecting Computers Directly (Ad Hoc Network)


In a direct connection (also called an ad hoc network), computers are connected with each other without any wireless access point like the FRITZ!Box involved.

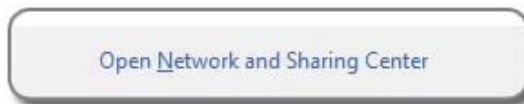
If you set up an ad-hoc network on a computer with the FRITZ!WLAN USB stick, other computers can register with the ad hoc network.



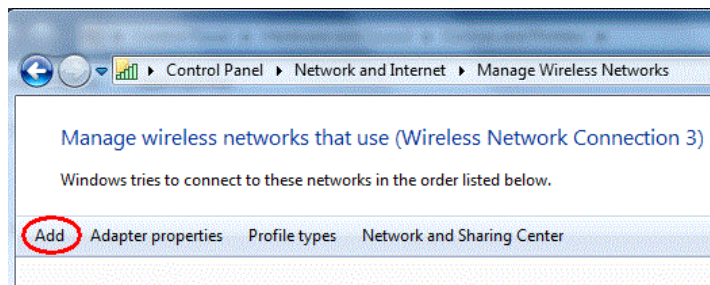
The Windows 8.1 and Windows 8 operating systems no longer allow an ad hoc network to be established.

### 5.1 Setting Up an Ad Hoc Network in Windows 7

1. Click the WLAN icon  in the Windows task bar with the right mouse button.
2. Select “Open Network and Sharing Center”.



3. On the left, click “Manage wireless networks”.
4. Click “Add”.



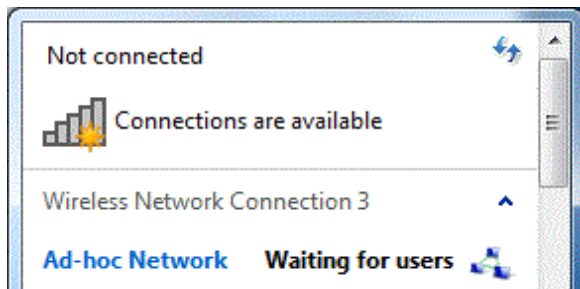
5. Select “Create an ad hoc network” and click “Next” in the following window.
6. Enter a network name.

7. Select a WLAN encryption method (“Security type”). WPA and WPA2 offer the highest level of security. For more information on the various wireless LAN encryption methods, click the “Need help deciding” link next to the “Security Type” drop-down list.
8. Enter a “Security key”.
9. The ad hoc network is deleted automatically as soon as all participants clear the connection or the provider of the ad hoc network clears all connections.

Enable the **Save this network** option if the ad hoc network should “not” be automatically deleted.

10. Click “Next”.

The ad hoc network is being configured and awaiting users. You see the ad hoc network when you click the WLAN icon in the Windows task bar.

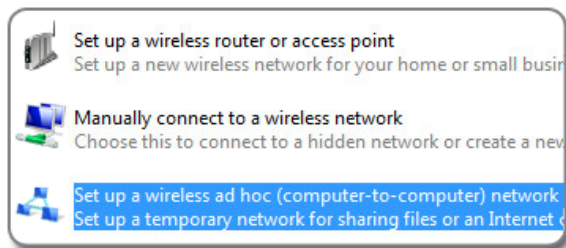


## 5.2 Setting Up an Ad Hoc Network in Windows Vista

1. Click the “Start” button.
2. Click “Connect” or “Establish Connection”.
3. Click “Set Up a Connection or Network”.



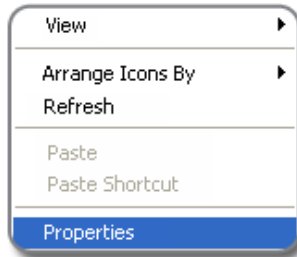
4. Select “Set Up a Wireless Ad-hoc Network (Computer-to-Computer)” and click “Next”.



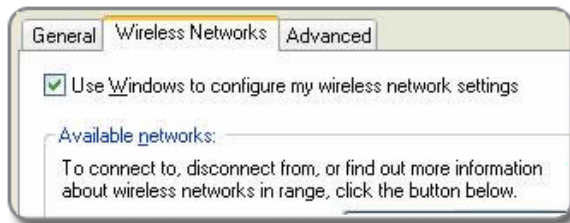
5. Follow the wizard’s instructions. The wizard takes you step by step through the configuration of the ad hoc network.

