GRUNDIG

made for you

**ELECTRONIC
INTERNET
KITCHEN RADIO**

Sonoclock 890 WEB

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SONOCLOCK 890 WEB _____

Special features

Your device provides you with access to numerous internet radio stations via a router. You can connect the device to the internet using a LAN cable or WLAN.
For Internet operation a DSL connection and DSL flat rate are recommended.

Music titles archived on a PC or hard drive (NAS – Network Attached Storage) can be played on the device using a UPnP server or enabled folders via LAN or WLAN (audio streaming).

The MP3 and WMA music data formats can also be played back via the USB input using a USB memory stick or an MP3 player. This function is optional, and is enabled through a software update.

Use the Aux input to connect any other audio sources.

As well as internet radio stations, the device can receive DAB and RM radio stations.

Packing contents

1 Sonoclock 890 WEB

2 Remote control

3 1 lithium battery 3 V CR 2025

4 Operating manual

5 Device holder

CE declaration

You can find the CE declaration for Sonoclock 890 WEB in the form of a pdf file on the enclosed CD-ROM.

SET-UP AND SAFETY _____

Please note the following instructions when setting up the system:

This device is designed for the playback of audio signals. Any other use is expressly prohibited.

If you want to set up the device on wall shelves or in cupboards, please ensure that the device is adequately ventilated. There must be at least 10 cm space at the side and at the back of the device.

Do not cover the device with newspapers, table cloths, curtains, etc.

When setting up the device, remember that furniture is often coated with various types of varnish and plastic, which often contain chemical additives These additives may cause corrosion to the feet of the unit. This may leave stains on the surface of the furniture which can be difficult or impossible to remove.

If the device is exposed to sudden changes in temperature, for example when taken from the cold into a warm room, wait at least two hours before using it.

The device is designed for use in dry rooms. If you do use it outdoors, make sure it is protected from moisture such as dripping or splashing water.

Only use the device in a moderate climate.

Do not place the device close to heating units or in direct sunlight, as this will impair cooling.

Do not place any vessels containing liquids (for example, vases) on the device. Do not place any naked flames such as candles on the device.

Do not use any cleaning agents as they may damage the housing. Clean the device with a clean dry cloth.

Never open the appliance under any circumstances. Warranty claims are excluded for damage resulting from improper handling.

SET-UP AND SAFETY _____

Thunderstorms are a danger to all electrical devices. Even if the device is switched off, it can be damaged by a lightning strike to the mains. Always remove the mains adapter during a thunderstorm.

If malfunctions occur due to static electricity charges or brief mains voltage surges, reset the device. To do this, pull out the the power plug and connect it again after a few seconds.

Make sure the power plug is freely accessible.

Environmental Note

This product is manufactured from high-quality parts and materials which can be reused and recycled.

Therefore, do not dispose of the product along with normal household waste at the end of its service life. Take it to a collection point for the recycling of electrical and electronic devices. The symbol on the product, in the operating manual or on the packaging indicates recyclability.

Please find out about collection points operated by your local authority.

Help protect the environment by recycling used products.

OVERVIEW _____

Controls
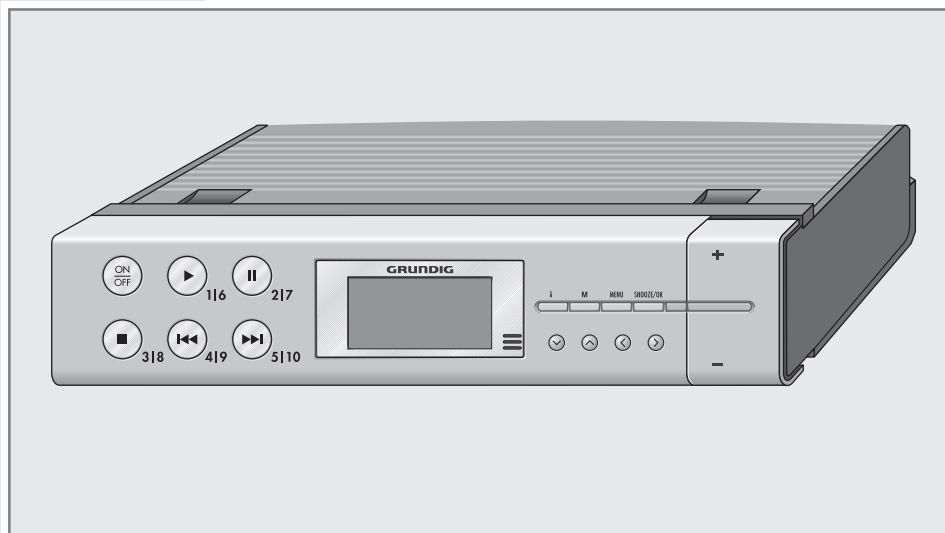
The front of the device

ON/OFF	Switches the device in and out of standby mode.
▶ **1|6**	In radio mode: station button 1/6. In music archive mode: starts playback of a track.
❚❚ **2|7**	In radio mode: station button 2/7. In music archive mode: pauses playback.
■ **3|8**	In radio mode: station button 3/8. In music archive mode: ends playback.
◄◄ **4|9**	In radio mode: station button 4/9. In music archive mode: selects the previous track.
►►❙ **5|10**	In radio mode: station button 5/10. In music archive mode: selects the next track.
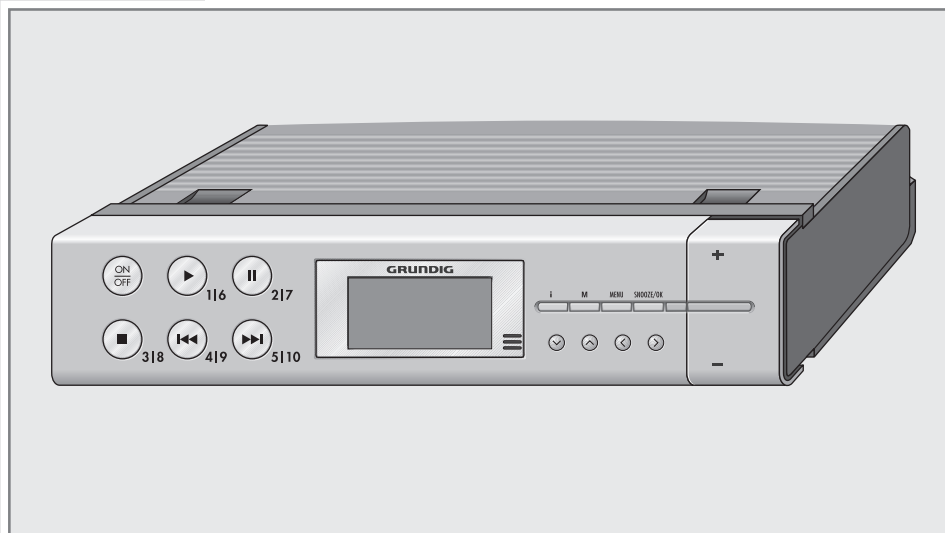
i	Displays information about the Internet, DAB and FM radio stations. Confirms the default settings are restored.
M	Switches between the Internet radio, music archive, DAB, FM and Aux input sources.
MENU	Opens the menu.
SNOOZE/OK	In the menu: selects and confirms options. In alarm mode: interrupts the alarm signal.
+ –	Adjust the volume.
∧	In the menus: moves cursor up. In radio mode: starts the FM search.
∨	In the menus: moves cursor down.
‹	Selects options and menu pages in reverse.
›	Selects options and menu pages forwards. In radio mode: starts the FM search.

OVERVIEW _____
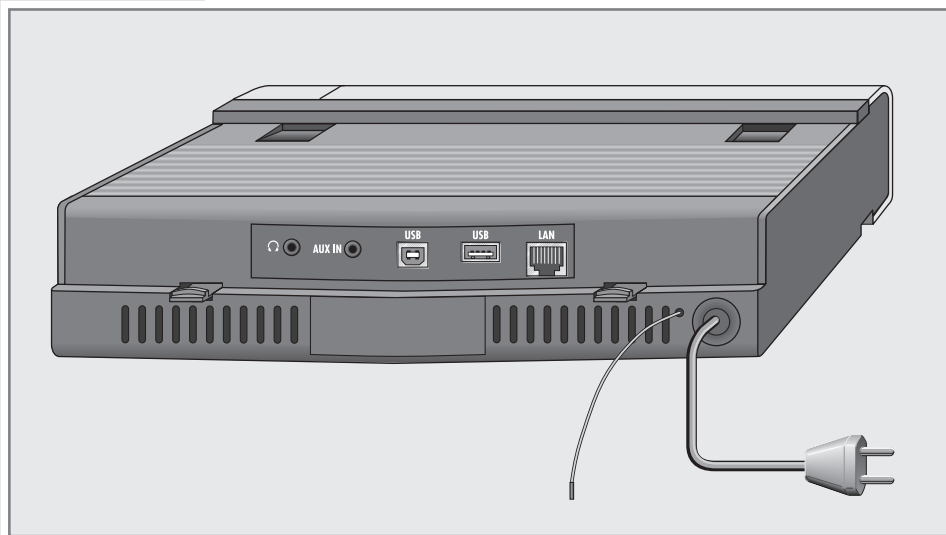
The back of the device

∩	Headphone jack for connecting a stereo headphone set with a jack plug (3.5 mm). The loudspeaker of the device is automatically switched off.
AUX IN	Audio signal input (stereo/mono) for connecting an external device.
USB	USB port type B. Only for software upgrades.
USB	USB port type A. For connecting a USB memory stick or an MP3 player (optional).
LAN	Socket for connecting to the Ethernet network via LAN cable.
~	Wire antenna for DAB and FM reception.
	Power cord. The only way to disconnect the device completely from the mains is to pull out the plug.

