Wireless WIFI Extender

MEDION® P85032 (MD 87070)

AFTER SALES SUPPORT

UK/N.IRELAND HELPLINE NO
costs 7p/min from a BT landline, mobile costs may be higher

REP IRELAND HELPLINE NO
free phone

WEB SUPPORT www.medion.co.uk

MODEL NUMBER: MD 00000

Instruction Manual

Table of contents

1. Notes on how to use these instructions

Read the safety instructions carefully before use. Note the warnings on the device and in the operating instructions.
Always keep the operating instructions close to hand. If you sell the device or give it away, make sure you also hand over these instructions and the warranty card.

1.1. Symbols and keywords used in these instructions

	***DANGER!*** ***Warning: immediate mortal danger!*** ***WARNING!*** ***Warning of possible risk of fatal injury and/or serious irreversible injuries!***

	**CAUTION!** *Please follow the instructions to prevent injuries and property damage!* **ATTENTION!** *Please follow the guidelines to avoid property damage!*
	**NOTE!** Additional information on using the device.
	**NOTE!** Please follow the guidelines in the operating instructions!
	***WARNING!*** ***Warning of risk of electric shock!***
•	Bullet point/information on operating steps and results
▸	Tasks to be performed

2. Proper use

This device is designed to amplify the signal in a WLAN network. In addition, the device can be used as an access point for devices that communicate wirelessly or as a client for connected devices which do not have their own WLAN adapter. You can also use the device as a router so that the WLAN Repeater directly establishes a connection with the Internet and clients can log into the router. Never use the device for any other purpose. Only use the device indoors.

This device is only designed for private use and is not suitable for commercial purposes.

NOTE!

If you have a DSL connection and want to use the WLAN Repeater as a router, you will also require a DSL modem that needs to be connected to the WLAN Repeater.

3. Safety instructions

Please read through this section and all of the documentation carefully and follow all of the instructions given. The instructions will help you to operate the device reliably and help increase its service life.

Always keep these operating instructions near at hand to the device, but store them safely so that you can pass them on to a new owner should you sell the device Should you have any problems with the device, please only contact our authorised service partners.

3.1. Operational safety

- This device is not intended for use by people (including children) with reduced physical, sensory or mental abilities or by those without experience and/or knowledge, unless they are supervised by a person responsible for their safety or they have been instructed in its use by that person. Children should be supervised to ensure they do not play

with this device.

- Always adhere to the user instructions of the devices that you connect to the WLAN Repeater.
- Do not place liquid containers, e.g. vases, on or near the device. The container may tip over and the liquid may impair the electrical safety of the device.
- Keep the device away from moisture and from water in droplet or spray form. Avoid vibrations, dust, heat and direct sunlight in order to prevent malfunction. The operating temperature is 5-35° C.
- Never open the housing of the device. This would invalidate the warranty and may render the device unusable.

- After transporting the device, wait until it has reached room temperature before switching it on. Major fluctuations in temperature or humidity can lead to condensation which could cause an electrical short-circuit.
- The device is intended to be connected to computers with power supply fuse protection (limited power source according to EN60950)
- Position the cable so that it cannot be stepped on or tripped over.
- To avoid damaging the cable, do not place any objects on it.
- To avoid static charges, you should not operate the device in extremely dry conditions.
- In circumstances where there are electrostatic discharges, the device could malfunction. In this case, the device must be reset to the factory settings.

3.2. Data backup

We do not accept any liability for claims for compensation due to loss of data or any damages that are incurred. Always backup your data onto an external storage device (e.g. CD-R) before updating it.

3.3. Power supply

- To disconnect the power supply to the device or to isolate the product entirely from voltage sources, disconnect the device from the mains completely by unplugging it from the mains socket.
- Only operate the WLAN Repeater from an easily accessible and earthed socket with an AC 100-240 V~ 50 Hz power supply.

4. Notes on conformity

Your device fulfils the requirements for electromagnetic compatibility and electrical safety.

4.1. Conformity information as per R&TTE

Medion AG hereby declares that product MD 87070 conforms to the following European requirements:

- R&TTE Directive 1999/5/EC
- EMC Directive 2004/108/EC
- Low Voltage Directive 2006/95/EC
- Ecodesign Directive 2009/125/EC
- RoHS Directive 2011/65/EU.

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

CE 0700

In France, please operate your device only in buildings!

5. Before use

5.1. Check package contents

Please check your purchase to ensure that all items are included. If anything is missing, please contact us within 14 days of purchase.