### 5.3 Setting Up an Ad Hoc Network in Windows XP

1. Click the “Start” button and select “My Network Places”. If “My Network Places” is not available, open “My Computer” and click “My Network Places” under “Other Places”.
2. Click with the right mouse button in the free area in the “My Network Places” window. Select “Properties” from the context menu.



3. In the “Network Connections” window, click the “Wireless Network Connection / FRITZ!WLAN USB Stick” icon with the right mouse button. Select “Properties” from the context menu.
4. In the “Wireless Network Connection Properties” window, switch to the “Wireless Networks” tab.



5. Click the “Add...” button.
6. Configure the following settings in the “Wireless network properties” window:

Enable the option “This is a computer-to-computer (ad hoc) network; wireless access points are not used”.

For “Network Authentication” select “Shared”.

For “Data encryption” select “WEP”.

Enter a 5-digit or 13-digit network key.



7. Click the “OK” button.

### Assigning IP Addresses to Participating Devices

Windows XP does not provide a DHCP server that can assign dynamic IP addresses to the participants of the ad-hoc network. This means you have to assign fixed IP addresses to the participating devices.

1. Open the properties of the network connection “Wireless Network Connection / FRITZ!WLAN USB Stick” (see steps 1–3 in “Setting Up a New Ad Hoc Network”).
2. Select the “Internet Protocol (TCP/IP)” in the list of elements to be used.
3. Click the “Properties” button.
4. Enable the “Use the following IP address:” option.

5. On the computer that provides the ad hoc network you can assign, for instance, the IP address 192.168.1.1 and the subnet mask 255.255.255.0.

Assign to other computers participating in the ad hoc network IP addresses between 192.168.1.2 and 192.168.1.9. Each IP address can be assigned only once.


The image shows a screenshot of a Windows XP network configuration dialog box. It has two main sections. The first section is for IP configuration, with the radio button 'Use the following IP address:' selected. It contains three input fields: 'IP address:' with the value '192 . 168 . 1 . 1', 'Subnet mask:' with the value '255 . 255 . 255 . 0', and 'Default gateway:' with the value '192 . 168 . 1 . 1'. The second section is for DNS configuration, with the radio button 'Use the following DNS server addresses:' selected. It contains two input fields: 'Preferred DNS server:' with the value '192 . 168 . 1 . 1' and 'Alternate DNS server:' which is empty.

If one of the computers in the ad hoc network is connected with the Internet (for instance via LAN cable), you can enter the IP address of that computer on the other computers as the standard gateway to provide access to the Internet for all computers.

If a DNS server is running on one of the computers in the ad hoc network, you can enter the IP address of this computer as the “Preferred DNS server”. If no DNS server is available, enter any IP address. In this case you can reach other computers only by entering their IP addresses.

### Registering with an Ad hoc Network

The computer on which you set up the ad hoc network still has to log in to the ad hoc network. Only then is the ad hoc network visible for other computers.

1. Click the WLAN icon  in the notification area of the Windows task bar.
2. Select the ad hoc network and click “Connect”.

Now you can use the WLAN software on the other computers to search for and log in to the ad hoc network.


## 6 The FRITZ!WLAN

The FRITZ!WLAN software is installed on your computer along with the FRITZ!WLAN USB Stick.

FRITZ!WLAN offers you information on the wireless LAN connection and various settings for the FRITZ!WLAN USB Stick.