OVERVIEW _____

The remote control

⏻	Switches the device to standby mode and from standby mode to the last input source selected.
M	Switches between the Internet radio, music archive, DAB, FM and Aux input sources.
1 ... 0	Number buttons for various inputs. In radio mode: Selects Internet, DAB and FM stations stored on preset channels 1 to 10.
i	Displays information about the Internet, DAB and FM radio stations and about the music archive.
	Confirms the restoring of the default settings.
MENU	Switches between the Internet radio, music archive, DAB, FM and Aux input sources.
∧	In the menus: moves cursor up.
	In radio mode: starts the FM search.
∨	In the menus: moves cursor down.
	In radio mode: starts the FM search.
	Selects options and menu pages in reverse.
	Selects options and menu pages forwards.
OK	In the menus: selects and confirms options. Interrupts the alarm signal.
− ◄ +	Adjusts the volume.
►	In music archive mode: starts playback of a track.
■	In music archive mode: ends playback.

|◀◀	In music archive mode: selects the previous track.
▶▶|	In music archive mode: selects the next track.
II	In music archive mode: pauses playback.
AL1	Activates the setting for alarm time 1.
AL2	Activates the setting for alarm time 2.
S/N	Sets the sleep timer. Press and hold down: activates the reminder timer (NAP) settings.

CONNECTION AND PREPARATION —

Connecting the power cord

Note:
Check that the mains voltage on the type plate (on the back of the device) corresponds to your local mains supply. If this is not the case, contact your specialist dealer.
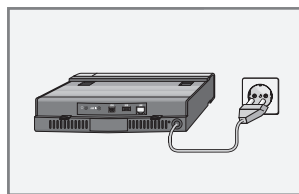
1 Plug the power cord into the wall socket.

Caution:
The device is connected to the mains with the power cord. Pull out the power plug when you want to completely disconnect the device from the mains.

Unplug the mains plug to disconnect the device from the mains. Make sure the power plug is easily accessible during operation and not hindered by other objects.

Connecting an MP3 player or a USB memory stick

Note:
The device is ready for connection to an MP3 player or USB memory stick. The device is only able to play MP3 data formats after a software update. The software update is available on www.grundig.com.

Important:
The device must be switched off while the USB connection is being made. If it is not switched off, data can be lost.
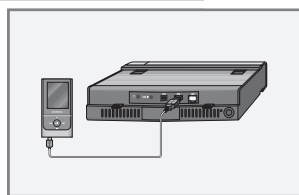
1 Connect the USB interface of the MP3 player to the »**USB**« (type A) socket on the device using a standard USB cable

or

Insert the USB plug of the USB memory stick in the USB socket »**USB**« (type A) on the device.

Connecting an external device

Note:
Switch the device off before you connect external devices.

1 Use standard audio cables to connect the audio outputs of the external device to the »**AUX IN**« socket on the device.
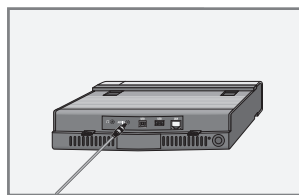
CONNECTION AND PREPARATION_

Connecting the headphones
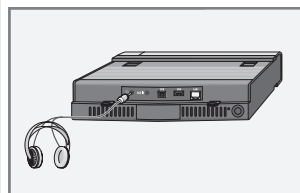
1 Insert the headphone plug (3.5 mm) into the »∩« socket on the device.
– The loudspeaker of the device is switched off.

Important:

Excessive volume levels when using headphones or earphones can damage your hearing.

Note:

You can also use the »∩« socket to connect the device to a hi-fi system.

Inserting batteries in the remote control
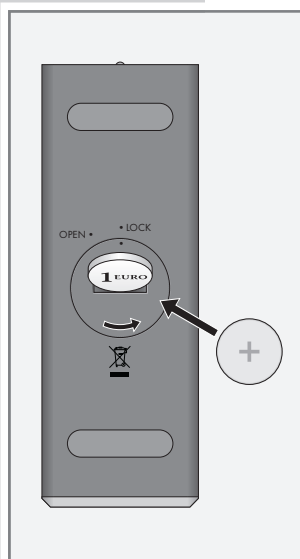
1 Pull off the film from the battery.

2 Take off the battery compartment cover (screw cap).

3 When inserting the battery (3 V, lithium, CR 2025), make sure the positive terminal (+) is facing upwards and the buttons on the remote control are facing downwards.

4 Replace the battery compartment cover (screw cap) and fasten it.

Notes:

Do not expose the battery to extreme heat, caused for example by direct sunlight, heaters or fire.

If the device no longer reacts properly to remote control commands, the battery may be flat. Always remove used batteries. The manufacturer accepts no liability for damage caused by leaking batteries.

Environmental note:

Batteries, including those which contain no heavy metal, should not be disposed of with household waste. Always dispose of used batteries in accordance with local environmental regulations.

LAN connection to the Internet

Telephone socket   Splitter   Modem/router

Sonoclock 890 WEB

Music archive on the computer
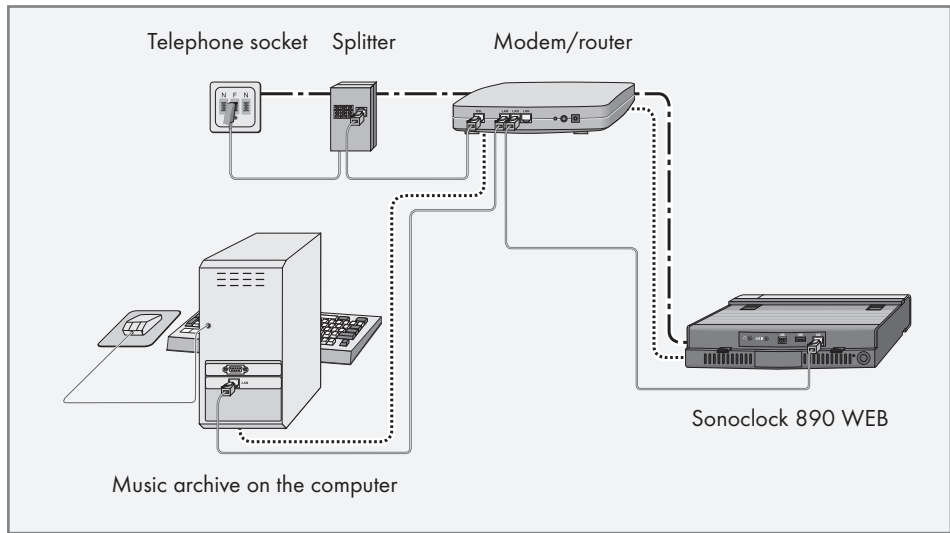
Note:
Switch the device off before you connect it to the internet.

1 Connect the Ethernet socket of the modem/router to the »**LAN**« socket of the device using a standard network cable (Twistedpair, RJ45 plug).
– The data throughput level is 10/100 MBIT.

Note:
The lines represent the function.
———·——·—— Internet radio
.... Music archive (audio streaming)

WLAN connection to the Internet

Note:

The quality of the radio signal depends on the distance between the device and your modem/router.
The substance of the building at the installation site can also affect this.

Telephone socket   Splitter   Modem/router

Laptop

Sonoclock 890 WEB

Music archive on hard drive (AS – Network Attached Storage)

Note:

The lines represent the function.

— · — · —   Internet radio

··········   Music archive (audio streaming)

))))))))))   WLAN

Mounting the device

The loudspeaker is located on the bottom of the device.
To obtain optimal sound, attach the device holder on the bottom of the device before mounting.

1 Push the device holder into the recess on the bottom of the device until it latches into place.
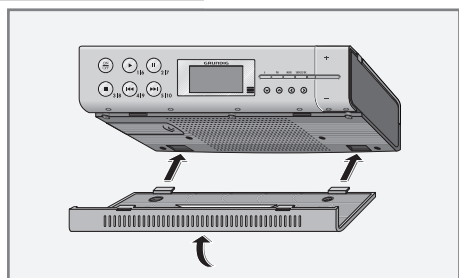
Mounting the device under a kitchen shelf

The fastening screws are attached at the side of the packaging.

1 Mark the position for the four fastening screws.

2 Attach the device holder with the four screws.
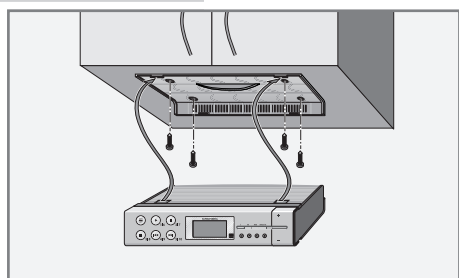
3 Insert the device into the holder.
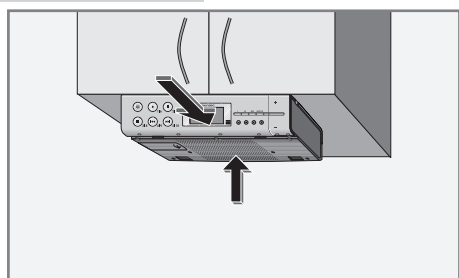
Note:

To remove the device, press the catch on the back and pull out the device.

SETTINGS _____

Menu navigation

When you first switch on the device, the display will show the Grundig logo, followed by the main menu.

›Internet Radio
Music Archive
DAB
FM

In the main menu, you can select the »Internet Radio«, »Music Archive«, »DAB«, »FM«, and »Aux« sources, or the »System setup« and »Info« options. Press »∧« or »∨« to make your selection, and press »>« or »OK« choose an option. Press »<« to return to the previous menu.

The Internet radio, music archive, DAB, FM and Aux sources have own menus which you can open by pressing »MENU«. You can return to the main menu from these menus by selecting the »Main menu« option.