After unpacking, ensure that the following parts have been supplied:

- WLAN Repeater
- RJ-45 network cable
- Operating instructions and guarantee documents

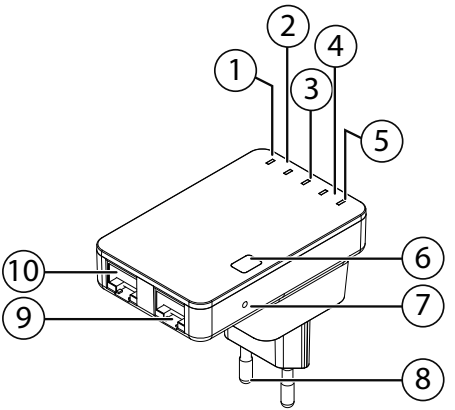
DANGER!

Keep the plastic packaging out of the reach of children as it can cause suffocation!

5.2. System requirements

- LAN connection or WLAN card that supports the WLAN Standard 802.11b/g/n
- Microsoft Windows®: Microsoft® Windows® 8x, Windows® 7 SP1, Windows® Vista SP2

6. Overview of the device



1) LAN LED
2) WAN/LAN LED
3) WPS LED
4) WLAN LED
5) Power LED
6) WPS button
7) Reset button
8) Mains plug
9) RJ45 socket for WAN/LAN
10) RJ45 socket for LAN

6.1. Overview of the LED displays

LED	Col-our	Status	Description
POWER	Green	Permanently lit	The repeater is switched on.
		Off	The repeater is switched off
WLAN	Green	Flashes	WLAN activated
		Off	The wireless network is switched off.
WPS	Green	Flashes	A WPS connection is being established or the device is waiting for the WPS signal from another device. The WPS LED flashes for 2 minutes while the connection is being established
		Off	No active WPS connection.

LED	Col-our	Status	Description
WAN/ LAN	Green	Permanently lit	A connection via the LAN port has been established
		Flashes	The connection via the LAN port is active (data is being transmitted)
		Off	No connection to the LAN port
LAN	Green	Permanently lit	A connection via the LAN port has been established
		Flashes	The connection via the LAN port is active (data is being transmitted)
		Off	No connection to the LAN port

6.2. Overview of the operating modes

Operating mode	Description
Router	The WLAN Repeater is connected to the Internet (e.g. using a modem) via the WLAN/LAN port and other devices (clients) can connect to the WLAN Repeater via WLAN or the LAN port.
AP	The WLAN Repeater is connected to a router that does not have its own WLAN interface via the WLAN/LAN port so that devices can now connect to the network router via the repeater (Access Point).
Repeater	The WLAN Repeater extends the range of your wireless network. This will reduce the data transmission rate of the wireless network by half as the repeater must also communicate with the clients and the wireless access point.

Operating mode	Description
WISP	The WLAN Repeater connects to a Wireless Internet Service Provider (WISP) and makes this Internet access available via the LAN ports or the extended wireless signal to clients (e.g. printers, set-top boxes with a LAN port) (client operation).

7. Using the device for the first time

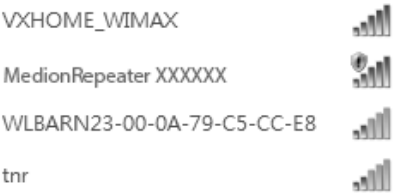
7.1. Logging in to the web interface for the repeater

In order to be able to configure the relevant operating mode on the WLAN Repeater, you need to log in to the web interface for the repeater via a web browser.

NOTE!

If you want to use the repeater mode and your router has a WPS function, you can skip this step and continue as described in section "8.1.1. Installation as a repeater via the WPS button" on page 22.

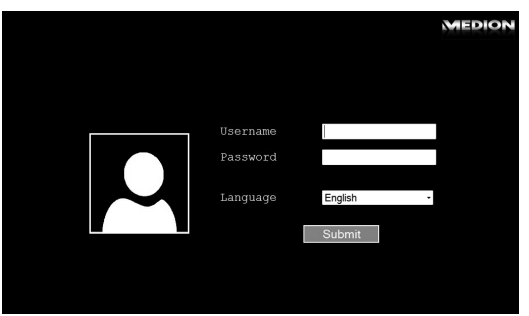
- Connect the repeater to an easily accessible mains socket.
- Connect the LAN port on your computer with the LAN socket on the repeater using the supplied LAN cable.
  OR
  You can use the WLAN interface on your computer instead. Search in the available wireless networks for the network "**MEDION REPEATER XXXXXX**" and click on "**CONNECT**".