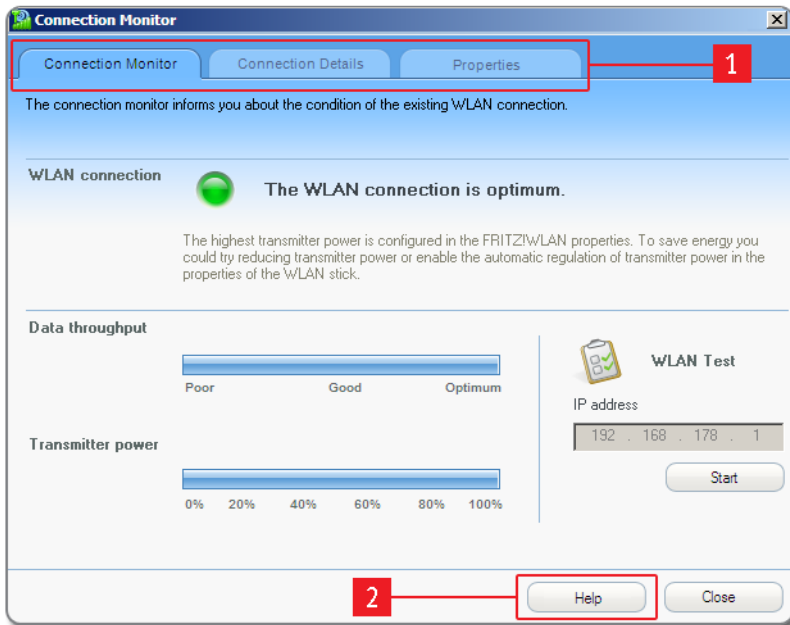
The software is not required to establish wireless LAN connections.

### 6.1 Starting FRITZ!WLAN

Double-click the FRITZ!WLAN icon  in the Windows task bar.

FRITZ!WLAN starts. The “Connection Monitor” tab is active.

### 6.2 The Control Software’s User Interface



1: Tabs

2: “Help” button to open the Online Help



The tabs present the following information and settings:

Tab	Information / Settings
Connection Monitor	<ul style="list-style-type: none"> <li>• information on the quality of the wireless LAN connection</li> <li>• a wireless LAN test to test and improve the wireless LAN connection</li> </ul>
Connection Details	<p>various data on the wireless LAN connection and the wireless LAN devices involved, e.g.:</p> <ul style="list-style-type: none"> <li>• WLAN key</li> <li>• wireless LAN channel</li> <li>• throughput rates</li> </ul>
Properties	<ul style="list-style-type: none"> <li>• the IP address and the MAC address of the FRITZ!WLAN USB Stick</li> <li>• various settings for the FRITZ!WLAN USB Stick, for instance for transmitter power</li> </ul>

### 6.3 Online Help

The FRITZ!WLAN includes a comprehensive Online Help with additional information on the software.

The Online Help can be opened on any tab by clicking the “Help” button.

## 7 Help in Case of Errors

This chapter presents assistance for problems that arise during installation, while establishing the wireless LAN connection, or during data exchange with other devices in the network.

### 7.1 Errors During Installation

#### No FRITZ!WLAN Icon in the Windows Task Bar

The FRITZ!WLAN icon is not displayed in the Windows task bar.

---

##### Cause

The FRITZ!WLAN USB Stick was not installed correctly or is disabled in the Windows “Device Manager”.

---

##### Help

Check whether the FRITZ!WLAN USB Stick is displayed in the Windows “Device Manager” and make sure it is enabled. If the device is disabled, enable it.

If the device is not displayed, uninstall the FRITZ!WLAN USB Stick (see [page 33](#)) and remove it from the USB port of the computer.

Then work through the steps from one of the following sections again: [Establishing a Wireless LAN Connection with Stick & Surf](#) on [page 8](#) or [Establishing a Wireless LAN Connection Manually or with WPS](#) on [page 11](#). The FRITZ!WLAN USB Stick will be re-installed.

---

### The Computer Does Not Detect FRITZ!WLAN USB Stick

The computer does not automatically detect the FRITZ!WLAN USB Stick when it is inserted. The device driver installation does not start.

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#### Cause

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The FRITZ!WLAN USB Stick is not inserted correctly into the USB port or the chip set drivers of the computer are out of date.

---

#### Help

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Remove the FRITZ!WLAN USB Stick from your computer and then insert it again into a USB port of the computer. Install the latest chip set drivers. See the documentation for your mainboard to find out which drivers your computer requires. The latest chip set drivers are available at [www.intel.com](http://www.intel.com), [www.nvidia.com](http://www.nvidia.com), [www.viaarena.com](http://www.viaarena.com).

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## 7.2 WLAN Connection Is Not Established

### Checking the Settings

Could not register at the wireless access point.

