



# Professional Router 2 router

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15.02.2019, ID: 422678 (V2)

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### 1 General information

This user manual contains important information on the safe operation of the device. Read and follow all safety notes and all instructions. Save this manual for future reference. Make sure that it is available to all persons using this device. If you sell the device to another user, be sure that they also receive this manual.

Our products and user manuals are subject to a process of continuous development. We therefore reserve the right to make changes without notice. Please refer to the latest version of the user manual which is ready for download under <u>www.thomann.de</u>.



#### 1.1 Further information

On our website (<u>www.thomann.de</u>) you will find lots of further information and details on the following points:

Download	This manual is also available as PDF file for you to download.
Keyword search	Use the search function in the electronic version to find the topics of interest for you quickly.
Online guides	Our online guides provide detailed information on technical basics and terms.
Personal consultation	For personal consultation please contact our technical hotline.
Service	If you have any problems with the device the customer service will gladly assist you.



#### 1.2 Notational conventions

This manual uses the following notational conventions:

**Letterings** The letterings for connectors and controls are marked by square brackets and italics.

**Examples:** [VOLUME] control, [Mono] button.

**Displays**Texts and values displayed on the device are marked by quotation marks and italics.

Examples: '24ch', 'OFF'.

**Text input**Text inputs that are carried out on the device are indicated by typewriter font.

Example: 2323



#### Instructions

The individual steps of an instruction are numbered consecutively. The result of a step is indented and highlighted by an arrow.

#### **Example:**

- **1.** Switch on the device.
- **2.** Press [Auto].
  - ⇒ Automatic operation is started.
- **3.** Switch off the device.

### 1.3 Symbols and signal words

In this section you will find an overview of the meaning of symbols and signal words that are used in this manual.



Signal word	Meaning
DANGER!	This combination of symbol and signal word indicates an immediate dangerous situation that will result in death or serious injury if it is not avoided.
NOTICE!	This combination of symbol and signal word indicates a possible dangerous situation that can result in material and environmental damage if it is not avoided.
Warning signs	Type of danger
A	Warning – high-voltage.
$\triangle$	Warning – danger zone.



# 2 Safety instructions

#### Intended use

This device is used to wirelessly connect Wi-Fi-enabled devices to each other to form a wireless local area network or to connect to the Internet. Use the device only as described in this user manual. Any other use or use under other operating conditions is considered to be improper and may result in personal injury or property damage. No liability will be assumed for damages resulting from improper use.

This device may be used only by persons with sufficient physical, sensorial, and intellectual abilities and having corresponding knowledge and experience. Other persons may use this device only if they are supervised or instructed by a person who is responsible for their safety.





#### **DANGER!**

#### **Danger for children**

Ensure that plastic bags, packaging, etc. are disposed of properly and are not within reach of babies and young children. Choking hazard!

Ensure that children do not detach any small parts (e.g. knobs or the like) from the unit. They could swallow the pieces and choke!

Never let children unattended use electrical devices.



#### **DANGER!**

#### Electric shock caused by high voltages inside

Within the device there are areas where high voltages may be present. Never remove any covers.

There are no user-serviceable parts inside.

Do not use the device if covers, protectors or optical components are missing or damaged.





#### **DANGER!**

#### **Electric shock caused by short-circuit**

Always use proper ready-made insulated mains cabling (power cord) with a protective contact plug. Do not modify the mains cable or the plug. Failure to do so could result in electric shock/death or fire. If in doubt, seek advice from a registered electrician.



#### NOTICE!

#### Risk of fire



Do not block areas of ventilation. Do not install the device near any direct heat source. Keep the device away from naked flames.





#### NOTICE!

#### **Power supply**

Before connecting the device, ensure that the input voltage (AC outlet) matches the voltage rating of the device and that the AC outlet is protected by a residual current circuit breaker. Failure to do so could result in damage to the device and possibly injure the user.

Unplug the device before electrical storms occur and when it is unused for long periods of time to reduce the risk of electric shock or fire.



#### NOTICE!

#### **Operating conditions**

This device has been designed for indoor use only. To prevent damage, never expose the device to any liquid or moisture. Avoid direct sunlight, heavy dirt, and strong vibrations.





#### NOTICE!

#### Radio interference

This device emits electromagnetic signals. This can cause interference due to overlapping radio waves. Do not use the device in locations where the use of wireless devices is prohibited.