NOTE!

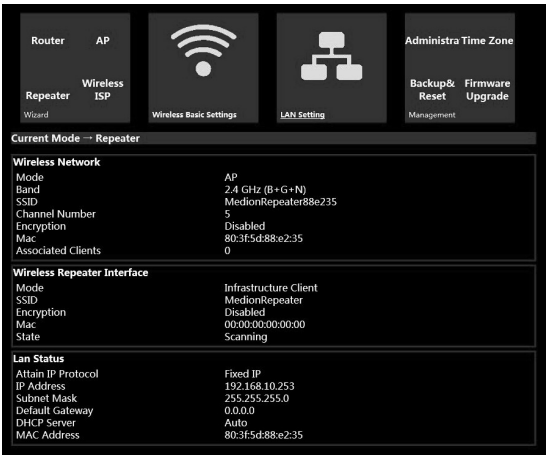
The name (SSID) of the repeater consists of MedionRepeater + the last 6 characters of the MAC address for your repeater.

- Then open your web browser and enter either "**http://repeater.setup**" or the IP address "**192.168.10.253**".



- The repeater's login window appears.
- Select the language for the menu interface.

- Enter the default user name "**admin**" and the default password "**1234**". Click on "**OK**".



The web interface for the WLAN Repeater will appear.

- Select an operating mode here and enter the settings for this mode.

8. Repeater mode

8.1. Installation as a repeater

Use the repeater mode in order to utilise the WLAN Repeater to extend the range of your wireless network. This will reduce the data transmission rate of the wireless network by half as the repeater must also communicate with the clients and the wireless access point.

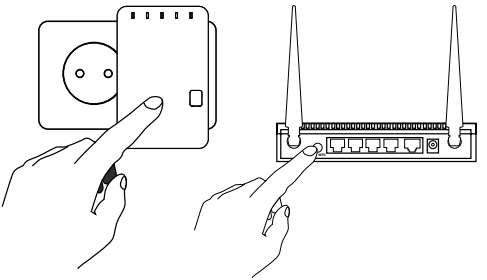
NOTE!

When using the device as a repeater for the first time, place the repeater as close as possible to the access point to which it is to be connected. After successful installation, you can reposition the repeater where the signal is to be amplified.

8.1.1. Installation as a repeater via the WPS button

The quickest, easiest and most secure way of establishing a wireless connection between the repeater and the WLAN router is by using the WPS button.

NOTE!
This connection method presupposes that both devices have a WPS button.



- Press and hold down the WPS button on the repeater for 8-10 seconds. The WPS LED starts to flash.
- Now press the WPS button on the router that you want to connect to the repeater. This step must be carried out within two minutes.
  The connection is established and the network information is exchanged.
- To make further settings after the successful establishment of a WPS connection or to set up the WPS connection manually after a failed attempt, use the web interface (see Page 38).

8.1.2. Manual installation as a router via the web interface

Basic settings for the WLAN Repeater in repeater mode

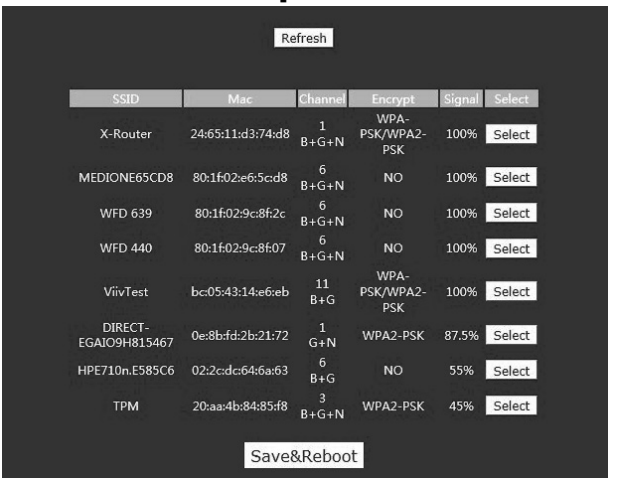
- Before the WLAN Repeater is configured via the web interface, DHCP for wireless and LAN is activated. The SSID is set to "**MedionRepeaterXXXXXX**" and no encryption is set.
- After the WLAN Repeater has been set up via the web interface and connected to the home router, the WLAN Repeater restarts.
- Following the restart, DHCP is deactivated on the WLAN Repeater. The WLAN Repeater now receives the IP addresses from the router and passes them on to the devices connected to the WLAN Repeater.