---

#### Cause

---

When the wireless LAN connection was established the wrong wireless access station was selected, or an incorrect network key was entered.

---

#### Help

---

Make sure you selected the right wireless access point. For a FRITZ!Box the preconfigured name of the radio network (SSID) always begins with “FRITZ!Box”.

Make sure that you entered the correct network key. Pay special attention to capitalization. On a FRITZ!Box the preconfigured network key is found on the base of the device.

---

### Switching On and Correctly Positioning the Wireless Access Point

**When you search for wireless networks in the vicinity of the FRITZ!WLAN USB Stick, Windows does not find your wireless access point.**

---

#### Cause

The wireless access point is switched off or located too far away.

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#### Help

Connect the wireless access point to electrical power and switch it on.

Reduce the distance between the FRITZ!WLAN USB Stick and the wireless access point.

---

## 7.3 Errors during Data Exchange with Other Devices in the Network

### Releasing Resources in the Network for Sharing

**Two or more devices are connected wirelessly to form a network. However, it is not possible to access folders or other resources in the network, for instance drives or printers.**

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#### Cause

The resources have not been released for sharing.

---

#### Help

Release the resources for network sharing. Instructions are provided in the Online Help of your operating system.

---

### Checking the Network Key and Enabling DHCP

**“Limited connectivity” error message: You computer recognizes the network and the wireless access point, but cannot access the Internet or the network.**

---

#### Cause

When the wireless LAN connection was established an incorrect wireless LAN key was entered, or the computer did not obtain an IP address from Windows.

---

#### Help

---

Check to make sure that you entered the correct network key. The preconfigured network key is located on the underside of your FRITZ!Box.

Enable automatic IP address assignment (DHCP) in Windows; see [page 31](#).

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### Checking the Ad Hoc Connection

**The FRITZ!WLAN USB Stick is connected directly to another wireless adapter via wireless radio, but the two adapters cannot exchange data.**

---

#### Cause

---

The network settings are incorrect.

---

#### Help

---

Make sure that the name of the ad hoc network and the network key are the same on both computers and that the computers are located in the same workgroup. Enable automatic assignment of IP addresses (DHCP) on both computers; see [page 31](#).

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## 7.4 The Wireless LAN Connection is Faulty or Interrupted

### Switching the WLAN Channel

**The wireless LAN connection is faulty or interrupted.**

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#### Cause

---

Other wireless devices are interfering with the connection.

---

#### Help

---

Switch to a less-used channel or set automatic channel selection on the wireless access point.

---

## Positioning Wireless Devices Correctly

**The wireless LAN connection is faulty or interrupted.**

---

### Cause

---

There are obstacles between the wireless access point and FRITZ!WLAN USB Stick.

---

### Help

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Do not position your wireless devices in the corner of a room.

Do not set up your wireless devices directly next to or beneath an obstacle (like a cabinet or radiator).

Position the wireless access point and the FRITZ!WLAN USB Stick so that there are as few obstacles between them as possible.

---

## Avoiding WLAN Channels with DFS

**The FRITZ!WLAN USB Stick loses the wireless LAN connection in the 5-GHz frequency band for no apparent reason.**

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### Cause

---

Forced channel change

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### Help

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Set the channel 36, 40, 44 or 48 in the wireless access point. On all other channels in the 5-GHz frequency band, the wireless access point is forced to switch channels whenever a radar device is transmitting on the same channel (DFS = Dynamic Frequency Selection).

---

## 7.5 Setting Automatic IP Address Assignment in Windows

Wireless access points like the FRITZ!Box are equipped with a DHCP server. The DHCP server assigns addresses for the connected computers.

For your computer to obtain its IP address from the DHCP server automatically, automatic assignment of IP addresses must be set in Windows.

### Preparations: Opening Network Connections

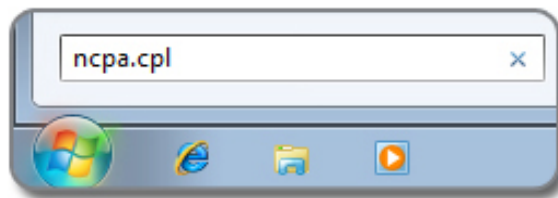
#### Windows 8.1 and Windows 8

1. Move the mouse cursor to the upper right corner of the “Start” page and click “Search”.
2. Enter “ncpa.cpl” and then press “Enter”.