Selecting the menu language

When you first switch on the device, you can choose between various menu languages. The preset setting is »English«.

FM
Aux
›System setup
Info

1 In the main menu, press »∧« or »∨« to select the »System setup« option and press »OK« to confirm.

2 Press »∧« or »∨« to select the »Language« option and press »OK« to confirm.

3 Select your language using »∧« or »∨« and press »OK« to confirm.

Setting the time and date

After connecting the device to the mains, you have to set the time and date. If the device is immediately connected to the network, and the network is set up accordingly, time and date are set automatically.

... automatically

1 Switch the device from standby with »ON/OFF«.

Manual tune
DRC
Station order
›Main menu

2 Press »MENU« to open the menu of the source.

3 Press »∧« or »∨« to select the »Main menu« option and press »OK« to confirm.

4 Press »∧« or »∨« to select the »System setup« option and press »OK« to confirm.

Network setup
› Time setup
Sleep
Alarms

Set date
Set Time Zone
Set DST
› Auto update

› Set clock
Set date
Set Time Zone
Set DST

Set time
11:50

Set date
06.12.2007

Set Time Zone
Set DST
Auto update
› Set 12/24 hour

5 Press »∧« or »∨« to select the »Time setup« option and press »OK« to confirm.

6 Press »∧« or »∨« to select the »Auto update« option and press »OK« to confirm.

7 Press »∧« or »∨« to select the »Update from NET« or »No Update« option and press »OK« to confirm.
– If you select »Update from NET«, time and date are set automatically after a power failure.

... manually

1 In the »System setup« menu, press »∧« or »∨« to select the »Time setup« option and press »OK« to confirm.

2 Press »∧« or »∨« to select the »Set clock« option and press »OK« to confirm.
– Display: the hours flash.

3 Press »∧« or »∨« to set the hours and press »OK« to confirm.
– Display: the minutes flash.

4 Press »∧« or »∨« to set the minutes and press »OK« to confirm.

5 Press »∧« or »∨« to select the »Set date« option and press »OK« to confirm.
– Display: the day of the month flashes.

6 Press »∧« or »∨« to set the day of the month and press »OK« to confirm.
– Display: the month flashes.

7 Press »∧« or »∨« to set the month and press »OK« to confirm.
– Display: the year flashes.

8 Press »∧« or »∨« to set the year and press »OK« to confirm.

9 Press »∧« or »∨« to select the »Set 12/24 hour« option and press »OK« to confirm.

10 Press »∧« or »∨« to select the »Set 12 hour« or »Set 24 hour« option and press »OK« to confirm.

SETTINGS

Setting the time zone

This setting allows you to set a time zone for the location of the network update.

1 In the »Time setup« menu, press »∧« or »∨« to select the »Set Time Zone« option and press »OK« to confirm.

2 Press »∧« or »∨« to select a time zone (in relation to Greenwich Mean Time) between »GMT -12.0« and »GMT 14.0«.

Note:

For setting the summer time in Central Europe, select »Time setting« in the menu, then select the »Set DST« option and set DST to »On« (you do not need to reset the time zone).

| Time Zone |
| GMT + 1.0 |

Registering the device with the WLAN router

Perform the registration process in the proximity of the router in order to avoid problems with the WLAN range.

Call the main menu of the device, go to the »System setup« → »Network setup« menu, select the network connection and start the wizard.

During this registration procedure, the device checks the configuration of the WLAN router (e.g. network encryption) and displays it.

1 Switch on the WLAN router.

Note:

The network name (SSID) must be visible and the MAC address of the device must be enabled in the WLAN router.

To call the MAC address (Unique product ID), press and hold »i«. To switch off the MAC address, press »i« again.

2 Press »**MENU**« to open the main menu.

3 Press »∧« or »∨« to select the »System setup« option and press »OK« to confirm.

›Network setup
Time setup
Sleep
Alarms

4 Press »∧« or »∨« to select the »Network setup« option and press »OK« to confirm.

5 Press »∧« or »∨« to select the »Wizard« option and press »OK« to confirm.
  – Display: »Network wizard Scanning«. The available networks (access points) are displayed.

Network wizard
Scanning

Note:

If the network name (SSID) is suppressed on the WLAN router for security reasons, the network cannot be found. In that case, it has to be entered manually. Go to the main menu → »System setup« → »Network setup« → »SSID« and enter it there (for manual configuration in WLAN mode, see page 50).

Key:

0123456789‹ ↵C

6 Select your network using »∧« or »∨« and press »>« to confirm.
   – If the network is encrypted, you will be requested to enter the web key (security code).

Notes:

Use buttons »∧«, »∨«, »>«, »<« and »OK« to enter the web key. You can choose between numbers, lower and upper case letters, and special characters.

Press »<« or »>« to select the required character. Press »∧« or »∨« to scroll through the menu pages (numbers, letters, special characters, etc.). When the selected character flashes, press »OK« to assign it to the web key.

If you make a mistake during entry, select the »<« character and press »OK« to confirm. The last character is deleted. To leave the menu without completing the key, select the »C« character and press »OK« to confirm.

Once you have entered the complete web key, select the »↵« character and press »OK« to confirm. If you entered an incorrect web key, you will be requested to enter the web key again.

»Please wait Processing« now appears in the display. The connection to the WLAN router and the internet is being built up. If the device cannot connect to the router, »Connection failed« appears in the display. If the connection was successful, »Connected« appears in the display.

SETTINGS_____

Settings for the music archive mode with a computer

If you wish to use the "Shared folders" function, you have to enter the user name and password in the device so that it can access these folders on a computer (or an external hard drive).

This is not necessary for the "Shared media" function. Access to these media is controlled by a UPnP server. For this purpose, your device has to be authorised on the UPnP server.

1 Press »**MENU**« to open the menu of the current source.

2 Press »⋀« or »⋁« to select the »Main menu« option and press »**OK**« to confirm.

3 Press »⋀« or »⋁« to select the »System setup« option and press »**OK**« to confirm.

4 Press »⋀« or »⋁« to select the »Network setup« option and press »**OK**« to confirm.

5 Press »⋀« or »⋁« to select the »PC settings« option and press »**OK**« to confirm.

6 Press »⋀« or »⋁« to select the »User name« option and press »**OK**« to confirm.

Notes:

Use buttons »⋀«, »⋁«, »❯«, »❮« and »**OK**« to enter the user name. You can choose between numbers, lower and upper case letters, and special characters.

Press »❮« or »❯« to select the required character. Press »⋀« or »⋁« to scroll through the menu pages (numbers, letters, special characters, etc.). When the selected character flashes, press »**OK**« to assign it to the user name or password.

If you make a mistake during entry, select the »❮« character and press »**OK**« to confirm. The incorrect character is deleted. To leave the menu without completing the key, select the »C« character and press »**OK**« to confirm.

Once you have entered the complete user name, select the »↵« character and press »**OK**« to confirm.

7 Press »⋀« or »⋁« to select the »Password« option and press »❯« to confirm.

Note:

The password is entered in the same manner as the user name.

›Network setup
Time setup
Sleep
Alarms

Wizard
›PC settings
View settings
Manual settings

›User name
Password

User: guest
0123456789‹ ↵C

SETTINGS _____

Searching for and saving DAB stations

Your device has a DAB (Digital Audio Broadcasting) receiver unit which enables crystal-clear radio reception in CD quality, i.e. without hissing or crackling.

DAB stations are combined into ensembles (multiplexes) at regional and national levels. An ensemble contains several stations broadcast on the same frequency. One individual station can combine other secondary service components such as live broadcasts or foreign language news.

The device can receive DAB stations on Band III (174.928 – 239.200 MHz, 5A – 13F).

If you first switch on the device in DAB mode, the automatic station search starts (Display: »Scanning«). During the search, the first line shows the number of stations found, and the second shows the search scale. After the end of the search, in an alphanumeric arrangement of stations (A ... Z, 0 ... 9) appears. If no stations are found, the DAB menu appears in the display.

Automatic station search

The device has two automatic station search modes.

1 Press »**MENU**« to open the DAB menu.

Station list
›Local scan
Full scan
Manual tune

2 Press »∧« or »∨« to select the »Local scan« option and press »**OK**« to confirm.
  – Display: »Scanning«.
  – The device searches for new stations on the bands reserved for local stations (11B - 12D). New stations are added to the channel list.

or

1 Press »**MENU**« to open the DAB menu.

Station list
Local scan
›Full scan
Manual tune

2 Press »∧« or »∨« to select the »Full scan« option and press »**OK**« to confirm.
  – Display: »Scanning«.
  – The device searches the entire DAB band for new stations. New stations are added to the channel list.

SETTINGS _____

Manual station search

If the automatic station search is not successful, you can search for DAB stations manually.

1 Press »**MENU**« to open the DAB menu.

2 Press »∧« or »∨« to select the »Manual tune« option and press »**OK**« to confirm.
   – Display: »>5A 174.928MHz«.

3 Select your frequency using »∧« or »∨« and press »**OK**« to confirm.
   – Display: e.g. »5D 180.064MHz« and the search scale.
   – New stations are added to the list and can be selected with »∧« or »∨«.

> Station list
> Local scan
> Full scan
> ›Manual tune

Sorting channels

You can sort the station list stored during the station search in three different ways.
– »Alphanumeric«: all stations are sorted alphanumerically (default setting).
– »Ensemble«: all stations are sorted by ensemble.
– »Valid«: active stations are listed first, stations that are not active are shown with a question mark.

1 Press »**MENU**« to open the DAB menu.

2 Press »∧« or »∨« to select the »Station order« option and press »**OK**« to confirm.
   – Display: e.g. »>Alphanumeric«.