Setting up the repeater via the web interface

- Call up the web interface (“13. Settings in the web interface” on page 38) and log in.
- Select the operating mode "**REPEATER**" at the top.

- The assistant for the repeater mode will appear. The assistant can be used to make basic settings.

Assistant for the repeater mode:



- All available wireless access points are listed. Select the access point with which the repeater should be connected and click on **SELECT**.

NOTE!

If the desired access point is not listed, ensure that it is active and move the repeater closer to the access point. Then click on "**REFRESH**" to update the list of available wireless access points.

- The login window for the selected access point appears.
- In order to cancel the configuration process, select the option "**HOMEPAGE**" from the lower menu bar.
- Enter the network key and click on "**SAVE&REBOOT**".

NOTE!

The "Device SSID" is the network call sign of the repeater and, as default, is set to the same SSID as the access point to which the repeater is connected. However, you can enter a different SSID here if desired.

- Wait a few seconds while the repeater restarts. After the restart is complete, you can connect the computer to the repeater's access point via the list of available networks.

NOTE!

After configuration, the repeater's DHCP server is deactivated and the DHCP server of the access point whose signal is being amplified by the WLAN Repeater is used instead.

8.1.3. After the configuration

NOTE!

You can connect a LAN cable to the LAN port on the WLAN Repeater to connect to the network for the access point whose signal is being amplified by the WLAN Repeater.

- You can now reposition the repeater in any location within the range of the access point (home router).

- Clients (other computers or WLAN-capable devices) within the range of the repeater can now be connected to the repeater with the network key or by pressing the WPS button (max. 3 seconds) on the WLAN Repeater.

NOTE!

To call up the Quick Setup menu again at any time, use a pointed object (e.g. a paper-clip) to press down the **RESET** button for about 10 seconds until the **WPS** LED is lit. The repeater is now reset to the factory settings and you can carry out the installation again.

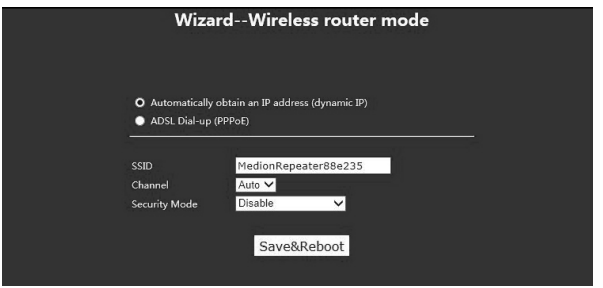
See also "1. Notes on how to use these instructions" on page 5.

9. Router mode

9.1. Installation as a router

- Connect the WAN/LAN port on the WLAN Repeater to a LAN port located on the device (e.g. a DSL modem) with access to the Internet.
- Call up the web interface (“13. Settings in the web interface” on page 38) and log in.
- Select the operating mode "**ROUTER**" at the top.

The assistant for the router mode will appear. The assistant can be used to make basic settings.



- In the setting "**AUTOMATICALLY OBTAIN AN IP ADDRESS (DYNAMIC IP)**", the router automatically obtains the IP address from the ISP (*Internet Service Provider*). It is not necessary to enter any further details. Finally, select a security mode for the encryption of your network.
- In the setting **ADSL DIAL UP (PPPOE)**, enter the user name and the password for your ISP. Finally, select a security mode for the encryption of your network.

▶ In order to cancel the configuration process, select the option "**HOMEPAGE**" from the lower menu bar.

▶ In order to save the settings, select the option "**SAVE&REBOOT**".

9.1.1. After the configuration

NOTE!

You can connect a LAN cable to the LAN port on the WLAN Repeater in order to gain access to the Internet via the WLAN Repeater.

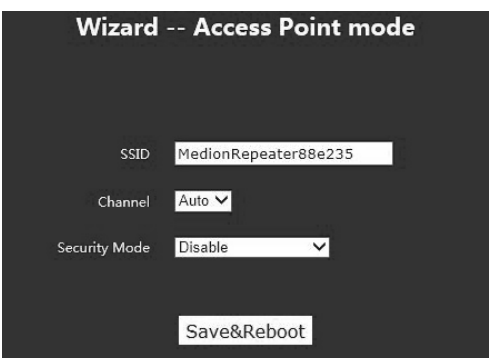
▶ Clients (other computers or WLAN-capable devices) within the range of the WLAN Repeater can now be connected to the repeater with the network key or by pressing the WPS button (max. 3 seconds) on the WLAN Repeater. In order to use the WPS function on other clients, also read the instructions for these devices.