#### Windows 7 and Windows Vista

1. Click “Start”.
2. Enter “ncpa.cpl” in the search line of the start menu, and press “Enter”.



#### Windows XP

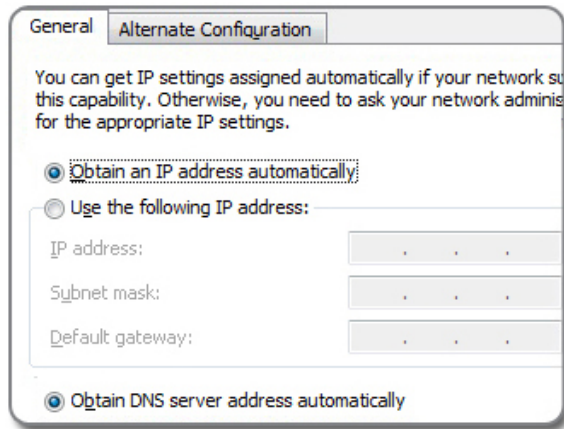
1. Click “Start” and select “Run”.
2. Enter “ncpa.cpl” and click “OK”.

## Enabling Automatic IP Address Assignment

1. In the “Network Connections” window, click your wireless network connection with the right mouse button.
2. Select “Properties”.
3. Under “This connection uses the following items”, select “Internet Protocol Version 4 (TCP/IPv4)”.

In Windows XP select the “Internet Protocol (TCP/IP)”.

4. Click the “Properties” button.
5. On the “General” tab, enable the options “Obtain an IP address automatically” and “Obtain DNS server address automatically”.



6. Click “OK” to save the settings.
7. Only in **Windows 8.1, 8, 7** and **Windows Vista**: Enable the options “Obtain an IPv6 address automatically” and “Obtain DNS server address automatically” for the Internet protocol version 6 (TCP/IPv6) as well.

Now the computer receives an IP address from the wireless access point.



## 8 Removing the FRITZ!WLAN USB Stick

During uninstallation the driver software of the FRITZ!WLAN USB Stick and the FRITZ!WLAN software are removed from your computer.

1. Click the “Start” button in Windows.
2. Click “Control Panel”.
3. Click “Programs” or “Software”.
4. Click “Uninstall a program” or “Change or Remove Programs”.
5. Select the “AVM FRITZ!WLAN” software.
6. Click “Uninstall/Change” or “Change/Remove”.

## 9 Wireless LAN Standards

Your FRITZ!WLAN USB Stick AC 430 supports the following wireless LAN standards:

Standard	Frequency Band	Data Throughput (Gross)	Data Throughput (Net)
802.11b	2.4 GHz	11 Mbit/s maximum	5 Mbit/s maximum
802.11g	2.4 GHz	54 Mbit/s maximum	25 Mbit/s maximum
802.11n	2.4 / 5 GHz	150 Mbit/s maximum	80 Mbit/s maximum
802.11a	5 GHz	54 Mbit/s maximum	25 Mbit/s maximum
802.11ac	5 GHz	433 Mbit/s maximum	200 Mbit/s maximum

The net transmission speed describes the transmission rate of the user data.

Which standard is used in a wireless LAN depends on the settings of the wireless access point. The FRITZ!WLAN USB Stick must use the same standard and the same frequency band as the wireless access point.



If your wireless access point supports the 5-GHz frequency band, use the 5-GHz band for fast wireless connections free of interference. More channels are available for use in the 5-GHz band than in the 2.4-GHz band. In addition, there are usually fewer wireless devices transmitting in the 5-GHz band than in the 2.4-GHz band. This means that operation in the 5-GHz is often subject to less interference than in the 2.4-GHz band.