3 Select your settings using »∧« or »∨« and press »**OK**« to confirm.

> Full scan
> Manual tune
> DRC
> ›Station order

Saving DAB radio stations on presets

You can use the remote control to fill 10 presets with the DAB radio stations of your choice. If you assign the presets again, the previously saved stations are overwritten. You can also assign presets 1 - 5 on the device.

1 Search for the DAB station as described.

2 To save stations, keep pressing the number button »**1 ... 0**« until »Preset 5 Saved«, for example, appears in the display.

3 To store more stations, repeat steps **1** and **2** as many times as necessary.

> Radio Galaxy
> 160 kbps
> Bayern
> Preset 5 Saved

Setting Dynamic Range Control (DRC) for DAB stations

When you activate Dynamic Range Control (DRC), you can hear quiet sounds better in a loud environment.

| Full Scan |
| Manual tune |
| ›DRC |
| Station order |

1 Press »**MENU**« to open the DAB menu.

2 Press »∧« or »∨« to select the »DRC« option and press »**OK**« to confirm.
   – Display: e.g. »DRC off« (no DRC).

3 Select the value (»DRC high« or »DRC low«) using »∧« or »∨« and press »**OK**« to confirm.

Note:
The DAB station must support DRC.

SETTINGS_____

Searching for and saving FM stations

Setting the search mode

There are two different automatic station search modes.

1 Press »**MENU**« to open the FM menu.

> ›Scan setting
> Audio setting
> Main menu

2 Press »⋀« or »⋁« to select the »Scan setting« option and press »**OK**« to confirm.
– Display: e.g. »All stations«.

> ›Stereo stations only
> All stations

3 Select your setting (»Stereo stations only« or »All stations«) using »⋀« or »⋁« and press »**OK**« to confirm.

Automatic station search

1 Press and hold »⋀« or »⋁«. When you release the button, the automatic search stops at the next station.
– If RDS information is transmitted by the broadcaster, then the device saves the station name. If station and title information is transmitted, it will appear as ticker text after a short time.

Tuning stations manually

1 Move the frequency forward in brief steps by repeatedly pressing »⋀« or »⋁«.
– The frequency goes up or down in 50 kHz steps.

Saving FM radio stations on presets

You can use the remote control to fill 10 presets with the FM radio stations of your choice. If you assign the presets again, the previously saved stations are overwritten. You can also assign presets 1 - 5 on the device.

1 Search for the FM station as described.

> ANTENNA   St
> 100.60 MHz
> [No RadioText]
> Preset 2 Saved

2 To save stations, keep pressing the number button »**1 ... 0**« until »Preset 2 Saved«, for example, appears in the display.

3 To store more stations, repeat steps **1** and **2** as many times as necessary.

SETTINGS _____

Restoring the default settings (reset)

This function enables you to reset all the custom settings back to the default settings (Internet, DAB and FM stations, time, alarm times and network access data are deleted).

You should execute the reset function if the device has been connected to another network or if you move to another reception area.

1 Press »**MENU**« to open the menu of the source.

2 Press »∧« or »∨« to select the »Main menu« option and press »**OK**« to confirm.

3 Press »∧« or »∨« to select the »System setup« option and press »**OK**« to confirm.

4 Press »∧« or »∨« to select the »Factory reset« option and press »**OK**« to confirm.

5 Press »i« to confirm the reset.

Nap
Contrast
Language
›Factory reset

GENERAL FUNCTIONS_____

Switching on and off

1 Switch on the device from standby with »**ON/OFF**«.
– The last input source used is automatically selected.

2 Switch the device to standby with »**ON/OFF**«.
– Display: the current time and date.

Note:

The only way to disconnect the appliance from the mains is to pull out the plug.

Selecting the input source

1 Press »**M**« to select the input source (»Internet Radio«, »Music Archive«, »DAB«, »FM« or »Aux«).

or

1 Press »**MENU**« to open the menu of the current source.

2 Press »⋀« or »⋁« to select the »Main menu« option and press »**OK**« to confirm.

3 Press »⋀« or »⋁« to select an input source (»Internet Radio«, »Music Archive«, »DAB«, »FM« or »Aux«) and press »**OK**« to confirm.

›Internet Radio
Music Archive
DAB
FM

Adjusting the volume

1 Adjust the volume with »– ▭ +«.

Setting the display contrast

1 Press »**MENU**« to open the menu of the source.

2 Press »⋀« or »⋁« to select the »Main menu« option and press »**OK**« to confirm.

3 Press »⋀« or »⋁« to select the »System setup« option and press »**OK**« to confirm.

Sleep
Alarms
Nap
›Contrast

4 Press »⋀« or »⋁« to select the »Contrast« option and press »**OK**« to confirm.

5 Set the value using »⋀« or »⋁« and press »**OK**« to confirm.

GENERAL FUNCTIONS

Listening with headphones or earphones

1 Insert the headphone plug (3.5 mm) into the »⌒« socket on the back of the device.
  – The loudspeaker of the device is switched off.

Important:
Prolonged listening with the head phones or ear phones at loud volumes can damage your hearing.

Displaying information

1 Press »**MENU**« to open the menu of the source.

2 Press »∧« or »∨« to select the »Main menu« option and press »**OK**« to confirm.

3 Press »∧« or »∨« to select the »Info« option and press »**OK**« to confirm.

4 Press »∧« or »∨« to select option »SW version« or »Mac address« and press »**OK**« to confirm.
  – The software version or the MAC address is displayed.

FM
Aux
System setup
›Info

INTERNET OPERATION _____

Selecting the Internet radio input source

1 Press »**M**« to select the »Internet Radio« input source.

or

1 Press »**MENU**« to open the menu of the current source.

2 Press »∧« or »∨« to select the »Main menu« option and press »**OK**« to confirm.

3 Press »∧« or »∨« to select the »Internet Radio« input source and press »**OK**« to confirm.
– Display: »Connection«, the connection to the Internet is being built up.

Note:

Initialisation usually takes up to 1 minute. If the network is very busy, this may take longer.

Navigating in the Internet menu

The structure of the radio stations on the Internet is very dynamic. Stations are usually selected by continent or region, and then by country.

1 Press »**MENU**« to open the Internet menu.

2 Press »∧« or »∨« to select the »Station list« option and press »**OK**« to confirm.

3 Press »∧« or »∨« to select the »Stations« option, for example, and press »**OK**« to confirm.

4 Press »∧« or »∨« to select the »Location« option, for example, and press »**OK**« to confirm.

5 Select your continent using »∧« or »∨« and press »**OK**« to confirm.

6 Select your country using »∧« or »∨« and press »**OK**« to confirm.

7 Select your radio station using »∧« or »∨« and press »**OK**« to confirm.

Notes:

If »Loading« appears in the display, the system is searching for a selection. Operation is not possible while this is displayed.

If »Not available« or »Network error« appears in the display, the radio station or the track are not currently available.

›Internet Radio
Music Archive
DAB
FM

Last listened
›Station list
Main menu

›Location
Genre
Search stations
Popular station

›2 Ten FM
80s And More
Advent Hour
Afro Sound FM

INTERNET OPERATION _____

Selecting Internet radio stations according to search criteria

Searching for Internet radio stations according to genres

Location
›Genre
Search stations
Popular station

1 Press »∧« or »∨« to select the »Stations« option and press »OK« to confirm.

2 Press »∧« or »∨« to select the »Genre« option and press »OK« to confirm.

3 Select your genre using »∧« or »∨« and press »OK« to confirm.
– A country selection is displayed.

All stations
Highlighted stat
›Albania
Anguilla

4 Select your country using »∧« or »∨« and press »OK« to confirm.
– The first radio stations of the selected country are displayed.

5 Select your radio station using »∧« or »∨« and press »OK« to confirm.
– »Loading« appears in the display, and then the station is played.

Searching for Internet radio stations by country

1 Press »∧« or »∨« to select the »Stations« option and press »OK« to confirm.

2 Press »∧« or »∨« to select the »Location« option and press »OK« to confirm.

Africa
Asia
›Caribbean
Central America

3 Select your continent or region using »∧« or »∨« and press »OK« to confirm.

4 Select your country using »∧« or »∨« and press »OK« to confirm.

5 Select the search criteria (station, highlighted or genre) using »∧« or »∨« and press »OK« to confirm.

6 Press »∧« or »∨« to select the station and press »OK« to confirm.
– »Loading« appears in the display, and then the station is played.

Note:

The subdivision can differ depending on country group. For example, for country group North America, you can choose between Canada, Mexico and the United States, afterwards the different states can be selected.

Searching for Internet radio stations by name

1 Press »∧« or »∨« to select the »Station« option and press »OK« to confirm.

Location

Genre

›Search stations

Polpular station

---

2 Press »∧« or »∨« to select the »Search stations« option and press »OK« to confirm.
  – You are prompted to enter the station name.

Notes:

Use buttons »∧«, »∨«, »<«, »>« and »OK« to enter the station name. You can choose between numbers and upper case letters.

Search:

ABCDEFGHIJ↵ C

Press »<« or »>« to select the required character. Press »∧« or »∨« to scroll through the menu pages (numbers, letters). When the selected character flashes, press »OK« to assign it to the station name.

If you make a mistake during entry, use »<« to select the character and press »OK« to confirm. The incorrect character is deleted. To leave the menu without completing your entry, select the »C« character and press »OK« to confirm.

Once you have entered the complete station name, select the »↵« character and press »OK« to confirm.

»Loading« appears in the display, and then the station is played.

In many cases, you only need to enter an abbreviation of the station name (e.g. »FAN« instead of »FANTASY«). You will then see a list of station names containing this abbreviation. You can then select the station from this list.

Selecting the most popular Internet radio stations

You can use this function to select radio stations that are most frequently listened to.