10. AP mode

Use AP mode if you want to utilise the WLAN Repeater as a wireless access point. In this operating mode, the repeater acts as a wireless interface for communication with the network. For example, you can connect the repeater to a network router that has no WLAN interface so that devices can now access the network router via the repeater.

- Connect the WAN/LAN port on the WLAN Repeater with a LAN port on the network router.
- Call up the web interface (“13. Settings in the web interface” on page 38) and log in.
- Select the operating mode "**AP**" at the top.

The assistant for the AP mode will appear. The assistant can be used to make basic settings.



- Enter an **SSID** (network identification) by which the repeater can be identified as an AP in the network.
- Enter a **CHANNEL** (automatic or 1-13) on which the WLAN AP will transmit the wireless signal.
- Finally, select a **SECURITY MODE** for the encryption of the AP.
- In order to cancel the configuration process, select the option "**HOMEPAGE**" from the lower menu bar.
- In order to save the settings, select the option "**SAVE&REBOOT**".

Wait a few seconds while the repeater restarts. After the restart has been completed, the repeater is available as a wireless access point.

- Now connect the LAN port on the WLAN Repeater with the LAN port on the home router or a network socket for your home network using the supplied LAN cable.
- Clients (other computers or WLAN-capable devices) within the range of the WLAN Repeater can now be connected to the repeater with the network key or by pressing the WPS button (max. 3 seconds) on the WLAN Repeater.

11. WISP mode

The WLAN Repeater connects to a Wireless Internet Service Provider (*WISP*) and makes this Internet access available via the LAN ports or the extended wireless signal to clients.

- Call up the web interface ("13. Settings in the web interface" on page 38) and log in.
- Select the operating mode "**WIRELESS ISP**" at the top.

The assistant for the WISP mode will appear. The assistant can be used to make basic settings.

- Activate the extended wireless coverage (**WIRELESS EXPANSION ENABLE**) so that other client can access the Internet via WLAN.

Set the SSID and finally select a security mode for the encryption of the AP.

- All available wireless access points are listed. Select the access point with which the repeater should be connected and click on **SELECT**.
- Enter the network key and click on "**SAVE&REBOOT**".

In order to cancel the configuration process, select the option "**HOMEPAGE**" from the lower menu bar.

12. Manually setting up DHCP on a Windows PC

In router mode, the management IP address of the repeater is set to 192.168.10.253. Please ensure that the IP address of your PC is in the range 192.168.10.1~192.168.10.252.
To log in via the web interface, the IP address of your PC must

be manually set to a value in this range. The procedure for this is described in the next section.

12.1.1. Setting the IP address in Windows Vista/7

- Click on the **START** button on the task bar and then on System Settings.
- Click on **NETWORK AND SHARING CENTER**. Click on **CHANGE ADAPTER SETTINGS**.
- Click with the right mouse button on **LOCAL AREA CONNECTION** and then select **PROPERTIES**.
- The window **LOCAL AREA CONNECTION PROPERTIES** appears. Select **INTERNET PROTOCOL VERSION 4 (TCP / IPV4)** and then click on Properties.

- Select the option "**USE THE FOLLOWING IP ADDRESS**" and then enter the IP address based on the following procedure:
- IP address: 192.168.10.x (whereby x can be a number between 2 and 200. If more than one computer is using this access point, each computer must use its own number)
- Subnet mask: 255.255.255.0
- To finish, click on **OK**.

12.1.2. Setting the IP address in Windows 8

- Click on the option **NETWORK** in Windows Explorer with the right mouse button and then select the item **PROPERTIES**.
- Click on **CHANGE ADAPTER SETTINGS**.
- Click with the right mouse button on **LOCAL AREA CONNECTION** and then select **PROPERTIES**.
- The window **LOCAL AREA CONNECTION PROPERTIES** appears. Select **INTERNET PROTOCOL VERSION 4 (TCP / IPV4)** and then click on Properties.
- Select the option "**USE THE FOLLOWING IP ADDRESS**" and then enter the IP address based on the following procedure:
- IP address: 192.168.10.x (whereby x can be a

number between 2 and 200. If more than one computer is using this access point, each computer must use its own number)

- Subnet mask: 255.255.255.0

▶ To finish, click on **OK**.

13. Settings in the web interface

13.1. Calling up the web interface

After the configuration process, the WLAN Repeater can only be called up via the Management IP **192.168.10.253** or the name **medion.Repeater**.

The process for calling up the web interface differs according to the operating mode.