## 10 Technical Specifications

LEDs	2 (connection / activity)
USB port	compatible with USB 2.0 and higher
WLAN module	support for radio networks in accordance with IEEE 802.11n, IEEE 802.11g, IEEE 802.11b, IEEE 802.11a and IEEE 802.11ac
Frequency band	2.4 and 5 GHz
Encryption	WPA (Wi-Fi Protected Access) / WPA2 (802.11i) / WEP 64/128-bit (Wired Equivalent Privacy)
Antenna	integrated
Operating systems supported	Windows 8.1/8 (32- or 64-bit edition) / Windows 7 (32- or 64-bit edition) / Windows Vista (32-bit edition) / Windows XP (32-bit edition)
Dimensions (W x D x H):	approx. 53 x 20 x 11 mm
Weight	approx. 10 g
Power supply	powered by USB, no external power supply required
Maximum power consumption	1.8 W
Transmitter power	max. 80 mW
Receiver sensitivity	min. -94 dBm (2.4 GHz) min. -93 dBm (5 GHz)
Supported data throughput rates (gross)	802.11ac up to 433 Mbit/s 802.11a up to 54 Mbit/s 802.11n up to 150 Mbit/s 802.11g up to 54 Mbit/s 802.11b up to 11 Mbit/s The achievable throughput rates (net data rates) are presented in the table on <a href="#">page 34</a> .
Firmware	can be updated
Channels	1 through 13 and 36 through 140 (ETSI)
Ambient temperature (during operation)	-5 to 45 °C
Ambient temperature (idle)	-10 to 70 °C
Humidity (idle/operation)	5 to 90%, no-condensation
Certification	CE

## 11 Customer Service

### 11.1 Documentation

#### Help on the FRITZ!WLAN Software

In the FRITZ!WLAN software you can open comprehensive Help by clicking the “Help” button or entering the “F1” key.

#### Manual

The printed quick guide to the FRITZ!WLAN USB Stick AC 430 is enclosed.

The PDF file of the manual can be opened and downloaded from the Internet at the following address:

[avm.de/en/service/manuals](http://avm.de/en/service/manuals)

Choose the “FRITZ!WLAN” product group and then “FRITZ!WLAN USB Stick AC 430”. The PDF is opened.



The current Adobe Acrobat Reader for reading PDF documents can be downloaded from the Internet free of charge at [www.adobe.com](http://www.adobe.com).

### 11.2 Information in the Internet

On its web site AVM presents comprehensive information on your AVM products as well as new product announcements and new product versions.

#### Frequently Asked Questions (FAQs)

We would like to make our products as easy to use as possible. If you still have problems, sometimes a little tip is all you need to resolve them. That is why we present you with a selection of frequently asked questions.

The FAQs can be viewed at the following address:

[service.avm.de/support/en/skb/](http://service.avm.de/support/en/skb/)

## 11.3 Updates

FRITZ!WLAN USB Stick provides updates for the AVM in the Internet free of charge.

The latest driver software can be downloaded at the following address:

[avm.de/en/Download](http://avm.de/en/Download)

## 11.4 Support from the Support Team

### Support by E-mail

You can send us an English-language request by e-mail at any time using the “Service” area at our web site.

[avm.de/en/service](http://avm.de/en/service)

### Preparing for a Support E-mail

The following information should be prepared for your mail:

- FRITZ!WLAN USB Stick  
For which FRITZ!WLAN USB Stick you require support for? The exact name of your device is located on the under-side of the device.
- Serial number of the FRITZ!WLAN USB Stick  
The serial number is printed on the sticker attached to the base of the device. Support staff will always check this number to ensure that you are a registered user.
- Which operating system are you using: for example, Windows 8.1, Windows 8, Windows 7, Windows Vista or Windows XP?
- At what step of the installation or in which application does an error occur or an error message appear?  
What is the exact wording of the message?

- What is the exact name of the wireless LAN access point you use with your FRITZ!WLAN USB Stick?

The exact name of a FRITZ!Box is located on the underside of the box housing.

- Which driver version of the FRITZ!WLAN USB Stick is installed? The driver version is listed in the FRITZ!WLAN program:



Click the FRITZ!WLAN program icon in the notification area of the task bar and select the menu command “About”.

Once you have gathered this information, please open the AVM Service pages.

1. Select the product group and product for which you need support from the “Support” area.
2. Click “Next”.
3. Select the topic for your support request.
4. If needed, narrow the topic.
5. If you do not find the required information, click the “Contact support” button.
6. Fill out the form and send it to AVM by clicking the “Submit support request” button.