#### NOTICE!

#### Locations subject to explosion hazards

This device emits electromagnetic signals. Under unfavourable conditions, radio waves near explosive spots can cause fire or explosions. Do not use the unit near locations subject to explosion hazards.



### 3 Features

- Wireless Dual Band Router (2.4 and 5 GHz)
- 4 operation modes: Router, Repeater (Extender), Access Point, wireless ISP
- 1 WAN port
- 4 LAN ports
- Diversity
- Detachable antennas
- Lockable Neutrik RJ-45 plugs on the front panel
- Built-in power supply
- 19" rack-mountable (1 RU)

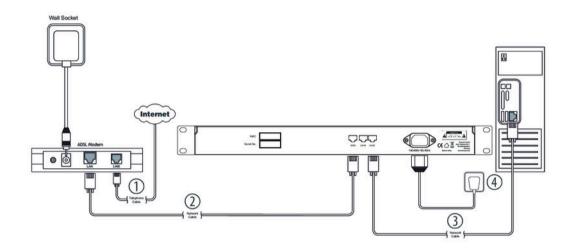


# 4 Installation and starting up

Unpack and check carefully there is no transportation damage before using the unit. Keep the equipment packaging. To fully protect the product against vibration, dust and moisture during transportation or storage use the original packaging or your own packaging material suitable for transport or storage, respectively.



#### Connect the router



- **1.** If you want to use the device with an existing DSL connection, connect the WAN connector of the router to the provided port at the DSL point of interconnection.
- **2.** Configure the router as follows: Connect the LAN connector of the device via an Ethernet network cable to your PC.
- **3.** Screw the four supplied antennas onto the connectors on the front panel of the device.



- **4.** Connect the device to the power supply with a suitable mains cable.
- **5.** Turn the main switch on.
  - ⇒ A few seconds after turning the main switch on, the device is operational.



# Set up WLAN at the PC (operating system Windows 10)

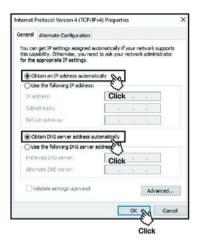


- **1.** Start your PC.
- **2.** Click the Windows start button and select 'All Apps'.
- 3. ► Click 'Windows System → Control Panel → Network and Internet → Network and Sharing Center' and select 'Change adapter settings'.
- **4.** Right-click on the displayed internet connection and select 'Settings'.



**5.** Double-click the *'Internet protocol version 4 (TCP IPv4)'*.





- **6.** Select the options 'Obtain IP address automatically' and 'Obtain DNS server address automatically'
- **7.** Confirm the selection with 'OK'.
  - ⇒ The WLAN connection is now set up at the PC.

#### Set up WLAN at the router

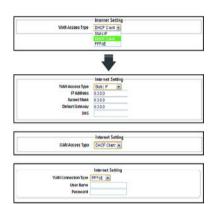


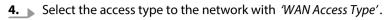




- 1. Start the browser of your PC.
- Enter http://192.168.1.1 into the address box of the browser. Confirm with [ENTER].
- **3.** Enter the user name and the password and click 'Login'. The preset user name and the preset password is 'admin'.
  - ⇒ The page 'Easy Setup' opens.







Select 'Static IP' when your internet provider has provided a fixed IP address. Your internet provider will send you the values for 'IP Address', 'Subnet Mask' and 'DNS'.

DHCP (Dynamic Host Configuration Protocol) is a local network protocol. Select 'DHCP Client' for getting automatically a dynamic IP address from your internet provider.

PPPoE (Point-to-Point Protocol over Ethernet) is a virtual private protocol and allows encapsulated data transmission. Select 'PPPoE' if your internet provider offers this option. Your internet provider sends you the user name and the password.





MEP MPA(AES) MPA2(AES) MPA2 Moed With '5G Wireless Setting' or '2.4G Wireless Setting' you can change the preset parameter for SSID and the encryption if needed.





**6.** Click 'Apply Changes' to save the settings. Click 'Reset' to discard the changes and to return to the presets.

#### **Establish WLAN connection**



- 1. Click the button for networks in the task bar.
  - ⇒ The available networks are displayed.