AP mode, WISP mode, router mode:

192.168.10.253 or medion.Repeater

Repeater mode:

The computer/client that you want to use to call up the web interface must be connected to the WLAN Repeater via a LAN cable. Otherwise, set DHCP on your PC to manual (see "12. Manually setting up DHCP on a Windows PC" on page 35).

13.2. Basic wireless settings

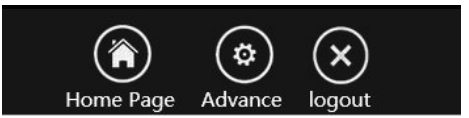
- You can set the **SSID**, the **ENCRYPT** and a **KEY** for the WLAN Repeater here.
- Click on **APPLY** to confirm the settings.

13.3. LAN settings

If the WLAN Repeater is connected to the network/other clients via a LAN cable then you can configure the LAN network connection here.

14. Advanced settings in the web interface

- Select the option "**ADVANCE**" on the start screen for the web interface.

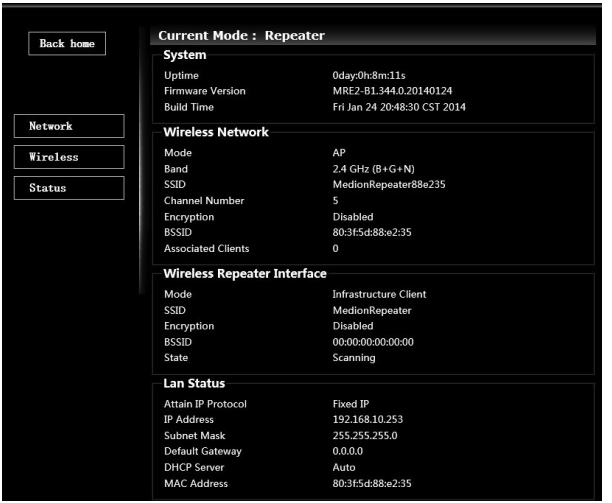


The **STATUS** screen appears.
You can call up the submenus for the advanced settings in the left-hand column:

NOTE!
In order for the settings you have made to become effective, click on **APPLY** in each menu. Otherwise, click on **RESET** if you want to discard the settings.

14.1. Status

This screen shows you the current configuration of the WLAN Repeater:



- You can view the data about the device under **SYSTEM**.
- The current mode and the network configuration are displayed under **WIRELESS NETWORK**.
- You can view the status of the WLAN adapter under the item **WIRELESS REPEATER INTERFACE** for the WLAN Repeater.

- You can view the status of the LAN adapter under the item **LAN STATUS**.

14.2. Wireless operation

14.2.1. Wireless Basic Settings

Place a tick in the field "**DISABLE WIRELESS LAN INTERFACE**" in order to switch off the WLAN adapter.

Band

Set the 2.4 GHz WLAN standard here.

Wireless mode

- Set this function to **AP** if you only want the WLAN Repeater to receive and transmit WLAN signals as

an AP (Access Point).

- Set this function to **WDS** (Wireless Distribution System) if you want the WLAN Repeater to act as a bridge between multiple APs. In this case, the other APs must also be set to WDS mode.
- If you want the WLAN Repeater to use both operating modes, choose the setting **AP+WDS**.
- In order to expand the network to include other APs, select the setting "**EXPAND WIRELESS NETWORK"**.

Network Type

This setting is only available if the WDS mode has been activated and other APs are connected to the WLAN Repeater. It can be set to **INFRASTRUCTURE** (network of APs and switches) or **AD-HOC** (network of clients).

SSID

Enter a name here for the network identifier (SSID) of your WLAN Repeater.

Channel Width

You can set the bandwidth for the wireless channel to 20 MHz or 40 MHz.

Control Sideband

Select here whether the upper or lower sideband should also be used for modulated signals.

Channel

Set the channel here on which the WLAN Repeater should operate.

Broadcast SSID

This setting determines whether the SSID is broadcast or not.

WMM

This setting determines whether the WMM function is activated or deactivated.

Data rate

This setting defines the speed of the data transmission.

Associated clients

Click here on the menu item "Show active clients" to display the devices registered to the WLAN Repeater together with their MAC addresses.

Extend SSID

Activate the WLAN Repeater box to add an extension for the SSID.

14.2.2. Wireless security

You can set the wireless security (encryption) for the individual APs here.

Select SSID

Select one of the APs here for which you want to set the encryption.

Wireless network security settings

- Set the type of encryption here (WEP, WPA, WPA2 or WPA-Mixed).