1 Press »∧« or »∨« to select the »Stations« option and press »OK« to confirm.

Location

Genre

Search stations

›Popular stations

---

2 Press »∧« or »∨« to select the »Popular stations« option and press »OK« to confirm.

3 Select your radio station using »∧« or »∨« and press »OK« to confirm.
  – »Loading« appears in the display, and then the station is played.

INTERNET OPERATION _____

Selecting Internet radio stations which the Internet provider has added recently

1 Press »∧« or »∨« to select the »Stations« option and press »OK« to confirm.

2 Press »∧« or »∨« to select the »New stations« option and press »OK« to confirm.

3 Select your radio station using »∧« or »∨« and press »OK« to confirm.
– »Loading« appears in the display, and then the station is played.

Genre

Search stations

Popular station

›New stations

Saving Internet radio stations to presets

You can use the remote control to fill 10 presets with the Internet radio stations of your choice. If you assign the presets again, the previously saved stations are overwritten. You can also assign presets 1 - 5 on the device.

1 Search for the Internet station as described.

2 To save stations, keep pressing the number button »1 ... 0« until »Preset 10 Saved«, for example, appears in the display.

3 To store more stations, repeat steps **1** and **2** as many times as necessary.

Bush Radio

16Kbps / WMA

Not Specified

Preset 10 Saved

Opening preset Internet stations

1 Open the Internet radio station by pressing one of the preset buttons »1|6 ... 5|10« on the device (press once for presets 1 - 5, press twice for presets 6 – 10) or one of the number buttons »1 ... 0« on the remote control.

INTERNET OPERATION _____

Selecting Internet radio stations for the favourites list

You can find out how to create a list of favourite Internet radio stations in the chapter on special functions on pages 45 to 47.

›My favourites
Stations
Podcasts
My added streams

1 Press »∧« or »∨« to select the »Station list« option and press »OK« to confirm.

2 Press »∧« or »∨« to select the »My favourites« option and press »OK« to confirm.

3 Select your radio station using »∧« or »∨« and press »OK« to confirm.
   – »Loading« appears in the display, and then the station is played.

Selecting manually added Internet radio stations

You can find out how you add these radio stations in the chapter on special functions on page 48.

My favourites
Stations
Podcasts
›My added streams

1 Press »∧« or »∨« to select the »Station list« option and press »OK« to confirm.

2 Press »∧« or »∨« to select the »My added streams« option and press »OK« to confirm.

3 Select your radio station using »∧« or »∨« and press »OK« to confirm.
   – »Loading« appears in the display, and then the station is played.

Opening the most recently selected Internet stations

The device saves the 10 most recently selected radio stations in a folder which you can open at the same time as the channel list.

›Last listened
Station list
Main menu

1 Press »MENU« to open the Internet menu.

2 Press »∧« or »∨« to select the »Last listened« option and press »OK« to confirm.

3 Select your radio station using »∧« or »∨« and press »OK« to confirm.
   – »Loading« appears in the display, and then the station is played.

Selecting podcasts

Podcasts are radio programmes that are available irrespective of broadcasting times. You could think of podcasts as audio files. They sometimes consist of a series of episodes that can be downloaded automatically through a feed.

1 Press »**MENU**« to open the Internet menu.

2 Press »∧« or »∨« to select the »Station list« option and press »**OK**« to confirm.

3 Press »∧« or »∨« to select the »Podcasts« option and press »**OK**« to confirm.

Notes:

You can only search for podcasts by country (the »Location« option), by genre (the »Genre« option) or by name (the »Search podcasts« option).

My favourites
Stations
›Podcasts
My added streams

Location
Genre
›Search podcasts

Displaying Internet station information

1 To display information on the current Internet station, press »i« repeatedly.
– The following displays remain on:
Station name.
Bit rate and format, e.g. »128Kbps / MP3«.
Station information as ticker text (if available).

– The following displays appear in sequence:
The current time.
The date.
A bar showing the strength of the signal.
The reliability, e.g. »Excellent«.
The location of the station, e.g. »Cape Town South«.
The genre.

Bush Radio
16Kbps / WMA
Not Specified
Cape Town South

MUSIC ARCHIVE _____

Audio streaming ...

This function enables you to play back tracks from a music archive
in MP3 and WMA format on the device.
The music archive can be stored on a computer or an external hard
drive.

... using the "Shared folders" function

If you wish to use the "Shared folders" function, you have to enter the
user name and password in the device so that it can access these
folders on a computer (or an external hard drive).

Music titles are selected only by file names.

... using the "Shared media" function

This function allows you to select by artist and track, but also by
album, genre, etc.; this selection depends on the structure of the
music archive and on the UPnP server software in use (e.g. Nero
Media Home, Windows Media Player 11). Access times can
lengthen depending on the size of the music archive, and this make
usage inconvenient. While the UPnP server is importing the complete
music archive, the device can only be operated in a limited fashion,
if at all.

You can select a track by the ID3 tag information (track, artists,
album, genre etc.). This information is displayed during playback.
It is recommended that you maintain this ID3 tag information.

Your device has to be authorised with the UPnP server of the com-
puter or hard drive. The UPnP server must be approved in any fire-
walls that may be installed. Several UPnP servers can be used in
parallel.

Selecting the music archive input source

1 Press »M« to select the »Music Archive« input source.

or

1 Press »MENU« to open the menu of the current source.

2 Press »∧« or »∨« to select the »Main menu« option and press
»OK« to confirm.

| Internet Radio |
| › Music Archive |
| DAB |
| FM |

3 Press »∧« or »∨« to select the »Music Archive« input source and
press »OK« to confirm.
– The display changes to the music archive menu.

Navigating the music archive menu

1 In the music archive menu, press »∧« or »∨« to select the »Browse« option and press »OK« to confirm.

Note:

You can only select the »Browse« option by pressing the »<« button in the music archive mode.

›Shared media
Shared folders

2 Press »∧« or »∨« to select the »Shared media« (UPnP server) or »Shared folders« (shared folders in Windows) option and press »OK« to confirm.

– The display shows the list of servers, media and media titles or the list of approved networks, clients, paths and folders.

Note:

The »Shared folders« option is only possible if the folders on the computer have been authorised for sharing. You may have to enter a user name and password for this purpose.

3 Press »∧« or »∨« to select the required option and press »OK« to confirm.

– The selection list appears in the display.

4 Press »∧« or »∨« to select the required track and press »OK« to confirm.

– Playback of the track starts.

Playback functions

1 Press »II« to pause playback.

2 Press »▶« to resume normal playback.

3 Select the previous or next track by pressing »I◀◀« or »▶▶I«.

4 Press »■« to end playback.

DAB OPERATION_____

Selecting the DAB input source

1 Press »**M**« to select the »DAB« input source.

or

1 Press »**MENU**« to open the menu of the current source.

2 Press »**∧**« or »**∨**« to select the »Main menu« option and press »**OK**« to confirm.

3 Press »**∧**« or »**∨**« to select the »DAB« input source and press »**OK**« to confirm.
  – The display changes to the most recently selected DAB station.

Internet Radio
Music Archive
›DAB
FM

Selecting DAB radio stations

After the end of the search, the DAB stations are alphanumerically arranged (A .. Z, 0 ... 9) in a station list.

1 Press »**MENU**« to open the DAB menu.

2 Press »**∧**« or »**∨**« to select the »Station list« option and press »**OK**« to confirm.

3 Select a station using »**∧**« or »**∨**« and press »**OK**« to confirm.
  – Display: »Playing«.
  – The selected station is played.

›Station list
Local scan
Full scan
Manual tune

Selecting stored DAB stations

1 Open the DAB radio station by pressing one of the preset buttons »**1|6 ... 5|10**« on the device (press once for presets 1 - 5, press twice for presets 6 - 10) or one of the number buttons »**1 ... 0**« on the remote control.

DAB OPERATION_____

Displaying DAB station information

1 To display information on the current DAB station, press »i« repeatedly.

  – The following displays remain on:
    Station name.
    The bit rate e.g. »128 kbps«.
    The name of the current station's DAB ensemble (multiplex).

  – The following displays appear in sequence:
    The current time.
    The date.
    Radio text as ticker text.
    A bar showing the strength of the signal.
    The frequency, e.g. »229.072 MHz«.
    The station type.
    Reference to signal interference, e.g. »Signal error 10«
    (at optimum signal »Signal error 0«).

Radio Galaxy
160 kbps
Bayern
Freq: 229.072MHz

FM MODE _____

Selecting the FM input source

1 Press »**M**« to select the »FM« input source.

or

1 Press »**MENU**« to open the menu of the current source.

2 Press »**∧**« or »**∨**« to select the »Main menu« option and press »**OK**« to confirm.

3 Press »**∧**« or »**∨**« to select the »FM« input source and press »**OK**« to confirm.
– The display changes to the most recently selected FM station.

Internet Radio
Music Archive
DAB
›FM

Selecting stored FM stations

1 Open the FM radio station by pressing one of the preset buttons »**1|6 ... 5|10**« on the device (press once for presets 1 - 5, press twice for presets 6 - 10) or one of the number buttons »**1 ... 0**« on the remote control.

Stereo and mono reception

The device has an auto mode, which switches automatically between stereo and mono depending on the strength of the reception signal.

1 Press »**MENU**« to open the FM menu.

2 Press »**∧**« or »**∨**« to select the »Audio setting« option and press »**OK**« to confirm.

›Stereo or mono
Mono only

3 Press »**∧**« or »**∨**« to select the »Stereo or mono« option and press »**OK**« to confirm.
– The auto mode is activated.

or

press »**∧**« or »**∨**« to select »Mono only« and press »**OK**« to confirm.
– The device is switched to mono reception; unwanted noise interference is suppressed.