The Support team will assist you in resolving your problem.

## 11.5 Manufacturer's Warranty

We offer a manufacturer's warranty of 5 years on the hardware of this original product. The warranty period begins with the purchase date from the first end user. Compliance with the warranty period can be proven by submission of the original invoice or comparable documents. This warranty does not restrict your warranty rights based on the contract of sale or other statutory rights.

Within the warranty period, we will remove defects to the product which are demonstrably due to faults in materials or manufacturing. Our warranty does not cover defects which occur due to incorrect installation, improper use, non-observance of instructions in the user manual, normal wear and tear or defects in the environment of the system (third-party hardware or software). We may, at our discretion, repair or replace the defective product. Claims other than the right to the removal of defects which is mentioned in these terms of warranty are not constituted.

We guarantee that the software conforms with general specifications, not, however, that the software meets your individual requirements. Delivery costs will not be reimbursed. Products which have been replaced revert to our ownership. Claims recognized under warranty entail neither an extension or recommencement of the warranty period. If we reject a warranty claim, this claim lapses no later than six months after being rejected by us.

This warranty shall be governed by German substantive law, to the exclusion of the United Nations Convention on Contracts for the International Sale of Goods (CISG).

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## Legal Notice

### Legal Notice

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## Declaration of CE Conformity

AVM declares herewith that the device is compliant with the basic requirements and the relevant rules in directives 1999/5/EC or 2004/108/EC and 2006/95/EC, 2009/125/EC and 2011/65/EU.

The declaration of CE conformity is available at <http://en.avm.de/ce>.

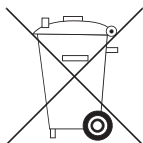
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## Disposal Information

In accordance with European regulations and the Waste Electrical and Electronic Equipment Directive (WEEE), the FRITZ!WLAN USB Stick AC 430, as well as all devices and electronic components contained in the package, may **not** be disposed with household waste.

In accordance with European regulations, the FRITZ!WLAN USB Stick AC 430, as well as all devices and electronic components contained in the package, may **not** be disposed with household waste.

Please bring FRITZ!WLAN USB Stick AC 430 to a collection point in your local community for the disposal of electric and electronic appliances after use.



Symbol for the separate collection of electric and electronic devices



Note the symbol for the separate collection of electric and electronic devices. FRITZ!WLAN USB Stick AC 430 and the electronic parts included with delivery must be disposed of separately from household waste.

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## Index

### A

ad hoc network ..... 17

### C

connecting  
    with Stick & Surf ..... 8  
copyright ..... 40  
customer service ..... 36

### D

declaration of CE conformity ..... 41  
direct connection ..... 17  
disposal ..... 42  
documentation ..... 36

### E

establishing connection  
    with WPS ..... 11

### F

FAQs ..... 36  
FRITZ!WLAN software ..... 24

### H

help  
    manual ..... 36  
    support team ..... 37  
help in case of errors ..... 26

### I

imprint ..... 40  
information in the Internet  
    FAQs ..... 36  
installation  
    help for errors ..... 26  
IP address ..... 24

### L

legal notice ..... 40

### M

manufacturer's warranty ..... 39

### N

network  
    error during data exchange ..... 28

### R

recycling  
    electrical equipment ..... 42  
    electronic equipment ..... 42  
removing ..... 33  
resolving errors ..... 26

### S

software update ..... 37  
software, FRITZ!WLAN ..... 24  
Stick & Surf ..... 8  
support  
    by fax ..... 37  
    information in the Internet ..... 36  
symbols in the manual ..... 4

### T

transmission rate ..... 24  
troubleshooting ..... 26

### U

update  
    driver software ..... 37

**W**

- warranty . . . . . 39
- wireless LAN connection
  - ad hoc network . . . . . 17
  - transmission rate . . . . . 24
  - with Stick & Surf . . . . . 8
  - with WPS . . . . . 11
- wireless networks service
  - in Windows 7/Vista . . . . . 14
  - in Windows 8.1 and 8 . . . . . 12
  - in Windows XP . . . . . 15
- WLAN
  - help for errors . . . . . 27
- WLAN connection
  - setting up on computer . . . . . 11
- WPS . . . . . 11