If you do not want to apply any encryption, select the option "**DISABLE**".

14.2.3. Advanced settings

Fragment threshold	The fragment threshold setting is used for the transmission of fragmented data packets. The default value is 2346.
RTS threshold	This setting is used to define the RTS value. The default value is 2347.
Beacon interval	This setting defines the interval for sending out the beacon. The standard value is 100.
Preamble type	This setting defines the type of preamble signal.

IAAP	This setting activates IEEE 802.11f for WLAN roaming.
Protection	If protection is activated, each packet is individually checked for a client that transmits in WLAN G mode. This only applies to a pure G or B/G wireless network.
Aggregation	Active aggregation is a technology that enables an 802.11n network to remain backwards compatible with 802.11g/b devices.
Short GI (Guard Interval)	This setting increases the data rate (the data error rate is however also increased).
WLAN partition	Switching on this function prevents WLAN clients communicating with each other.
20/40 MHz Coexist	If one of the two channels that are used in 40 MHz operation experiences interference, the WLAN Repeater switches to 20 MHz operation. You can force channel bonding (40 MHz operation) by deactivating this function.
RF output power	Set the transmission power of the WLAN antennae here.

14.2.4. Access control

Instead of using network encryption, you can also control access to the WLAN Repeater via the MAC address of the client.

This means that the client will be approved or blocked based on its MAC address.

- If you do not want to use the access control function, select the option "**DISABLE**".
- Select "**ALLOW LISTED**" and enter the MAC address and a comment (e.g. the device name) for the client that you want to approve for access to the router. All other clients are now no longer able to connect with the WLAN router.
- Select "**DENY LISTED**" and enter the MAC address and a comment (e.g. the device name) for the client that you want to block for access to the router. All other clients are now no longer able to connect with the WLAN router.

Schedule

This setting can be used to enter up to 10 time plans to control when the WLAN network is switched on.

- Select those time plans that you want to use.
- Switch on the WLAN time plan function by entering a tick in the "**ENABLE WIRELESS SCHEDULE**" field.

WDS

If you have activated the WDS mode (WDS or WDS+AP), you can set the WDS network here.

WPS

You can configure the WPS function of the repeater here.

- The WPS function is switched on in the factory. In order to deactivate this function, click on **DEACTIVATE.**

14.3. Network

You can change the advanced network settings here. Activate or deactivate the relevant function by placing a tick in the corresponding field.

UPnP

[Universal Plug and Play]: This function needs to be activated in order for media content from other UPnP devices in the network to be recognised.

IGMP

[Internet Group Management Protocol]: The IGMP protocol must be activated in order for IP multicast on the WLAN Repeater to work.

IPSec

[Internet Protocol Security]: This setting needs to be activated for the IPSec protocol suite - which enables secure communication in IP networks - on the WLAN Repeater to work.

PPTP

[Point-to-Point Tunnelling Protocol]: Activate this function to enable VPN tunnelling to be used on the WLAN Repeater.

L2TP

[Layer 2 Tunnelling Protocol]: In order to be able to set up a virtual private network, activate the L2TP function on the WLAN Repeater.

IPv6

[Internet Protocol Version 6]: If you want to use IPv6 on your network, activate this protocol here.

Ping access on WAN

Activate this function so that clients in the WAN network can ping each other.

Web server access on WAN

Activate this function so that clients in the WAN network can access a web server on the network.

MAC clone

If you want to change the MAC address for your router (for example, to receive a new IP address when connecting to your Internet Service Provider), enter your chosen MAC address here (e.g. 001122334455). In order to use the original MAC address for the WLAN Repeater, enter "000000000000" (12 zeros).

14.3.1. Static DHCP

You can activate DHCP on the WLAN Repeater here. If DHCP has been activated, the IP and MAC addresses for the WLAN Repeater can be issued manually.

14.3.2. DHCP Client Table

You can view all of the clients that are currently registered with the WLAN Repeater together with their IP and MAC addresses here.

15. Administration

- You can enter a new user name and password for logging into the web interface here.
- Click on **APPLY** to confirm the settings.

16. Time zone

- You can manually set the time and date here or set it automatically via a time server.
- Click on **APPLY** to confirm the settings.

17. Backup & reset

- You can save the current configuration in a file, load an already existing configuration or reset the system to the factory settings here.

18. Firmware upgrade

- If you have received a firmware update from our Service Department or our website, you can enter the file path here to load the firmware update.