Displaying RDS station information

If the DVD receiver receives an RDS station, the station name appears in the display (»[No name]« appears in the display if no information is available).

The station and track information appears as ticker text (radio text) (»[No RadioText]« appears in the display if no radio text is available). In addition, various RDS information can then be displayed, if available.

1 To display information on the current RDS station, press »i« repeatedly.
   – The following displays remain on:
     Station name.
     The frequency, e.g. »100.60 MHz«.
     The radio text (if available).

   – The following displays appear in sequence:
     The current time.
     The date.
     The current programme type (PTY), e.g. »Pop Music«. »[No PTY]« appears if no information is available.

```
ANTENNA       St
100.60 MHz
[No RadioText]
Pop Music
```
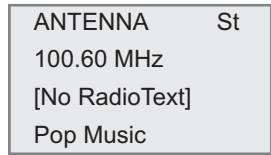
TIMER MODE_____

Your device has three timer modes:
– The switch-on timer, which switches the device on at two set times and wakes you with an alarm or music.
– The sleep-timer, which switches the device off at a time you set.
– The reminder timer (NAP), reminding you by sounding the signal tone at a preset time.

Switch-on timer

Setting the switch-on timer

The time on the device must be correct.
During the setting, if no button is pushed for more than 10 seconds, the device ends the procedure automatically without saving the changes.

1 Press »**MENU**« to open the menu of the source.

2 Press »∧« or »∨« to select the »Main menu« option and press »**OK**« to confirm.

3 Press »∧« or »∨« to select the »System setup« option and press »**OK**« to confirm.

4 Press »∧« or »∨« to select the »Alarms« option and press »**OK**« to confirm.

5 Press »∧« or »∨« to select the »Alarm1« option and press »**OK**« to confirm.

6 Press »∧« or »∨« to select the »Time« option and press »**OK**« to confirm.
 – The hours flash.

7 Press »∧« or »∨« to set the hours in steps or quickly (by pressing and holding the button) and press »**OK**« to confirm.
 – Display: the minutes flash.

8 Press »∧« or »∨« to set the minutes in steps or quickly (by pressing and holding the button) and press »**OK**« to confirm.

9 Press »∧« or »∨« to select the »Off« option and press »**OK**« to switch it to »On«.
 – The alarm function is activated.

10 Press »∧« or »∨« to select the »Mode« option and press »**OK**« to select an alarm signal (»Buzzer«, »Internet Radio«, »DAB« or »FM«).

or

Press »∧« or »∨« to select the »Last listened« option and press »**OK**« to confirm. Select a station using »∧« or »∨« and press »**OK**« to confirm.

Network setup
Time setup
Sleep
›Alarms

Set alarm time
00:00

Time: 06:30
›Off
Mode: Internet
Last listened

Time: 06:30
Off
Mode: Internet
›Last listened

```
On
Mode: Internet
Last listened
›Volume
```

```
14:57:56        ♠
06/12/2007
```

11 Press »∧« or »∨« to select the »Volume« option and press »OK« to confirm.

12 Use »∧« or »∨« to set the alarm volume and press »OK« to confirm.

13 Press »∧« or »∨« to select the »Save« option and press »OK« to save the alarm settings.
  – Display: briefly »Alarm Saved«.

14 Switch the device to standby with »ON/OFF«.
  – Display: time, date and »♠«.
  – The device wakes you up at the set time with the selected alarm tone.

15 To set the second alarm time (»Alarm2«), repeat steps **5** to **13**.

Note:

You can also use buttons »AL1« and »AL2« on the remote control to open alarm times 1 and 2 directly.

Interrupting the alarm

1 When the alarm goes off, press »SNOOZE« on the device or »OK« on the remote control.
  – The alarm signal (signal tone, Internet radio station, DAB station or FM station) stops.
  – The alarm goes off again at five-minute intervals. The full duration of the alarm is 90 minutes.

Cancelling the alarm for the day

1 Switch the device to standby with »ON/OFF« when the alarm goes off.
  – The alarm remains activated for the next day.

Activating and deactivating the alarm

1 Press »MENU« to open the menu of the source.

2 Press »∧« or »∨« to select the »Main menu« option and press »OK« to confirm.

3 Press »∧« or »∨« to select the »System setup« option and press »OK« to confirm.

4 Press »∧« or »∨« to select the »Alarms« option and press »OK« to confirm.

```
›Alarm1: 06:30
Alarm2: Off
```

5 Press »∧« or »∨« to select the »Alarm1« or »Alarm2« option and press »OK« to confirm.

6 Press »∧« or »∨« to select the »On« option and press »**OK**« to switch it to »Off«.
  – The alarm function is deactivated.

or

Press »∧« or »∨« to select the »Off« option and press »**OK**« to switch it to »On«.
  – The alarm function is activated.

7 Press »∧« or »∨« to select the »Save« option and press »**OK**« to save the settings.

Note:

You can also use buttons »**AL1**« and »**AL2**« on the remote control to open this function directly.

```
Time: 06:30
›Off
Mode: Internet
Last listened
```

Sleep timer

Setting the sleep timer

1 Switch the device from standby with »**ON/OFF**« and select an input source.

2 In the main menu, press »∧« or »∨« to select the »System setup« option and press »**OK**« to confirm.

```
Network setup
Time setup
›Sleep
Alarms
```

3 Press »∧« or »∨« to select the »Sleep« option and press »**OK**« to confirm.

4 Set the desired switch-off time in steps of 15 minutes (from »Sleep time off« to 15 to 60 minutes) with »∧« or »∨«.
  – Display: »🛏«.
  – The device switches off after the selected time.

```
Set sleep time
45 minutes
```

Ending the sleep timer prematurely

1 To deactivate the sleep timer prematurely, press »**ON/OFF**« and switch the device to standby mode.

or

Go to the »Sleep« menu and use »∧« or »∨« to select »Sleep time off«.
  – Display: »🛏« disappears.

```
Set sleep time
Sleep time off
```

Note:

You can also use the »**S/N**« button on the remote control (press repeatedly) to set and switch off the sleep timer.

Reminder timer

Time setup
Sleep
Alarms
›Nap

Setting the reminder timer

1 In the main menu, press »∧« or »∨« to select the »System-einstellung« option and press »OK« to confirm.

2 Press »∧« or »∨« to select the »Nap« option and press »OK« to confirm.

Set nap time
45 minutes

3 Select a reminder time (settings: »No Nap« or 1 to 300 minutes in minute increments) using »∧« or »∨« and press »OK« to confirm.
 – Display: »Nap«.
 – The device emits a reminder signal tone at the set time.

Note:

You can also use the »S/N« button on the remote control (press and hold) to open the reminder timer menu.

Ending the reminder timer prematurely

Set nap time
No Nap

1 Go to the »Set nap time« menu and use »∧« or »∨« to set the re-minder time to »No Nap«.
 – Display: »Nap« disappears.

SPECIAL SETTINGS _____

Registering on the GRUNDIG homepage

You need to perform a one-time registration of your device on the GRUNDIG page "GRUNDIG INTERNET RADIO TUNING SERVICE" stating the MAC address of your device. You can search for stations on this web page and listen to them.

If you wish to create a favourites list for your favourite radio stations, then you also need to register your e-mail address and the password of your choice. This takes you to the members' area.

1 Start the internet browser on your PC.

2 Enter the address "www.grundig.radiosetup.com".
– The "GRUNDIG INTERNET RADIO TUNING SERVICE" page appears.

3 Enter the twelve-digit MAC address of your device and click the » ▶ « button.
To call the MAC address (Unique product ID), press and hold »ℹ«. To switch off the MAC address, press »ℹ« again.
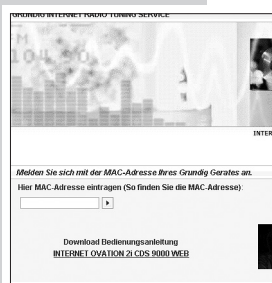
Creating lists of favourites

You can copy radio stations, which the V-Tuner Internet service makes available for GRUNDIG customers, into a favourites list. This gives you swift access to your favourite radio stations.
You can only conduct this process on a PC.
The current list is loaded when the device is switched on.

Preparation

1 Start the internet browser on your PC.

2 Enter the address "www.grundig.radiosetup.com".
– The "GRUNDIG INTERNET RADIO TUNING SERVICE" page appears.

3 Enter your e-mail address and password and click the » ▶ « button.
If several devices are registered, click on the desired MAC address.

Note:

Radio stations can only be played back in MP3, WMA or Real Audio format.

You have several options for searching for radio stations for a favourites group:
In the "Search" search field you can search for radio stations by name or you can select radio stations using search criteria such as "Music, "Location" and "Language".

SPECIAL SETTINGS _____

Selecting radio stations with the search function

1 In the "Search" field, enter the name of the desired provider (station name and radio programme) and then click the » ▶ « button.

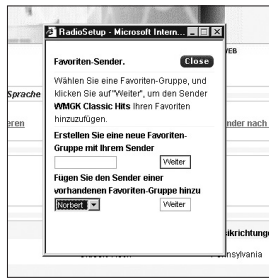– If the radio station is available, it is displayed.

Notes:

You can start listening to the radio station by pressing the »▶« button. Prerequisite for this is that you have suitable software installed (e.g. Nero MediaHome, Windows Media Player).

2 Highlight the radio station with the »♥ +« button.

– The "Favourite Stations" menu is displayed.

Note:

You can now create a new favourites group or add the selected radio station to an existing favourites group.

3 Enter the name of a new favourites group in the entry field and confirm with the » ▶ « button

or

Open the name field, select the desired favourites group and confirm with the » ▶ « button.

– The radio station is stored in the favourites group.