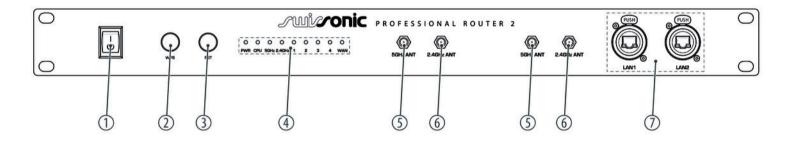


- **2.** Select the network to which you want to connect. Check the box at 'Automatically connect' and click 'Connect'.
  - ⇒ The WLAN connection is establishing.



## 5 Connections and controls

#### **Front panel**



1	Main switch. Turns the device on and off.		
2	[WPS]		
	Press [WPS] to add a new device to the wireless local area network.		
3	[RST]		
	Press [RST] for more than 5 seconds to reset the device to factory settings.		
4	4 LED indicator lights		
	ტ	illuminates as soon as the router is connected to the mains and ready for use.	
	СРИ	flashes as soon as the router is connected to the mains and ready for use.	
	flashes when there is a 5G Wi-Fi connection.  2.4G flashes when there is a 2.4G Wi-Fi connection.  flashes when data is being transferred via the port.		
	Δ	flashes when data is being transferred via the port.	
5	Detachable 5 GHz omnidirectional antenna		

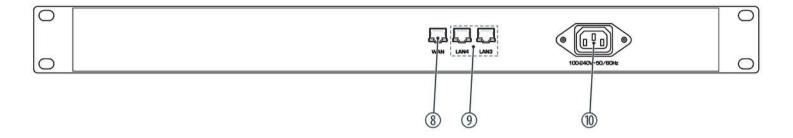


- 6 Detachable 2.4 GHz omnidirectional antenna
- 7 [LAN 1], [LAN 2]

Lockable Neutrik RJ-45 plugs for connection to local network devices



### **Rear panel**





8	[WAN]	
	WAN port for connecting to the internet	
9	[LAN 3], [LAN 4]	
	LAN port for connection to local network devices	
10	10 Connection socket for the power cable.	

# 6 Cleaning

Clean the unit with a dry, soft, lint-free cloth. Stubborn dirt can be removed with a slightly dampened cloth.

Never use solvents or alcohol for cleaning.



# 7 Troubleshooting

In the following we list a few common problems that may occur during operation. We give you some suggestions for easy troubleshooting:

Symptom	Remedy
The LED ర does not light up.	Check that the device is correctly connected to the mains.
Password forgotten	Reset the device to factory defaults.
Reset not possible	Press and hold [RST] for at least 10 seconds. The reset was successful when all LEDs are flashing.

If the procedures recommended above do not succeed, please contact our Service Center. You can find the contact information at www.thomann.de.



# 8 Technical specifications

Input connections	Voltage supply	Connection socket for the mains cable
	Data interface	$1 \times WAN$ port for the internet connection
Output connections	Network interfaces	$2\times LAN$ port for the connection to local network devices
		$2\times$ lockable Neutrik RJ-45 plug for the connection to local network devices
Supply voltage	100 − 240 V ~ 50/60 Hz	
Installation	19", 1 RU	
Dimensions (W $\times$ H $\times$ D)	438 mm × 44 mm × 180 mm	
Weight	2.1 kg	
Ambient conditions	Temperature range	0 °C40 °C
	Relative humidity	50 %, non condensing
IP address	192.168.1.1	



Default user name	admin
Default password	admin

#### **Further information**

Component type	Router
WLan Standards	IEEE 802.11a, b, ac, g, n
Data throughput WLan	Up to 300 Mbps (2.4 GHz), up to 867 Mbps (5 GHz)

# 9 Protecting the environment

# Disposal of the packaging material



For the transport and protective packaging, environmentally friendly materials have been chosen that can be supplied to normal recycling.

Ensure that plastic bags, packaging, etc. are properly disposed of.

Do not just dispose of these materials with your normal household waste, but make sure that they are collected for recycling. Please follow the notes and markings on the packaging.

#### Disposal of your old device



This product is subject to the European Waste Electrical and Electronic Equipment Directive (WEEE) in its currently valid version. Do not dispose with your normal household waste.

Dispose of this device through an approved waste disposal firm or through your local waste facility. When discarding the device, comply with the rules and regulations that apply in your country. If in doubt, consult your local waste disposal facility.