19. Do you need more help?

If the above suggestions did not solve your problem please contact us. The following information would help us:

- What external devices are connected?
- When operating the device, at which step did the problem occur?
- What steps have you already taken to try and rectify the problem?
- Please provide your customer number if you have one.

20. Cleaning

Follow the instructions below to increase the service life of the device:

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

Please keep the packaging and do not use anything other than this packaging to transport the device.

CAUTION!

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

21. Disposal

Packaging

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

Device

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

22. Technical data

Input:	AC 100 - 230 V ~ 50/60 Hz
WLAN standard:	802.11 b/g/n
Dimensions (W x H x D):	49 x 75 x 71 mm
Weight:	71 g
Total weight (approx.)	86 g
Operating temperature	5°C - 35°C
Humidity during operation:	5 % - 65 %

Subject to technical and optical changes as well as printing errors.

CE 0700

23. Glossary

Access Point (AP), Wireless AP

Also known as a base station, this is an electronic device that functions as an interface for wireless communications devices. End devices make a radio connection to the wireless access point via a wireless adapter. The access point can also be connected by cable to a permanently installed communications network.

Operating system

Software via which the user and the other software installed on the system can communicate with the computer hardware and the hard drive.

BSSID (MAC)

The basic service set identification (BSSID) corresponds to the MAC address of the wireless access point.

Client Mode

Client mode is an operating mode of a wireless access point (here: the WLAN Repeater) in which the device behaves like a wireless adapter towards the higher level AP. Via an AP operated in client mode, individual computers can be connected to a higher level network without their own wireless adapter.

DHCP – Dynamic Host Configuration Protocol

A protocol to assign an IP address to devices in the network. Dynamic addresses give the device a different IP address each time it connects to a network. In some systems, the IP address changes automatically while the device is connected. DHCP also supports a combination of static and dynamic IP addresses. See also Protocol.

DNS – Domain Name Service

A system that a network name server uses to translate text host names into numerical IP addresses to uniquely identify a device connected to the Internet.

Enrollee

The device that searches via the WPS function after logging into a network. The enrollee always searches for a registrar.

Ethernet

A standard method for connecting a computer to a local network (LAN).

ESSID

By providing different network call signs, it is possible to operate various wireless LANs at the same location. The SSID is set at the base station. To connect several

base stations to the same network, they need to be set to the same SSID; this is then known as an ESSID (extended SSID).

Gateway

The standard gateway is provided by the computer/ router in the network in which all queries are made which have no address in the local network (queries in the Internet). It forwards these queries to a computer/ router that may be able to answer these queries. Normally, you enter the IP address of your home router (DSL router) as the standard gateway.

IP Address

A binary 32-bit number that uniquely identifies any computer connected to the internet.

LAN – Local Area Network

A system in which computer users are connected within a company or an organisation and are often also connected to central data collections stored on LAN servers.

MAC Address

The MAC address (media access control address) is the hardware address of every individual network adapter. It serves as a unique identifier for the device in a computer network.

Passphrase Key

The network key that is used for authentication on a WEP/ WPA2 encrypted network.

Registrar

The device that publishes and withdraws WPS permissions within a network. A registrar can be integrated into a wireless access point or be separate from the access point (AP).

Self Pin Code

The PIN code that is provided by the registrar for completing a connection via the WPS function.

SSID

By providing different network call signs, it is possible to operate various wireless LANs at the same location. The SSID is set at the base station. To connect several base stations to the same network, they need to be set to the same SSID; this is then known as an ESSID (extended SSID).

Subnet mask

A subnet is a subordinate part of a network. It collates several consecutive IP addresses by means of a subnet mask.

TCP/IP

Transmission control protocol/Internet protocol. A series of protocols used for communication via connected networks. The standard for data transmission via networks. See also Protocol.

WPS

Wi-Fi Protected Setup (WPS) is a standard used to simply add devices to an existing network without the often laborious setting up of an adequate encryption. Your device supports the following WPS methods:

PIN entry:

The device has a sticker or a display for a PIN that must be provided to the registrar (e.g. the access point) when connecting to a network.

Push Button Configuration (PBC): The access point and the devices to be connected to it all have a physical or virtual (software-based) button to set up a connection. When this is pressed, a two-minute phase starts in which the devices can join the network.

24. Legal notice

Medion AG
Am Zehnthof 77
45307 Essen
Germany

These operating instructions can be re-ordered via the Service Hotline and are available for download on the Service web page www.medionservice.de.
You can also scan the QR code above to download the instructions onto your mobile appliance via the service portal.

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