4 Close the "Favourite Stations" menu.

5 Repeat the procedure for additional stations.

Note:

To check the radio stations, select the start page and click on the favourites group. You will see the new radio stations.

6 Exit the "GRUNDIG INTERNET RADIO TUNING SERVICE" Internet page with the »**Logout**« button.

Note:

Radio stations that are no longer required can be deleted from the favourites group. To do this. select the radio station and then click on the »♥ - button«.

SPECIAL SETTINGS _____

Selecting a radio station from the genres on offer

1 Select the desired genre in the "Music" genre.
– A list of the radio stations of the selected style is displayed.

Note:

Instead of the search criterion "Music", you could also click "Location" or "Language" and search for radio stations. Several search criteria can be combined..

2 Select the desired radio station from the list and highlight it with the »❤ +« button.
– The " Favourite Stations" menu is displayed.

Note:

You can now create a new favourites group or add the selected radio station to an existing favourites group.

3 Enter the name of a new favourites group in the entry field and confirm with the » ▶ « button

or

Open the name field, select the desired favourites group and confirm with the » ▶ « button.
– The radio station is stored in the favourites group.

4 Close the "Favourite Stations" menu.

5 Repeat the procedure for additional stations.

Note:
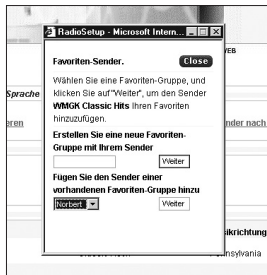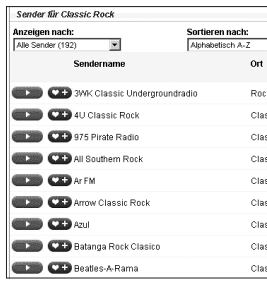
To check the radio stations, select the start page and click on the favourites group. You will see the new radio stations.

6 Exit the "GRUNDIG INTERNET RADIO TUNING SERVICE" Internet page with the »**Logout**« button.

Note:

Radio stations that are no longer required can be deleted from the favourites group. To do this, select the radio station and then click on the »❤ - button«.

SPECIAL SETTINGS _____

Searching for radio stations that are not provided by V-Tuner

You can also add radio stations to your favourites list that are not provided by the V-Tuner Internet service.

You can find information on this on the Internet. In Windows Media Player you can call the parameters of these (for example, the URL) in the "Properties" submenu.

You can only conduct this process on a computer.

You cannot play back every radio station on your device that you can listen to on your computer. These radio stations require a special media player that can only be installed on a PC.

1 Start the internet browser on your PC.

2 Enter the address "www.grundig.radiosetup.com".
– The "GRUNDIG INTERNET RADIO TUNING SERVICE" page appears.

3 Enter your e-mail address and password and confirm.

4 Click the "My added radio stations" line

or

If radio stations are already available, click the » ▶ « button after the line "Add another radio station".
– The "My added radio stations" menu is displayed.

5 Enter the station name, URL of the radio station, location and music genre and confirm with the » ▶ « button.
– The new radio station is displayed in the overview under "My added radio stations".

Note:

If details of the radio station need to be changed, click »**Edit**« and make the changes in the "My added radio stations" menu.

Note:

To open these radio stations on the device, go to the internet menu and press ➞ »Station list« ➞ »My added streams«.
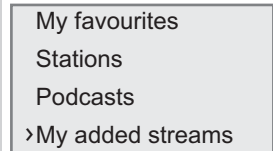
SPECIAL SETTINGS _____

Calling information

You can call up information on your device and the network in use. Settings cannot be made in this menu.

1 Press »**MENU**« to open the menu of the current source.

2 Press »∧« or »∨« to select the »Main menu« option and press »**OK**« to confirm.

3 Press »∧« or »∨« to select the »System setup« option and press »**OK**« to confirm.

4 Press »∧« or »∨« to select the »Network setup« option and press »**OK**« to confirm.

5 Press »∧« or »∨« to select the »View settings« option and press »**OK**« to confirm.

6 Select information using »∧« or »∨« and press »**OK**« to confirm.
   – The following information is available:
   »Active adapter«: e.g. WLAN is activated.
   »MAC address«: e.g. 00:13:EO:55:89:56.
   »DHCP«: e.g. DHCP active.
   »PC settings«: options »User name« and »Password«, e.g. »guest« and »[Not set]«.
   »SSID«: The network name, e.g. »Netgear«.
   »IP settings«: options »IP address« (e.g. 192.168.2.103), »Subnet Mask« (e.g. 255.255. 255.0), »Gateway address« (e.g. 192.168.2.1), »Primary DNS« (e.g. 192.168.2.1) and »Secondary DNS« (e.g. 0.0.0.0).

›Network setup
Time setup
Sleep
Alarms

Wizard
PC settings
›View settings
Manual settings

›Active adapter
MAC address
DHCP
PC settings

Registering the device with the WLAN router with individual settings in the network

These settings require advanced knowledge of the configuration of networks.

1 Press »**MENU**« to open the menu of the current source.

2 Press »∧« or »∨« to select the »Main menu« option and press »**OK**« to confirm.

3 Press »∧« or »∨« to select the »System setup« option and press »**OK**« to confirm.

4 Press »∧« or »∨« to select the »Network setup« option and press »**OK**« to confirm.

5 Press »∧« or »∨« to select the »Manual settings« option and press »**OK**« to confirm.

6 Press »∧« or »∨« to select option »Wireless« or »Wired« and press »**OK**« to confirm.

7 Press »∧« or »∨« to select the »DHCP disable« option and press »**OK**« to confirm.
– You are prompted to enter the IP address(es).

Note:

Setting »DHCP disable« means you have to enter all addresses manually. If »DHCP enable« is set, the addresses are automatically assigned by the router. If you have selected »DHCP enable«, continue with step **12**.

8 Use »∧« or »∨« to enter the IP address and press »**OK**« to confirm.
– You are prompted to enter the subnet mask.

Notes:

Use »>« to move to the next position.
The settings in steps **9** to **11** can be found in the router configuration.

9 Use »∧« or »∨« to enter the subnet mask and press »**OK**« to confirm.
– You are prompted to enter the gateway address.

Note:

The device uses the gateway address to access the network.

10 Use »∧« or »∨« to enter the gateway address and press »**OK**« to confirm.
– You are prompted to enter the primary DNS.

Note:

The primary and secondary DNS (Domain Name System) are the network address of the server made available by the provider.

›Network setup
Time setup
Sleep
Alarms

Wizard
PC settings
View settings
›Manual settings

DHCP enable
›DHCP disable

Ethernet
IP address
193.169.99.220

Ethernet
Subnet mask
255.255.255.0

Ethernet
Gateway address
193.168.99.1

Ethernet
Primary DNS
255.253.251.250

11 Use »∧« or »∨« to enter the primary and then the secondary DNS, and press »OK« to confirm.
– You are prompted to enter the SSID.

Note:

The SSID (Service Set Identifier) is the code of the WLAN network, and is used to identify this wireless network.

SSID: grinternet
0123456789‹ ↵ C

12 Enter the SSID.

Notes:

Use buttons »∧«, »∨«, »>«, »<« and »OK« to enter the SSID. You can choose between numbers, lower and upper case letters, and special characters.

Press »<« or »>« to select the required character.

Press »∧« or »∨« to scroll through the menu pages (numbers, letters, special characters, etc.). When the selected character flashes, press »OK« to assign it to the SSID.

If you make a mistake during entry, select the »<« character and press »OK« to confirm. The last character is deleted.

To leave the menu without completing your entry, select the »C« character and press »OK« to confirm.

Once you have entered the complete SSID, select the »↵« character and press »OK« to confirm. If you entered an incorrect SSID, you will be requested to enter the web key again.

»Please wait Processing« now appears in the display. The connection to the WLAN router and the internet is being built up. If the device cannot connect to the router, »Connection failed« appears in the display. If the connection was successful, »Connected« appears in the display.

Open
WEP
WPA
›WPA2

You can now select different encryption types:
»WEP« (»WEP« offers a choice between »Open« and »PSK«).
»WPA« (»WPA« offers a choice between »TKIP« and »AES«).
»WPA2«: the highest security level (»WPA2« also offers options »TKIP« »AES«).

Note:

The encryption settings of the device must match those of the router.

Open
WEP
WPA
›WPA2

Key: [Set]
0123456789‹ ↵ C

13 Use »∧« or »∨« to enter the encryption level and press »**OK**« to confirm.
– You are prompted to enter the key.

14 You enter the key in the same way as the SSID (see page 51).

Notes:

»Please wait Processing« now appears in the display. The connection to the WLAN router and the internet is being built up.

If the device cannot connect to the router, »Connection failed« appears in the display.

If the connection was successful, »Connected« appears in the display.

INFORMATION _____

CE

Technical data

This device is noise-suppressed according to the applicable EU directives. This product fulfils the European directives 2006/95/EC, 2004/108/EC and 1999/5/EC.

This device conforms to the safety regulation DIN EN 60065 (VDE 0860) and therefore the international safety regulation IEC 60065.

Never open the device casing. No warranty claims are accepted for damage caused by improper handling.

This device may be used in the following countries:

Belgium	Latvia	Portugal	Spain
Denmark	Liechtenstein	Romania	Czech Republic
Germany	Lithuania	Russia	Hungary
Estonia	Luxemburg	Sweden	
Finland	The Netherlands	Switzerland	
France	Norway	Slovenia	
Italy	Austria		
Croatia	Poland		

Further information can be found under the following Internet addresses:

http://ec.europa.eu/enterprise/rtte/weblinks.htm

System

Power supply:
Operating voltage: 230 V~
Mains frequency: 50/60 Hz
Max. power consumption: 14 W
Power consumption in standby: ≤ 5 W

Amplifier unit

Output:
Sine wave power: 1 x 2 W
Audio power: 1 x 2.5 W

Receiver unit

Reception range:
DAB band III
(174.928 - 239.200 MHz, 5A - 13F)
FM 87.5 ...108.0 MHz

WLAN

Network standard:
IEEE 802.11b (Wi-Fi)
IEEE 802.11g (54G)

Transfer rate:
802.11b: 11, 5.5, 2, 1 Mbps
802.11g: 54, 48, 36, 24, 18, 12, 9, 6 Mbps

Operating channels:
13 (ETSI)

Safety:
Hardware-WEP-Engine (64/128-Bit);
WEP-Weak-Key-Avoidance (WEPplus), TKIP,
Hardware-AES-Engine with support for CCM
and OCB, 802.1x, SSN

USB (optional)

USB 2.0 compatible
for format FAT 32

Dimensions and weight

Device dimensions:
W x H x D 270 x 60 x 150 mm
Device weight: 1.574 kg

INFORMATION _____

Troubleshooting

Not every kind of sound interference is caused by a defect in your device. Cables that have accidentally been disconnected and flat batteries for the remote control will impair functioning. If the following measures do not resolve the problem satisfactorily, please visit www.grundig.com or contact your specialist dealer.

General faults

Problem	Possible cause/remedy
No sound.	The volume setting is too low – increase the volume. The headphones are plugged in – disconnect the headphones. Power cable is not properly connected, connect the power cable properly.
The device does not respond to button commands.	Static electrical discharge. Switch off the device – disconnect the power cable and plug it in again after a few seconds.
The remote control does not work.	The batteries are flat – replace the batteries. The remote control is out of range of the device.
Poor radio reception.	Weak antenna signal, check antenna. Weak FM stereo signal, switch to mono. Interference from electrical devices such as televisions, video recorders, computers, neon lamps, thermostats or motors. Keep the hi-fi away from such equipment.

Internet faults

Problem	Possible cause/remedy
Desired WLAN network not found.	– WLAN network is deactivated, switch on the WLAN network. – SSID is suppressed on the router; display SSID on the router. – Distance to router is too large; reduce distance to router.
Connection to router not established.	– MAC address of the device is not enabled on the router; enable MAC address (see menu item »Info«) on the router. – Data transfer from the router is encrypted; Enter the network key (WEP or WPA) on the device. If this does not help, check the entire router configuration.
Music playback is briefly interrupted.	High network usage on the radio station server.

INFORMATION _____

Messages from the device

Message	Possible cause/remedy
Connection failed	– WLAN network is deactivated; switch on the WLAN network. – Range problem: move the device closer to the router or install an external repeater. – Other networks are transmitting on the same channel; change channel settings on the router, then repeat the registration procedure.
Please wait	– Indicates a search in the network for the selected radio station. When this is displayed, navigation in the menu is not possible.
Network error	– The selected radio station is currently not available. The broadcaster has ceased operation or only broadcasts at certain times or the maximum permitted number of users has been reached. – The selected file is currently not available. The file has been deleted, moved ore renamed on the storage medium.

Streaming problems

Problem	Possible cause/remedy
No UPnP server is displayed in the »Shared media« menu.	– Switch on the PC or external hard drive (NAS). – Start UPnP server.
The music archive (UPnP server) is displayed, however no connection is made.	– Check the setting of the firewall (if installed) for the UPnP server and correct if necessary. – Enable the device on the UPnP server in use.
The music archive is empty.	– Enable the folder on the UPnP server.
Display: »List not complete«	The list of the music archive (UPnP server) is not completely sorted. Please wait until the UPnP server software in use has completely sorted the music archive.

INFORMATION _____

Licence conditions

This product is protected by the intellectual property rights of the Microsoft Corporation. The use or distribution of such technology outside of this product is prohibited unless under licence from Microsoft or an authorised subsidiary.

Content providers use the digital rights management technology for Windows Media contained in this device ("WM-DRM") to protect the integrity of their content ("Secure Content") so that their intellectual property, including copyright, in such content is not misappropriated. This device uses WM-DRM software to play Secure Content ("WM-DRM Software"). If the security of the WM-DRM Software in this device has been compromised, owners of Secure Content ("Secure Content Owners") may request that Microsoft revoke the WM-DRM Software's right to acquire new licenses to copy, display and/or play Secure Content. This revocation does not affect the ability of the WM-DRM software to playback unprotected content. A list of revoked WM-DRM Software is sent to your device whenever you download a license for Secure Content from the Internet or from a PC. Microsoft may, in conjunction with such license, also download revocation lists onto your device on behalf of Secure Content Owners.

"Real enabled" licence conditions for end users

End users

a. May not modify, technically reconstruct or take apart the device, or make any other attempts to decode the source code or imitate the functions of the customer code. This clause is only invalid if specifically prohibited by law.

b. Will resign all claims and conditions in the name of Real Networks Inc. that are not specified in these license conditions for end consumers; this explicitly includes claims or conditions for the purpose or marketing, and suitability for certain purposes. No liability will be accepted for indirect, specific, random and resulting damage, such as loss of value.

c. Have to confirm that "this product is protected for Microsoft by intellectual property rights. The use or distribution of this technology outside of this product is prohibited unless under licence from Microsoft or an authorised subsidiary".

INFORMATION _____

Glossary

Boot loader version

Boot loader is a software application that is loaded by the firmware of a device from a boot-capable medium and then executed. The boot loader then loads further parts of the operating system.

Domain name system

The domain name system (DNS) is one of the most important services on the Internet. Its main function is to convert Internet address into the corresponding IP address.

Firmwareversion

Firmware is the term used for software that is embedded in a programmed chip (microcontroller). It is mostly stored in a flash memory, an EPROM or an EEPROM.
The firmware contains functions for the control of the Ovation.

Gateway IP

A gateway allows networks, which may be based on completely different protocols, to communicate with each other.
In the home area, a combination of the router and the DSL modem are used as an Internet gateway.

Hardware version

Hardware in this context means the device. This includes all components such as processor, display, etc.

IP address

An IP address (Internet protocol address) is used to uniquely identify the address of computers and other devices in an IP network. The most well-known network in which IP addresses are used in the Internet. Here, for example, web servers are addressed using the IP address.
The IP address can be provided automatically by the router (automatic address) or it is entered manually in the router (staticaddress). If it is entered manually, this address must also be entered in the hi-fi system.

NAS (network access storage)

The abbreviation NAS is used for devices that provide data from a hard drive to a network.

INFORMATION _____

Network name (SSID)

The network name (SSID – service set identifier) is the term used for the identification of a wireless network that is based on IEEE 802.11. Every wireless LAN has a configurable SSID, which uniquely identifies the wireless network.

The character sequence of the network name can be up to 32 characters in length. If is configured in the base station (access point) of a wireless LAN and set on all clients which access it.

Network mask

The network mask or net mask, also sometimes referred to as subnet mask is a bit mask that separates an IP address into a network part and a device/host part. It is used in IP networks to make routing decisions.

Private IP address

Private IP address belong to particular IP address ranges that are not routed in the Internet. The can be used by anybody for private networks such as LANs.

Many computer networks require complete connectivity at IP level, but only limited access to the Internet. If such a computer network has a private IP address range, it forms an intranet which cannot be accessed from the Internet as the Internet routers ignore private address ranges. A gateway or router that is placed in this private network and which also has a public address in the Internet as well as a private IP address, makes the connection to the Internet. This can be performed by a proxy or using NAT/PAT/Masquerading.

As the used address range can only be seen within the private network, the same range can also be used in other private networks. The unique nature of an IP address required by the Internet protocol, is ensured by this restricted visibility.

Proxy server

A proxy or proxy server is a service program for computer networks that administers data transfer. It makes data transfer faster, can also increase security by implementing access control mechanisms.

The transfer is conducted between computers or programs in computer networks. On the server side, the proxy acts as a client, on the client side it acts as a server.

Router

A router is a network component that links several computer networks.

The router analyses (on the basis of layer 3 information) the network packages of a protocol it receives and forwards it to the intended destination network.

Conventional routers work on layer 3 of the application layer. A router has an interface for every network connected to it. When data is received, the router determines the correct path to the destination and thereby the suitable interface via which the data can be transferred. For this it uses a locally available routing table that specifies via which router connection a particular network can be reached.

Security (WEP/WPA)

WEP (wired equivalent privacy) is the standard encryption algorithm for WLAN. It controls both access to the network as well as ensuring the confidentiality and integrity of data. This procedure is seen as insecure nowadays.

For this reason, more modern WLAN installations should use the more secure WPA encryption.

V-Tuner

Service provider that provides Internet radio stations.

Wi-Fi

The Wi-Fi Alliance is an organisation that has taken on the task of certifying products from different manufacturers on the basis of the IEEE-802.11 standard and thereby ensuring that different wireless devices can operate in parallel.

On 31 October 2002 the consortium announced a new encryption technology – Wi-Fi Protected Access (WPA) – a part of the (then) forthcoming IEEE standard 802.11i which would replace the WEP encryption procedure which was already regarded as insecure before the new standard came into force. After 802.11i came into force, the Wi-Fi group coined the term WPA2.

IEEE 802.11e is an industrial standard of the Institute of Electrical and Electronics Engineers (IEEE) and a supplement to the wireless LAN standard IEEE 802.11 for supporting quality of service.

802.11e works according to a similar principle to the QoS procedure DiffServ. Data packages in the WLAN are marked by the sender and the access point is stopped in order to handle packages with higher priority.

With the aid of 802.11e real-time application such as Voice over IP are better supported as they require a certain bandwidth in the network so that the connection is not interrupted if other network traffic places too great a burden on the available data transfer rate.